MCDEP LLC

Industry Idea

Analysis of Oil and Gas Stocks
November 5, 2018

Healthy Business
CVX, RDS, SU, XOM

	Symbol/Rating		Price (US$/sh) 2-Nov 2018	Market Cap (US$mm)	Enterprise Value ($mm)	EV/ Market Cap	EV/ Ebitda NTM	PV/ Ebitda NTM	Oil Prod'n/ Ebitda (%)	Dist. Yield NTM (%)	McDep Ratio (EV/PV)
Exxon Mobil Corporation	XOM		81.95	350,000	440,000	1.26	7.8	8.4	50	4.0	0.93
Chevron Corporation	CVX		114.73	220,000	280,000	1.27	6.1	7.5	61	3.9	0.81
Suncor Energy	SU		33.56	55,000	73,000	1.34	5.8	7.9	76	3.3	0.73
Royal Dutch Shell	RDS-B		64.38	269,000	386,000	1.43	6.6	9.1	50	5.8	0.72
Total or Median				*894,000*	*1,179,000*	*1.31*	*6.3*	*8.1*	*56*	*4.0*	*0.77*

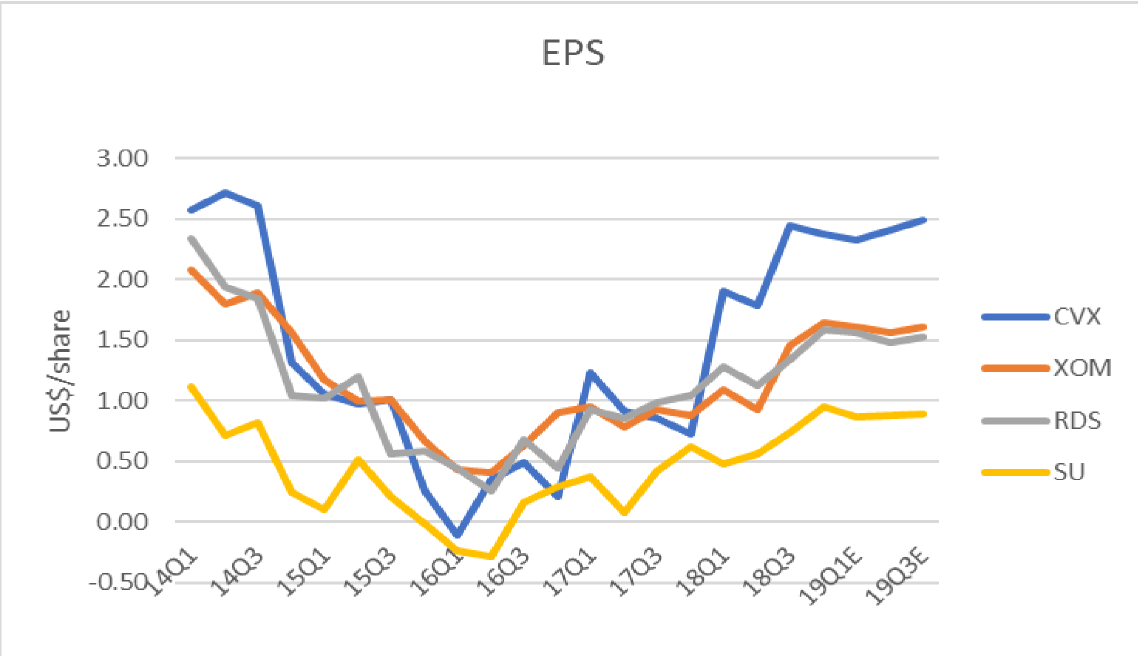
Summary and Recommendation

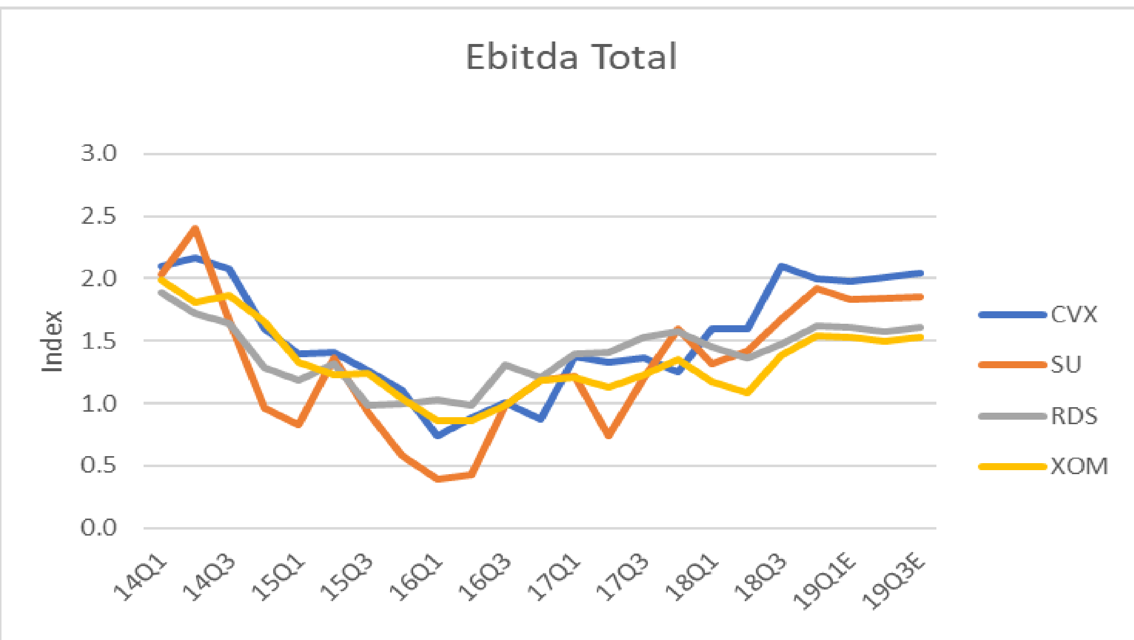
Favorable third quarter results disclosed on November 1-2 support a positive investment outlook for integrated oil companies **Chevron (CVX)**, **ExxonMobil (XOM)**, **Royal Dutch Shell (RDS)** and **Suncor (SU)**. Median McDep Ratio of 0.77 signals 30% more unlevered value to be realized for Enterprise Value to reach Present Value corresponding to a long-term oil price of $70 a barrel. Earnings per share gains compared to the second quarter ranged from 20% for RDS to 59% for XOM (see chart EPS on page 2). Unlevered cash flow (Ebitda) gains from the previous quarter ranged from 8% for RDS to 31% for CVX (see chart Ebitda Total on page 2).

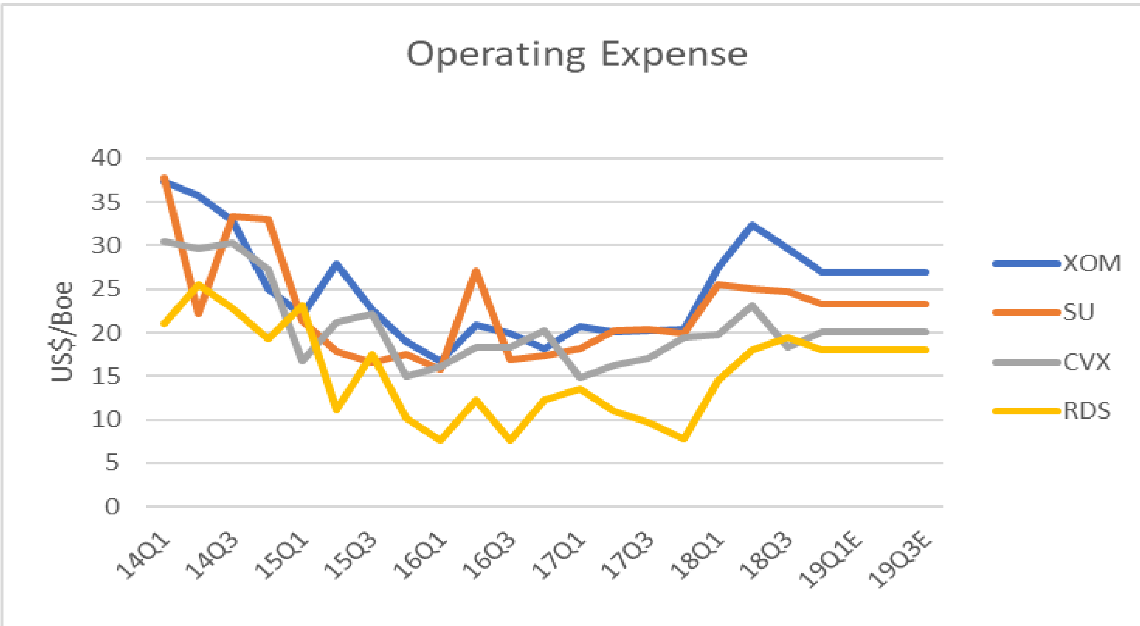
- CVX scored a positive surprise, helped in part by a 21% reduction in upstream costs (see chart Operating Expense on page 3). The company's current rate of cash generation, if sustained, may support an increase in Net Present Value (NPV) from our current estimate of $150 a share.
- XOM reported the strength in operating results we had expected after disappointing investors the first two quarters this year. The gratifying numbers helped XOM stock performance turn from worst among peers to best among peers year-to-date. Downstream assisted with a 29% increase in cash flow added per barrel of upstream production (see chart Downstream Value Added on page 3).
- RDS looks promising, too, though the valuation advantage versus CVX, for example, may fall within the margin of error.
- SU performs well operationally despite a sharper decline in stock price recently.

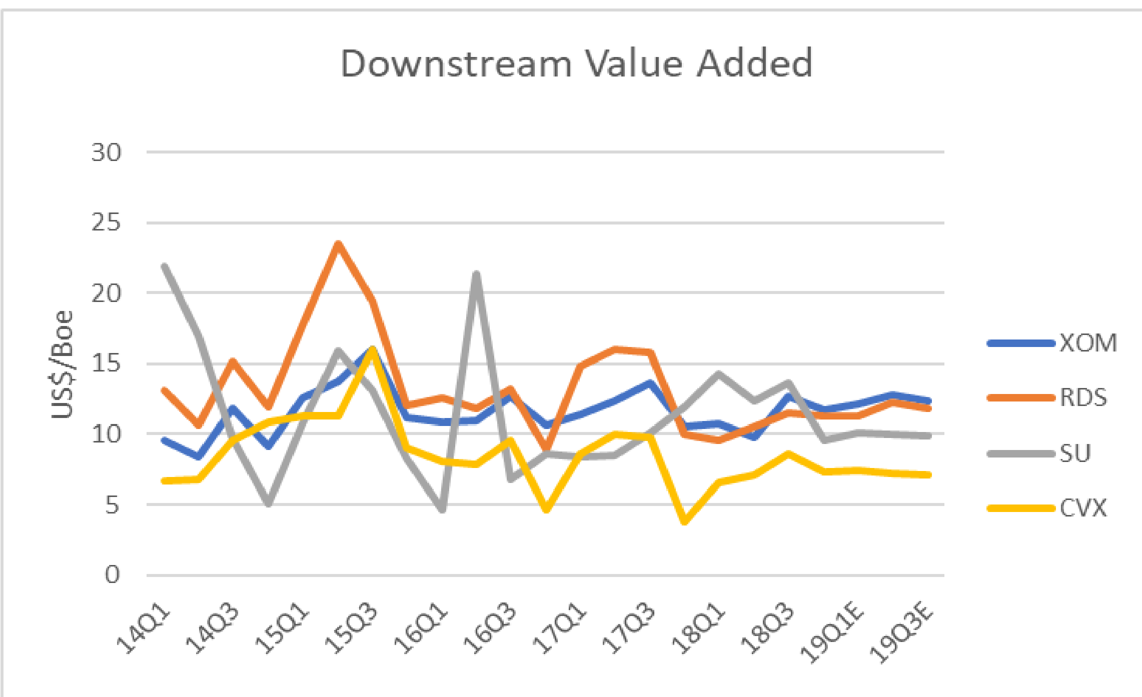
Meanwhile, quarterly detail is summarized in condensed models (see Next Twelve Months Operating and Financial Results on pages 4-5). We have optimistic expectations for each of the four integrated stocks as well as others in our coverage (see Tables 1-4 on pages 6-9).

Kurt H. Wulff, CFA


EPS
US$/share
3.00
2.50
2.00
1.50
1.00
0.50
0.00
-0.50
14Q1
14Q3
15Q1
15Q3
16Q1
16Q3
17Q1
17Q3
18Q1
18Q3
19Q1E
19Q3E
CVX
XOM
RDS
SU


Ebitda Total
Index
3.0
2.5
2.0
1.5
1.0
0.5
0.0
14Q1
14Q3
15Q1
15Q3
16Q1
16Q3
17Q1
17Q3
18Q1
18Q3
19Q1E
19Q3E
CVX
SU
RDS
XOM


Operating Expense
40
35
30
25
20
15
10
5
0
US$/Boe
14Q1
14Q3
15Q1
15Q3
16Q1
16Q3
17Q1
17Q3
18Q1
18Q3
19Q1E
19Q3E
XOM
SU
CVX
RDS


Downstream Value Added
30
25
20
15
10
5
0
US$/Boe
14Q1
14Q3
15Q1
15Q3
16Q1
16Q3
17Q1
17Q3
18Q1
18Q3
19Q1E
19Q3E
XOM
RDS
SU
CVX

Chevron
Next Twelve Months Operating and Financial Estimates

										Next Twelve Months
	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)	2,717	**2,728**	2,864	2,956	2,983	**2,919**	3,012	3,040	3,068	**3,026**
Period (mmboe)	250	**996**	261	272	274	**1,065**	271	277	282	**1,104**
Price (US$/boe)	38.57	**39.62**	51.46	54.26	54.58	**52.34**	54.61	54.63	54.66	**54.62**
Expense (US$/boe)	17.03	**16.90**	23.20	18.33	20.00	**20.31**	20.00	20.00	20.00	**20.00**
Ebitda - Production (US$/boe)	21.54	**22.72**	28.26	35.93	34.58	**32.04**	34.61	34.63	34.66	**34.62**
Downstream VA (US$/boe)	9.78	**8.02**	7.10	8.60	7.29	**7.41**	7.38	7.23	7.08	**7.24**
Ebitda - Total										
Unit (US$/boe)	31.32	**30.74**	35.36	44.53	41.87	**39.45**	41.98	41.86	41.74	**41.86**
Period (US$mm)	7,827	**30,610**	9,216	12,108	11,491	**42,022**	11,379	11,580	11,783	**46,234**
Deprec, Deplet,Amort, Other	5,348	**19,783**	4,675	6,005	5,550	**20,677**	5,550	5,550	5,550	**22,200**
Ebit (US$mm)	2,479	**10,827**	4,541	6,103	5,941	**21,345**	5,829	6,030	6,233	**24,034**
Interest										
Ebt (US$mm)	2,479	**10,827**	4,324	5,921	5,759	**20,605**	5,647	5,848	6,051	**23,306**
Income Tax	868	**3,789**	908	1,243	1,209	**4,327**	1,186	1,228	1,271	**4,894**
Net Income (US$mm)										
Exploration and Production	873	**5,096**	3,348	4,351		-				
Other	1,124	**3,469**	794	1,030		-				
Unallocated	(385)	**(1,528)**	(726)	(704)		-				
Total	1,612	**7,037**	3,416	4,677	4,550	**16,278**	4,461	4,620	4,781	**18,412**
Shares (millions)	1,896	**1,897**	1,919	1,917	1,917	**1,917**	1,917	1,917	1,917	**1,917**
Earnings Per Share (US$)	0.85	**3.71**	1.78	2.44	2.37	**8.49**	2.33	2.41	2.49	**9.60**
Dividend (US$/share)	1.08	**4.32**	1.12	1.12	1.12	**4.48**	1.12	1.12	1.12	**4.48**
Present Value (US$mm)	320,370		348,209	347,909	347,909		347,909	347,909	347,909	**347,909**
Debt (US$mm)	64,410		60,359	60,359	60,359		60,359	60,359	60,359	**60,359**
Net Present Value (US$mm)	255,960		287,850	287,550	287,550		287,550	287,550	287,550	**287,550**
NPV (US$/share)	135		150	150	150		150	150	150	**150**

Exxon Mobil Corporation
Next Twelve Months Operating and Financial Estimates

										Next Twelve Months
	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)	3,878	**3,985**	3,648	3,786	4,077	**3,850**	4,023	3,792	3,873	**3,941**
Period (mmboe)	357	**1,454**	332	348	375	**1,405**	362	345	356	**1,438**
Price (US$/boe)	38.60	**39.69**	52.93	53.98	53.44	**52.05**	53.87	54.51	54.43	**54.05**
Expense (US$/boe)	20.26	**20.38**	32.47	29.74	27.00	**29.10**	27.00	27.00	27.00	**27.00**
Ebitda - Production (US$/boe)	18.34	**19.31**	20.47	24.24	26.44	**22.96**	26.87	27.51	27.43	**27.05**
Downstream VA (US$/boe)	13.60	**11.98**	9.79	12.63	11.73	**11.24**	12.15	12.75	12.35	**12.24**
Ebitda - Total										
Unit (US$/boe)	31.93	**31.28**	30.25	36.87	38.17	**34.19**	39.03	40.26	39.78	**39.29**
Period (US$mm)	11,392	**45,502**	10,042	12,843	14,319	**48,056**	14,130	13,893	14,172	**56,513**
Deprec, Deplet,Amort, Other	5,170	**21,712**	4,921	4,950	5,450	**20,078**	5,450	5,450	5,450	**21,800**
Ebit (US$mm)	6,222	**23,790**	5,121	7,893	8,869	**27,978**	8,680	8,443	8,722	**34,713**
Interest	111	**601**	147	-	-	**351**	-	-	-	**-**
Ebt (US$mm)	6,111	**23,189**	4,974	7,893	8,869	**27,627**	8,680	8,443	8,722	**34,713**
Income Tax	2,139	**8,116**	1,045	1,658	1,862	**5,802**	1,823	1,773	1,832	**7,290**
Net Income (US$mm)										
Exploration and Production	1,567	**7,521**	3,040	4,229		-				
Other	2,624	**9,168**	1,614	2,355		-				
Unallocated	(219)	**(1,616)**	(725)	(348)		-				
Total	3,972	**15,073**	3,929	6,236	7,006	**21,825**	6,857	6,670	6,890	**27,423**
Shares (millions)	4,271	**4,258**	4,271	4,271	4,271	**4,271**	4,271	4,271	4,271	**4,271**
Earnings Per Share (US$)	0.93	**3.54**	0.92	1.46	1.64	**5.11**	1.61	1.56	1.61	**6.42**
Dividend (US$/share)	0.77	**3.06**	0.82	0.82	0.82	**3.28**	0.82	0.82	0.82	**3.28**
Present Value (US$mm)	518,871		474,520	474,520	474,520		474,520	474,520	474,520	**474,520**
Debt (US$mm)	91,771		90,130	90,130	90,130		90,130	90,130	90,130	**90,130**
Net Present Value (US$mm)	427,100		384,390	384,390	384,390		384,390	384,390	384,390	**384,390**
NPV (US$/share)	100		90	90	90		90	90	90	**90**

Royal Dutch/Shell 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)	3,597	**3,604**	3,385	3,537	3,859	**3,638**	3,942	3,601	3,666	**3,767**
Period (mmboe)	331	**1,315**	308	325	355	**1,328**	355	328	337	**1,375**
Price (US$/boe)	36.31	**37.48**	48.03	49.41	48.41	**47.46**	48.17	49.80	49.65	**48.98**
Expense (US$/boe)	9.70	**10.48**	18.04	19.42	18.00	**17.47**	18.00	18.00	18.00	**18.00**
Ebitda - Production (US$/boe)	26.61	**27.01**	29.99	29.98	30.41	**29.98**	30.17	31.80	31.65	**30.98**
Downstream VA (US$/boe)	15.76	**14.07**	10.49	11.54	11.27	**10.73**	11.27	12.21	11.86	**11.64**
Ebitda - Total										
Unit (US$/boe)	42.37	**41.08**	40.48	41.53	41.67	**40.72**	41.45	44.00	43.51	**42.62**
Period (US$mm)	14,021	**54,032**	12,468	13,513	14,796	**54,064**	14,704	14,421	14,674	**58,594**
Deprec, Deplet,Amort, Other	6,734	**25,726**	5,602	5,520	5,520	**22,206**	5,520	5,698	5,698	**22,436**
Ebit (US$mm)	7,287	**28,306**	6,866	7,993	9,276	**31,858**	9,184	8,723	8,976	**36,158**
Interest	1,011	**4,042**	929	909	909	**3,683**	909	909	909	**3,636**
Ebt (US$mm)	6,276	**24,264**	5,937	7,084	8,367	**28,175**	8,275	7,814	8,067	**32,522**
Income Tax	2,197	**8,492**	1,247	1,488	1,757	**5,917**	1,738	1,641	1,694	**6,830**
Net Income (US$mm)										
Exploration and Production	1,844	**8,359**	3,762	4,178		-				
Other	2,668	**9,082**	1,660	2,010		-				
Unallocated	(433)	**(1,670)**	(731)	(591)		-				
Total	4,079	**15,771**	4,691	5,597	6,610	**22,258**	6,537	6,173	6,373	**25,692**
Shares (millions)	4,163	**4,150**	4,188	4,177	4,177	**4,182**	4,177	4,177	4,177	**4,177**
Earnings Per Share (US$)	0.98	**3.80**	1.12	1.34	1.58	**5.32**	1.57	1.48	1.53	**6.15**
Dividend (US$/share)	0.94	**3.76**	0.94	0.94	0.94	**3.76**	0.94	0.94	0.94	**3.76**
Present Value (US$mm)	457,534		527,313	523,770	523,770		523,770	523,770	523,770	**523,770**
Debt (US$mm)	124,534		108,513	106,120	106,120		106,120	106,120	106,120	**106,120**
Net Present Value (US$mm)	333,000		418,800	417,650	417,650		417,650	417,650	417,650	**417,650**
NPV (US$/share)	80		100	100	100		100	100	100	**100**

Suncor 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)	740	**685**	662	744	870	**742**	840	840	840	**848**
Period (mmboe)	68	**250**	60	68	80	**271**	76	76	77	**309**
Price (US$/boe)	45.52	**47.73**	60.18	60.06	61.86	**59.35**	61.52	61.52	61.52	**61.61**
Expense (US$/boe)	25.44	**25.29**	32.43	32.01	30.54	**31.74**	30.54	30.54	30.54	**30.54**
Ebitda - Production (US$/boe)	20.08	**22.44**	27.75	28.06	31.32	**27.60**	30.98	30.98	30.98	**31.07**
Downstream VA (US$/boe)	10.06	**9.79**	12.32	13.66	9.54	**12.27**	10.10	9.99	9.88	**9.87**
Ebitda - Total										
Unit (US$/boe)	30.14	**32.22**	40.07	41.71	40.86	**39.87**	41.08	40.97	40.86	**40.95**
Period (US$mm)	2,052	**8,060**	2,414	2,855	3,270	**10,799**	3,106	3,132	3,158	**12,667**
Deprec, Deplet,Amort, Other	1,035	**4,407**	1,086	1,175	1,171	**4,583**	1,171	1,171	1,171	**4,687**
Ebit (US$mm)	1,017	**3,653**	1,329	1,680	2,099	**6,216**	1,934	1,960	1,986	**7,980**
Interest	29	**167**	161	157	156	**579**	156	156	156	**623**
Ebt (US$mm)	988	**3,486**	1,168	1,523	1,943	**5,637**	1,779	1,805	1,831	**7,357**
Income Tax	296	**1,046**	245	320	408	**1,184**	374	379	384	**1,545**
Net Income (US$mm)										
Exploration and Production	380	**1,345**	523	780		-				
Downstream	478	**1,780**	527	723		-				
Unallocated	(166)	**(685)**	(128)	(300)		-				
Total	691	**2,440**	922	1,203	1,535	**4,453**	1,405	1,426	1,446	**5,812**
Shares (millions)	1,662	**1,662**	1,641	1,628	1,628	**1,633**	1,628	1,628	1,628	**1,628**
Earnings Per Share (US$)	0.42	**1.47**	0.56	0.74	0.94	**2.73**	0.86	0.88	0.89	**3.57**
Dividend (US$/share)	0.26	**1.02**	0.28	0.28	0.27	**1.11**	0.27	0.27	0.27	**1.10**
Present Value (US$mm)	91,071		101,586	99,994	99,838		99,838	99,838	99,838	**99,838**
Debt (US$mm)	17,943		19,536	18,594	18,438		18,438	18,438	18,438	**18,438**
Net Present Value (US$mm)	73,128		82,050	81,400	81,400		81,400	81,400	81,400	**81,400**
NPV (US$/share)	44		50	50	50		50	50	50	**50**

Table 1										
McDep Energy Stocks										
Ranked by McDep Ratio										
	Symbol/Rating	*Price (US$/sh) 2-Nov 2018*	*Market Cap (US$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	81.95	350,000	440,000	1.26	7.8	8.4	50	4.0	0.93
Chevron Corporation	CVX	114.73	220,000	280,000	1.27	6.1	7.5	61	3.9	0.81
Suncor Energy	SU	33.56	55,000	73,000	1.34	5.8	7.9	76	3.3	0.73
Royal Dutch Shell	RDS-B	64.38	269,000	386,000	1.43	6.6	9.1	50	5.8	0.72
Total or Median			*894,000*	*1,179,000*	*1.31*	*6.3*	*8.1*	*56*	*4.0*	*0.77*
Large Independent										
Occidental Petroleum Corp.	OXY	68.31	52,400	66,100	1.26	6.9	7.5	71	4.6	0.93
ConocoPhillips	COP	67.84	80,000	100,000	1.26	6.2	7.0	77	1.8	0.88
EOG Resources, Inc.	EOG	102.35	59,600	66,600	1.12	6.4	7.9	90	0.9	0.81
Pioneer Natural Resources	PXD	146.90	25,100	27,700	1.10	6.2	8.2	94	0.2	0.75
Total or Median			*217,100*	*260,400*	*1.19*	*6.3*	*7.7*	*84*	*1.3*	*0.84*
Mid-Size Independent										
Hess Corporation	HES	56.35	16,800	25,900	1.55	8.3	8.1	90	1.8	1.02
Continental Resources	CLR	49.93	18,700	25,100	1.34	5.8	7.5	81	-	0.77
Cimarex Energy Company	XEC	80.74	7,700	9,300	1.21	5.6	9.1	85	0.9	0.62
Devon Energy Corporation	DVN	32.28	16,900	21,600	1.28	5.6	9.4	88	1.0	0.60
Marathon Oil Corporation	MRO	18.21	15,480	22,200	1.43	5.2	9.6	89	1.1	0.55
Total or Median			*75,600*	*104,100*	*1.34*	*5.6*	*9.1*	*88*	*1.0*	*0.62*
Small Independent										
California Resources	CRC	29.84	1,300	8,100	6.4	5.6	7.7	91	-	0.73
Range Resources	RRC	16.39	4,100	8,700	2.15	6.2	10.3	46	0.5	0.60
Whiting Petroleum Corporation	WLL	34.22	3,200	6,300	2.01	3.8	7.4	98	-	0.51
Birchcliff Energy Ltd.	BIREF	3.16	900	1,500	1.75	4.4	9.1	48	2.5	0.49
Total or Median			*9,500*	*24,600*	*2.08*	*5.0*	*8.4*	*69*	*0.2*	*0.55*
Income										
Dorchester Minerals, L.P.	DMLP	17.81	580	580	1.00	8.0	10.8	87	10.5	0.74
Permian Basin RT	PBT	7.40	350	350	1.00	11.1	15.0	80	9.0	0.74
Sabine Royalty Trust	SBR	36.52	530	530	1.00	11.2	15.4	66	8.9	0.73
San Juan Basin Royalty Trust	SJT	5.15	240	240	1.00	8.7	13.6	-	8.7	0.64
Cross Timbers Royalty Trust	CRT	14.86	90	90	1.00	8.3	14.0	38	9.8	0.59
Total or Median			*1,790*	*1,790*	*1.00*	*8.7*	*14.0*	*66*	*9.0*	*0.73*

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	*Upstream NTM*				*Down-*	*Total*		
		(US$/sh)		*Equiv.*	*Ebitda*		*stream*	*Ebitda*	*Distrib./*	*Distrib.*
	Symbol/Rating	*2-Nov*	*Volume*	*Price*	*Margin*	*Ebitda*	*Uplift*	*NTM*	*Ebitda*	*NTM*
		2018	*(mmboe)*	*($/boe)*	*(%)*	*($/boe)*	*($/boe)*	*($mm)*	*(%)*	*($/sh)*
Integrated										
Royal Dutch Shell	RDS-B	64.38	1374	48.98	63	31.00	11.64	58,594	27	3.76
Exxon Mobil Corporation	XOM	81.95	1436	54.05	50	27.10	12.26	56,513	25	3.28
Chevron Corporation	CVX	114.73	1105	54.62	63	34.60	7.24	46,234	19	4.48
Suncor Energy	SU	33.56	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	67.84	485	54.41	61	33.40	0.00	16,207	9	1.22
EOG Resources, Inc.	EOG	102.35	290	48.45	74	35.95	0.00	10,443	5	0.88
Occidental Petroleum Corp.	OXY	68.31	258	47.60	58	27.60	9.29	9,531	25	3.12
Pioneer Natural Resources	PXD	146.90	134	45.99	72	33.30	0.00	4,475	1	0.32
Total or Median			*1168*	*48.03*	*67*	*33.35*	*0.00*	*9,987*	*7*	
Mid-Size Independent										
Continental Resources	CLR	49.93	118	45.65	81	36.90	0.00	4,340	-	-
Marathon Oil Corporation	MRO	18.21	148	41.65	69	28.60	0.00	4,236	4	0.20
Devon Energy Corporation	DVN	32.28	199	34.04	57	19.40	0.00	3,863	4	0.32
Hess Corporation	HES	56.35	111	48.21	58	28.20	0.00	3,137	9	1.00
Cimarex Energy Company	XEC	80.74	85	29.37	66	19.40	0.00	1,643	4	0.72
Total or Median			*661*	*41.65*	*66*	*28.20*	*0.00*	*3,863*	*4*	
Small Independent										
Whiting Petroleum Corporation	WLL	34.22	49	48.89	70	34.30	0.00	1,673	-	-
California Resources	CRC	29.84	49	56.79	51	29.20	0.00	1,444	-	-
Range Resources	RRC	16.39	141	21.68	46	10.00	0.00	1,413	1	0.08
Birchcliff Energy Ltd.	BIREF	3.16	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	17.81	2.47	41.41	70	29.04	0.00	72	84	1.87
Sabine Royalty Trust	SBR	36.52	1.73	32.89	83	27.36	0.00	47	100	3.25
Permian Basin RT	PBT	7.40	1.16	44.12	61	26.81	0.00	31	100	0.67
San Juan Basin Royalty Trust	SJT	5.15	3.99	13.93	49	6.89	0.00	27	76	0.45
Cross Timbers Royalty Trust	CRT	14.86	0.38	44.45	64	28.53	0.00	11	81	1.46
Total or Median			*10*	*41.41*	*64*	*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$/sh) 2-Nov 2018*	*Shares (mm)*	*Debt ($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	114.73	1,917	60,359	12	6.8	57	26		150.00
Royal Dutch Shell	RDS-B	64.38	4,177	116,710	10	7.2	22	31		100.00
Exxon Mobil Corporation	XOM	81.95	4,271	90,130	13	9.7	52	28		90.00
Suncor Energy	SU	33.56	1,628	18,438	9	8.2	87			50.00
Median						*7.7*	*55*			
Large Independent										
Pioneer Natural Resources	PXD	146.90	171	2,600	17	6.7	9	6		200.00
EOG Resources, Inc.	EOG	102.35	582	7,071	14	4.7	43	10		130.00
ConocoPhillips	COP	67.84	1,173	20,375	11	7.2	31	23		80.00
Occidental Petroleum Corp.	OXY	68.31	767	13,700	13	7.5	35	4		75.00
Median						*7.0*	*33*			
Mid-Size Independent										
Cimarex Energy Company	XEC	80.74	95	1,579	10	4.9	35	15		140.00
Continental Resources	CLR	49.93	375	6,333	13	5.1	121	19		70.00
Devon Energy Corporation	DVN	32.28	525	4,720	12	8.8	24	12		60.00
Hess Corporation	HES	56.35	297	9,177		6.5	59	10		55.00
Marathon Oil Corporation	MRO	18.21	850	6,712	15	6.1	60	11		40.00
Median						*6.1*	*59*			
Small Independent										
Whiting Petroleum Corporation	WLL	34.22	92	3,170	13	6.9	84	2		100.00
California Resources	CRC	29.84	43	6,800		8.9	41	9		100.00
Range Resources	RRC	16.39	247	4,657	13	9.9	83	54		40.00
Birchcliff Energy Ltd.	BIREF	3.16	268	641	11	7.2	228	52		9.00
Median						*8.0*	*83*			
Income										
Sabine Royalty Trust	SBR	36.52	15	-	11	10.4	3	33	100	50.00
Cross Timbers Royalty Trust	CRT	14.86	6	-	10	13.2	-	69	81	25.00
Dorchester Minerals, L.P.	DMLP	17.81	32	-	13	6.5	-	16	71	24.00
Permian Basin RT	PBT	7.40	47	-	11	6.8	-	17	48	10.00
San Juan Basin Royalty Trust	SJT	5.15	47	-	11	10.5	-	100	-	8.00
Median						*10.4*				

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

McDep LLC Industry Idea

Analysis of Oil and Gas Stocks
November 5, 2018

Table 4

McDep Energy Stocks

Total Return Year-to-Date 2018

Ranked by Unlevered Total Return

		Price	*Price*			*Equity*		*Unlevered*	
		($/sh)	*($/sh)*	*Price*	*Cash*	*Total*		*Total*	
	Symbol/Rati	*2-Nov*	*29-Dec*	*Change*	*Distrib.*	*Return*	*Debt*	*Return*	*McDep*
		2018	*2017*	*(%)*	*(%)*	*(%)*	*($/sh)*	*(%)*	*Ratio*
Integrated									
Exxon Mobil Corporation	XOM	81.95	83.64	(2)	3	1	21	1	0.93
Royal Dutch Shell	RDS-B	64.38	68.29	(6)	4	(2)	28	(1)	0.72
Chevron Corporation	CVX	114.73	125.19	(8)	3	(6)	31	(5)	0.81
Suncor Energy	SU	33.56	36.72	(9)	2	(6)	11	(5)	0.73
Median				*(7)*		*(4)*		*(3)*	*0.77*
Large Independent									
ConocoPhillips	COP	67.84	54.89	24	2	25	17	19	0.88
Occidental Petroleum Corp.	OXY	68.31	73.66	(7)	3	(4)	18	(3)	0.93
EOG Resources, Inc.	EOG	102.35	107.91	(5)	0	(5)	12	(4)	0.81
Pioneer Natural Resources	PXD	146.90	172.85	(15)	0	(15)	15	(14)	0.75
Median				*(6)*		*(4)*		*(4)*	*0.84*
Mid-Size Independent									
Hess Corporation	HES	56.35	47.47	19	2	20	31	12	1.02
Marathon Oil Corporation	MRO	18.21	16.93	8	1	8	8	6	0.55
Continental Resources	CLR	49.93	52.97	(6)	-	(6)	17	(4)	0.77
Devon Energy Corporation	DVN	32.28	41.40	(22)	1	(21)	9	(18)	0.60
Cimarex Energy Company	XEC	80.74	122.01	(34)	0	(33)	17	(29)	0.62
Median				*(6)*		*(6)*		*(4)*	*0.62*
Small Independent									
Whiting Petroleum Corporation	WLL	34.22	26.48	29	-	29	34	13	0.51
California Resources	CRC	29.84	19.44	53	-	53	159	6	0.73
Range Resources	RRC	16.39	17.06	(4)	0	(4)	19	(2)	0.60
Birchcliff Energy Ltd.	BIREF	3.16	3.50	(10)	2	(8)	2	(5)	0.49
Median				*13*		*13*		*2*	*0.55*
Income									
Dorchester Minerals, L.P.	DMLP	17.81	15.20	17	9	26	-	26	0.74
Cross Timbers Royalty Trust	CRT	14.86	14.69	1	7	8	-	8	0.59
Permian Basin RT	PBT	7.40	8.87	(17)	5	(12)	-	(12)	0.74
Sabine Royalty Trust	SBR	36.52	44.60	(18)	5	(13)	-	(13)	0.73
San Juan Basin Royalty Trust	SJT	5.15	8.24	(38)	3	(34)	-	(34)	0.64
Median				*(17)*		*(12)*		*(12)*	*0.73*
Grand Median				*(6)*		*(5)*		*(4)*	*0.73*
Natural Gas ($/mmbtu)		3.29	2.95	12					
Oil -West Texas Intermediate ($/bbl)		62.87	60.09	5					
Total Stock Market - U.S.	VTI	139.56	137.25	2	1	3			
Developed Markets - ex US	VEA	40.18	44.86	(10)	2	(8)			
Emerging Markets	VWO	39.36	45.91	(14)	2	(12)			
Total Stock Market - World	VT	70.85	74.26	(5)	2	(3)			

Source: *McDep LLC, Yahoo, CME Group, Bloomberg*

For historical research see www.mcdep.com

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