

# US Oil & Gas E&P

## What We Learned from 3Q E&P Results Season

Oil & Gas Exploration & Production | Sector Review

- **2021 outlooks little changed (maintenance mode <\$45/Bbl); lower op. costs help drive down WTI breakevens.** Messaging on 2021 remained consistent, with most E&Ps committed to maintenance capex levels next year in a <\$45/Bbl WTI environment. We think E&Ps need more confidence in WTI sustainably closer to \$50/Bbl before contemplating growth capex and thus expect little change to this narrative into the upcoming budgeting season. A similar outlook emerged for the gassy E&Ps, with [COG](#), [EQT](#) & [RRC](#) all pointing to flattish pro-forma volumes next year (stronger 2022+ price signal needed to incentivize a return to modest growth). The average breakeven WTI price (required to fund capex and dividends) for our E&P universe improved from ~\$41 to ~\$39/Bbl, helped by lower operating costs: 3Q cash costs came in ~5% below CSe on average, most E&Ps reduced cost guidance (primarily LOE/G&A) and we lowered 2021E cash costs by ~2%.
- **Long-term frameworks continue to take shape; key to attracting capital back to sector.** Most notable/new was [EOG's](#) 3-year outlook (70-80% reinvestment rate; 8-10% cap on oil growth '22-23), a significant endorsement of the "new" E&P model/value proposition, in our view. More broadly, LT parameters continue to converge around mid-single digit oil growth, ~70-80% reinvestment and lower financial leverage targets (<1.0-1.5x). Ability to not only generate FCF but also show a path/commitment to returning that excess cash to shareholders (via dividends, buybacks and/or variable payout) is a differentiator. Incrementally shareholder-friendly commentary on accelerating return of cash ([COG](#), [EOG](#), [MGY](#)), while [APA](#), [CLR](#), [MRO](#), [MUR](#), [QVY](#), [OXY](#), [RRC](#) must first reduce debt.
- **Slightly lowered 4Q20E US oil forecasts; continue to see 2021E flat/down modestly YoY.** We trimmed 4Q20 US oil production forecasts by ~1.5% overall for our E&P universe (primarily on spillover hurricane impact for GoM-exposed operators: [OXY](#), [HES](#), [MUR](#)), now implying more modest +3% QoQ growth (vs. +5% prior) and putting US crude volumes on pace to exit the year (4Q/4Q) down ~13% YoY (right in line with our top-down model which has total domestic oil production averaging ~11.1 MBbld in 4Q20, down ~1.7 MBbld YoY). Our 2021 forecasts continue to show US oil volumes for our E&P universe down ~2% YoY (flattish vs. 4Q20E), modestly more resilient vs. CSe top-down.
- **M&A a key thread, but some new perspectives emerge.** M&A remained a top focus in the wake of the flurry of corporate deals in the weeks leading up to 3Q earnings ([DVN-WPX](#), [COP-CXO](#), [PXD-PE](#)). Some interesting new perspectives did, however, emerge, as a number of E&Ps that have not yet participated this cycle weighed in. [FANG](#) and [XEC](#) both pushed back on the notion that increased size/scale necessarily translates into better efficiencies/financial metrics. Organic resource adds ([EOG](#), [MGY](#)) and strategic bolt-ons ([CLR](#)) were highlighted as alternatives. [EQT's](#) acquisition of CVX's Appalachian assets underscored the broader trend of FCF accretion as a key rationale for consolidation.
- **View on the stocks.** E&Ps +14% this week (crude +11%) on the "vaccine trade," though the rally has faded after IEA/EIA/OPEC cut 4Q20/1H21 oil demand & given recent spike in COVID-19 cases. With oil likely volatile medium-term, re-engaging investors still hinges on E&Ps' ability to show continued discipline & execute on the FCF/payout model into 2021. Expect quality/FCF visibility to drive relative o/p. **Top picks: XEC, DVN, EQT, VNOM.**

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**Figure 1: 2021 Capex and Oil Production Comparison and Maintenance Capex Rundown**

Ticker	2021 Capex (\$MM)			Maintenance Capex*			2021 Oil Production (MBbld)			2021 Framework/Our Take
	CSe	Cons	CSe vs. Cons	\$MM	Breakeven WTI (CSe)**	Breakeven WTI (CSe Pre-3Q)**	CSe	Cons	CSe vs. Cons	
<b>Global Large-Cap E&amp;Ps</b>										
APA	\$963	\$942	2%	NA	\$40	\$43	191.9	198.6	(3%)	< <b>\$1 billion capex</b> (assuming \$40/Bbl WTI and \$2.75 NYMEX); stabilizes US oil volumes vs. 4Q20, modest volume declines in Egypt/North Sea; prioritize Suriname capex
EOG	\$3,500	\$3,598	(3%)	\$3,400	\$38	\$40	446.0	433.2	3%	<b>\$3.4 billion</b> maintenance capex holds US oil flat vs. 4Q20E at 435-445 MBbld; excludes other potential value-add non D&C (exploration, ESG, cost initiatives, etc.)
HES	\$1,802	\$1,843	(2%)	NA	\$56	\$58	159.1	170.1	(6%)	<b>&gt;\$50/Bbl needed</b> before accelerating in 2021 (first call would be a 2nd rig in the Bakken); preliminary 2021 capex outlook (flatish YoY) does not anticipate any spending for Phase 1 FPSO
MRO	\$1,018	\$1,091	(7%)	\$1,000	\$36	\$35	170.2	175.2	(3%)	<b>~\$1 billion</b> to hold oil flat vs. 4Q20E at ~172 MBbld; does not seem inclined to accelerate vs. maintenance case even at \$45-\$50/Bbl WTI
MUR	\$696	\$704	(1%)	\$700	\$47	\$47	85.6	93.6	(9%)	<b>Soft guide:</b> 150-160 MBoed in 2021 with flat capex YoY (~\$700MM); priority is generating excess cash flow after dividends to reduce debt
OXY	\$2,964	\$2,905	2%	\$2,900	\$39	\$40	599.5	652.1	(8%)	Views <b>\$2.9 billion "sustaining" capex</b> (to hold total volumes flat vs. 4Q20E at ~1,130 MBoed for one year) as a cap on 2021 budget
<b>North American Oil-Weighted E&amp;Ps</b>										
CLR	\$1,214	\$1,256	(3%)	\$1,250	\$33	\$35	165.1	165.6	(0%)	<b>\$1.2-\$1.3 billion</b> capex for low-single digit YoY production growth or ~300 MBoed (down modestly vs. 4Q20E); ~65-75% reinvestment rate at <b>~\$40/Bbl</b> ; FCF priority is debt reduction
DVN	\$1,738	NA	NA	\$1,700	\$36	\$37	289.4	NA	NA	<b>Pro-forma</b> maintenance capex \$1.7 billion for oil volumes >280 MBbld; would evaluate certain growth projects at <b>&gt;\$45/Bbl</b>
FANG	\$1,283	\$1,372	(6%)	\$1,300	\$37	\$36	173.9	174.2	(0%)	Maintenance capex <b>~\$1.2-\$1.4bn</b> holds 2021 oil flat vs. 4Q20E (170-175 MBbld); at <b>\$40/Bbl</b> it expects >\$525MM FCF before dividends (~70% reinvestment); threshold to consider growth appears ~\$50/Bbl
MGY	\$214	\$244	(12%)	NA	NA	NA	30.2	30.1	0%	Governed by target to spend <b>~60% of EBITDX</b> on D&C; at current commodity outlook, preliminarily sees this model enabling <b>modest growth relative to 4Q20E</b>
OVV	\$1,486	\$1,494	(1%)	\$1,500	\$37	\$39	146.0	148.6	(2%)	<b>\$1.4-\$1.6 billion</b> to hold crude + condensate at ~200 MBbld; at <\$45/Bbl it appears the priority is to fund maintenance capex levels over incremental debt repayment
XEC	\$634	\$670	(5%)	\$600	\$34	\$35	76.5	74.2	3%	Similar YoY capex budget ( <b>~\$600MM</b> ) for oil volumes flat/up slightly YoY; expects to fund capex and dividends at <b>\$35/Bbl</b> WTI

Source: Company data, Credit Suisse estimates

\*Maintenance capex shown as company estimate based on most recent guidance

\*\*WTI breakeven is our estimate of the oil price required to fund capex and dividends (where applicable) in 2021 under our current model assumptions and \$2.75/MMBtu NYMEX natural gas price deck

Figure 2: E&amp;P "All-in" Cash Operating Costs (\$/Boe)

Company Name	Ticker	Actuals			3Q20		4Q20E		2020E		2021E		Percent Change Post Earnings		
		4Q19	1Q20	2Q20	CSe	Actual	Before	After	Before	After	Before	After	3Q20	'20E	'21E
<b>Global Large-Cap E&amp;Ps</b>															
Apache Corp.	APA	\$14.84	\$14.33	\$14.11	\$14.37	\$12.38	\$14.72	\$14.93	\$14.38	\$13.91	\$14.87	\$14.82	-14%	-3%	0%
ConocoPhillips	COP	\$12.65	\$13.57	\$14.85	\$14.93	\$13.27	\$15.25	\$14.18	\$15.43	\$13.94	\$13.77	\$12.66	-11%	-10%	-8%
EOG Resources	EOG	\$13.25	\$12.35	\$13.40	\$14.15	\$12.55	\$13.34	\$12.61	\$13.24	\$12.68	\$13.36	\$12.67	-11%	-4%	-5%
Hess	HES	\$19.42	\$17.29	\$16.25	\$18.17	\$17.81	\$17.48	\$19.59	\$17.29	\$17.69	\$18.36	\$17.96	-2%	2%	-2%
Marathon Oil	MRO	\$12.73	\$11.65	\$9.68	\$11.69	\$11.62	\$11.85	\$11.79	\$11.20	\$11.18	\$11.41	\$11.77	-1%	0%	3%
Murphy Oil	MUR	\$19.47	\$15.96	\$17.64	\$18.58	\$17.91	\$19.46	\$18.75	\$17.77	\$17.43	\$18.61	\$18.15	-4%	-2%	-2%
Occidental Petroleum	OXY	\$14.71	\$22.85	\$10.48	\$13.12	\$13.73	\$14.84	\$14.86	\$15.42	\$15.57	\$15.07	\$15.10	5%	1%	0%
<b>Average</b>		<b>\$15.29</b>	<b>\$15.43</b>	<b>\$13.77</b>	<b>\$15.00</b>	<b>\$14.18</b>	<b>\$15.28</b>	<b>\$15.24</b>	<b>\$14.96</b>	<b>\$14.63</b>	<b>\$15.06</b>	<b>\$14.73</b>	<b>-5%</b>	<b>-2%</b>	<b>-2%</b>
<b>North American Oil-Weighted E&amp;Ps</b>															
Cimarex Energy	XEC	\$8.41	\$8.29	\$7.35	\$7.93	\$7.74	\$7.97	\$7.80	\$7.89	\$7.81	\$8.08	\$8.01	-2%	-1%	-1%
Concho Resources	CXO	\$12.83	\$12.86	\$10.65	\$12.19	\$11.13	\$12.25	\$12.25	\$11.99	\$11.72			-9%	-2%	
Continental Resources	CLR	\$9.09	\$8.52	\$9.05	\$9.64	\$8.48	\$9.35	\$9.10	\$9.12	\$8.76	\$9.78	\$9.58	-12%	-4%	-2%
Devon Energy	DVN	\$16.91	\$13.77	\$14.37	\$14.98	\$13.75	\$14.50	\$13.53	\$14.39	\$13.85	\$14.11	\$14.20	-8%	-4%	1%
Diamondback Energy	FANG	\$10.17	\$10.17	\$8.14	\$10.10	\$9.61	\$10.20	\$9.90	\$9.66	\$9.47	\$9.83	\$9.66	-5%	-2%	-2%
Magnolia Oil & Gas	MGY	\$8.30	\$8.14	\$6.20	\$7.61	\$7.67	\$7.70	\$7.66	\$7.41	\$7.41	\$7.81	\$7.98	1%	0%	2%
Ovintiv	OVV	\$15.62	\$15.06	\$14.38	\$15.74	\$15.23	\$15.26	\$14.93	\$15.13	\$14.90	\$15.31	\$14.92	-3%	-2%	-3%
Parsley Energy	PE	\$12.01	\$10.93	\$10.20	\$11.92	\$10.37	\$10.91	\$10.67	\$10.75	\$10.55			-5%	-2%	
Pioneer Natural Res.	PXD	\$14.42	\$8.17	\$9.33	\$10.47	\$10.87	\$10.89	\$10.61	\$9.68	\$9.73	\$10.78	\$10.11	4%	0%	-6%
WPX Energy	WPX	\$17.66	\$16.47	\$14.23	\$16.34	\$14.44	\$15.72	\$14.48	\$15.68	\$14.87			-12%	-5%	
<b>Average</b>		<b>\$12.54</b>	<b>\$11.24</b>	<b>\$10.39</b>	<b>\$11.59</b>	<b>\$10.93</b>	<b>\$11.48</b>	<b>\$11.09</b>	<b>\$11.17</b>	<b>\$10.91</b>	<b>\$10.82</b>	<b>\$10.64</b>	<b>-6%</b>	<b>-2%</b>	<b>-2%</b>
<b>Gas-Weighted E&amp;Ps</b>															
Cabot Oil & Gas	COG	\$5.43	\$5.46	\$5.48	\$5.46	\$5.37	\$5.46	\$5.45	\$5.46	\$5.44	\$5.39	\$5.38	-2%	0%	0%
EQT Corp.	EQT	\$8.94	\$8.93	\$9.53	\$9.12	\$9.52	\$9.13	\$9.07	\$9.17	\$9.25	\$9.55	\$8.98	4%	1%	-6%
Range Resources	RRC	\$11.57	\$11.67	\$10.82	\$11.00	\$11.09	\$11.15	\$11.24	\$11.16	\$11.20	\$11.42	\$11.33	1%	0%	-1%
<b>Average</b>		<b>\$8.65</b>	<b>\$8.68</b>	<b>\$8.61</b>	<b>\$8.53</b>	<b>\$8.66</b>	<b>\$8.58</b>	<b>\$8.58</b>	<b>\$8.60</b>	<b>\$8.63</b>	<b>\$8.79</b>	<b>\$8.56</b>	<b>2%</b>	<b>0%</b>	<b>-3%</b>
<b>E&amp;P Universe Average</b>		<b>\$12.92</b>	<b>\$12.32</b>	<b>\$11.31</b>	<b>\$12.33</b>	<b>\$11.73</b>	<b>\$12.37</b>	<b>\$12.17</b>	<b>\$12.11</b>	<b>\$11.87</b>	<b>\$12.21</b>	<b>\$11.96</b>	<b>-5%</b>	<b>-2%</b>	<b>-2%</b>

Source: Company data, Credit Suisse estimates

Figure 3: US Oil Production Forecasts (Pre-and Post 3Q Results Updates)

Company Name	Ticker	Actuals			3Q20		4Q20E		2020E		2021E		Percent Change Post Earnings			4Q20/4Q19		2021/2020		
		4Q19	1Q20	2Q20	CSe	Actual	Before	After	Before	After	Before	After	3Q20	4Q20E	2020E	2021E	Before	After	Before	After
<b>Global Large-Cap E&amp;Ps</b>																				
Apache Corp.	APA	108	102	94	91	83	82	73	92	88	73	72	-8%	-10%	-4%	-2%	-25%	-32%	-20%	-18%
ConocoPhillips	COP	440	459	319	380	381	438	433	401	400	652	650	0%	-1%	0%	0%	-1%	-2%	8%	8%
EOG Resources	EOG	468	483	331	370	377	445	445	407	409	445	445	2%	0%	0%	0%	-5%	-5%	9%	9%
Hess	HES	133	158	153	144	142	138	129	149	146	116	119	-1%	-7%	-2%	3%	4%	-3%	-23%	-19%
Marathon Oil	MRO	199	209	181	158	159	160	156	176	176	158	155	1%	-2%	0%	-2%	-19%	-21%	-10%	-12%
Murphy Oil	MUR	102	98	84	72	72	76	72	83	81	74	74	-1%	-6%	-2%	0%	-25%	-29%	-11%	-9%
Occidental Petroleum	OXY	644	663	593	523	508	504	472	573	561	480	478	-3%	-6%	-2%	-1%	-22%	-27%	-16%	-15%
<b>Total</b>		<b>2,094</b>	<b>2,171</b>	<b>1,756</b>	<b>1,738</b>	<b>1,722</b>	<b>1,843</b>	<b>1,781</b>	<b>1,881</b>	<b>1,862</b>	<b>1,998</b>	<b>1,993</b>	<b>-1%</b>	<b>-3%</b>	<b>-1%</b>	<b>0%</b>	<b>-12%</b>	<b>-15%</b>	<b>6%</b>	<b>7%</b>
<b>North American Oil-Weighted E&amp;Ps</b>																				
Cimarex Energy	XEC	92	90	78	73	72	67	66	77	76	77	77	-2%	-1%	-1%	-1%	-2%	-28%	0%	0%
Concho Resources	CXO	215	209	200	200	201	194	193	201	201			0%	0%	0%	0%	-10%	-10%		
Continental Resources	CLR	206	201	95	153	169	177	178	157	161	170	165	10%	0%	3%	-3%	-14%	-14%	8%	3%
Devon Energy	DVN	163	163	153	142	146	147	153	151	154	287	289	3%	4%	2%	1%	-10%	-6%	4%	3%
Diamondback Energy	FANG	195	201	176	170	170	174	173	180	180	174	174	0%	0%	0%	0%	-11%	-11%	-4%	-3%
Magnolia Oil & Gas	MGY	35	37	34	29	27	29	29	32	32	30	30	-6%	2%	-1%	2%	-18%	-17%	-8%	-5%
Ovintiv	OVV	172	162	146	136	139	150	149	149	149	144	145	2%	-1%	0%	1%	-13%	-14%	-3%	-2%
Parsley Energy	PE	125	127	113	113	111	112	112	116	115			-2%	0%	0%	0%	-10%	-10%		
Pioneer Natural Res.	PXD	220	223	215	200	201	202	206	210	211	329	330	0%	2%	1%	0%	-8%	-7%	1%	1%
WPX Energy	WPX	147	122	124	124	122	131	140	125	127			-1%	7%	1%	0%	-11%	-4%		
<b>Total</b>		<b>1,570</b>	<b>1,534</b>	<b>1,334</b>	<b>1,341</b>	<b>1,357</b>	<b>1,383</b>	<b>1,399</b>	<b>1,398</b>	<b>1,406</b>	<b>1,211</b>	<b>1,211</b>	<b>1%</b>	<b>1%</b>	<b>1%</b>	<b>0%</b>	<b>-12%</b>	<b>-11%</b>	<b>-13%</b>	<b>-14%</b>
<b>E&amp;P Oily Universe Total</b>		<b>3,664</b>	<b>3,705</b>	<b>3,089</b>	<b>3,079</b>	<b>3,079</b>	<b>3,226</b>	<b>3,180</b>	<b>3,279</b>	<b>3,268</b>	<b>3,209</b>	<b>3,204</b>	<b>0%</b>	<b>-1%</b>	<b>0%</b>	<b>0%</b>	<b>-12%</b>	<b>-13%</b>	<b>-2%</b>	<b>-2%</b>
<b>U.S. Majors</b>																				
Chevron	CVX	771	803	747	721	747	829	866	775	791	850	867	4%	4%	2%	2%	7%	12%	10%	10%
Exxon Mobil	XOM	665	699	628	644	692	671	669	660	672	667	658	8%	0%	2%	-1%	1%	1%	1%	-2%
<b>Total</b>		<b>1,436</b>	<b>1,502</b>	<b>1,375</b>	<b>1,365</b>	<b>1,439</b>	<b>1,500</b>	<b>1,534</b>	<b>1,435</b>	<b>1,463</b>	<b>1,517</b>	<b>1,525</b>	<b>5%</b>	<b>2%</b>	<b>2%</b>	<b>1%</b>	<b>4%</b>	<b>7%</b>	<b>6%</b>	<b>4%</b>
<b>Total (including Majors)</b>		<b>5,100</b>	<b>5,207</b>	<b>4,464</b>	<b>4,443</b>	<b>4,518</b>	<b>4,726</b>	<b>4,714</b>	<b>4,714</b>	<b>4,730</b>	<b>4,726</b>	<b>4,729</b>	<b>2%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>-7%</b>	<b>-8%</b>	<b>0%</b>	<b>0%</b>

Source: Company data, Credit Suisse estimates

**Figure 4: E&P Valuation Metrics Pre/Post 3Q Updates (Assuming Current Stock Prices and Futures Strip Pricing)**

Company	Ticker	Price (Nov 12)	Post-Earnings				Pre-Earnings				Change in Premium/ Discount vs Peers	
			EV/DACF		vs Peers		EV/DACF		vs Peers		2021	2022
			2021	2022	2021	2022	2021	2022	2021	2022		
<b>Global Large-Cap E&amp;Ps</b>			<i>vs Large Peers</i>				<i>vs Large Peers</i>					
Apache Corp.	APA	\$9.70	9.3x	10.2x	+1.7x	+3.1x	8.4x	9.4x	+0.9x	+2.2x	+0.7x	+0.9x
ConocoPhillips	COP	\$34.01	6.9x	6.7x	-0.8x	-0.5x	6.6x	6.5x	-0.9x	-0.7x	+0.1x	+0.2x
EOG Resources	EOG	\$40.49	5.0x	4.4x	-2.6x	-2.7x	5.2x	5.2x	-2.2x	-1.9x	-0.5x	-0.8x
Hess Corp.	HES	\$41.59	13.8x	12.0x	+6.1x	+4.9x	13.6x	12.2x	+6.2x	+5.0x	-0.1x	-0.1x
Marathon Oil	MRO	\$4.82	4.7x	4.4x	-3.0x	-2.8x	4.4x	4.3x	-3.0x	-2.9x	+0.0x	+0.1x
Murphy Oil	MUR	\$8.39	4.6x	4.0x	-3.1x	-3.1x	4.3x	3.8x	-3.1x	-3.3x	+0.0x	+0.2x
Occidental Petroleum	OXY	\$11.31	9.3x	8.1x	+1.7x	+1.0x	9.4x	8.7x	+2.0x	+1.6x	-0.3x	-0.5x
<b>Average</b>			<b>7.6x</b>	<b>7.1x</b>			<b>7.4x</b>	<b>7.2x</b>				
<b>North American Oil-Weighted E&amp;Ps</b>			<i>vs Oily Peers</i>				<i>vs Oily Peers</i>					
Cimarex Energy	XEC	\$30.65	4.6x	4.1x	-0.2x	-0.3x	4.8x	4.3x	-0.1x	-0.1x	-0.1x	-0.2x
Concho Resources	CXO	\$49.27	5.2x	4.8x	+0.4x	+0.4x	5.2x	4.8x	+0.3x	+0.3x	+0.1x	+0.1x
Continental Resources	CLR	\$13.58	4.8x	4.5x	+0.0x	+0.2x	4.7x	4.5x	-0.2x	+0.0x	+0.2x	+0.1x
Devon Energy	DVN	\$11.22	3.6x	3.1x	-1.2x	-1.3x	3.6x	3.2x	-1.3x	-1.2x	+0.1x	-0.1x
Diamondback Energy	FANG	\$31.66	5.9x	5.6x	+1.1x	+1.2x	5.7x	5.3x	+0.8x	+0.9x	+0.3x	+0.3x
Magnolia Oil & Gas	MGY	\$5.15	3.8x	3.3x	-1.0x	-1.1x	3.8x	3.2x	-1.1x	-1.3x	+0.1x	+0.2x
Ovintiv	OVV	\$10.34	4.4x	4.4x	-0.4x	+0.0x	4.4x	4.5x	-0.5x	+0.0x	+0.1x	+0.0x
Parsley Energy	PE	\$10.77	5.3x	4.6x	+0.5x	+0.2x	5.3x	4.6x	+0.5x	+0.2x	+0.0x	+0.0x
Pioneer Natural Res.	PXD	\$86.27	5.5x	5.2x	+0.7x	+0.8x	6.6x	5.9x	+1.7x	+1.4x	-1.0x	-0.6x
WPX Energy	WPX	\$5.72	4.8x	4.2x	-0.0x	-0.1x	4.7x	4.2x	-0.1x	-0.3x	+0.1x	+0.1x
<b>Average</b>			<b>4.8x</b>	<b>4.4x</b>			<b>4.9x</b>	<b>4.4x</b>				
<b>Gas-Weighted E&amp;Ps</b>			<i>vs Gassy Peers</i>				<i>vs Gassy Peers</i>					
Cabot Oil & Gas	COG	\$16.91	5.1x	5.0x	-0.3x	-0.1x	5.1x	5.2x	+0.0x	+0.1x	-0.3x	-0.3x
EQT Corp.	EQT	\$14.52	4.4x	4.0x	-1.0x	-1.1x	4.4x	3.9x	-0.7x	-1.1x	-0.2x	+0.0x
Range Resources	RRC	\$6.75	6.6x	6.4x	+1.3x	+1.2x	5.8x	6.0x	+0.7x	+1.0x	+0.5x	+0.2x
<b>Average</b>			<b>5.3x</b>	<b>5.1x</b>			<b>5.1x</b>	<b>5.0x</b>				

Source: Company data, Credit Suisse estimates

Note: Based on current NYMEX Brent, WTI, and Henry Hub futures strip prices: 2020 - \$41.6/Bbl, \$39.03/Bbl, & \$2.08/MMBtu; 2021 - \$44.56/Bbl, \$42.45/Bbl, & \$2.97/MMBtu; 2022 - \$46.15/Bbl, \$43.38/Bbl, & \$2.77/MMBtu; 2023 - \$47.42/Bbl, \$43.89/Bbl, & \$2.55/MMBtu; and 2024+ - \$48.47/Bbl, \$44.45/Bbl, & \$2.52/MMBtu.

Figure 5: E&amp;P Valuation Metrics Under Current Strip Prices

Company	Ticker	Price 11/12/20	EV/EBITDX				EV/DACF				Organic Free Cash Flow Yield			Unlevered Organic FCF Yield			P/NAV	
			Hist. FY1	2020E	2021E	2022E	Hist. FY1	2020E	2021E	2022E	2020E	2021E	2022E	2020E	2021E	2022E	1P	2P
<b>Global Large-Cap E&amp;Ps</b>																		
Apache Corp.	APA	\$9.70	5.3x	6.6x	5.6x	5.3x	7.5x	9.9x	9.3x	10.2x	-6.7%	7.5%	-1.6%	1.3%	5.2%	2.7%	NA	2.85x
ConocoPhillips	COP	\$34.01	6.6x	8.8x	6.8x	6.6x	7.3x	8.3x	6.9x	6.7x	0.9%	3.0%	1.0%	2.6%	3.8%	2.4%	NA	NA
EOG Resources	EOG	\$40.49	7.4x	5.5x	4.9x	4.2x	7.5x	5.4x	5.0x	4.4x	5.5%	6.5%	2.9%	5.7%	6.7%	3.4%	2.16x	0.82x
Hess Corp.	HES	\$41.59	9.3x	8.1x	12.9x	10.9x	10.0x	8.4x	13.8x	12.0x	-0.7%	-4.5%	-5.6%	2.1%	-0.4%	-1.0%	2.69x	1.21x
Marathon Oil	MRO	\$4.82	5.0x	5.3x	4.7x	4.4x	5.2x	5.2x	4.7x	4.4x	6.1%	14.8%	12.9%	5.6%	9.6%	9.0%	NA	2.82x
Murphy Oil	MUR	\$8.39	4.7x	5.0x	4.8x	4.3x	5.5x	4.7x	4.6x	4.0x	6.3%	0.7%	5.3%	6.2%	4.5%	5.5%	1.01x	0.73x
Occidental Petroleum	OXY	\$11.31	7.5x	8.6x	8.8x	7.5x	8.5x	7.9x	9.3x	8.1x	22.4%	7.3%	5.1%	7.1%	4.7%	4.2%	NA	NA
<b>Average</b>			<b>6.5x</b>	<b>6.8x</b>	<b>6.9x</b>	<b>6.2x</b>	<b>7.4x</b>	<b>7.1x</b>	<b>7.6x</b>	<b>7.1x</b>	<b>5.5%</b>	<b>6.5%</b>	<b>2.9%</b>	<b>5.6%</b>	<b>4.7%</b>	<b>3.4%</b>	<b>2.16x</b>	<b>1.01x</b>
<b>North American Oil-Weighted E&amp;Ps</b>																		
Cimarex Energy	XEC	\$30.65	5.6x	5.7x	4.7x	4.1x	5.6x	5.6x	4.6x	4.1x	6.9%	12.7%	11.6%	5.9%	9.8%	9.6%	2.98x	0.82x
Concho Resources	CXO	\$49.27	8.2x	4.7x	5.2x	4.8x	8.2x	4.7x	5.2x	4.8x	10.5%	8.3%	4.9%	8.9%	7.6%	5.2%	2.19x	0.89x
Continental Resources	CLR	\$13.58	6.5x	6.3x	4.8x	4.5x	6.5x	6.3x	4.8x	4.5x	2.1%	12.4%	7.3%	3.5%	8.7%	6.5%	NA	2.16x
Devon Energy	DVN	\$11.22	5.5x	4.1x	3.7x	3.2x	5.6x	4.1x	3.6x	3.1x	5.6%	9.5%	10.9%	7.7%	11.3%	12.4%	1.40x	0.72x
Diamondback Energy	FANG	\$31.66	7.4x	5.7x	5.5x	5.1x	8.0x	6.1x	5.9x	5.6x	-0.4%	11.4%	12.1%	1.8%	6.7%	7.1%	1.95x	0.65x
Magnolia Oil & Gas	MGY	\$5.15	4.7x	4.8x	3.8x	3.2x	4.8x	4.9x	3.8x	3.3x	5.9%	11.6%	7.3%	6.6%	11.8%	8.6%	1.94x	1.01x
Ovintiv	OVV	\$10.34	4.1x	4.5x	4.4x	4.4x	4.1x	4.7x	4.4x	4.4x	1.3%	17.0%	15.3%	4.0%	8.3%	7.6%	NA	1.23x
Parsley Energy	PE	\$10.77	6.3x	5.5x	5.3x	4.6x	6.3x	5.4x	5.3x	4.6x	12.6%	13.2%	7.8%	9.9%	10.3%	7.4%	4.40x	0.90x
Pioneer Natural Res.	PXD	\$86.27	8.0x	7.3x	5.6x	5.2x	8.0x	7.1x	5.5x	5.2x	4.5%	6.4%	9.1%	4.7%	6.6%	8.5%	1.84x	0.62x
WPX Energy	WPX	\$5.72	6.2x	4.1x	4.9x	4.3x	6.1x	4.0x	4.8x	4.2x	11.7%	8.4%	5.4%	8.7%	7.3%	5.9%	2.04x	0.68x
<b>Average</b>			<b>6.3x</b>	<b>5.3x</b>	<b>4.8x</b>	<b>4.4x</b>	<b>6.3x</b>	<b>5.3x</b>	<b>4.8x</b>	<b>4.4x</b>	<b>5.7%</b>	<b>11.5%</b>	<b>8.5%</b>	<b>6.3%</b>	<b>8.5%</b>	<b>7.5%</b>	<b>1.95x</b>	<b>0.72x</b>
<b>Gas-Weighted E&amp;Ps</b>																		
Cabot Oil & Gas	COG	\$16.91	8.7x	9.7x	4.6x	4.4x	8.8x	9.3x	5.1x	5.0x	2.8%	12.9%	11.3%	3.2%	12.6%	12.0%	1.33x	0.81x
Diversified Gas & Oil PLC	DGOC.L	113p	NA	5.3x	5.3x	5.6x	NA	5.3x	5.3x	5.6x	23.5%	23.0%	20.0%	17.0%	16.9%	15.8%	0.87x	0.87x
EQT Corp.	EQT	\$14.52	4.7x	6.0x	4.5x	4.1x	4.7x	5.9x	4.4x	4.0x	5.1%	18.8%	17.9%	5.1%	11.1%	11.6%	0.73x	0.49x
Range Resources	RRC	\$6.75	6.5x	8.0x	6.5x	6.3x	6.1x	8.0x	6.6x	6.4x	2.8%	8.5%	10.6%	4.8%	6.6%	7.2%	NA	1.82x
<b>Average</b>			<b>6.6x</b>	<b>7.2x</b>	<b>5.2x</b>	<b>5.1x</b>	<b>6.5x</b>	<b>7.1x</b>	<b>5.3x</b>	<b>5.2x</b>	<b>3.9%</b>	<b>15.8%</b>	<b>14.6%</b>	<b>4.9%</b>	<b>11.9%</b>	<b>11.8%</b>	<b>0.87x</b>	<b>0.84x</b>

Source: Company data, Credit Suisse estimates

Note: Based on current NYMEX Brent, WTI, and Henry Hub futures strip prices: 2020 - \$41.6/Bbl, \$39.03/Bbl, & \$2.08/MMBtu; 2021 - \$44.56/Bbl, \$42.45/Bbl, & \$2.97/MMBtu; 2022 - \$46.15/Bbl, \$43.38/Bbl, & \$2.77/MMBtu; 2023 - \$47.42/Bbl, \$43.89/Bbl, & \$2.55/MMBtu; and 2024+ - \$48.47/Bbl, \$44.45/Bbl, & \$2.52/MMBtu.

**Figure 6: Relative Stock Performance Pre/Post 3Q Prints****Performance vs E&P Index (XOP)**

Ticker	-10 Day	-5 Day	+1 Day	+5 Day
<b>Global Large-Cap E&amp;Ps</b>				
APA	0.9%	<b>10.4%</b>	(0.8%)	<b>(5.2%)</b>
COP	<b>(6.6%)</b>	0.8%	(1.3%)	0.5%
EOG	<b>2.9%</b>	1.8%	0.2%	<b>3.1%</b>
HES	1.0%	<b>2.4%</b>	<b>2.2%</b>	(0.8%)
MRO	<b>6.2%</b>	<b>5.9%</b>	(0.1%)	<b>2.8%</b>
MUR	<b>(7.4%)</b>	(0.8%)	<b>(5.9%)</b>	<b>(3.4%)</b>
OXY	<b>18.4%</b>	<b>14.8%</b>	(1.9%)	<b>(5.8%)</b>

<b>North American Oil-Weighted E&amp;Ps</b>				
CLR	<b>3.1%</b>	<b>5.0%</b>	<b>(4.9%)</b>	<b>(8.5%)</b>
CXO	<b>3.3%</b>	<b>(3.6%)</b>	0.4%	<b>(2.4%)</b>
DVN	(0.6%)	(0.3%)	<b>5.9%</b>	<b>15.9%</b>
FANG	0.0%	1.6%	<b>2.3%</b>	<b>5.0%</b>
MGY	<b>(14.1%)</b>	<b>(10.2%)</b>	<b>4.0%</b>	<b>14.0%</b>
OVV	(0.9%)	(1.7%)	<b>3.7%</b>	<b>7.2%</b>
PE	<b>9.2%</b>	<b>8.8%</b>	(0.7%)	0.4%
PXD	<b>8.5%</b>	(1.1%)	<b>(5.2%)</b>	<b>(7.4%)</b>
XEC	<b>(2.8%)</b>	<b>3.5%</b>	<b>4.0%</b>	<b>9.4%</b>
WPX	<b>7.4%</b>	<b>8.3%</b>	<b>4.0%</b>	<b>10.4%</b>

<b>Gas-Weighted E&amp;Ps</b>				
COG	<b>4.1%</b>	0.4%	<b>(3.1%)</b>	<b>(13.5%)</b>
EQT	<b>7.5%</b>	<b>3.4%</b>	1.3%	<b>13.2%</b>
RRC	(0.5%)	<b>(8.2%)</b>	<b>(15.0%)</b>	<b>(25.2%)</b>

<b>Royalty Minerals</b>				
FLMN	<b>(18.5%)</b>	<b>(7.0%)</b>	<b>26.4%</b>	<b>4.9%</b>
KRP	<b>6.0%</b>	<b>(6.0%)</b>	<b>(3.0%)</b>	(1.8%)
MNRL	<b>4.8%</b>	1.2%	<b>3.3%</b>	<b>6.6%</b>
VNOM	<b>(3.9%)</b>	(0.6%)	<b>4.4%</b>	<b>4.0%</b>

Source: Company data, Credit Suisse estimates, FactSet

**Companies Mentioned** (Price as of 12-Nov-2020)

**Apache Corporation** (APA.OQ, \$9.7)  
**Cabot Oil & Gas Corporation** (COG.N, \$16.91)  
**Chevron Corporation** (CVX.N, \$80.67)  
**Cimarex Energy Co.** (XEC.N, \$30.65)  
**Concho Resources Inc.** (CXO.N, \$49.27)  
**ConocoPhillips** (COP.N, \$34.01)  
**Continental Resources, Inc.** (CLR.N, \$13.58)  
**Devon Energy Corporation** (DVN.N, \$11.22)  
**Diamondback Energy, Inc.** (FANG.OQ, \$31.66)  
**EOG Resources, Inc.** (EOG.N, \$40.49)  
**EQT Corporation** (EQT.N, \$14.52)  
**Falcon Minerals** (FLMN.OQ, \$2.11)  
**Hess Corporation** (HES.N, \$41.59)  
**Kimbell Royalty Partners** (KRP.N, \$6.76)  
**Magnolia Oil & Gas** (MGY.N, \$5.15)  
**Marathon Oil Corporation** (MRO.N, \$4.82)  
**Murphy Oil Corporation** (MUR.N, \$8.39)  
**Occidental Petroleum Corporation** (OXY.N, \$11.31)  
**Ovintiv** (OVV.N, \$10.34)  
**Parsley Energy, Inc.** (PE.N, \$10.77)  
**Pioneer Natural Resources Company** (PXD.N, \$86.27)  
**Range Resources Corporation** (RRC.N, \$6.75)  
**Viper Energy Partners** (VNOM.OQ, \$8.74)  
**WPX Energy Inc.** (WPX.N, \$5.72)

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## Disclosure Appendix

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### Analyst Certification

I, William Janela, CFA, certify that (1) the views expressed in this report accurately reflect my personal views about all of the subject companies and securities and (2) no part of my compensation was, is or will be directly or indirectly related to the specific recommendations or views expressed in this report.

### As of December 10, 2012 Analysts' stock rating are defined as follows:

**Outperform (O)** : The stock's total return is expected to outperform the relevant benchmark\* over the next 12 months.

**Neutral (N)** : The stock's total return is expected to be in line with the relevant benchmark\* over the next 12 months.

**Underperform (U)** : The stock's total return is expected to underperform the relevant benchmark\* over the next 12 months.

*\*Relevant benchmark by region: As of 10th December 2012, Japanese ratings are based on a stock's total return relative to the analyst's coverage universe which consists of all companies covered by the analyst within the relevant sector, with Outperforms representing the most attractive, Neutrals the less attractive, and Underperforms the least attractive investment opportunities. As of 2nd October 2012, U.S. and Canadian as well as European (excluding Turkey) ratings are based on a stock's total return relative to the analyst's coverage universe which consists of all companies covered by the analyst within the relevant sector, with Outperforms representing the most attractive, Neutrals the less attractive, and Underperforms the least attractive investment opportunities. For Latin America, Turkey and Asia (excluding Japan and Australia), stock ratings are based on a stock's total return relative to the average total return of the relevant country or regional benchmark (India - S&P BSE Sensex Index); prior to 2nd October 2012 U.S. and Canadian ratings were based on (1) a stock's absolute total return potential to its current share price and (2) the relative attractiveness of a stock's total return potential within an analyst's coverage universe. For Australian and New Zealand stocks, the expected total return (ETR) calculation includes 12-month rolling dividend yield. An Outperform rating is assigned where an ETR is greater than or equal to 7.5%; Underperform where an ETR less than or equal to 5%. A Neutral may be assigned where the ETR is between -5% and 15%. The overlapping rating range allows analysts to assign a rating that puts ETR in the context of associated risks. Prior to 18 May 2015, ETR ranges for Outperform and Underperform ratings did not overlap with Neutral thresholds between 15% and 7.5%, which was in operation from 7 July 2011.*

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Restricted	2%	

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Within the past 12 months, Credit Suisse has received compensation for investment banking services from the following issuer(s): APA.OQ, COP.N, MRO.N, OXY.N, CXO.N, FANG.OQ, MGY.N, OVV.N, PE.N, PXD.N, WPX.N, EQT.N, RRC.N, VNOM.OQ, KRP.N, CVX.N

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