



efficiency, and (v) decreasing non-productive capital spending (test wells, seismic, infrastructure, etc).

As we consider 2016, our equity counterparts have looked at the issue of US growth and asked the question: "What would we need to see from the industry to normalize production growth from 2016 forward at a level more consistent with demand expectations? (i.e. reduce US YoY supply growth to 500-600 Mb/d)." They estimate "that at minimum, the industry would need to drop ~160+ horizontal rigs from the "Big Three" plays (Bakken, Permian, Eagle Ford) – or ~25% of the near 700 rigs currently operating in these plays. The implications for the overall oil rig count (~1,600) is much more severe, as vertical rigs and marginal plays would likely fall off first, implying a total rig cut of 500+." If this scenario plays out as expected, it suggests that US YoY supply growth would be reduced from 0.90-1.0 million boepd now to about 500-600K boepd, or a reduction of 300-400K boepd. We believe markets would view this move as significant.

Looking at Figure 8, the good news is that we have seen some solid progress towards decreasing horizontal rigs by that ~160 figure. Since the OPEC meeting in late November, horizontal rig count in the Big Three plays has decreased by 40 rigs or about 25% of the DB required cut - and the biggest step down came in this past week. In that same span, total US rig count has decreased by 167 rigs or about 33% of the DB required cut - again, with the best step down coming this past week. Not surprisingly, the necessary decline in less efficient rigs (both vertical rigs and rigs in marginal plays) is happening faster than for the core three plays, where rigs are most efficient.

Figure 8: US Drilling Rig Score Card Since November OPEC Meeting

Total Rigs Across All Basins	Directional	Horizontal	Vertical	Total
Rigs working as of OPEC Meeting	194	1,371	352	1,917
12/5/2014 WoW change	4	(3)	2	3
12/12/2014 WoW change	(2)	(1)	(24)	(27)
12/19/2014 WoW change	(1)	(11)	(6)	(18)
12/26/2014 WoW change	(14)	(6)	(15)	(35)
1/2/2015 WoW change	(6)	(14)	(9)	(29)
1/9/2015 WoW change	(14)	(35)	(12)	(61)
Rigs working as Week 1/9	161	1,301	288	1,750
Total Rig Decline since OPEC Meeting (11/27)	(33)	(70)	(64)	(167)
Total Rig Decline since Relative Oil Peak (6/20)	(67)	51	(92)	(108)

Horizontal Rig Decline in the Big 3 Plays	Eagle Ford	Permian	Bakken	Total
Rigs working as of OPEC Meeting	207	363	189	759
12/5/2014 WoW change	(3)	4	(3)	(2)
12/12/2014 WoW change	(2)	(7)	(1)	(10)
12/19/2014 WoW change	2	4	(7)	(1)
12/26/2014 WoW change	(2)	3	(2)	(1)
1/2/2015 WoW change	(5)	0	0	(5)
1/9/2015 WoW change	(3)	(10)	(8)	(21)
Rigs working as Week 1/9	194	357	168	719
Big 3 Rig Decline since OPEC Meeting (11/27)	(13)	(6)	(21)	(40)
Big 3 Rig Decline since Relative Oil Peak (6/20)	10	(34)	7	(17)

Source: Baker Hughes