



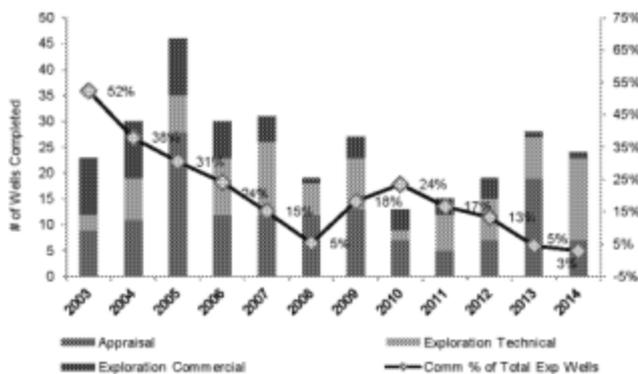
Primary Growth Drivers

Near-term volume growth will be driven by recent discoveries off Sabah which have extended the eventual drop-off from Kikeh to 2017. In the near-term (2014-2017) we anticipate oil production to increase 9% by 2017 to 670mboe/d driven exclusively by the deepwater fields off Sabah. However, with Sabah expected to peak production in 2017 and anticipated lower levels of exploration over the next several years, growth visibility in the region post 2017+ is limited.

Primary Risks

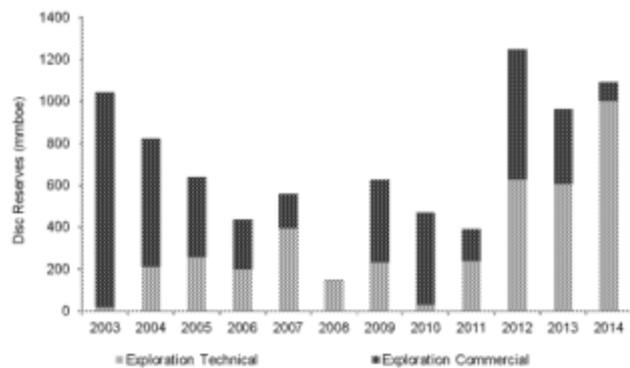
In our view, the primary risk associated to the oil production outlook is a longer-term depletion of its mature asset base. From 2010-2014 exploration activity has dropped significantly with annual exploration wells completed averaging only 11 vs. 16 during the 2003-2009 time-frame with commercial wells representing 24% and 40% of the mix respectively. While total (commercial and technical) resource discovered per well has been significant (~33 mmboe/well) over the last 5 years the commerciality of the discovered resource has fallen off. From 2000-2010 commercial reserves made up ~2/3 of the discovered resource; however, that figure has averaged ~1/3 over the last 4 years and reached an all time low in 2014 of 8%.

Figure 105: Exploration activity has dropped over the last 5 years



Source: Deutsche Bank, Wood Mackenzie

Figure 106: Even though resource per well metrics are more constructive, only 33% of the discovered reserves over the last 4 years are considered 'commercial'



Source: Deutsche Bank, Mackenzie

Figure 107: Key Growth Projects, 2014-2020

Project	IEA Region	Country	Sector	Operator	Project Type	Dev Status	API	Prod Start Up Yr	Peak Prod Yr	2014-2017 Prod	2014-2020 Prod
SBJ	Asia	Malaysia	Sabah	Shell	DW	Onstream	40	2012	2015	59	40
SBK	Asia	Malaysia	Sabah	Murphy Oil	DW	Onstream	37	2007	2021	33	32
SBG	Asia	Malaysia	Sabah	Shell	DW	Onstream	35	2014	2022	20	50
Wakid	Asia	Malaysia	Sabah	Petronas Carigali	DW	Good Technical	35	2019	2020	0	18

Source: Deutsche Bank, Wood Mackenzie