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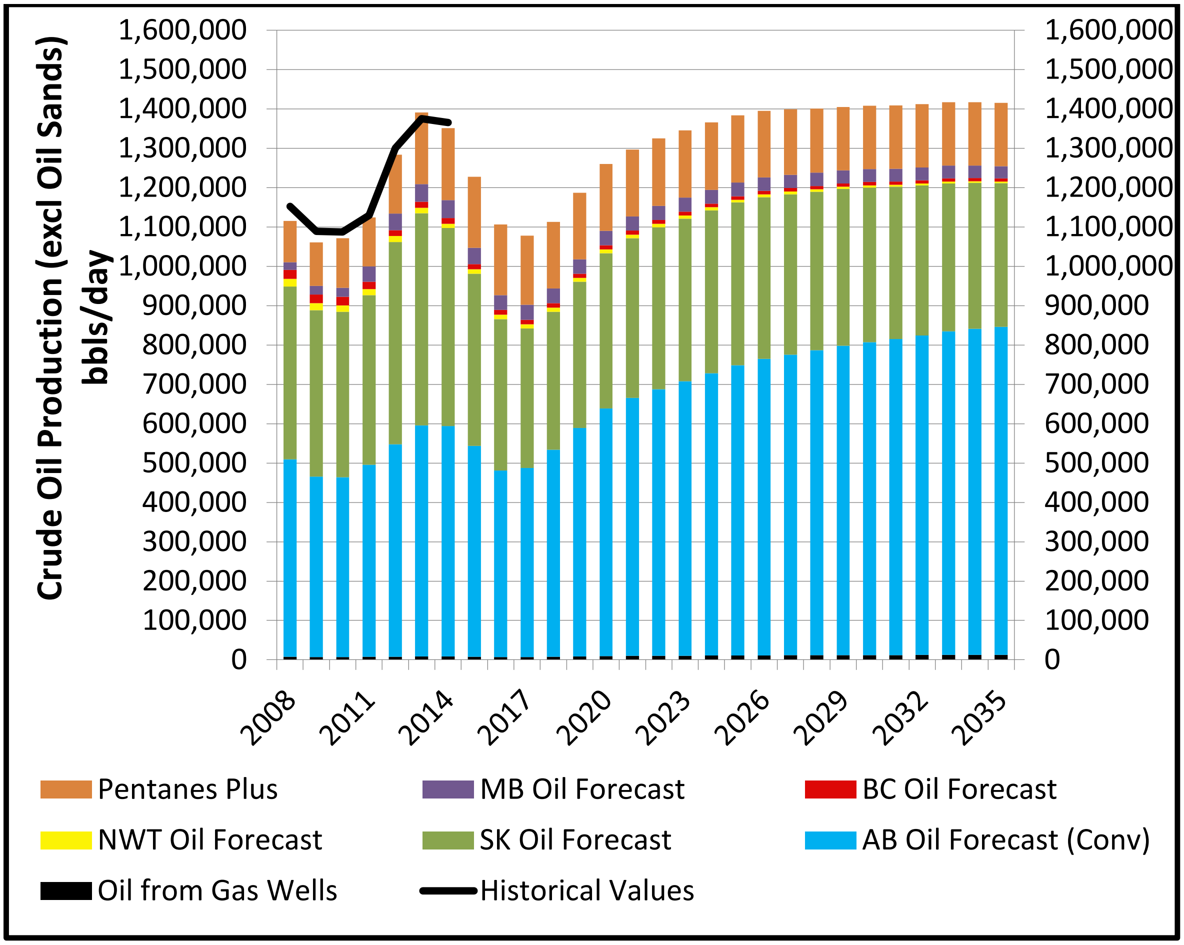
WESTERN CANADA CRUDE OIL FORECASTS AND IMPACTS (2015-2035)



Executive Summary

In 2008, the oil and gas industry in Western Canada brought on stream 4,483 new crude oil wells. This included for Alberta (1,870), British Columbia (19) and Saskatchewan (2,594). The average annual WTI market price at Cushing, Oklahoma was US$99.8/bbl. The following year, 2009, was the low point for oil well activity in western Canada with under 2,500 new crude oil wells drilled because of the global recession. The average annual WTI market price dropped to US$62/bbl. However, in the following year oil developments moved up quickly following the upswing in the oil price that reached a WTI market price of US$105/bbl in July 2014. For the remaining five months of 2014 and continuing into the first half of 2015, WTI oil prices fell to a low point of US$40/bbl before settling in on a range of US$50 to US$60/bbl.

In July 2014, the Canadian Energy Research Institute (CERI) published a study that forecasted the future of the North American oil market as played out in four plausible narratives.[1] That report, which investigated the productive capacity of all major oil plays in North America, with detailed attention to the merging shale oil plays, established a reference case forecast for the United States. That analysis was undertaken by ICF International and was the basis for CERI establishing a western Canadian crude oil forecast by taking into account market basis differentials, pipeline and rail transportation and upstream supply cost estimates. Figure 1.3 illustrates the results of that study with respect to the western Canadian conventional crude oil forecast. Also included on Figure 1.3 is the June 2013 conventional oil forecast from the Canadian Association of Petroleum Producers (CAPP).

The purpose of this report is to extend the work done by the 2014 report by investigating the downside potential of oil well activity in Western Canada as a direct result of declining oil prices and reduced producers capital budgets. As a secondary task, this report is intended to report on the economic impacts associated with this forecast of drilling and future production in terms of Gross Domestic Product (GDP), taxes paid to the provincial and federal governments and future employment for the industry.

Analysis of the provincial regulator licensing files for the first 6 months of 2015 and extrapolating out to the end of the year suggests that new oil well licenses for 2015 will be reduced by 45-55 percent from 2014 levels. With regard to determining a well activity forecast for western Canada, CERI has adopted the extrapolated new well license estimate for 2015 and has also assumed that this reduced level of activity will continue into 2016. CERI has assumed that WTI oil prices will start moving upwards in 2017 as demonstrated in Figure 1.5. New well activity is assumed to follow the upward trend in market prices.

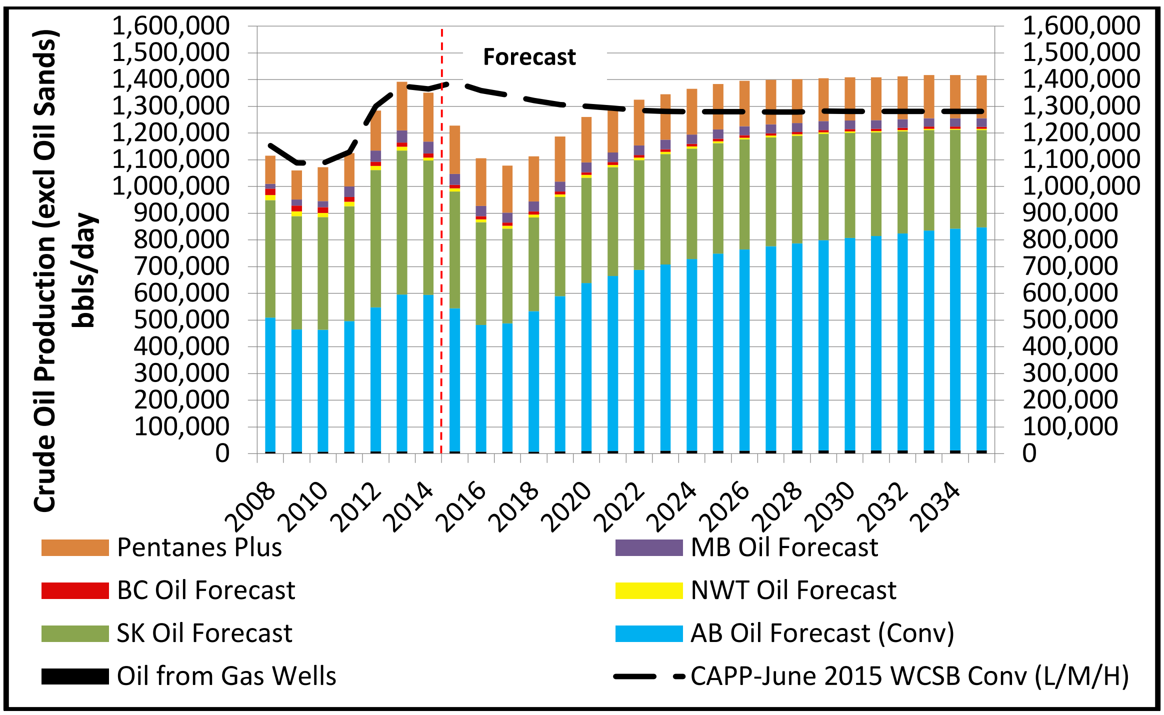
Figure E.1 demonstrates the resulting oil forecast by province while Table E.1 details the economic impacts of those oil developments. The Canadian Association of Petroleum Producers (CAPP) June 2015 forecast (light, medium and heavy crude oil) is also presented on Figure E.1 for

[1] CERI Study 144, Canadian Oil Pathways, July 2014

comparative purposes. In order to compare directly against the CAPP forecast, Figure E.1 has included a forecast for Pentanes Plus. CERI's analysis of the fallout from reduced drilling in western Canada suggests that by 2017 conventional crude oil production will be 350,000 barrels below CERI's 2014 forecast. This is a direct result of drilling and connecting fewer wells in 2014, 2015 and 2016. The fallout from this reduced activity over the next 3 years will be played out in reduced field employment, provincial and federal taxes, royalties and activity in various indirect and induced industries.

Table E.1 details the economic impacts of the reduced forecast expressed in terms of capital investment, producer revenues, gross domestic product, and taxes paid to provincial and federal governments.

Figure E.1: Western Canada Crude Oil and Oil Equivalent Forecast (2015-2035)



Source: CERI

Table E.1: Summary of Economic Impacts from Oil Well Developments in Western Canada, 2015-2035 (Billion CDN$)

	AB	BC	SK	Total
Capital investment in the drilling, completing and connection of crude oil wells	261.0	1.0	133.0	395.0
Revenues from crude oil domestic sales and export sales	481.0	9.8	209.0	699.8
Total Canadian GDP impacts	949.0	12.0	347.0	1,308.0
Federal Government tax revenues	108.0	1.1	30.0	139.1
Provincial Government tax revenues	66.0	0.7	26.0	92.7

Source: CERI