

**Daly Unit #14**  
**2016 Annual EOR Report**



## 2016 Update

Figure 1 shows the production history of Daly Unit #14.

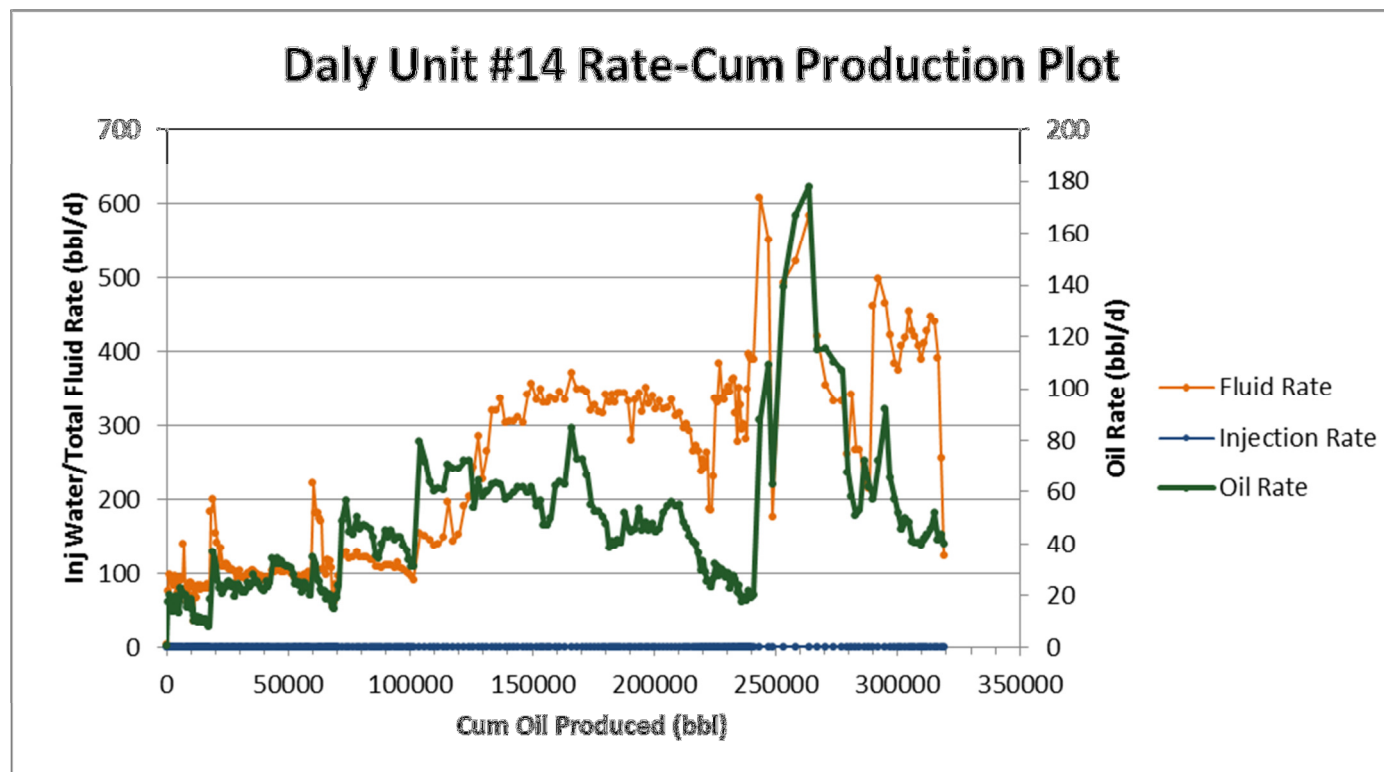


Figure 1: Daly Unit #14 – Production History

In 2016 oil production from the Daly Unit #14 was 6.7 m<sup>3</sup>/d (42 bbl/d), totaling 2.4 10<sup>3</sup>m<sup>3</sup> (15.4 mbbl). Annual production declined 30.4% from 2015 to 2016, if a waterflood is implemented the decline within the unit should be reduced. Cumulative oil production from the Daly Unit #14 was 50.9 10<sup>3</sup>m<sup>3</sup> (0.32 mmbbl) at the end of 2016. In December 2016, there were 11 active oil producers.

The first development in this unit occurred in 1994 with the deepening of existing vertical producers in the Lodgepole, Daly Unit #13 into the Bakken formation. Further wells were deepened to the Bakken throughout the years, continuing until 2009 where there were a maximum of 11 wells in the unit. In 2014, Corex continued to develop the unit through horizontal multistage fractured wells, drilling two wells in the Bakken formation in the southern portion of the unit. With continued development and primary production it will be beneficial to implement a waterflood.



All produced water from the Daly Unit #14 was disposed through the use of a disposal well in Daly Unit #13.



## 2016 Reservoir Pressure Surveys

In 2016, no pressure surveys were conducted in Daly Unit #14. There are also no recent recorded pressures within the unit. The estimated initial reservoir pressure for the Bakken is 9,500 kPaa. Thus far, due to minimal production out of the Bakken for the majority of the unit it is likely that most of the unit is near initial reservoir pressure. With further development, due to the inter well spacing it is likely that the average reservoir pressure will drop well below the initial reservoir pressure relatively quickly. Therefore an implementation of a waterflood will be advantageous.

## 2016 Well Servicing

UWI	Unit	Licence	Operation	Date	Objective
102/14-25-009-29W1/00	DU #14	8131	Pump Repair	15-Dec-16	

## Waterflood Development

The current plan for the unit is to drill a third Bakken well in the southern portion of the unit in Q1 2018. After some time on production one of the producers will be converted to injection, likely around Q1 2019. Further horizontal well development is proposed to continue in Q3 and Q4 of 2018 and in to 2019. After a period of primary production additional wells will be converted to injection. Injection water will be sourced from 100/03-32-009-28W1/00 then filtered and treated prior to injection.