

Virden Roselea Unit #4
2018 Annual EOR Report

Executive Summary

In 2018 oil production in the Virden Roselea Unit #4 (VRU #4) averaged 13.9 m³/d (87 bbl/d) totaling 5.1 e³m³ (31.9 mbbbl). Annual production had a decline of 40.7% from 2017 to 2018, using the yearly average, using December 2017 to December 2018 the decline is 59.5%. By the end of 2018 cumulative oil production from the VRU #4 was 24.2 e³m³ (152.2 mbbbl). The unit is currently still under primary production and, as of yet, has had no water injected into the producing formations.

In December 2018 there were 3 producing oil wells and no active water injectors in the unit. In 2017, two wells were drilled within the unit. Corex Resources filed a unit application for Virden Roselea Unit #4 in 2017, thereby creating this area as a unit. In 2018, a re-entry on an existing horizontal well was performed.

Discussion

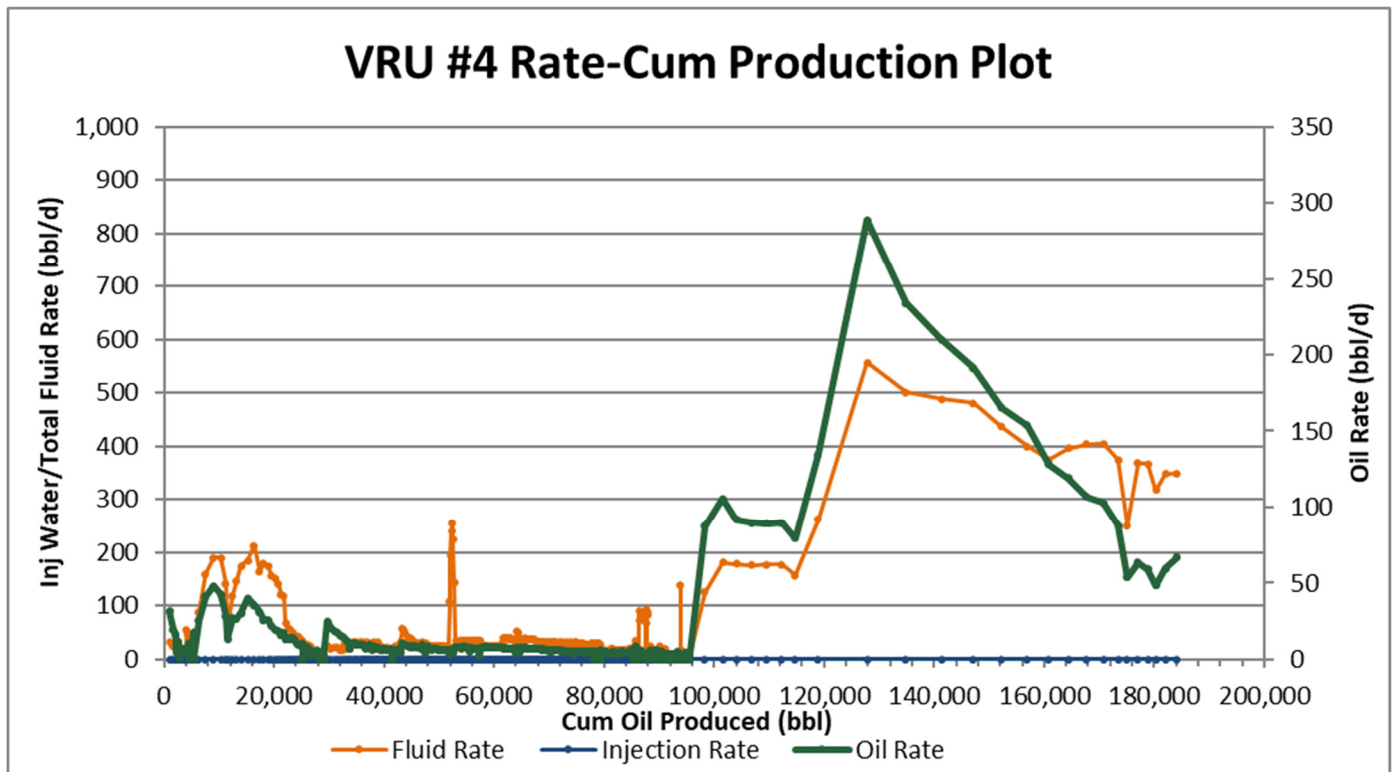
The VRU #4 was created as a unit in 2018, with the intention of further development through the implementation of a waterflood scheme.

Prior to the operatorship transferring to Corex Resources very little additional development had taken place in the unit. Four vertical producers were drilled, resulting in minimal recovery. In 2016, a very successful horizontal Scallion well was drilled in the unit, followed by an additional two wells in 2017. The intention is to progress to secondary recovery methods after a period of primary production. This unit has a low recovery factor and further development through waterflood will increase the recovery. In 2017, the producing WOR was 4 m³/m³ an increase over last year.

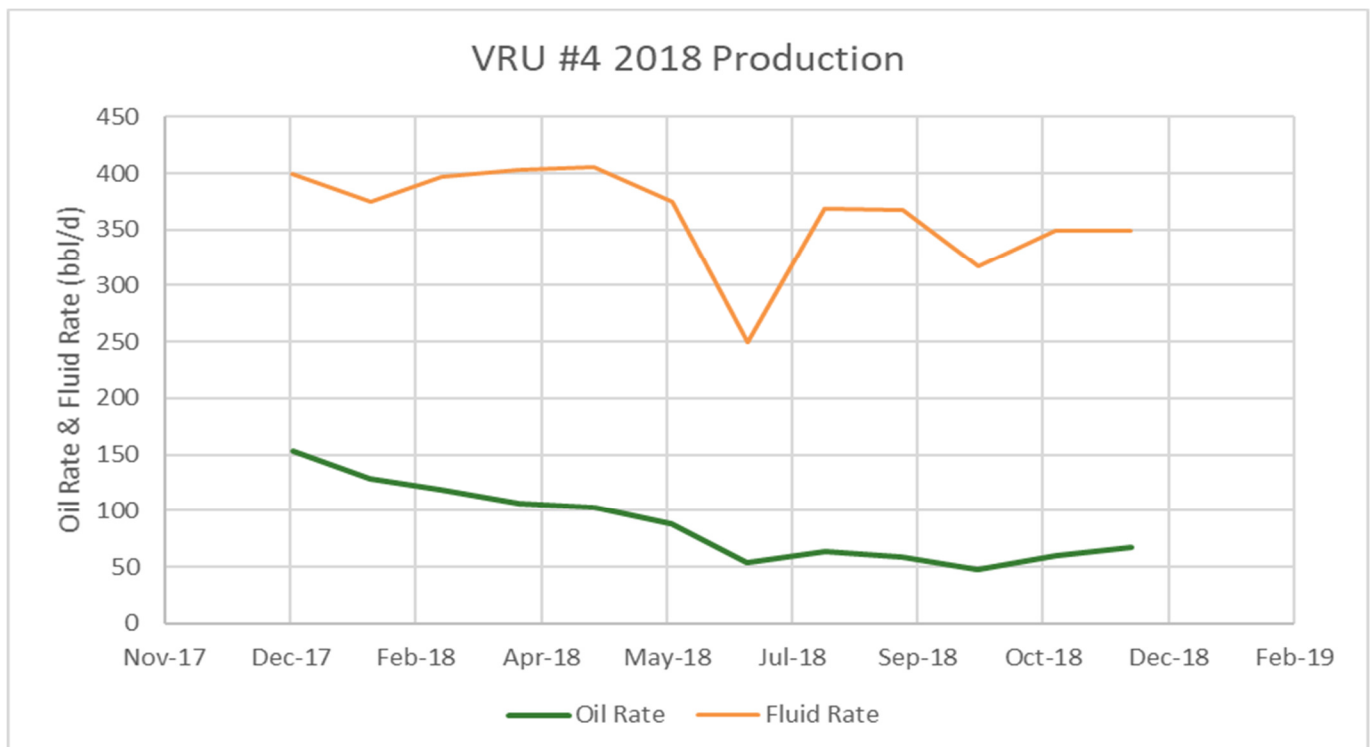
Significant events in 2018 are as follows:

- July 2018, drill a re-entry leg in the 102/06-24-010-26W1/00 horizontal well in the Oolite formation.

VRU #4 – Rate vs Cum Oil Production



VRU #4 – Rate vs Time



2018 Reservoir Pressure Surveys

Unit	UWI	License	Test Type	Date of Pressure	Duration of SI (days)	Datum BHP (kPaa)
VRU #4	102/06-24-010-26W1/00	10578	BH BU	2018-07-31	6	3,071

In 2018, one pressure was taken within the unit at around 3,100 kPa. From the pressures recorded in 2017, the average reservoir pressure was around 5,000 kPa. This is lower than the estimated initial reservoir pressure of 6,500 kPa. With further depletion due to production the reservoir pressure has noticeably decreased. This is also seen in production results with decreasing fluid production. With further production, the pressure will deplete, at which point it will be deemed that a conversion to injection is necessary. Currently, the total fluid production continues to drop, indicating that water injection will be needed at some point.

2018 Well Servicing

UWI	Unit	Licence	Operation	Date	Objective
102/06-24-010-26W1/00	VRU#4	10578	Drilling - re-entry	2018-08-04	
102/03-24-010-26W1/00	VRU#4	10672	Equip Only	2018-09-17	

Waterflood Pattern Map

