

Daly Unit No. 17
2020 Annual EOR Report

Executive Summary

In 2020, oil production in Daly Unit No. 17 averaged 23.7 m³/d (203 bbl/d) totaling 8.7 e³m³ (54.4 mbbbl). Annual production declined 43% from 2019 to 2020, this is using the average production year over year, comparing December 2019 to December 2020 the decline in production would be 43.7%. By the end of 2020 cumulative oil production from the Daly Unit No. 17 was 54.3 e³m³ (341.3 mbbbl). The unit is currently still under primary production and has had no water injected into the producing formations. However, two wells were converted to injection at the end of 2020 and will be injecting in 2021.

In December 2020 there were four producing oil wells fully within the unit and five wells that cross unit boundaries, and two wells prepped for injection. In 2017, two wells were drilled within the unit. In 2018, five crossover horizontals were drilled. In 2019, one existing horizontal well had a solvent wash to improve production. In 2020, two wells were converted to injection, but water injection has not yet commenced.

Discussion

The Daly Unit No. 17 was created as a unit in 2018, with the intention of further development through the implementation of a waterflood scheme.

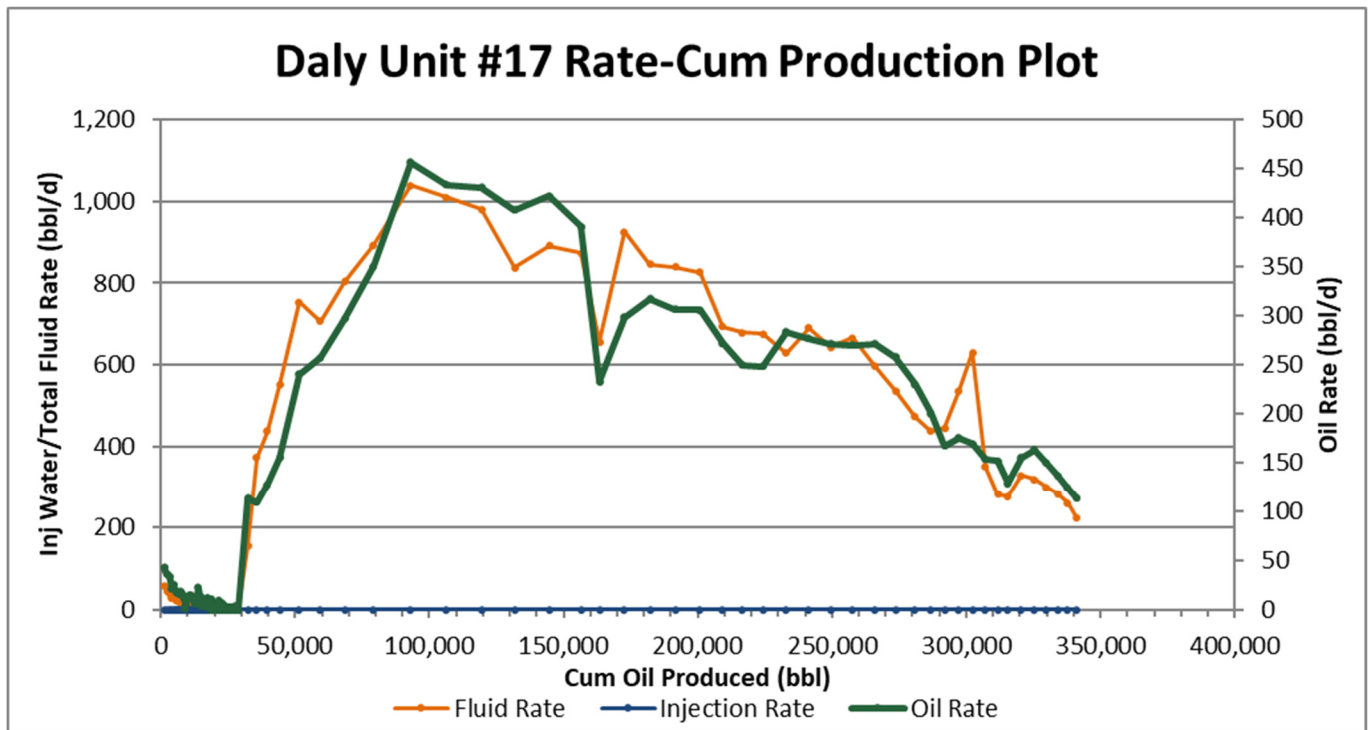
In 1954, three vertical wells were drilled and all produced for several years. In 2017, Corex was active drilling horizontal wells and completing with hydraulic fractures. The intention is to progress to secondary recovery methods after a period of primary production. This unit has a low recovery factor and further development through waterflood will increase the recovery. In 2020, the producing WOR was $1.4 \text{ m}^3/\text{m}^3$. This is slightly higher than some of the other new units as there are some wells in the northern portion of the unit that have higher watercuts than seen elsewhere.

Significant events in 2020 are as follows:

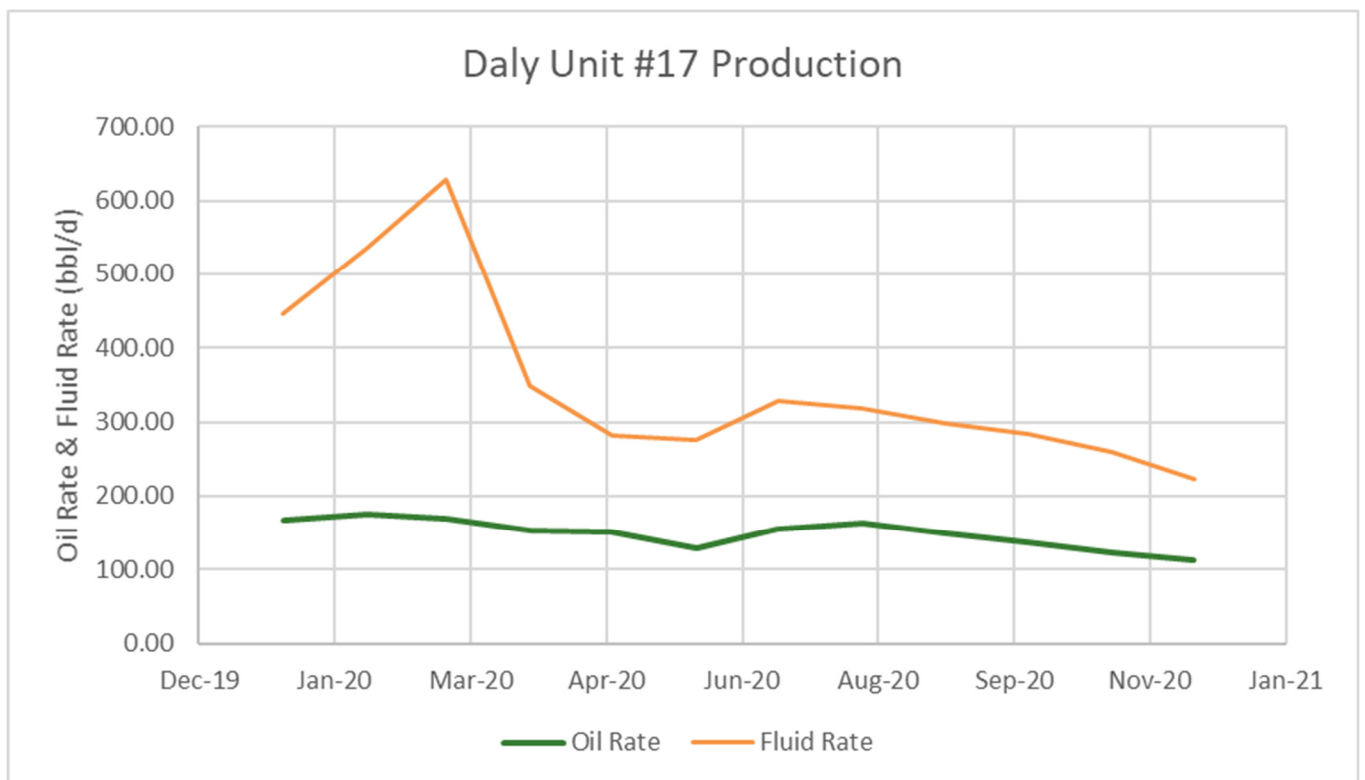
- November 2020, convert the 103/12-05-010-28W1/00 well to injection.
- November 2020, convert the 102/13-05-010-28W1/00 well to injection.

With the conversion of wells to water injection the unit will be monitored closely for response and it is expected that significant incremental reserves will be recovered.

Daly Unit #17 – Rate vs Cum Oil Production



Daly Unit #17 – Rate vs Time



2020 Reservoir Pressure Surveys

No pressures have been taken in this unit since the history of its inception. It is estimated that the initial reservoir pressure is around 7,500 kPa and the bubble point around 2,000 kPa. With the recent rapid development in the unit and the inter well spacing the reservoir pressure is likely dropping significantly. Due to the nature of the rock in this area and the lower permeability recording accurate pressures are difficult.

2020 Well Servicing

UWI	Unit	Licence	Start Date	Job Category	Primary Job Type
100/13-05-010-28W1/00	DU#17	10649	2020-06-12 7:30	Completion/Workover	Pump Repair
103/05-05-010-28W1/00	DU17 / DU1	10801	2020-10-07 16:08	Completion/Workover	Pump Repair
102/05-05-010-28W1/00	DU#17	10730	2020-01-20 14:00	Completion/Workover	Pump Repair
103/12-05-010-28W1/00	DU#17	10836	2020-11-15 11:00	Completion/Workover	Injection Conversion
100/05-05-010-28W1/00	DU#17	10729	2020-07-17 7:30	Completion/Workover	Pump Repair
102/13-05-010-28W1/00	DU#17	10650	2020-11-20 11:00	Completion/Workover	Injection Conversion