

Cromer Unit #4
2019 Annual EOR Report

Executive Summary

In 2019 oil production in Cromer Unit #4 averaged 60.9 m³/d (383 bbl/d) totaling 22.2 e³m³ (139.8 mbbbl). Annual production declined by 45.4% from 2018 to 2019, using the yearly averages. Comparing December 2018 to December 2019 the production declined by 36.3%. By the end of 2019 cumulative oil production from the Cromer Unit #4 was 90.2 e³m³ (567.1 mbbbl). The unit is currently still under primary production and has had no water injected into the producing formations.

In December 2019 there were 16 producing oil wells and no active water injectors in the unit. In 2018, an additional two wells were drilled within the unit. In 2019, no new wells were drilled within the unit.

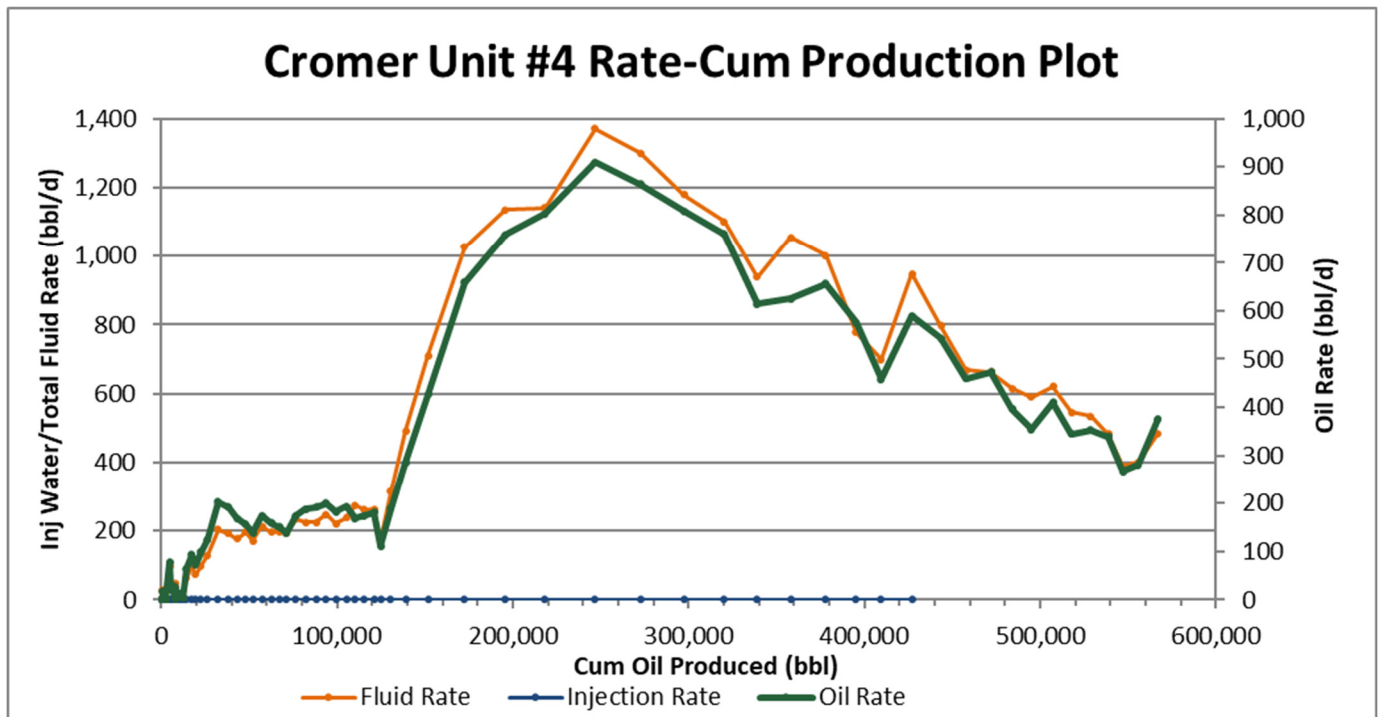
Discussion

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

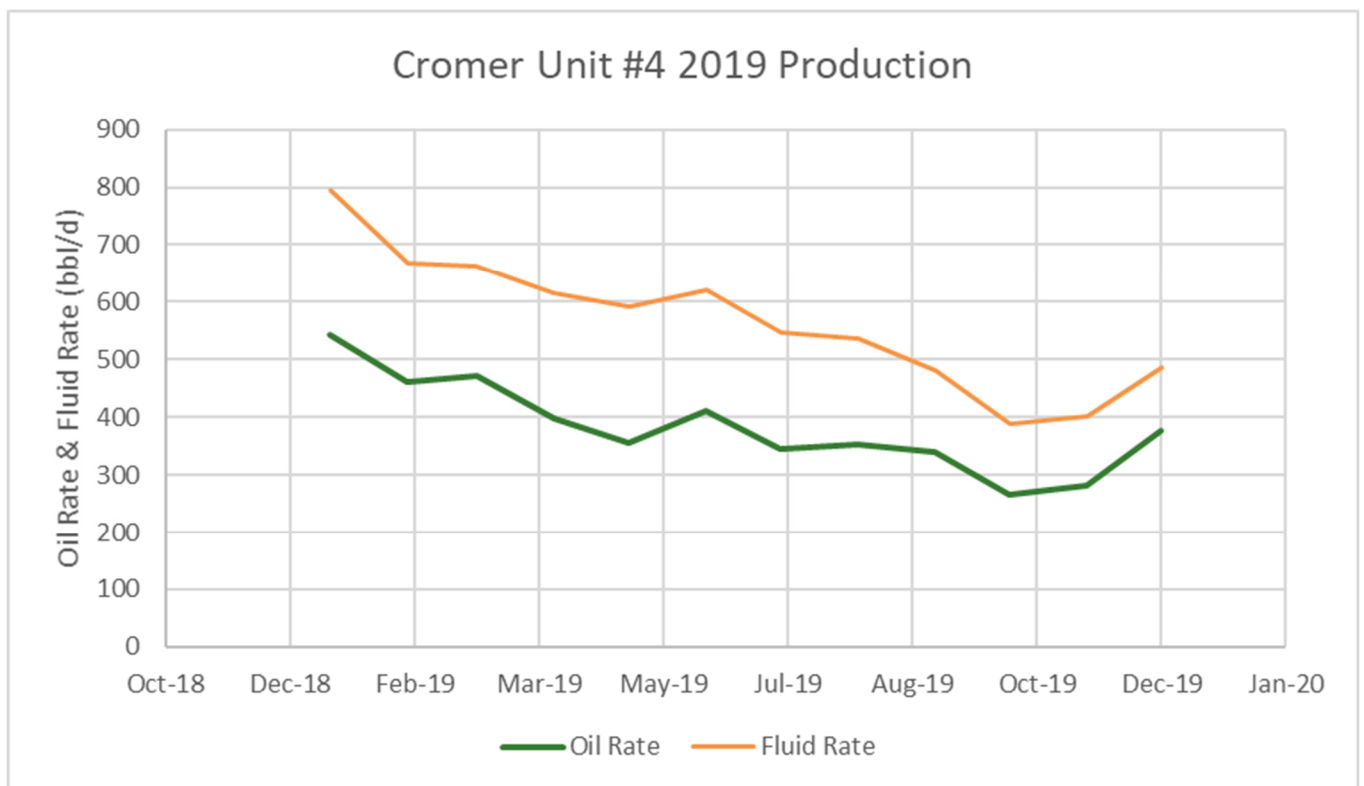
In 1954, one vertical producer was drilled, resulting in minimal recovery and another vertical was drilled a year later and left dry and abandoned. In 2006, a relatively unsuccessful open hole horizontal well was drilled. In the following years Corex was active drilling horizontal wells and completing with hydraulic fractures, resulting in much more successful wells. 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 2019, the producing WOR was $0.3 \text{ m}^3/\text{m}^3$.

In 2019 there were no significant events to report.

Cromer Unit #4 – Rate vs Cum Oil Production



Cromer Unit #4 – Rate vs Time



2019 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. When effects of a decline in pressure is seen, the implementation of a waterflood will be advantageous. Due to the nature of the rock in this area and the lower permeability recording accurate pressures are difficult.

2019 Well Servicing

UWI	Unit	Licence	Start Date	Operation	Objective
BURY LINES - 102/10-13-009-28W1/0	CROMER #4	RM19DAL010	2019-11-22	Facilities	Major Surface R&M
100/05-24-009-28W1/00	CROMER #4	10564	2019-05-22	Completion/Workover	Pump Repair
100/05-24-009-28W1/00	CROMER #4	10564	2019-09-19	Completion/Workover	Tenex Nanoclear Workover
100/05-13-009-28W1/00	DNU / CU4	11252	2019-03-22	Construction	Construction
100/05-13-009-28W1/00	DNU / CU4	11252	2019-10-15	Drilling	Drilling - original
100/05-13-009-28W1/00	DNU / CU4	11252	2019-10-21	Facilities	Equip & Tie-In
100/05-13-009-28W1/00	DNU / CU4	11252	2019-10-26	Completion/Workover	Initial Completion
104/09-24-009-28W1/00	CROMER #4	11017	2019-02-11	Completion/Workover	Pump Repair
104/09-24-009-28W1/00	CROMER #4	11017	2019-05-21	Completion/Workover	Pump Repair
104/09-24-009-28W1/00	CROMER #4	11017	2019-09-19	Completion/Workover	Tenex Nanoclear Workover
BURY LINES - 100/10-13-009-28W1/0	CROMER #4	RM19DAL009	2019-11-23	Facilities	Major Surface R&M
104/16-24-009-28W1/00	CROMER #4	10975	2019-01-25	Completion/Workover	Pump Repair
104/16-24-009-28W1/00	CROMER #4	10975	2019-09-18	Completion/Workover	Tenex Nanoclear Workover