

WASKADA UNIT NO. 13 - PM 58

Waterflood Progress Report 2020

Prepared for:

Manitoba Industry, Economic Development and Mines

Petroleum Branch

Prepared by:



TUNDRA OIL & GAS

Date: 2021-08-26

Introduction

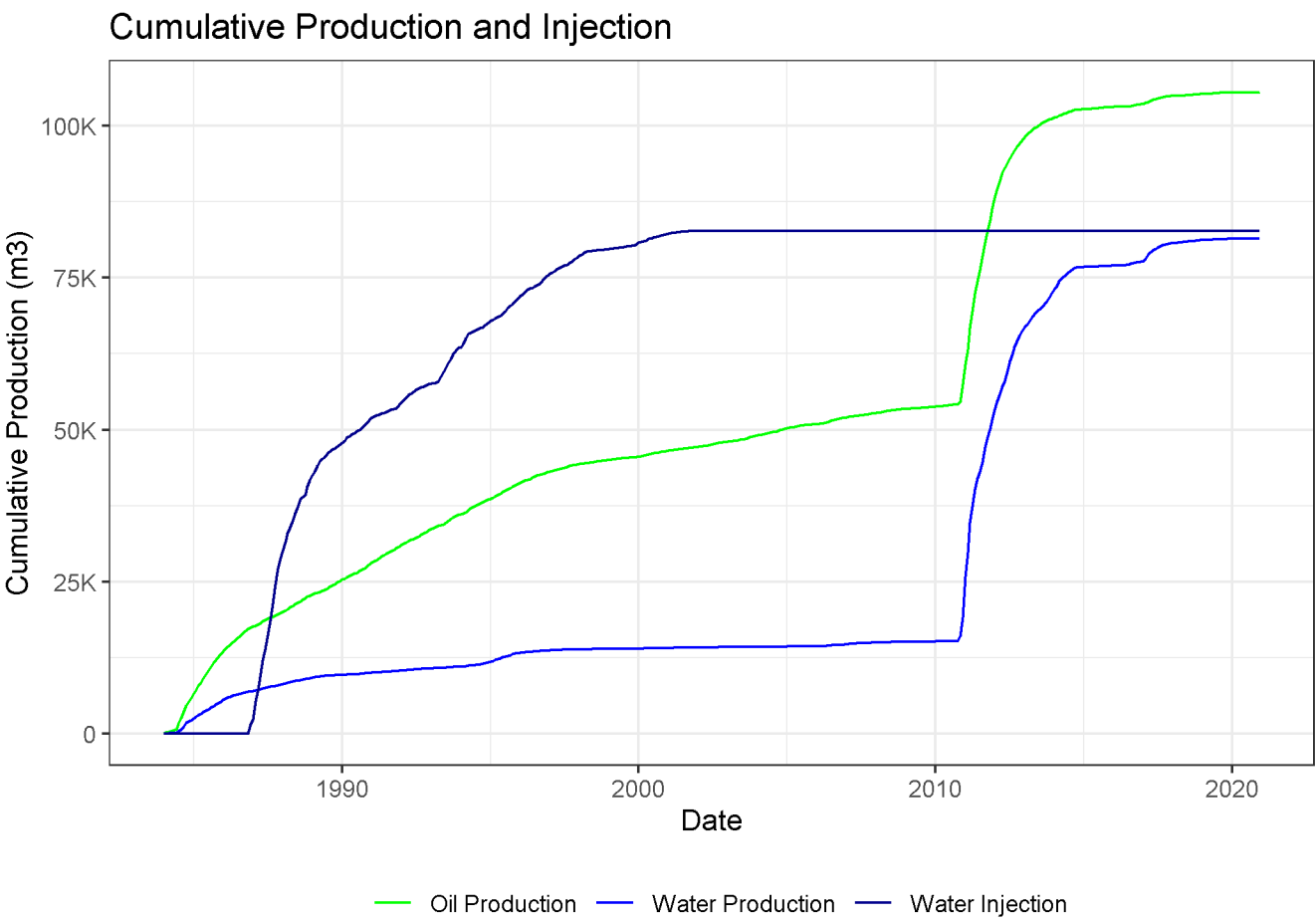
Waskada Unit No. 13 Enhanced Oil Recovery (EOR) Waterflood Project was approved under Board Order No. PM 58 effective December 1986. The Unit area contains wells in 15 LSDs in Township 2, Range 26 W1. The Unit contains 28 wells. 1 producers, 0 injectors, and 27 abandoned/suspended/other.

Monthly oil and water production rates, injection rate, GOR and WOR

MONTH	Cal Day Oil m3/d	Cal Day Water m3/d	Cal Day Injection m3/d	WOR	GOR
APR 2020	0.24	0.20	0	0.83	0
SEP 2020	0.15	0.15	0	1.00	0
OCT 2020	0.48	0.31	0	0.65	0
NOV 2020	0.37	0.24	0	0.65	0
DEC 2020	0.26	0.17	0	0.65	0
Average	0.30	0.21	0		

Year summary of produced oil, gas, water and fluid injected

Categories	m3
Oil Production	46
Water Production	33
Gas Production	0
Water Injection	0
Cumulative Oil	105,517
Cumulative Water	81,415
Cumulative Injection	82,654



Monthly Wellhead Pressure

NO INJECTION

Monthly Injected Volumes

NO INJECTION

Voidage

All Volumes are in m3 Oil Formation Volume Factor (Rm3/Sm3) = 1.17								
MONTH	Oil	Water	Injection	Cumulative Oil	Cumulative Water	Cumulative Injection	VRR	Cumulative VRR
APR 2020	7	6	0	105,482	81,398	82,653	0	0.404
SEP 2020	5	4	0	105,487	81,402	82,653	0	0.404
OCT 2020	15	10	0	105,502	81,412	82,653	0	0.403
NOV 2020	11	7	0	105,513	81,419	82,653	0	0.403
DEC 2020	8	5	0	105,521	81,424	82,653	0	0.403

Workovers

UWI	Date	Description
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Well List

UWI	Type	Status
100.01-01-002-26W1.00	Vertical	Abandoned
100.02-01-002-26W1.00	Vertical	Producing
100.03-01-002-26W1.00	Vertical	Abandoned Zone
100.04-01-002-26W1.00	Vertical	Producing
102.04-01-002-26W1.00	Horizontal	Producing
103.04-01-002-26W1.00	Horizontal	Suspended
104.04-01-002-26W1.00	Horizontal	Producing
105.04-01-002-26W1.00	Horizontal	Suspended
100.05-01-002-26W1.00	Vertical	Abandoned
102.05-01-002-26W1.00	Horizontal	Producing
103.05-01-002-26W1.00	Horizontal	Producing
104.05-01-002-26W1.00	Horizontal	Producing
105.05-01-002-26W1.00	Horizontal	Producing
100.06-01-002-26W1.00	Vertical	Producing
100.07-01-002-26W1.00	Vertical	Abandoned
100.08-01-002-26W1.00	Vertical	Abandoned
102.08-01-002-26W1.00	Horizontal	Producing
100.09-01-002-26W1.00	Vertical	Abandoned
102.09-01-002-26W1.00	Horizontal	Producing
103.09-01-002-26W1.00	Horizontal	Suspended
100.10-01-002-26W1.00	Vertical	Producing
100.11-01-002-26W1.00	Vertical	Injection
100.12-01-002-26W1.00	Vertical	Producing
102.12-01-002-26W1.00	Horizontal	Producing
100.13-01-002-26W1.00	Vertical	Abandoned
102.13-01-002-26W1.00	Horizontal	Producing
100.14-01-002-26W1.00	Vertical	Abandoned Zone
100.15-01-002-26W1.00	Vertical	Abandoned