

WASKADA UNIT NO. 1 - PM 47

Waterflood Progress Report 2020

Prepared for:

Manitoba Industry, Economic Development and Mines

Petroleum Branch

Prepared by:



TUNDRA OIL & GAS

Date: 2021-08-26

Introduction

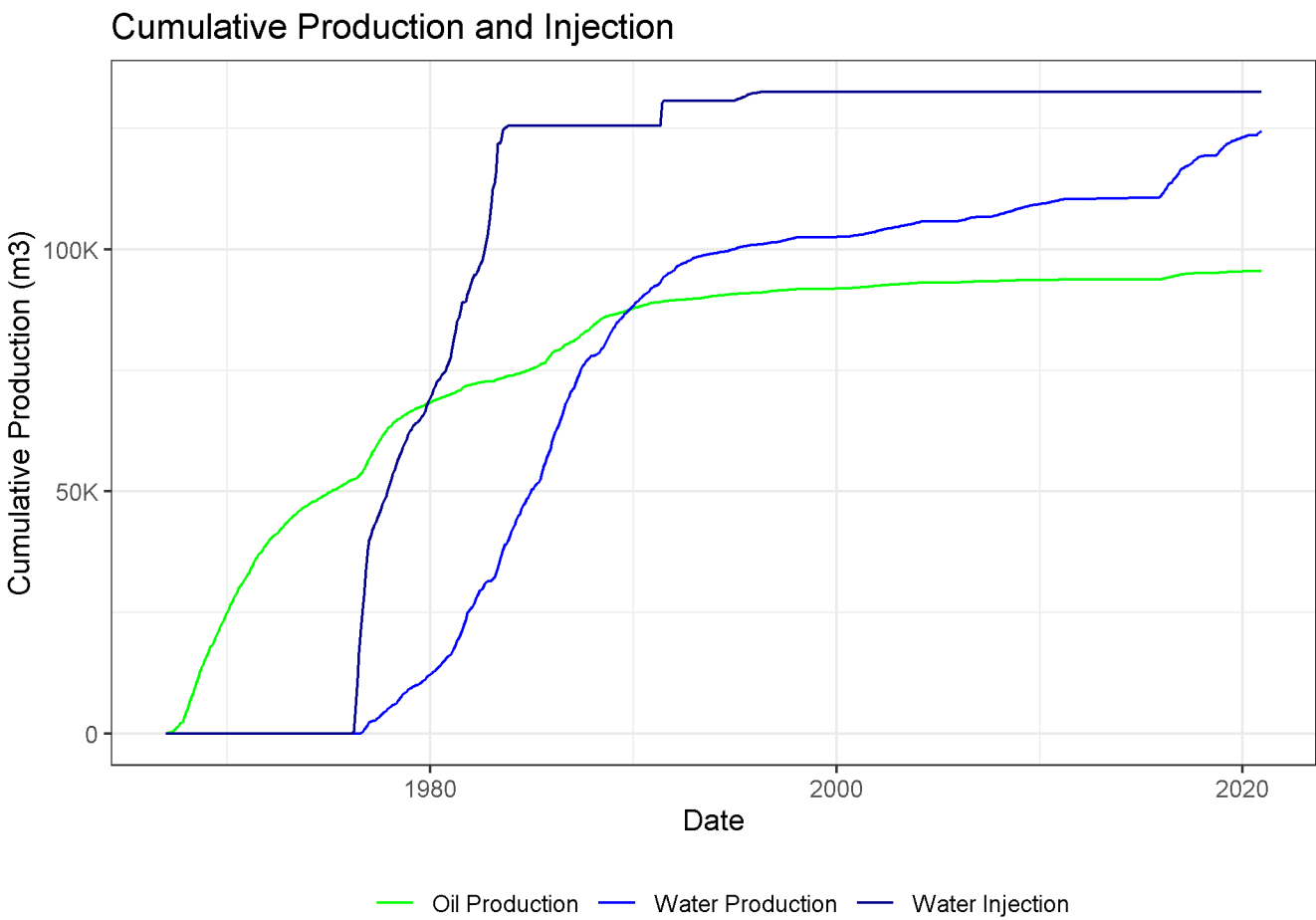
Waskada Unit No. 1 Enhanced Oil Recovery (EOR) Waterflood Project was approved under Board Order No. PM47 effective June 1976. The Unit area contains wells in 6 LSDs in Township 1 Range 25 W1. The Unit contains 7 wells. 1 producers, 0 injectors, and 6 abandoned/suspended/other.

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
JAN 2020	0.39	5.62	0	14.41	0
FEB 2020	0.47	4.53	0	9.64	0
MAR 2020	0.59	2.78	0	4.71	0
APR 2020	0.64	5.32	0	8.31	0
SEP 2020	0.08	0.77	0	9.62	0
OCT 2020	0.21	9.61	0	45.76	0
NOV 2020	0.20	10.41	0	52.05	0
DEC 2020	0.16	9.38	0	58.63	0
Average	0.34	6.05	0		

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

Categories	m3
Oil Production	83
Water Production	1,476
Gas Production	0
Water Injection	0
Cumulative Oil	95,500
Cumulative Water	124,492
Cumulative Injection	132,443



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
JAN 2020	12	174	0	95,424	123,187	132,450	0	0.564
FEB 2020	14	131	0	95,438	123,318	132,450	0	0.564
MAR 2020	18	86	0	95,456	123,404	132,450	0	0.563
APR 2020	19	160	0	95,475	123,564	132,450	0	0.563
SEP 2020	2	23	0	95,477	123,587	132,450	0	0.563
OCT 2020	7	298	0	95,484	123,885	132,450	0	0.562
NOV 2020	6	312	0	95,490	124,197	132,450	0	0.561
DEC 2020	5	291	0	95,495	124,488	132,450	0	0.561

Workovers

UWI	Date	Description
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Well List

UWI	Type	Status
100.03-30-001-25W1.00	Vertical	Abandoned Zone
100.04-30-001-25W1.00	Vertical	Abandoned
103.04-30-001-25W1.00	Horizontal	Producing
100.05-30-001-25W1.00	Vertical	Abandoned
100.06-30-001-25W1.00	Vertical	Abandoned
100.11-30-001-25W1.00	Vertical	Abandoned Zone
100.12-30-001-25W1.00	Vertical	Abandoned