

WASKADA UNIT NO. 9 - PM 49

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. 9 Enhanced Oil Recovery (EOR) Waterflood Project was approved under Board Order No. PM 49 effective April 1986. The Unit area contains wells in 8 LSDs in Township 1, Range 26 W1. The Unit contains 12 wells. 1 producers, 0 injectors, and 11 abandoned/suspended/other.

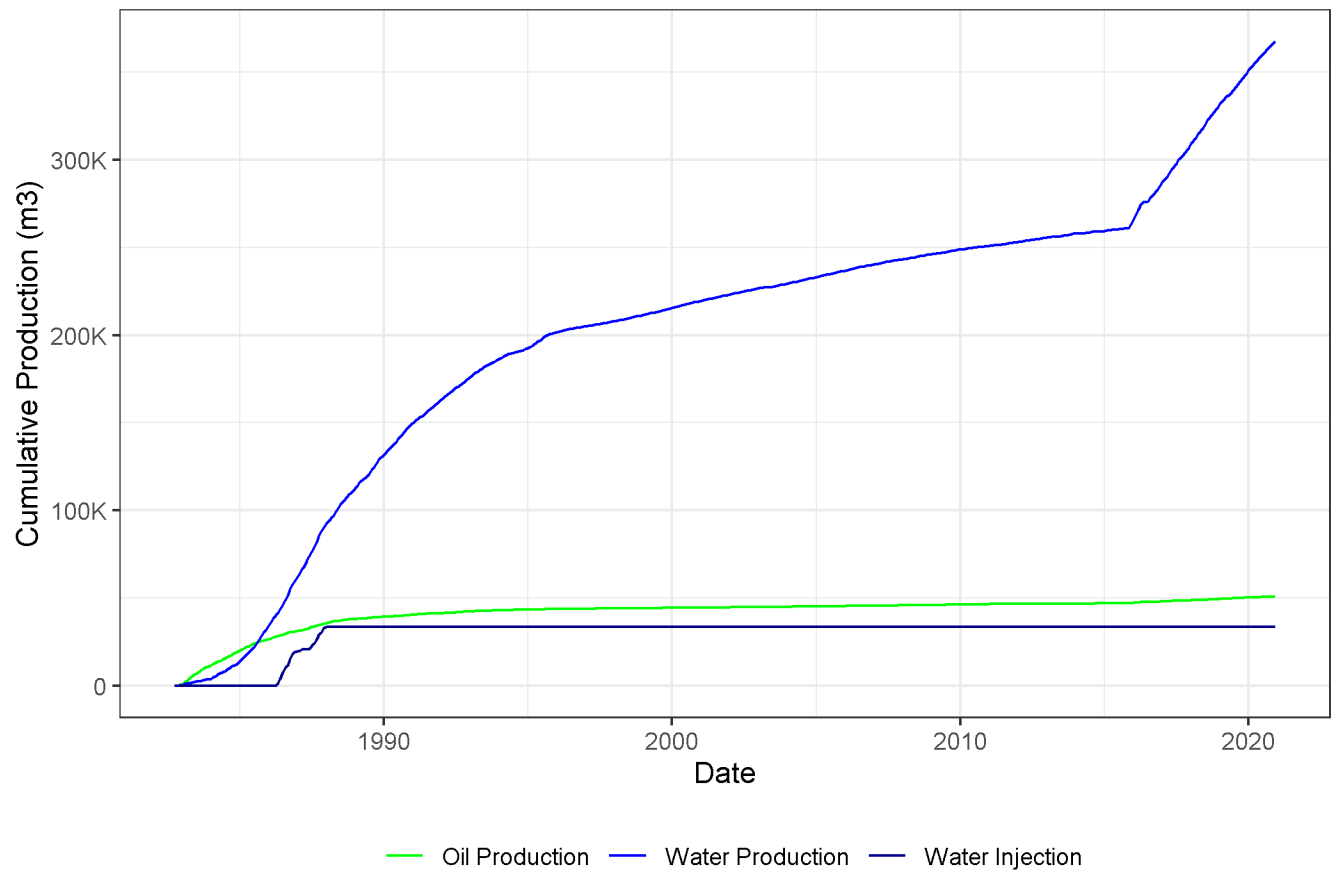
Monthly oil and water production rates, injection rate, GOR and WOR

MONTH	Cal Day Oil m3/d	Cal Day Water m3/d	Cal Day Injection m3/d	WOR	GOR
JAN 2020	2.09	56.43	0	27.00	0
FEB 2020	1.89	57.47	0	30.41	0
MAR 2020	1.27	54.67	0	43.05	0
APR 2020	1.18	47.97	0	40.65	0
MAY 2020	2.02	53.14	0	26.31	0
JUN 2020	2.51	46.73	0	18.62	0
JUL 2020	2.11	45.73	0	21.67	0
AUG 2020	1.93	52.85	0	27.38	0
SEP 2020	0.94	45.79	0	48.71	0
OCT 2020	0.53	39.14	0	73.85	0
NOV 2020	1.12	48.70	0	43.48	0
DEC 2020	1.32	45.16	0	34.21	0
Average	1.58	49.48	0		

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

Categories	m3
Oil Production	576
Water Production	18,102
Gas Production	0
Water Injection	0
Cumulative Oil	50,914
Cumulative Water	367,321
Cumulative Injection	33,525

Cumulative Production and Injection



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	65	1,749	0	50,399	350,960	33,524	0	0.082
FEB 2020	55	1,666	0	50,454	352,626	33,524	0	0.081
MAR 2020	39	1,695	0	50,493	354,321	33,524	0	0.081
APR 2020	35	1,439	0	50,528	355,760	33,524	0	0.081
MAY 2020	62	1,647	0	50,590	357,407	33,524	0	0.080
JUN 2020	75	1,402	0	50,665	358,809	33,524	0	0.080
JUL 2020	65	1,418	0	50,730	360,227	33,524	0	0.080
AUG 2020	60	1,638	0	50,790	361,865	33,524	0	0.080
SEP 2020	28	1,374	0	50,818	363,239	33,524	0	0.079
OCT 2020	16	1,213	0	50,834	364,452	33,524	0	0.079
NOV 2020	34	1,461	0	50,868	365,913	33,524	0	0.079
DEC 2020	41	1,400	0	50,909	367,313	33,524	0	0.079

Workovers

UWI	Date	Description
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Well List

UWI	Type	Status
100.11-27-001-26W1.00	Vertical	Abandoned
102.12-27-001-26W1.02	Vertical	Abandoned
100.13-27-001-26W1.00	Vertical	Abandoned
102.13-27-001-26W1.02	Vertical	Abandoned
103.13-27-001-26W1.00	Horizontal	Producing
100.14-27-001-26W1.00	Vertical	Abandoned
100.15-27-001-26W1.00	Vertical	Abandoned
102.15-27-001-26W1.02	Vertical	Abandoned
100.16-27-001-26W1.00	Vertical	Abandoned
102.16-27-001-26W1.02	Vertical	Abandoned
100.01-34-001-26W1.00	Vertical	Abandoned
100.02-34-001-26W1.00	Vertical	Abandoned