

WASKADA UNIT NO. 5 - 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

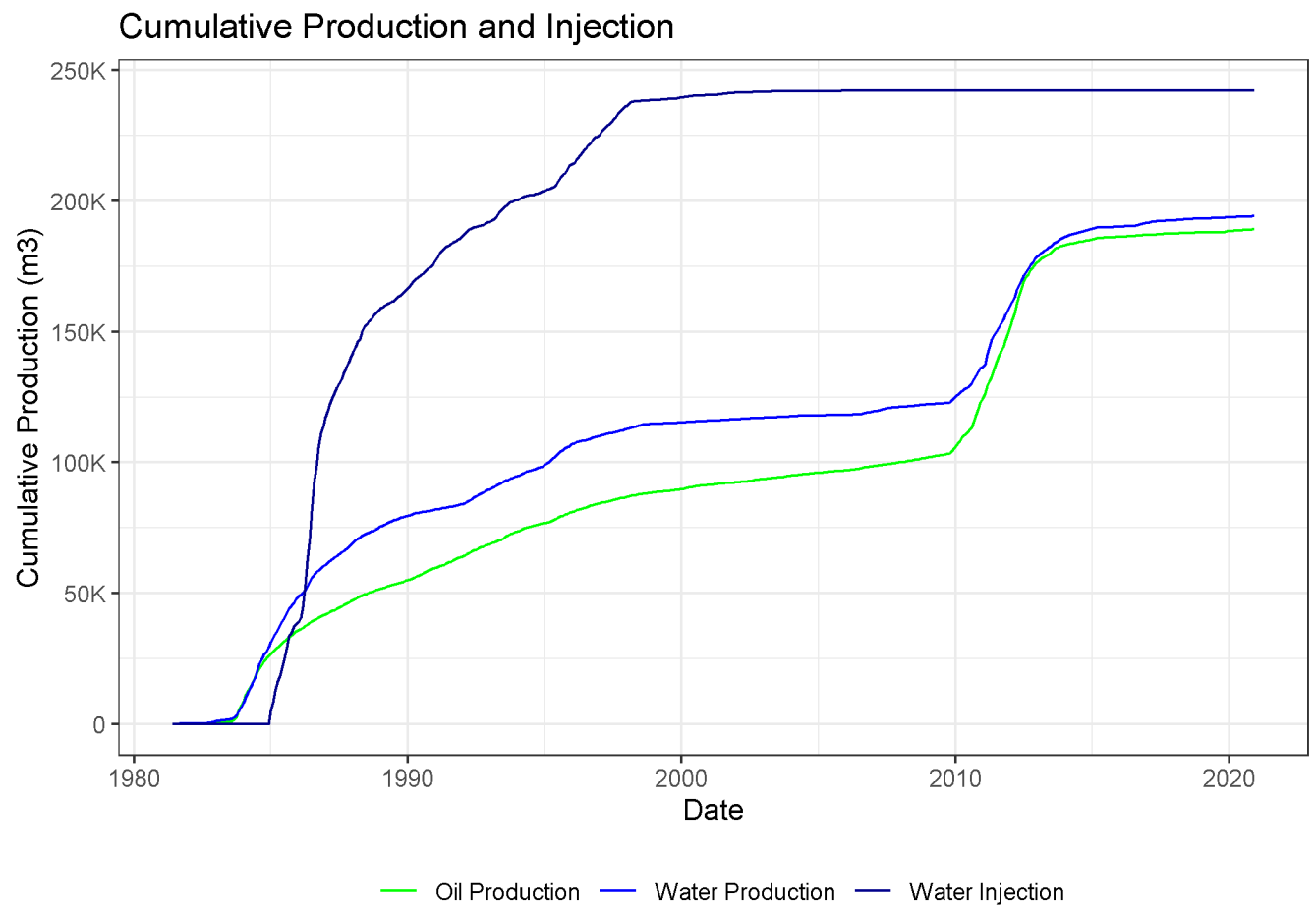
Waskada Unit No. 5 Enhanced Oil Recovery (EOR) Waterflood Project was approved under Board Order No. PM58 effective January 1985. The Unit area contains wells in 32 LSDs in Townships 1 and 2, Range 26 W1. The Unit contains 52 wells. 3 producers, 0 injectors, and 49 abandoned/suspended/other.

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	3.07	1.44	0	0.47	0
FEB 2020	2.23	1.11	0	0.50	0
MAR 2020	2.80	1.69	0	0.60	0
APR 2020	2.72	1.61	0	0.59	0
MAY 2020	1.64	1.02	0	0.62	0
JUN 2020	2.08	1.50	0	0.72	0
JUL 2020	1.77	1.61	0	0.91	0
AUG 2020	1.96	0.99	0	0.51	0
SEP 2020	2.24	0.47	0	0.21	0
OCT 2020	2.50	0.77	0	0.31	0
NOV 2020	1.99	0.59	0	0.30	0
DEC 2020	2.18	0.83	0	0.38	0
Average	2.27	1.14	0		

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

Categories	m3
Oil Production	829
Water Production	416
Gas Production	0
Water Injection	0
Cumulative Oil	189,140
Cumulative Water	194,106
Cumulative Injection	241,973



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	95	45	0	188,399	193,727	241,978	0	0.584
FEB 2020	65	32	0	188,464	193,759	241,978	0	0.584
MAR 2020	87	52	0	188,551	193,811	241,978	0	0.584
APR 2020	82	48	0	188,633	193,859	241,978	0	0.584
MAY 2020	51	32	0	188,684	193,891	241,978	0	0.584
JUN 2020	62	45	0	188,746	193,936	241,978	0	0.583
JUL 2020	55	50	0	188,801	193,986	241,978	0	0.583
AUG 2020	61	31	0	188,862	194,017	241,978	0	0.583
SEP 2020	67	14	0	188,929	194,031	241,978	0	0.583
OCT 2020	78	24	0	189,007	194,055	241,978	0	0.583
NOV 2020	60	18	0	189,067	194,073	241,978	0	0.583
DEC 2020	68	26	0	189,135	194,099	241,978	0	0.583

Workovers

UWI	Date	Description
-----	------	-------------

Well List

UWI	Type	Status
100.03-34-001-26W1.00	Vertical	Abandoned
100.04-34-001-26W1.00	Vertical	Abandoned
100.05-34-001-26W1.00	Vertical	Abandoned
100.06-34-001-26W1.00	Vertical	Abandoned Zone
102.10-34-001-26W1.00	Vertical	Abandoned
100.12-34-001-26W1.02	Vertical	Abandoned
100.13-34-001-26W1.00	Vertical	Abandoned
100.14-34-001-26W1.02	Vertical	Abandoned Zone
100.15-34-001-26W1.00	Vertical	Abandoned
100.16-34-001-26W1.00	Vertical	Abandoned
100.13-35-001-26W1.00	Vertical	Abandoned
100.14-35-001-26W1.02	Vertical	Abandoned Zone
100.15-35-001-26W1.00	Vertical	Abandoned
102.15-35-001-26W1.00	Horizontal	Suspended
103.15-35-001-26W1.00	Horizontal	Producing
100.16-35-001-26W1.00	Vertical	Abandoned Zone
100.01-02-002-26W1.00	Vertical	Producing
102.01-02-002-26W1.00	Horizontal	Suspended
103.01-02-002-26W1.00	Horizontal	Producing
100.02-02-002-26W1.00	Vertical	Abandoned Zone
102.02-02-002-26W1.00	Horizontal	Suspended
100.03-02-002-26W1.00	Vertical	Producing
102.03-02-002-26W1.00	Horizontal	Suspended
100.04-02-002-26W1.00	Vertical	Producing
102.04-02-002-26W1.00	Horizontal	Suspended
103.04-02-002-26W1.00	Horizontal	Producing
100.05-02-002-26W1.00	Vertical	Abandoned
102.05-02-002-26W1.00	Horizontal	Producing
100.06-02-002-26W1.00	Vertical	Producing
102.06-02-002-26W1.00	Horizontal	Suspended
100.07-02-002-26W1.00	Vertical	Abandoned
102.07-02-002-26W1.00	Horizontal	Producing
103.07-02-002-26W1.00	Horizontal	Suspended
100.08-02-002-26W1.00	Vertical	Abandoned Zone
100.09-02-002-26W1.00	Vertical	Abandoned
100.10-02-002-26W1.00	Vertical	Abandoned Zone
102.10-02-002-26W1.00	Horizontal	Suspended
100.11-02-002-26W1.00	Vertical	Producing
100.12-02-002-26W1.00	Vertical	Abandoned Zone
102.12-02-002-26W1.00	Horizontal	Suspended
103.12-02-002-26W1.00	Horizontal	Suspended
100.15-02-002-26W1.00	Vertical	Abandoned
100.01-03-002-26W1.00	Vertical	Abandoned

UWI	Type	Status
102.01-03-002-26W1.02	Horizontal	Suspended
100.02-03-002-26W1.00	Vertical	Abandoned
102.02-03-002-26W1.00	Horizontal	Suspended
100.03-03-002-26W1.00	Vertical	Abandoned
102.03-03-002-26W1.00	Horizontal	Producing
100.07-03-002-26W1.00	Vertical	Abandoned
102.07-03-002-26W1.00	Horizontal	Suspended
103.07-03-002-26W1.00	Horizontal	Suspended
100.08-03-002-26W1.00	Vertical	Producing