

Virden Roselea Unit No. 2
2020 Annual EOR Report

Executive Summary

In 2020, oil production in Virden Roselea Unit No. 2 (VRU #2) averaged 25.4 m³/d (160 bbl/d) totaling 9.3 e³m³ (58.4 mmbbl). Annual production declined by 36.5% from 2019 to 2020, using yearly averages. Comparing December 2019 to December 2020 the unit had a decline of 20.3%. By the end of 2020 cumulative oil production from the VRU #2 was 1,255 e³m³ (7.9 mmbbl). The original forecasted recovery was 270 e³m³ (1.7 mmbbl) on primary recovery and 730 e³m³ (4.6 mmbbl) total primary plus secondary recovery. It should be noted that the pool was expanded slightly after the original waterflood forecast was made; however, the waterflood has made a tremendous increase to the ultimate oil recovery and has exceeded the original expectations. That said, the unit is still at a low recovery and there is still potential to improve the performance and gain incremental reserves.

In December 2020 there were 34 producing oil wells and 4 water injectors active in the unit. In 2020, one dual leg horizontal well was drilled.

Discussion

The VRU #2 has been under waterflood since 1966, seven years after first production from the pool in 1959. Water injection increased the oil production rate from $\sim 60 \text{ m}^3/\text{d}$ ($\sim 377 \text{ bbl/d}$) to $\sim 150 \text{ m}^3/\text{d}$ (944 bbl/d), equivalent to peak production from the field. Expected ultimate oil recovery was increased by more than four times by the waterflood.

Prior to the operatorship transferring to Corex Resources very little additional development had taken place in the unit. From 1997- 2002, four horizontal wells were drilled in the unit, all with poor results. In 2013, a very successful Virden well was drilled in the unit. 2014 was very active: six horizontal wells, a disposal well, and a vertical producer were drilled and five vertical recompletes in the Whitewater formation were executed successfully. In 2015, one well in the Virden formation was drilled. In 2015, a poor producer, 103/16-05-011-25W1/00 was converted to injection. Currently, the pattern is being monitored for response, and some response has been seen. This is the first well to have been converted to injection since 1971. At the end of 2016 all of the old pipelines in the unit had been replaced, allowing for us to effectively set injection targets. The unit is mainly laid out in 5-spot patterns; however, there are some areas in the unit that have seen little to no waterflood support, mainly on the west side of the unit. There is the possibility of completing the remaining 5-spot patterns, but it was deemed more efficient to implement a horizontal-horizontal waterflood after drilling infill wells. This unit has a low recovery factor and has poor sweep efficiency. Changing the established patterns should help to recover incremental reserves, as at this point in time, there is a lot of water cycling. The water injection rate was $699 \text{ m}^3/\text{d}$ ($4,397 \text{ bbl/d}$) in 2020 and the producing WOR was $32.7 \text{ m}^3/\text{m}^3$. The injected water at VRU #2 is not filtered or treated in any way.

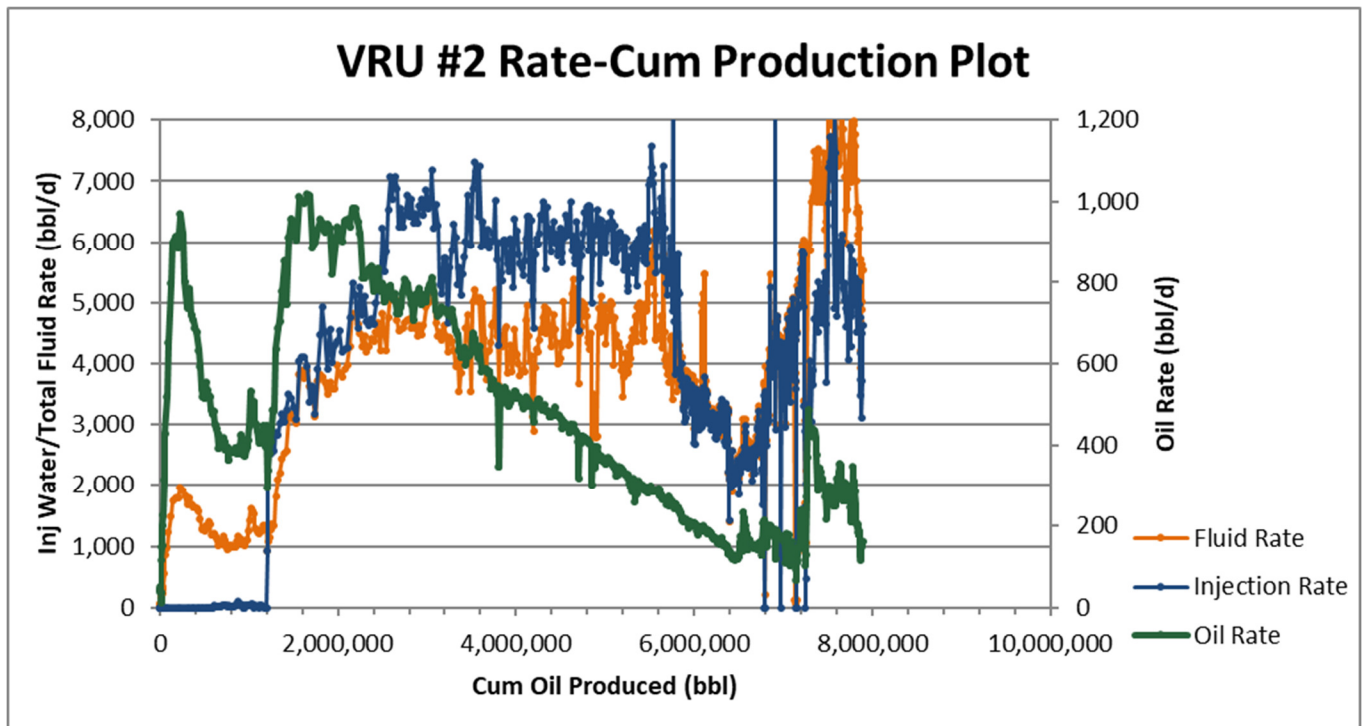
Significant events in 2020 are as follows:

- June 2020, suspend the 102/09-05-011-25W1/00 horizontal well.
- June 2020, suspend the 100/16-05-011-25W1/00 vertical well.
- October 2020, perform a water shutoff on the 103/05-31-010-25W1/00 horizontal well.
- October 2020, drill the 102/13-31-010-25W1/00 horizontal well in the Oolites/Scallion.

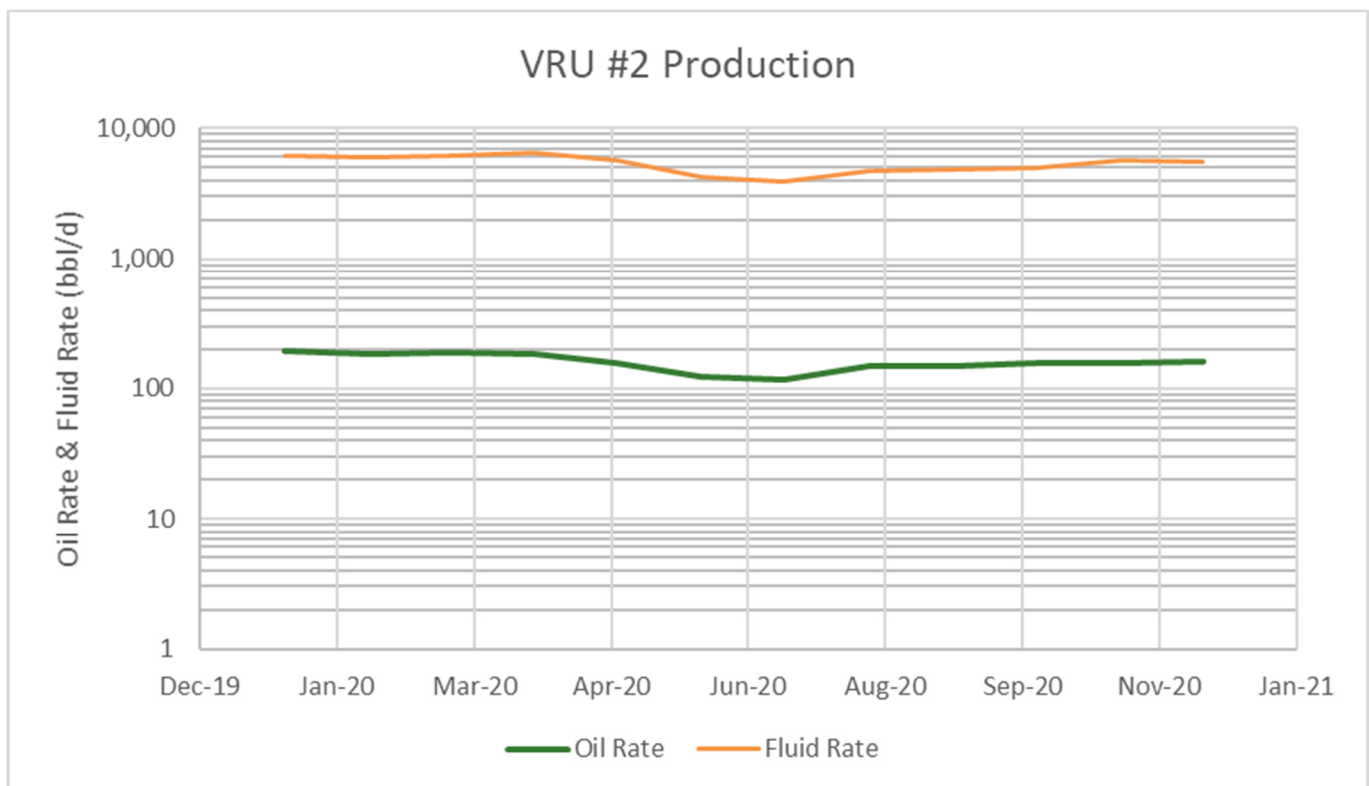
In the composite rate – cumulative oil plot below, waterflood response is clearly demonstrated at a cumulative oil production of 200 e³m³ (1.25 MMbbl).

Detailed production, injection, voidage tables and plots for the total unit and each injection pattern are at the end of this report.

VRU #2 – Rate vs Cum Oil Production



VRU #2 – Rate vs Time



2020 Reservoir Pressure Surveys

Unit	UWI	License	Test Type	Date of Pressure	Duration of SI (days)	Datum BHP (kPaa)
VRU #2	100/13-31-010-25W1/00	1784	FL Shot	2020-05-31	3074	6,322
VRU #2	100/16-36-010-26W1/00	1776	FL Shot	2020-05-31	7853	4,997
VRU #2	100/04-06-011-25W1/00	4379	FL Shot	2020-05-31	244	6,875
VRU #2	100/07-06-011-25W1/00	1772	FL Shot	2020-05-31	183	7,332
VRU #2	100/13-06-011-25W1/00	2238	FL Shot	2020-05-31	180	3,809
VRU #2	100/08-12-011-26W1/00	2311	FL Shot	2020-06-03	1525	4,510

In 2020, six pressures were taken giving an average reservoir pressure of ~5,600 kPa. In 2018, seven pressures were taken, the average of this pressure survey is around 4,900 kPa. It is unlikely that these surveys are representative of the average unit pressure. Past surveys have consistently indicated that the unit is over pressured. Some injection wells have been shut-in to reduce the pressure in the unit, and the disposal well has allowed Corex to attempt to balance the flood by setting injection targets, lowering the overall pressure of the pool. Therefore, a reduction in pressure may be plausible within the unit. The pool is still over pressured as vertical wells even far away from injection have high pressure and suspended wells can hold fluid to surface for years. It is hoped that the high pressure will help improve production in the new producers. We may also need to reconsider the previous notion that a significant portion of the injected water has gone out of zone. The water still may have gone out of zone, resulting in poor sweep efficiency and the overall low recovery in the unit, but it did not appear to entirely leave the system and has therefore pressured up the unit. That being said, in recent years the injection has not kept up with voidage and the pressure may be declining, but it will vary by area.

Pressures taken from 2010 and 2011 ranged from 6,000 kPaa to 11,218 kPaa. The pressures for VRU #2 taken over the years are very variable resulting in a large array of pressures and uncertainty in the average pool pressure. As the pressures vary with area, and possibly by formation, it is unlikely we will be able to record consistent pressures. As the voidage replacement ratio (VRR) has been less than one for the year so we will see a decline in the unit pressure. However, individual patterns have been over injecting or under injecting resulting in variable pressures by pattern.

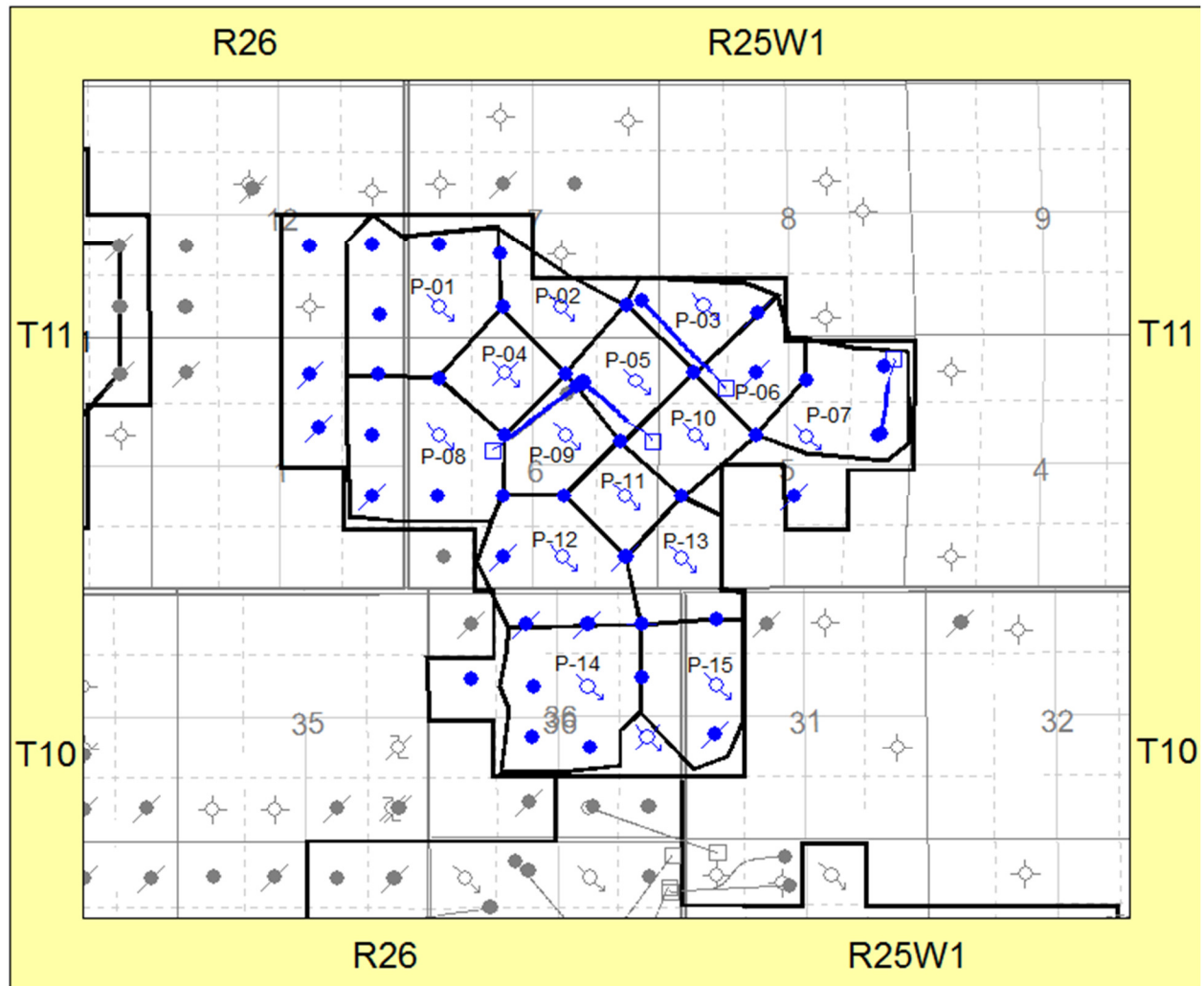
The VRR in 2020 varied from 0.57 to 0.86 for a maximum. Currently, the disposal well is taking large volumes of water, enabling us to balance the flood in other areas. It is hoped that the ability to balance the patterns will result in improved sweep efficiency.

The cumulative VRR at year end dropped slightly to 1.04, this number is misleading, as while the cumulative VRR within the unit is close to 1.0 there is a large discrepancy based on a pattern basis, with some patterns being significantly over or under injected in. An oil formation volume factor of $1.06 \text{ m}^3/\text{m}^3$ and a water formation volume factor of $1.04 \text{ m}^3/\text{m}^3$ were used in the VRR calculations.

2020 Well Servicing

UWI	Unit	Licence	Start Date	Job Category	Primary Job Type
103/05-31-010-25W1/00	VRU#2	11308	2020-01-06 7:30	Completion/Workover	Upsize Pump
PIPELINE REPLACEMENT - 02-06- 11-25	VRU#2	FF20VIR002	2020-02-11 7:49	Facilities	Pipeline / Flowline Replacement
102/13-31-010-25W1/00	VRU#2	11437	2020-02-28 16:00	Construction	Construction
103/05-31-010-25W1/00	VRU#2	11308	2020-03-03 7:30	Completion/Workover	Upsize Pump
102/13-31-010-25W1/00	VRU#2	11437	2020-05-11 0:00	Facilities	Equip & Tie-In
TURNAROUND - 02-06- 011-25 BATTERY	VRU#2	T20VIR001	2020-06-01 9:04	Facilities	Turnaround
SPILL RESPONSE - 14-25- 10-26 FLOWLINE LEAK	VRU#2	SR20VIR001	2020-06-16 13:49	Facilities	Spill Response
102/03-07-011-25W1/00	VRU#2	10677	2020-06-19 7:30	Completion/Workover	Pump Repair
102/09-05-011-25W1/00	VRU#2	005125	2020-06-27 6:30	Completion/Workover	Suspension
100/16-05-011-25W1/00	VRU#2	002103	2020-06-29 7:30	Completion/Workover	Suspension
102/05-31-010-25W1/00	VRU#2	10966	2020-07-06 7:30	Completion/Workover	Swab & Evaluate
102/10-01-011-26W1/00	VRU#2	10689	2020-07-09 14:30	Completion/Workover	Pump Repair
SPILL RESPONSE - 10-06- 11-25 to 12-05-11-25 INJECT	VRU#2	SR20VIR002	2020-07-19 11:01	Facilities	Spill Response
VRU2 10-06 TO 12-05-11- 25 Injection Line Replacement	VRU#2	P20VIR008	2020-07-20 8:37	Facilities	Pipeline / Flowline Replacement
103/05-31-010-25W1/00	VRU#2	11308	2020-10-08 7:30	Completion/Workover	Water Shut Off
102/13-31-010-25W1/00	VRU#2	11437	2020-10-17 8:00	Drilling	Drilling - original
102/13-31-010-25W1/00	VRU#2	11437	2020-10-27 12:00	Completion/Workover	Initial Completion
102/13-05-011-25W1/00	VRU#2	9879	2020-11-26 14:30	Completion/Workover	Pump Repair
FLOWLINE REPLACEMENT - 02-06- 11-25 TO 07-06-11-25	VRU#2	P20VIR010	2020-11-30 0:00	Facilities	Pipeline / Flowline Replacement

Waterflood Pattern Map

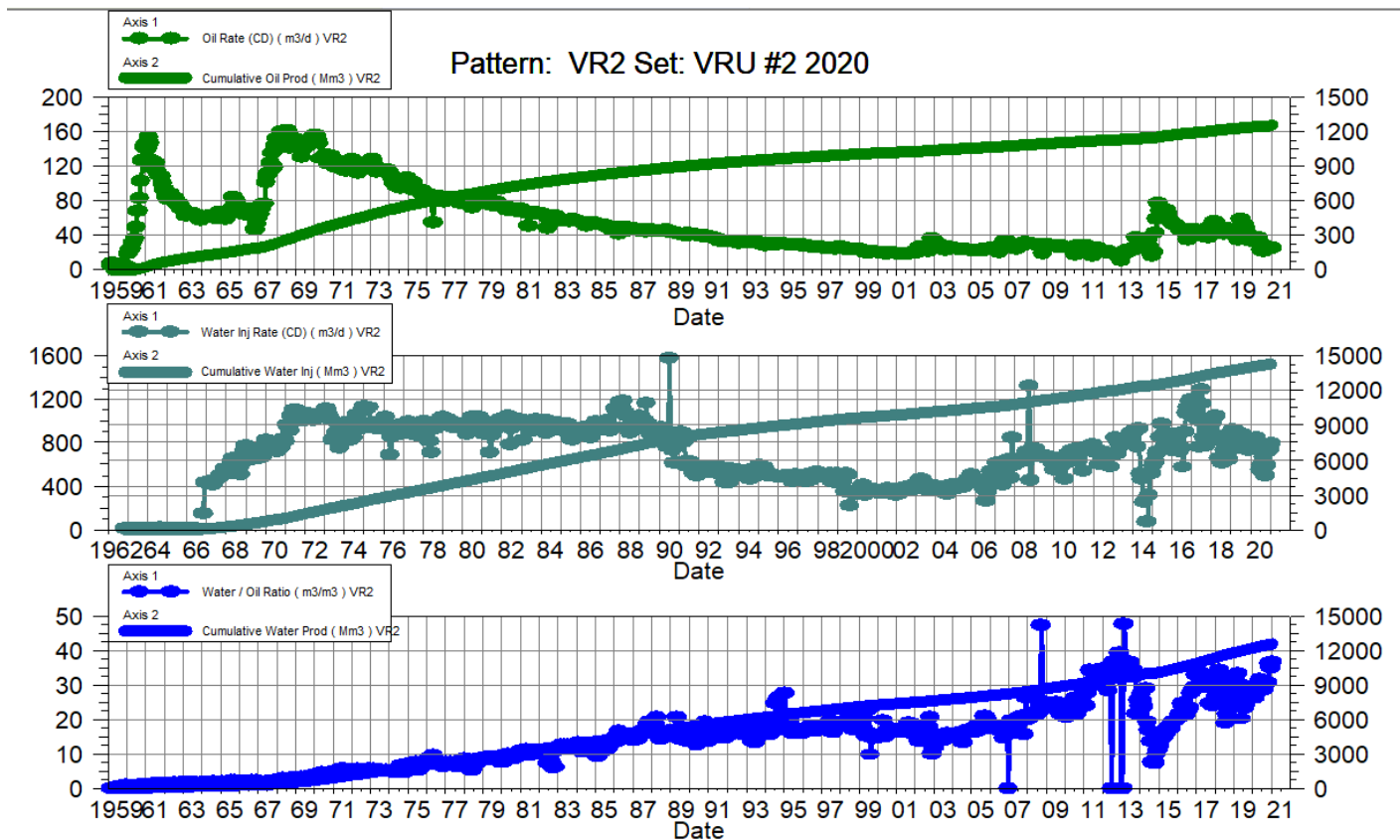


Waterflood Patterns and Corresponding Injectors

Pattern	Injection Well
P-01	100/04-07-011-25W1/00
P-02	100/02-07-011-25W1/00
P-03	100/04-08-011-25W1/00
P-04	100/14-06-011-25W1/00
P-05	100/16-06-011-25W1/00
P-06	100/14-05-011-25W1/00
P-07	100/10-05-011-25W1/00, 103/16-05-011-25W1/00
P-08	100/12-06-011-25W1/00
P-09	100/10-06-011-25W1/00
P-10	100/12-05-011-25W1/00
P-11	100/08-06-011-25W1/00
P-12	100/02-06-011-25W1/00
P-13	100/04-05-011-25W1/00
P-14	100/10-36-010-26W1/00
P-15	100/12-31-010-25W1/00

Total for Virden Roselea Unit #2

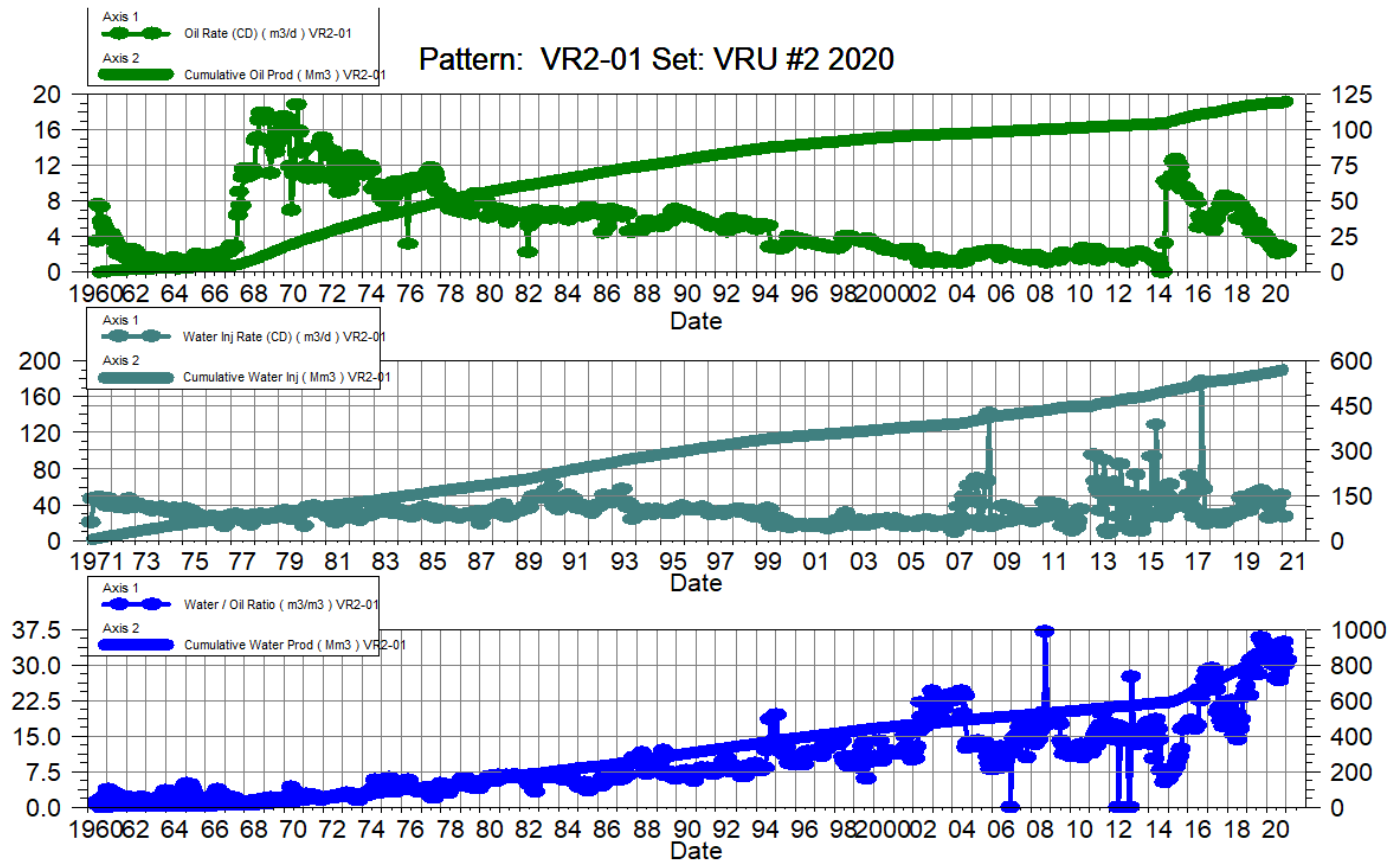
Date	Oil Rate (CD) m3/d	Cum Oil Prod Mm3	Water Rate (CD) m3/d	Cum Water Prod Mm3	Water Inj Rate (CD) m3/d	Cum Water Inj Mm3	Water Oil Ratio m3/m3	Voidage Replacement Ratio	Cum Voidage Replacement Ratio	Water Inj Pressure kPa
1-31-2020	38.1	1247.09	1007.0	12212.32	817.06	14107.4	26.41	0.78	1.05	4,885.71
2-29-2020	38.2	1248.20	997.0	12241.23	827.17	14131.4	26.09	0.80	1.05	4,885.71
3-31-2020	37.8	1249.37	1031.6	12273.21	790.42	14155.9	27.33	0.74	1.05	4,885.71
4-30-2020	37.4	1250.49	1101.2	12306.25	850.74	14181.4	29.43	0.75	1.04	4,885.71
5-31-2020	30.5	1251.44	963.6	12336.12	757.68	14204.9	31.63	0.76	1.04	4,885.71
6-30-2020	22.9	1252.12	704.1	12357.24	552.02	14221.5	30.81	0.76	1.04	4,885.71
7-31-2020	21.6	1252.79	667.3	12377.93	593.59	14239.9	30.89	0.86	1.04	4,714.63
8-31-2020	28.0	1253.66	800.3	12402.74	664.46	14260.5	28.63	0.80	1.04	4,691.47
9-30-2020	27.5	1254.49	832.7	12427.72	493.90	14275.3	30.26	0.57	1.04	4,757.14
10-31-2020	25.2	1255.27	773.1	12451.68	589.48	14293.5	30.64	0.74	1.04	4,764.75
11-30-2020	24.8	1256.01	901.2	12478.72	715.37	14315.0	36.36	0.77	1.04	4,991.90
12-31-2020	26.1	1256.82	913.4	12507.03	735.97	14337.8	34.96	0.78	1.04	4,965.67



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Pattern P-01 - 00/04-07-011-25W1/0

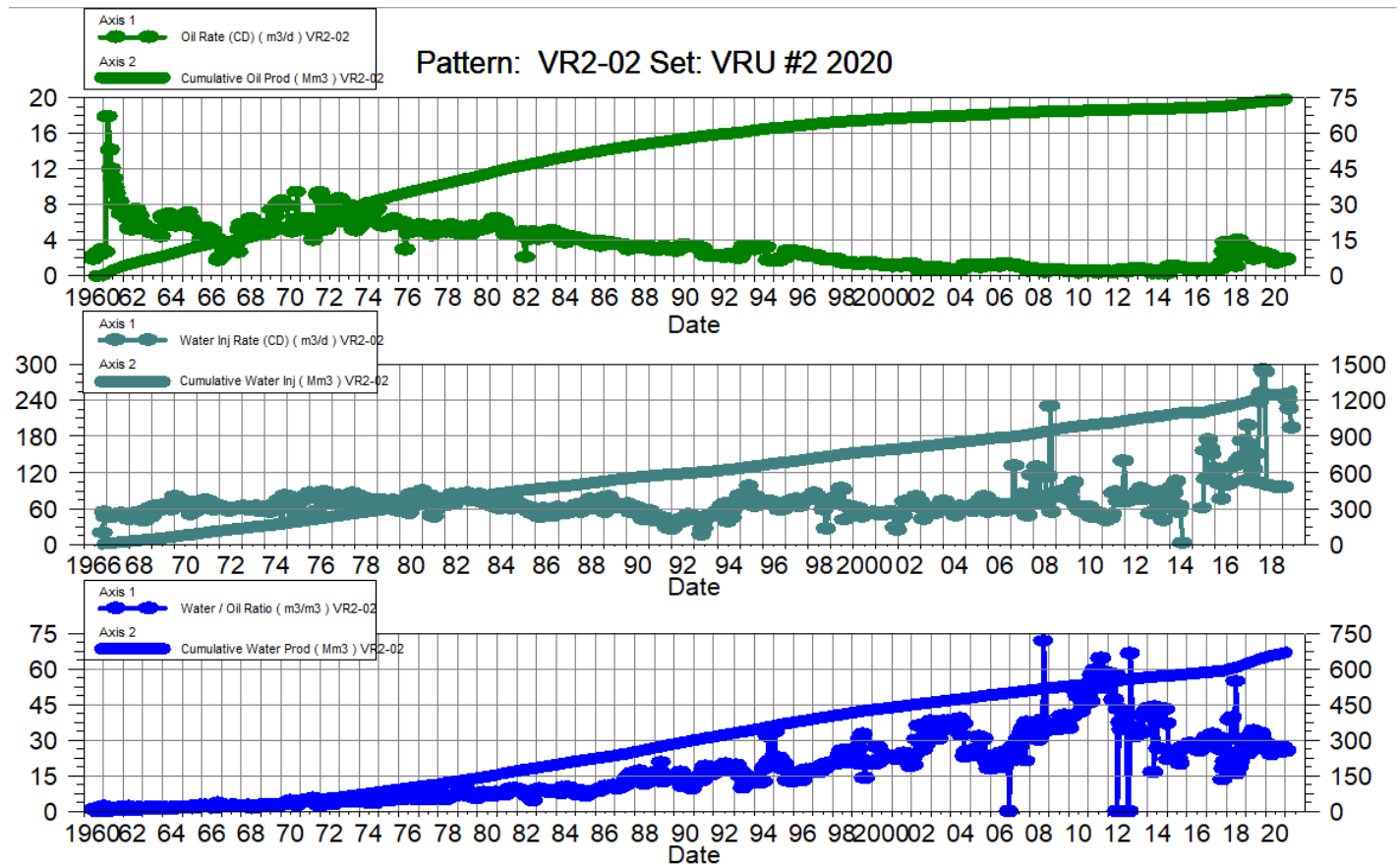
Date	Oil Rate (CD) m3/d	Cum Oil Prod Mm3	Water Rate (CD) m3/d	Cum Water Prod Mm3	Water Inj Rate (CD) m3/d	Cum Water Inj Mm3	Water Oil Ratio m3/m3	Voidage Replacement Ratio	Cum Voidage Replacement Ratio	Water Inj Pressure kPa
1-31-2020	3.7	118.88	122.80	848.95	54.42	556.7	33.22	0.43	0.57	3,700.00
2-29-2020	3.4	118.97	115.20	852.29	55.10	558.27	34.28	0.46	0.57	3,700.00
3-31-2020	3.2	119.07	102.80	855.48	48.38	559.77	32.02	0.46	0.57	3,700.00
4-30-2020	2.9	119.16	94.56	858.32	52.13	561.34	33.18	0.54	0.57	3,700.00
5-31-2020	2.9	119.25	86.32	860.99	41.58	562.62	29.95	0.47	0.57	3,700.00
6-30-2020	2.3	119.32	63.28	862.89	25.16	563.38	27.14	0.38	0.57	3,700.00
7-31-2020	2.1	119.38	56.89	864.65	37.23	564.53	27.00	0.63	0.57	4,309.68
8-31-2020	3.0	119.48	80.45	867.15	38.87	565.74	26.58	0.47	0.57	4,400.00
9-30-2020	2.9	119.56	80.91	869.58	38.53	566.89	28.02	0.46	0.57	4,400.00
10-31-2020	2.4	119.64	77.63	871.98	38.87	568.1	32.05	0.49	0.57	4,448.39
11-30-2020	2.3	119.71	81.58	874.43	48.53	569.56	34.80	0.58	0.57	5,900.00
12-31-2020	2.6	119.79	76.32	876.80	49.76	571.1	29.90	0.63	0.57	5,906.45



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Pattern P-02 - 00/02-07-011-25W1/0

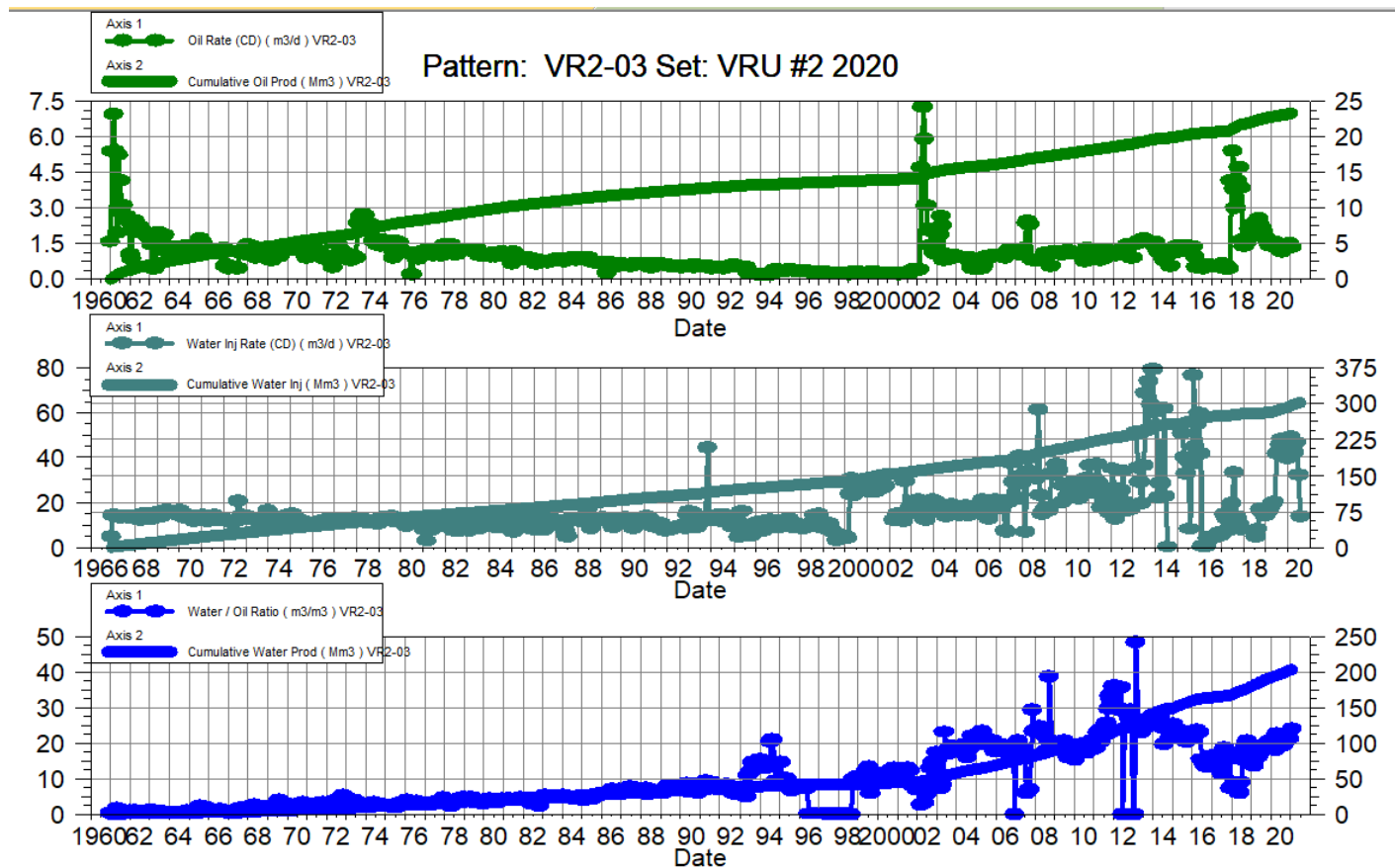
Date	Oil Rate (CD) m3/d	Cum Oil Prod Mm3	Water Rate (CD) m3/d	Cum Water Prod Mm3	Water Inj Rate (CD) m3/d	Cum Water Inj Mm3	Water Oil Ratio m3/m3	Voidage Replacement Ratio	Cum Voidage Replacement Ratio	Water Inj Pressure kPa
1-31-2020	2.49	73.76	70.56	650.27		1281.78	28.34		1.77	6,300.00
2-29-2020	2.30	73.83	63.32	652.10		1281.78	27.59		1.76	6,300.00
3-31-2020	2.25	73.90	58.17	653.91		1281.78	25.90		1.76	6,300.00
4-30-2020	2.26	73.97	53.93	655.53		1281.78	23.82		1.75	6,300.00
5-31-2020	1.96	74.03	48.28	657.02		1281.78	24.69		1.75	6,300.00
6-30-2020	1.49	74.07	37.25	658.14		1281.78	24.97		1.75	6,300.00
7-31-2020	1.48	74.12	37.34	659.30		1281.78	25.19		1.74	6,300.00
8-31-2020	1.79	74.17	44.20	660.67		1281.78	24.64		1.74	6,300.00
9-30-2020	1.75	74.23	46.69	662.07		1281.78	26.65		1.74	6,300.00
10-31-2020	1.89	74.28	47.09	663.53		1281.78	24.98		1.73	6,300.00
11-30-2020	1.82	74.34	49.31	665.01		1281.78	27.05		1.73	6,300.00
12-31-2020	1.73	74.39	44.65	666.39		1281.78	25.80		1.73	6,300.00



Virden Roselea Unit No. 2

Pattern P-03 - 00/04-08-011-25W1/0

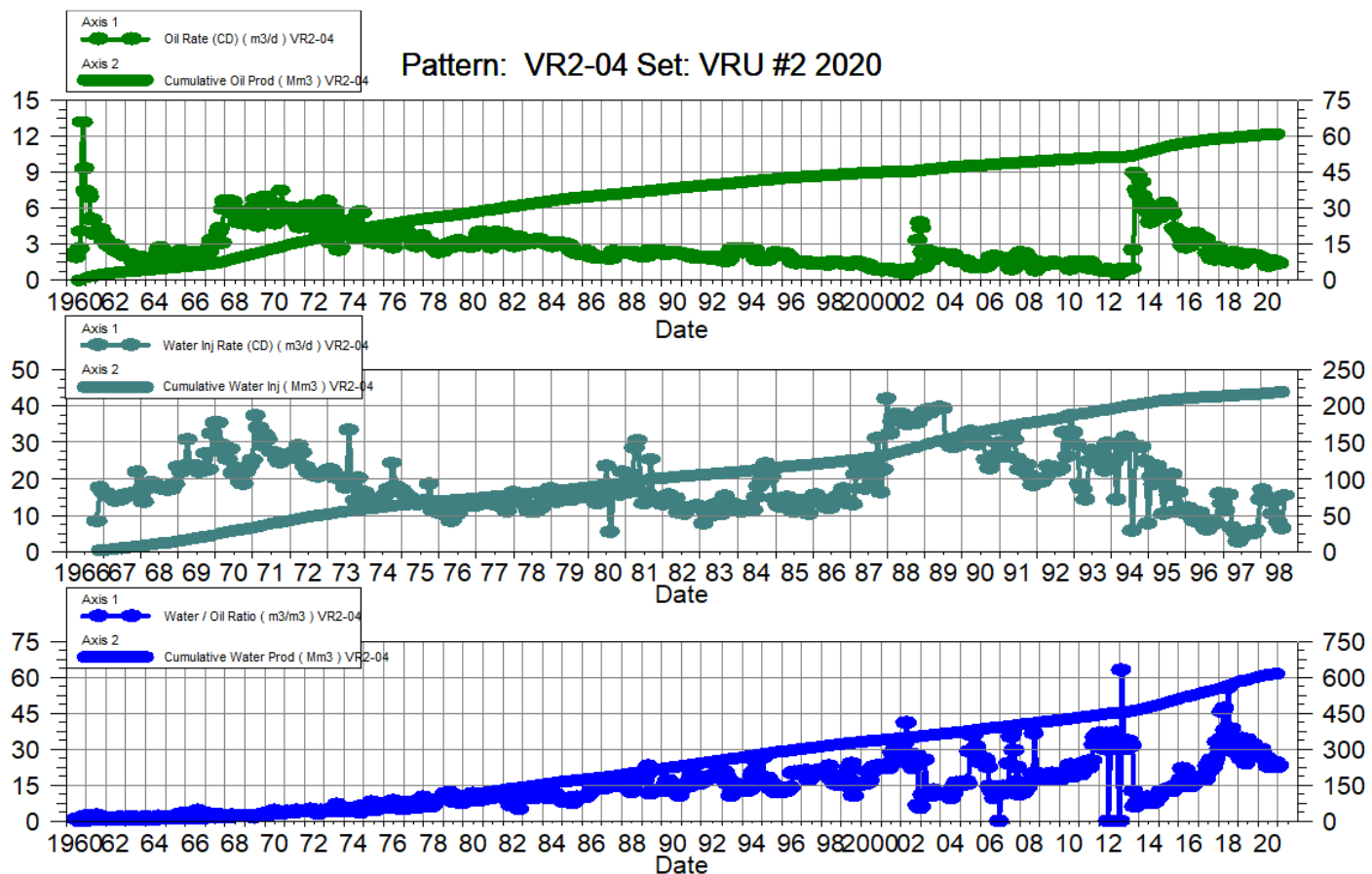
Date	Oil Rate (CD) m3/d	Cum Oil Prod Mm3	Water Rate (CD) m3/d	Cum Water Prod Mm3	Water Inj Rate (CD) m3/d	Cum Water Inj Mm3	Water Oil Ratio m3/m3	Voidage Replacement Ratio	Cum Voidage Replacement Ratio	Water Inj Pressure kPa
1-31-2020	1.46	22.88	28.59	192.64	47.26	296.14	19.57	1.57	1.37	6,000.00
2-29-2020	1.44	22.92	28.36	193.47	49.14	297.56	19.75	1.65	1.37	6,000.00
3-31-2020	1.56	22.97	27.91	194.33	44.10	298.93	17.87	1.50	1.37	6,000.00
4-30-2020	1.46	23.01	32.93	195.32	42.33	300.20	22.64	1.23	1.37	6,000.00
5-31-2020	1.49	23.06	32.33	196.32	46.90	301.66	21.70	1.39	1.37	6,000.00
6-30-2020	1.21	23.09	24.67	197.06	32.19	302.62	20.37	1.24	1.37	6,000.00
7-31-2020	1.17	23.13	24.88	197.83	13.84	303.05	21.19	0.53	1.37	5,738.71
8-31-2020	1.46	23.18	27.92	198.70		303.05	19.15		1.36	5,700.00
9-30-2020	1.25	23.21	25.98	199.48		303.05	20.77		1.36	5,700.00
10-31-2020	1.49	23.26	30.43	200.42		303.05	20.43		1.35	5,700.00
11-30-2020	1.39	23.30	31.01	201.35		303.05	22.27		1.35	5,700.00
12-31-2020	1.49	23.35	31.52	202.33		303.05	21.10		1.34	5,700.00



Virden Roselea Unit No. 2

Pattern P-04 - 00/14-06-011-25W1/0

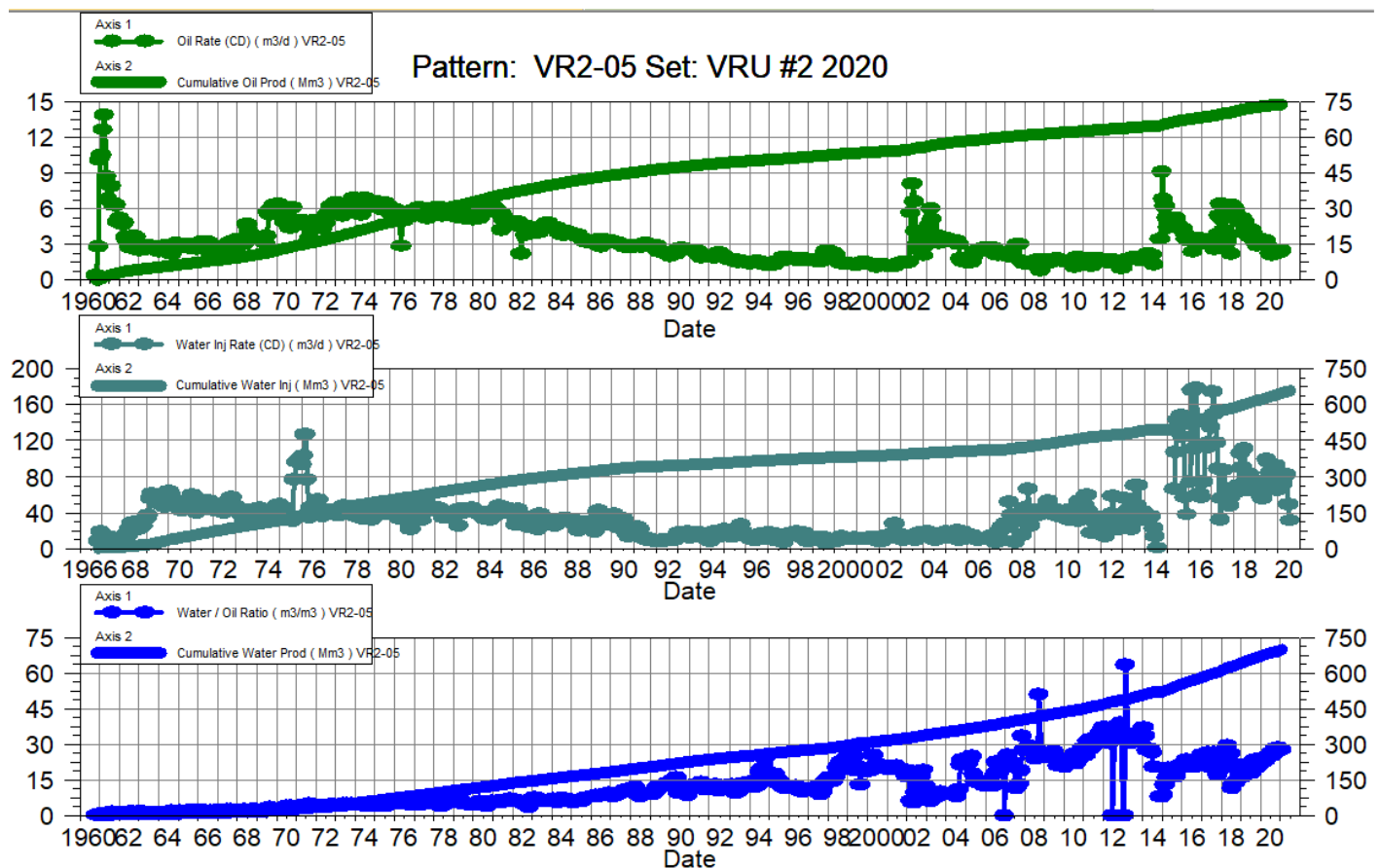
Date	Oil Rate (CD) m3/d	Cum Oil Prod Mm3	Water Rate (CD) m3/d	Cum Water Prod Mm3	Water Inj Rate (CD) m3/d	Cum Water Inj Mm3	Water Oil Ratio m3/m3	Voidage Replacement Ratio	Cum Voidage Replacement Ratio	Water Inj Pressure kPa
1-31-2020	1.96	60.72	56.43	601.91		220.82	28.79		0.33	--
2-29-2020	1.84	60.78	55.29	603.51		220.82	29.98		0.33	--
3-31-2020	1.82	60.83	50.96	605.09		220.82	27.93		0.33	--
4-30-2020	1.72	60.88	46.14	606.48		220.82	26.90		0.33	--
5-31-2020	1.63	60.93	43.21	607.81		220.82	26.49		0.33	--
6-30-2020	1.18	60.97	28.57	608.67		220.82	24.24		0.33	--
7-31-2020	1.21	61.01	27.33	609.52		220.82	22.62		0.33	--
8-31-2020	1.59	61.06	35.40	610.62		220.82	22.20		0.33	--
9-30-2020	1.56	61.10	36.54	611.71		220.82	23.46		0.33	--
10-31-2020	1.64	61.15	37.07	612.86		220.82	22.56		0.33	--
11-30-2020	1.53	61.20	37.55	613.99		220.82	24.51		0.33	--
12-31-2020	1.50	61.25	33.50	615.03		220.82	22.37		0.33	--



Virden Roselea Unit No. 2

Pattern P-05 - 00/16-06-011-25W1/0

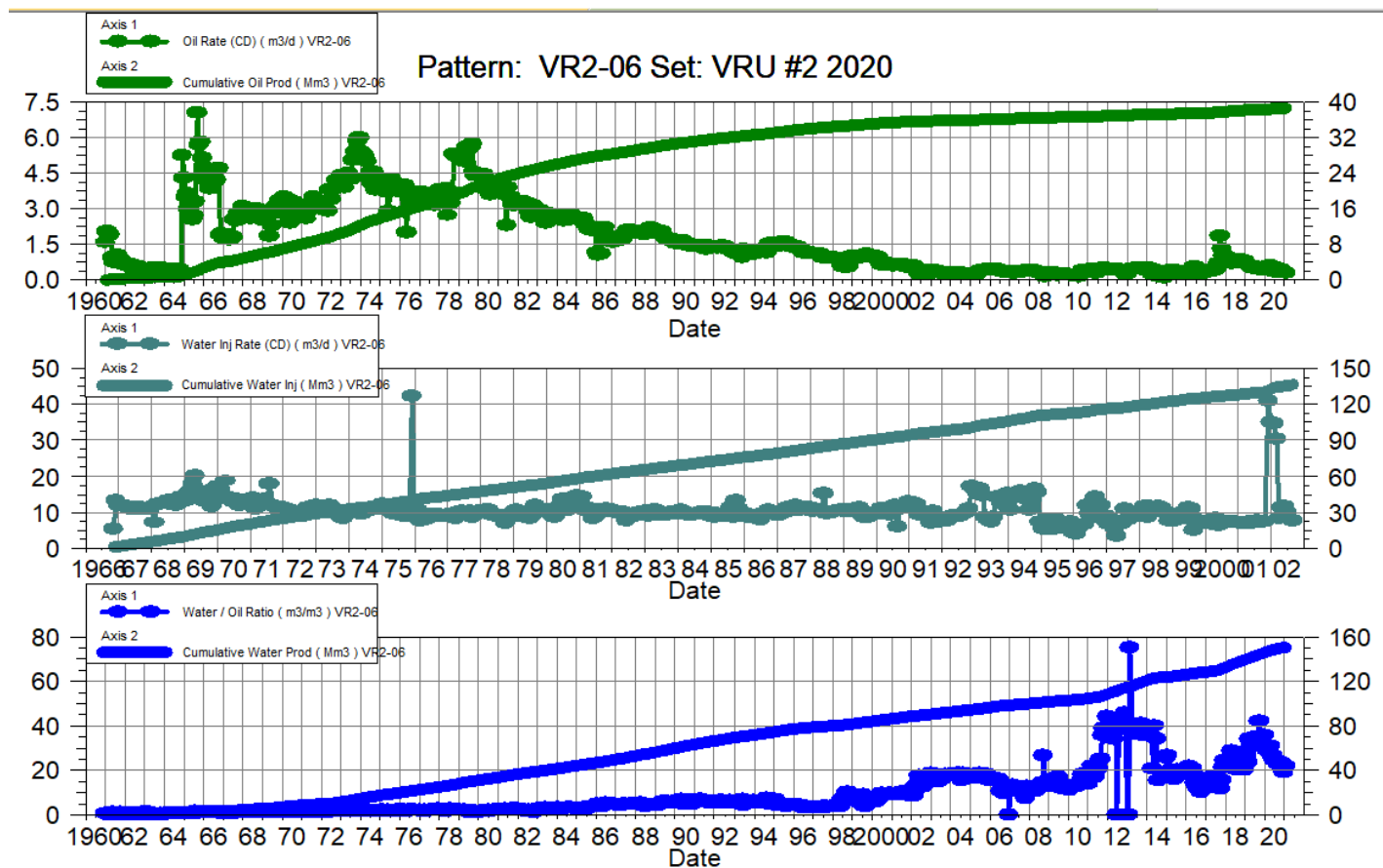
Date	Oil Rate (CD) m3/d	Cum Oil Prod Mm3	Water Rate (CD) m3/d	Cum Water Prod Mm3	Water Inj Rate (CD) m3/d	Cum Water Inj Mm3	Water Oil Ratio m3/m3	Voidage Replacement Ratio	Cum Voidage Replacement Ratio	Water Inj Pressure kPa
1-31-2020	3.39	73.31	77.38	672.03	67.58	648.50	22.81	0.84	0.87	4,800.00
2-29-2020	3.32	73.41	74.99	674.21	75.34	650.68	22.56	0.96	0.87	4,800.00
3-31-2020	3.37	73.51	76.19	676.57	71.10	652.88	22.64	0.89	0.87	4,800.00
4-30-2020	3.30	73.61	79.89	678.97	79.53	655.27	24.18	0.96	0.87	4,800.00
5-31-2020	2.82	73.70	70.68	681.16	82.39	657.83	25.10	1.12	0.87	4,800.00
6-30-2020	2.26	73.77	56.71	682.86	48.40	659.28	25.11	0.82	0.87	4,800.00
7-31-2020	2.10	73.83	55.07	684.57	30.77	660.23	26.28	0.54	0.87	4,364.52
8-31-2020	2.51	73.91	63.55	686.54		660.23	25.34		0.87	4,300.00
9-30-2020	2.38	73.98	66.06	688.52		660.23	27.77		0.86	4,300.00
10-31-2020	2.58	74.06	68.78	690.65		660.23	26.65		0.86	4,300.00
11-30-2020	2.48	74.13	70.93	692.78		660.23	28.65		0.86	4,300.00
12-31-2020	2.27	74.20	61.71	694.69		660.23	27.19		0.86	4,300.00



Viriden Roselea Unit No. 2

Pattern P-06 - 00/14-05-011-25W1/0

Date	Oil Rate (CD) m3/d	Cum Oil Prod Mm3	Water Rate (CD) m3/d	Cum Water Prod Mm3	Water Inj Rate (CD) m3/d	Cum Water Inj Mm3	Water Oil Ratio m3/m3	Voidage Replacement Ratio	Cum Voidage Replacement Ratio	Water Inj Pressure kPa
1-31-2020	0.54	38.49	16.41	146.22		137.03	30.16		0.74	--
2-29-2020	0.58	38.51	16.60	146.70		137.03	28.86		0.74	--
3-31-2020	0.63	38.53	17.71	147.25		137.03	28.14		0.74	--
4-30-2020	0.62	38.55	19.19	147.82		137.03	31.03		0.73	--
5-31-2020	0.47	38.56	12.56	148.21		137.03	26.58		0.73	--
6-30-2020	0.36	38.57	8.76	148.47		137.03	24.36		0.73	--
7-31-2020	0.39	38.58	9.15	148.76		137.03	23.73		0.73	--
8-31-2020	0.50	38.60	11.39	149.11		137.03	22.96		0.73	--
9-30-2020	0.48	38.61	11.56	149.46		137.03	24.04		0.73	--
10-31-2020	0.48	38.63	11.25	149.81		137.03	23.36		0.72	--
11-30-2020	0.42	38.64	8.51	150.06		137.03	20.44		0.72	--
12-31-2020	0.37	38.65	6.94	150.28		137.03	18.86		0.72	--

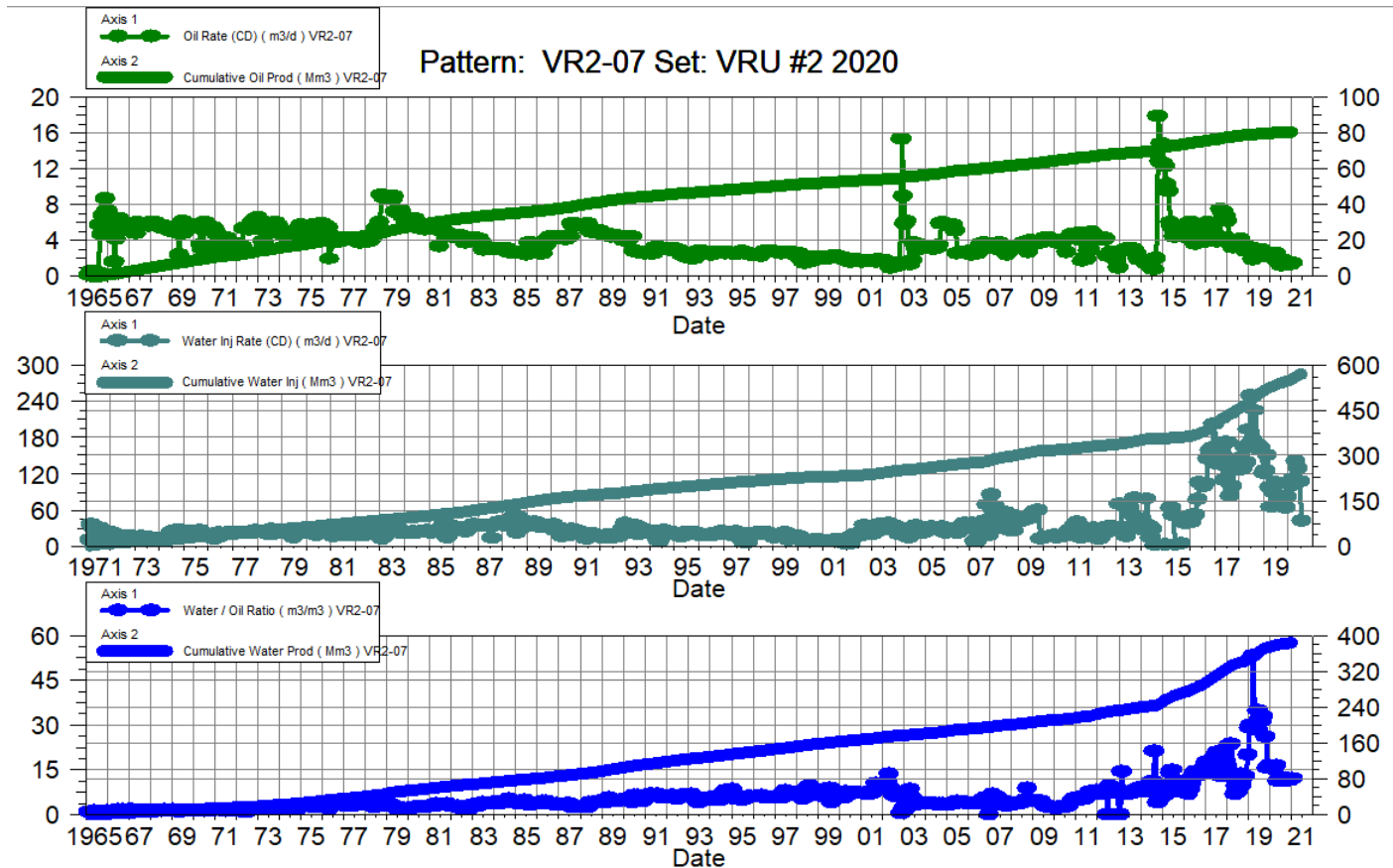


Virden Roselea Unit No. 2

Pattern P-07 - 00/10-05-011-25W1/0 &

03/16-05-011-25W1/0

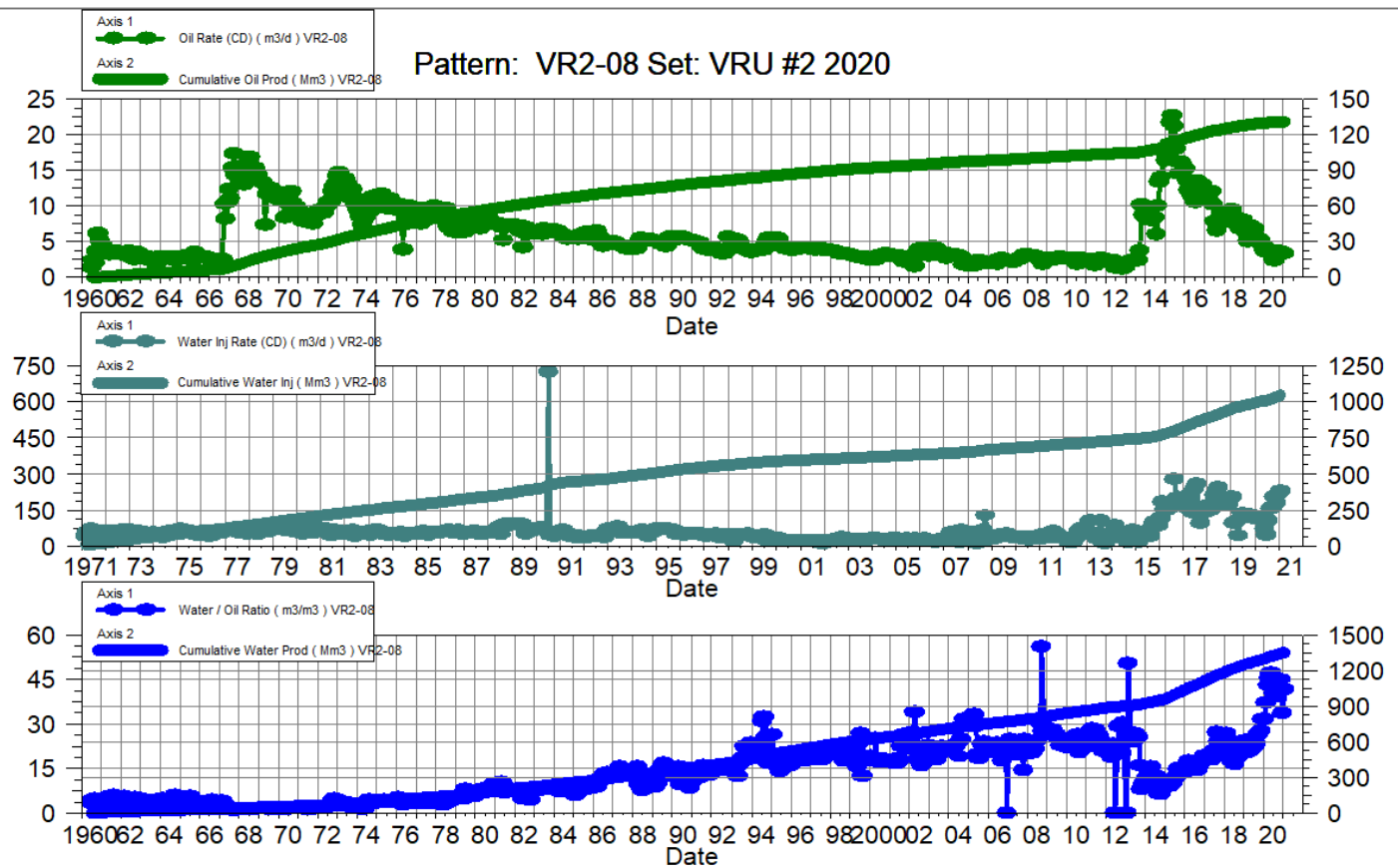
Date	Oil Rate (CD) m3/d	Cum Oil Prod Mm3	Water Rate (CD) m3/d	Cum Water Prod Mm3	Water Inj Rate (CD) m3/d	Cum Water Inj Mm3	Water Oil Ratio m3/m3	Voidage Replacement Ratio	Cum Voidage Replacement Ratio	Water Inj Pressure kPa	Water Inj Pressure kPa
1-31-2020	2.35	80.34	36.92	374.81	105.84	554.87	15.70	2.69	1.22	5,600.00	3,800.00
2-29-2020	2.37	80.41	36.22	375.86	100.00	557.77	15.29	2.59	1.22	5,600.00	3,800.00
3-31-2020	2.58	80.49	38.97	377.07	112.19	561.24	15.10	2.70	1.22	5,600.00	3,800.00
4-30-2020	2.58	80.57	41.77	378.32	141.50	565.49	16.19	3.19	1.23	5,600.00	3,800.00
5-31-2020	1.67	80.62	18.48	378.89	128.74	569.48	11.06	6.38	1.24	5,600.00	3,800.00
6-30-2020	1.33	80.66	15.73	379.37	106.70	572.68	11.84	6.24	1.24	5,600.00	3,800.00
7-31-2020	1.18	80.69	14.82	379.83	40.77	573.95	12.54	2.55	1.24	5,600.00	3,800.00
8-31-2020	1.64	80.74	18.74	380.41		573.95	11.46		1.24	5,600.00	3,800.00
9-30-2020	1.76	80.80	19.42	380.99		573.95	11.03		1.24	5,600.00	3,800.00
10-31-2020	1.63	80.85	18.41	381.56		573.95	11.32		1.24	5,600.00	3,800.00
11-30-2020	1.32	80.89	15.93	382.04		573.95	12.05		1.24	5,600.00	3,800.00
12-31-2020	1.42	80.93	16.61	382.55		573.95	11.66		1.23	5,600.00	3,800.00



Virden Roselea Unit No. 2

Pattern P-08 - 00/12-06-011-25W1/0

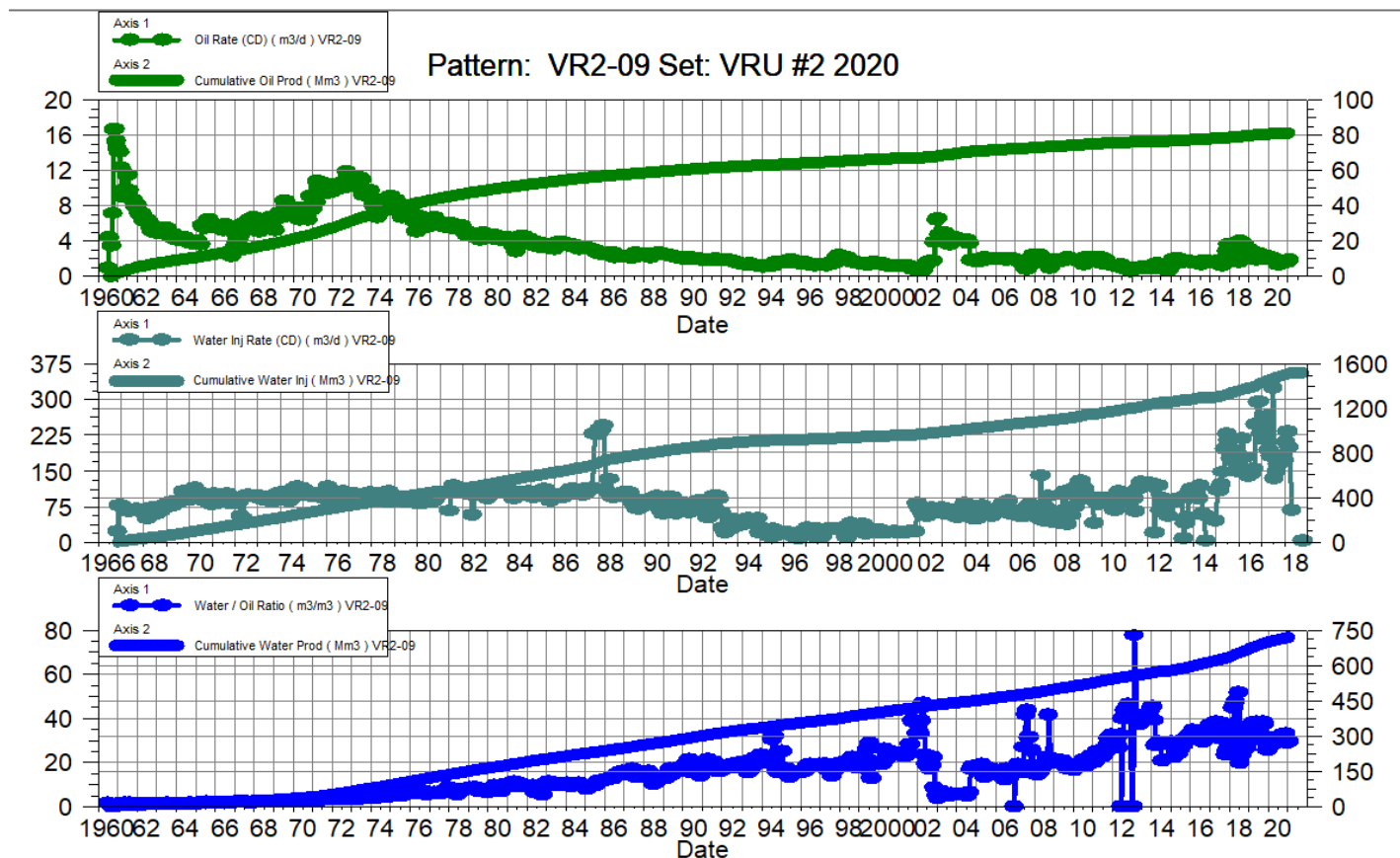
Date	Oil Rate (CD) m3/d	Cum Oil Prod Mm3	Water Rate (CD) m3/d	Cum Water Prod Mm3	Water Inj Rate (CD) m3/d	Cum Water Inj Mm3	Water Oil Ratio m3/m3	Voidage Replacement Ratio	Cum Voidage Replacement Ratio	Water Inj Pressure kPa
1-31-2020	3.66	130.35	116.01	1298.34	118.94	1001.51	31.67	0.99	0.70	6,600.00
2-29-2020	3.53	130.46	130.95	1302.13	119.97	1004.99	37.06	0.89	0.70	6,600.00
3-31-2020	3.75	130.57	160.90	1307.12	114.38	1008.54	42.89	0.69	0.70	6,600.00
4-30-2020	3.90	130.69	177.87	1312.46	111.50	1011.88	45.62	0.61	0.70	6,600.00
5-31-2020	3.51	130.80	165.17	1317.58	67.68	1013.98	47.06	0.40	0.70	6,600.00
6-30-2020	2.85	130.88	120.47	1321.19	44.83	1015.33	42.34	0.36	0.70	6,600.00
7-31-2020	2.40	130.96	96.85	1324.19	104.13	1018.56	40.28	1.05	0.70	4,683.87
8-31-2020	3.78	131.08	147.66	1328.77	151.03	1023.24	39.07	1.00	0.70	4,451.61
9-30-2020	3.73	131.19	150.94	1333.30	158.83	1028.00	40.46	1.03	0.70	6,000.00
10-31-2020	3.63	131.30	152.71	1338.03	203.16	1034.30	42.03	1.30	0.70	6,000.00
11-30-2020	3.48	131.41	156.39	1342.73	176.73	1039.60	44.89	1.11	0.70	6,003.33
12-31-2020	3.57	131.52	119.08	1346.42	219.19	1046.40	33.36	1.79	0.71	6,100.00



Virden Roselea Unit No. 2

Pattern P-09 - 00/10-06-011-25W1/0

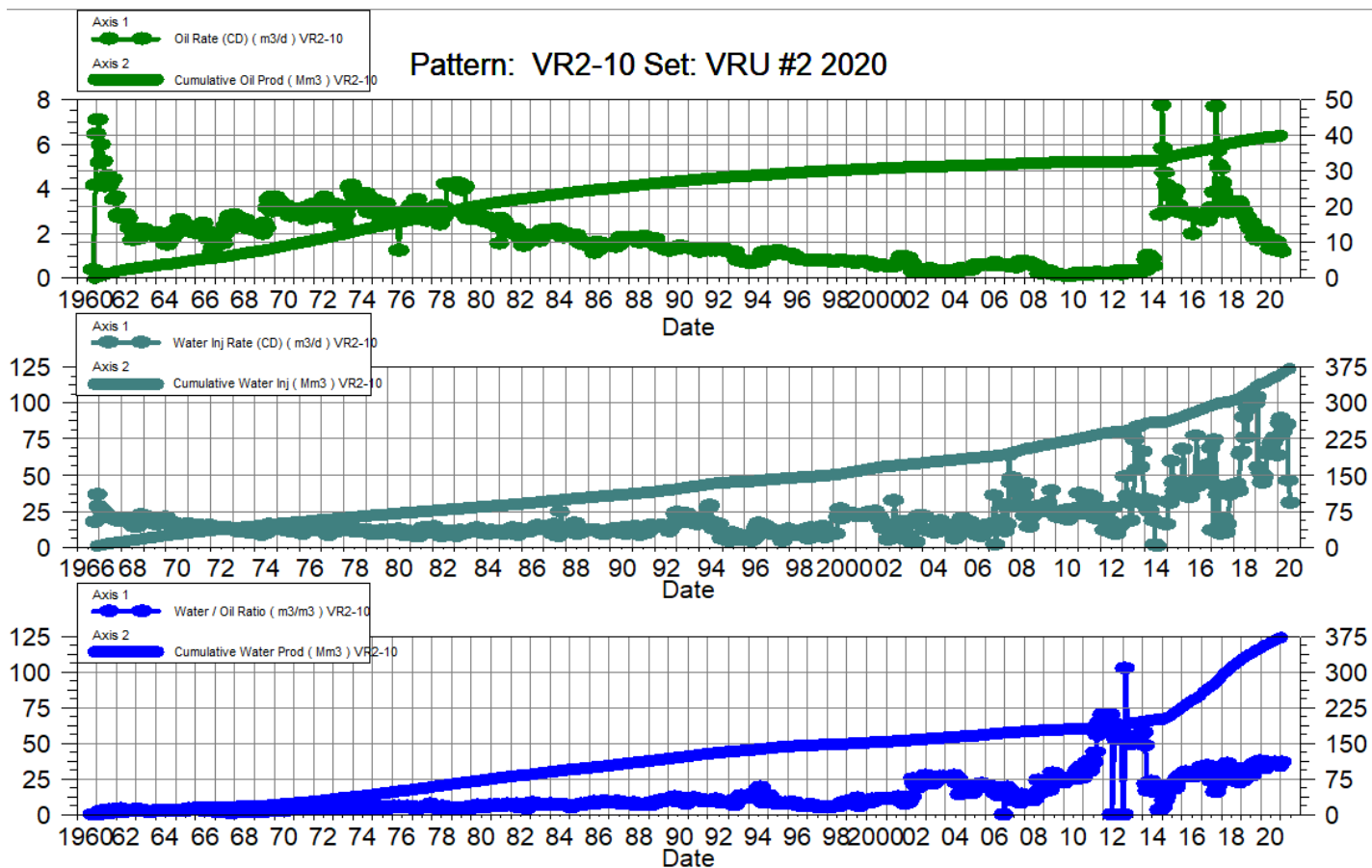
Date	Oil Rate (CD) m3/d	Cum Oil Prod Mm3	Water Rate (CD) m3/d	Cum Water Prod Mm3	Water Inj Rate (CD) m3/d	Cum Water Inj Mm3	Water Oil Ratio m3/m3	Voidage Replacement Ratio	Cum Voidage Replacement Ratio	Water Inj Pressure kPa
1-31-2020	2.17	81.07	58.09	700.22		1530.94	26.78		1.96	5,000.00
2-29-2020	2.08	81.14	57.01	701.87		1530.94	27.38		1.95	5,000.00
3-31-2020	2.07	81.20	58.66	703.69		1530.94	28.32		1.95	5,000.00
4-30-2020	2.06	81.26	62.71	705.57		1530.94	30.50		1.94	5,000.00
5-31-2020	1.85	81.32	58.06	707.37		1530.94	31.44		1.94	5,000.00
6-30-2020	1.40	81.36	43.40	708.68		1530.94	31.07		1.93	5,000.00
7-31-2020	1.42	81.40	43.89	710.04		1530.94	30.87		1.93	5,000.00
8-31-2020	1.78	81.46	54.07	711.71		1530.94	30.37		1.93	5,000.00
9-30-2020	1.74	81.51	56.44	713.41		1530.94	32.50		1.92	5,000.00
10-31-2020	1.85	81.57	56.67	715.16		1530.94	30.69		1.92	5,000.00
11-30-2020	1.78	81.62	58.86	716.93		1530.94	33.08		1.91	5,000.00
12-31-2020	1.69	81.67	48.90	718.44		1530.94	28.92		1.91	5,000.00



Viriden Roselea Unit No. 2

Pattern P-10 - 00/12-05-011-25W1/0

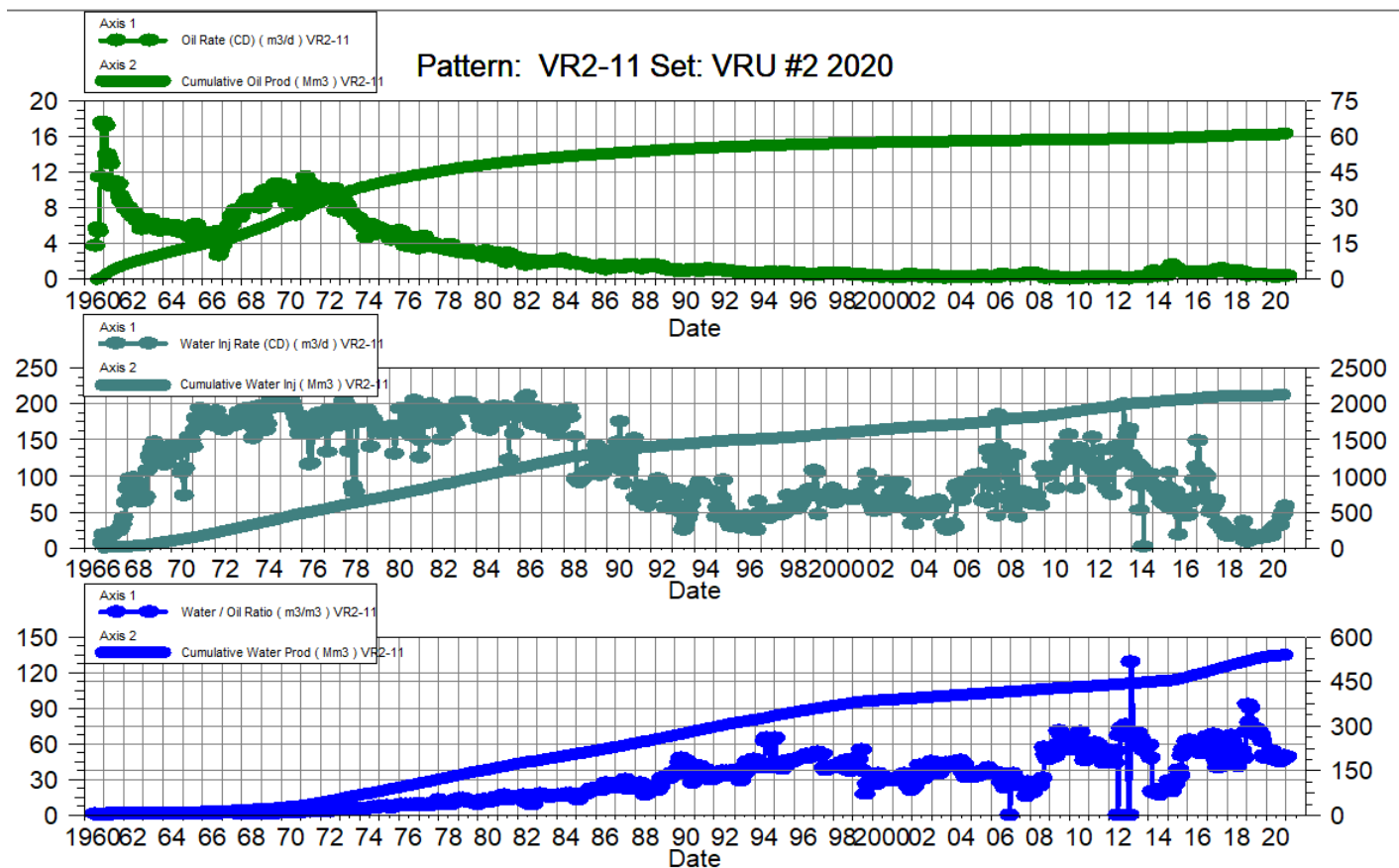
Date	Oil Rate (CD) m3/d	Cum Oil Prod Mm3	Water Rate (CD) m3/d	Cum Water Prod Mm3	Water Inj Rate (CD) m3/d	Cum Water Inj Mm3	Water Oil Ratio m3/m3	Voidage Replacement Ratio	Cum Voidage Replacement Ratio	Water Inj Pressure kPa
1-31-2020	2.02	39.44	66.35	351.96	86.29	361.86	32.90	1.26	0.92	3,800.00
2-29-2020	1.99	39.50	64.54	353.83	89.62	364.46	32.36	1.35	0.93	3,800.00
3-31-2020	2.03	39.57	66.39	355.89	80.23	366.94	32.63	1.17	0.93	3,800.00
4-30-2020	1.87	39.62	67.18	357.91	83.37	369.44	36.00	1.21	0.93	3,800.00
5-31-2020	1.74	39.68	63.27	359.87	85.23	372.09	36.31	1.31	0.93	3,800.00
6-30-2020	1.32	39.72	45.39	361.23	45.90	373.46	34.46	0.98	0.93	3,800.00
7-31-2020	1.28	39.76	45.20	362.63	30.77	374.42	35.18	0.66	0.93	3,887.10
8-31-2020	1.69	39.81	58.65	364.45		374.42	34.60		0.92	3,900.00
9-30-2020	1.66	39.86	60.40	366.26		374.42	36.48		0.92	3,900.00
10-31-2020	1.64	39.91	58.16	368.06		374.42	35.48		0.92	3,900.00
11-30-2020	1.41	39.95	50.18	369.57		374.42	35.56		0.91	3,900.00
12-31-2020	1.27	39.99	43.15	370.91		374.42	33.92		0.91	3,900.00



Virden Roselea Unit No. 2

Pattern P-11 - 00/08-06-011-25W1/0

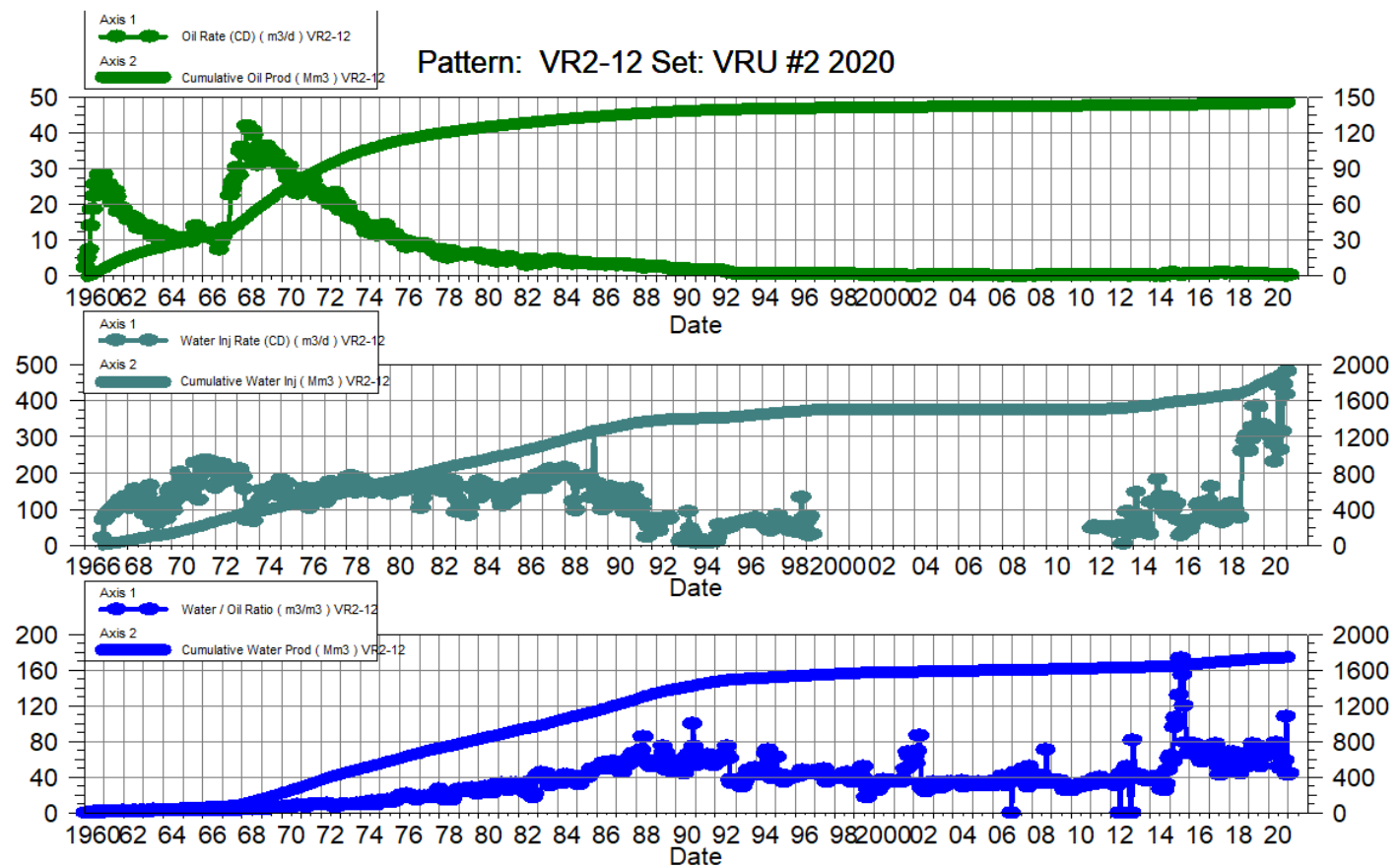
Date	Oil Rate (CD) m3/d	Cum Oil Prod Mm3	Water Rate (CD) m3/d	Cum Water Prod Mm3	Water Inj Rate (CD) m3/d	Cum Water Inj Mm3	Water Oil Ratio m3/m3	Voidage Replacement Ratio	Cum Voidage Replacement Ratio	Water Inj Pressure kPa
1-31-2020	0.42	61.24	20.03	533.01	15.00	2128.89	48.13	0.73	3.58	4,200.00
2-29-2020	0.40	61.25	19.71	533.58	17.28	2129.39	49.01	0.86	3.57	4,200.00
3-31-2020	0.42	61.26	20.02	534.21	14.72	2129.85	48.11	0.72	3.57	4,200.00
4-30-2020	0.37	61.27	19.91	534.80	17.07	2130.36	53.62	0.84	3.57	4,200.00
5-31-2020	0.35	61.28	17.94	535.36	22.61	2131.06	50.69	1.24	3.57	4,200.00
6-30-2020	0.30	61.29	13.64	535.77	15.93	2131.54	45.56	1.14	3.56	4,200.00
7-31-2020	0.29	61.30	13.28	536.18	28.30	2132.42	46.39	2.09	3.56	4,243.55
8-31-2020	0.39	61.31	17.67	536.73	29.85	2133.34	45.01	1.65	3.56	4,258.06
9-30-2020	0.38	61.32	18.19	537.27	30.33	2134.25	47.67	1.63	3.56	4,500.00
10-31-2020	0.39	61.34	17.93	537.83	30.81	2135.21	45.62	1.68	3.56	4,500.00
11-30-2020	0.38	61.35	18.91	538.40	42.53	2136.48	49.57	2.20	3.56	4,500.00
12-31-2020	0.41	61.36	19.52	539.00	47.41	2137.95	48.13	2.38	3.55	4,500.00



Virden Roselea Unit No. 2

Pattern P-12 - 00/02-06-011-25W1/0

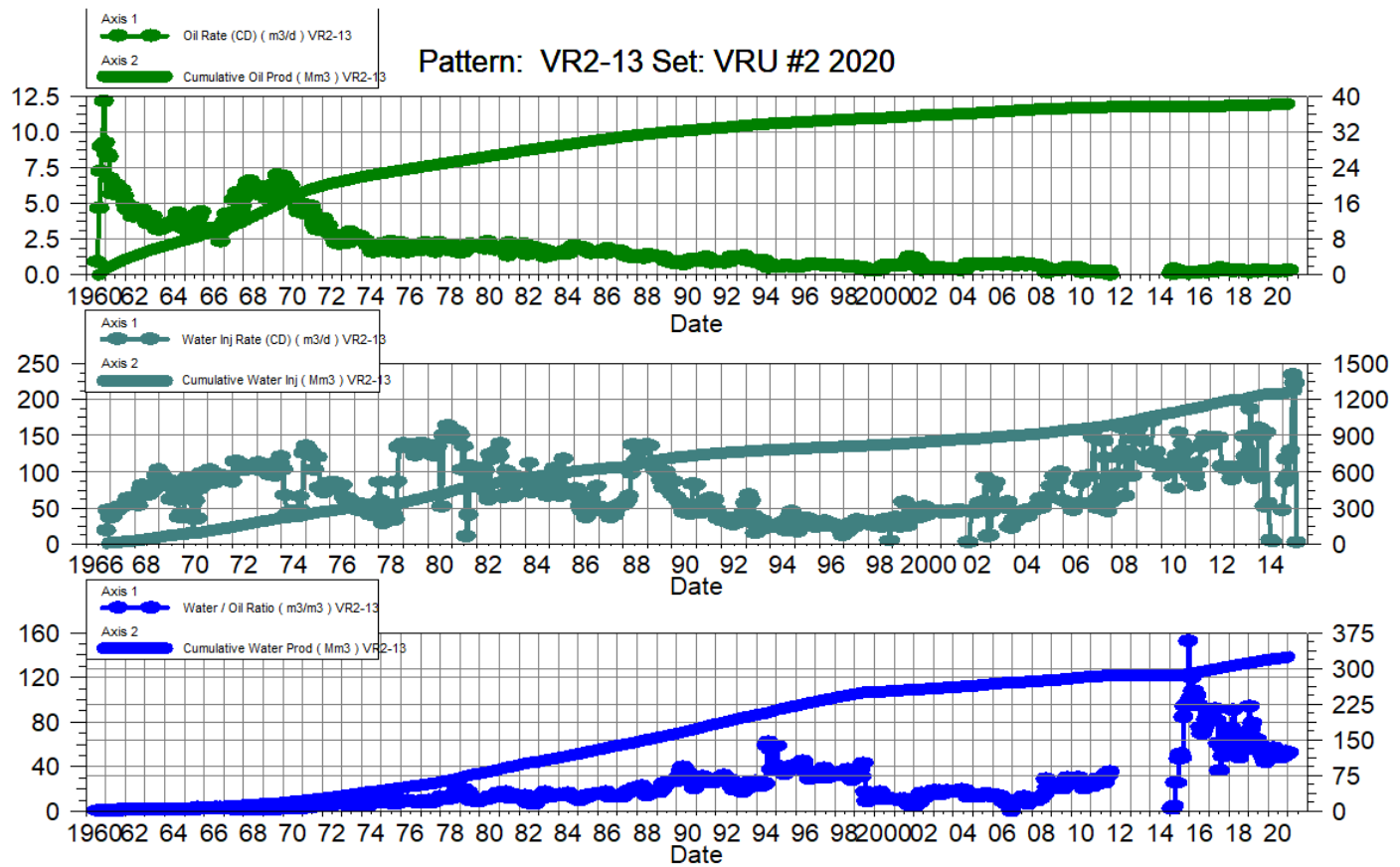
Date	Oil Rate (CD) m3/d	Cum Oil Prod Mm3	Water Rate (CD) m3/d	Cum Water Prod Mm3	Water Inj Rate (CD) m3/d	Cum Water Inj Mm3	Water Oil Ratio m3/m3	Voidage Replacement Ratio	Cum Voidage Replacement Ratio	Water Inj Pressure kPa
1-31-2020	0.39	145.69	26.37	1731.02	321.74	1826.00	67.95	12.02	0.97	5,400.00
2-29-2020	0.38	145.71	25.95	1731.77	320.72	1835.31	69.03	12.18	0.98	5,400.00
3-31-2020	0.40	145.72	26.73	1732.60	305.32	1844.77	67.34	11.25	0.98	5,400.00
4-30-2020	0.39	145.73	28.38	1733.45	323.32	1854.47	73.48	11.24	0.99	5,400.00
5-31-2020	0.29	145.74	22.61	1734.15	282.55	1863.23	78.11	12.34	0.99	5,400.00
6-30-2020	0.32	145.75	20.68	1734.77	232.90	1870.22	65.27	11.09	0.99	5,400.00
7-31-2020	0.27	145.76	14.26	1735.22	307.77	1879.76	52.13	21.17	1.00	4,964.52
8-31-2020	0.36	145.77	17.42	1735.76	444.71	1893.54	48.60	25.00	1.01	4,909.68
9-30-2020	0.37	145.78	18.29	1736.31	266.20	1901.53	49.91	14.26	1.01	5,200.00
10-31-2020	0.28	145.79	16.34	1736.81	316.65	1911.34	58.60	19.05	1.01	5,229.03
11-30-2020	0.13	145.79	14.00	1737.23	447.57	1924.77	107.78	31.68	1.02	6,080.00
12-31-2020	0.29	145.80	12.47	1737.62	419.60	1937.78	42.43	32.85	1.03	5,512.90



Virden Roselea Unit No. 2

Pattern P-13 - 00/04-05-011-25W1/0

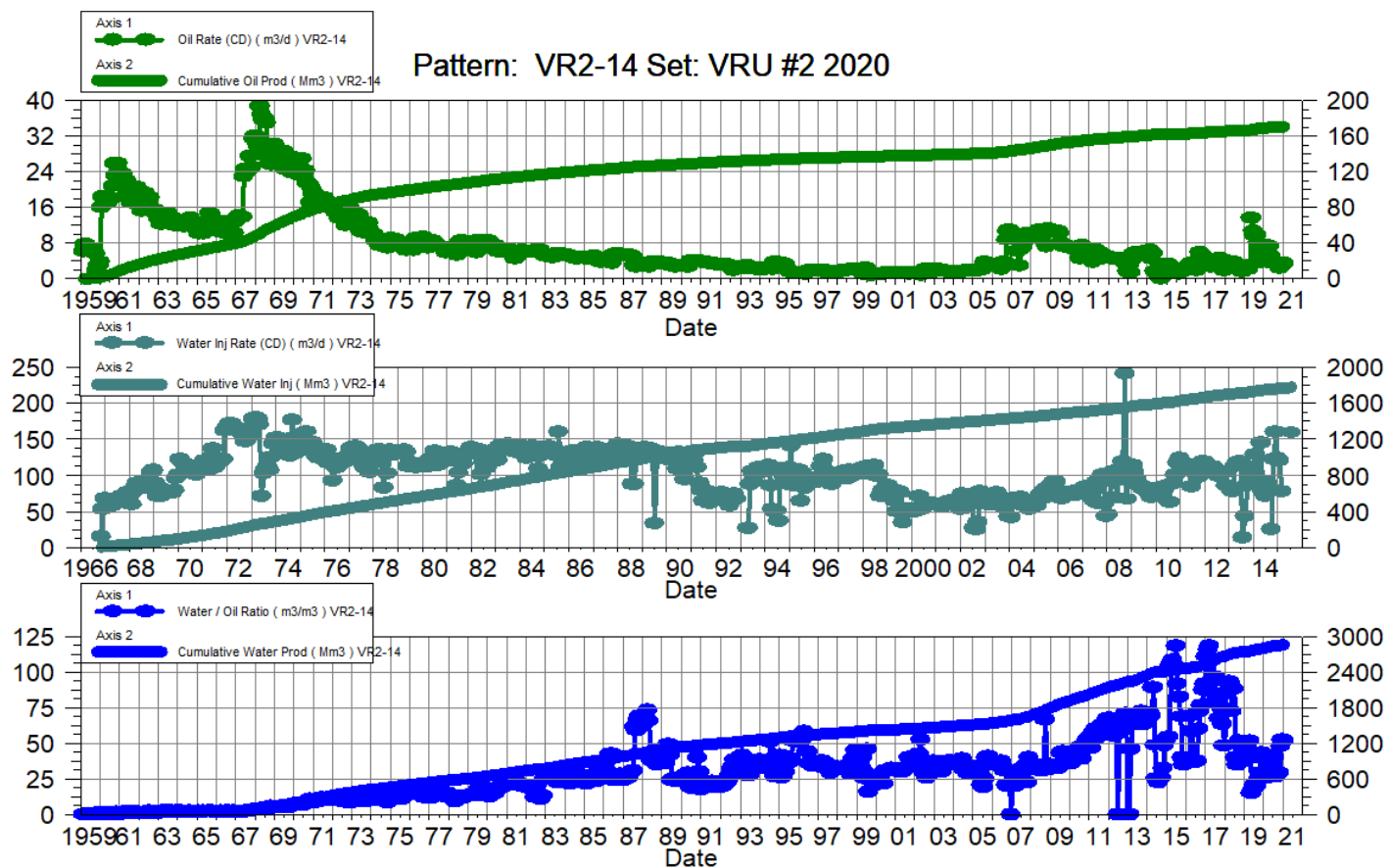
Date	Oil Rate (CD) m3/d	Cum Oil Prod Mm3	Water Rate (CD) m3/d	Cum Water Prod Mm3	Water Inj Rate (CD) m3/d	Cum Water Inj Mm3	Water Oil Ratio m3/m3	Voidage Replacement Ratio	Cum Voidage Replacement Ratio	Water Inj Pressure kPa
1-31-2020	0.3	38.28	16.65	317.71		1285.3	53.1		3.60	3,800.00
2-29-2020	0.3	38.29	16.39	318.18		1285.3	54.1		3.60	3,800.00
3-31-2020	0.3	38.30	16.88	318.71		1285.3	52.7		3.59	3,800.00
4-30-2020	0.3	38.31	17.79	319.24		1285.3	56.8		3.59	3,800.00
5-31-2020	0.3	38.32	15.91	319.73		1285.3	53.5		3.58	3,800.00
6-30-2020	0.3	38.32	12.10	320.10		1285.3	48.0		3.58	3,800.00
7-31-2020	0.2	38.33	11.63	320.46		1285.3	49.2		3.58	3,800.00
8-31-2020	0.3	38.34	15.33	320.93		1285.3	47.9		3.57	3,800.00
9-30-2020	0.3	38.35	15.78	321.41		1285.3	50.8		3.57	3,800.00
10-31-2020	0.3	38.36	15.50	321.89		1285.3	48.8		3.56	3,800.00
11-30-2020	0.3	38.37	16.31	322.38		1285.3	53.3		3.56	3,800.00
12-31-2020	0.3	38.38	16.83	322.90		1285.3	51.5		3.55	3,800.00



Virden Roselea Unit No. 2

Pattern P-14 - 00/10-36-010-26W1/0

Date	Oil Rate (CD) m3/d	Cum Oil Prod Mm3	Water Rate (CD) m3/d	Cum Water Prod Mm3	Water Inj Rate (CD) m3/d	Cum Water Inj Mm3	Water Oil Ratio m3/m3	Voidage Replacement Ratio	Cum Voidage Replacement Ratio	Water Inj Pressure kPa
1-31-2020	7.29	169.64	209.74	2800.19		1786.49	28.78		0.60	3,000.00
2-29-2020	7.69	169.86	199.27	2805.97		1786.49	25.93		0.60	3,000.00
3-31-2020	7.11	170.08	200.47	2812.18		1786.49	28.19		0.60	3,000.00
4-30-2020	7.30	170.30	228.17	2819.02		1786.49	31.25		0.60	3,000.00
5-31-2020	5.07	170.46	195.58	2825.09		1786.49	38.55		0.60	3,000.00
6-30-2020	3.57	170.56	144.40	2829.42		1786.49	40.48		0.60	3,000.00
7-31-2020	3.40	170.67	136.99	2833.67		1786.49	40.27		0.59	3,000.00
8-31-2020	3.58	170.78	95.61	2836.63		1786.49	26.72		0.59	3,000.00
9-30-2020	3.69	170.89	104.66	2839.77		1786.49	28.39		0.59	3,000.00
10-31-2020	2.44	170.97	70.72	2841.96		1786.49	28.94		0.59	3,000.00
11-30-2020	2.73	171.05	130.78	2845.89		1786.49	47.82		0.59	3,000.00
12-31-2020	3.53	171.16	183.97	2851.59		1786.49	52.07		0.59	3,000.00



Virden Roselea Unit No. 2

Pattern P-15 - 00/12-31-010-25W1/0

Date	Oil Rate (CD) m3/d	Cum Oil Prod Mm3	Water Rate (CD) m3/d	Cum Water Prod Mm3	Water Inj Rate (CD) m3/d	Cum Water Inj Mm3	Water Oil Ratio m3/m3	Voidage Replacement Ratio	Cum Voidage Replacement Ratio	Water Inj Pressure kPa
1-31-2020	4.86	54.80	53.11	490.84		483.90	10.93		0.89	--
2-29-2020	5.37	54.96	49.85	492.28		483.90	9.29		0.88	--
3-31-2020	4.69	55.11	49.85	493.83		483.90	10.63		0.88	--
4-30-2020	4.94	55.25	68.22	495.87		483.90	13.80		0.88	--
5-31-2020	3.04	55.35	56.07	497.61		483.90	18.44		0.87	--
6-30-2020	1.66	55.40	30.53	498.53		483.90	18.39		0.87	--
7-31-2020	1.73	55.45	44.91	499.92		483.90	26.02		0.87	--
8-31-2020	2.30	55.52	65.70	501.96		483.90	28.52		0.87	--
9-30-2020	2.39	55.59	72.78	504.14		483.90	30.41		0.86	--
10-31-2020	1.41	55.64	44.65	505.52		483.90	31.75		0.86	--
11-30-2020	2.15	55.70	109.27	508.80		483.90	50.86		0.86	--
12-31-2020	2.29	55.77	144.70	513.29		483.90	63.06		0.85	--

