Virden Roselea Unit #3

2018 Annual EOR Report

Executive Summary

In 2018 oil production in the Virden Roselea Unit #3 (VRU #3) was 46.7 m^3/d (294 bbl/d) totaling 17.1 e^3m^3 (107.4 mbbl). Annual production inclined 20% from 2017 to 2018, a large change in production. By the end of 2018 cumulative oil production from the VRU #3 was 2,667 e^3m^3 (16.8 mmbbl). The original forecasted recovery was 1,290 e^3m^3 (8.1 mmbbl) on primary recovery and 2,837 e^3m^3 (17.9 mmbbl) total primary plus secondary recovery.

In December 2018 there were 40 producing oil wells and 20 water injectors active in the unit. In 2016, one re-entry from an existing horizontal in the Scallion formation was drilled. In 2017, six dual leg horizontal wells and three re-entries from existing horizontals were drilled within the unit. In 2018, three dual leg horizontal wells were drilled in the unit.

Discussion

The VRU #3 has been under waterflood since 1967, 13 years after first production from the pool in 1954. Water injection increased the oil production rate from ~100 m^3/d (~629 bbl/d) to ~225 m^3/d (1,415 bbl/d); however, lower than peak production from the field of 450 m^3/d (2,830 bbl/d). Expected ultimate oil recovery was doubled by the waterflood. As of yet, the waterflood forecast has not been exceeded as in other units.

Prior to 2013, there had been only one development well drilled in VRU #3 in the last nine years, a horizontal well drilled in 2008. In 2002 and 2003, nine horizontal wells were drilled in the unit with mixed results. In 2014, two Scallion and three Virden horizontal wells were drilled in the unit. In 2015, an additional Scallion well was drilled. In 2016, a re-entry well was drilled in the Scallion formation. In 2017, six dual leg horizontal wells and three re-entries from existing horizontals were drilled within the unit. In 2018, three dual leg horizontal wells were drilled in the unit.

2018 is the first year since 1974 to have wells converted to injection: 102/03-11-010-26W1/02 and 100/01-10-010-26W1/00. Currently, further potential conversions are under technical review to improve the sweep efficiency in the unit. In the Northeast segment of the unit different tracers were placed into the injectors and the produced water was monitored from the producing wells. The results showed that the reservoir is very complex with notable fracturing. A clear fracture trend can be seen in the NW-SE orientation, with water from distant injectors traveling to some wells and completely bypassing others. Therefore, there is an undisputable high permeability channel that is preferential to flow in some areas of the unit. This gives us the understanding that the waterflood is more complex than envisioned and the patterns that have been drawn in all of the units will rarely be correct. The intricacy of the reservoir and ultimately the waterflood behavior cannot be fully understood. With natural fractures the low recovery of the unit and poor sweep efficiency is understandable. An increase in the injector to producer ratio will likely be effective and change the well-established streamlines. This unit also has the lowest cum VRR of any of the units at 0.81 and increasing the amount of injection as well as balancing the flood would be beneficial. The water injection rate was 1,518 m^3/d (9,548 bbl/d) in 2018 and the producing WOR was 25 m^3/m^3. The injected water at VRU #3 is not filtered or treated in any way.

Significant events in 2018 are as follows:

- January 2018, re-enter the 103/05-18-010-25W1/00 horizontal well and drill a leg in the Sandhill/Oolites.
- June 2018, begin injection into the 102/03-11-010-26W1/02 disposal well.

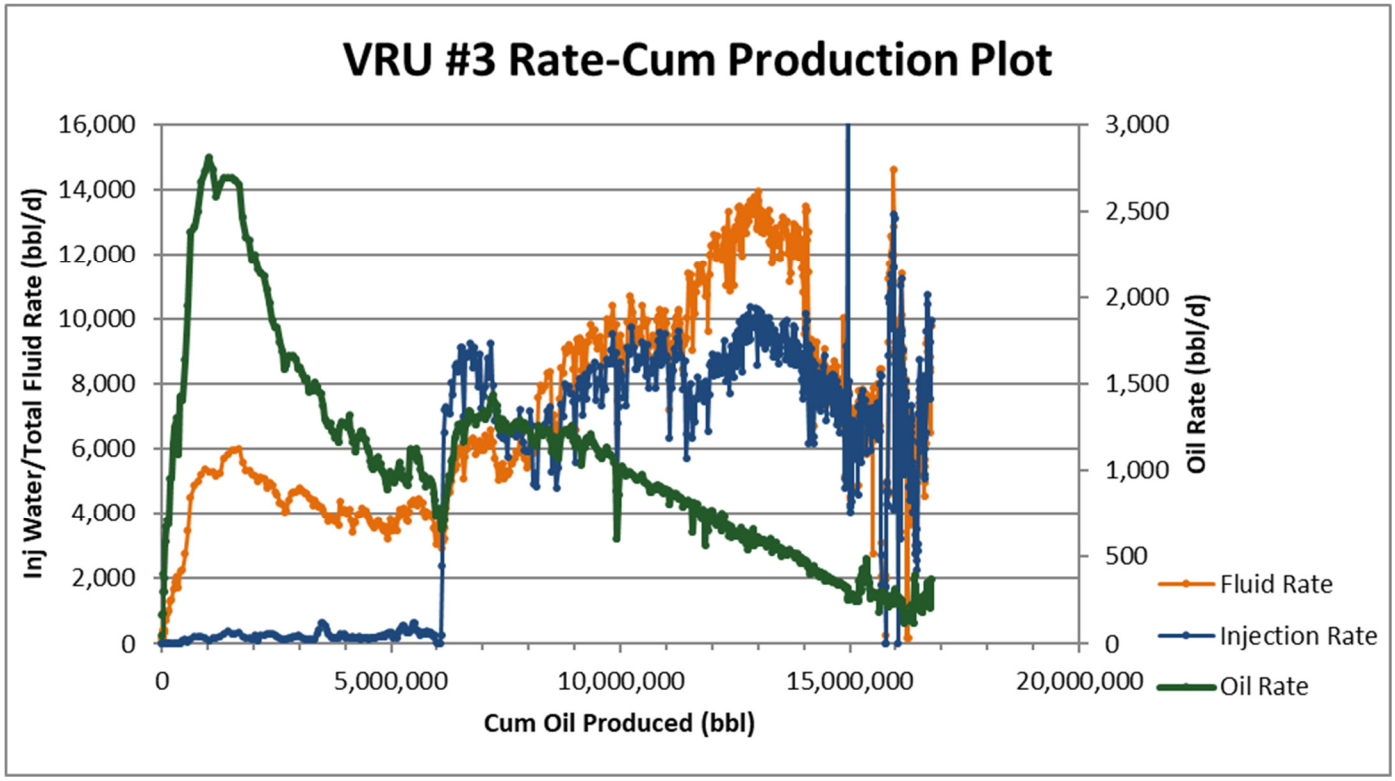
- September 2018, deepen and convert the 100/01-10-010-26W1/00 vertical well to injection.
- October 2018, drill the 102/16-14-010-26W1/00 horizontal well in the Scallion/Oolites.
- October 2018, drill the 103/10-11-010-26W1/00 horizontal well in the Scallion/Oolites.

It is important to note that publicly available production data does not include contribution from the newly drilled wells. Volumes quoted, and unit graphs presented are based on public production data augmented with proprietary data, and consequently should accurately reflect all wells. The pattern data within the tables below is based solely on publicly available production data and therefore missing some production volumes. These tables will be updated in subsequent progress reports.

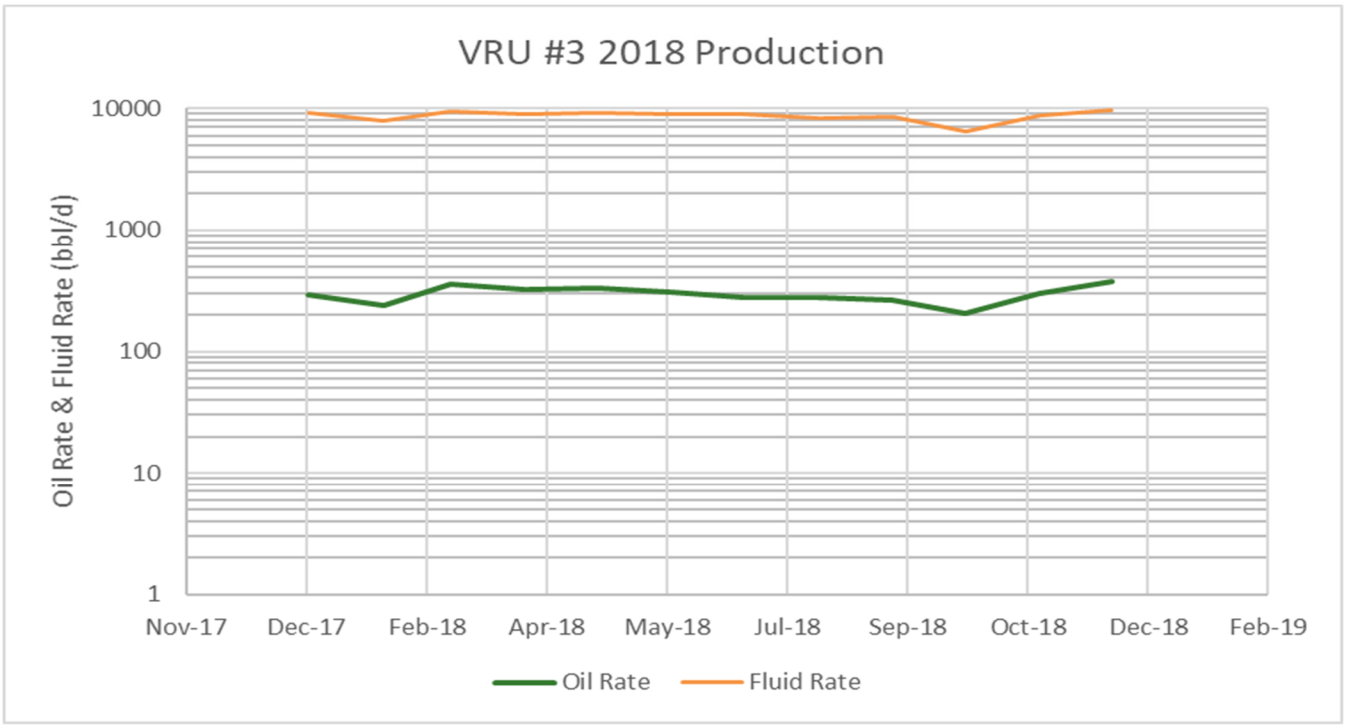
In the composite rate – cumulative oil plot below, waterflood response is clearly demonstrated at a cumulative oil production of 1000 e^3m^3 (6.3 MMbbl) after a pattern waterflood was initiated.

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

VRU #3 – Rate vs Cum Oil Production



VRU #3 – Rate vs Time



2018 Reservoir Pressure Surveys

Unit	UWI	License	Test Type	Date of Pressure	Duration of SI (days)	Datum BHP (kPaa)
VRU #3	103/05-18-010-25W1/00	10124	BH BU	2018-02-07	8	4,616
VRU #3	103/10-11-010-26W1/00	11061	BH BU	2018-10-31	6	7,989
VRU #3	102/16-14-010-26W1/00	10961	BH BU	2018-10-19	2	5,181

In 2018, three pressures were taken, giving an average of 5,900 kPa. This is similar to the pressure survey conducted in 2017 that gave an average reservoir pressure of 6,000 kPa. This is close to normally pressured, if a bit under pressured. In 2015, two pressure surveys were conducted within the unit, pressures close to normally pressured. In 2014, six pressure surveys were conducted giving an average pool pressure of 7,200 kPaa. Prior pressure surveys have shown that wide variations in pressure exist across the pool. There are plans to implement more waterflood conversions within the unit to reduce further decline in the pressure due to the drilling of new infill wells.

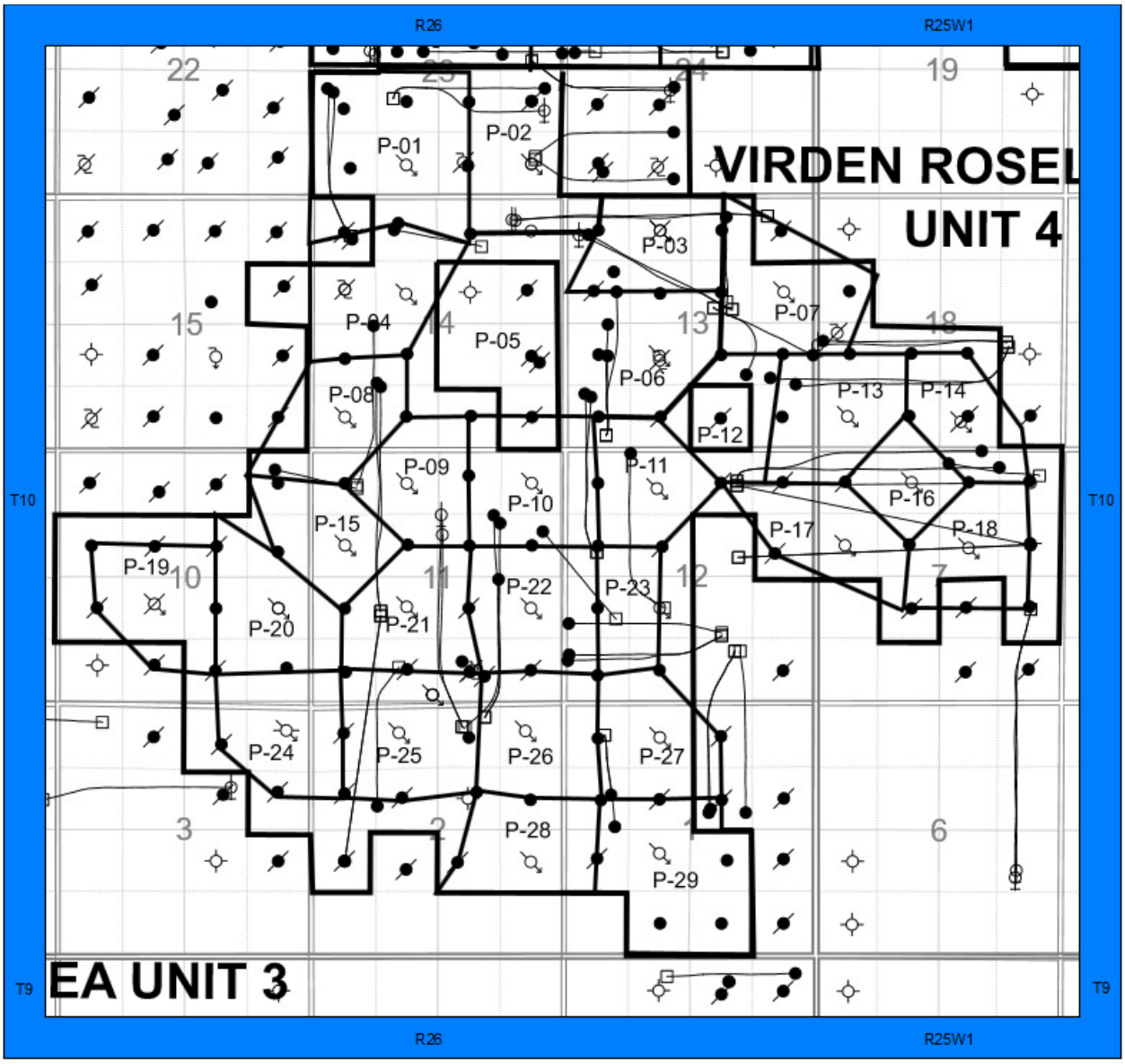
The voidage replacement ratio (VRR) in 2018 stayed below 1.0, ranging from 0.59 to 0.93. At the end of the year the VRR was 0.59. The cumulative VRR at year end was 0.81. The high reservoir pressure is inconsistent with the cumulative VRR less than 1.0.

There is potentially partial pressure support for the field from an aquifer on the west side of the unit and the water influx from the aquifer is not accounted for in the VRR calculation. An oil formation volume factor of 1.06 rm^3/sm^3 and a water formation volume factor of 1.04 rm^3/sm^3 were used in the VRR calculations.

2018 Well Servicing

UWI	Unit	Licence	Operation	Date	Objective
103/05-18-010-25W1/00	VRU#3	10124	Initial Completion	2018-01-14	SANDHILL / OOLITES
100/02-01-010-26W1/00	VRU#3	001280	Tubing Repair	2018-01-16	
100/16-03-010-26W1/00	VRU#3	001370	Suspension	2018-01-26	
102/05-23-010-26W1/00	VRU#3	10688	Upsize Pump	2018-02-23	
PRELIMINARY ENGINEERING	VRU#3	P18VIR008	Preliminary Engineering	2018-03-15	
103/15-07-010-25W1/00	VRU#3	10802	Upsize Pump	2018-04-08	
INJECTION PUMP UPGRADE	VRU#3	F18VIR004	Battery Upgrade	2018-04-10	
HEADER MODIFICATION	VRU#3	FF18VIR001	Header Repair	2018-04-15	
INJECTION LINE REPLACEMENT	VRU#3	P18VIR014	Pipeline / Flowline Replacement	2018-05-07	
NEW DUAL TIP FLARE STACK & 50 BBL FKOD	VRU#3	F18VIR008	Battery Upgrade	2018-05-22	
102/03-11-010-26W1/02	VRU#3	001516	Injection Conversion	2018-06-12	
102/05-12-010-26W1/00	VRU#3	10238	Pump Repair	2018-07-11	
INJECTION LINE REPLACEMENT	VRU#3	P18VIR020	Pipeline / Flowline Replacement	2018-08-01	
102/05-14-010-26W1/00	VRU#3	9690	Pump Repair	2018-08-23	
DEAD LEG REMOVAL	VRU#3	RM18VIR020	Dead Leg Removal	2018-08-30	
CATHODIC	VRU#3	RM18VIR013	Cathodic	2018-09-12	
BACKUP MOTOR	VRU#3	F18VIR010	Backup Equipment	2018-09-12	
102/04-12-010-26W1/00	VRU#3	10204	Cathodic	2018-09-12	
100/01-10-010-26W1/00	VRU#3	001330	Injection Conversion	2018-09-25	
102/05-02-010-26W1/00	VRU#3	11110	Equip & Tie-In	2018-10-03	
102/16-14-010-26W1/00	VRU#3	10961	Initial Completion	2018-10-18	SAND / OOL / SCAL
HEADER REPLACEMENT	VRU#3	FF18VIR017	Header Repair	2018-10-27	
102/16-07-010-25W1/00	VRU#3	10948	Equip & Tie-In	2018-10-30	
103/10-11-010-26W1/00	VRU#3	11061	Initial Completion	2018-10-31	SAND / OOL / SCAL
INJECTION LINE REPLACEMENT	VRU#3	P18VIR013	Pipeline / Flowline Replacement	2018-11-23	
HEAT TRACE & INSULATE	VRU#3	RM18VIR017	Major Surface R&M	2018-12-01	
100/05-13-010-26W1/00	VRU#3	001017	Inhibitor Squeeze	2018-12-14	

Waterflood Pattern Map

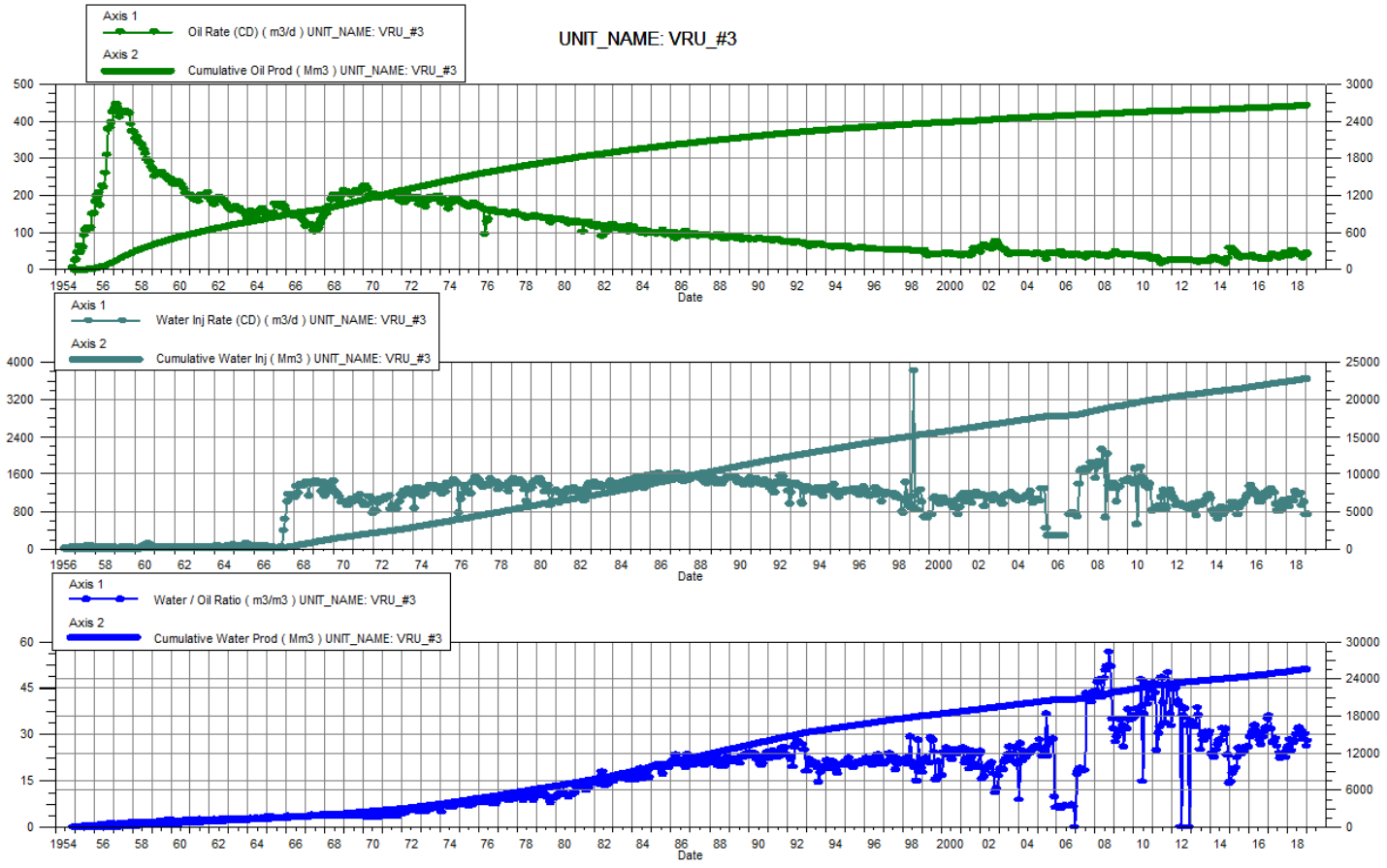


Waterflood Pattern Table

Pattern	Well
P-01	100/03-23-010-26W1/00
P-02	100/01-23-010-26W1/00
P-03	100/14-13-010-26W1/00
P-03	102/14-13-010-26W1/00
P-04	100/11-14-010-26W1/00
P-06	100/06-13-010-26W1/00
P-07	100/09-13-010-26W1/00
P-08	100/04-14-010-26W1/00
P-09	100/14-11-010-26W1/00
P-10	100/16-11-010-26W1/00
P-11	100/14-12-010-26W1/00
P-13	100/04-18-010-25W1/00
P-14	102/02-18-010-25W1/00
P-15	100/12-11-010-26W1/00
P-16	100/14-07-010-25W1/00
P-17	100/12-07-010-25W1/00
P-18	100/10-07-010-25W1/00
P-19	100/06-10-010-26W1/00
P-20	100/08-10-010-26W1/00 & 100/01-10-010-26W1/00
P-21	100/06-11-010-26W1/00
P-22	100/08-11-010-26W1/00
P-23	100/06-12-010-26W1/00
P-24	100/16-03-010-26W1/00
P-25	100/14-02-010-26W1/00 & 102/03-11-010-26W1/02
P-26	100/16-02-010-26W1/00
P-27	100/14-01-010-26W1/00
P-28	100/08-02-010-26W1/00
P-29	100/06-01-010-26W1/00

Total for VRU #3

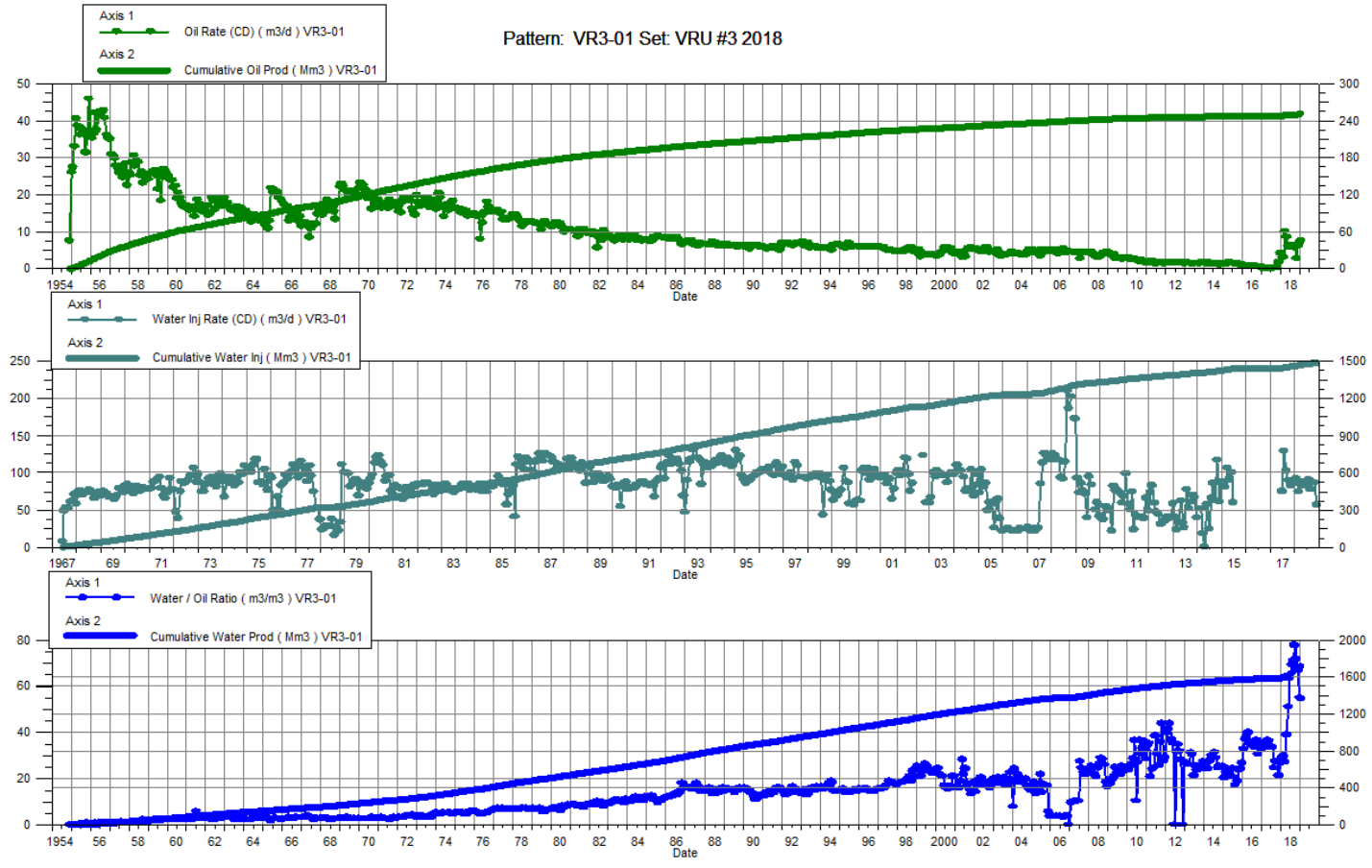
Date	Oil Rate (CD) m3/d	Cum Oil Prod Mm3	Water Rate (CD) m3/d	Cum Water Prod Mm3	Water Inj Rate (CD) m3/d	Cum Water Inj Mm3	Water Oil Ratio m3/m3	Voidage Replacement Ratio	Cum Voidage Replacemt Ratio	Water Inj Pressure kPa
1-31-2018	45.3	2650.09	1184.8	25140.27	1015.08	22525.5	26.14	0.83	0.81	4,132.65
2-28-2018	37.5	2651.14	1062.8	25170.03	900.07	22550.7	28.32	0.82	0.81	4,087.93
3-31-2018	53.9	2652.81	1323.5	25211.05	1065.73	22583.7	24.56	0.77	0.81	4,087.93
4-30-2018	51.4	2654.35	1396.4	25252.95	1057.69	22615.4	27.19	0.73	0.81	4,084.94
5-31-2018	47.6	2655.83	1330.0	25294.18	1033.05	22647.5	27.95	0.75	0.81	3,988.26
6-30-2018	46.1	2657.21	1384.6	25335.71	1224.59	22684.2	30.02	0.86	0.81	3,696.84
7-31-2018	42.6	2658.53	1358.5	25377.83	1149.36	22719.8	31.88	0.82	0.81	3,955.17
8-31-2018	40.9	2659.80	1317.9	25418.68	1193.96	22756.9	32.19	0.88	0.81	3,955.17
9-30-2018	40.2	2661.01	1249.6	25456.17	1197.97	22792.8	31.11	0.93	0.81	3,955.17
10-31-2018	33.5	2662.05	956.9	25485.83	925.32	22821.5	28.59	0.93	0.81	3,955.17
11-30-2018	37.8	2663.18	1141.6	25520.08	1009.40	22851.8	30.20	0.86	0.81	3,960.92
12-31-2018	45.4	2664.59	1183.6	25556.77	726.51	22874.3	26.09	0.59	0.81	4,127.59



VRU #3

Pattern P-01 – 00/03-23-010-26W1/0

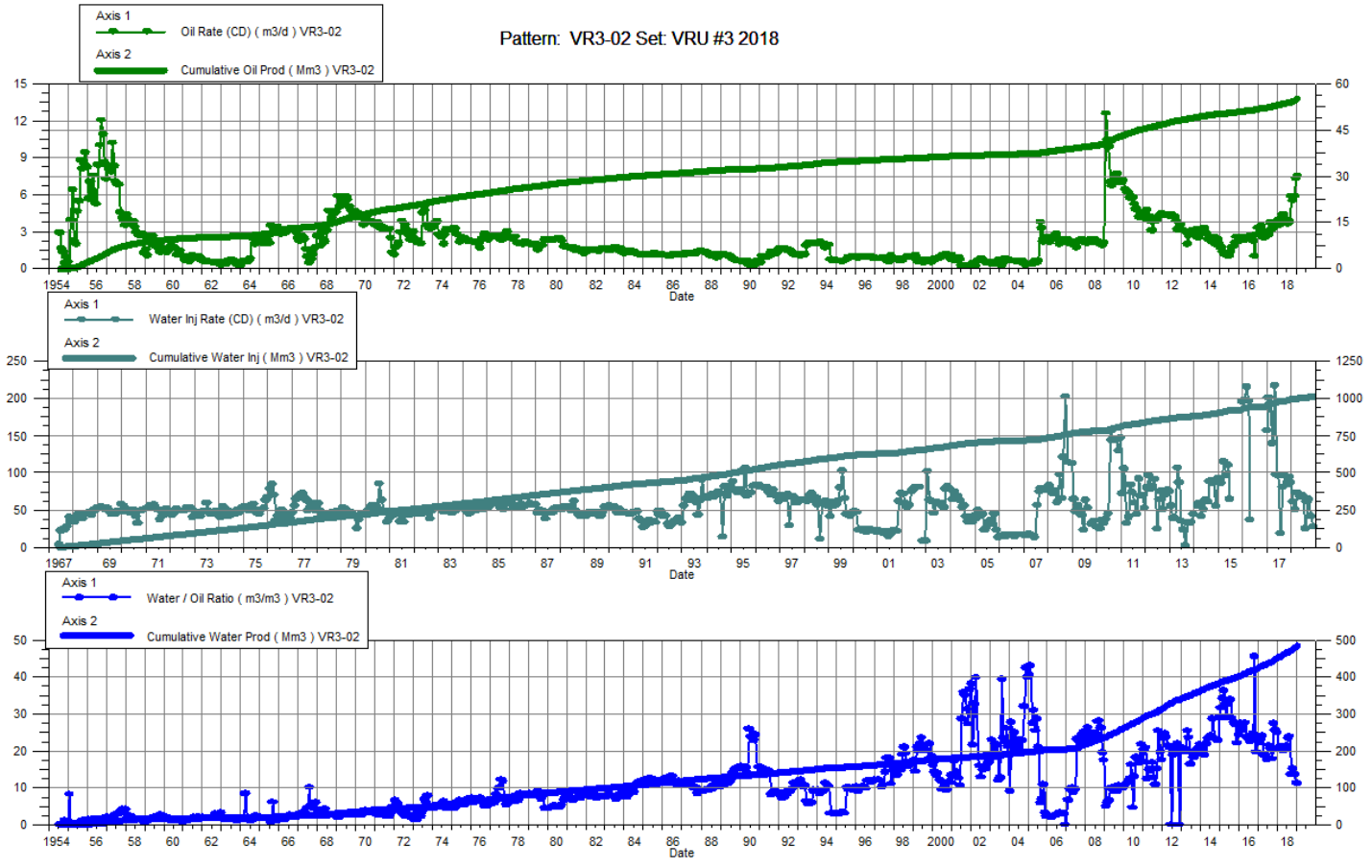
Date	Oil Rate (CD) m3/d	Cum Oil Prod Mm3	Water Rate (CD) m3/d	Cum Water Prod Mm3	Water Inj Rate (CD) m3/d	Cum Water Inj Mm3	Water Oil Ratio m3/m3	Voidage Replacement Ratio	Cum Voidage Replacemt Ratio	Water Inj Pressure kPa
1-31-2018	4.1	249.12	116.3	1587.96	91.99	1469.1	28.25	0.76	0.80	5,561.29
2-28-2018	3.2	249.20	94.8	1590.61	74.90	1471.2	29.65	0.76	0.80	4,400.00
3-31-2018	10.2	249.52	277.9	1599.23	87.86	1473.9	27.31	0.31	0.80	4,400.00
4-30-2018	8.7	249.78	341.4	1609.47	83.90	1476.4	39.08	0.24	0.79	4,393.33
5-31-2018	6.1	249.97	311.4	1619.12	82.45	1479.0	50.92	0.26	0.79	4,209.68
6-30-2018	6.5	250.17	414.9	1631.57	87.20	1481.6	63.54	0.21	0.79	4,506.67
7-31-2018	6.1	250.36	423.8	1644.71	90.30	1484.4	69.00	0.21	0.78	4,700.00
8-31-2018	6.4	250.56	450.6	1658.68	78.03	1486.8	70.66	0.17	0.78	4,700.00
9-30-2018	5.8	250.73	450.5	1672.19	87.50	1489.5	77.58	0.19	0.77	4,700.00
10-31-2018	2.8	250.82	202.8	1678.48	86.52	1492.1	71.74	0.42	0.77	4,700.00
11-30-2018	6.2	251.00	411.3	1690.82	56.60	1493.8	66.72	0.14	0.77	4,700.00
12-31-2018	7.2	251.23	394.0	1703.03		1493.8	54.85		0.76	4,700.00



VRU #3

Pattern P-02 – 00/01-23-010-26W1/0

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 Replacemt Ratio	Water Inj Pressure kPa
1-31-2018	4.0	53.16	82.6	451.47	61.08	997.6	20.75	0.71	1.97	4,700.00
2-28-2018	3.6	53.26	75.1	453.57	50.72	999.0	21.04	0.65	1.97	4,700.00
3-31-2018	4.1	53.39	86.2	456.25	72.72	1001.3	20.89	0.80	1.96	4,700.00
4-30-2018	4.4	53.52	88.8	458.91	72.28	1003.5	20.12	0.78	1.95	4,690.00
5-31-2018	4.0	53.65	81.8	461.45	67.13	1005.5	20.23	0.78	1.95	4,403.23
6-30-2018	3.9	53.77	83.2	463.94	69.58	1007.6	21.37	0.80	1.94	4,506.67
7-31-2018	3.7	53.88	85.8	466.60	24.79	1008.4	23.38	0.28	1.93	4,700.00
8-31-2018	3.8	54.00	91.7	469.45	60.87	1010.3	23.96	0.64	1.93	4,700.00
9-30-2018	5.9	54.18	80.9	471.87	64.40	1012.2	13.68	0.74	1.92	4,700.00
10-31-2018	5.5	54.35	84.2	474.48	41.32	1013.5	15.24	0.46	1.91	4,700.00
11-30-2018	5.9	54.52	80.8	476.91	27.03	1014.3	13.69	0.31	1.91	4,700.00
12-31-2018	7.3	54.75	83.9	479.51		1014.3	11.43		1.90	4,700.00

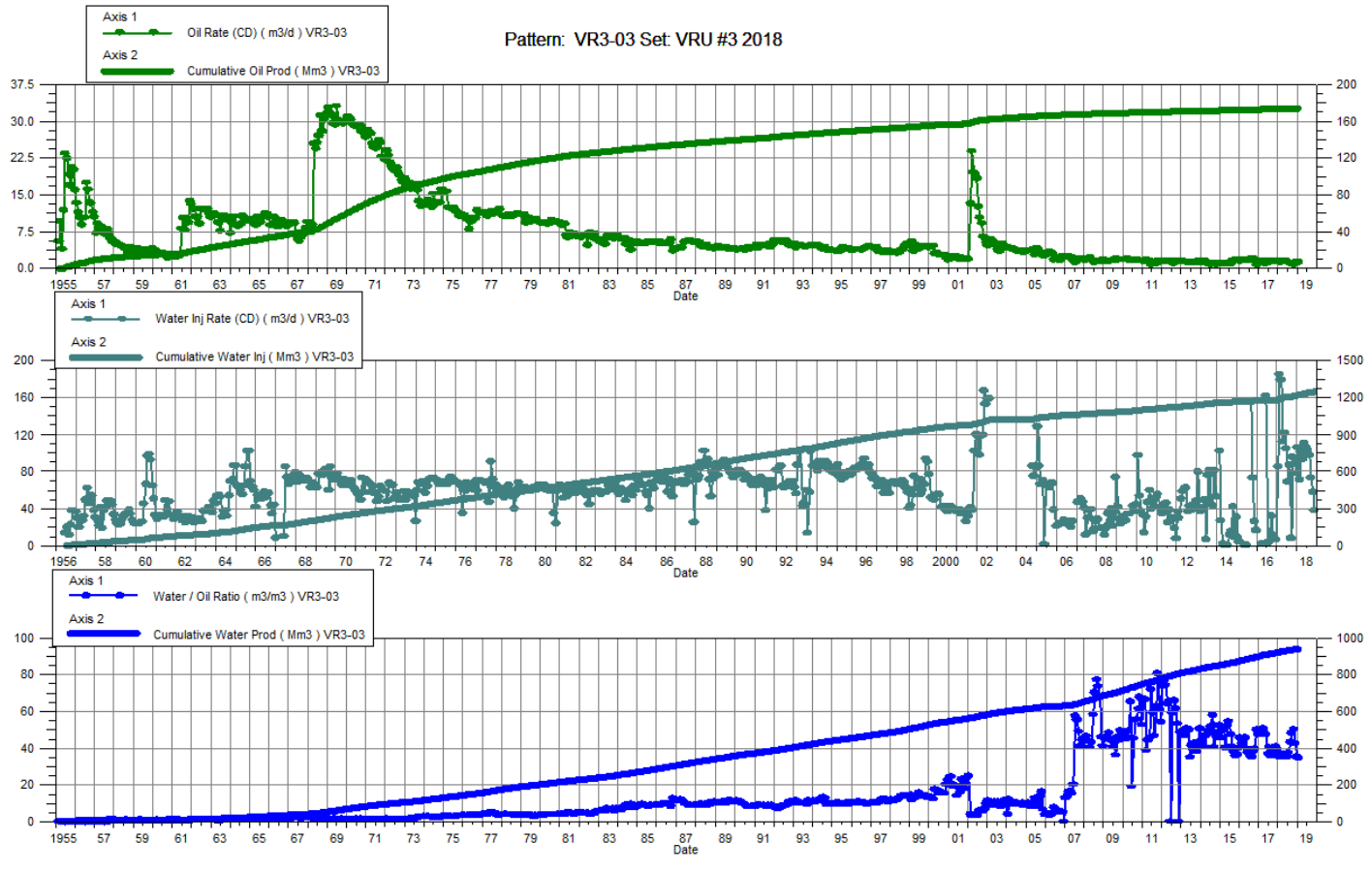


VRU #3

Pattern P-03 – 00/14-13-010-26W1/0

P-03 – 02/14-13-010-26W1/0

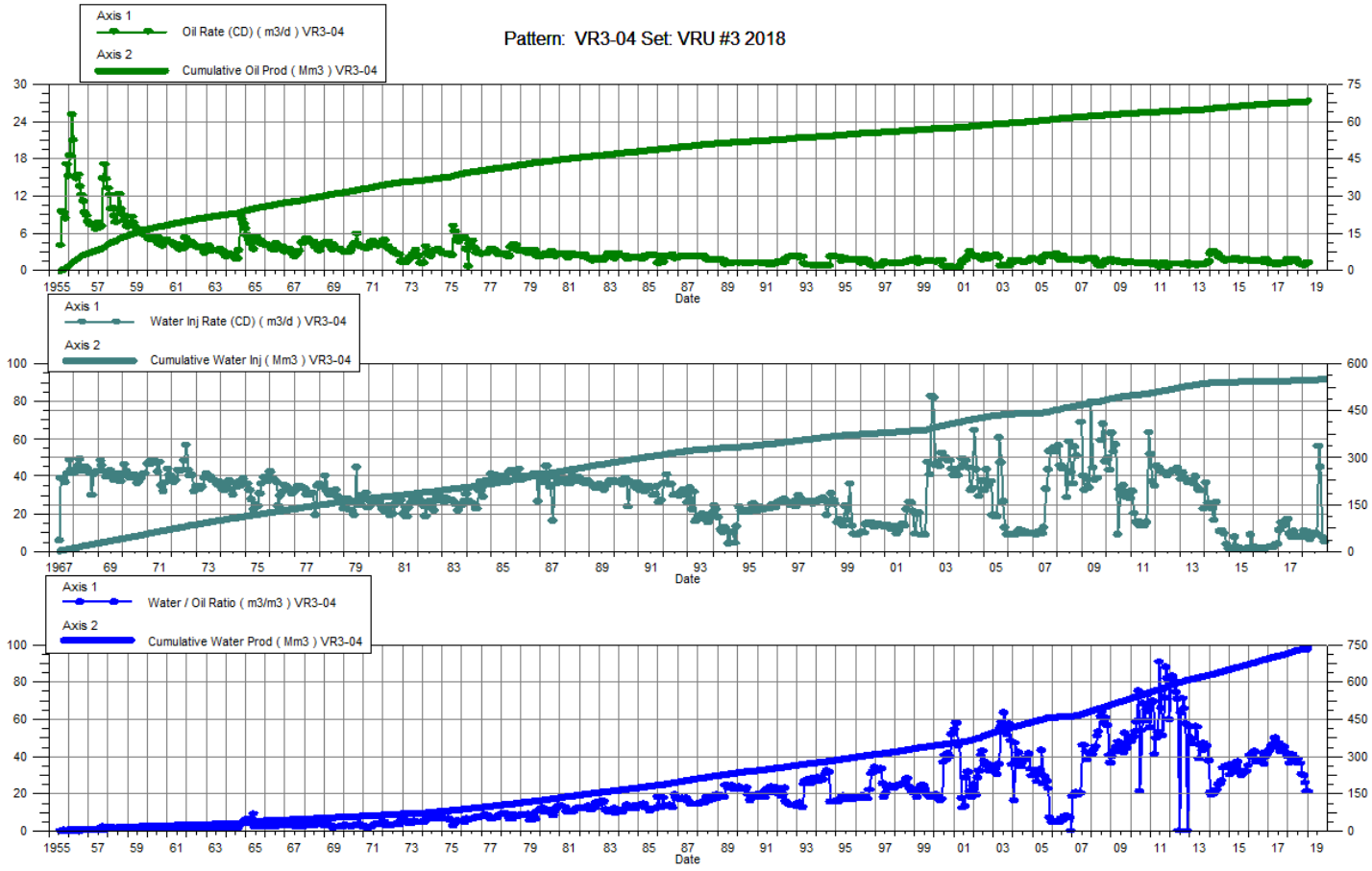
Date	Oil Rate (CD) m3/d	Cum Oil Prod Mm3	Water Rate (CD) m3/d	Cum Water Prod Mm3	Water Inj Rate (CD) m3/d	Cum Water Inj Mm3	Water Oil Ratio m3/m3	Voidage Replacement Ratio	Cum Voidage Replacemt Ratio	Water Inj Pressure kPa
1-31-2018	1.6	173.94	54.2	920.33	105.97	1224.5	35.03	1.90	1.12	4,703.23
2-28-2018	1.4	173.98	50.2	921.73	71.01	1226.5	37.18	1.38	1.12	4,800.00
3-31-2018	1.6	174.03	59.0	923.56	101.09	1229.6	36.72	1.67	1.12	4,800.00
4-30-2018	1.7	174.08	61.1	925.39	93.40	1232.4	35.36	1.49	1.12	4,773.33
5-31-2018	1.6	174.13	56.0	927.13	110.56	1235.9	36.02	1.92	1.12	4,006.45
6-30-2018	1.5	174.17	51.9	928.68	105.64	1239.0	35.33	1.98	1.12	4,200.00
7-31-2018	1.2	174.21	46.6	930.13	103.14	1242.2	37.43	2.16	1.12	4,200.00
8-31-2018	1.2	174.25	49.9	931.68	97.52	1245.2	43.16	1.91	1.12	4,200.00
9-30-2018	1.0	174.28	48.4	933.13	73.00	1247.4	47.95	1.48	1.12	4,200.00
10-31-2018	1.0	174.31	47.5	934.60	57.87	1249.2	50.16	1.20	1.12	4,200.00
11-30-2018	1.1	174.34	46.1	935.98	37.87	1250.4	42.60	0.80	1.12	4,200.00
12-31-2018	1.4	174.38	47.7	937.46		1250.4	35.37		1.12	4,200.00



VRU #3

Pattern P-04 – 00/11-14-010-26W1/0

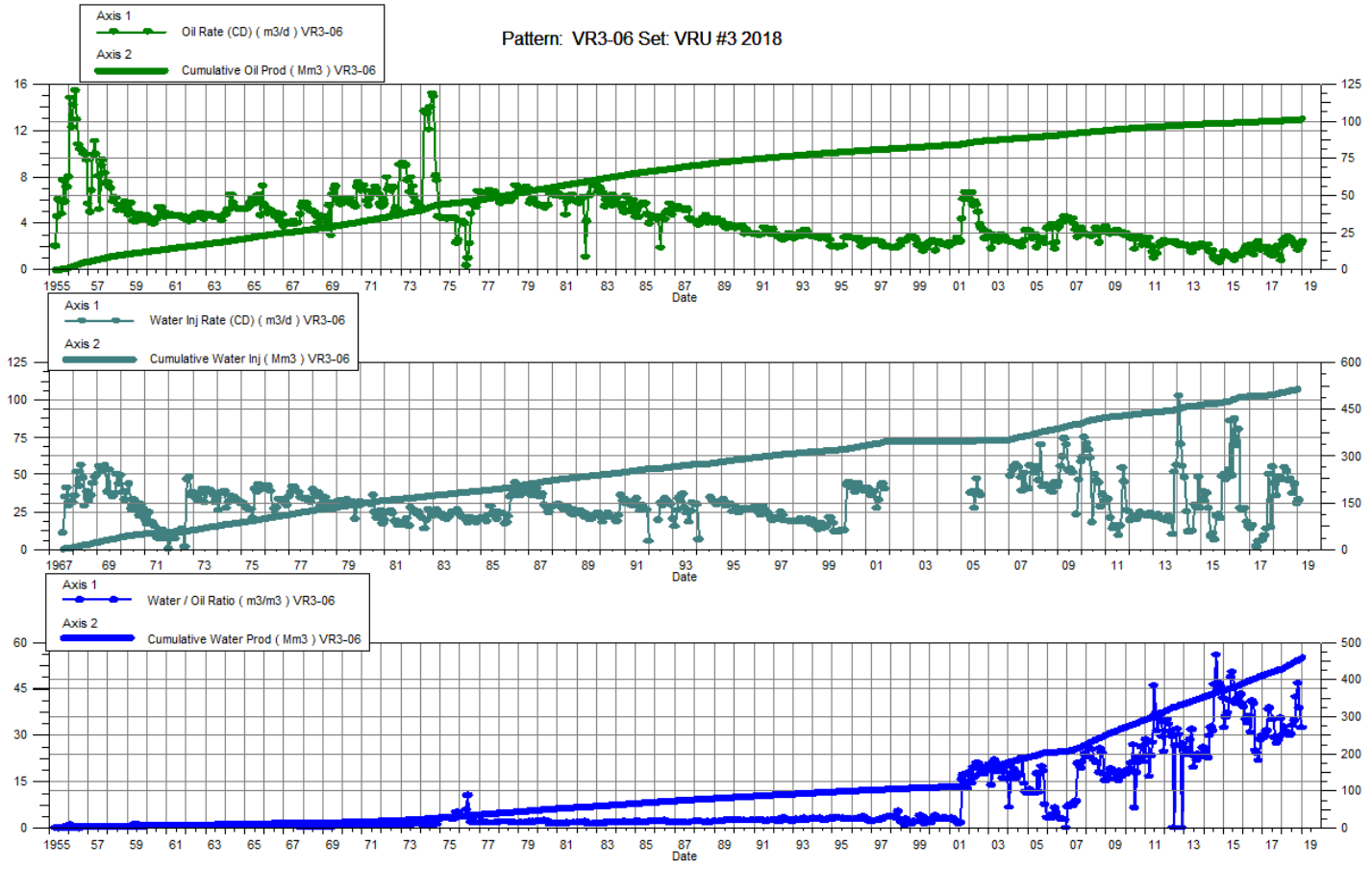
Date	Oil Rate (CD) m3/d	Cum Oil Prod Mm3	Water Rate (CD) m3/d	Cum Water Prod Mm3	Water Inj Rate (CD) m3/d	Cum Water Inj Mm3	Water Oil Ratio m3/m3	Voidage Replacement Ratio	Cum Voidage Replacemt Ratio	Water Inj Pressure kPa
1-31-2018	1.8	67.80	66.7	715.28	10.92	549.3	36.20	0.16	0.70	4,893.55
2-28-2018	1.5	67.84	60.5	716.98	7.20	549.6	41.15	0.12	0.70	4,700.00
3-31-2018	1.5	67.89	62.5	718.91	10.01	549.9	41.04	0.16	0.70	4,700.00
4-30-2018	1.9	67.94	74.8	721.16	5.86	550.0	39.00	0.08	0.70	4,700.00
5-31-2018	1.8	68.00	69.0	723.30	8.19	550.3	38.55	0.12	0.69	4,706.45
6-30-2018	1.7	68.05	61.3	725.14	9.52	550.6	36.65	0.15	0.69	4,906.67
7-31-2018	1.4	68.09	53.0	726.78	9.40	550.9	38.60	0.17	0.69	5,100.00
8-31-2018	1.0	68.12	36.7	727.92	56.16	552.6	36.18	1.49	0.69	5,100.00
9-30-2018	1.0	68.15	30.3	728.82	44.83	554.0	30.27	1.43	0.69	5,100.00
10-31-2018	0.9	68.18	26.2	729.64	7.26	554.2	29.90	0.27	0.69	5,100.00
11-30-2018	1.0	68.21	26.2	730.42	4.73	554.3	25.68	0.17	0.69	5,100.00
12-31-2018	1.3	68.25	27.9	731.29		554.3	21.25		0.69	5,100.00



VRU #3

Pattern P-06 – 00/06-13-010-26W1/0

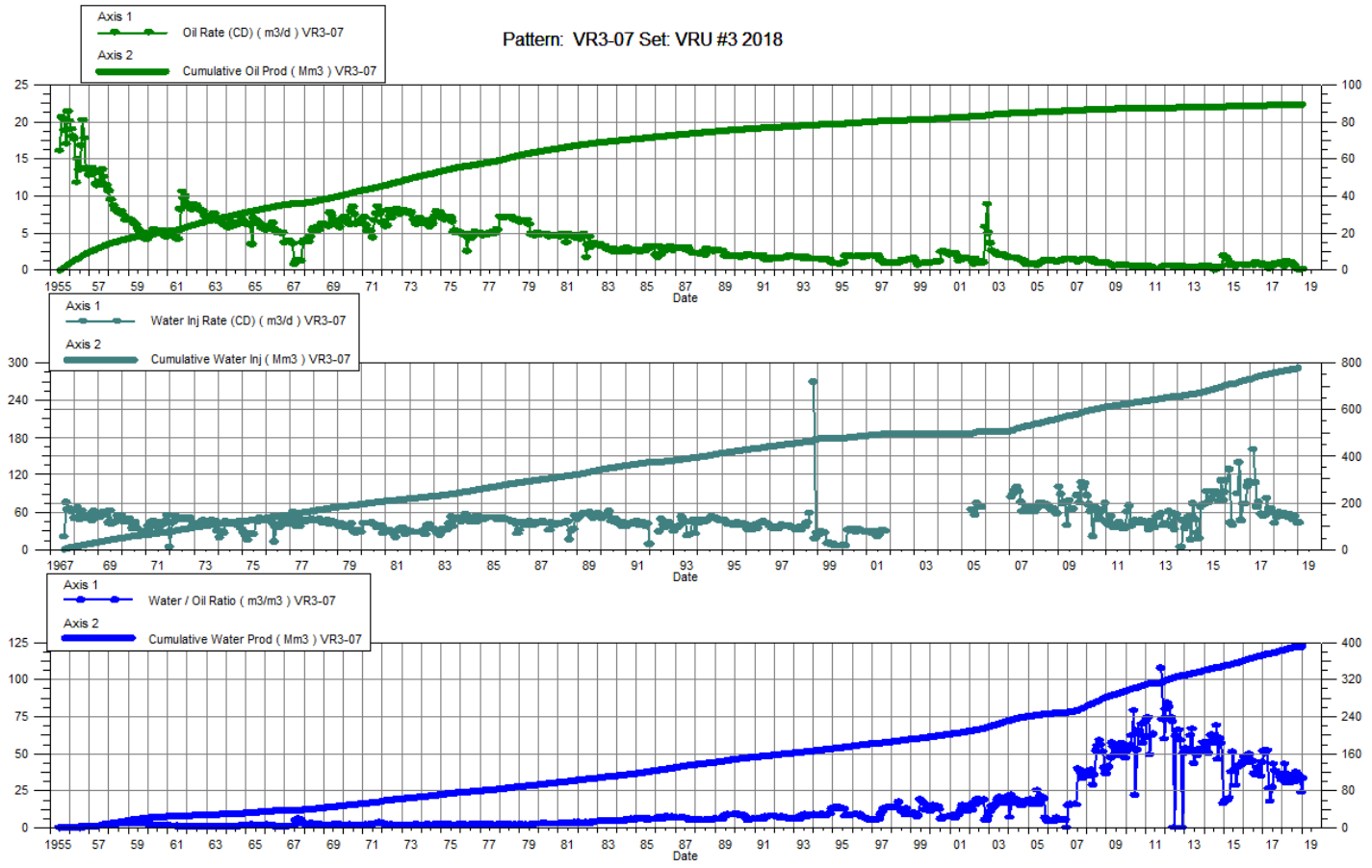
Date	Oil Rate (CD) m3/d	Cum Oil Prod Mm3	Water Rate (CD) m3/d	Cum Water Prod Mm3	Water Inj Rate (CD) m3/d	Cum Water Inj Mm3	Water Oil Ratio m3/m3	Voidage Replacement Ratio	Cum Voidage Replacemt Ratio	Water Inj Pressure kPa
1-31-2018	2.5	100.75	75.7	429.10	44.27	499.9	30.07	0.57	0.94	5,570.97
2-28-2018	2.2	100.81	70.4	431.07	35.65	500.9	32.73	0.49	0.94	5,000.00
3-31-2018	2.7	100.90	84.8	433.70	48.26	502.4	31.06	0.55	0.94	5,000.00
4-30-2018	2.9	100.99	86.2	436.29	46.45	503.8	30.07	0.52	0.93	4,993.33
5-31-2018	2.7	101.07	81.1	438.80	46.84	505.2	29.85	0.56	0.93	4,806.45
6-30-2018	2.6	101.15	80.0	441.20	54.92	506.8	30.30	0.66	0.93	5,006.67
7-31-2018	2.5	101.22	81.1	443.71	52.29	508.5	33.14	0.63	0.93	5,200.00
8-31-2018	2.3	101.30	79.3	446.17	46.19	509.9	34.76	0.57	0.93	5,200.00
9-30-2018	2.1	101.36	87.0	448.78	47.07	511.3	42.23	0.53	0.93	5,200.00
10-31-2018	1.7	101.41	80.3	451.27	37.45	512.5	46.67	0.46	0.92	5,200.00
11-30-2018	1.9	101.47	72.1	453.43	43.77	513.8	38.73	0.59	0.92	5,200.00
12-31-2018	2.2	101.54	72.5	455.68	30.66	514.7	32.34	0.41	0.92	5,200.00



VRU #3

Pattern P-07 – 00/09-13-010-26W1/0

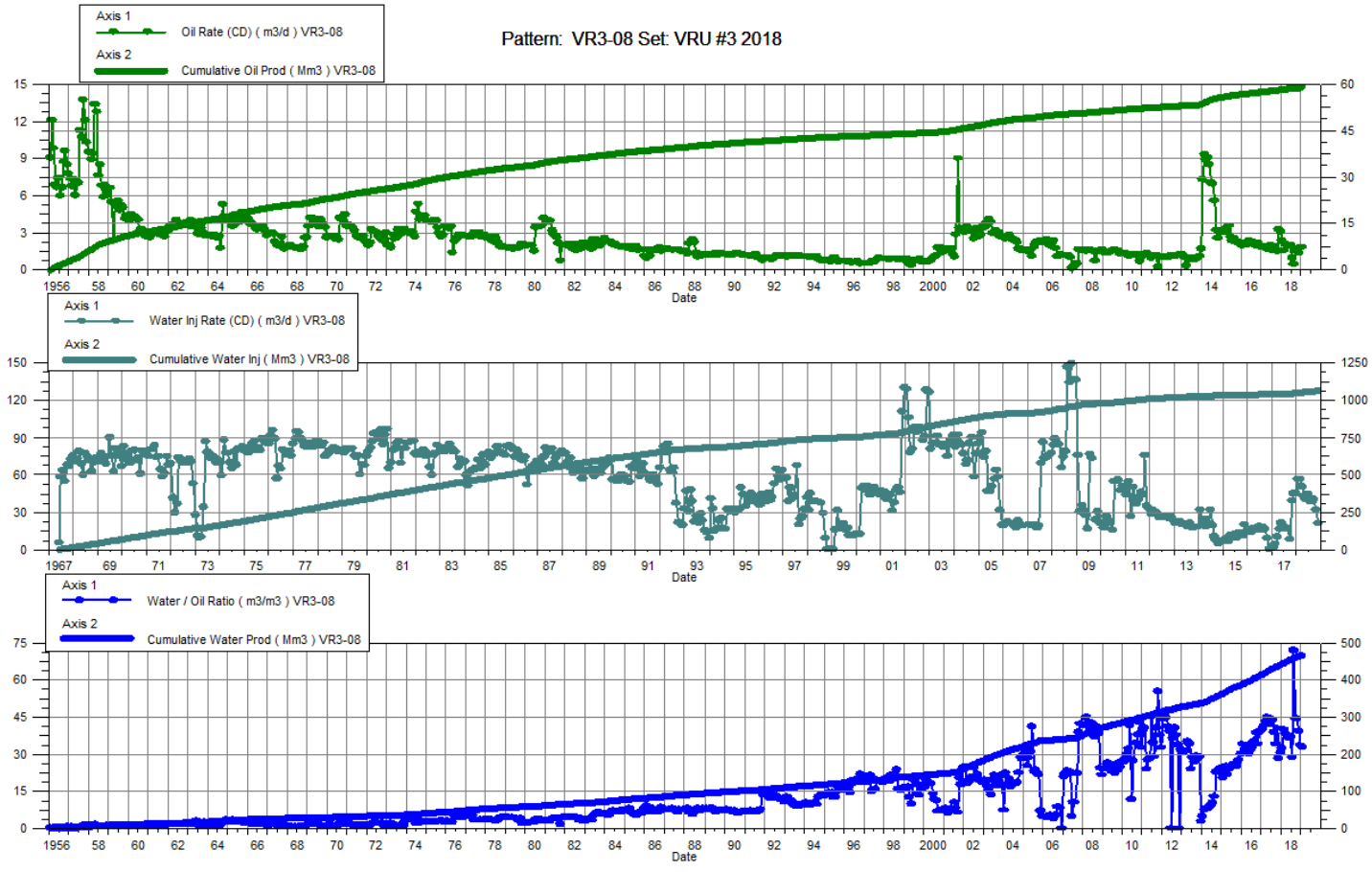
Date	Oil Rate (CD) m3/d	Cum Oil Prod Mm3	Water Rate (CD) m3/d	Cum Water Prod Mm3	Water Inj Rate (CD) m3/d	Cum Water Inj Mm3	Water Oil Ratio m3/m3	Voidage Replacement Ratio	Cum Voidage Replacemt Ratio	Water Inj Pressure kPa
1-31-2018	0.9	89.41	29.2	383.12	41.68	761.4	33.74	1.39	1.61	4,700.00
2-28-2018	0.6	89.43	26.0	383.85	52.34	762.8	42.77	1.96	1.61	4,700.00
3-31-2018	1.2	89.46	35.5	384.95	58.93	764.7	30.39	1.61	1.61	4,700.00
4-30-2018	0.9	89.49	33.0	385.94	53.98	766.3	35.92	1.59	1.61	4,693.33
5-31-2018	1.1	89.52	33.4	386.97	53.85	767.9	30.34	1.56	1.61	4,500.00
6-30-2018	1.1	89.56	32.6	387.95	57.13	769.7	31.01	1.70	1.61	4,506.67
7-31-2018	1.0	89.59	32.5	388.96	56.81	771.4	33.81	1.70	1.61	4,700.00
8-31-2018	0.6	89.60	17.6	389.50	52.29	773.0	30.57	2.88	1.61	4,700.00
9-30-2018	0.3	89.61	11.1	389.84	55.33	774.7	37.67	4.85	1.61	4,700.00
10-31-2018	0.1	89.62	4.5	389.98	47.35	776.2	35.52	10.17	1.61	4,700.00
11-30-2018	0.2	89.62	5.6	390.14	53.93	777.8	34.32	9.34	1.62	4,700.00
12-31-2018	0.2	89.63	4.8	390.29	42.55	779.1	23.91	8.55	1.62	4,700.00



VRU #3

Pattern P-08 – 00/04-14-010-26W1/0

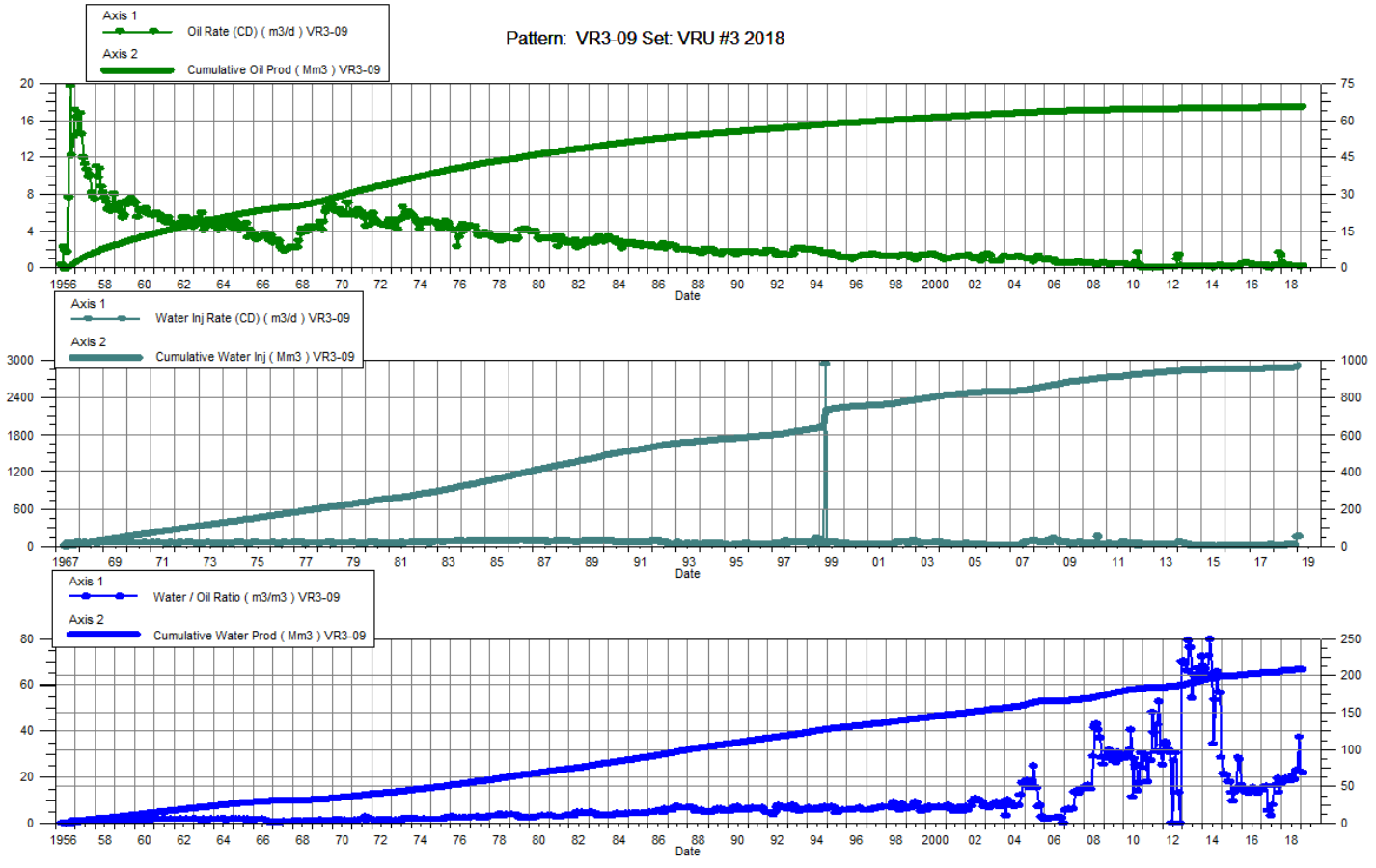
Date	Oil Rate (CD) m3/d	Cum Oil Prod Mm3	Water Rate (CD) m3/d	Cum Water Prod Mm3	Water Inj Rate (CD) m3/d	Cum Water Inj Mm3	Water Oil Ratio m3/m3	Voidage Replacement Ratio	Cum Voidage Replacemt Ratio	Water Inj Pressure kPa
1-31-2018	2.4	58.42	77.7	443.19	56.57	1052.9	32.53	0.71	2.09	5,500.00
2-28-2018	1.6	58.46	64.1	444.98	56.64	1054.4	39.98	0.86	2.09	5,500.00
3-31-2018	2.1	58.53	80.3	447.47	50.66	1056.0	38.31	0.62	2.08	5,500.00
4-30-2018	2.0	58.59	76.7	449.77	43.07	1057.3	37.73	0.55	2.08	5,500.00
5-31-2018	2.1	58.65	75.1	452.10	40.00	1058.5	36.42	0.52	2.07	5,454.84
6-30-2018	2.0	58.71	75.0	454.35	44.82	1059.9	36.94	0.58	2.06	4,106.67
7-31-2018	1.0	58.74	28.3	455.23	38.18	1061.1	28.64	1.30	2.06	4,300.00
8-31-2018	0.5	58.76	35.9	456.34	38.58	1062.3	71.79	1.06	2.06	4,300.00
9-30-2018	1.7	58.81	76.0	458.62	40.47	1063.5	44.08	0.52	2.05	4,300.00
10-31-2018	1.6	58.86	69.1	460.76	31.81	1064.5	44.30	0.45	2.04	4,300.00
11-30-2018	1.4	58.90	55.3	462.42	21.10	1065.1	39.40	0.37	2.04	4,300.00
12-31-2018	1.8	58.96	61.2	464.31		1065.1	33.53		2.03	4,300.00



VRU #3

Pattern P-09 – 00/14-11-010-26W1/0

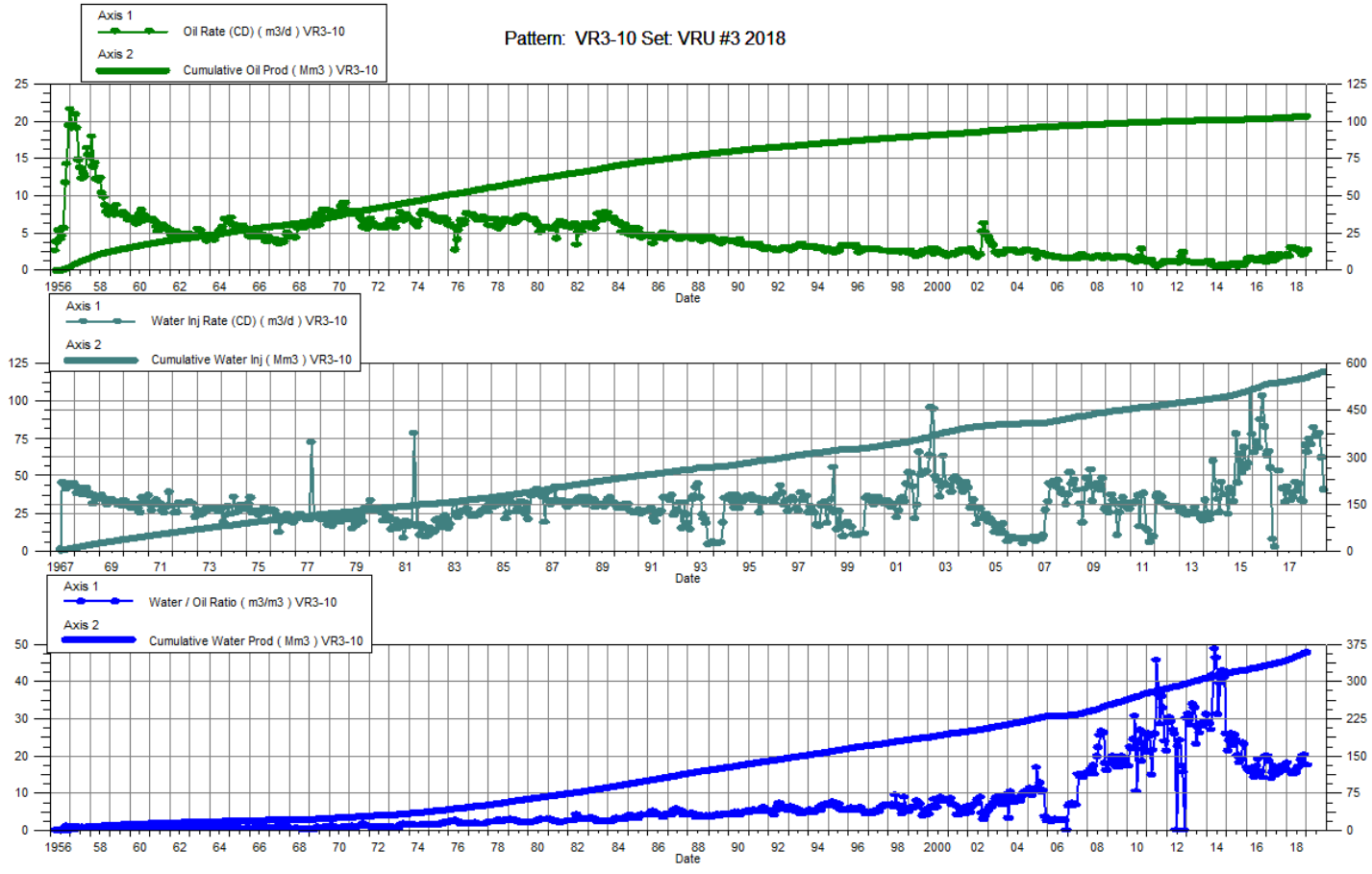
Date	Oil Rate (CD) m3/d	Cum Oil Prod Mm3	Water Rate (CD) m3/d	Cum Water Prod Mm3	Water Inj Rate (CD) m3/d	Cum Water Inj Mm3	Water Oil Ratio m3/m3	Voidage Replacement Ratio	Cum Voidage Replacemt Ratio	Water Inj Pressure kPa
1-31-2018	0.6	65.72	10.8	205.89	5.20	963.1	17.45	0.46	3.53	6,600.00
2-28-2018	0.3	65.73	5.6	206.05	5.55	963.3	18.95	0.94	3.53	6,600.00
3-31-2018	0.3	65.74	6.3	206.24	5.55	963.4	19.36	0.83	3.53	6,600.00
4-30-2018	0.4	65.75	6.7	206.44	5.72	963.6	18.59	0.81	3.52	6,600.00
5-31-2018	0.3	65.76	6.1	206.63	5.15	963.8	18.53	0.80	3.52	6,532.26
6-30-2018	0.3	65.77	5.9	206.81	8.17	964.0	18.32	1.32	3.52	4,500.00
7-31-2018	0.3	65.78	6.1	207.00	25.90	964.8	20.46	4.04	3.52	4,500.00
8-31-2018	0.3	65.79	5.6	207.17	25.94	965.6	19.05	4.38	3.52	4,500.00
9-30-2018	0.3	65.80	6.5	207.37	27.03	966.4	22.70	3.97	3.52	4,500.00
10-31-2018	0.3	65.80	6.3	207.56	24.00	967.2	23.09	3.67	3.52	4,500.00
11-30-2018	0.2	65.81	5.4	207.73	15.70	967.7	37.25	2.81	3.52	4,500.00
12-31-2018	0.3	65.82	5.9	207.91	146.39	972.2	22.18	23.92	3.54	4,500.00



VRU #3

Pattern P-10 – 00/16-11-010-26W1/0

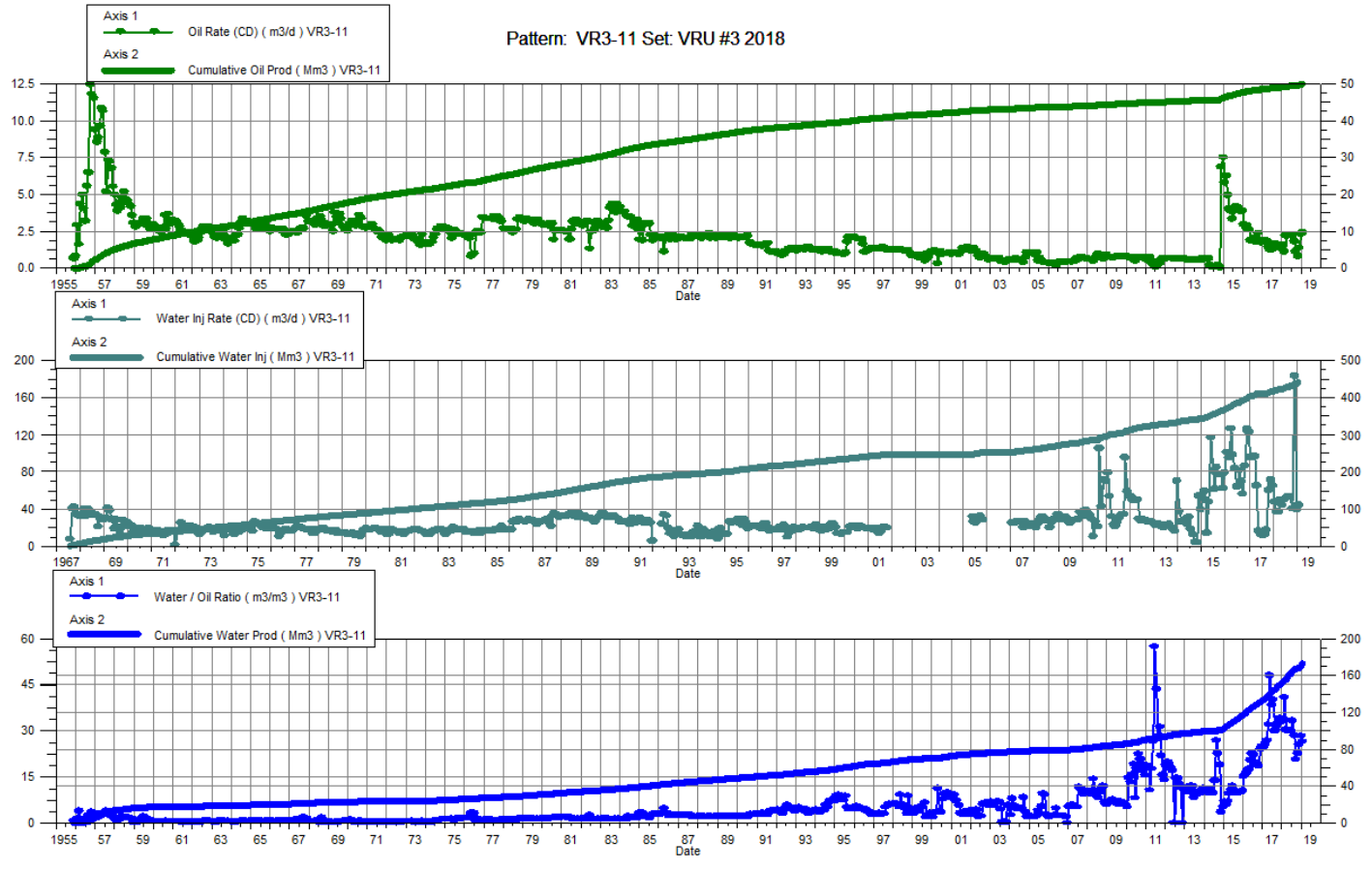
Date	Oil Rate (CD) m3/d	Cum Oil Prod Mm3	Water Rate (CD) m3/d	Cum Water Prod Mm3	Water Inj Rate (CD) m3/d	Cum Water Inj Mm3	Water Oil Ratio m3/m3	Voidage Replacement Ratio	Cum Voidage Replacemt Ratio	Water Inj Pressure kPa
1-31-2018	2.1	102.80	37.9	342.69	33.18	553.8	18.12	0.83	1.24	5,000.00
2-28-2018	1.9	102.85	30.8	343.55	70.60	555.8	16.00	2.16	1.24	5,000.00
3-31-2018	3.0	102.95	47.5	345.02	65.93	557.8	15.65	1.30	1.24	5,000.00
4-30-2018	3.1	103.04	47.2	346.44	74.66	560.1	15.11	1.48	1.24	5,000.00
5-31-2018	3.0	103.13	45.2	347.84	70.86	562.3	15.23	1.47	1.24	4,974.19
6-30-2018	3.0	103.22	46.0	349.22	82.41	564.7	15.46	1.68	1.24	4,210.00
7-31-2018	2.7	103.31	45.6	350.64	76.55	567.1	16.73	1.58	1.24	4,500.00
8-31-2018	2.8	103.39	48.8	352.15	78.13	569.5	17.15	1.51	1.25	4,500.00
9-30-2018	2.6	103.47	48.4	353.60	78.50	571.9	18.91	1.54	1.25	4,500.00
10-31-2018	2.1	103.54	41.8	354.90	62.29	573.8	19.81	1.42	1.25	4,500.00
11-30-2018	2.2	103.60	44.9	356.24	40.73	575.0	20.19	0.86	1.25	4,500.00
12-31-2018	2.7	103.69	47.1	357.70		575.0	17.68		1.24	4,500.00



VRU #3

Pattern P-11 – 00/14-12-010-26W1/0

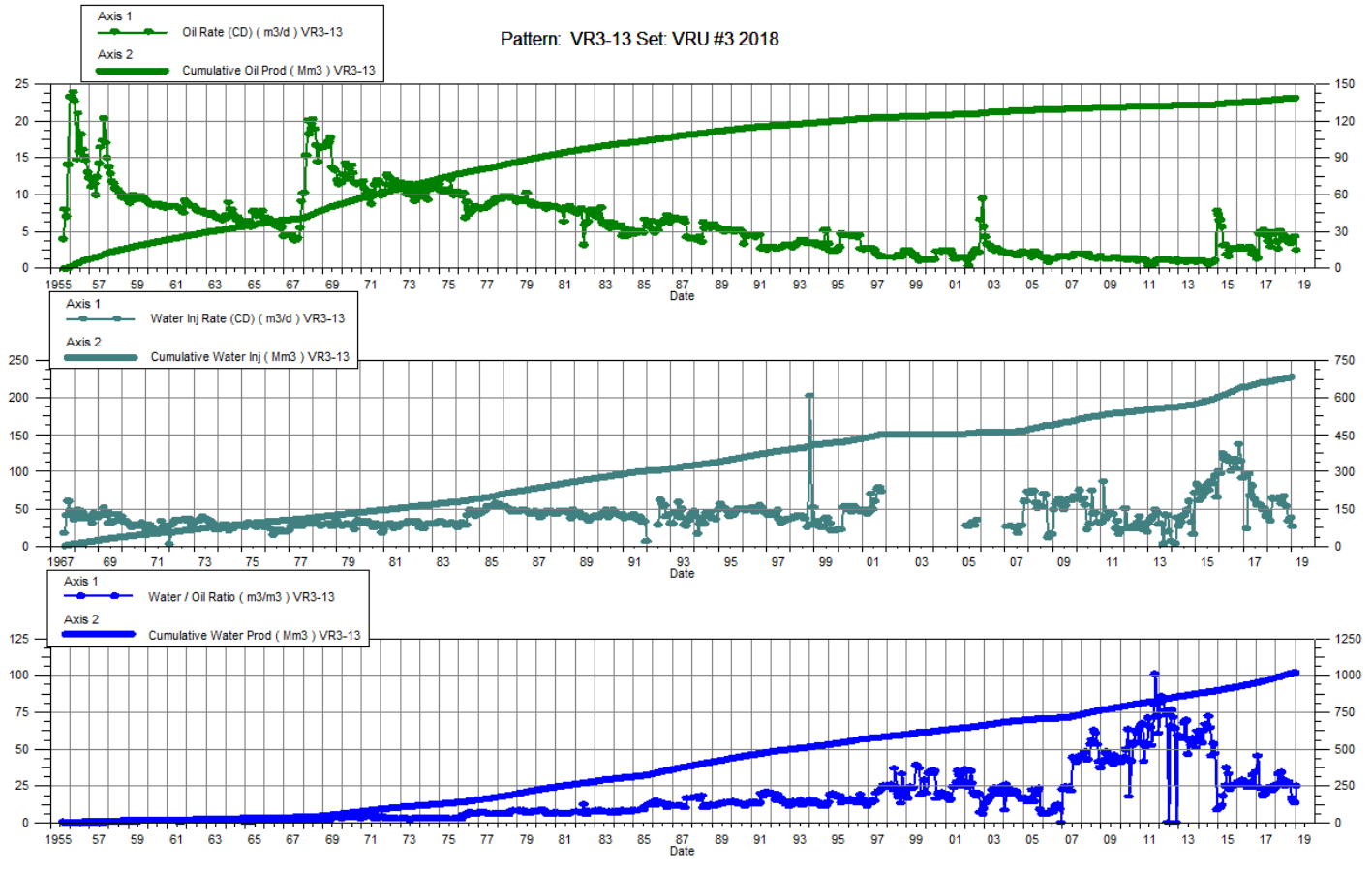
Date	Oil Rate (CD) m3/d	Cum Oil Prod Mm3	Water Rate (CD) m3/d	Cum Water Prod Mm3	Water Inj Rate (CD) m3/d	Cum Water Inj Mm3	Water Oil Ratio m3/m3	Voidage Replacement Ratio	Cum Voidage Replacemt Ratio	Water Inj Pressure kPa
1-31-2018	1.6	49.21	53.0	152.49	47.54	420.7	33.35	0.87	2.08	5,300.00
2-28-2018	1.2	49.24	46.7	153.79	36.79	421.7	40.74	0.77	2.07	5,300.00
3-31-2018	2.2	49.31	66.4	155.85	36.94	422.9	30.24	0.54	2.05	5,300.00
4-30-2018	2.3	49.38	68.0	157.89	49.80	424.4	29.70	0.71	2.04	5,300.00
5-31-2018	2.3	49.45	67.5	159.99	43.71	425.7	29.72	0.63	2.02	5,259.68
6-30-2018	2.3	49.52	69.9	162.08	50.68	427.2	29.89	0.70	2.01	4,081.67
7-31-2018	2.2	49.59	72.1	164.32	52.13	428.9	33.27	0.70	2.00	5,000.00
8-31-2018	1.8	49.64	51.5	165.91	53.39	430.5	28.41	1.00	1.99	5,000.00
9-30-2018	1.2	49.68	23.8	166.63	53.27	432.1	20.61	2.13	1.99	5,000.00
10-31-2018	0.8	49.70	18.5	167.20	40.13	433.3	22.56	2.07	1.99	5,000.00
11-30-2018	1.4	49.75	36.0	168.28	183.70	438.9	25.53	4.90	2.00	5,000.00
12-31-2018	2.3	49.82	65.4	170.31	39.24	440.1	28.29	0.58	1.99	5,000.00



VRU #3

Pattern P-13 – 00/04-18-010-26W1/0

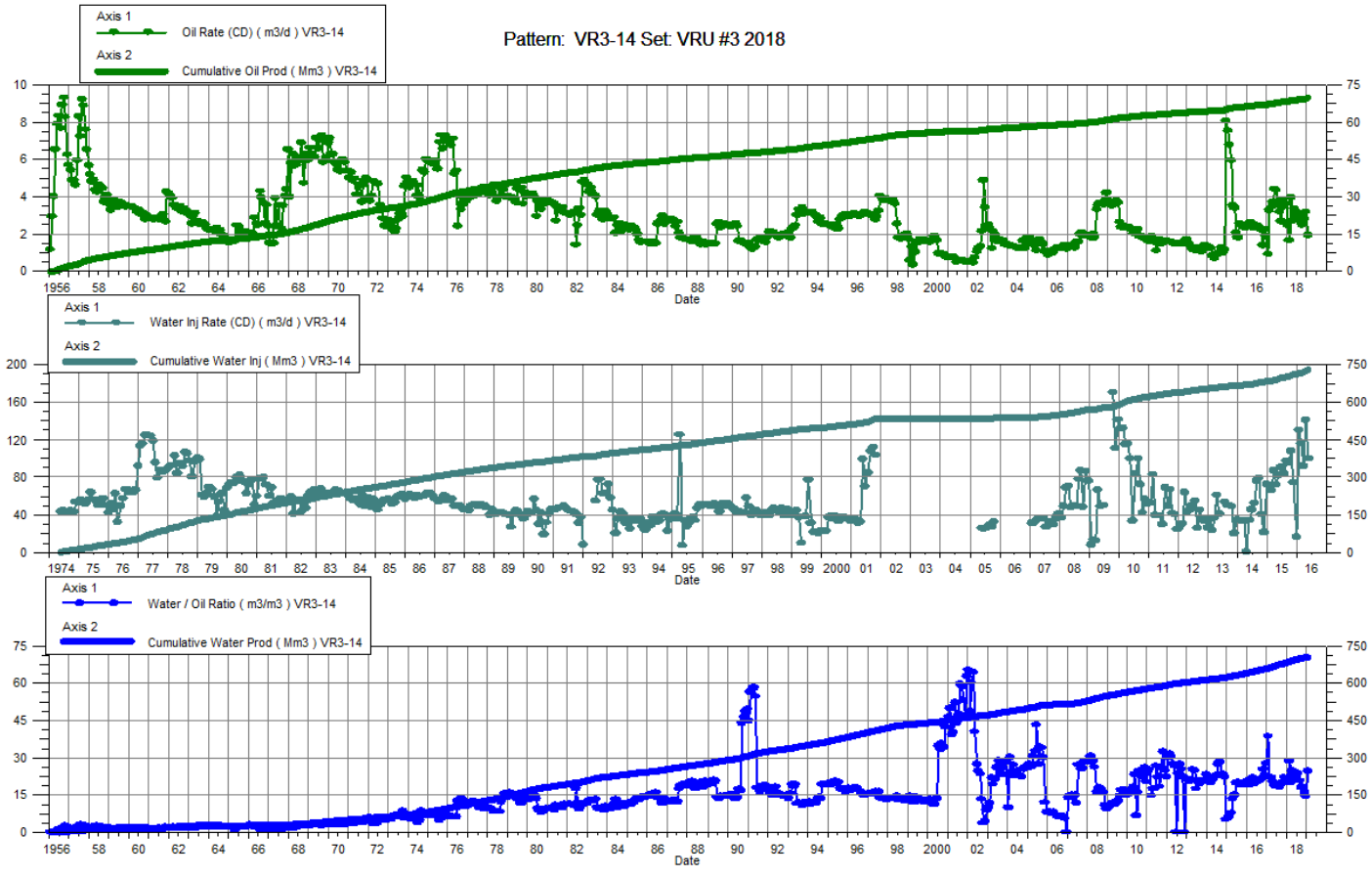
Date	Oil Rate (CD) m3/d	Cum Oil Prod Mm3	Water Rate (CD) m3/d	Cum Water Prod Mm3	Water Inj Rate (CD) m3/d	Cum Water Inj Mm3	Water Oil Ratio m3/m3	Voidage Replacement Ratio	Cum Voidage Replacemt Ratio	Water Inj Pressure kPa
1-31-2018	3.6	137.83	89.0	983.62	43.68	667.2	24.59	0.47	0.59	4,600.00
2-28-2018	2.7	137.91	87.7	986.07	33.81	668.2	32.97	0.37	0.59	4,600.00
3-31-2018	5.1	138.07	136.3	990.30	64.94	670.2	26.54	0.46	0.59	4,600.00
4-30-2018	3.9	138.18	132.0	994.26	62.68	672.1	34.14	0.46	0.59	4,596.67
5-31-2018	4.5	138.32	130.7	998.31	63.35	674.1	29.11	0.47	0.59	4,503.23
6-30-2018	4.3	138.45	106.6	1001.51	64.85	676.0	25.00	0.59	0.59	4,610.00
7-31-2018	3.9	138.57	104.5	1004.75	63.32	678.0	26.76	0.58	0.59	4,900.00
8-31-2018	3.6	138.68	100.2	1007.85	56.16	679.7	27.51	0.54	0.59	4,900.00
9-30-2018	3.5	138.79	90.3	1010.56	66.80	681.7	25.53	0.71	0.59	4,900.00
10-31-2018	3.5	138.90	58.3	1012.37	52.97	683.3	16.91	0.86	0.59	4,900.00
11-30-2018	3.9	139.01	57.6	1014.10	33.33	684.3	14.93	0.54	0.59	4,900.00
12-31-2018	4.3	139.15	58.3	1015.90	37.62	685.5	13.52	0.60	0.59	4,900.00



VRU #3

Pattern P-14 – 02/02-18-010-26W1/0

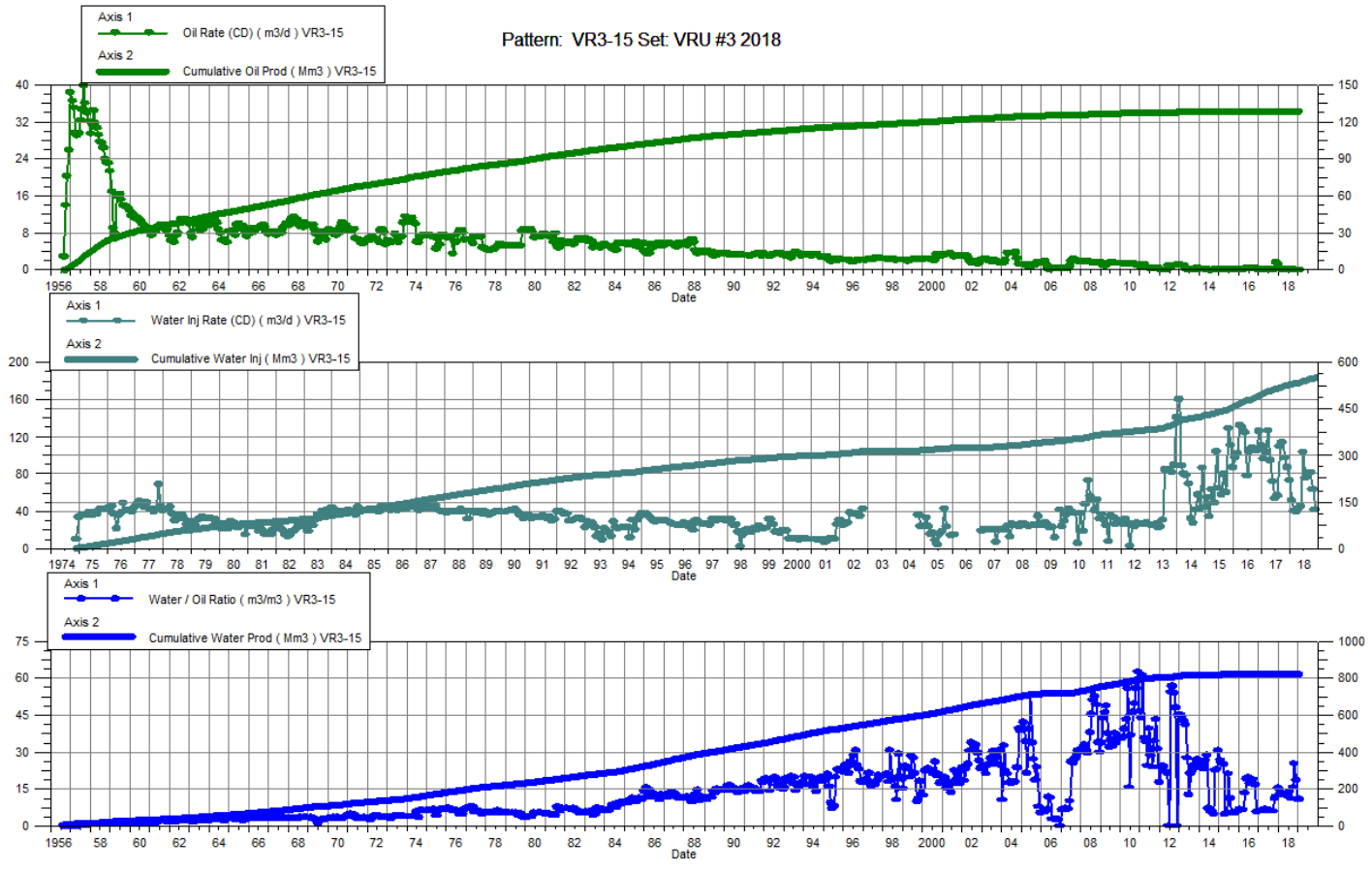
Date	Oil Rate (CD) m3/d	Cum Oil Prod Mm3	Water Rate (CD) m3/d	Cum Water Prod Mm3	Water Inj Rate (CD) m3/d	Cum Water Inj Mm3	Water Oil Ratio m3/m3	Voidage Replacement Ratio	Cum Voidage Replacemt Ratio	Water Inj Pressure kPa
1-31-2018	2.5	68.62	55.2	682.91		731.0	21.94		0.97	-
2-28-2018	1.7	68.67	47.8	684.25		731.0	28.47		0.97	-
3-31-2018	4.0	68.79	78.7	686.69		731.0	19.86		0.97	-
4-30-2018	2.7	68.87	66.8	688.70		731.0	24.71		0.96	-
5-31-2018	3.4	68.98	72.4	690.94		731.0	21.44		0.96	-
6-30-2018	3.2	69.07	70.2	693.04		731.0	22.12		0.96	-
7-31-2018	2.9	69.16	68.5	695.17		731.0	23.79		0.96	-
8-31-2018	2.9	69.25	60.5	697.04		731.0	20.77		0.95	-
9-30-2018	2.7	69.33	47.8	698.48		731.0	18.01		0.95	-
10-31-2018	2.5	69.41	45.9	699.90		731.0	18.36		0.95	-
11-30-2018	2.8	69.49	45.1	701.25		731.0	16.06		0.95	-
12-31-2018	3.2	69.59	46.3	702.69		731.0	14.51		0.95	-



VRU #3

Pattern P-15 – 00/12-11-010-26W1/0

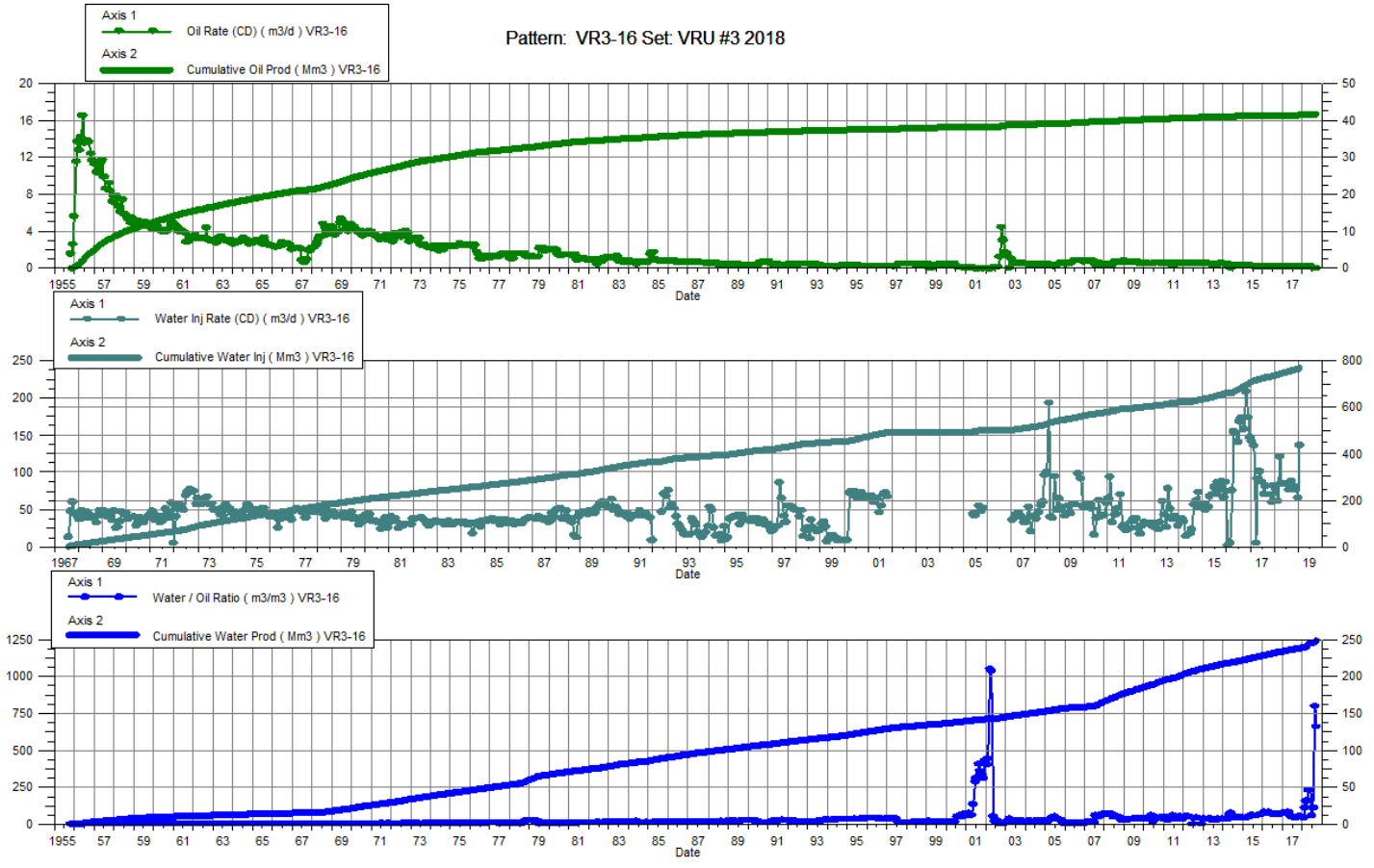
Date	Oil Rate (CD) m3/d	Cum Oil Prod Mm3	Water Rate (CD) m3/d	Cum Water Prod Mm3	Water Inj Rate (CD) m3/d	Cum Water Inj Mm3	Water Oil Ratio m3/m3	Voidage Replacement Ratio	Cum Voidage Replacemt Ratio	Water Inj Pressure kPa
1-31-2018	0.5	128.90	7.8	821.87	51.78	532.8	15.02	6.22	0.56	5,400.00
2-28-2018	0.2	128.91	2.8	821.95	40.36	533.9	12.81	13.25	0.56	5,400.00
3-31-2018	0.2	128.92	3.2	822.05	38.87	535.1	13.36	11.48	0.56	5,400.00
4-30-2018	0.3	128.92	3.3	822.15	43.07	536.4	12.80	12.12	0.56	5,400.00
5-31-2018	0.2	128.93	2.9	822.24	45.39	537.8	13.02	14.33	0.56	5,354.84
6-30-2018	0.2	128.94	2.7	822.32	103.88	541.0	12.02	35.16	0.57	4,036.67
7-31-2018	0.2	128.94	3.0	822.42	75.80	543.3	14.24	23.70	0.57	5,100.00
8-31-2018	0.2	128.95	2.3	822.49	80.23	545.8	11.20	32.23	0.57	5,100.00
9-30-2018	0.2	128.96	3.2	822.58	81.90	548.2	15.71	24.14	0.58	5,100.00
10-31-2018	0.1	128.96	3.5	822.69	63.10	550.2	25.37	17.45	0.58	5,100.00
11-30-2018	0.1	128.96	2.3	822.76	41.27	551.4	18.55	16.72	0.58	5,100.00
12-31-2018	0.2	128.97	1.6	822.81		551.4	10.96		0.58	5,100.00



VRU #3

Pattern P-16 – 00/14-07-010-25W1/0

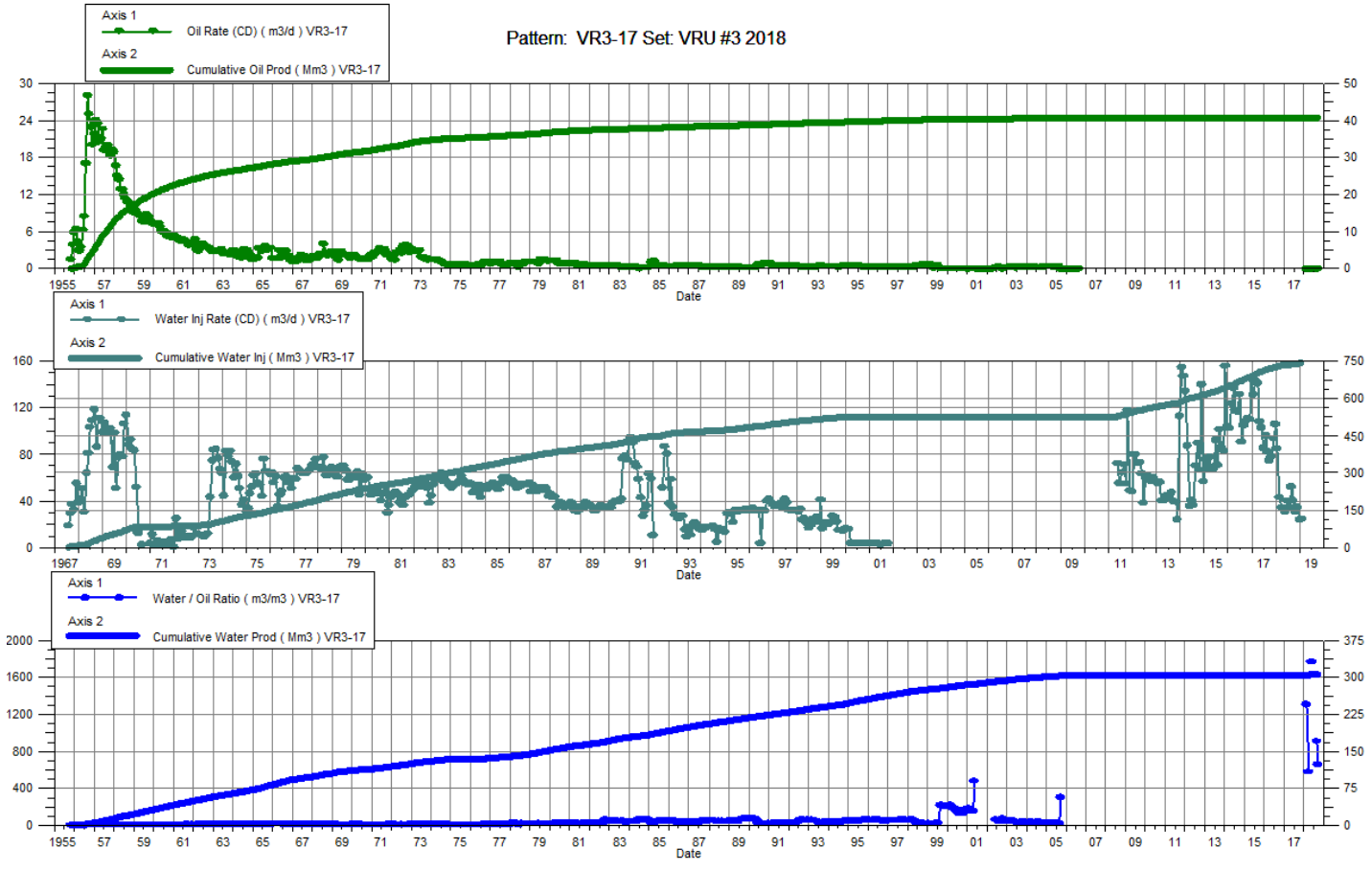
Date	Oil Rate (CD) m3/d	Cum Oil Prod Mm3	Water Rate (CD) m3/d	Cum Water Prod Mm3	Water Inj Rate (CD) m3/d	Cum Water Inj Mm3	Water Oil Ratio m3/m3	Voidage Replacement Ratio	Cum Voidage Replacemt Ratio	Water Inj Pressure kPa
1-31-2018	0.3	41.55	11.3	238.45	78.41	740.1	44.50	6.79	2.64	4,406.45
2-28-2018	0.2	41.56	24.8	239.15	60.94	741.8	110.47	2.43	2.64	4,600.00
3-31-2018	0.3	41.57	49.7	240.69	121.55	745.6	156.65	2.43	2.63	4,600.00
4-30-2018	0.3	41.58	63.5	242.59	84.26	748.1	232.27	1.32	2.63	4,590.00
5-31-2018	0.2	41.58	53.4	244.25	84.92	750.7	229.89	1.58	2.62	4,300.00
6-30-2018	0.2	41.59	9.3	244.53	84.16	753.3	60.49	8.86	2.63	4,310.00
7-31-2018	0.1	41.59	7.8	244.77	83.59	755.9	113.09	10.56	2.63	4,600.00
8-31-2018	0.1	41.59	41.1	246.04	75.97	758.2	795.88	1.85	2.63	4,600.00
9-30-2018	0.1	41.59	46.1	247.43	87.70	760.8	658.93	1.90	2.63	4,600.00
10-31-2018		41.59		247.43	75.97	763.2			2.63	4,600.00
11-30-2018		41.59		247.43	79.57	765.6			2.64	4,600.00
12-31-2018		41.59		247.43	65.48	767.6			2.65	4,600.00



VRU #3

Pattern P-17 – 00/12-07-010-25W1/0

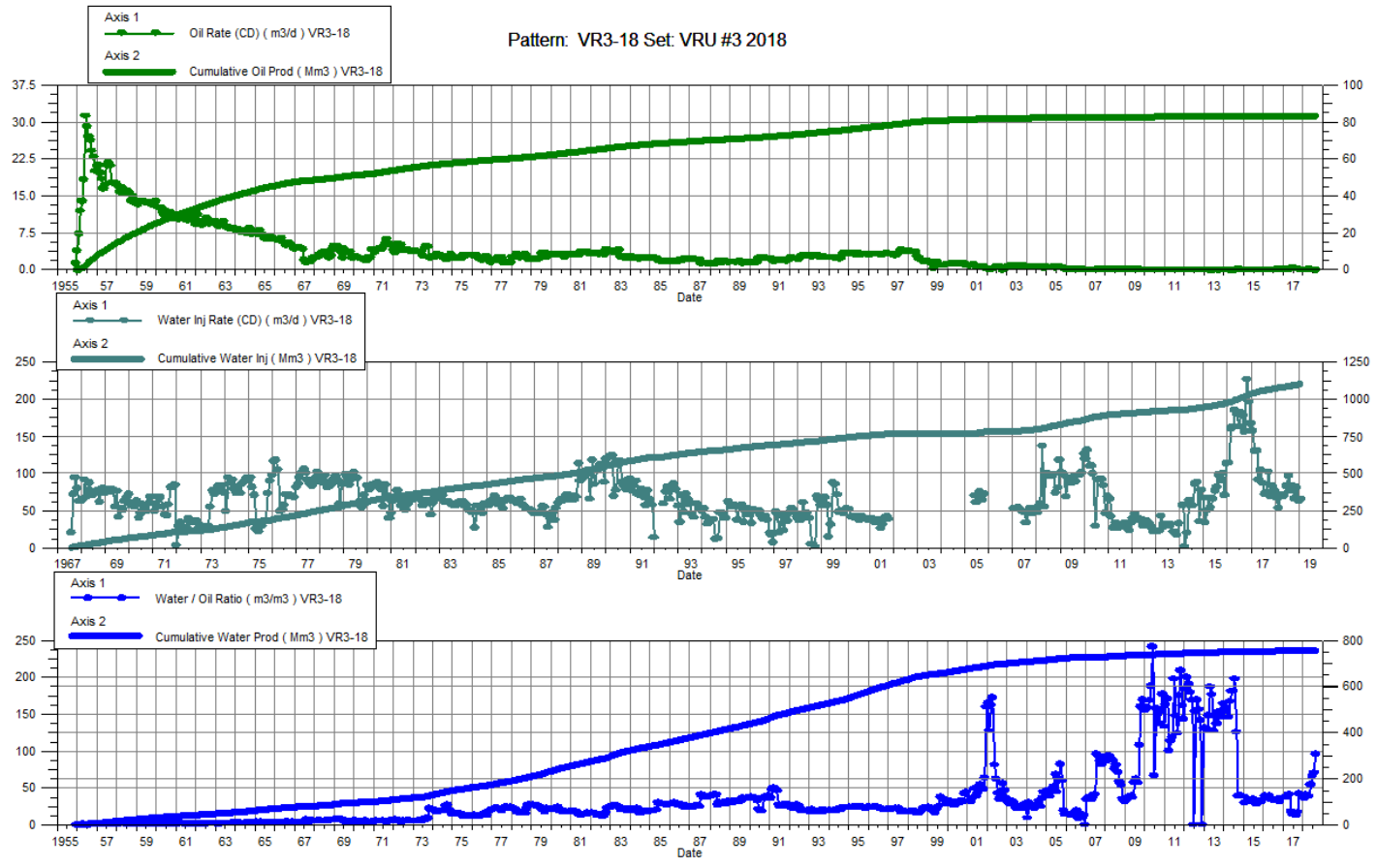
Date	Oil Rate (CD) m3/d	Cum Oil Prod Mm3	Water Rate (CD) m3/d	Cum Water Prod Mm3	Water Inj Rate (CD) m3/d	Cum Water Inj Mm3	Water Oil Ratio m3/m3	Voidage Replacement Ratio	Cum Voidage Replacemt Ratio	Water Inj Pressure kPa
1-31-2018		40.89		302.83	84.75	732.7			2.13	4,754.84
2-28-2018	0.0	40.89	7.0	303.03	42.78	733.9	1307.00	6.11	2.13	4,900.00
3-31-2018	0.0	40.89	18.6	303.61	34.05	734.9	577.00	1.83	2.13	4,900.00
4-30-2018	0.0	40.89	25.2	304.36	34.00	736.0		1.35	2.13	4,893.33
5-31-2018	0.0	40.89	21.4	305.02	30.66	736.9	1765.60	1.44	2.13	4,703.23
6-30-2018		40.89		305.02	39.95	738.1			2.13	4,806.67
7-31-2018		40.89		305.02	33.82	739.2			2.13	5,000.00
8-31-2018	0.0	40.89	18.3	305.59	52.29	740.8	909.12	2.85	2.13	5,000.00
9-30-2018	0.0	40.89	23.1	306.28	40.43	742.0	658.93	1.75	2.13	5,000.00
10-31-2018		40.89		306.28	30.65	742.9			2.14	5,000.00
11-30-2018		40.89		306.28	34.77	744.0			2.14	5,000.00
12-31-2018		40.89		306.28	23.53	744.7			2.14	5,000.00



VRU #3

Pattern P-18 – 00/10-07-010-25W1/0

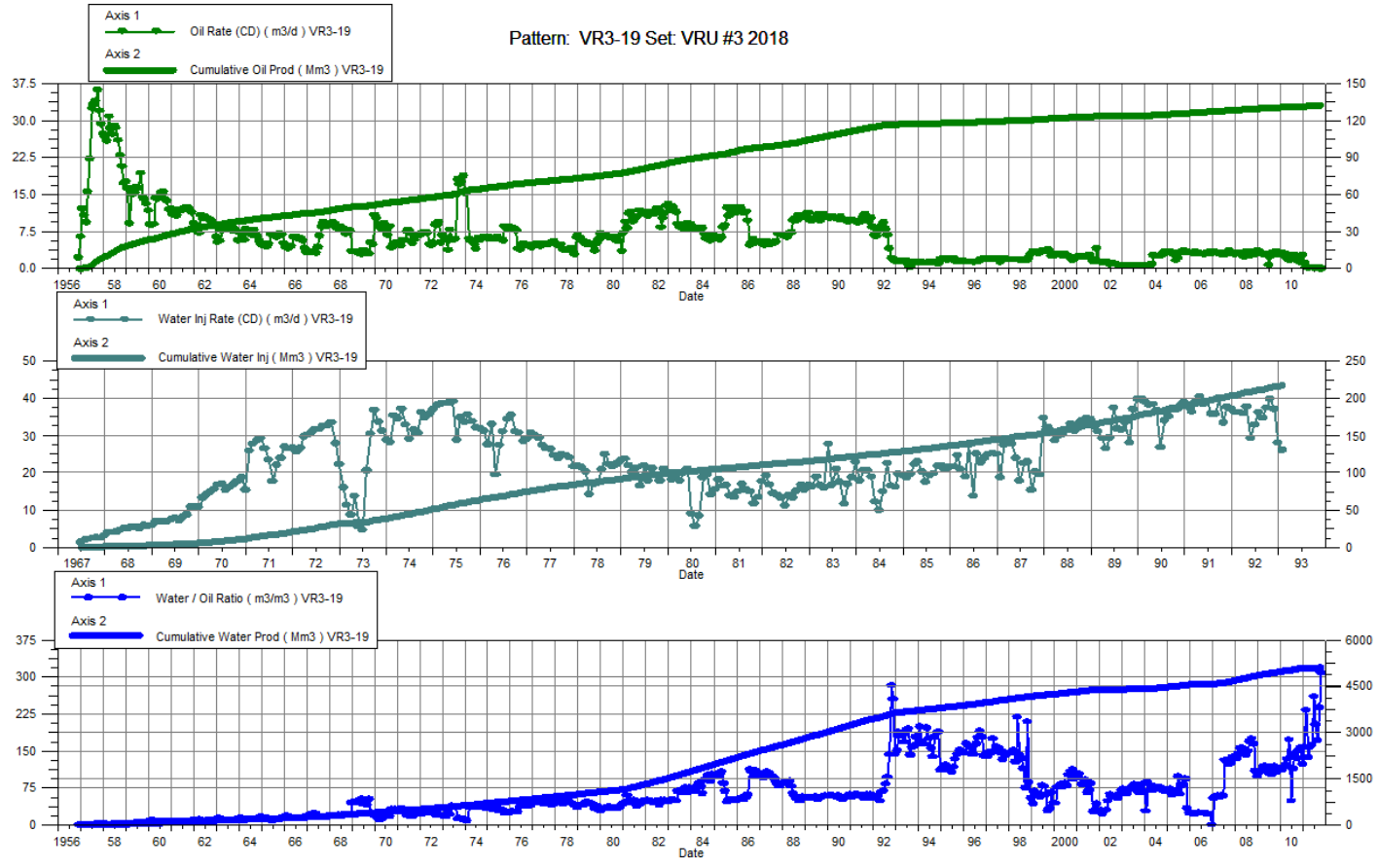
Date	Oil Rate (CD) m3/d	Cum Oil Prod Mm3	Water Rate (CD) m3/d	Cum Water Prod Mm3	Water Inj Rate (CD) m3/d	Cum Water Inj Mm3	Water Oil Ratio m3/m3	Voidage Replacement Ratio	Cum Voidage Replacemt Ratio	Water Inj Pressure kPa
1-31-2018	0.1	83.33	5.0	754.54	67.35	1078.2	36.24	13.19	1.28	4,406.45
2-28-2018	0.1	83.34	4.7	754.67	53.04	1079.7	40.75	11.11	1.29	4,600.00
3-31-2018	0.1	83.34	5.5	754.84	71.28	1081.9	39.96	12.69	1.29	4,600.00
4-30-2018	0.2	83.35	5.7	755.01	68.70	1084.0	38.64	11.68	1.29	4,590.00
5-31-2018	0.1	83.35	4.8	755.16	69.92	1086.2	54.83	14.37	1.29	4,300.00
6-30-2018	0.1	83.35	4.7	755.30	82.92	1088.6	65.84	17.31	1.30	4,316.67
7-31-2018	0.1	83.35	4.7	755.44	96.82	1091.6	70.56	20.45	1.30	4,800.00
8-31-2018	0.0	83.35	2.6	755.52	76.23	1094.0	96.06	28.64	1.30	4,800.00
9-30-2018		83.35		755.52	83.57	1096.5			1.31	4,800.00
10-31-2018		83.35		755.52	66.19	1098.6			1.31	4,800.00
11-30-2018		83.35		755.52	81.37	1101.0			1.31	4,800.00
12-31-2018		83.35		755.52	63.02	1103.0			1.31	4,800.00



VRU #3

Pattern P-19 – 00/06-10-010-26W1/0

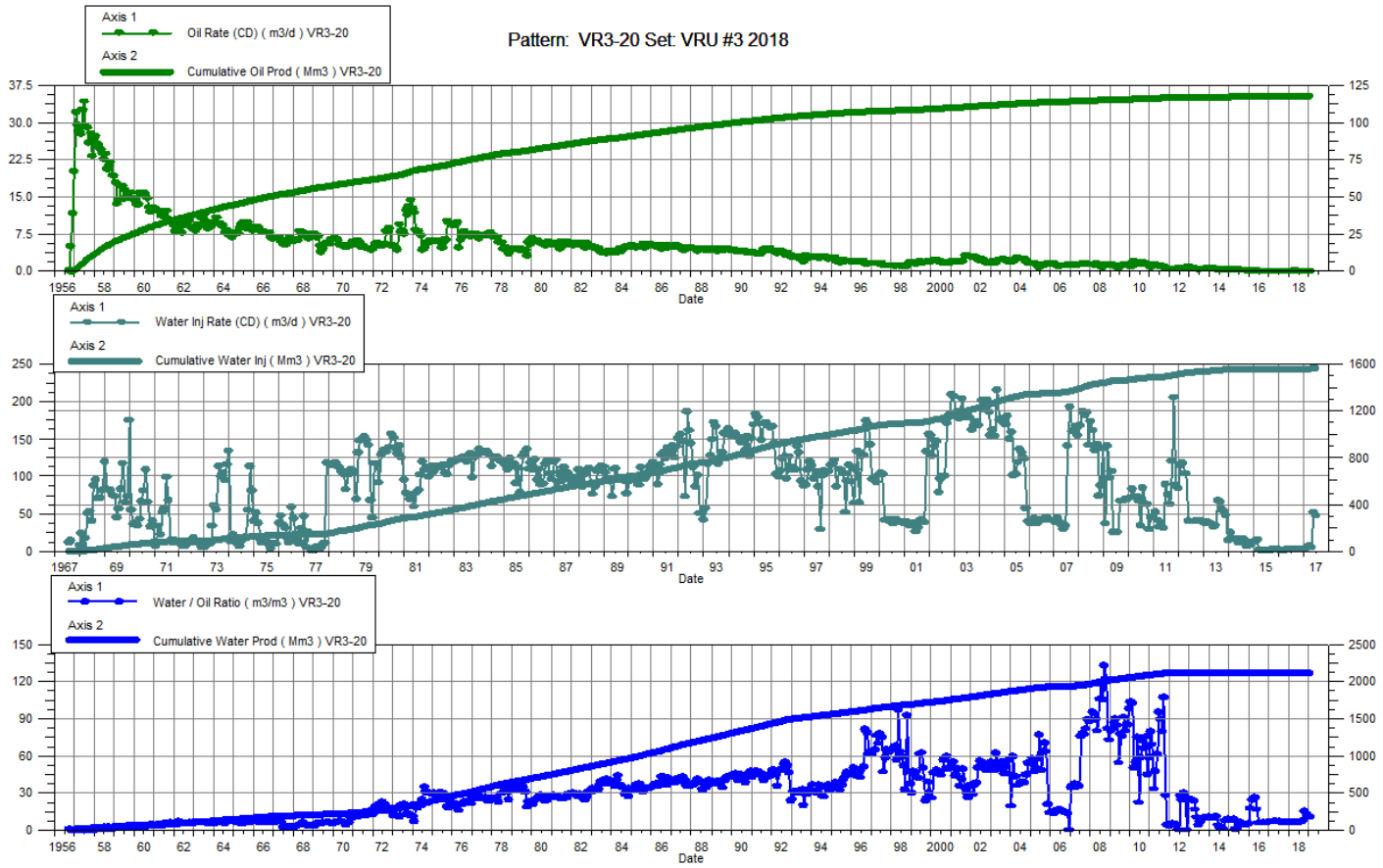
Date	Oil Rate (CD) m3/d	Cum Oil Prod Mm3	Water Rate (CD) m3/d	Cum Water Prod Mm3	Water Inj Rate (CD) m3/d	Cum Water Inj Mm3	Water Oil Ratio m3/m3	Voidage Replacement Ratio	Cum Voidage Replacemt Ratio	Water Inj Pressure kPa
1-31-2018		132.00		5087.57		217.7	0.00	--	0.04	--
2-28-2018		132.00		5087.57		217.7	0.00	--	0.04	--
3-31-2018		132.00		5087.57		217.7	0.00	--	0.04	--
4-30-2018		132.00		5087.57		217.7	0.00	--	0.04	--
5-31-2018		132.00		5087.57		217.7	0.00	--	0.04	--
6-30-2018		132.00		5087.57		217.7	0.00	--	0.04	--
7-31-2018		132.00		5087.57		217.7	0.00	--	0.04	--
8-31-2018		132.00		5087.57		217.7	0.00	--	0.04	--
9-30-2018		132.00		5087.57		217.7	0.00	--	0.04	--
10-31-2018		132.00		5087.57		217.7	0.00	--	0.04	--
11-30-2018		132.00		5087.57		217.7	0.00	--	0.04	--
12-31-2018		132.00		5087.57		217.7	0.00	--	0.04	--



VRU #3

Pattern P-20 – 00/08-10-010-26W1/0

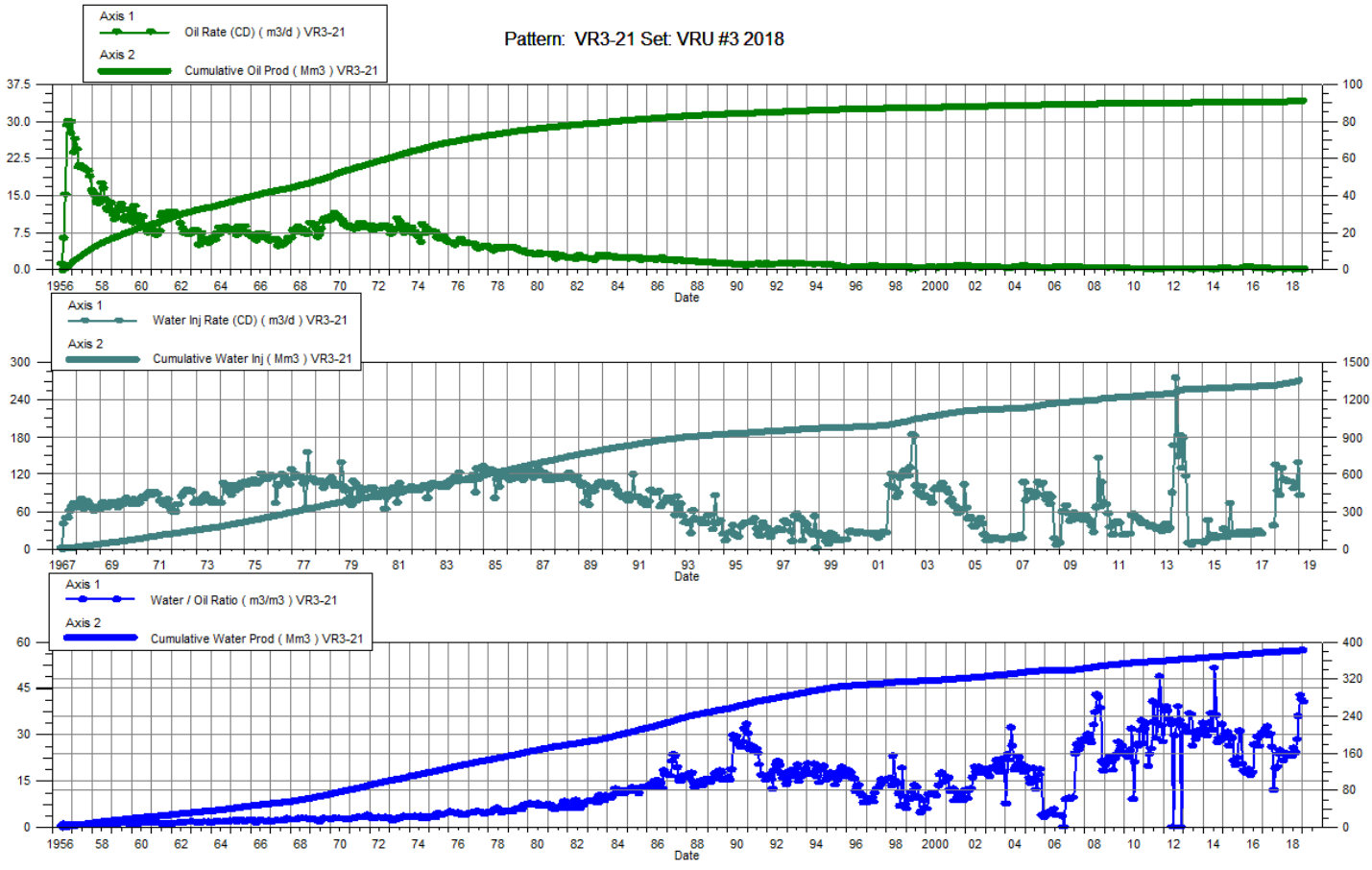
Date	Oil Rate (CD) m3/d	Cum Oil Prod Mm3	Water Rate (CD) m3/d	Cum Water Prod Mm3	Water Inj Rate (CD) m3/d	Cum Water Inj Mm3	Water Oil Ratio m3/m3	Voidage Replacement Ratio	Cum Voidage Replacemt Ratio	Water Inj Pressure kPa	Water Inj Pressure kPa
1-31-2018	0.1	117.81	0.8	2116.16		1570.9	5.72		0.70	3,800.00	-
2-28-2018	0.1	117.81	0.8	2116.18		1570.9	6.45		0.70	3,800.00	-
3-31-2018	0.1	117.82	0.9	2116.21		1570.9	6.37		0.70	3,800.00	-
4-30-2018	0.2	117.82	0.9	2116.24		1570.9	6.11		0.70	3,800.00	-
5-31-2018	0.1	117.83	0.8	2116.26		1570.9	6.09		0.70	3,790.32	-
6-30-2018	0.1	117.83	0.8	2116.29		1570.9	6.21		0.70	3,500.00	-
7-31-2018	0.1	117.83	0.8	2116.31		1570.9	6.79		0.70	3,500.00	-
8-31-2018	0.1	117.84	0.9	2116.34		1570.9	6.95		0.70	3,500.00	-
9-30-2018	0.1	117.84	0.9	2116.36		1570.9	7.49		0.70	3,500.00	-
10-31-2018	0.1	117.84	1.2	2116.40		1570.9	15.43		0.70	3,500.00	-
11-30-2018	0.1	117.85	1.0	2116.43		1570.9	13.19		0.70	3,500.00	166.67
12-31-2018	0.1	117.85	1.1	2116.46		1570.9	10.96		0.70	3,500.00	5,000.00



VRU #3

Pattern P-21 – 00/06-11-010-26W1/0

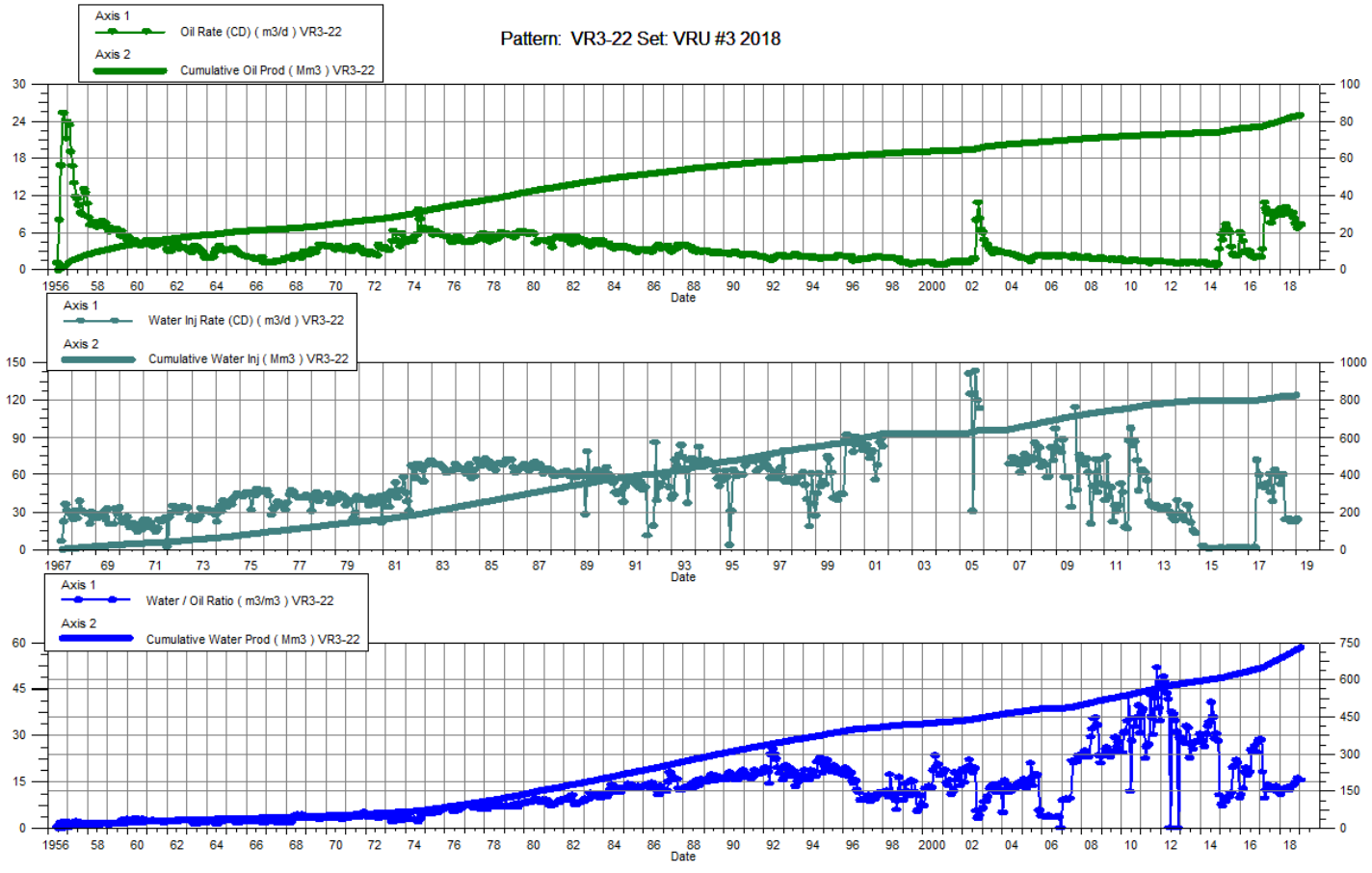
Date	Oil Rate (CD) m3/d	Cum Oil Prod Mm3	Water Rate (CD) m3/d	Cum Water Prod Mm3	Water Inj Rate (CD) m3/d	Cum Water Inj Mm3	Water Oil Ratio m3/m3	Voidage Replacement Ratio	Cum Voidage Replacemt Ratio	Water Inj Pressure kPa
1-31-2018	0.3	91.00	6.1	378.75	135.05	1321.2	21.55	21.16	2.80	5,050.00
2-28-2018	0.3	91.01	5.9	378.91	93.25	1323.8	23.46	15.09	2.81	5,050.00
3-31-2018	0.3	91.01	6.6	379.12	86.71	1326.5	23.92	12.54	2.81	5,050.00
4-30-2018	0.3	91.02	7.0	379.33	129.51	1330.4	23.06	17.64	2.82	5,050.00
5-31-2018	0.3	91.03	6.4	379.53	111.20	1333.8	23.37	16.78	2.82	5,019.35
6-30-2018	0.3	91.04	6.2	379.71	110.36	1337.1	22.86	17.17	2.83	4,130.00
7-31-2018	0.3	91.05	6.4	379.91	108.48	1340.5	25.56	16.36	2.84	5,000.00
8-31-2018	0.2	91.05	5.9	380.09	107.81	1343.8	24.12	17.52	2.84	5,000.00
9-30-2018	0.2	91.06	6.8	380.29	108.20	1347.1	28.32	15.35	2.85	5,000.00
10-31-2018	0.2	91.07	6.8	380.51	97.13	1350.1	35.93	13.82	2.85	5,000.00
11-30-2018	0.2	91.07	6.2	380.69	100.00	1353.1	42.54	15.77	2.86	5,000.00
12-31-2018	0.2	91.08	6.4	380.89	138.68	1357.4	41.15	21.13	2.87	5,000.00



VRU #3

Pattern P-22 – 00/08-11-010-26W1/0

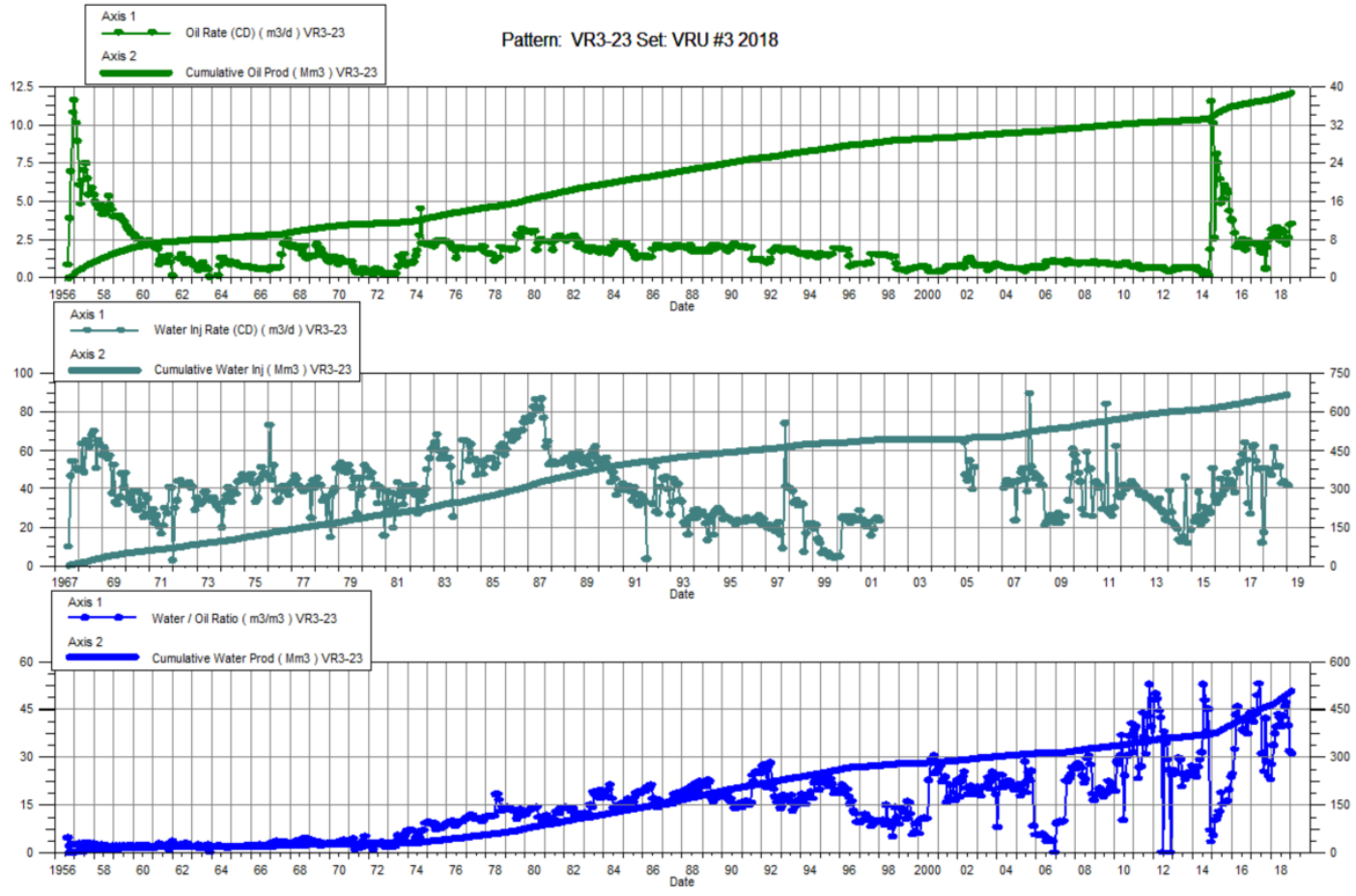
Date	Oil Rate (CD) m3/d	Cum Oil Prod Mm3	Water Rate (CD) m3/d	Cum Water Prod Mm3	Water Inj Rate (CD) m3/d	Cum Water Inj Mm3	Water Oil Ratio m3/m3	Voidage Replacement Ratio	Cum Voidage Replacemt Ratio	Water Inj Pressure kPa
1-31-2018	9.9	80.55	108.7	686.31	38.24	813.9	10.94	0.32	1.06	5,400.00
2-28-2018	9.0	80.80	109.8	689.38	63.99	815.7	12.25	0.54	1.06	5,400.00
3-31-2018	9.9	81.11	125.3	693.27	60.45	817.6	12.64	0.45	1.05	5,400.00
4-30-2018	10.1	81.41	127.8	697.10	58.63	819.4	12.67	0.42	1.05	5,400.00
5-31-2018	9.3	81.70	120.2	700.83	51.96	821.0	12.93	0.40	1.05	5,361.29
6-30-2018	9.3	81.98	116.0	704.31	59.99	822.8	12.46	0.48	1.04	4,206.67
7-31-2018	8.9	82.26	121.3	708.06	23.64	823.5	13.63	0.18	1.04	4,400.00
8-31-2018	9.2	82.54	125.3	711.95	24.19	824.2	13.69	0.18	1.04	4,400.00
9-30-2018	8.3	82.79	118.0	715.49	24.50	825.0	14.14	0.19	1.03	4,400.00
10-31-2018	7.5	83.03	110.6	718.92	22.26	825.7	14.68	0.19	1.03	4,400.00
11-30-2018	6.8	83.23	108.8	722.18	23.33	826.4	16.07	0.20	1.02	4,400.00
12-31-2018	7.2	83.45	111.8	725.65	22.26	827.1	15.56	0.19	1.02	4,400.00



VRU #3

Pattern P-23 – 00/06-12-010-26W1/0

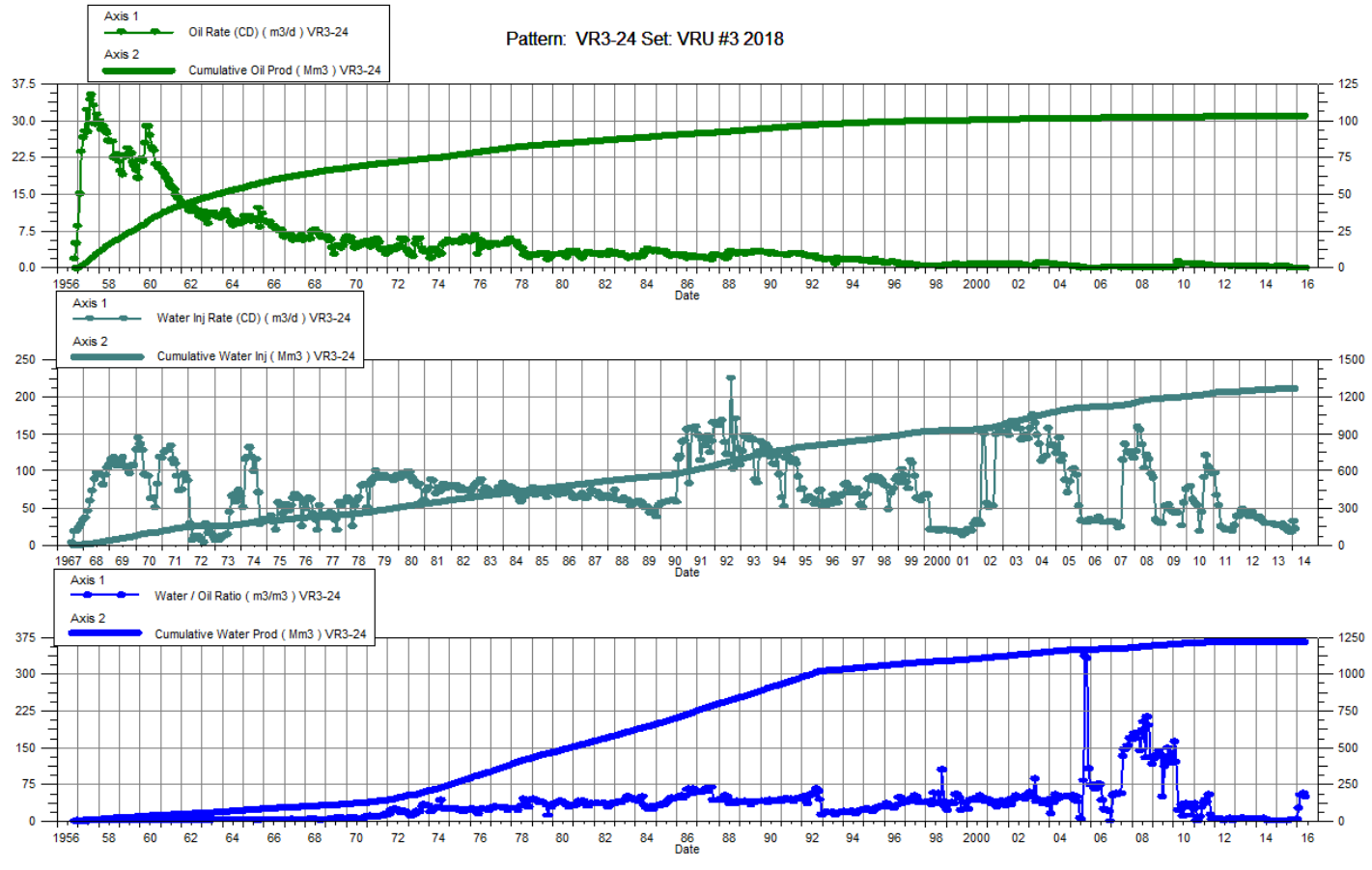
Date	Oil Rate (CD) m3/d	Cum Oil Prod Mm3	Water Rate (CD) m3/d	Cum Water Prod Mm3	Water Inj Rate (CD) m3/d	Cum Water Inj Mm3	Water Oil Ratio m3/m3	Voidage Replacement Ratio	Cum Voidage Replacemt Ratio	Water Inj Pressure kPa
1-31-2018	3.2	37.54	87.1	463.90	17.40	652.0	27.50	0.19	1.30	4,900.00
2-28-2018	2.8	37.62	94.4	466.54	50.50	653.4	33.61	0.52	1.29	4,900.00
3-31-2018	3.2	37.72	119.8	470.25	49.94	655.0	37.24	0.41	1.29	4,900.00
4-30-2018	3.3	37.82	131.8	474.20	47.72	656.4	39.55	0.35	1.28	4,900.00
5-31-2018	3.1	37.91	132.0	478.30	46.91	657.9	43.35	0.35	1.27	4,874.19
6-30-2018	2.5	37.98	104.2	481.42	61.41	659.7	42.42	0.58	1.27	4,133.33
7-31-2018	3.2	38.08	123.8	485.26	51.24	661.3	39.29	0.40	1.26	5,100.00
8-31-2018	3.0	38.17	127.2	489.20	51.97	662.9	42.62	0.40	1.26	5,100.00
9-30-2018	2.4	38.25	111.3	492.54	51.50	664.5	45.70	0.45	1.25	5,100.00
10-31-2018	2.2	38.32	103.4	495.75	42.81	665.8	47.06	0.41	1.25	5,100.00
11-30-2018	2.6	38.39	102.6	498.83	44.00	667.1	39.85	0.42	1.24	5,100.00
12-31-2018	3.5	38.50	109.7	502.23	42.32	668.4	31.79	0.37	1.23	5,100.00



VRU #3

Pattern P-24 – 00/16-03-010-26W1/0

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 Replacemt Ratio	Water Inj Pressure kPa
1-31-2018		103.79		1218.72		1274.73		--	0.96	--
2-28-2018		103.79		1218.72		1274.73		--	0.96	--
3-31-2018		103.79		1218.72		1274.73		--	0.96	--
4-30-2018		103.79		1218.72		1274.73		--	0.96	--
5-31-2018		103.79		1218.72		1274.73		--	0.96	--
6-30-2018		103.79		1218.72		1274.73		--	0.96	--
7-31-2018		103.79		1218.72		1274.73		--	0.96	--
8-31-2018		103.79		1218.72		1274.73		--	0.96	--
9-30-2018		103.79		1218.72		1274.73		--	0.96	--
10-31-2018		103.79		1218.72		1274.73		--	0.96	--
11-30-2018		103.79		1218.72		1274.73		--	0.96	--
12-31-2018		103.79		1218.72		1274.73		--	0.96	--

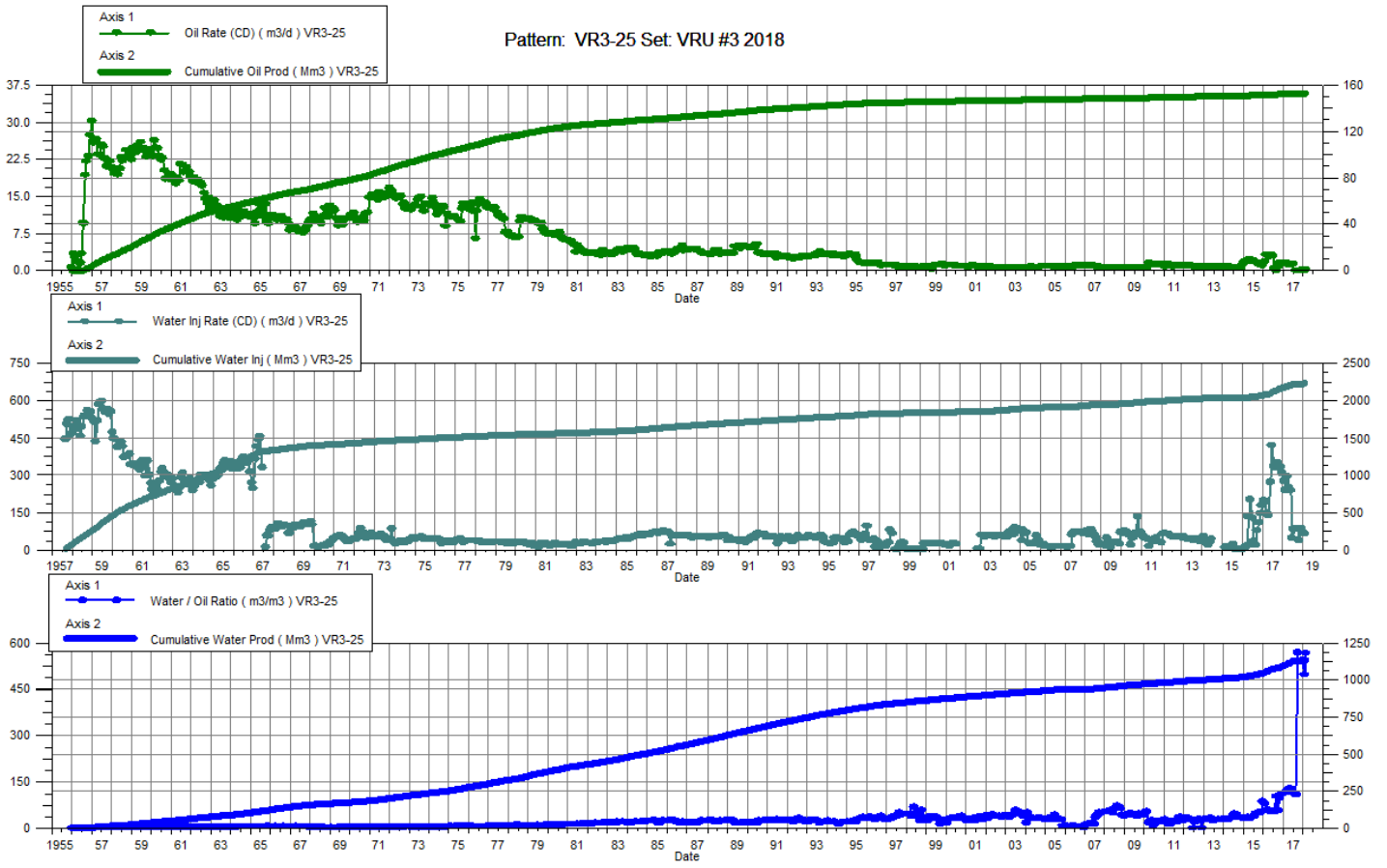


VRU #3

Pattern P-25 – 00/14-02-010-26W1/0

02/03-11-010-26W1/2

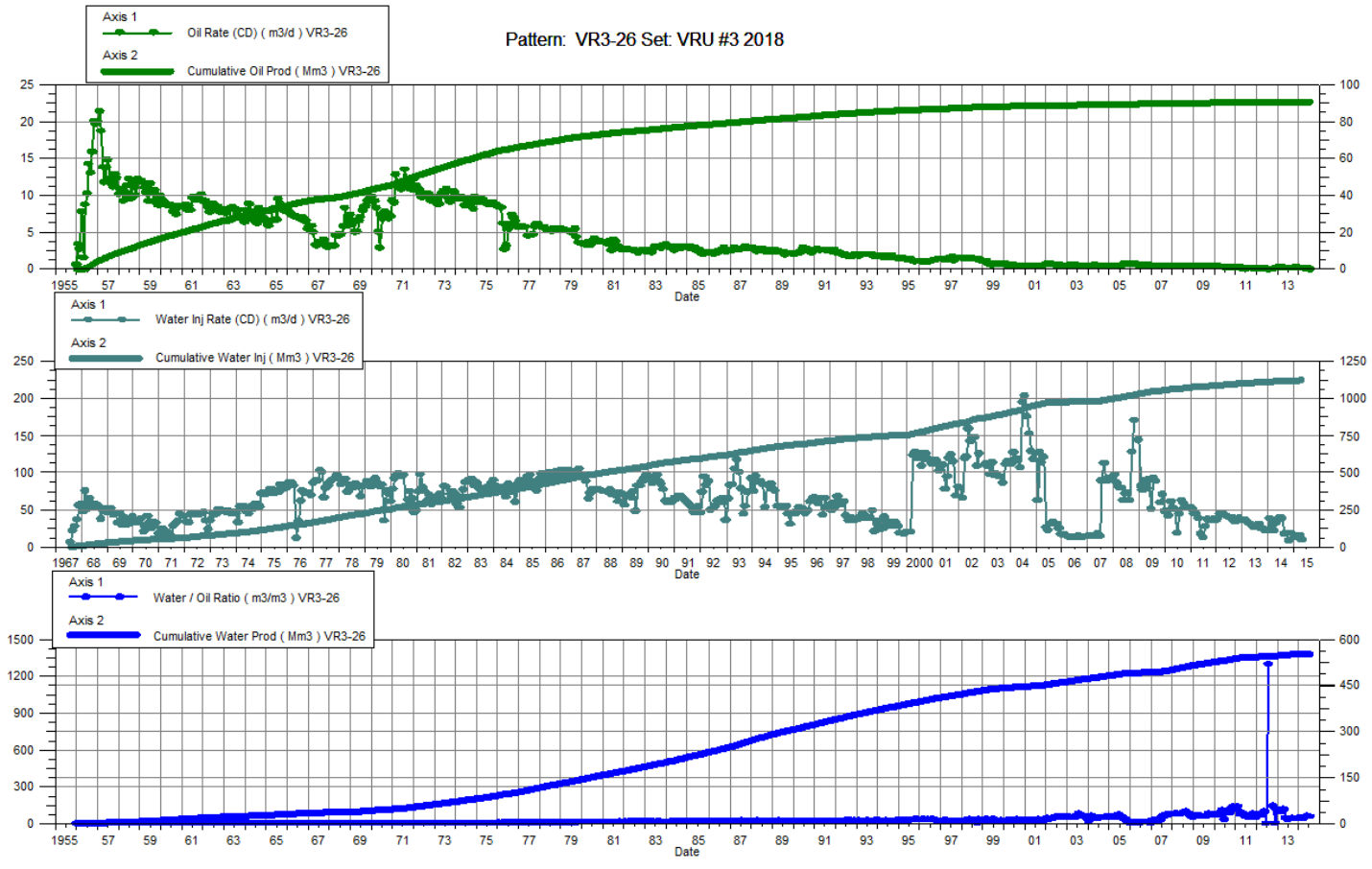
Date	Oil Rate (CD) m3/d	Cum Oil Prod Mm3	Water Rate (CD) m3/d	Cum Water Prod Mm3	Water Inj Rate (CD) m3/d	Cum Water Inj Mm3	Water Oil Ratio m3/m3	Voidage Replacement Ratio	Cum Voidage Replacemt Ratio	Water Inj Pressure kPa	Water Inj Pressure kPa
1-31-2018	0.3	152.87	161.5	1131.91	275.65	2188.4	495.78	1.70	1.70	5,000.00	5,000.00
2-28-2018	0.2	152.88	117.0	1135.19	239.60	2195.1	564.78	2.04	1.70	5,000.00	5,000.00
3-31-2018		152.88		1135.19	295.59	2204.3			1.71	5,000.00	5,000.00
4-30-2018		152.88		1135.19	252.05	2211.8			1.71	5,000.00	5,000.00
5-31-2018		152.88		1135.19	240.49	2219.3			1.72	5,000.00	5,000.00
6-30-2018		152.88		1135.19	46.99	2220.7			1.72	5,000.00	5,026.67
7-31-2018		152.88		1135.19	83.16	2223.3			1.72	5,000.00	5,800.00
8-31-2018		152.88		1135.19	82.03	2225.8			1.72	5,000.00	5,800.00
9-30-2018		152.88		1135.19	81.97	2228.3			1.73	5,000.00	5,800.00
10-31-2018		152.88		1135.19	38.26	2229.5			1.73	5,000.00	5,800.00
11-30-2018		152.88		1135.19	86.60	2232.0			1.73	5,000.00	5,800.00
12-31-2018		152.88		1135.19	74.76	2234.4			1.73	5,000.00	5,800.00



VRU #3

Pattern P-26 – 00/16-02-010-26W1/0

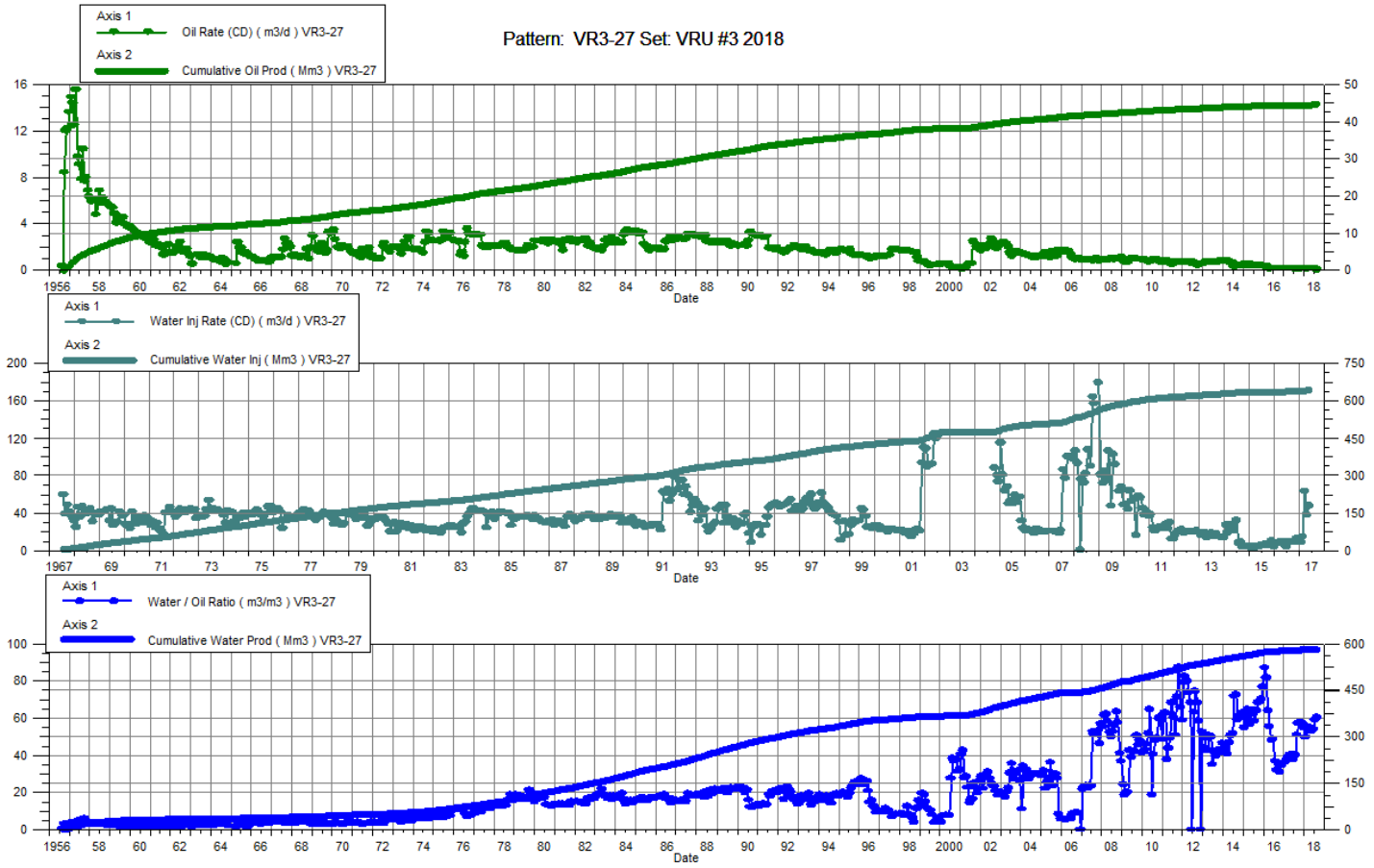
Date	Oil Rate (CD) m3/d	Cum Oil Prod Mm3	Water Rate (CD) m3/d	Cum Water Prod Mm3	Water Inj Rate (CD) m3/d	Cum Water Inj Mm3	Water Oil Ratio m3/m3	Voidage Replacement Ratio	Cum Voidage Replacemt Ratio	Water Inj Pressure kPa
1-31-2018		90.78		551.91		1125.85			1.75	3,700.00
2-28-2018		90.78		551.91		1125.85			1.75	3,700.00
3-31-2018		90.78		551.91		1125.85			1.75	3,700.00
4-30-2018		90.78		551.91		1125.85			1.75	3,700.00
5-31-2018		90.78		551.91		1125.85			1.75	3,700.00
6-30-2018		90.78		551.91		1125.85			1.75	3,700.00
7-31-2018		90.78		551.91		1125.85			1.75	3,700.00
8-31-2018		90.78		551.91		1125.85			1.75	3,700.00
9-30-2018		90.78		551.91		1125.85			1.75	3,700.00
10-31-2018		90.78		551.91		1125.85			1.75	3,700.00
11-30-2018		90.78		551.91		1125.85			1.75	3,700.00
12-31-2018		90.78		551.91		1125.85			1.75	3,700.00



VRU #3

Pattern P-27 – 00/14-01-010-26W1/0

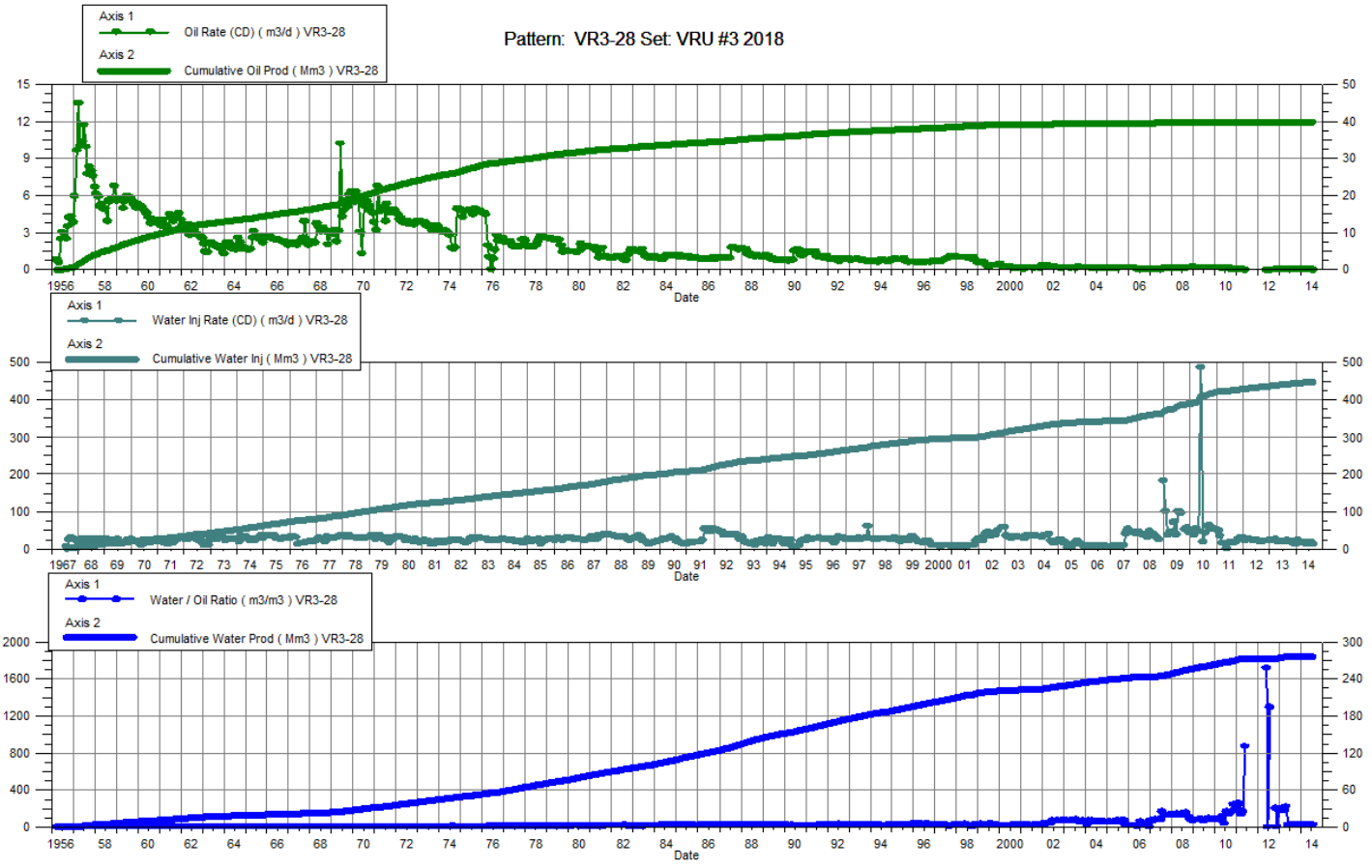
Date	Oil Rate (CD) m3/d	Cum Oil Prod Mm3	Water Rate (CD) m3/d	Cum Water Prod Mm3	Water Inj Rate (CD) m3/d	Cum Water Inj Mm3	Water Oil Ratio m3/m3	Voidage Replacement Ratio	Cum Voidage Replacemt Ratio	Water Inj Pressure kPa
1-31-2018	0.2	44.56	11.3	579.40		645.6	49.75		1.03	5,400.00
2-28-2018	0.2	44.56	11.0	579.71		645.6	55.88		1.03	5,400.00
3-31-2018	0.2	44.57	12.5	580.09		645.6	55.13		1.03	5,400.00
4-30-2018	0.2	44.58	12.8	580.48		645.6	53.16		1.03	5,400.00
5-31-2018	0.2	44.58	11.8	580.84		645.6	52.92		1.03	5,400.00
6-30-2018	0.2	44.59	12.0	581.20		645.6	54.00		1.03	5,400.00
7-31-2018	0.2	44.60	11.9	581.57		645.6	58.69		1.03	5,400.00
8-31-2018	0.1	44.60	6.5	581.77		645.6	60.27		1.03	5,400.00
9-30-2018		44.60		581.77		645.6			1.03	5,400.00
10-31-2018		44.60		581.77		645.6			1.03	5,400.00
11-30-2018		44.60		581.77		645.6			1.03	5,400.00
12-31-2018		44.60		581.77		645.6			1.03	5,400.00



VRU #3

Pattern P-28 – 00/08-02-010-26W1/0

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 Replacemt Ratio	Water Inj Pressure kPa
1-31-2018		40.00		275.86		448.98			1.42	3,400.00
2-28-2018		40.00		275.86		448.98			1.42	3,400.00
3-31-2018		40.00		275.86		448.98			1.42	3,400.00
4-30-2018		40.00		275.86		448.98			1.42	3,400.00
5-31-2018		40.00		275.86		448.98			1.42	3,400.00
6-30-2018		40.00		275.86		448.98			1.42	3,400.00
7-31-2018		40.00		275.86		448.98			1.42	3,400.00
8-31-2018		40.00		275.86		448.98			1.42	3,400.00
9-30-2018		40.00		275.86		448.98			1.42	3,400.00
10-31-2018		40.00		275.86		448.98			1.42	3,400.00
11-30-2018		40.00		275.86		448.98			1.42	3,400.00
12-31-2018		40.00		275.86		448.98			1.42	3,400.00



VRU #3

Pattern P-29 – 00/06-01-010-26W1/0

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 Replacemt Ratio	Water Inj Pressure kPa
1-31-2018	1.1	127.07	19.8	1590.22		749.8	18.40		0.44	2,100.00
2-28-2018	1.5	127.11	25.7	1590.94		749.8	16.87		0.44	2,100.00
3-31-2018	2.0	127.17	32.2	1591.94		749.8	16.20		0.44	2,100.00
4-30-2018	2.2	127.23	33.7	1592.95		749.8	15.59		0.44	2,100.00
5-31-2018	2.0	127.30	30.6	1593.90		749.8	15.56		0.44	2,100.00
6-30-2018	2.0	127.35	30.9	1594.83		749.8	15.86		0.44	2,100.00
7-31-2018	1.8	127.41	30.6	1595.77		749.8	17.27		0.43	2,100.00
8-31-2018	1.9	127.47	32.7	1596.79		749.8	17.69		0.43	2,100.00
9-30-2018	1.7	127.52	32.6	1597.77		749.8	19.05		0.43	2,100.00
10-31-2018	1.0	127.55	39.0	1598.98		749.8	37.91		0.43	2,100.00
11-30-2018	1.1	127.58	35.1	1600.03		749.8	31.07		0.43	2,100.00
12-31-2018	1.4	127.63	38.0	1601.21		749.8	26.75		0.43	2,100.00