



March 4<sup>th</sup>, 2013

Manitoba Science, Technology, Energy and Mines  
Box 1359, 227 King Street West  
Virden, Manitoba  
R0M 2C0

Attn: Jennifer Abel  
Chief Petroleum Engineer

**Re: South Pierson Unit No. 1 2012 Waterflood Progress Report**

Please find the attached 2012 Waterflood Progress Report for South Pierson Unit No. 1.

If you have any questions or concerns, please contact the undersigned at (403) 386-5335.

Yours truly,

Brittany Trask, E.I.T.  
Exploitation Engineer  
Canadian Natural Resources Ltd

## South Pierson Unit No. 1 2012 Progress Report

Canadian Natural Resources Limited (CNRL) continued to be active in the Pierson area during 2012. In South Pierson Unit No 1 (SPU 1) specifically, a pressure survey was completed at the beginning of the year, a well was recompleted from the Alida to the Spearfish, a cleanout and acid job were done on the existing horizontal, a new infill horizontal well was drilled and work on the injection water filtration system continued.

The production profile for the overall unit continued to remain on trend for the majority of 2012. Variance from the trend was observed when wells were waiting on service rigs and at the end of 2012 when the 02/10-17-002-29W1/0 horizontal infill came on production. It is expected that the horizontal well will decline quite quickly before the overall unit settles back onto the previous decline but at a slightly higher rate. The recompletion of 00/15-17-002-29W1/0 from the Alida to the Spearfish was in March 2012. The Alida was producing just over 0.15 m<sup>3</sup>/day of oil with a water cut between 98 and 100% before the zone was abandoned and recompleted to the Spearfish. The Spearfish peaked at about 4 m<sup>3</sup>/day of oil in March 2012 and declined to approximately 1.5 m<sup>3</sup>/day within that same month so the increased production is not noticeable in the overall plot of the unit. A map of the unit is provided in Figure A.1, which highlights the pressure data collected at the end of 2011 and early 2012. Historical and forecasted production for the unit can be found in Figures A.2 and A.3, respectively.

Monthly production, injection, instantaneous voidage replacement ratios (VRR's) and cumulative VRR's for each pattern and the overall unit are summarized in Table B.1 and the corresponding plots follow the table. It is observed in these plots that the water oil ratio bounced around and at the end of 2012 it jumped up quite a bit. The reason for the jump in water production is due to the horizontal well coming on production (Patterns 34 and 35). It seems to be quite typical for the horizontal wells to produce at higher water cuts than their offsetting vertical wells and the water cut on this well is still low enough that it is not expected to be from the waterflood front. The gas oil ratio trend continues to be quite flat, which indicates that pressure is being maintained. Overall, the instantaneous VRR is being maintained, however, on an individual pattern basis there is room for improvement.

A summary of the cumulative production and injection for the overall unit and each pattern can be found in Table C.1 and in the subsequent plots. The average injection pressures and daily injection rates for each injector are entered in Table D.1 and their respective injection plots follow. Injection rate in SPU 1 is limited by wellhead injection pressure, which limits the ability to move water around to wells that require more water to increase VRR. It has been an ongoing project to try increase injectivity by doing solvent stimulations on injectors as well as by cleaning up the water more effectively with an additional filtration system. Optimization of the water filtration system continues as various media are tried inside the vessels in combination with several different types of bag filters. Frequent water testing has been conducted throughout the process to help ensure the water is the best quality as economically possible. It is estimated that the

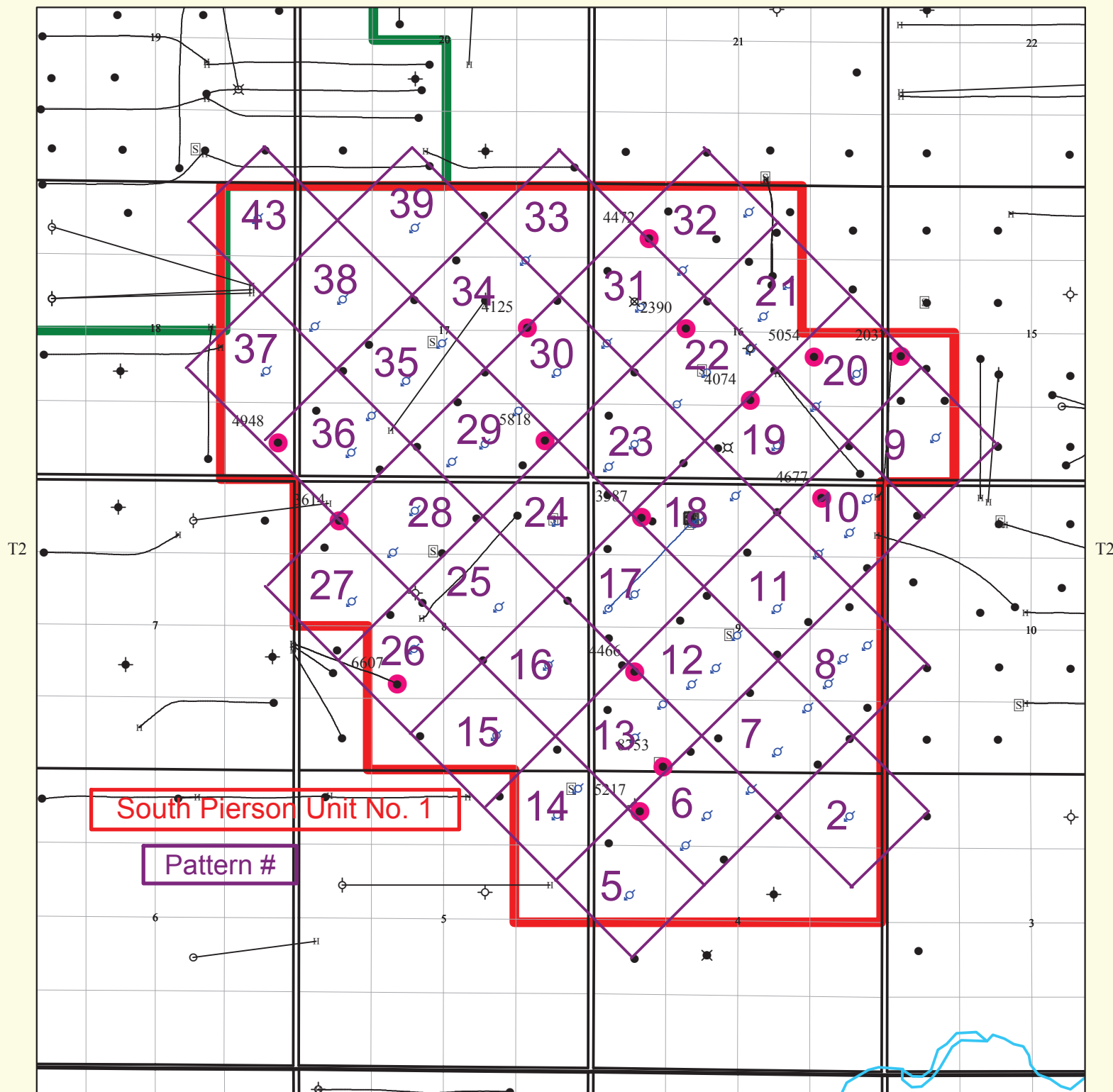
optimized filtration system will be ready in late March or April of 2013. It is anticipated that the water filtration project will pay off in the long run if it helps to keep the near wellbore from plugging and losing injectivity.

A list of the workovers done in the unit over the past year can be found in Table E.1. The majority of the well servicing in 2012 was pump changes, tubing repairs and wax removal, however there also were a couple of packers that needed to be repaired as well as a two solvent/acid stimulations, which were quite effective. The pressure survey that commenced in late October 2011 and was completed in early January 2012 is summarized in Table F.1. Results of the pressure survey showed pressures ranging from 2037 kPa up to 8753 kPa, which indicates that some areas are being more effectively waterflooded than others. However, it is felt that the pressure takes a long time to build up and that if the wells were shut in longer that the pressure would continue to rise very slowly.

For the recent application to get South Pierson Unit No. 3 (SPU 3) approved, further work was done to refine the geology in SPU 1, which is a direct analogy to SPU 3. This caused minor changes in OOIP, increasing the Spearfish OOIP to 7,174  $E^3m^3$  from 7,118  $E^3m^3$  in SPU 1. The recovery factor only changed from 14% to 13.9% this year, however with the early results of the latest horizontal infill well there is potential for the recovery factor to increase. If the well proves to be economic, there could be potential follow ups. Ultimate recovery factors were calculated by quarter section in the unit and it was found that there was quite a variance throughout, ranging from as low as 3.5% to upwards of 20%. The large difference in recovery factors is believed to correlate with the changing permeability throughout the unit. The most recent horizontal well was in drilled in an area with a mid-range recovery factor, which will test the theory if further infill drilling is a feasible method in getting the optimum recovery factors that are being observed in the higher permeability parts of the unit.

R30

R29W1




WELL LEGEND	
Bottom Hole Locations:	
○ Location	◇ Suspended
⊗ Service or Drain	● Oil
◇ Dry & Abandoned	◆ Abandoned Oil
⊗ Abandoned Service	◇ Injection
Surface Hole Locations:	
—○ Directional	— Horizontal
Well Postings:	
WC Pressure (kPa)	⊗

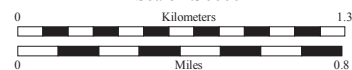
WELL LISTS	
⊗	SPU 1 - 2011-2012 Pressure Survey

## Canadian Natural Resources L

### SPU 1 2012 Progress Report Figure A.1

 Created in AccuMap™ Product of IHS Datum: NAD27 Vol. 23 No. 02, Feb 21 2013 Copyright © 1991-2013 (403) 770-4646	Author: Brittany Trask Date: March 3, 2013 File: Pierson - 2009 Progress Report Scale: 1 : 30000 Projection: Stereographic Center: N49.11457 W101.31949
	DLS Version Information: AB: ATS 2.6 BC: PRB 2.0 SK: STS 2.5 MB: ML107

Scale 1:30000



## South Pierson Unit No 1 Production History

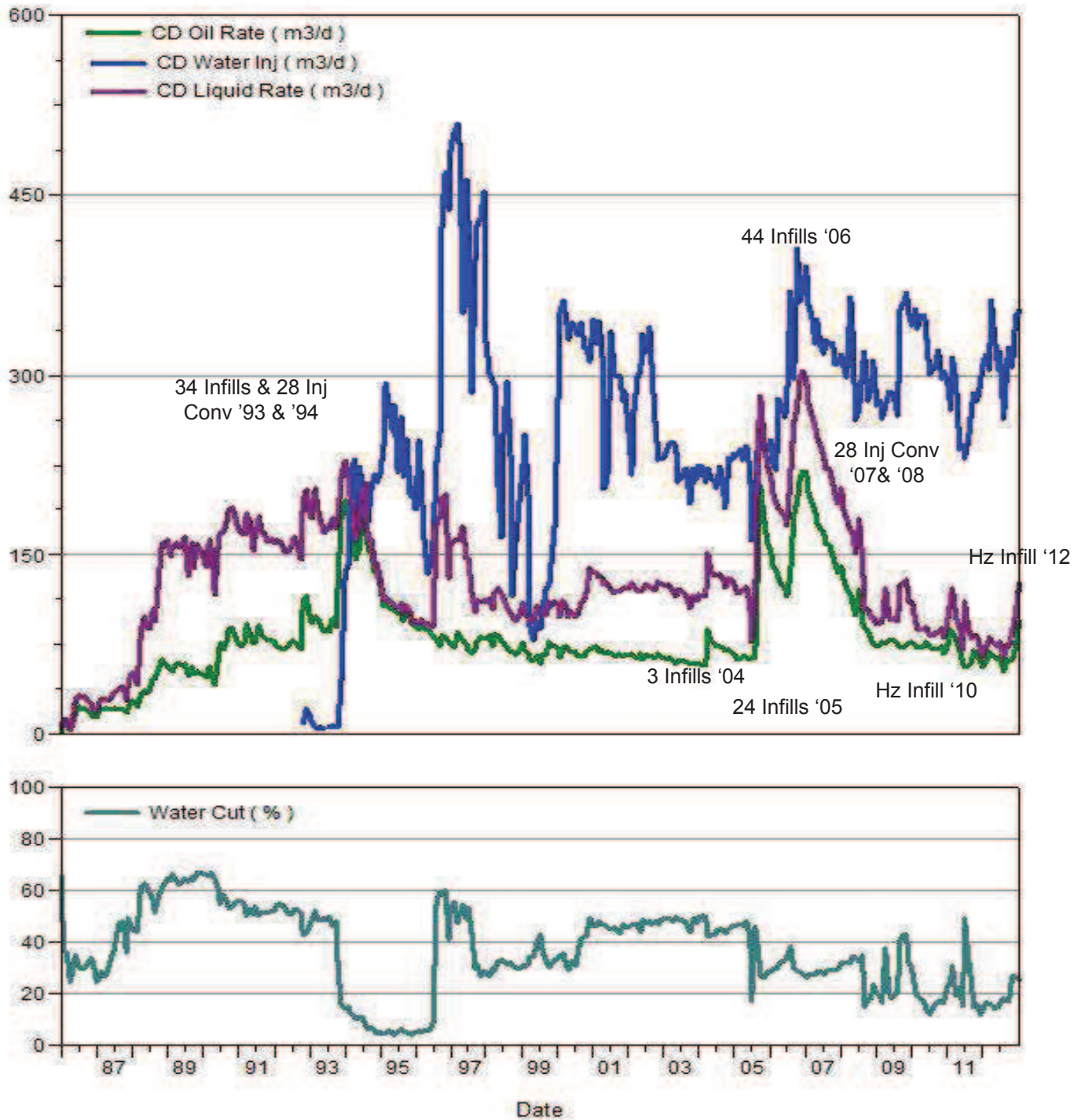


Figure A.2

# South Pierson Unit No. 1 - Forecast

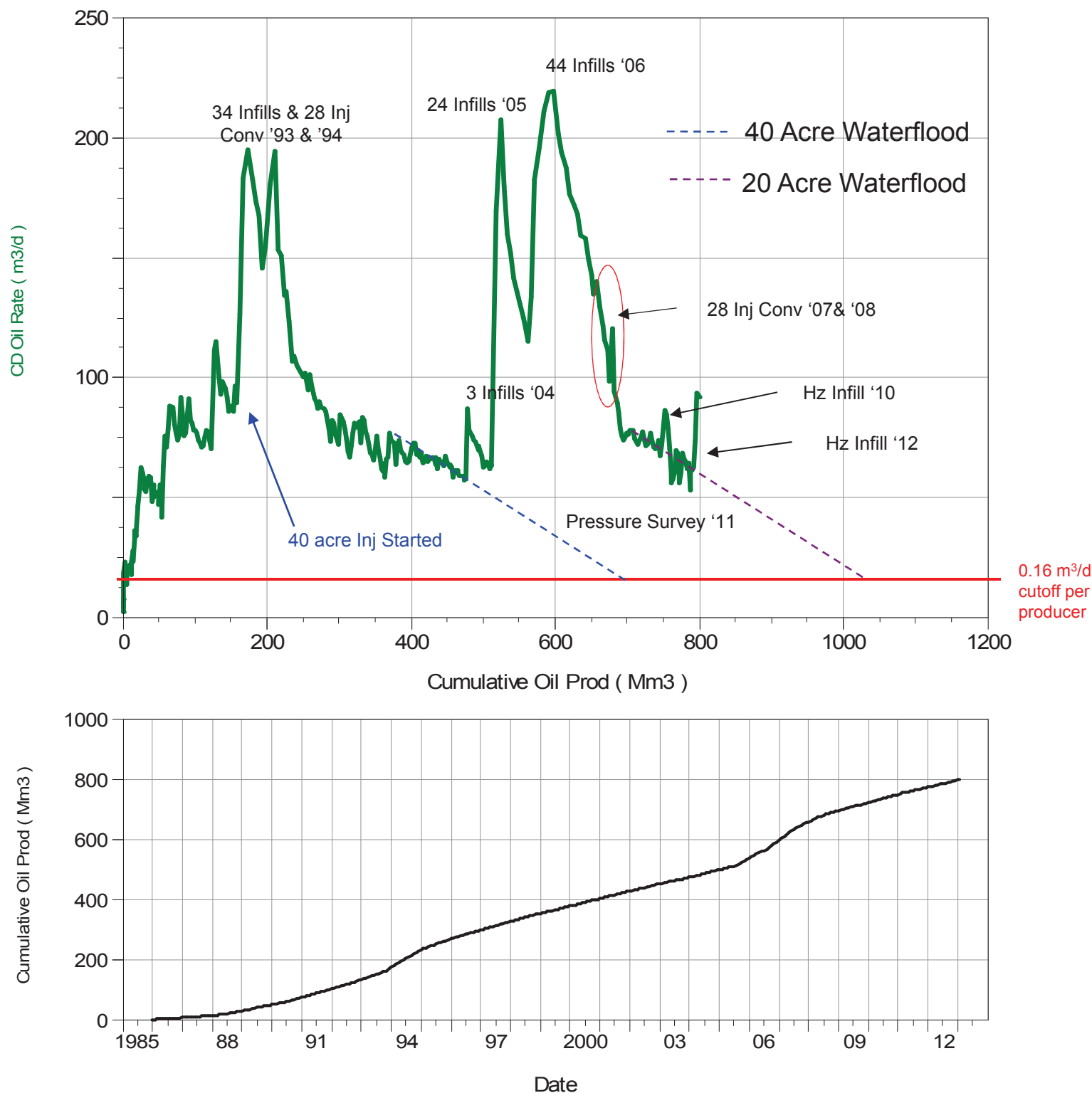


Figure A.3

TABLE B.1: 2012 MONTHLY PRODUCTION, INJECTION AND VRR BY PATTERN

	Month	CD Oil Rate (m <sup>3</sup> /d)	CD Water Inj Rate (m <sup>3</sup> /d)	Gas Oil Ratio m <sup>3</sup> /m <sup>3</sup>	Water Oil Ratio m <sup>3</sup> /m <sup>3</sup>	Monthly VRR	Cum VRR
OVERALL UNIT	January	60.34	316.10	40.21	0.20	3.77	1.30
	February	68.38	304.96	34.69	0.35	2.90	1.31
	March	68.48	361.78	52.38	0.36	3.42	1.31
	April	65.98	330.00	52.39	0.17	3.67	1.32
	May	63.04	304.58	67.08	0.18	3.53	1.32
	June	64.65	319.62	68.06	0.20	3.55	1.33
	July	53.34	263.86	40.52	0.22	3.50	1.33
	August	63.27	308.47	44.41	0.20	3.50	1.33
	September	62.63	322.51	51.31	0.21	3.67	1.34
	October	63.99	307.37	55.80	0.37	3.09	1.34
	November	75.04	350.32	5.27	0.37	2.99	1.35
	December	95.00	353.42	4.03	0.34	2.43	1.35
PATTERN: P-02	January	0.57	0.01	70.32	0.03	0.01	0.58
	February	0.68	0.01	58.15	0.03	0.01	0.58
	March	0.79	0.01	50.97	0.03	0.01	0.57
	April	0.78	0.01	49.04	0.02	0.01	0.57
	May	0.64	0.01	63.45	0.02	0.01	0.57
	June	0.54	0.05	53.68	0.00	0.08	0.57
	July	0.34	0.01	28.30	0.00	0.02	0.57
	August	0.51	0.01	28.30	0.00	0.02	0.57
	September	0.52	0.00	28.62	0.00	0.01	0.57
	October	0.57	0.01	26.99	0.02	0.01	0.57
	November	0.86	0.00	0.00	0.05	0.00	0.56
	December	0.94	0.01	0.00	0.04	0.01	0.56
PATTERN: P-05	January	0.18	0.79	197.37	0.40	2.70	0.94
	February	0.20	0.89	198.28	0.34	2.92	0.95
	March	0.21	1.13	171.10	0.35	3.47	0.95
	April	0.21	0.95	163.42	0.33	2.92	0.96
	May	0.23	0.93	172.04	0.33	2.71	0.96
	June	0.23	0.93	160.14	0.33	2.60	0.96
	July	0.14	0.94	141.18	0.08	5.37	0.97
	August	0.15	1.01	114.58	0.05	5.26	0.97
	September	0.15	1.12	81.08	0.06	5.79	0.98
	October	0.13	1.14	25.32	0.20	6.44	0.99
	November	0.12	1.06	0.00	0.26	6.23	0.99
	December	0.12	2.81	0.00	0.26	16.20	1.01
PATTERN: P-06	January	1.30	1.20	26.05	0.20	0.67	0.64
	February	1.58	1.45	22.89	0.15	0.69	0.64
	March	1.61	1.55	22.51	0.14	0.72	0.64
	April	1.66	1.44	31.59	0.13	0.66	0.64
	May	1.25	1.28	296.20	0.15	0.76	0.64
	June	1.44	1.32	241.76	0.12	0.70	0.64
	July	1.34	1.29	13.29	0.06	0.78	0.64
	August	1.30	1.39	16.09	0.06	0.85	0.64
	September	1.10	1.65	24.91	0.05	1.20	0.64
	October	1.15	1.65	28.83	0.07	1.15	0.64
	November	1.47	1.40	38.20	0.08	0.75	0.64
	December	1.43	1.19	38.00	0.08	0.66	0.64

TABLE B.1: 2012 MONTHLY PRODUCTION, INJECTION AND VRR BY PATTERN

	Month	CD Oil Rate (m <sup>3</sup> /d)	CD Water Inj Rate (m <sup>3</sup> /d)	Gas Oil Ratio m <sup>3</sup> /m <sup>3</sup>	Water Oil Ratio m <sup>3</sup> /m <sup>3</sup>	Monthly VRR	Cum VRR
PATTERN: P-07	January	2.25	7.09	23.26	0.01	2.61	0.29
	February	2.40	6.32	16.53	0.01	2.19	0.29
	March	2.71	7.69	46.70	0.01	2.36	0.29
	April	2.77	7.20	54.35	0.01	2.16	0.29
	May	2.50	6.48	121.25	0.01	2.17	0.30
	June	2.40	6.57	173.91	0.01	2.29	0.30
	July	1.75	5.55	44.24	0.00	2.66	0.30
	August	2.02	6.00	0.00	0.01	2.48	0.30
	September	1.67	5.83	17.46	0.00	2.92	0.31
	October	1.93	5.52	26.33	0.17	2.10	0.31
	November	2.71	4.80	7.82	0.07	1.41	0.31
	December	2.92	4.34	7.01	0.07	1.18	0.31
PATTERN: P-08	January	1.47	81.03	71.70	0.09	43.08	2.92
	February	1.62	94.77	64.29	0.07	46.53	2.95
	March	1.75	96.70	60.34	0.06	44.29	2.99
	April	1.67	76.17	50.95	0.06	36.63	3.01
	May	1.67	67.48	51.11	0.06	32.29	3.04
	June	1.85	71.02	32.51	0.06	30.90	3.06
	July	1.41	63.75	24.63	0.06	36.34	3.09
	August	1.57	72.61	13.36	0.05	37.19	3.11
	September	1.40	81.16	0.00	0.04	47.34	3.14
	October	1.36	84.35	2.37	0.23	43.79	3.17
	November	1.42	88.22	0.00	0.04	50.57	3.20
	December	1.44	77.66	0.00	0.03	44.15	3.23
PATTERN: P-09	January	1.38	4.89	23.32	0.07	2.81	1.09
	February	1.35	5.04	19.11	0.05	3.00	1.09
	March	1.31	6.03	50.60	0.05	3.72	1.09
	April	1.29	5.76	44.41	0.05	3.60	1.10
	May	1.27	5.30	27.73	0.06	3.35	1.10
	June	1.10	5.71	24.92	0.07	4.12	1.10
	July	0.93	4.58	29.26	0.07	3.90	1.11
	August	1.16	5.79	66.14	0.07	3.98	1.11
	September	1.03	5.70	95.89	0.05	4.45	1.11
	October	1.19	5.75	59.18	0.06	3.89	1.12
	November	1.21	4.99	11.23	0.06	3.31	1.12
	December	1.19	4.10	11.07	0.07	2.75	1.12
PATTERN: P-10	January	1.90	4.70	14.45	0.05	2.00	1.20
	February	2.19	4.52	20.45	0.04	1.68	1.20
	March	2.17	5.81	41.92	0.05	2.16	1.20
	April	2.15	6.34	40.62	0.04	2.39	1.20
	May	2.11	6.30	30.78	0.05	2.40	1.21
	June	1.93	6.33	18.88	0.05	2.64	1.21
	July	1.63	5.18	11.79	0.04	2.58	1.21
	August	2.03	5.83	28.54	0.04	2.33	1.21
	September	1.78	6.24	37.51	0.02	2.89	1.21
	October	1.87	5.63	21.18	0.03	2.48	1.21
	November	1.83	5.70	10.11	0.03	2.55	1.22
	December	1.80	6.22	9.96	0.03	2.83	1.22



TABLE B.1: 2012 MONTHLY PRODUCTION, INJECTION AND VRR BY PATTERN

	Month	CD Oil Rate (m <sup>3</sup> /d)	CD Water Inj Rate (m <sup>3</sup> /d)	Gas Oil Ratio m <sup>3</sup> /m <sup>3</sup>	Water Oil Ratio m <sup>3</sup> /m <sup>3</sup>	Monthly VRR	Cum VRR
PATTERN: P-11	January	2.97	1.87	38.80	0.09	0.49	2.18
	February	3.08	2.03	34.41	0.06	0.53	2.17
	March	3.17	3.74	30.06	0.04	0.96	2.17
	April	3.20	3.64	29.67	0.07	0.90	2.17
	May	3.15	3.47	30.17	0.09	0.86	2.17
	June	3.40	3.33	28.47	0.08	0.77	2.17
	July	2.12	3.03	26.65	0.10	1.11	2.16
	August	2.43	3.32	21.58	0.10	1.06	2.16
	September	2.35	2.63	19.16	0.05	0.91	2.16
	October	2.65	2.58	23.72	0.16	0.72	2.16
	November	2.73	2.34	8.92	0.08	0.67	2.16
	December	2.77	1.67	8.49	0.08	0.47	2.16
PATTERN: P-12	January	2.89	9.85	13.66	0.08	2.67	0.85
	February	3.09	9.53	6.98	0.05	2.49	0.85
	March	3.36	12.02	47.01	0.03	2.93	0.86
	April	3.49	11.76	56.54	0.06	2.70	0.86
	May	3.42	10.33	94.25	0.06	2.41	0.86
	June	3.51	9.48	123.93	0.06	2.16	0.86
	July	2.79	8.70	32.90	0.06	2.49	0.87
	August	3.26	10.45	3.22	0.06	2.57	0.87
	September	2.63	9.79	14.24	0.04	3.03	0.87
	October	2.90	9.76	49.15	0.17	2.48	0.87
	November	3.55	8.21	10.90	0.10	1.79	0.88
	December	3.68	5.37	10.17	0.10	1.13	0.88
PATTERN: P-13	January	1.62	1.21	26.36	0.02	0.62	1.80
	February	2.08	1.44	21.52	0.02	0.57	1.80
	March	2.18	1.82	60.54	0.02	0.69	1.79
	April	2.24	2.09	70.42	0.02	0.77	1.79
	May	2.01	1.76	206.58	0.01	0.73	1.79
	June	2.25	2.45	150.17	0.01	0.91	1.79
	July	1.97	1.69	9.42	0.01	0.72	1.79
	August	2.08	2.10	66.80	0.01	0.84	1.79
	September	1.77	2.72	132.52	0.01	1.28	1.79
	October	1.63	1.80	122.02	0.01	0.93	1.79
	November	1.64	1.81	58.04	0.01	0.92	1.78
	December	1.81	1.69	50.68	0.01	0.78	1.78
PATTERN: P-14	January	0.57	2.54	69.60	0.02	3.70	0.98
	February	0.59	2.34	71.12	0.03	3.23	0.98
	March	0.58	2.87	121.55	0.03	4.04	0.98
	April	0.55	2.38	129.57	0.02	3.59	0.98
	May	0.45	1.88	98.39	0.01	3.47	0.98
	June	0.46	2.19	81.37	0.01	3.96	0.98
	July	0.35	1.86	34.17	0.01	4.39	0.98
	August	0.42	1.39	19.01	0.01	2.74	0.98
	September	0.41	1.71	18.11	0.01	3.44	0.99
	October	0.33	1.65	22.22	0.01	4.20	0.99
	November	0.52	1.65	0.00	0.02	2.59	0.99
	December	0.72	1.30	0.00	0.02	1.49	0.99

TABLE B.1: 2012 MONTHLY PRODUCTION, INJECTION AND VRR BY PATTERN

	Month	CD Oil Rate (m <sup>3</sup> /d)	CD Water Inj Rate (m <sup>3</sup> /d)	Gas Oil Ratio m <sup>3</sup> /m <sup>3</sup>	Water Oil Ratio m <sup>3</sup> /m <sup>3</sup>	Monthly VRR	Cum VRR
PATTERN: P-15	January	1.36	2.17	29.03	0.03	1.31	0.53
	February	1.42	2.37	26.72	0.02	1.38	0.53
	March	1.38	2.15	50.76	0.02	1.29	0.54
	April	1.40	2.19	52.19	0.02	1.28	0.54
	May	1.43	2.48	35.09	0.04	1.42	0.54
	June	1.45	1.47	43.63	0.03	0.83	0.54
	July	1.12	1.31	45.42	0.03	0.96	0.54
	August	1.33	1.80	43.16	0.04	1.11	0.54
	September	1.29	1.80	44.10	0.03	1.15	0.54
	October	0.79	1.60	21.32	0.04	1.64	0.54
	November	1.02	1.73	0.00	0.04	1.38	0.55
	December	1.23	1.53	0.00	0.04	1.02	0.55
PATTERN: P-16	January	2.57	1.54	42.11	0.02	0.50	1.11
	February	2.81	1.68	37.70	0.02	0.49	1.11
	March	2.81	0.12	65.71	0.01	0.03	1.11
	April	2.77	0.16	69.58	0.01	0.05	1.11
	May	2.72	0.12	43.66	0.01	0.04	1.11
	June	2.78	0.12	20.66	0.01	0.04	1.10
	July	2.17	0.07	12.28	0.01	0.03	1.10
	August	2.75	0.10	48.02	0.01	0.03	1.10
	September	2.89	1.41	76.63	0.01	0.41	1.10
	October	2.16	0.12	100.93	0.02	0.05	1.10
	November	1.87	0.21	25.41	0.02	0.09	1.10
	December	2.12	3.27	21.71	0.02	1.28	1.10
PATTERN: P-17	January	3.09	4.76	29.19	0.10	1.19	0.74
	February	3.38	4.24	29.85	0.07	1.00	0.75
	March	3.42	5.11	40.60	0.05	1.21	0.75
	April	3.45	4.90	42.71	0.07	1.12	0.75
	May	3.36	4.71	78.45	0.08	1.11	0.75
	June	3.40	5.02	74.58	0.07	1.18	0.75
	July	2.78	4.16	8.13	0.06	1.20	0.75
	August	3.52	5.16	5.27	0.06	1.18	0.75
	September	3.48	6.29	4.55	0.03	1.48	0.75
	October	3.33	5.18	45.52	0.05	1.25	0.75
	November	3.29	5.68	7.99	0.07	1.37	0.76
	December	3.25	6.28	7.81	0.07	1.53	0.76
PATTERN: P-18	January	3.84	6.08	52.95	0.17	1.17	0.65
	February	4.07	4.97	52.10	0.12	0.93	0.65
	March	3.92	10.96	53.73	0.07	2.22	0.65
	April	3.68	12.54	60.48	0.05	2.74	0.66
	May	3.63	13.33	61.85	0.06	2.93	0.66
	June	4.20	12.62	42.28	0.06	2.41	0.66
	July	3.47	8.94	16.02	0.11	1.98	0.66
	August	4.36	10.68	18.50	0.14	1.85	0.66
	September	4.34	10.76	21.33	0.08	1.95	0.66
	October	4.67	9.57	57.99	0.10	1.59	0.67
	November	4.79	8.49	5.08	0.13	1.34	0.67
	December	4.65	7.88	5.06	0.17	1.25	0.67

TABLE B.1: 2012 MONTHLY PRODUCTION, INJECTION AND VRR BY PATTERN

	Month	CD Oil Rate (m <sup>3</sup> /d)	CD Water Inj Rate (m <sup>3</sup> /d)	Gas Oil Ratio m <sup>3</sup> /m <sup>3</sup>	Water Oil Ratio m <sup>3</sup> /m <sup>3</sup>	Monthly VRR	Cum VRR
PATTERN: P-19	January	1.43	4.13	25.97	0.32	1.91	1.97
	February	1.70	3.23	29.94	0.22	1.35	1.97
	March	1.67	8.80	48.78	0.12	4.01	1.97
	April	1.55	10.48	48.46	0.02	5.57	1.98
	May	1.51	11.32	53.22	0.03	6.16	1.98
	June	1.36	11.00	22.14	0.03	6.60	1.99
	July	1.63	7.17	22.85	0.21	3.13	1.99
	August	2.39	8.46	43.88	0.32	2.35	1.99
	September	2.79	8.07	41.21	0.25	2.01	1.99
	October	2.95	7.35	35.49	0.32	1.65	1.99
	November	2.54	6.06	4.98	0.33	1.57	1.99
	December	1.80	5.19	6.80	0.34	1.88	1.99
PATTERN: P-20	January	1.11	0.19	53.08	0.01	0.14	0.26
	February	1.39	0.43	16.09	0.02	0.25	0.26
	March	1.47	0.16	29.68	0.02	0.09	0.26
	April	1.40	0.43	32.12	0.02	0.26	0.26
	May	1.36	0.12	54.16	0.06	0.07	0.25
	June	1.19	0.09	40.81	0.08	0.06	0.25
	July	1.12	0.07	49.32	0.06	0.05	0.25
	August	1.33	0.04	75.82	0.04	0.03	0.25
	September	1.26	0.05	70.58	0.02	0.03	0.25
	October	1.20	0.05	74.17	0.04	0.03	0.25
	November	1.26	0.07	6.15	0.04	0.05	0.25
	December	1.16	0.03	6.48	0.04	0.02	0.25
PATTERN: P-21	January	1.26	4.69	51.79	0.04	3.03	1.67
	February	1.38	4.85	23.66	0.03	2.88	1.67
	March	1.77	6.62	47.86	0.03	3.07	1.67
	April	1.68	5.60	38.29	0.02	2.75	1.68
	May	1.65	5.48	37.25	0.06	2.67	1.68
	June	1.74	5.27	35.94	0.07	2.41	1.68
	July	1.43	4.38	49.04	0.07	2.44	1.68
	August	1.64	5.55	82.51	0.05	2.74	1.69
	September	1.56	5.73	81.41	0.02	3.04	1.69
	October	1.48	4.94	89.23	0.06	2.67	1.69
	November	1.57	5.13	0.00	0.06	2.61	1.70
	December	1.36	5.16	0.00	0.04	3.08	1.70
PATTERN: P-22	January	1.44	2.26	26.88	0.34	1.03	0.67
	February	1.84	2.39	22.94	0.21	0.92	0.67
	March	1.81	1.93	69.64	0.11	0.82	0.67
	April	1.74	2.89	70.30	0.02	1.37	0.67
	May	1.73	2.77	65.80	0.03	1.32	0.67
	June	1.83	2.20	53.81	0.03	0.99	0.68
	July	1.81	2.50	45.07	0.19	1.00	0.68
	August	2.37	3.06	72.71	0.32	0.86	0.68
	September	2.85	3.20	72.04	0.25	0.78	0.68
	October	3.23	3.15	62.44	0.31	0.65	0.68
	November	3.07	2.77	0.00	0.29	0.61	0.68
	December	2.14	1.81	0.00	0.30	0.57	0.68

TABLE B.1: 2012 MONTHLY PRODUCTION, INJECTION AND VRR BY PATTERN

	Month	CD Oil Rate (m <sup>3</sup> /d)	CD Water Inj Rate (m <sup>3</sup> /d)	Gas Oil Ratio m <sup>3</sup> /m <sup>3</sup>	Water Oil Ratio m <sup>3</sup> /m <sup>3</sup>	Monthly VRR	Cum VRR
PATTERN: P-23	January	2.72	2.35	24.06	0.22	0.61	1.21
	February	3.07	1.77	25.27	0.16	0.43	1.21
	March	2.90	2.60	41.98	0.10	0.70	1.21
	April	2.68	3.53	45.10	0.05	1.07	1.21
	May	2.65	3.64	37.13	0.05	1.11	1.21
	June	2.84	4.07	29.69	0.05	1.16	1.21
	July	2.54	2.72	27.61	0.11	0.82	1.21
	August	2.96	3.41	35.66	0.16	0.85	1.21
	September	2.53	3.63	50.45	0.11	1.10	1.21
	October	2.98	3.50	96.37	0.12	0.90	1.21
	November	3.31	3.46	0.00	0.16	0.77	1.21
	December	3.43	2.47	0.00	0.19	0.52	1.20
PATTERN: P-24	January	3.08	4.54	18.83	0.33	0.97	0.51
	February	3.57	4.05	17.63	0.24	0.79	0.51
	March	3.03	5.05	25.16	0.16	1.24	0.51
	April	2.66	4.12	21.59	0.08	1.22	0.51
	May	2.57	4.27	87.08	0.07	1.32	0.51
	June	2.78	4.34	104.58	0.09	1.22	0.51
	July	2.20	3.74	34.06	0.08	1.33	0.52
	August	2.28	4.55	16.14	0.04	1.63	0.52
	September	2.29	4.28	26.00	0.38	1.19	0.52
	October	2.81	3.91	25.33	0.76	0.71	0.52
	November	3.29	3.49	2.66	0.30	0.71	0.52
	December	3.35	3.34	2.53	0.20	0.72	0.52
PATTERN: P-25	January	4.95	0.24	19.69	0.63	0.03	0.31
	February	5.01	0.12	13.60	0.51	0.02	0.31
	March	2.93	0.35	59.02	0.37	0.08	0.31
	April	1.33	0.11	28.16	0.02	0.07	0.31
	May	1.30	0.13	37.22	0.02	0.08	0.31
	June	1.91	0.14	115.80	0.23	0.05	0.30
	July	1.63	0.06	124.18	0.25	0.03	0.30
	August	1.46	0.05	55.58	0.06	0.03	0.30
	September	2.28	0.09	70.80	1.52	0.01	0.30
	October	3.05	0.04	61.94	2.69	0.00	0.30
	November	4.40	0.01	1.99	0.81	0.00	0.30
	December	4.74	0.01	1.79	0.51	0.00	0.29
PATTERN: P-26	January	1.43	2.23	76.88	0.23	1.10	0.98
	February	1.67	1.36	91.05	0.34	0.53	0.98
	March	1.61	2.85	88.08	0.34	1.16	0.98
	April	1.86	2.79	42.97	0.36	0.97	0.98
	May	1.93	2.68	42.17	0.34	0.90	0.98
	June	1.95	2.99	54.39	0.35	1.00	0.98
	July	1.37	2.21	75.75	0.23	1.13	0.98
	August	1.66	2.44	82.81	0.20	1.06	0.98
	September	1.69	2.46	78.78	0.16	1.08	0.98
	October	1.34	2.58	54.62	0.31	1.28	0.99
	November	1.26	1.68	0.00	0.34	0.87	0.99
	December	1.25	0.72	0.00	0.33	0.38	0.98

TABLE B.1: 2012 MONTHLY PRODUCTION, INJECTION AND VRR BY PATTERN

	Month	CD Oil Rate (m <sup>3</sup> /d)	CD Water Inj Rate (m <sup>3</sup> /d)	Gas Oil Ratio m <sup>3</sup> /m <sup>3</sup>	Water Oil Ratio m <sup>3</sup> /m <sup>3</sup>	Monthly VRR	Cum VRR
PATTERN: P-27	January	0.70	0.10	138.57	0.42	0.09	0.46
	February	0.77	0.20	188.55	0.23	0.19	0.46
	March	0.99	0.26	108.55	0.20	0.19	0.45
	April	1.21	0.14	35.15	0.30	0.08	0.45
	May	1.22	0.11	35.64	0.31	0.06	0.45
	June	1.22	0.06	40.96	0.31	0.03	0.45
	July	0.87	0.03	67.97	0.19	0.02	0.45
	August	1.09	0.02	80.32	0.19	0.01	0.45
	September	1.12	0.13	75.15	0.15	0.09	0.45
	October	1.11	0.12	54.31	0.21	0.07	0.45
	November	1.02	0.02	0.00	0.23	0.02	0.44
	December	0.79	0.03	0.00	0.27	0.03	0.44
PATTERN: P-28	January	0.89	1.65	86.52	0.09	1.45	0.60
	February	0.91	2.06	63.81	0.06	1.82	0.60
	March	0.76	1.55	110.64	0.05	1.64	0.60
	April	0.71	0.54	158.82	0.05	0.62	0.60
	May	0.68	1.19	166.67	0.06	1.40	0.60
	June	0.66	1.21	133.08	0.06	1.47	0.61
	July	0.55	1.16	105.57	0.07	1.67	0.61
	August	0.79	0.30	118.07	0.11	0.29	0.61
	September	0.91	1.23	109.39	0.11	1.04	0.61
	October	1.13	0.84	78.68	0.12	0.57	0.61
	November	1.06	0.30	0.00	0.09	0.22	0.61
	December	1.06	0.13	0.00	0.09	0.10	0.61
PATTERN: P-29	January	1.16	1.82	77.62	0.06	1.25	0.43
	February	1.56	2.07	52.05	0.04	1.08	0.43
	March	1.48	1.56	80.20	0.04	0.86	0.43
	April	1.50	0.49	86.38	0.05	0.27	0.43
	May	1.51	1.21	86.26	0.05	0.64	0.43
	June	1.54	1.51	79.22	0.05	0.79	0.44
	July	1.07	1.35	74.32	0.03	1.03	0.44
	August	1.08	0.22	81.85	0.03	0.16	0.44
	September	1.24	2.62	78.17	0.03	1.74	0.44
	October	1.29	2.02	64.42	0.05	1.27	0.44
	November	1.38	0.57	0.00	0.04	0.34	0.44
	December	1.39	0.14	0.00	0.03	0.09	0.44
PATTERN: P-30	January	1.21	93.99	17.34	0.02	64.43	9.08
	February	1.54	69.01	24.59	0.14	33.65	9.15
	March	1.74	79.01	45.05	0.24	31.73	9.23
	April	1.81	76.50	33.56	0.35	27.46	9.30
	May	1.71	69.12	29.63	0.41	25.24	9.37
	June	1.75	73.73	30.91	0.41	26.25	9.43
	July	1.46	59.18	44.83	0.39	25.73	9.49
	August	1.71	71.30	67.08	0.32	27.59	9.56
	September	1.53	67.00	90.36	0.22	30.97	9.62
	October	1.58	53.76	79.20	0.30	22.82	9.67
	November	1.75	82.51	0.00	0.34	30.92	9.75
	December	1.76	91.68	0.00	0.34	34.23	9.84

TABLE B.1: 2012 MONTHLY PRODUCTION, INJECTION AND VRR BY PATTERN

	Month	CD Oil Rate (m <sup>3</sup> /d)	CD Water Inj Rate (m <sup>3</sup> /d)	Gas Oil Ratio m <sup>3</sup> /m <sup>3</sup>	Water Oil Ratio m <sup>3</sup> /m <sup>3</sup>	Monthly VRR	Cum VRR
PATTERN: P-31	January	1.12	3.82	31.68	0.04	2.78	0.72
	February	1.64	3.84	31.53	0.16	1.73	0.72
	March	1.71	3.38	77.79	0.28	1.35	0.72
	April	1.72	1.72	71.26	0.42	0.62	0.72
	May	1.68	1.60	67.89	0.48	0.57	0.72
	June	1.80	4.88	60.05	0.46	1.64	0.73
	July	1.54	3.64	63.28	0.42	1.47	0.73
	August	1.67	3.61	89.06	0.36	1.40	0.73
	September	1.70	4.60	90.95	0.23	1.90	0.73
	October	1.80	3.89	95.11	0.32	1.43	0.74
	November	1.98	3.53	0.00	0.35	1.16	0.74
	December	1.79	2.31	0.00	0.36	0.83	0.74
PATTERN: P-32	January	2.22	2.05	58.14	0.81	0.46	0.19
	February	2.18	1.47	46.64	0.68	0.36	0.19
	March	2.57	1.90	68.22	0.55	0.43	0.19
	April	2.58	1.37	53.24	0.54	0.31	0.19
	May	2.57	1.72	30.44	0.58	0.38	0.20
	June	2.68	1.67	32.28	0.60	0.35	0.20
	July	2.14	1.77	48.70	0.58	0.47	0.20
	August	2.56	1.23	65.16	0.56	0.27	0.20
	September	2.54	1.05	70.87	0.40	0.26	0.20
	October	2.51	1.29	77.02	0.53	0.30	0.20
	November	2.53	1.27	0.00	0.57	0.28	0.20
	December	2.43	0.49	0.00	0.58	0.12	0.20
PATTERN: P-33	January	0.23		73.68	0.06		0.06
	February	0.36	0.00	71.19	8.36	0.00	0.06
	March	0.90	0.01	16.06	3.76	0.00	0.06
	April	0.64	0.01	0.00	1.38	0.01	0.06
	May	0.53		0.00	1.73		0.06
	June	0.39		25.41	2.12		0.06
	July	0.50	0.00	83.35	1.37	0.00	0.06
	August	0.80	0.00	90.50	0.88	0.00	0.06
	September	0.91	0.17	63.23	0.58	0.10	0.06
	October	0.84	0.03	79.91	0.77	0.02	0.06
	November	0.71	0.00	0.00	1.03	0.00	0.06
	December	0.73		0.00	1.02		0.06
PATTERN: P-34	January	0.27		111.45	0.20		0.04
	February	0.70	0.00	125.55	6.75	0.00	0.04
	March	1.64	0.14	91.99	4.26	0.02	0.04
	April	1.56	0.24	53.97	2.23	0.05	0.04
	May	1.27	0.05	40.06	2.40	0.01	0.04
	June	1.43	0.02	69.34	3.05	0.00	0.04
	July	1.54	0.00	52.74	2.72	0.00	0.04
	August	1.97	0.09	60.57	2.22	0.01	0.04
	September	1.86	0.37	62.72	1.57	0.07	0.04
	October	1.90	0.17	58.13	1.91	0.03	0.04
	November	5.58	0.04	0.00	1.55	0.00	0.04
	December	15.68	0.01	0.00	0.68	0.00	0.03

TABLE B.1: 2012 MONTHLY PRODUCTION, INJECTION AND VRR BY PATTERN

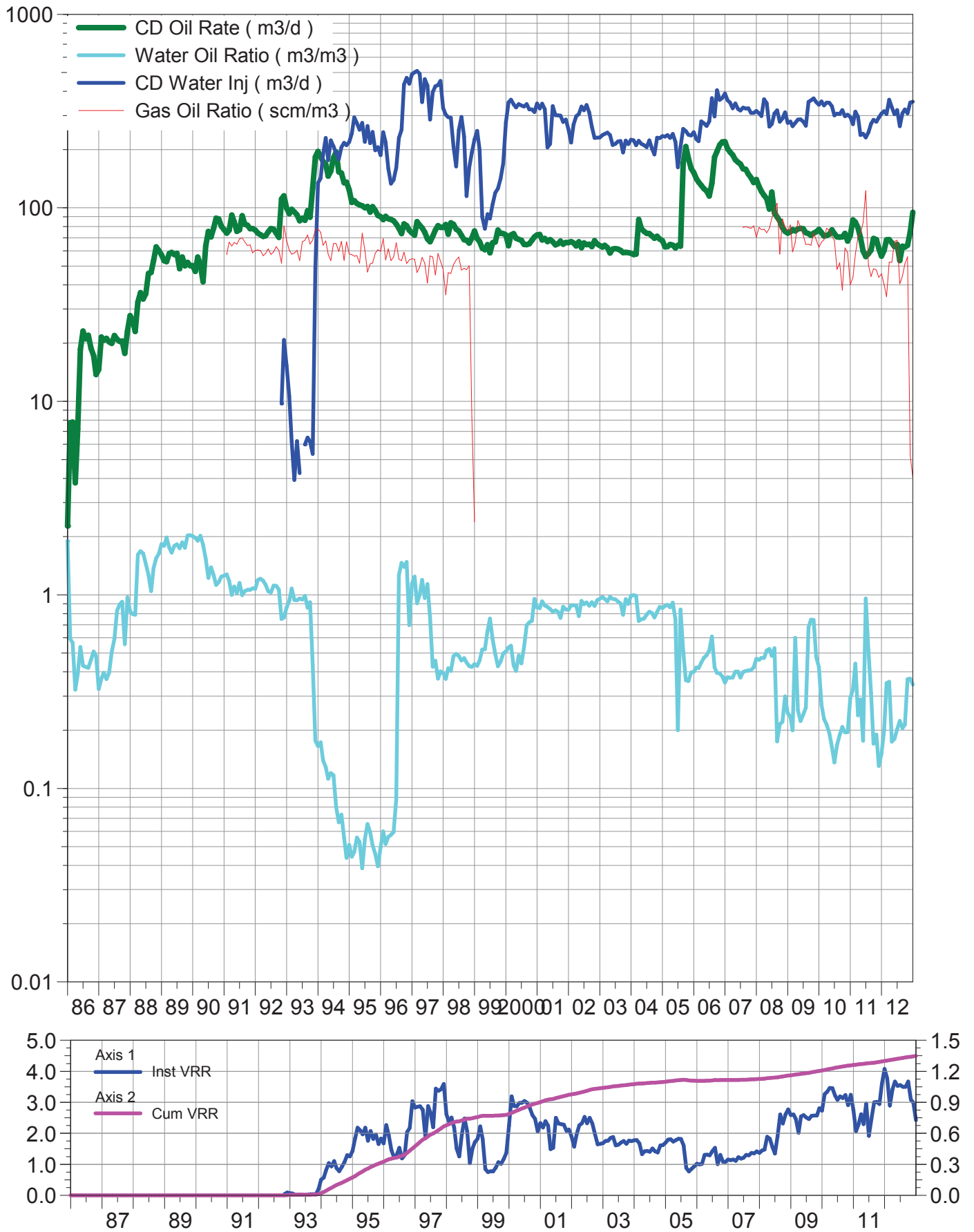
	Month	CD Oil Rate (m <sup>3</sup> /d)	CD Water Inj Rate (m <sup>3</sup> /d)	Gas Oil Ratio m <sup>3</sup> /m <sup>3</sup>	Water Oil Ratio m <sup>3</sup> /m <sup>3</sup>	Monthly VRR	Cum VRR
PATTERN: P-35	January	1.10	1.77	104.76	0.11	1.24	1.85
	February	1.07	0.91	82.46	0.08	0.67	1.85
	March	1.04	1.08	130.84	0.08	0.82	1.85
	April	1.09	0.99	121.28	0.09	0.71	1.85
	May	1.07	0.91	99.62	0.10	0.66	1.85
	June	0.99	0.57	100.00	0.09	0.45	1.85
	July	0.73	0.50	111.23	0.08	0.54	1.84
	August	0.88	1.04	131.63	0.08	0.93	1.84
	September	0.87	1.09	119.35	0.06	1.01	1.84
	October	0.90	0.65	94.09	0.08	0.57	1.84
	November	4.68	0.90	0.00	1.08	0.09	1.82
	December	14.75	0.23	0.00	0.48	0.01	1.77
PATTERN: P-36	January	0.91	0.36	96.29	0.06	0.32	0.98
	February	1.16	0.67	73.13	0.05	0.47	0.98
	March	1.35	0.53	94.76	0.05	0.32	0.97
	April	1.31	0.45	133.67	0.05	0.28	0.97
	May	0.93	0.47	152.44	0.06	0.40	0.97
	June	0.87	0.03	143.27	0.06	0.03	0.97
	July	0.69	0.06	119.72	0.07	0.07	0.97
	August	0.84	0.28	117.59	0.07	0.27	0.96
	September	0.78	0.38	86.02	0.05	0.40	0.96
	October	0.74	0.27	66.16	0.11	0.28	0.96
	November	0.69	0.09	0.00	0.14	0.10	0.96
	December	0.69	0.00	0.00	0.13	0.00	0.96
PATTERN: P-37	January	1.87	2.72	76.42	0.59	0.82	0.49
	February	2.07	1.62	40.83	0.37	0.50	0.49
	March	2.08	0.36	43.33	0.25	0.12	0.48
	April	2.26	0.14	95.24	0.01	0.05	0.48
	May	2.16	0.15	70.65	0.01	0.06	0.47
	June	2.18	0.64	74.48	0.01	0.24	0.47
	July	1.78	0.35	82.84	0.01	0.16	0.47
	August	2.21	1.25	86.99	0.01	0.47	0.47
	September	2.05	1.21	77.30	0.01	0.49	0.47
	October	0.75	0.91	33.55	0.16	0.90	0.47
	November	0.56	1.21	0.00	1.58	0.79	0.47
	December	0.51	0.46	0.00	1.08	0.39	0.47
PATTERN: P-38	January	0.37		162.69	0.22		0.21
	February	0.28		106.06	0.18		0.21
	March	0.31	0.00	105.94	0.16	0.00	0.21
	April	0.38	0.00	97.40	0.15	0.00	0.21
	May	0.35		32.48	0.16		0.21
	June	0.27	0.00	27.86	0.14	0.01	0.21
	July	0.25		120.92	0.14		0.21
	August	0.32		173.03	0.15		0.21
	September	0.26	0.00	157.56	0.10	0.00	0.21
	October	0.23		147.37	0.12		0.21
	November	0.24		0.00	0.13		0.21
	December	0.24		0.00	0.13		0.21

TABLE B.1: 2012 MONTHLY PRODUCTION, INJECTION AND VRR BY PATTERN

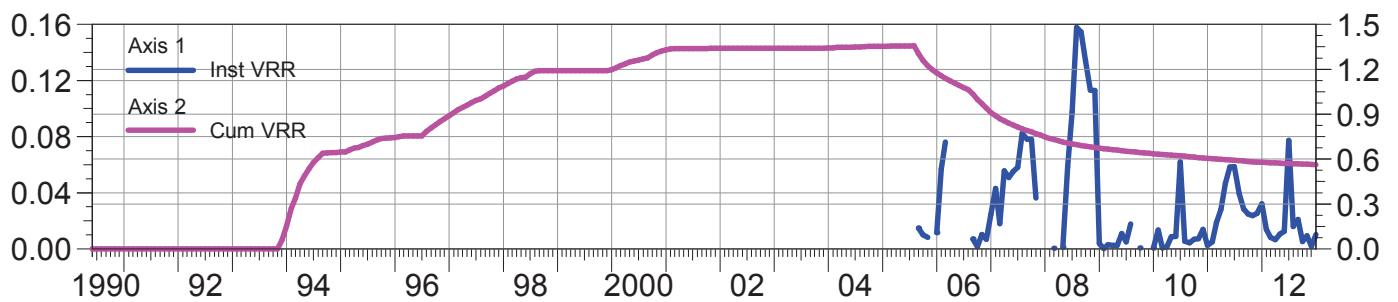
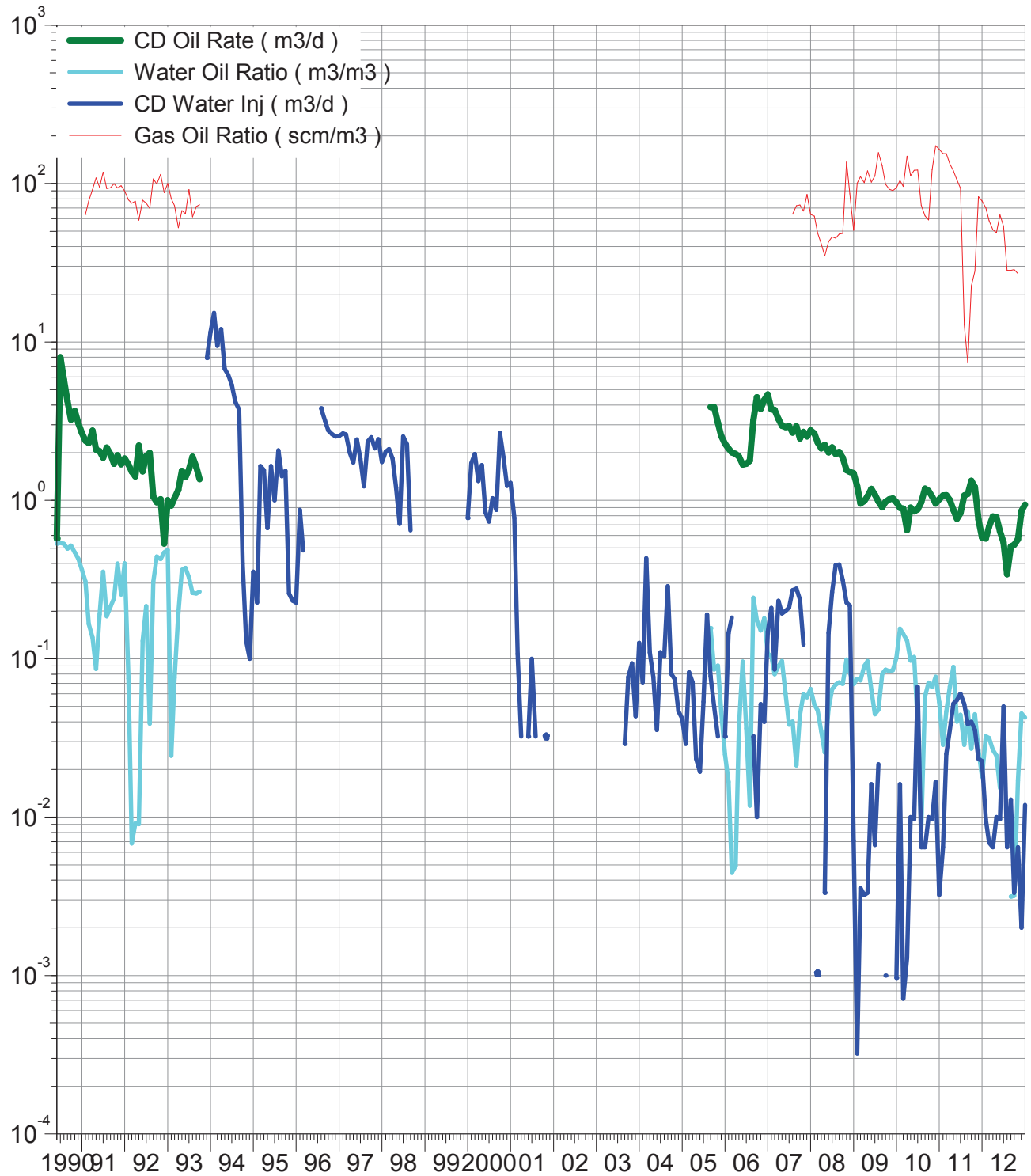
	Month	CD Oil Rate (m <sup>3</sup> /d)	CD Water Inj Rate (m <sup>3</sup> /d)	Gas Oil Ratio m <sup>3</sup> /m <sup>3</sup>	Water Oil Ratio m <sup>3</sup> /m <sup>3</sup>	Monthly VRR	Cum VRR
PATTERN: P-39	January	0.15	53.95	116.67	0.28	252.25	18.67
	February	0.25	60.60	10.51	11.49	19.43	18.68
	March	0.80	82.21	0.00	3.72	20.90	18.70
	April	0.82	76.88	0.00	0.27	63.99	18.83
	May	0.71	68.65	0.00	0.26	66.54	18.95
	June	0.42	73.45	43.63	0.27	119.97	19.10
	July	0.39	58.85	40.99	0.33	98.09	19.22
	August	0.69	70.93	28.09	0.26	70.83	19.34
	September	0.73	72.90	25.05	0.25	68.95	19.47
	October	0.83	78.89	19.48	0.22	67.37	19.61
	November	0.78	97.92	0.00	0.22	89.51	19.79
	December	0.83	111.45	0.00	0.23	95.13	20.00
PATTERN: P-40	January						
	February	0.01		0.00	439.00		0.00
	March	0.54		0.00	5.48		0.00
	April	0.32		0.00	0.62		0.00
	May	0.24		0.00	0.69		0.00
	June	0.06		0.00	0.76		0.00
	July	0.11		0.00	0.67		0.00
	August	0.38		0.00	0.39		0.00
	September	0.38		0.00	0.43		0.00
	October	0.36		0.00	0.40		0.00
	November	0.30		0.00	0.42		0.00
	December	0.34		0.00	0.42		0.00
PATTERN: P-43	January						
	February						
	March						
	April						
	May						
	June						
	July						
	August		0.03				1.23
	September		0.05				1.24
	October						
	November						
	December						



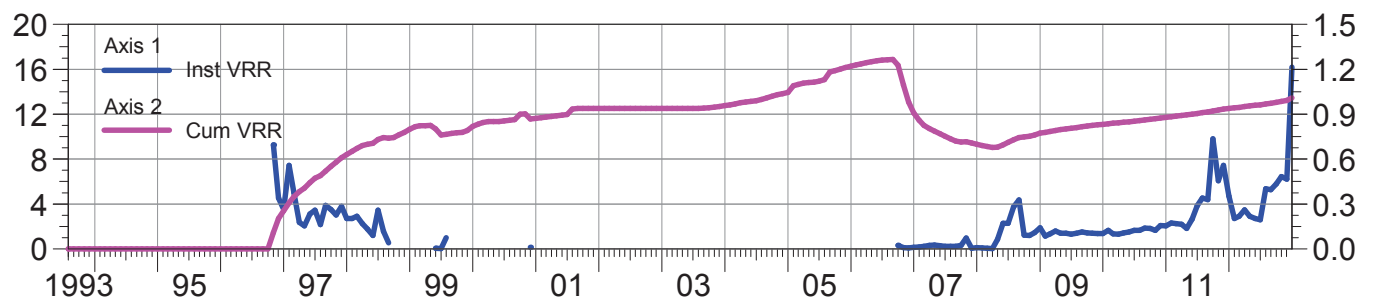
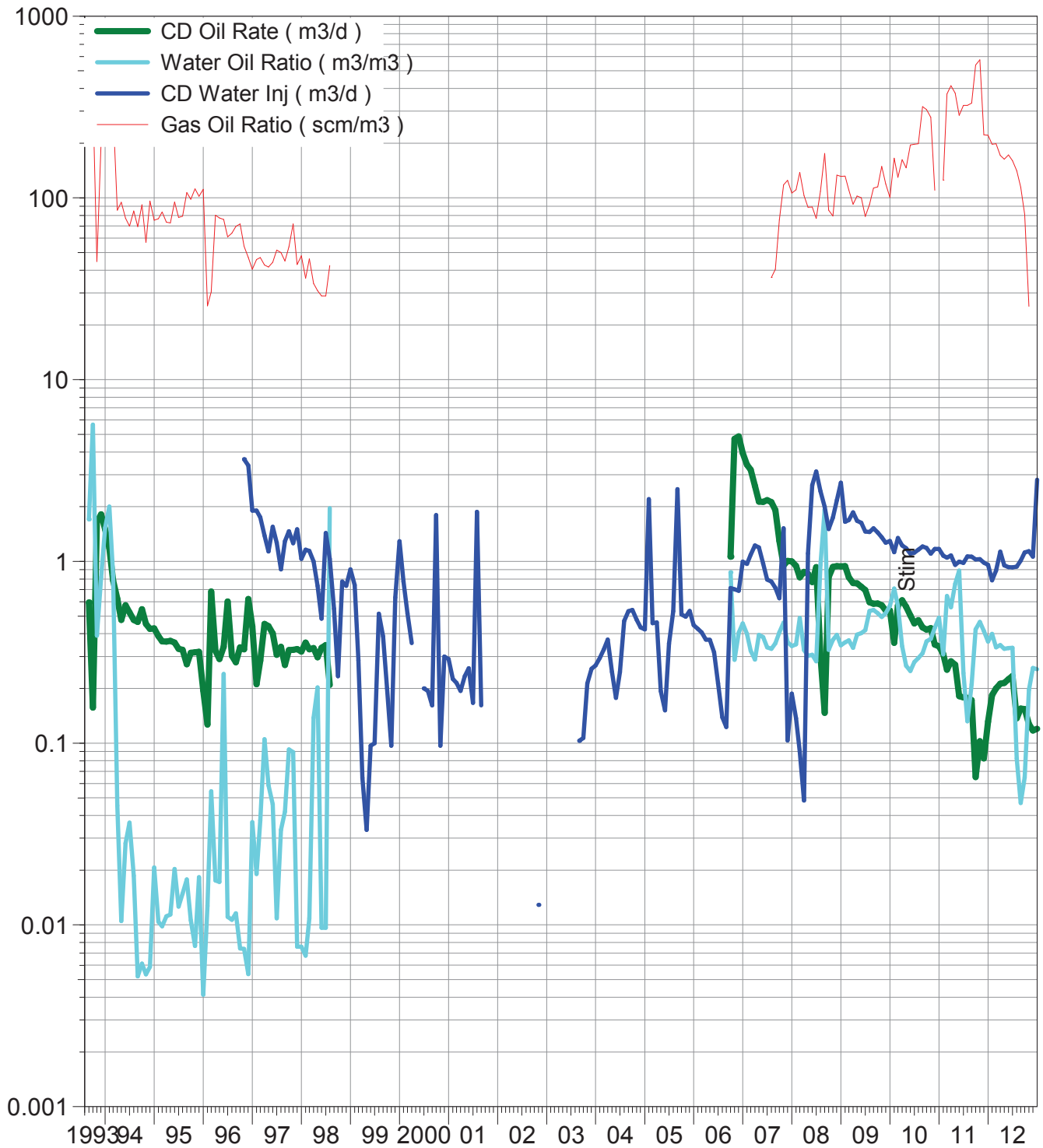
# South Pierson Unit No. 1 Overall Calendar Day Production



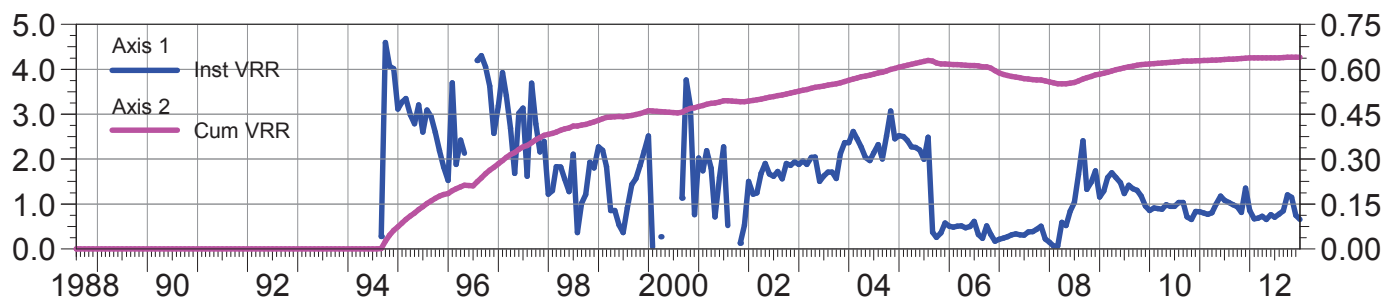
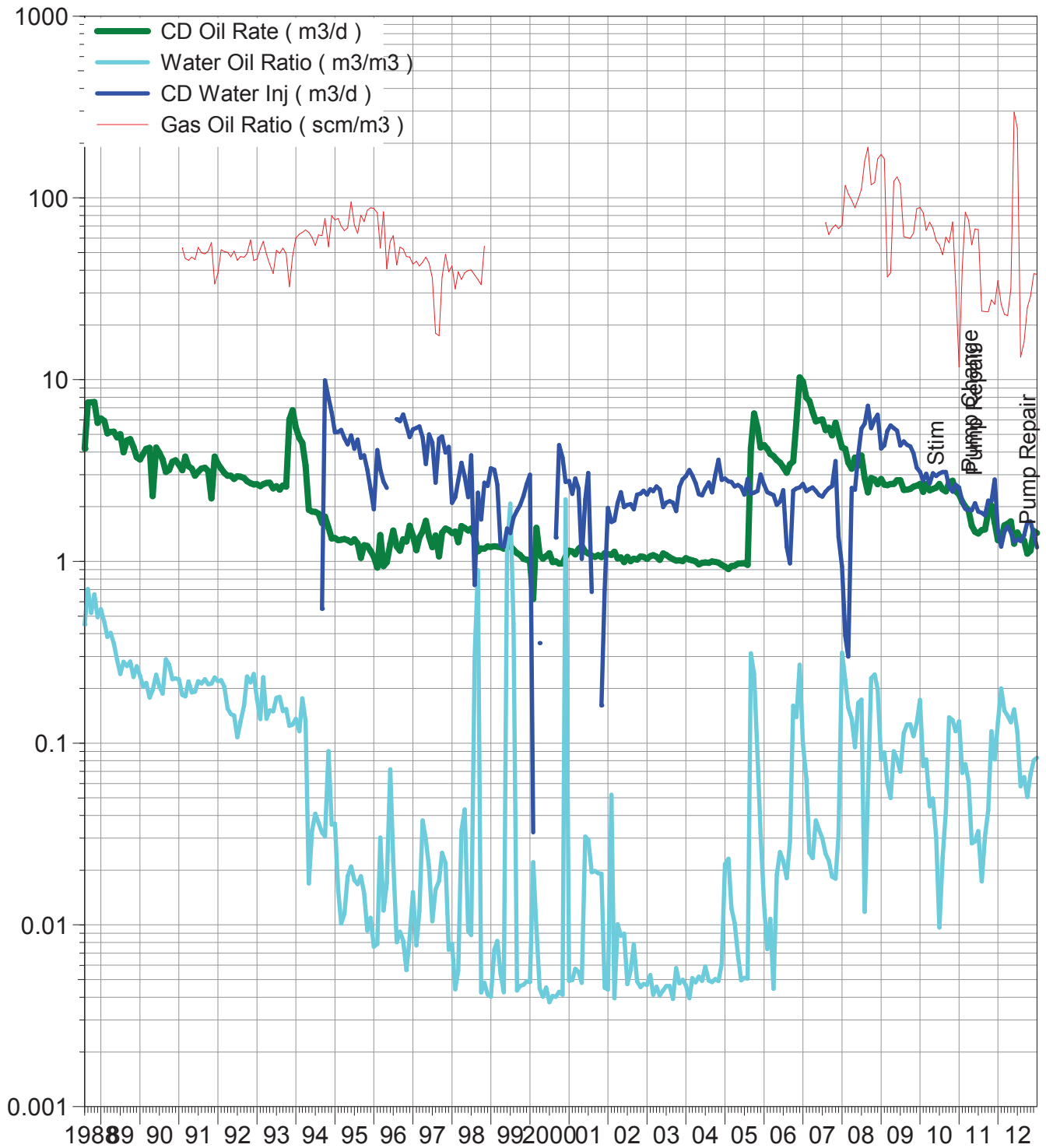
# Calendar Day Production for Pattern: P-02 Set: PIERSON UNIT



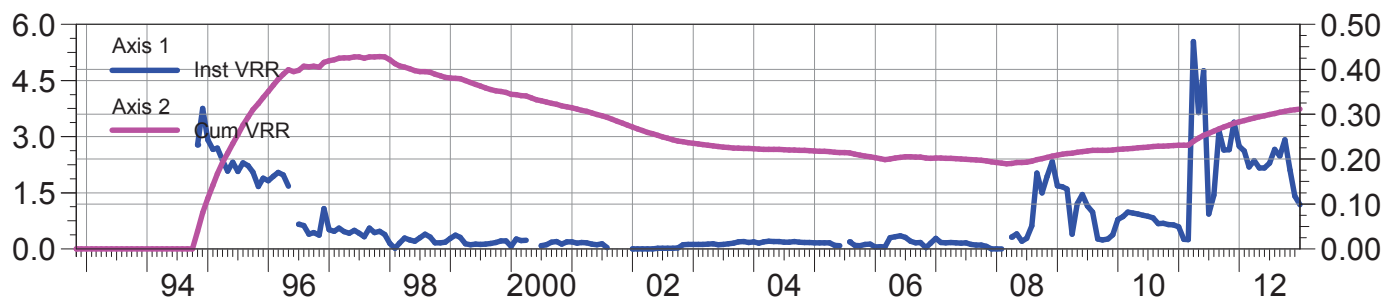
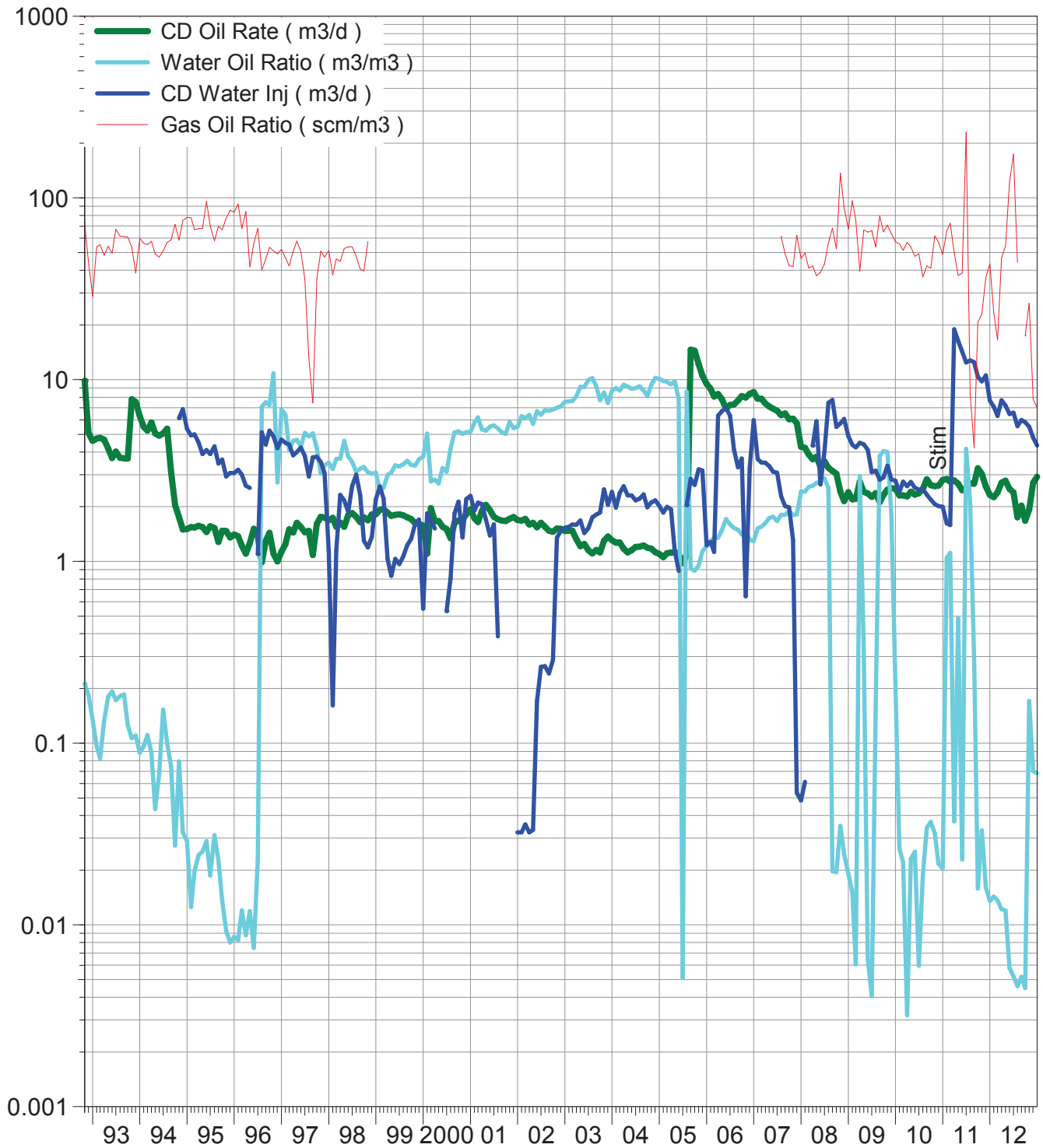
# Calendar Day Production for Pattern: P-05 Set: PIERSON UNIT



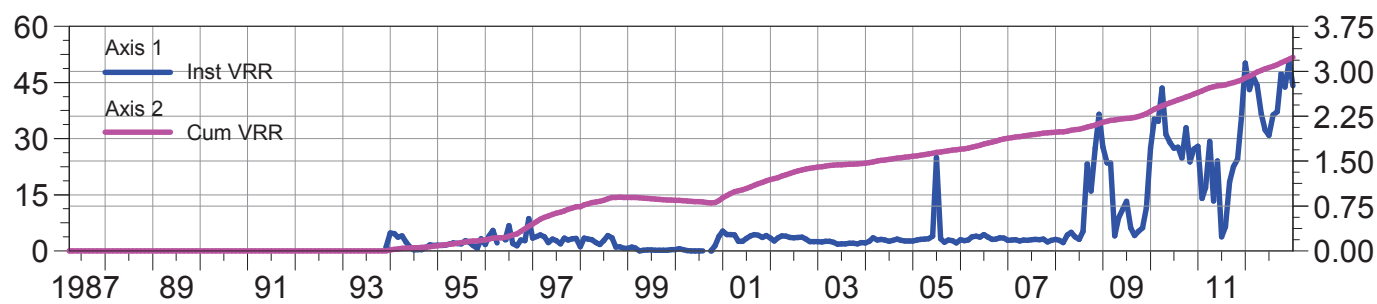
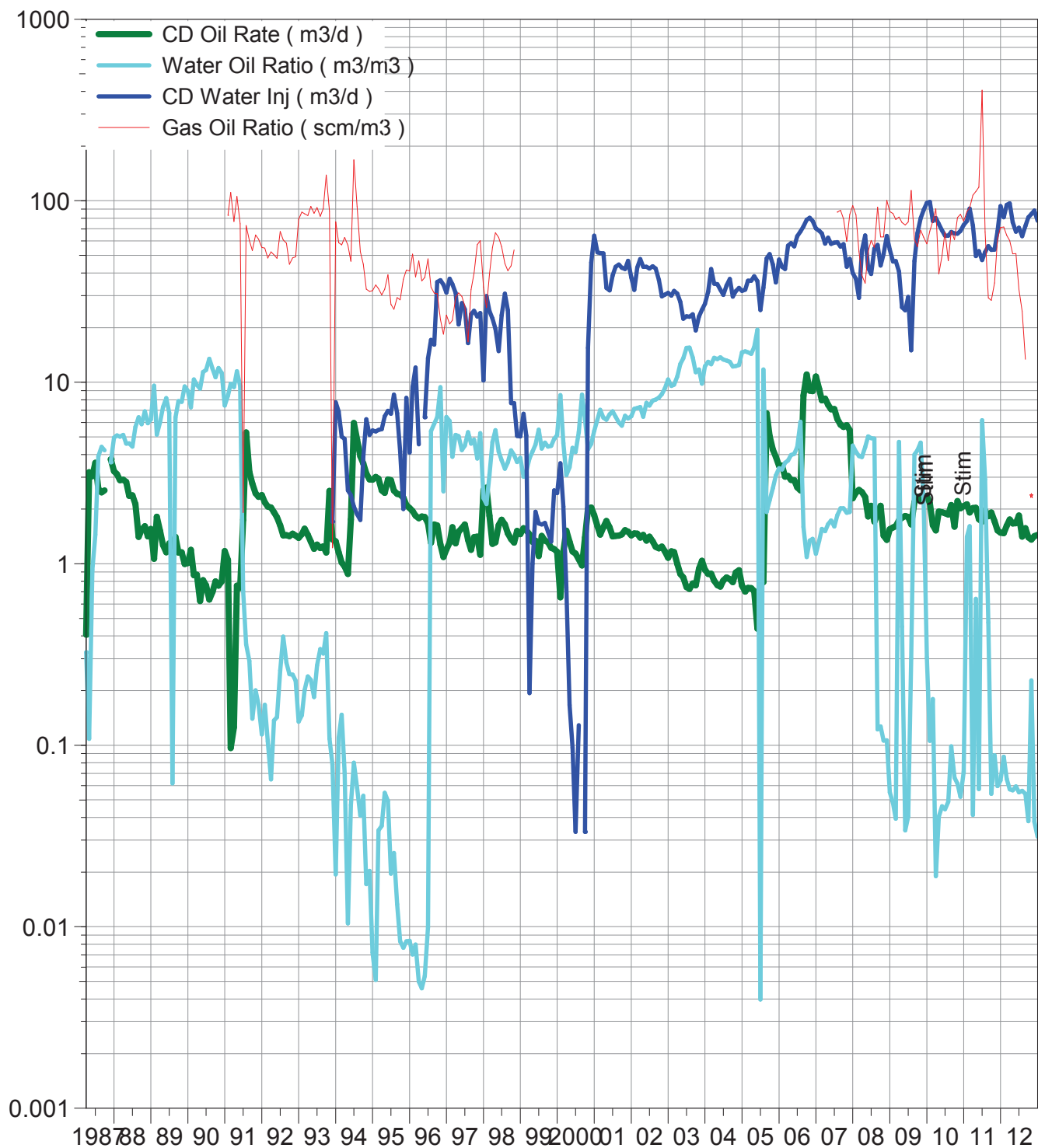
# Calendar Day Production for Pattern: P-06 Set: PIERSON UNIT



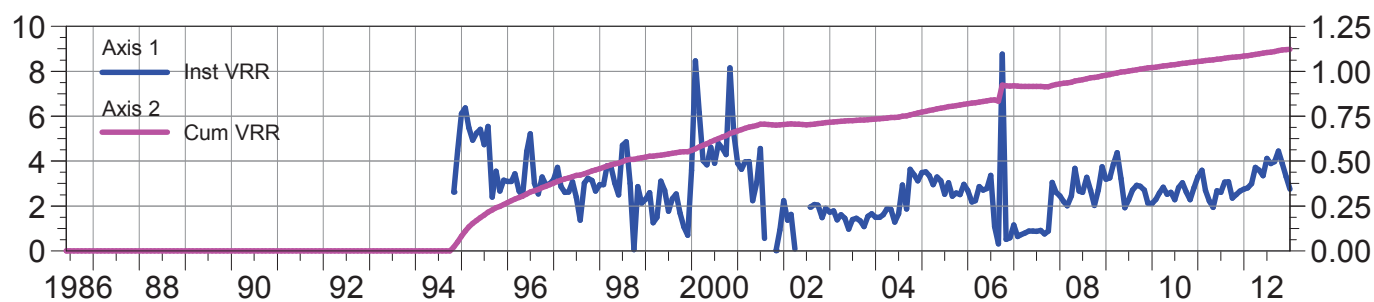
# Calendar Day Production for Pattern: P-07 Set: PIERSON UNIT



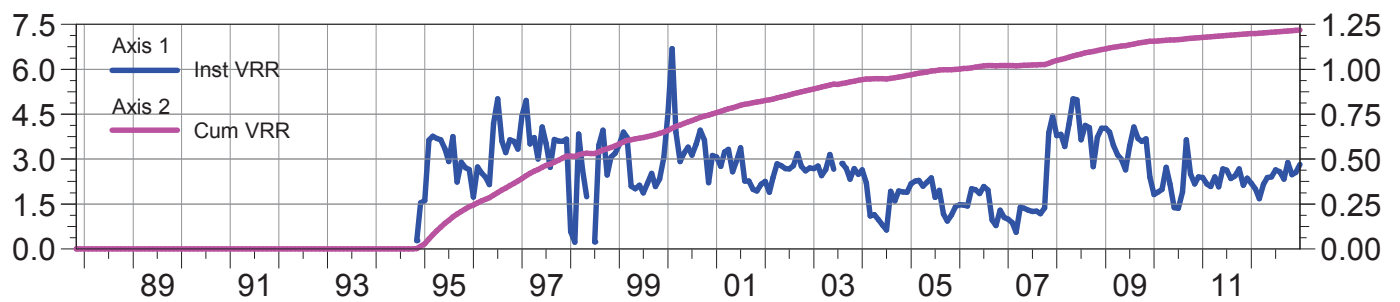
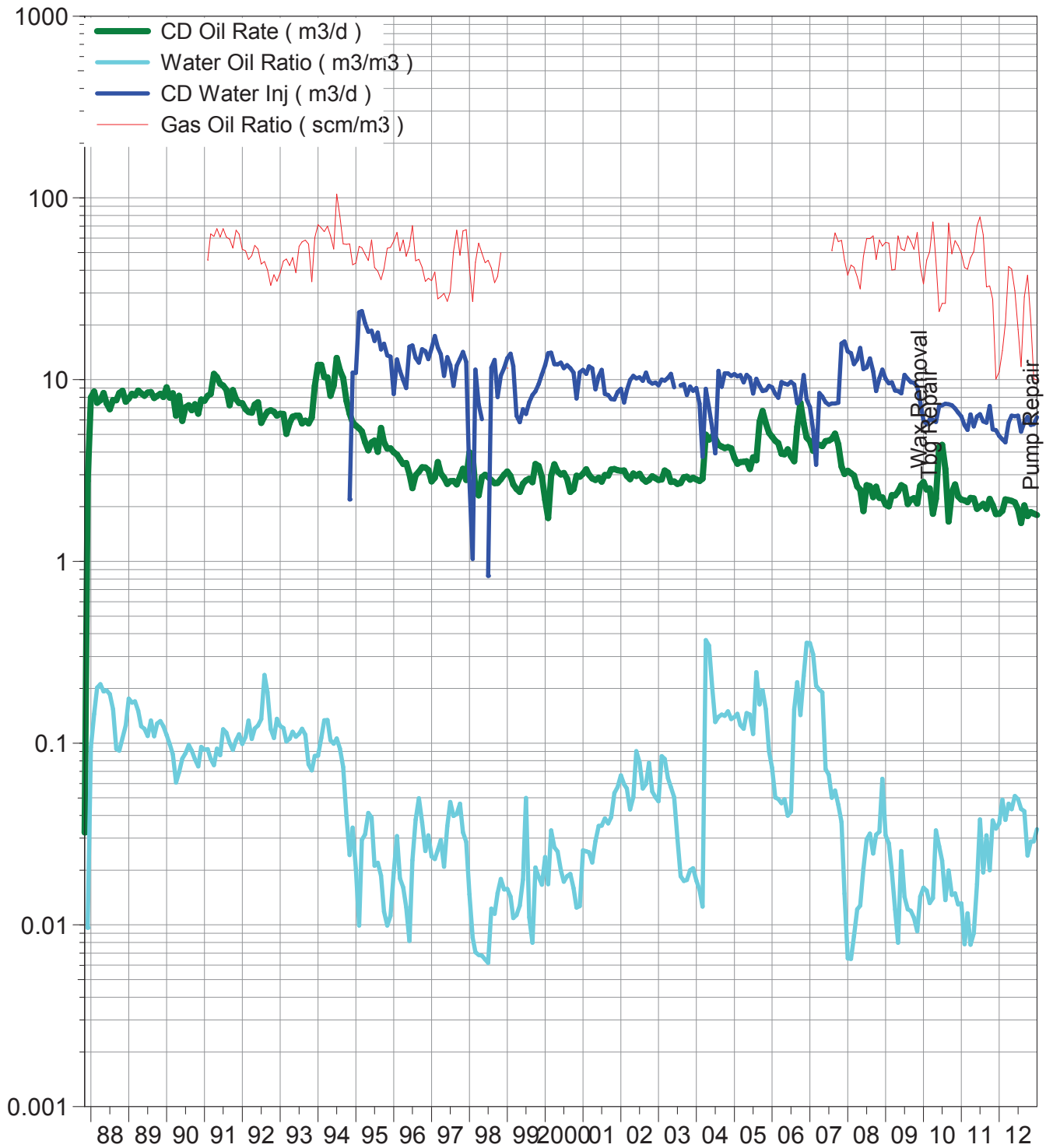
# Calendar Day Production for Pattern: P-08 Set: PIERSON UNIT



# Calendar Day Production for Pattern: P-09 Set: PIERSON UNIT

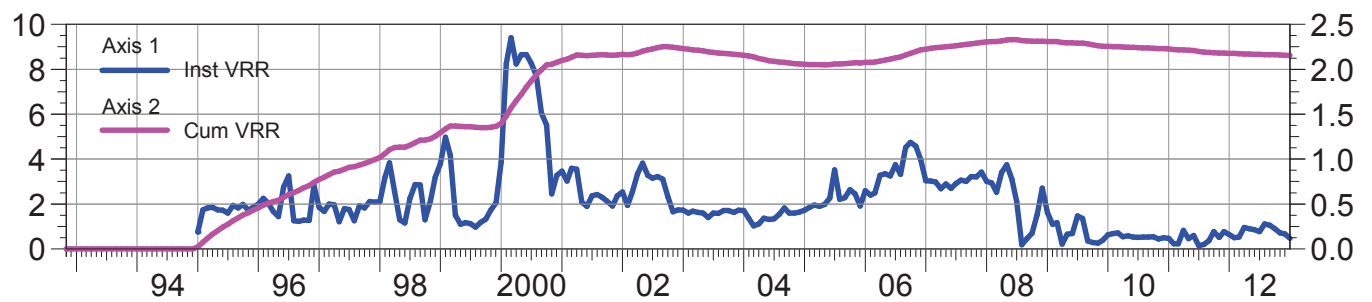
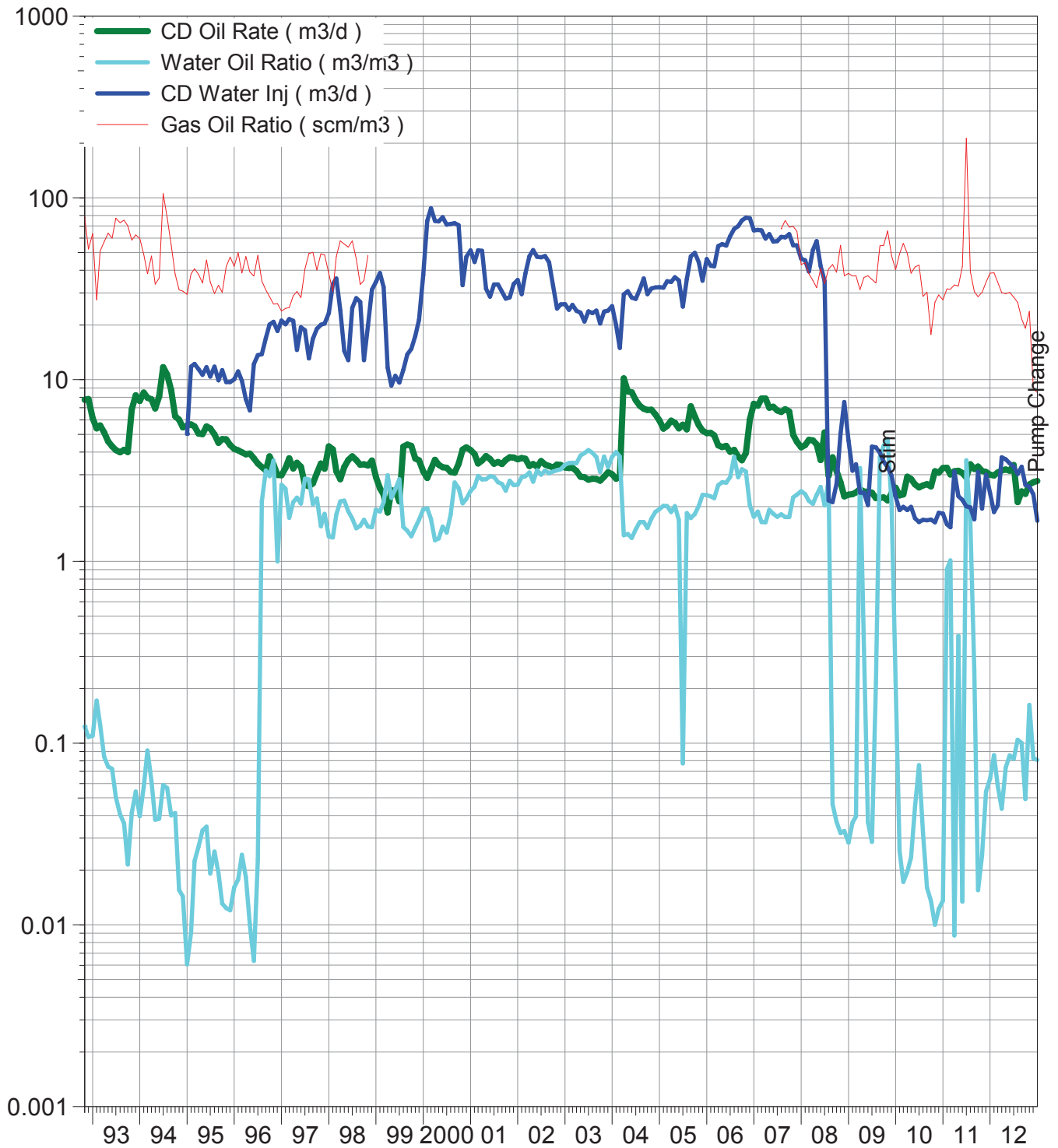


# Calendar Day Production for Pattern: P-10 Set: PIERSON UNIT

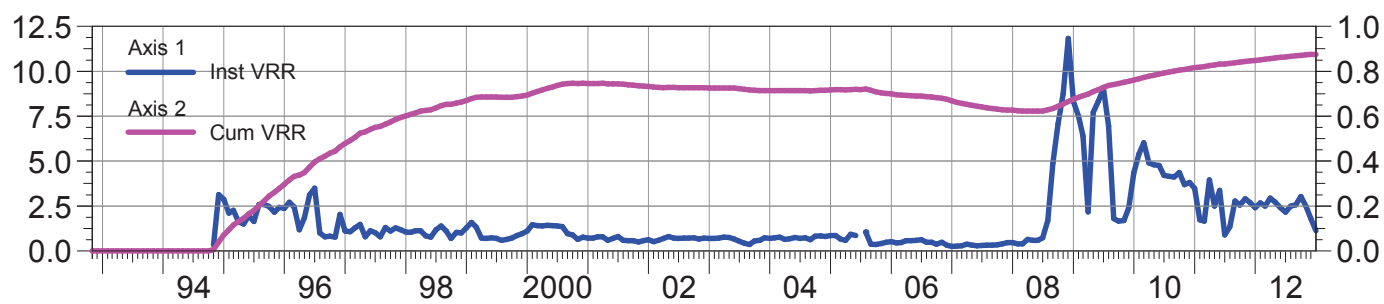
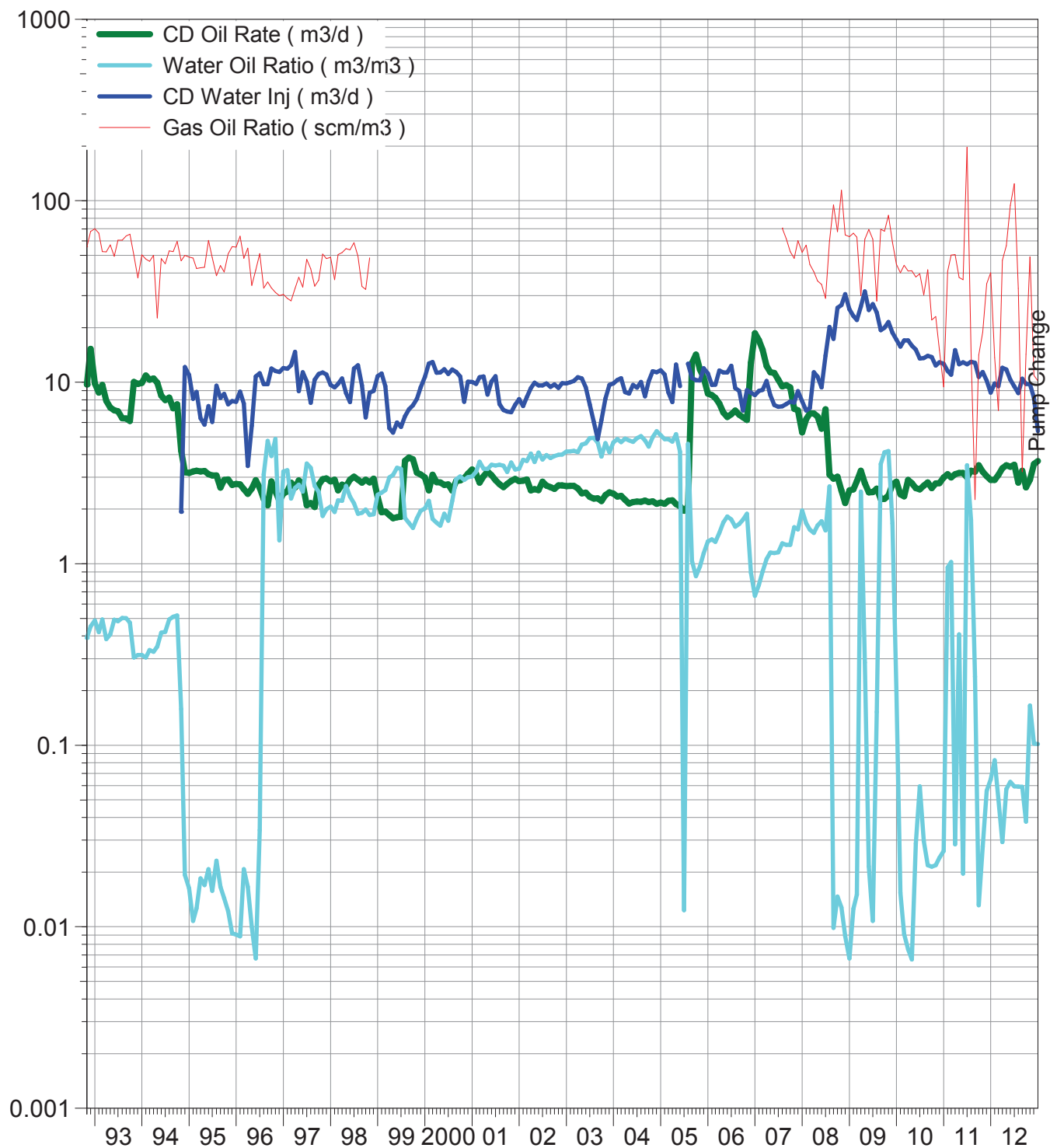




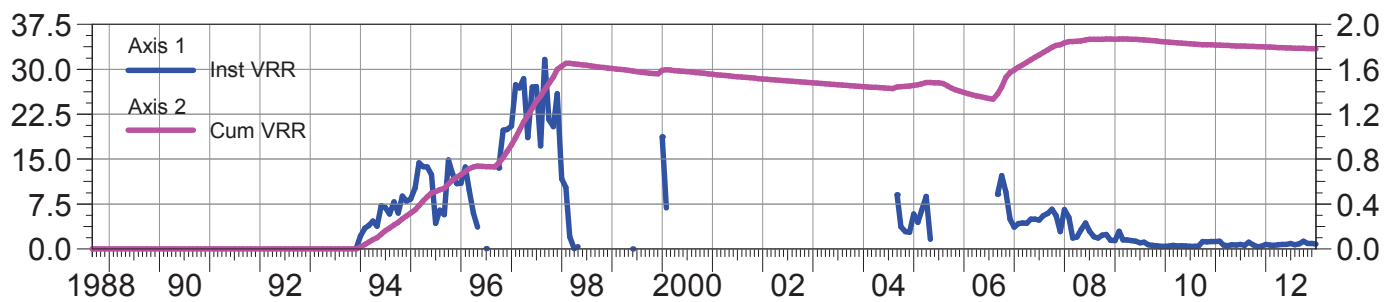
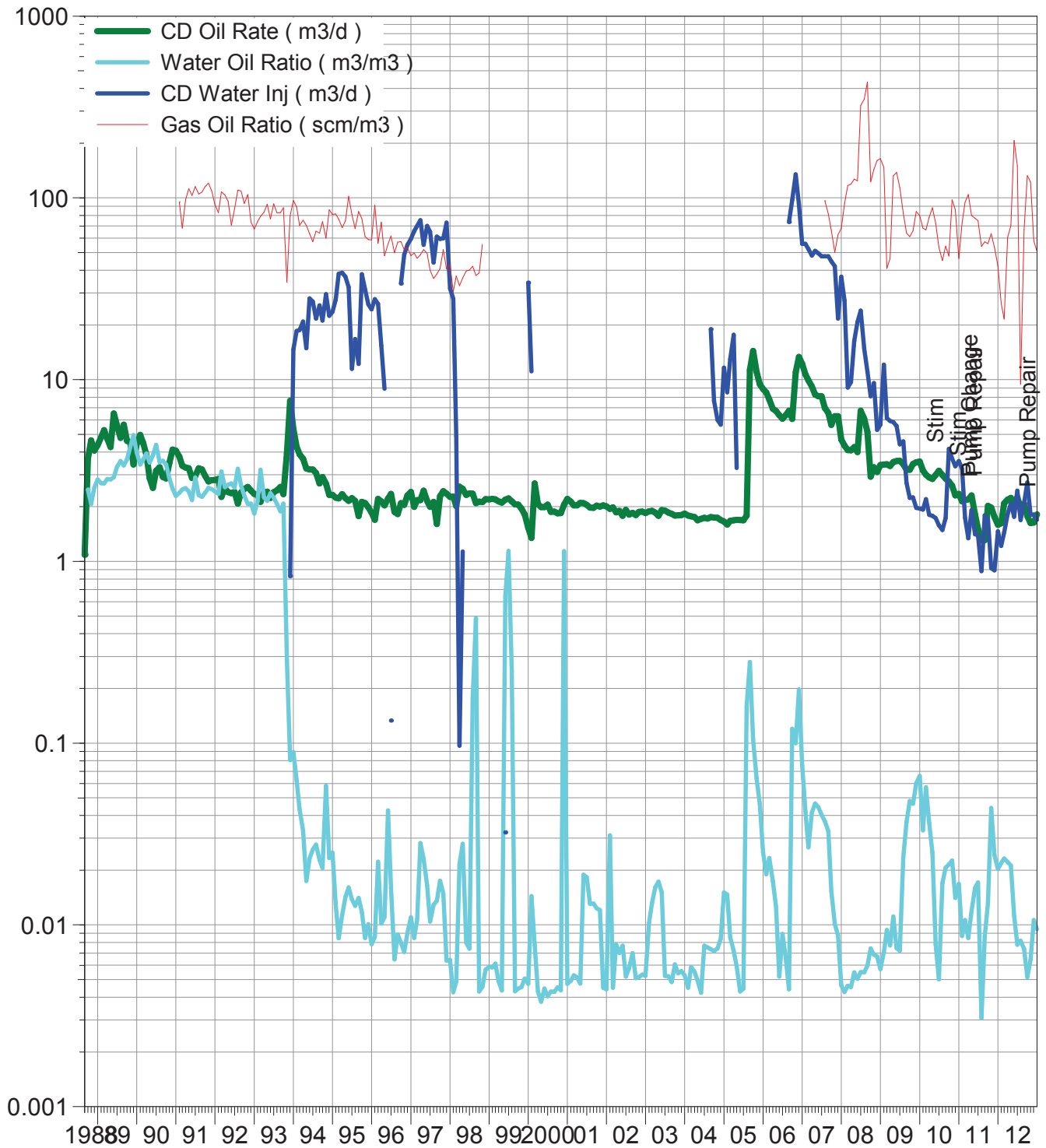
# Calendar Day Production for Pattern: P-11 Set: PIERSON UNIT



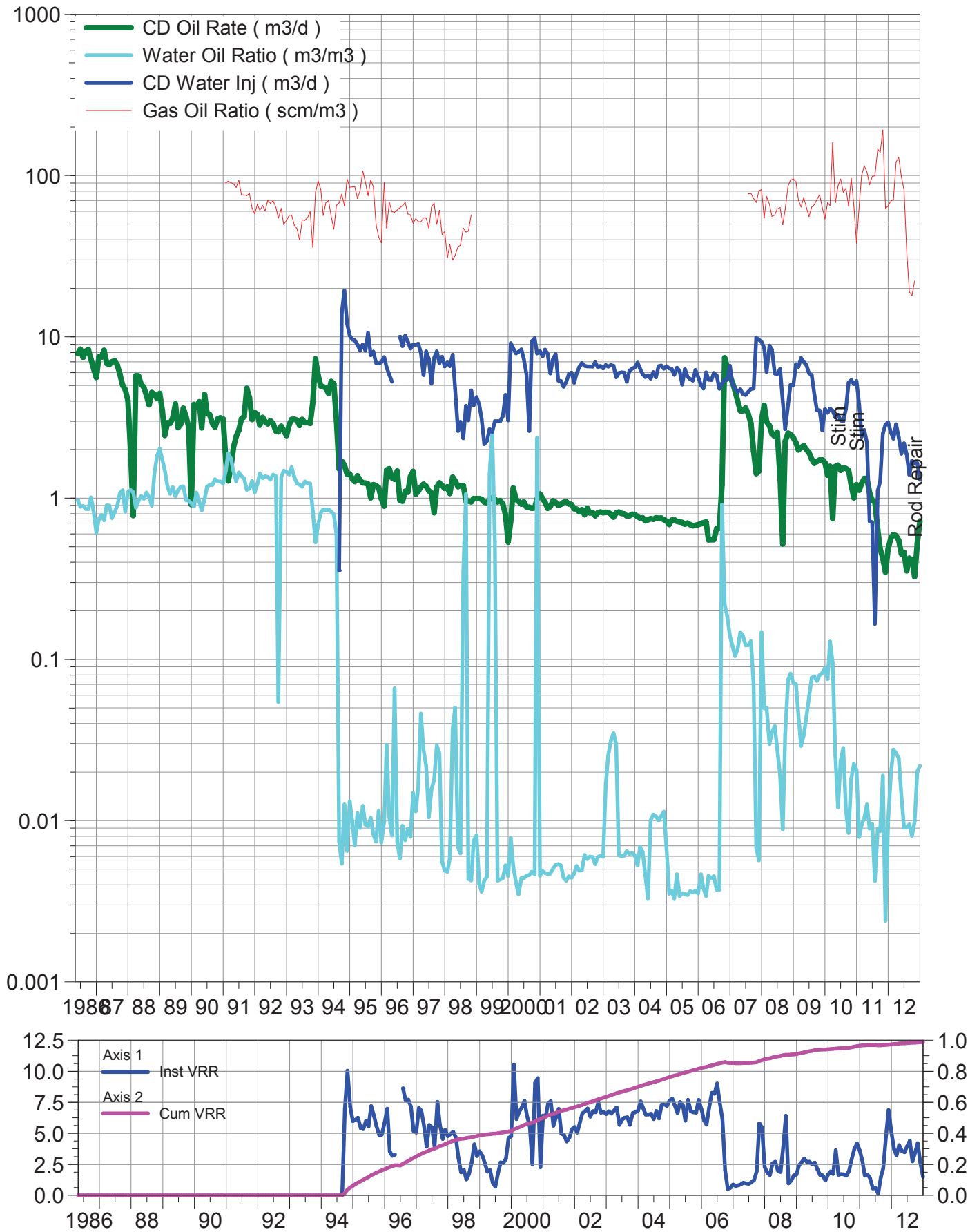
# Calendar Day Production for Pattern: P-12 Set: PIERSON UNIT



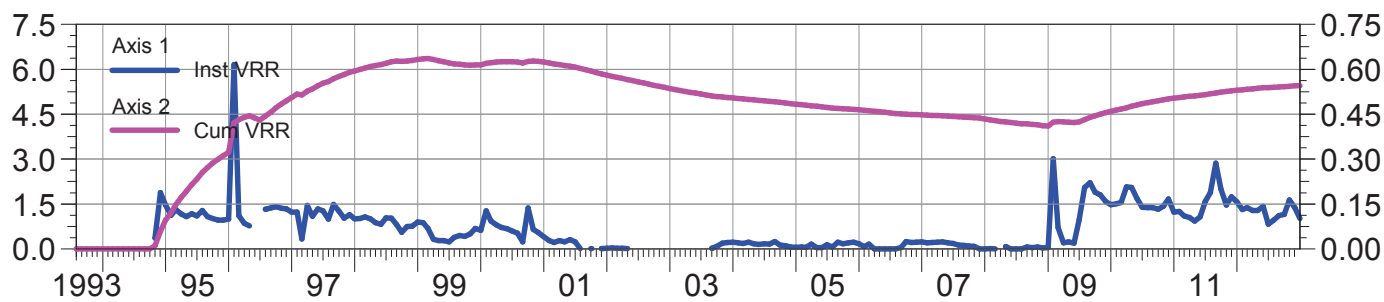
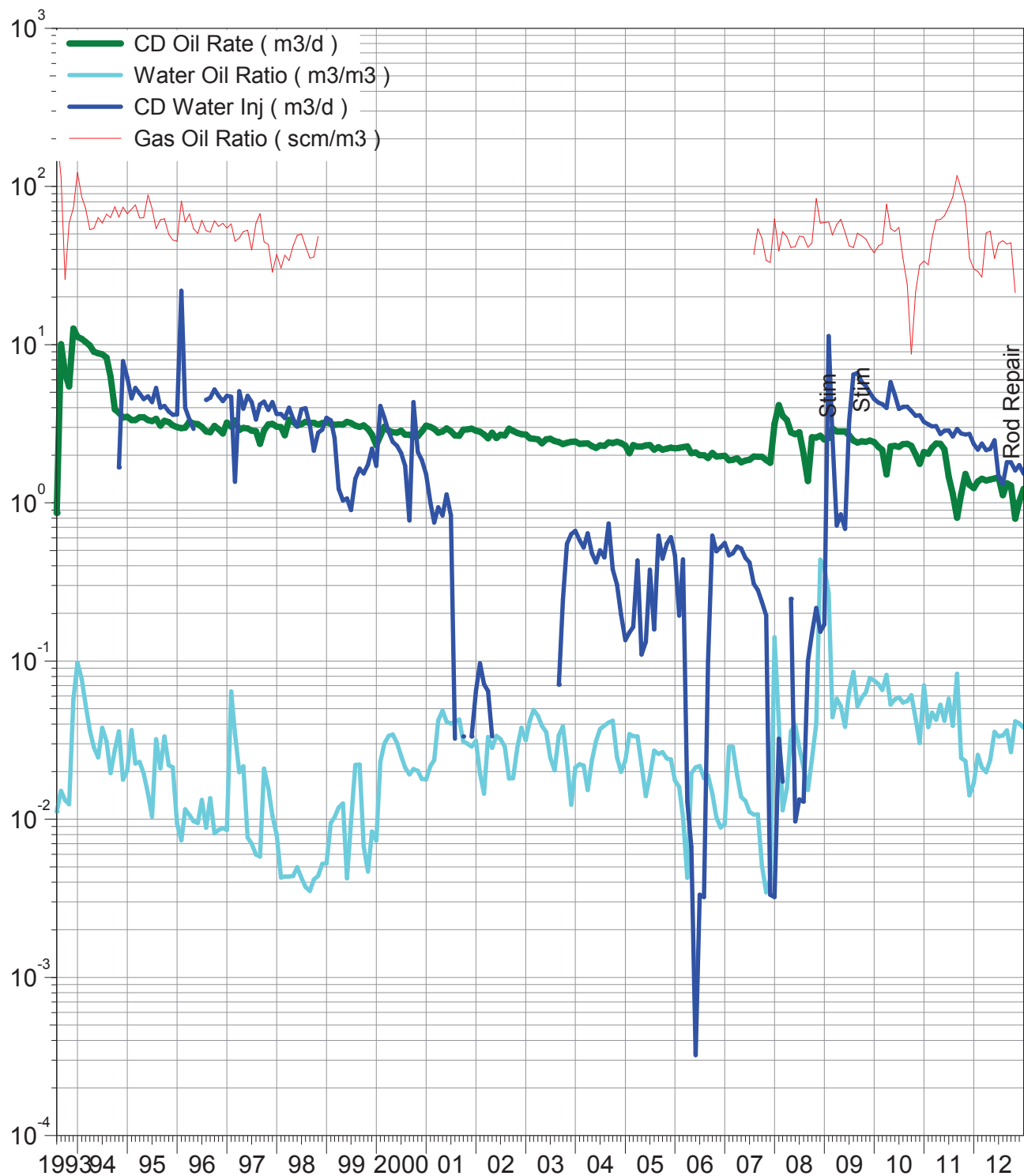
# Calendar Day Production for Pattern: P-13 Set: PIERSON UNIT



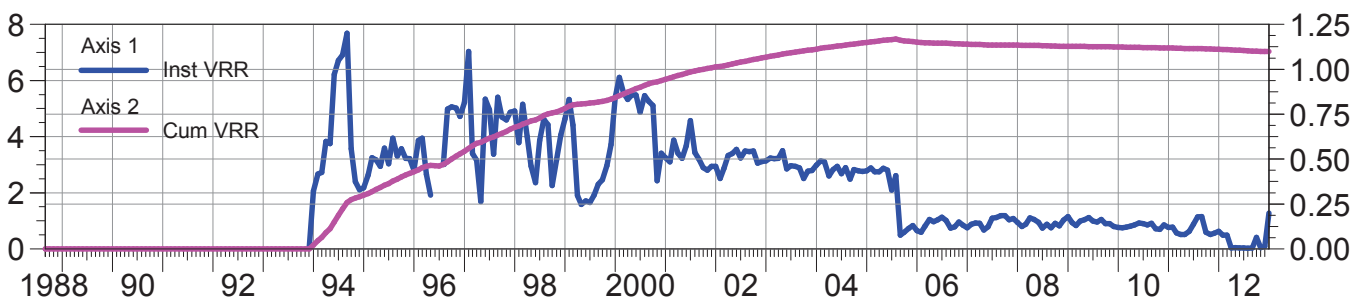
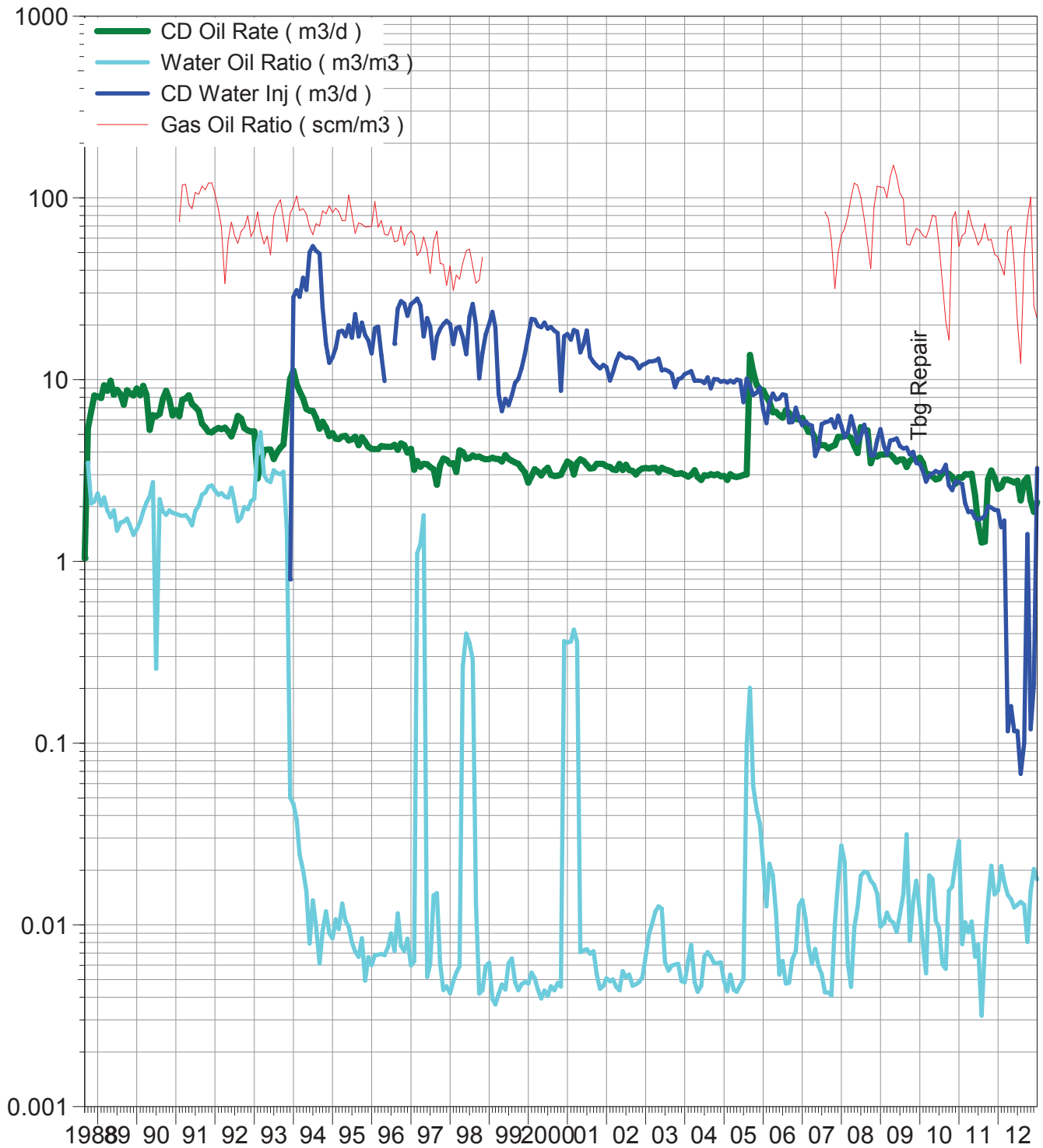
# Calendar Day Production for Pattern: P-14 Set: PIERSON UNIT



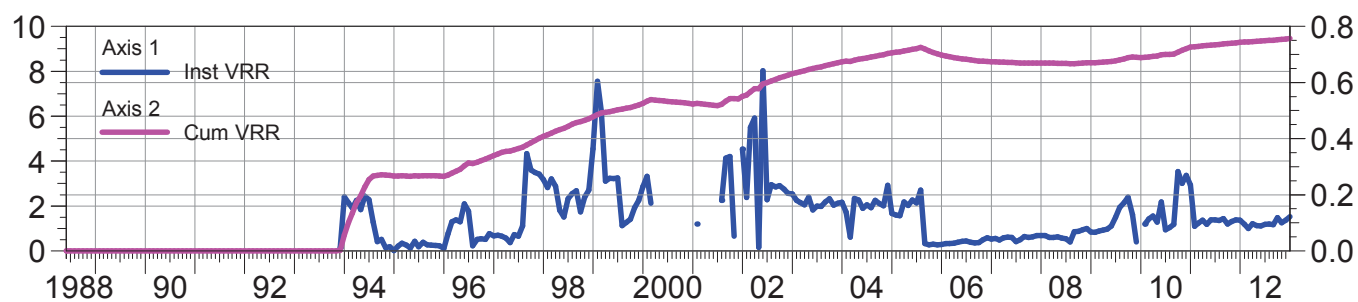
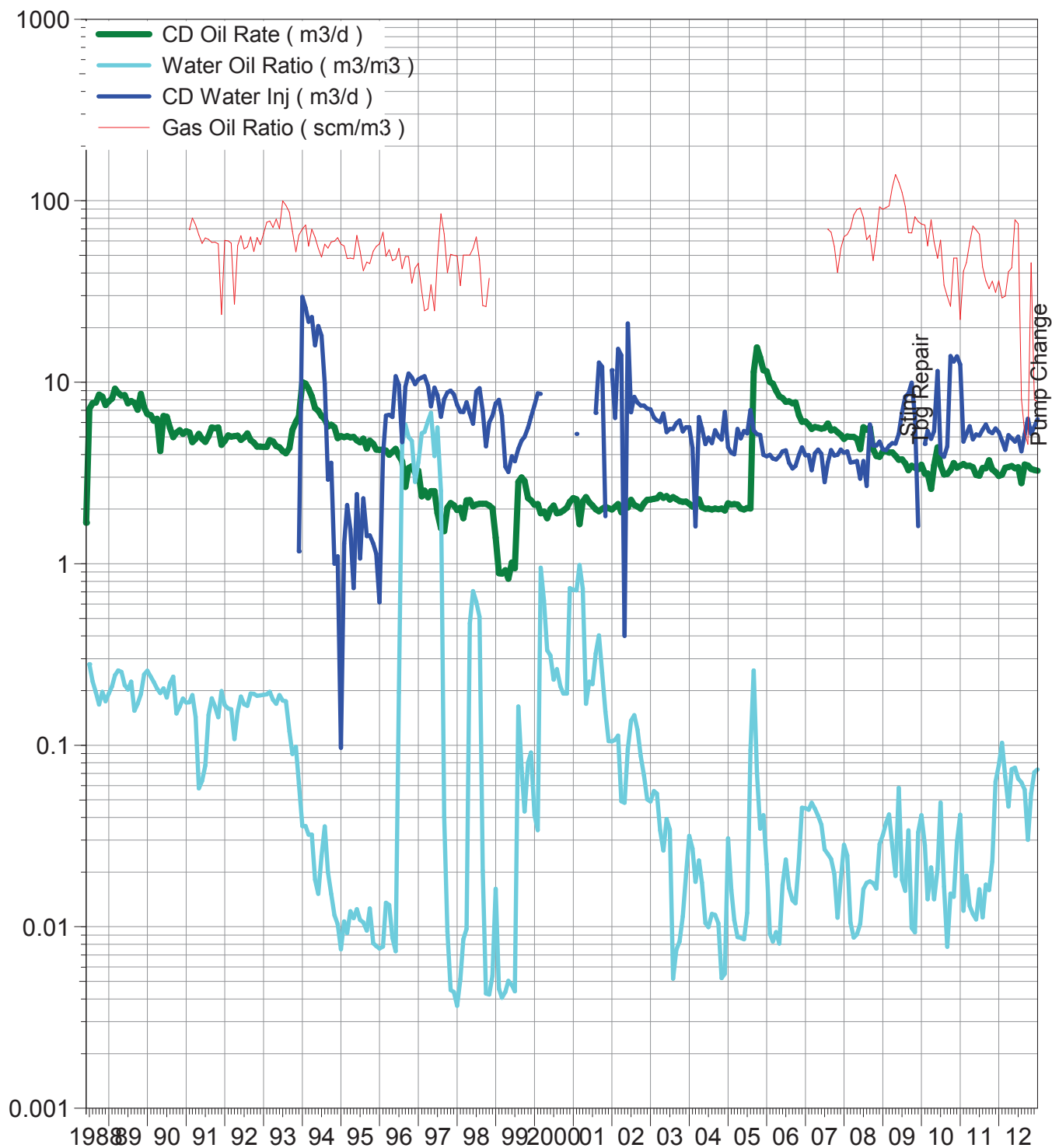
# Calendar Day Production for Pattern: P-15 Set: PIERSON UNIT



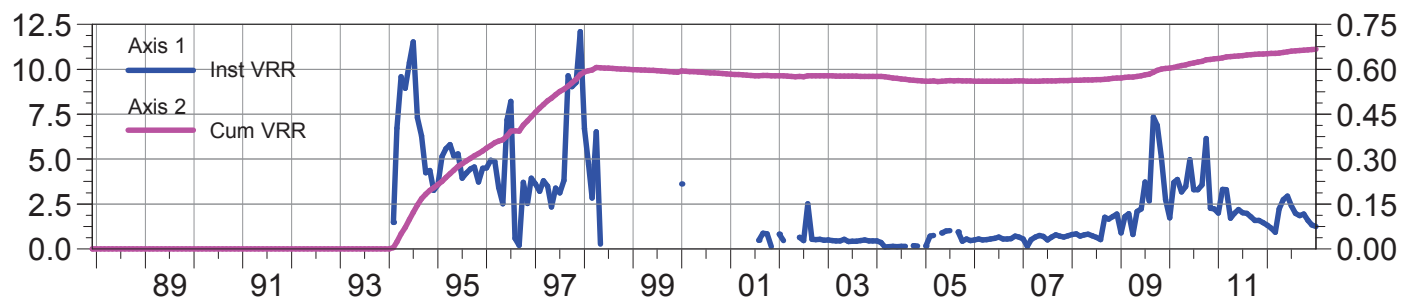
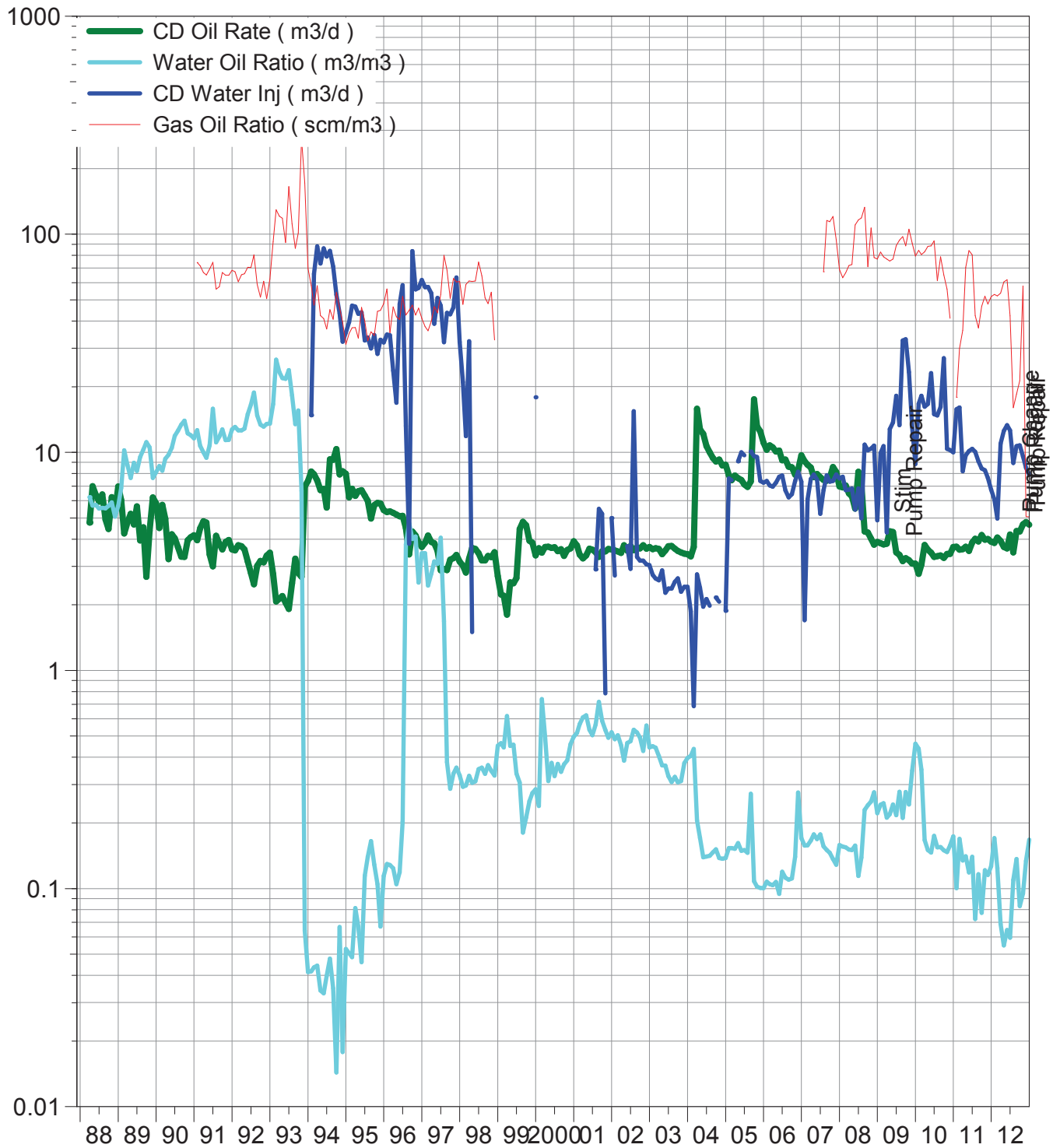
# Calendar Day Production for Pattern: P-16 Set: PIERSON UNIT



# Calendar Day Production for Pattern: P-17 Set: PIERSON UNIT

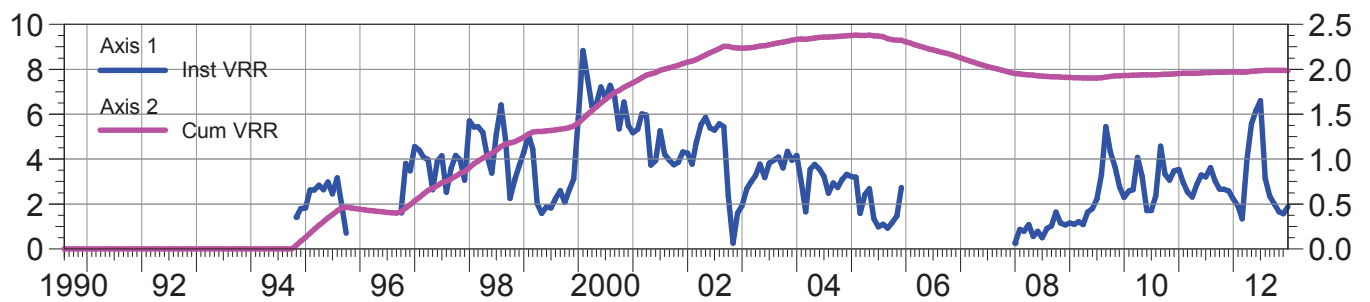
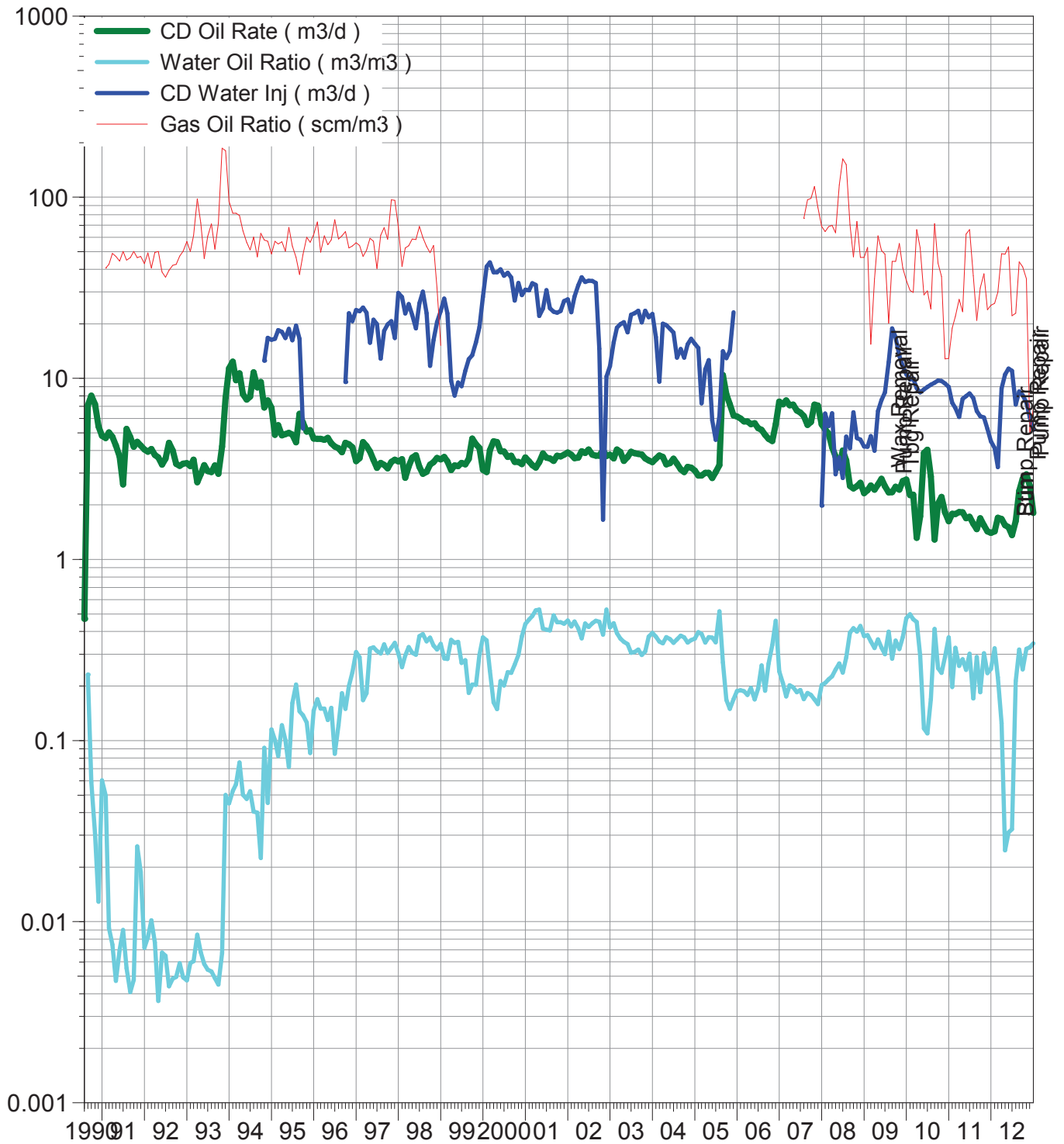


# Calendar Day Production for Pattern: P-18 Set: PIERSON UNIT

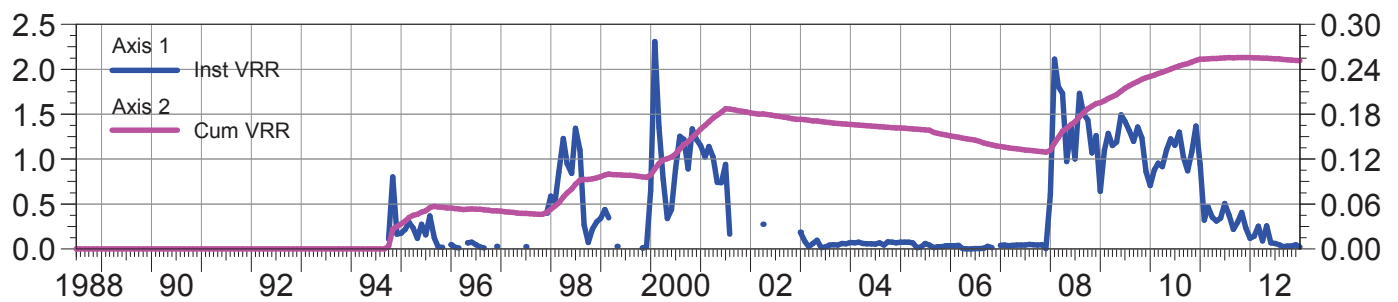
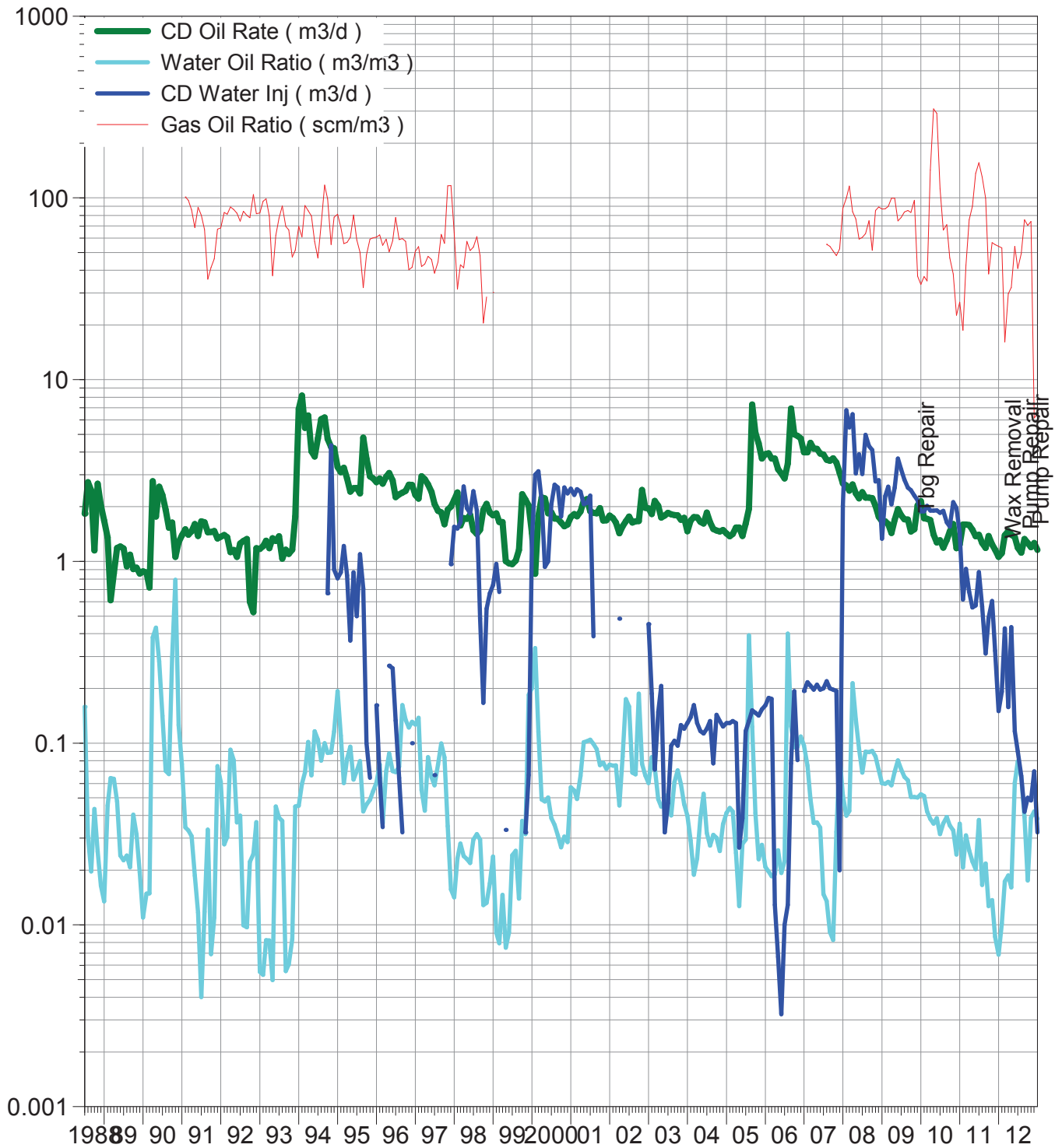




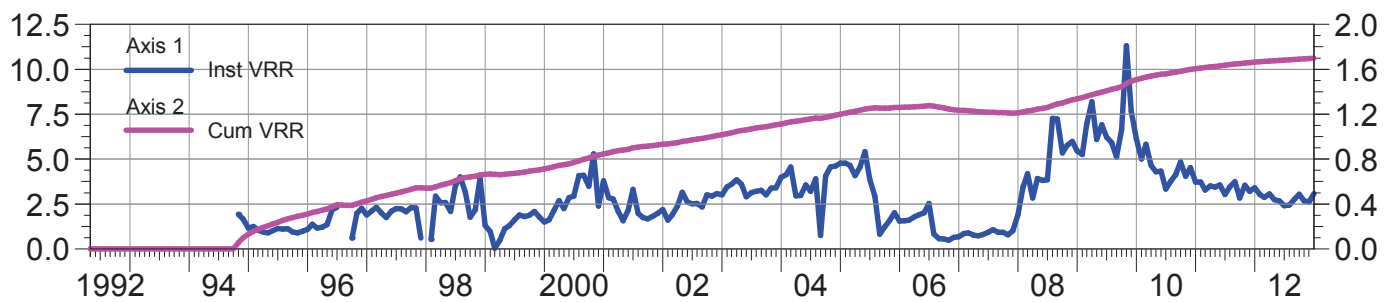
# Calendar Day Production for Pattern: P-19 Set: PIERSON UNIT



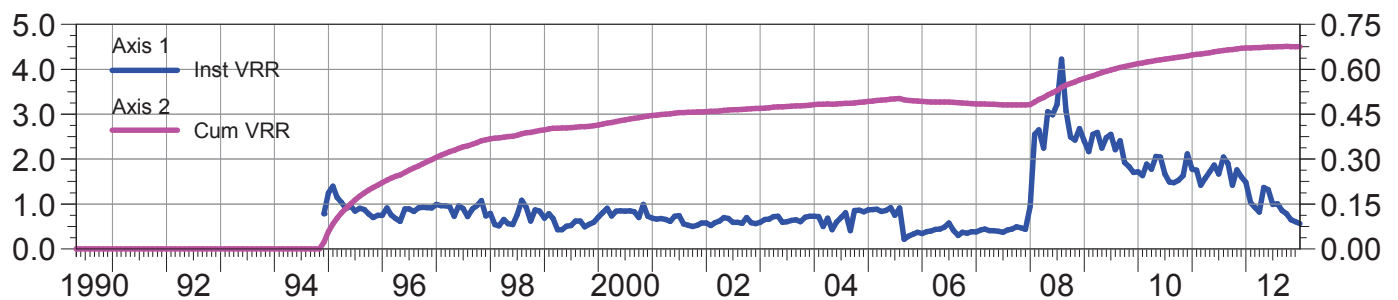
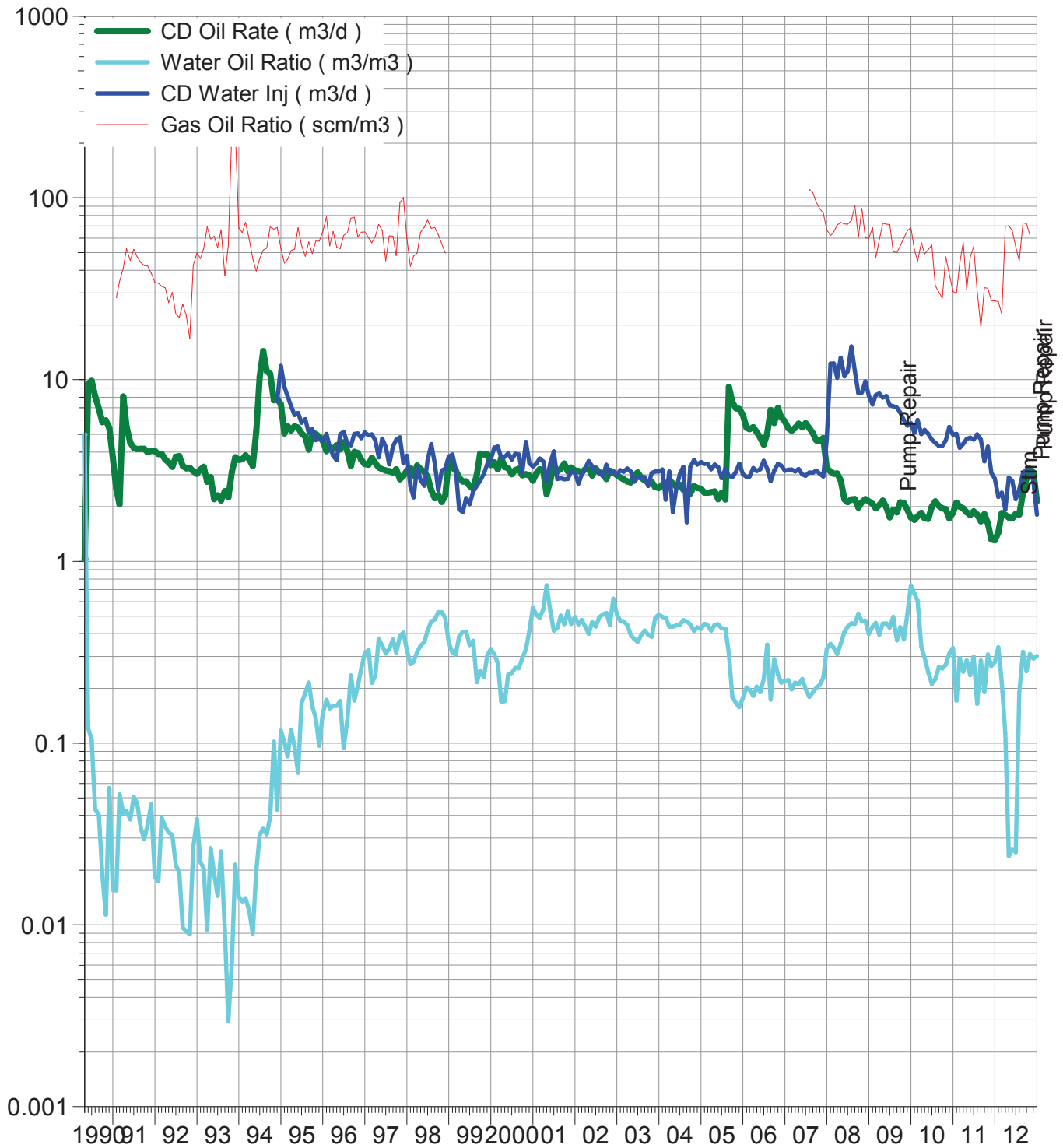
# Calendar Day Production for Pattern: P-20 Set: PIERSON UNIT



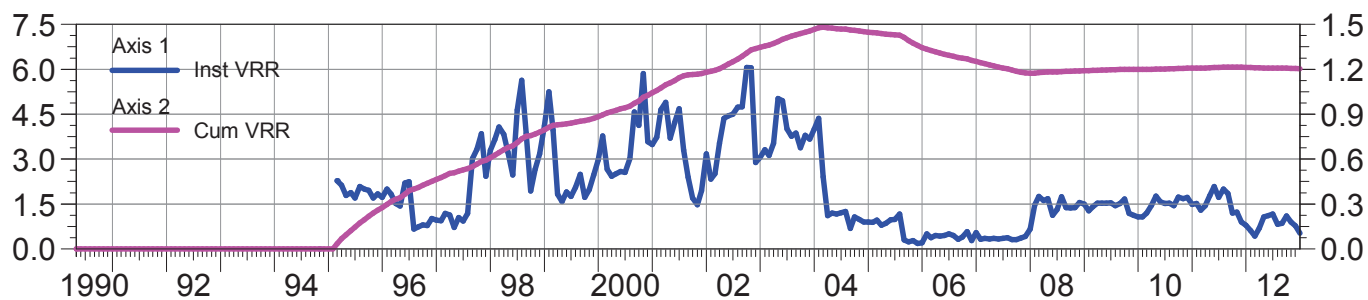
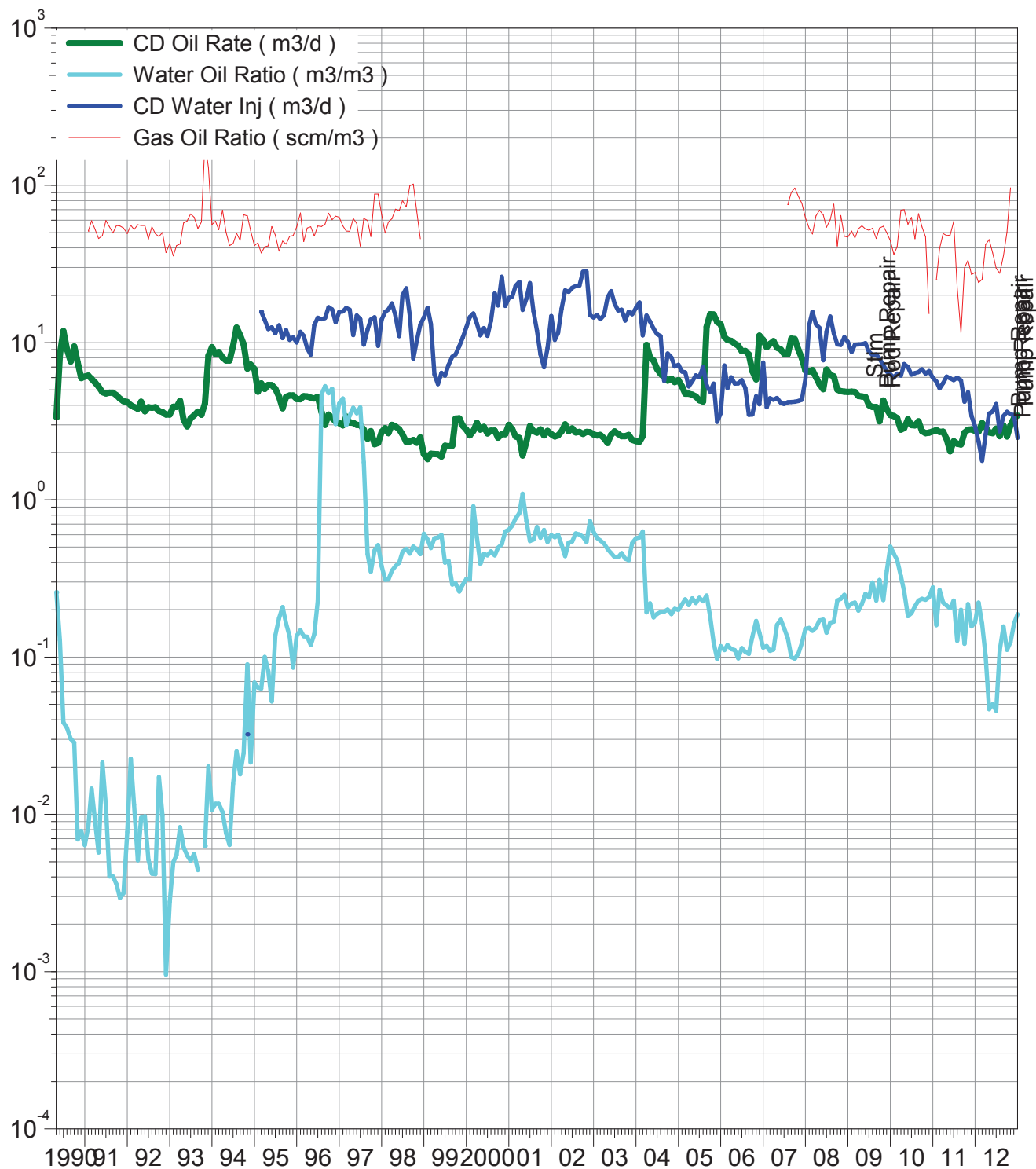
# Calendar Day Production for Pattern: P-21 Set: PIERSON UNIT



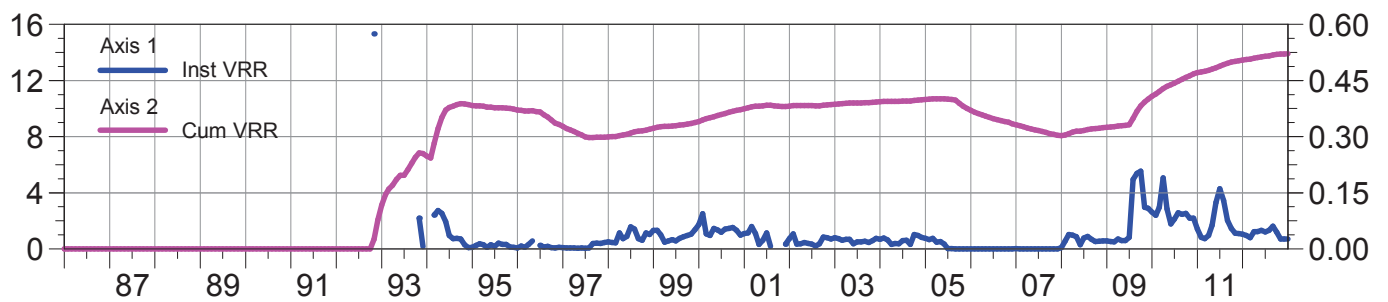
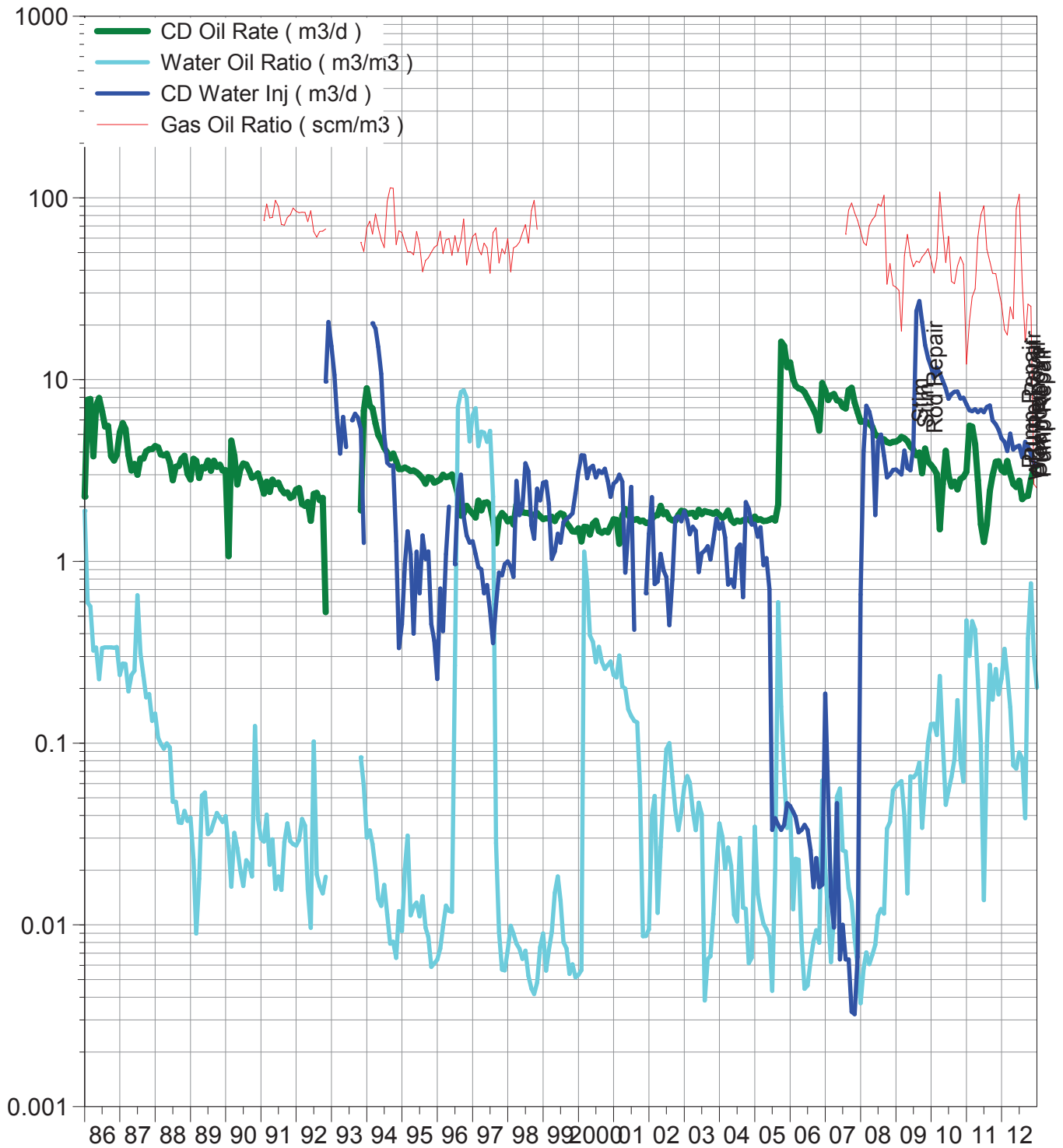
# Calendar Day Production for Pattern: P-22 Set: PIERSON UNIT



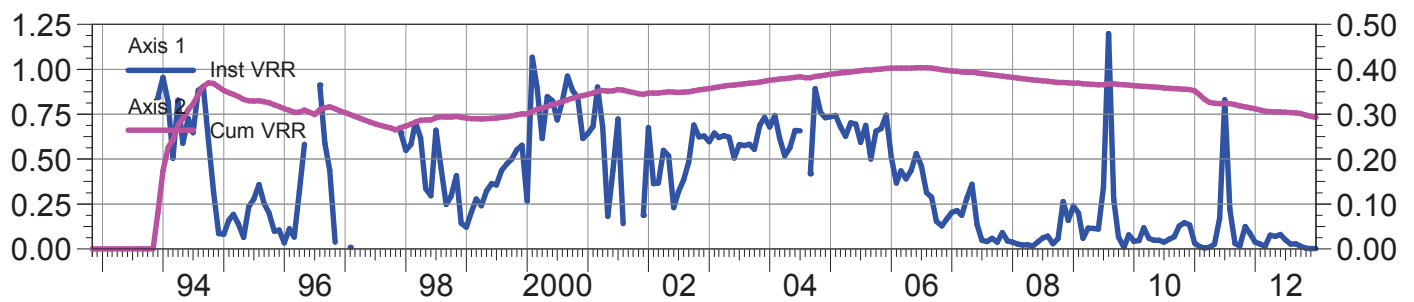
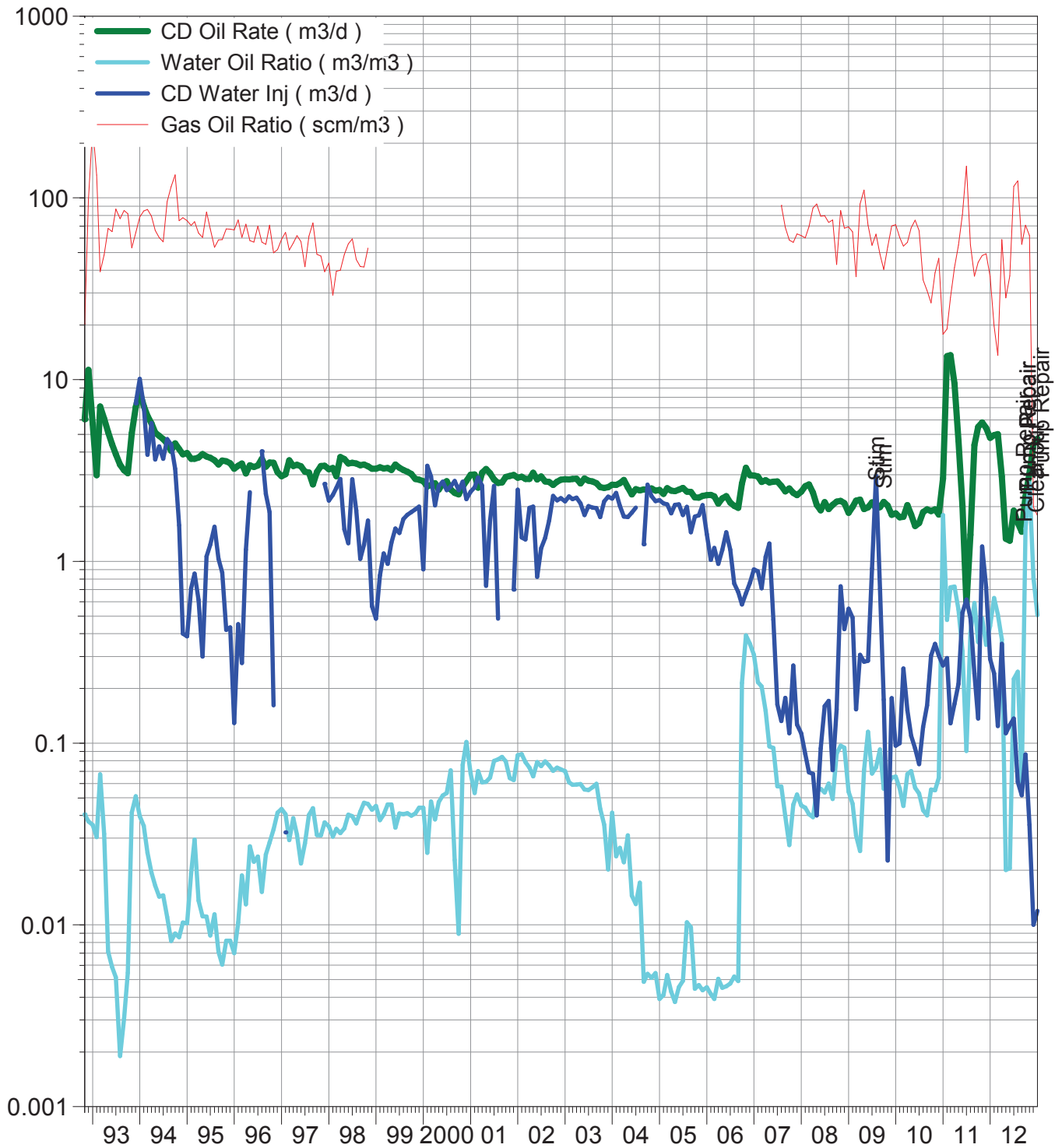
# Calendar Day Production for Pattern: P-23 Set: PIERSON UNIT



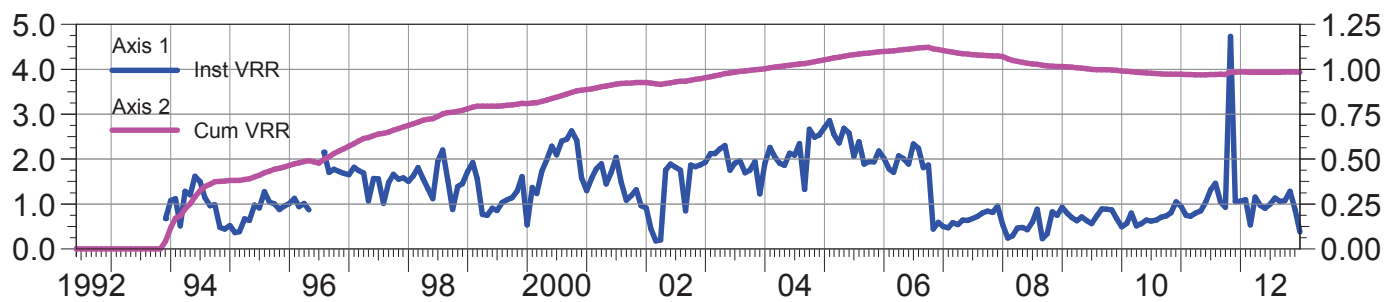
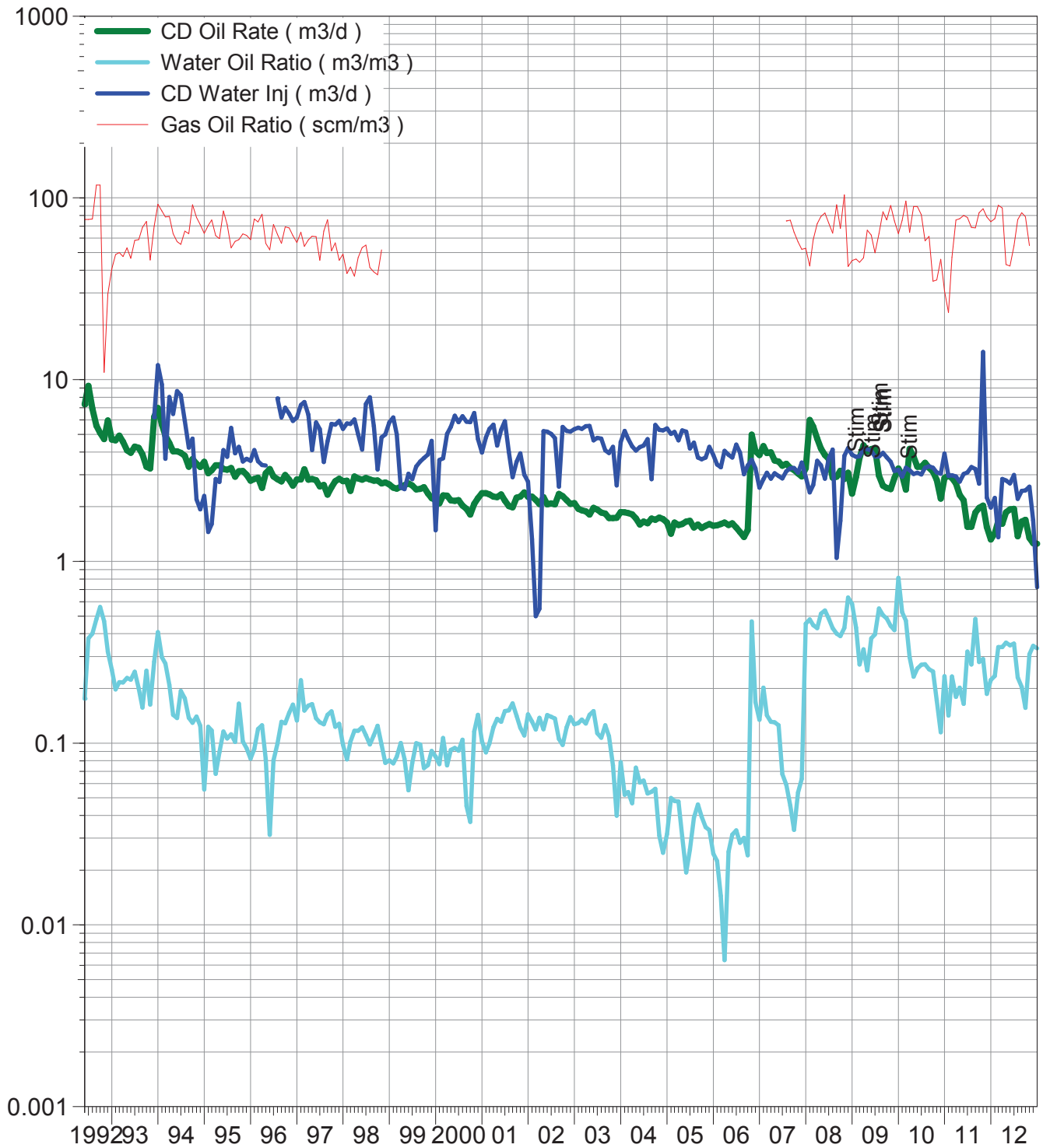
# Calendar Day Production for Pattern: P-24 Set: PIERSON UNIT



# Calendar Day Production for Pattern: P-25 Set: PIERSON UNIT

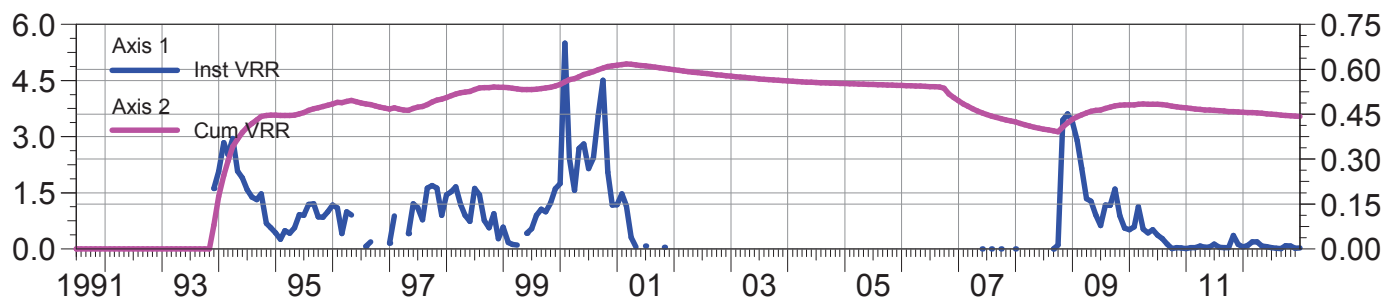
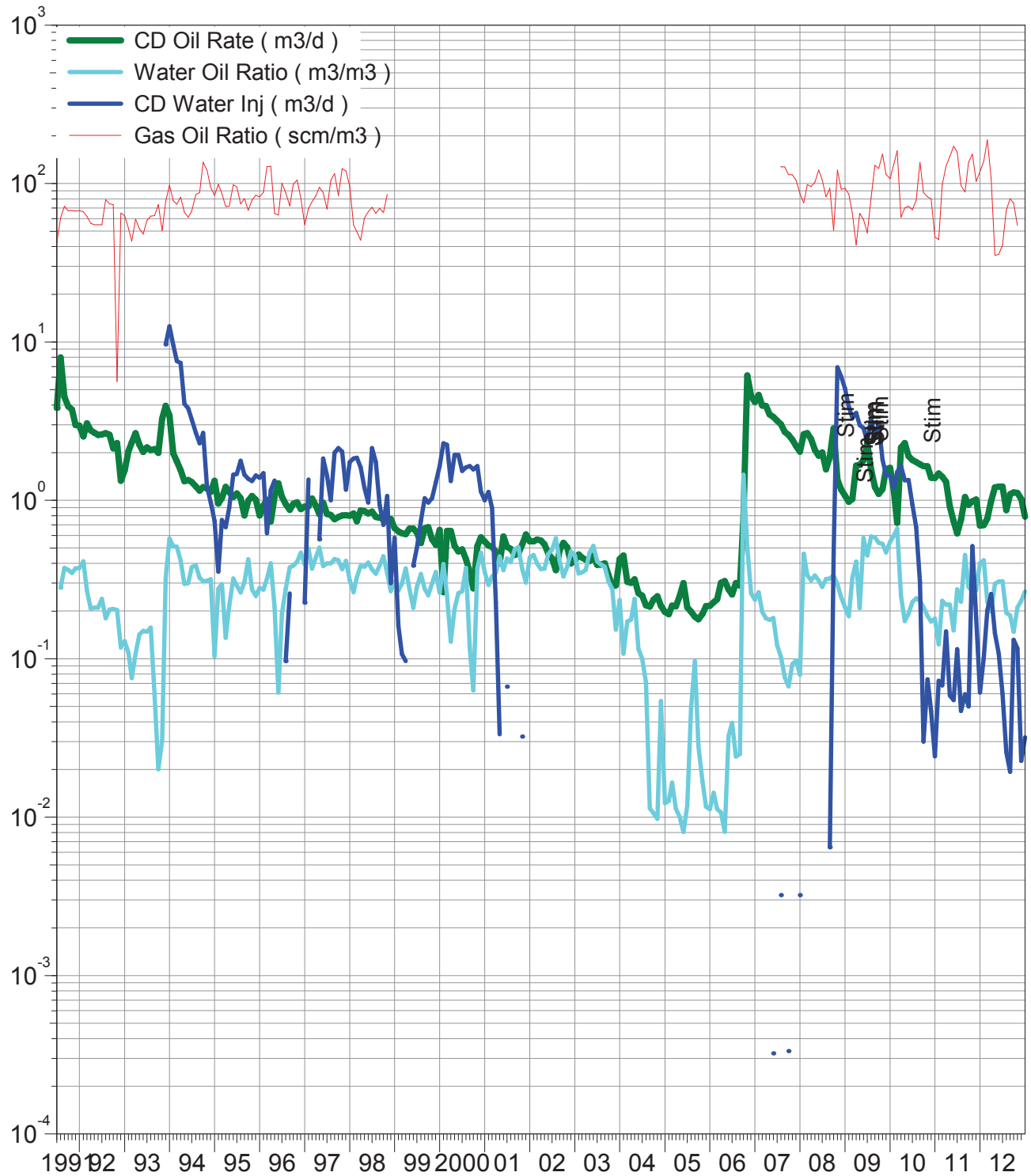


# Calendar Day Production for Pattern: P-26 Set: PIERSON UNIT

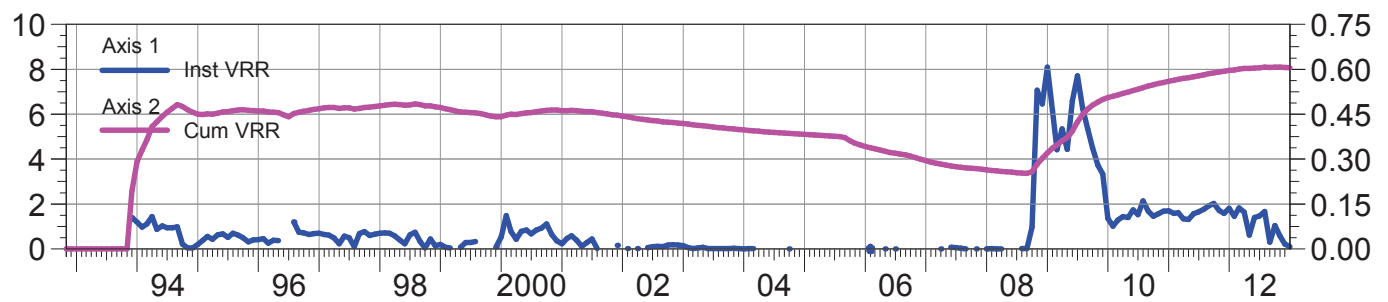
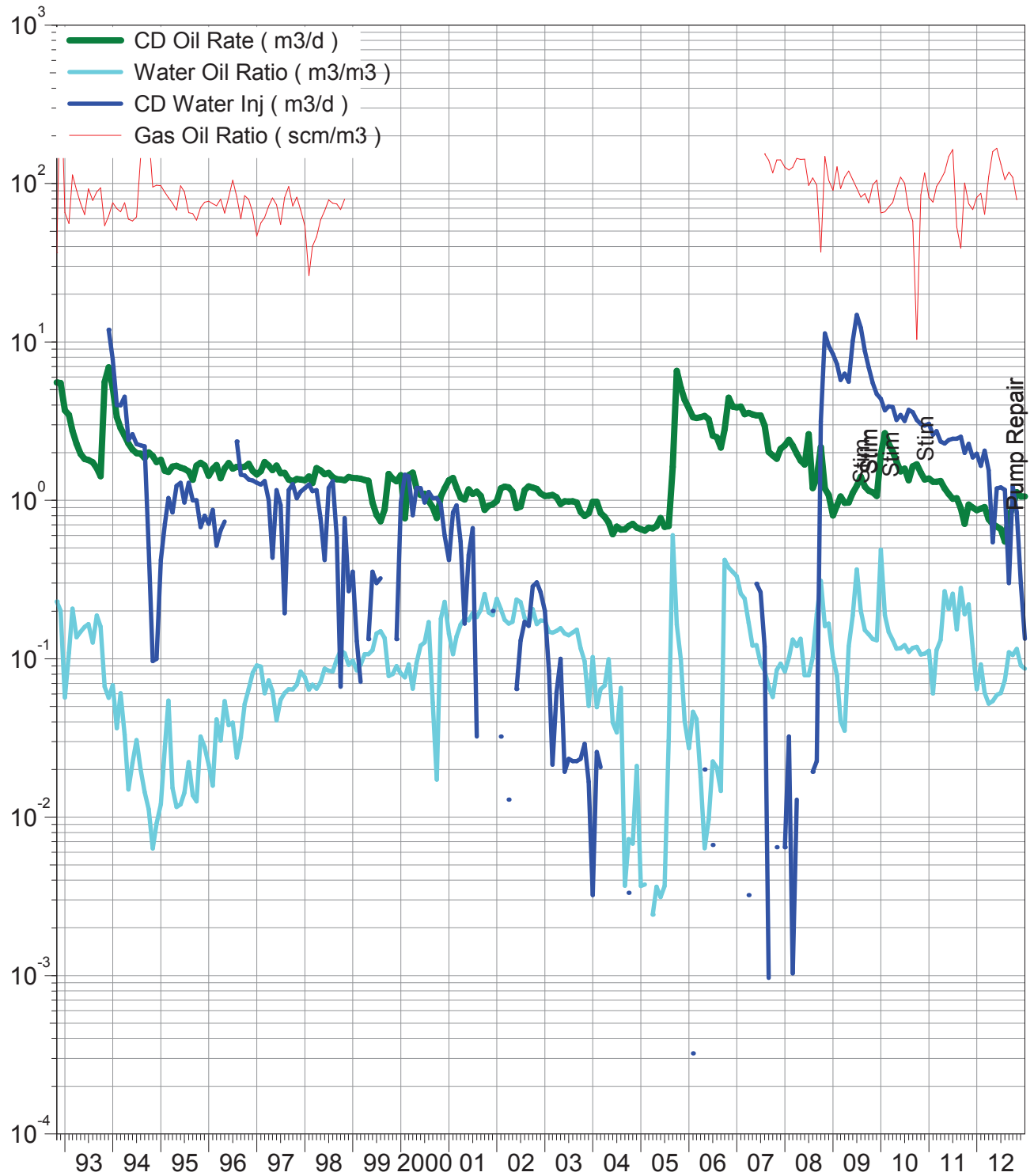




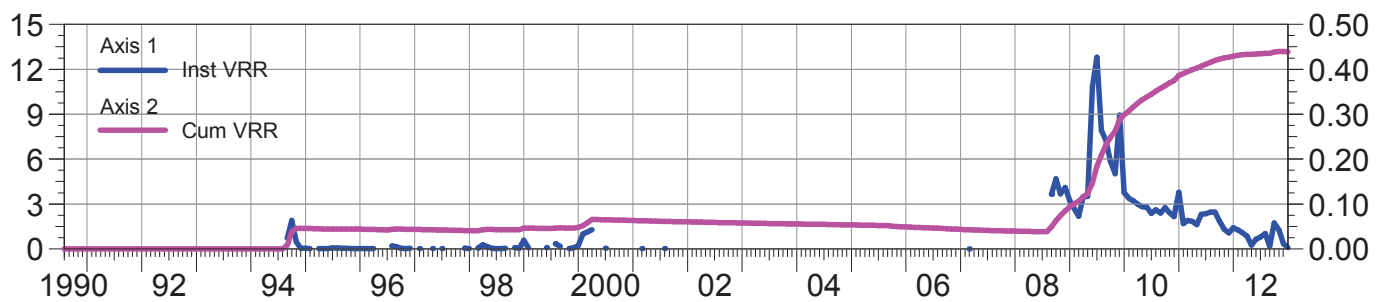
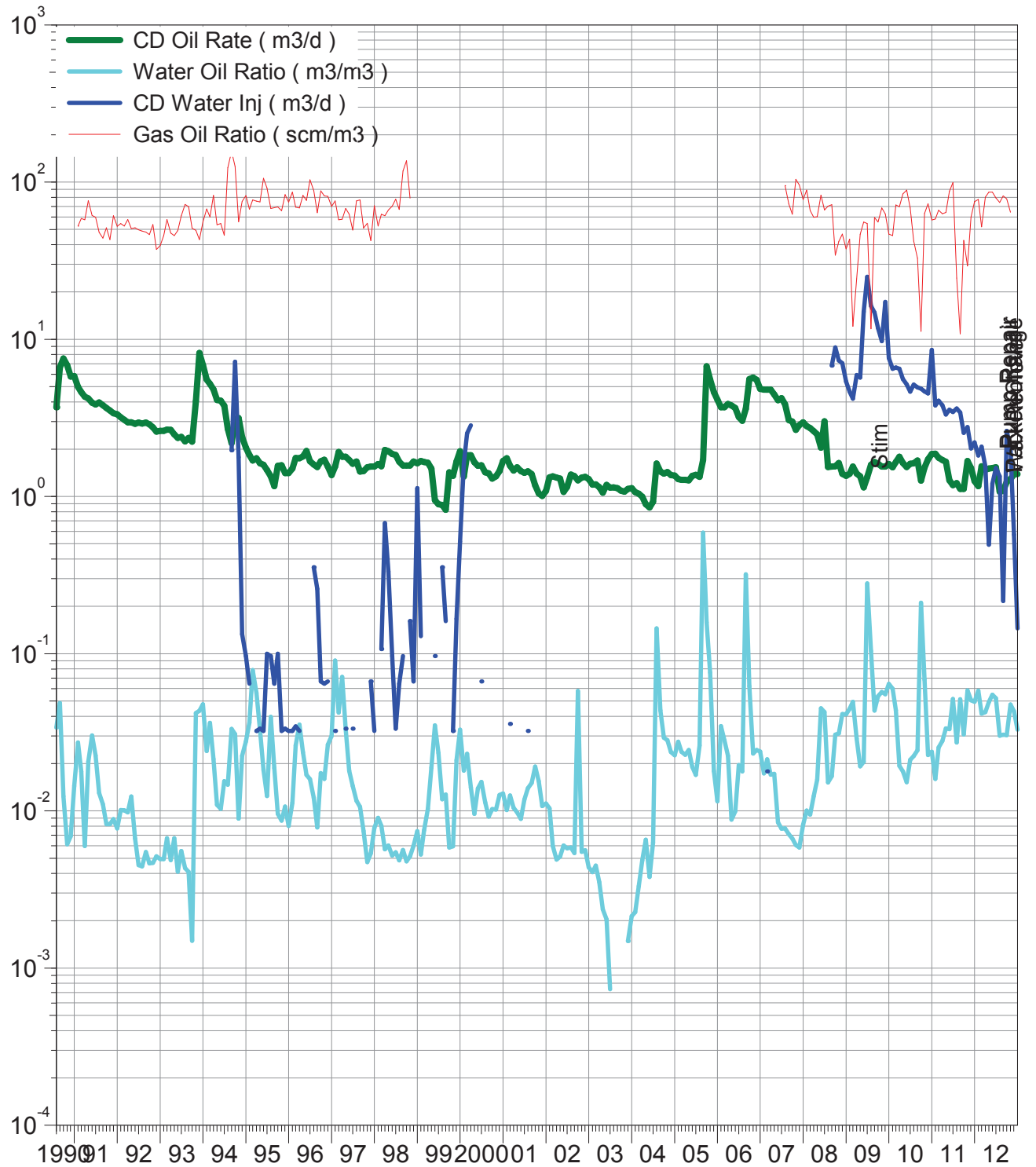
# Calendar Day Production for Pattern: P-27 Set: PIERSON UNIT



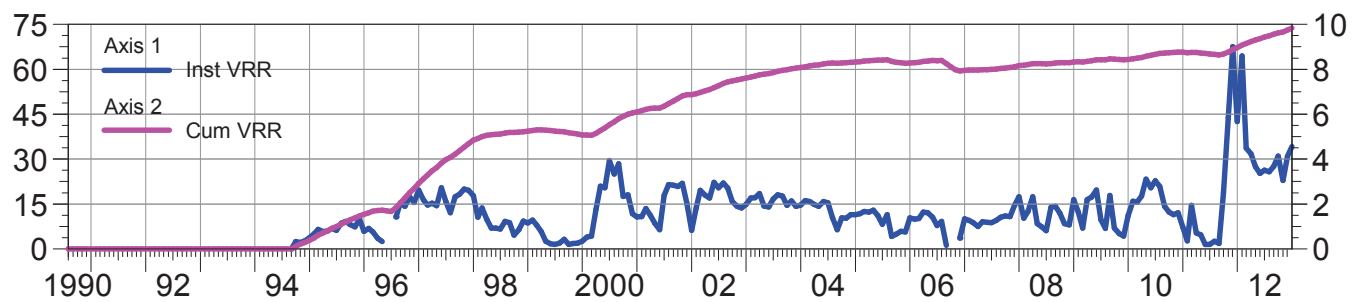
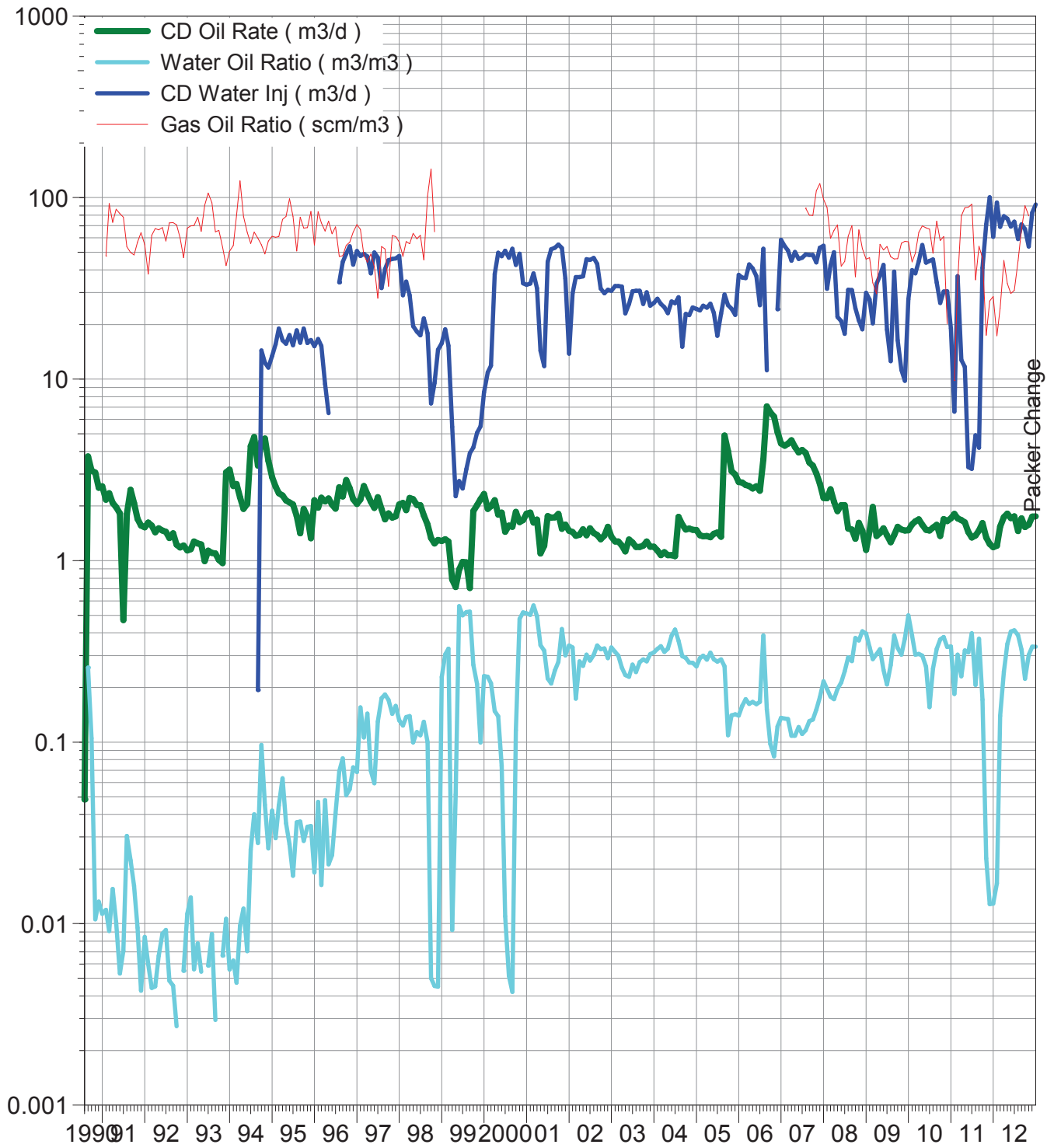
# Calendar Day Production for Pattern: P-28 Set: PIERSON UNIT



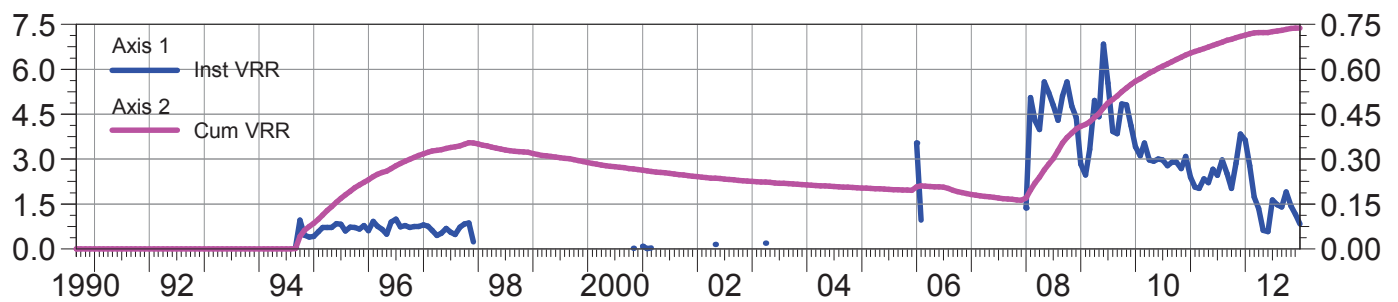
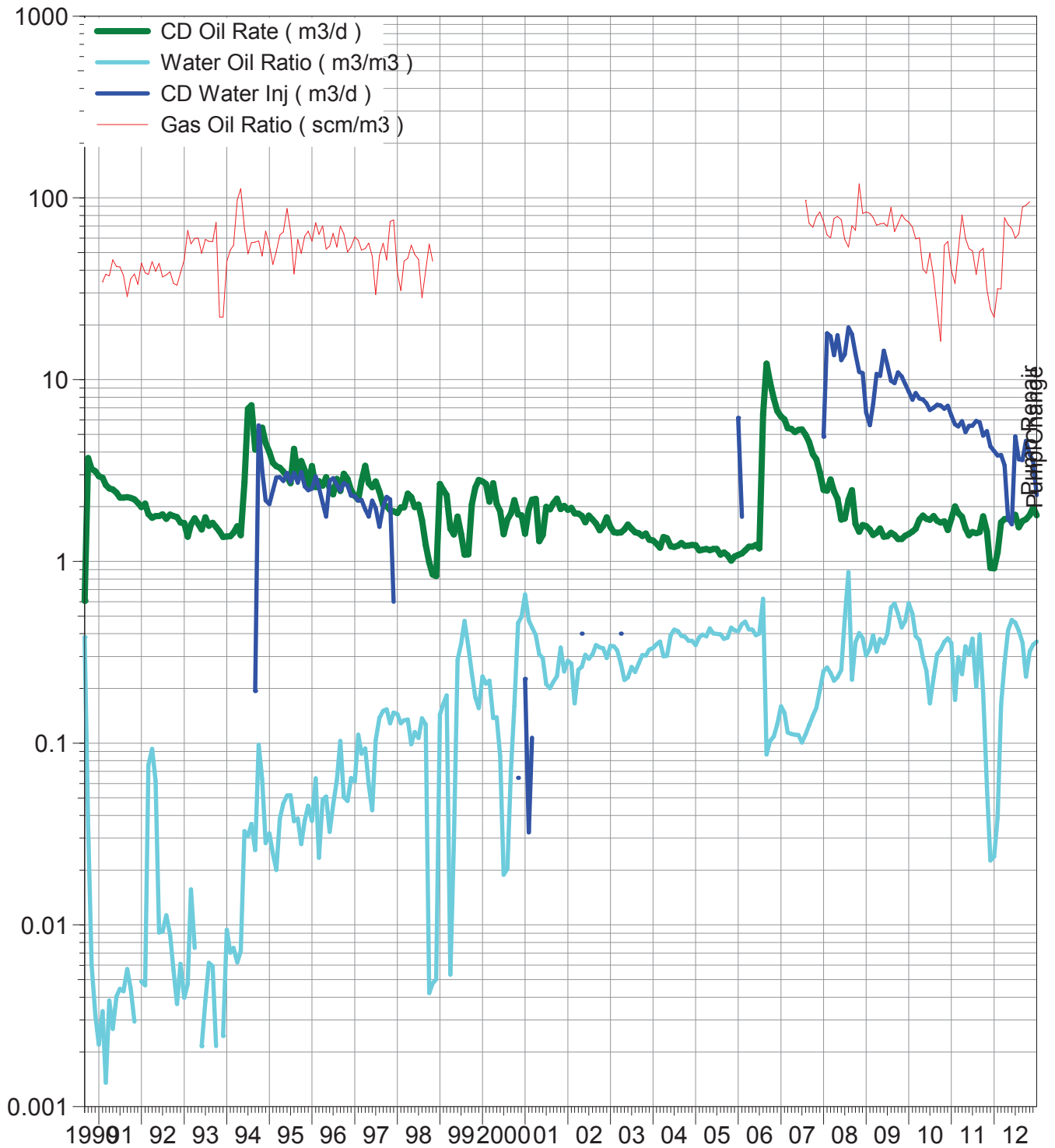
# Calendar Day Production for Pattern: P-29 Set: PIERSON UNIT



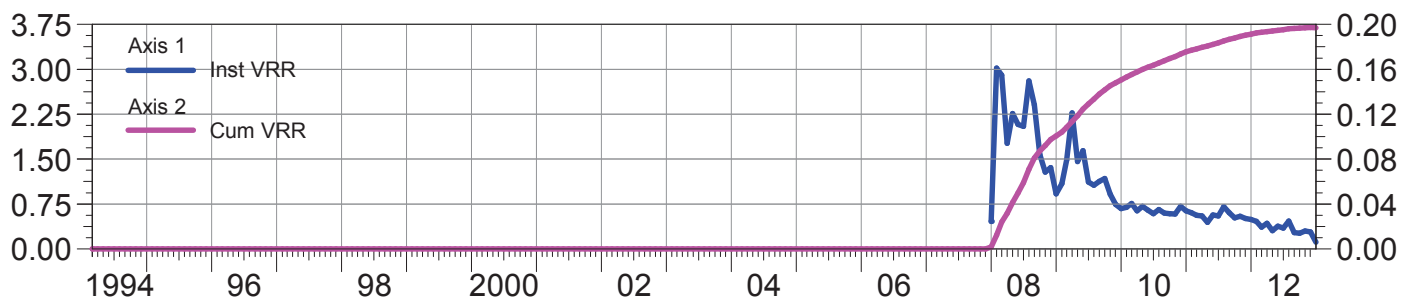
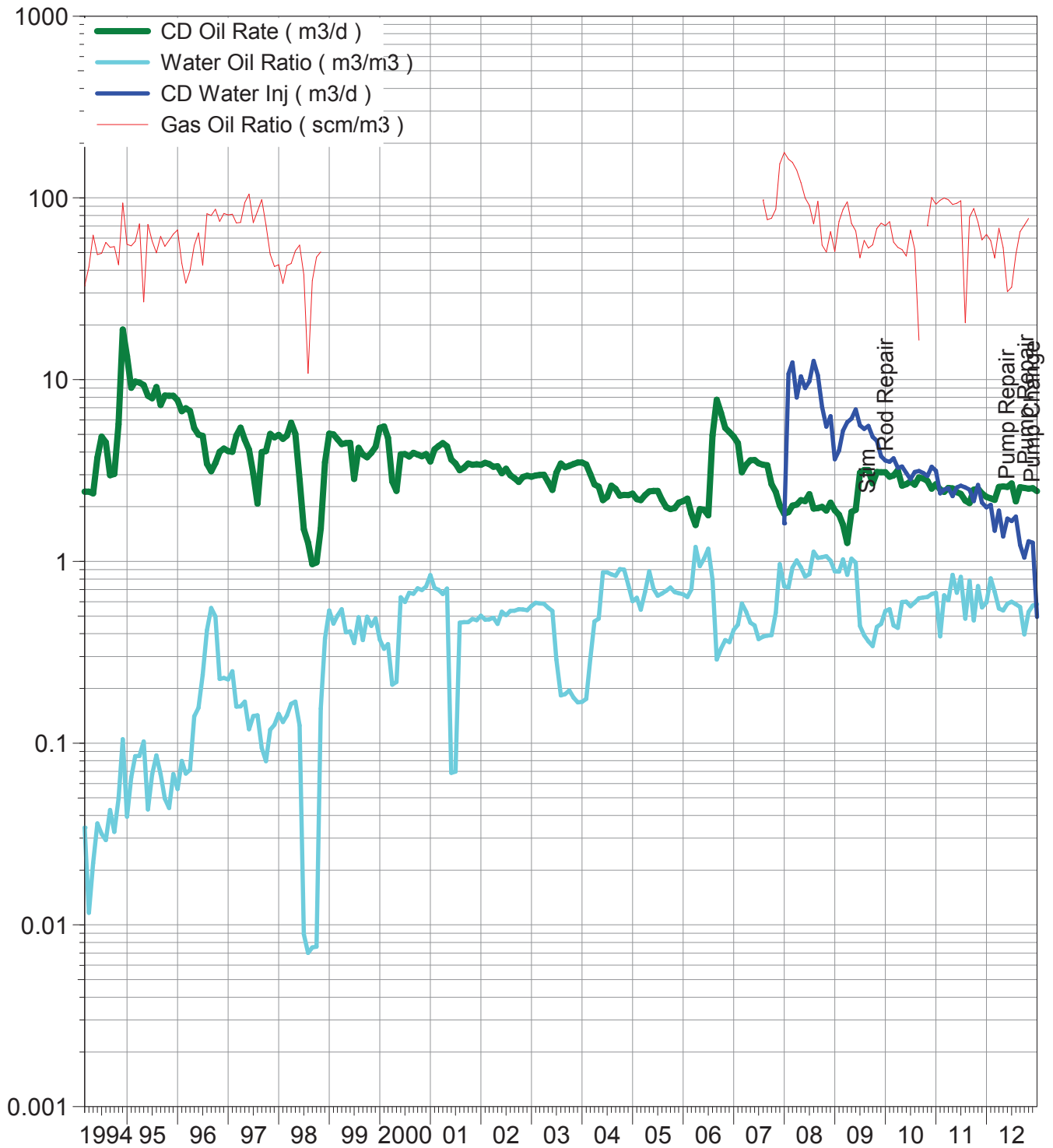
# Calendar Day Production for Pattern: P-30 Set: PIERSON UNIT



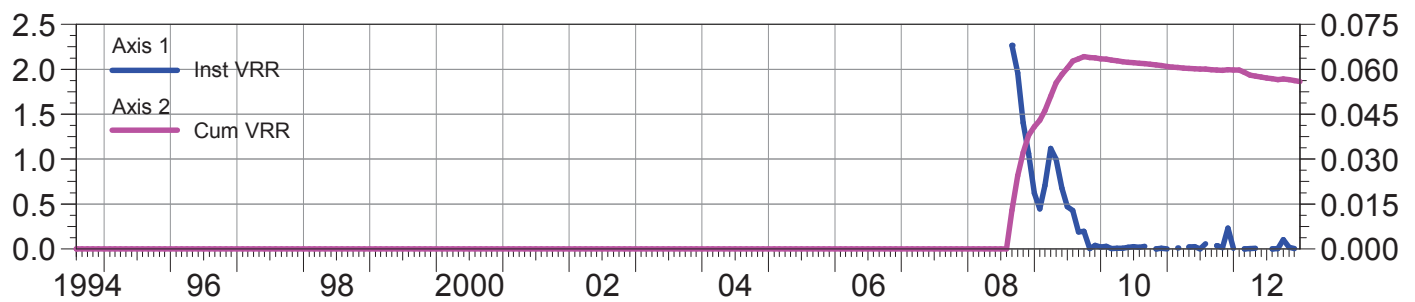
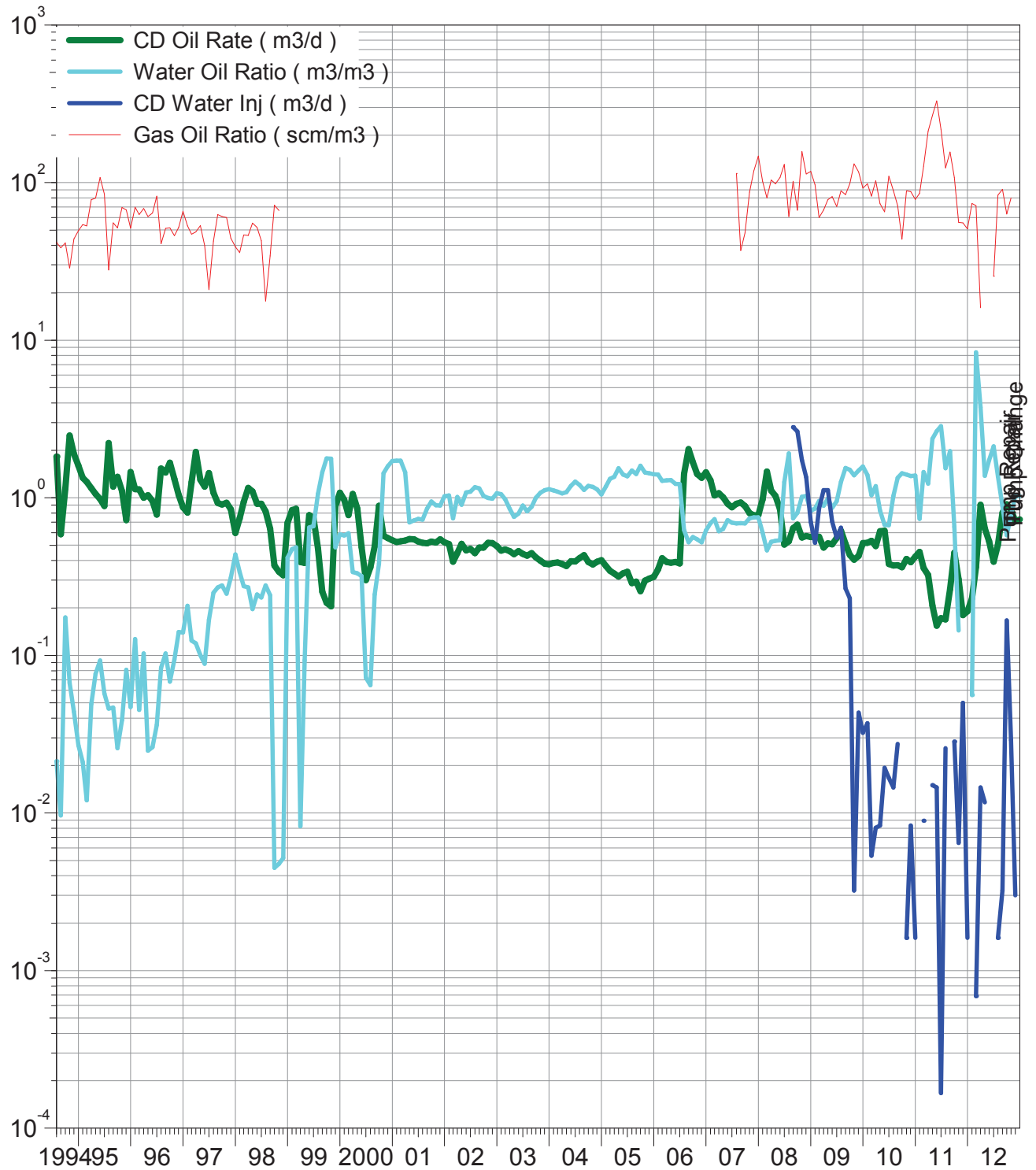
# Calendar Day Production for Pattern: P-31 Set: PIERSON UNIT



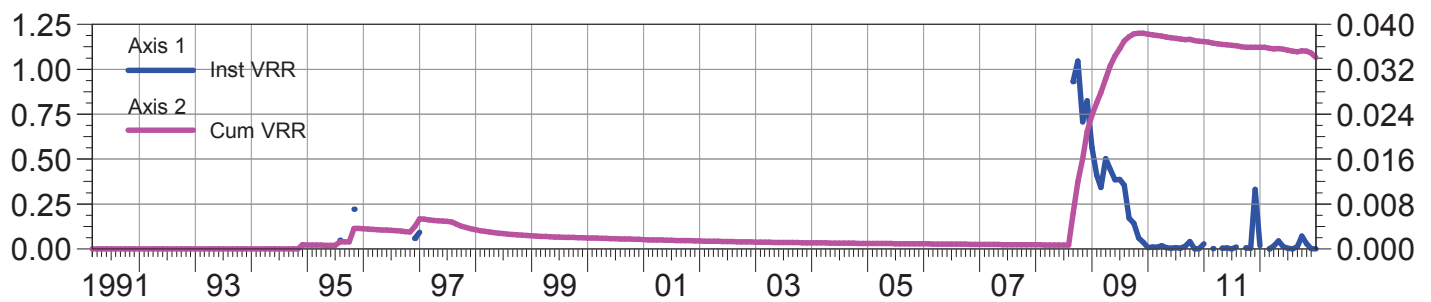
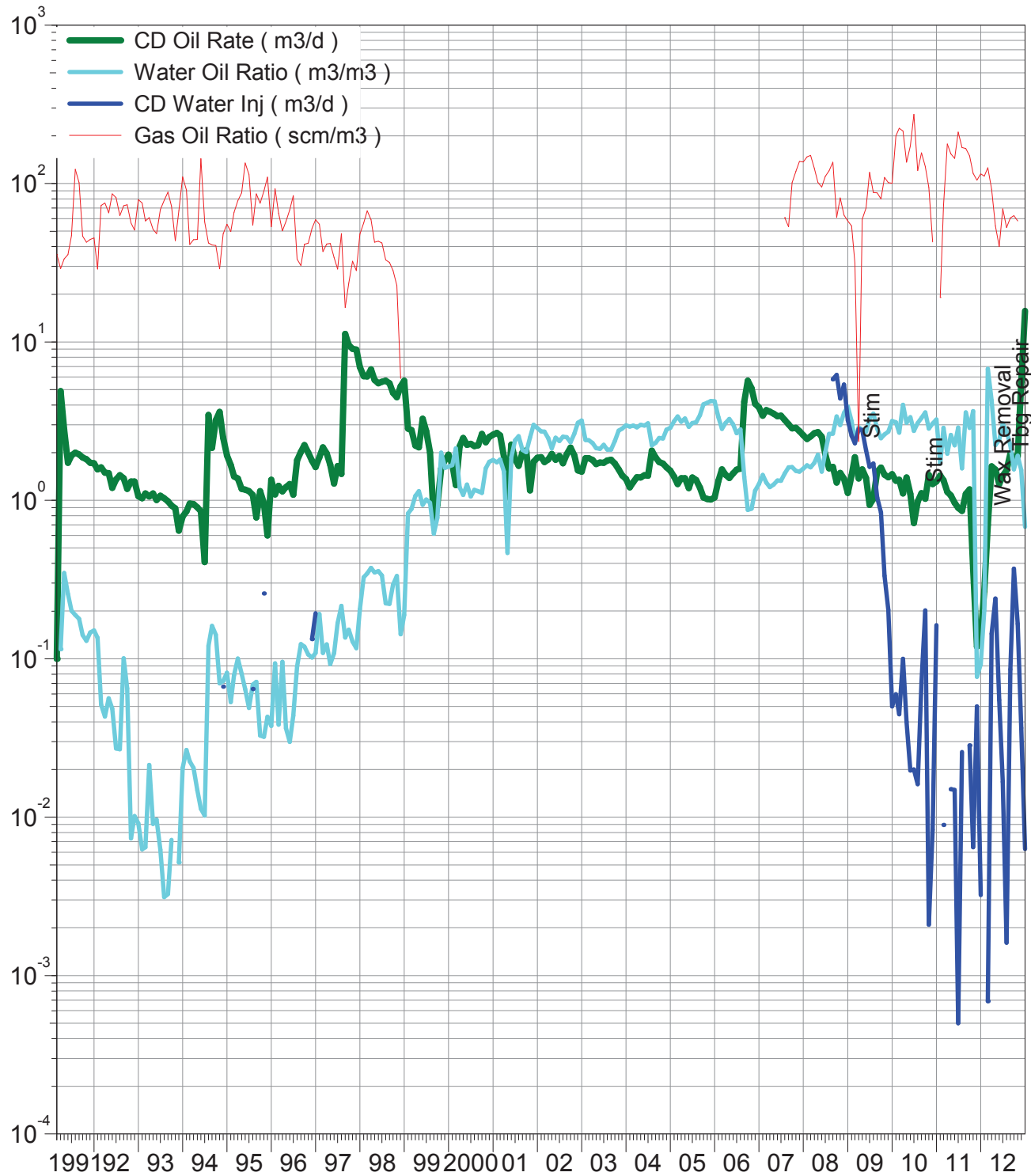
# Calendar Day Production for Pattern: P-32 Set: PIERSON UNIT



# Calendar Day Production for Pattern: P-33 Set: PIERSON UNIT

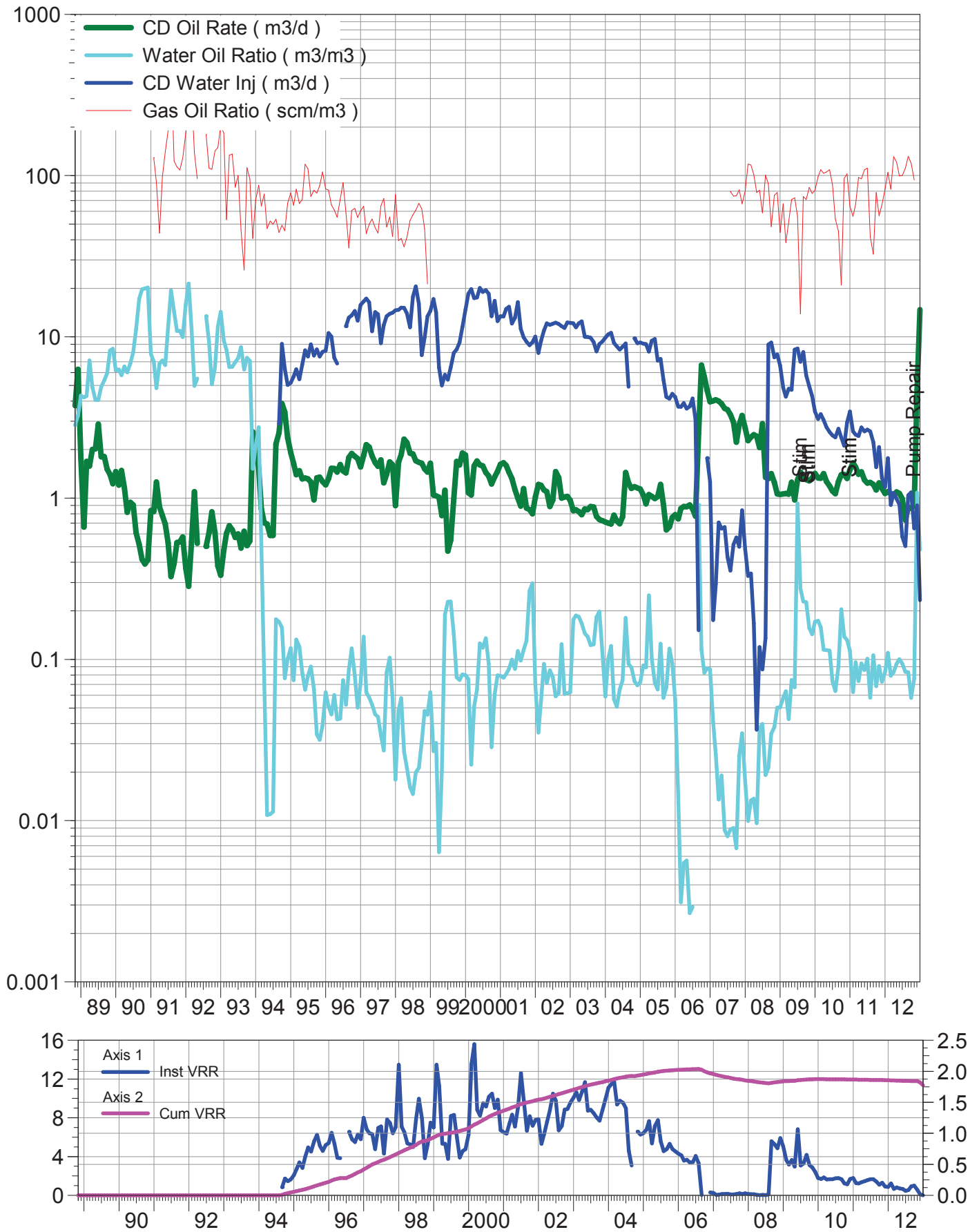


# Calendar Day Production for Pattern: P-34 Set: PIERSON UNIT

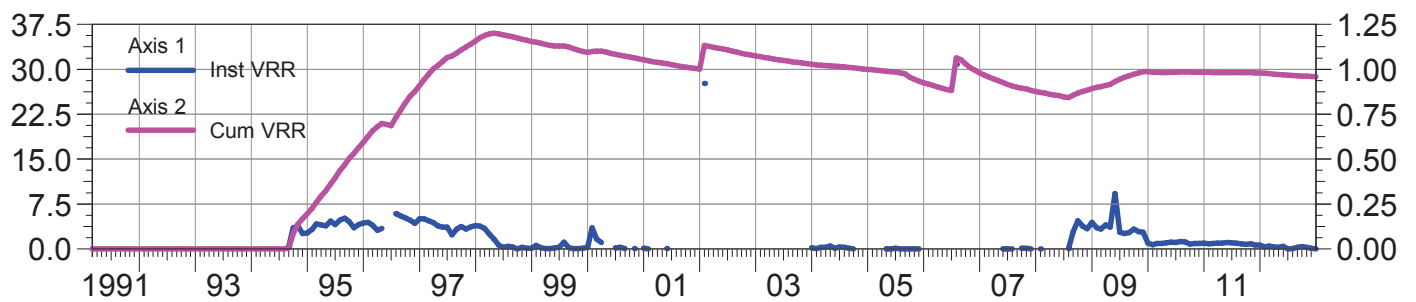
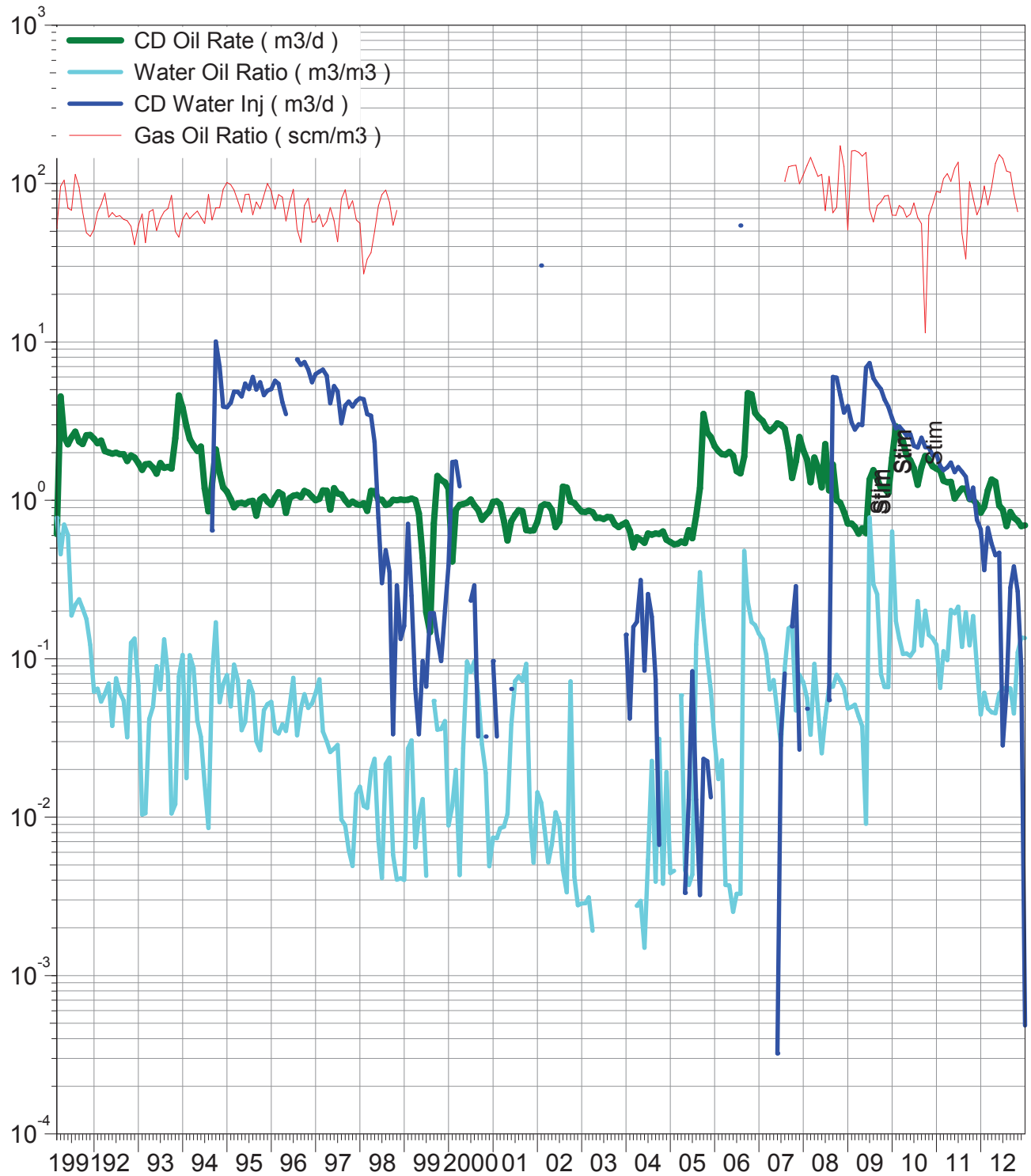




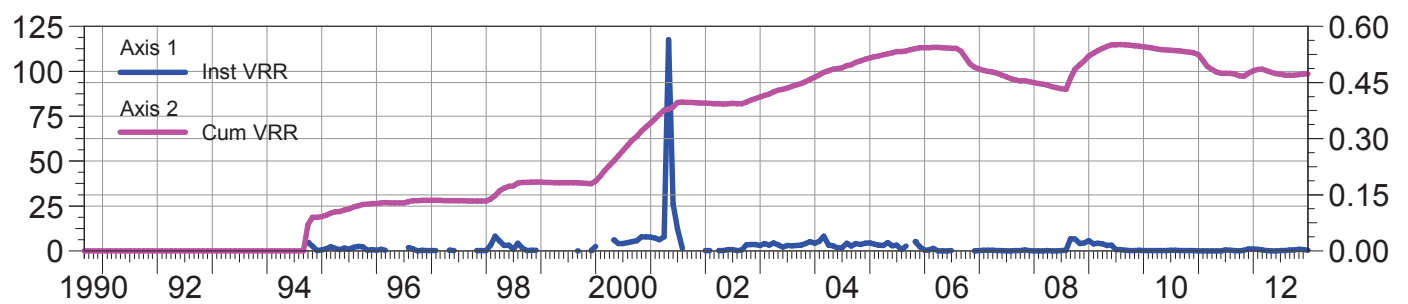
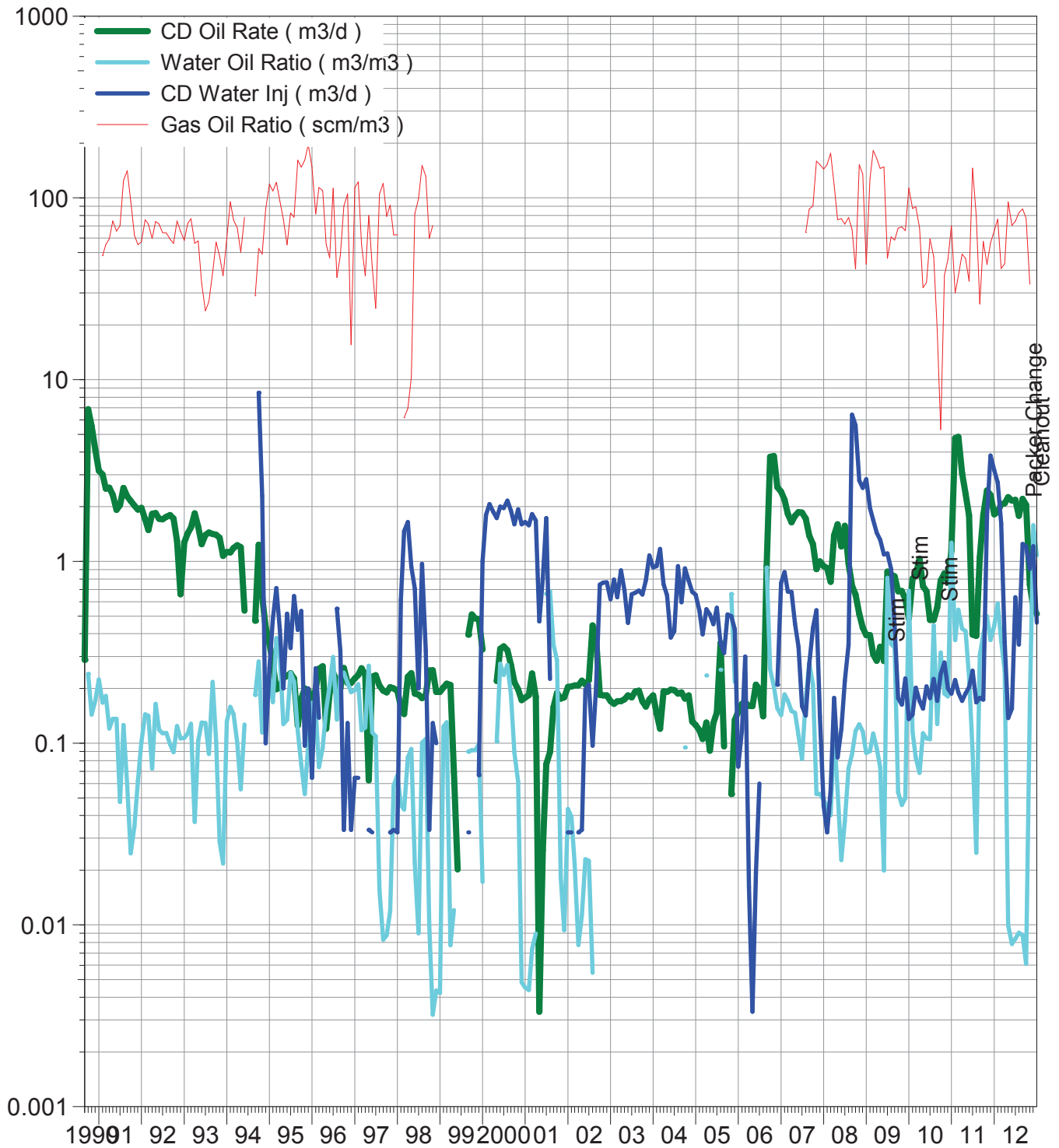
# Calendar Day Production for Pattern: P-35 Set: PIERSON UNIT



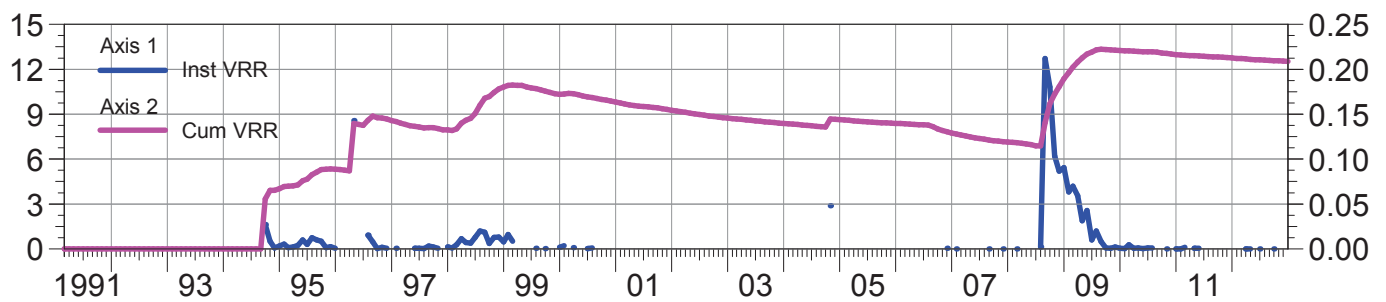
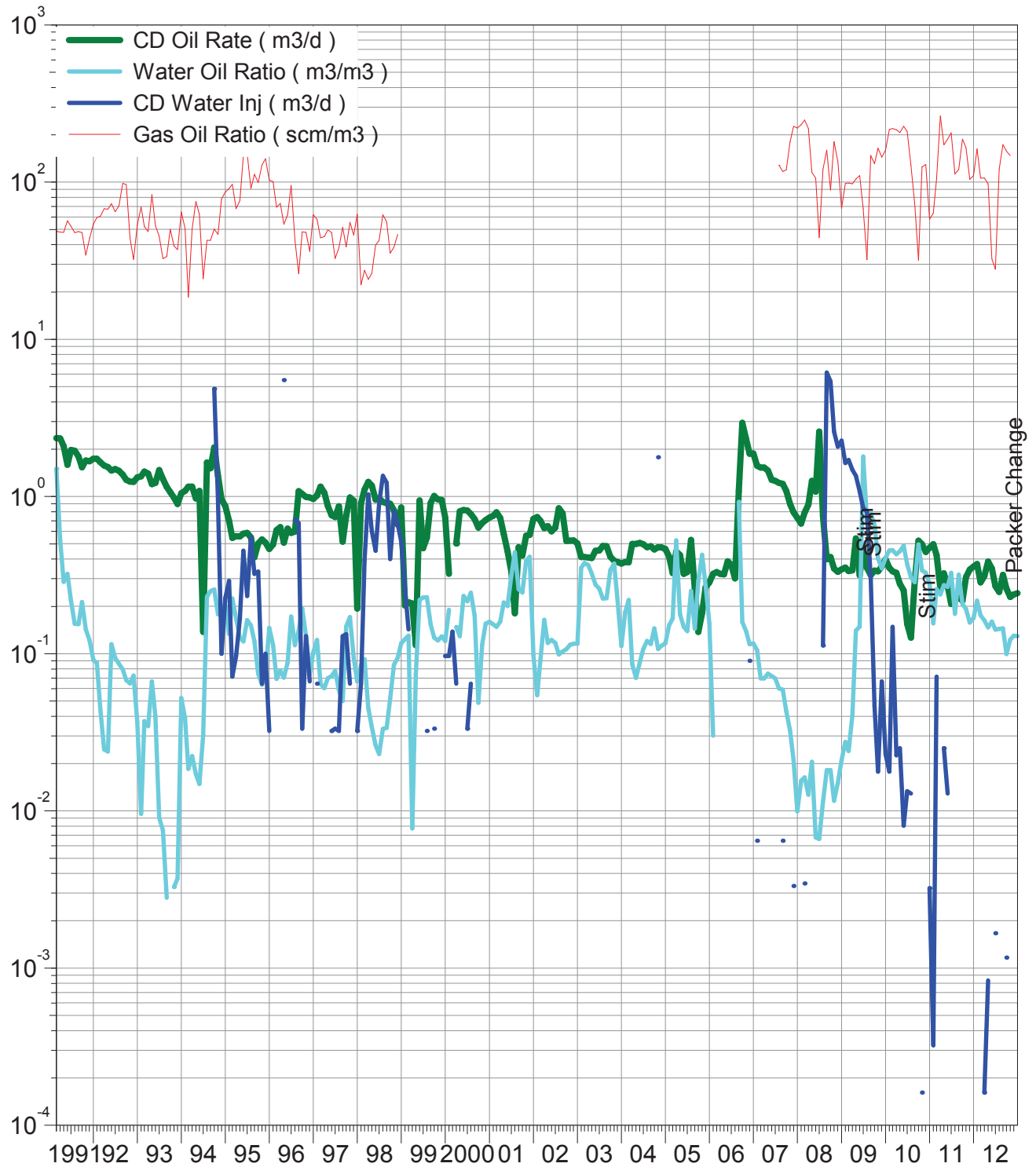
# Calendar Day Production for Pattern: P-36 Set: PIERSON UNIT



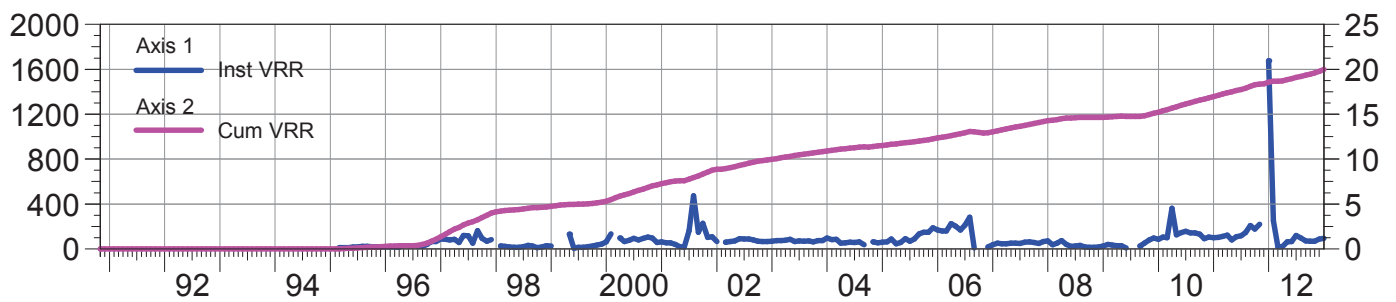
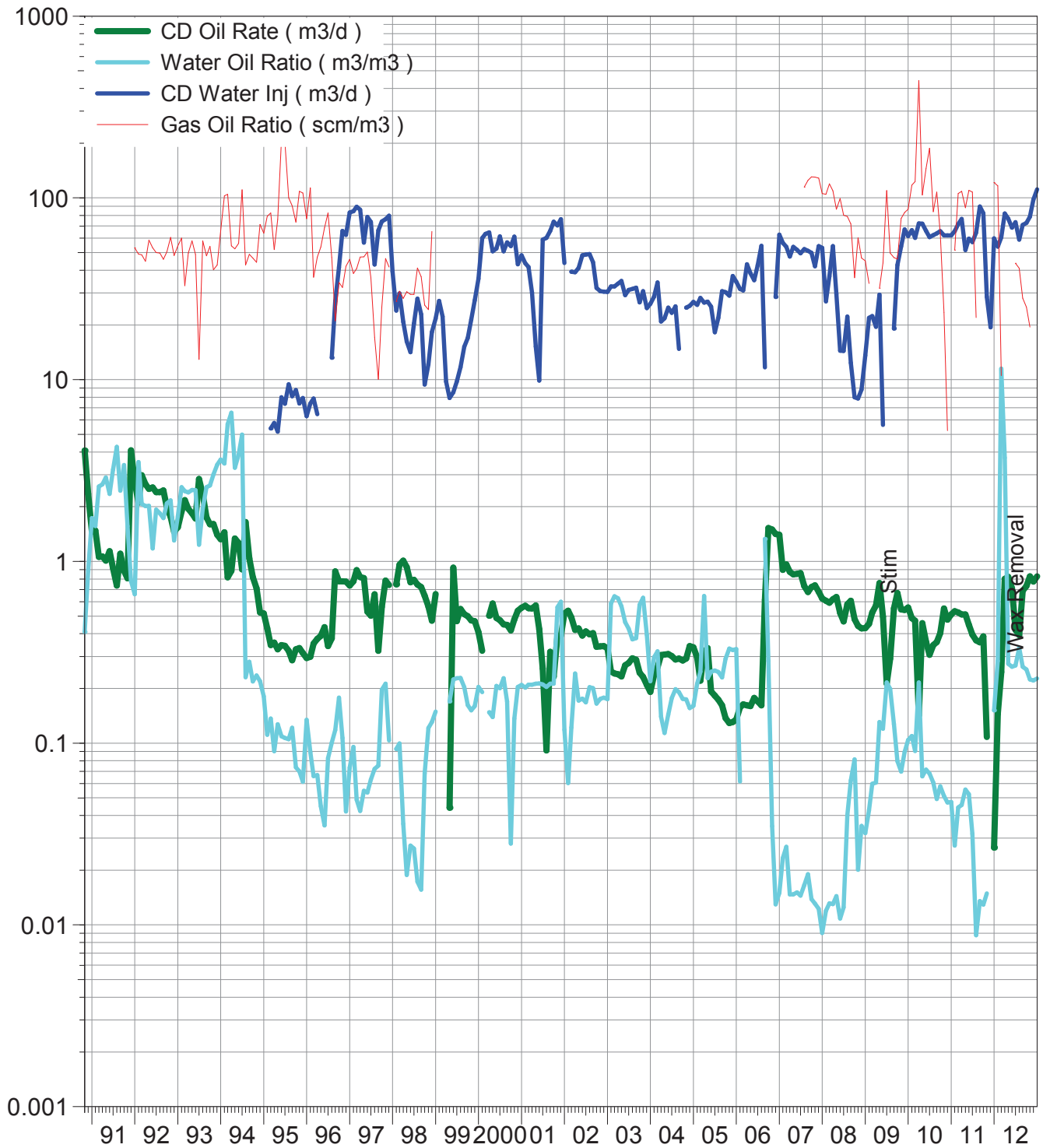
# Calendar Day Production for Pattern: P-37 Set: PIERSON UNIT



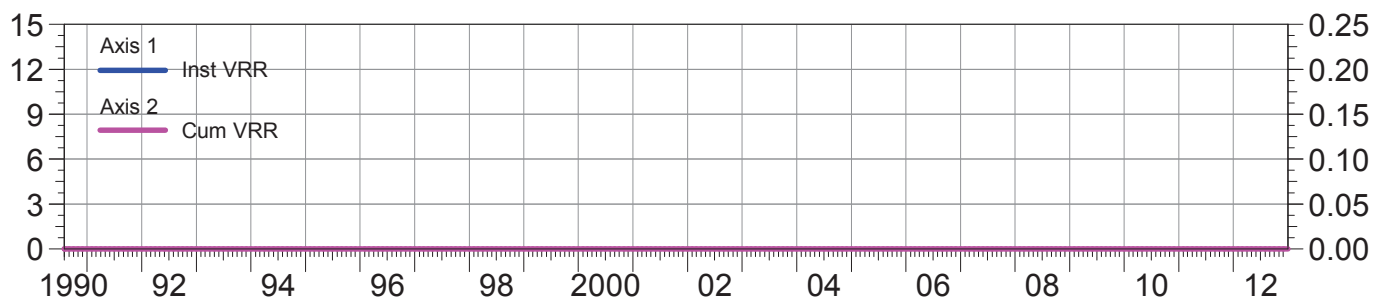
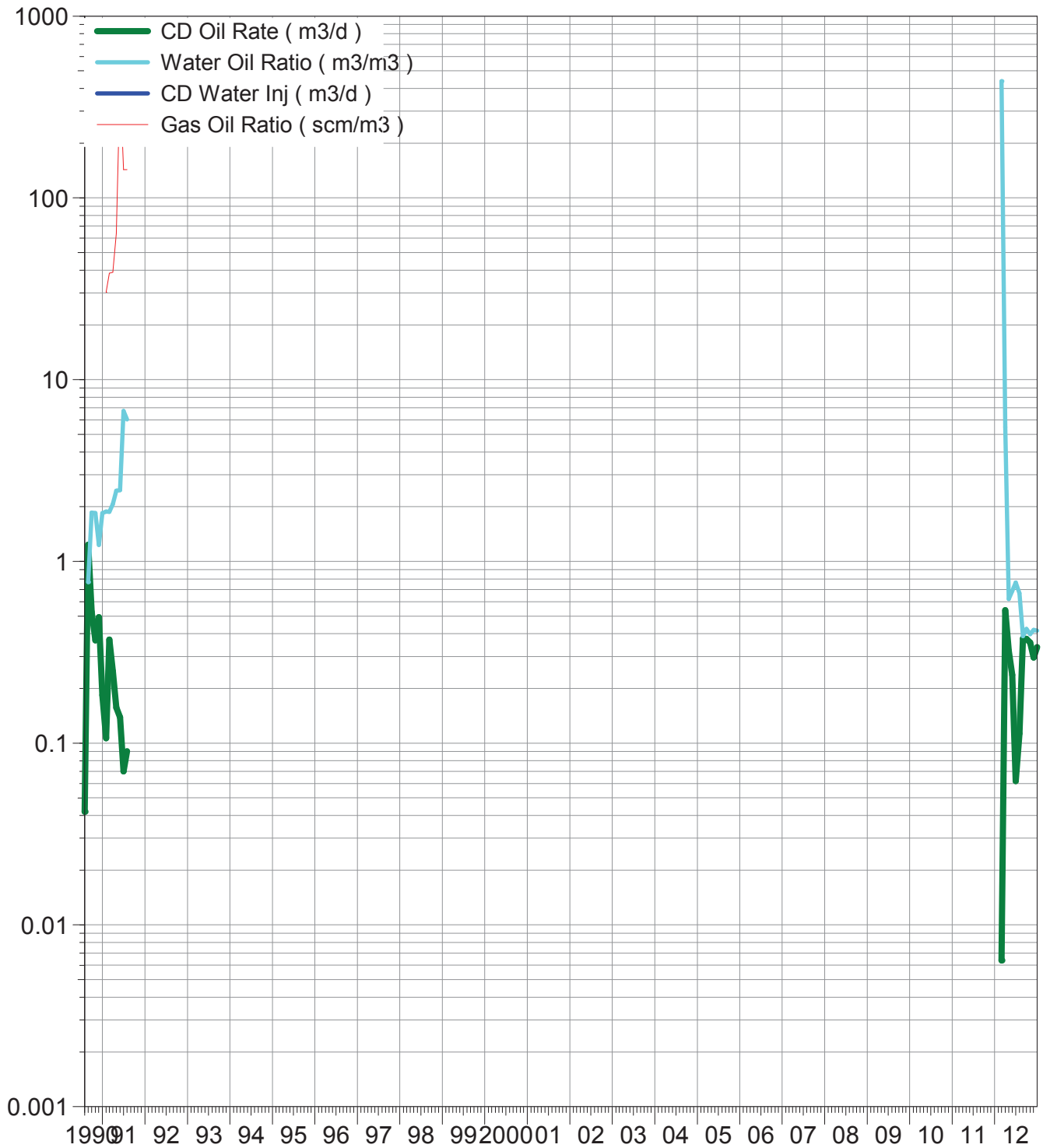
# Calendar Day Production for Pattern: P-38 Set: PIERSON UNIT



# Calendar Day Production for Pattern: P-39 Set: PIERSON UNIT



# Calendar Day Production for Pattern: P-40 Set: PIERSON UNIT



# Calendar Day Production for Pattern: P-43 Set: PIERSON UNIT

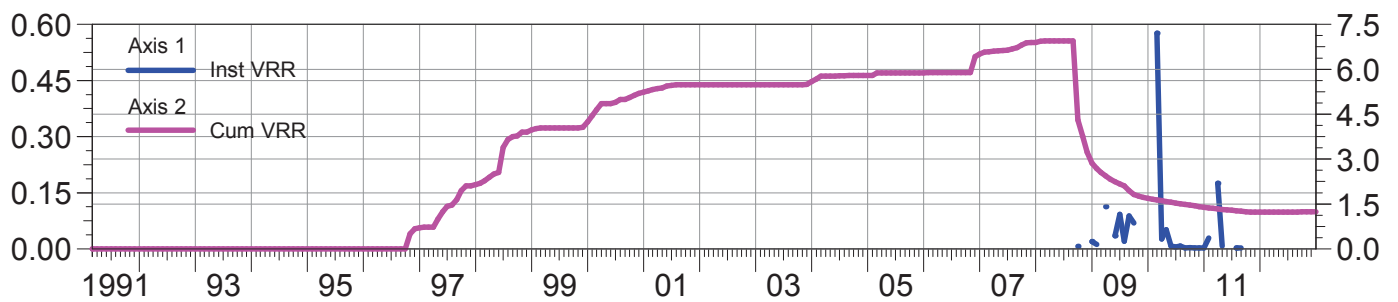
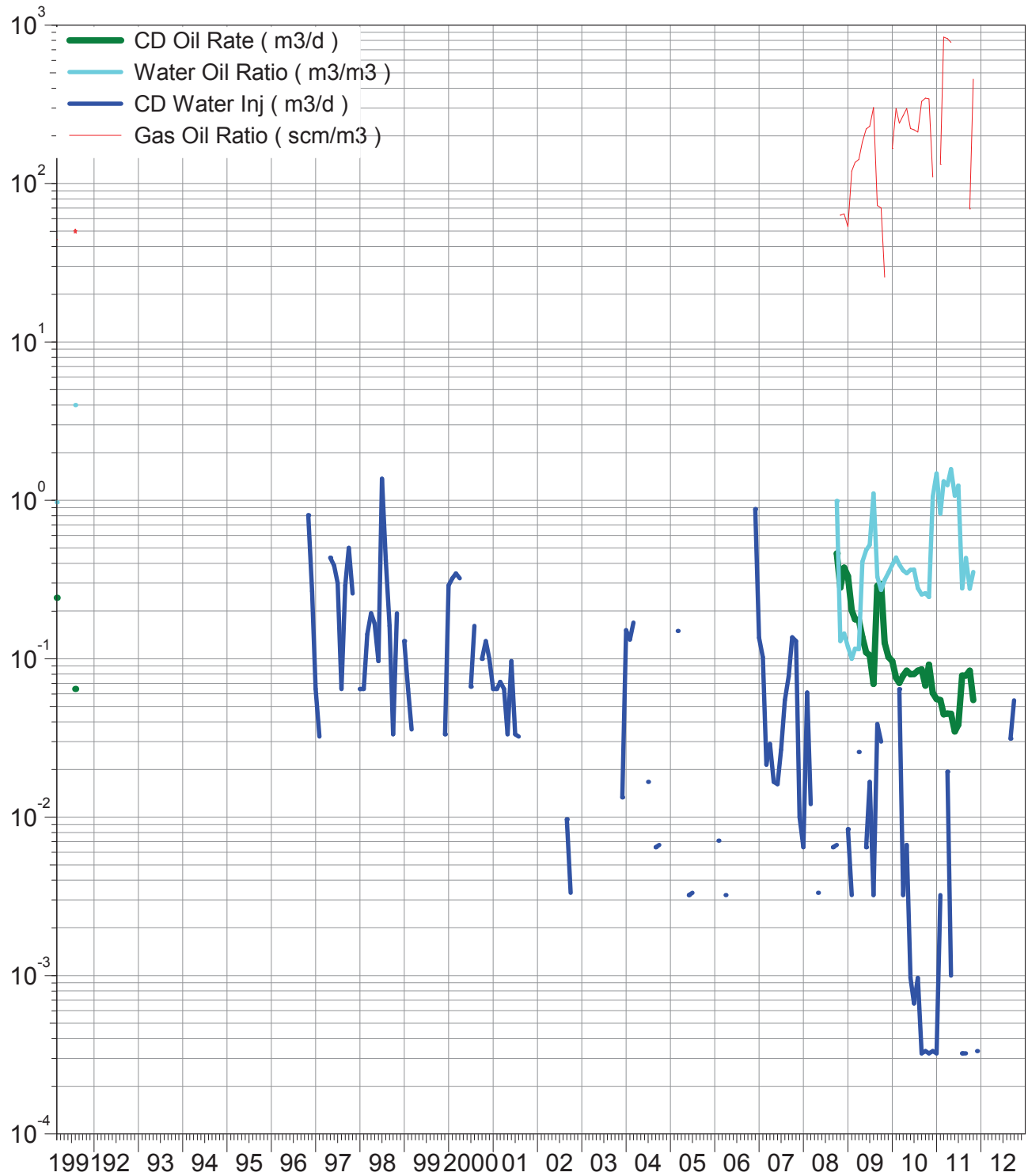


TABLE C.1: CUMULATIVE PRODUCTION AND INJECTION TO THE END OF 2012

	Cum Oil Prod (E <sup>3</sup> m <sup>3</sup> )	Cum Gas Prod (E <sup>6</sup> m <sup>3</sup> )	Cum Water Prod (E <sup>3</sup> m <sup>3</sup> )	Cum Liquid Prod (E <sup>3</sup> m <sup>3</sup> )	Cum Water Inj (E <sup>3</sup> m <sup>3</sup> )
Overall Unit	797.82	27.62	480.01	1277.83	1927.82
PATTERN: P-02	7.22	0.33	1.18	8.4	5.5
PATTERN: P-05	2.83	0.25	1.34	4.17	4.75
PATTERN: P-06	21.82	0.73	3.31	25.13	18.76
PATTERN: P-07	21.54	0.64	42.52	64.05	21.23
PATTERN: P-08	19.15	0.59	56.37	75.52	255.76
PATTERN: P-09	28.02	0.8	2	30.02	39.69
PATTERN: P-10	41.14	1.09	3.6	44.74	64.02
PATTERN: P-11	31.07	0.79	43.77	74.85	174.01
PATTERN: P-12	31.57	0.88	45.41	76.98	72.65
PATTERN: P-13	28.31	1.23	19	47.32	93.94
PATTERN: P-14	20.93	0.62	13.56	34.49	37.98
PATTERN: P-15	20.59	0.73	0.68	21.28	13.74
PATTERN: P-16	40.46	1.55	26.46	66.92	81.94
PATTERN: P-17	37.81	1.19	8.75	46.56	40.68
PATTERN: P-18	45.32	1.38	100.78	146.1	103.18
PATTERN: P-19	33.3	1.15	7.09	40.39	92.79
PATTERN: P-20	19	0.71	1.29	20.29	6.01
PATTERN: P-21	17.41	0.67	0.84	18.26	36.64
PATTERN: P-22	29.61	0.96	6.98	36.59	28.52
PATTERN: P-23	38.65	1.19	11.78	50.43	69.53
PATTERN: P-24	32.46	0.87	7.64	40.09	24.13
PATTERN: P-25	23.51	0.92	2.98	26.49	9.06
PATTERN: P-26	21.17	0.91	4.32	25.49	29.03
PATTERN: P-27	9.89	0.6	2.75	12.64	6.42
PATTERN: P-28	12.24	0.7	1.39	13.63	9.65
PATTERN: P-29	18.23	0.68	0.49	18.72	9.73
PATTERN: P-30	15.99	0.56	2.63	18.61	213.01
PATTERN: P-31	18.05	0.6	3.11	21.16	18.14
PATTERN: P-32	24.85	0.91	9.61	34.46	7.72
PATTERN: P-33	4.75	0.19	2.98	7.72	0.48
PATTERN: P-34	16.8	0.62	21.11	37.91	1.4
PATTERN: P-35	12.79	0.49	13.75	26.54	51.36
PATTERN: P-36	10.92	0.55	1.05	11.97	13.45
PATTERN: P-37	6.81	0.33	1.23	8.04	4.41
PATTERN: P-38	6.07	0.3	0.93	7	1.7
PATTERN: P-39	5.7	0.21	5.92	11.63	254.21
PATTERN: P-40	0.22	0	0.41	0.63	0
PATTERN: P-43	0.16	0.02	0.1	0.25	0.35



# Overall South Pierson Unit No. 1

Axis 1 Completions Selected (148)

Cumulative Oil Prod ( Mm3 )

Cumulative Liquid Prod ( Mm3 )

Cumulative Water Prod ( Mm3 )

Cumulative Water Inj ( Mm3 )

Axis 2

Cumulative Gas Prod ( MMscm )

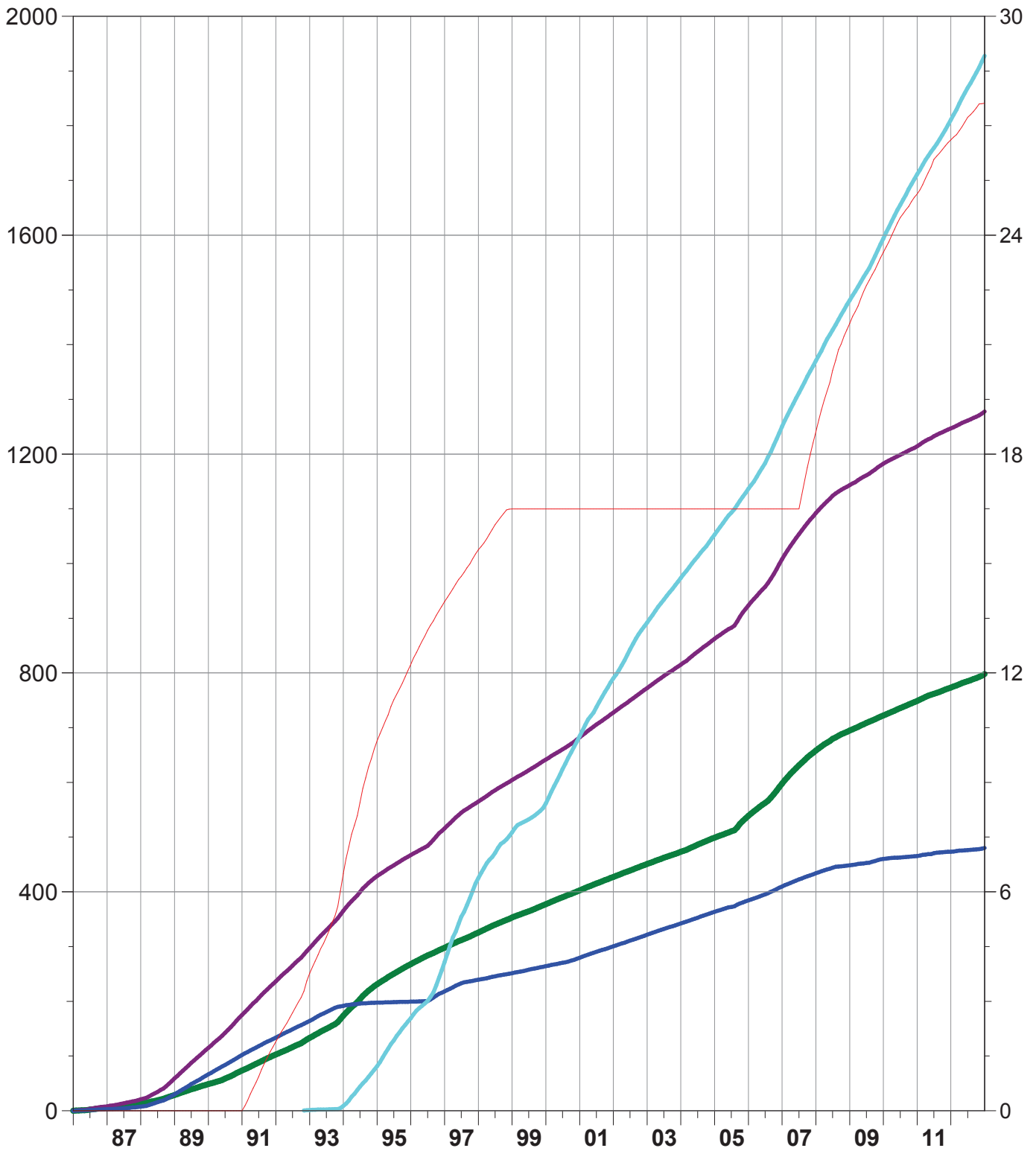
Cumulative Oil Prod : 797.82 Mm3

Cumulative Liquid Prod : 1277.83 Mm3

Cumulative Water Prod : 480.01 Mm3

Cumulative Water Inj : 1927.82 Mm3

Cumulative Gas Prod : 27.62 MMscm



# Pattern: P-02 Set: PIERSON UNIT

Axis 1 P-02

- Cumulative Oil Prod ( Mm3 )
- Cumulative Liquid Prod ( Mm3 )
- Cumulative Water Prod ( Mm3 )
- Cumulative Water Inj ( Mm3 )

Axis 2

- Cumulative Gas Prod ( MMscm )

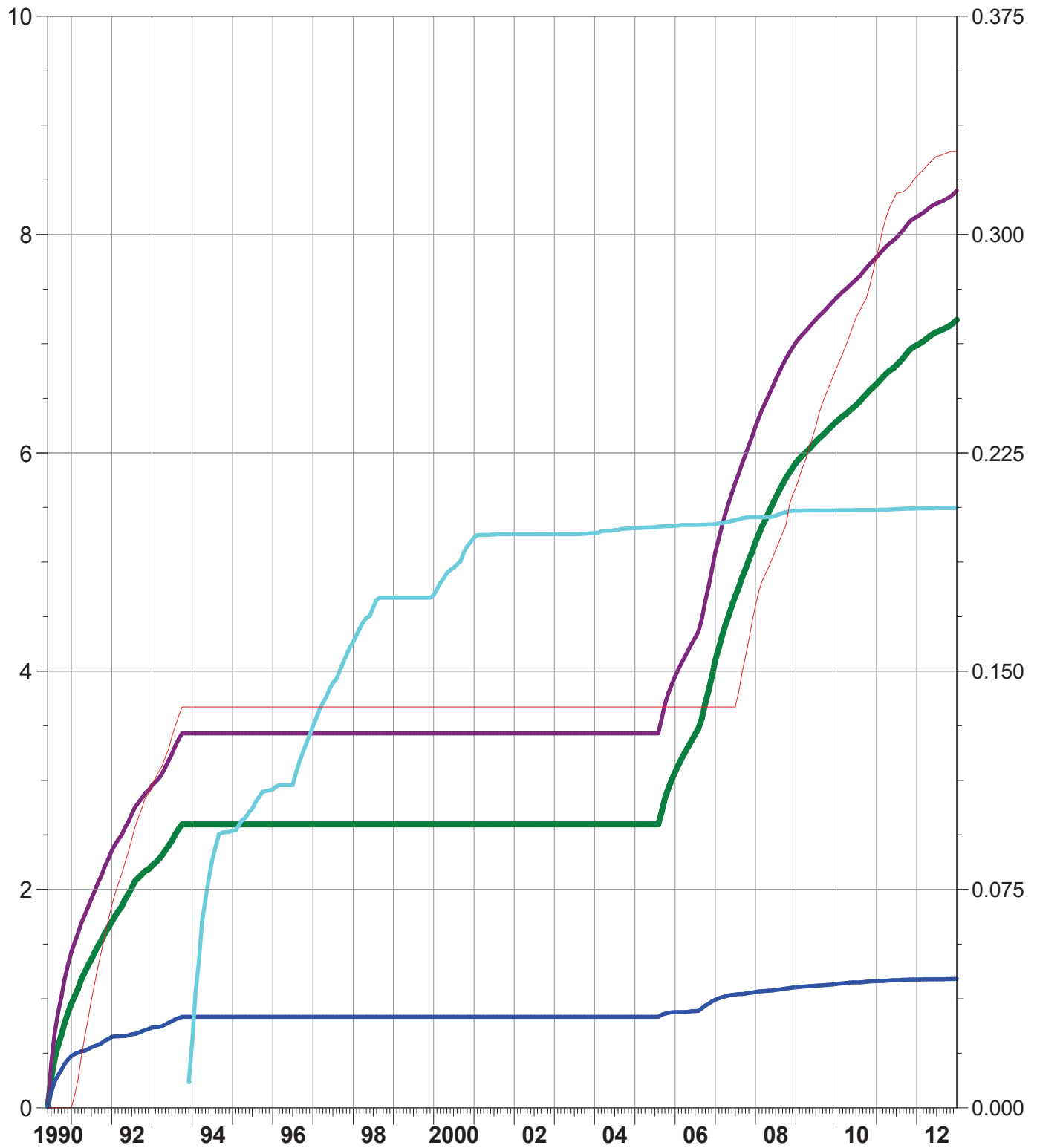
Cumulative Oil Prod : 7.22 Mm3

Cumulative Liquid Prod : 8.40 Mm3

Cumulative Water Prod : 1.18 Mm3

Cumulative Water Inj : 5.50 Mm3

Cumulative Gas Prod : 0.33 MMscm



# Pattern: P-05 Set: PIERSON UNIT

Axis 1 P-05

- Cumulative Oil Prod ( Mm3 )
- Cumulative Liquid Prod ( Mm3 )
- Cumulative Water Prod ( Mm3 )
- Cumulative Water Inj ( Mm3 )

Axis 2

- Cumulative Gas Prod ( MMscm )

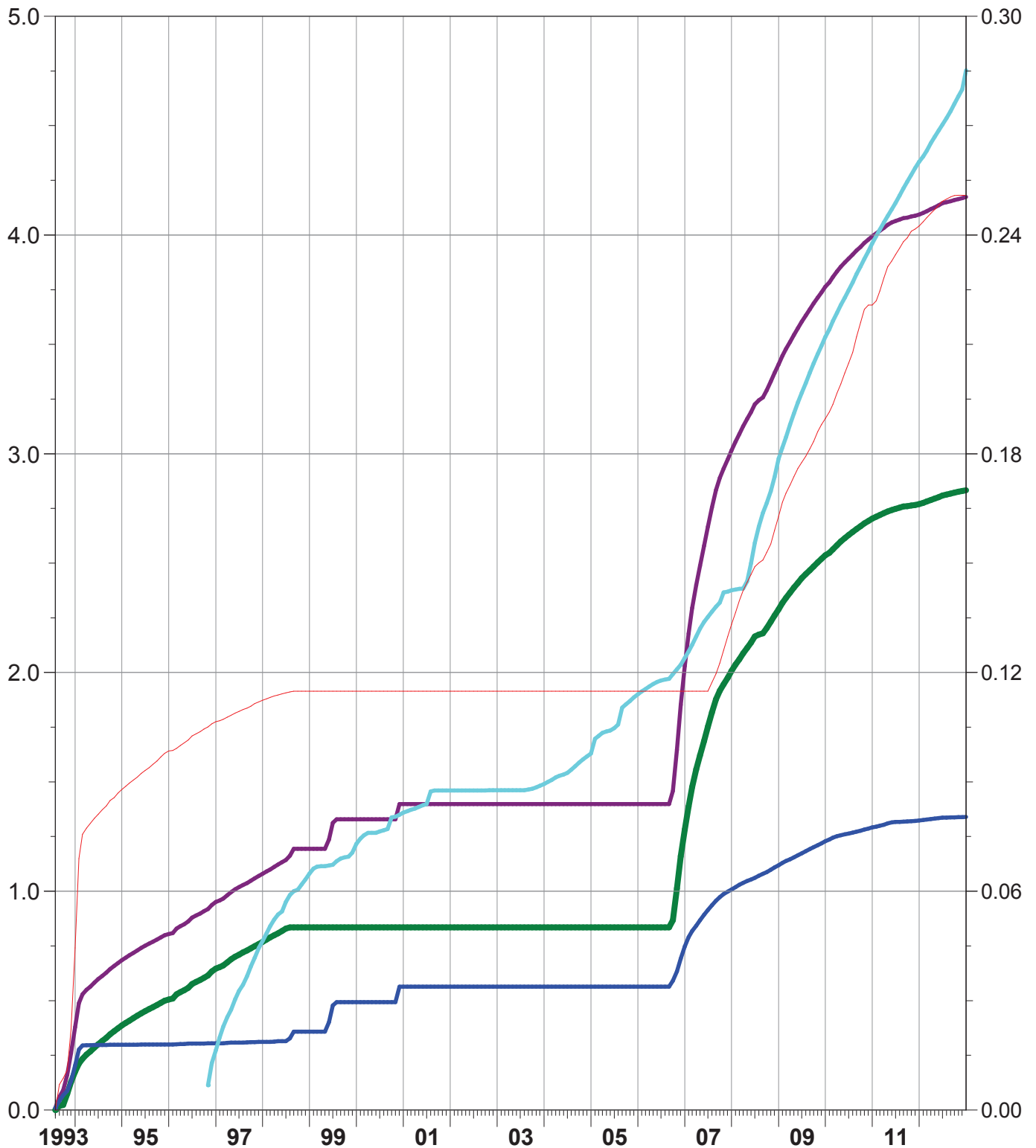
Cumulative Oil Prod : 2.83 Mm3

Cumulative Liquid Prod : 4.17 Mm3

Cumulative Water Prod : 1.34 Mm3

Cumulative Water Inj : 4.75 Mm3

Cumulative Gas Prod : 0.25 MMscm



# Pattern: P-06 Set: PIERSON UNIT

Axis 1 P-06

- Cumulative Oil Prod ( Mm3 )
- Cumulative Liquid Prod ( Mm3 )
- Cumulative Water Prod ( Mm3 )
- Cumulative Water Inj ( Mm3 )

Axis 2

- Cumulative Gas Prod ( MMscm )

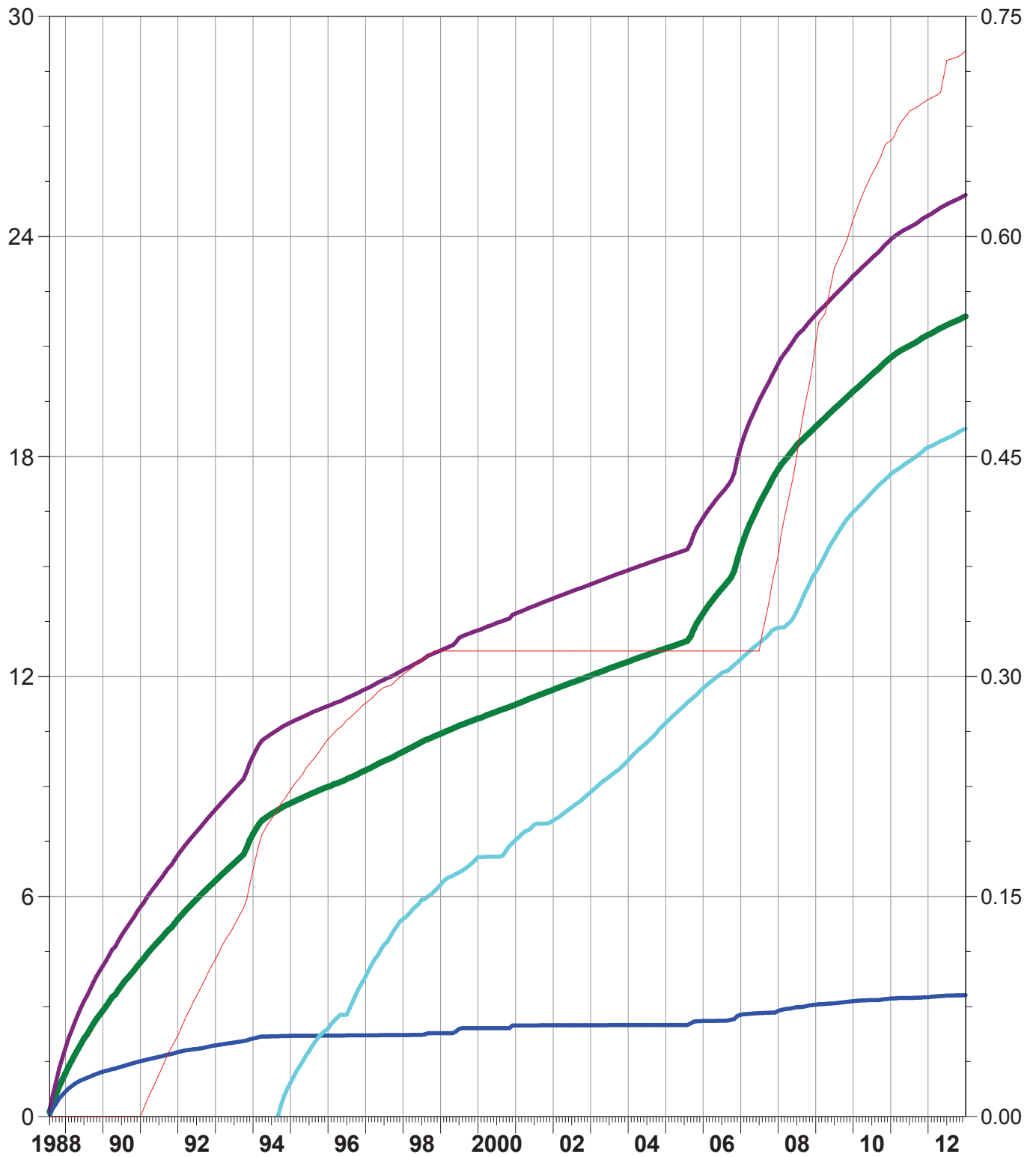
Cumulative Oil Prod : 21.82 Mm3

Cumulative Liquid Prod : 25.13 Mm3

Cumulative Water Prod : 3.31 Mm3

Cumulative Water Inj : 18.76 Mm3

Cumulative Gas Prod : 0.73 MMscm



# Pattern: P-07 Set: PIERSON UNIT

Axis 1 P-07

- Cumulative Oil Prod ( Mm3 )
- Cumulative Liquid Prod ( Mm3 )
- Cumulative Water Prod ( Mm3 )
- Cumulative Water Inj ( Mm3 )

Axis 2

- Cumulative Gas Prod ( MMscm )

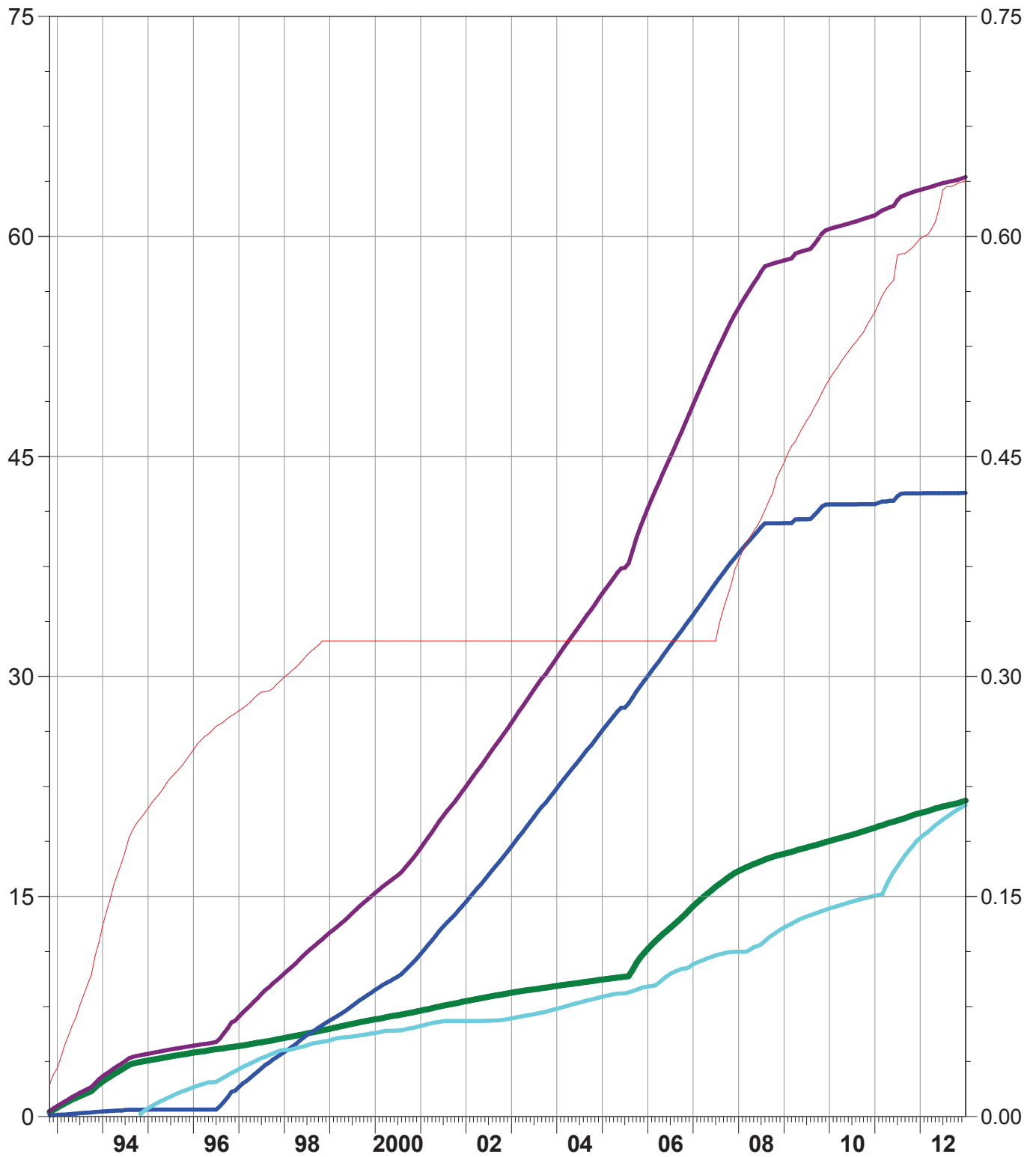
**Cumulative Oil Prod : 21.54 Mm3**

**Cumulative Liquid Prod : 64.05 Mm3**

**Cumulative Water Prod : 42.52 Mm3**

**Cumulative Water Inj : 21.23 Mm3**

**Cumulative Gas Prod : 0.64 MMscm**



# Pattern: P-08 Set: PIERSON UNIT

Axis 1 P-08

- Cumulative Oil Prod ( Mm3 )
- Cumulative Liquid Prod ( Mm3 )
- Cumulative Water Prod ( Mm3 )
- Cumulative Water Inj ( Mm3 )

Axis 2

- Cumulative Gas Prod ( MMscm )

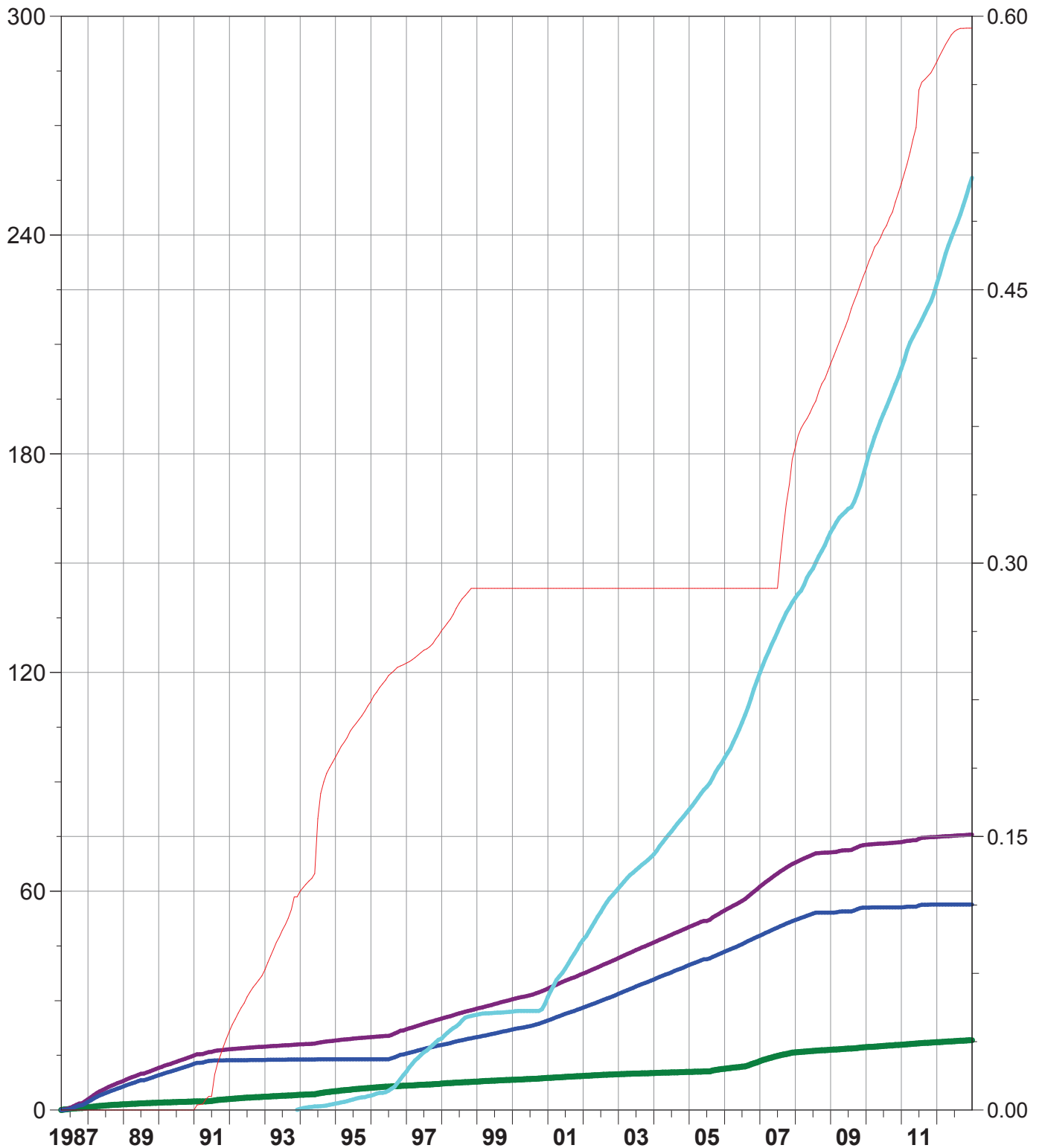
**Cumulative Oil Prod : 19.15 Mm3**

**Cumulative Liquid Prod : 75.52 Mm3**

**Cumulative Water Prod : 56.37 Mm3**

**Cumulative Water Inj : 255.76 Mm3**

**Cumulative Gas Prod : 0.59 MMscm**



# Pattern: P-09 Set: PIERSON UNIT

Axis 1 P-09

- Cumulative Oil Prod ( Mm3 )
- Cumulative Liquid Prod ( Mm3 )
- Cumulative Water Prod ( Mm3 )
- Cumulative Water Inj ( Mm3 )

Axis 2

- Cumulative Gas Prod ( MMscm )

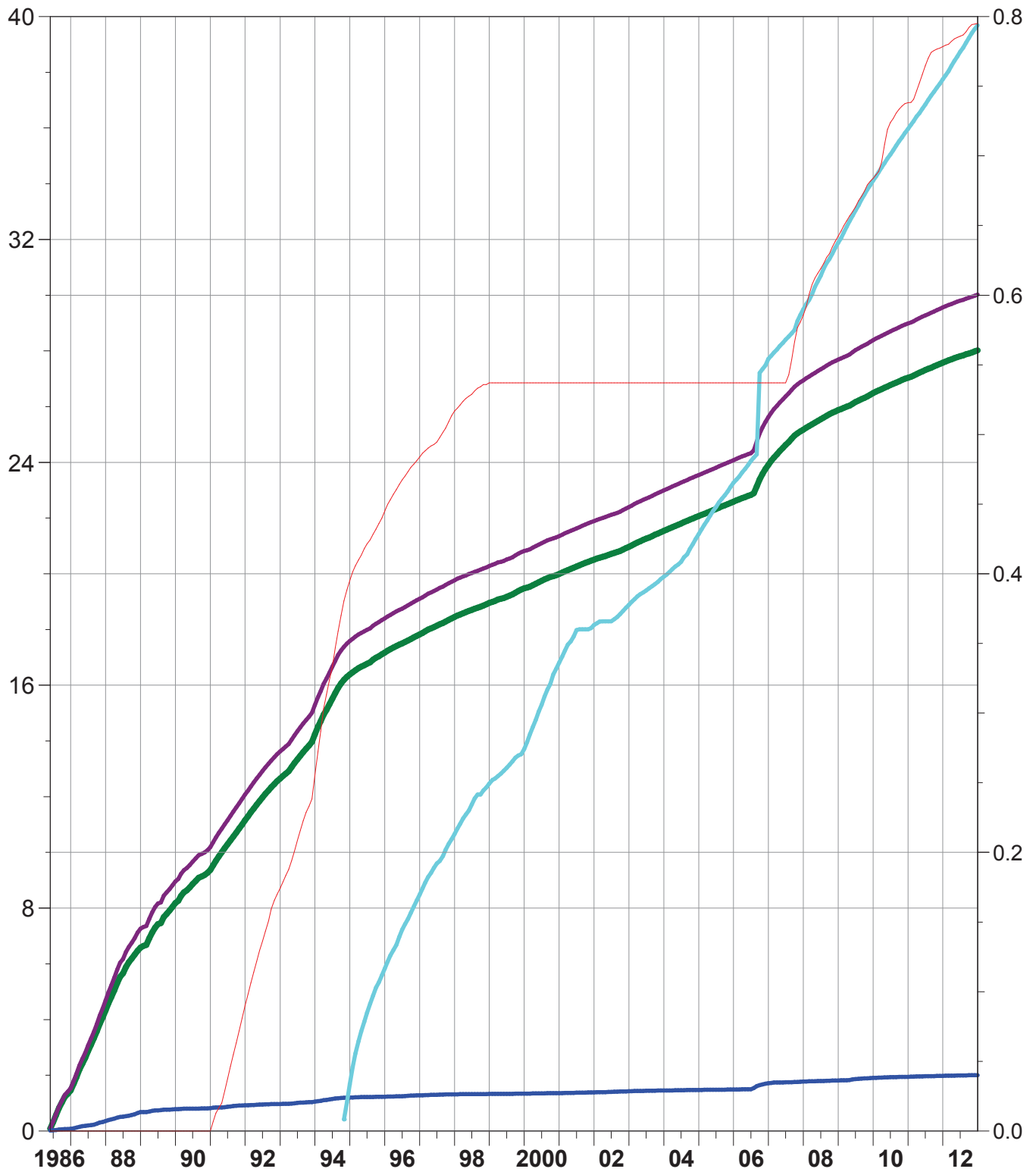
**Cumulative Oil Prod : 28.02 Mm3**

**Cumulative Liquid Prod : 30.02 Mm3**

**Cumulative Water Prod : 2.00 Mm3**

**Cumulative Water Inj : 39.69 Mm3**

**Cumulative Gas Prod : 0.80 MMscm**



# Pattern: P-10 Set: PIERSON UNIT

Axis 1 P-10

- Cumulative Oil Prod ( Mm3 )
- Cumulative Liquid Prod ( Mm3 )
- Cumulative Water Prod ( Mm3 )
- Cumulative Water Inj ( Mm3 )

Axis 2

- Cumulative Gas Prod ( MMscm )

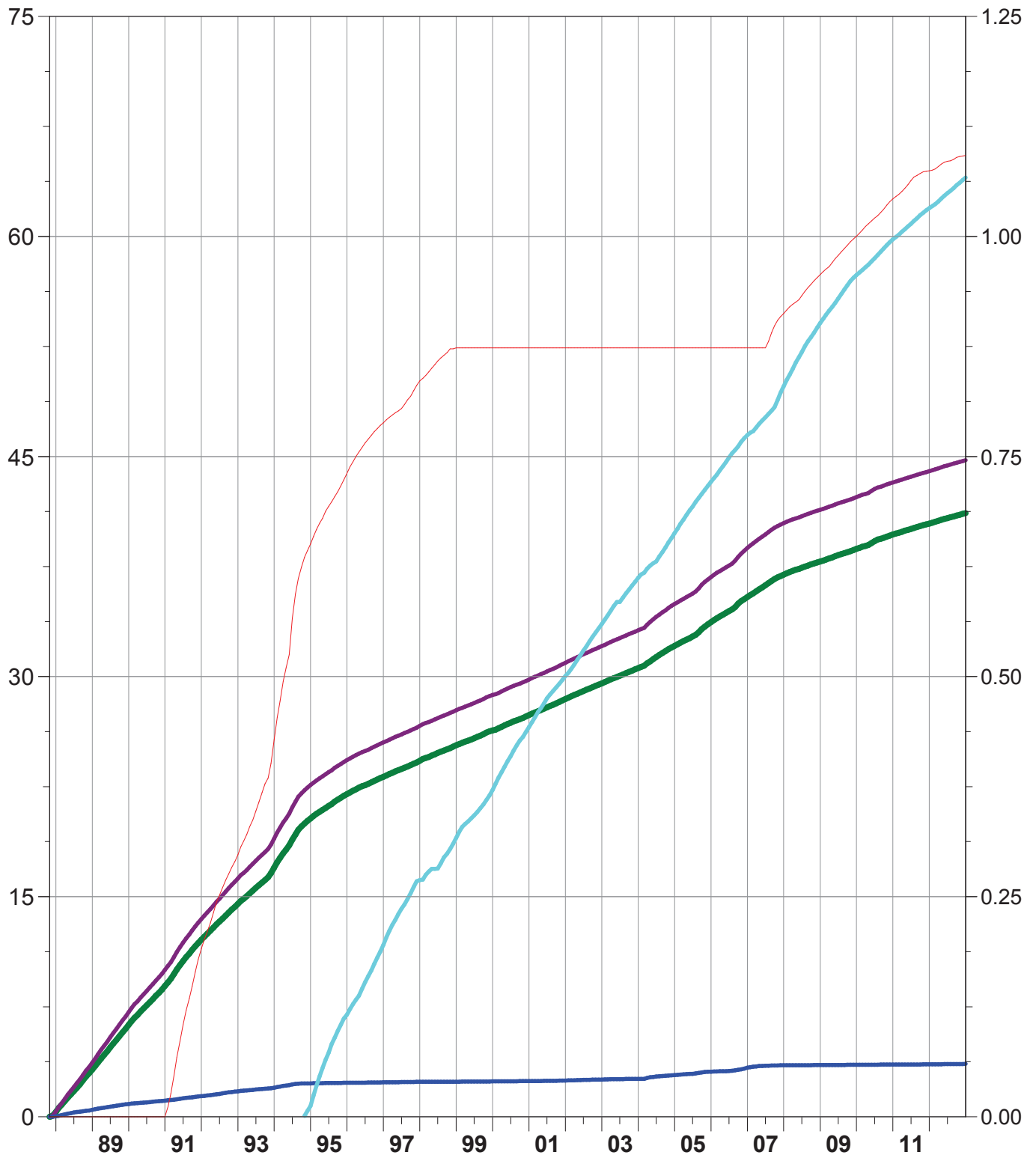
Cumulative Oil Prod : 41.14 Mm3

Cumulative Liquid Prod : 44.74 Mm3

Cumulative Water Prod : 3.60 Mm3

Cumulative Water Inj : 64.02 Mm3

Cumulative Gas Prod : 1.09 MMscm





# Pattern: P-11 Set: PIERSON UNIT

Axis 1 P-11

- Cumulative Oil Prod ( Mm3 )
- Cumulative Liquid Prod ( Mm3 )
- Cumulative Water Prod ( Mm3 )
- Cumulative Water Inj ( Mm3 )

Axis 2

- Cumulative Gas Prod ( MMscm )

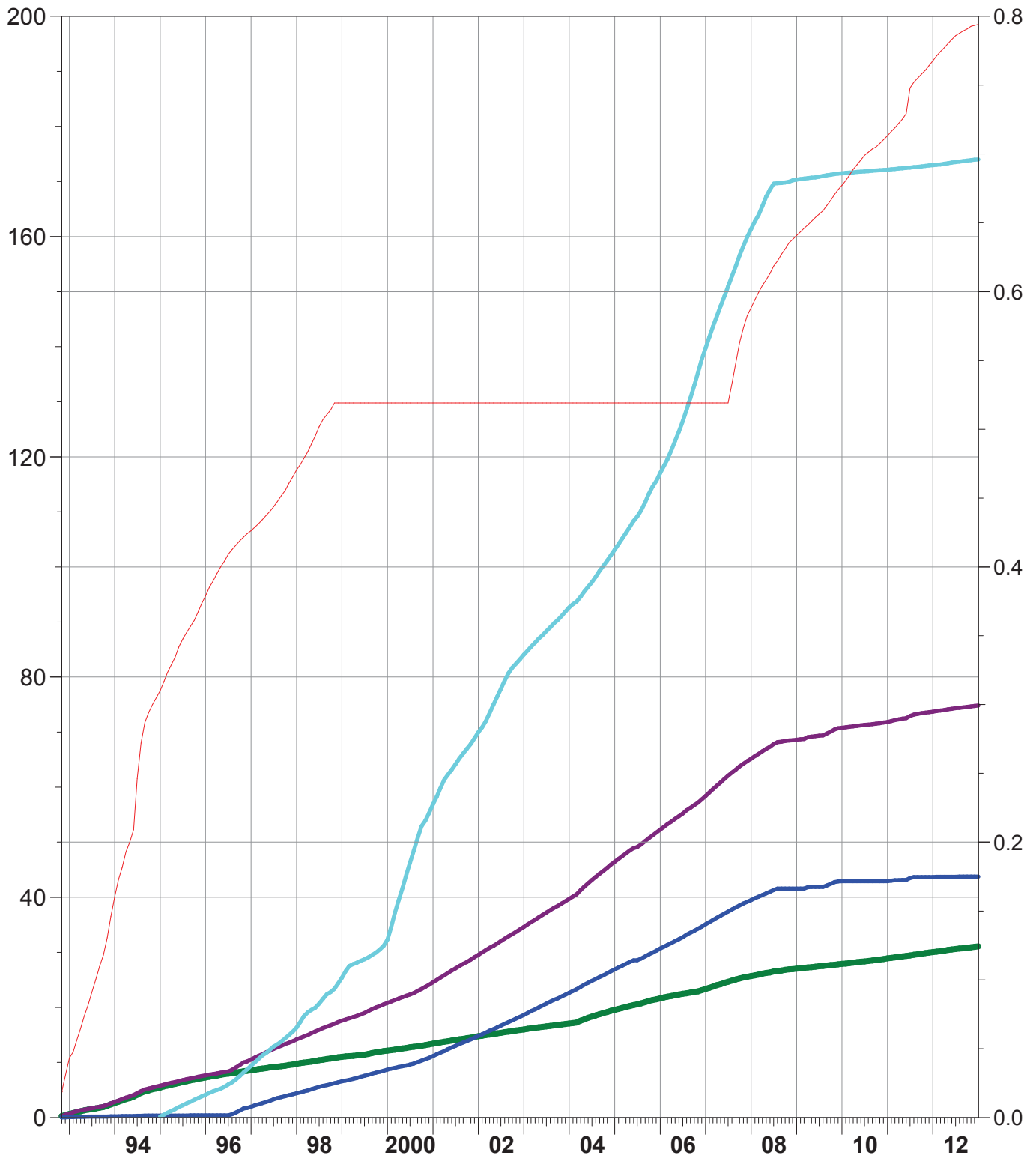
**Cumulative Oil Prod : 31.07 Mm3**

**Cumulative Liquid Prod : 74.85 Mm3**

**Cumulative Water Prod : 43.77 Mm3**

**Cumulative Water Inj : 174.01 Mm3**

**Cumulative Gas Prod : 0.79 MMscm**



# Pattern: P-12 Set: PIERSON UNIT

Axis 1 P-12

- Cumulative Oil Prod ( Mm3 )
- Cumulative Liquid Prod ( Mm3 )
- Cumulative Water Prod ( Mm3 )
- Cumulative Water Inj ( Mm3 )

Axis 2

- Cumulative Gas Prod ( MMscm )

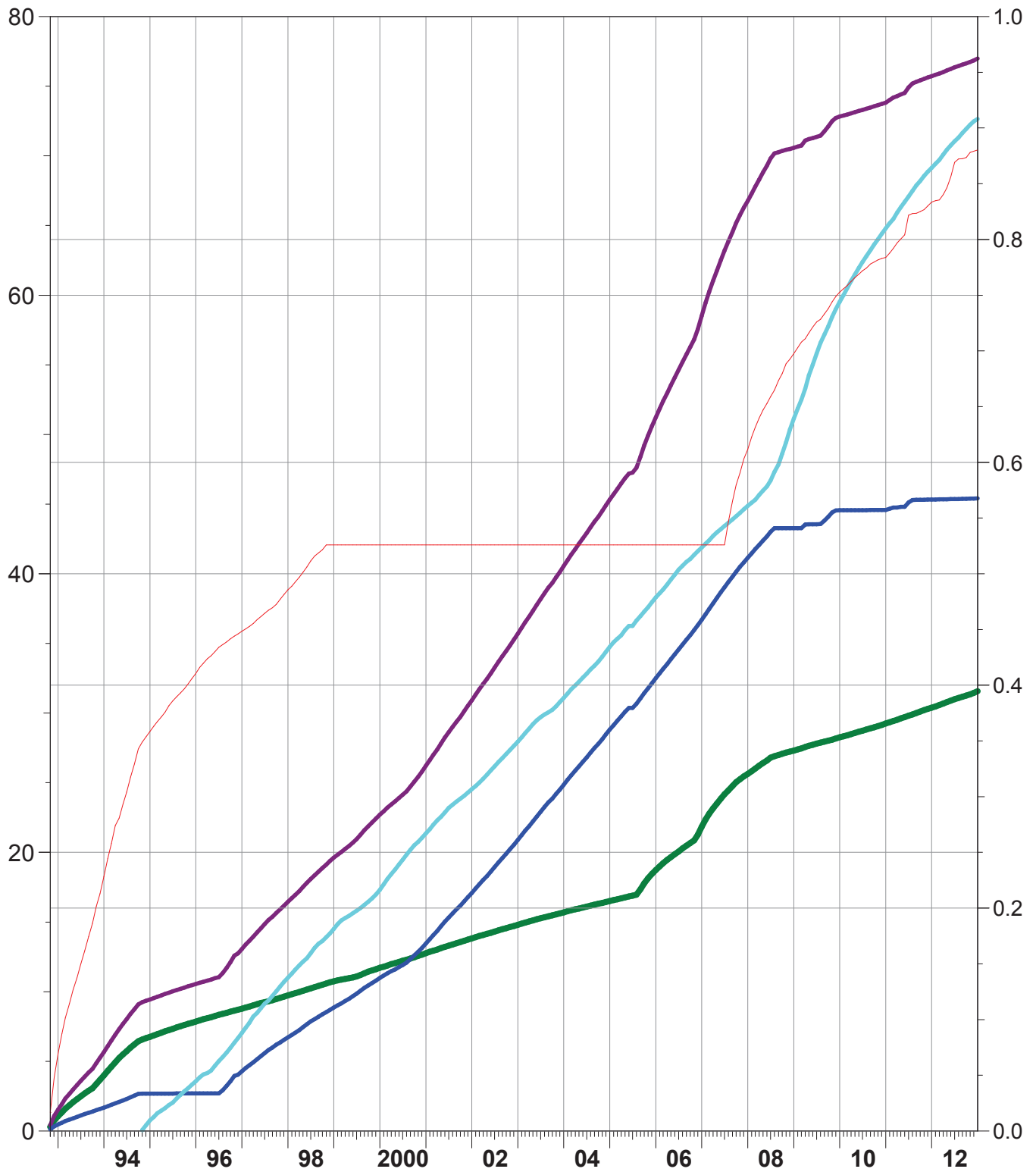
**Cumulative Oil Prod : 31.57 Mm3**

**Cumulative Liquid Prod : 76.98 Mm3**

**Cumulative Water Prod : 45.41 Mm3**

**Cumulative Water Inj : 72.65 Mm3**

**Cumulative Gas Prod : 0.88 MMscm**



# Pattern: P-13 Set: PIERSON UNIT

Axis 1 P-13

- Cumulative Oil Prod ( Mm3 )
- Cumulative Liquid Prod ( Mm3 )
- Cumulative Water Prod ( Mm3 )
- Cumulative Water Inj ( Mm3 )

Axis 2

- Cumulative Gas Prod ( MMscm )

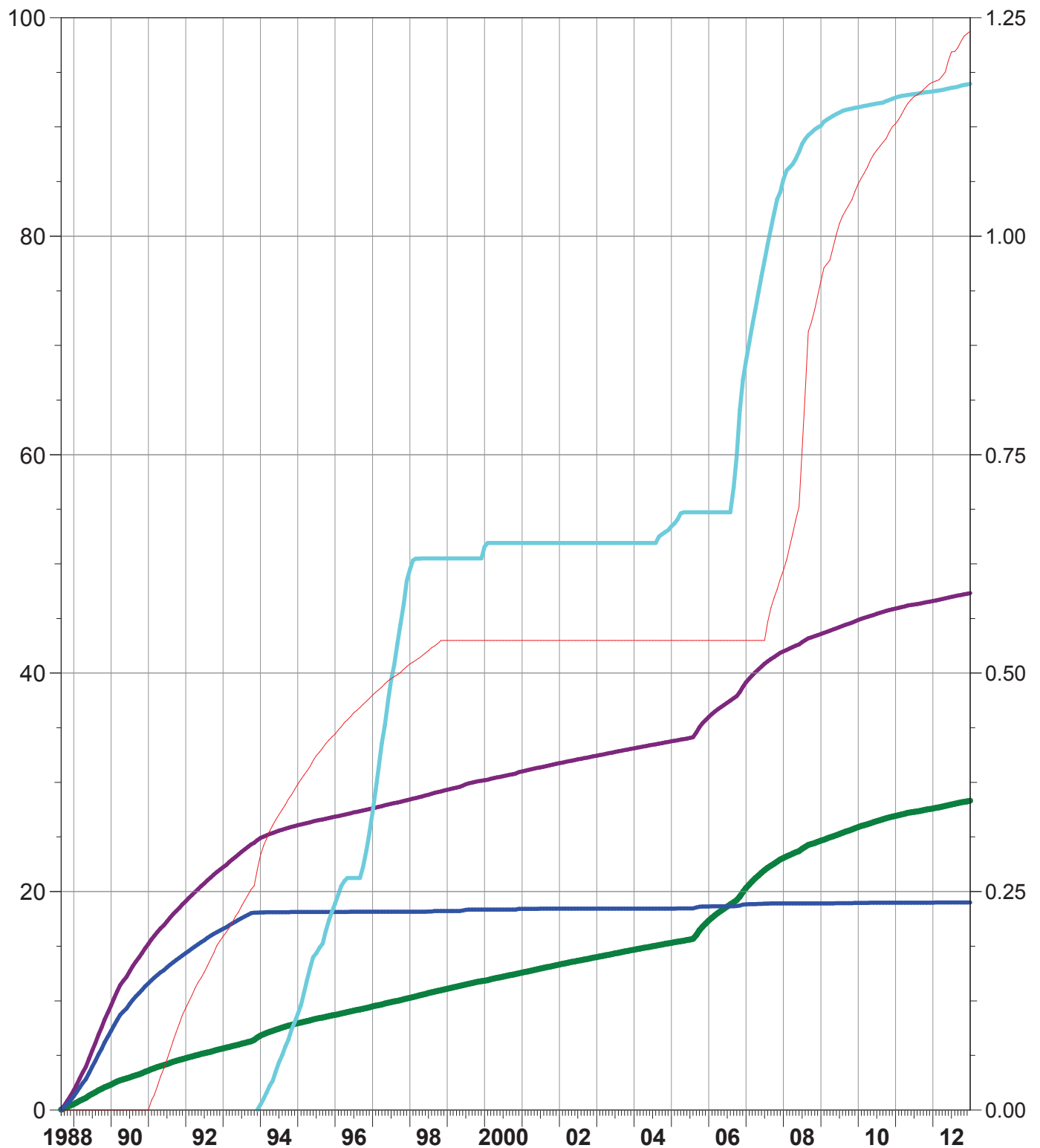
**Cumulative Oil Prod : 28.31 Mm3**

**Cumulative Liquid Prod : 47.32 Mm3**

**Cumulative Water Prod : 19.00 Mm3**

**Cumulative Water Inj : 93.94 Mm3**

**Cumulative Gas Prod : 1.23 MMscm**



# Pattern: P-14 Set: PIERSON UNIT

Axis 1 P-14

- Cumulative Oil Prod ( Mm3 )
- Cumulative Liquid Prod ( Mm3 )
- Cumulative Water Prod ( Mm3 )
- Cumulative Water Inj ( Mm3 )

Axis 2

- Cumulative Gas Prod ( MMscm )

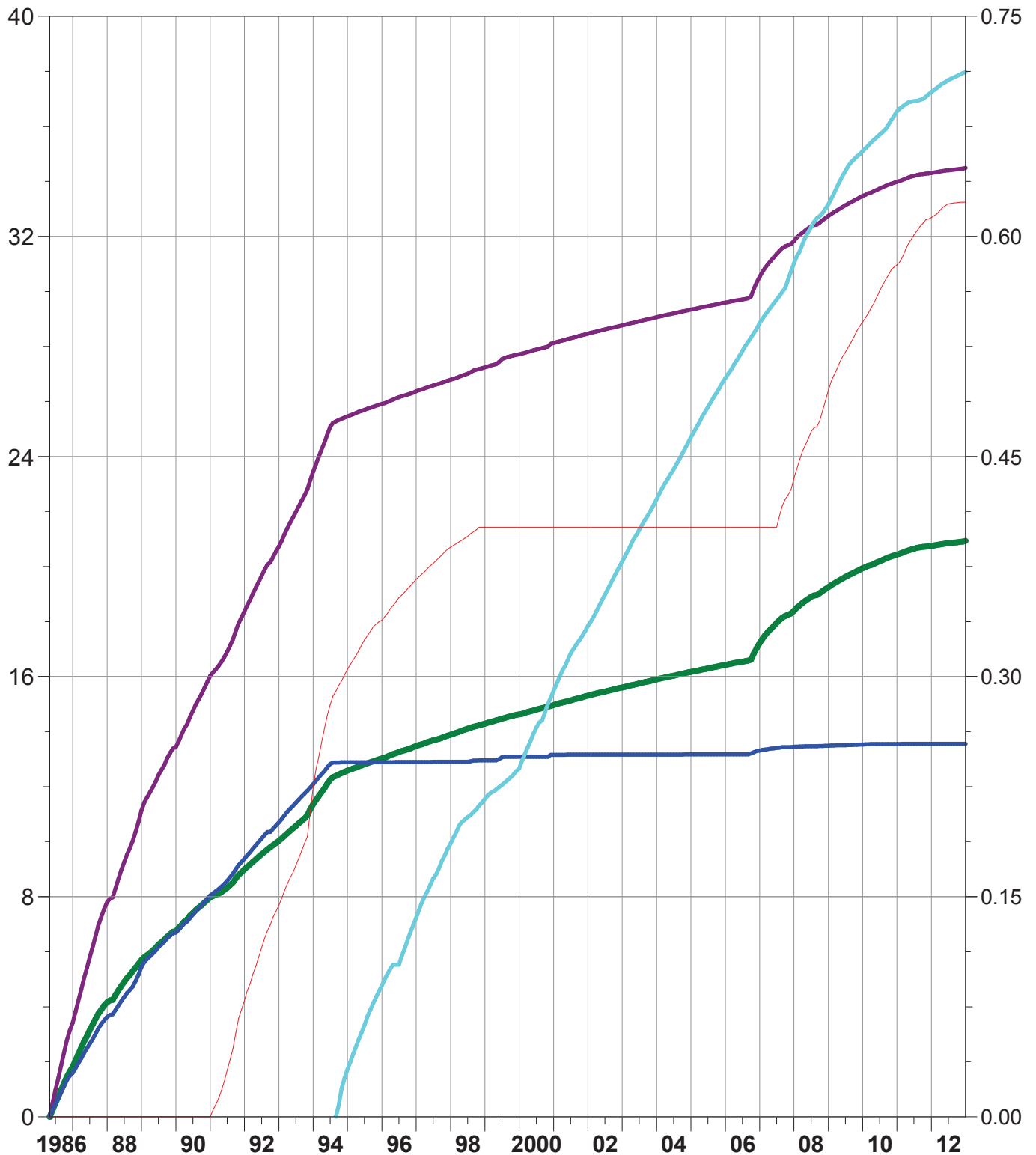
Cumulative Oil Prod : 20.93 Mm3

Cumulative Liquid Prod : 34.49 Mm3

Cumulative Water Prod : 13.56 Mm3

Cumulative Water Inj : 37.98 Mm3

Cumulative Gas Prod : 0.62 MMscm



# Pattern: P-15 Set: PIERSON UNIT

Axis 1 P-15

Cumulative Oil Prod ( Mm3 )  
Cumulative Liquid Prod ( Mm3 )  
Cumulative Water Prod ( Mm3 )  
Cumulative Water Inj ( Mm3 )

Axis 2

Cumulative Gas Prod ( MMscm )

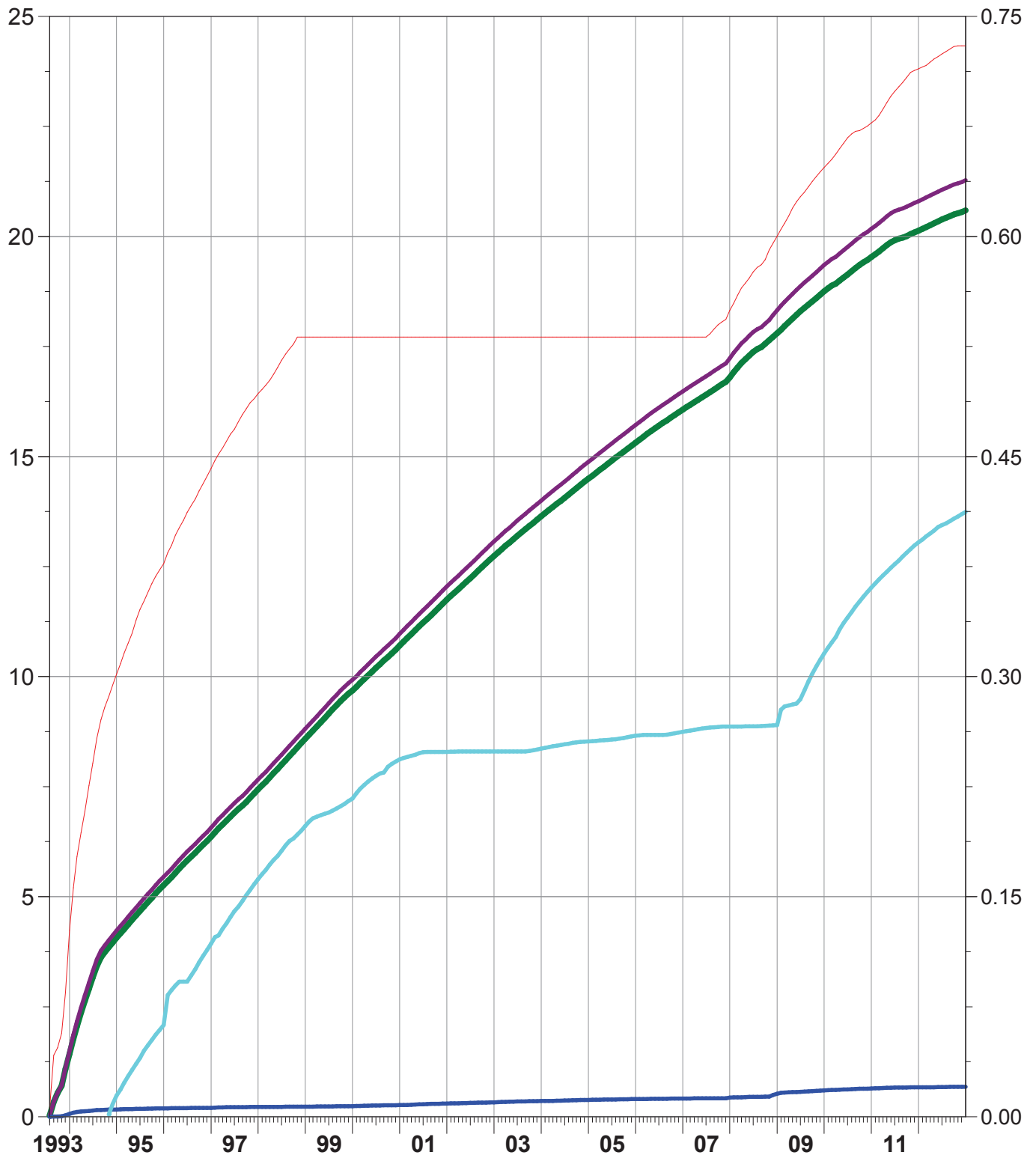
Cumulative Oil Prod : 20.59 Mm3

Cumulative Liquid Prod : 21.28 Mm3

Cumulative Water Prod : 0.68 Mm3

Cumulative Water Inj : 13.74 Mm3

Cumulative Gas Prod : 0.73 MMscm



# Pattern: P-16 Set: PIERSON UNIT

Axis 1 P-16

- Cumulative Oil Prod ( Mm3 )
- Cumulative Liquid Prod ( Mm3 )
- Cumulative Water Prod ( Mm3 )
- Cumulative Water Inj ( Mm3 )

Axis 2

- Cumulative Gas Prod ( MMscm )

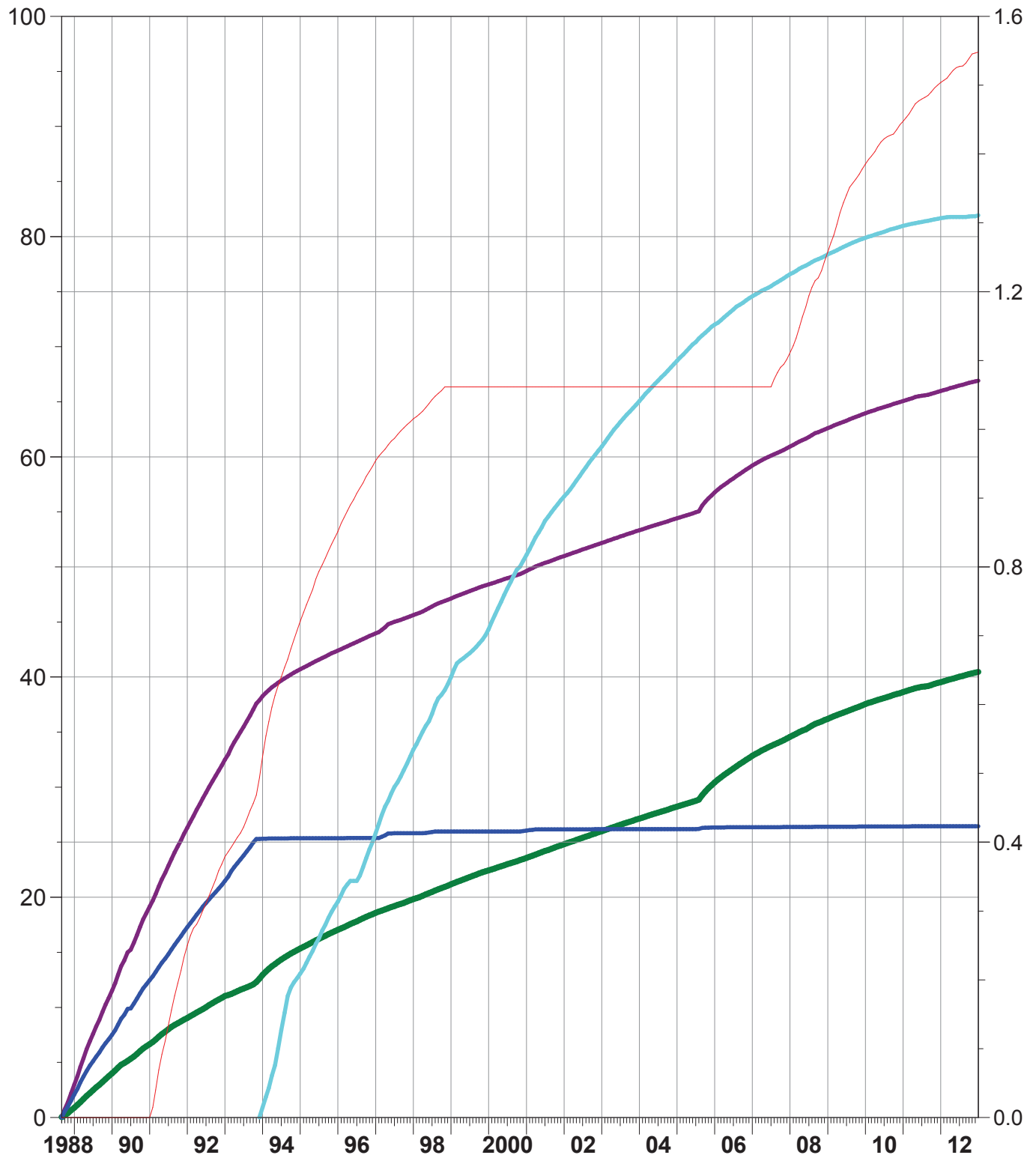
Cumulative Oil Prod : 40.46 Mm3

Cumulative Liquid Prod : 66.92 Mm3

Cumulative Water Prod : 26.46 Mm3

Cumulative Water Inj : 81.94 Mm3

Cumulative Gas Prod : 1.55 MMscm



# Pattern: P-17 Set: PIERSON UNIT

Axis 1 P-17

- Cumulative Oil Prod ( Mm3 )
- Cumulative Liquid Prod ( Mm3 )
- Cumulative Water Prod ( Mm3 )
- Cumulative Water Inj ( Mm3 )

Axis 2

- Cumulative Gas Prod ( MMscm )

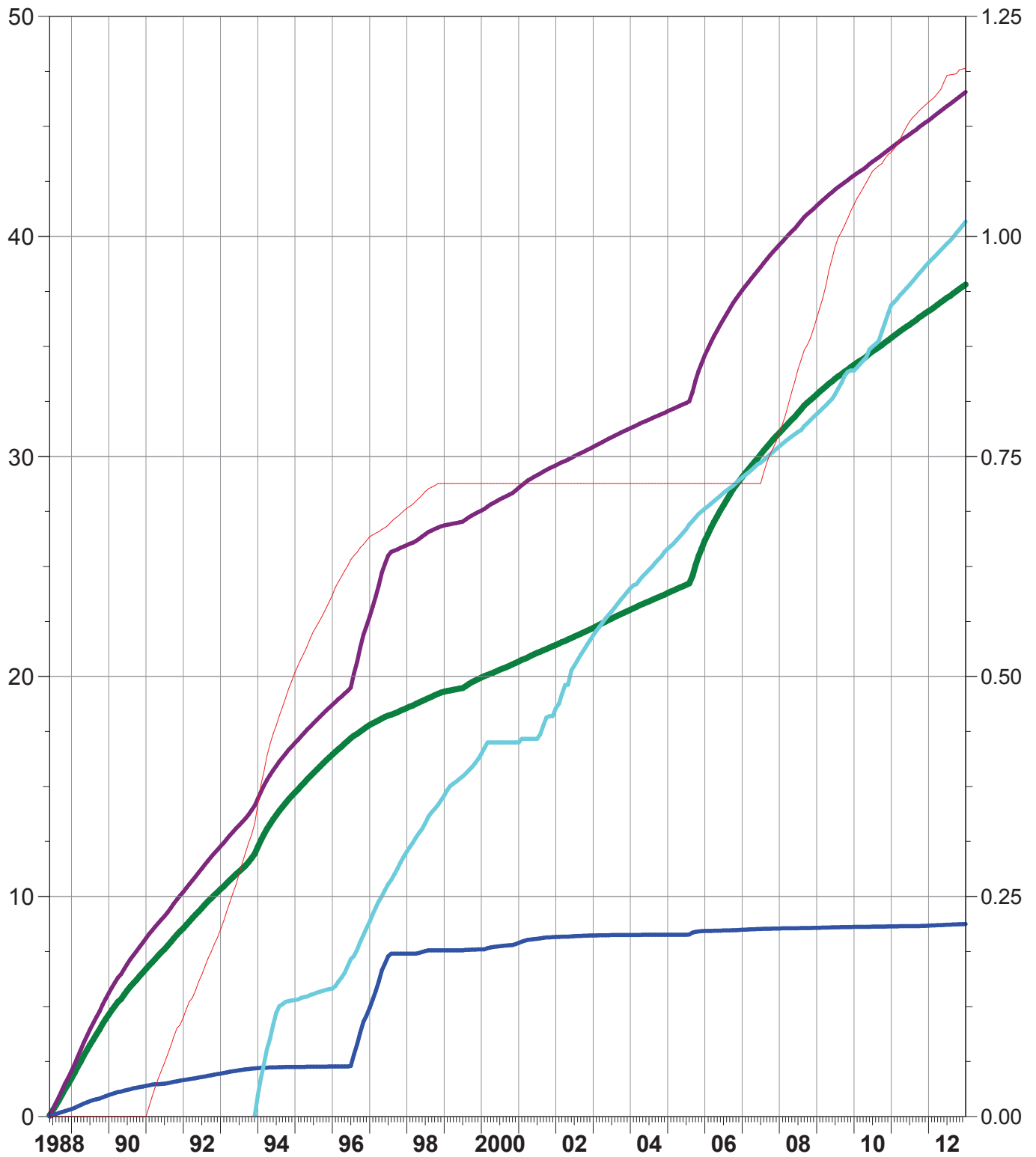
Cumulative Oil Prod : 37.81 Mm3

Cumulative Liquid Prod : 46.56 Mm3

Cumulative Water Prod : 8.75 Mm3

Cumulative Water Inj : 40.68 Mm3

Cumulative Gas Prod : 1.19 MMscm



# Pattern: P-18 Set: PIERSON UNIT

Axis 1 P-18

- Cumulative Oil Prod ( Mm3 )
- Cumulative Liquid Prod ( Mm3 )
- Cumulative Water Prod ( Mm3 )
- Cumulative Water Inj ( Mm3 )

Axis 2

- Cumulative Gas Prod ( MMscm )

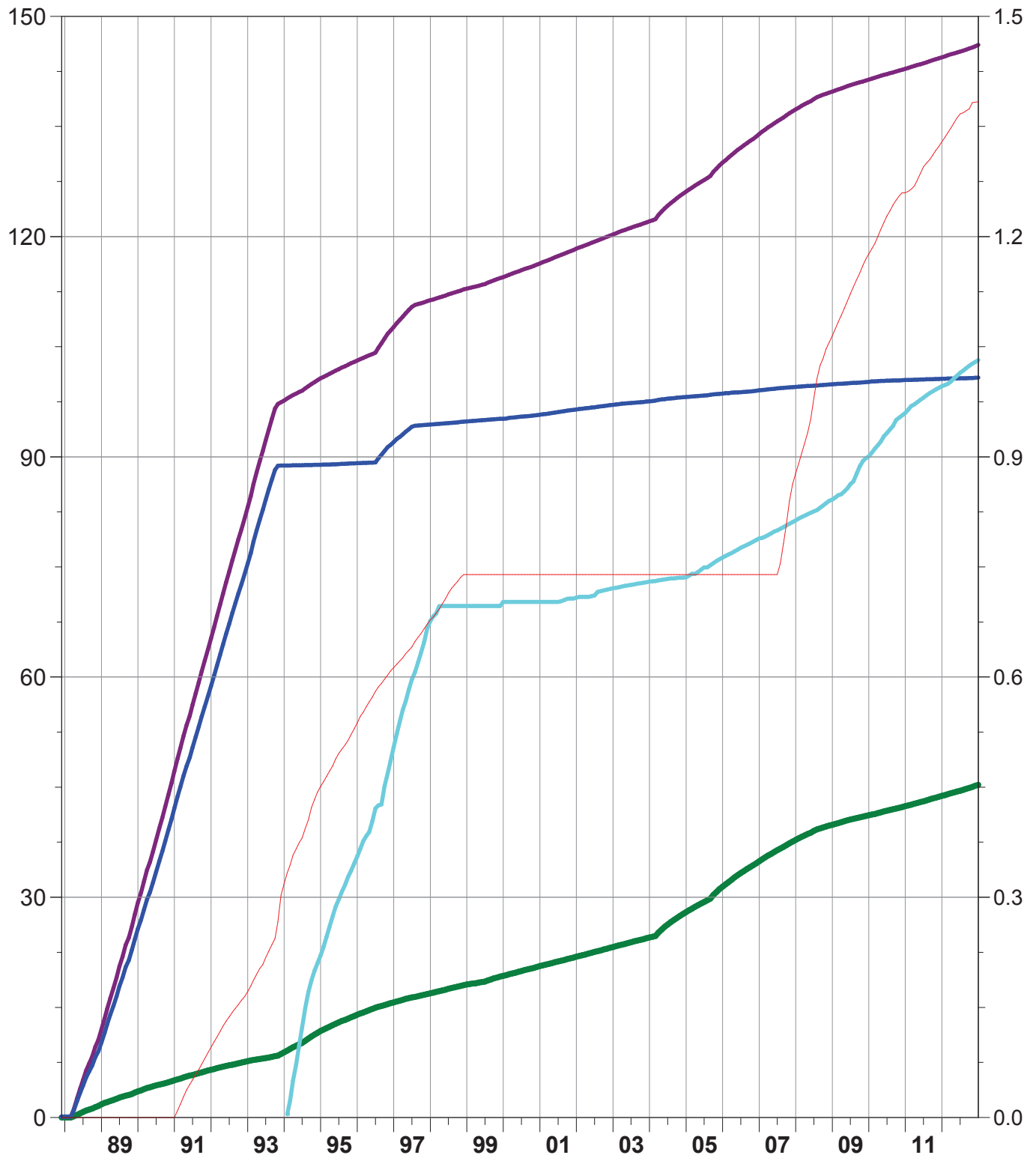
**Cumulative Oil Prod : 45.32 Mm3**

**Cumulative Liquid Prod : 146.10 Mm3**

**Cumulative Water Prod : 100.78 Mm3**

**Cumulative Water Inj : 103.18 Mm3**

**Cumulative Gas Prod : 1.38 MMscm**





# Pattern: P-19 Set: PIERSON UNIT

Axis 1 P-19

- Cumulative Oil Prod ( Mm3 )
- Cumulative Liquid Prod ( Mm3 )
- Cumulative Water Prod ( Mm3 )
- Cumulative Water Inj ( Mm3 )

Axis 2

- Cumulative Gas Prod ( MMscm )

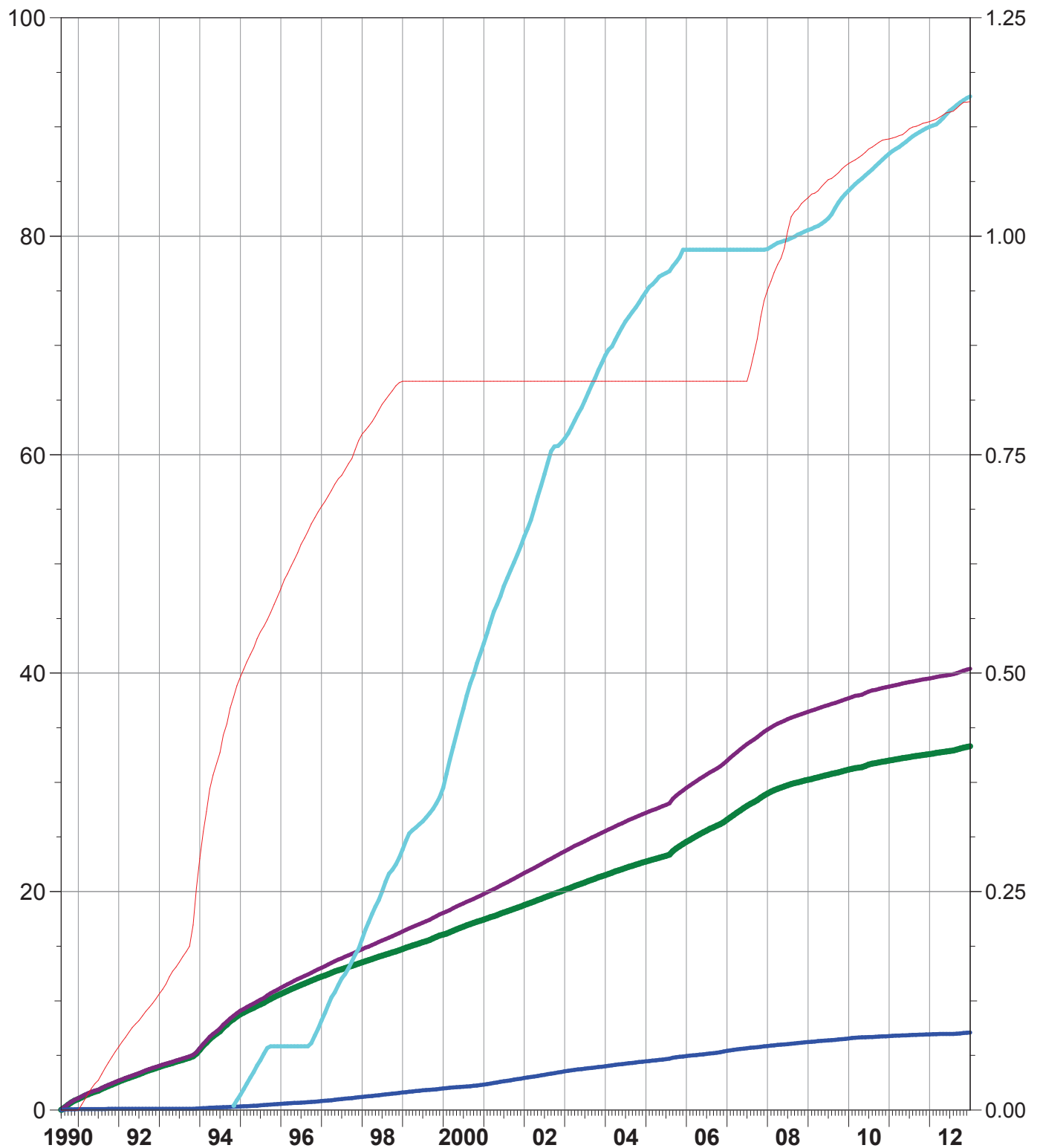
Cumulative Oil Prod : 33.30 Mm3

Cumulative Liquid Prod : 40.39 Mm3

Cumulative Water Prod : 7.09 Mm3

Cumulative Water Inj : 92.79 Mm3

Cumulative Gas Prod : 1.15 MMscm



# Pattern: P-20 Set: PIERSON UNIT

Axis 1 P-20

- Cumulative Oil Prod ( Mm3 )
- Cumulative Liquid Prod ( Mm3 )
- Cumulative Water Prod ( Mm3 )
- Cumulative Water Inj ( Mm3 )

Axis 2

- Cumulative Gas Prod ( MMscm )

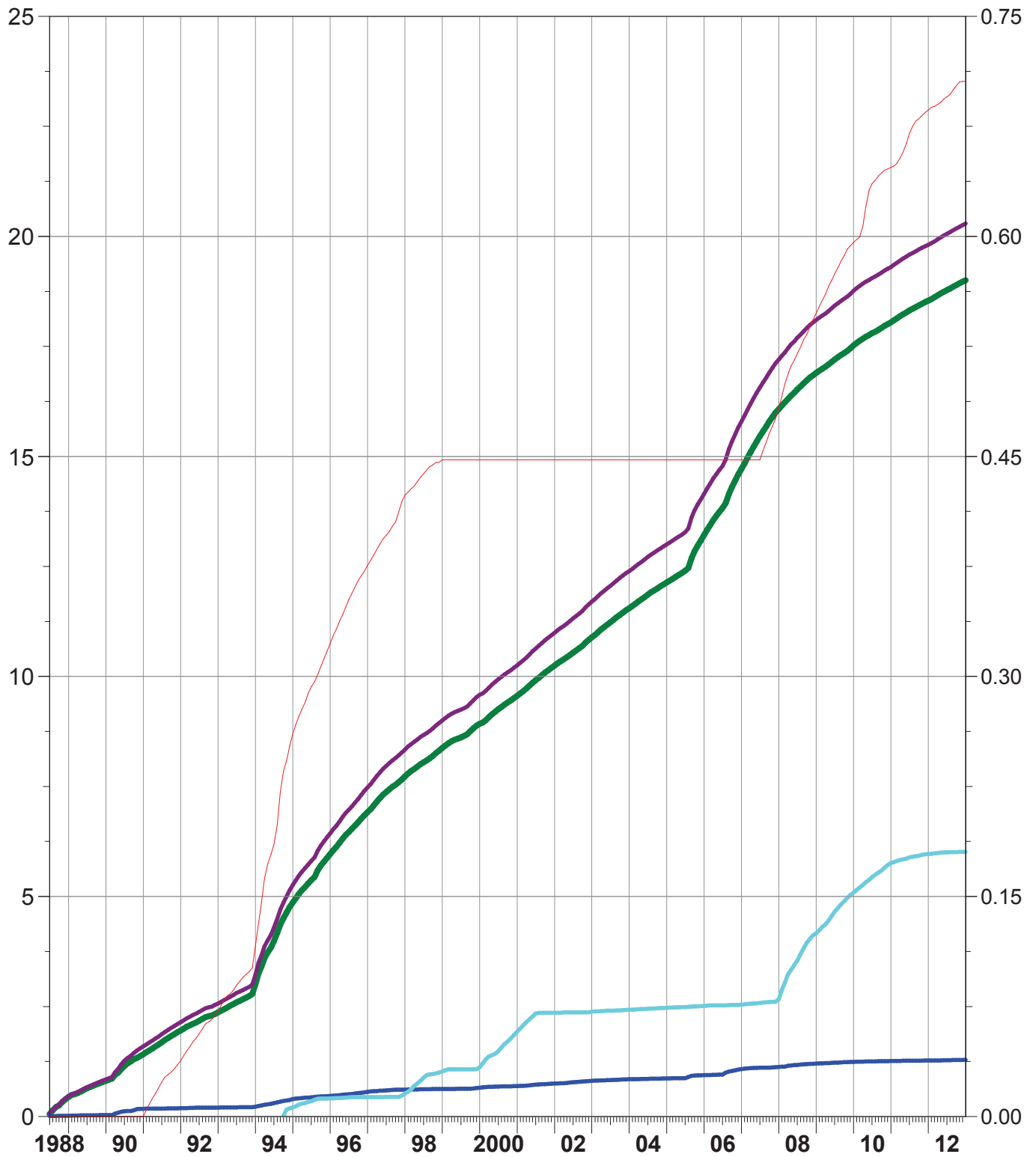
Cumulative Oil Prod : 19.00 Mm3

Cumulative Liquid Prod : 20.29 Mm3

Cumulative Water Prod : 1.29 Mm3

Cumulative Water Inj : 6.01 Mm3

Cumulative Gas Prod : 0.71 MMscm



# Pattern: P-21 Set: PIERSON UNIT

Axis 1 P-21

- Cumulative Oil Prod ( Mm3 )
- Cumulative Liquid Prod ( Mm3 )
- Cumulative Water Prod ( Mm3 )
- Cumulative Water Inj ( Mm3 )

Axis 2

- Cumulative Gas Prod ( MMscm )

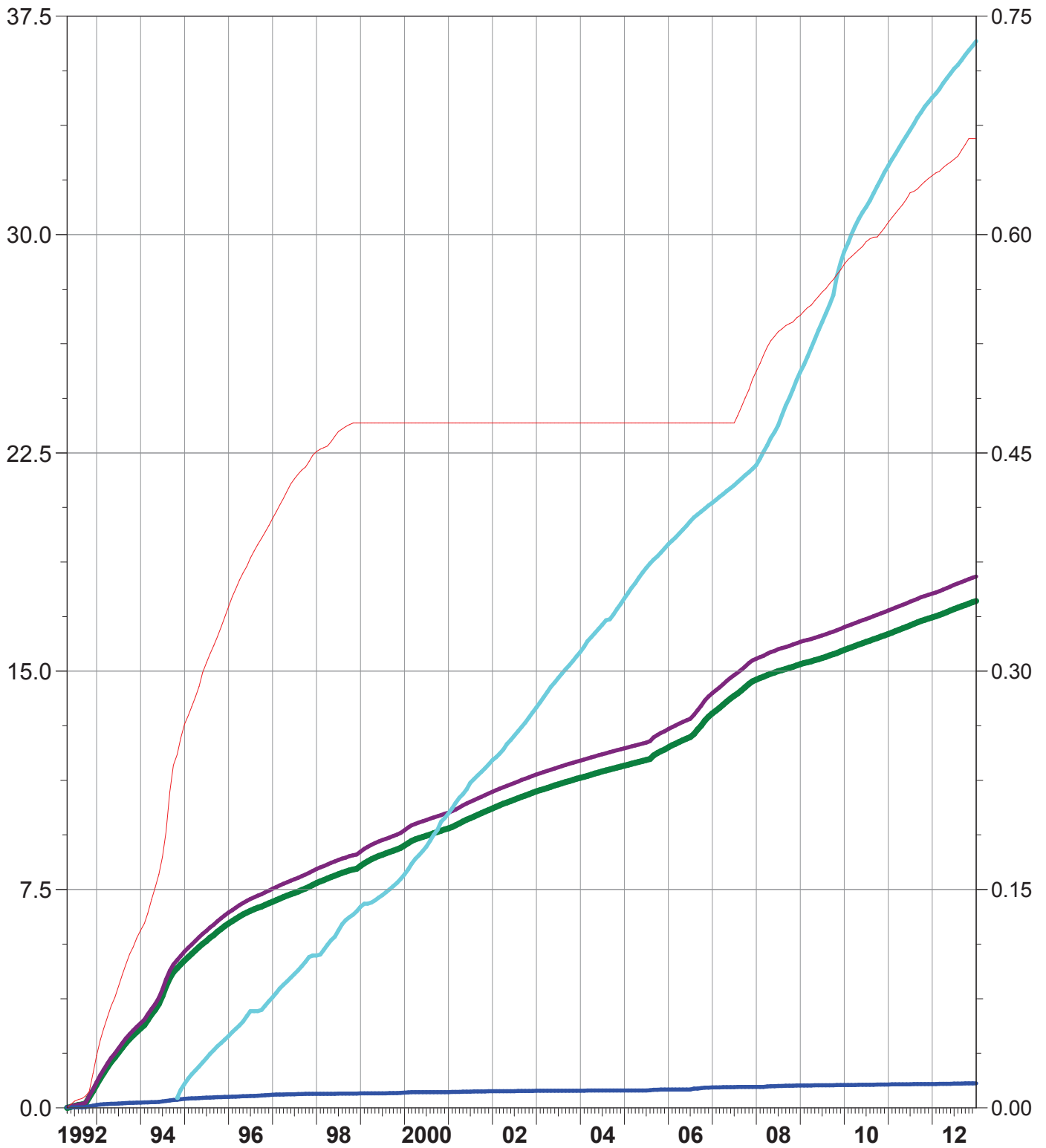
Cumulative Oil Prod : 17.41 Mm3

Cumulative Liquid Prod : 18.26 Mm3

Cumulative Water Prod : 0.84 Mm3

Cumulative Water Inj : 36.64 Mm3

Cumulative Gas Prod : 0.67 MMscm



# Pattern: P-22 Set: PIERSON UNIT

Axis 1 P-22

- Cumulative Oil Prod ( Mm3 )
- Cumulative Liquid Prod ( Mm3 )
- Cumulative Water Prod ( Mm3 )
- Cumulative Water Inj ( Mm3 )

Axis 2

- Cumulative Gas Prod ( MMscm )

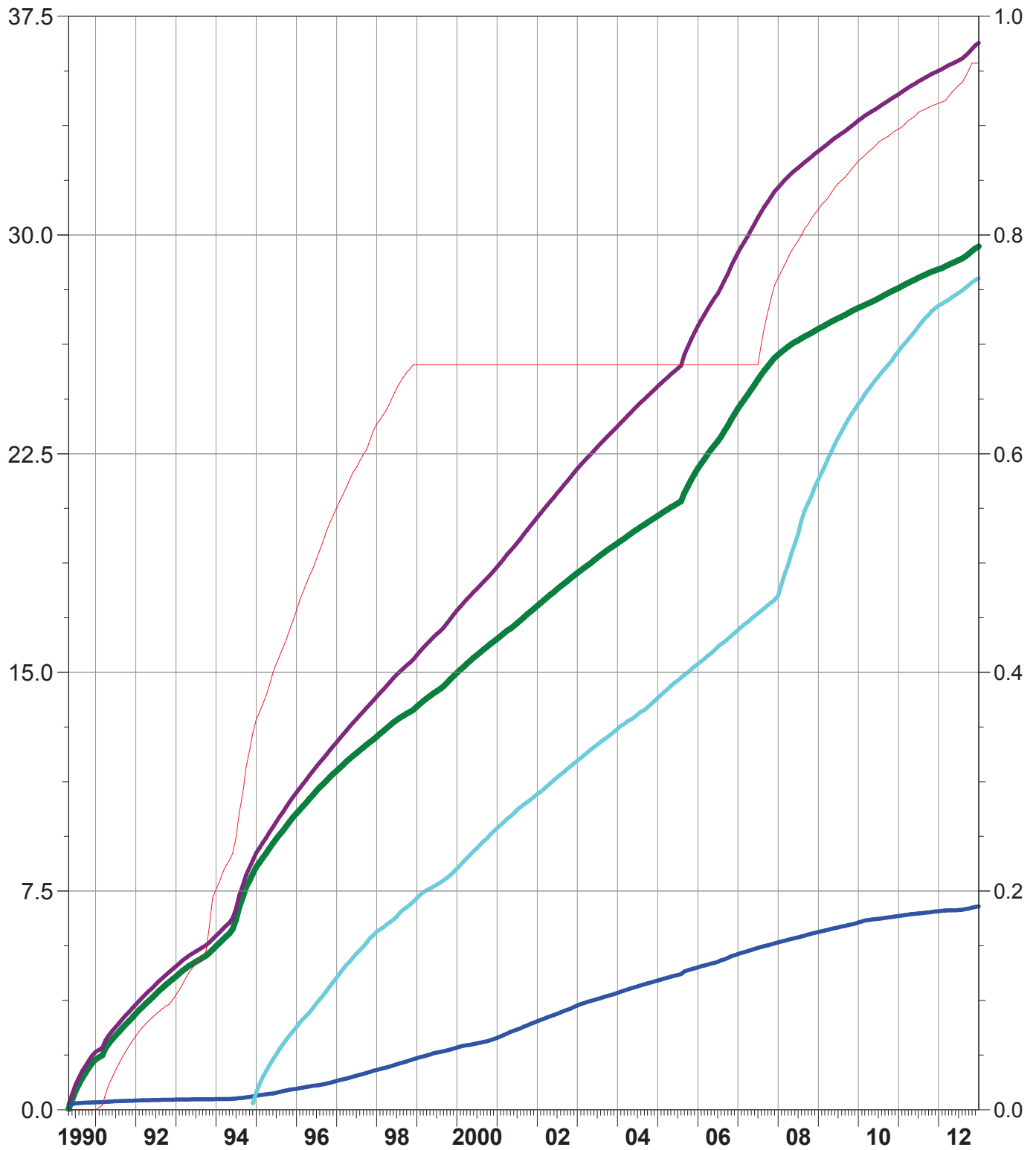
Cumulative Oil Prod : 29.61 Mm3

Cumulative Liquid Prod : 36.59 Mm3

Cumulative Water Prod : 6.98 Mm3

Cumulative Water Inj : 28.52 Mm3

Cumulative Gas Prod : 0.96 MMscm



# Pattern: P-23 Set: PIERSON UNIT

Axis 1 P-23

- Cumulative Oil Prod ( Mm3 )
- Cumulative Liquid Prod ( Mm3 )
- Cumulative Water Prod ( Mm3 )
- Cumulative Water Inj ( Mm3 )

Axis 2

- Cumulative Gas Prod ( MMscm )

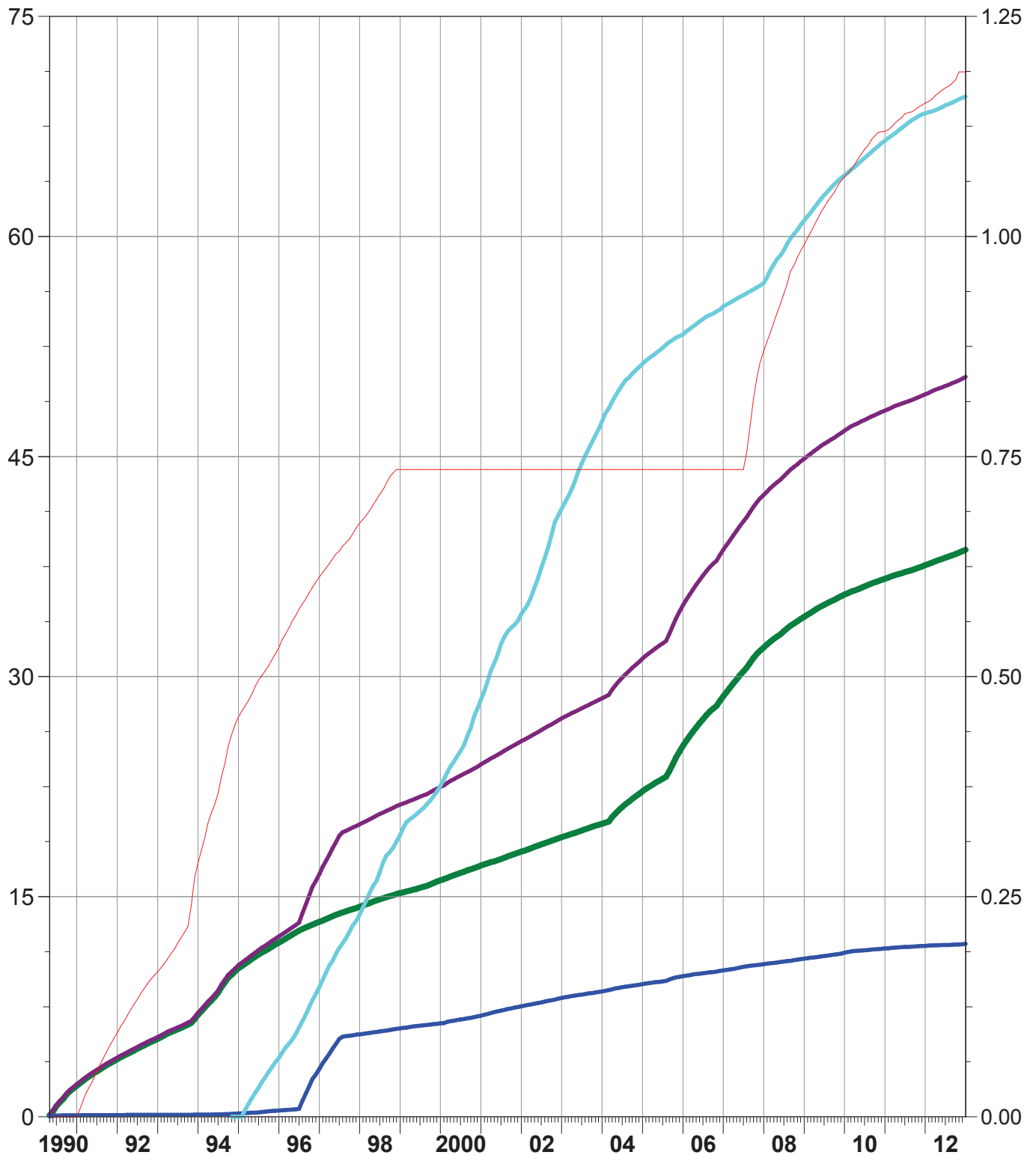
**Cumulative Oil Prod : 38.65 Mm3**

**Cumulative Liquid Prod : 50.43 Mm3**

**Cumulative Water Prod : 11.78 Mm3**

**Cumulative Water Inj : 69.53 Mm3**

**Cumulative Gas Prod : 1.19 MMscm**



# Pattern: P-24 Set: PIERSON UNIT

Axis 1 P-24

- Cumulative Oil Prod ( Mm3 )
- Cumulative Liquid Prod ( Mm3 )
- Cumulative Water Prod ( Mm3 )
- Cumulative Water Inj ( Mm3 )

Axis 2

- Cumulative Gas Prod ( MMscm )

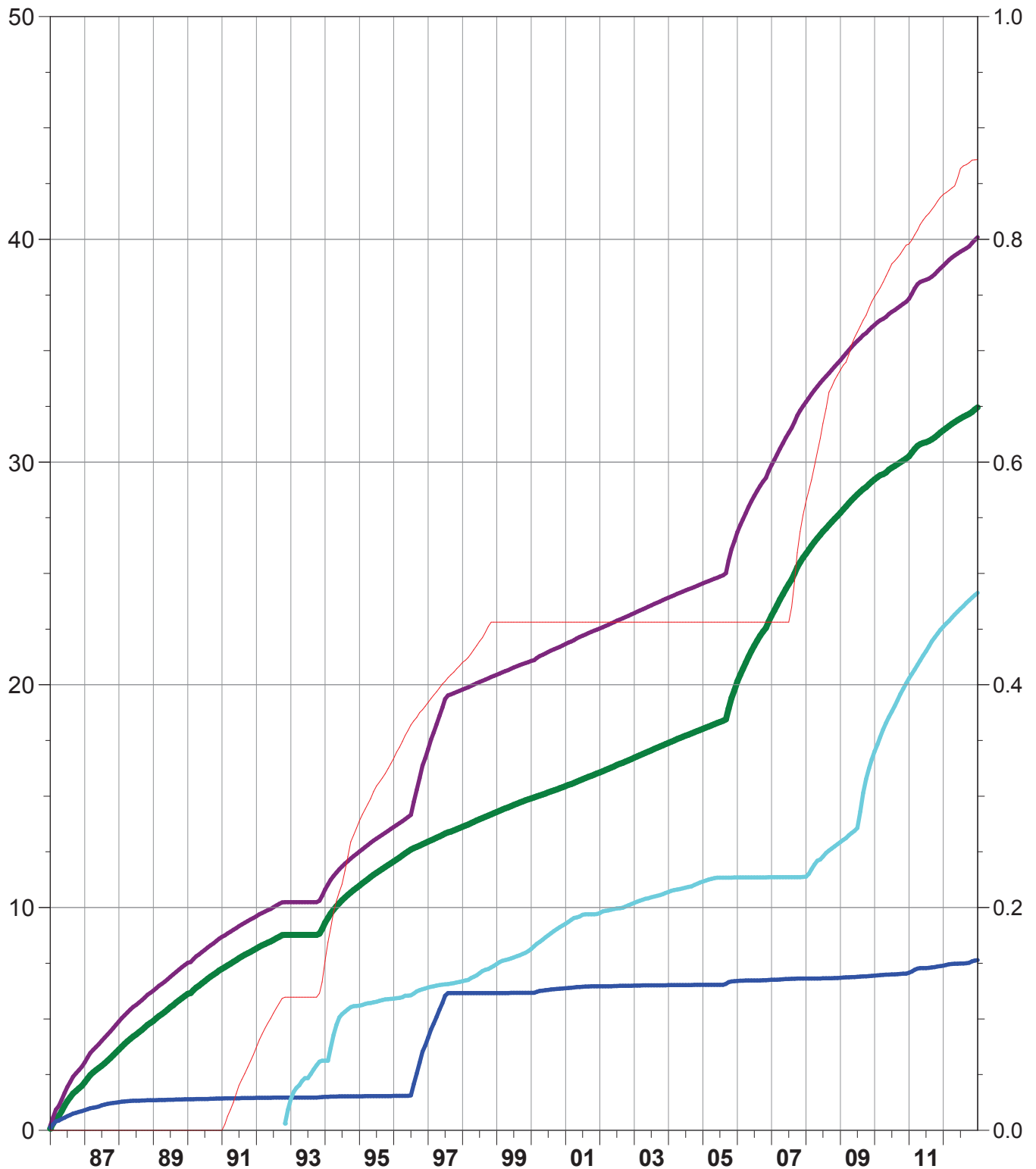
Cumulative Oil Prod : 32.46 Mm3

Cumulative Liquid Prod : 40.09 Mm3

Cumulative Water Prod : 7.64 Mm3

Cumulative Water Inj : 24.13 Mm3

Cumulative Gas Prod : 0.87 MMscm



# Pattern: P-25 Set: PIERSON UNIT

Axis 1 P-25

- Cumulative Oil Prod ( Mm3 )
- Cumulative Liquid Prod ( Mm3 )
- Cumulative Water Prod ( Mm3 )
- Cumulative Water Inj ( Mm3 )

Axis 2

- Cumulative Gas Prod ( MMscm )

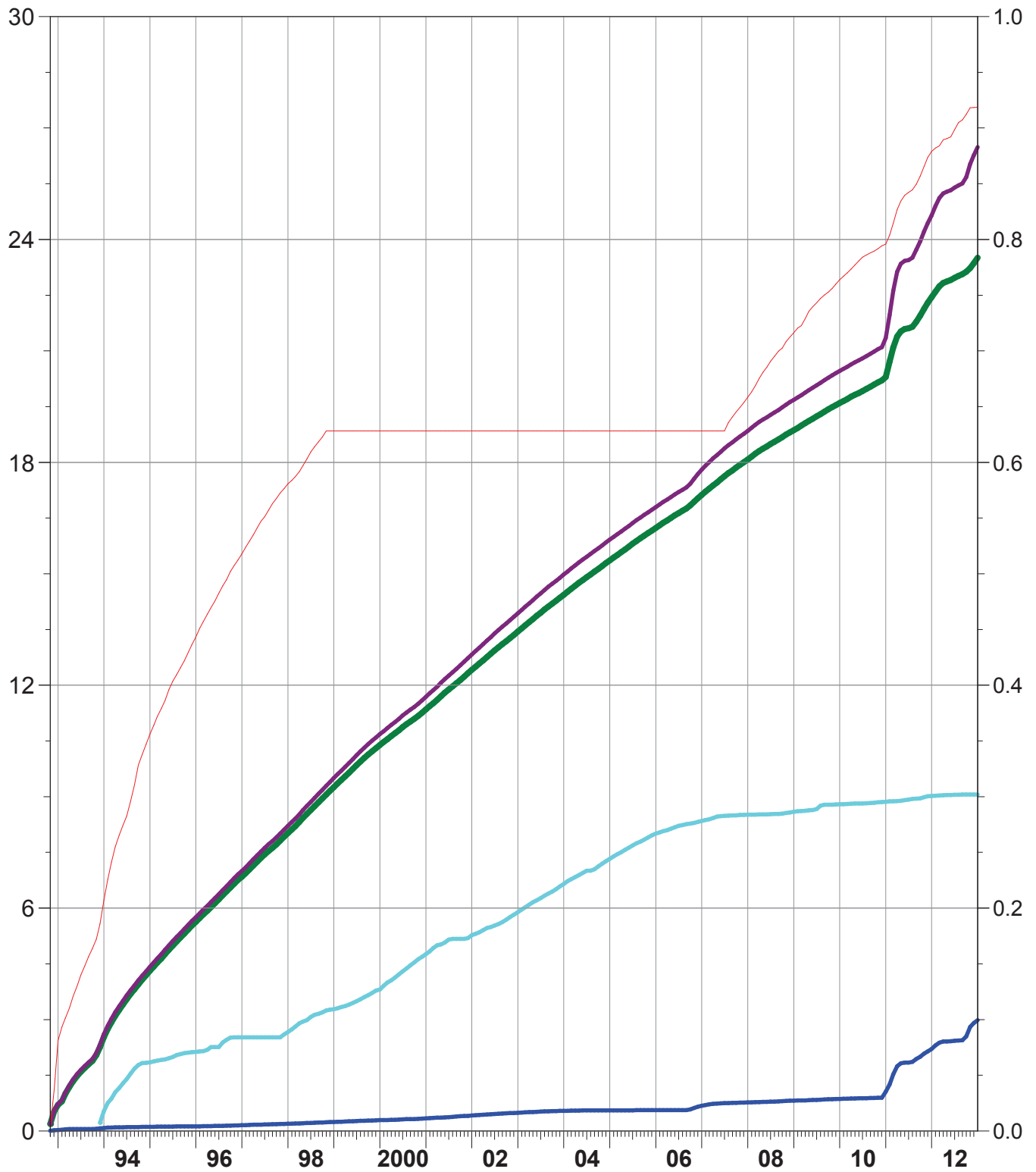
Cumulative Oil Prod : 23.51 Mm3

Cumulative Liquid Prod : 26.49 Mm3

Cumulative Water Prod : 2.98 Mm3

Cumulative Water Inj : 9.06 Mm3

Cumulative Gas Prod : 0.92 MMscm



# Pattern: P-26 Set: PIERSON UNIT

Axis 1 P-26

- Cumulative Oil Prod ( Mm3 )
- Cumulative Liquid Prod ( Mm3 )
- Cumulative Water Prod ( Mm3 )
- Cumulative Water Inj ( Mm3 )

Axis 2

- Cumulative Gas Prod ( MMscm )

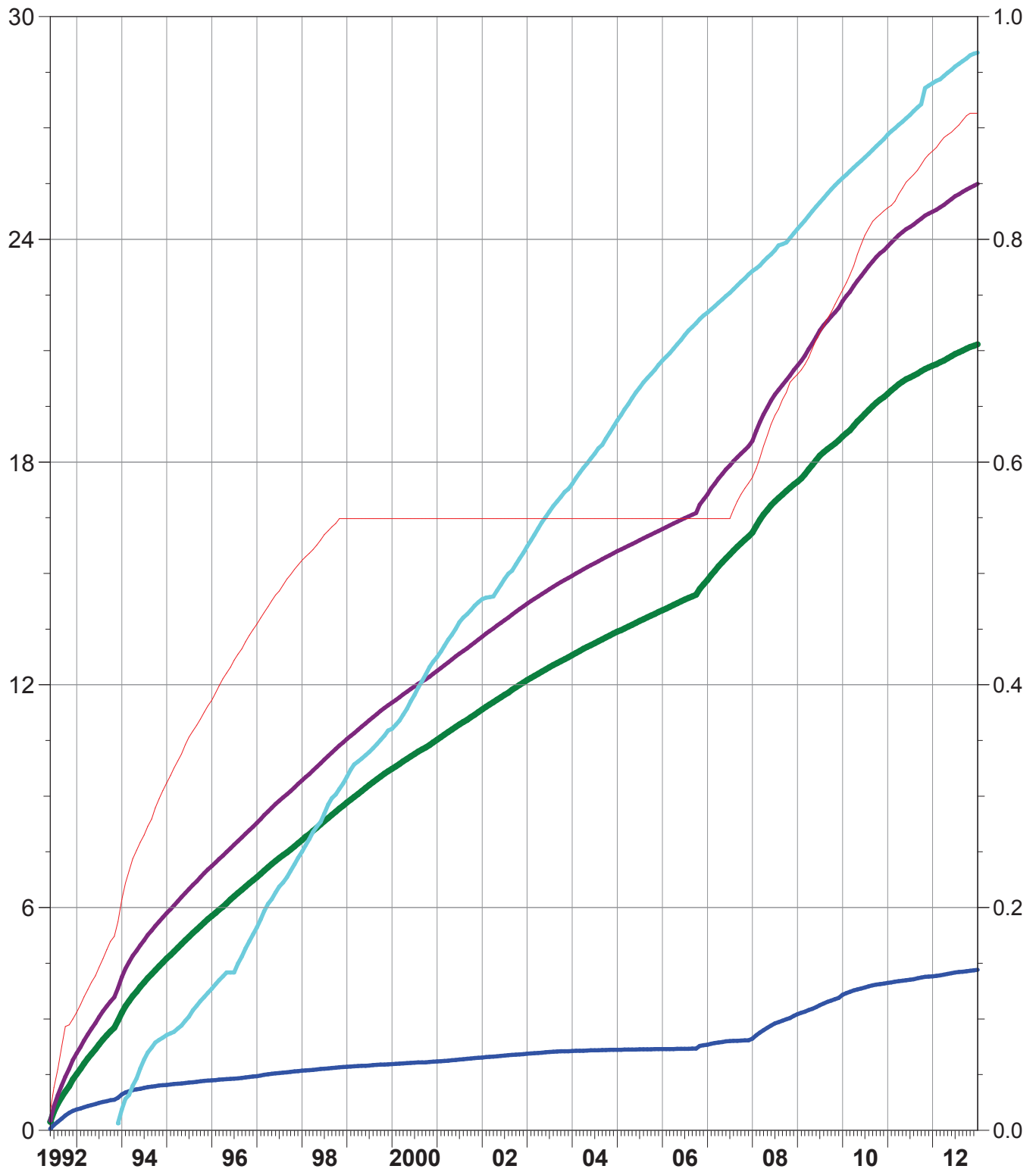
**Cumulative Oil Prod : 21.17 Mm3**

**Cumulative Liquid Prod : 25.49 Mm3**

**Cumulative Water Prod : 4.32 Mm3**

**Cumulative Water Inj : 29.03 Mm3**

**Cumulative Gas Prod : 0.91 MMscm**





# Pattern: P-27 Set: PIERSON UNIT

Axis 1 P-27

- Cumulative Oil Prod ( Mm3 )
- Cumulative Liquid Prod ( Mm3 )
- Cumulative Water Prod ( Mm3 )
- Cumulative Water Inj ( Mm3 )

Axis 2

- Cumulative Gas Prod ( MMscm )

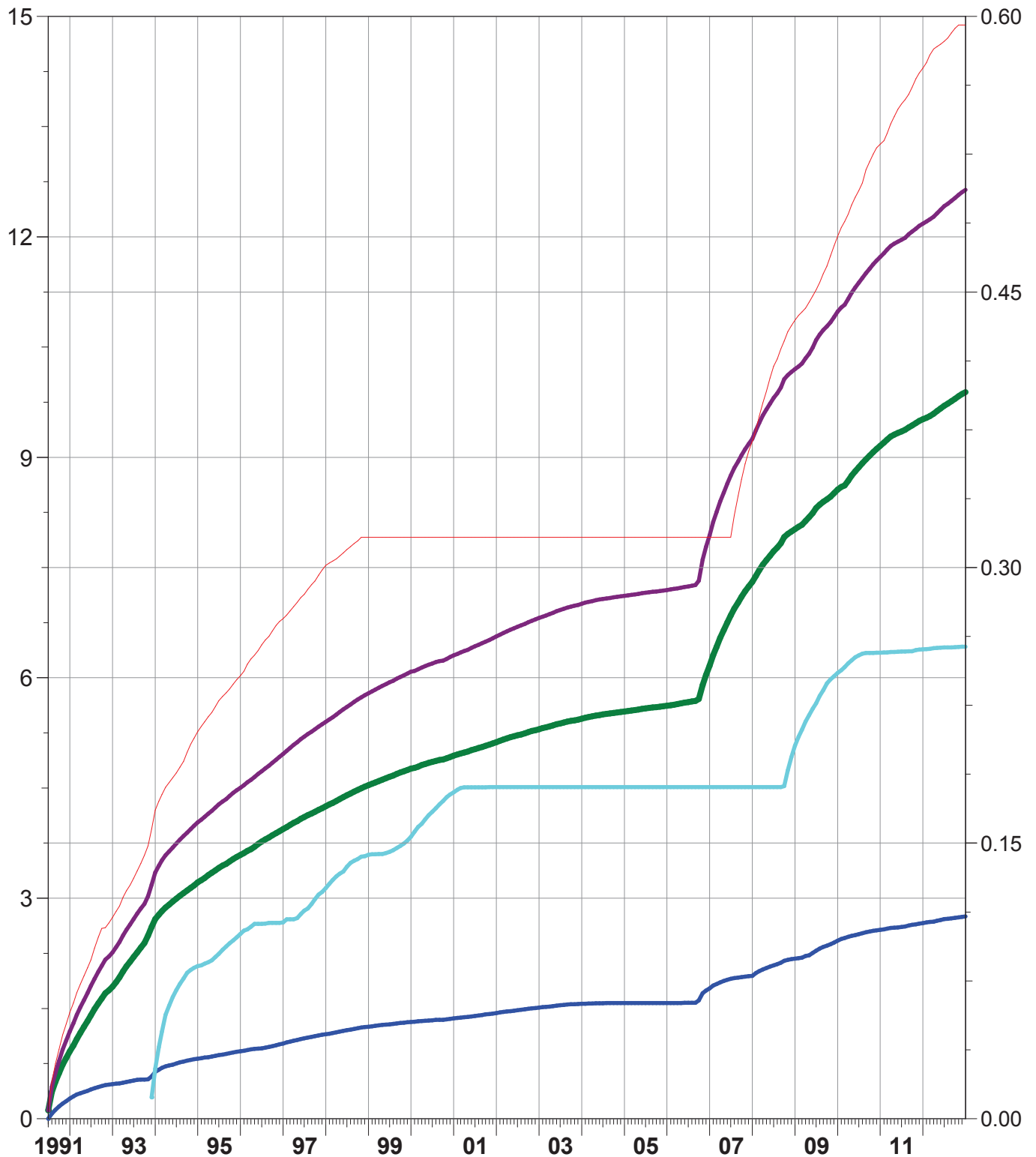
Cumulative Oil Prod : 9.89 Mm3

Cumulative Liquid Prod : 12.64 Mm3

Cumulative Water Prod : 2.75 Mm3

Cumulative Water Inj : 6.42 Mm3

Cumulative Gas Prod : 0.60 MMscm



# Pattern: P-28 Set: PIERSON UNIT

Axis 1 P-28

- Cumulative Oil Prod ( Mm3 )
- Cumulative Liquid Prod ( Mm3 )
- Cumulative Water Prod ( Mm3 )
- Cumulative Water Inj ( Mm3 )

Axis 2

- Cumulative Gas Prod ( MMscm )

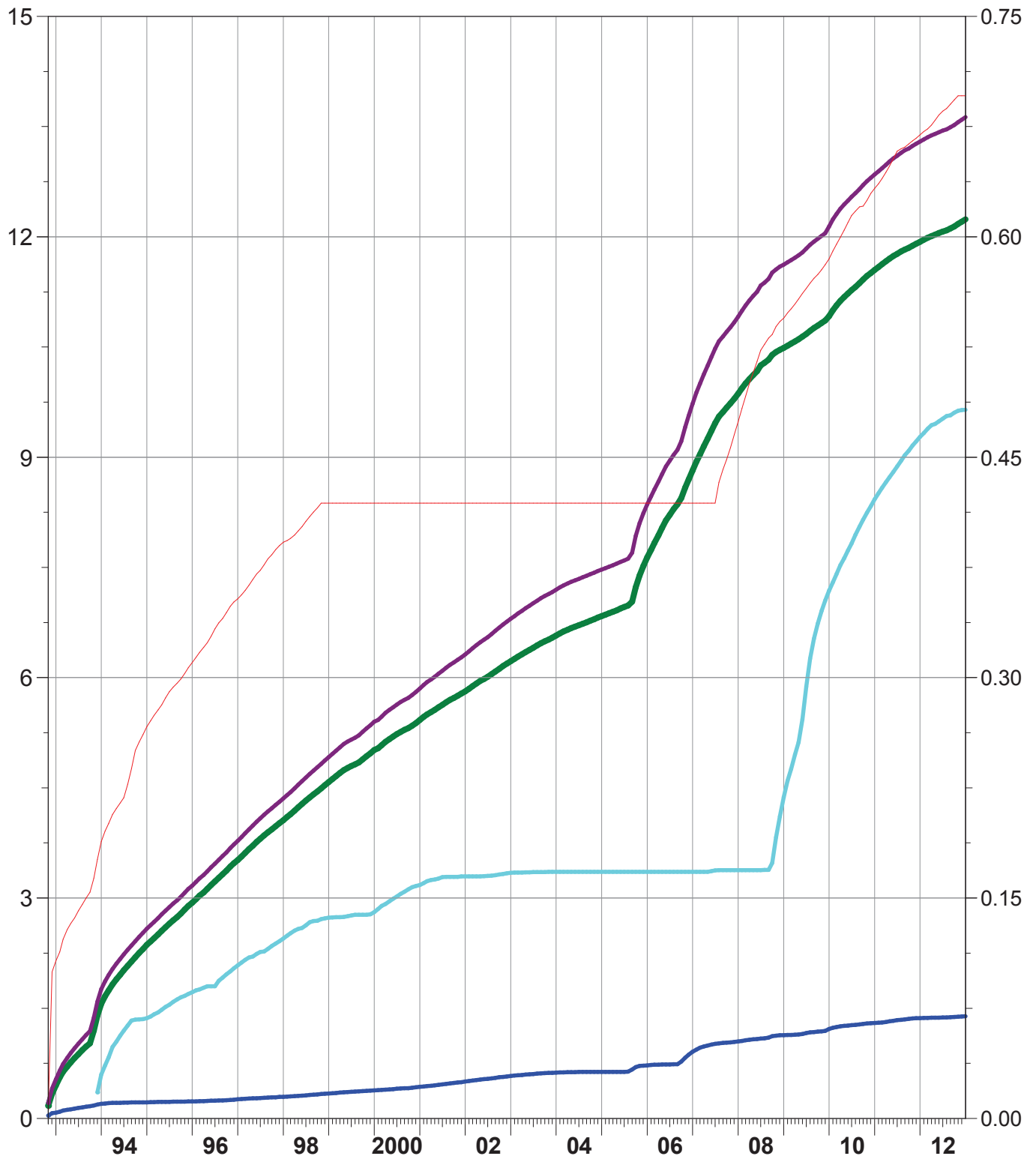
Cumulative Oil Prod : 12.24 Mm3

Cumulative Liquid Prod : 13.63 Mm3

Cumulative Water Prod : 1.39 Mm3

Cumulative Water Inj : 9.65 Mm3

Cumulative Gas Prod : 0.70 MMscm



# Pattern: P-29 Set: PIERSON UNIT

Axis 1 P-29

- Cumulative Oil Prod ( Mm3 )
- Cumulative Liquid Prod ( Mm3 )
- Cumulative Water Prod ( Mm3 )
- Cumulative Water Inj ( Mm3 )

Axis 2

- Cumulative Gas Prod ( MMscm )

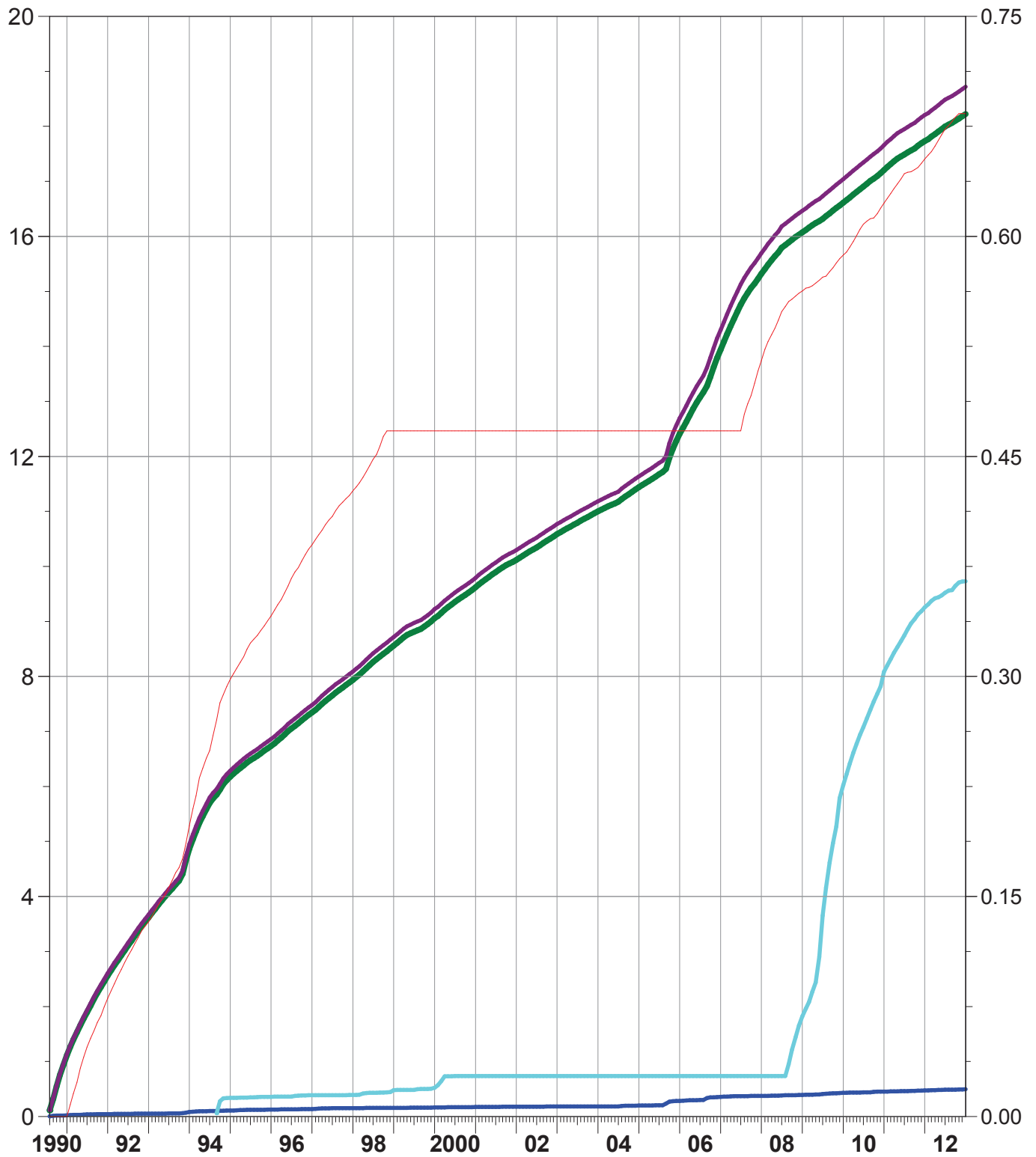
Cumulative Oil Prod : 18.23 Mm3

Cumulative Liquid Prod : 18.72 Mm3

Cumulative Water Prod : 0.49 Mm3

Cumulative Water Inj : 9.73 Mm3

Cumulative Gas Prod : 0.68 MMscm



# Pattern: P-30 Set: PIERSON UNIT

Axis 1 P-30

- Cumulative Oil Prod ( Mm3 )
- Cumulative Liquid Prod ( Mm3 )
- Cumulative Water Prod ( Mm3 )
- Cumulative Water Inj ( Mm3 )

Axis 2

- Cumulative Gas Prod ( MMscm )

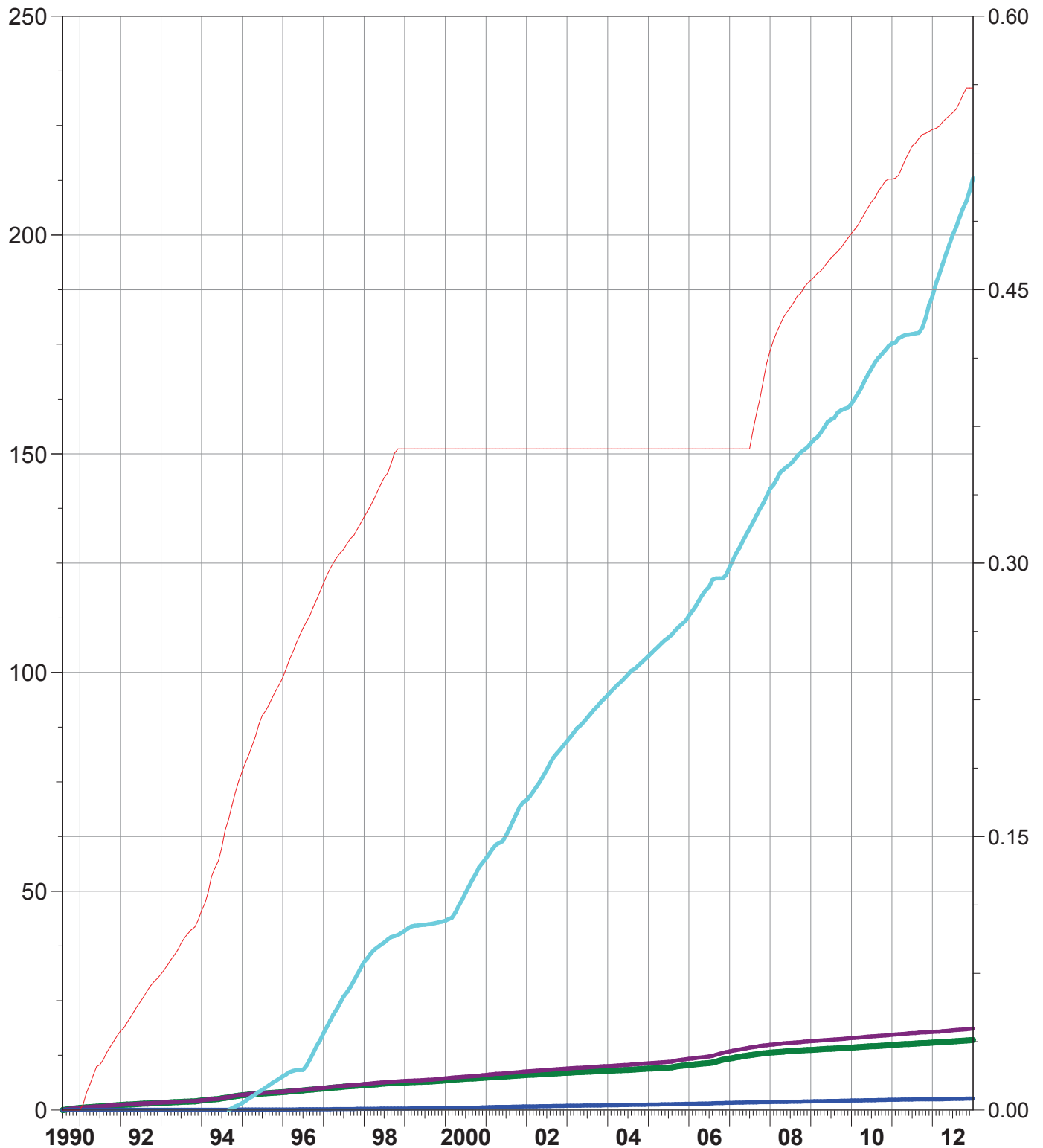
**Cumulative Oil Prod : 15.99 Mm3**

**Cumulative Liquid Prod : 18.61 Mm3**

**Cumulative Water Prod : 2.63 Mm3**

**Cumulative Water Inj : 213.01 Mm3**

**Cumulative Gas Prod : 0.56 MMscm**



# Pattern: P-31 Set: PIERSON UNIT

Axis 1 P-31

Cumulative Oil Prod ( Mm3 )  
Cumulative Liquid Prod ( Mm3 )  
Cumulative Water Prod ( Mm3 )  
Cumulative Water Inj ( Mm3 )

Axis 2

Cumulative Gas Prod ( MMscm )

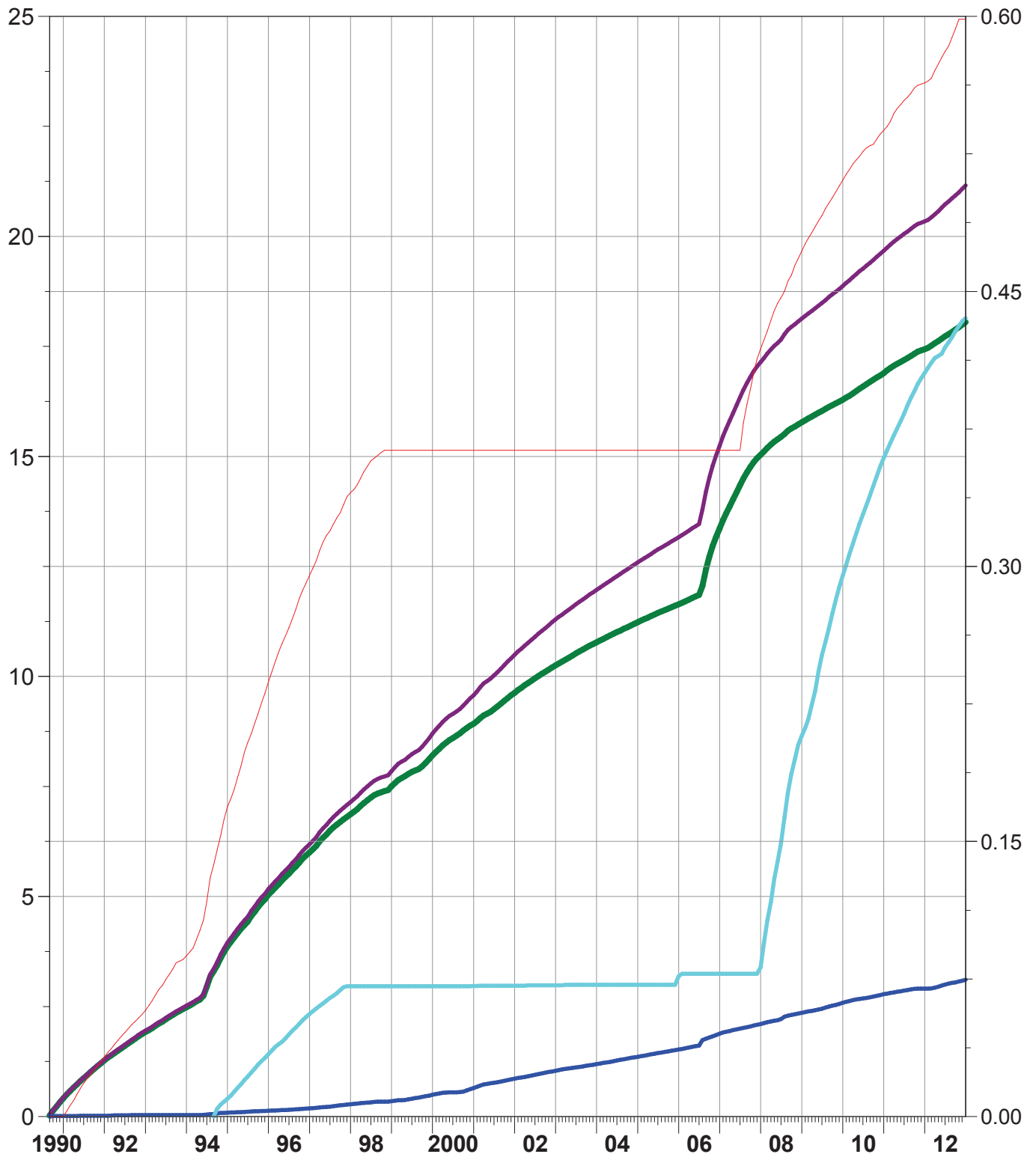
Cumulative Oil Prod : 18.05 Mm3

Cumulative Liquid Prod : 21.16 Mm3

Cumulative Water Prod : 3.11 Mm3

Cumulative Water Inj : 18.14 Mm3

Cumulative Gas Prod : 0.60 MMscm



# Pattern: P-32 Set: PIERSON UNIT

Axis 1 P-32

- Cumulative Oil Prod ( Mm3 )
- Cumulative Liquid Prod ( Mm3 )
- Cumulative Water Prod ( Mm3 )
- Cumulative Water Inj ( Mm3 )

Axis 2

- Cumulative Gas Prod ( MMscm )

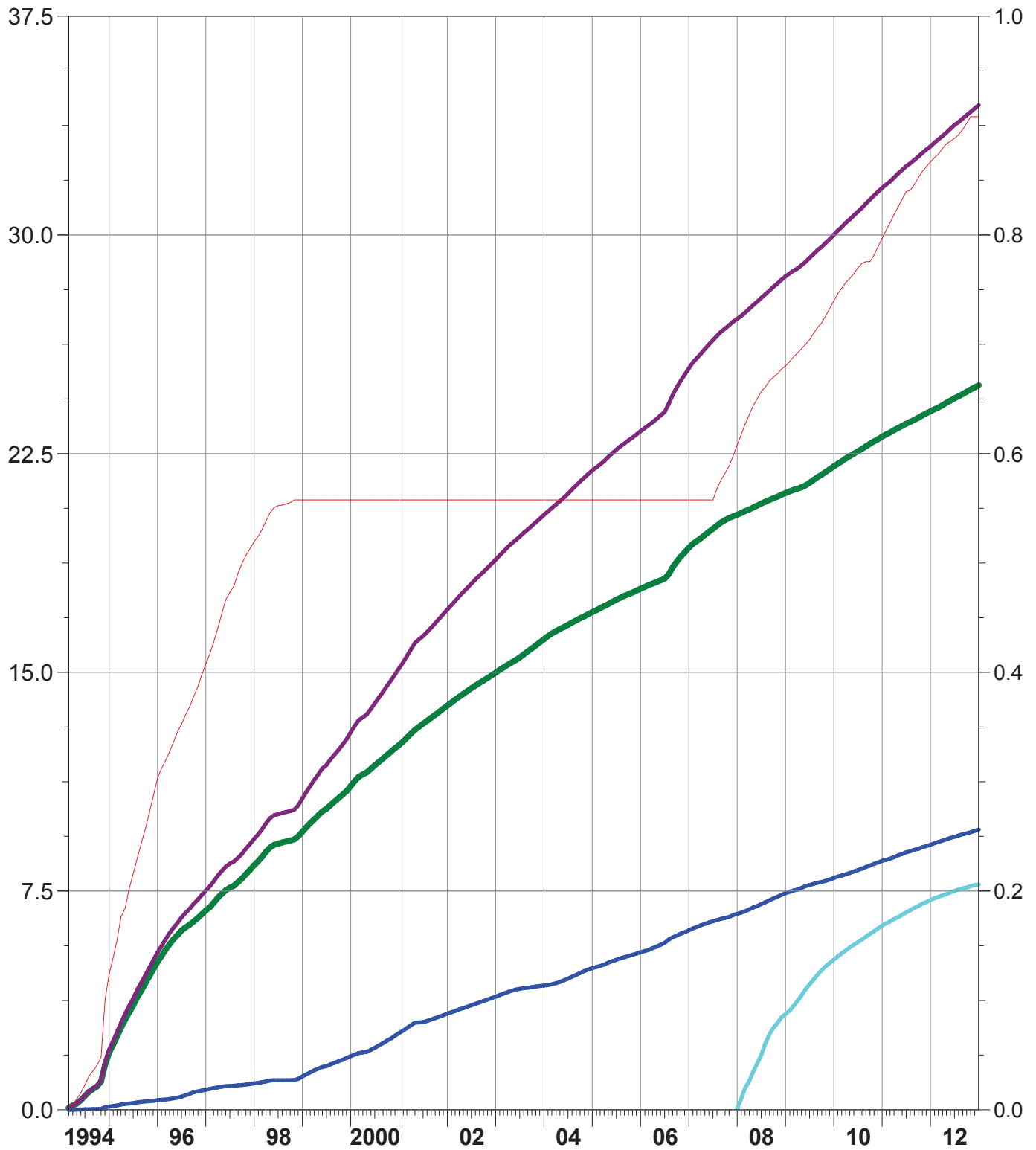
Cumulative Oil Prod : 24.85 Mm3

Cumulative Liquid Prod : 34.46 Mm3

Cumulative Water Prod : 9.61 Mm3

Cumulative Water Inj : 7.72 Mm3

Cumulative Gas Prod : 0.91 MMscm



# Pattern: P-33 Set: PIERSON UNIT

Axis 1 P-33

- Cumulative Oil Prod ( Mm3 )
- Cumulative Liquid Prod ( Mm3 )
- Cumulative Water Prod ( Mm3 )
- Cumulative Water Inj ( Mm3 )

Axis 2

- Cumulative Gas Prod ( MMscm )

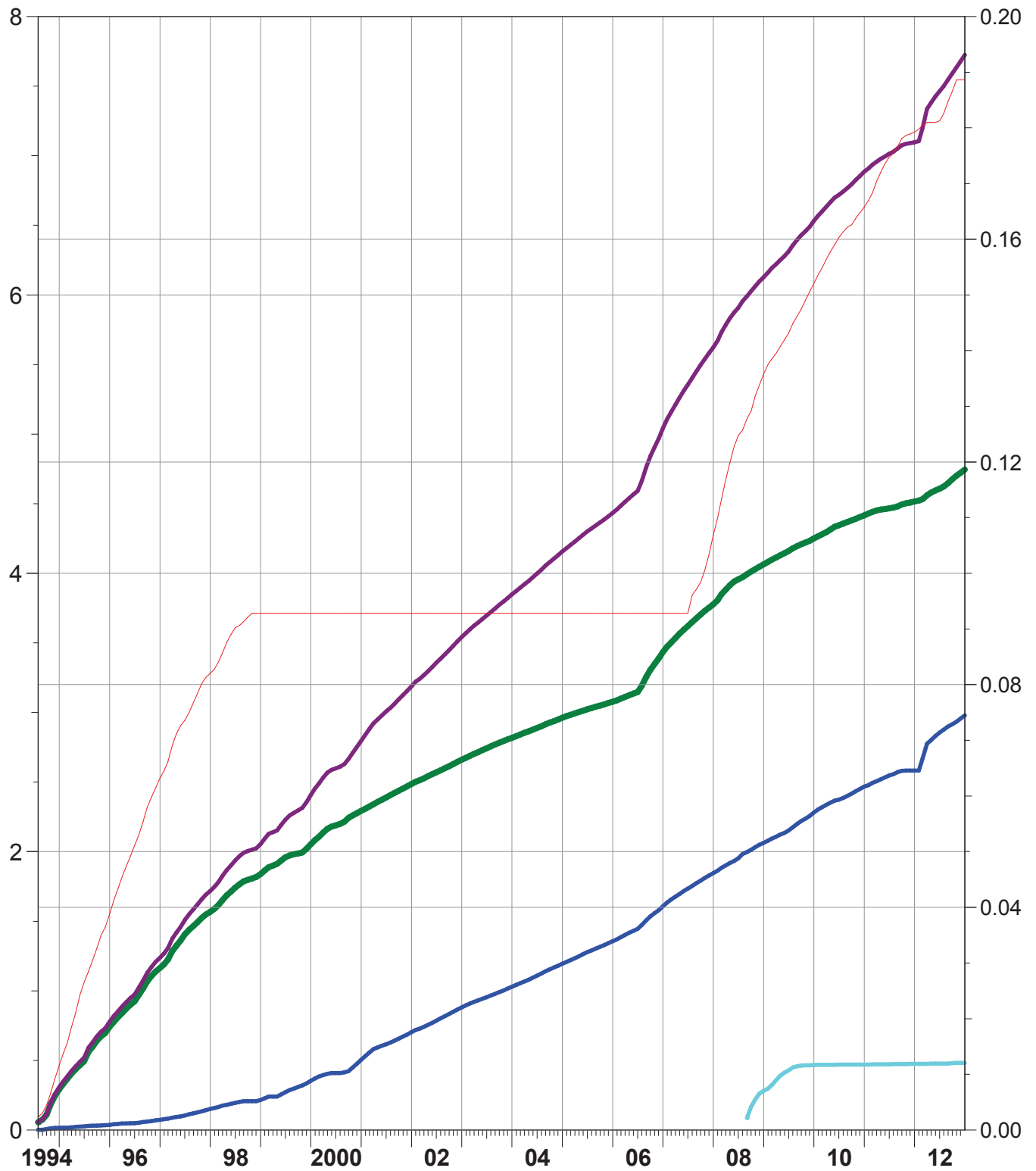
Cumulative Oil Prod : 4.75 Mm3

Cumulative Liquid Prod : 7.72 Mm3

Cumulative Water Prod : 2.98 Mm3

Cumulative Water Inj : 0.48 Mm3

Cumulative Gas Prod : 0.19 MMscm



# Pattern: P-34 Set: PIERSON UNIT

Axis 1 P-34

- Cumulative Oil Prod ( Mm3 )
- Cumulative Liquid Prod ( Mm3 )
- Cumulative Water Prod ( Mm3 )
- Cumulative Water Inj ( Mm3 )

Axis 2

- Cumulative Gas Prod ( MMscm )

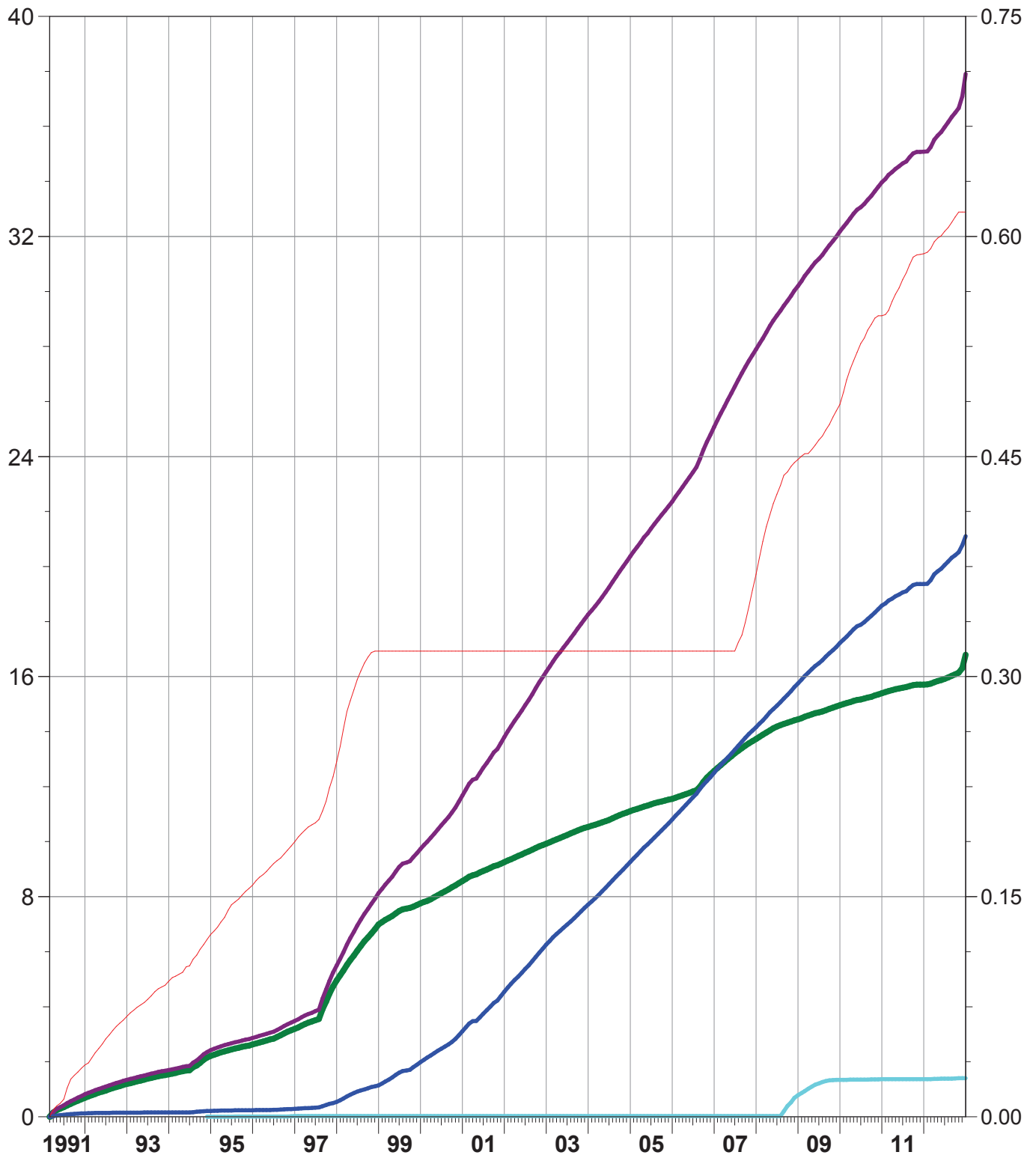
Cumulative Oil Prod : 16.80 Mm3

Cumulative Liquid Prod : 37.91 Mm3

Cumulative Water Prod : 21.11 Mm3

Cumulative Water Inj : 1.40 Mm3

Cumulative Gas Prod : 0.62 MMscm





# Pattern: P-35 Set: PIERSON UNIT

Axis 1 P-35

Cumulative Oil Prod ( Mm3 )  
Cumulative Liquid Prod ( Mm3 )  
Cumulative Water Prod ( Mm3 )  
Cumulative Water Inj ( Mm3 )

Axis 2

Cumulative Gas Prod ( MMscm )

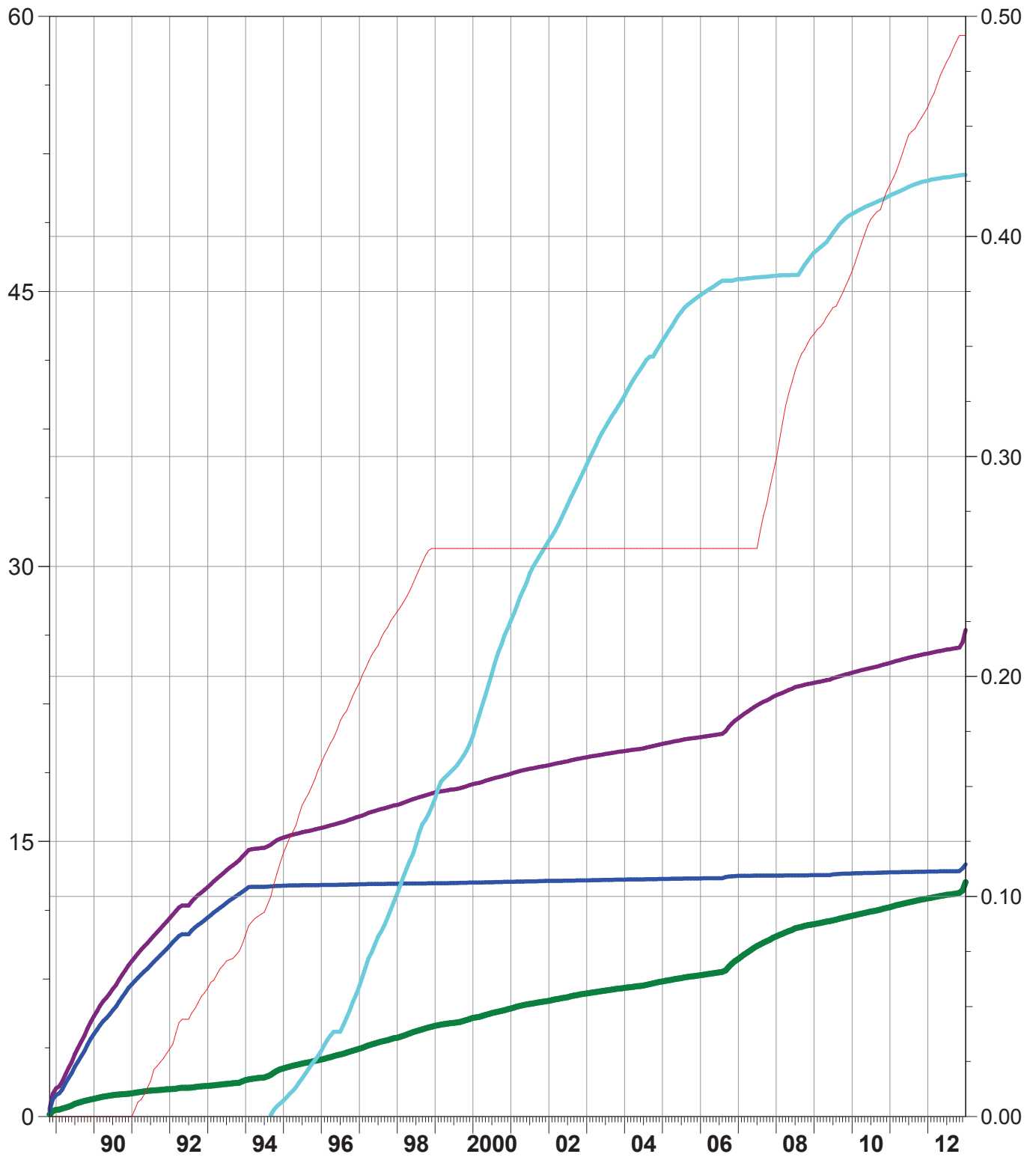
Cumulative Oil Prod : 12.79 Mm3

Cumulative Liquid Prod : 26.54 Mm3

Cumulative Water Prod : 13.75 Mm3

Cumulative Water Inj : 51.36 Mm3

Cumulative Gas Prod : 0.49 MMscm



# Pattern: P-36 Set: PIERSON UNIT

Axis 1 P-36

- Cumulative Oil Prod ( Mm3 )
- Cumulative Liquid Prod ( Mm3 )
- Cumulative Water Prod ( Mm3 )
- Cumulative Water Inj ( Mm3 )

Axis 2

- Cumulative Gas Prod ( MMscm )

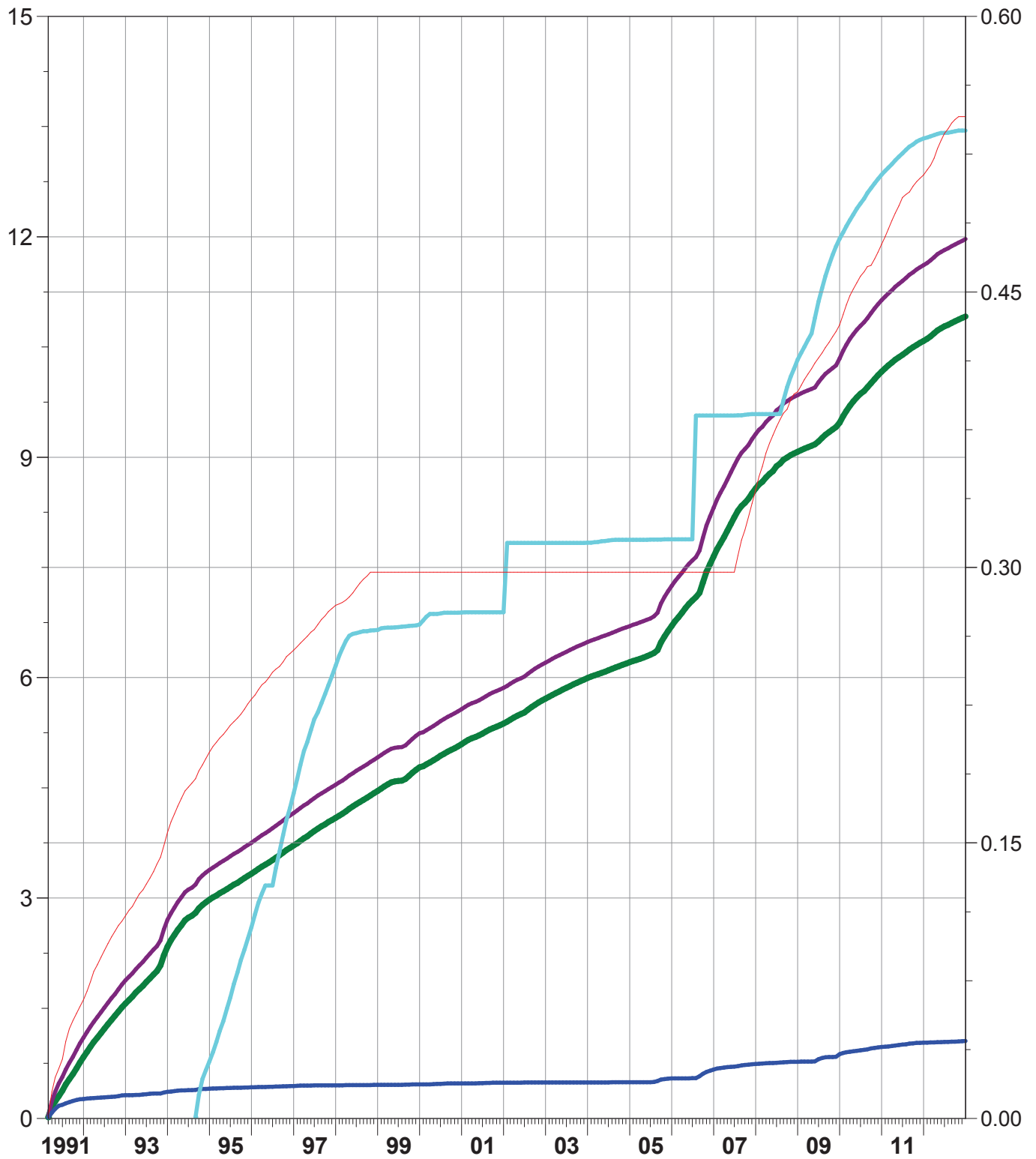
Cumulative Oil Prod : 10.92 Mm3

Cumulative Liquid Prod : 11.97 Mm3

Cumulative Water Prod : 1.05 Mm3

Cumulative Water Inj : 13.45 Mm3

Cumulative Gas Prod : 0.55 MMscm



# Pattern: P-37 Set: PIERSON UNIT

Axis 1 P-37

- Cumulative Oil Prod ( Mm3 )
- Cumulative Liquid Prod ( Mm3 )
- Cumulative Water Prod ( Mm3 )
- Cumulative Water Inj ( Mm3 )

Axis 2

- Cumulative Gas Prod ( MMscm )

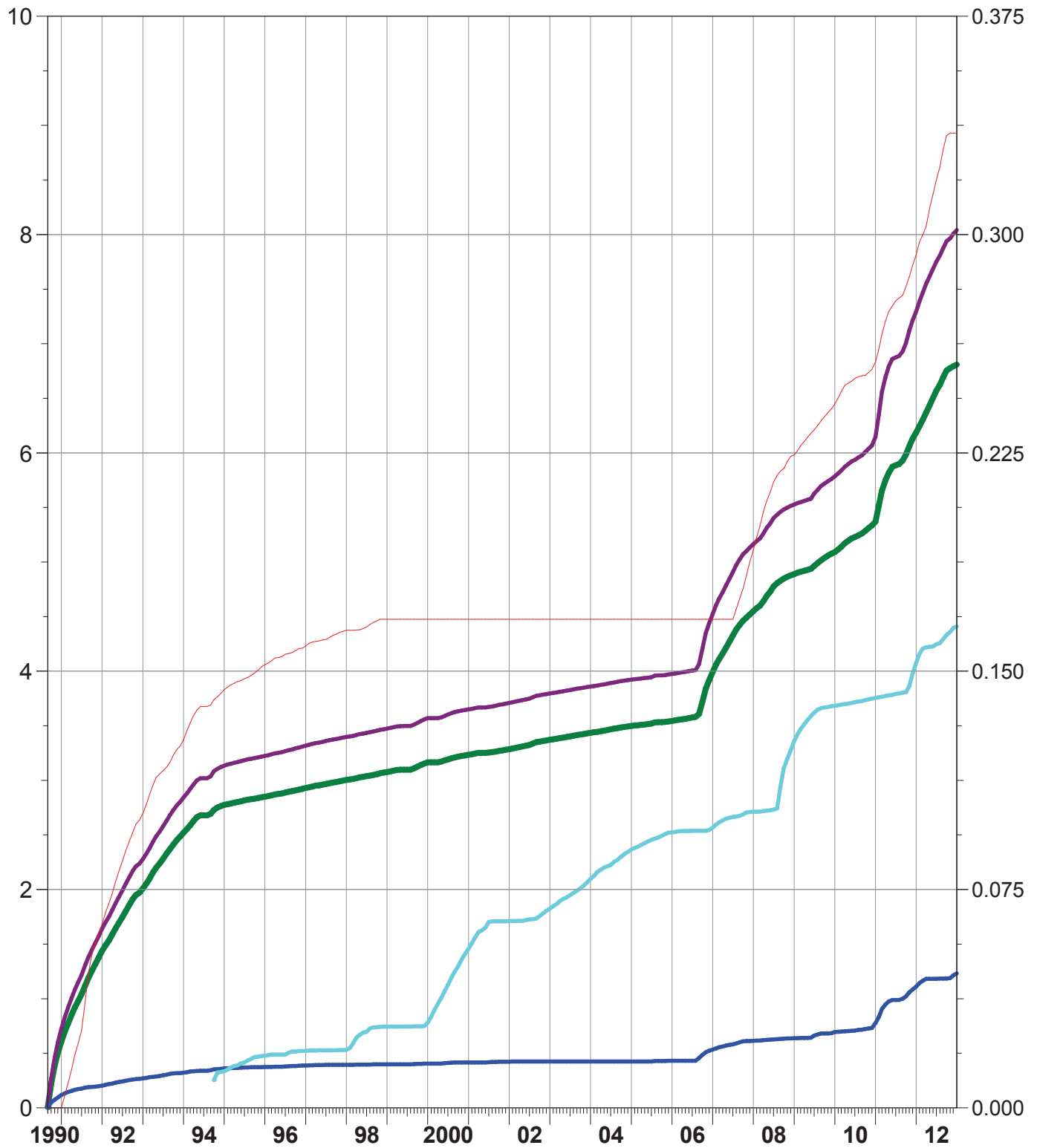
Cumulative Oil Prod : 6.81 Mm3

Cumulative Liquid Prod : 8.04 Mm3

Cumulative Water Prod : 1.23 Mm3

Cumulative Water Inj : 4.41 Mm3

Cumulative Gas Prod : 0.33 MMscm



# Pattern: P-38 Set: PIERSON UNIT

Axis 1 P-38

- Cumulative Oil Prod ( Mm3 )
- Cumulative Liquid Prod ( Mm3 )
- Cumulative Water Prod ( Mm3 )
- Cumulative Water Inj ( Mm3 )

Axis 2

- Cumulative Gas Prod ( MMscm )

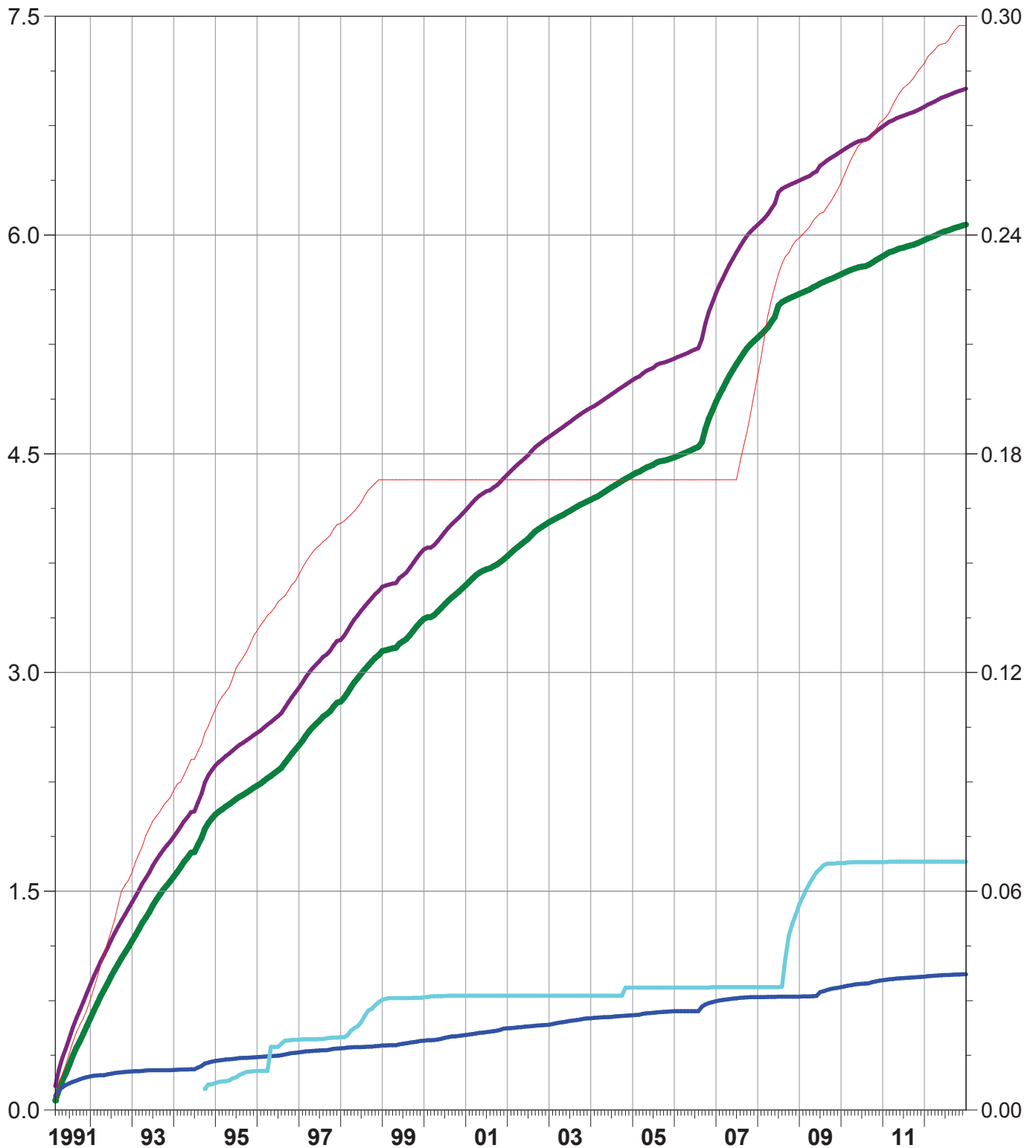
Cumulative Oil Prod : 6.07 Mm3

Cumulative Liquid Prod : 7.00 Mm3

Cumulative Water Prod : 0.93 Mm3

Cumulative Water Inj : 1.70 Mm3

Cumulative Gas Prod : 0.30 MMscm



# Pattern: P-39 Set: PIERSON UNIT

Axis 1 P-39

- Cumulative Oil Prod ( Mm3 )
- Cumulative Liquid Prod ( Mm3 )
- Cumulative Water Prod ( Mm3 )
- Cumulative Water Inj ( Mm3 )

Axis 2

- Cumulative Gas Prod ( MMscm )

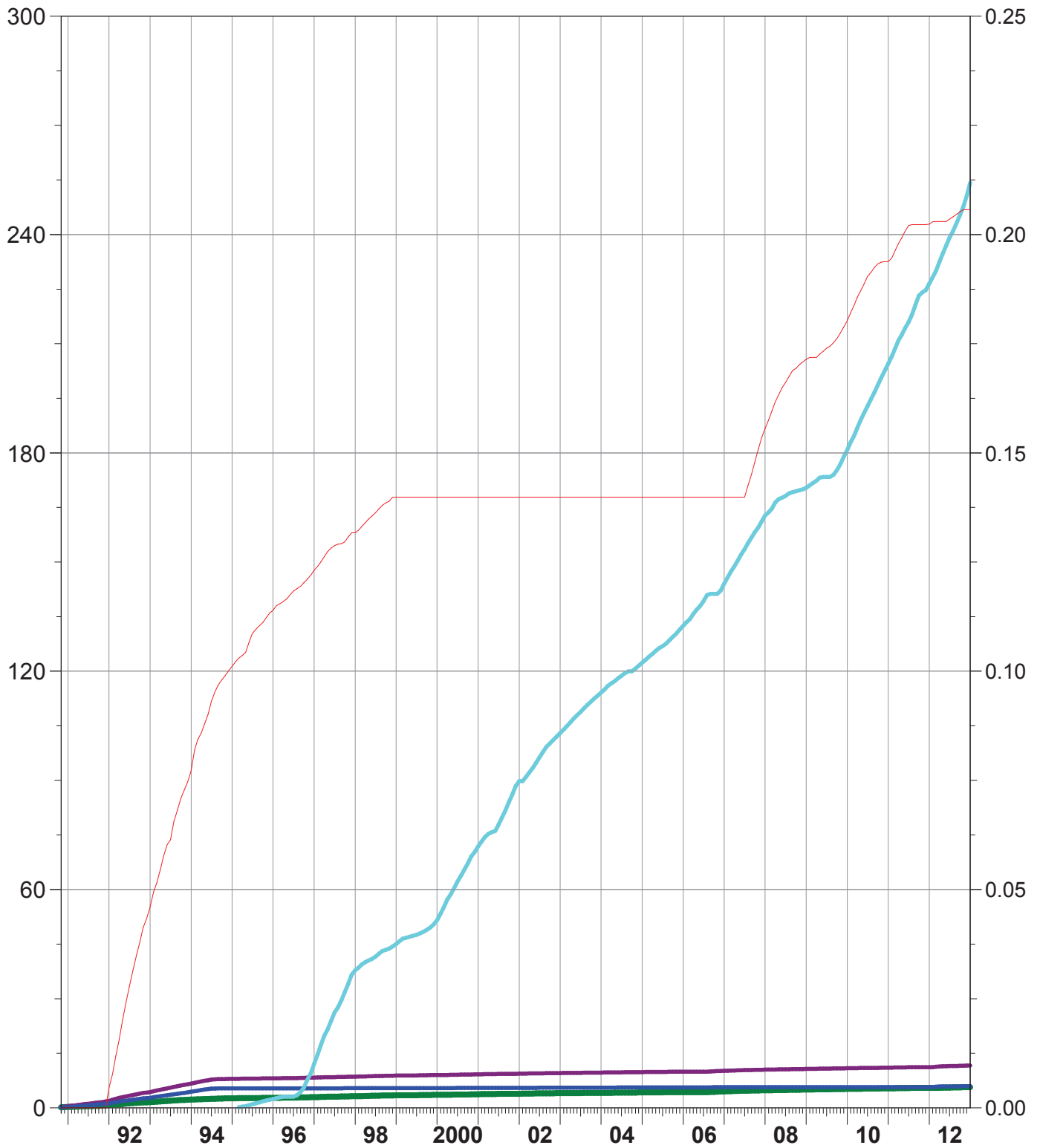
**Cumulative Oil Prod : 5.70 Mm3**

**Cumulative Liquid Prod : 11.63 Mm3**

**Cumulative Water Prod : 5.92 Mm3**

**Cumulative Water Inj : 254.21 Mm3**

**Cumulative Gas Prod : 0.21 MMscm**



# Pattern: P-40 Set: PIERSON UNIT

Axis 1 P-40

- Cumulative Oil Prod ( Mm3 )
- Cumulative Liquid Prod ( Mm3 )
- Cumulative Water Prod ( Mm3 )
- Cumulative Water Inj ( Mm3 )

Axis 2

- Cumulative Gas Prod ( MMscm )

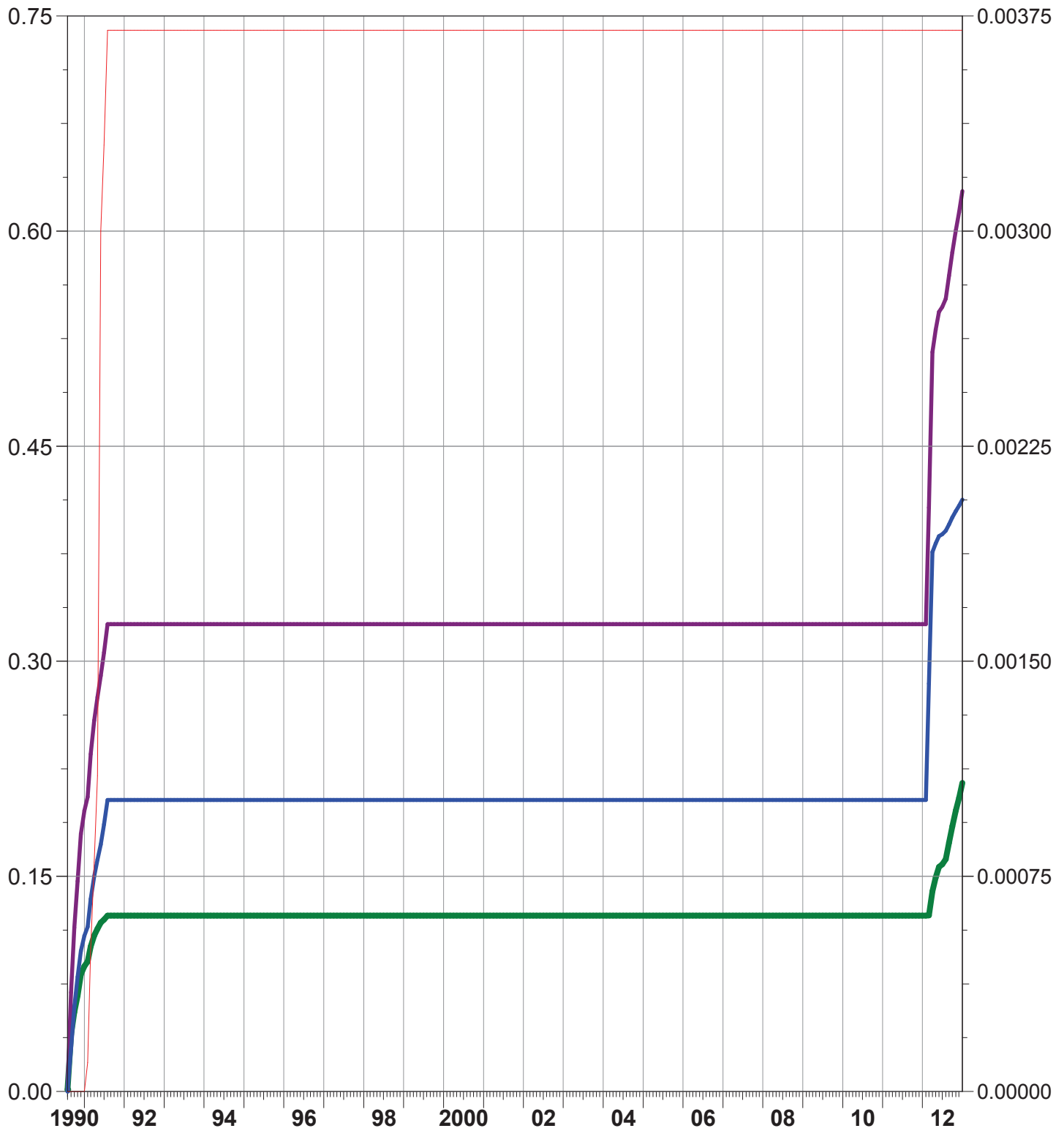
Cumulative Oil Prod : 0.22 Mm3

Cumulative Liquid Prod : 0.63 Mm3

Cumulative Water Prod : 0.41 Mm3

Cumulative Water Inj : \* Mm3

Cumulative Gas Prod : 0.00 MMscm



# Pattern: P-43 Set: PIERSON UNIT

Axis 1 P-43

Cumulative Oil Prod ( Mm3 )  
Cumulative Liquid Prod ( Mm3 )  
Cumulative Water Prod ( Mm3 )  
Cumulative Water Inj ( Mm3 )

Axis 2

Cumulative Gas Prod ( MMscm )

Cumulative Oil Prod : 0.16 Mm3

Cumulative Liquid Prod : 0.25 Mm3

Cumulative Water Prod : 0.10 Mm3

Cumulative Water Inj : 0.35 Mm3

Cumulative Gas Prod : 0.02 MMscm

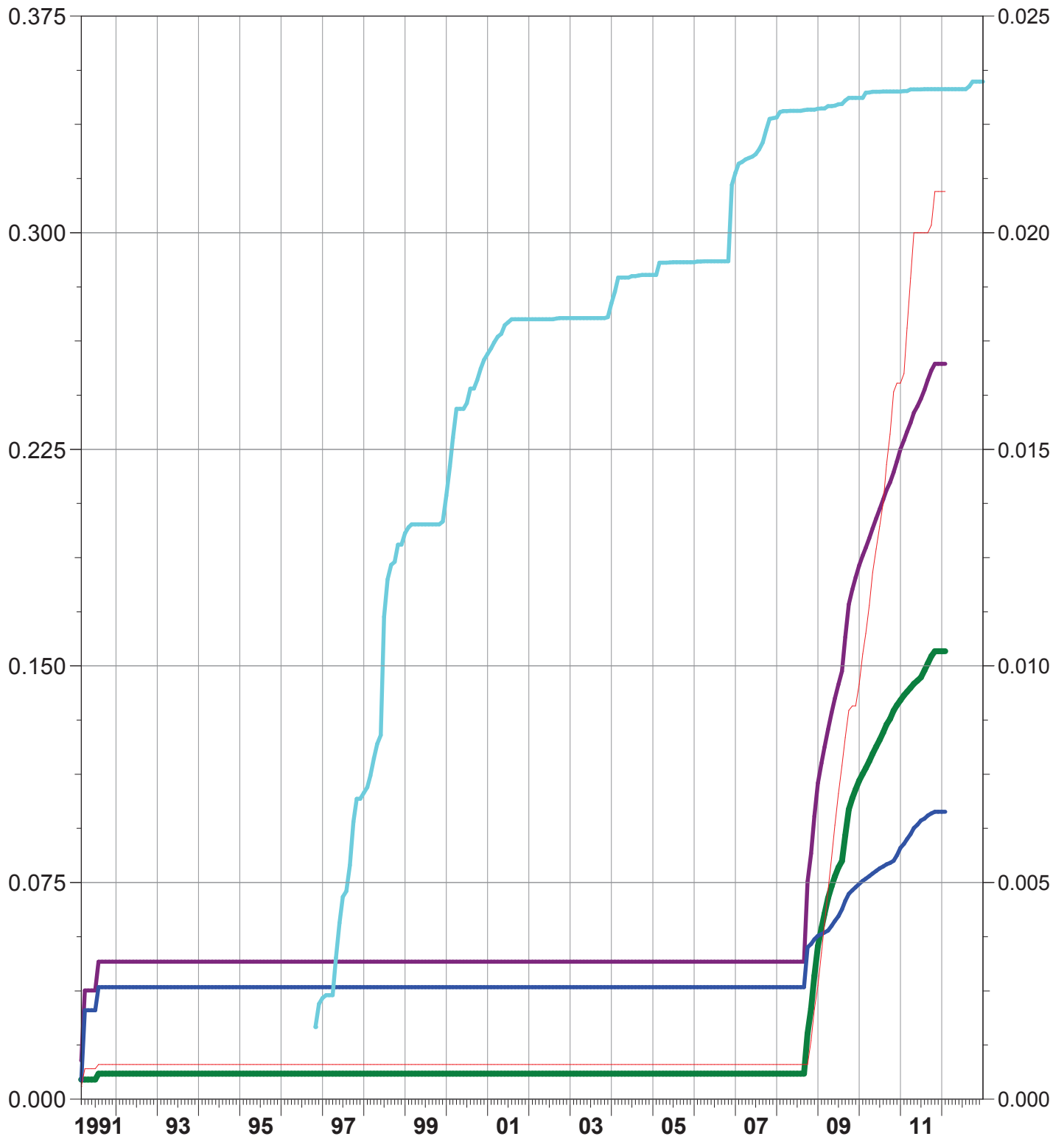


TABLE D.1: 2012 AVERAGE DAILY INJECTION RATE AND AVERAGE INJECTION PRESSURE

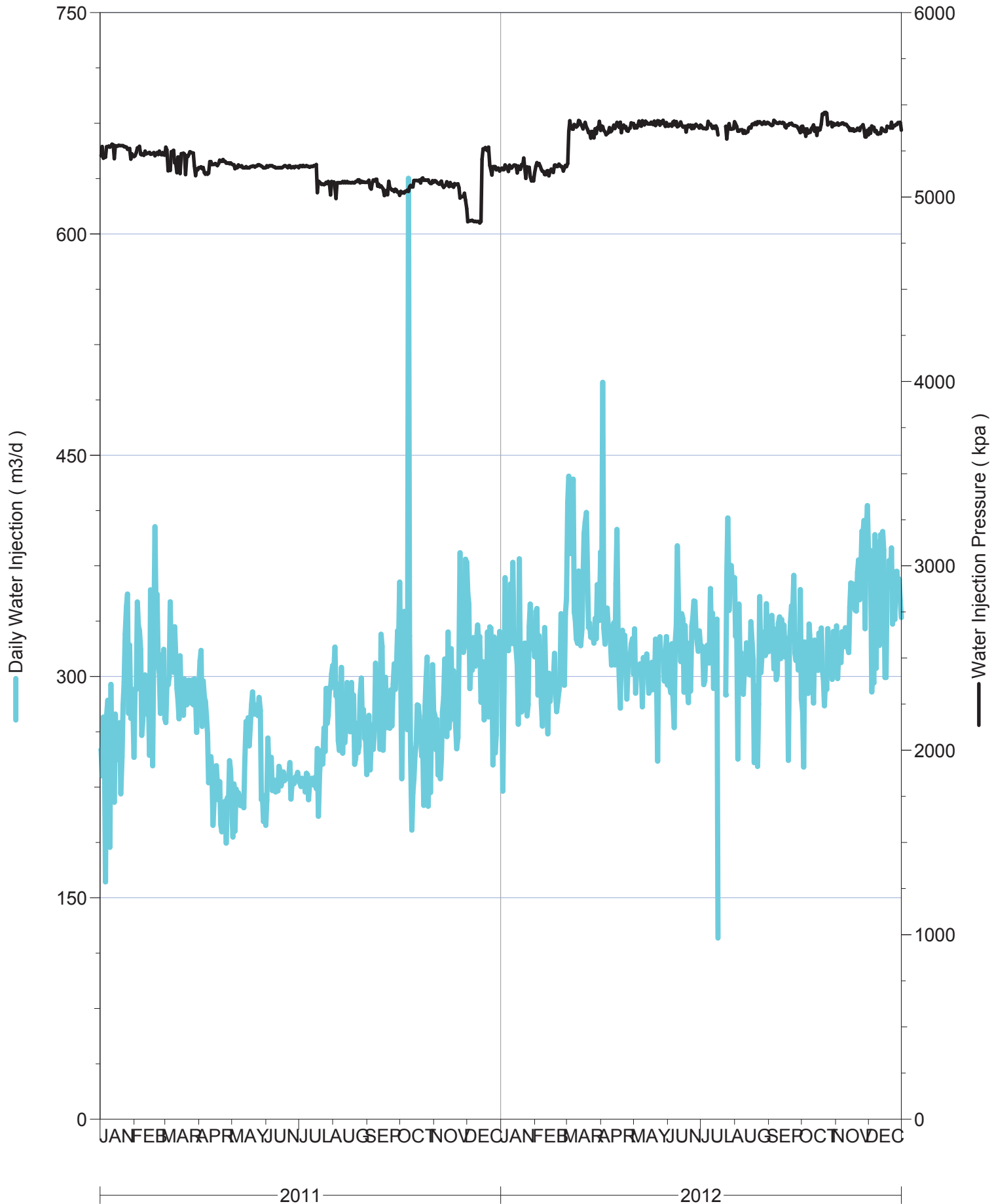
Injector UWI	January		February		March		April		May		June	
	Avg Daily Inj Rate (m3/d)	Avg Pressure (kPa)	Avg Daily Inj Rate (m3/d)	Avg Pressure (kPa)	Avg Daily Inj Rate (m3/d)	Avg Pressure (kPa)	Avg Daily Inj Rate (m3/d)	Avg Pressure (kPa)	Avg Daily Inj Rate (m3/d)	Avg Pressure (kPa)	Avg Daily Inj Rate (m3/d)	Avg Pressure (kPa)
00/02-08-002-29W1/0	2.18	5250	2.37	5250	2.15	5502	2.19	5510	2.50	5510	1.47	5510
00/02-09-002-29W1/0	6.01	5050	5.06	5050	6.33	5292	6.10	5300	5.37	5300	5.43	5300
00/02-16-002-29W1/0											2.26	
00/02-17-002-29W1/0					0.02	5520						
00/04-09-002-29W1/0							1.38				0.71	
00/04-15-002-29W1/0	3.40	5520	3.64	5520	4.40	5646	3.90	5655	3.53	5655	3.75	5655
00/04-16-002-29W1/0	1.38	5520	0.98	5520	1.96	5520	2.13	5520	2.06	5520	2.75	5520
00/04-17-002-29W1/0	0.30	5520	0.34	5520	0.18	5585	0.94	5650	0.10	5650		
00/06-08-002-29W1/0	2.31	5520	1.36	5520	2.84	5501	3.10	5500	2.68	5500	2.99	5500
00/06-09-002-29W1/0	4.82	5300	4.32	5300	6.03	6171	5.64	6200	4.98	6200	4.94	6200
00/06-16-002-29W1/0	1.24	5520	1.14	5520	1.09	5408	1.34	5400	1.14	5400	0.87	5400
00/06-17-002-29W1/0	1.84	5520	0.53	5520	0.44	5576	0.40	5580	0.40	5580	0.53	5580
00/08-08-002-29W1/0	1.54	5250	1.68	5250	0.12	5492	0.16	5500	0.11	5500	0.12	5500
00/08-09-002-29W1/0	77.47	2400	91.68	2400	93.63	3677	73.57	3720	65.67	3720	69.93	3720
00/08-16-002-29W1/0	0.18	5516	0.30	5516	0.16	5597	0.44	5600	0.11	5600	0.12	5600
00/08-17-002-29W1/0	93.29	810	68.07	810	78.28	2578	75.81	2700	68.57	2700	72.99	2700
00/08-18-002-29W1/0	2.81	5520	1.62	5520	1.01	5504	0.20	5500	0.17	5500	0.63	5500
00/10-08-002-29W1/0	0.63	5520	0.18	5520	0.78	5479	0.56	5490	0.15	5490	0.14	5490
00/10-16-002-29W1/0	1.95	5500	2.07	5500	3.31	5687	2.94	5700	2.85	5700	2.77	5700
00/12-04-002-29W1/0	0.01	5200	0.02	5200	0.03	5496	0.05	5510	0.08	5510	0.01	5510
00/12-08-002-29W1/0	0.06	5520	0.19	5520	0.20	5520	0.14	5520	0.06	5520	0.06	5520
00/14-04-002-29W1/0	0.09	5100	0.14	5100	0.02	6200	0.03	6200	0.03	6200	0.02	6200
00/14-08-002-29W1/0	0.30	5516	0.49	5516	0.40	5387	0.17	5380	0.14	5380	0.13	5380
00/14-17-002-29W1/0	76.02	3200	60.60	3200	82.21	2171	76.88	2100	68.64	2100	73.45	2100
00/16-04-002-29W1/0	0.02	5100	0.02	5100	0.01	5680	0.02	5680	0.01	5680	0.07	5680
00/16-05-002-29W1/0	1.72	5200	1.35	5200	1.50	5893	1.35	5920	0.40	5920	0.65	5920
00/16-08-002-29W1/0	4.35	5500	3.97	5500	4.97	5453	4.08	5450	3.97	5450	4.21	5450
00/16-09-002-29W1/0	1.92	5200	1.89	5200	2.55	5829	3.07	5850	3.15	5850	2.91	5850
00/16-18-002-29W1/0												
02/08-09-002-29W1/0	0.74	5100	1.52	5100	1.48	5612	0.96	5640	1.00	5640	0.97	5640
02/10-16-002-29W1/0	5.52	5520	4.47	5520	6.05	5595	4.92	5600	4.56	5600	4.72	5600
02/12-09-002-29W1/0	6.80	5500	6.06	5500	7.30	5584	7.00	5590	6.72	5590	7.17	5590
02/12-16-002-29W1/0	2.25	5520	2.16	5520	2.02	5502	0.10	5500		5500	3.36	5500
02/16-09-002-29W1/0	2.57	5200	2.48	5200	2.96	5626	2.82	5640	2.75	5640	2.92	5640
03/15-16-002-29W1/0	1.62	5520	1.50	5520	1.68	5600	1.01	5610	1.08	5610	1.20	5610
03/16-09-002-29W1/0	2.99	5200	2.79	5200	3.55	5626	3.72	5640	3.55	5640	3.92	5640
B0/02-17-002-29W1/0	3.06	5520	3.15	5520	2.94	5520	1.99	5520	2.11	5520	2.44	5520
B0/04-16-002-29W1/0	0.39	5520	0.23	5520	0.87	5520	0.83	5520	0.60	5520	0.27	5520
B0/06-09-002-29W1/0	4.06	5300	4.00	5300	3.48	5503	3.47	5510	2.99	5510	2.44	5510
B0/06-16-002-29W1/0	1.55	5520	1.43	5520	2.65	5588	2.81	5600	2.55	5600	2.64	5600
B0/08-09-002-29W1/0	2.61	5300	2.01	5300	1.71	5629	1.70	5640	0.88	5640	0.30	5640
B0/08-16-002-29W1/0	0.53	5520	0.28	5520	0.27	5560	0.77	5580	0.20	5580		
B0/12-17-002-29W1/0					0.01	5570	0.01	5570			0.10	5570
B0/14-04-002-29W1/0	1.57	5200	1.90	5200	2.28	5500	1.85	5510	1.75	5510	1.84	5510
B0/14-08-002-29W1/0	0.22	5516	0.10	5516	0.29	5553	0.09	5560	0.54	5560	0.10	5560
B0/16-17-002-29W1/0			0.02	5520	0.22	5580	0.17	5580				
C0/05-16-002-29W1/0	1.28	5516	1.36	5516	1.60	5516	1.50	5516	0.85	5516	0.99	5516
C0/11-16-002-29W1/0	2.53	5540	2.67	5540	3.32	5540	2.68	5540	2.40	5540	2.38	5540
C0/15-04-002-29W1/0	0.67	5200	0.84	5200	0.89	5297	1.01	5300	0.80	5300	0.79	5300
C2/07-16-002-29W1/0	0.85	5520	1.83	5520	1.46	5520	1.17	5520	0.80	5520	0.29	5520
D0/02-09-002-29W1/0	1.47	5200	1.67	5200	1.83	5500	1.55	5510	1.41	5510	1.59	5510
D0/02-17-002-29W1/0	1.86	5520	1.71	5520	0.91	5502	0.48	5500	0.50	5500	1.00	5500
D0/04-09-002-29W1/0	0.79	5200	0.82	5200	0.67	5622	1.06	5640	0.54	5640	0.71	5640
D0/04-17-002-29W1/0	1.12	5520	1.11	5520	1.21	5453	0.79	5450	1.43	5450	0.25	5450
D0/06-09-002-29W1/0	1.16	4800	1.59	4800	4.52	5487	4.47	5510	4.18	5510	3.73	5510
D0/06-17-002-29W1/0					1.14	5510	0.98	5510	0.26	5510	0.10	5510
D0/14-09-002-29W1/0	8.09	5520	6.31	5520	17.54	5604	20.88	5610	22.62	5610	20.94	5610
D0/16-05-002-29W1/0	2.04	5200	2.22	5200	3.23	5761	3.24	5780	3.00	5780	3.07	5780



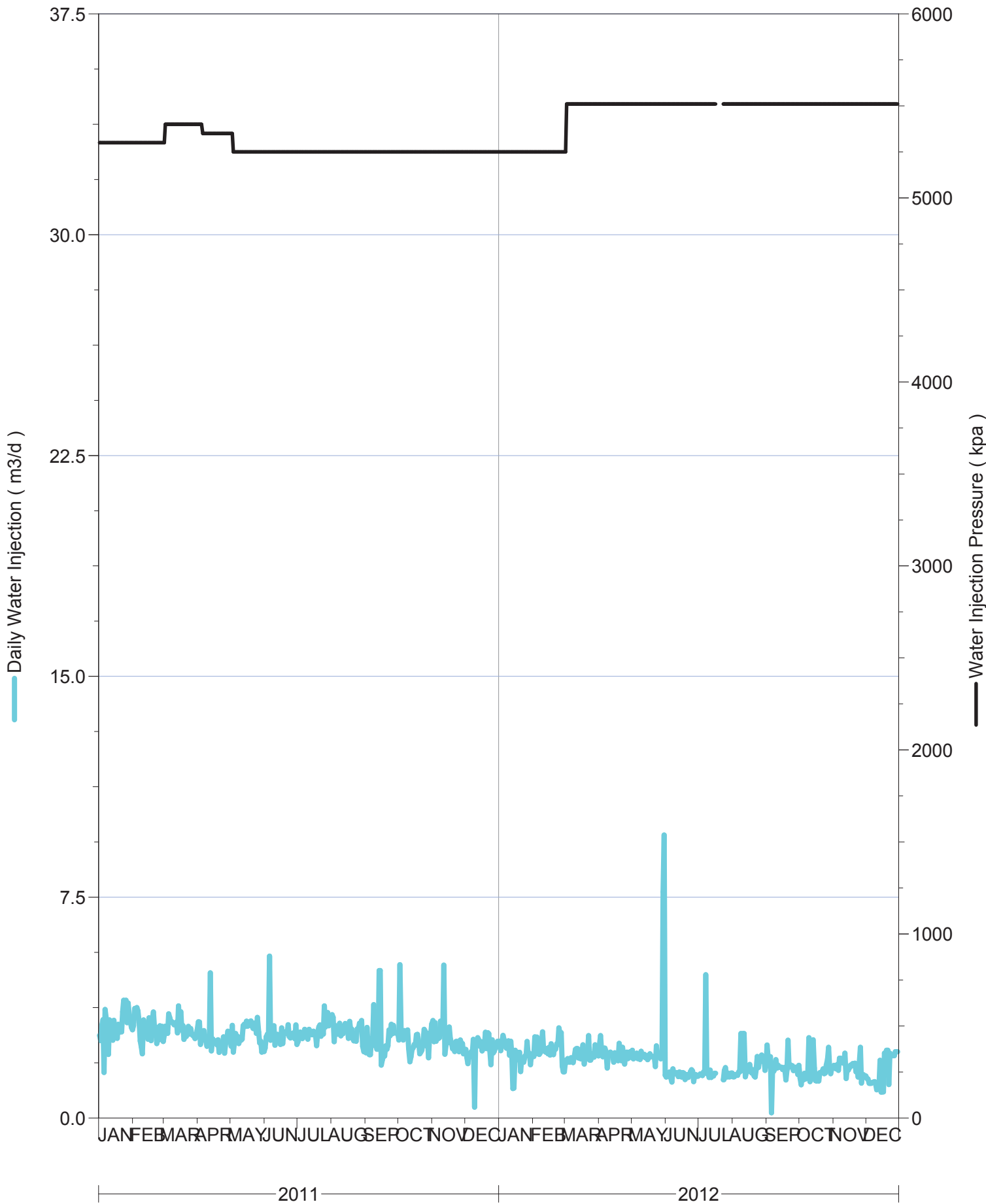
TABLE D.1: 2012 AVERAGE DAILY INJECTION RATE AND AVERAGE INJECTION PRESSURE

Injector UWI	July		August		September		October		November		December	
	Avg Daily Inj Rate (m3/d)	Avg Pressure (kPa)	Avg Daily Inj Rate (m3/d)	Avg Pressure (kPa)	Avg Daily Inj Rate (m3/d)	Avg Pressure (kPa)	Avg Daily Inj Rate (m3/d)	Avg Pressure (kPa)	Avg Daily Inj Rate (m3/d)	Avg Pressure (kPa)	Avg Daily Inj Rate (m3/d)	Avg Pressure (kPa)
00/02-08-002-29W1/0	1.63	5510	1.78	5510	1.74	5510	1.60	5510	1.73	5510	1.60	5510
00/02-09-002-29W1/0	5.40	5300	5.10	5300	5.09	5300	4.96	5300	4.47	5300	3.87	5300
00/02-16-002-29W1/0												
00/02-17-002-29W1/0					0.01	5520						
00/04-002-29W1/0	0.73		0.72	5510	0.82	5510	0.82	5510			0.53	5300
00/04-15-002-29W1/0	3.85	5655	3.94	5655	3.82	5655	3.79	5655	3.02	5655	2.39	5655
00/04-16-002-29W1/0	2.19	5520	2.15	5520	2.26	5520	2.15	5520	2.49	5520	2.05	5520
00/04-17-002-29W1/0											0.01	5650
00/06-08-002-29W1/0	2.85	5500	2.44	5500	2.46	5500	2.75	5500	1.80	5500	0.74	5500
00/06-09-002-29W1/0	5.18	6200	5.11	6200	5.24	6200	5.48	6200	4.79	6200	2.82	6200
00/06-16-002-29W1/0	1.79	5400	1.86	5400	1.64	5400	1.66	5400	1.63	5400	1.32	5400
00/06-17-002-29W1/0	0.60	5580	0.68	5580	0.50	5580	0.29	5580	0.78	5580	0.24	5580
00/08-08-002-29W1/0	0.09	5500	0.10	5500	1.41	5500	0.12	5500	0.21	5500	3.56	5500
00/08-09-002-29W1/0	77.71	3720	71.69	3720	80.15	3720	83.93	3720	87.99	3720	77.46	3720
00/08-16-002-29W1/0	0.12	5600	0.09	5600	0.12	5600	0.09	5600	0.15	5600	0.10	5600
00/08-17-002-29W1/0	75.72	2700	71.27	2700	64.20	2700	61.89	2700	81.50	2700	91.37	2700
00/08-18-002-29W1/0	0.45	5500	1.24	5500	1.25	5500	0.91	5500	1.21	5500	0.47	5500
00/10-08-002-29W1/0	0.08	5490	0.05	5490	0.10	5490	0.04	5490	0.02	5490	0.02	5490
00/10-16-002-29W1/0	2.77	5700	2.96	5700	2.87	5700	2.84	5700	2.68	5700	2.73	5700
00/12-04-002-29W1/0	0.08	5510	0.16	5510	0.01	5510	0.02	5510	0.09	5510	2.00	5510
00/12-08-002-29W1/0	0.04	5520	0.02	5520	0.04	5520	0.07	5520	0.02	5520	0.02	5520
00/14-04-002-29W1/0	0.02	6200	0.05	6200	0.06	6200	0.02	6200	0.06	6200	0.01	6200
00/14-08-002-29W1/0	0.08	5380	0.10	5380	0.22	5380	0.40	5380			0.10	5380
00/14-17-002-29W1/0	72.97	2100	70.93	2100	72.90	2100	78.89	2100	97.93	2100	111.56	2100
00/16-04-002-29W1/0	0.01	5680	0.02	5680	0.01	5680	0.01	5680	0.01	5680	0.03	5680
00/16-05-002-29W1/0	0.61	5920	0.32	5920	0.37	5920	0.34	5920	0.15	5920	0.11	5920
00/16-08-002-29W1/0	4.68	5450	4.41	5450	4.18	5450	3.81	5450	3.58	5450	3.30	5450
00/16-09-002-29W1/0	2.69	5850	2.59	5850	2.87	5850	2.24	5850	2.39	5850	3.33	5850
00/16-18-002-29W1/0			0.19	5520	0.08	5520						
02/08-002-29W1/0	0.97	5640	0.97	5640	1.50	5640	0.99	5640	0.81	5640	0.14	5640
02/10-16-002-29W1/0	5.54	5600	5.00	5600	5.16	5600	5.03	5600	4.52	5600	4.60	5600
02/12-09-002-29W1/0	7.37	5590	7.37	5590	8.99	5590	7.41	5590	8.12	5590	8.97	5590
02/12-16-002-29W1/0	2.82	5500	2.45	5500	2.36	5500	2.49	5500	2.07	5500	1.40	5500
02/16-09-002-29W1/0	3.20	5640	2.78	5640	2.97	5640	2.85	5640	2.66	5640	2.46	5640
03/15-16-002-29W1/0	1.67	5610	0.95	5610	0.58	5610	1.42	5610	1.13	5610	0.46	5610
03/16-09-002-29W1/0	4.27	5640	3.70	5640	3.76	5640	3.92	5640	3.94	5640	3.48	5640
B002-17-002-29W1/0	2.88	5520	0.95	5520	2.77	5520	3.23	5520	2.21	5520	1.03	5520
B004-16-002-29W1/0	0.31	5520	0.28	5520	0.31	5520	0.21	5520	0.14	5520	0.20	5520
B006-09-002-29W1/0	3.45	5510	2.97	5510	2.92	5510	2.74	5510	2.15	5510	1.77	5510
B006-16-002-29W1/0	2.66	5600	2.46	5600	2.63	5600	2.50	5600	1.89	5600	0.79	5600
B008-09-002-29W1/0			0.20	5640					0.13	5640	0.48	5640
B008-16-002-29W1/0	0.25	5580			0.20	5580						
B0/12-17-002-29W1/0					0.02	5360						
B0/14-04-002-29W1/0	2.26	5510	1.93	5510	2.23	5510	2.26	5510	2.04	5510	1.74	5510
B0/14-08-002-29W1/0					1.90	5560	0.52	5560	0.10	5560	0.13	5560
B0/16-17-002-29W1/0	0.05	5580	0.22	5580	1.25	5345	0.45	5200	0.18	5200		
C005-16-002-29W1/0	1.72	5516	0.61	5516	2.57	5516	1.72	5516	1.45	5516	1.17	5516
C0/11-16-002-29W1/0	2.89	5540	2.25	5540	2.22	5540	1.95	5540	1.59	5540	1.31	5540
C0/15-04-002-29W1/0	0.94	5300	0.80	5300	0.94	5300	1.02	5300	0.67	5300	0.65	5300
C2/07-16-002-29W1/0	0.51	5520	0.22	5520	0.74	5520	0.51	5520	0.40	5520	0.28	5520
D0/02-09-002-29W1/0	2.04	5510	1.26	5510	0.82	5510	0.21	5510	0.15	5510	0.45	5510
D0/02-17-002-29W1/0	1.43	5500			3.89	5253	2.48	5200	0.87	5200	0.12	5200
D0/04-09-002-29W1/0	1.00	5640	0.88	5640	0.95	5640	1.01	5640	0.61	5640	0.70	5640
D0/04-17-002-29W1/0	0.65	5450	1.09	5450	0.92	5450	1.84	5450	0.41	5450	0.01	5450
D0/06-09-002-29W1/0	4.32	5510	3.85	5510	2.30	5510	2.30	5510	2.01	5510	0.88	5510
D0/06-17-002-29W1/0			0.22	5510	0.51	5510	0.66	5510	0.22	5510	0.10	5510
D0/14-09-002-29W1/0	17.76	5610	16.93	5610	16.13	5610	14.70	5610	12.12	5610	10.40	5610
D0/16-05-002-29W1/0	3.45	5780	3.02	5780	2.85	5780	2.67	5780	3.09	5780	2.49	5780

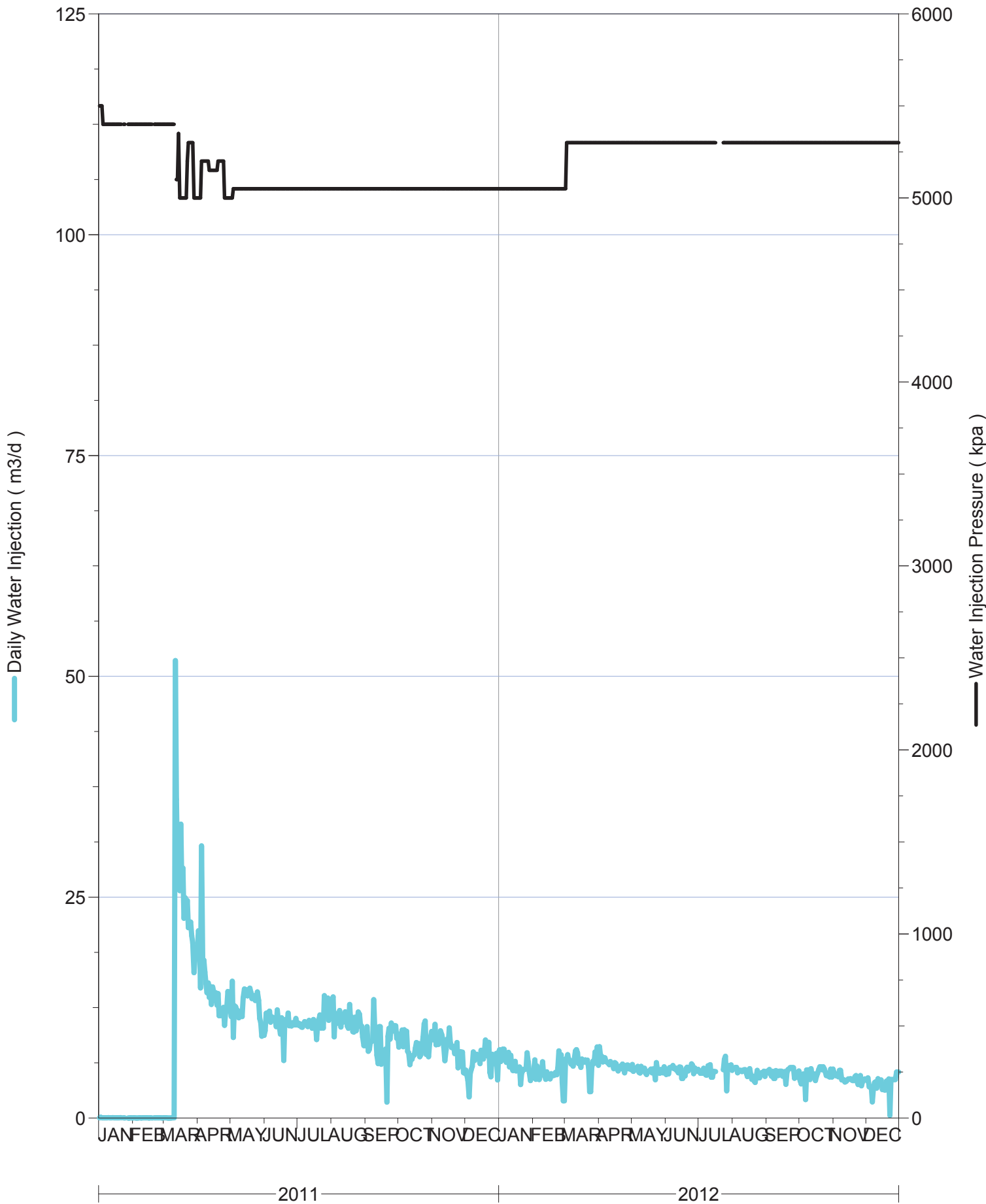
# South Pierson Unit No. 1 Overall Injection



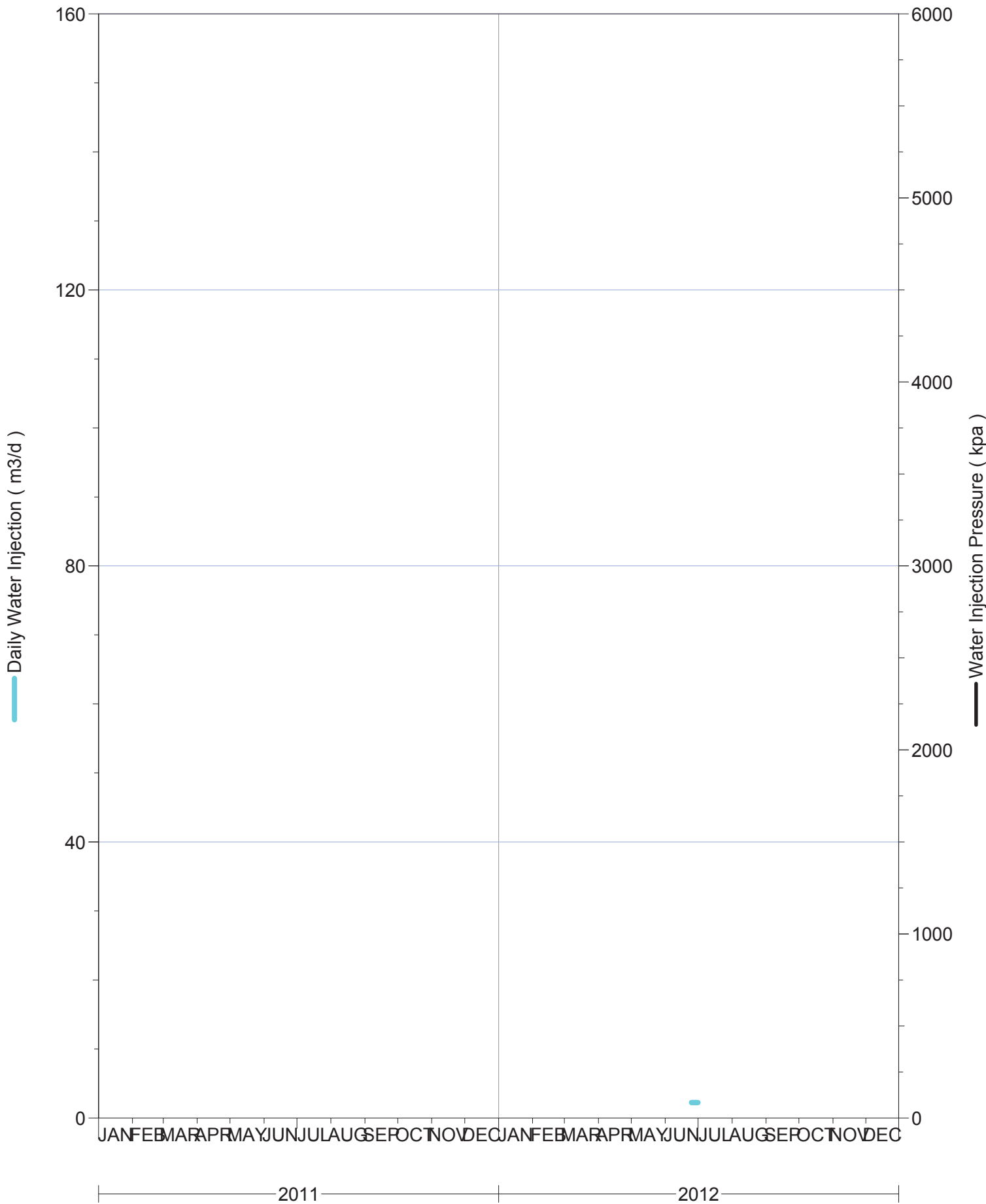
Daily Injection Rate and Pressure for: 00/02-08-002-29W1/0



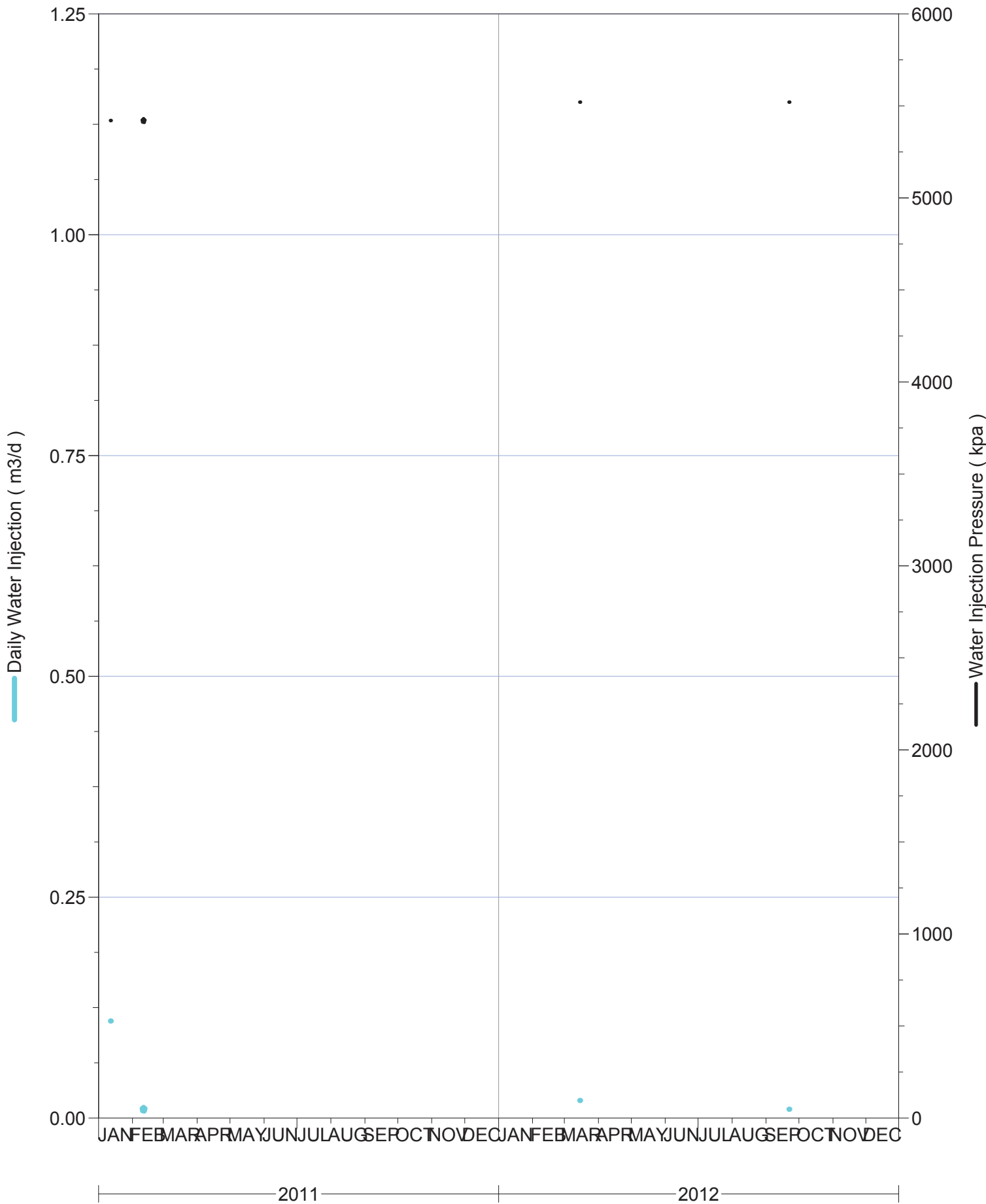
Daily Injection Rate and Pressure for: 00/02-09-002-29W1/0



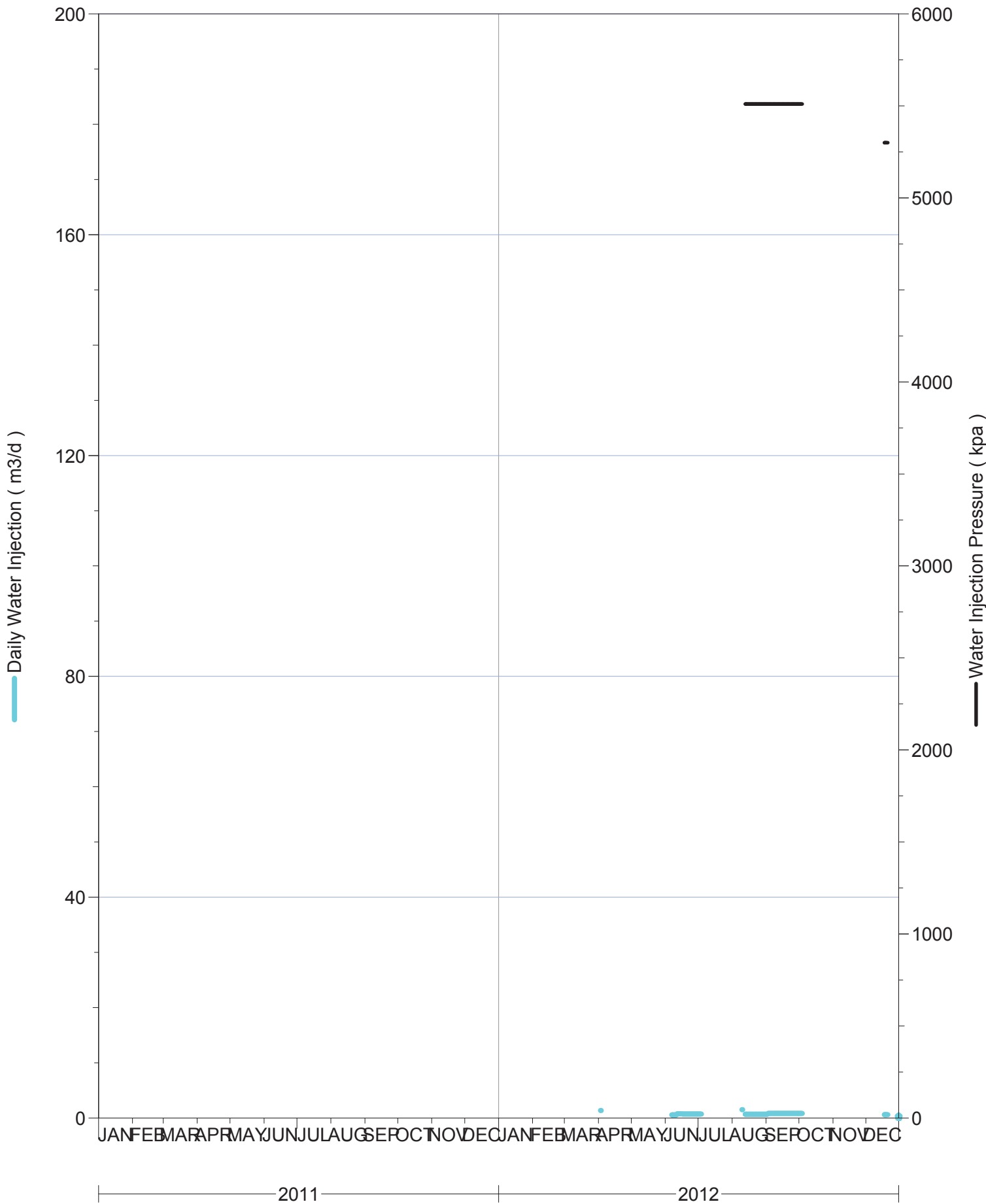
Daily Injection Rate and Pressure for: 00/02-16-002-29W1/0



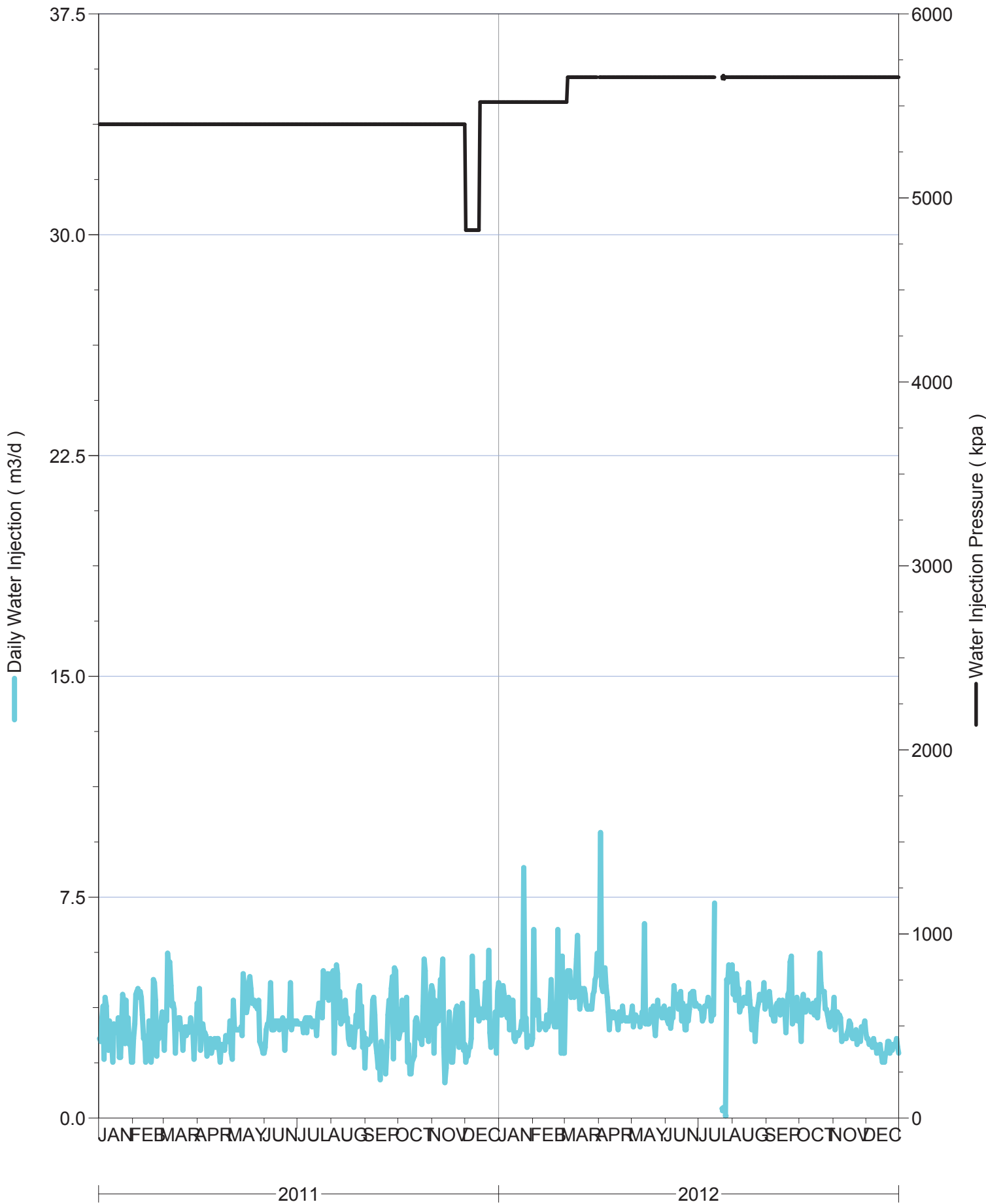
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Daily Injection Rate and Pressure for: 00/04-09-002-29W1/0

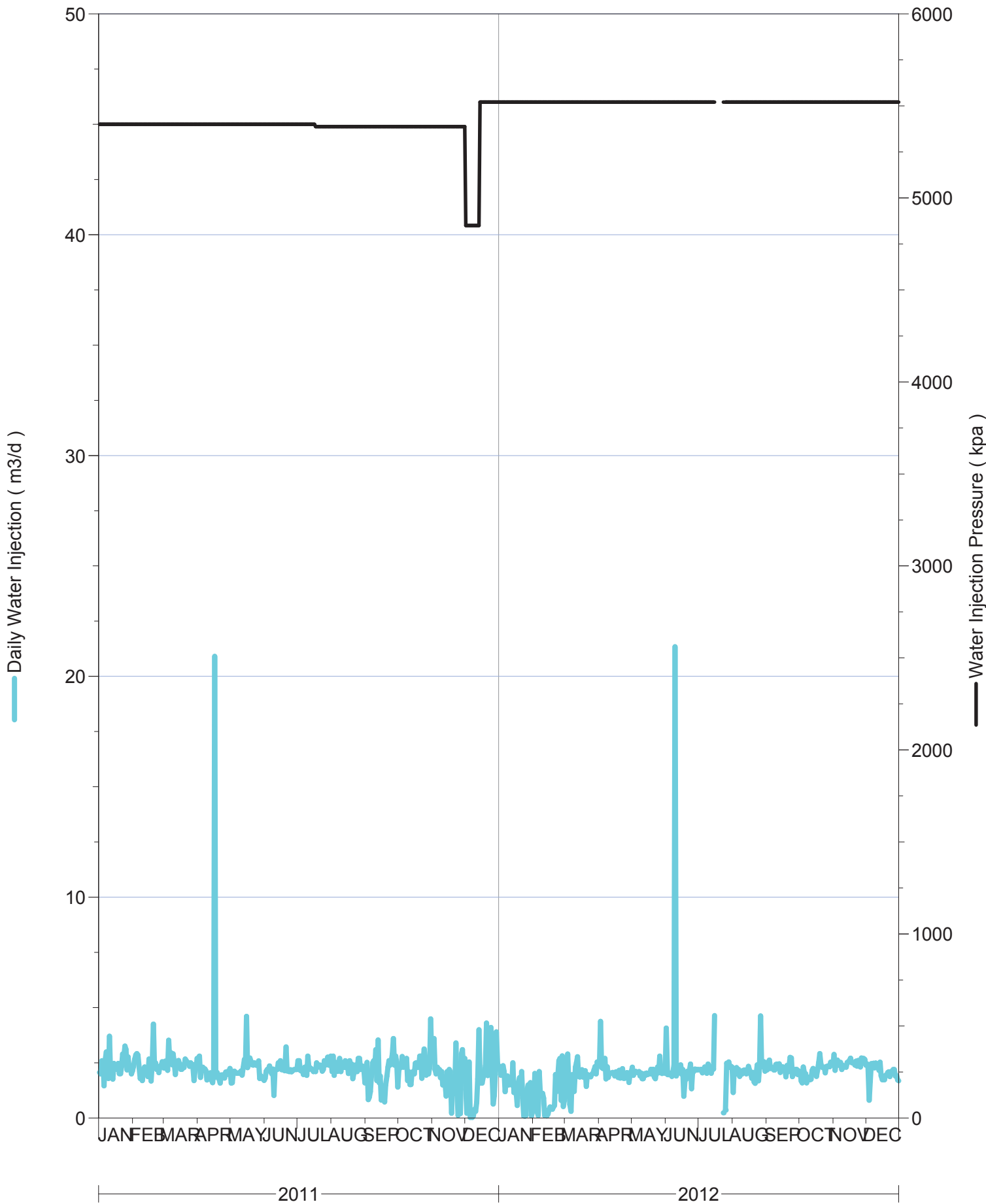


Daily Injection Rate and Pressure for: 00/04-15-002-29W1/0

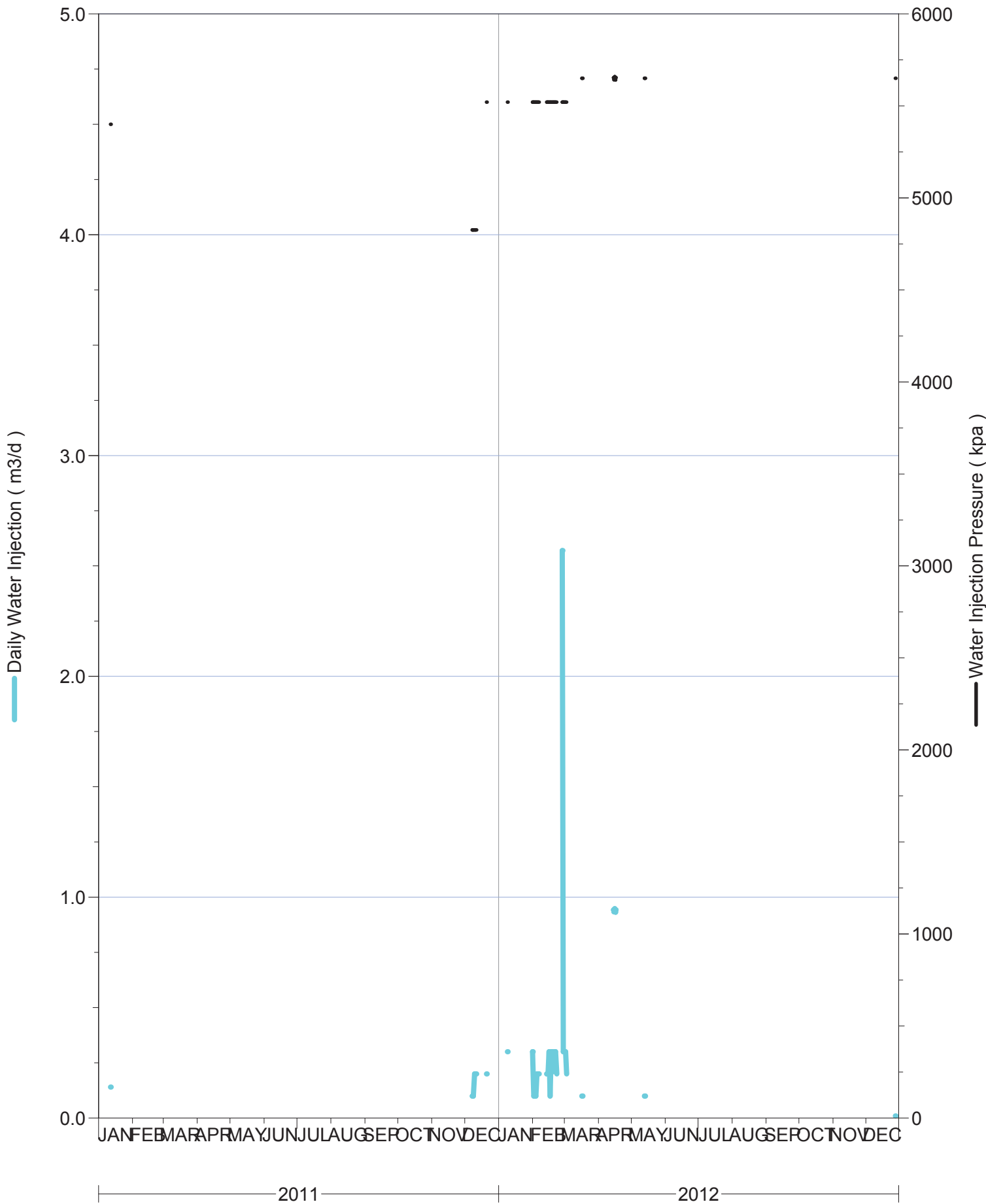




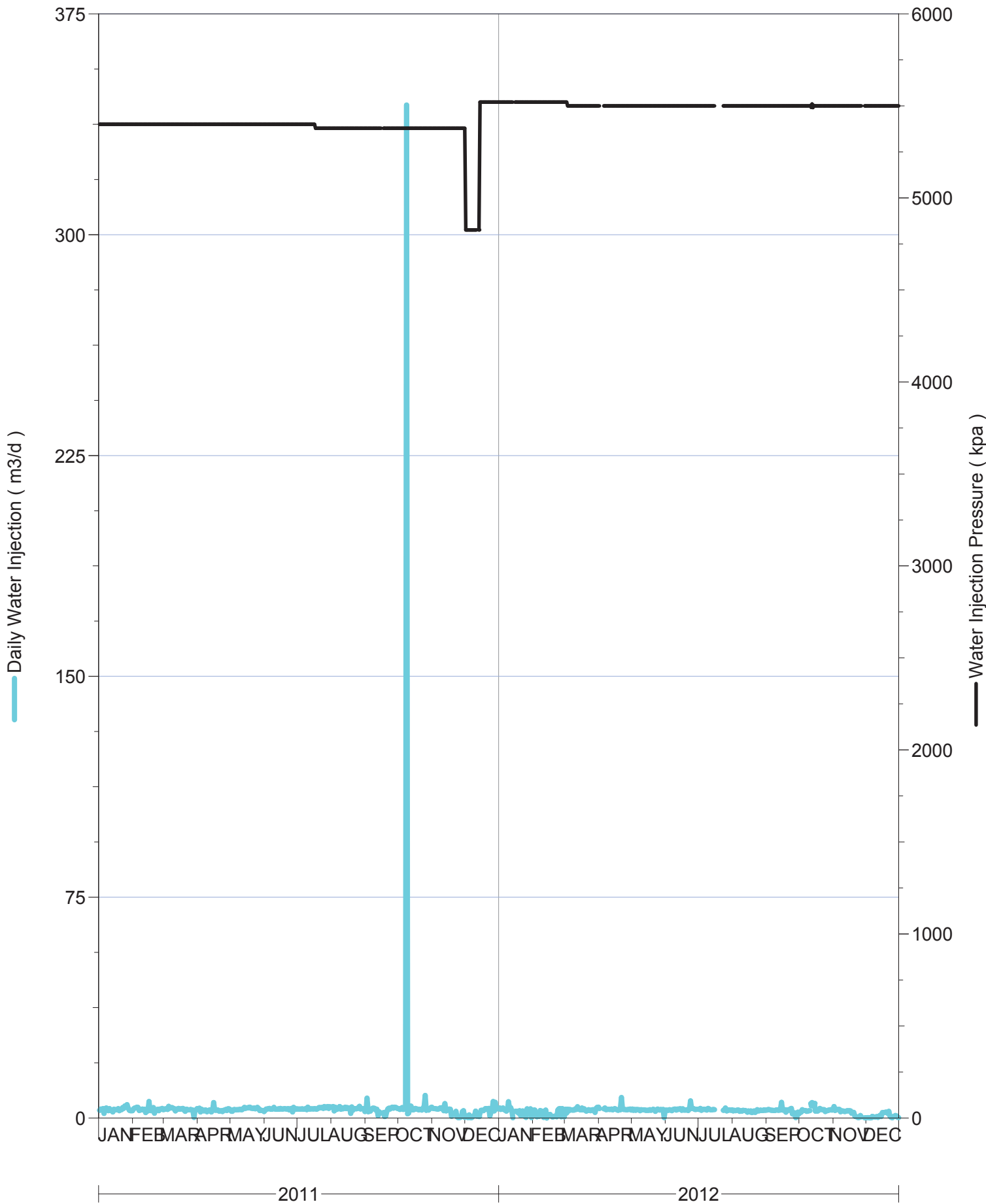
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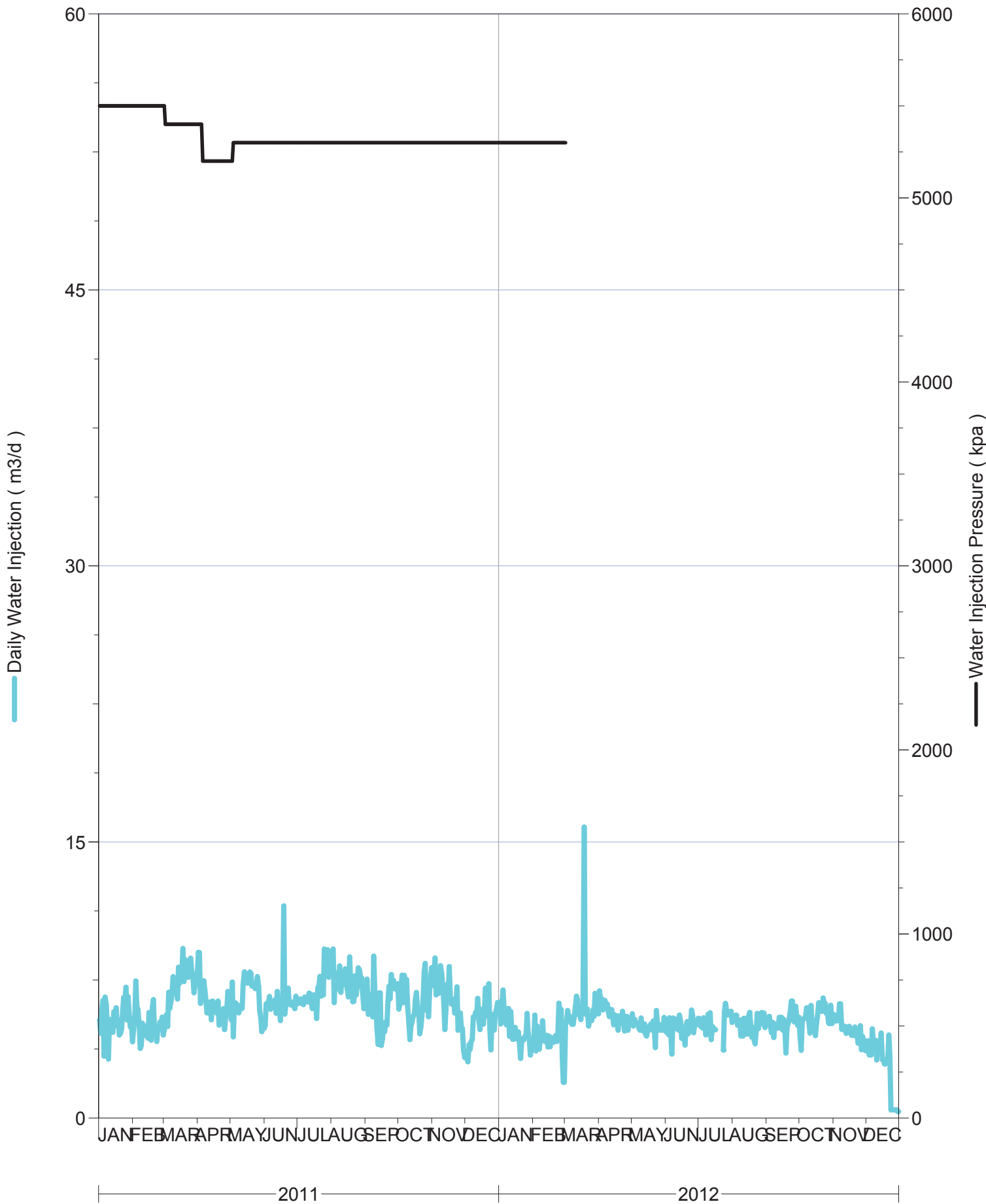
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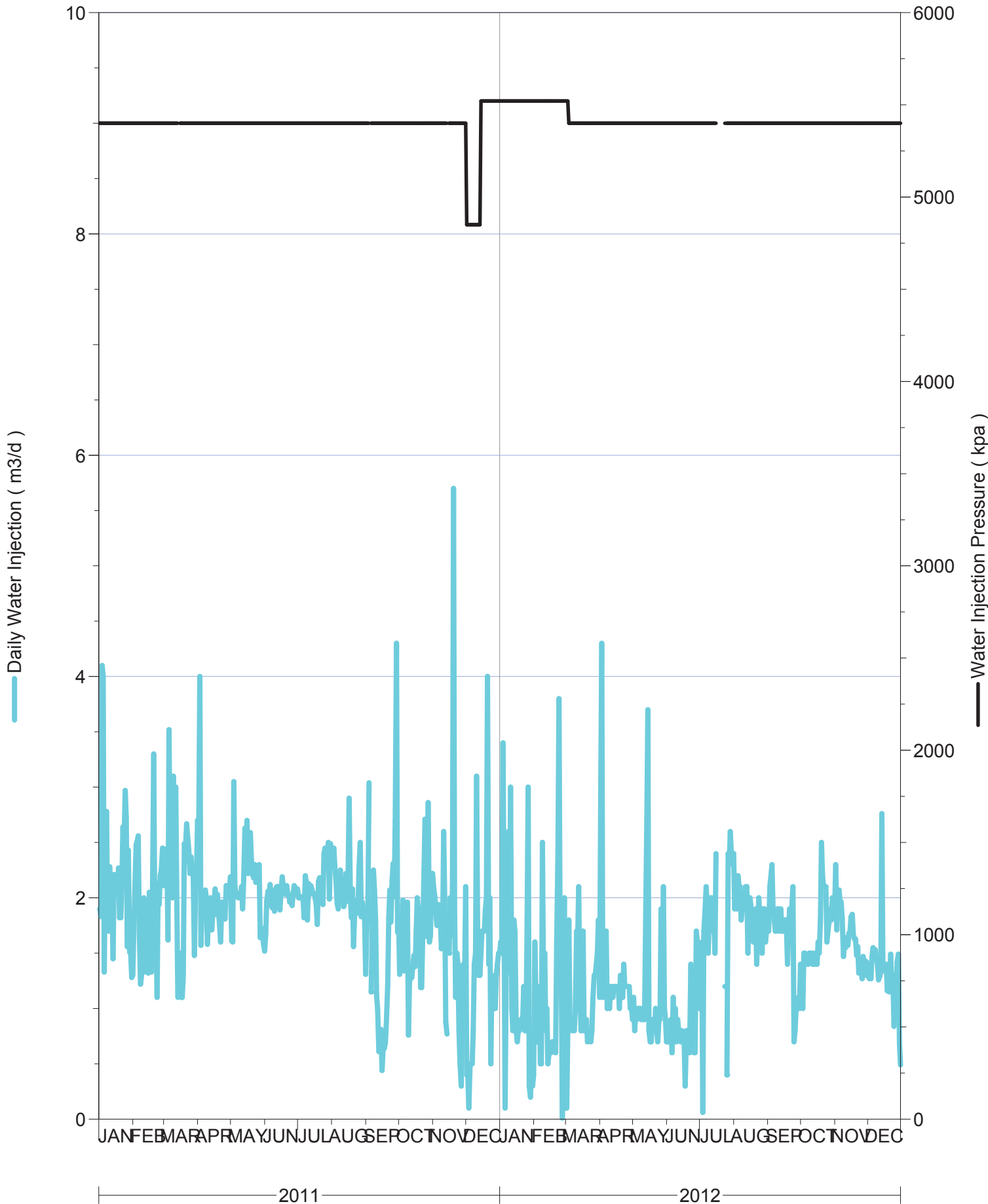
Daily Injection Rate and Pressure for: 00/06-08-002-29W1/0



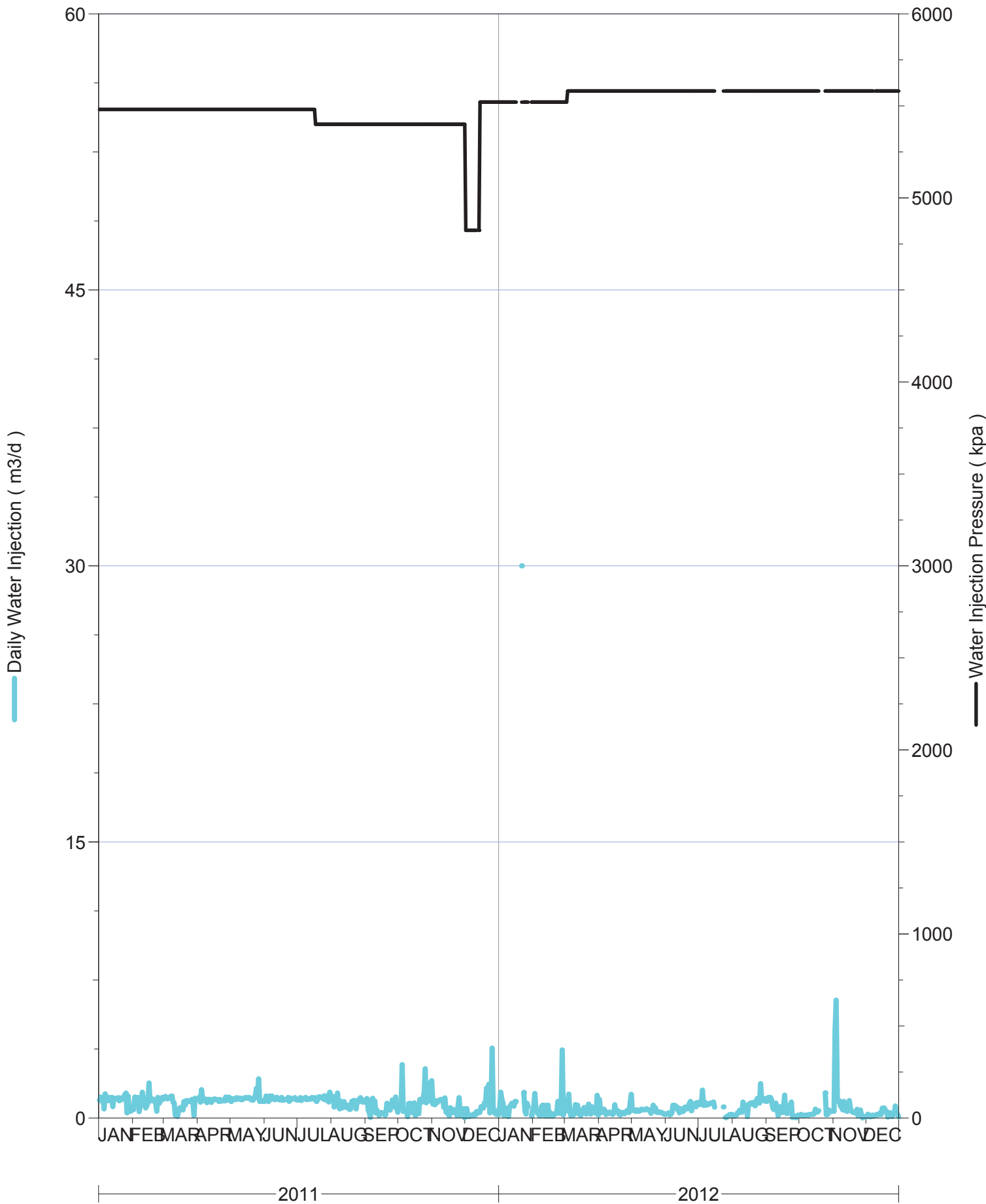
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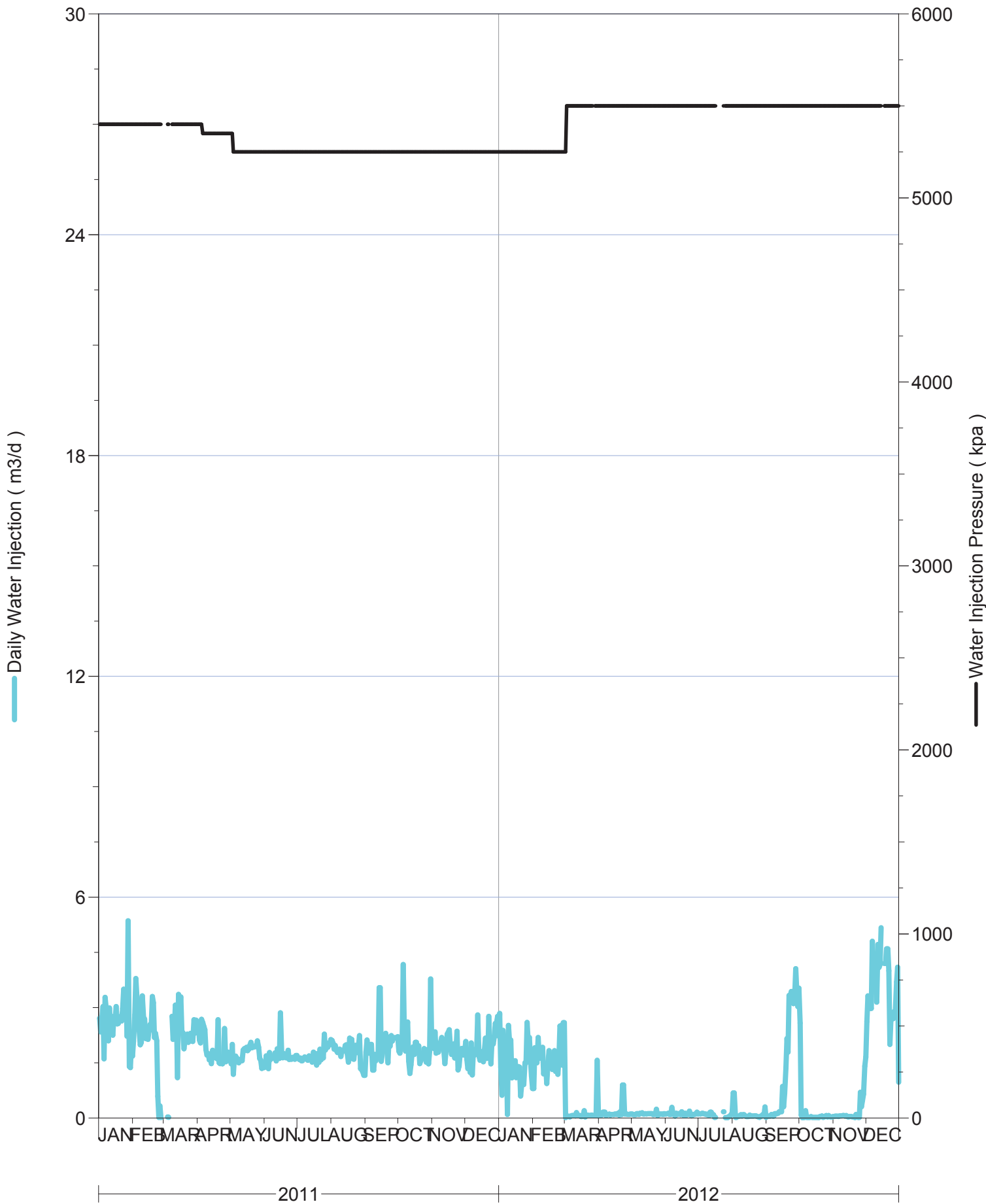
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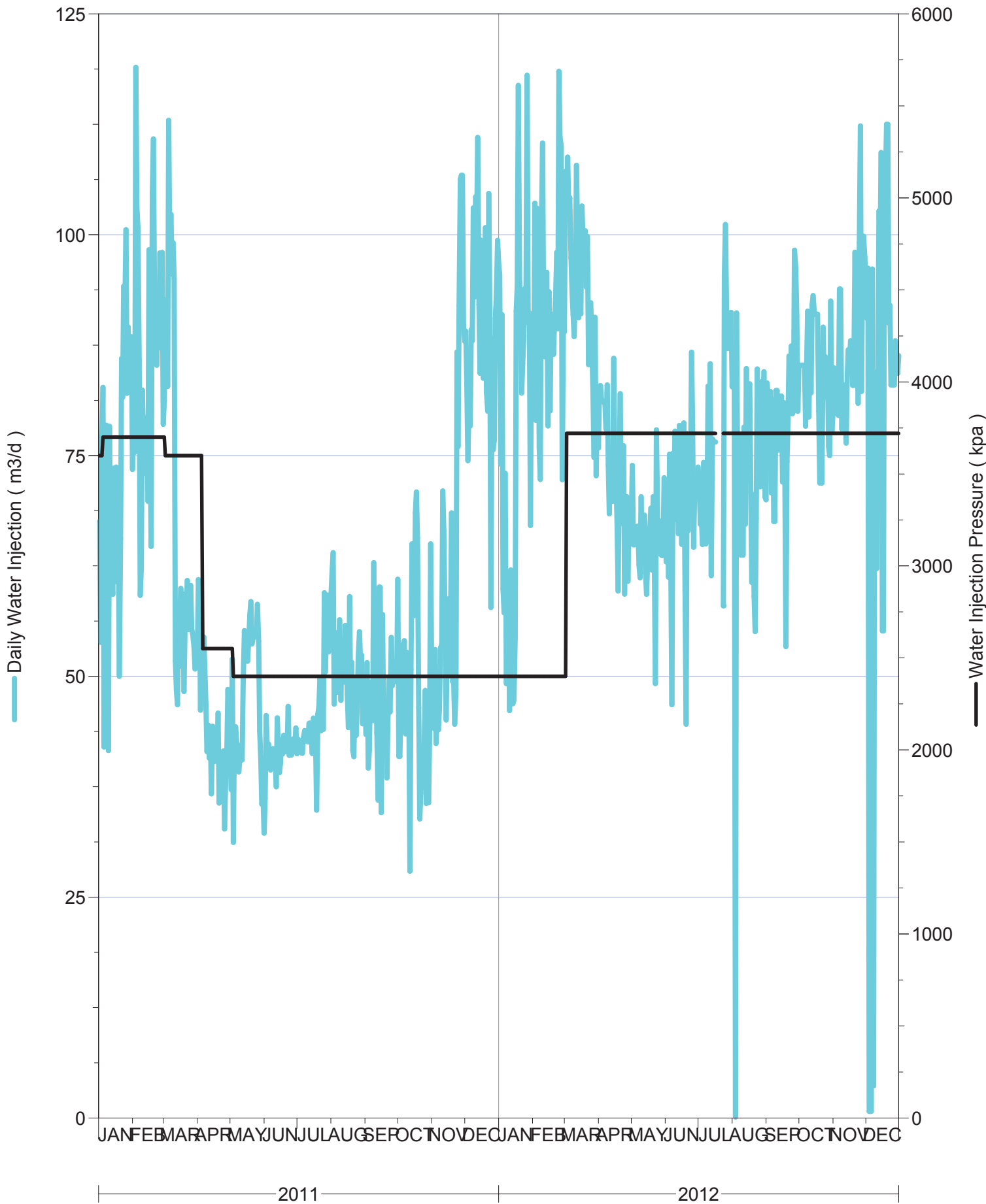
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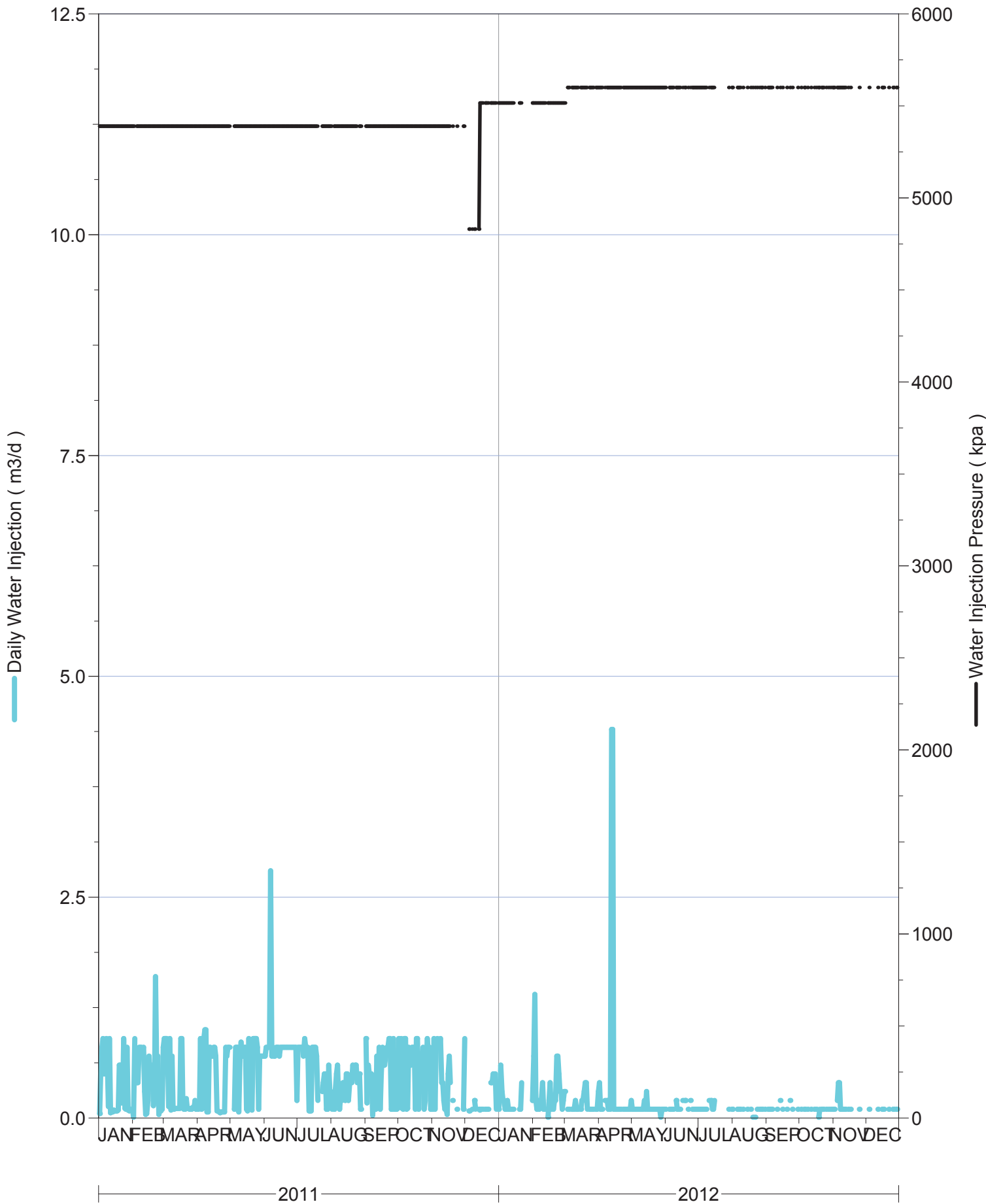


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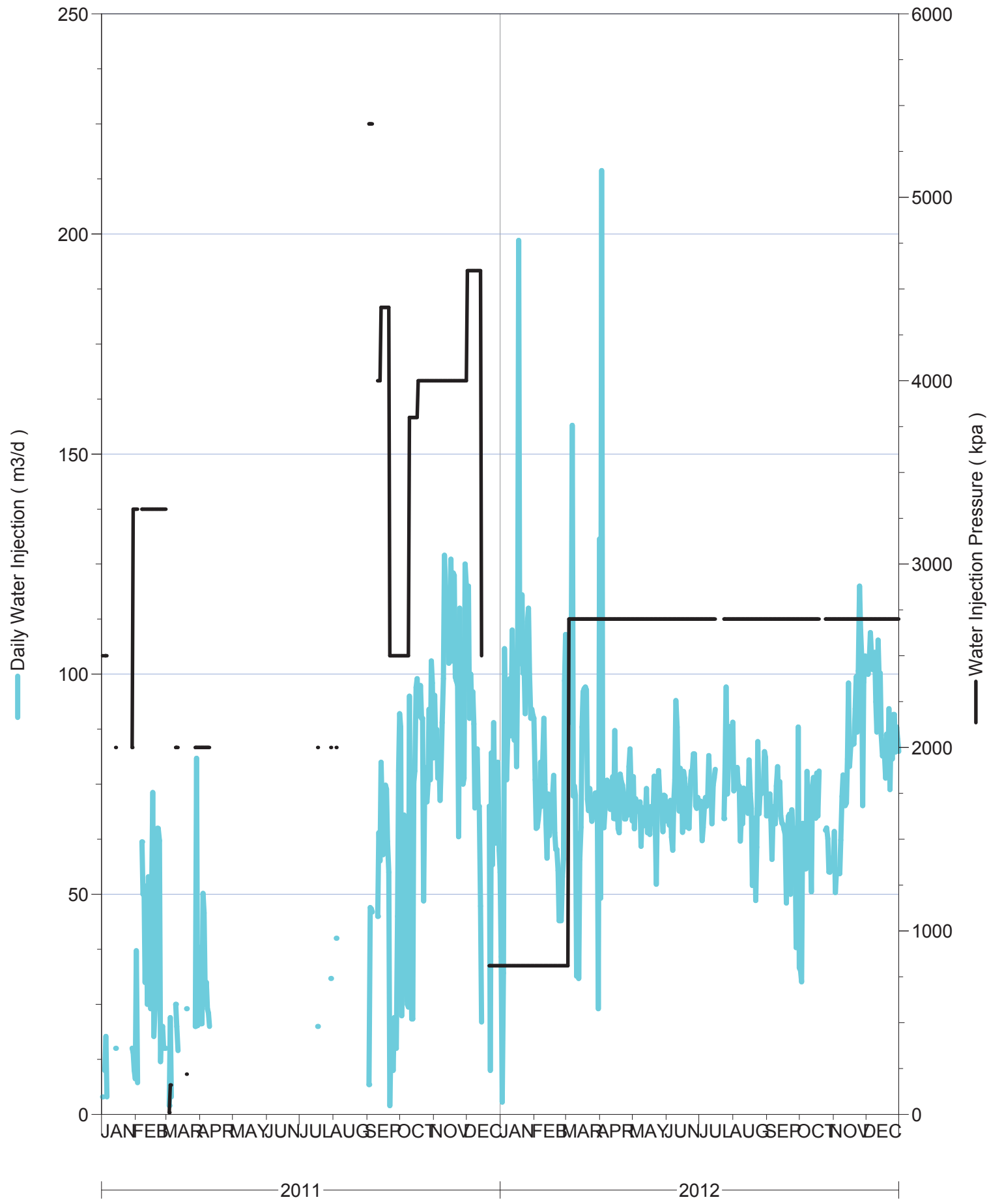




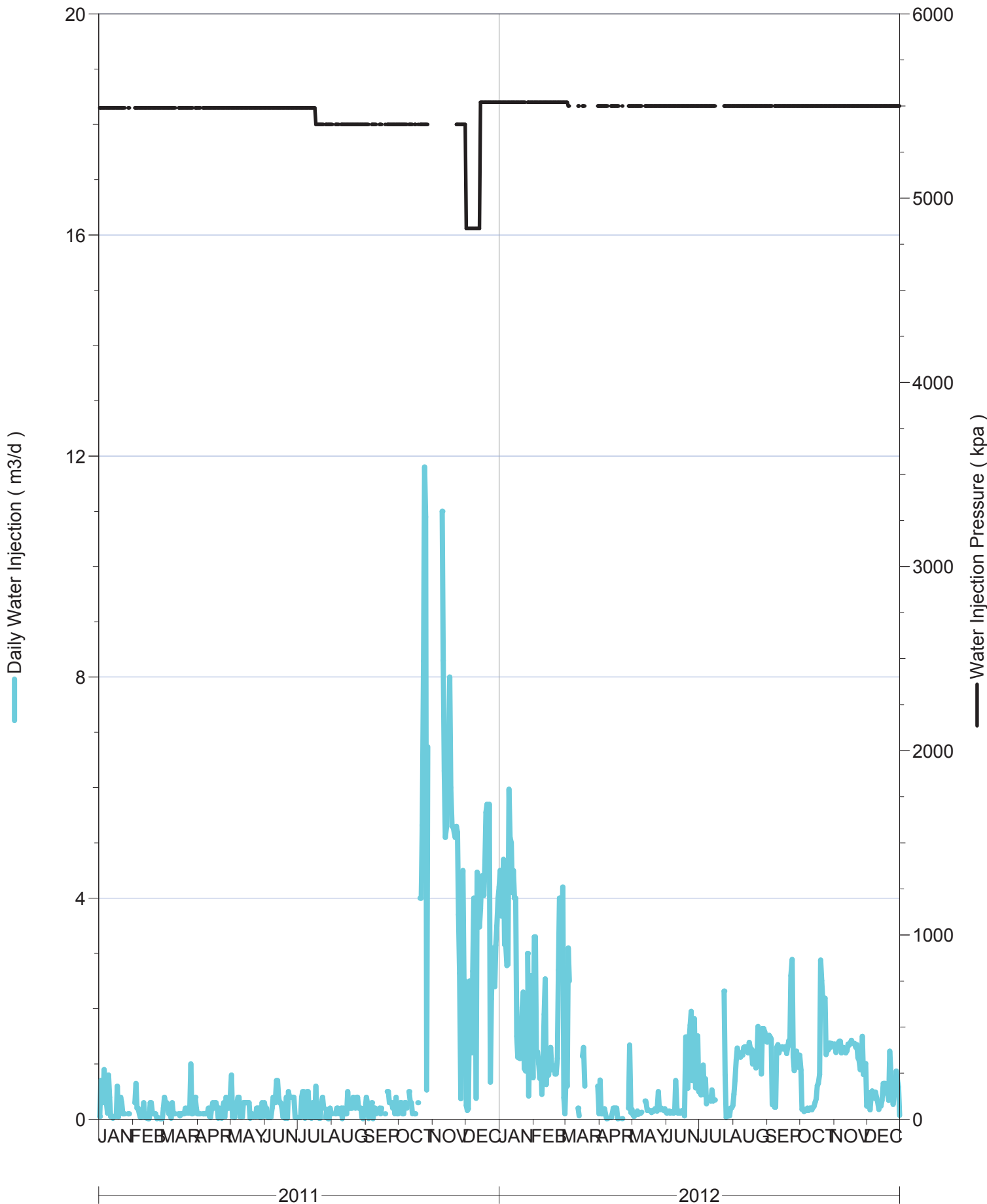
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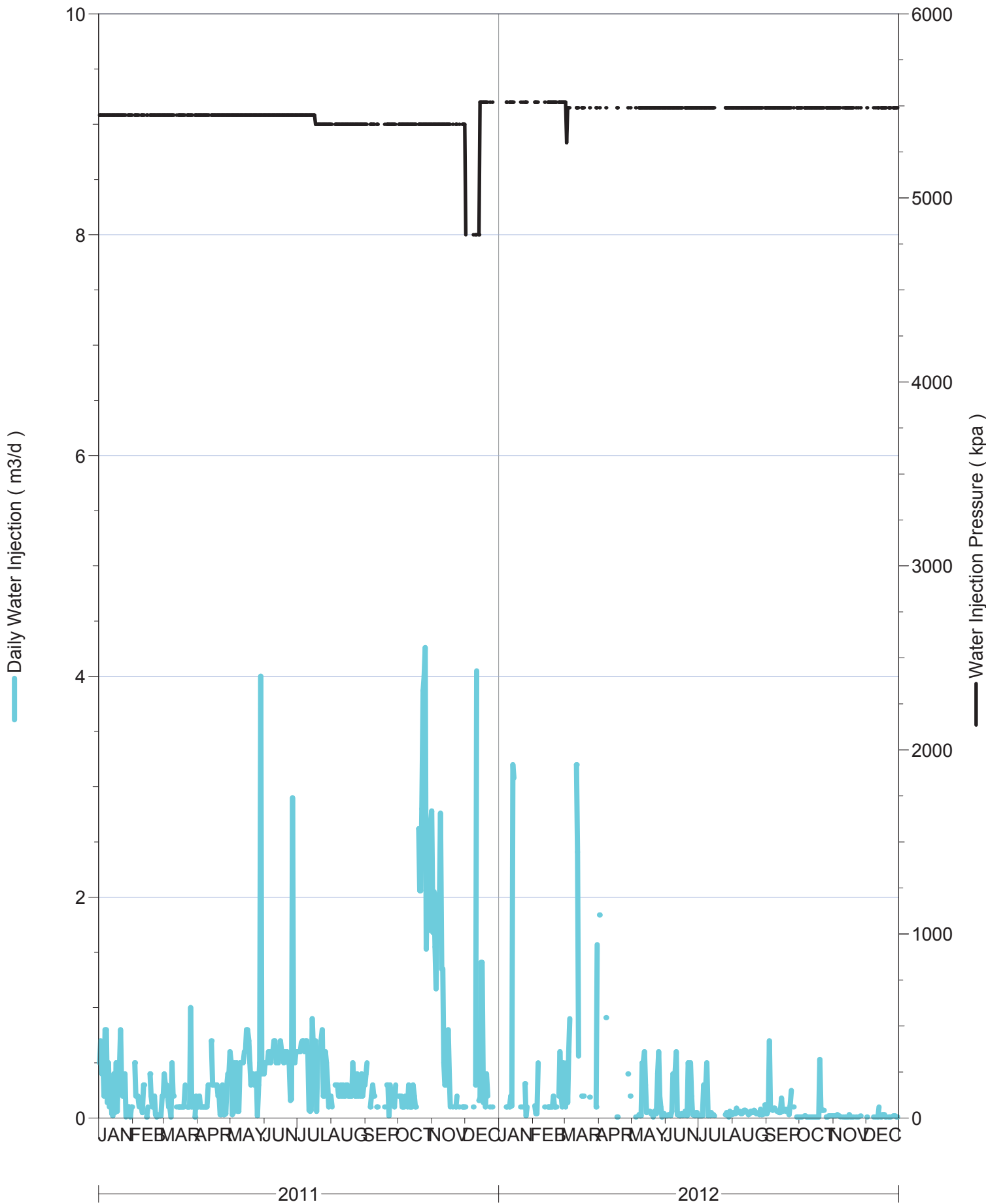
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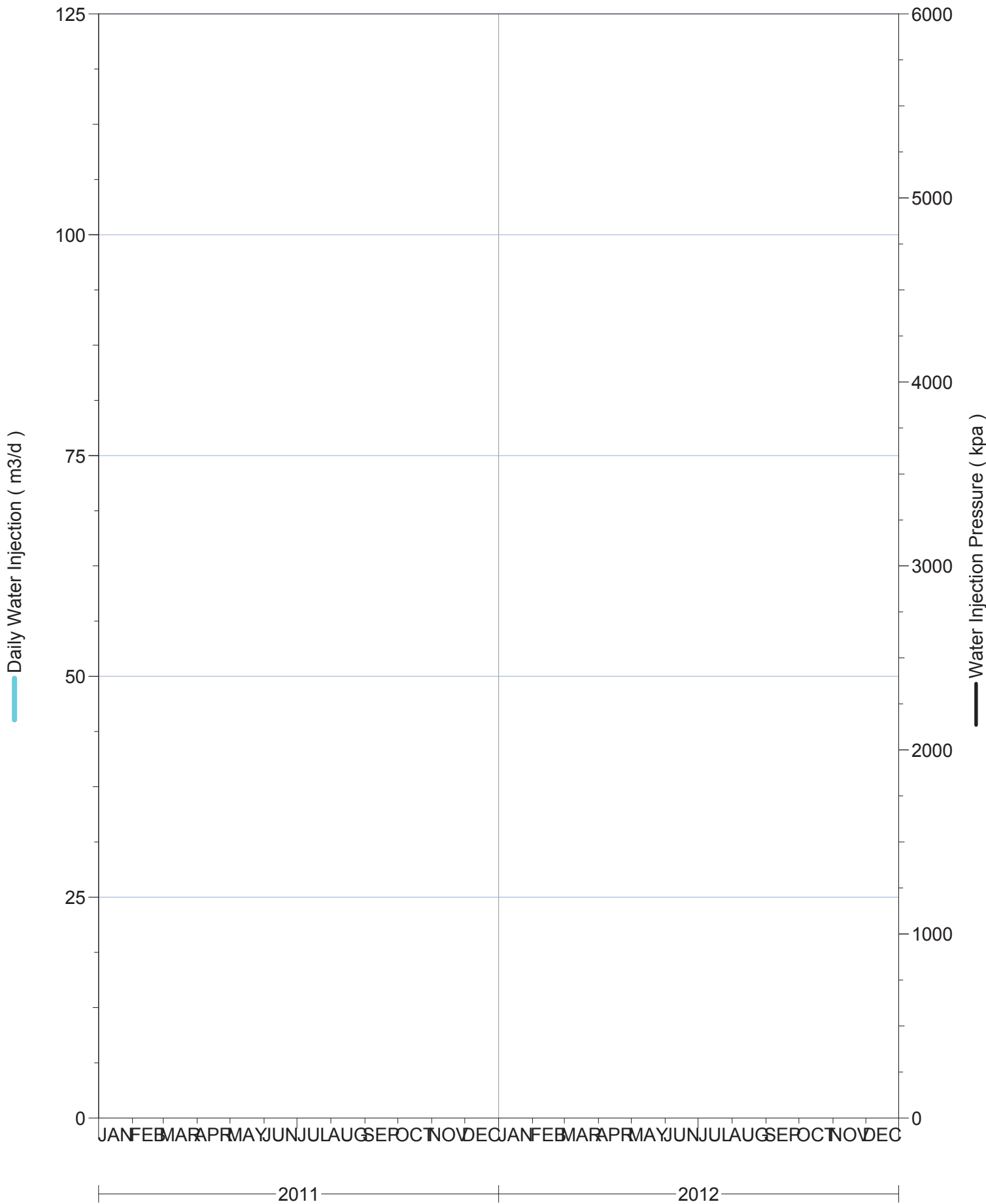
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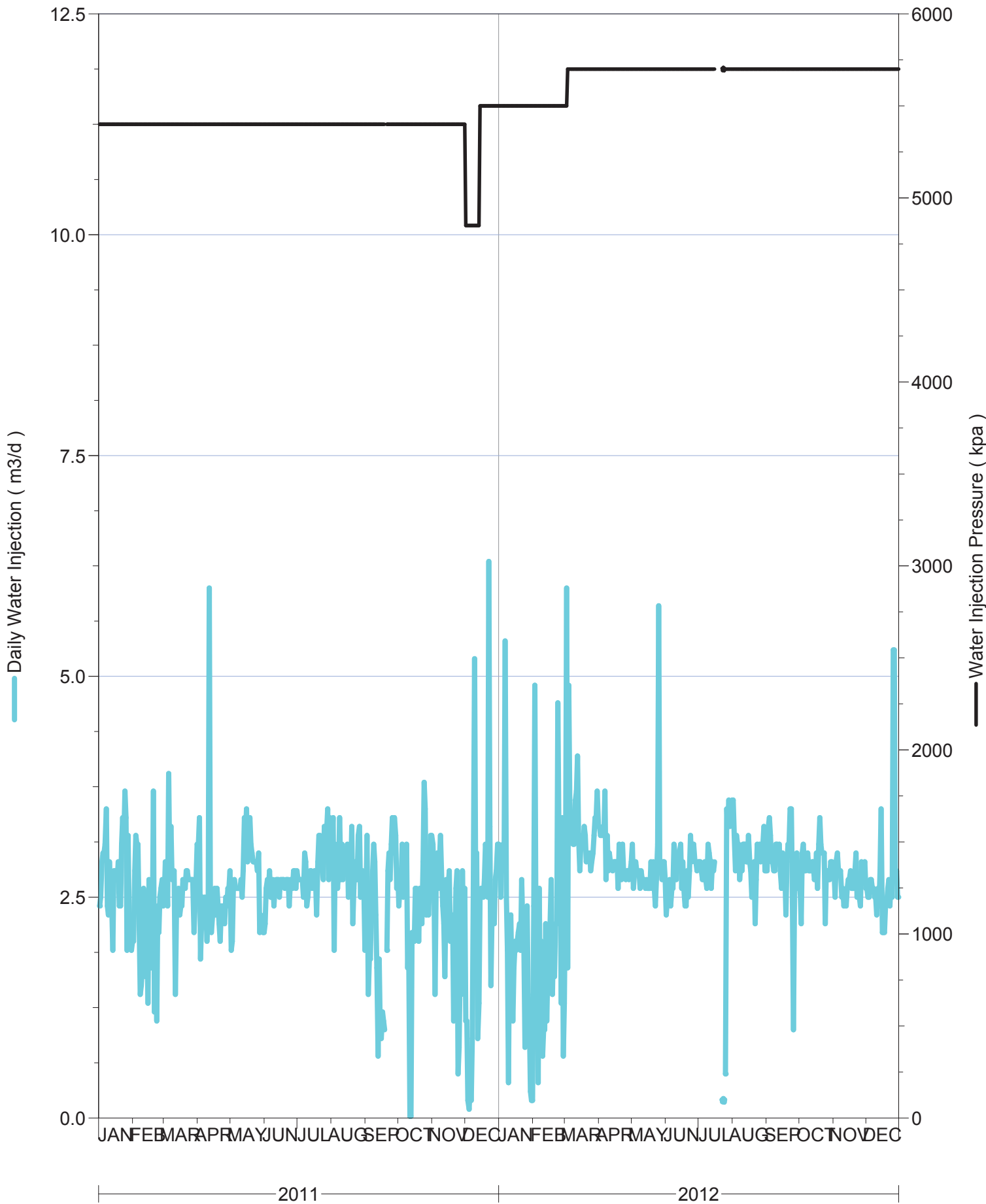
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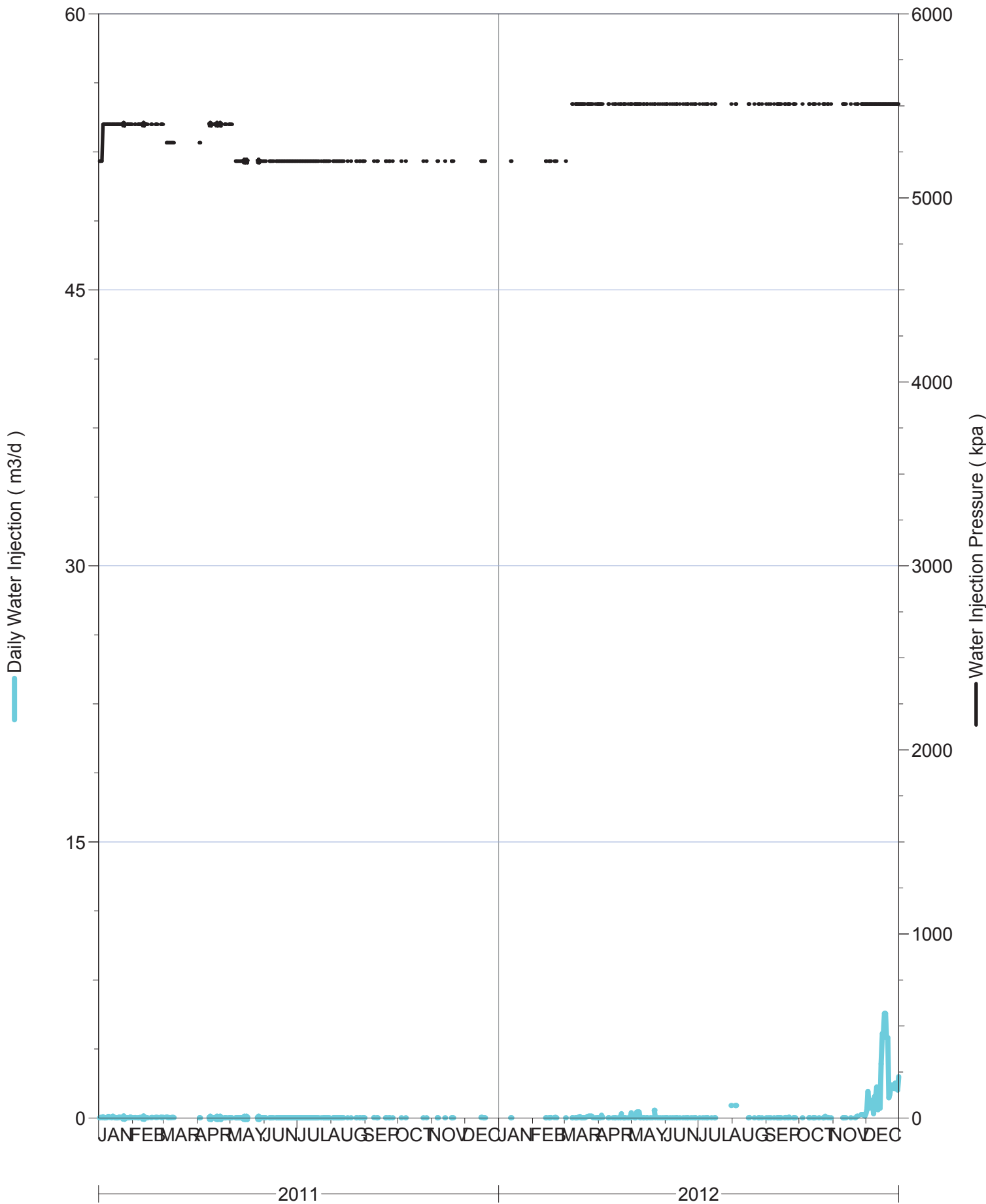
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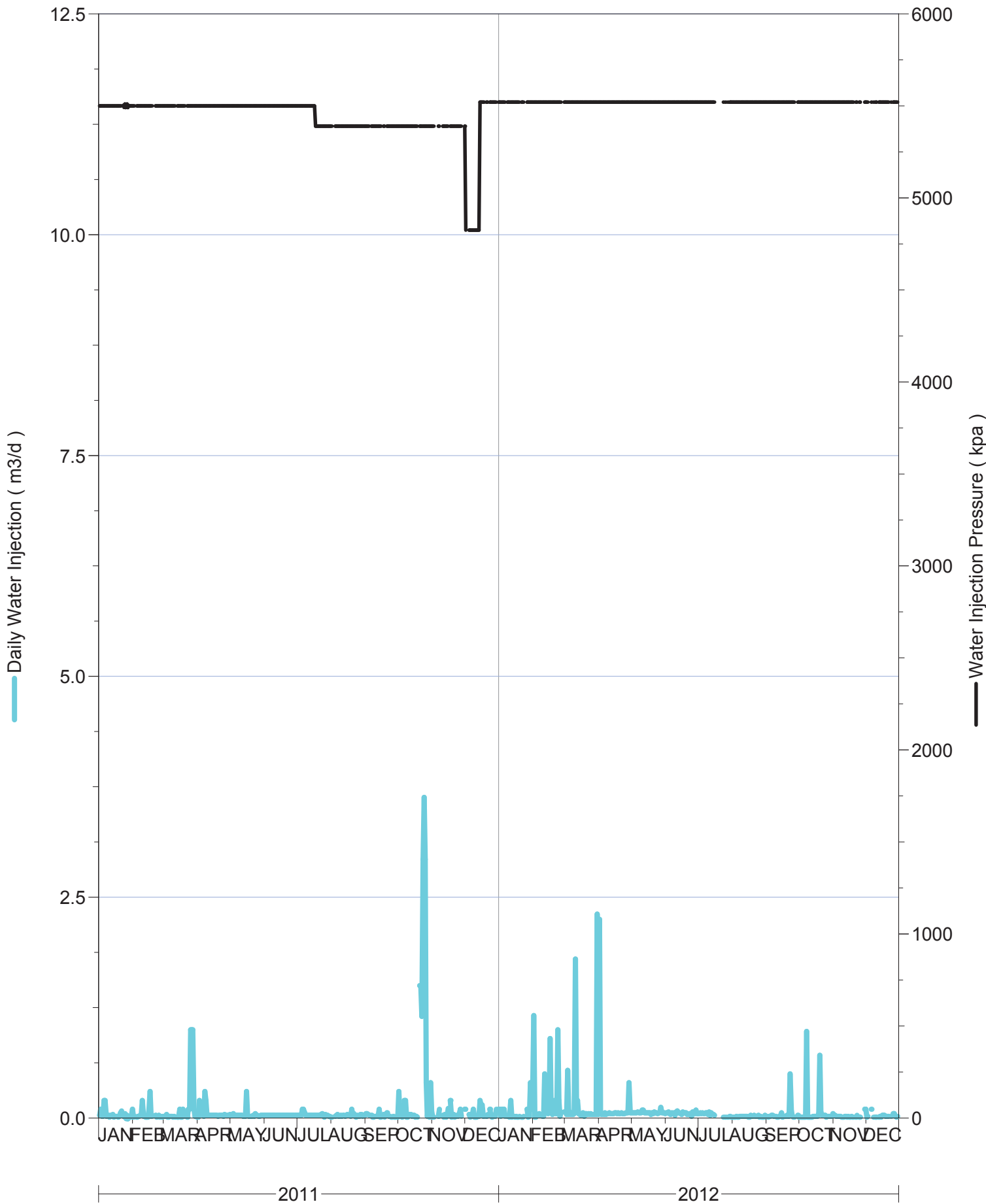
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Daily Injection Rate and Pressure for: 00/12-04-002-29W1/0

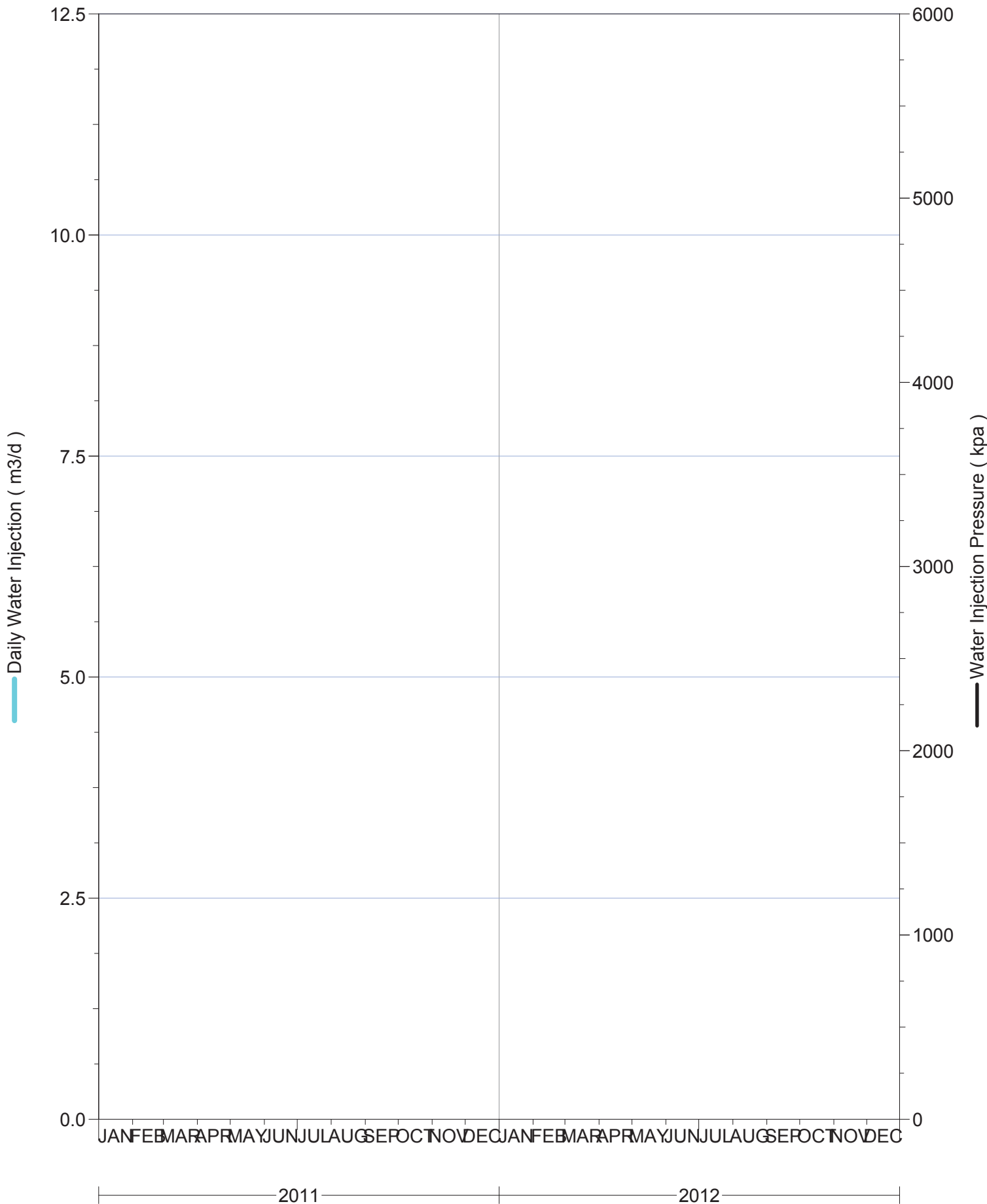


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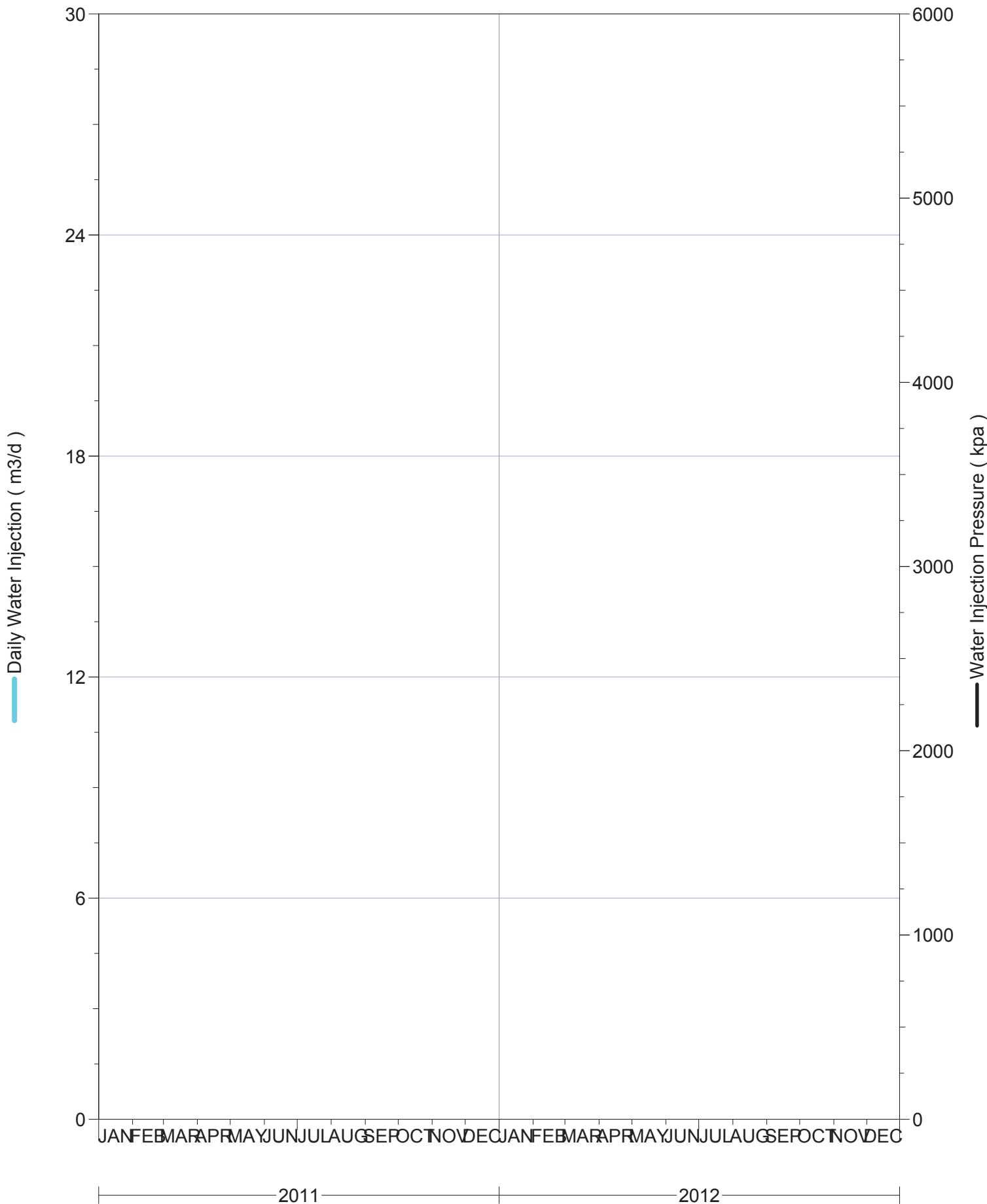




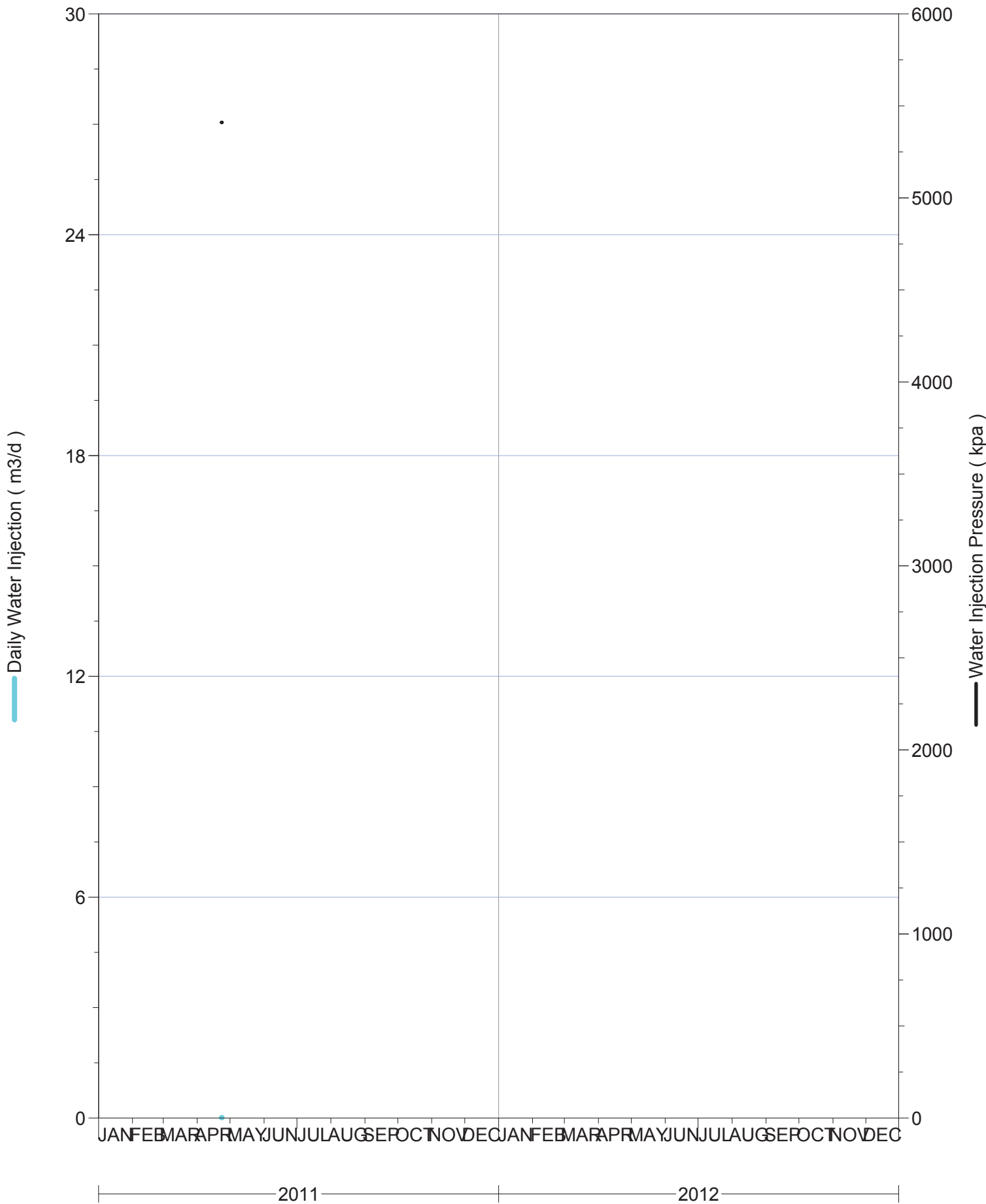
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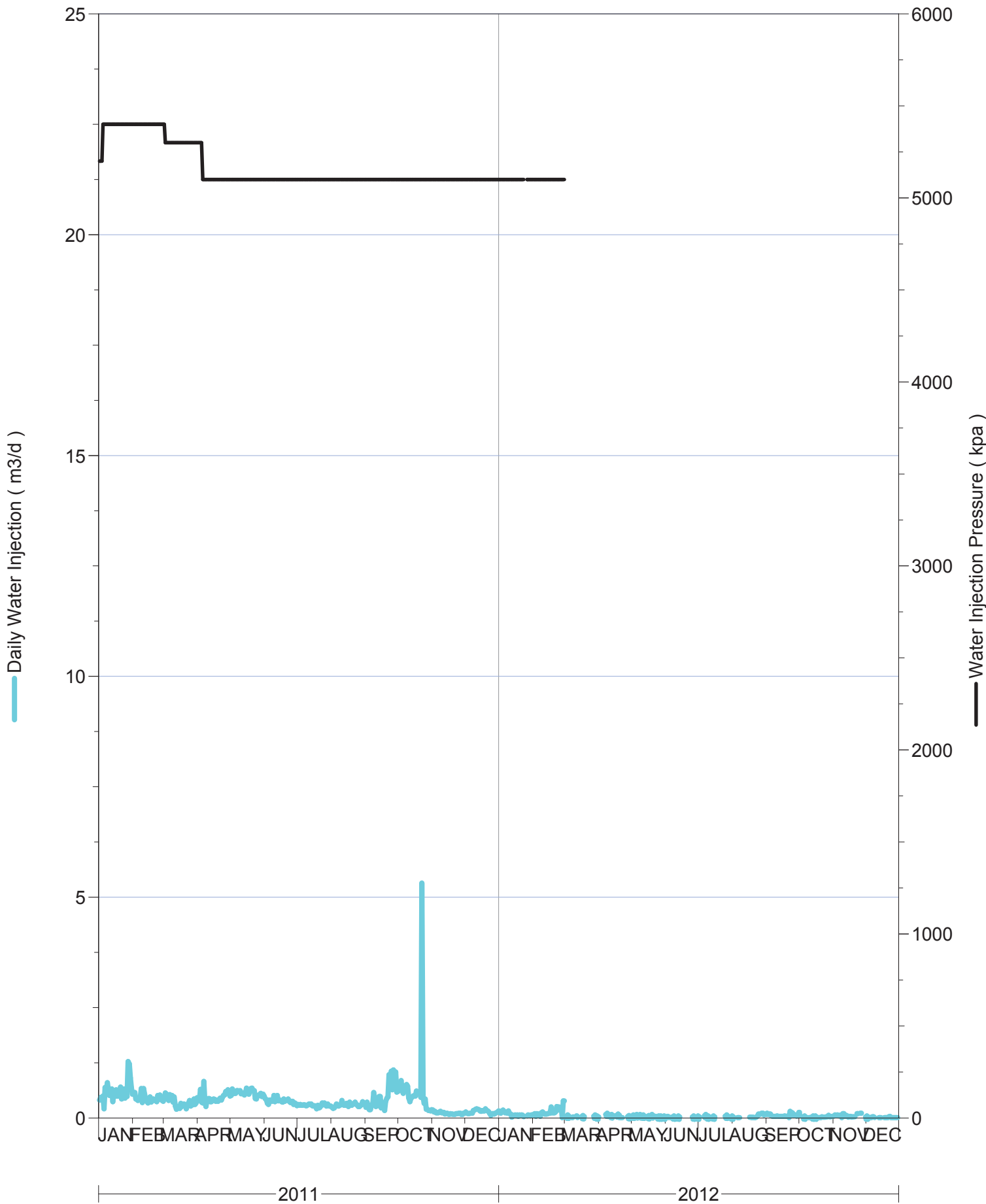
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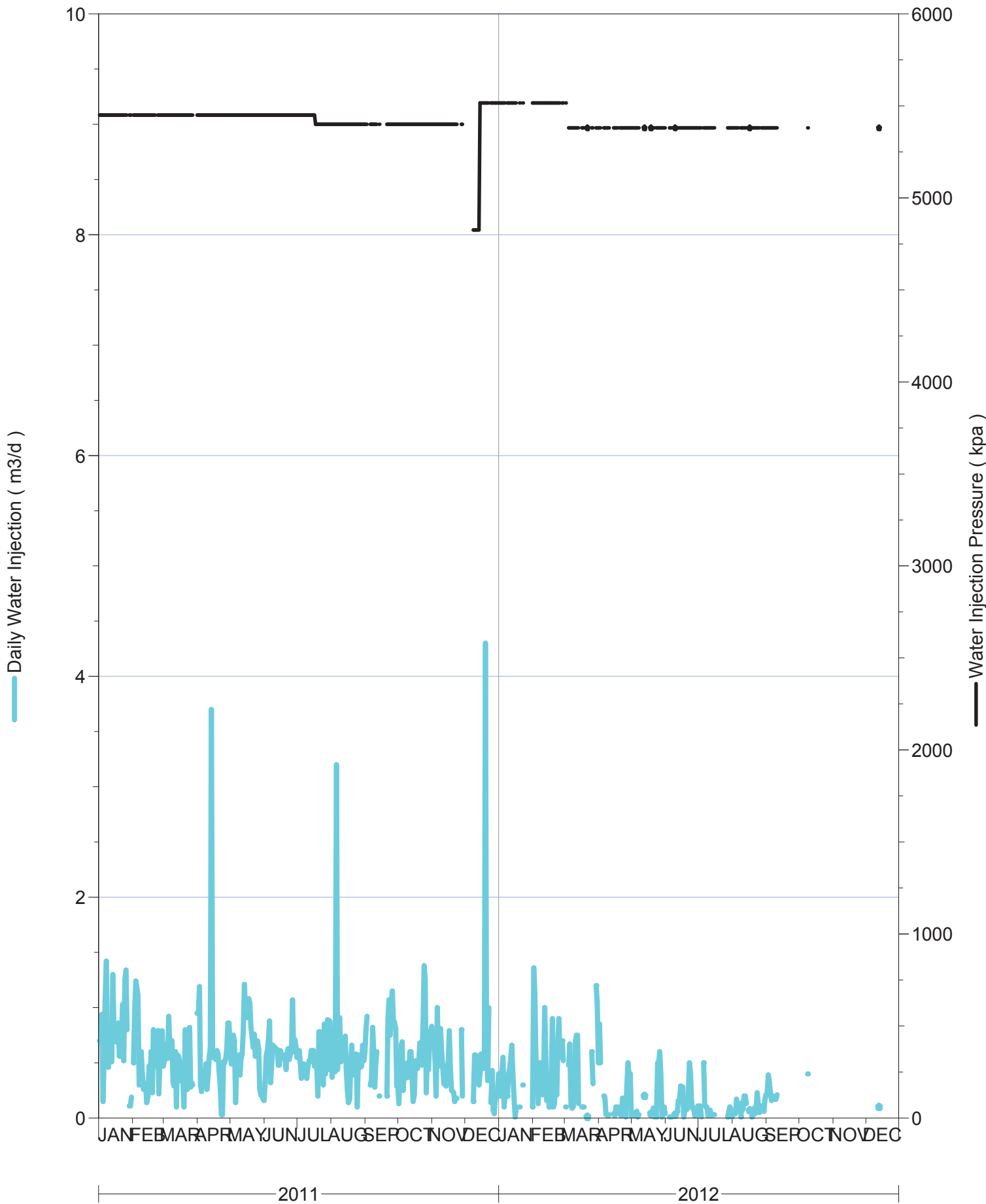
Daily Injection Rate and Pressure for: 00/12-17-002-29W1/0



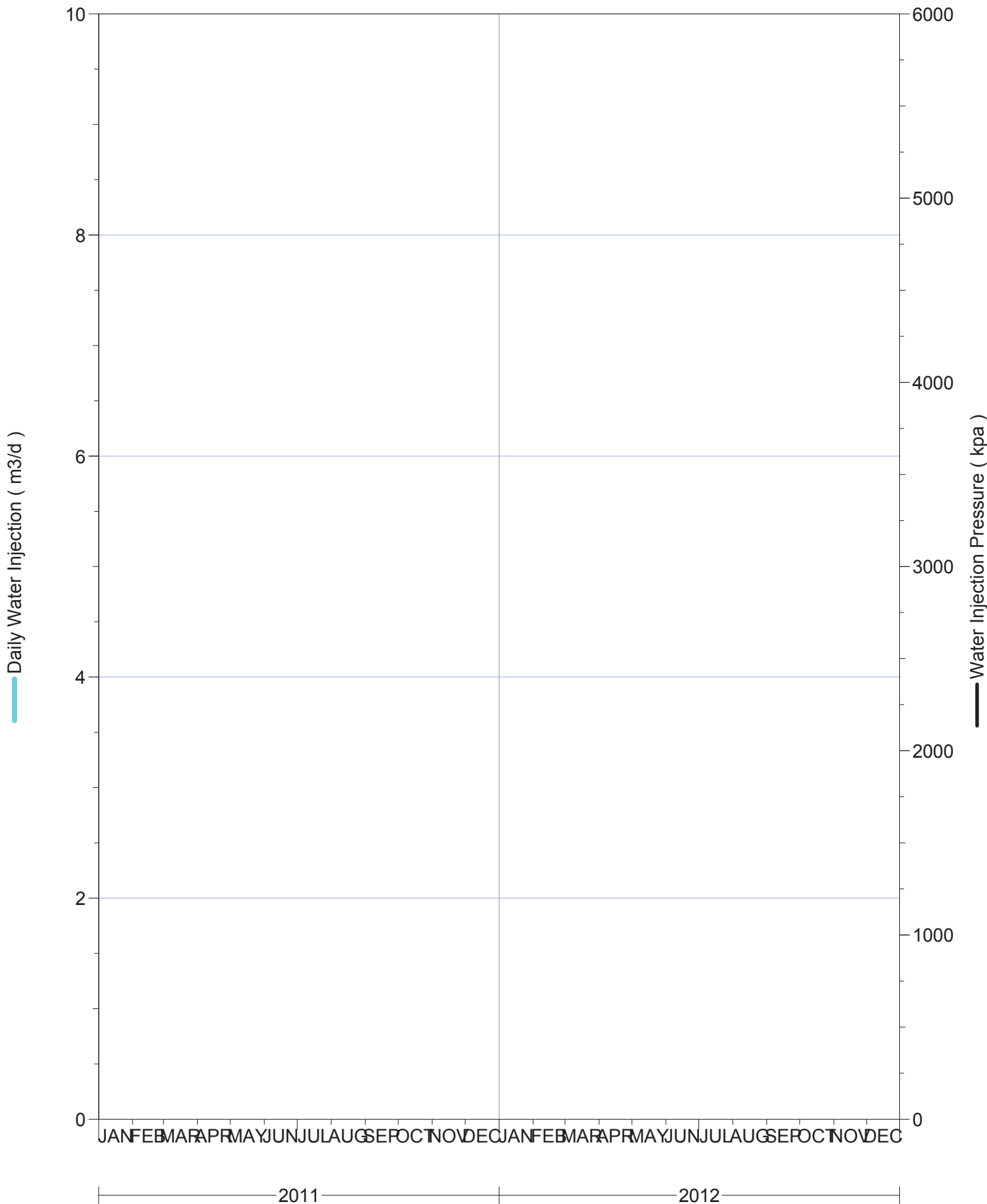
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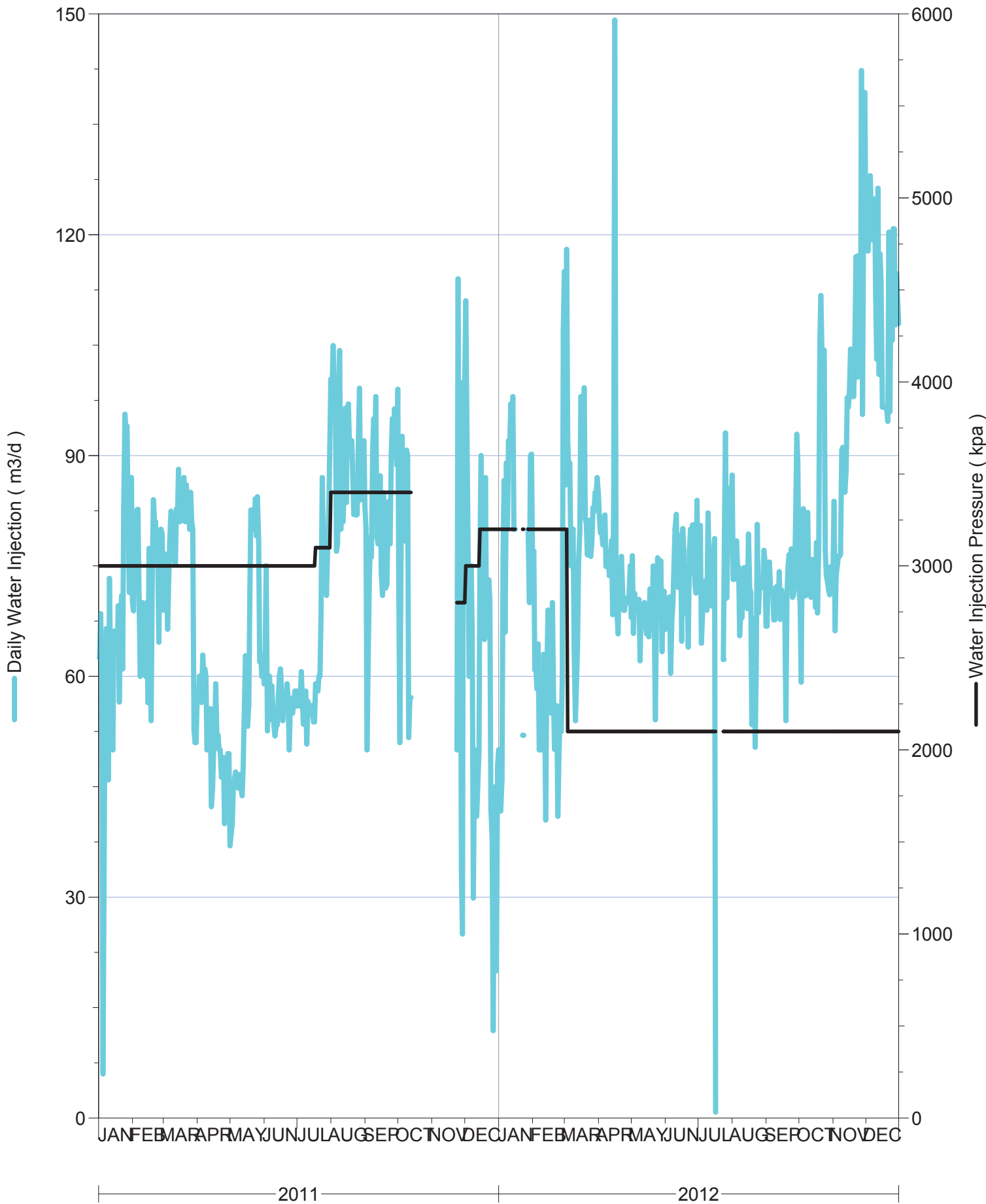
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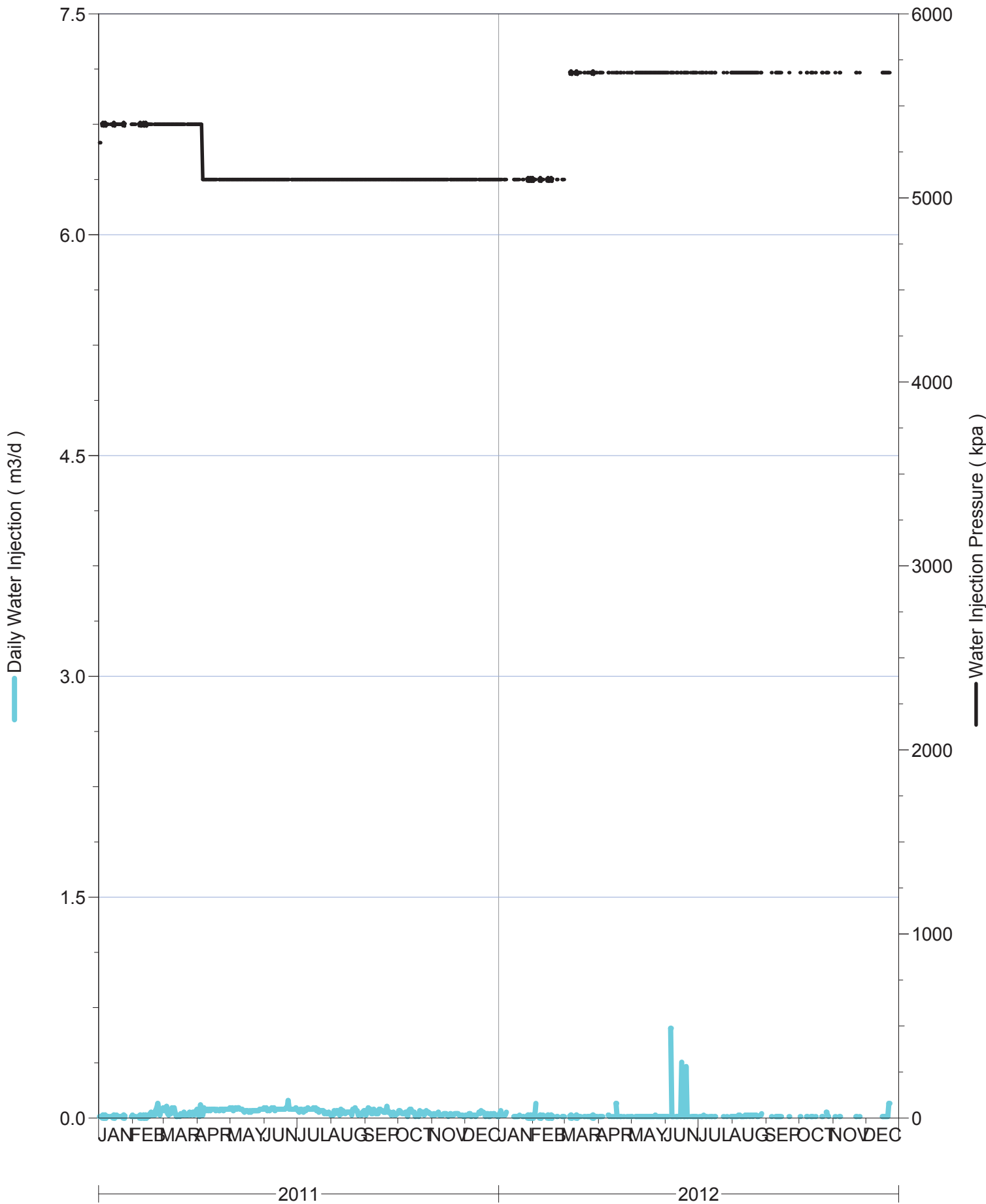
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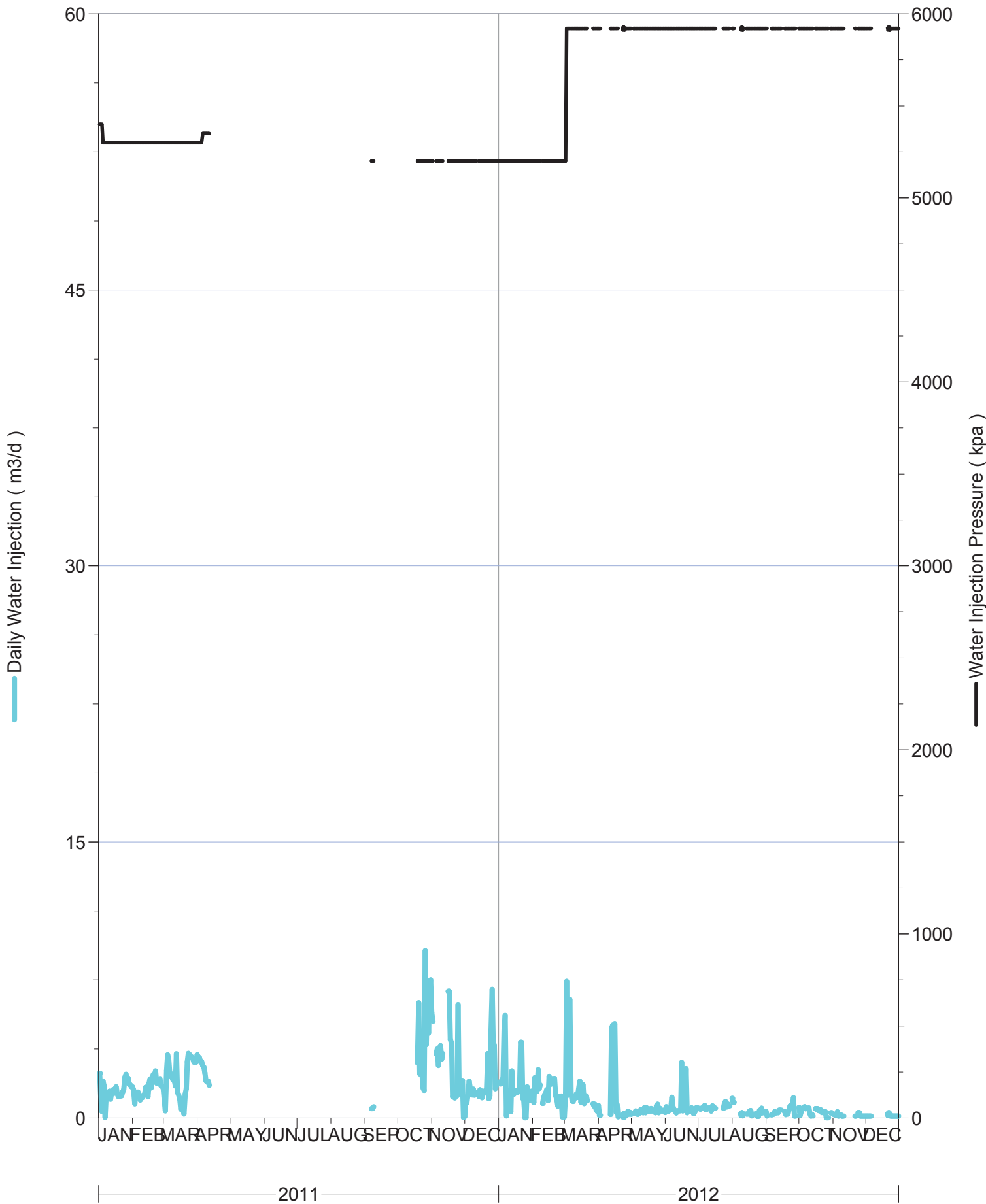


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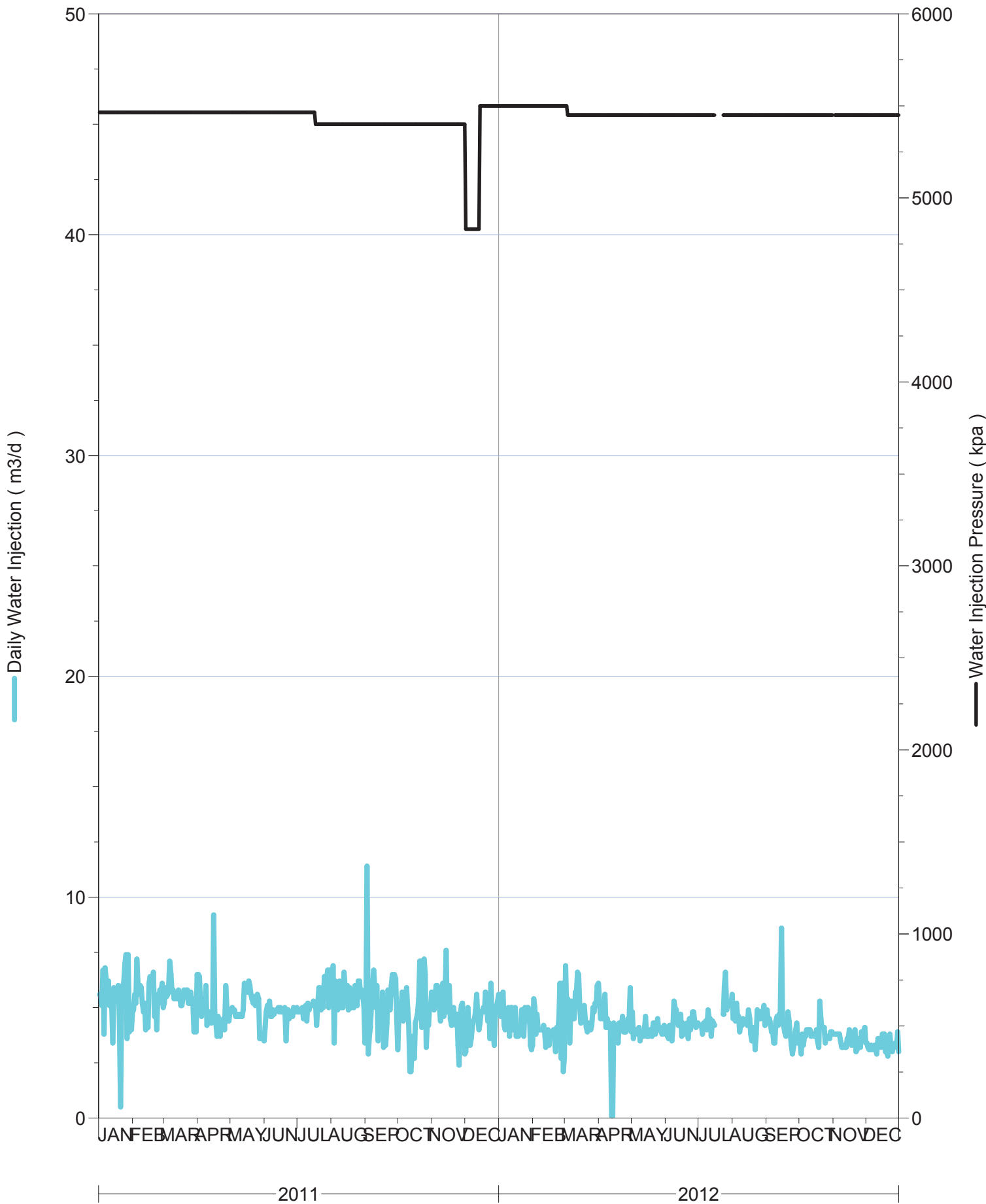




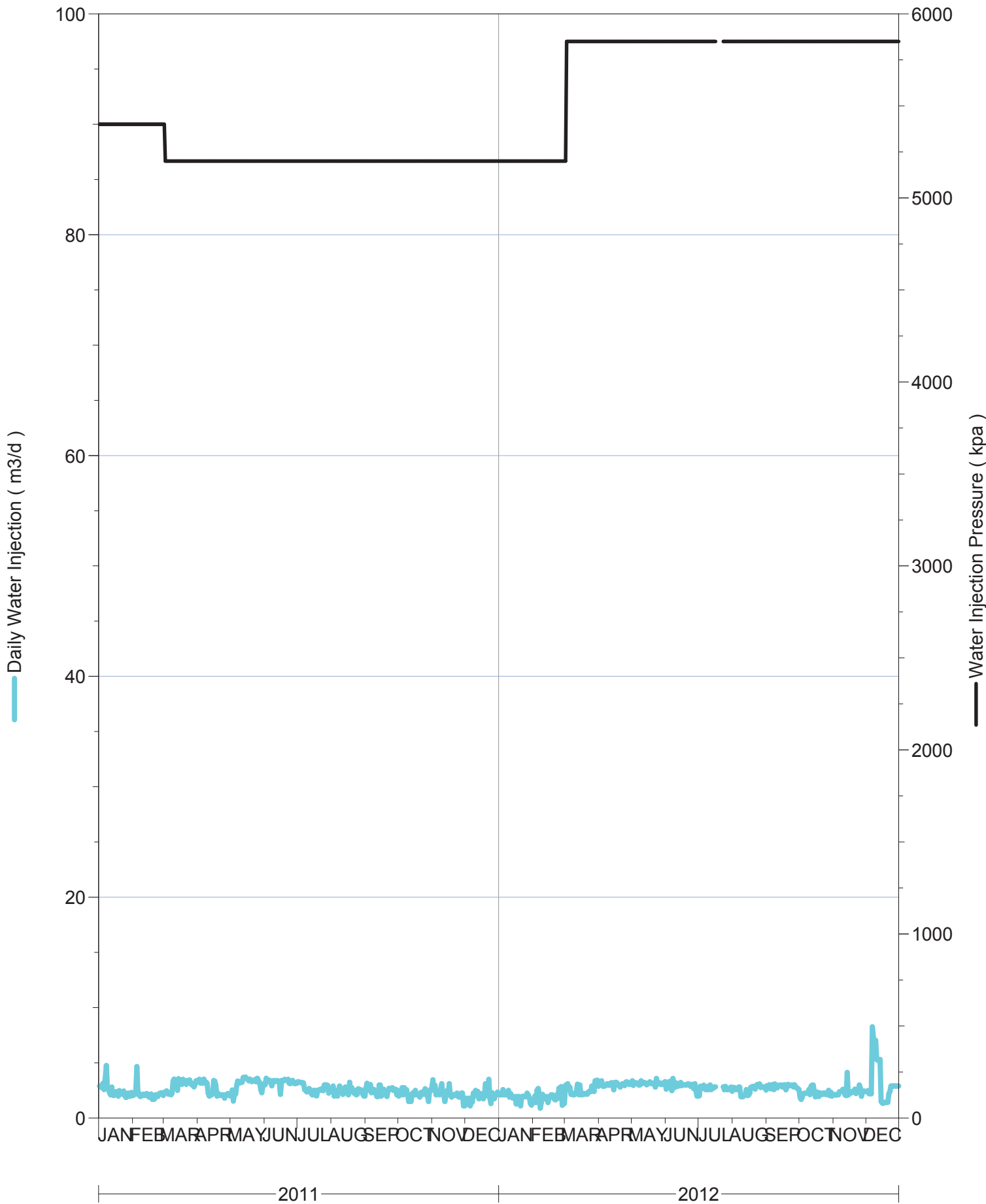
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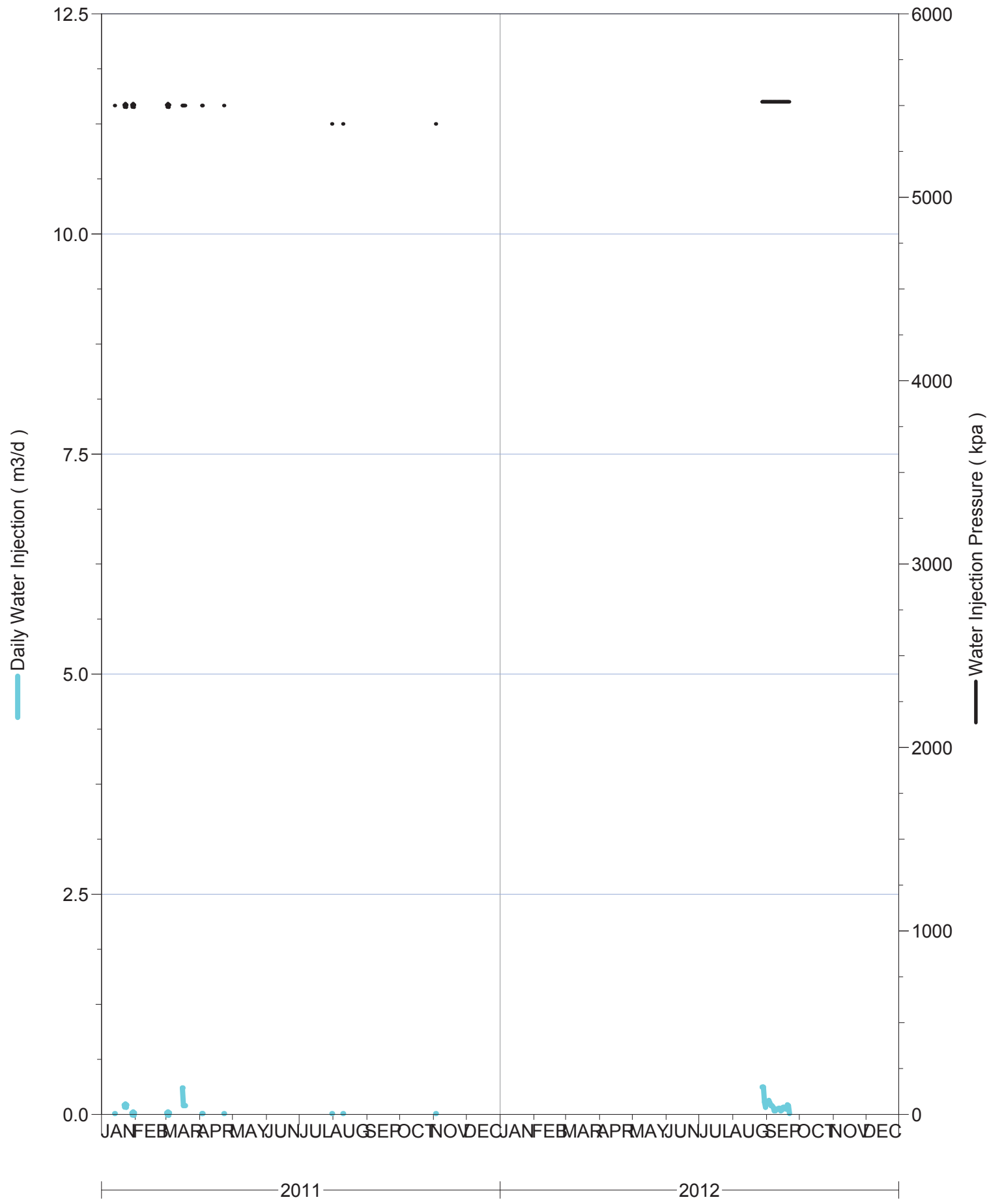
Daily Injection Rate and Pressure for: 00/16-08-002-29W1/0



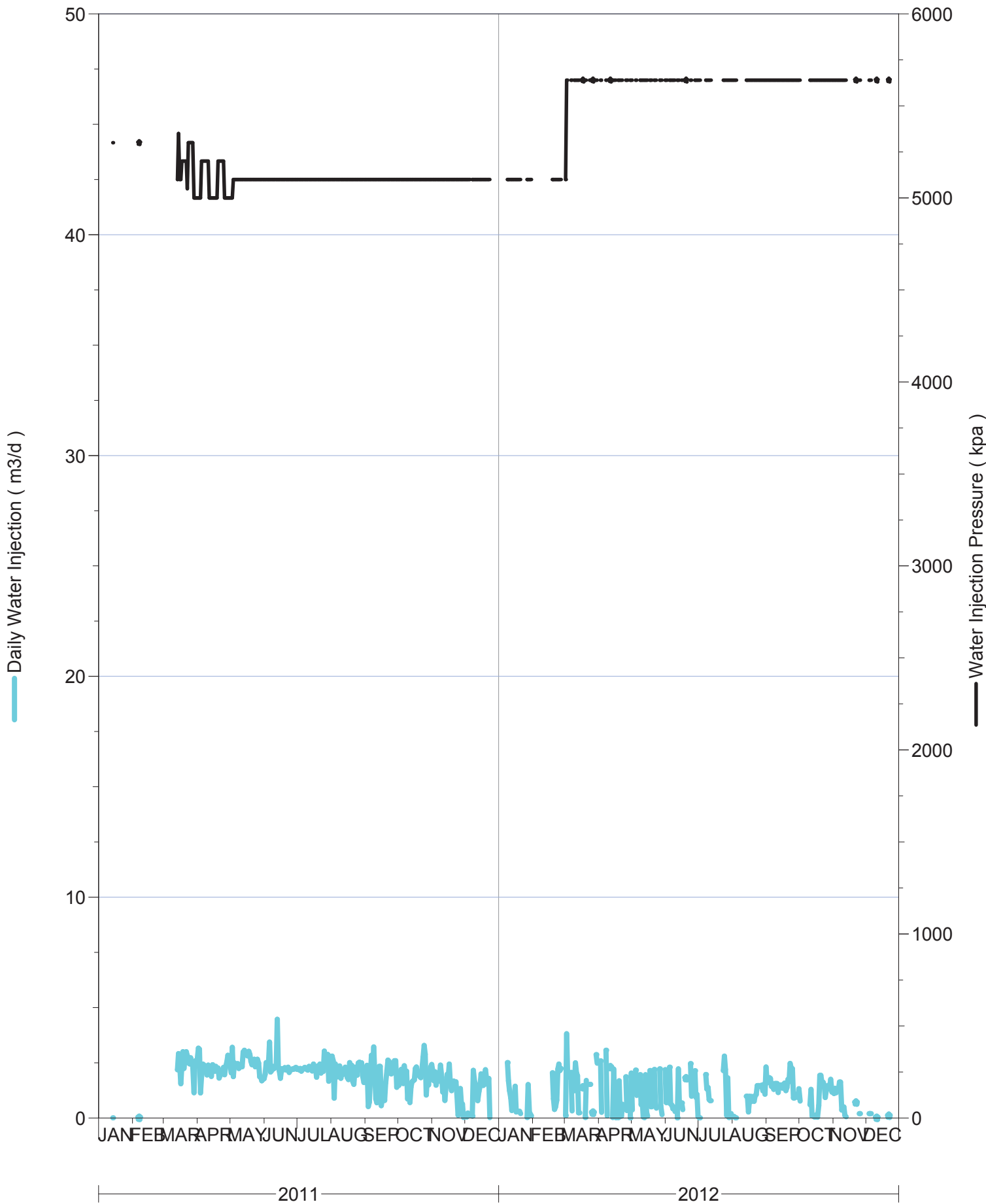
Daily Injection Rate and Pressure for: 00/16-09-002-29W1/0



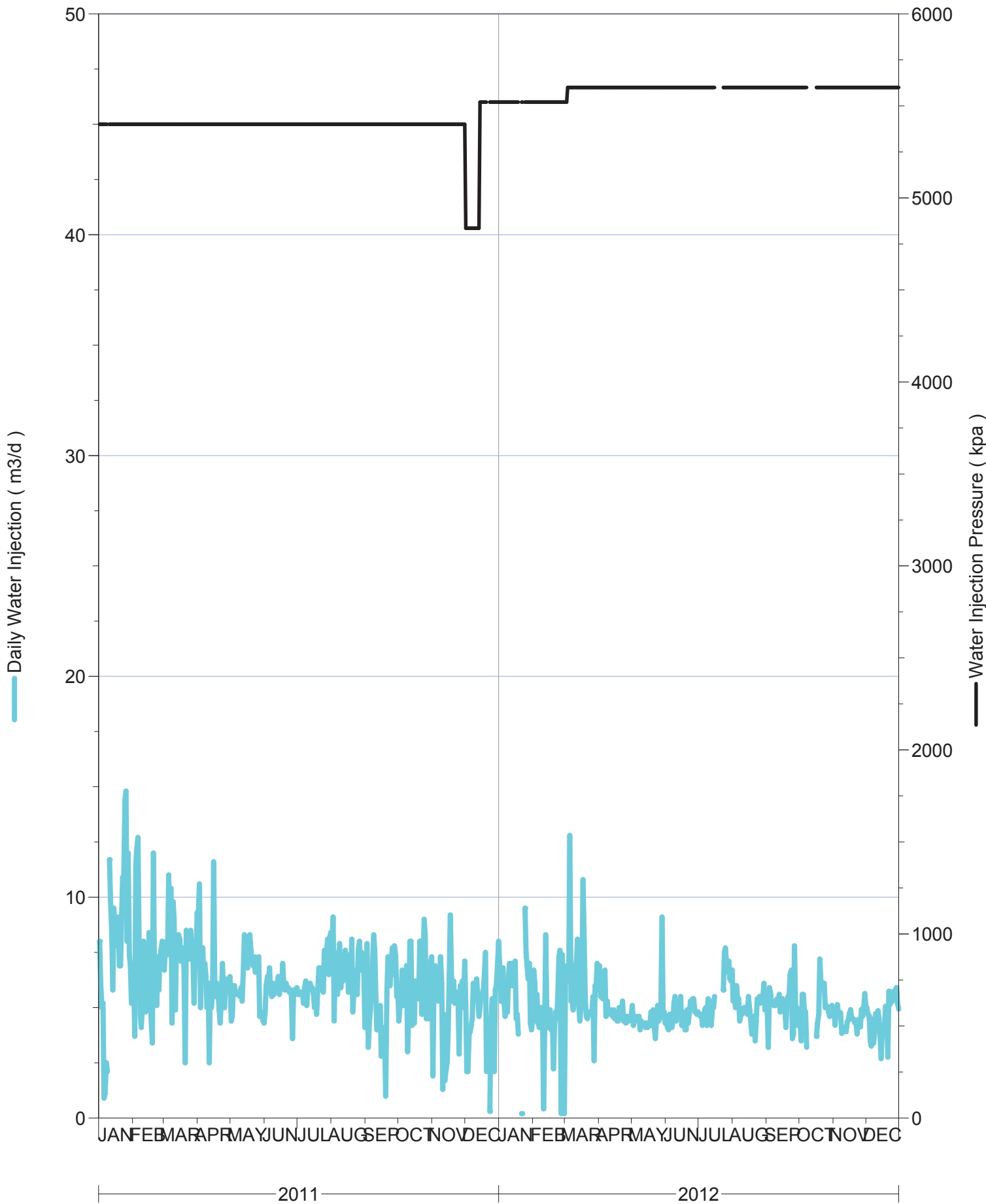
Daily Injection Rate and Pressure for: 00/16-18-002-29W1/0



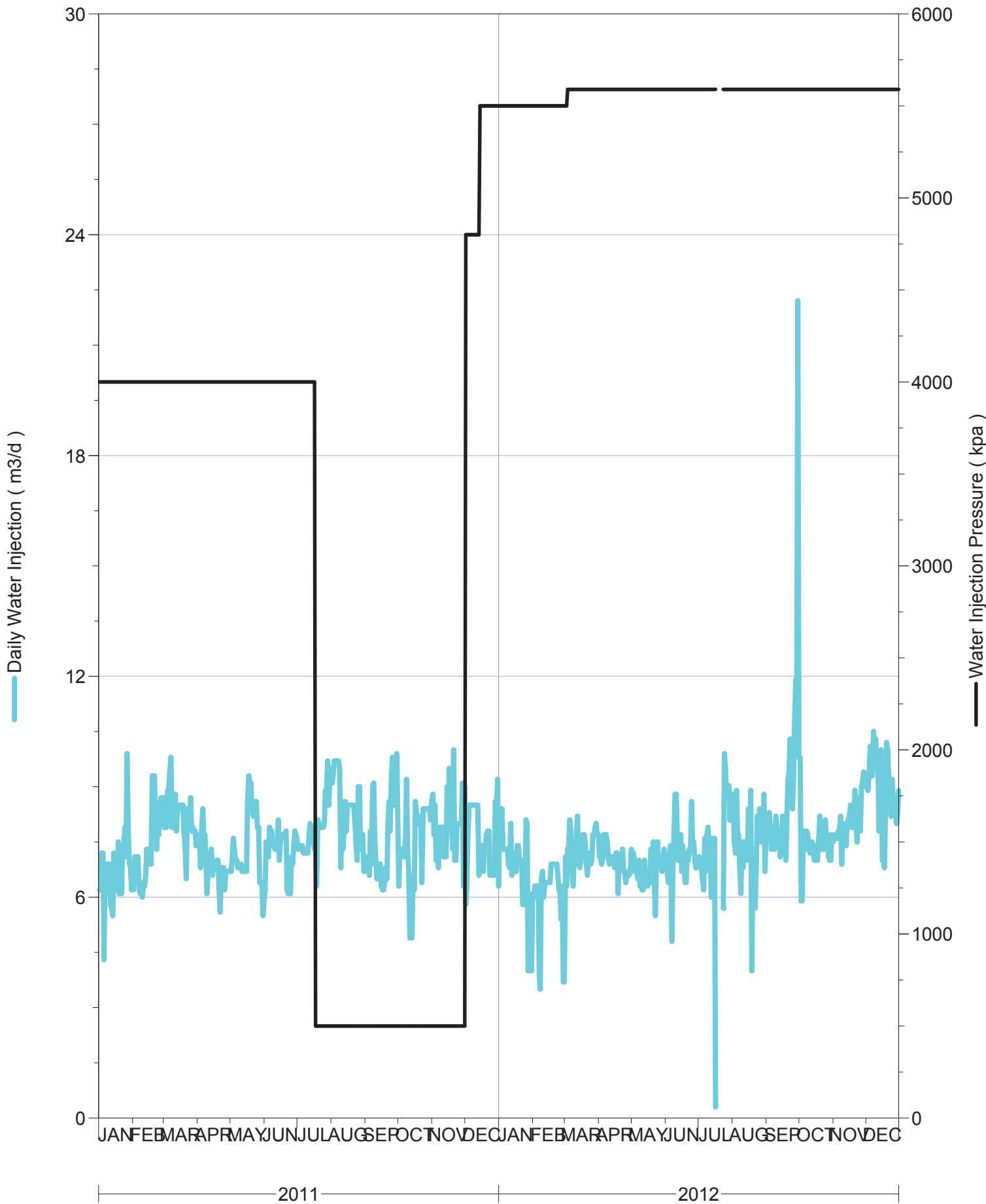
Daily Injection Rate and Pressure for: 02/08-09-002-29W1/0



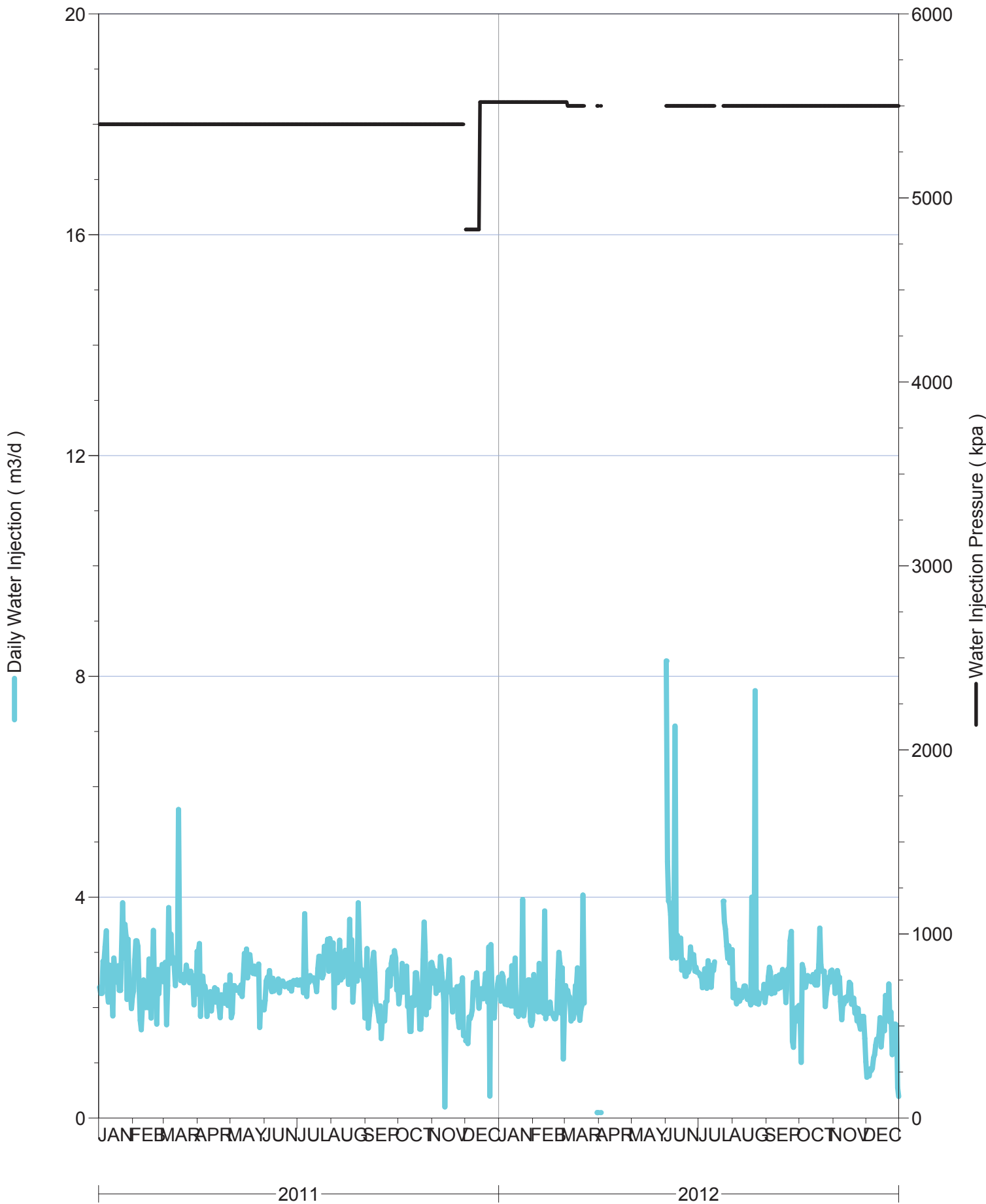
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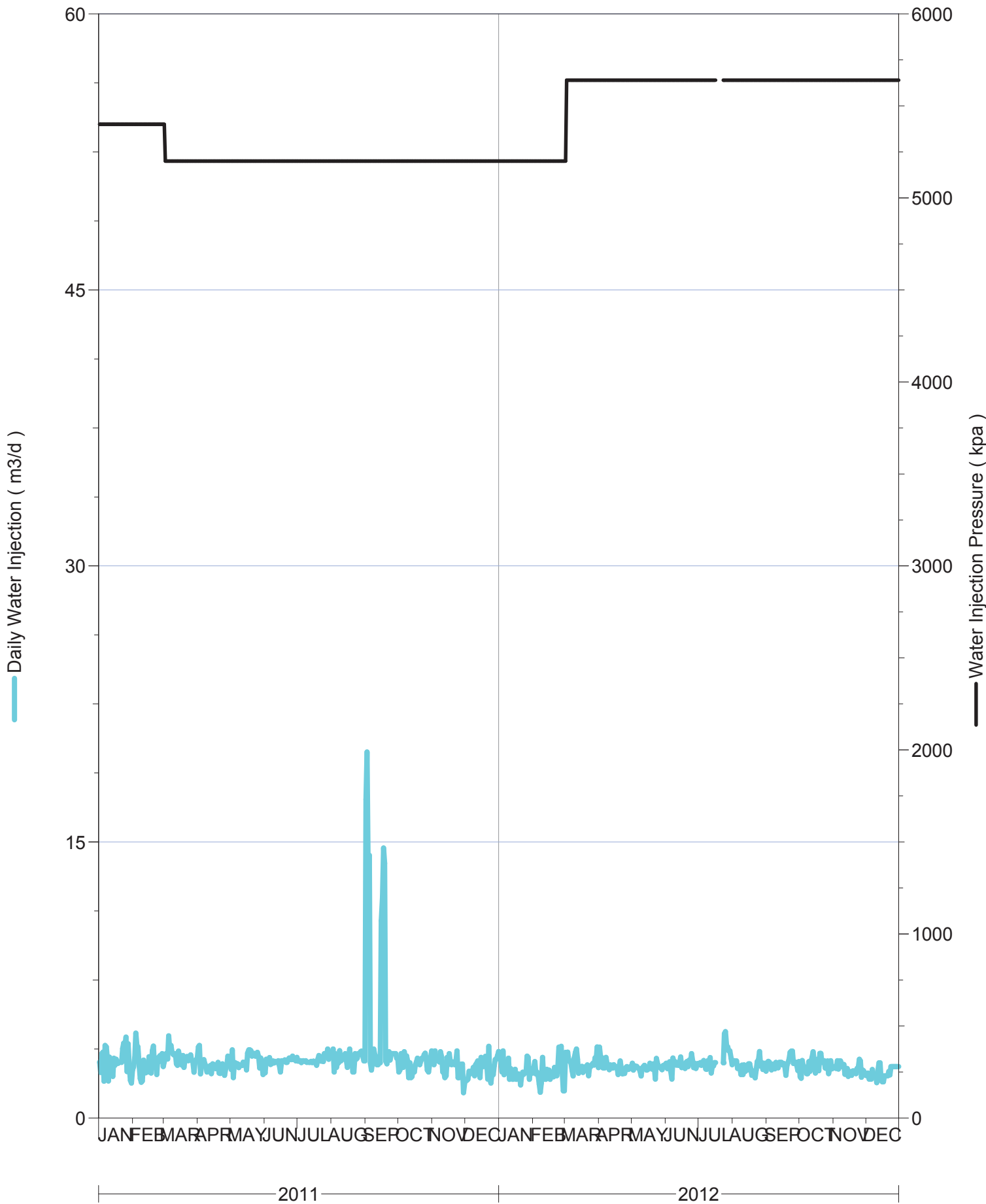


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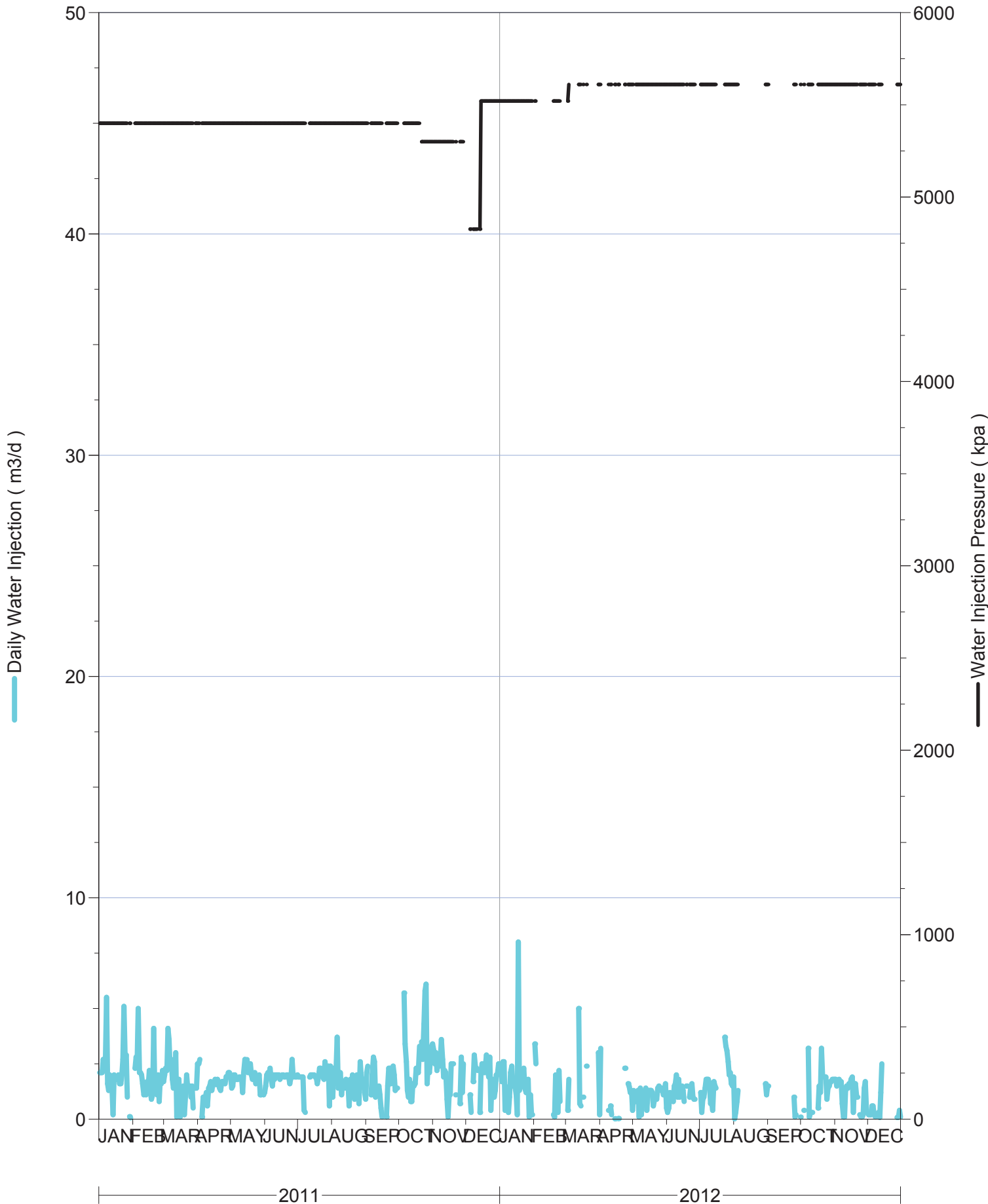




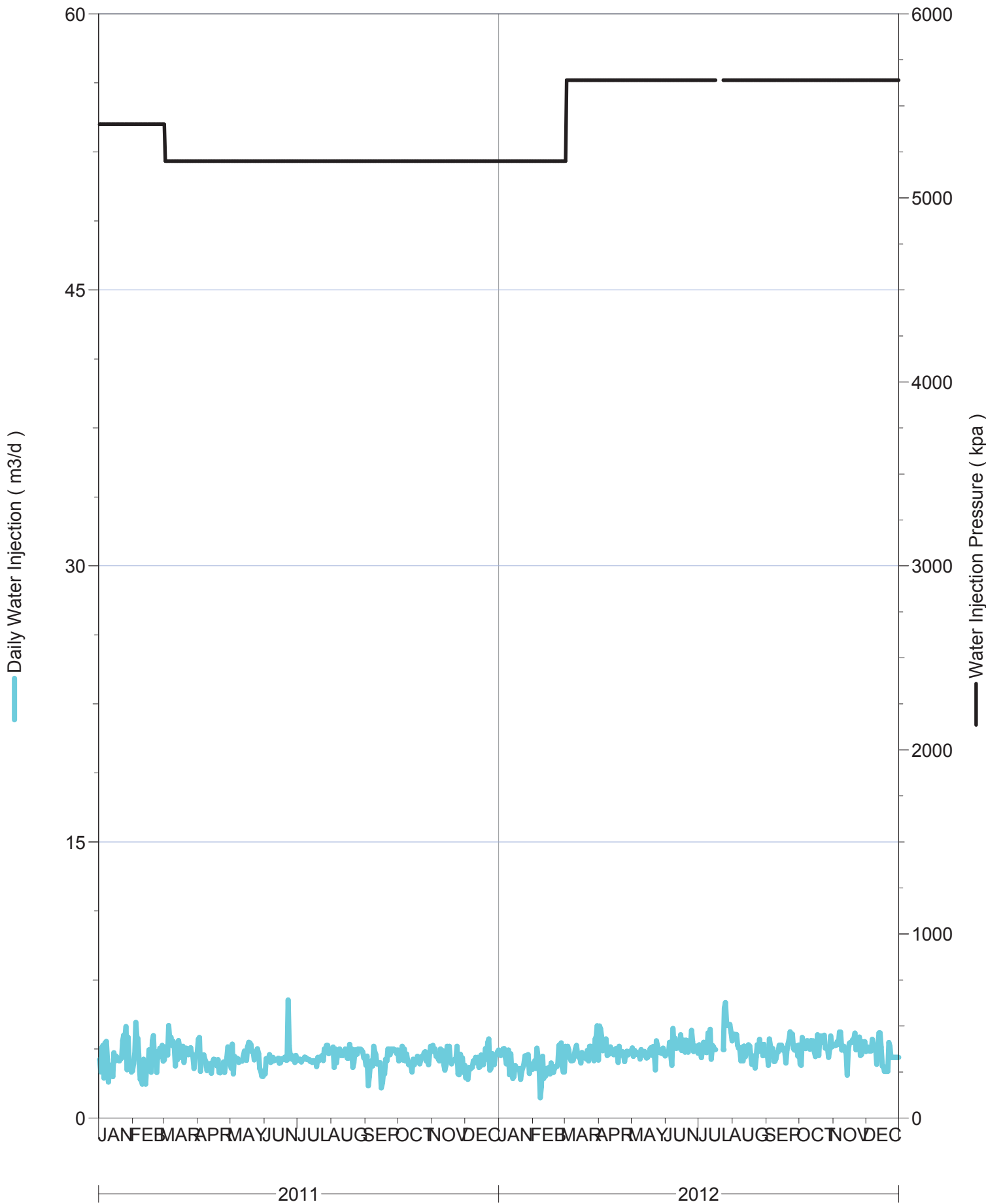
Daily Injection Rate and Pressure for: 02/16-09-002-29W1/0



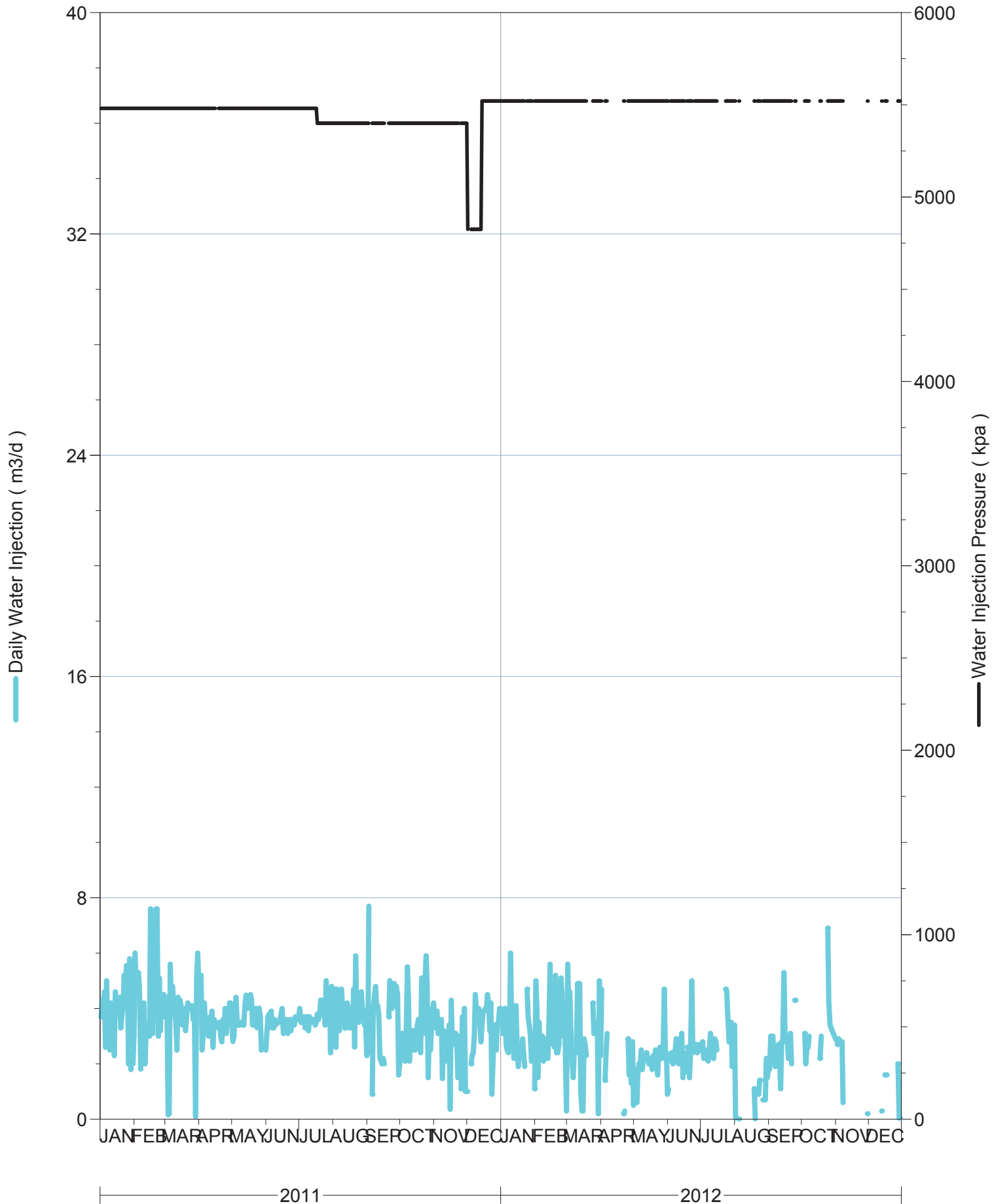
Daily Injection Rate and Pressure for: 03/15-16-002-29W1/0



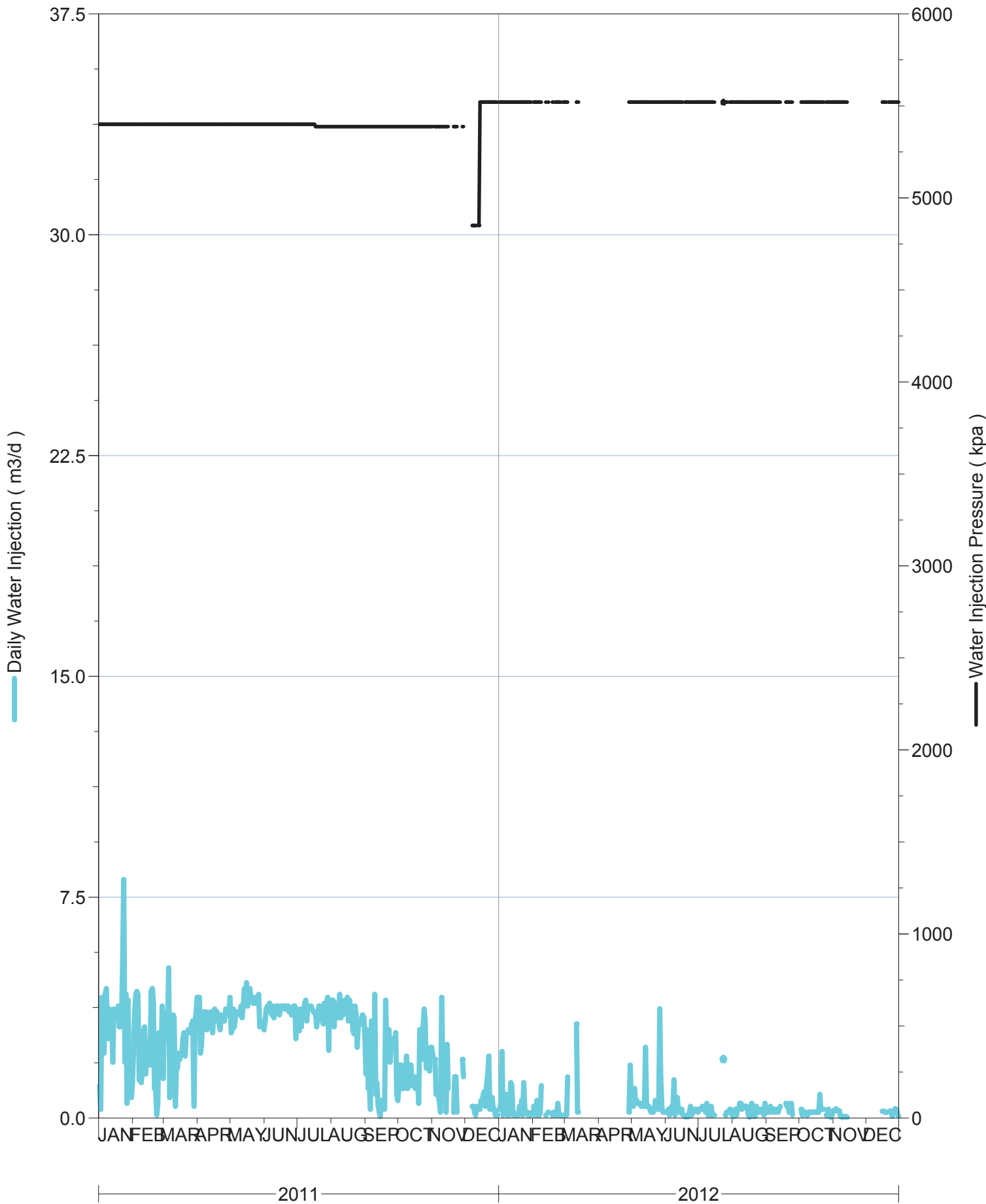
Daily Injection Rate and Pressure for: 03/16-09-002-29W1/0



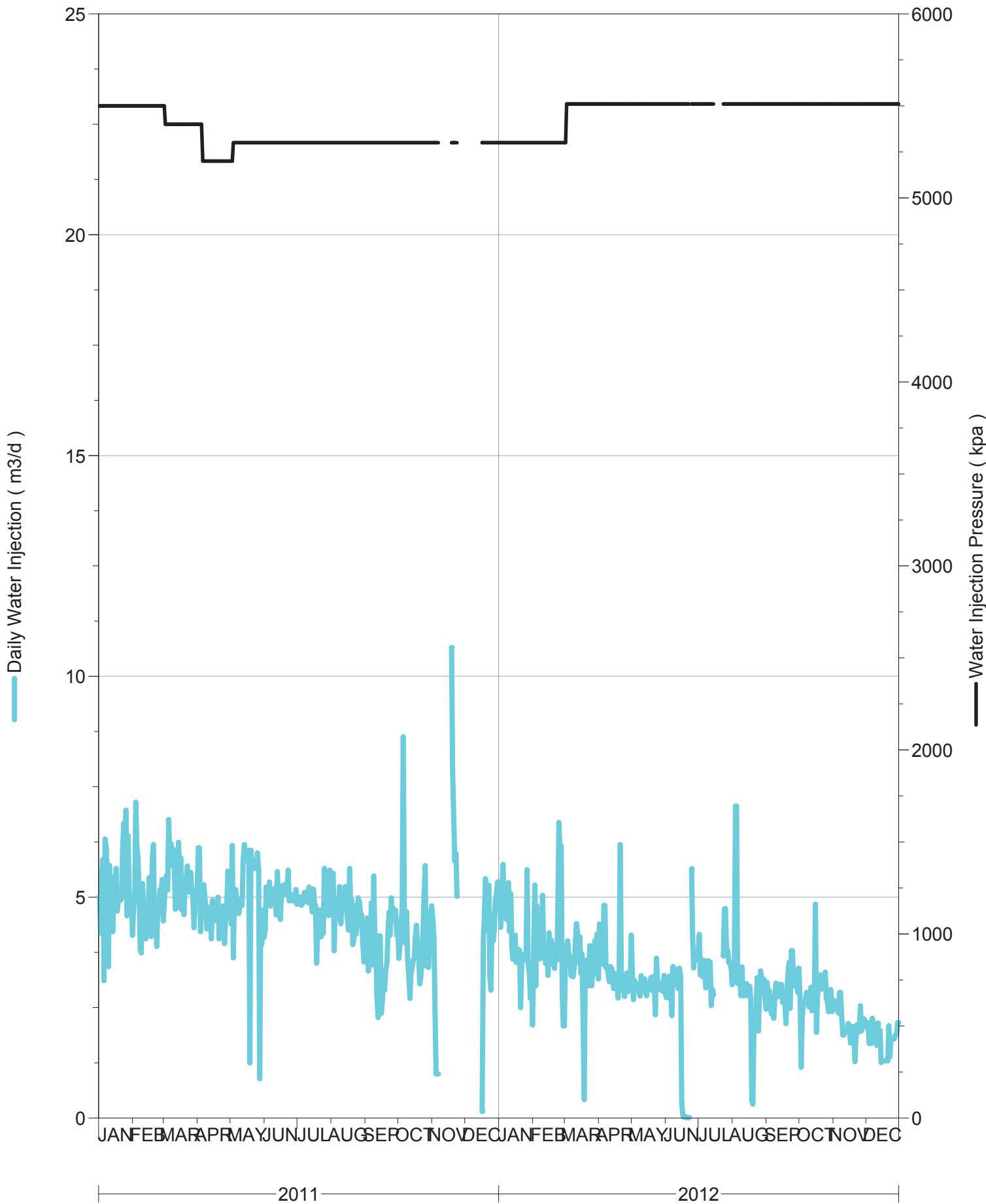
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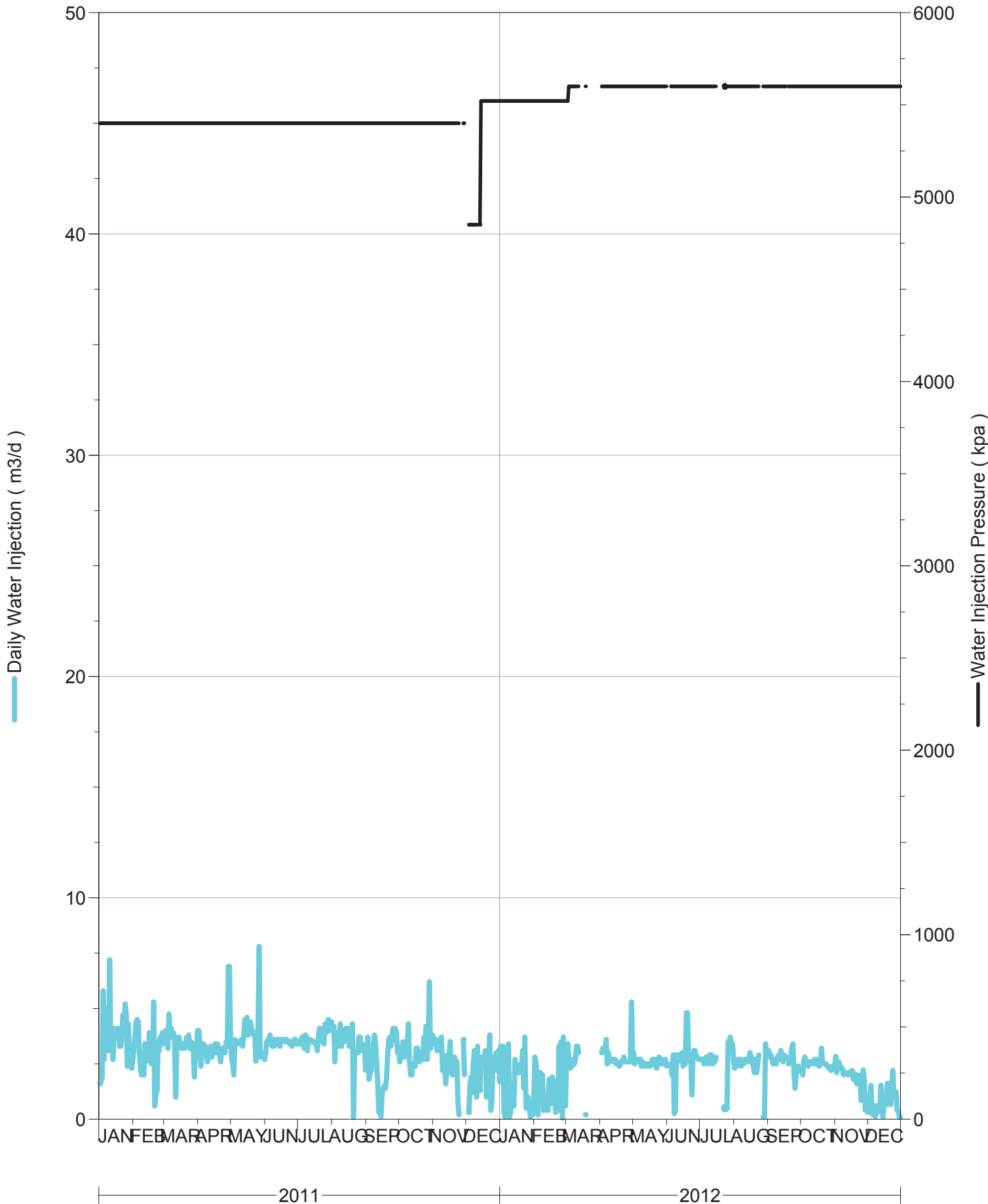
Daily Injection Rate and Pressure for: B0/04-16-002-29W1/0



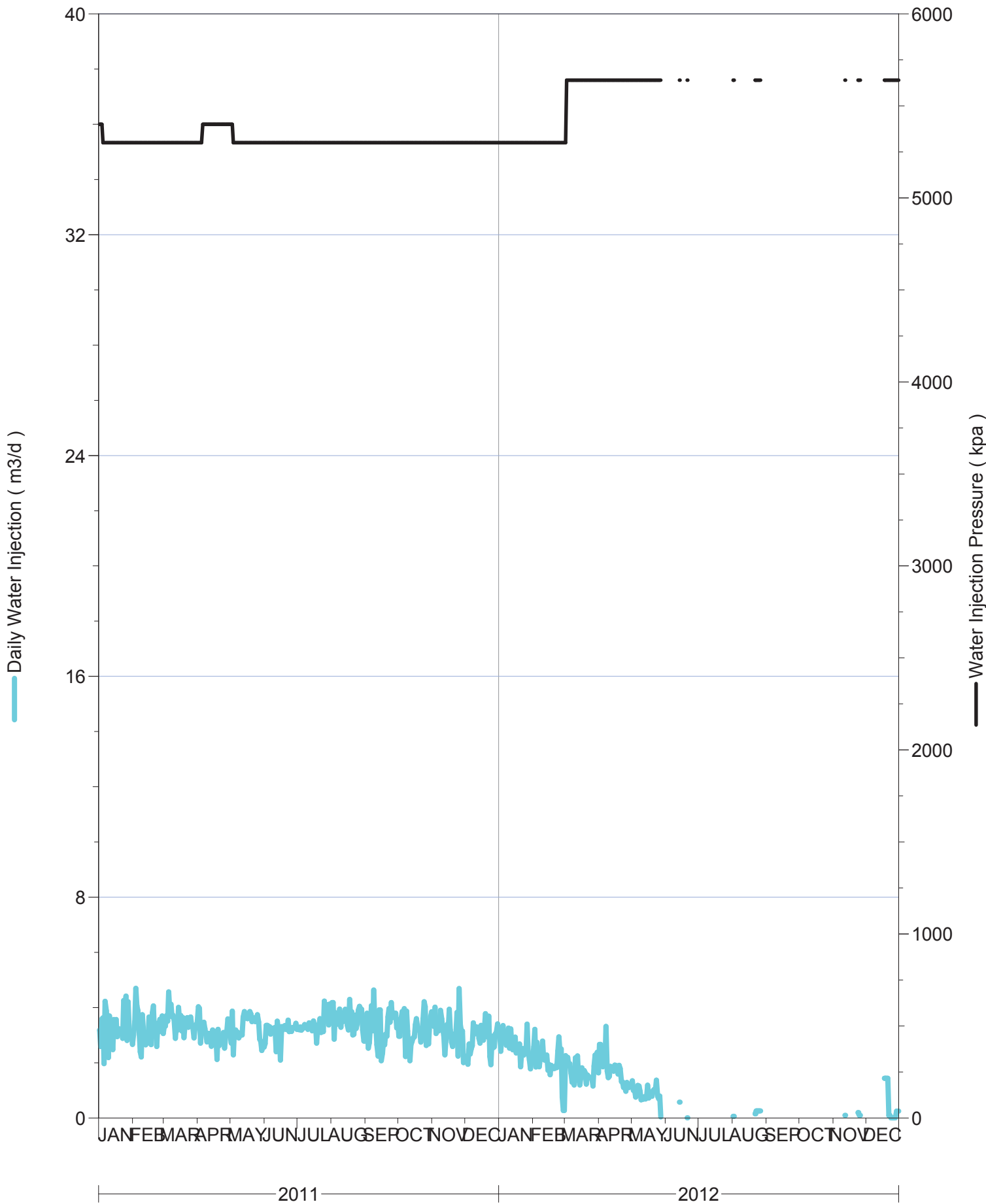
Daily Injection Rate and Pressure for: B0/06-09-002-29W1/0



Daily Injection Rate and Pressure for: B0/06-16-002-29W1/0

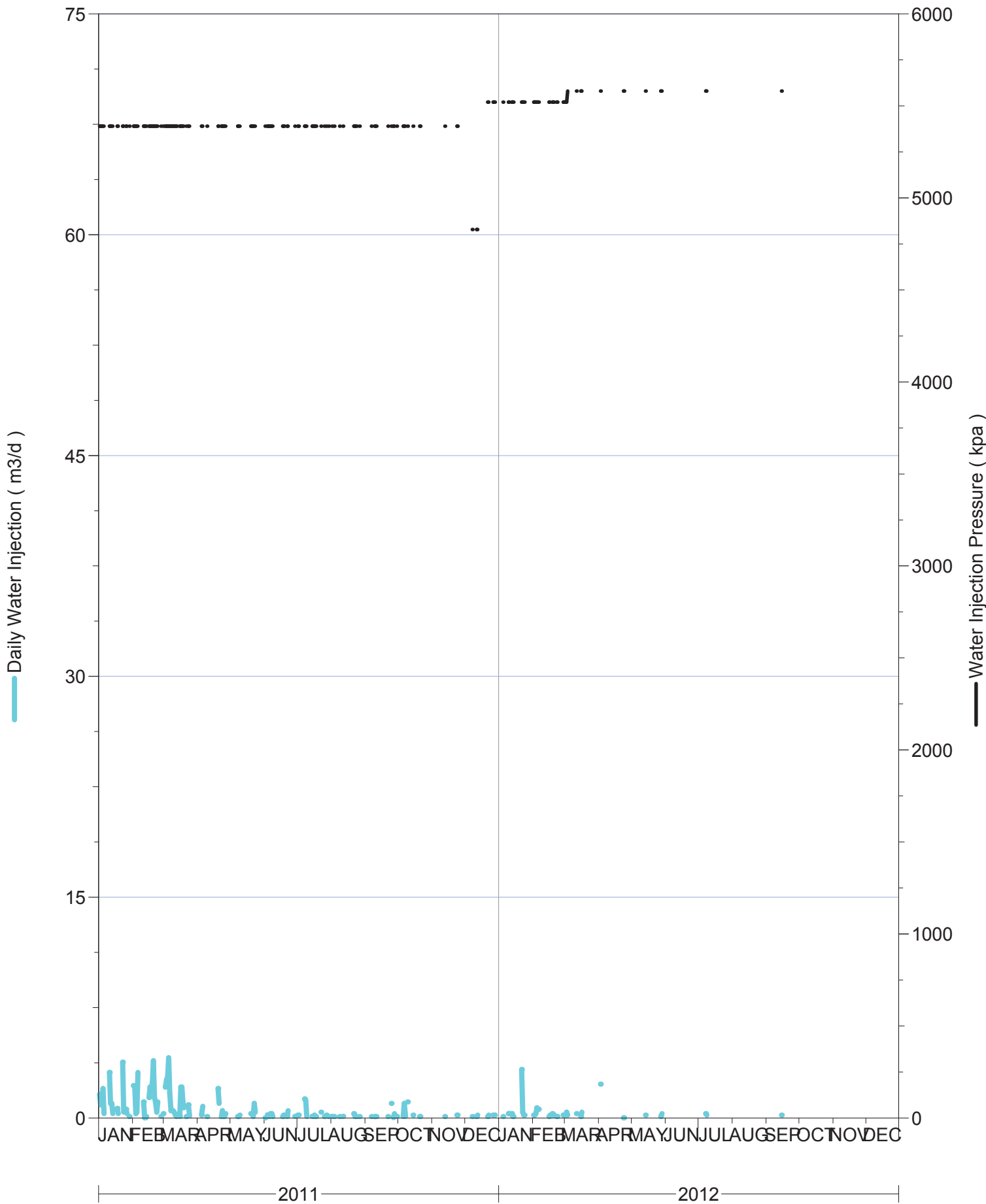


Daily Injection Rate and Pressure for: B0/08-09-002-29W1/0

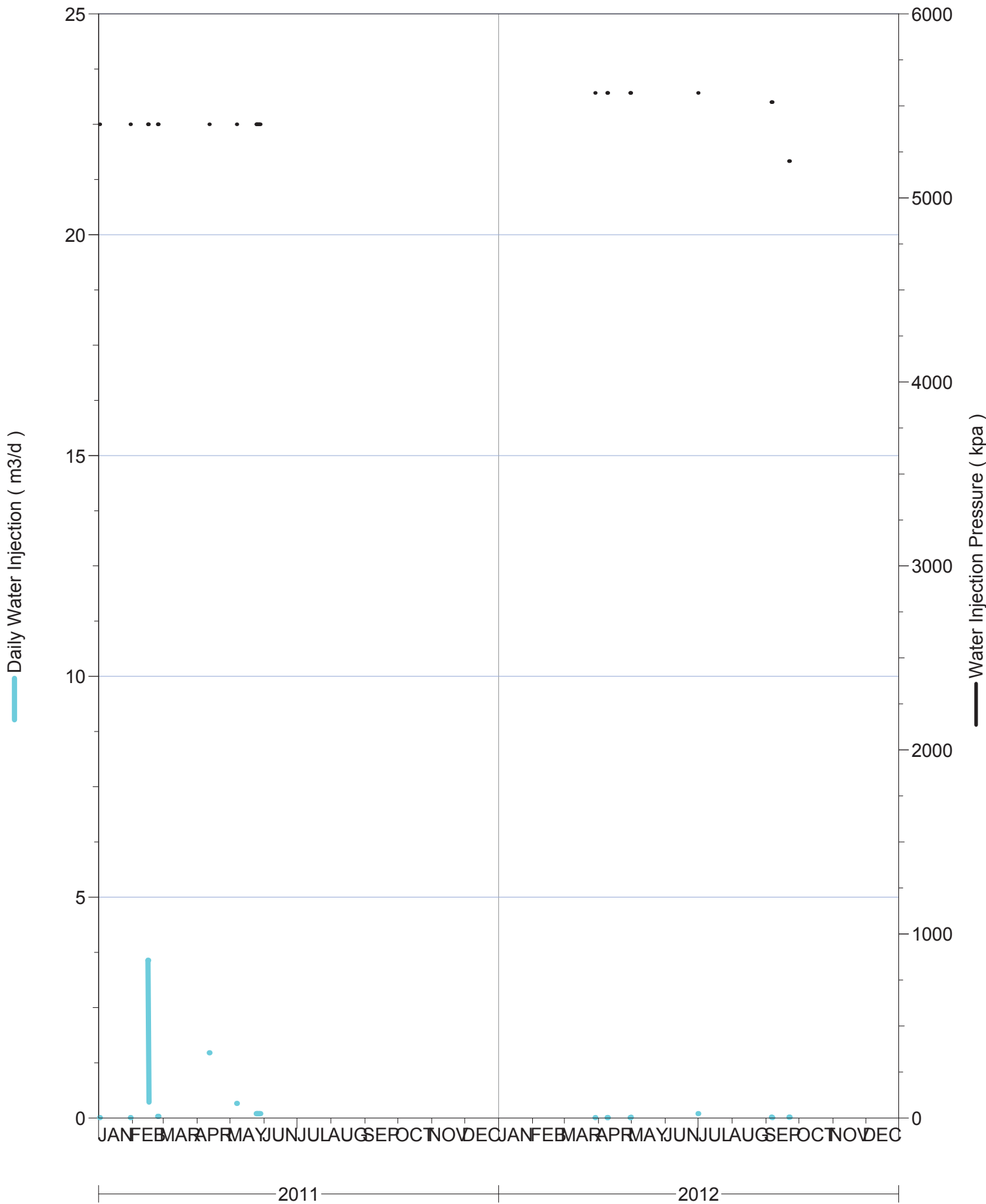




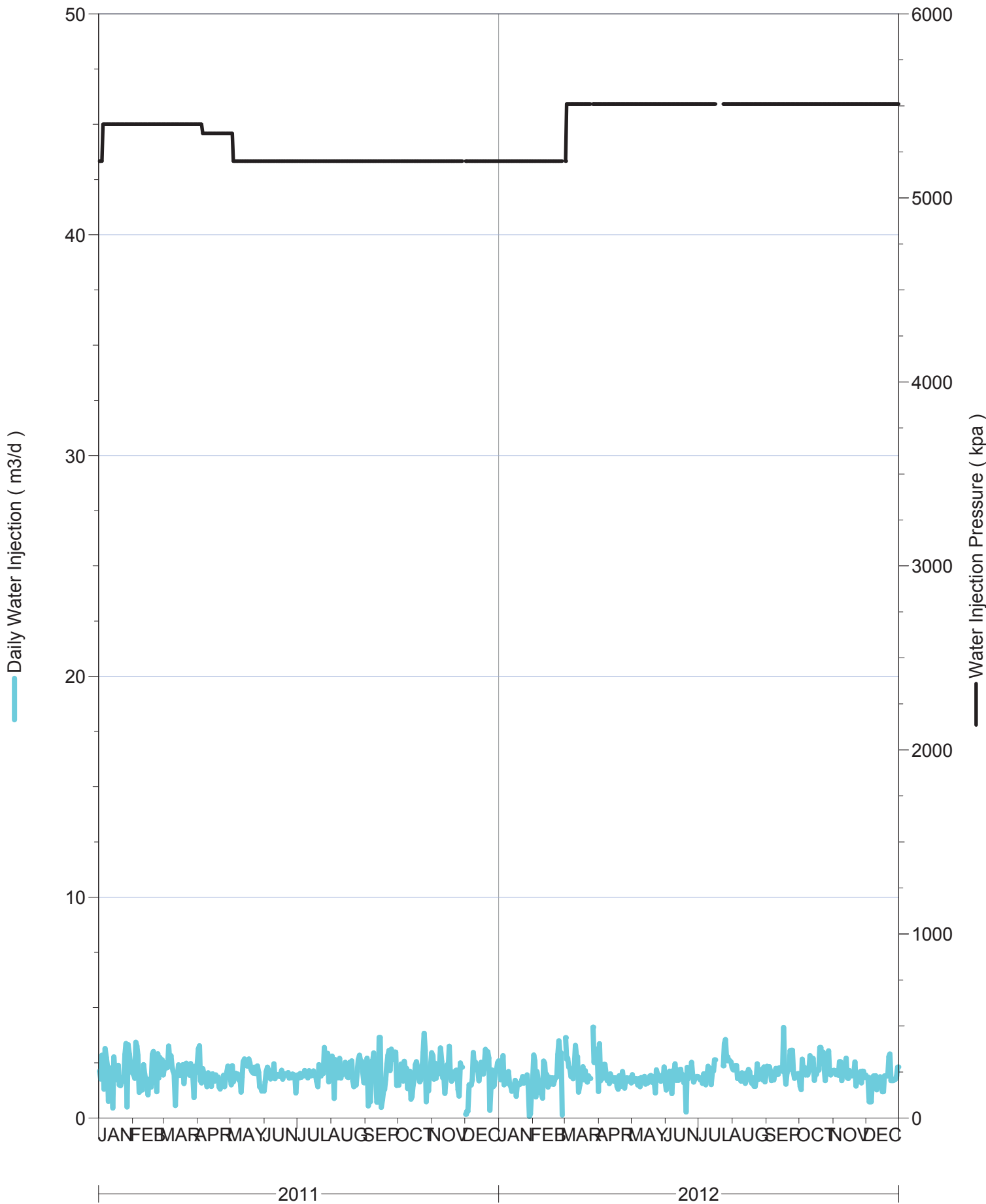
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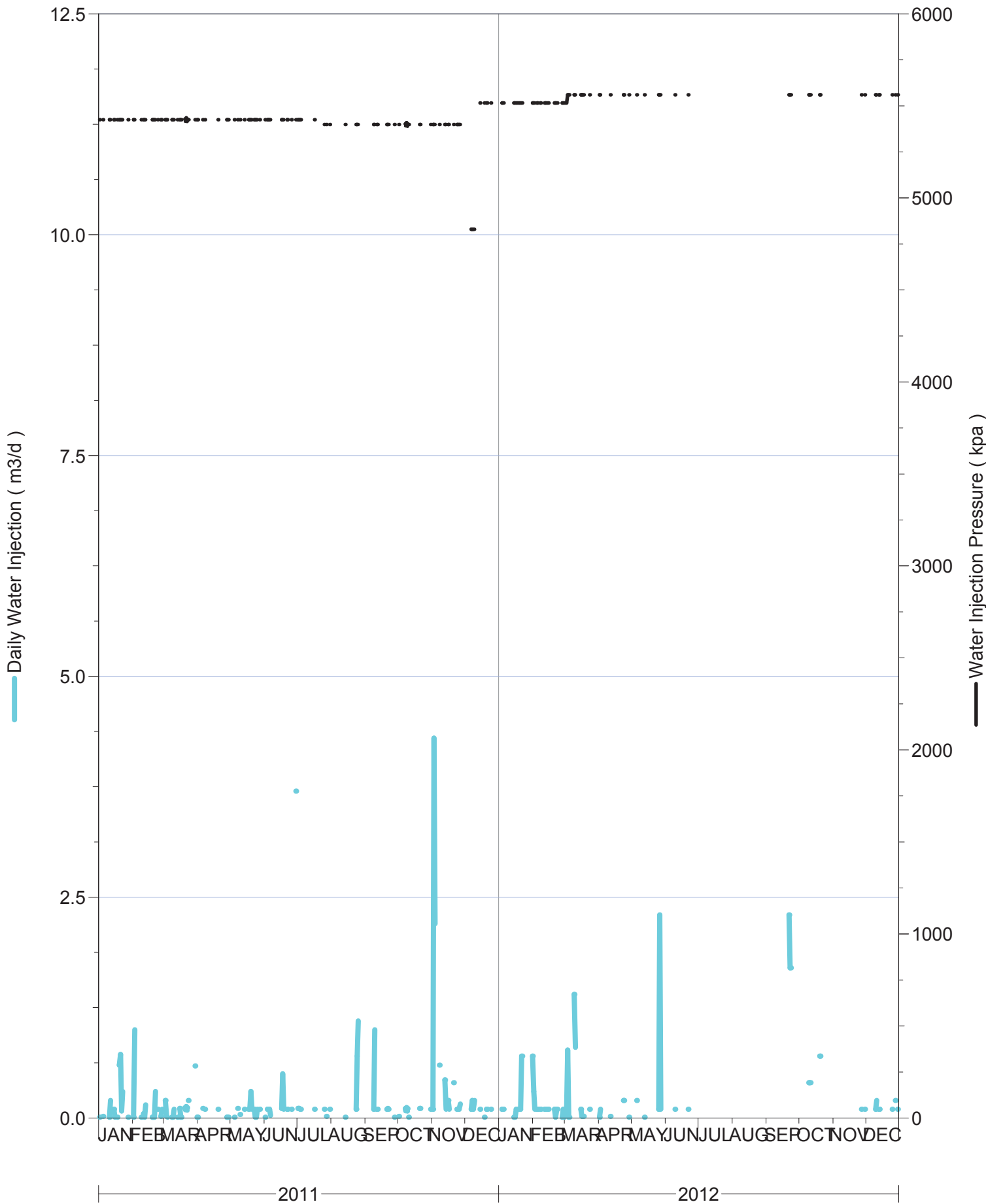
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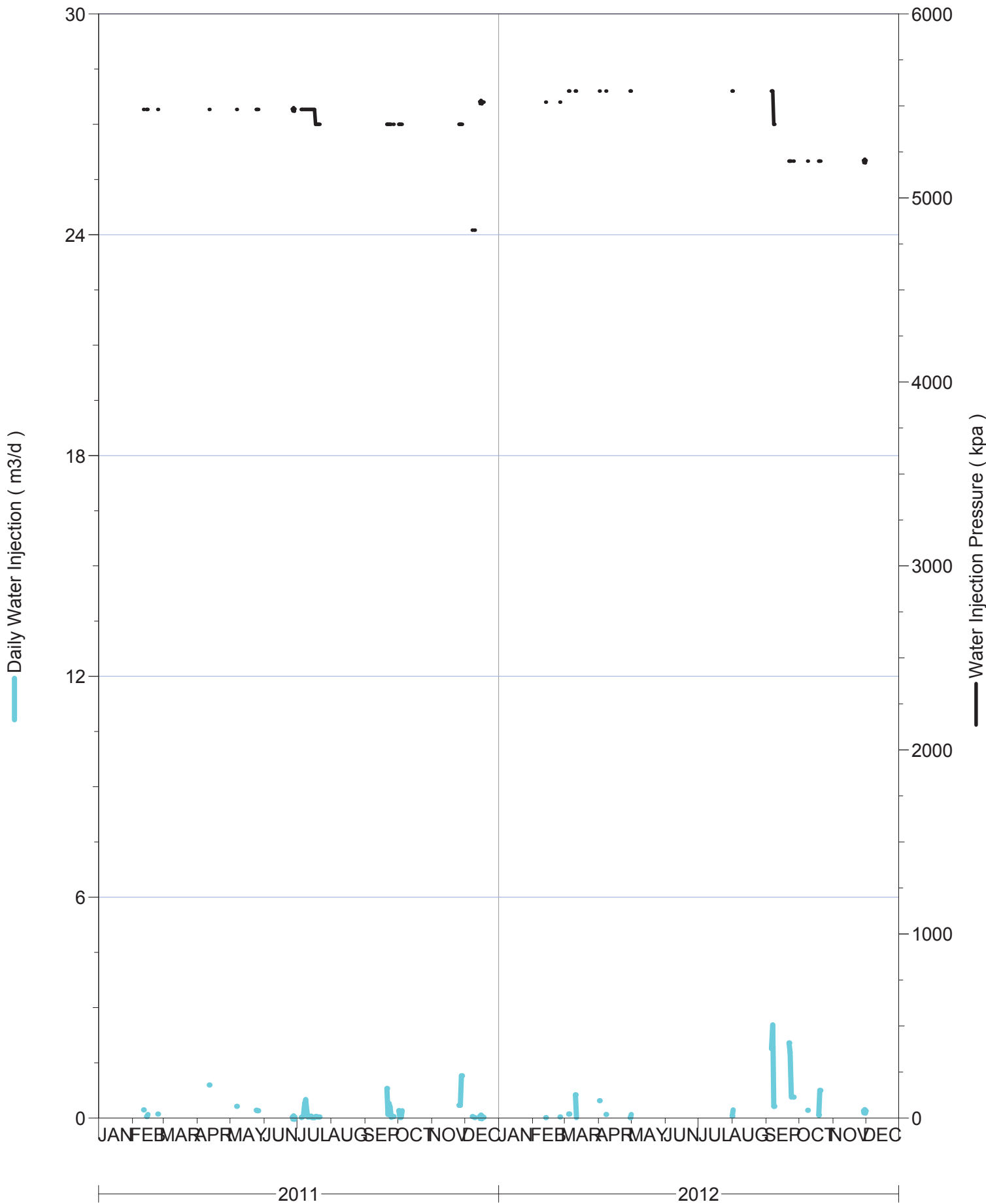
Daily Injection Rate and Pressure for: B0/14-04-002-29W1/0



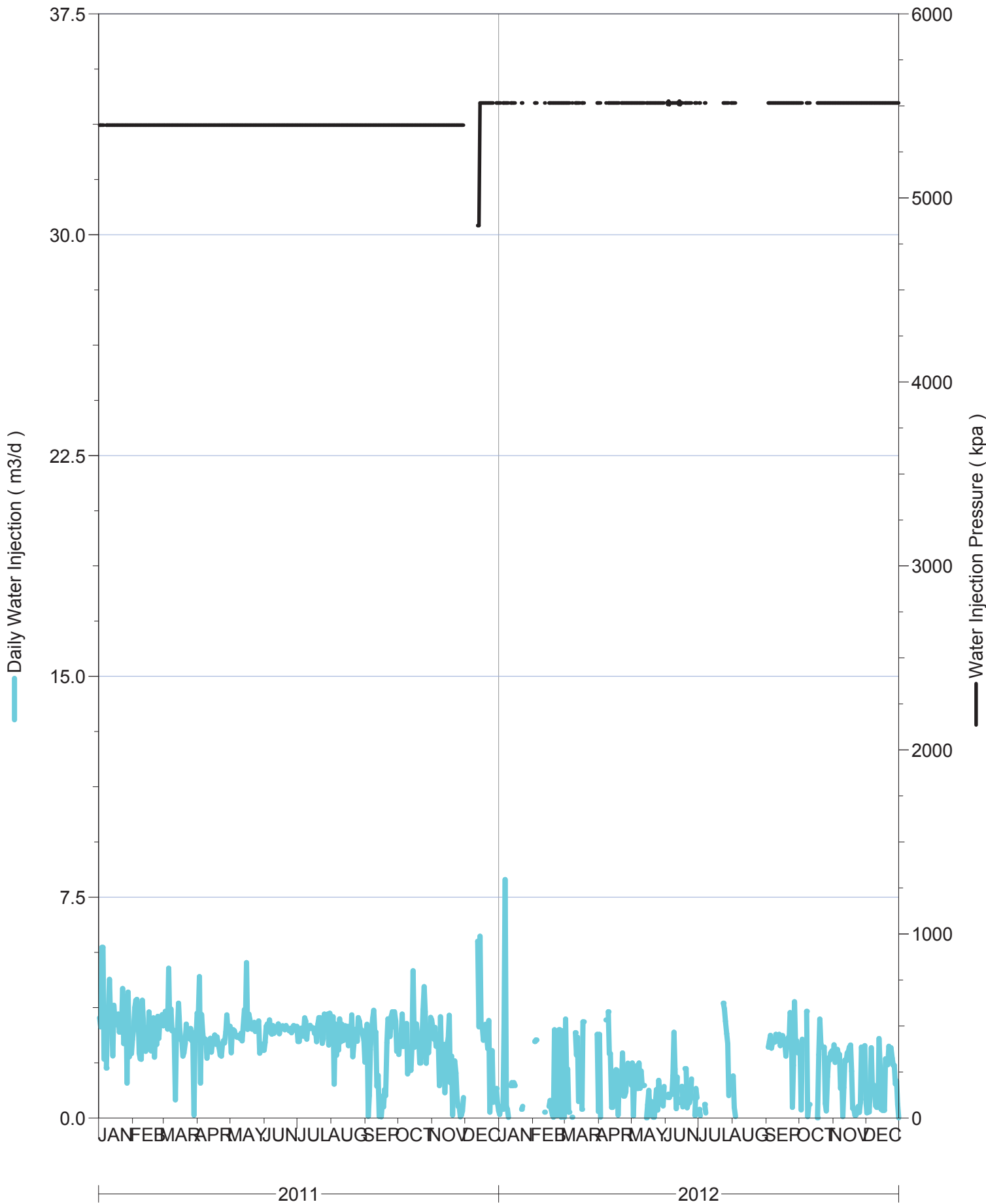
Daily Injection Rate and Pressure for: B0/14-08-002-29W1/0



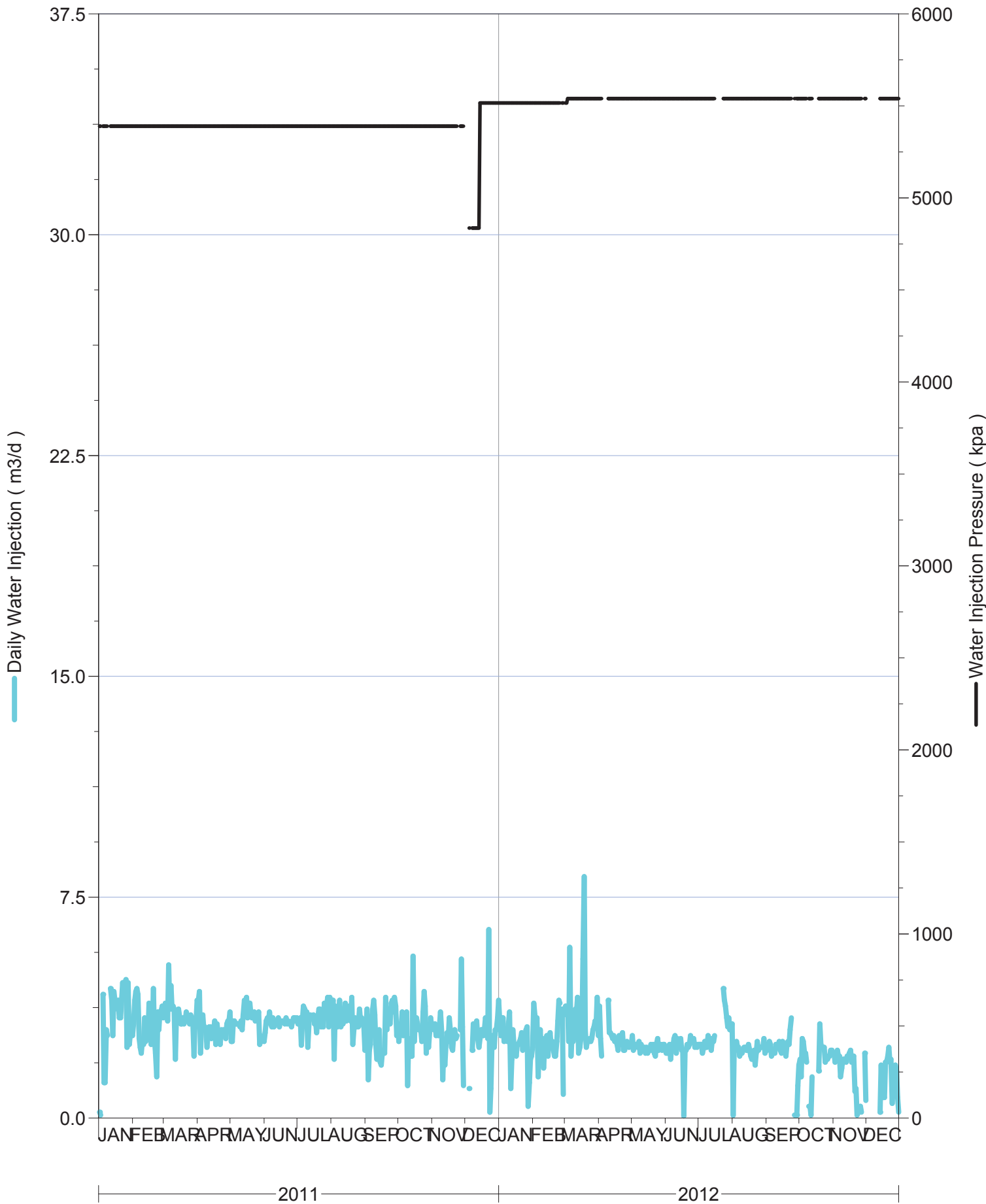
Daily Injection Rate and Pressure for: B0/16-17-002-29W1/0



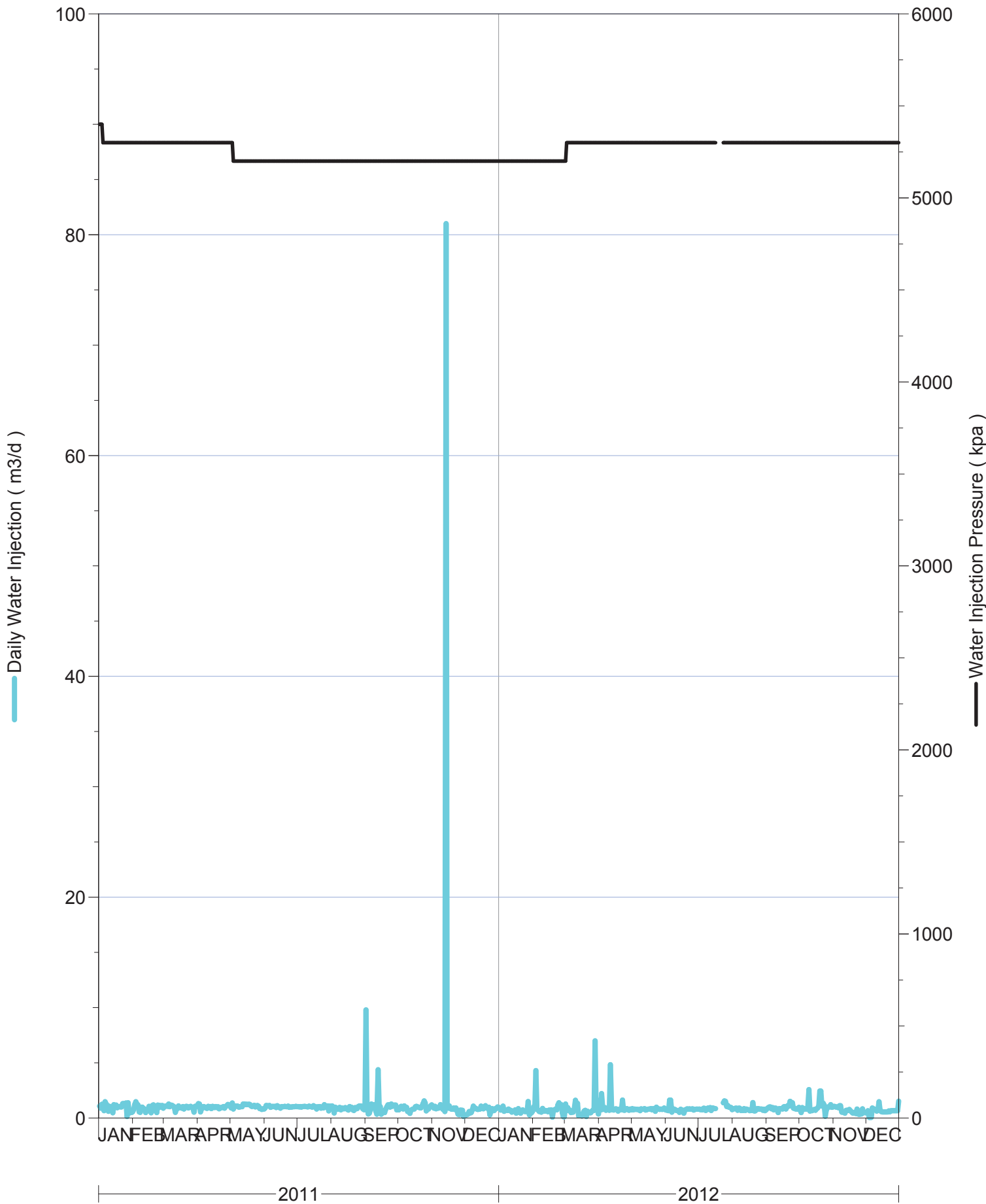
Daily Injection Rate and Pressure for: C0/05-16-002-29W1/0



Daily Injection Rate and Pressure for: C0/11-16-002-29W1/0

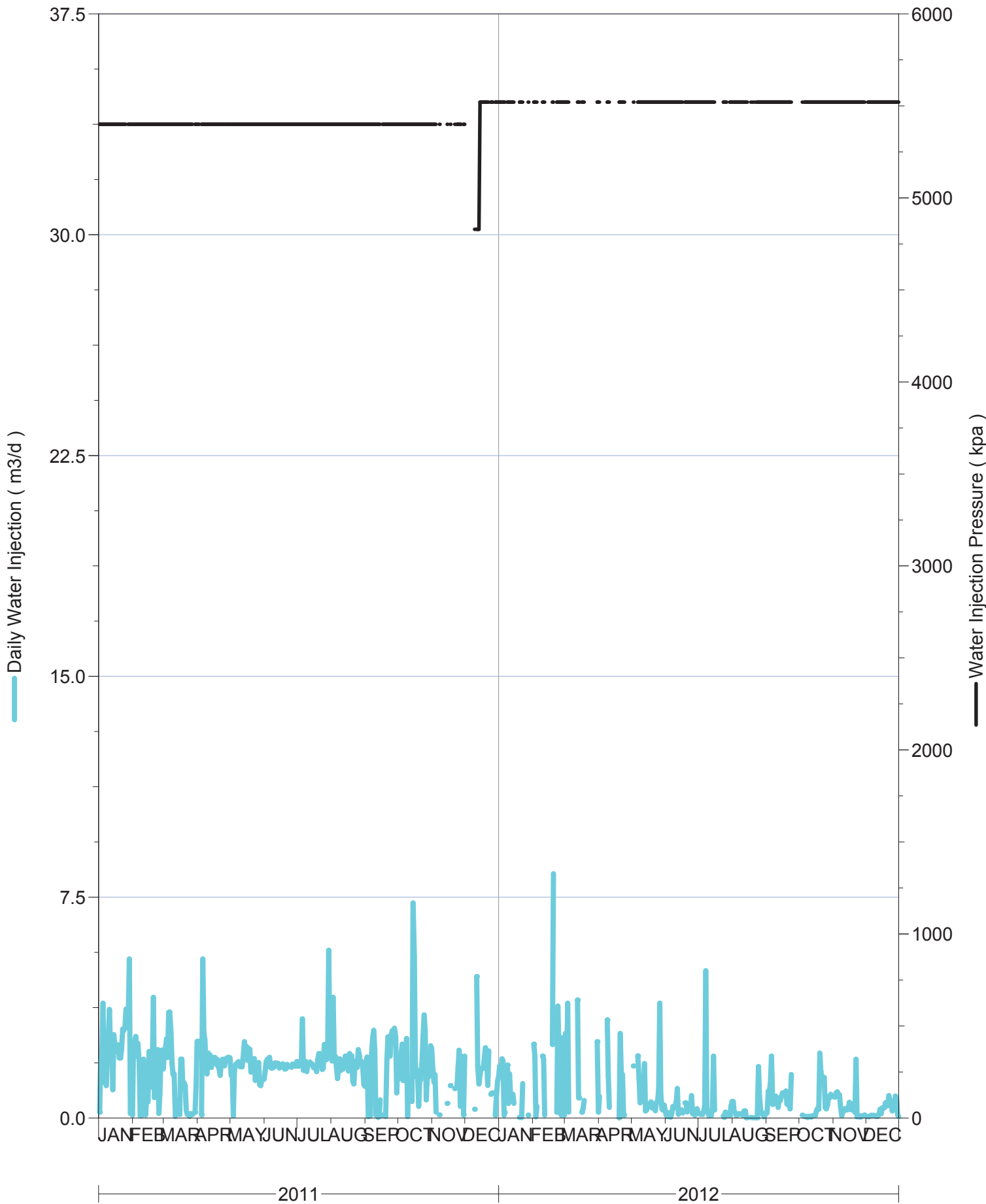


Daily Injection Rate and Pressure for: C0/15-04-002-29W1/0

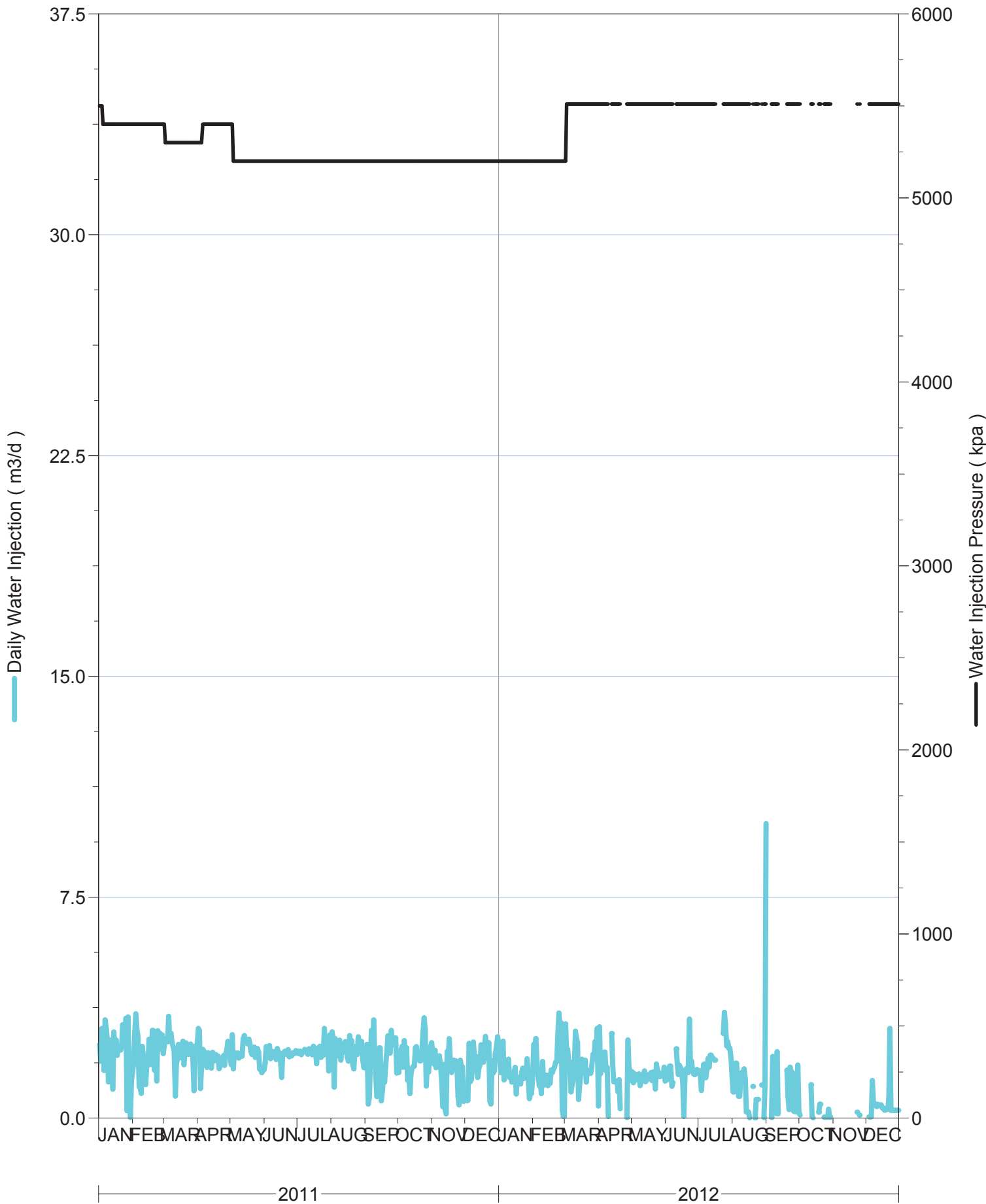




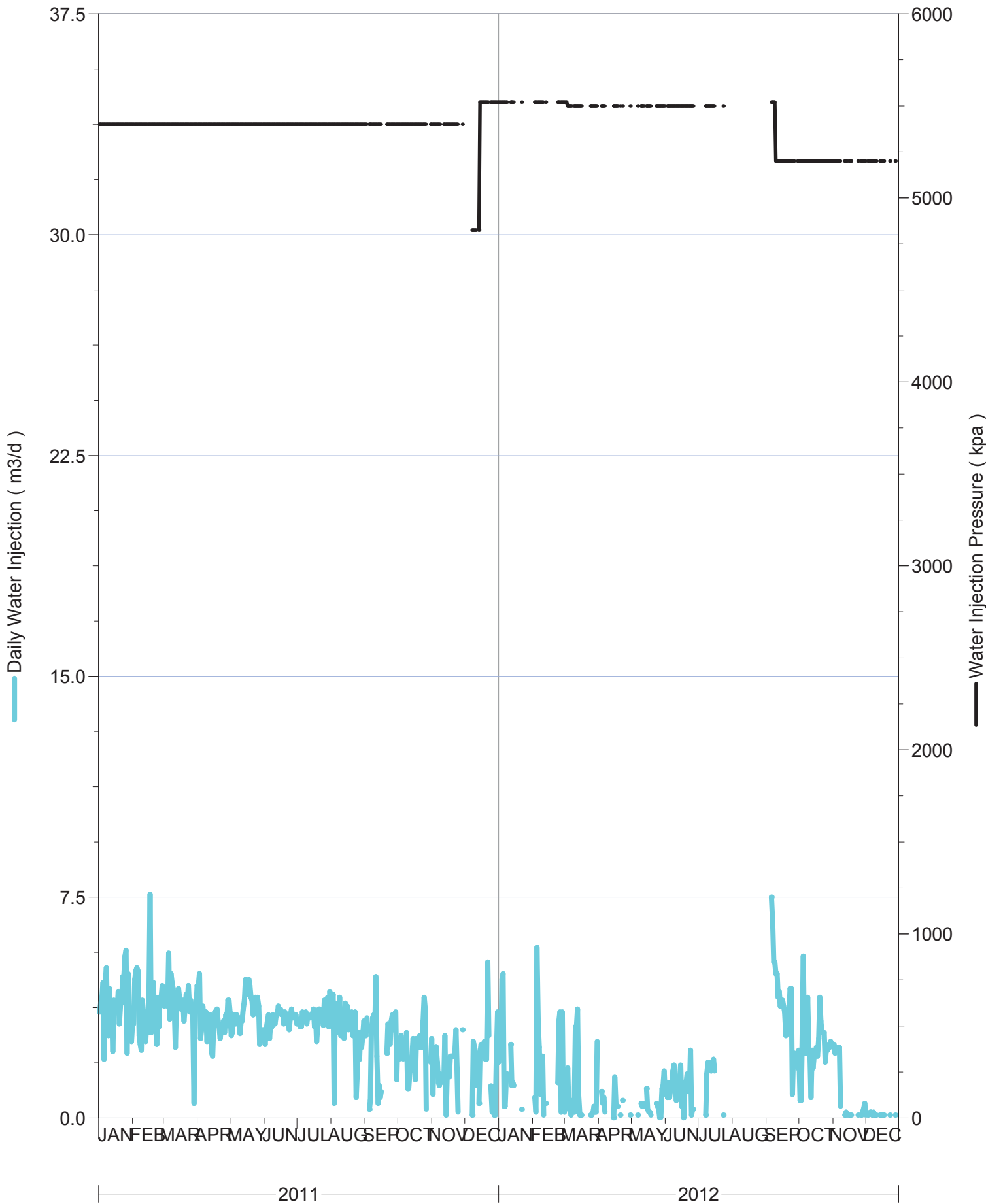
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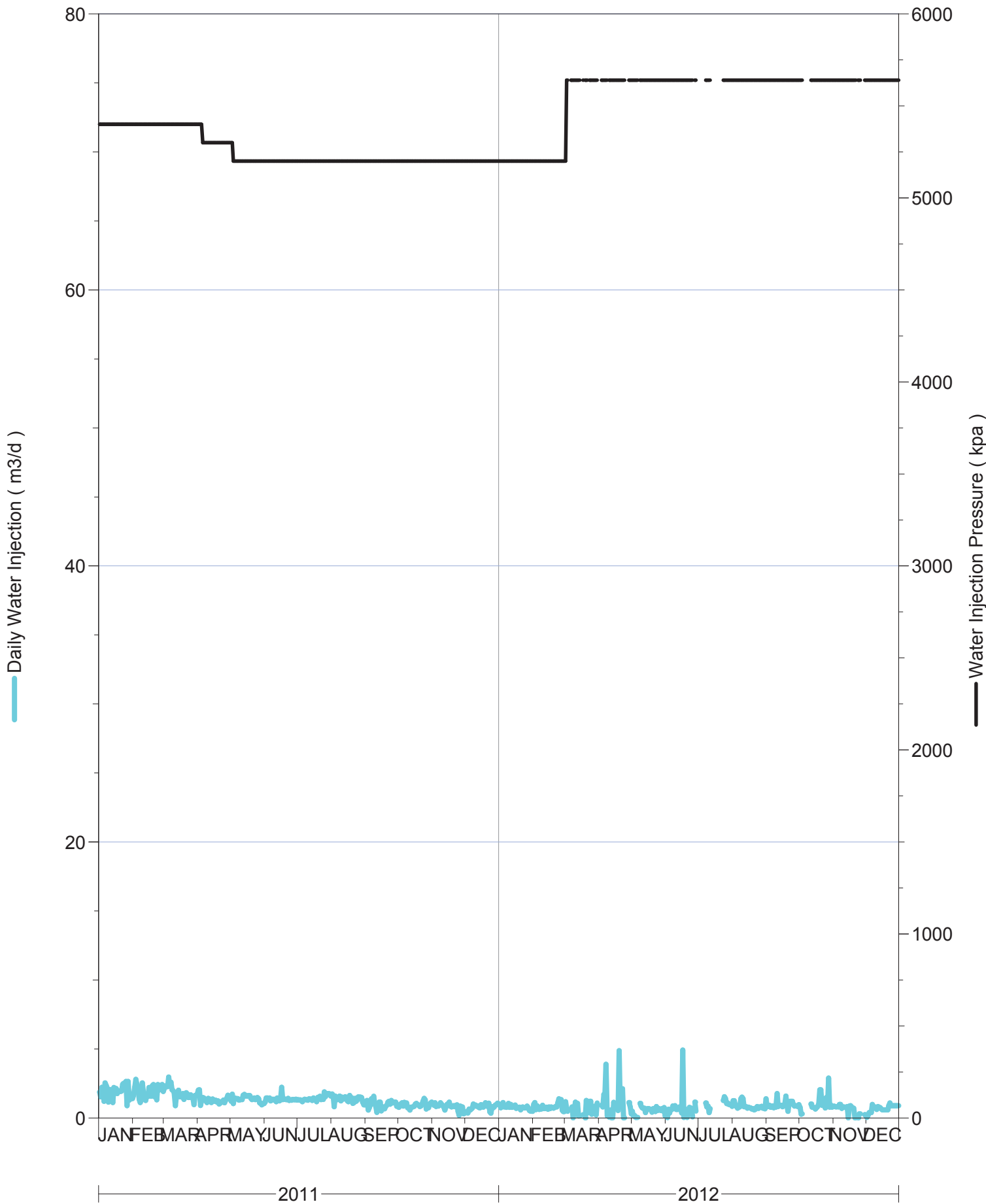
Daily Injection Rate and Pressure for: D0/02-09-002-29W1/0



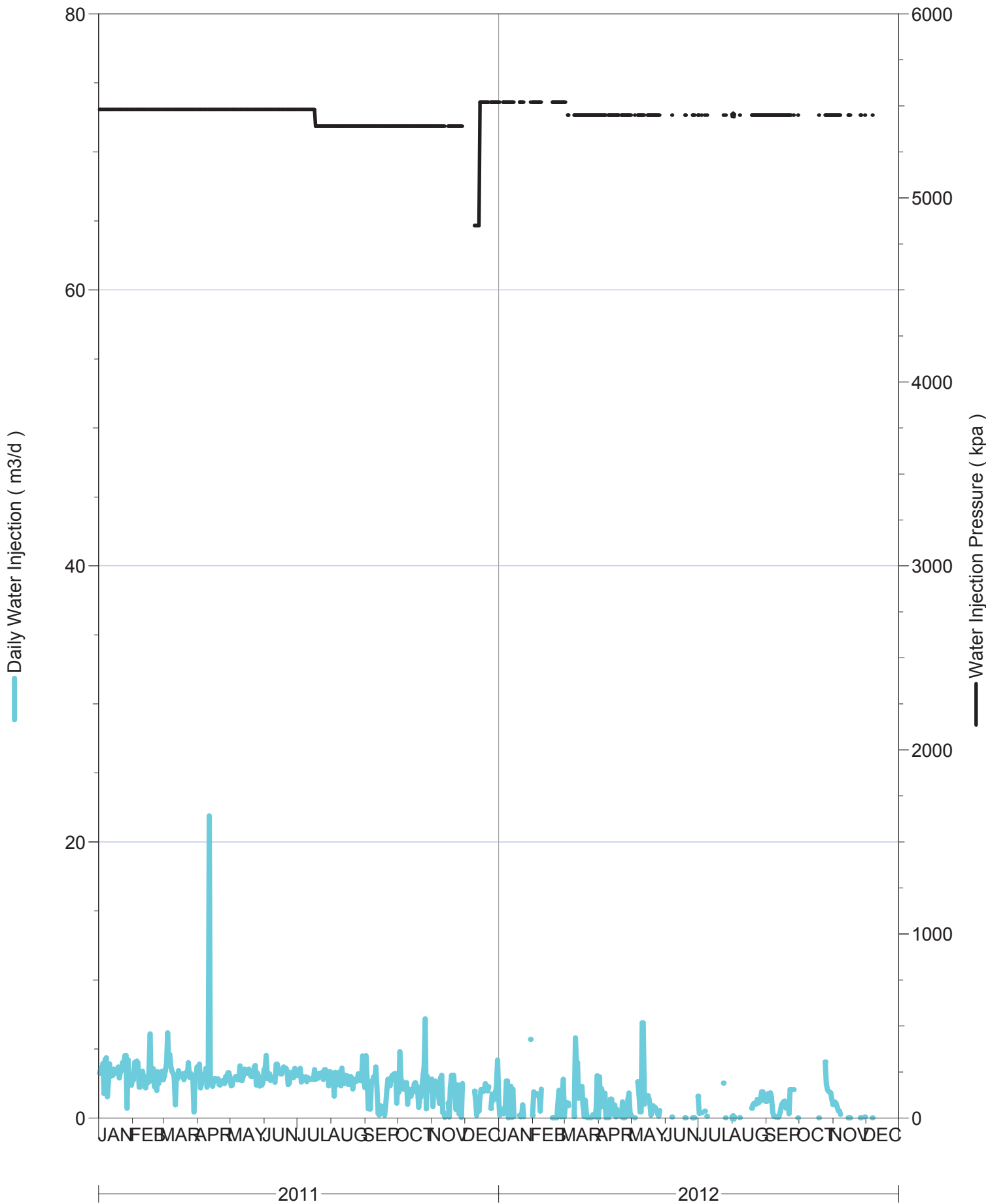
Daily Injection Rate and Pressure for: D0/02-17-002-29W1/0



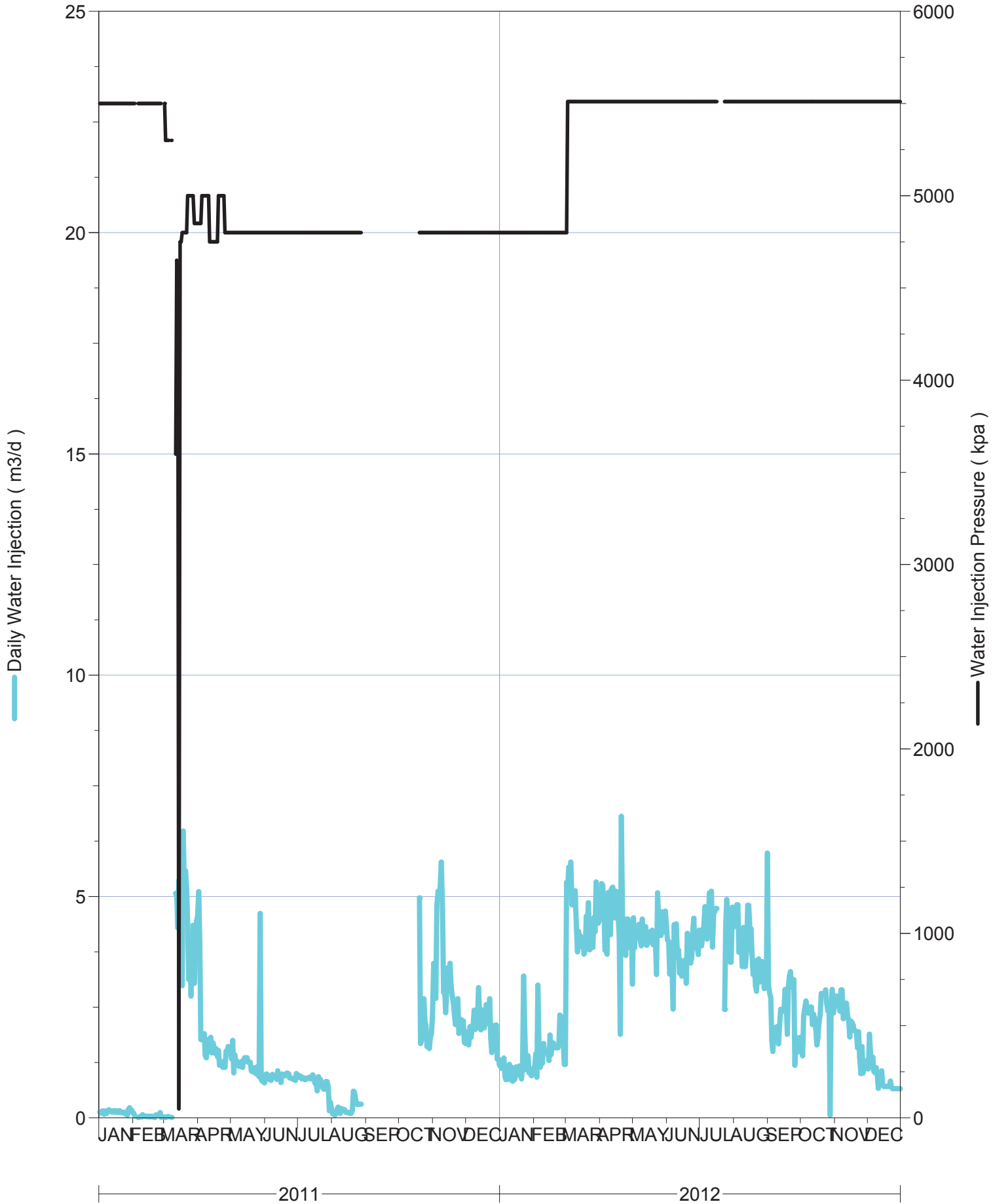
Daily Injection Rate and Pressure for: D0/04-09-002-29W1/0



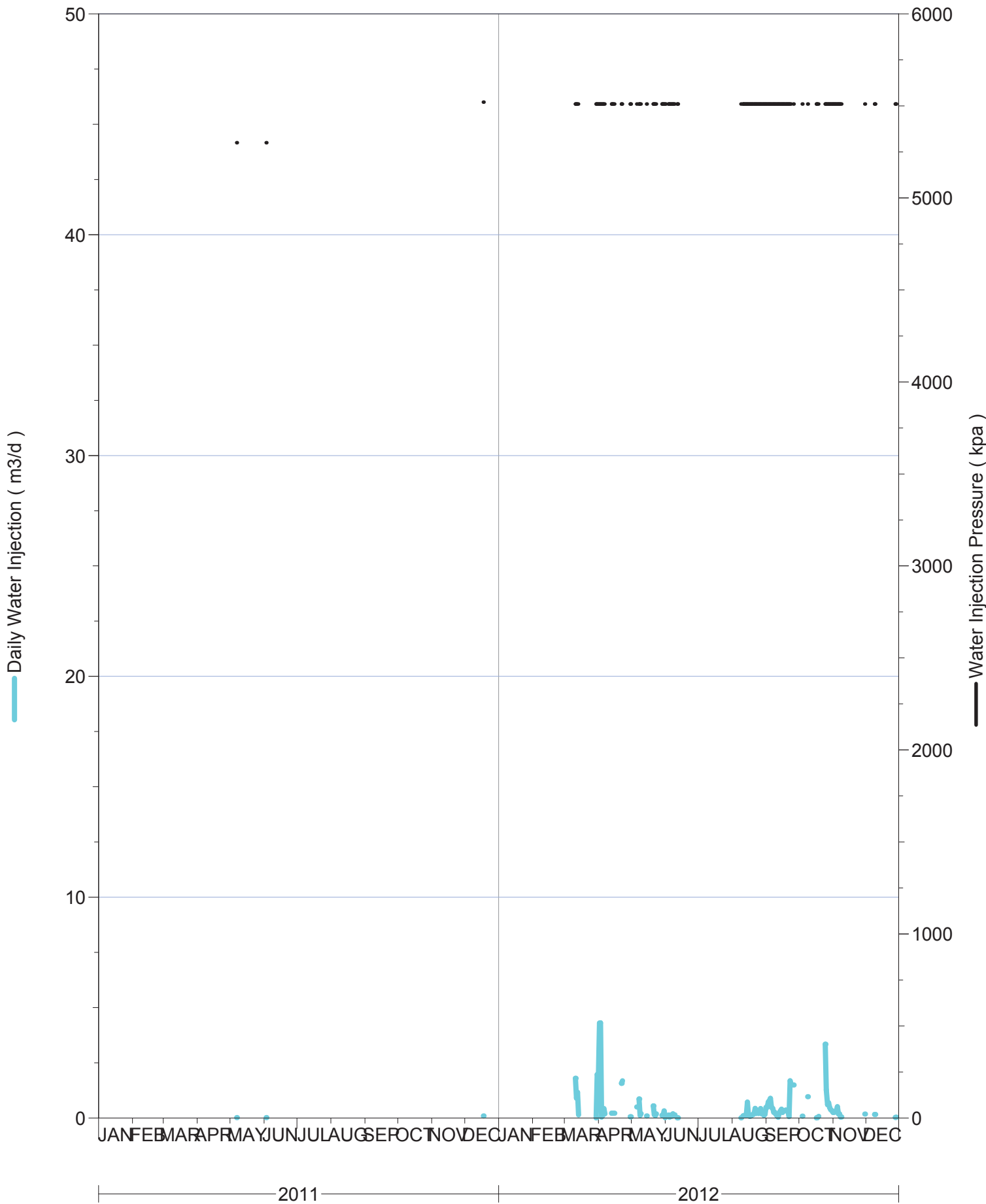
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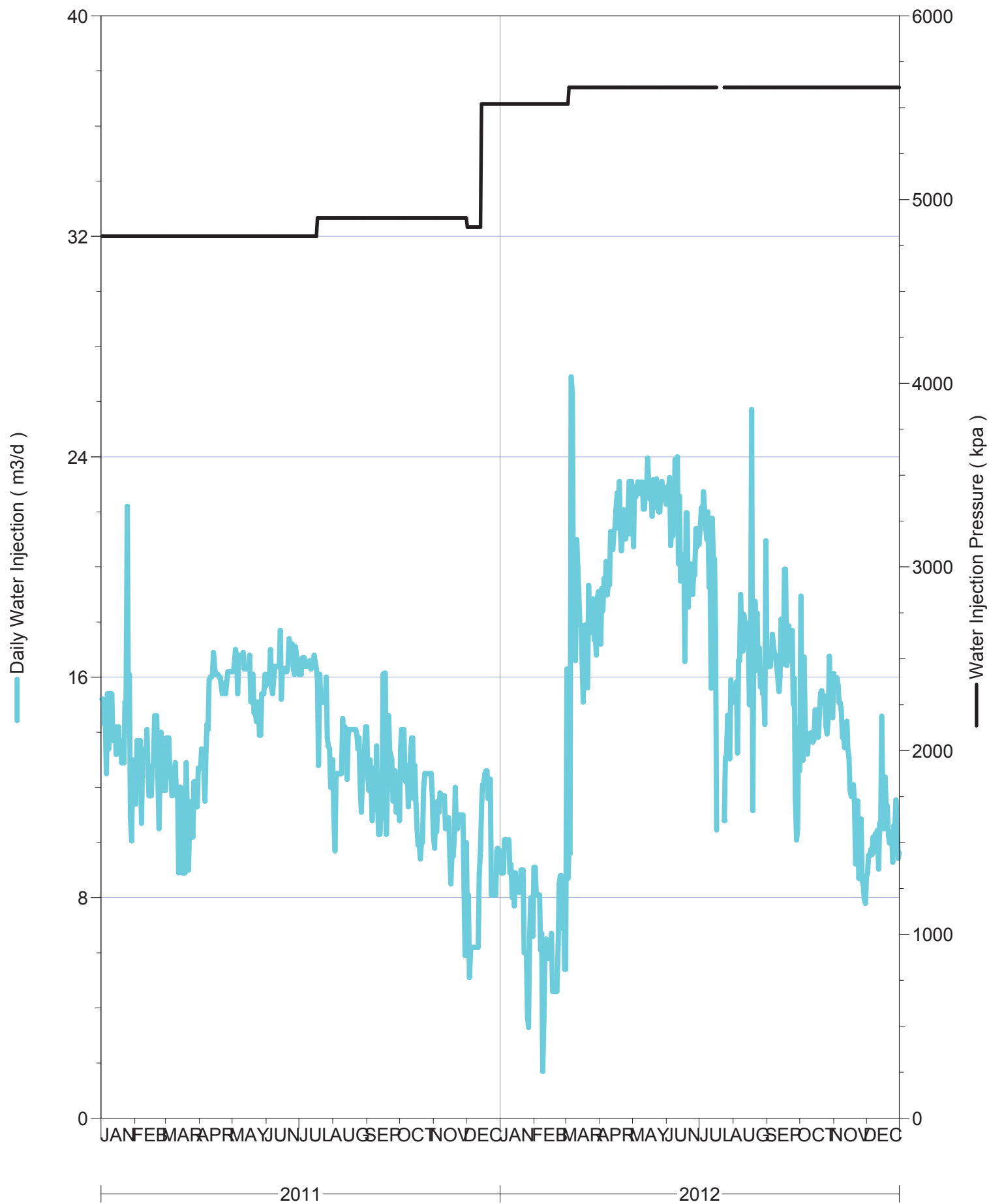
# Daily Injection Rate and Pressure for: D0/06-09-002-29W1/0



Daily Injection Rate and Pressure for: D0/06-17-002-29W1/0



# Daily Injection Rate and Pressure for: D0/14-09-002-29W1/0





Daily Injection Rate and Pressure for: D0/16-05-002-29W1/0

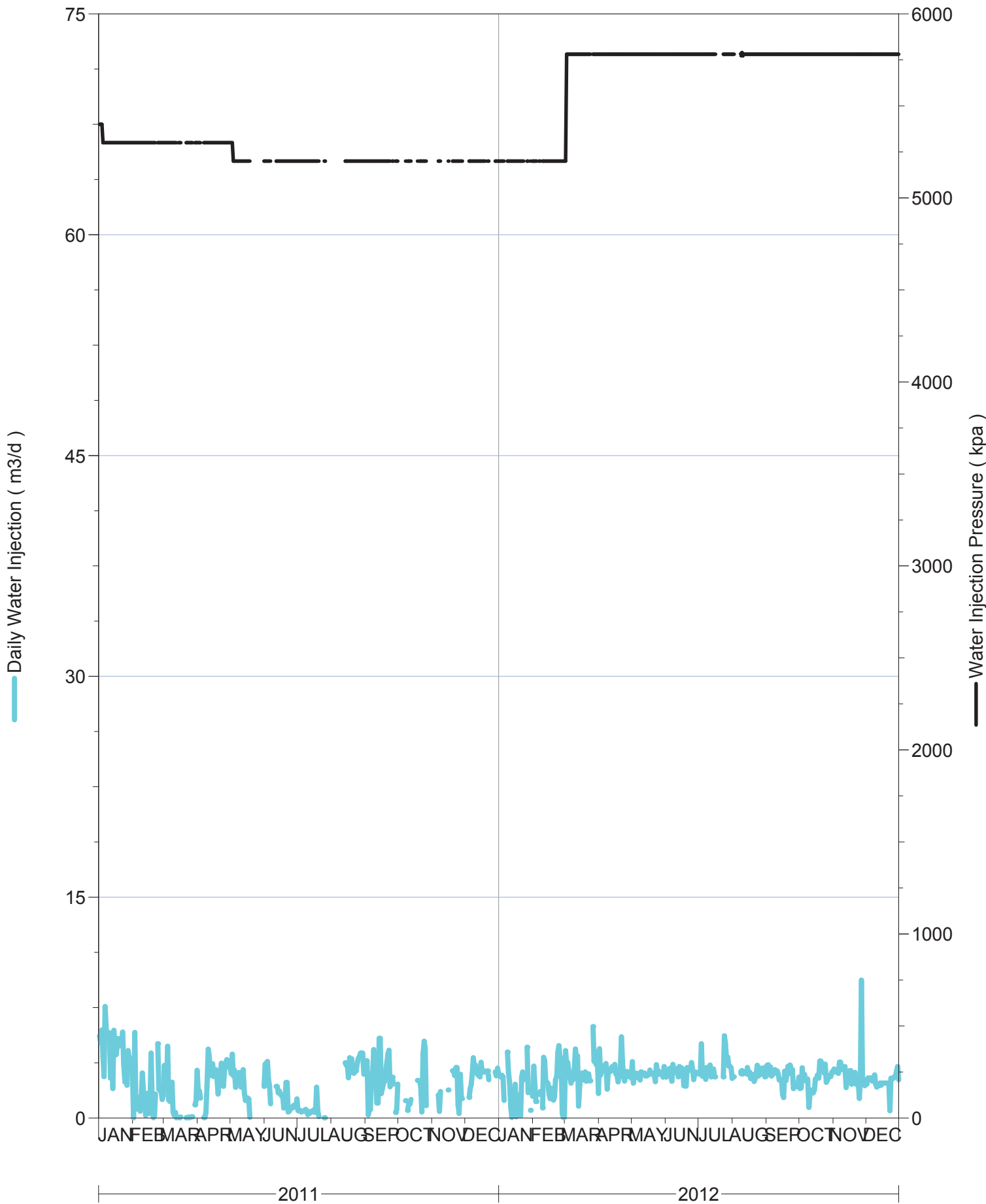


TABLE E.1: 2012 WELL SERVICING SUMMARY

Well Name	COMPLETED DATE	WELL STATUS/DESCRIPTION
02/15-16-002-29W1/0	11-Jan-12	Wax removal
B0/15-16-002-29W1/0	23-Feb-12	Changed BHP
B0/15-17-002-29W1/0	15-Mar-12	Wax removal
A0/04-09-002-29W1/0	7-Jun-12	Changed BHP
02/15-08-002-29W1/0	12-Jun-12	Tubing Repair
B0/07-17-002-29W1/0	25-Jun-12	Change BHP
02/01-16-002-29W1/0	3-Jul-12	Changed BHP an rods
B0/07-16-002-29W1/0	6-Jul-12	Solvent / acid stimulation
0/15-17-002-29W1/0	8-Jul-12	Changed polish rod and BHP
00/15-08-002-29W1/0	10-Jul-12	Changed BHP
00/13-16-002-29W1/0	11-Jul-12	Changed BHP
A0/14-08-002-29W1/0	13-Jul-12	Tubing repair and changed BHP
02/11-08-002-29W1/0	18-Jul-12	Solvent / acid stimulation
B0/16-17-002-29W1/0	9-Aug-12	Tubing Repair
D0/02-17-002-29W1/0	15-Aug-12	Repair failed packer
B0/12-17-002-29W1/0	19-Aug-12	Repair failed packer
B0/01-17-002-29W1/0	22-Aug-12	Wax removal and changed BHP
00/13-16-002-29W1/0	25-Aug-12	Changed polish rod and BHP
02/15-08-002-29W1/0	13-Sep-12	Cleanout sand, wax and acid, changed BHP
00/11-09-002-29W1/0	14-Sep-12	Changed polish rod and BHP
C0/13-09-002-29W1/0	28-Sep-12	Changed BHP
00/03-16-002-29W1/0	22-Oct-12	Changed polish rod and BHP
02/15-08-002-29W1/0	23-Oct-12	Changed BHP
02/07-16-002-29W1/0	15-Nov-12	Tubing Repair
00/03-16-002-29W1/0	16-Nov-12	Cleanout and changed BHP
04/05-15-002-29W1/0	18-Dec-12	Changed BHP

TABLE F.1: 2011-2012 PRESSURE SURVEY SUMMARY

Well Location	Date	SI Hours	Pressure (kPa)	Type
1B0/07-16-002-29W1/0	27-Oct-11	6864	4074	Acoustic (Static)
1B0/09-17-002-29W1/0	9-Nov-11	1200	4125	Acoustic (Static)
1A0/04-09-002-29W1/0	4-Jan-12	1704	8753	Acoustic (Static)
102/13-04-002-29W1/0	4-Jan-12	1704	5217	Acoustic (Static)
102/05-09-002-29W1/0	4-Jan-12	1704	4466	Acoustic (Static)
102/06-08-002-29W1/0	4-Jan-12	1704	6607	Acoustic (Static)
1C0/16-09-002-29W1/0	4-Jan-12	1704	4677	Acoustic (Static)
100/13-09-002-29W1/0	4-Jan-12	1704	3387	Acoustic (Static)
100/13-08-002-29W1/0	4-Jan-12	1704	3614	Acoustic (Static)
103/05-15-002-29W1/0	4-Jan-12	1704	2037	Acoustic (Static)
102/08-16-002-29W1/0	4-Jan-12	1704	5054	Acoustic (Static)
100/01-17-002-29W1/0	4-Jan-12	2160	5818	Acoustic (Static)
1B0/11-16-002-29W1/0	4-Jan-12	1704	2390	Acoustic (Static)
100/13-16-002-29W1/0	4-Jan-12	1704	4472	Acoustic (Static)
100/01-18-002-29W1/0	4-Jan-12	1704	4948	Acoustic (Static)