

WASKADA UNIT NO. 3

WATERFLOOD PROGRESS REPORT

January 1, through December 31, 2012

PennWest Exploration

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Introduction

The WASKADA UNIT NO.3 pressure maintenance project commenced water injection into the Lower Amaranth designed and in accordance with Manitoba Energy and Mines Approval No. PM 58.

PRESSURE MAINTENANCE: Governed by Board Order No. PM 58

UNIT INFORMATION:

UNITIZED ZONE: Lower Amaranth

Original Unit May 1, 1984 Voluntary

First Enlargement Sept. 1, 1984 Board Order Voluntary

Second Enlargement Aug. 1, 1985 Board Order Voluntary

Third Enlargement July 1, 1986 Board Order Voluntary

Fourth Enlargement Nov. 1, 1986 Board Order Voluntary

POOL: Waskada Lower Amaranth A (03 29A)

This report documents the performance of the Waskada Lower Amaranth unit # 2 pressure maintenance project for the period of January 1 to December 31, 2012.

Unit # 3 is part of main Waskada. The Waskada field is situated on the northeast rim of the Williston Basin in southern Manitoba. It comprises a large portion of Township 1 and 2, Ranges 25 and 26 (W1PM).

The Waskada Fields produce light density crude (approximately 36° API), predominantly from the Lower Amaranth formation. The interlaminated, shallow marine to subtidal succession of sandstones, siltstones, and shale progressively onlaps the Mississippian unconformity surface from basin center, up dip to the north and eastern basin limits in Saskatchewan and Manitoba. The fine grained reservoir rock has a complex reservoir characterization with 13 to 16 % porosity and permeability on the order of 0.5 to 15 md. The lower Amaranth, the oldest Mesozoic unit is a clastic red bed sequence lying directly on the Paleozoic erosional surface. It consists of a series of dolomitic siltstones and sandstones interbedded with argillaceous siltstones and shales. The section is usually subdivided into a lower sandy unit and an overlying shale unit. The lower sequence is the

oil production zone. The bulk of pay is founded in the laminated sandstone/siltstone facies.

The Lower Amaranth has been classified into four general lithological types:

1. Interbedded shale/siltstone/sandstone by grain size, color and texture
2. Siltstone – This lithology occurs in distinct intervals up to two or three meters in thickness. It is generally light green in color and dolomitic.
3. Laminated sandstone – This occurs in distinct sandy intervals with a wide range of grain sizes and primary sedimentary structures.
4. Massive sandstone – This lithology occurs in thin intervals and usually associated with the laminated sandstones facies. Beds are usually light grey to reddish grey in color and coarse to medium – grained.

Waskada Unit # 3 (Unit History)

CPA Pretty Well ID	Date Well Spudded	On Prod YYYY/MM/DD	Org Operator Name	Ground Elevation (m)	TVD (m)
100/02-30-001-25W1/00	8/16/1982	10/1/1982	Omega Hydcbns Ltd	468.3	955
103/02-30-001-25W1/00	10/19/2011		Penn West Enrg Trust	471.6	906.8
102/04-30-001-25W1/00	9/16/1982	12/1/1982	Omega Hydcbns Ltd	469	950
100/05-30-001-25W1/02	3/16/1967	12/1/1980	NCE Petrofund Corp	467.9	973.8
102/07-30-001-25W1/00	12/4/1985	12/1/1985	Omega Hydcbns Ltd	468.4	947
100/08-30-001-25W1/02	7/29/1982	9/1/1983	Omega Hydcbns Ltd	468.6	952
100/09-30-001-25W1/00	12/4/1981	3/1/1982	Omega Hydcbns Ltd	468.8	944
100/11-30-001-25W1/02	12/29/1966	6/1/1980	NCE Petrofund Corp	468.2	957.7
102/11-30-001-25W1/02	8/24/1985	11/1/1985	NCE Petrofund Corp	467.7	937
102/12-30-001-25W1/00	10/31/1983	12/1/1983	Omega Hydcbns Ltd	467.6	925
100/13-30-001-25W1/00	7/14/1982	8/1/1982	Omega Hydcbns Ltd	467.4	954
100/14-30-001-25W1/00	7/18/1982	9/1/1982	Omega Hydcbns Ltd	470.2	952.3
102/14-30-001-25W1/00	7/29/2012			470.5	1266
100/15-30-001-25W1/00	7/25/1982	9/1/1982	Omega Hydcbns Ltd	470.2	953
100/16-30-001-25W1/00	7/22/1982	9/1/1982	Omega Hydcbns Ltd	468.9	956.7
102/16-30-001-25W1/00	3/2/2012		Penn West Petrl Ltd	470.4	
103/16-30-001-25W1/00	7/18/2012	10/1/2012		470.1	903
104/16-30-001-25W1/00	7/13/2012			470.3	
105/16-30-001-25W1/00				470.3	902.1
100/01-31-001-25W1/00	6/10/1983	7/1/1983	Omega Hydcbns Ltd	471.6	949
102/01-31-001-25W1/00	6/15/2010	7/1/2010	Penn West Petrl Ltd	471.2	902.2

100/02-31-001-25W1/00	7/3/1982	10/1/1982	Omega Hydcbns Ltd	468.6	953
100/03-31-001-25W1/00	10/3/1981	3/1/1982	Omega Hydcbns Ltd	468.7	950
102/04-31-001-25W1/00	7/7/1982	8/1/1982	Omega Hydcbns Ltd	467.3	948
103/04-31-001-25W1/00	9/10/2009	12/1/2009	Penn West Enrg Trust	469.7	900
104/04-31-001-25W1/00	9/16/2009	12/1/2009	Penn West Enrg Trust	469.2	902
100/05-31-001-25W1/00	2/19/1983	6/1/1983	Omega Hydcbns Ltd	466.9	950
100/06-31-001-25W1/00	7/11/1982	9/1/1982	Omega Hydcbns Ltd	469.9	950
100/07-31-001-25W1/00	6/6/1983	7/1/1983	Omega Hydcbns Ltd	469.2	950
100/08-31-001-25W1/00	6/14/1983	7/1/1983	Omega Hydcbns Ltd	471	948
103/08-31-001-25W1/00				469.6	
104/08-31-001-25W1/00				470.3	
100/09-31-001-25W1/00	8/16/1984	9/1/1984	Omega Hydcbns Ltd	470.9	945
102/09-31-001-25W1/00	7/6/2010	8/1/2010	Penn West Enrg Trust	469	893.6
103/09-31-001-25W1/00				471.1	
104/09-31-001-25W1/00				469.8	
100/10-31-001-25W1/00	8/17/1984	11/1/1984	Omega Hydcbns Ltd	470.7	940
100/11-31-001-25W1/00	9/22/1982	12/1/1982	Omega Hydcbns Ltd	468.6	944
100/12-31-001-25W1/02	6/21/1983	7/1/1984	NCE Petrofund Corp	467	949
102/12-31-001-25W1/00	7/19/2010	9/1/2010	Penn West Petrl Ltd	470.3	900.3
100/13-31-001-25W1/00	3/2/1983	3/1/1983	Omega Hydcbns Ltd	467.6	951
102/13-31-001-25W1/00	8/18/2010	10/1/2010	Penn West Enrg Trust	471.4	901
100/14-31-001-25W1/00	8/7/1983	9/1/1983	Omega Hydcbns Ltd	470	935
100/15-31-001-25W1/00	8/20/1984	11/1/1984	Omega Hydcbns Ltd	469.5	940
100/16-31-001-25W1/00	8/22/1984	10/1/1984	Omega Hydcbns Ltd	471.1	940
102/16-31-001-25W1/00	7/12/2010	9/1/2010	Penn West Petrl Ltd	470.4	895.1
100/11-32-001-25W1/00	8/25/1984	9/1/1984	Omega Hydcbns Ltd	470.8	930
100/12-32-001-25W1/00	8/20/1984	11/1/1984	Omega Hydcbns Ltd	470.9	940
100/13-32-001-25W1/00	8/28/1984	11/1/1984	Omega Hydcbns Ltd	470.8	936
102/13-32-001-25W1/00	11/19/2011	2/1/2012	Penn West Petrl	471.8	897.7
100/14-32-001-25W1/00	9/1/1982	10/1/1982	Omega Hydcbns Ltd	469.9	947
103/09-35-001-26W1/00	12/29/2010	3/1/2011	Penn West Enrg Trust	466	903.2
100/04-36-001-26W1/00	1/6/1986	2/1/1986	Omega Hydcbns Ltd	468.2	972
103/04-36-001-26W1/00	1/4/2011	3/1/2011	Penn West Enrg Trust	465.9	904.2
100/05-36-001-26W1/00	9/4/1983	10/1/1983	Omega Hydcbns Ltd	467.3	947
100/06-36-001-26W1/00	5/31/1985	7/1/1985	Omega Hydcbns Ltd	467.6	992
100/07-36-001-26W1/00	11/26/1985	12/1/1985	Omega Hydcbns Ltd	466.7	940
100/08-36-001-26W1/00	6/13/1984	7/1/1984	Omega Hydcbns Ltd	467.9	950
102/08-36-001-26W1/00	6/15/2010	7/1/2010	Penn West Petrl Ltd	468.6	898
103/08-36-001-26W1/00	1/14/2011	3/1/2011	Penn West Enrg Trust	466.3	898.9
100/09-36-001-26W1/02	10/31/1982	2/1/1984	NCE Petrofund Corp	469.1	942
102/09-36-001-26W1/00	7/6/2010	9/1/2010	Penn West Enrg Trust	465.7	894.1

103/09-36-001-26W1/00	1/24/2011	3/1/2011	Penn West Petrl	466.1	894.7
104/09-36-001-26W1/00	1/16/2011	3/1/2011	Penn West Enrg Trust	465.6	896.9
105/09-36-001-26W1/00	1/9/2011	3/1/2011	Penn West Petrl	465.8	896.8
100/10-36-001-26W1/00	6/17/1984	7/1/1984	Omega Hydcbns Ltd	469.7	950
100/11-36-001-26W1/00	8/24/1983	9/1/1983	Omega Hydcbns Ltd	466.6	949
100/13-36-001-26W1/00	9/27/1983	10/1/1983	Omega Hydcbns Ltd	464.8	950
100/14-36-001-26W1/00	10/9/1983	11/1/1983	Omega Hydcbns Ltd	463.8	954
102/14-36-001-26W1/00	9/13/2010	11/1/2010	Penn West Petrl Ltd	466.7	908.2
103/14-36-001-26W1/00	9/19/2010	10/1/2010	Penn West Petrl Ltd	466.7	908.6
100/15-36-001-26W1/00	6/21/1984	7/1/1984	Omega Hydcbns Ltd	469.2	950
100/16-36-001-26W1/00	7/12/1985	8/1/1985	Omega Hydcbns Ltd	467.2	951
102/16-36-001-26W1/00	1/27/2010	5/1/2010	Penn West Energy	465.5	898.2
103/16-36-001-26W1/00	9/27/2010	11/1/2010	Penn West Enrg Trust	464.6	899.9
100/01-05-002-25W1/00	11/6/1984	1/1/1985	Omega Hydcbns Ltd	471	935
102/01-05-002-25W1/00	12/14/2010	2/1/2011	Penn West Enrg Trust	471.2	886.6
103/01-05-002-25W1/00	12/1/2010	2/1/2011	Penn West Enrg Trust	471.4	889.5
104/01-05-002-25W1/00	11/26/2010	2/1/2011	Penn West Enrg Trust	471.4	890.3
100/02-05-002-25W1/00	11/10/1984	1/1/1985	Omega Hydcbns Ltd	471.9	935
100/03-05-002-25W1/00	11/10/1982	11/1/1982	Omega Hydcbns Ltd	470.8	915
100/04-05-002-25W1/00	9/24/1985	10/1/1985	Omega Hydcbns Ltd	470.8	925
103/04-05-002-25W1/00	11/30/2011			471.8	900.5
104/04-05-002-25W1/00	11/25/2011	2/1/2012		471.8	894.2
100/07-05-002-25W1/00	11/3/1984	12/1/1984	Omega Hydcbns Ltd	471.5	932
100/08-05-002-25W1/00	11/14/1984	12/1/1984	Omega Hydcbns Ltd	473.1	934
102/08-05-002-25W1/00	11/28/2010	2/1/2011	Penn West Enrg Trust	471.1	887.4
103/08-05-002-25W1/00	12/4/2010	2/1/2011	Penn West Enrg Trust	471.1	887.6
104/08-05-002-25W1/00	12/9/2010	2/1/2011	Penn West Enrg Trust	471.1	889.4

Waskada Unit #3 (Production & Injection History)

CPA Pretty Well ID	First Prod YYYY/MM	On Inject. YYYY/MM/DD	Last Prod. YYYY/MM	Cumulative OIL Prod. (m3)	Cumulative WTR Prod. (m3)	Last Inject. YYYY/MM
100/02-30-001-25W1/00	1982/10		1989/07	1324	2664	
103/02-30-001-25W1/00						
102/04-30-001-25W1/00	1982/12		1990/06	6964	34070	
100/05-30-001-25W1/02	1980/12	8/1/1984	1984/06	570	1305	1998/10
102/07-30-001-25W1/00	1985/12	12/1/1987	1987/11	4182	2452	2003/07
100/08-30-001-25W1/02	1983/09		1996/06	4571	14855	
100/09-30-001-25W1/00	1982/03		1989/04	1144	1518	
100/11-30-001-25W1/02	1980/06		1984/11	2182	5444	
102/11-30-001-25W1/02	1985/11		1997/10	5783	37157	
102/12-30-001-25W1/00	1983/12		1994/07	8747	10698	
100/13-30-001-25W1/00	1982/08	6/1/1984	1984/05	772	1351	2006/10
100/14-30-001-25W1/00	1982/09		1990/08	2877	6789	
102/14-30-001-25W1/00						
100/15-30-001-25W1/00	1982/09	6/1/1984	1984/05	1773	7390	2006/11
100/16-30-001-25W1/00	1982/09		1991/12	3054	3615	
102/16-30-001-25W1/00						
103/16-30-001-25W1/00	2012/10		2012/10	8	1171	
104/16-30-001-25W1/00						
105/16-30-001-25W1/00						
100/01-31-001-25W1/00	1983/07		1990/09	5057	33880	
102/01-31-001-25W1/00	2010/07		2012/10	2725	28780	
100/02-31-001-25W1/00	1982/10		1990/10	3540	18478	
100/03-31-001-25W1/00	1982/03		1990/08	2828	2334	
102/04-31-001-25W1/00	1982/08		1989/10	1960	2800	
103/04-31-001-25W1/00	2009/12		2012/10	10521	7776	
104/04-31-001-25W1/00	2009/12		2012/10	1542	11313	
100/05-31-001-25W1/00	1983/06	6/1/1984	1984/05	778	321	1998/02
100/06-31-001-25W1/00	1982/09		1990/08	3197	13522	
100/07-31-001-25W1/00	1983/07	6/1/1984	1984/05	1361	1280	1992/04
100/08-31-001-25W1/00	1983/07		1990/07	5573	22603	
103/08-31-001-25W1/00						
104/08-31-001-25W1/00						
100/09-31-001-25W1/00	1984/09		1990/07	9679	29079	
102/09-31-001-25W1/00	2010/08		2012/10	4736	15804	
103/09-31-001-25W1/00						
104/09-31-001-25W1/00						
100/10-31-001-25W1/00	1984/11		1990/10	566	1947	

100/11-31-001-25W1/00	1982/12		1990/06	2393	4836	
100/12-31-001-25W1/02	1984/07		1991/09	4256	16751	
102/12-31-001-25W1/00	2010/09		2012/10	5646	17180	
100/13-31-001-25W1/00	1983/03	10/1/1985	1985/08	513	572	1998/02
102/13-31-001-25W1/00	2010/10		2012/10	1749	8763	
100/14-31-001-25W1/00	1983/09		1990/05	827	3050	
100/15-31-001-25W1/00	1984/11	1/1/1986	1985/09	1028	1662	1998/02
100/16-31-001-25W1/00	1984/10		1989/05	1740	2802	
102/16-31-001-25W1/00	2010/09		2012/10	4364	13829	
100/11-32-001-25W1/00	1984/09		2012/02	7740	21460	
100/12-32-001-25W1/00	1984/11		2012/10	5589	2931	
100/13-32-001-25W1/00	1984/11	10/1/1985	1985/09	695	697	1999/04
102/13-32-001-25W1/00	2012/02		2012/10	4478	7833	
100/14-32-001-25W1/00	1982/10		1997/09	4595	13367	
103/09-35-001-26W1/00	2011/03		2012/10	4829	1350	
100/04-36-001-26W1/00	1986/02		1996/02	2430	698	
103/04-36-001-26W1/00	2011/03		2012/10	6846	2608	
100/05-36-001-26W1/00	1983/10	12/1/1986	1986/11	3814	521	2005/06
100/06-36-001-26W1/00	1985/07		2012/04	5583	1460	
100/07-36-001-26W1/00	1985/12	11/1/1986	1986/10	839	137	2004/05
100/08-36-001-26W1/00	1984/07		2003/03	4915	17332	
102/08-36-001-26W1/00	2010/07		2012/10	7462	6570	
103/08-36-001-26W1/00	2011/03		2012/10	695	4783	
100/09-36-001-26W1/02	1984/02		1995/11	6636	31124	
102/09-36-001-26W1/00	2010/09		2012/10	8244	4125	
103/09-36-001-26W1/00	2011/03		2012/10	2382	2977	
104/09-36-001-26W1/00	2011/03		2012/10	2100	4022	
105/09-36-001-26W1/00	2011/03		2012/10	3308	3564	
100/10-36-001-26W1/00	1984/07		2011/03	6739	1142	
100/11-36-001-26W1/00	1983/09		2010/12	7083	1420	
100/13-36-001-26W1/00	1983/10	10/1/1985	1985/09	2605	445	2005/11
100/14-36-001-26W1/00	1983/11		2012/03	6251	1199	
102/14-36-001-26W1/00	2010/11		2012/10	9733	2586	
103/14-36-001-26W1/00	2010/10		2012/10	6133	2645	
100/15-36-001-26W1/00	1984/07	10/1/1985	1985/09	1272	356	2006/01
100/16-36-001-26W1/00	1985/08		1989/01	613	511	
102/16-36-001-26W1/00	2010/05		2012/10	5293	11031	
103/16-36-001-26W1/00	2010/11		2012/10	7600	2782	
100/01-05-002-25W1/00	1985/01		2009/10	7128	14932	
102/01-05-002-25W1/00	2011/02		2012/06	292	13512	
103/01-05-002-25W1/00	2011/02		2012/10	7113	26348	

104/01-05-002-25W1/00	2011/02		2012/10	7023	20448	
100/02-05-002-25W1/00	1985/01		2011/09	9137	1696	
100/03-05-002-25W1/00	1982/11		2012/01	5966	2218	
100/04-05-002-25W1/00	1985/10		2012/01	7486	13822	
103/04-05-002-25W1/00						
104/04-05-002-25W1/00	2012/02		2012/10	3901	7152	
100/07-05-002-25W1/00	1984/12	7/1/1986	1986/07	1194	1193	1994/03
100/08-05-002-25W1/00	1984/12		2012/08	19046	2953	
102/08-05-002-25W1/00	2011/02		2012/10	4603	24355	
103/08-05-002-25W1/00	2011/02		2012/10	5858	16986	
104/08-05-002-25W1/00	2011/02		2012/10	8739	20007	

Discussion:

Production Performance

Production Response versus Injection: Since injection began, early 1984, injection rates fluctuated to the some degree amongst the injectors; it is difficult to link any production responses to any specific injector. Water breakthrough of certain producers could not be directly correlated with over injection in associated injectors. Some wells showed no change in oil rate when injection was ceased in 2006.

Voidage Replacement Ratio Calculation

What could be described as very limited success, the waterflood was not maintained properly and injection rate dropped year after year in most cases. The cumulative VRR in the pool is about 1.0 and the current monthly VRR is zero and, no injection since 2006. All of the injectors are shut in currently. PennWest has no plans to reactivate the old injectors (See Appendix C).

To understand the past performance of the Lower Amaranth waterflood, we are doing some reservoir engineering work to come up with potential solutions. One of our plans is to do a pilot program in section 2: The objective of the pilot is to:

1. See if we can inject water into the Lower Amaranth Formation
 - i. Particle size less than 1 micron
 - ii. Total Suspended Solid (TSS) less than 10 ppm

- iii. Oil less than 10 ppm
2. Inject below the frac pressure
3. Test the simulation model that we have built.

2012 Waskada Lower Amaranth Waterflood Pilot Location

The pilot producer is 102/12-01-02-26W1/00 (the existing horizontal well) and the injectors are two vertical wells; 100/12-01-02-26W1 and 100/11-01-02-26 (converted to injectors). The pilot started late 2012, but because of some technical issues and cold weather the operation suspended, and it was postponed until spring 2013.

Corrosion and Scale Prevention Program

We currently inject ScalCor down all the new horizontal wells. Plus, PennWest will be installing cathodic protection on the wells. Also, the new gathering system is Fiberglass and as such is not susceptible to corrosion.

Summary and Recommendations

Producers

Current Producing Wells

103/16-30-001-25W1/00
102/01-31-001-25W1/00
103/04-31-001-25W1/00
104/04-31-001-25W1/00
102/09-31-001-25W1/00
102/12-31-001-25W1/00
102/13-31-001-25W1/00
102/16-31-001-25W1/00
100/12-32-001-25W1/00
102/13-32-001-25W1/00
103/09-35-001-26W1/00
103/04-36-001-26W1/00
102/08-36-001-26W1/00
103/08-36-001-26W1/00
102/09-36-001-26W1/00
103/09-36-001-26W1/00
104/09-36-001-26W1/00
105/09-36-001-26W1/00

102/14-36-001-26W1/00
103/14-36-001-26W1/00
102/16-36-001-26W1/00
103/16-36-001-26W1/00
103/01-05-002-25W1/00
104/01-05-002-25W1/00
104/04-05-002-25W1/00
102/08-05-002-25W1/00
103/08-05-002-25W1/00
104/08-05-002-25W1/00

Current Suspended Wells

103/02-30-001-25W1/00 (no data)
105/16-30-001-25W1/00 (no data)
100/11-32-001-25W1/00 (since 2012/03)
100/06-36-001-26W1/00 (since 2012/05)
100/10-36-001-26W1/00 (since 2011/04)
100/11-36-001-26W1/00 (since 2011/01)
100/14-36-001-26W1/00 (since 2012/04)
100/01-05-002-25W1/00 (since 2009/11)
102/01-05-002-25W1/00 (since 2012/07)
100/02-05-002-25W1/00 (since 2011/10)
100/03-05-002-25W1/00 (since 2012/02)
100/04-05-002-25W1/00 (since 2012/02)
100/08-05-002-25W1/00 (since 2012/09)

Abandoned Wells

00/02-30-001-25W1/0 (since 1989/08)
02/04-30-001-25W1/0 (since 1990/07)
00/08-30-001-25W1/2 (since 1996/07)
00/09-30-001-25W1/0 (since 1989/05)
00/11-30-001-25W1/2 (since 1984/12)
02/11-30-001-25W1/2 (since 1997/11)
02/12-30-001-25W1/0 (since 1994/08)
00/14-30-001-25W1/0 (since 1990/09)
00/16-30-001-25W1/0 (since 1992/01)
00/01-31-001-25W1/0 (since 1990/10)
00/02-31-001-25W1/0 (since 1990/11)
00/03-31-001-25W1/0 (since 1990/09)
02/04-31-001-25W1/0 (since 1989/11)
00/06-31-001-25W1/0 (since 1990/09)
00/08-31-001-25W1/0 (since 1990/08)
00/09-31-001-25W1/0 (since 1990/08)

00/10-31-001-25W1/0 (since 1990/11)
00/11-31-001-25W1/0 (since 1990/07)
00/12-31-001-25W1/2 (since 1991/10)
00/14-31-001-25W1/0 (since 1990/06)
00/16-31-001-25W1/0 (since 1989/06)
00/14-32-001-25W1/0 (since 1997/10)
00/04-36-001-26W1/0 (since 1996/03)
00/08-36-001-26W1/0 (since 2003/04)
00/09-36-001-26W1/2 (since 1995/12)
00/16-36-001-26W1/0 (since 1989/02)

Injectors

Current Injecting Wells

None

Current Suspended Wells

00/13-30-001-25W1/0 (since 2006/11)
00/13-32-001-25W1/0 (since 1999/05)
00/05-36-001-26W1/0 (since 2005/07)
00/07-36-001-26W1/0 (since 2004/06)
00/13-36-001-26W1/0 (since 2005/12)
00/15-36-001-26W1/0 (since 2006/02)

Abandoned Wells

00/05-30-001-25W1/2 (since 1998/11)
02/07-30-001-25W1/0 (since 2003/08)
00/15-30-001-25W1/0 (since 2006/12)
00/05-31-001-25W1/0 (since 1998/03)
00/07-31-001-25W1/0 (since 1992/05)
00/13-31-001-25W1/0 (since 1998/03)
00/15-31-001-25W1/0 (since 1998/03)
00/07-05-002-25W1/0 (since 1994/04)

The behavior of a Waskada Unit 3 producers are indicated by examining the oil rate versus time plots (see Appendix B). Waskada Unit 3 exhibited relatively high initial oil

productivity (most of the wells drilled in the past were vertical), rapidly declining to flat/low decline rates, with almost no discernible water flood response. This behavior can be explained by drop in the reservoir pressure from initial (approximately 8700 kPag) to above in some wells or below in others bubble point pressure (about 4200 kPag) followed by solution gas breakout which adversely affected the relative permeability to oil. (See Table # 2)

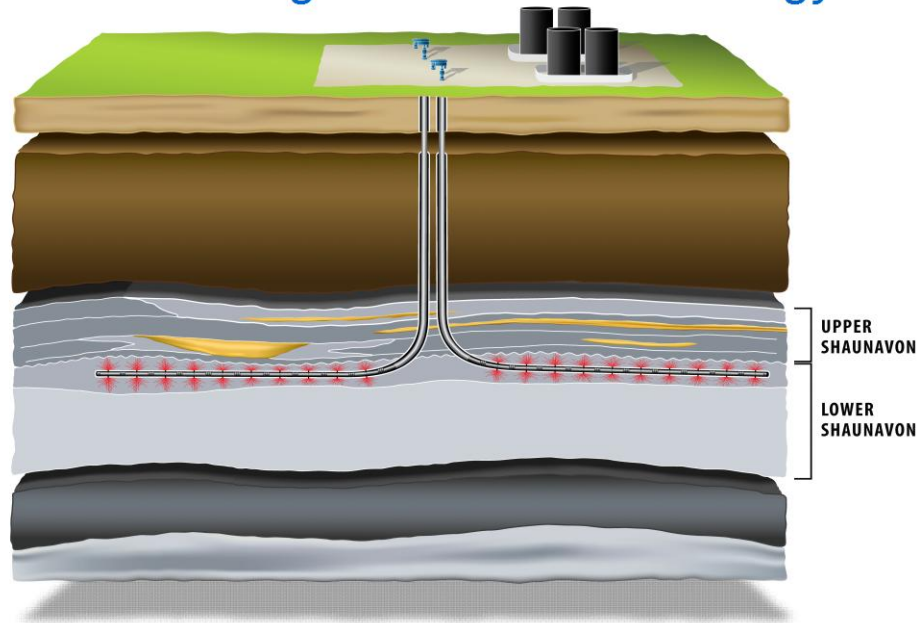
Also, it is believed that fracture stimulation treatments, performed on these wells prior to initiation of water injection, “broke” through into the higher productivity Mississippian zone and that majority of injected water to date has entered this zone. This is one of the major explanations for lack of waterflood response to date and the continued decline in oil productivities.

The Waskada Unit # 3 is becoming a non-conventional tight oil resources play that utilizes horizontal multi-stage frac drilling technology (small multi-stage frac stimulations on newly drilled wells will remain “in zone” within the Lower Amaranth) to re-develop the thick low perm oil zones adjacent to the conventional Amaranth zone that was discovered in the 1980’s.

PennWest’s next plan is to convert some of the recent horizontal producing wells to injection wells to increase the sweep efficiency and ultimately increase the recoverable oil in place.

The following is the HZ Multi Stage Fracture Technology development plan that we are using:-

Hz Multi Stage Fracture Technology



TABLES

Waskada Unit #3

Table 1: Rate History

Production Data						
Date	Oil		Water		Injection Water	
Year	m3/year	m3/day	m3/year	m3/day	m3/year	m3/day
1980	183	0.50	315	0.86	0	0.00
1981	1,124	3.08	2,500	6.85	0	0.00
1982	6,379	17.48	5,322	14.58	0	0.00
1983	19,167	52.51	34,598	94.79	0	0.00

1984	24,582	67.35	49,131	134.61	68,953	188.91
1985	24,638	67.50	53,585	146.81	85,890	235.32
1986	26,265	71.96	49,175	134.73	143,288	392.57
1987	17,020	46.63	42,395	116.15	88,310	241.95
1988	12,535	34.34	36,320	99.51	46,449	127.26
1989	9,713	26.61	28,005	76.72	11,519	31.56
1990	6,630	18.17	15,180	41.59	27,898	76.43
1991	6,384	17.49	11,631	31.87	35,537	97.36
1992	6,335	17.36	16,071	44.03	33,244	91.08
1993	6,308	17.28	14,199	38.90	48,126	131.85
1994	3,922	10.74	11,965	32.78	21,512	58.94
1995	4,424	12.12	13,839	37.92	22,294	61.08
1996	2,925	8.01	6,174	16.92	19,503	53.43
1997	3,315	9.08	4,165	11.41	16,774	45.96
1998	2,782	7.62	2,406	6.59	7,958	21.80
1999	2,628	7.20	2,651	7.26	4,079	11.18
2000	1,996	5.47	2,140	5.86	4,886	13.39
2001	1,400	3.84	1,589	4.35	3,538	9.69
2002	1,511	4.14	1,419	3.89	3,284	9.00
2003	1,476	4.04	1,445	3.96	3,172	8.69
2004	1,620	4.44	1,145	3.14	1,967	5.39
2005	1,717	4.70	921	2.52	1,944	5.33
2006	1,788	4.90	1,442	3.95	1,515	4.15
2007	1,541	4.22	1,268	3.47	0	0.00
2008	1,636	4.48	1,245	3.41	0	0.00
2009	2,293	6.28	3,461	9.48	0	0.00
2010	30,629	83.92	42,487	116.40	0	0.00
2011	69,369	190.05	128,958	353.31	0	0.00
2012	40,288	110.38	119,993	328.75	0	0.00

Waskada Unit #3

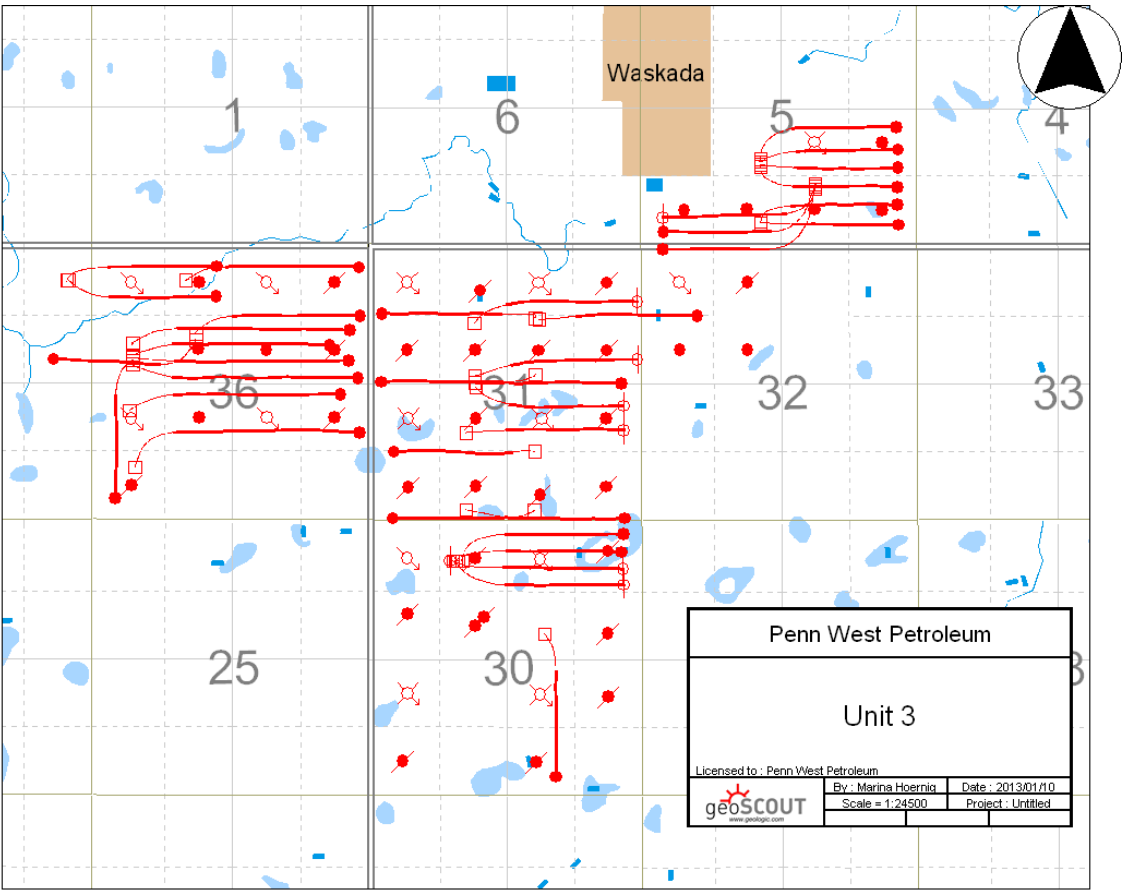
Table 2: Pressure Surveys

Location	Shut In Date	Date of Survey	Type of Survey	Pressure @ Datum Depth (kPa)
04/04-31-001-25W1/0	17-Oct-10	24-Oct-10	BHP Build Up	9335
00/11-32-001-25W1/0	(16.1 days)	29-Nov-06	Acoustic Build Up	8384
00/14-36-001-26W1/0		10-Jan-10	BHP, Assuming WC from Last Prod'n	3172
02/16-36-001-26W1/0	17-Oct-10	24-Oct-10	BHP Build Up	2704
00/01-05-002-25W1/0		14-Jan-10	BHP, Assuming WC from Last Prod'n	7405
00/02-05-002-25W1/0		2008	BHP, Assuming WC from Last Prod'n	4570
102/13-31-001-25W1/00		July 2011	Results of the test are attached to the report	

Recent pressure test was performed on 102/13-31-001-25W1/00 on July 2011 and the results of the test are attached to the report

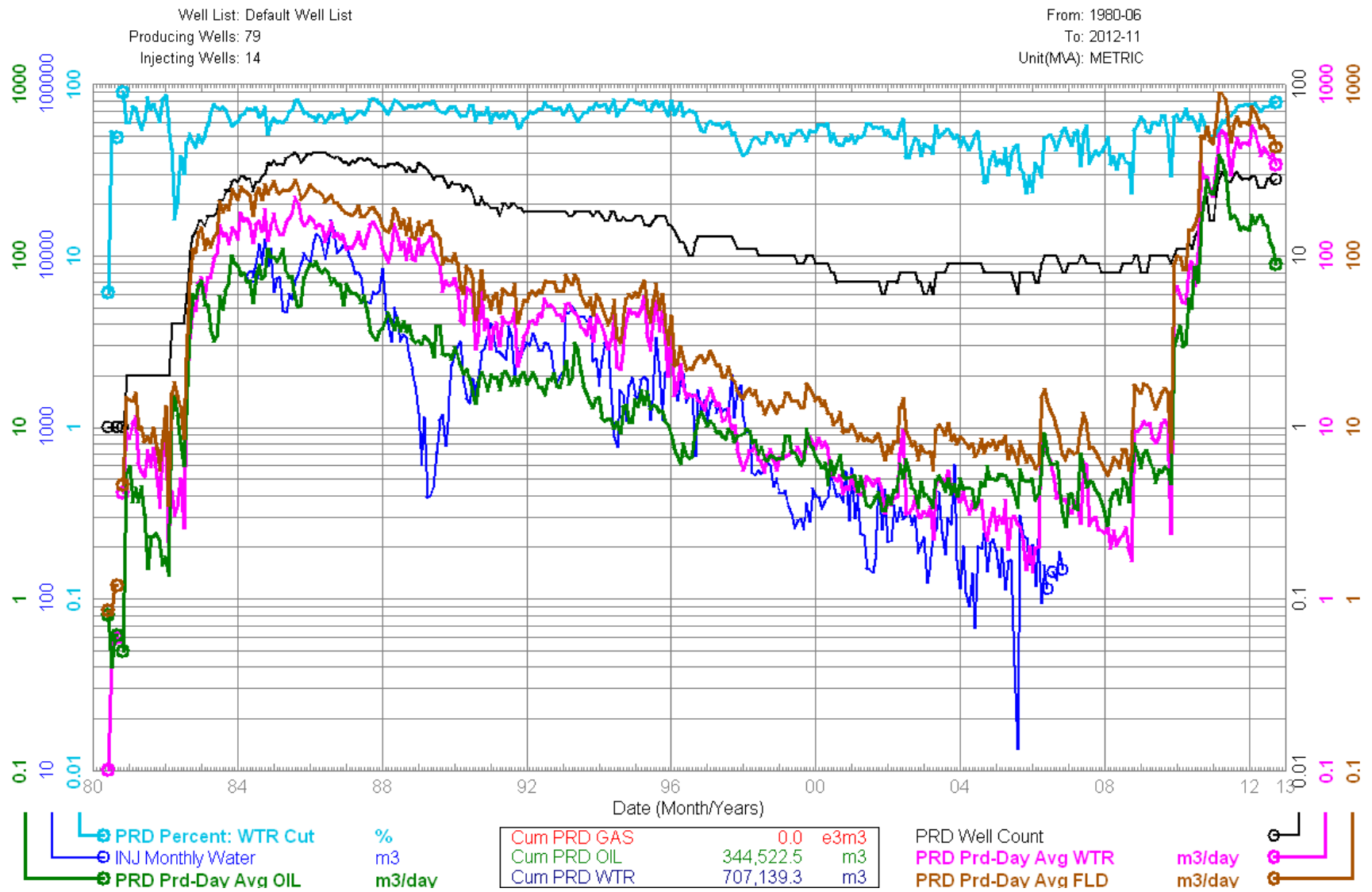
APPENDIX A

Appendix A – Area Map



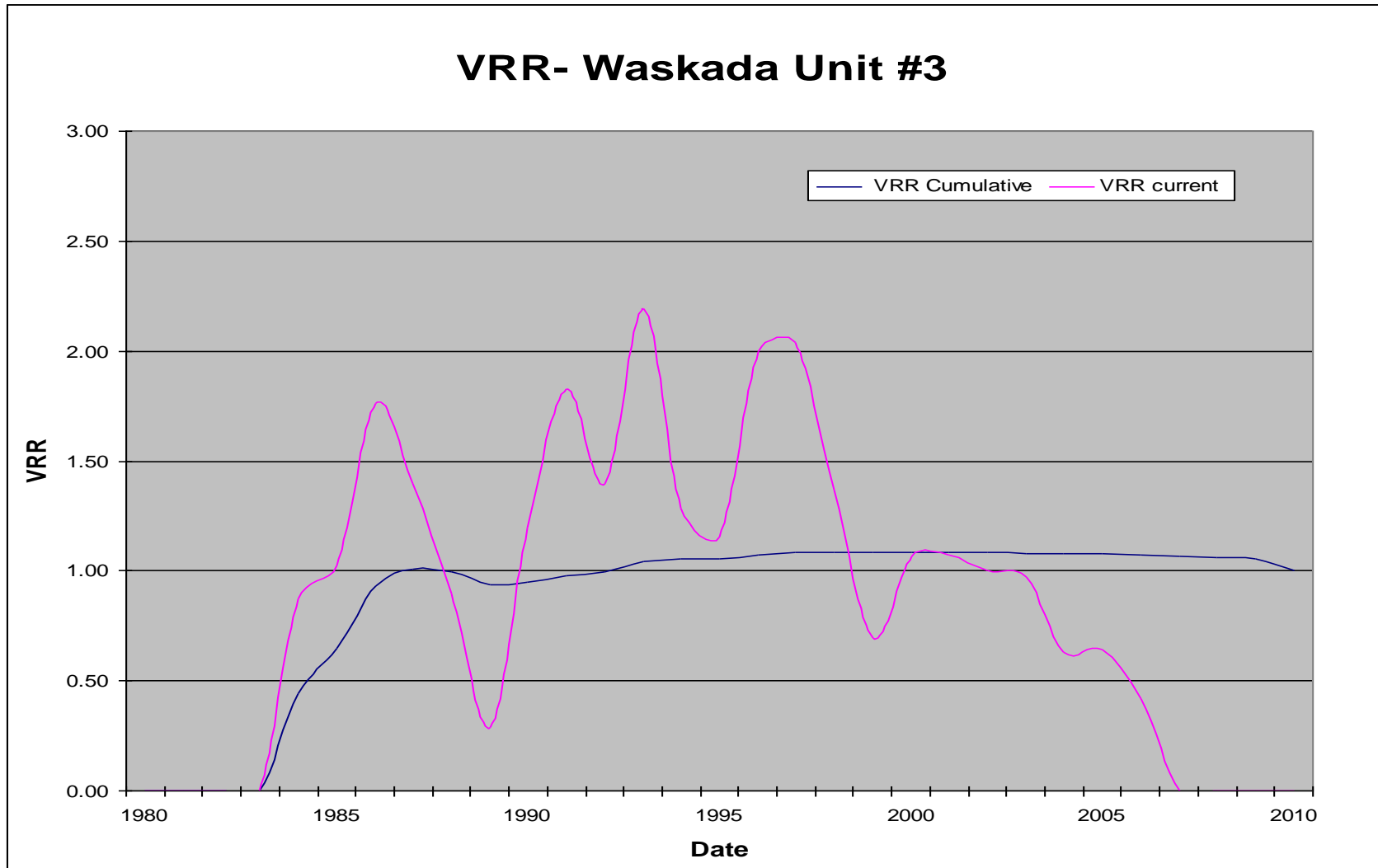
APPENDIX B

Appendix B – Production and Injection History plot



APPENDIX C

Appendix C – Voidage Replacement Ratio VRR



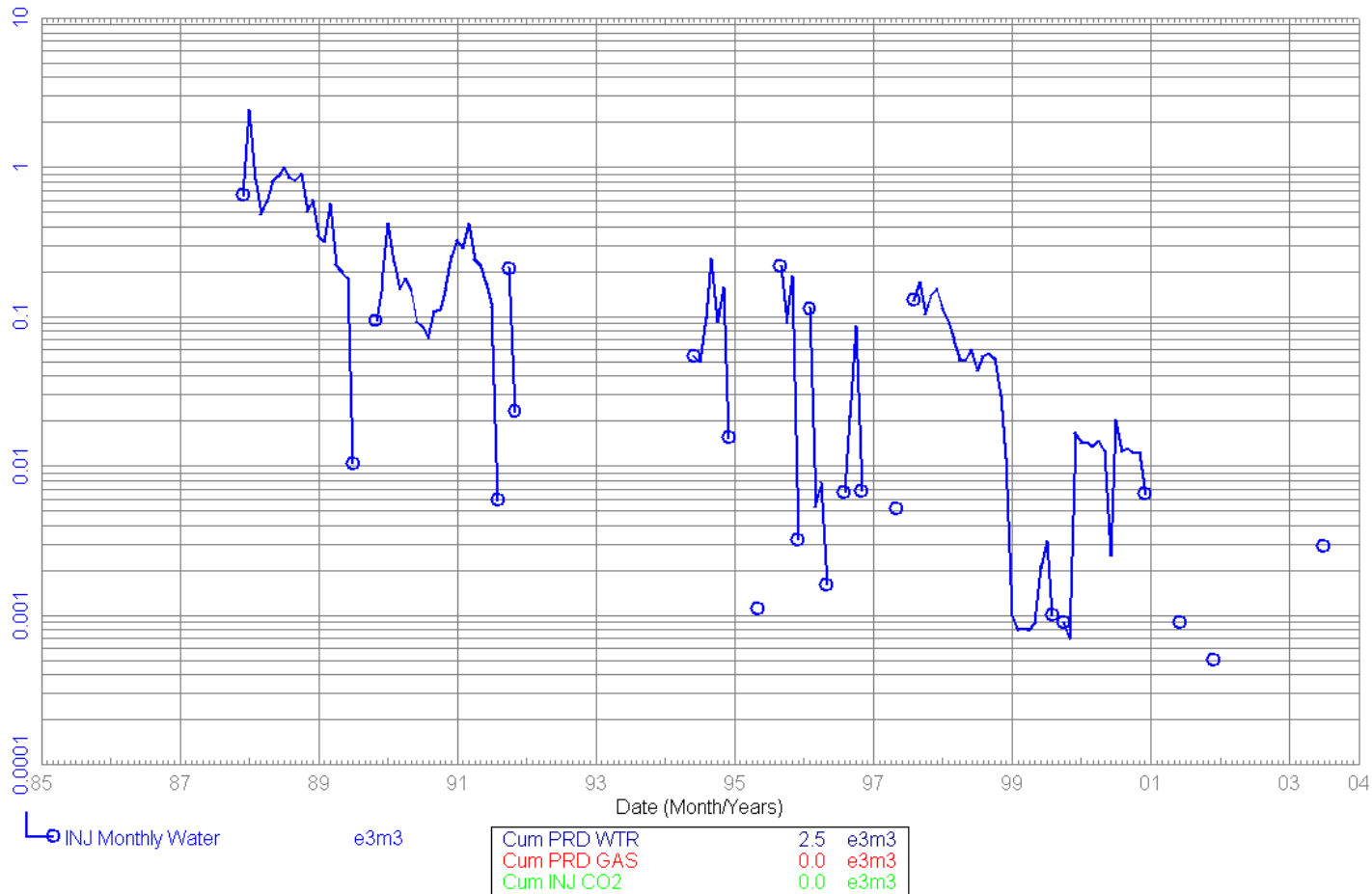
APPENDIX D

Appendix D – Production and Injection Profiles (Individual wells)

Data As Of: 2012-10 (MB)
From: 1985-12
To: 1987-11

102/07-30-001-25W1/00
Waskada Unit No. 3 Prov. WIV
Abandoned Water Inj Well

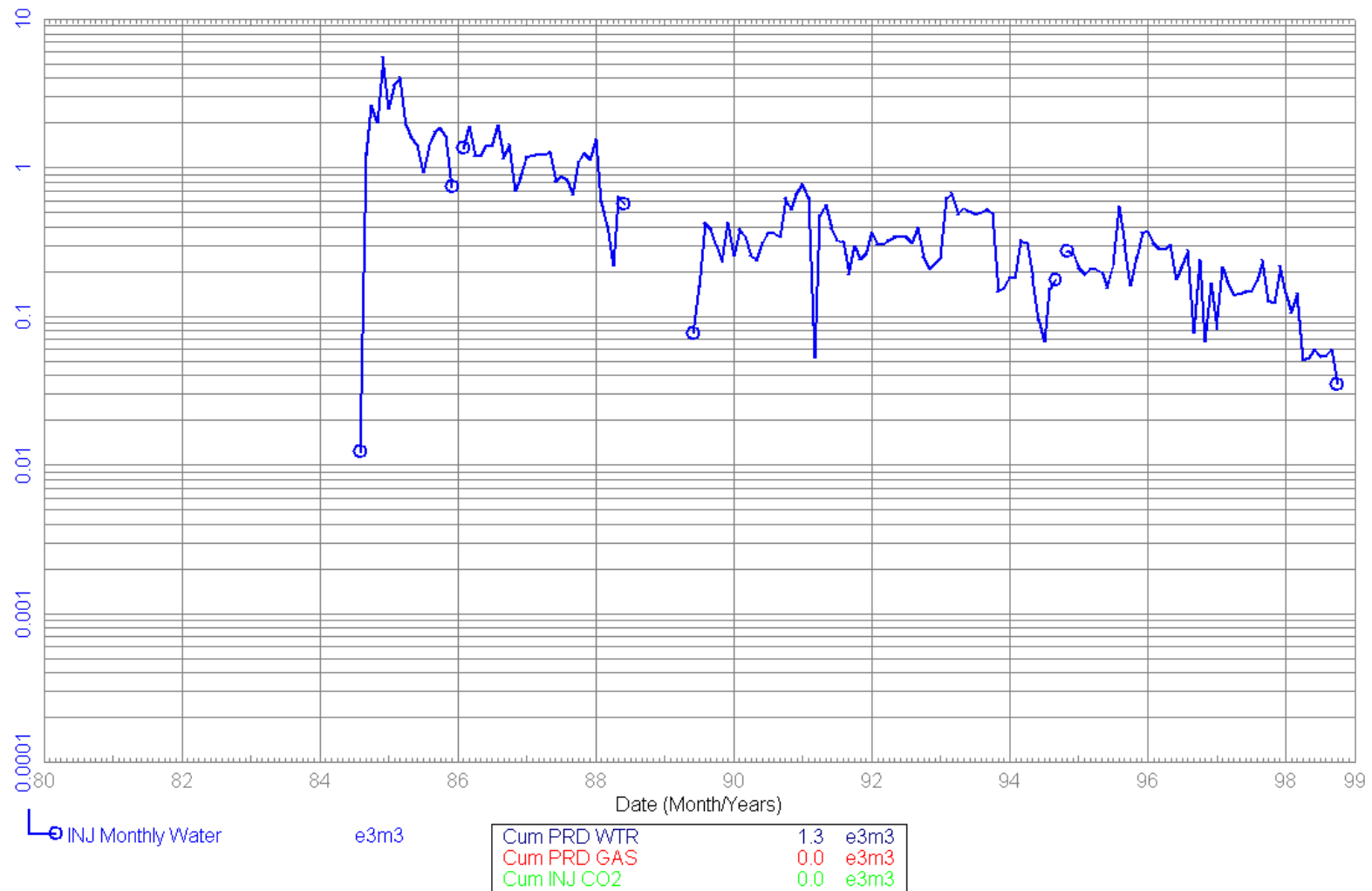
Field: WASKADA (03)
Pool: LOWER AMARANTH A (29A)
Unit: WASKADA UNIT NO. 3



Data As Of: 2012-10 (MB)
From: 1980-12
To: 1984-06

100/05-30-001-25W1/02
Waskada Unit No. 3 WIW
Abandoned Water Inj Well

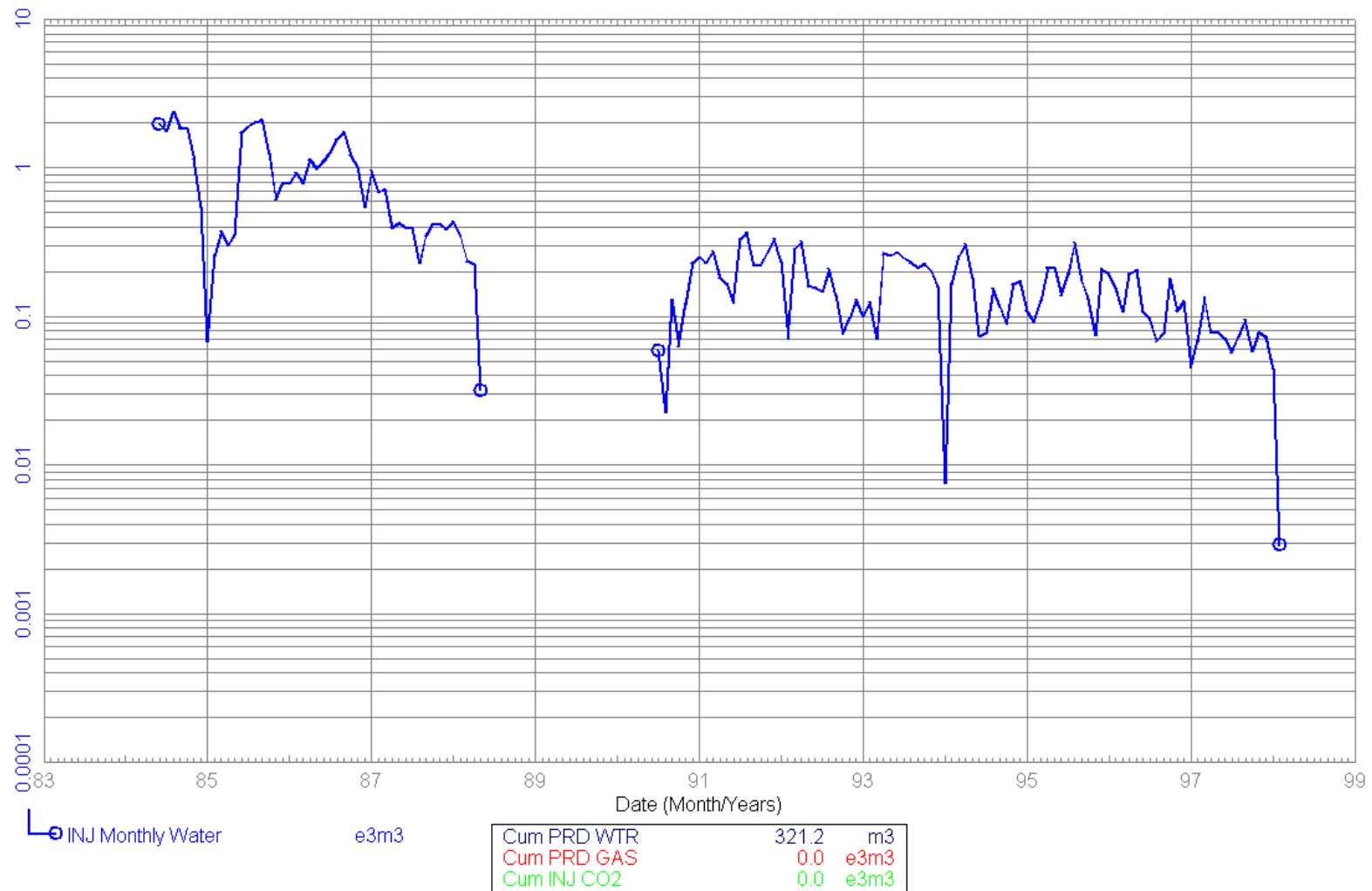
Field: WASKADA (03)
Pool: LOWER AMARANTH A (29A)
Unit: WASKADA UNIT NO. 3



Data As Of: 2012-10 (MB)
From: 1983-06
To: 1984-05

100/05-31-001-25W1/00
Waskada Unit No. 3 WIW
Abandoned Water Inj Well

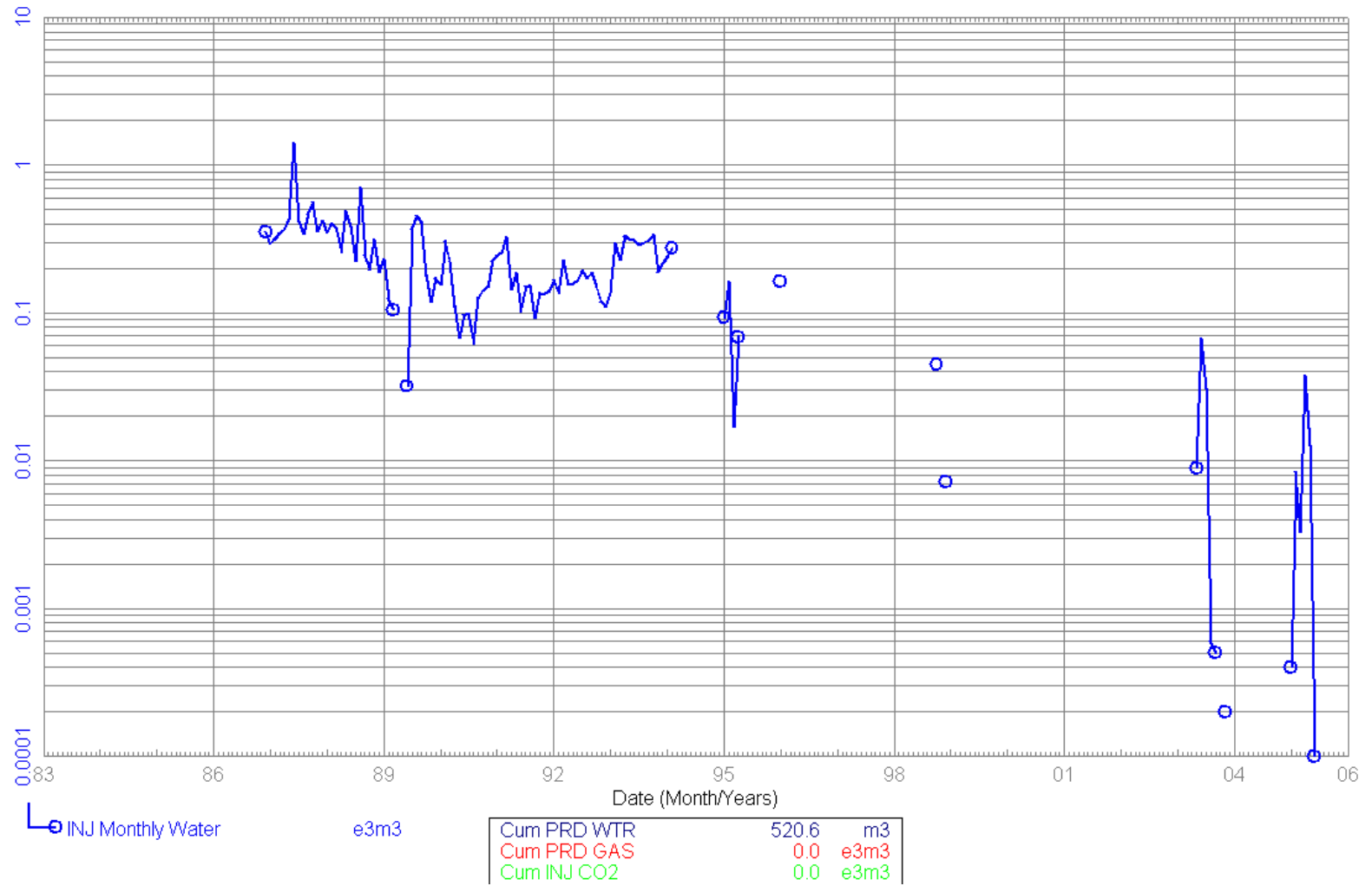
Field: WASKADA (03)
Pool: LOWER AMARANTH A (29A)
Unit: WASKADA UNIT NO. 3



Data As Of: 2012-10 (MB)
From: 1983-10
To: 1986-11

100/05-36-001-26W1/00
Waskada Unit No. 3 WIW
Water Inj Well

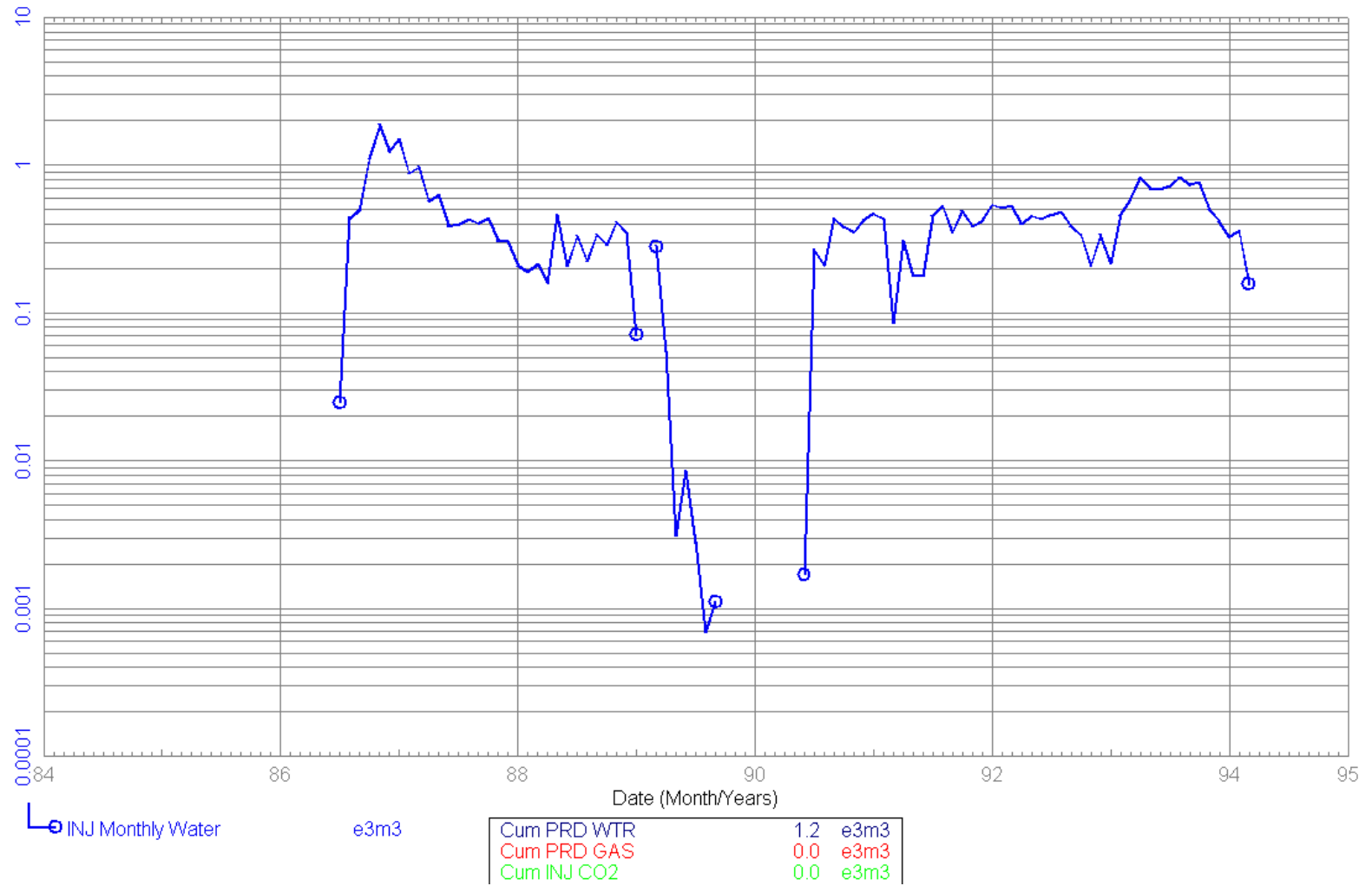
Field: WASKADA (03)
Pool: LOWER AMARANTH A (29A)
Unit: WASKADA UNIT NO. 3



Data As Of: 2012-10 (MB)
From: 1984-12
To: 1986-07

100/07-05-002-25W1/00
Waskada Unit No. 3 WIW
Abandoned Water Inj Well

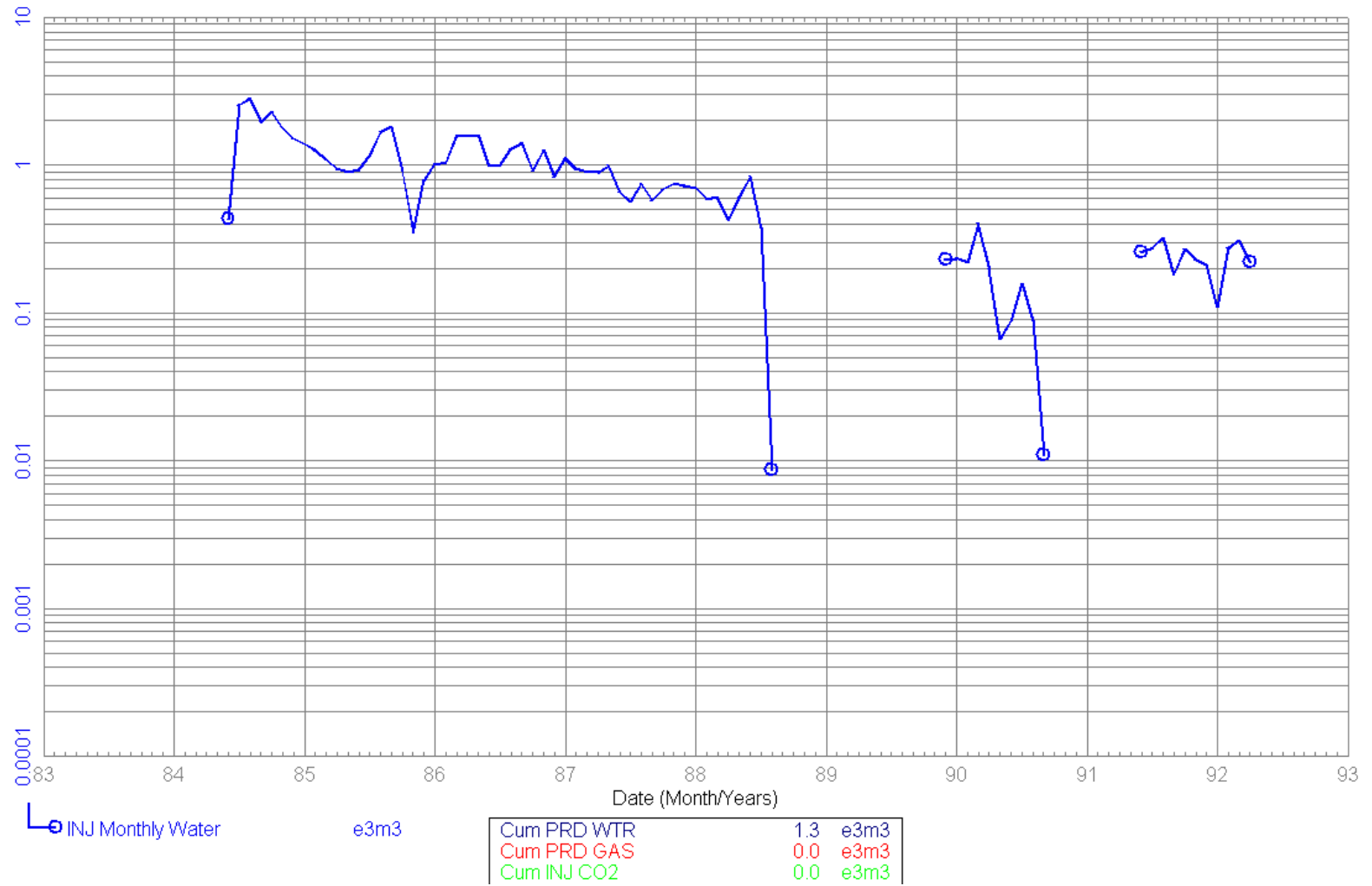
Field: WASKADA (03)
Pool: LOWER AMARANTH A (29A)
Unit: WASKADA UNIT NO. 3



Data As Of: 2012-10 (MB)
From: 1983-07
To: 1984-05

100/07-31-001-25W1/00
Omega Waskada WW
Abandoned Water Inj Well

Field: WASKADA (03)
Pool: LOWER AMARANTH A (29A)
Unit: WASKADA UNIT NO. 3



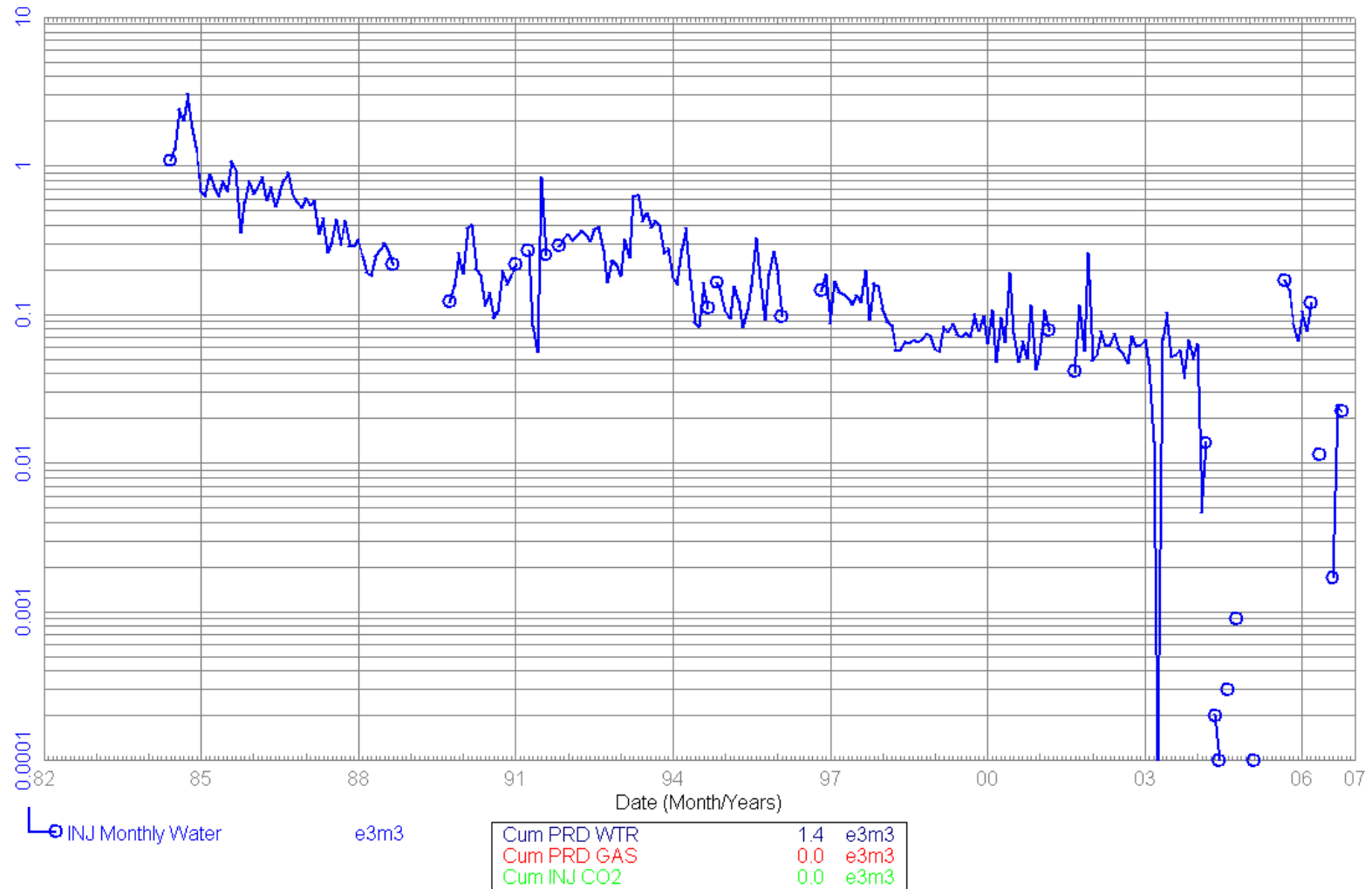
Field: WASKADA (03)
Pool: LOWER AMARANTH A (29A)
Unit: WASKADA UNIT NO. 3



Data As Of: 2012-10 (MB)
From: 1982-08
To: 1984-05

100/13-30-001-25W1/00
Waskada Unit No. 3 WIW
Water Inj Well

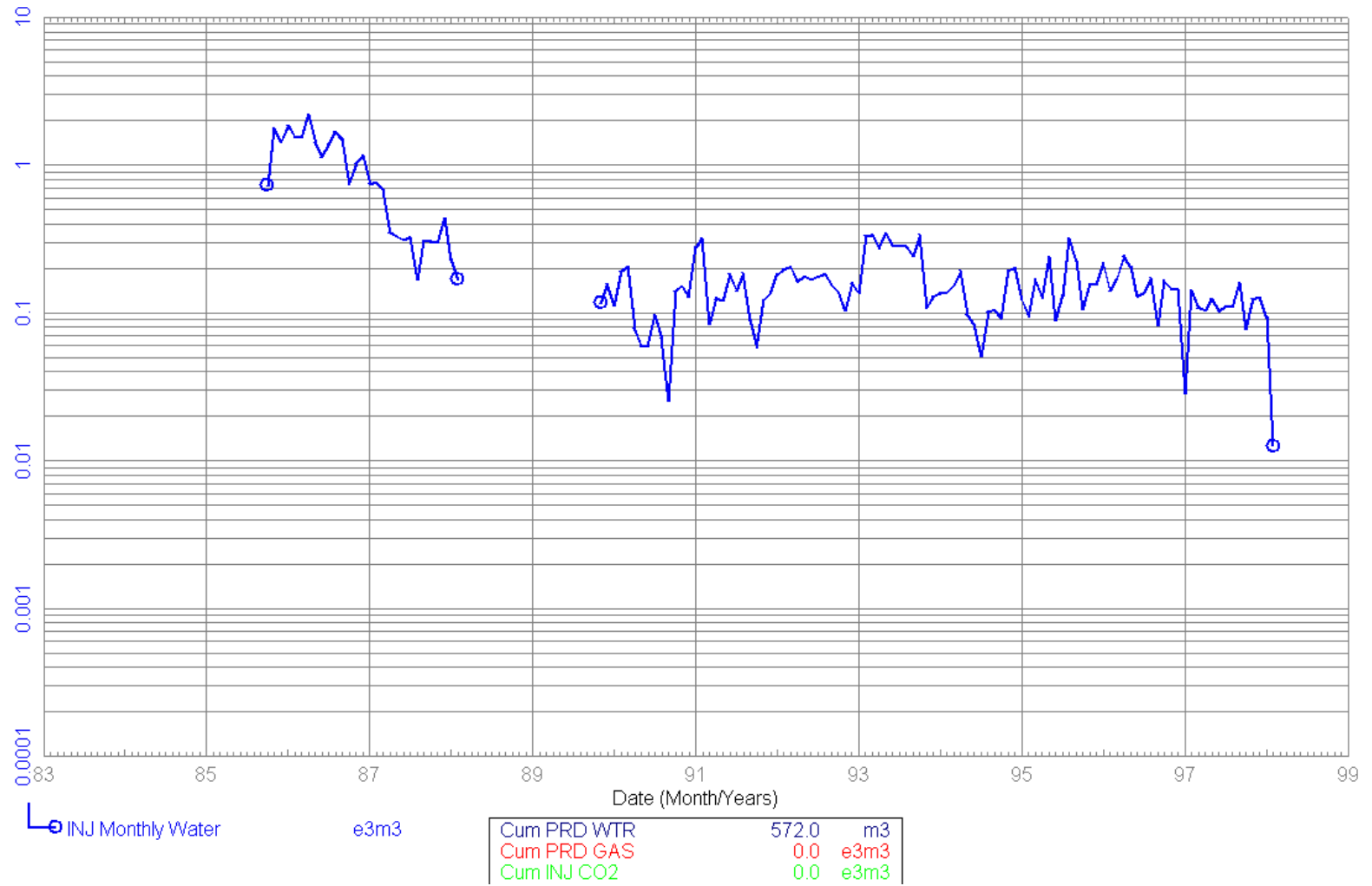
Field: WASKADA (03)
Pool: LOWER AMARANTH A (29A)
Unit: WASKADA UNIT NO. 3



Data As Of: 2012-10 (MB)
From: 1983-03
To: 1985-08

100/13-31-001-25W1/00
Waskada Unit No. 3 WIW
Abandoned Water Inj Well

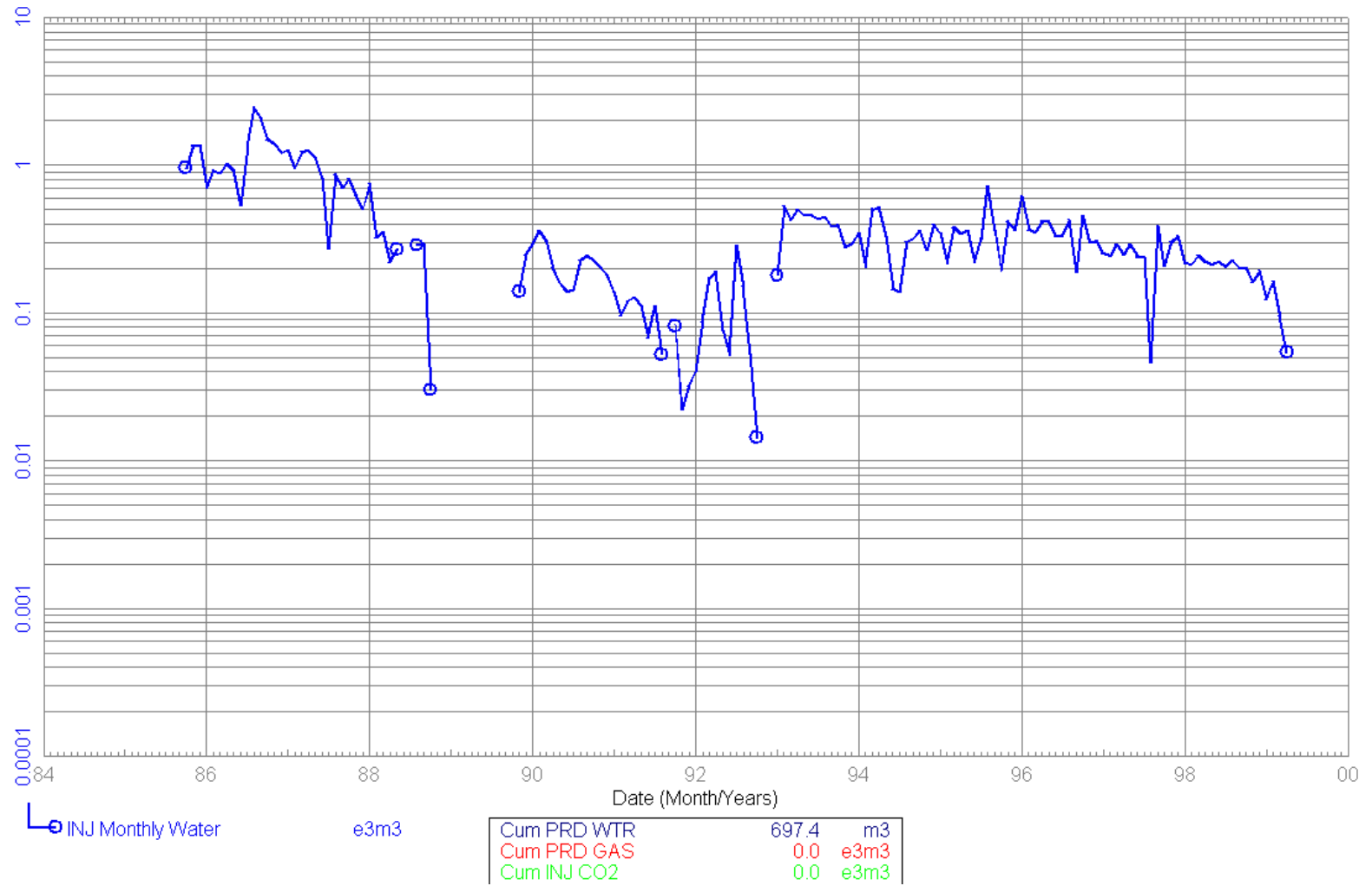
Field: WASKADA (03)
Pool: LOWER AMARANTH A (29A)
Unit: WASKADA UNIT NO. 3



Data As Of: 2012-10 (MB)
From: 1984-11
To: 1985-09

100/13-32-001-25W1/00
Waskada Unit No. 3 WIW
Water Inj Well

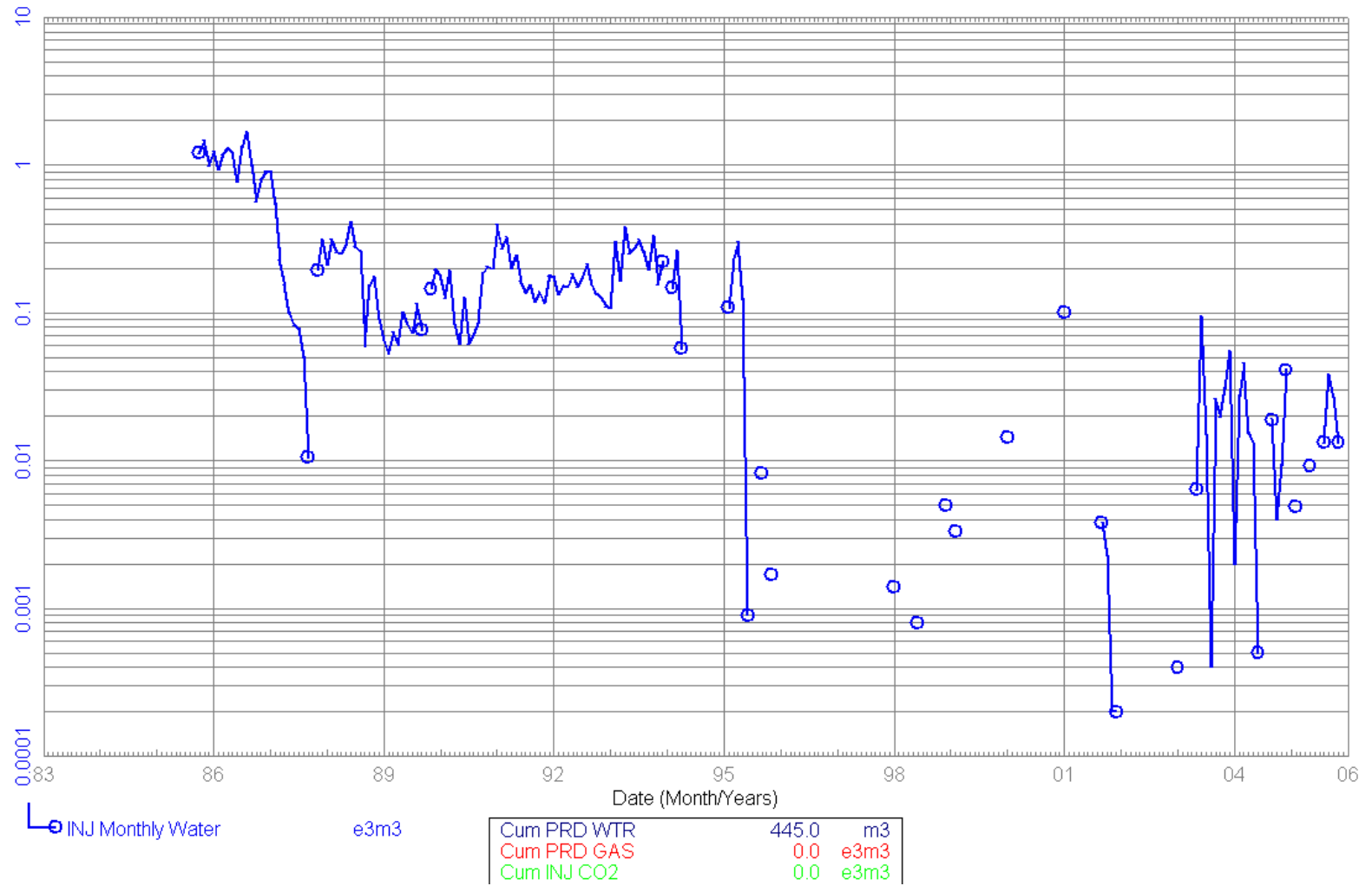
Field: WASKADA (03)
Pool: LOWER AMARANTH A (29A)
Unit: WASKADA UNIT NO. 3



Data As Of: 2012-10 (MB)
From: 1983-10
To: 1985-09

100/13-36-001-26W1/00
Waskada Unit No. 3 WIW
Water Inj Well

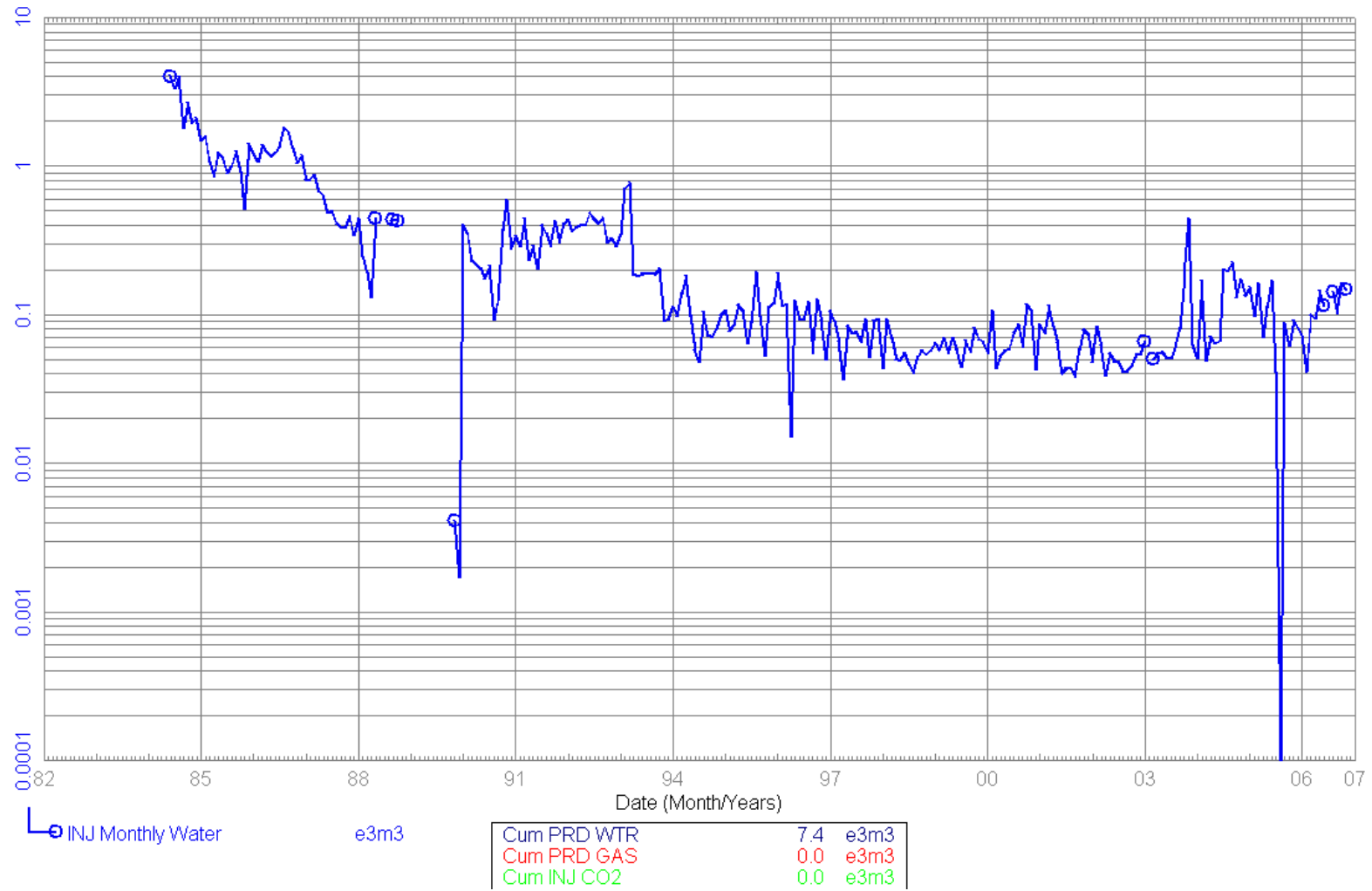
Field: WASKADA (03)
Pool: LOWER AMARANTH A (29A)
Unit: WASKADA UNIT NO. 3



Data As Of: 2012-10 (MB)
From: 1982-09
To: 1984-05

100/15-30-001-25W1/00
Penn West Waskada SWD
Abandoned Water Inj Well

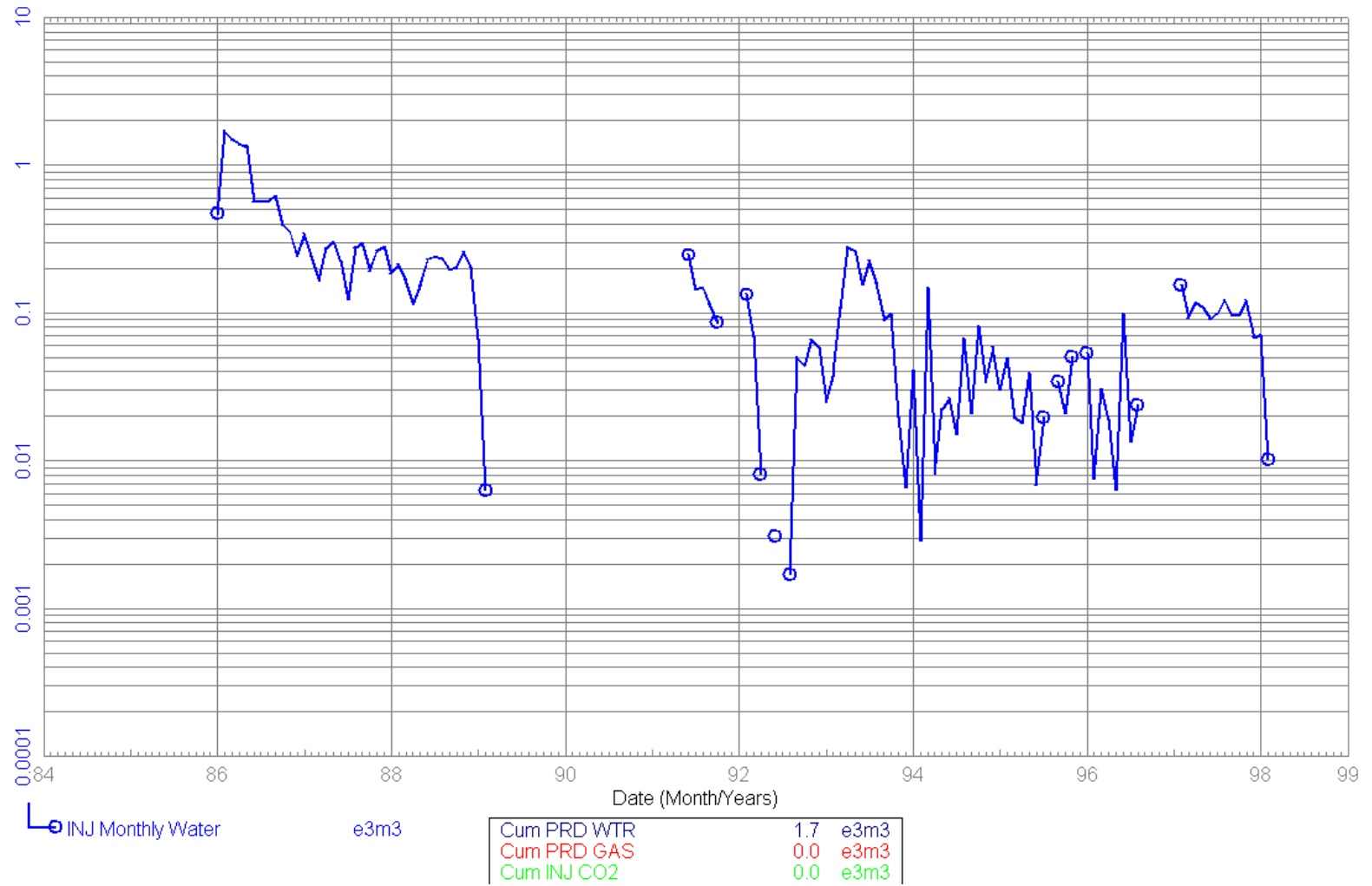
Field: WASKADA (03)
Pool: LOWER AMARANTH A (29A)
Unit: WASKADA UNIT NO. 3



Data As Of: 2012-10 (MB)
From: 1984-11
To: 1985-09

100/15-31-001-25W1/00
Waskada Unit No. 3 WW
Abandoned Water Inj Well

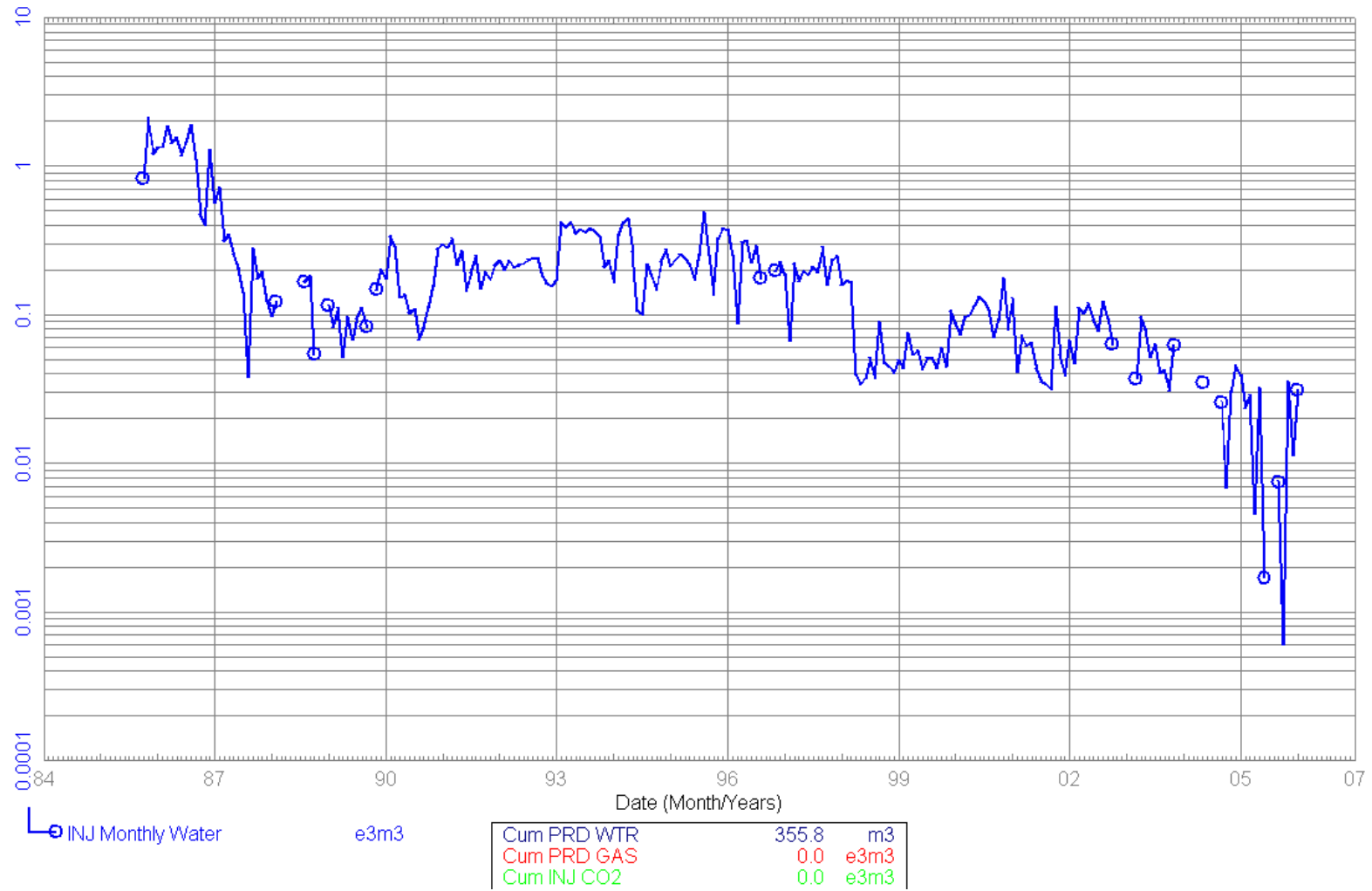
Field: WASKADA (03)
Pool: LOWER AMARANTH A (29A)
Unit: WASKADA UNIT NO. 3



Data As Of: 2012-10 (MB)
From: 1984-07
To: 1985-09

100/15-36-001-26W1/00
Waskada Unit No. 3 WIW
Water Inj Well

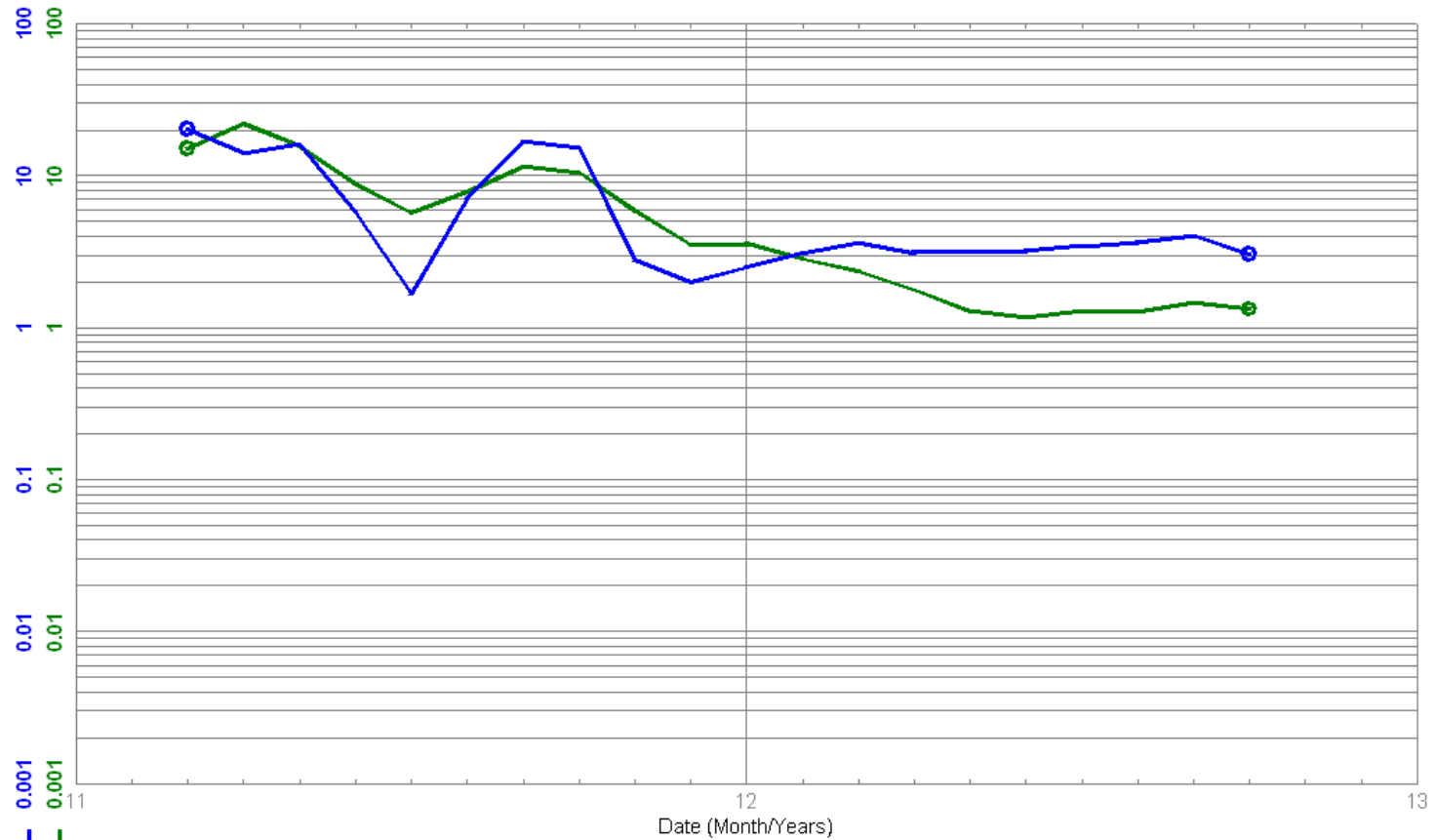
Field: WASKADA (03)
Pool: LOWER AMARANTH A (29A)
Unit: WASKADA UNIT NO. 3



Data As Of: 2012-10 (MB)
 From: 2011-03
 To: 2012-10

105/09-36-001-26W1/00
 Waskada Unit No. 3 HZNTL
 Capable Of Oil Prod

Field: WASKADA (03)
 Pool: LOWER AMARANTH A (29A)
 Unit: WASKADA UNIT NO. 3



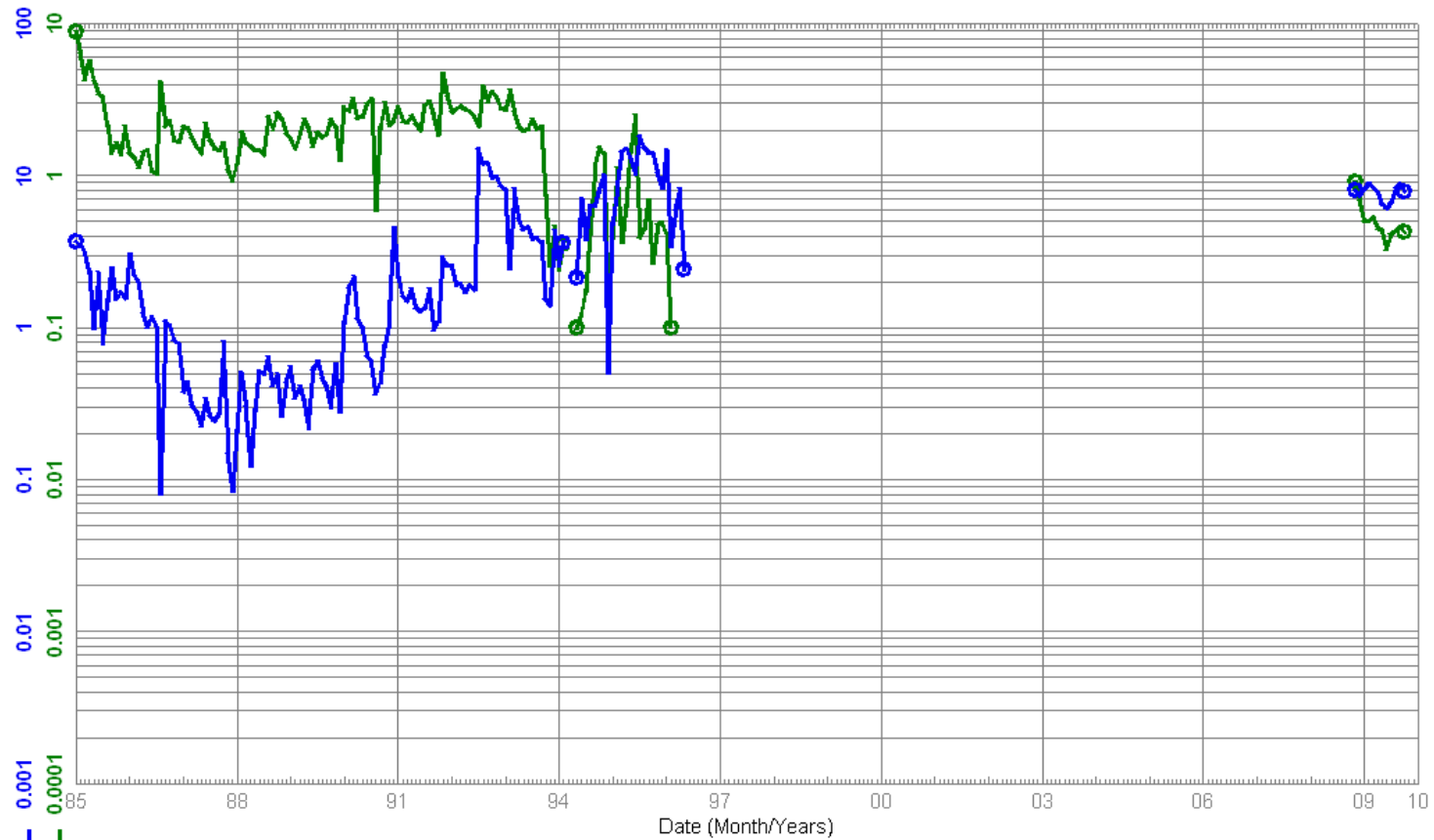
PRD Prd-Day Avg OIL m3/day
 PRD Prd-Day Avg WTR m3/day

Cum PRD OIL	3.3	e3m3
Cum PRD GAS	0.0	e3m3
Cum PRD WTR	3.6	e3m3
Cum PRD HRS	13,644.0	Hour
Cum INJ WTR	0.0	m3

Data As Of: 2012-10 (MB)
 From: 1985-01
 To: 2009-10

100/01-05-002-25W1/00
 Waskada Unit No. 3
 Capable Of Oil Prod

Field: WASKADA (03)
 Pool: LOWER AMARANTH A (29A)
 Unit: WASKADA UNIT NO. 3



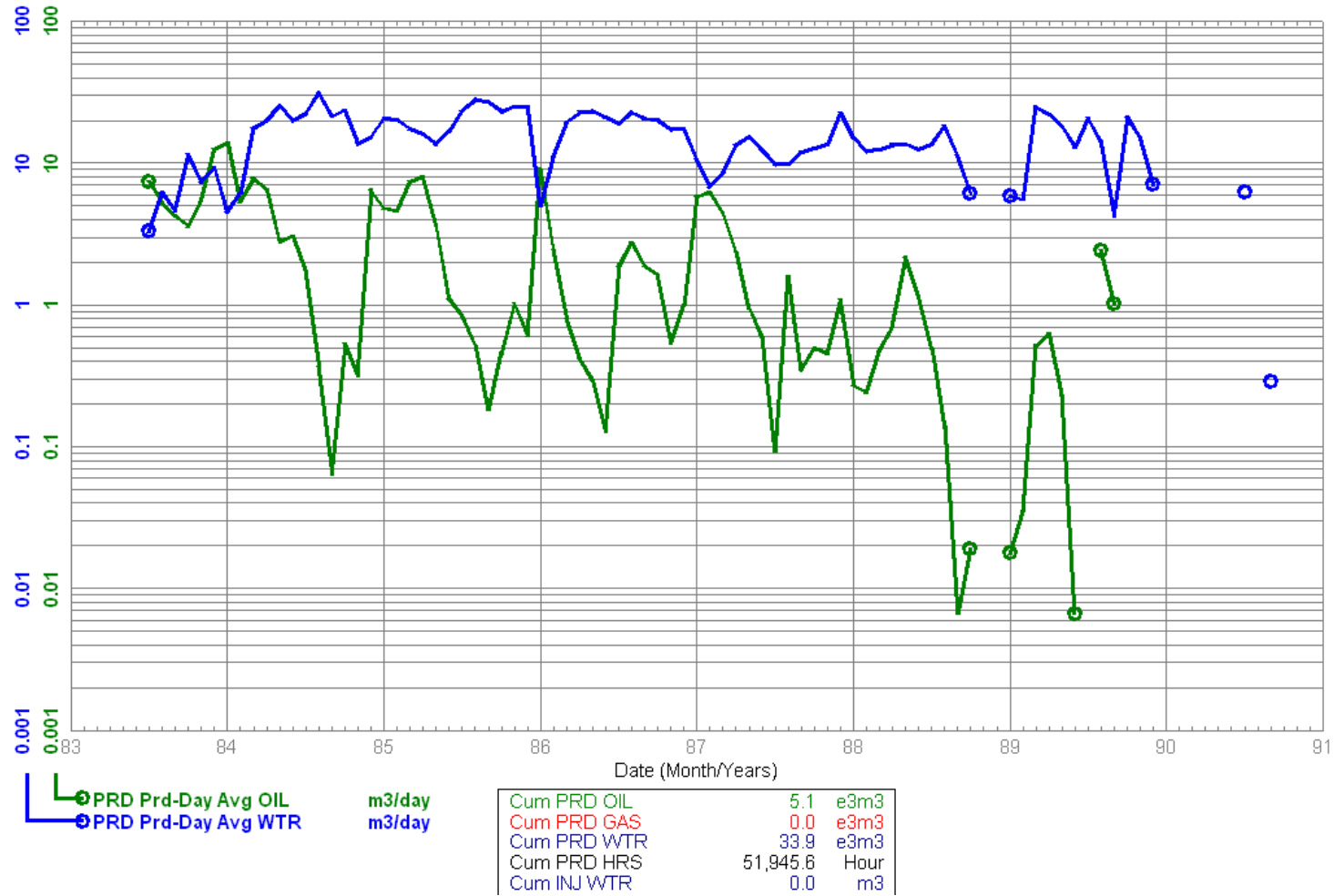
PRD Prd-Day Avg OIL m3/day
 PRD Prd-Day Avg WTR m3/day

Cum PRD OIL	7.1	e3m3
Cum PRD GAS	0.0	e3m3
Cum PRD WTR	14.9	e3m3
Cum PRD HRS	94,780.8	Hour
Cum INJ WTR	0.0	m3

Data As Of: 2012-10 (MB)
 From: 1983-07
 To: 1990-09

100/01-31-001-25W1/00
 Omega Waskada
 Abandoned Producer

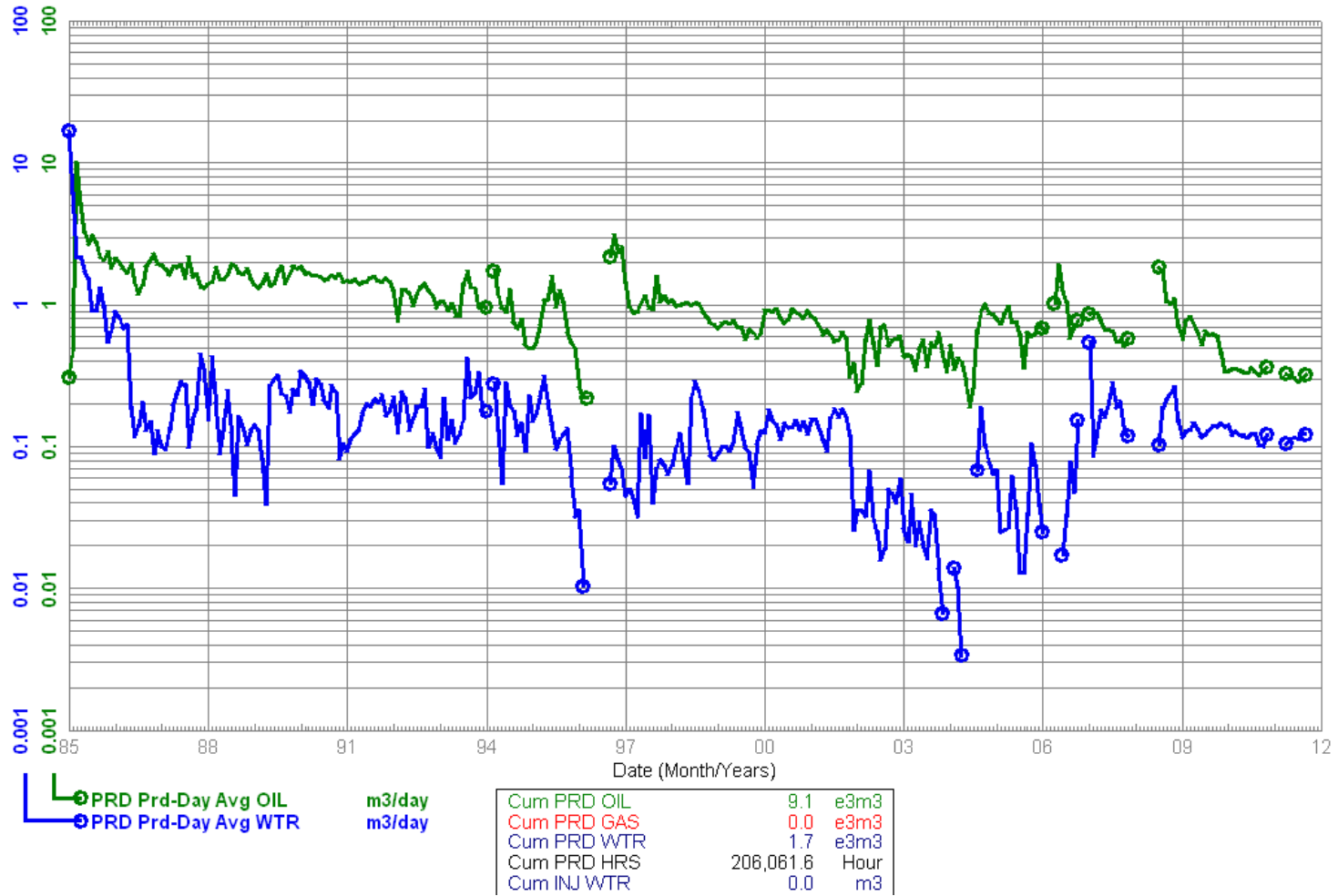
Field: WASKADA (03)
 Pool: LOWER AMARANTH A (29A)
 Unit: WASKADA UNIT NO. 3



Data As Of: 2012-10 (MB)
 From: 1985-01
 To: 2011-09

100/02-05-002-25W1/00
 Waskada Unit No. 3
 Capable Of Oil Prod

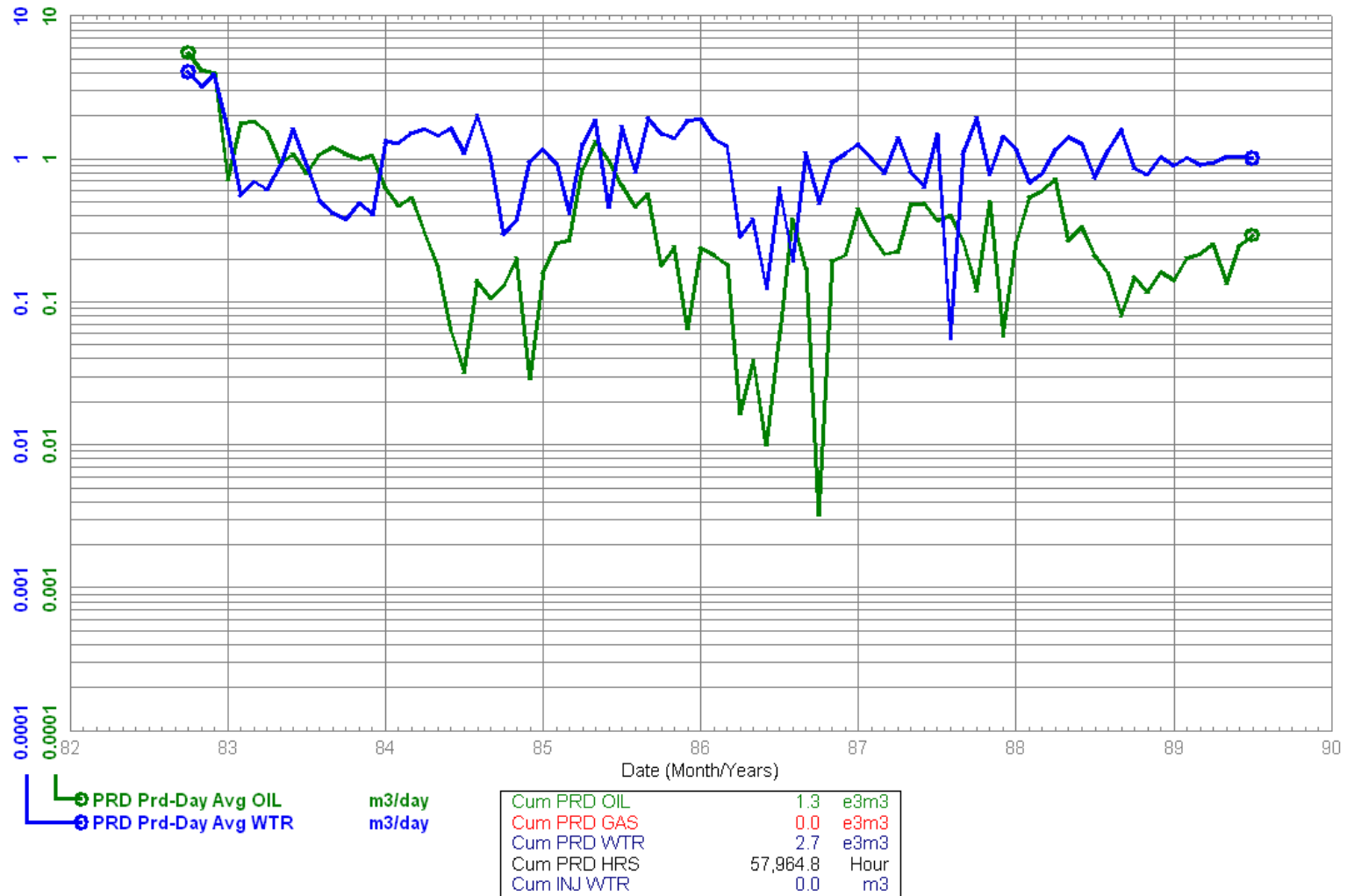
Field: WASKADA (03)
 Pool: LOWER AMARANTH A (29A)
 Unit: WASKADA UNIT NO. 3



Data As Of: 2012-10 (MB)
 From: 1982-10
 To: 1989-07

100/02-30-001-25W1/00
 Waskada Unit No. 3 Prov. WSW
 Abandoned Producer

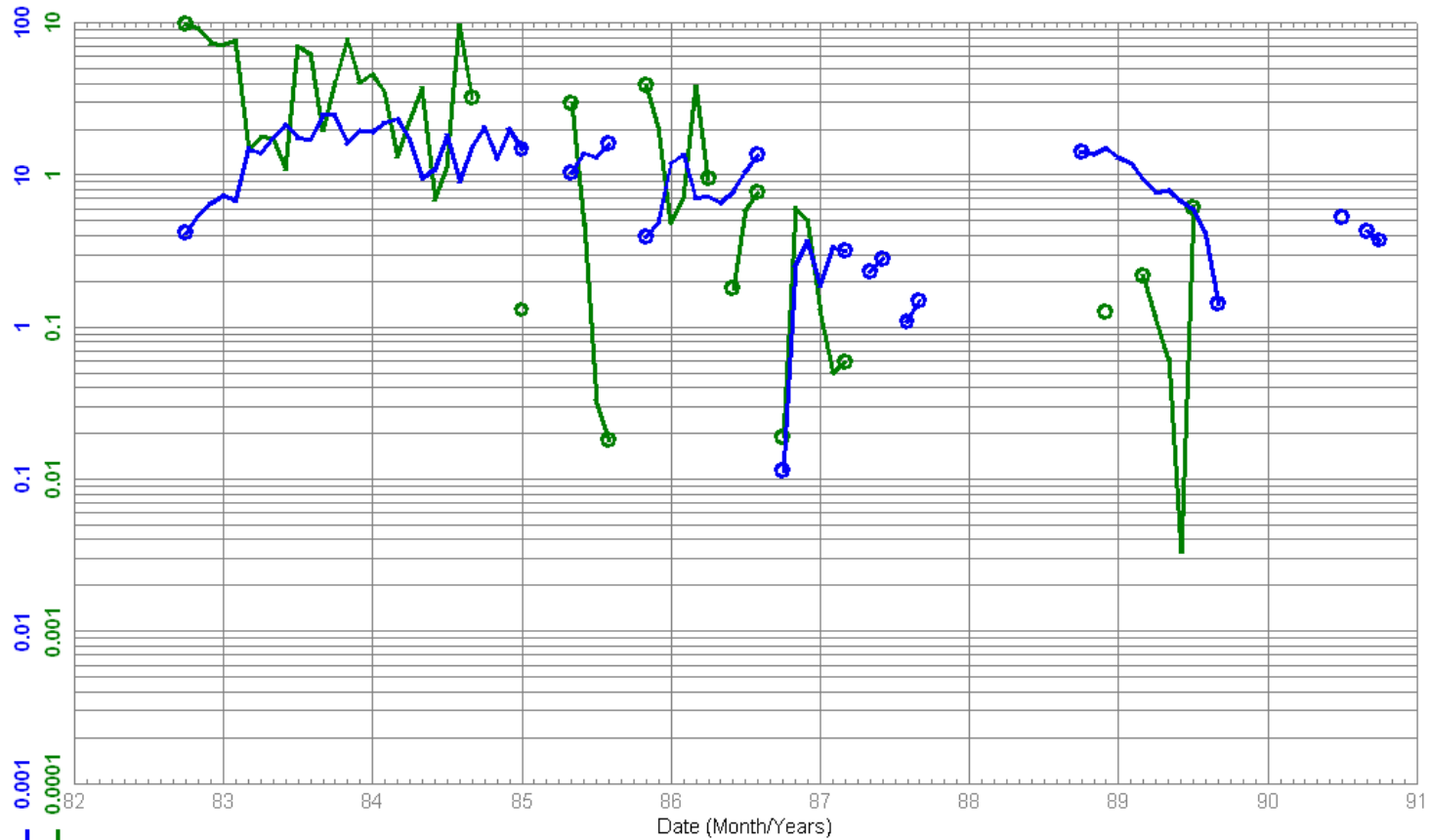
Field: WASKADA (03)
 Pool: LOWER AMARANTH A (29A)
 Unit: WASKADA UNIT NO. 3



Data As Of: 2012-10 (MB)
 From: 1982-10
 To: 1990-10

100/02-31-001-25W1/00
 Omega Waskada
 Abandoned Producer

Field: WASKADA (03)
 Pool: LOWER AMARANTH A (29A)
 Unit: WASKADA UNIT NO. 3



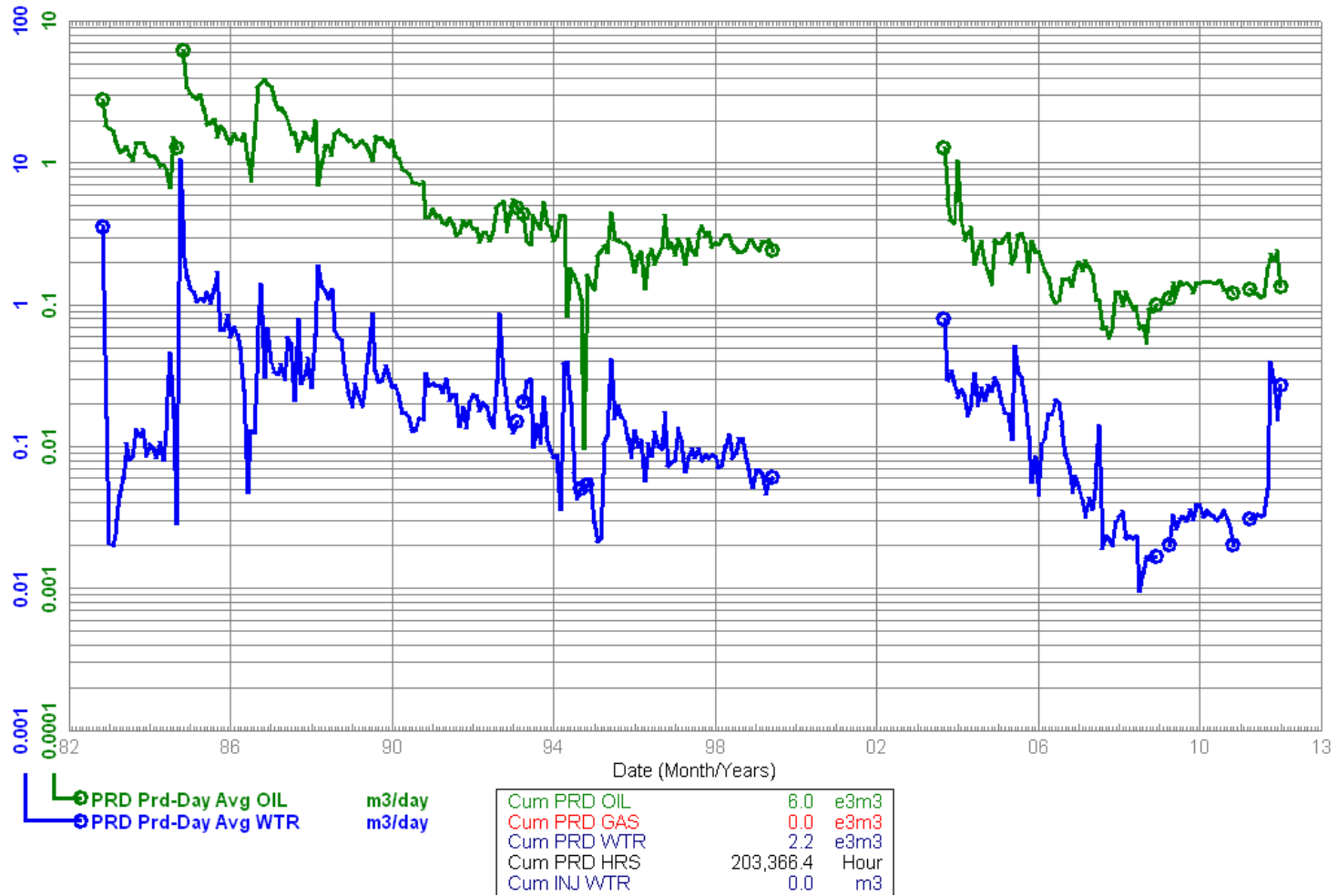
PRD Prd-Day Avg OIL m3/day
 PRD Prd-Day Avg WTR m3/day

Cum PRD OIL	3.5	e3m3
Cum PRD GAS	0.0	e3m3
Cum PRD WTR	18.5	e3m3
Cum PRD HRS	38,162.4	Hour
Cum INJ WTR	0.0	m3

Data As Of: 2012-10 (MB)
 From: 1982-11
 To: 2012-01

100/03-05-002-25W1/00
 Waskada Unit No. 3
 Capable Of Oil Prod

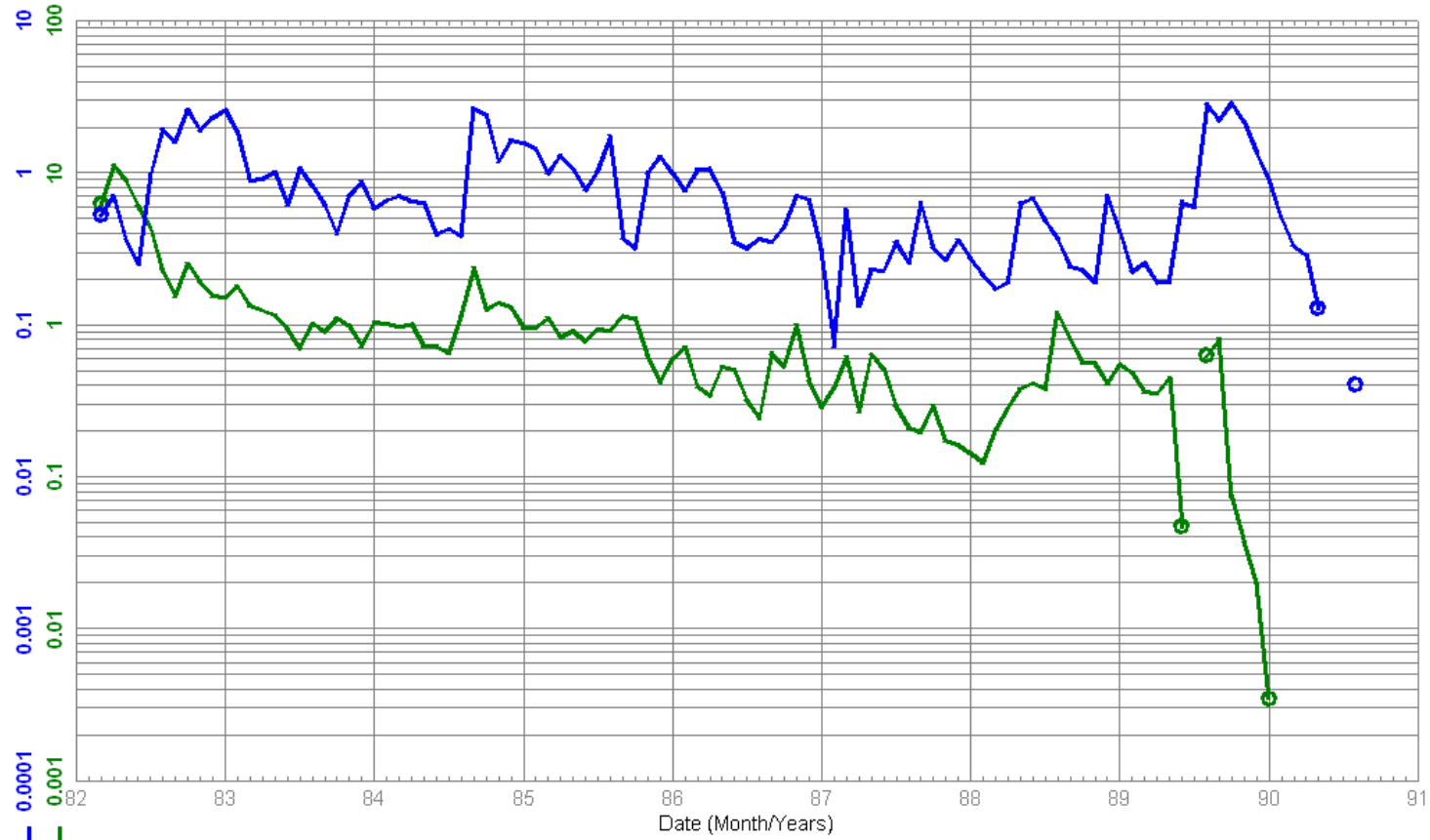
Field: WASKADA (03)
 Pool: LOWER AMARANTH A (29A)
 Unit: WASKADA UNIT NO. 3



Data As Of: 2012-10 (MB)
 From: 1982-03
 To: 1990-08

100/03-31-001-25W1/00
 Omega Waskada
 Abandoned Producer

Field: WASKADA (03)
 Pool: LOWER AMARANTH A (29A)
 Unit: WASKADA UNIT NO. 3



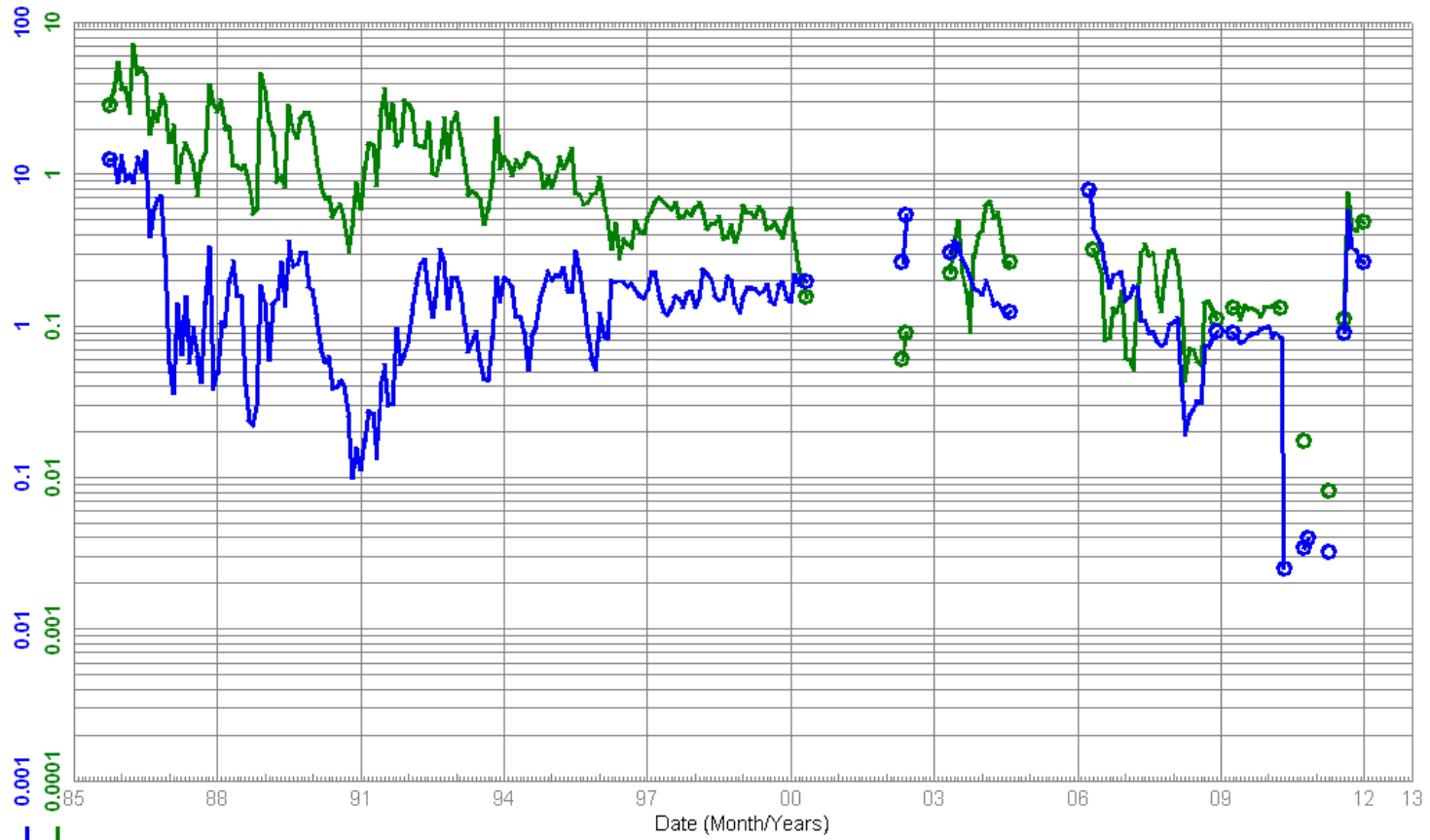
PRD Prd-Day Avg OIL m3/day
 PRD Prd-Day Avg WTR m3/day

Cum PRD OIL	2.8	e3m3
Cum PRD GAS	0.0	e3m3
Cum PRD WTR	2.3	e3m3
Cum PRD HRS	67,656.0	Hour
Cum INJ WTR	0.0	m3

Data As Of: 2012-10 (MB)
 From: 1985-10
 To: 2012-01

100/04-05-002-25W1/00
 Waskada Unit No. 3
 Capable Of Oil Prod

Field: WASKADA (03)
 Pool: LOWER AMARANTH A (29A)
 Unit: WASKADA UNIT NO. 3



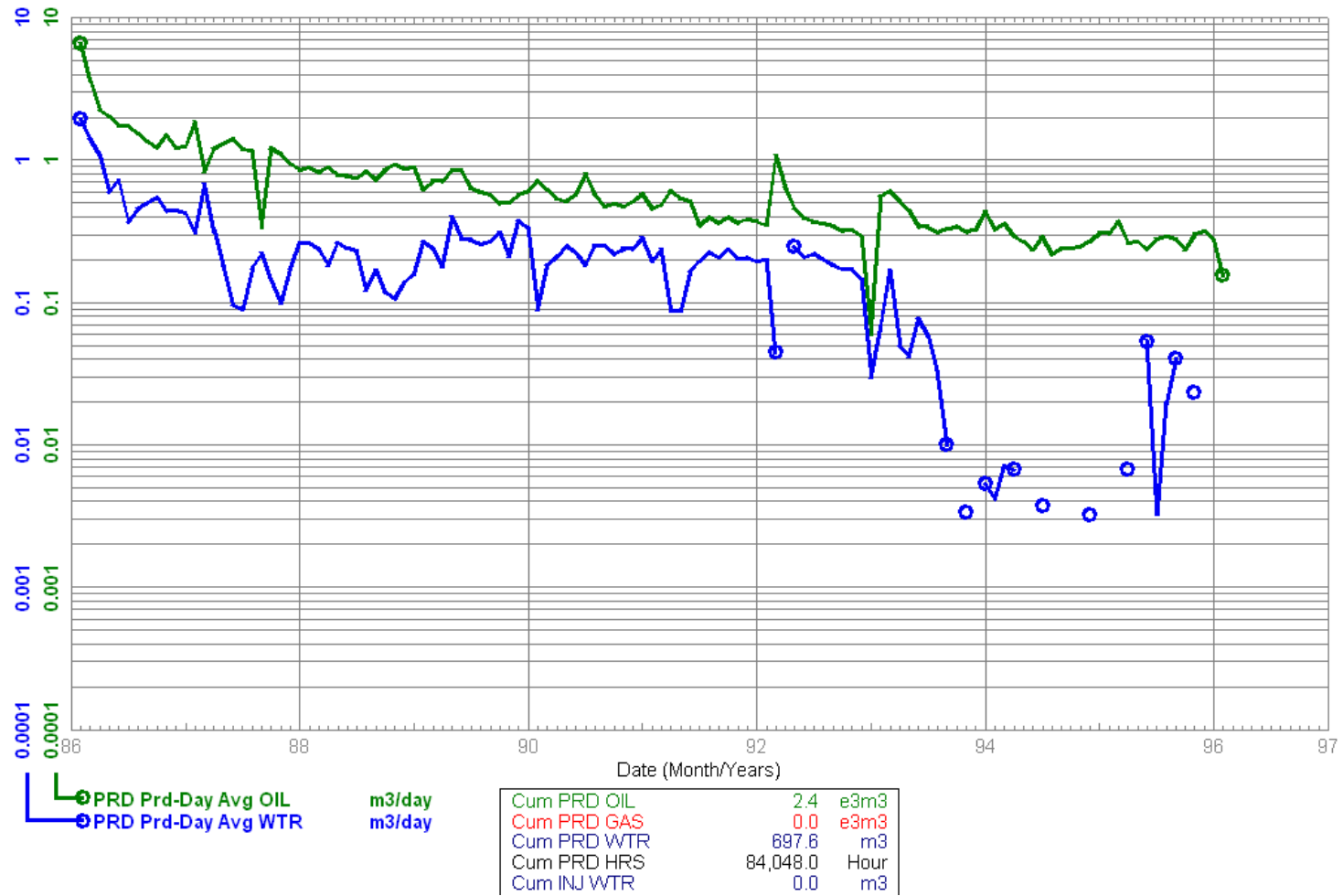
PRD Prd-Day Avg OIL m3/day
 PRD Prd-Day Avg WTR m3/day

Cum PRD OIL	7.5	e3m3
Cum PRD GAS	0.0	e3m3
Cum PRD WTR	13.8	e3m3
Cum PRD HRS	172,324.8	Hour
Cum INJ WTR	0.0	m3

Data As Of: 2012-10 (MB)
 From: 1986-02
 To: 1996-02

100/04-36-001-26W1/00
 Waskada Unit No. 3
 Abandoned Producer

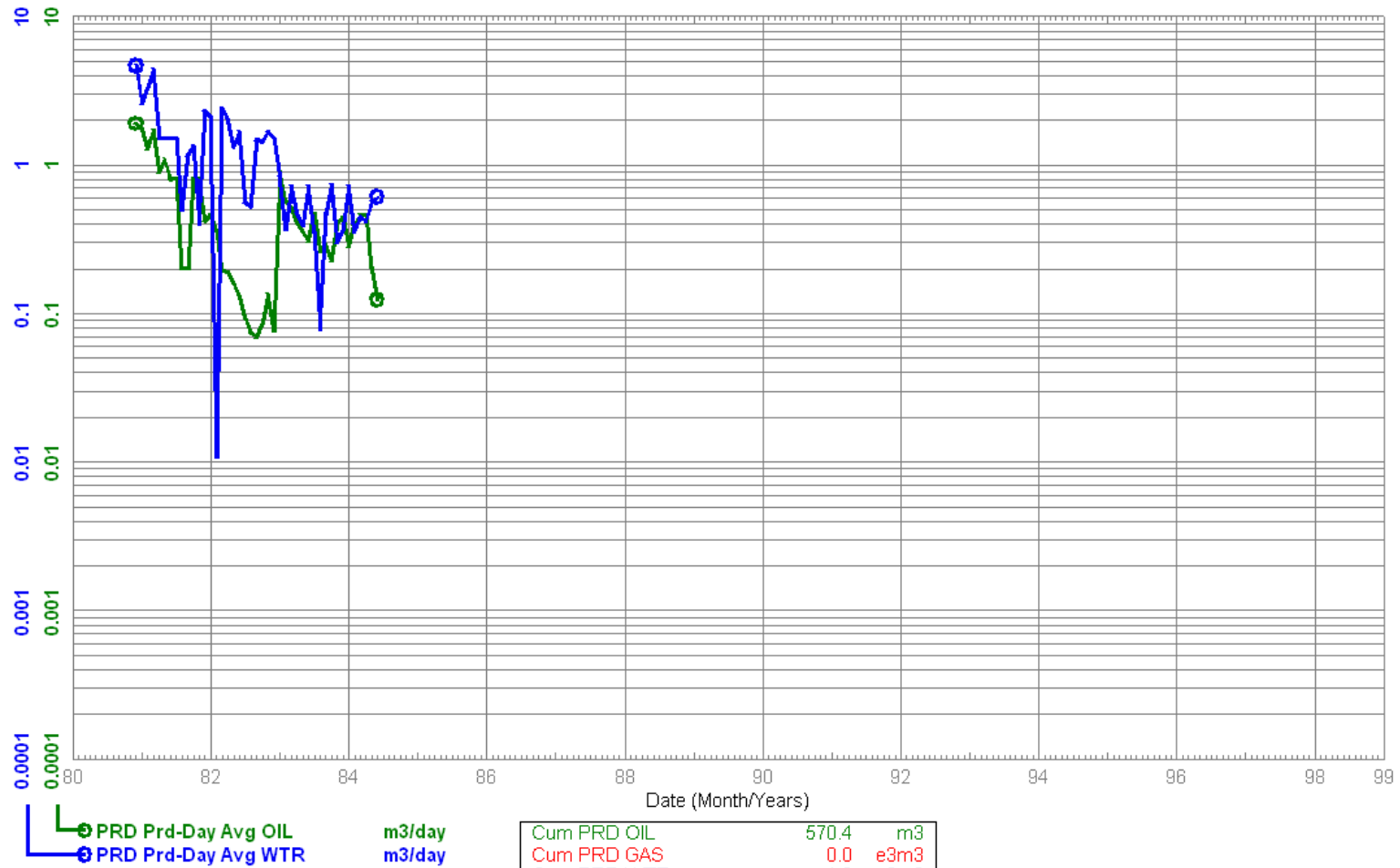
Field: WASKADA (03)
 Pool: LOWER AMARANTH A (29A)
 Unit: WASKADA UNIT NO. 3



Data As Of: 2012-10 (MB)
 From: 1980-12
 To: 1984-06

100/05-30-001-25W1/02
 Waskada Unit No. 3 WIW
 Abandoned Water Inj Well

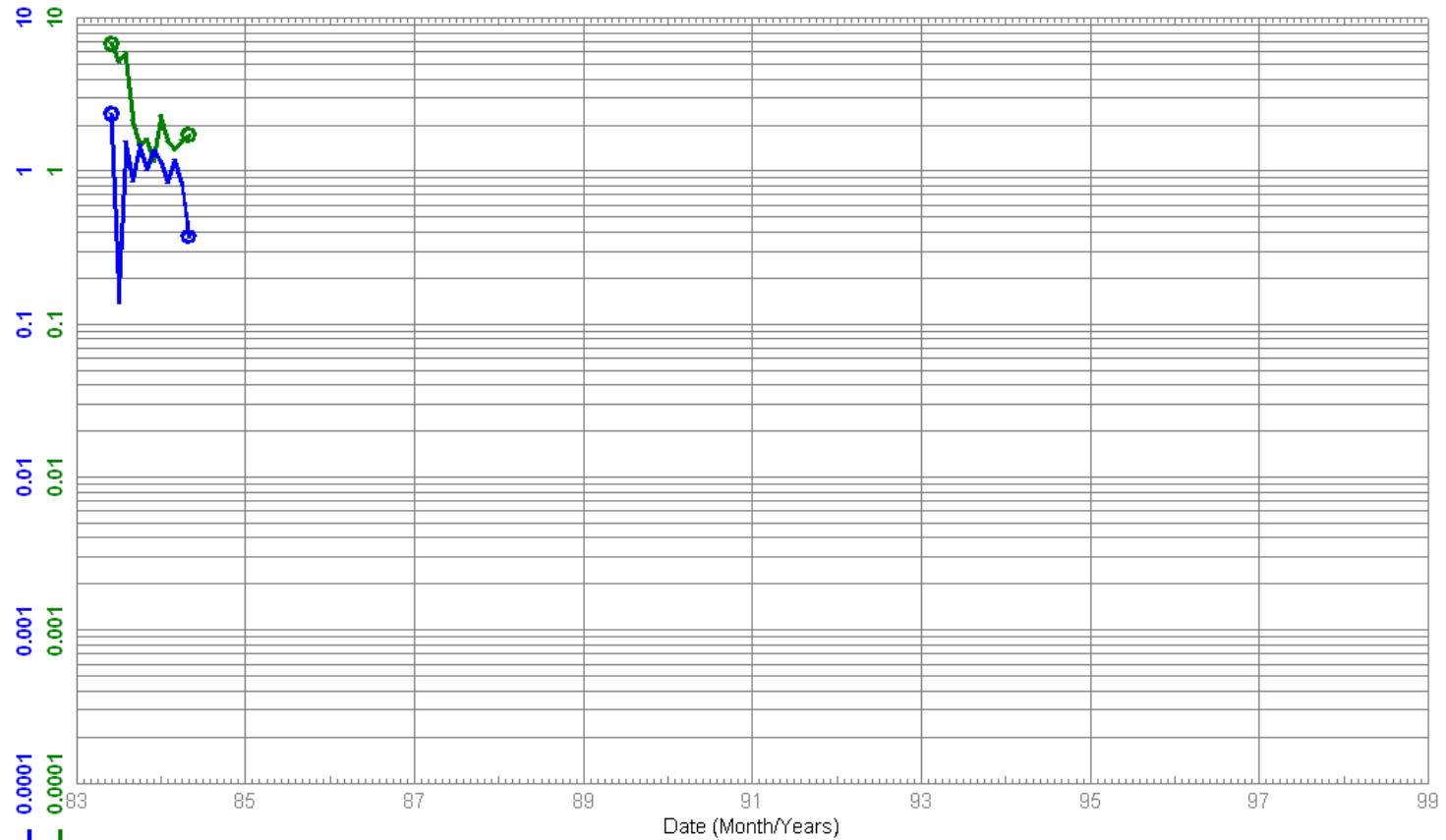
Field: WASKADA (03)
 Pool: LOWER AMARANTH A (29A)
 Unit: WASKADA UNIT NO. 3



Data As Of: 2012-10 (MB)
From: 1983-06
To: 1984-05

100/05-31-001-25W1/00
Waskada Unit No. 3 WWV
Abandoned Water Inj Well

Field: WASKADA (03)
Pool: LOWER AMARANTH A (29A)
Unit: WASKADA UNIT NO. 3



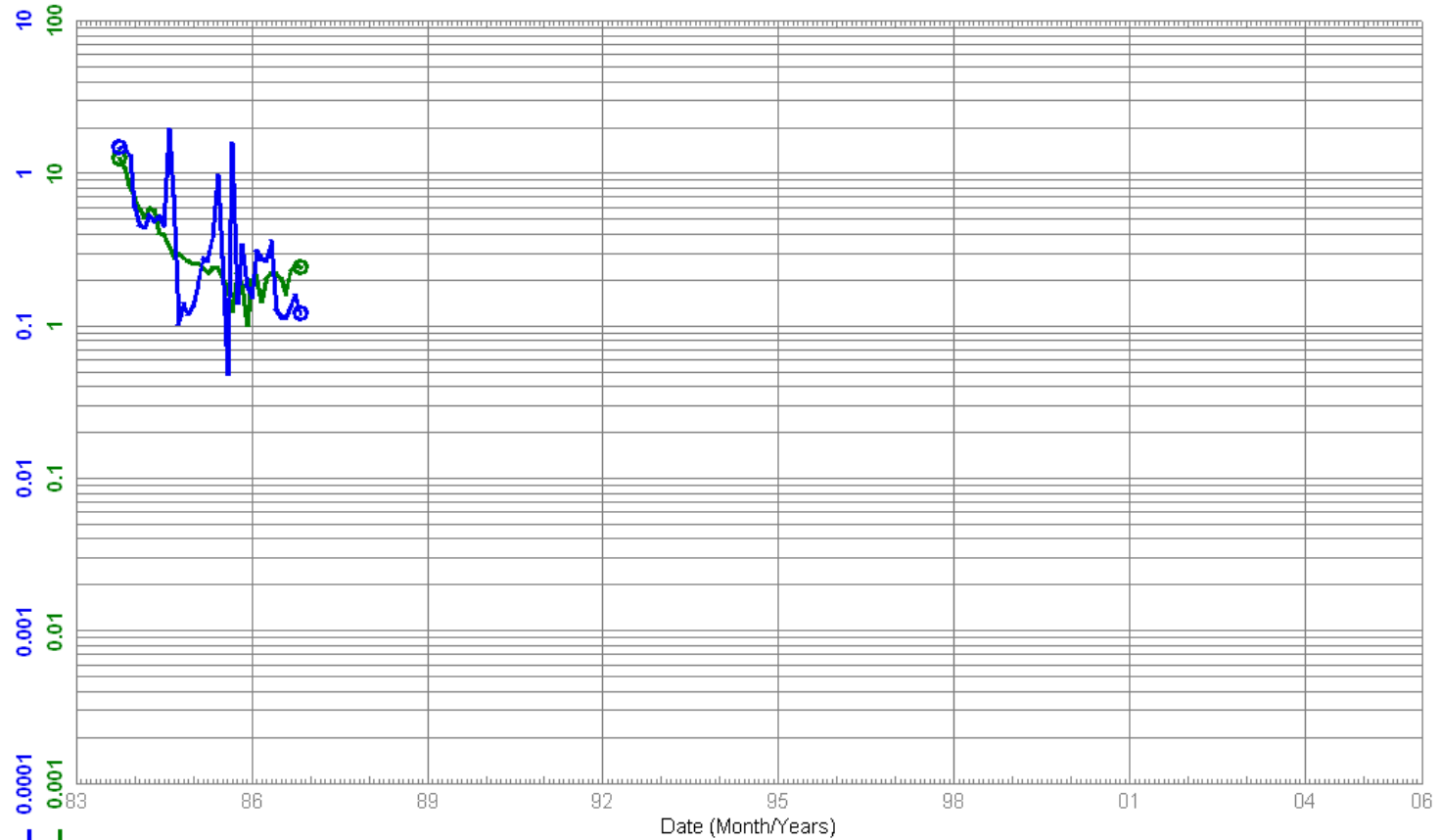
PRD Prd-Day Avg OIL m3/day
PRD Prd-Day Avg WTR m3/day

Cum PRD OIL	778.0	m3
Cum PRD GAS	0.0	e3m3
Cum PRD WTR	321.2	m3
Cum PRD HRS	7,104.0	Hour
Cum INJ WTR	57.6	e3m3

Data As Of: 2012-10 (MB)
From: 1983-10
To: 1986-11

100/05-36-001-26W1/00
Waskada Unit No. 3 WWV
Water Inj Well

Field: WASKADA (03)
Pool: LOWER AMARANTH A (29A)
Unit: WASKADA UNIT NO. 3



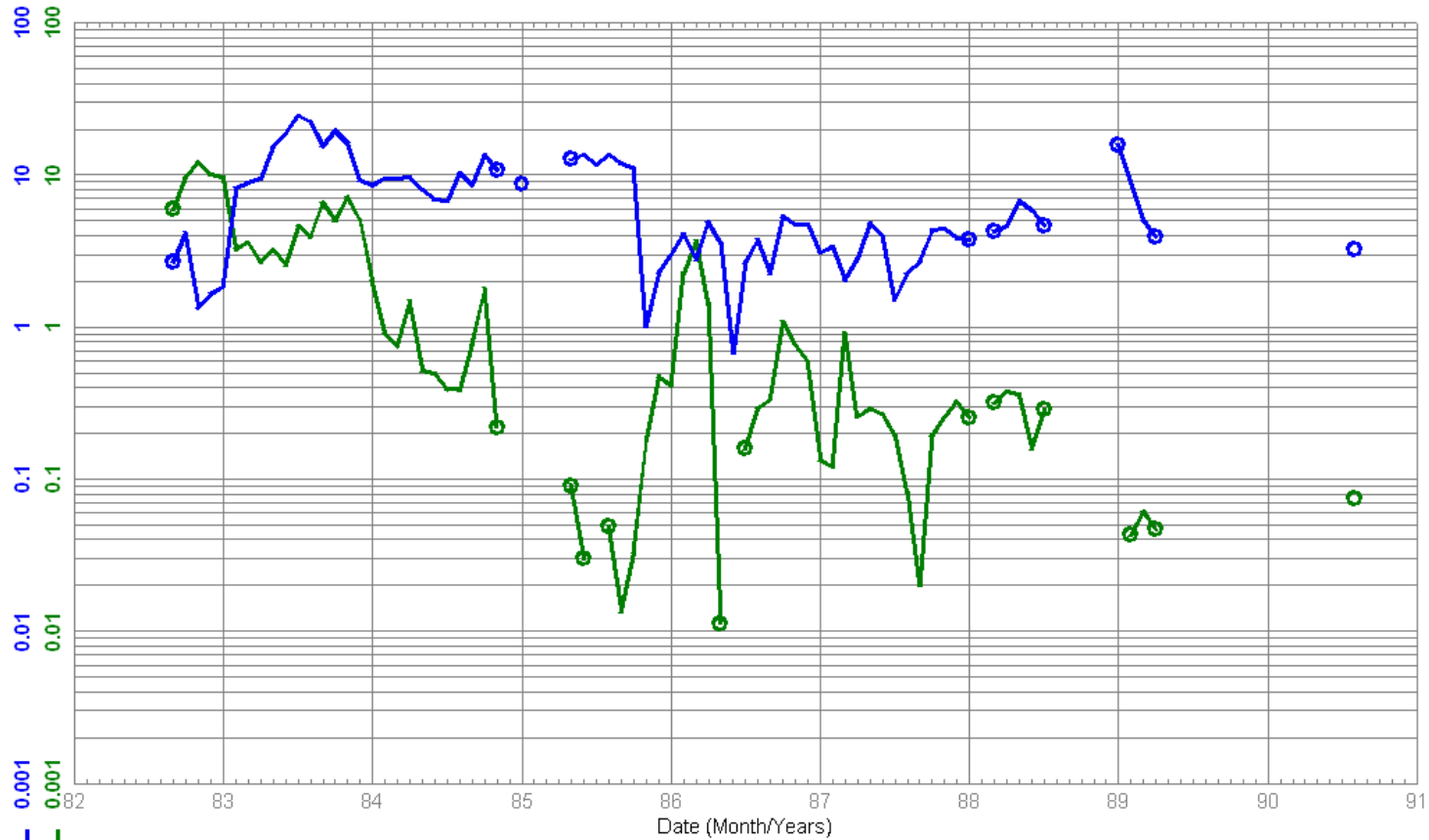
PRD Prd-Day Avg OIL m3/day
PRD Prd-Day Avg WTR m3/day

Cum PRD OIL	3.8	e3m3
Cum PRD GAS	0.0	e3m3
Cum PRD WTR	520.6	m3
Cum PRD HRS	26,856.8	Hour
Cum INJ WTR	22.7	e3m3

Data As Of: 2012-10 (MB)
 From: 1982-09
 To: 1990-08

100/06-31-001-25W1/00
 Waskada Unit No. 3
 Abandoned Producer

Field: WASKADA (03)
 Pool: LOWER AMARANTH A (29A)
 Unit: WASKADA UNIT NO. 3

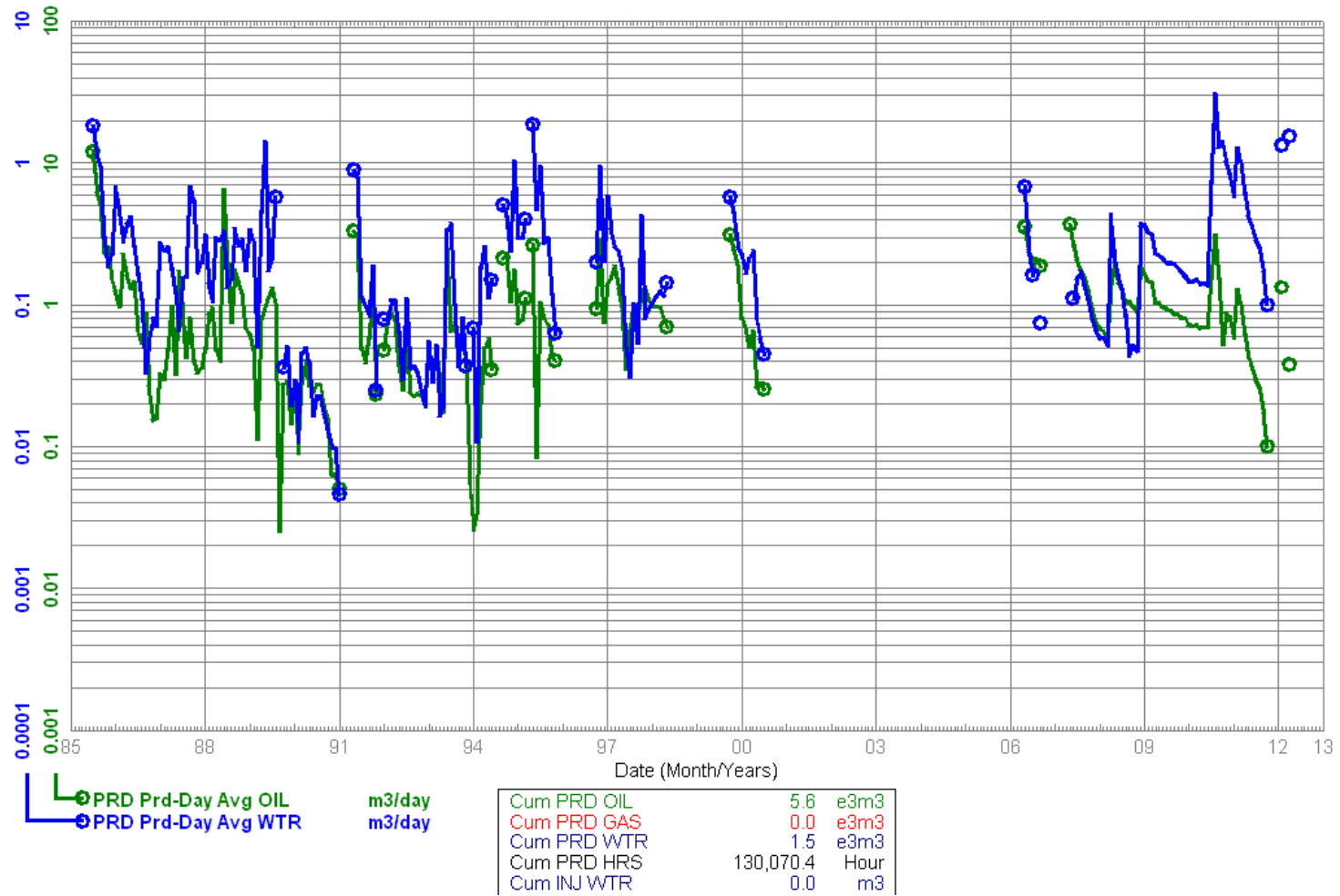


Cum PRD OIL	3.2	e3m3
Cum PRD GAS	0.0	e3m3
Cum PRD WTR	13.5	e3m3
Cum PRD HRS	43,298.4	Hour
Cum INJ WTR	0.0	m3

Data As Of: 2012-10 (MB)
 From: 1985-07
 To: 2012-04

100/06-36-001-26W1/00
 Waskada Unit No. 3
 Capable Of Oil Prod

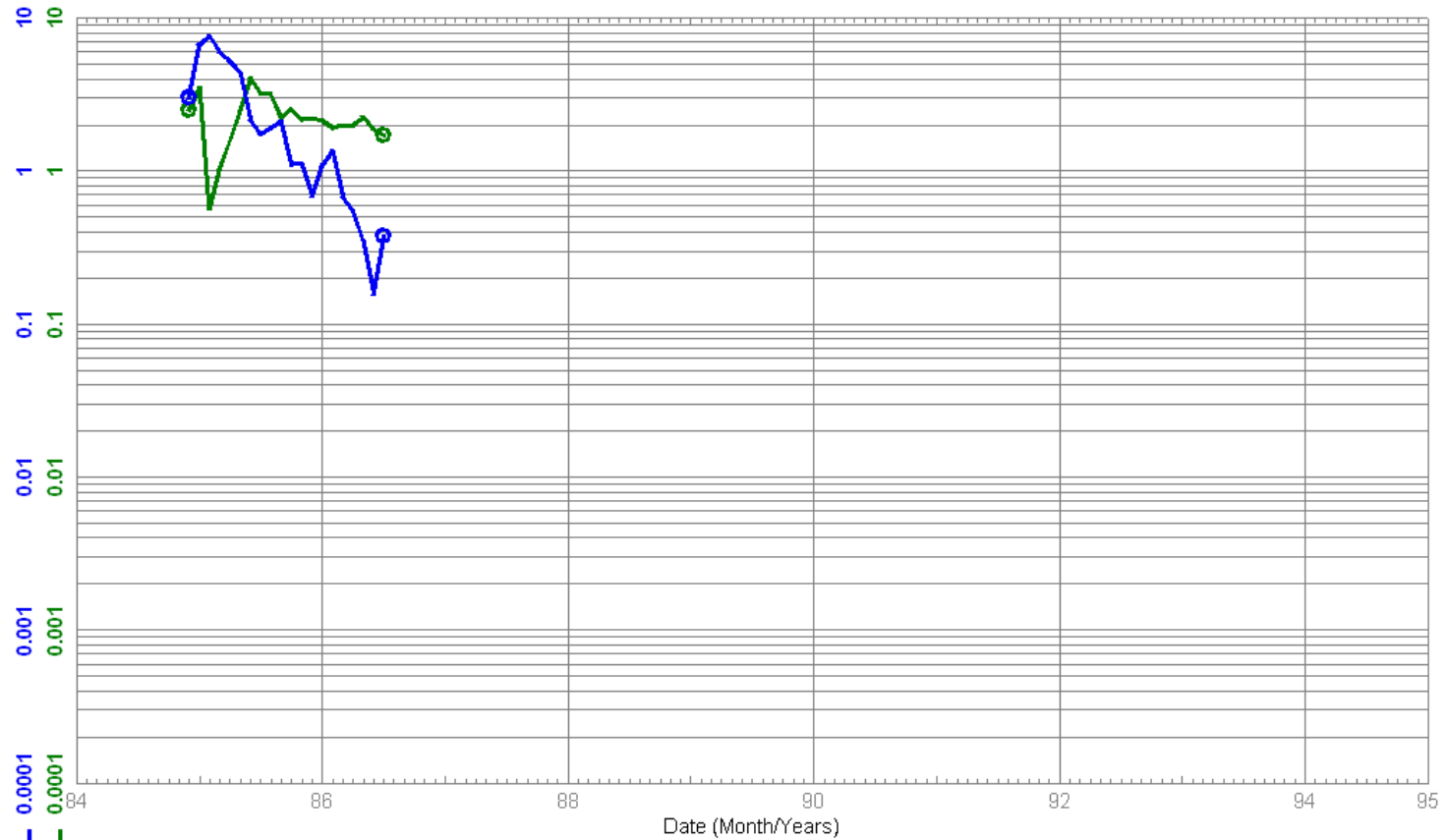
Field: WASKADA (03)
 Pool: LOWER AMARANTH A (29A)
 Unit: WASKADA UNIT NO. 3



Data As Of: 2012-10 (MB)
 From: 1984-12
 To: 1986-07

100/07-05-002-25W1/00
 Waskada Unit No. 3 WWV
 Abandoned Water Inj Well

Field: WASKADA (03)
 Pool: LOWER AMARANTH A (29A)
 Unit: WASKADA UNIT NO. 3



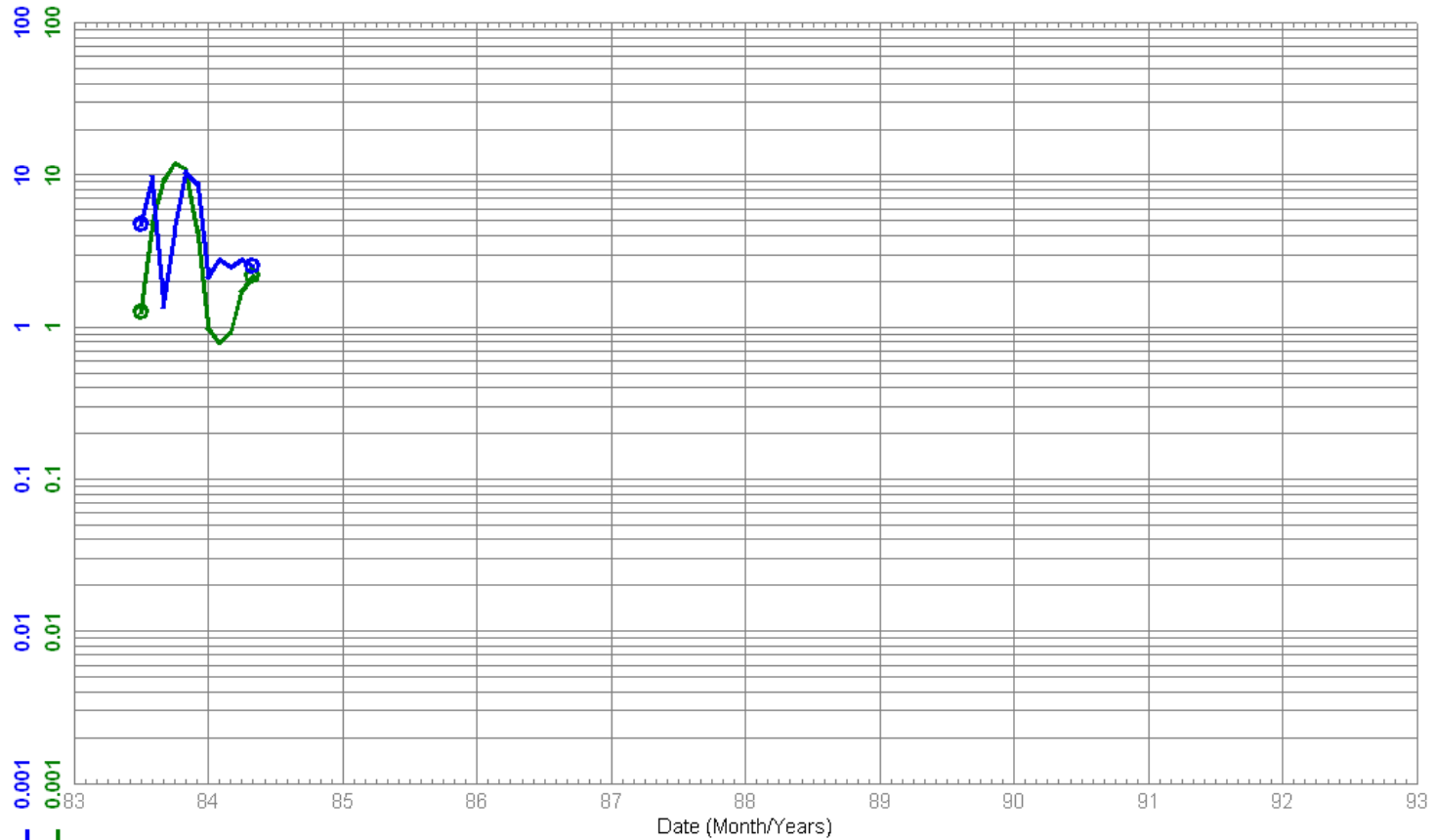
PRD Prd-Day Avg OIL m3/day
 PRD Prd-Day Avg WTR m3/day

Cum PRD OIL	1.2	e3m3
Cum PRD GAS	0.0	e3m3
Cum PRD WTR	1.2	e3m3
Cum PRD HRS	12,415.2	Hour
Cum INJ WTR	35.9	e3m3

Data As Of: 2012-10 (MB)
From: 1983-07
To: 1984-05

100/07-31-001-25W1/00
Omega Waskada WIW
Abandoned Water Inj Well

Field: WASKADA (03)
Pool: LOWER AMARANTH A (29A)
Unit: WASKADA UNIT NO. 3



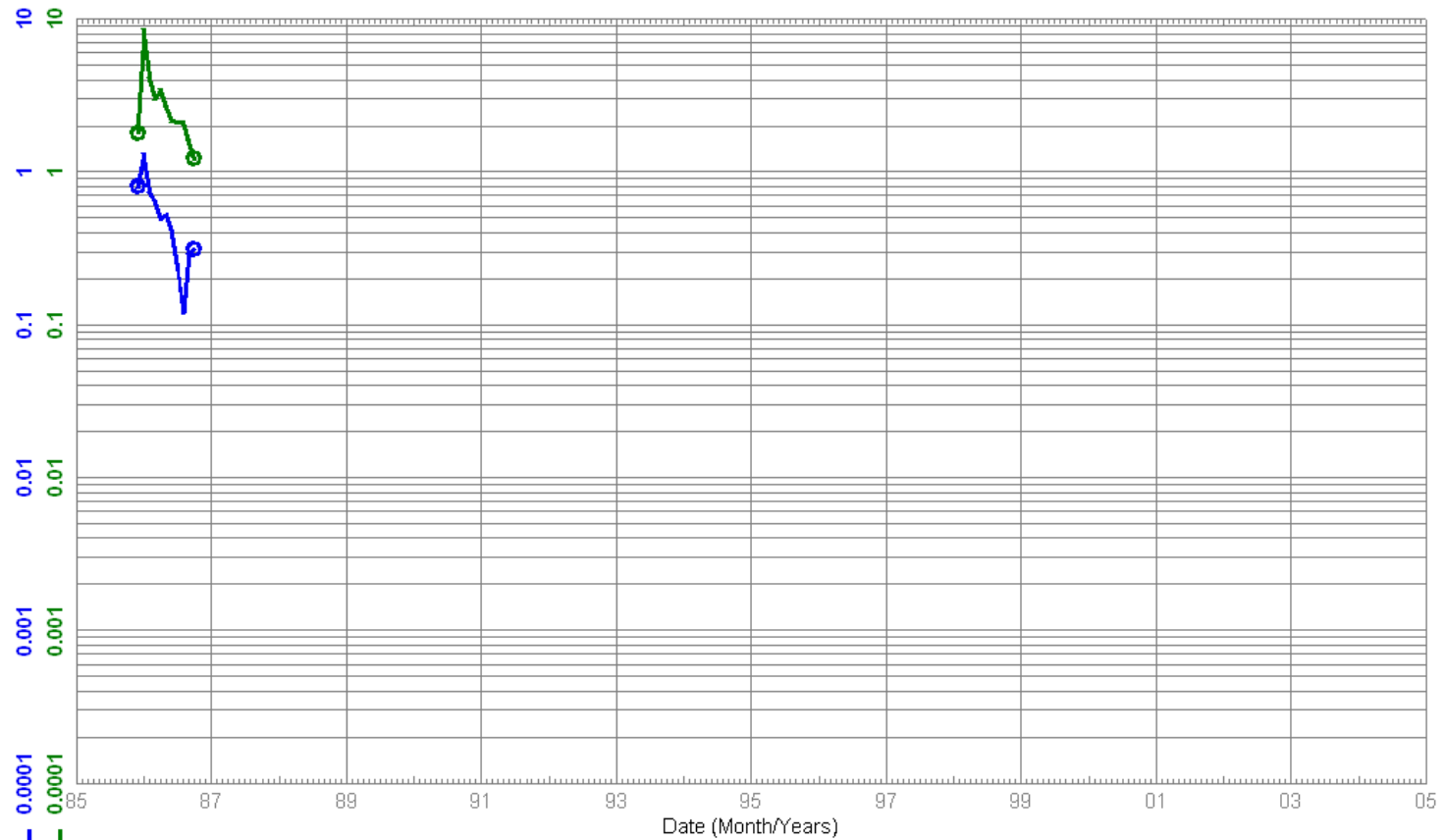
PRD Prd-Day Avg OIL m3/day
PRD Prd-Day Avg WTR m3/day

Cum PRD OIL	1.4	e3m3
Cum PRD GAS	0.0	e3m3
Cum PRD WTR	1.3	e3m3
Cum PRD HRS	6,696.0	Hour
Cum INJ WTR	59.2	e3m3

Data As Of: 2012-10 (MB)
 From: 1985-12
 To: 1986-10

100/07-36-001-26W1/00
 Waskada Unit No. 3 WWV
 Water Inj Well

Field: WASKADA (03)
 Pool: LOWER AMARANTH A (29A)
 Unit: WASKADA UNIT NO. 3



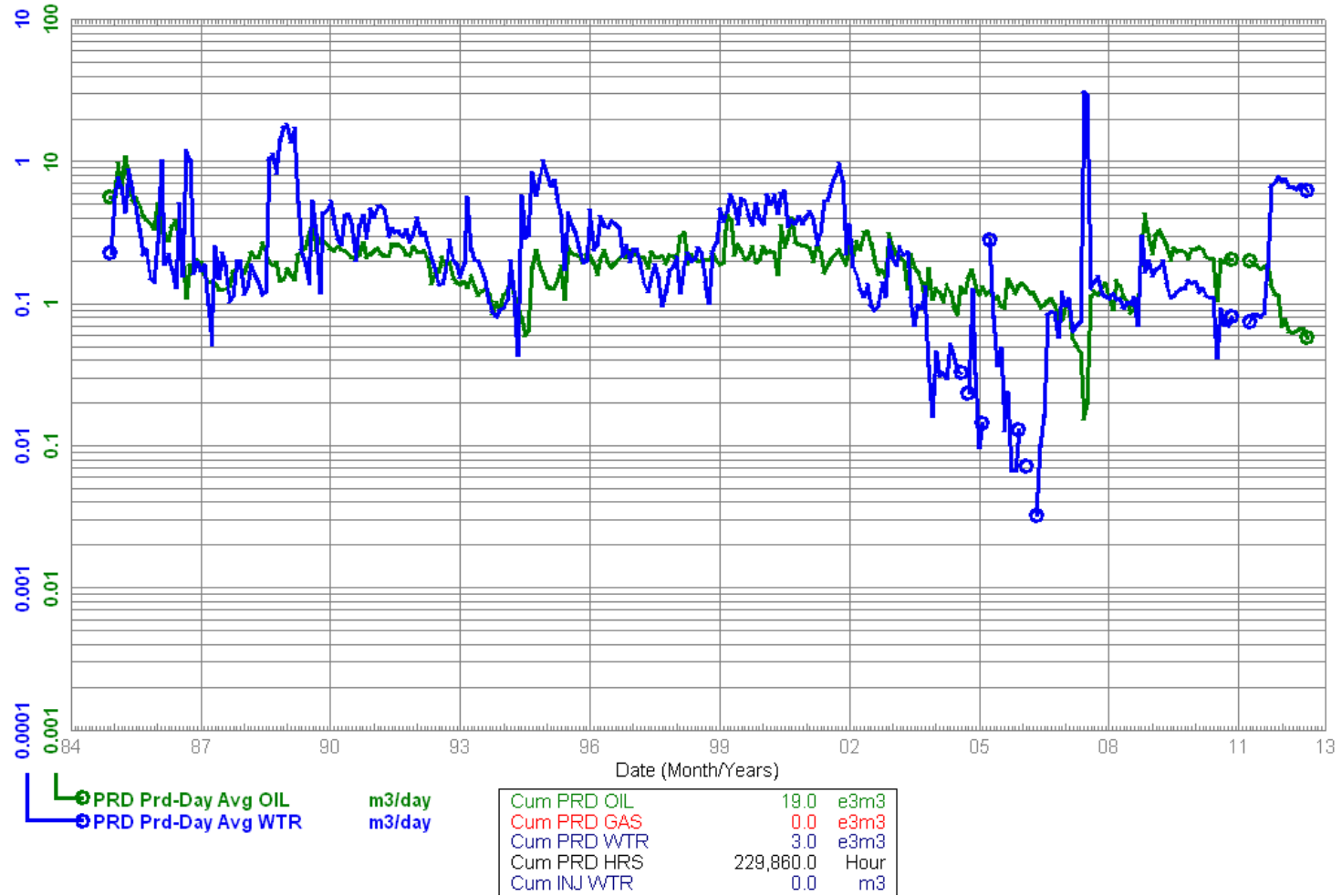
PRD Prd-Day Avg OIL m3/day
 PRD Prd-Day Avg WTR m3/day

Cum PRD OIL	839.3	m3
Cum PRD GAS	0.0	e3m3
Cum PRD WTR	137.4	m3
Cum PRD HRS	6,576.0	Hour
Cum INJ WTR	52.0	e3m3

Data As Of: 2012-10 (MB)
From: 1984-12
To: 2012-08

100/08-05-002-25W1/00
Waskada Unit No. 3
Capable Of Oil Prod

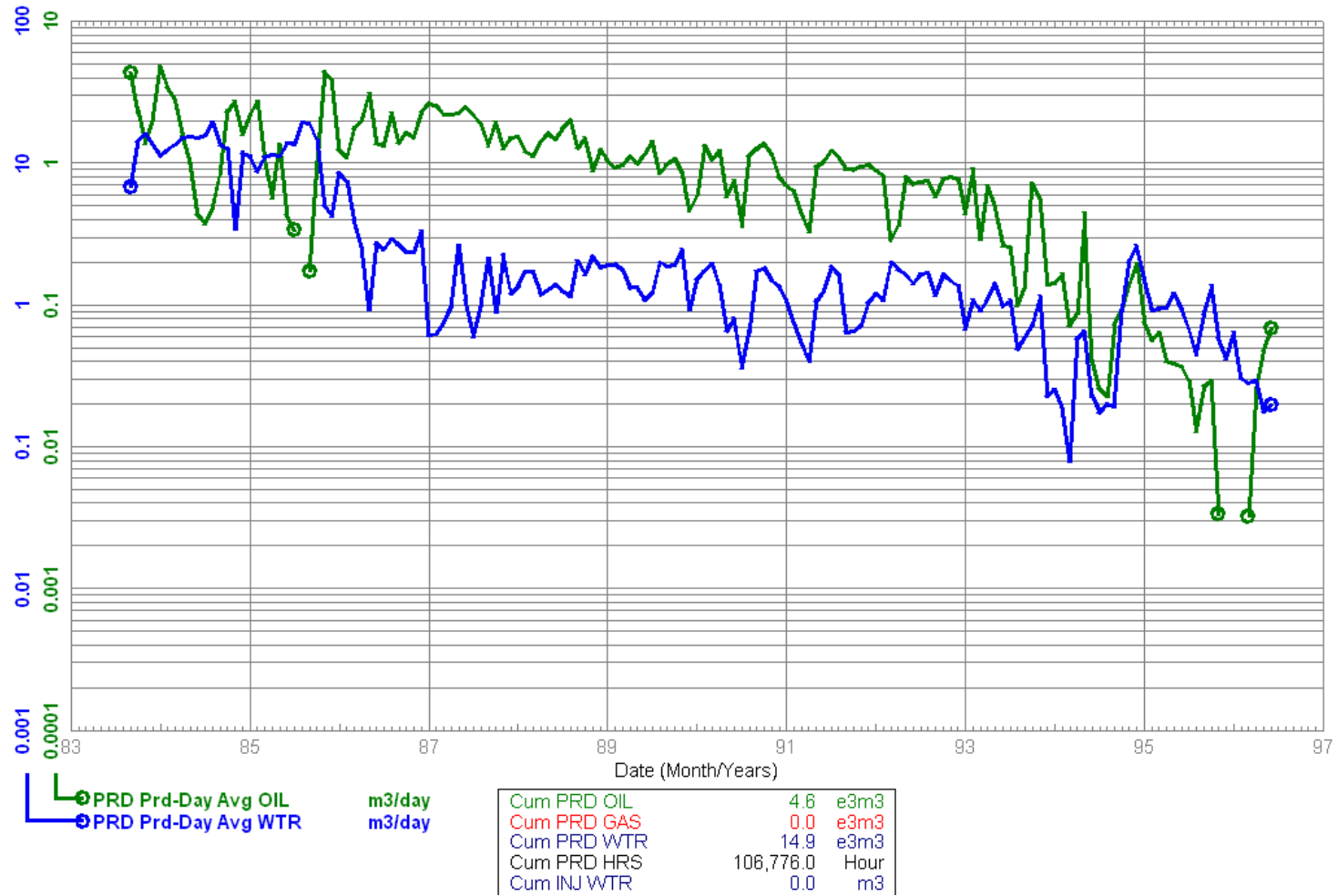
Field: WASKADA (03)
Pool: LOWER AMARANTH A (29A)
Unit: WASKADA UNIT NO. 3



Data As Of: 2012-10 (MB)
From: 1983-09
To: 1996-06

100/08-30-001-25W1/02
Waskada Unit No. 3 Prov.
Abandoned Producer

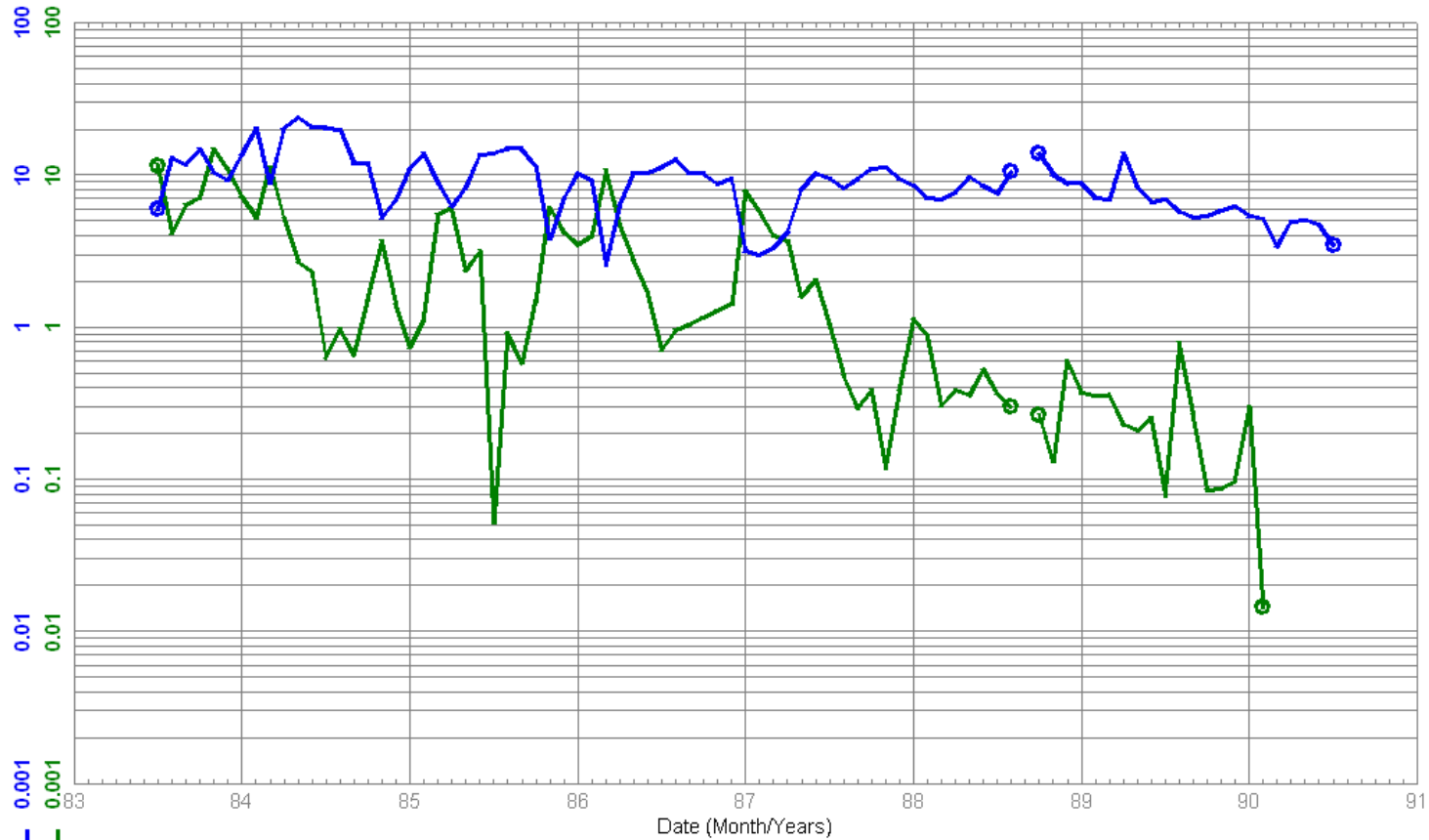
Field: WASKADA (03)
Pool: LOWER AMARANTH A (29A)
Unit: WASKADA UNIT NO. 3



Data As Of: 2012-10 (MB)
 From: 1983-07
 To: 1990-07

100/08-31-001-25W1/00
 Omega Waskada
 Abandoned Producer

Field: WASKADA (03)
 Pool: LOWER AMARANTH A (29A)
 Unit: WASKADA UNIT NO. 3



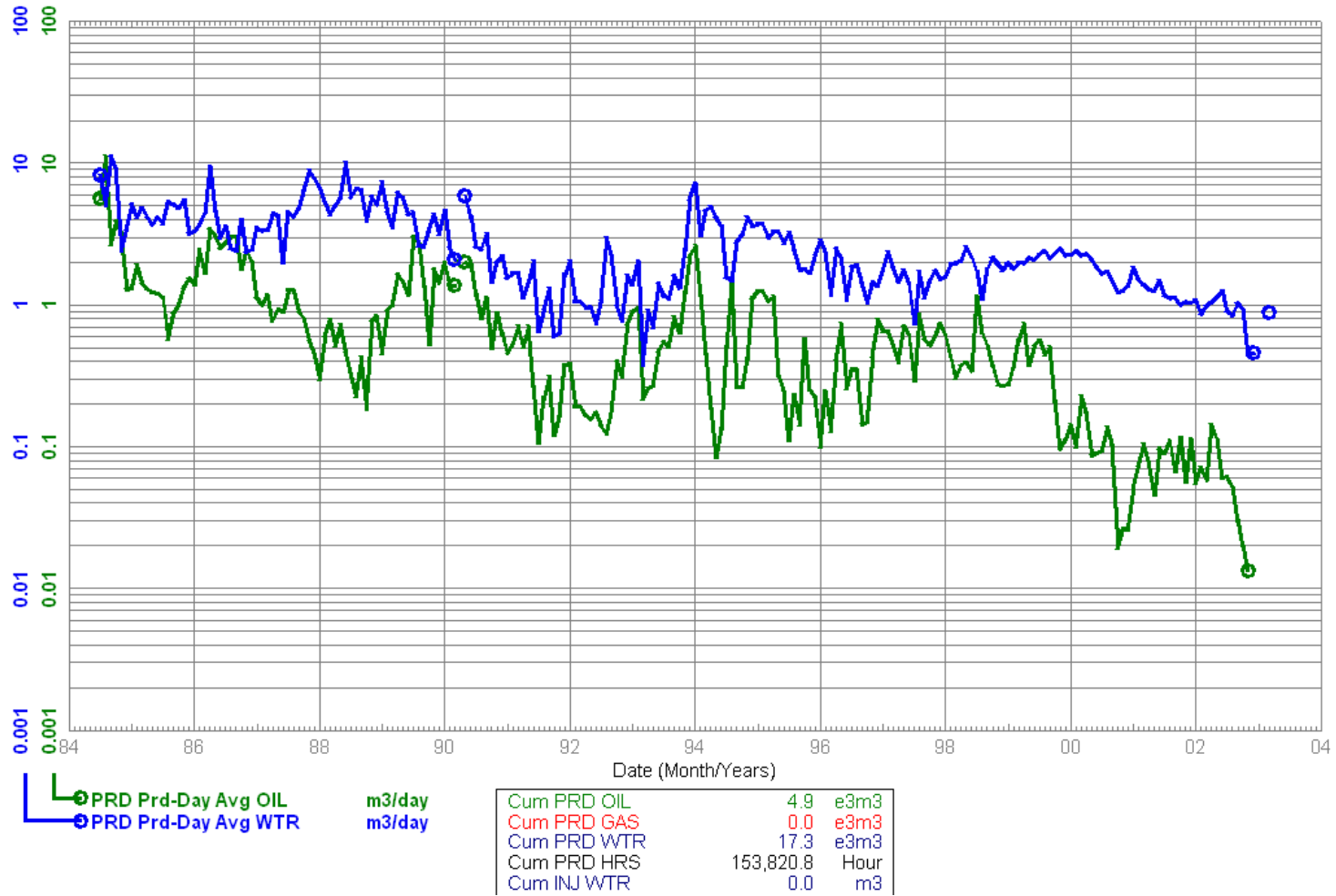
PRD Prd-Day Avg OIL m3/day
 PRD Prd-Day Avg WTR m3/day

Cum PRD OIL	5.8	e3m3
Cum PRD GAS	0.0	e3m3
Cum PRD WTR	22.6	e3m3
Cum PRD HRS	57,892.8	Hour
Cum INJ WTR	0.0	m3

Data As Of: 2012-10 (MB)
 From: 1984-07
 To: 2003-03

100/08-36-001-26W1/00
 Waskada Unit No. 3
 Abandoned Producer

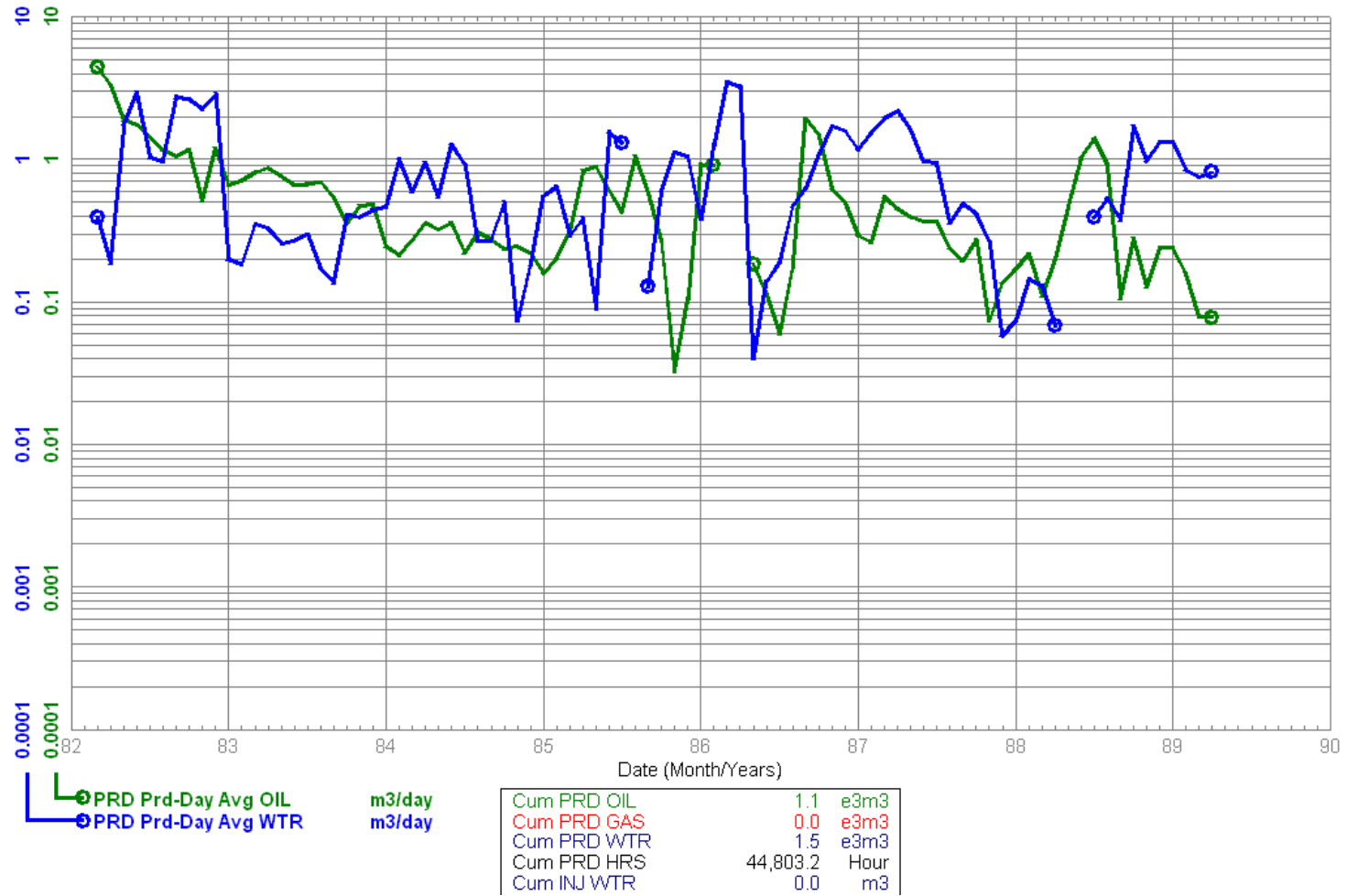
Field: WASKADA (03)
 Pool: LOWER AMARANTH A (29A)
 Unit: WASKADA UNIT NO. 3



Data As Of: 2012-10 (MB)
 From: 1982-03
 To: 1989-04

100/09-30-001-25W1/00
 Waskada Unit No. 3
 Abandoned Producer

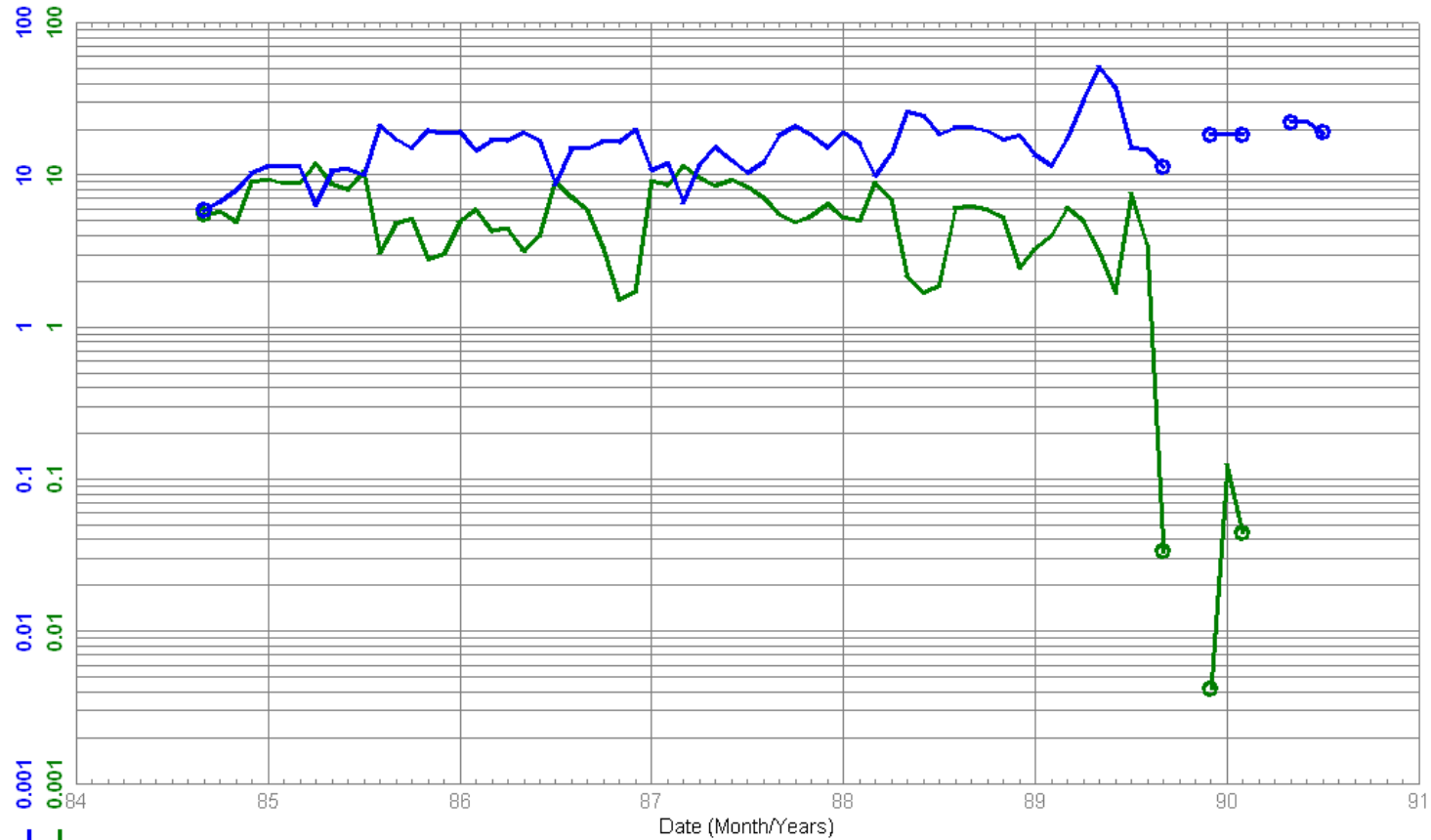
Field: WASKADA (03)
 Pool: LOWER AMARANTH A (29A)
 Unit: WASKADA UNIT NO. 3



Data As Of: 2012-10 (MB)
 From: 1984-09
 To: 1990-07

100/09-31-001-25W1/00
 Omega Waskada
 Abandoned Producer

Field: WASKADA (03)
 Pool: LOWER AMARANTH A (29A)
 Unit: WASKADA UNIT NO. 3



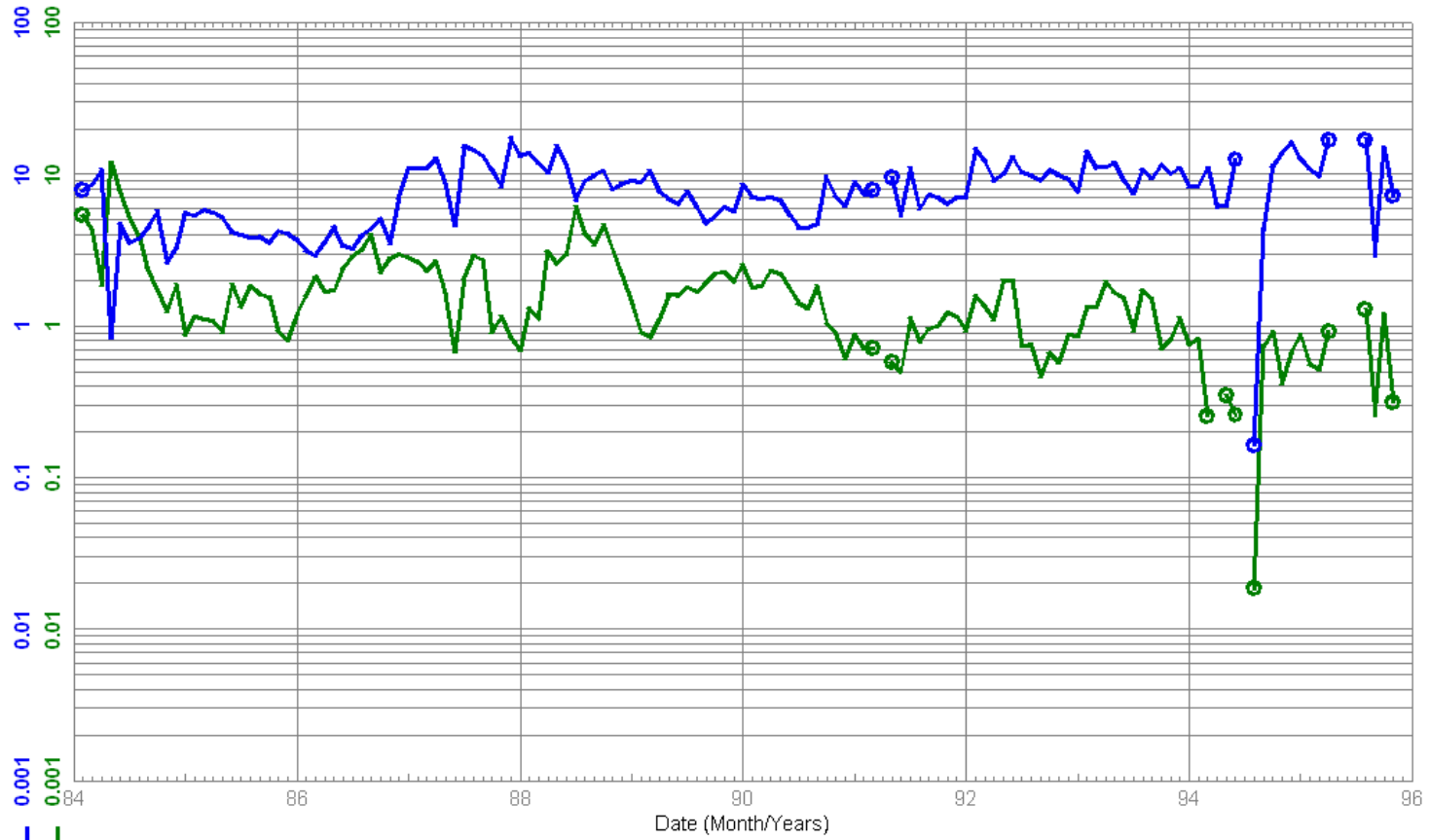
PRD Prd-Day Avg OIL m3/day
 PRD Prd-Day Avg WTR m3/day

Cum PRD OIL	9.7	e3m3
Cum PRD GAS	0.0	e3m3
Cum PRD WTR	29.1	e3m3
Cum PRD HRS	43,293.6	Hour
Cum INJ WTR	0.0	m3

Data As Of: 2012-10 (MB)
 From: 1984-02
 To: 1995-11

100/09-36-001-26W1/02
 Waskada Unit No. 3
 Abandoned Producer

Field: WASKADA (03)
 Pool: LOWER AMARANTH A (29A)
 Unit: WASKADA UNIT NO. 3



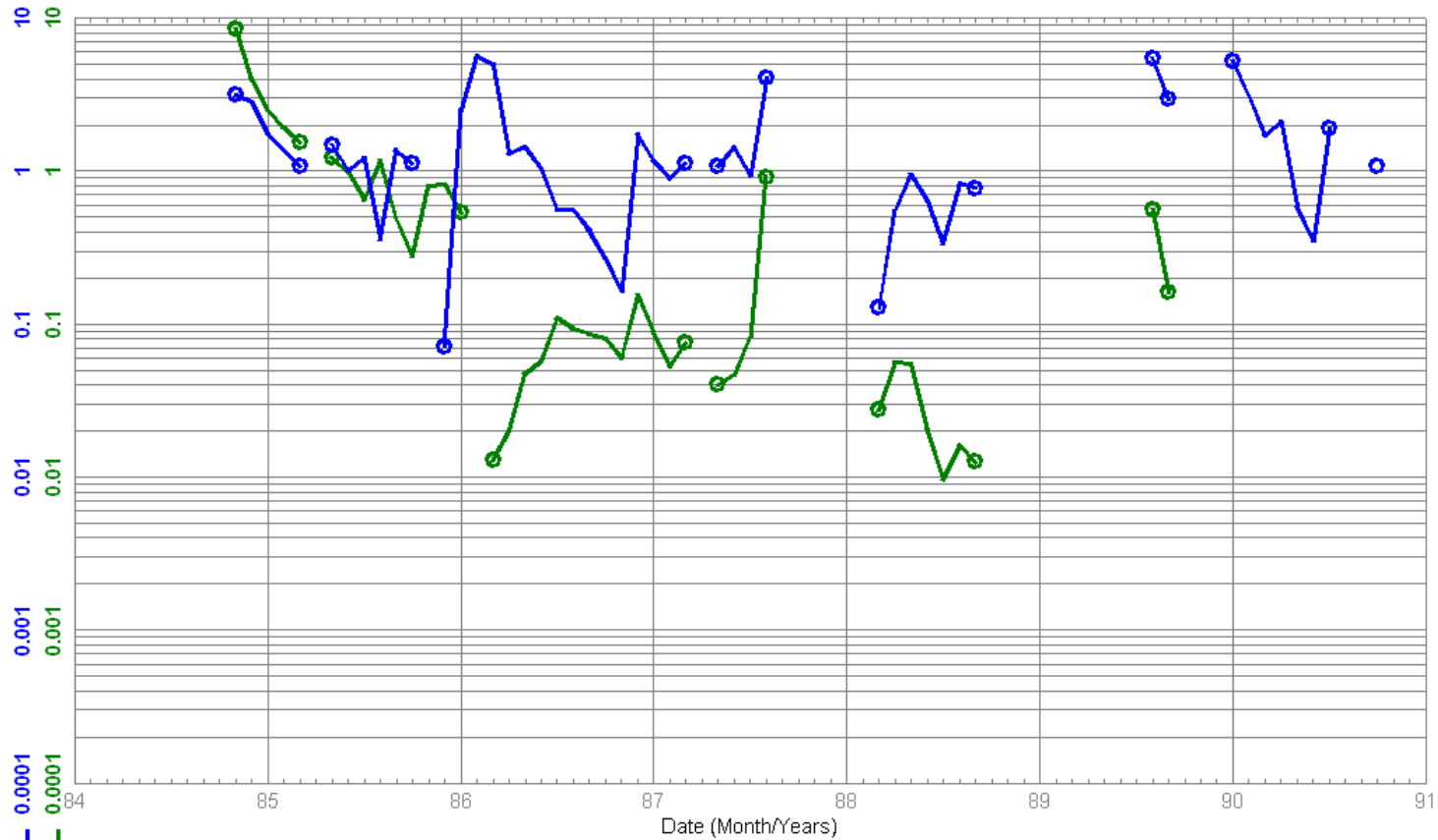
PRD Prd-Day Avg OIL m3/day
 PRD Prd-Day Avg WTR m3/day

Cum PRD OIL	8.8	e3m3
Cum PRD GAS	0.0	e3m3
Cum PRD WTR	31.1	e3m3
Cum PRD HRS	91,416.0	Hour
Cum INJ WTR	0.0	m3

Data As Of: 2012-10 (MB)
 From: 1984-11
 To: 1990-10

100/10-31-001-25W1/00
 Waskada Unit No. 3
 Abandoned Producer

Field: WASKADA (03)
 Pool: LOWER AMARANTH A (29A)
 Unit: WASKADA UNIT NO. 3



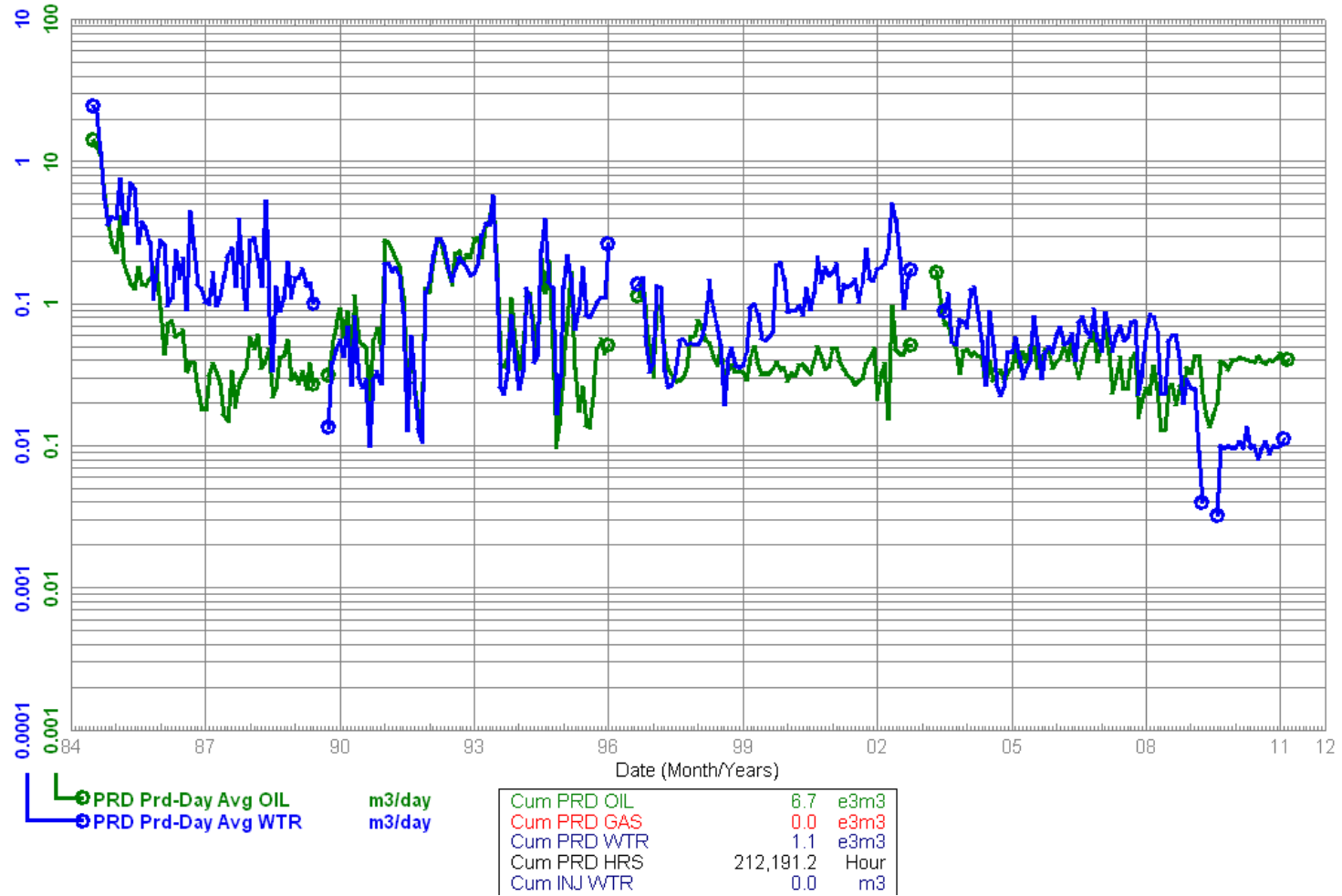
PRD Prd-Day Avg OIL m3/day
 PRD Prd-Day Avg WTR m3/day

Cum PRD OIL	565.9	m3
Cum PRD GAS	0.0	e3m3
Cum PRD WTR	1.9	e3m3
Cum PRD HRS	31,068.0	Hour
Cum INJ WTR	0.0	m3

Data As Of: 2012-10 (MB)
From: 1984-07
To: 2011-03

100/10-36-001-26W1/00
Waskada Unit No. 3
Capable Of Oil Prod

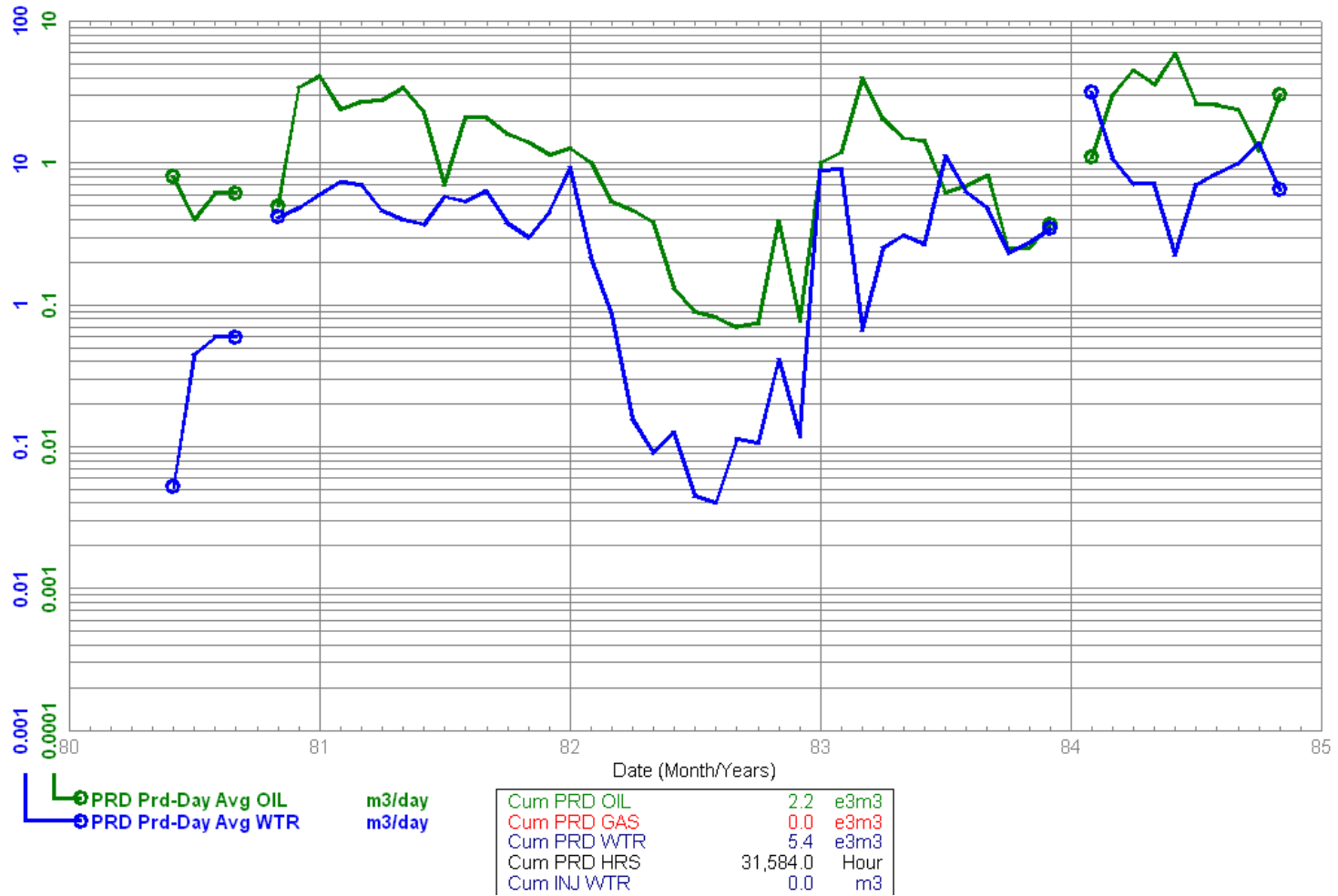
Field: WASKADA (03)
Pool: LOWER AMARANTH A (29A)
Unit: WASKADA UNIT NO. 3



Data As Of: 2012-10 (MB)
 From: 1980-06
 To: 1984-11

100/11-30-001-25W1/02
 Waskada Unit No. 3 WSW
 Abandoned Producer

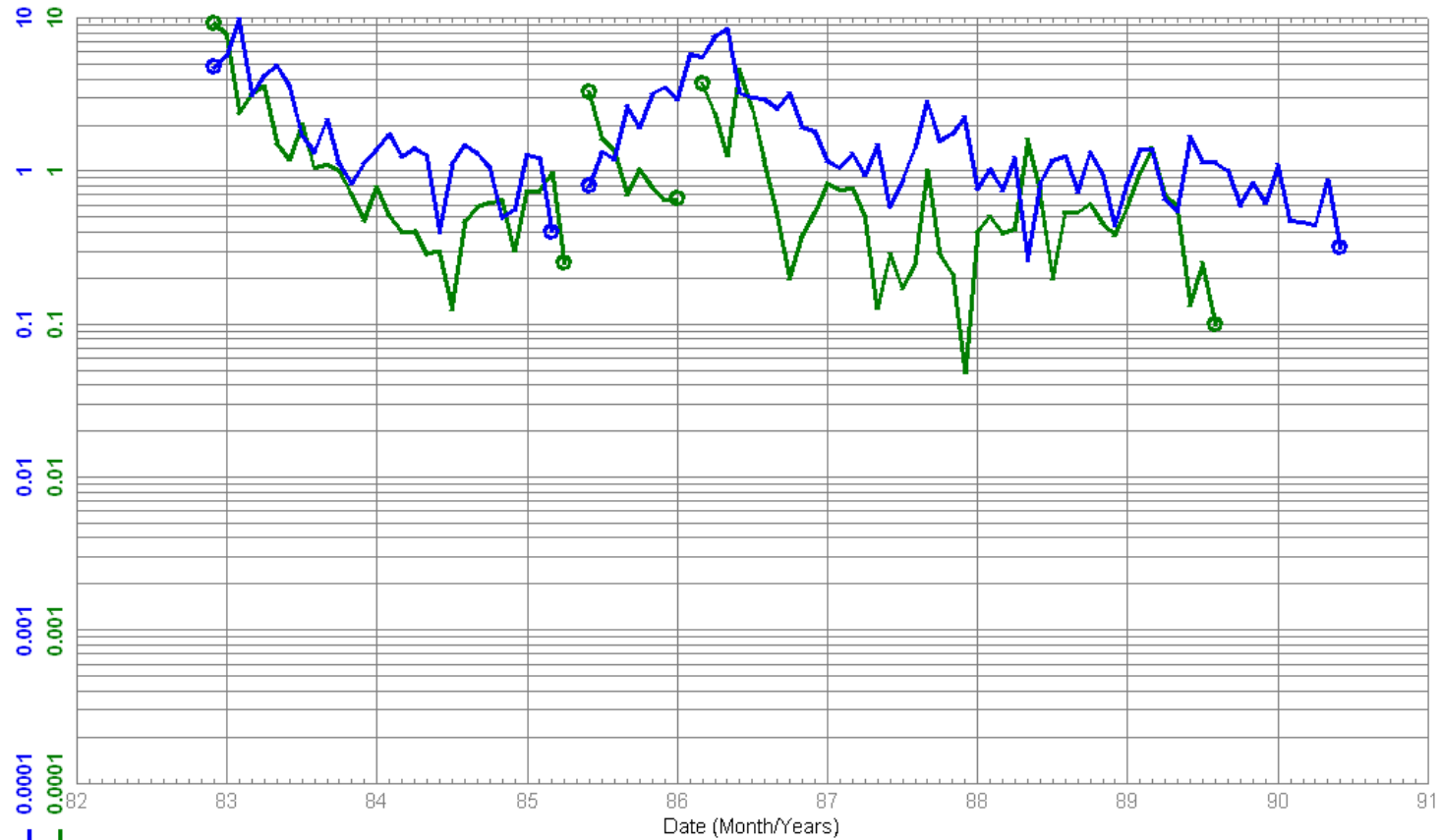
Field: WASKADA (03)
 Pool: LOWER AMARANTH A (29A)
 Unit: WASKADA UNIT NO. 3



Data As Of: 2012-10 (MB)
 From: 1982-12
 To: 1990-06

100/11-31-001-25W1/00
 Omega Waskada
 Abandoned Producer

Field: WASKADA (03)
 Pool: LOWER AMARANTH A (29A)
 Unit: WASKADA UNIT NO. 3

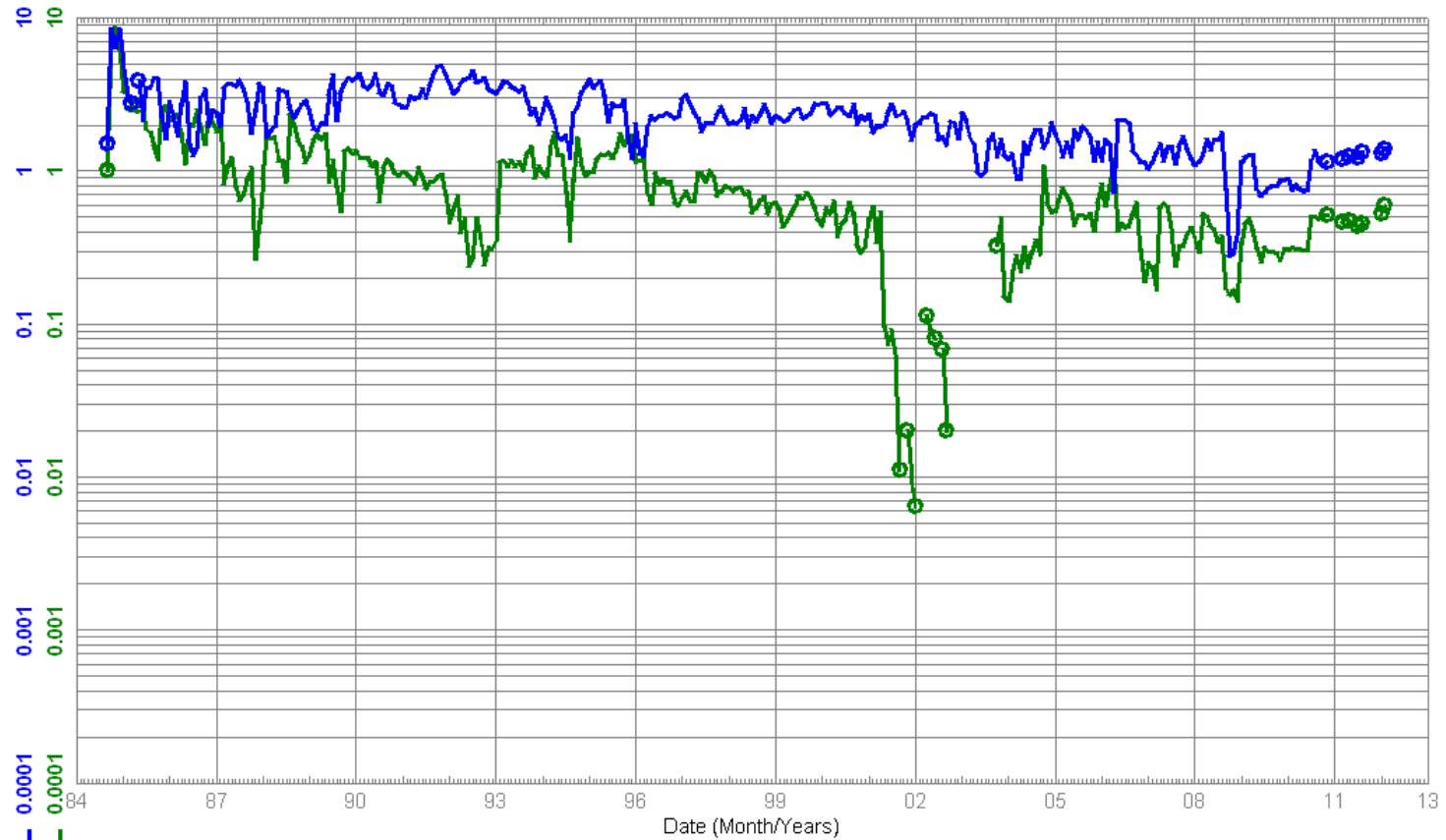


Cum PRD OIL	2.4	e3m3
Cum PRD GAS	0.0	e3m3
Cum PRD WTR	4.8	e3m3
Cum PRD HRS	62,239.2	Hour
Cum INJ WTR	0.0	m3

Data As Of: 2012-10 (MB)
 From: 1984-09
 To: 2012-02

100/11-32-001-25W1/00
 Waskada Unit No. 3
 Capable Of Oil Prod

Field: WASKADA (03)
 Pool: LOWER AMARANTH A (29A)
 Unit: WASKADA UNIT NO. 3



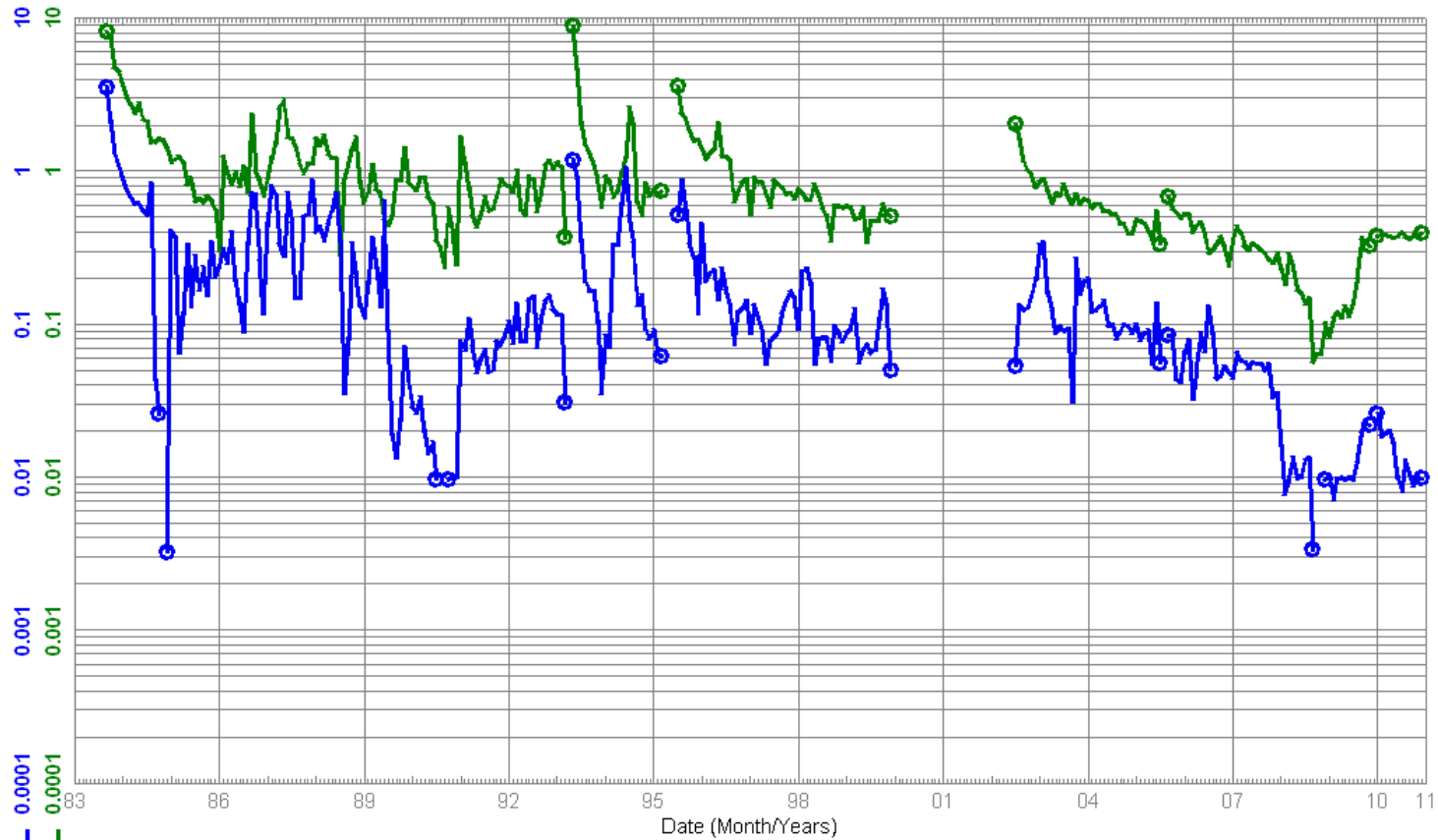
PRD Prd-Day Avg OIL m3/day
 PRD Prd-Day Avg WTR m3/day

Cum PRD OIL	7.7	e3m3
Cum PRD GAS	0.0	e3m3
Cum PRD WTR	21.5	e3m3
Cum PRD HRS	222,825.6	Hour
Cum INJ WTR	0.0	m3

Data As Of: 2012-10 (MB)
 From: 1983-09
 To: 2010-12

100/11-36-001-26W1/00
 Waskada Unit No. 3
 Capable Of Oil Prod

Field: WASKADA (03)
 Pool: LOWER AMARANTH A (29A)
 Unit: WASKADA UNIT NO. 3



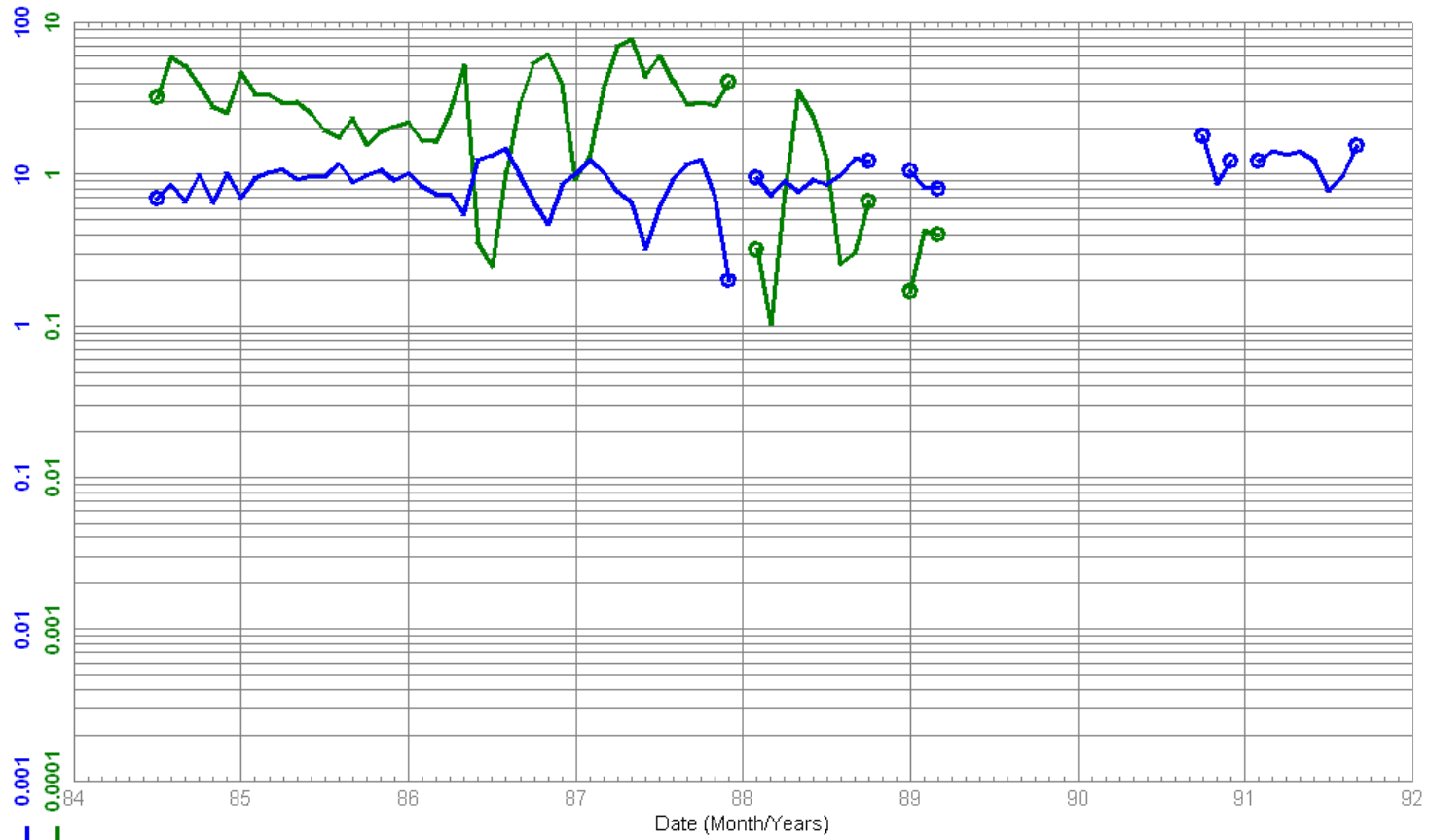
PRD Prd-Day Avg OIL m3/day
 PRD Prd-Day Avg WTR m3/day

Cum PRD OIL	7.1	e3m3
Cum PRD GAS	0.0	e3m3
Cum PRD WTR	1.4	e3m3
Cum PRD HRS	192,645.6	Hour
Cum INJ WTR	0.0	m3

Data As Of: 2012-10 (MB)
 From: 1984-07
 To: 1991-09

100/12-31-001-25W1/02
 Waskada Unit No. 3
 Abandoned Producer

Field: WASKADA (03)
 Pool: LOWER AMARANTH A (29A)
 Unit: WASKADA UNIT NO. 3



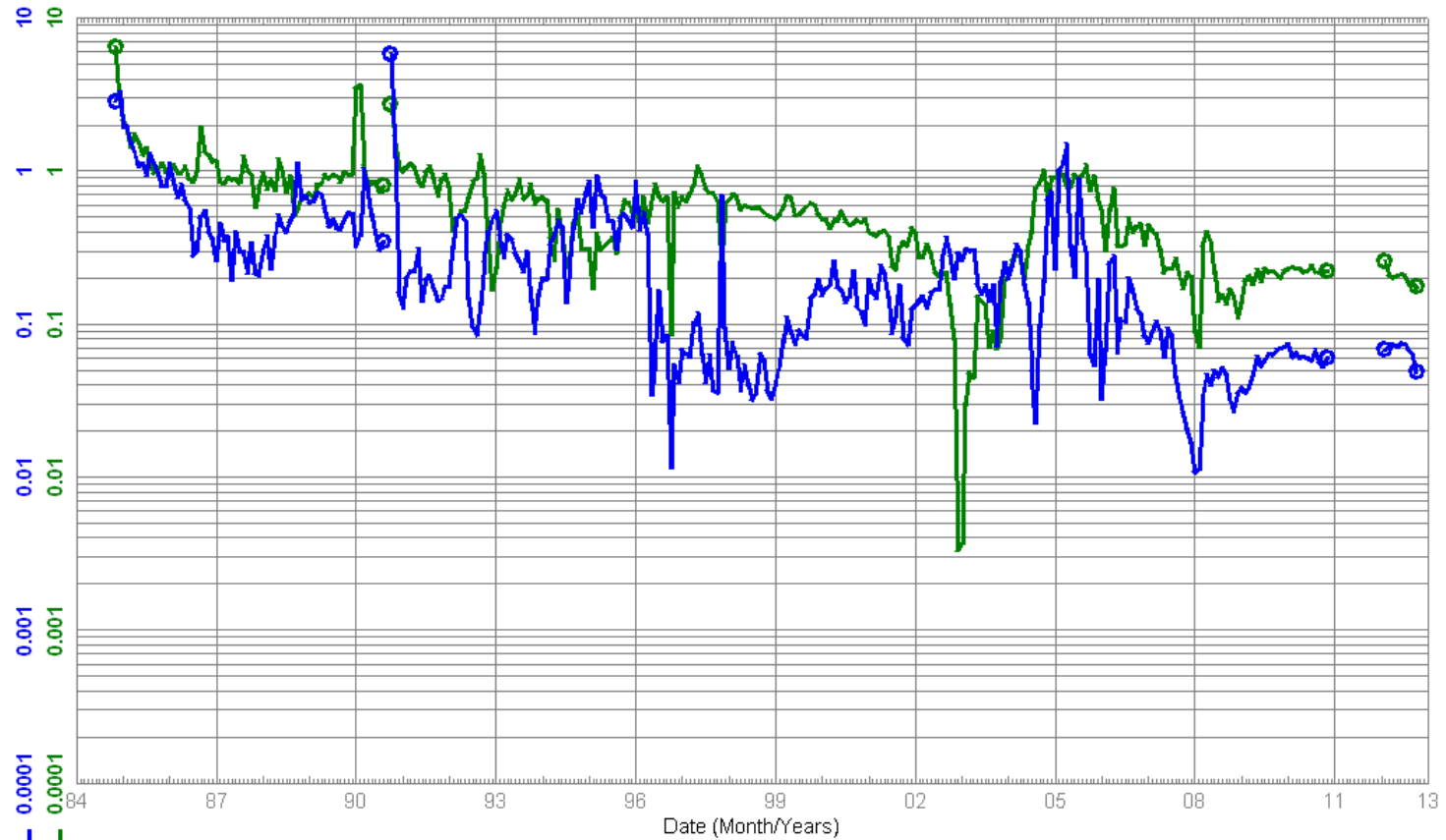
PRD Prd-Day Avg OIL m3/day
 PRD Prd-Day Avg WTR m3/day

Cum PRD OIL	4.3	e3m3
Cum PRD GAS	0.0	e3m3
Cum PRD WTR	16.8	e3m3
Cum PRD HRS	42,648.0	Hour
Cum INJ WTR	0.0	m3

Data As Of: 2012-10 (MB)
 From: 1984-11
 To: 2012-10

100/12-32-001-25W1/00
 Waskada Unit No. 3
 Capable Of Oil Prod

Field: WASKADA (03)
 Pool: LOWER AMARANTH A (29A)
 Unit: WASKADA UNIT NO. 3



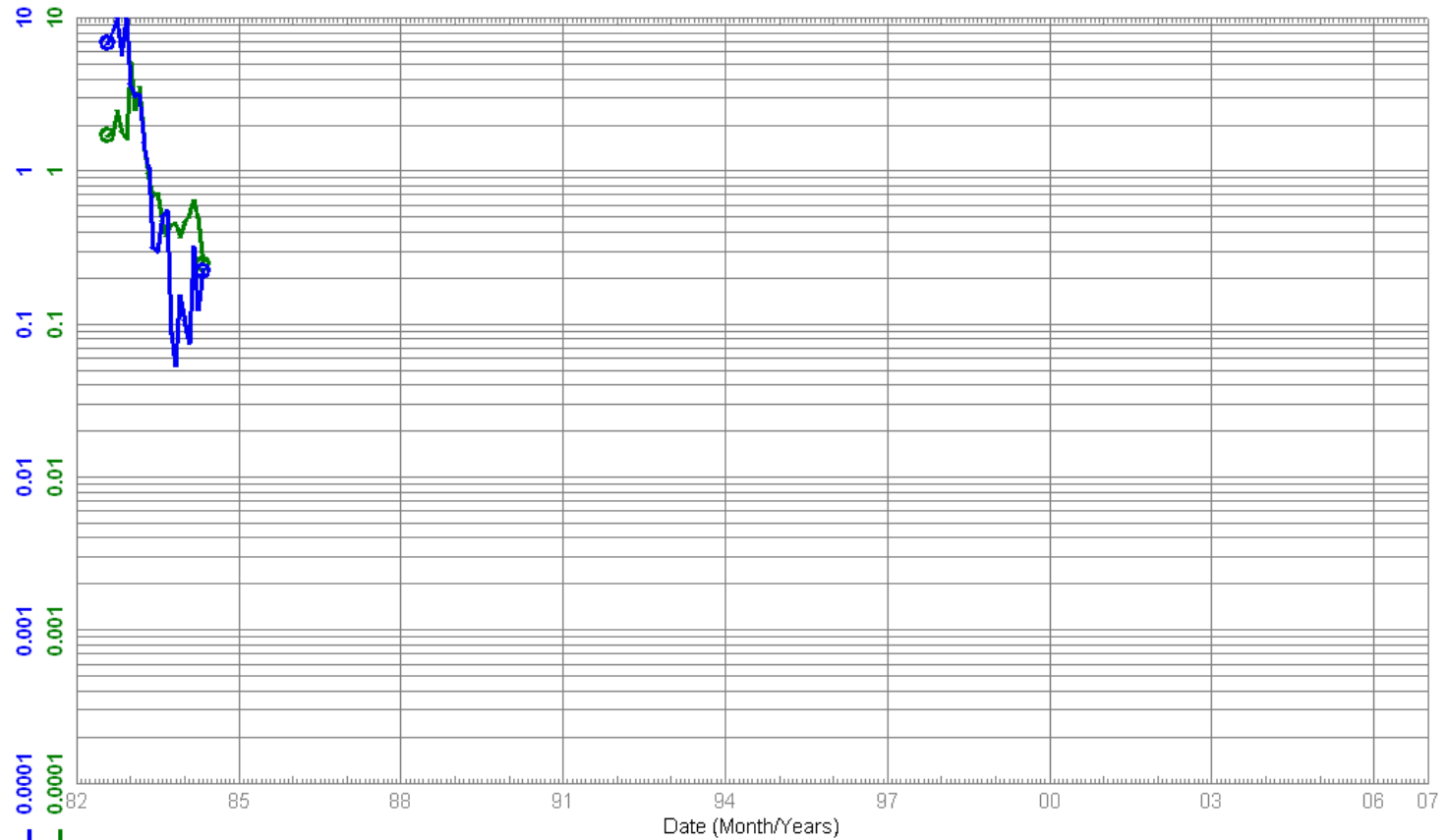
PRD Prd-Day Avg OIL m3/day
 PRD Prd-Day Avg WTR m3/day

Cum PRD OIL	5.8	e3m3
Cum PRD GAS	0.0	e3m3
Cum PRD WTR	2.9	e3m3
Cum PRD HRS	222,960.0	Hour
Cum INJ WTR	0.0	m3

Data As Of: 2012-10 (MB)
 From: 1982-08
 To: 1984-05

100/13-30-001-25W1/00
 Waskada Unit No. 3 WWV
 Water Inj Well

Field: WASKADA (03)
 Pool: LOWER AMARANTH A (29A)
 Unit: WASKADA UNIT NO. 3



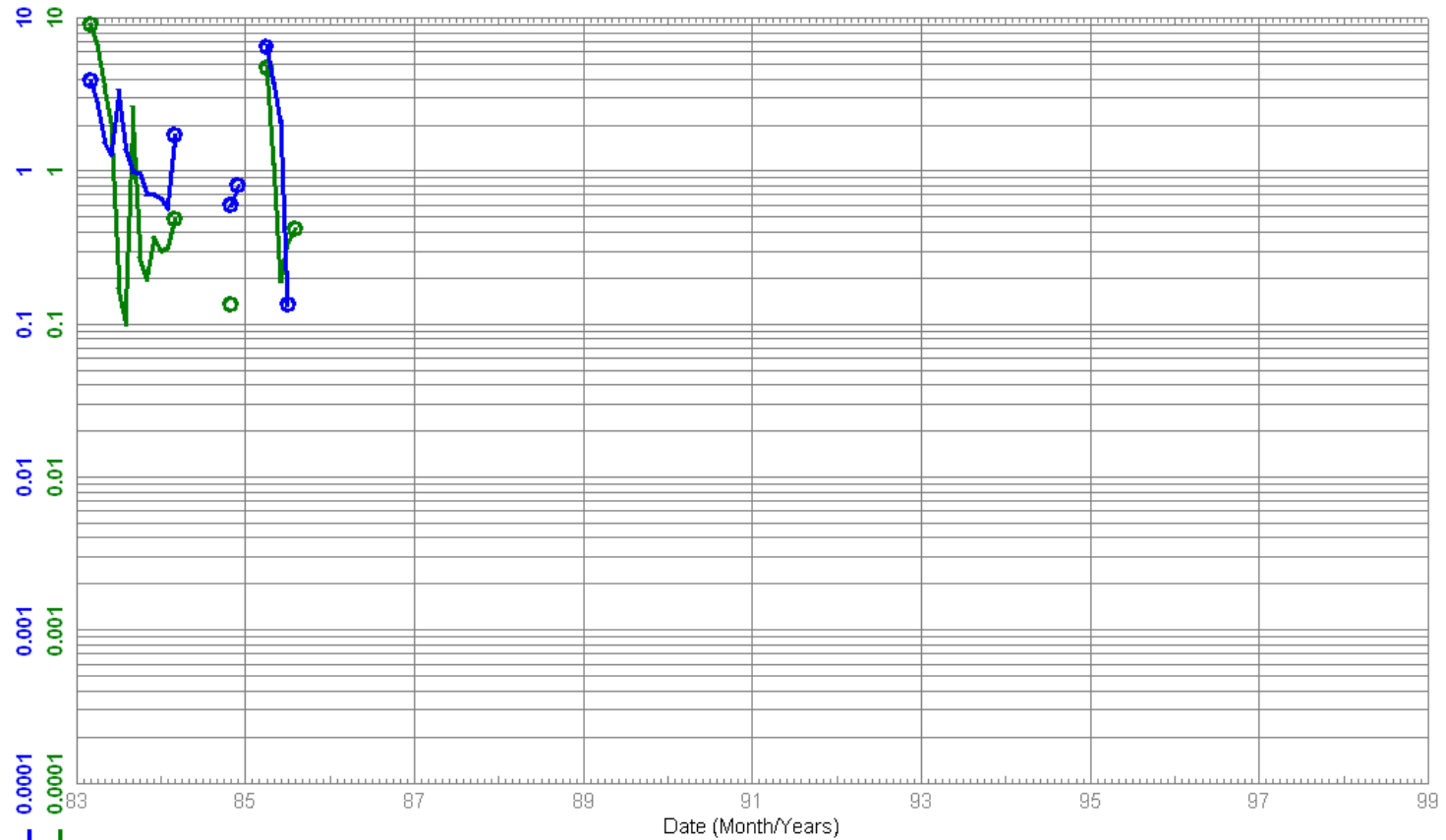
● PRD Prd-Day Avg OIL m3/day
● PRD Prd-Day Avg WTR m3/day

Cum PRD OIL	771.5	m3
Cum PRD GAS	0.0	e3m3
Cum PRD WTR	1.4	e3m3
Cum PRD HRS	14,568.0	Hour
Cum INJ WTR	62.2	e3m3

Data As Of: 2012-10 (MB)
 From: 1983-03
 To: 1985-08

100/13-31-001-25W1/00
 Waskada Unit No. 3 WWV
 Abandoned Water Inj Well

Field: WASKADA (03)
 Pool: LOWER AMARANTH A (29A)
 Unit: WASKADA UNIT NO. 3



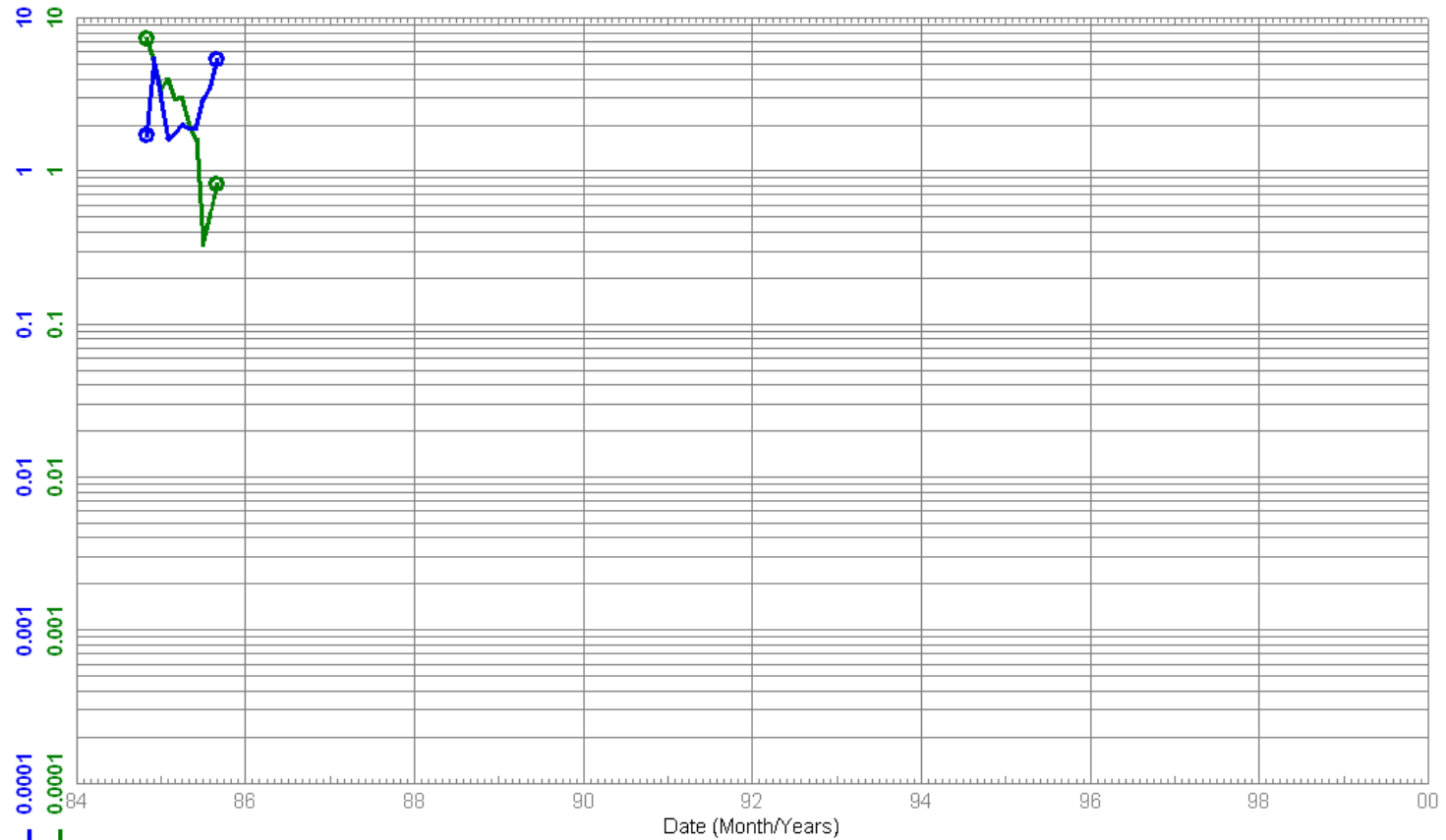
PRD Prd-Day Avg OIL m3/day
 PRD Prd-Day Avg WTR m3/day

Cum PRD OIL	513.0	m3
Cum PRD GAS	0.0	e3m3
Cum PRD WTR	572.0	m3
Cum PRD HRS	8,712.0	Hour
Cum INJ WTR	41.9	e3m3

Data As Of: 2012-10 (MB)
 From: 1984-11
 To: 1985-09

100/13-32-001-25W1/00
 Waskada Unit No. 3 WWV
 Water Inj Well

Field: WASKADA (03)
 Pool: LOWER AMARANTH A (29A)
 Unit: WASKADA UNIT NO. 3



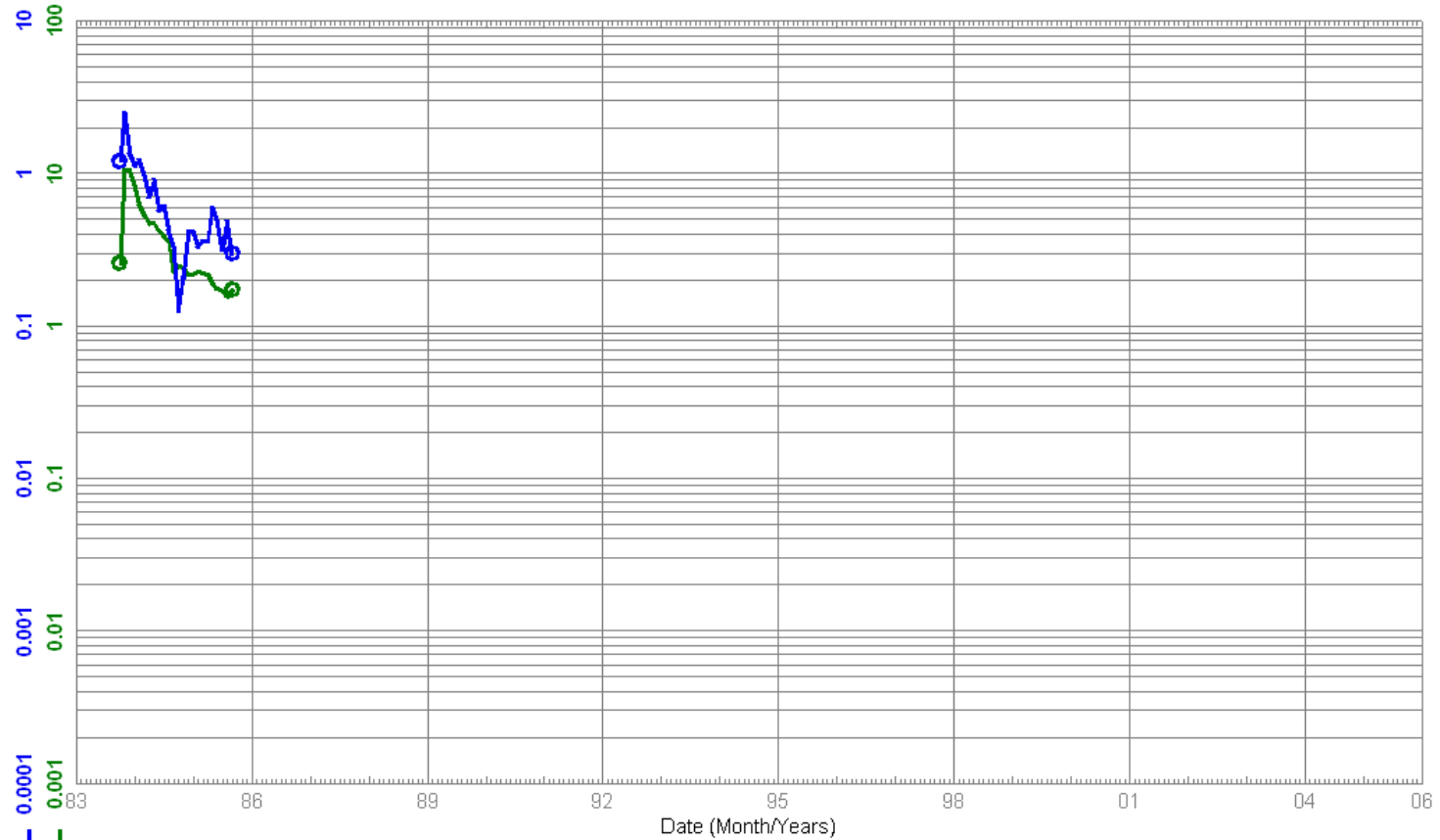
PRD Prd-Day Avg OIL m3/day
 PRD Prd-Day Avg WTR m3/day

Cum PRD OIL	695.1	m3
Cum PRD GAS	0.0	e3m3
Cum PRD WTR	697.4	m3
Cum PRD HRS	6,160.8	Hour
Cum INJ WTR	60.1	e3m3

Data As Of: 2012-10 (MB)
 From: 1983-10
 To: 1985-09

100/13-36-001-26W1/00
 Waskada Unit No. 3 WWV
 Water Inj Well

Field: WASKADA (03)
 Pool: LOWER AMARANTH A (29A)
 Unit: WASKADA UNIT NO. 3



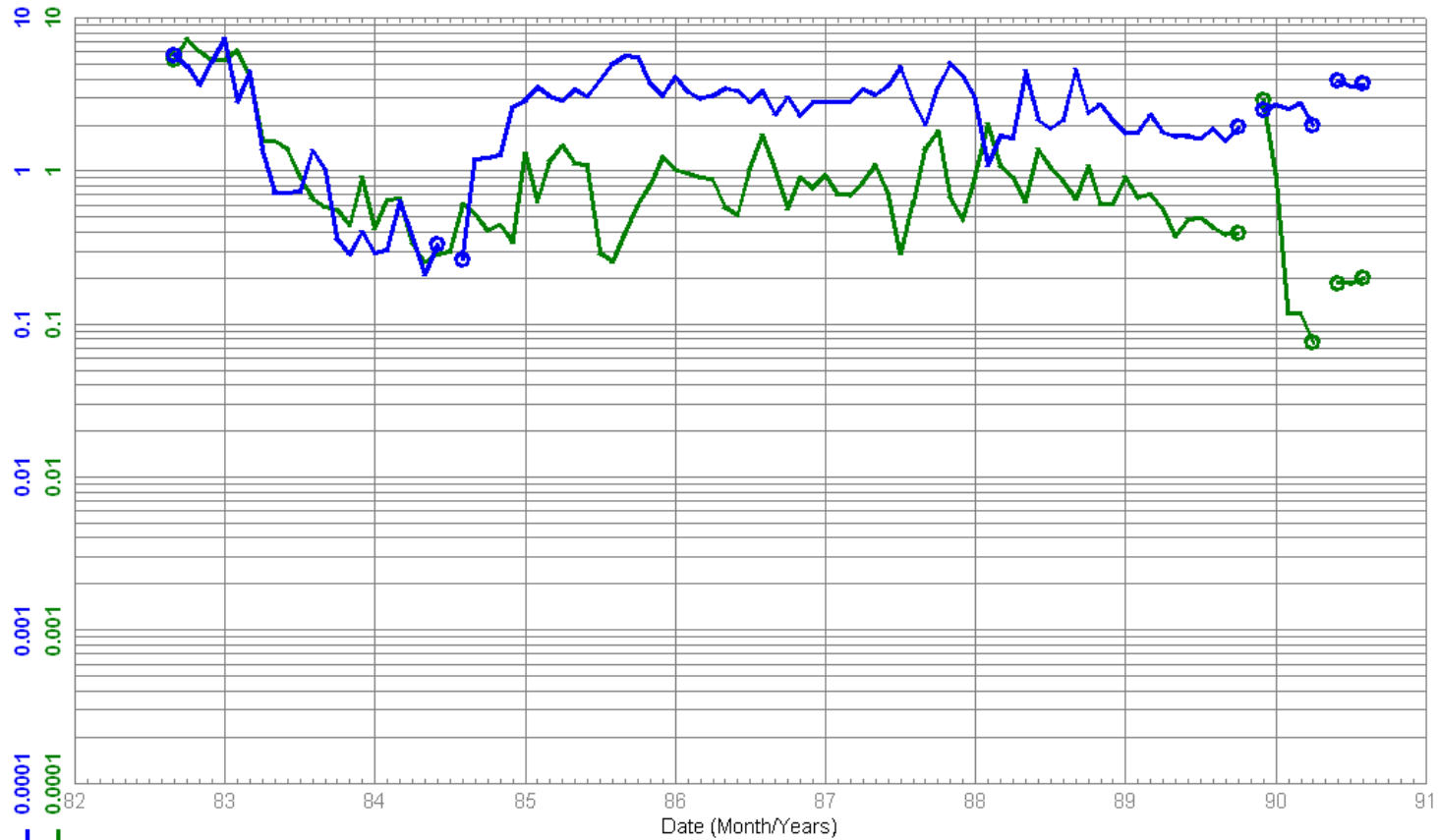
PRD Prd-Day Avg OIL m3/day
 PRD Prd-Day Avg WTR m3/day

Cum PRD OIL	2.8	e3m3
Cum PRD GAS	0.0	e3m3
Cum PRD WTR	445.0	m3
Cum PRD HRS	16,144.8	Hour
Cum INJ WTR	33.8	e3m3

Data As Of: 2012-10 (MB)
 From: 1982-09
 To: 1990-08

100/14-30-001-25W1/00
 Waskada Unit No. 3
 Abandoned Producer

Field: WASKADA (03)
 Pool: LOWER AMARANTH A (29A)
 Unit: WASKADA UNIT NO. 3

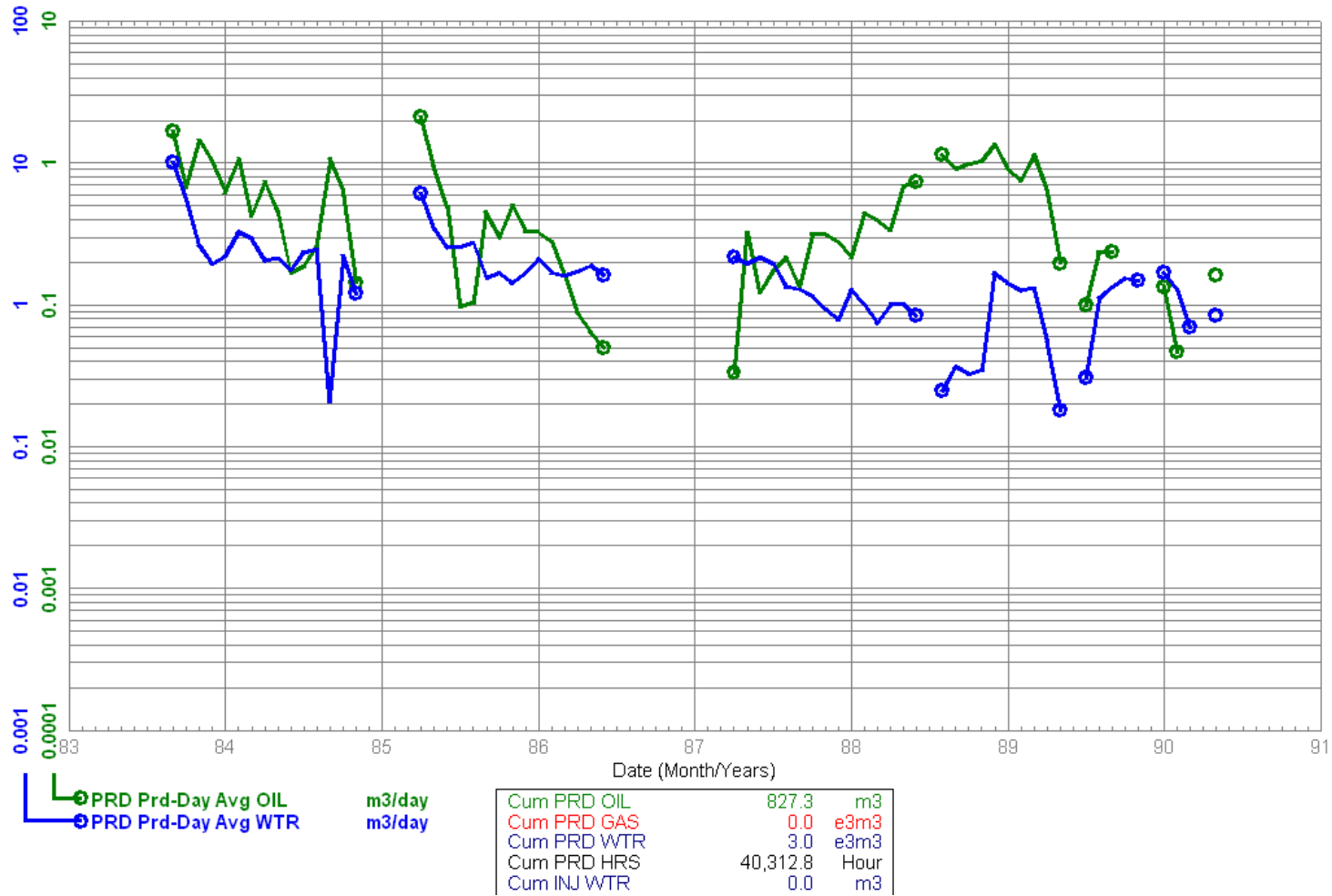


Cum PRD OIL	2.9	e3m3
Cum PRD GAS	0.0	e3m3
Cum PRD WTR	6.8	e3m3
Cum PRD HRS	62,745.6	Hour
Cum INJ WTR	0.0	m3

Data As Of: 2012-10 (MB)
 From: 1983-09
 To: 1990-05

100/14-31-001-25W1/00
 Omega Waskada
 Abandoned Producer

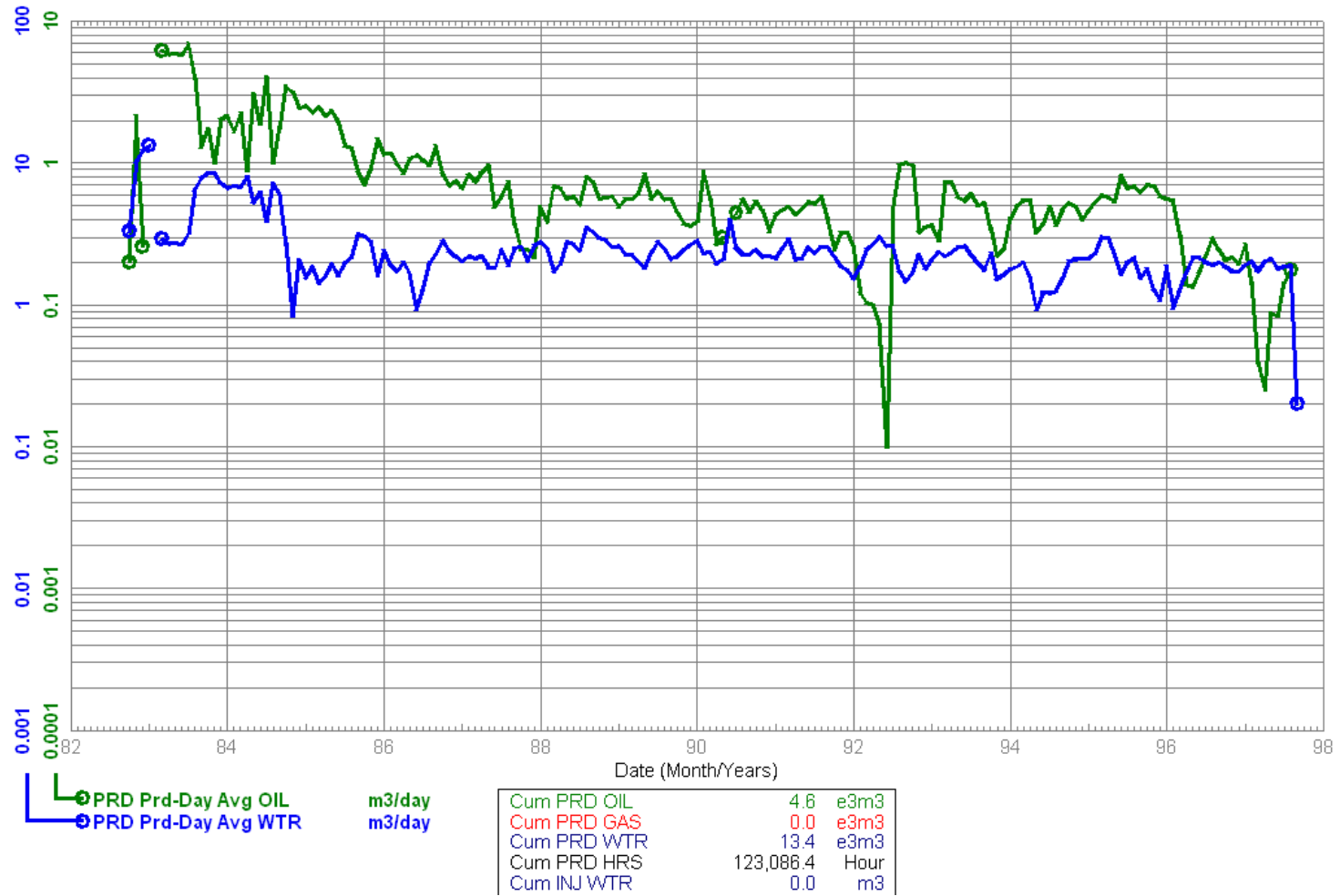
Field: WASKADA (03)
 Pool: LOWER AMARANTH A (29A)
 Unit: WASKADA UNIT NO. 3



Data As Of: 2012-10 (MB)
From: 1982-10
To: 1997-09

100/14-32-001-25W1/00
Waskada Unit No. 3
Abandoned Producer

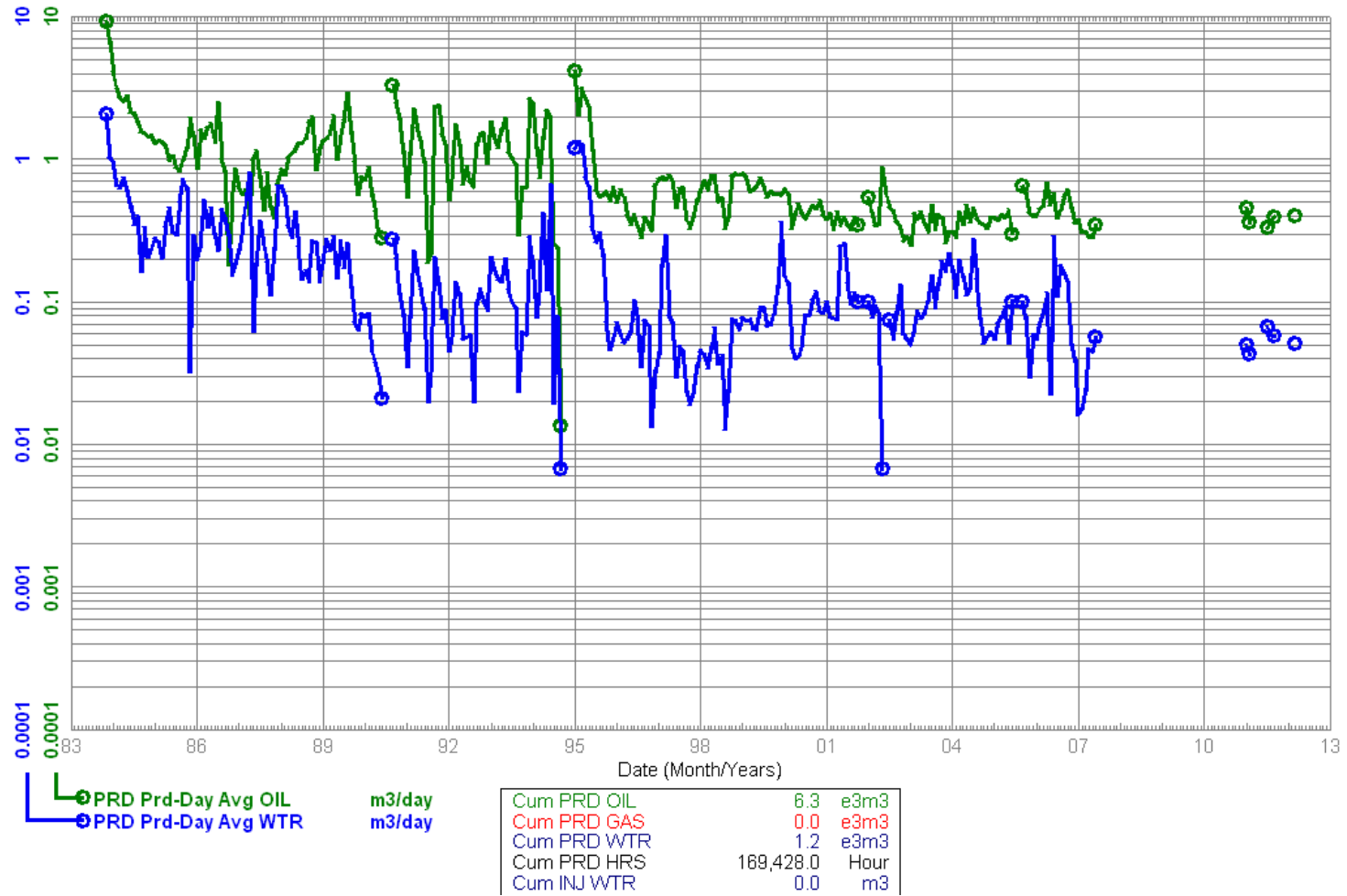
Field: WASKADA (03)
Pool: LOWER AMARANTH A (29A)
Unit: WASKADA UNIT NO. 3



Data As Of: 2012-10 (MB)
 From: 1983-11
 To: 2012-03

100/14-36-001-26W1/00
 Waskada Unit No. 3
 Capable Of Oil Prod

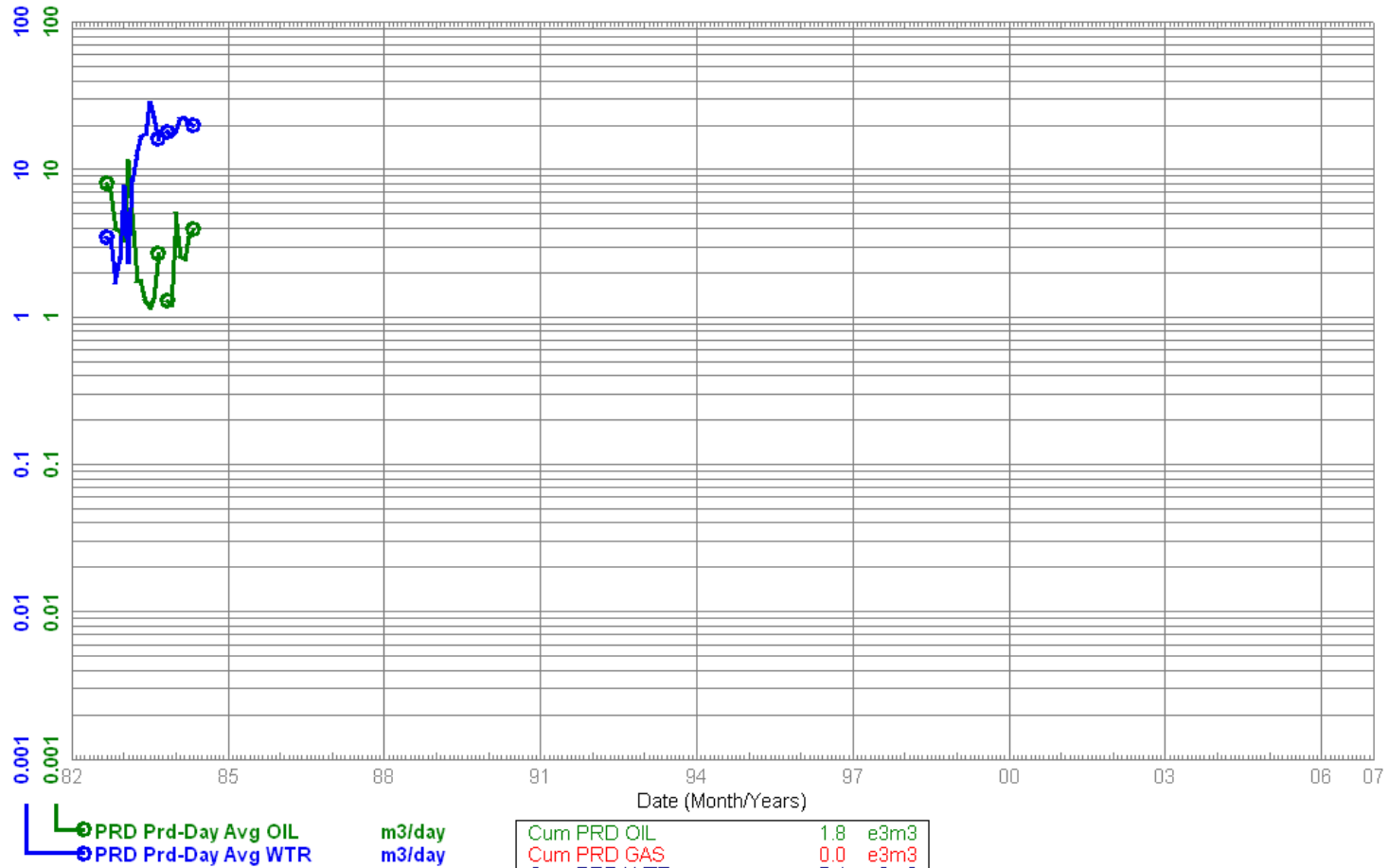
Field: WASKADA (03)
 Pool: LOWER AMARANTH A (29A)
 Unit: WASKADA UNIT NO. 3



Data As Of: 2012-10 (MB)
From: 1982-09
To: 1984-05

100/15-30-001-25W1/00
Penn West Waskada SWD
Abandoned Water Inj Well

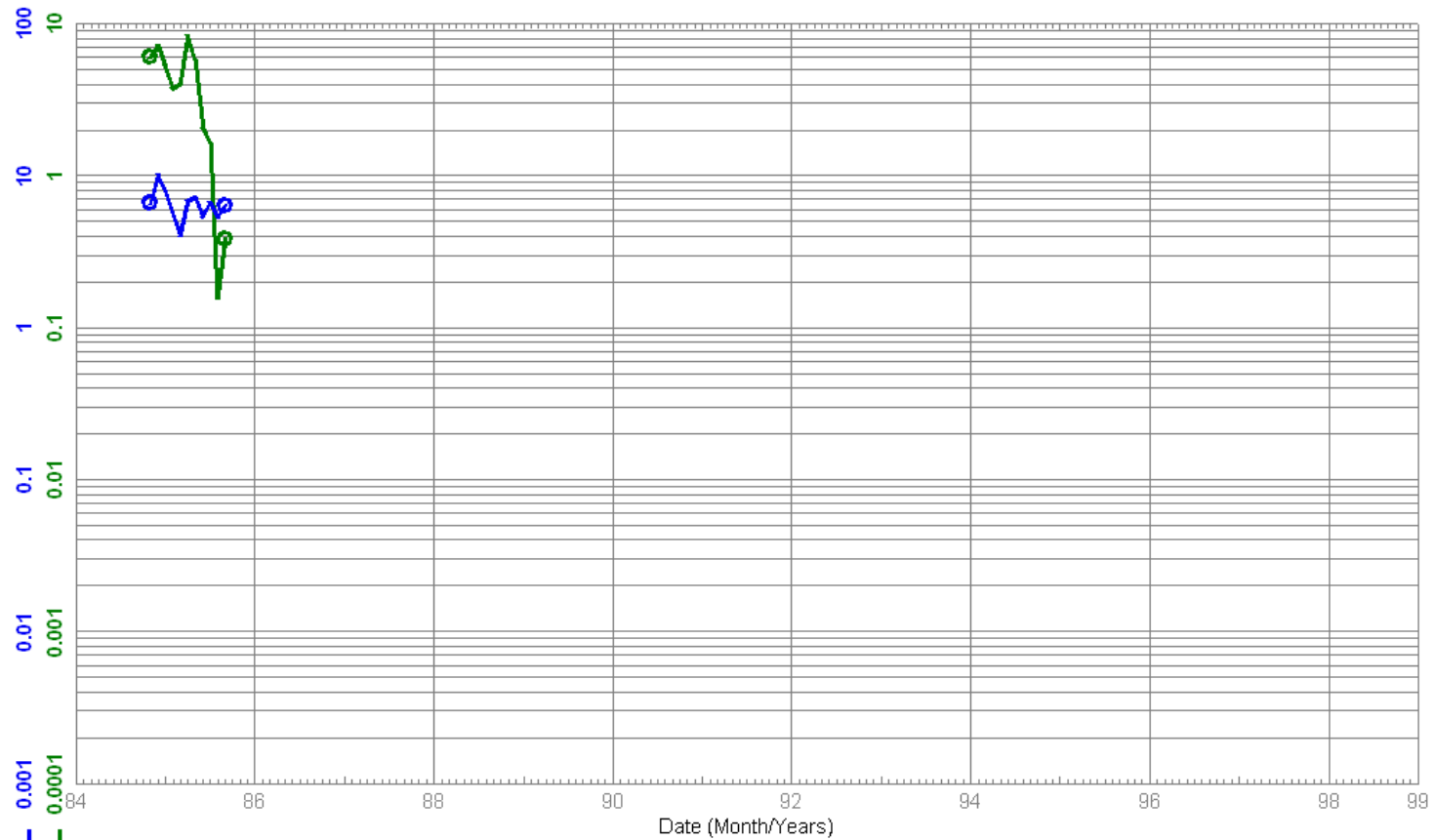
Field: WASKADA (03)
Pool: LOWER AMARANTH A (29A)
Unit: WASKADA UNIT NO. 3



Data As Of: 2012-10 (MB)
From: 1984-11
To: 1985-09

100/15-31-001-25W1/00
Waskada Unit No. 3 WWV
Abandoned Water Inj Well

Field: WASKADA (03)
Pool: LOWER AMARANTH A (29A)
Unit: WASKADA UNIT NO. 3



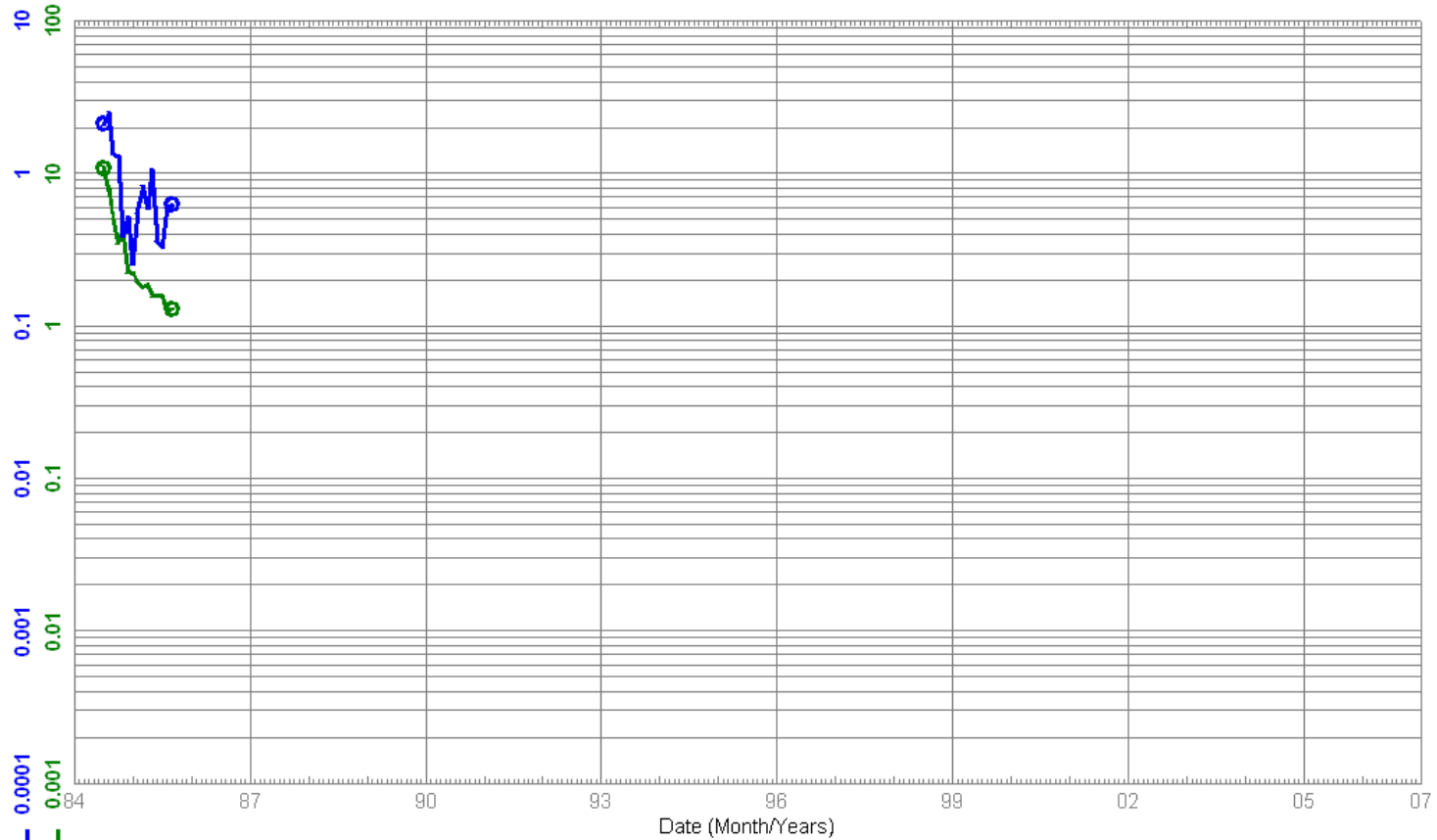
PRD Prd-Day Avg OIL m3/day
PRD Prd-Day Avg WTR m3/day

Cum PRD OIL	1.0	e3m3
Cum PRD GAS	0.0	e3m3
Cum PRD WTR	1.7	e3m3
Cum PRD HRS	5,882.4	Hour
Cum INJ WTR	20.1	e3m3

Data As Of: 2012-10 (MB)
From: 1984-07
To: 1985-09

100/15-36-001-26W1/00
Waskada Unit No. 3 WWV
Water Inj Well

Field: WASKADA (03)
Pool: LOWER AMARANTH A (29A)
Unit: WASKADA UNIT NO. 3



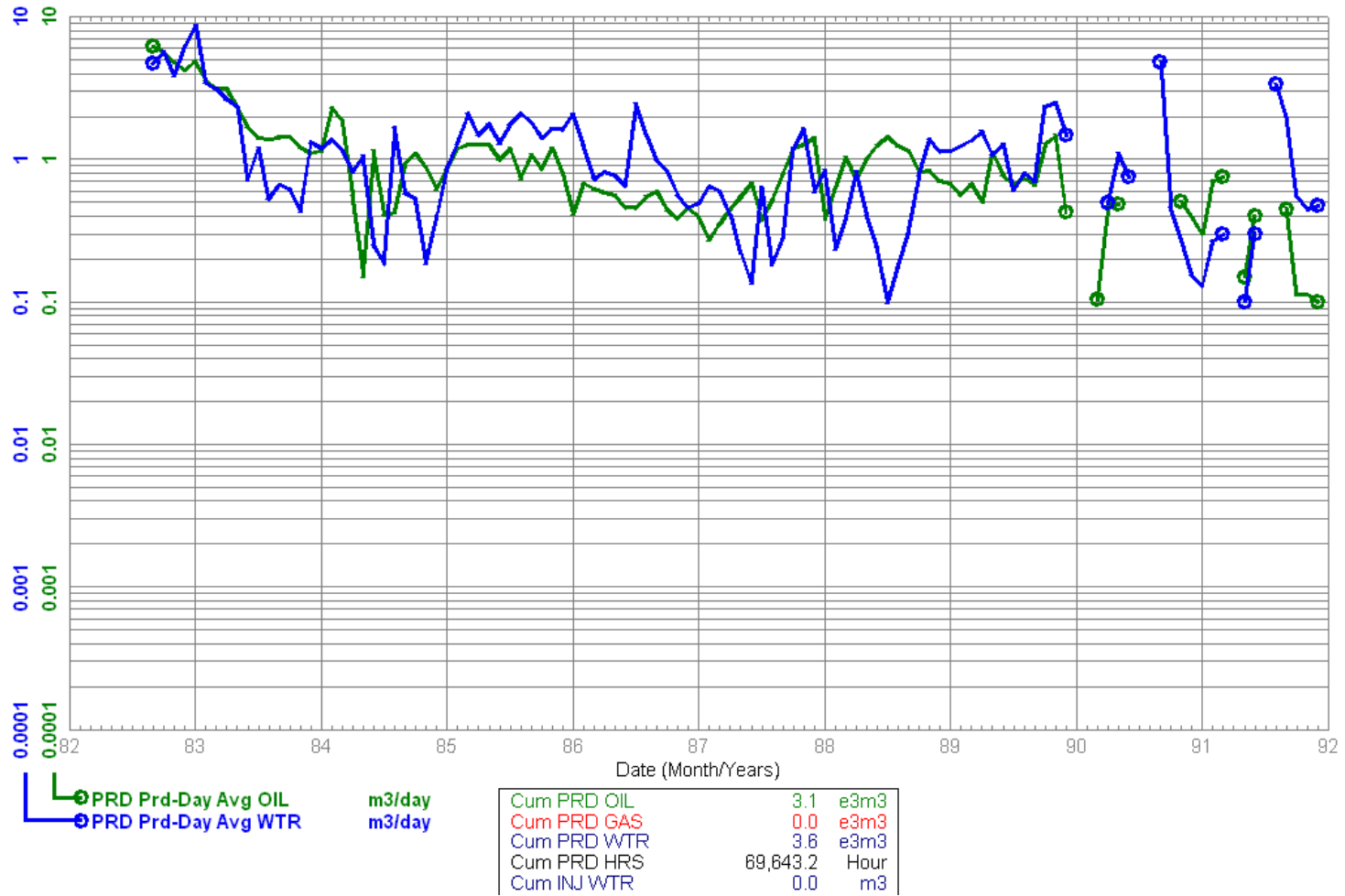
PRD Prd-Day Avg OIL m3/day
PRD Prd-Day Avg WTR m3/day

Cum PRD OIL	1.3	e3m3
Cum PRD GAS	0.0	e3m3
Cum PRD WTR	355.8	m3
Cum PRD HRS	9,616.8	Hour
Cum INJ WTR	52.0	e3m3

Data As Of: 2012-10 (MB)
 From: 1982-09
 To: 1991-12

100/16-30-001-25W1/00
 Waskada Unit No. 3
 Abandoned Producer

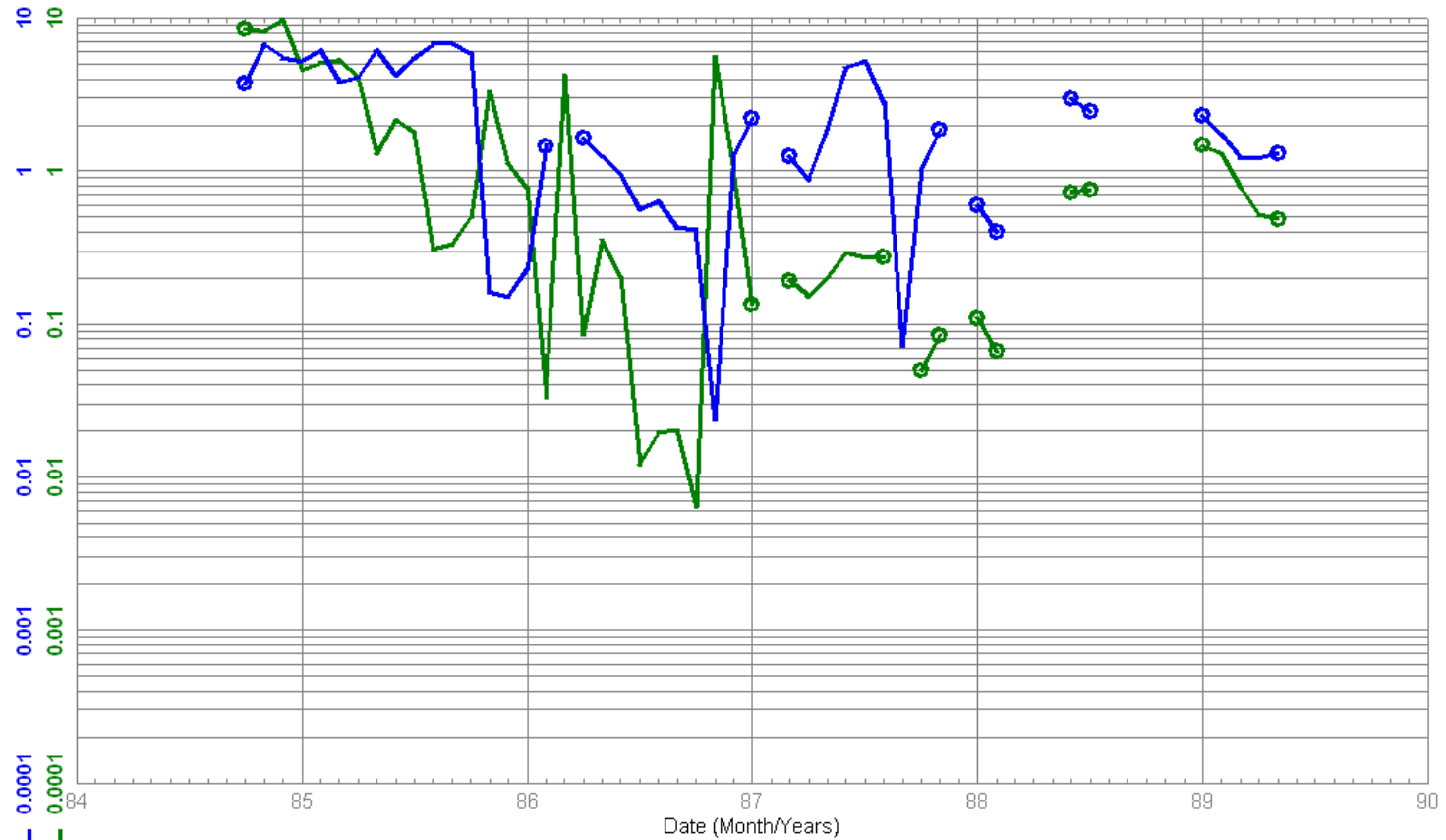
Field: WASKADA (03)
 Pool: LOWER AMARANTH A (29A)
 Unit: WASKADA UNIT NO. 3



Data As Of: 2012-10 (MB)
 From: 1984-10
 To: 1989-05

100/16-31-001-25W1/00
 Waskada Unit No. 3
 Abandoned Producer

Field: WASKADA (03)
 Pool: LOWER AMARANTH A (29A)
 Unit: WASKADA UNIT NO. 3

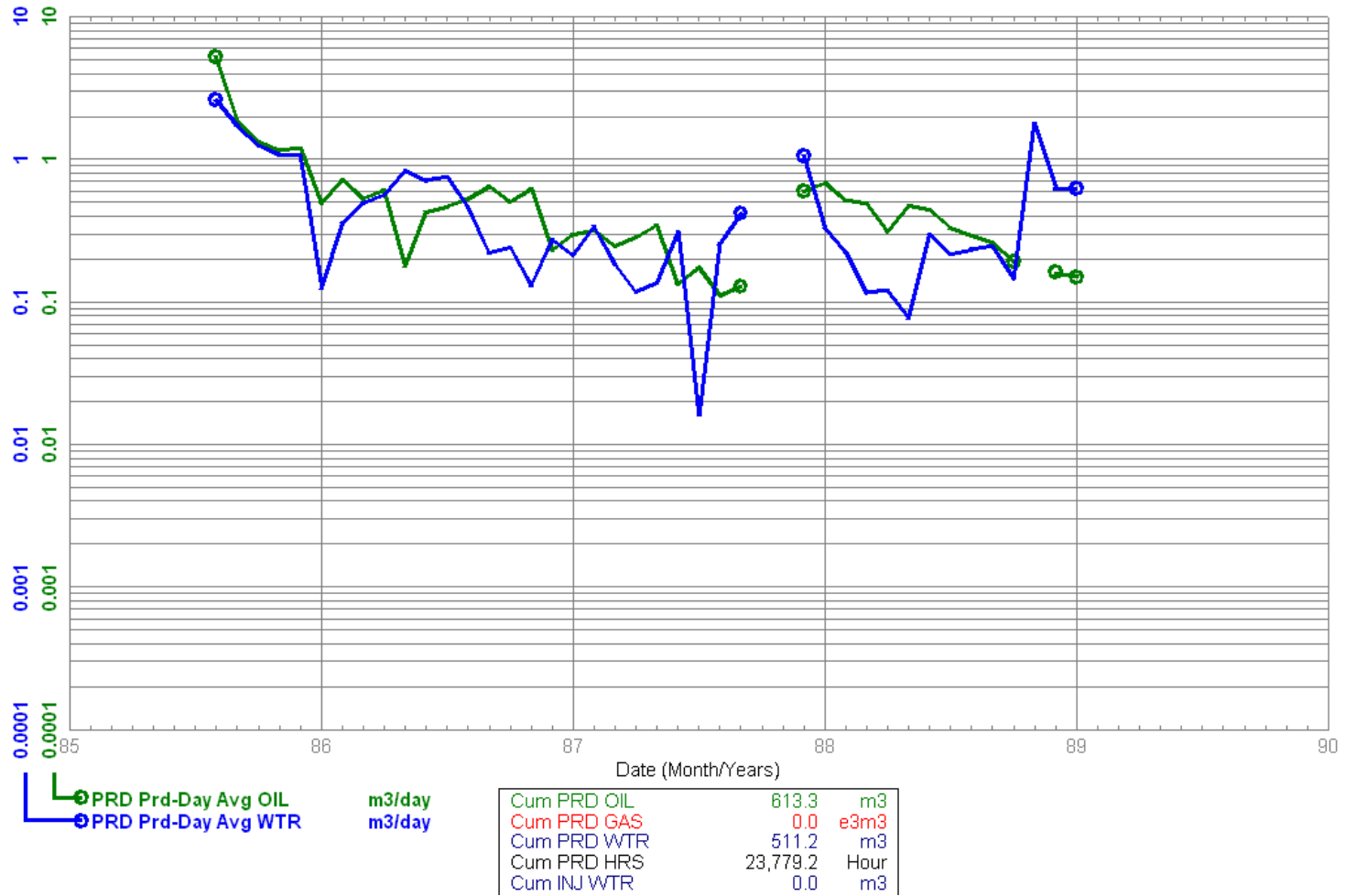


Cum PRD OIL	1.7	e3m3
Cum PRD GAS	0.0	e3m3
Cum PRD WTR	2.8	e3m3
Cum PRD HRS	23,553.6	Hour
Cum INJ WTR	0.0	m3

Data As Of: 2012-10 (MB)
 From: 1985-08
 To: 1989-01

100/16-36-001-26W1/00
 Omega Waskada
 Abandoned Producer

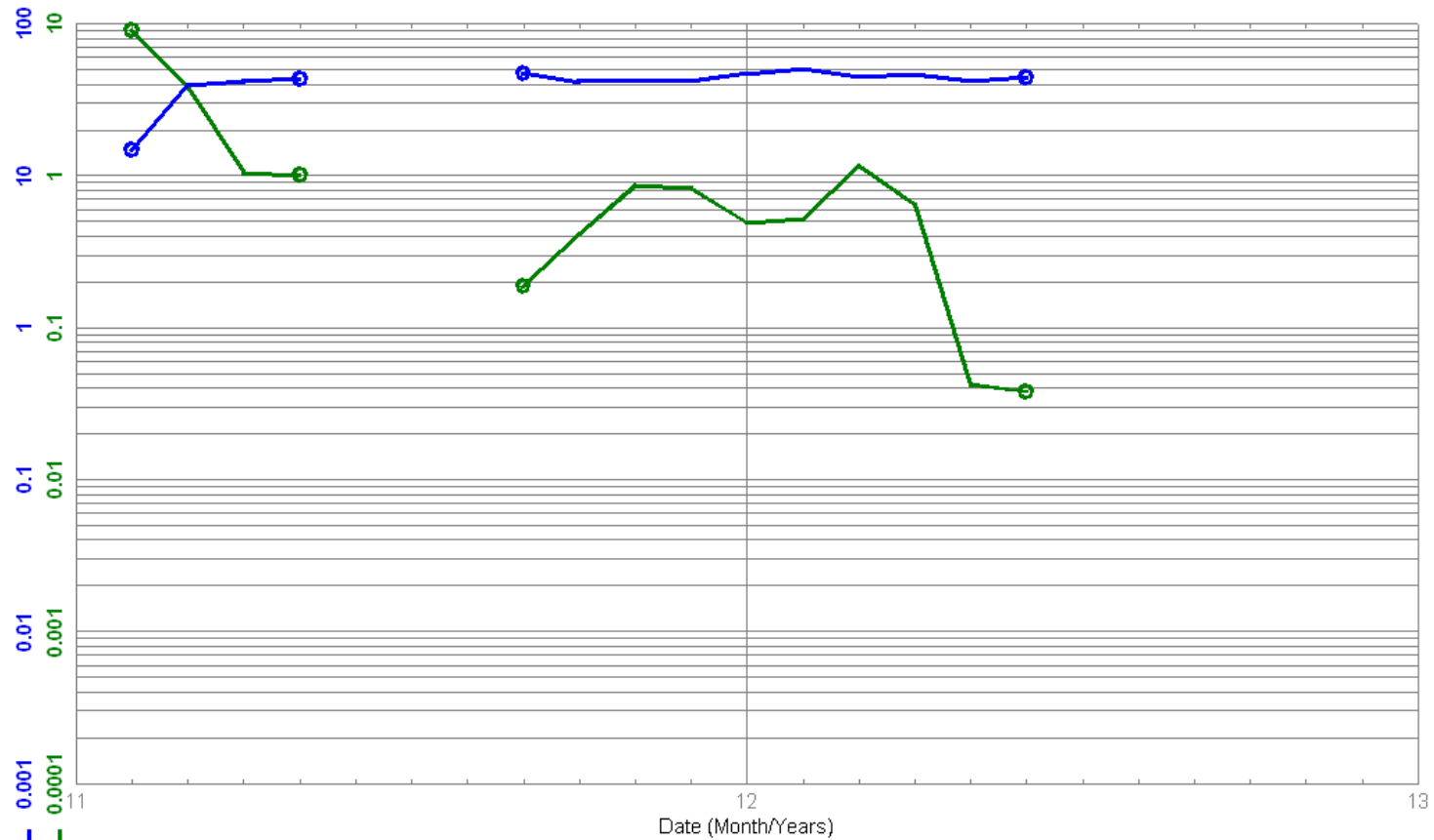
Field: WASKADA (03)
 Pool: LOWER AMARANTH A (29A)
 Unit: WASKADA UNIT NO. 3



Data As Of: 2012-10 (MB)
 From: 2011-02
 To: 2012-06

102/01-05-002-25W1/00
 Waskada Unit No. 3 HZNTL
 Capable Of Oil Prod

Field: WASKADA (03)
 Pool: LOWER AMARANTH A (29A)
 Unit: WASKADA UNIT NO. 3



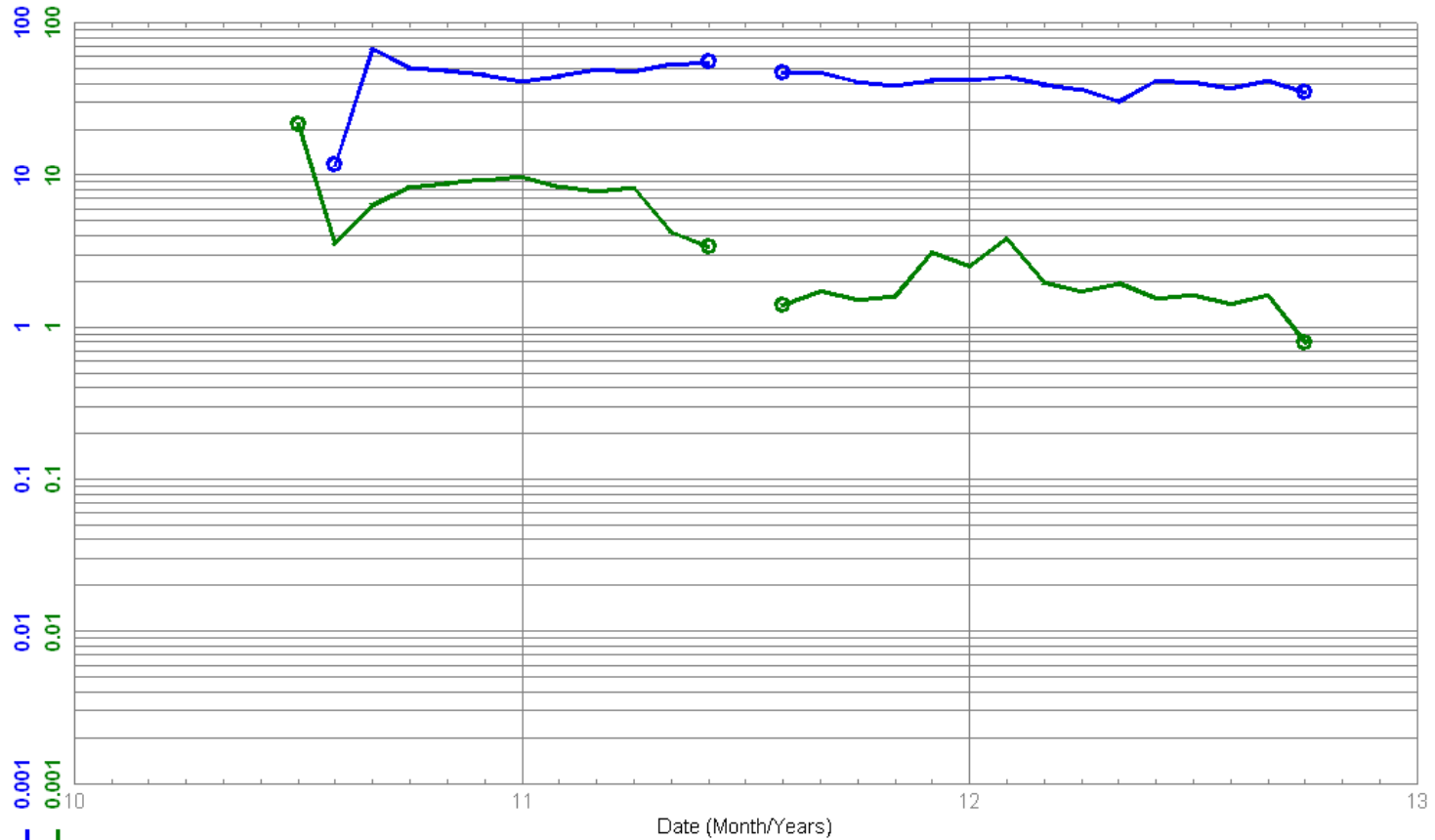
PRD Prd-Day Avg OIL m3/day
 PRD Prd-Day Avg WTR m3/day

Cum PRD OIL	292.2	m3
Cum PRD GAS	0.0	e3m3
Cum PRD WTR	13.5	e3m3
Cum PRD HRS	7,456.8	Hour
Cum INJ WTR	0.0	m3

Data As Of: 2012-10 (MB)
 From: 2010-07
 To: 2012-10

102/01-31-001-25W1/00
 Waskada Unit No. 3 HZNTL
 Capable Of Oil Prod

Field: WASKADA (03)
 Pool: LOWER AMARANTH A (29A)
 Unit: WASKADA UNIT NO. 3

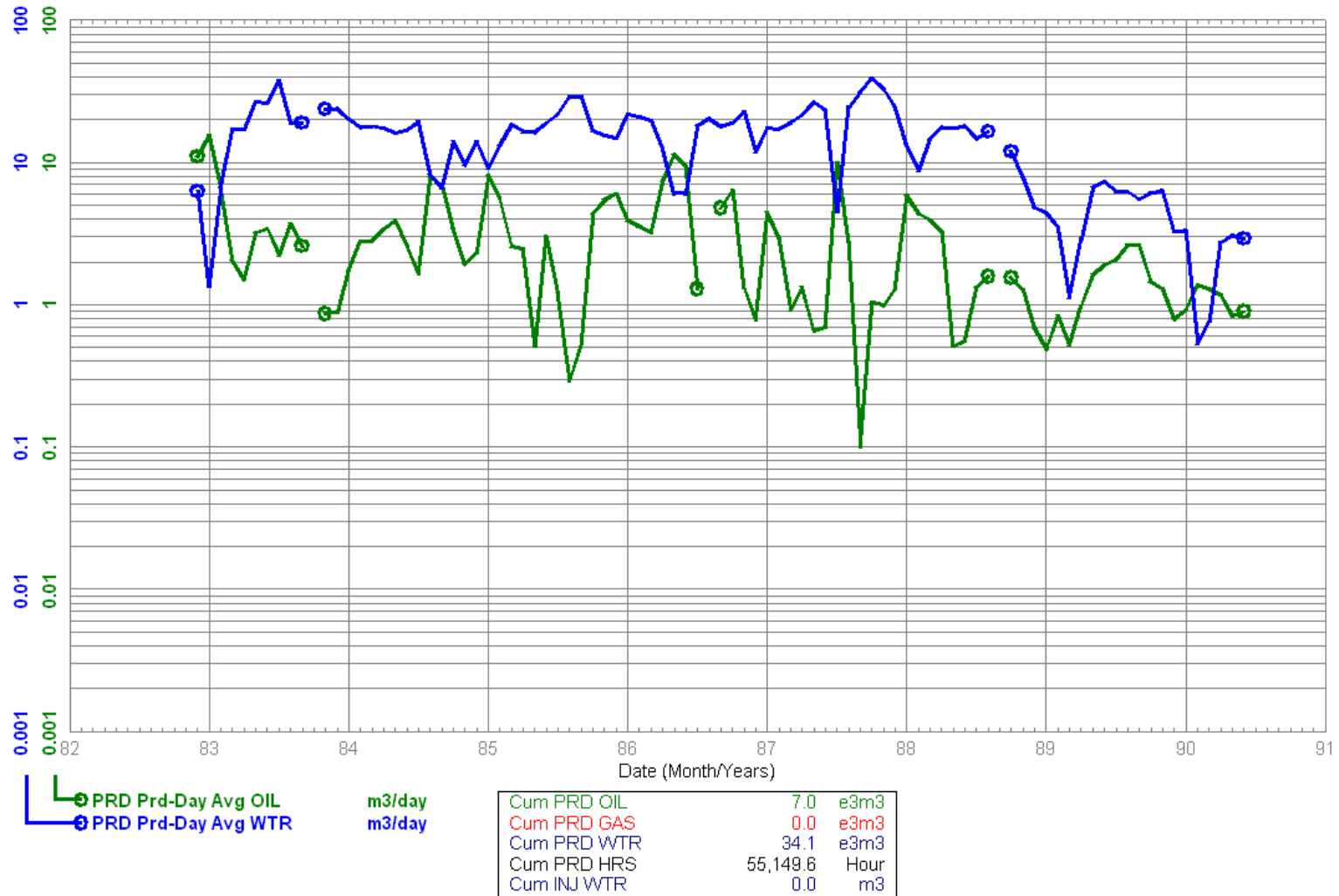


Cum PRD OIL	2.7	e3m3
Cum PRD GAS	0.0	e3m3
Cum PRD WTR	28.8	e3m3
Cum PRD HRS	15,782.4	Hour
Cum INJ WTR	0.0	m3

Data As Of: 2012-10 (MB)
 From: 1982-12
 To: 1990-06

102/04-30-001-25W1/00
 Omega Waskada
 Abandoned Producer

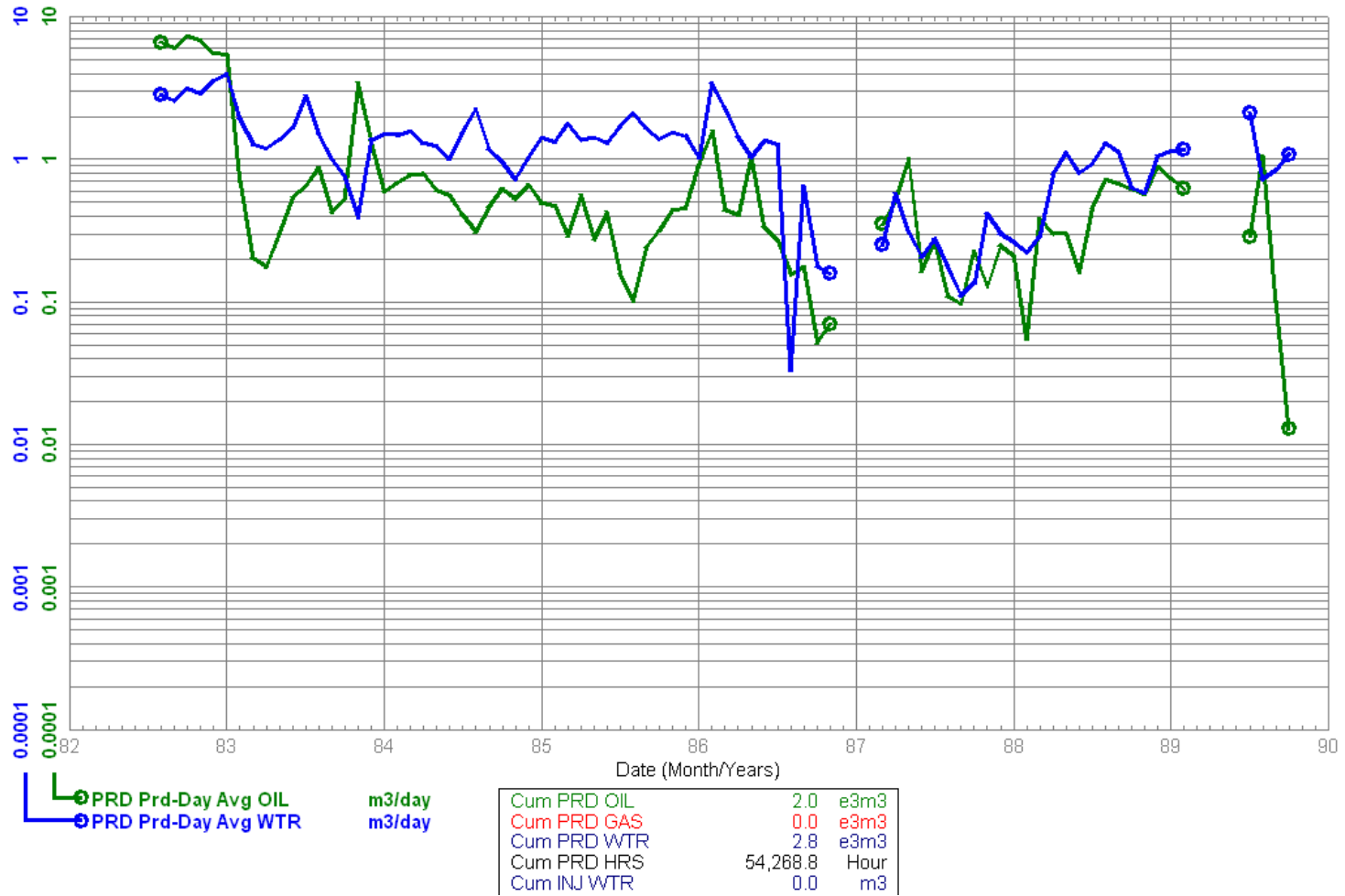
Field: WASKADA (03)
 Pool: LOWER AMARANTH A (29A)
 Unit: WASKADA UNIT NO. 3



Data As Of: 2012-10 (MB)
 From: 1982-08
 To: 1989-10

102/04-31-001-25W1/00
 Waskada Unit No. 3
 Abandoned Producer

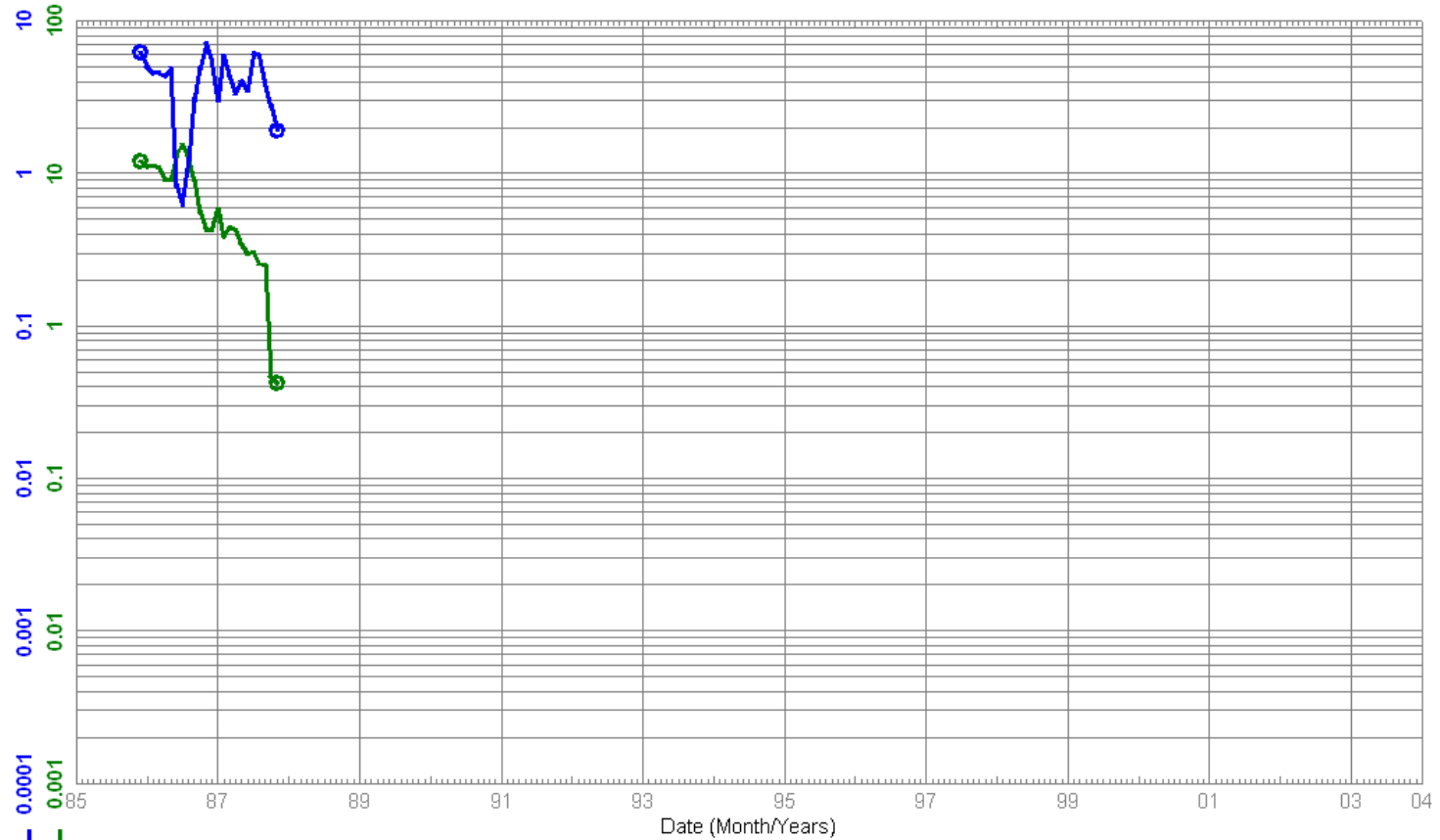
Field: WASKADA (03)
 Pool: LOWER AMARANTH A (29A)
 Unit: WASKADA UNIT NO. 3



Data As Of: 2012-10 (MB)
From: 1985-12
To: 1987-11

102/07-30-001-25W1/00
Waskada Unit No. 3 Prov. WIW
Abandoned Water Inj Well

Field: WASKADA (03)
Pool: LOWER AMARANTH A (29A)
Unit: WASKADA UNIT NO. 3



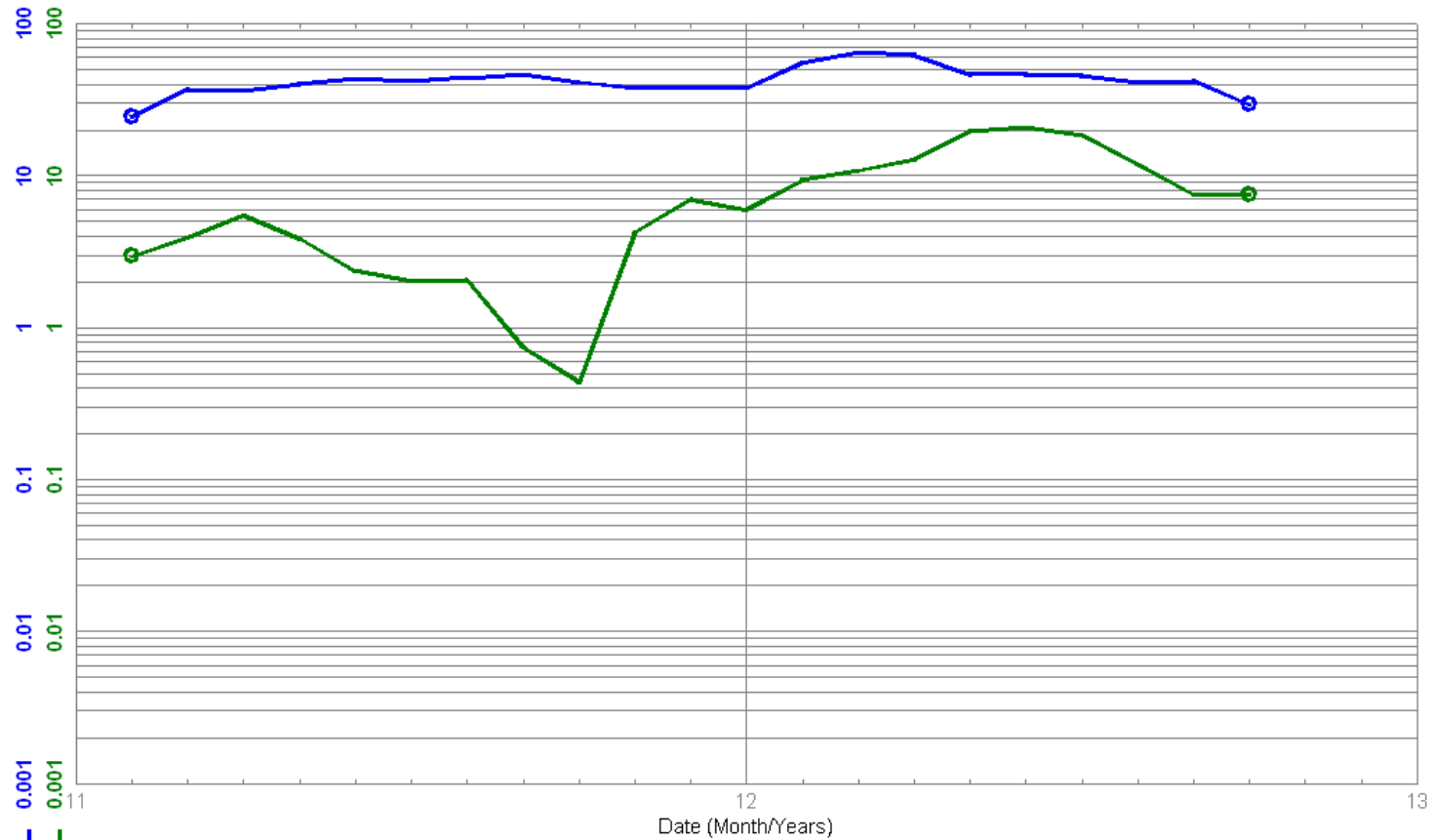
PRD Prd-Day Avg OIL m3/day
PRD Prd-Day Avg WTR m3/day

Cum PRD OIL	4.2	e3m3
Cum PRD GAS	0.0	e3m3
Cum PRD WTR	2.5	e3m3
Cum PRD HRS	14,731.2	Hour
Cum INJ WTR	20.5	e3m3

Data As Of: 2012-10 (MB)
 From: 2011-02
 To: 2012-10

102/08-05-002-25W1/00
 Waskada Unit No. 3 HZNTL
 Capable Of Oil Prod

Field: WASKADA (03)
 Pool: LOWER AMARANTH A (29A)
 Unit: WASKADA UNIT NO. 3



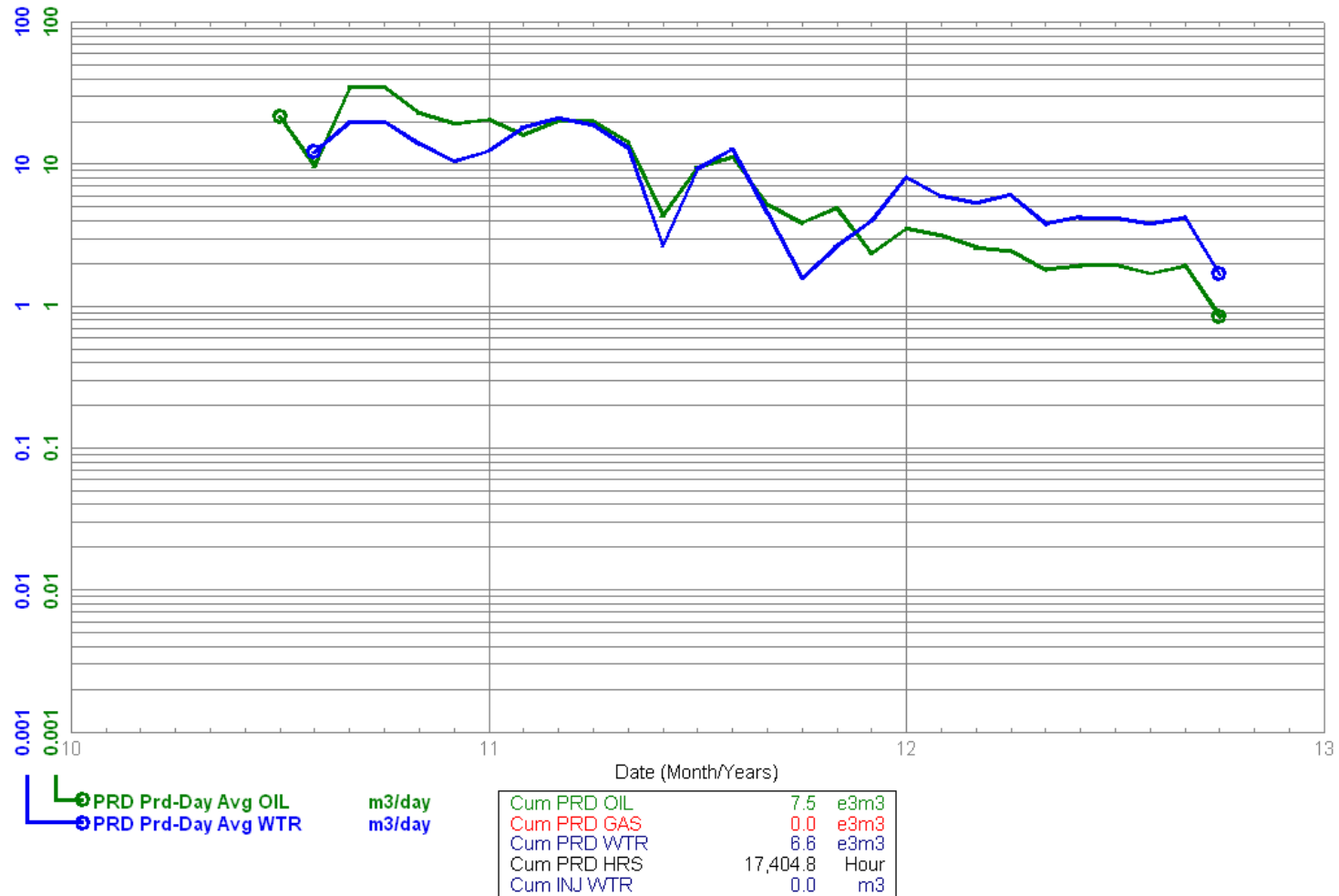
PRD Prd-Day Avg OIL m3/day
 PRD Prd-Day Avg WTR m3/day

Cum PRD OIL	4.8	e3m3
Cum PRD GAS	0.0	e3m3
Cum PRD WTR	24.4	e3m3
Cum PRD HRS	13,351.2	Hour
Cum INJ WTR	0.0	m3

Data As Of: 2012-10 (MB)
 From: 2010-07
 To: 2012-10

102/08-36-001-26W1/00
 Waskada Unit No. 3 HZNTL
 Capable Of Oil Prod

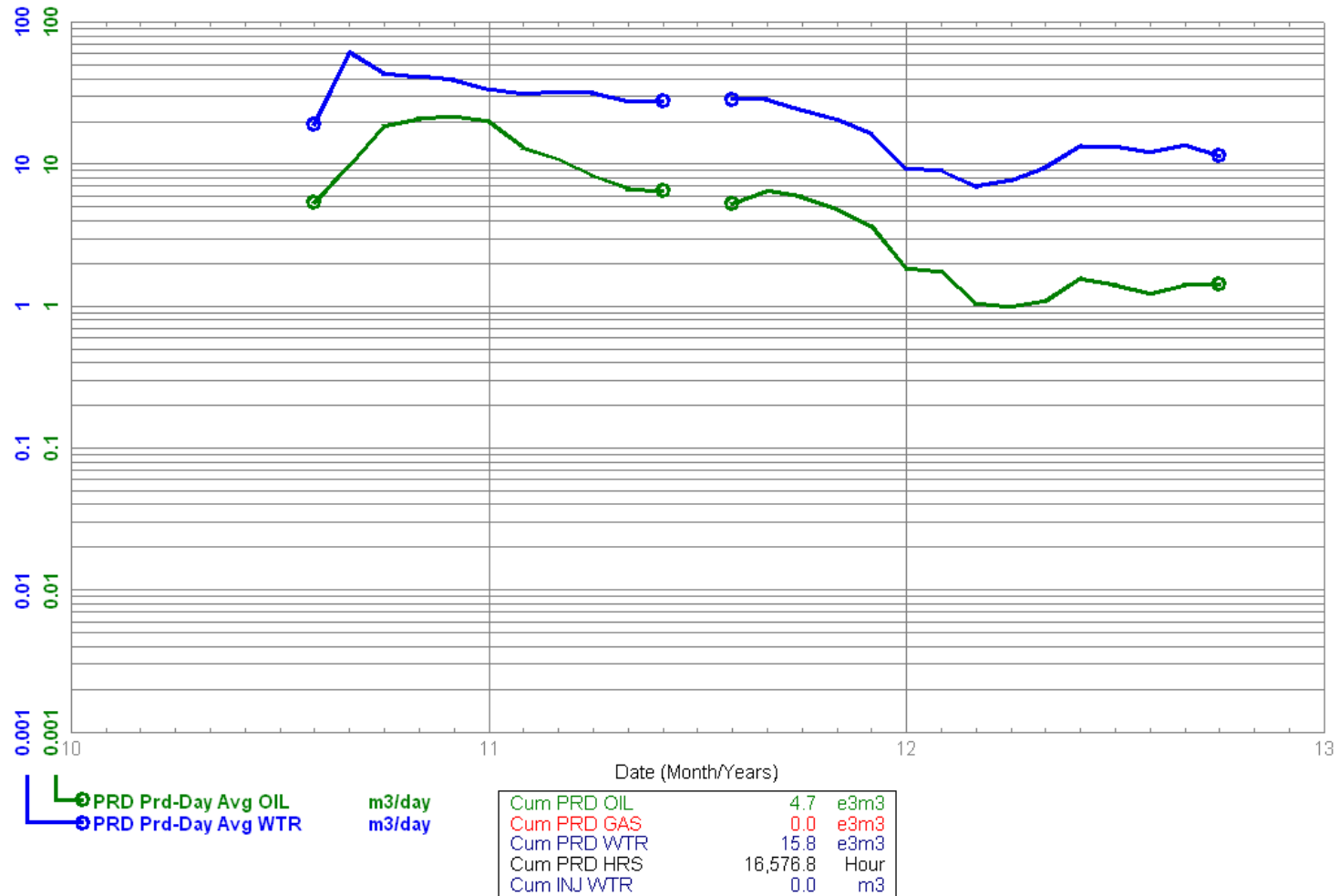
Field: WASKADA (03)
 Pool: LOWER AMARANTH A (29A)
 Unit: WASKADA UNIT NO. 3



Data As Of: 2012-10 (MB)
 From: 2010-08
 To: 2012-10

102/09-31-001-25W1/00
 Waskada Unit No. 3 HZNTL
 Capable Of Oil Prod

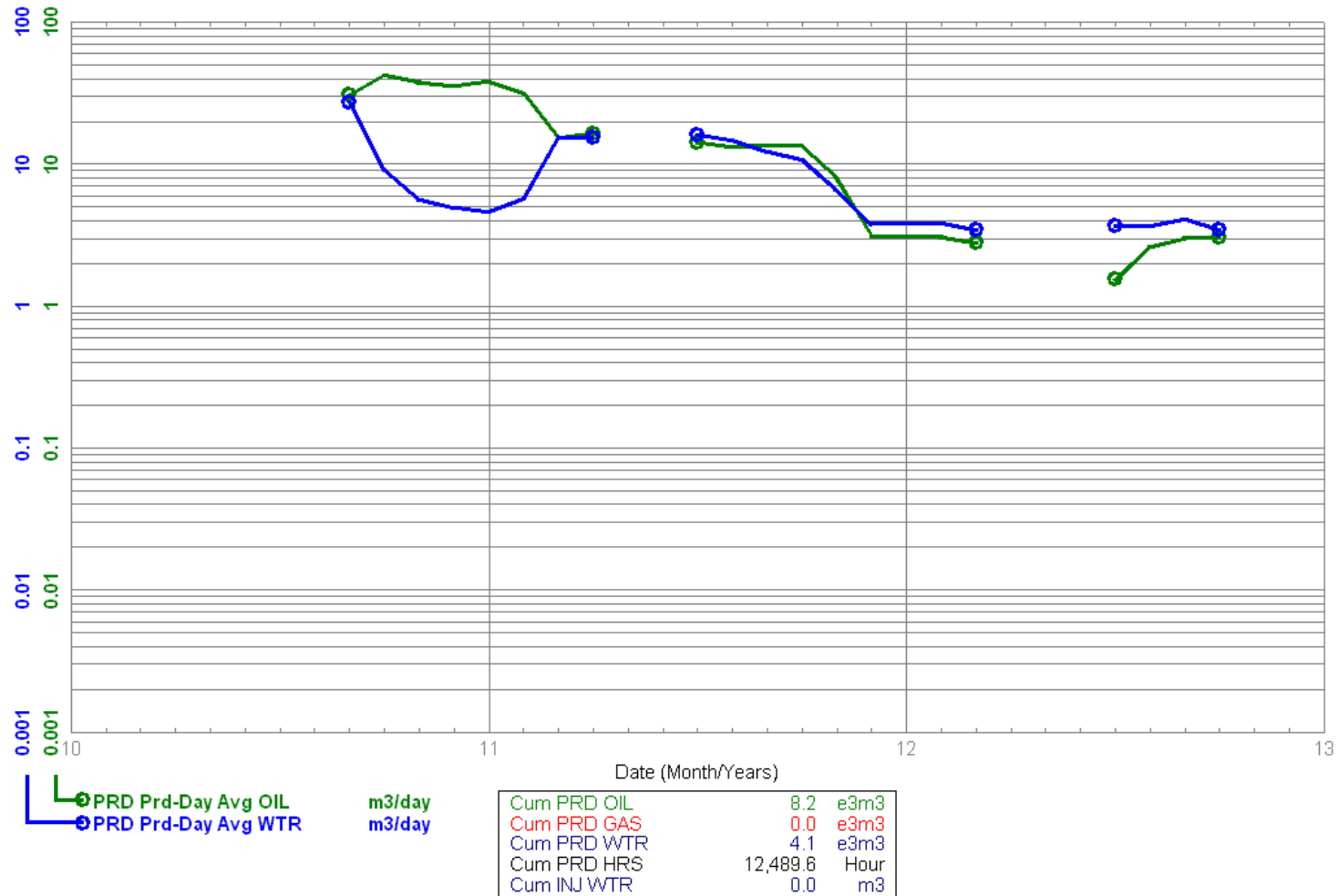
Field: WASKADA (03)
 Pool: LOWER AMARANTH A (29A)
 Unit: WASKADA UNIT NO. 3



Data As Of: 2012-10 (MB)
 From: 2010-09
 To: 2012-10

102/09-36-001-26W1/00
 Waskada Unit No. 3 HZNTL
 Capable Of Oil Prod

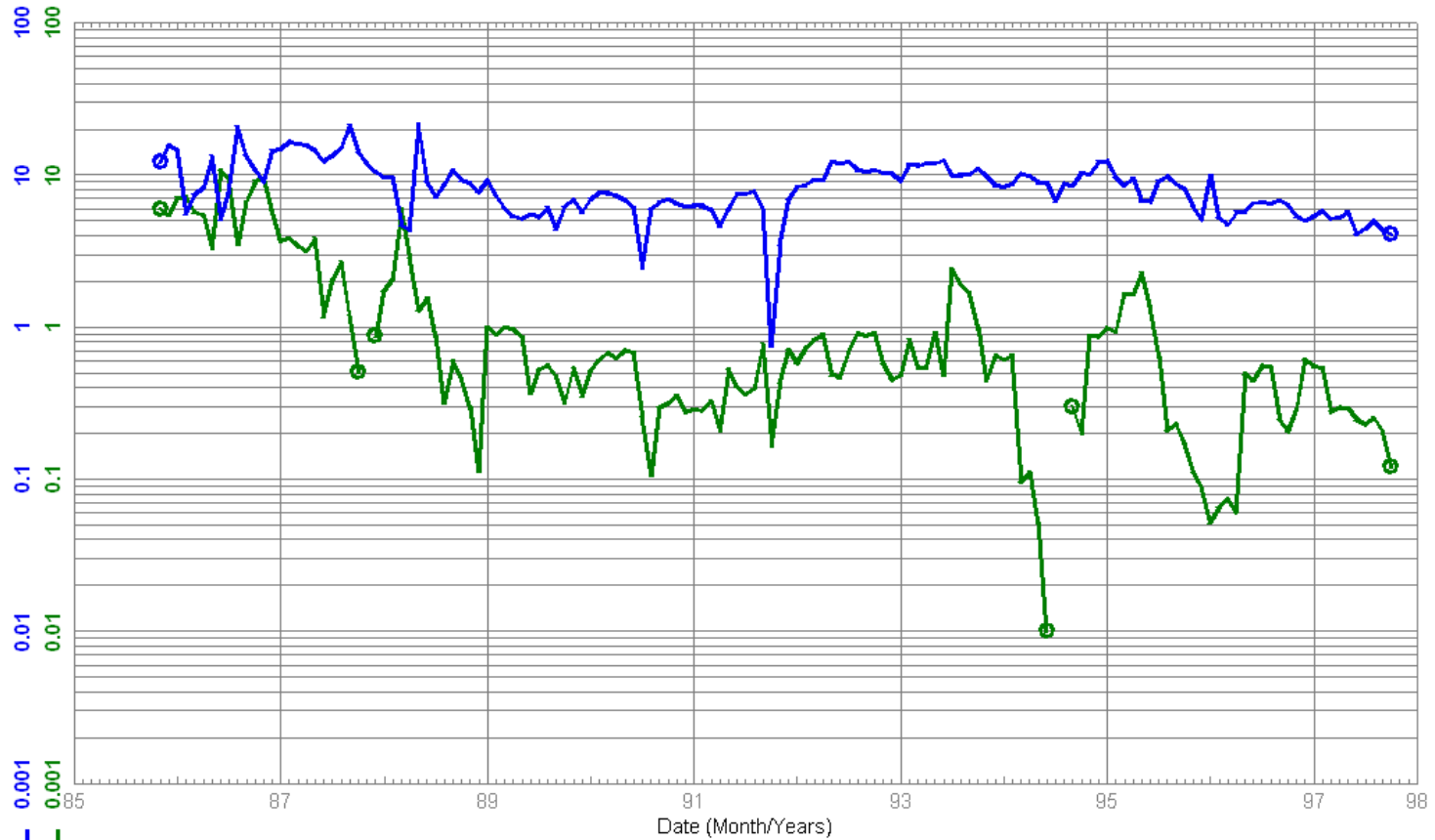
Field: WASKADA (03)
 Pool: LOWER AMARANTH A (29A)
 Unit: WASKADA UNIT NO. 3



Data As Of: 2012-10 (MB)
 From: 1985-11
 To: 1997-10

102/11-30-001-25W1/02
 Waskada Unit No. 3
 Abandoned Producer

Field: WASKADA (03)
 Pool: LOWER AMARANTH A (29A)
 Unit: WASKADA UNIT NO. 3



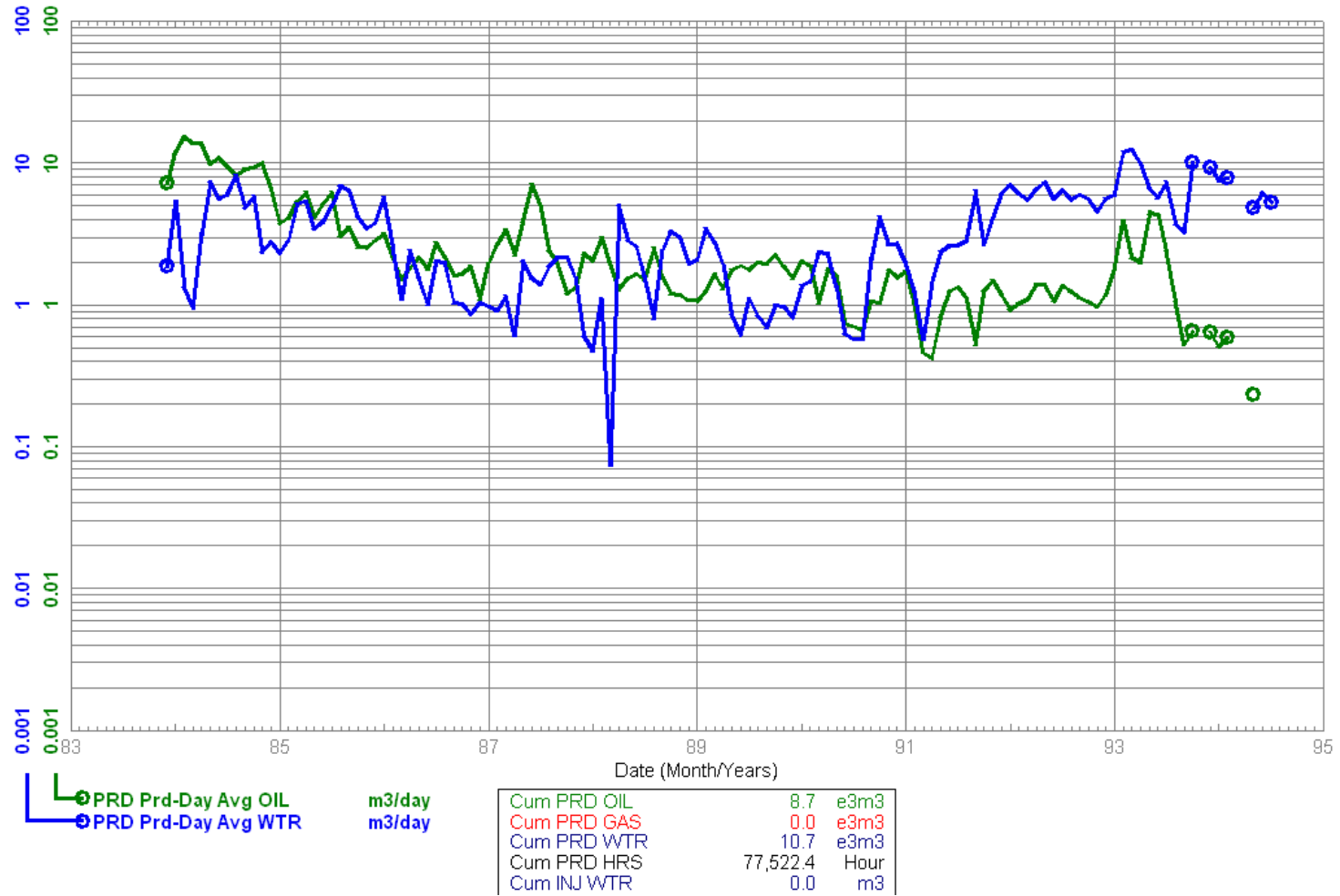
PRD Prd-Day Avg OIL m3/day
 PRD Prd-Day Avg WTR m3/day

Cum PRD OIL	5.8	e3m3
Cum PRD GAS	0.0	e3m3
Cum PRD WTR	37.2	e3m3
Cum PRD HRS	102,648.0	Hour
Cum INJ WTR	0.0	m3

Data As Of: 2012-10 (MB)
 From: 1983-12
 To: 1994-07

102/12-30-001-25W1/00
 Waskada Unit No. 3
 Abandoned Producer

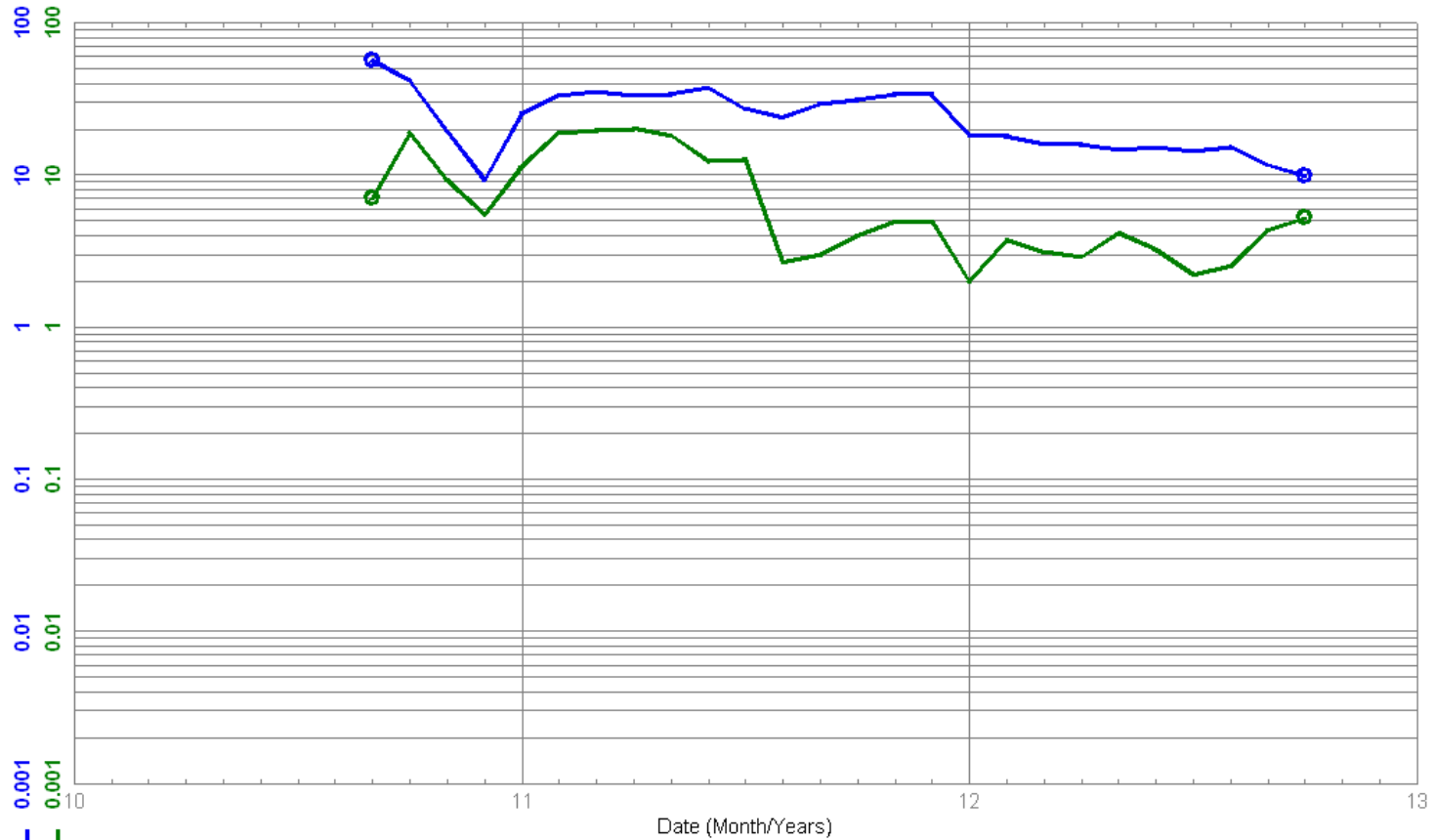
Field: WASKADA (03)
 Pool: LOWER AMARANTH A (29A)
 Unit: WASKADA UNIT NO. 3



Data As Of: 2012-10 (MB)
 From: 2010-09
 To: 2012-10

102/12-31-001-25W1/00
 Waskada Unit No. 3 HZNTL
 Capable Of Oil Prod

Field: WASKADA (03)
 Pool: LOWER AMARANTH A (29A)
 Unit: WASKADA UNIT NO. 3



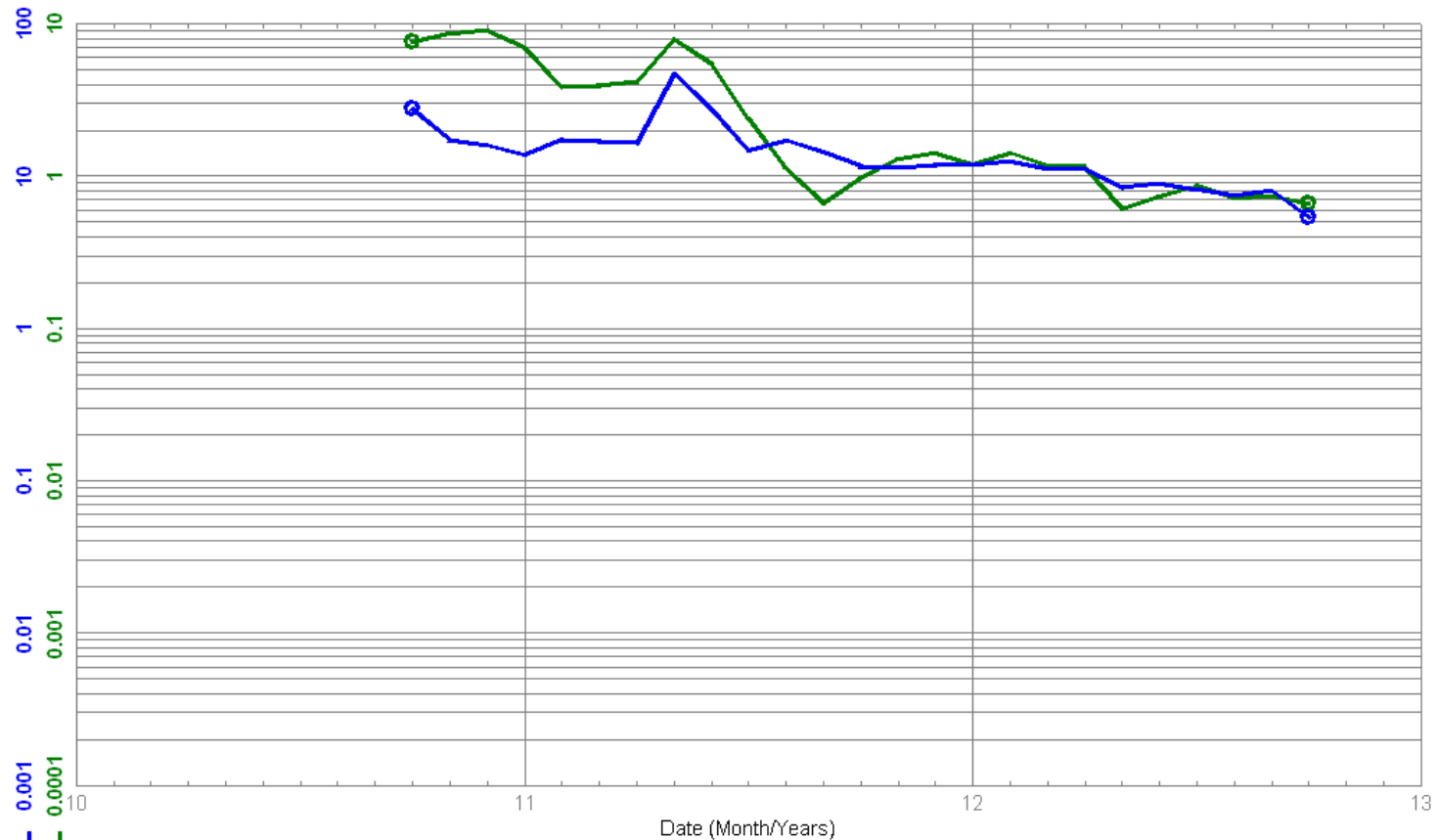
PRD Prd-Day Avg OIL m3/day
 PRD Prd-Day Avg WTR m3/day

Cum PRD OIL	5.8	e3m3
Cum PRD GAS	0.0	e3m3
Cum PRD WTR	17.2	e3m3
Cum PRD HRS	17,215.2	Hour
Cum INJ WTR	0.0	m3

Data As Of: 2012-10 (MB)
 From: 2010-10
 To: 2012-10

102/13-31-001-25W1/00
 Waskada Unit No. 3 HZNTL
 Capable Of Oil Prod

Field: WASKADA (03)
 Pool: LOWER AMARANTH A (29A)
 Unit: WASKADA UNIT NO. 3



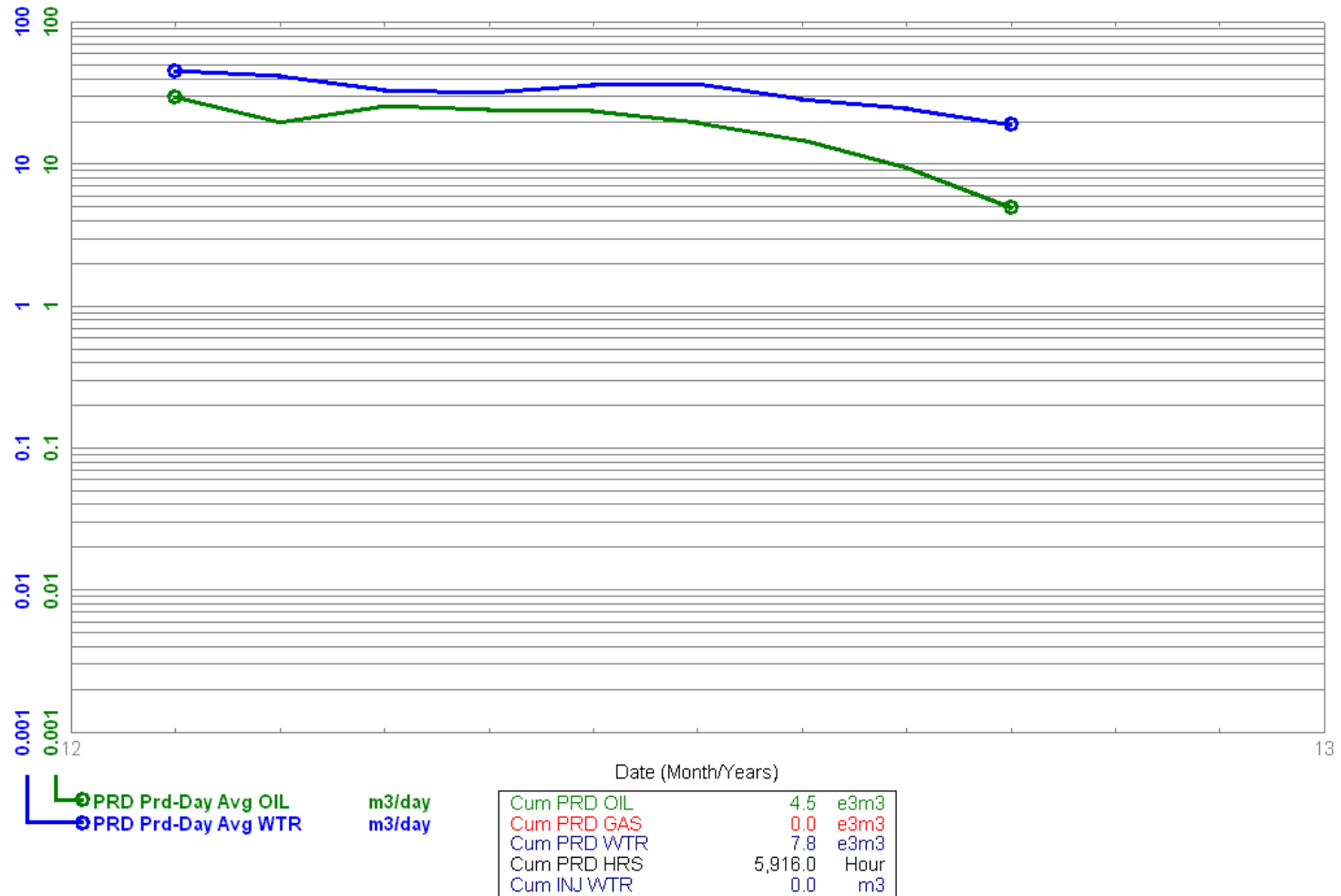
PRD Prd-Day Avg OIL m3/day
 PRD Prd-Day Avg WTR m3/day

Cum PRD OIL	1.7	e3m3
Cum PRD GAS	0.0	e3m3
Cum PRD WTR	8.8	e3m3
Cum PRD HRS	15,890.4	Hour
Cum INJ WTR	0.0	m3

Data As Of: 2012-10 (MB)
 From: 2012-02
 To: 2012-10

102/13-32-001-25W1/00
 Waskada Unit No. 3 HZNTL
 Capable Of Oil Prod

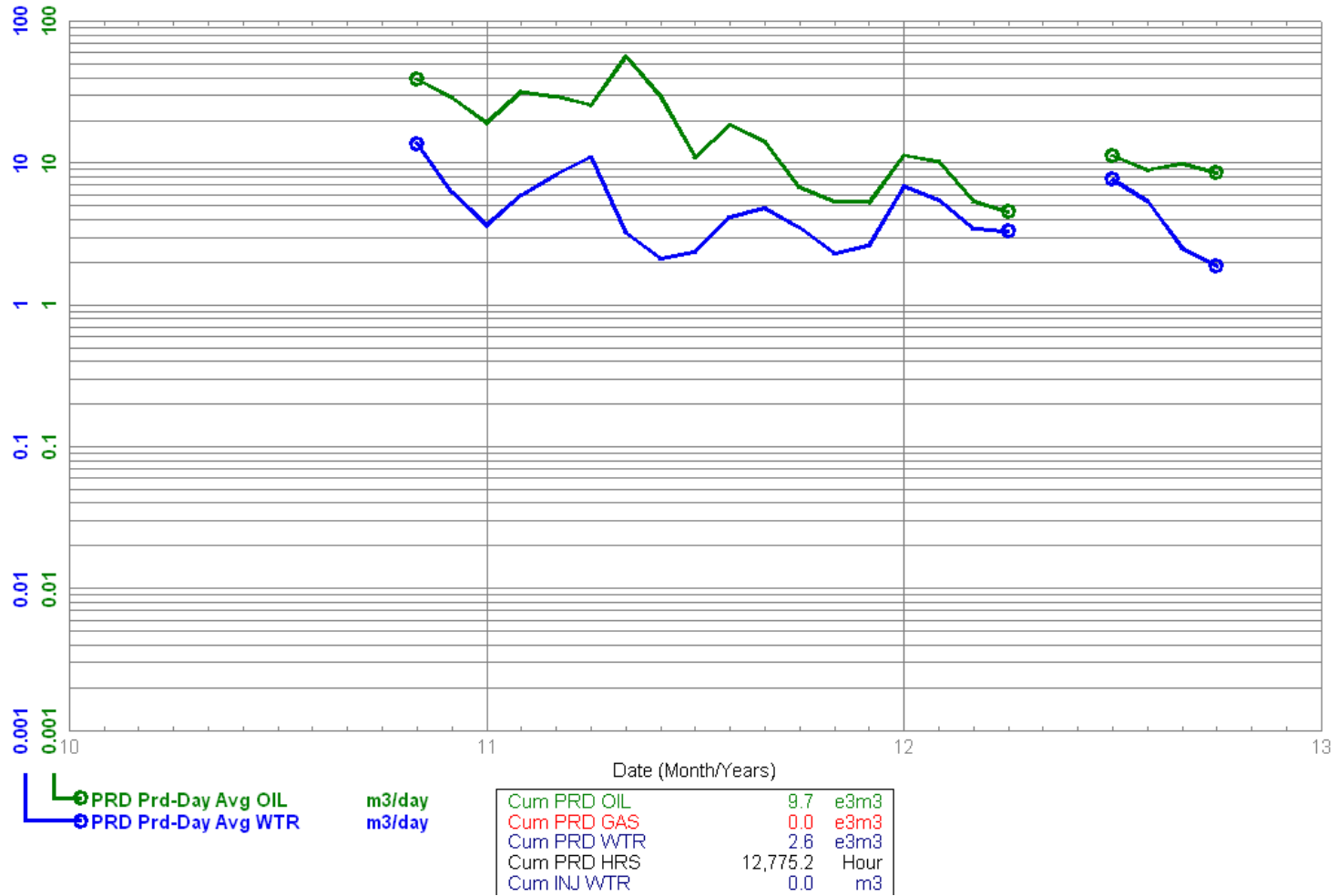
Field: WASKADA (03)
 Pool: LOWER AMARANTH A (29A)
 Unit: WASKADA UNIT NO. 3



Data As Of: 2012-10 (MB)
 From: 2010-11
 To: 2012-10

102/14-36-001-26W1/00
 Waskada Unit No. 3 HZNTL
 Capable Of Oil Prod

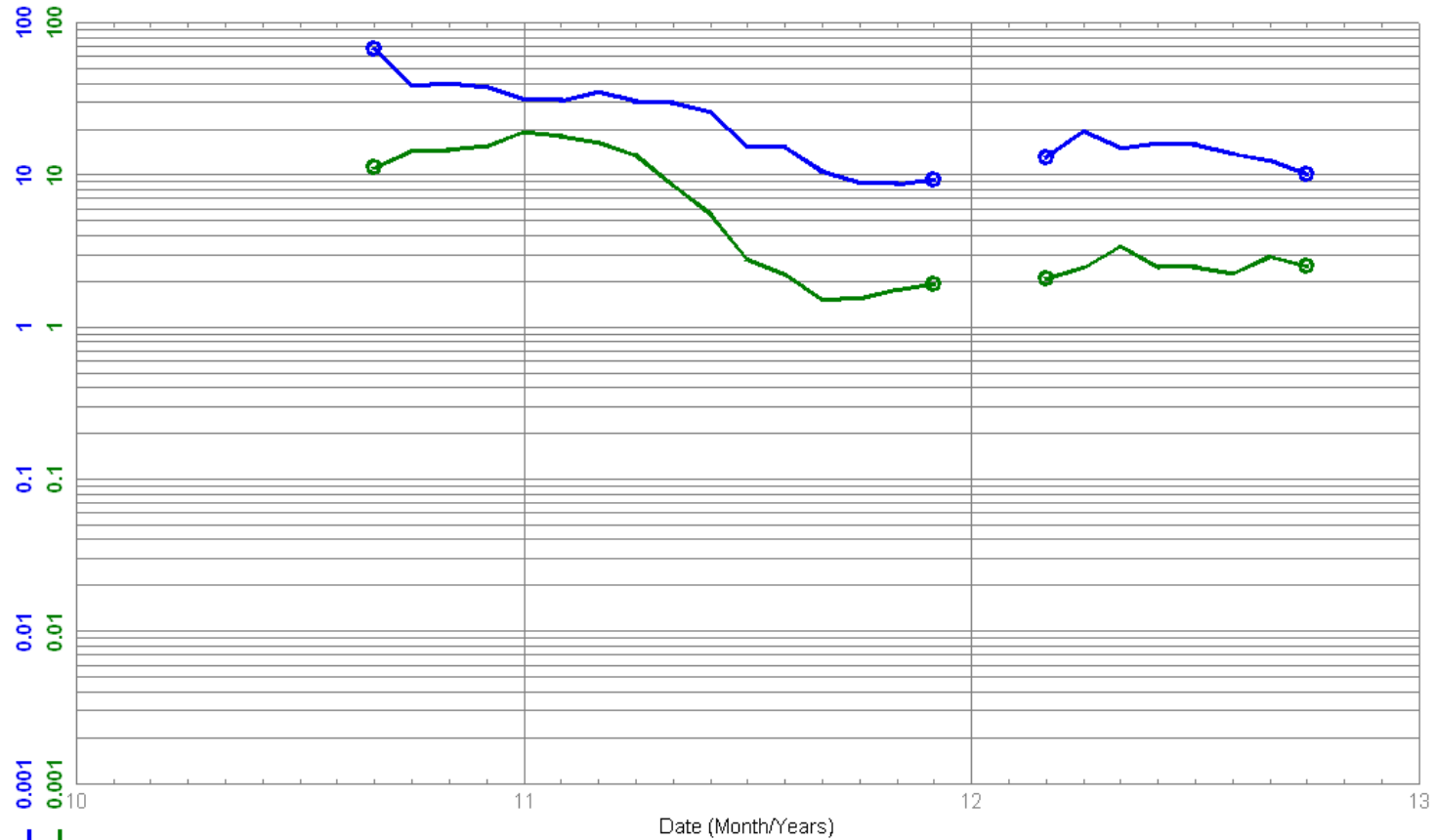
Field: WASKADA (03)
 Pool: LOWER AMARANTH A (29A)
 Unit: WASKADA UNIT NO. 3



Data As Of: 2012-10 (MB)
 From: 2010-09
 To: 2012-10

102/16-31-001-25W1/00
 Waskada Unit No. 3 HZN TL
 Capable Of Oil Prod

Field: WASKADA (03)
 Pool: LOWER AMARANTH A (29A)
 Unit: WASKADA UNIT NO. 3



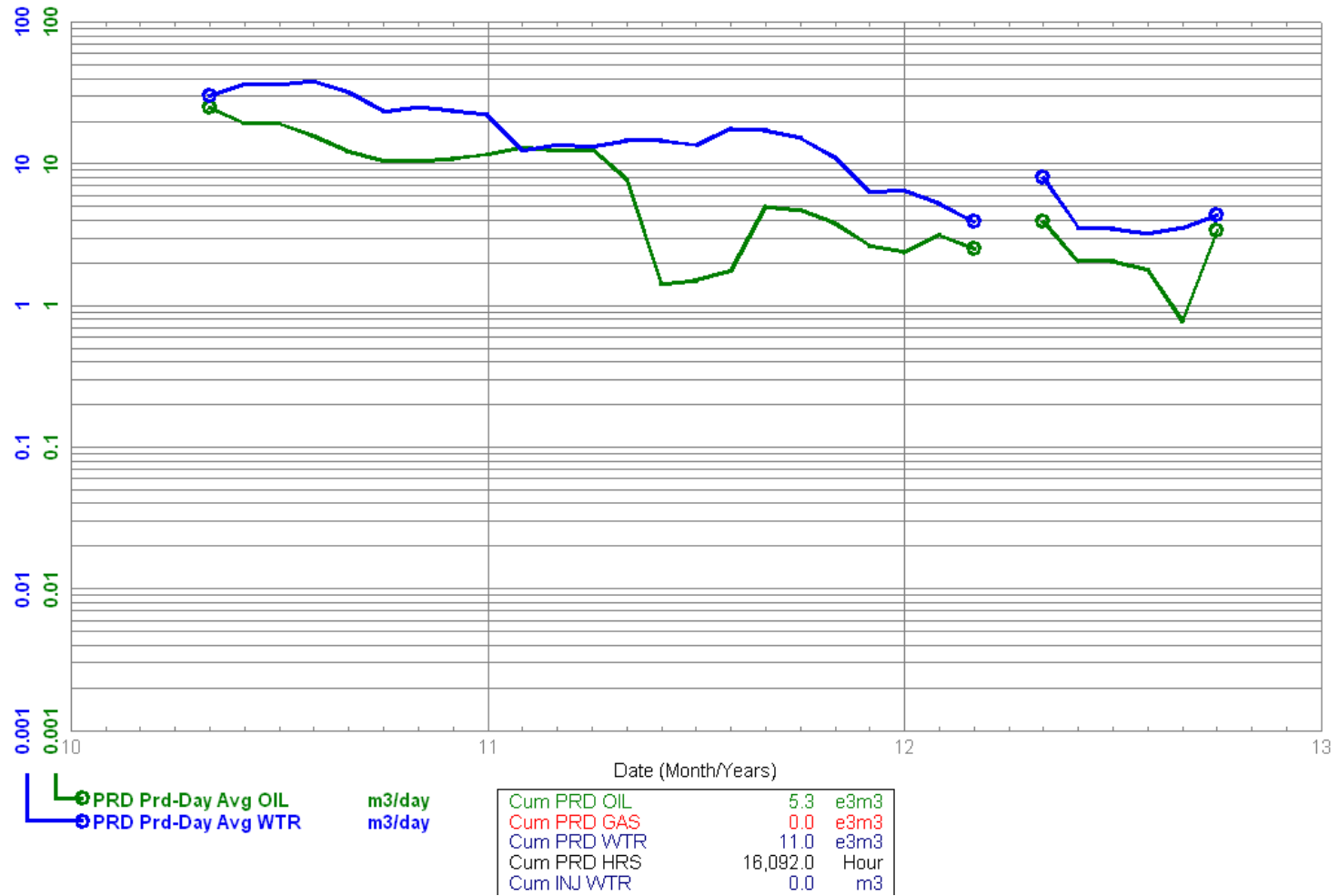
PRD Prd-Day Avg OIL m3/day
 PRD Prd-Day Avg WTR m3/day

Cum PRD OIL	4.4	e3m3
Cum PRD GAS	0.0	e3m3
Cum PRD WTR	13.8	e3m3
Cum PRD HRS	15,499.2	Hour
Cum INJ WTR	0.0	m3

Data As Of: 2012-10 (MB)
 From: 2010-05
 To: 2012-10

102/16-36-001-26W1/00
 Waskada Unit No. 3 HZNTL
 Capable Of Oil Prod

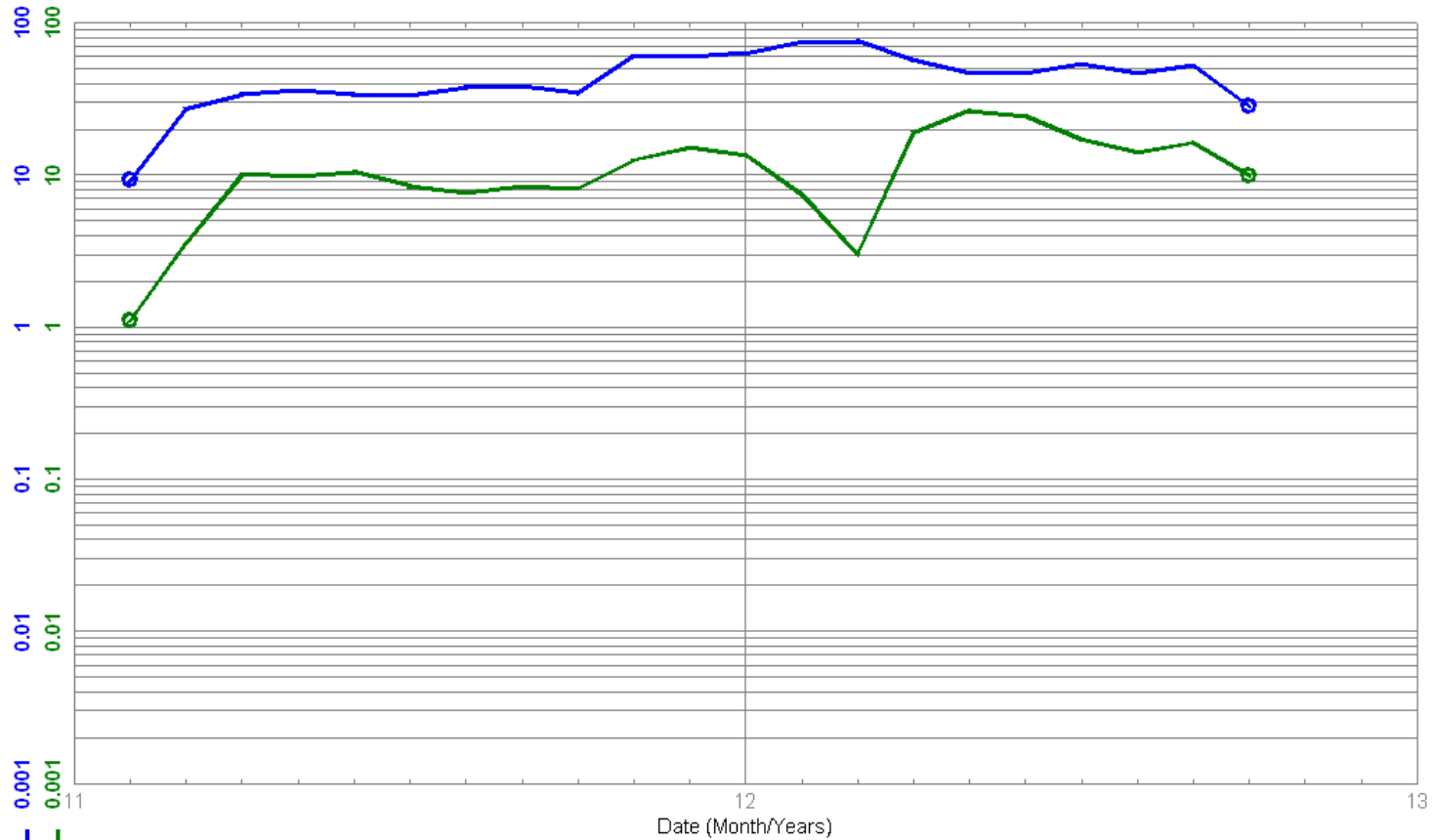
Field: WASKADA (03)
 Pool: LOWER AMARANTH A (29A)
 Unit: WASKADA UNIT NO. 3



Data As Of: 2012-10 (MB)
 From: 2011-02
 To: 2012-10

103/01-05-002-25W1/00
 Waskada Unit No. 3 HZNTL
 Capable Of Oil Prod

Field: WASKADA (03)
 Pool: LOWER AMARANTH A (29A)
 Unit: WASKADA UNIT NO. 3



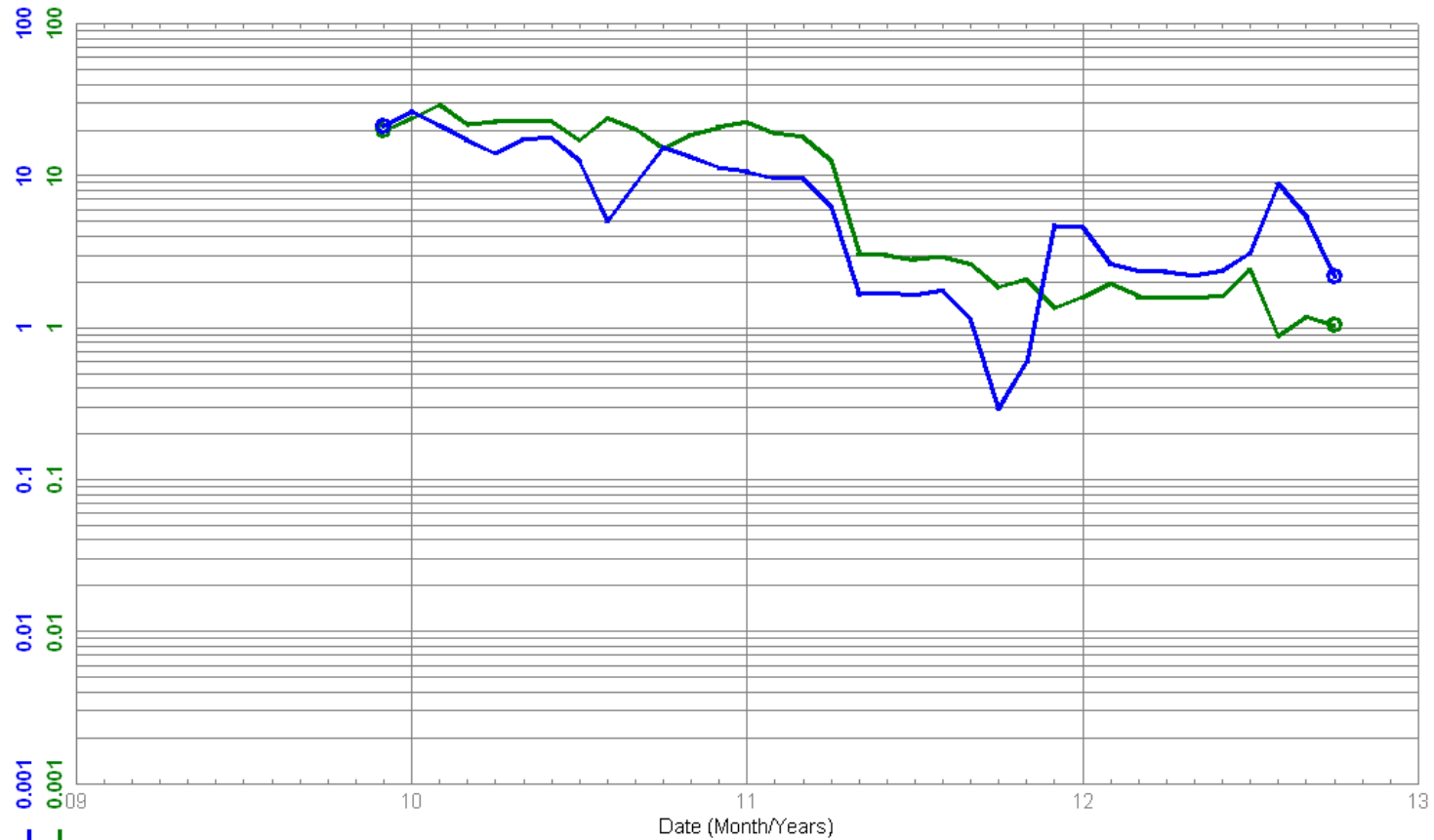
PRD Prd-Day Avg OIL m3/day
 PRD Prd-Day Avg WTR m3/day

Cum PRD OIL	7.1	e3m3
Cum PRD GAS	0.0	e3m3
Cum PRD WTR	26.3	e3m3
Cum PRD HRS	13,346.4	Hour
Cum INJ WTR	0.0	m3

Data As Of: 2012-10 (MB)
 From: 2009-12
 To: 2012-10

103/04-31-001-25W1/00
 Waskada Unit No. 3 HZNTL
 Capable Of Oil Prod

Field: WASKADA (03)
 Pool: LOWER AMARANTH A (29A)
 Unit: WASKADA UNIT NO. 3



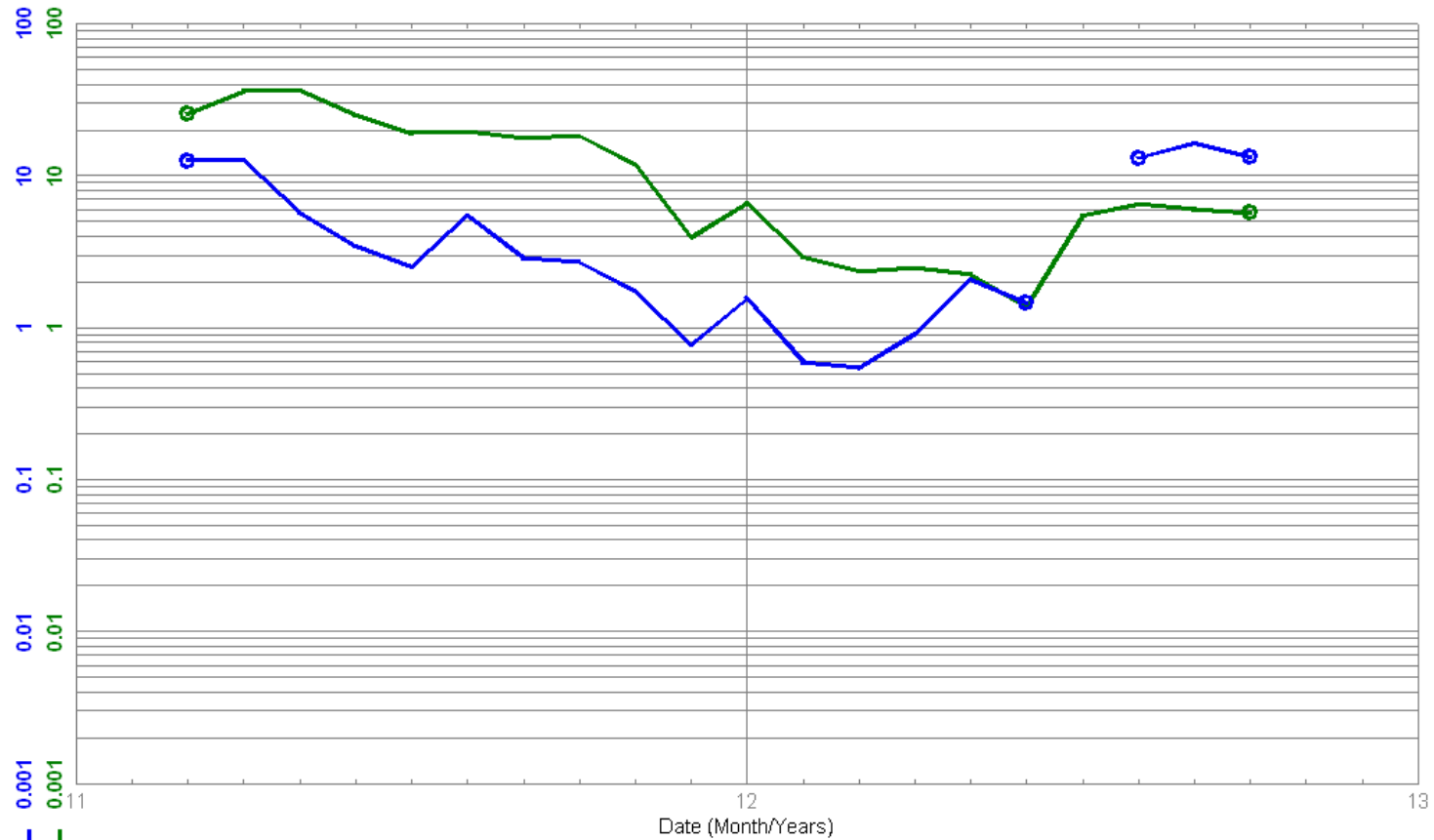
PRD Prd-Day Avg OIL m3/day
 PRD Prd-Day Avg WTR m3/day

Cum PRD OIL	10.5	e3m3
Cum PRD GAS	0.0	e3m3
Cum PRD WTR	7.8	e3m3
Cum PRD HRS	23,424.0	Hour
Cum INJ WTR	0.0	m3

Data As Of: 2012-10 (MB)
 From: 2011-03
 To: 2012-10

103/04-36-001-26W1/00
 Waskada Unit No. 3 HZNTL
 Capable Of Oil Prod

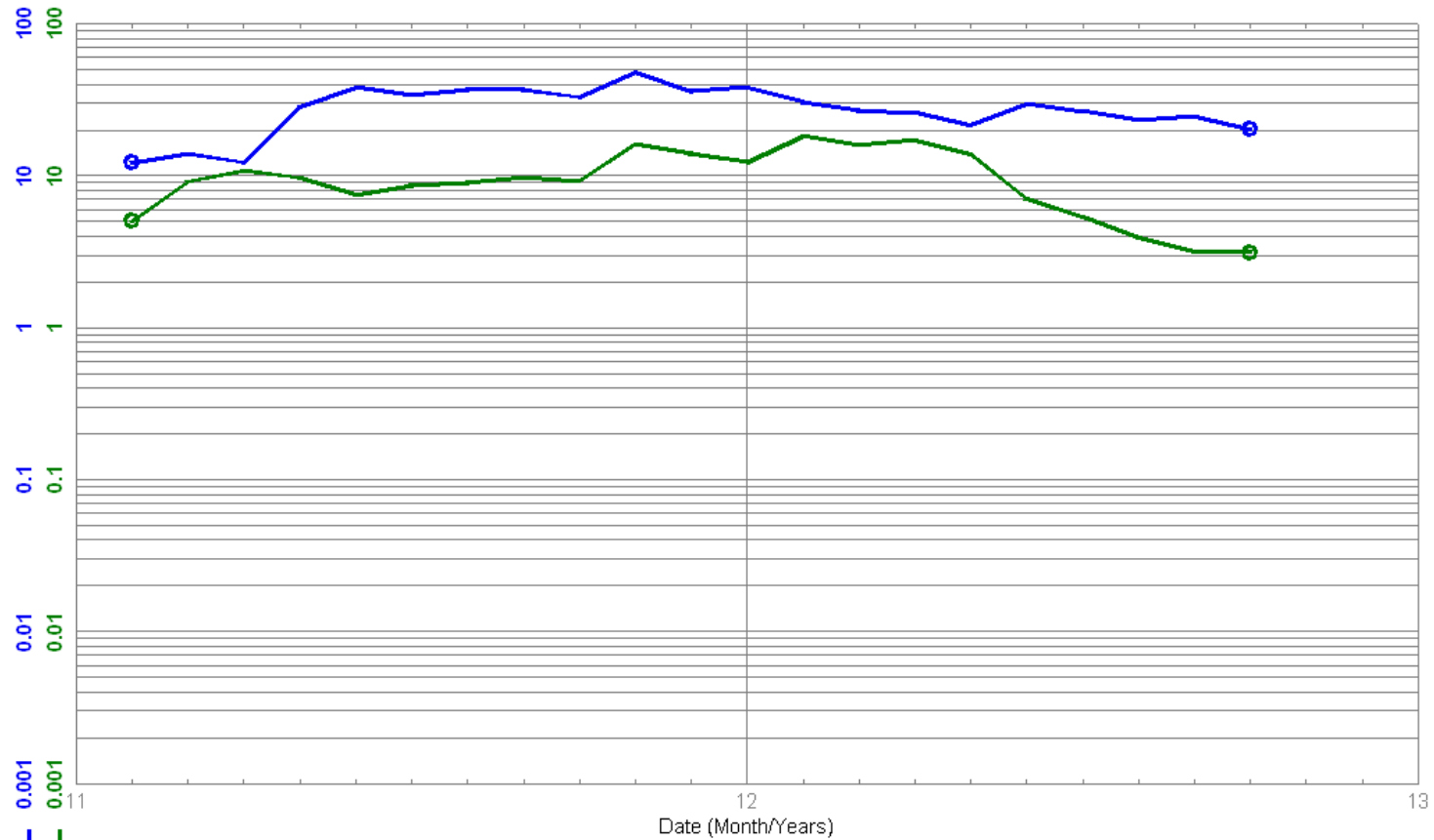
Field: WASKADA (03)
 Pool: LOWER AMARANTH A (29A)
 Unit: WASKADA UNIT NO. 3



Data As Of: 2012-10 (MB)
 From: 2011-02
 To: 2012-10

103/08-05-002-25W1/00
 Waskada Unit No. 3 HZNTL
 Capable Of Oil Prod

Field: WASKADA (03)
 Pool: LOWER AMARANTH A (29A)
 Unit: WASKADA UNIT NO. 3



PRD Prd-Day Avg OIL m3/day
 PRD Prd-Day Avg WTR m3/day

Cum PRD OIL	5.9	e3m3
Cum PRD GAS	0.0	e3m3
Cum PRD WTR	17.0	e3m3
Cum PRD HRS	13,888.8	Hour
Cum INJ WTR	0.0	m3

Data As Of: 2012-10 (MB)
 From: 2011-03
 To: 2012-10

103/08-36-001-26W1/00
 Waskada Unit No. 3 HZNTL
 Capable Of Oil Prod

Field: WASKADA (03)
 Pool: LOWER AMARANTH A (29A)
 Unit: WASKADA UNIT NO. 3



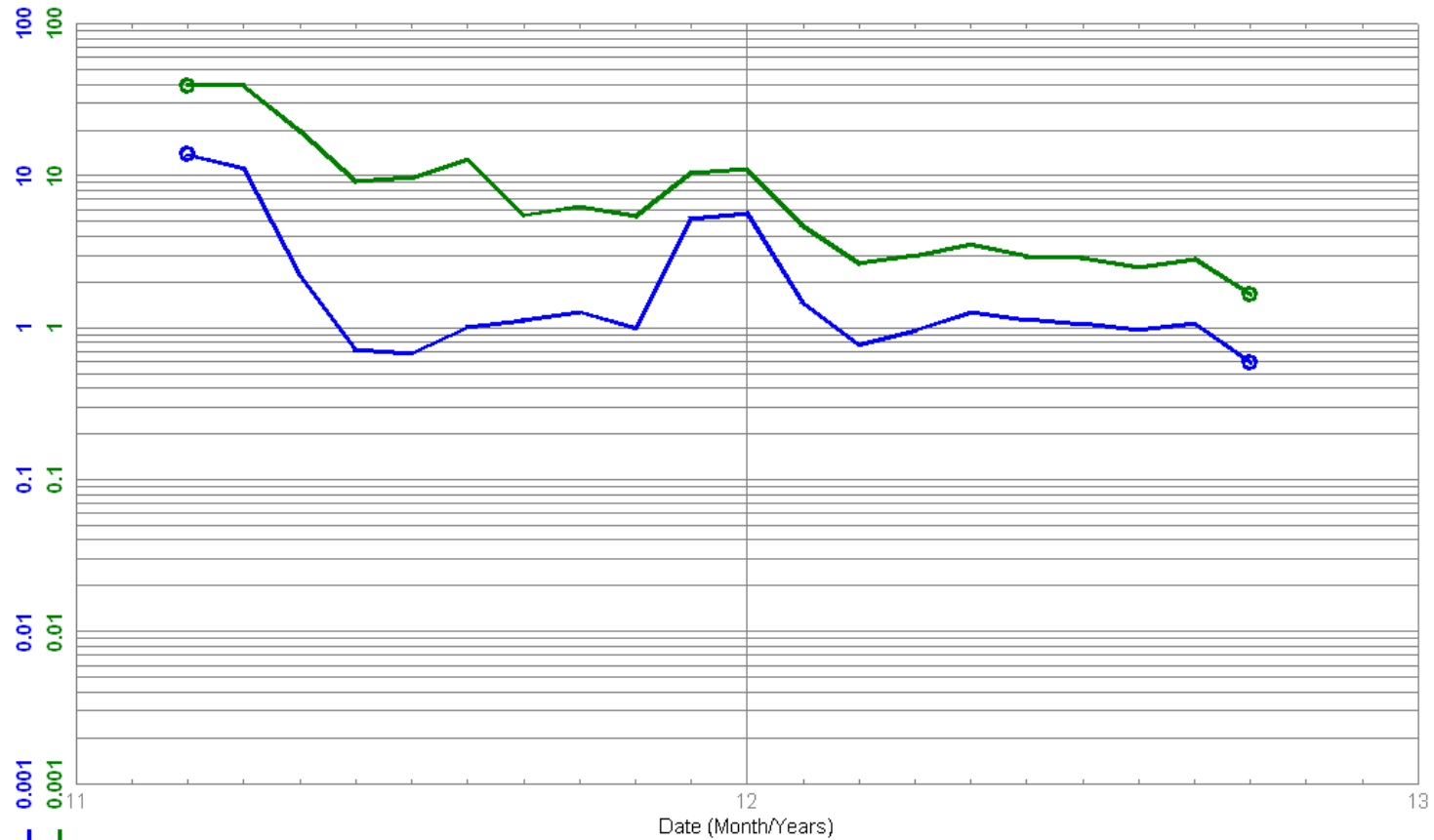
PRD Prd-Day Avg OIL m3/day
 PRD Prd-Day Avg WTR m3/day

Cum PRD OIL	695.4	m3
Cum PRD GAS	0.0	e3m3
Cum PRD WTR	4.8	e3m3
Cum PRD HRS	11,772.0	Hour
Cum INJ WTR	0.0	m3

Data As Of: 2012-10 (MB)
 From: 2011-03
 To: 2012-10

103/09-35-001-26W1/00
 Penn West Waskada HZNTL
 Capable Of Oil Prod

Field: WASKADA (03)
 Pool: LOWER AMARANTH A (29A)
 Unit:



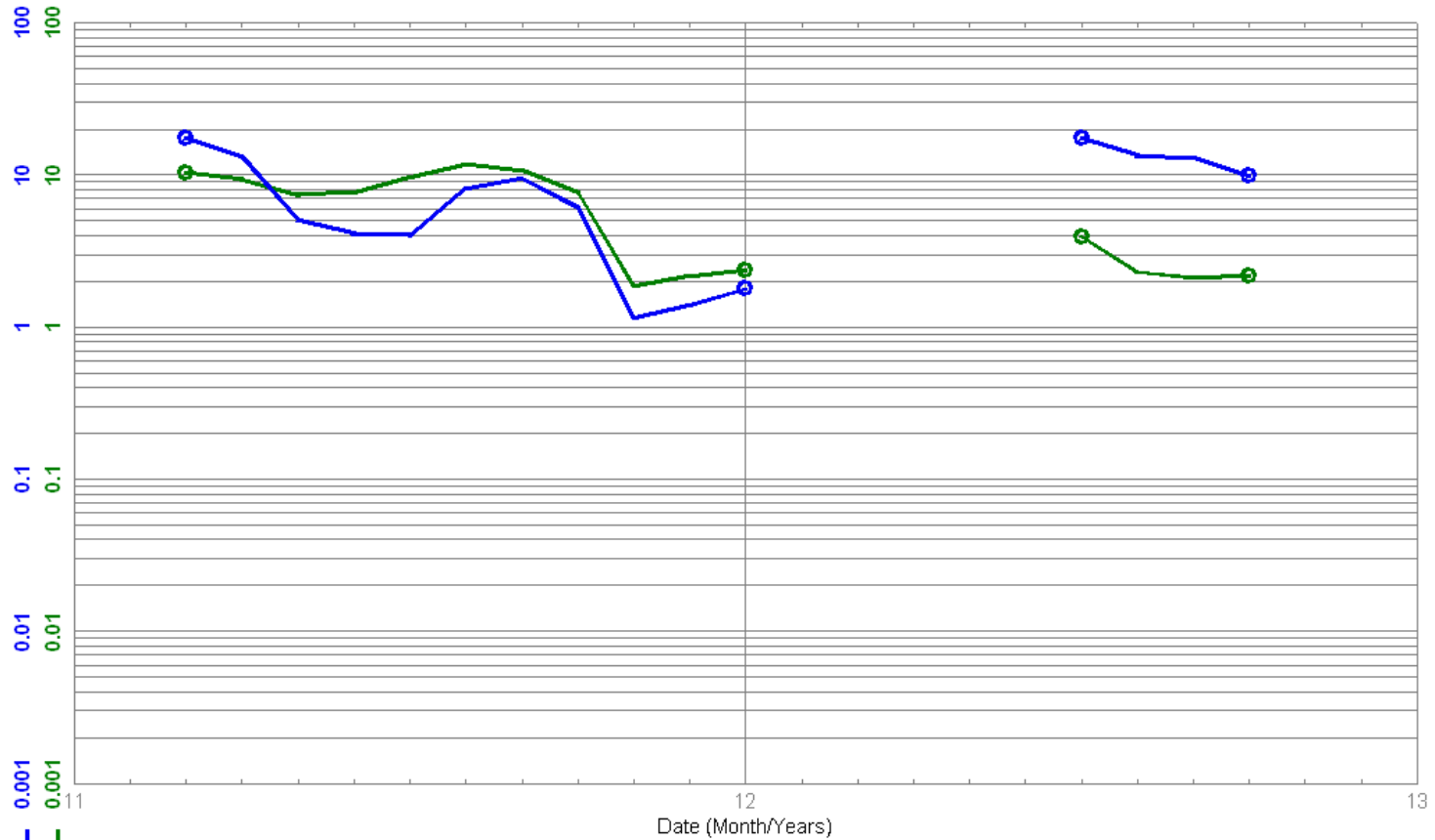
PRD Prd-Day Avg OIL m3/day
 PRD Prd-Day Avg WTR m3/day

Cum PRD OIL	4.8	e3m3
Cum PRD GAS	0.0	e3m3
Cum PRD WTR	1.4	e3m3
Cum PRD HRS	12,715.2	Hour
Cum INJ WTR	0.0	m3

Data As Of: 2012-10 (MB)
 From: 2011-03
 To: 2012-10

103/09-36-001-26W1/00
 Waskada Unit No. 3 HZNTL
 Capable Of Oil Prod

Field: WASKADA (03)
 Pool: LOWER AMARANTH A (29A)
 Unit: WASKADA UNIT NO. 3



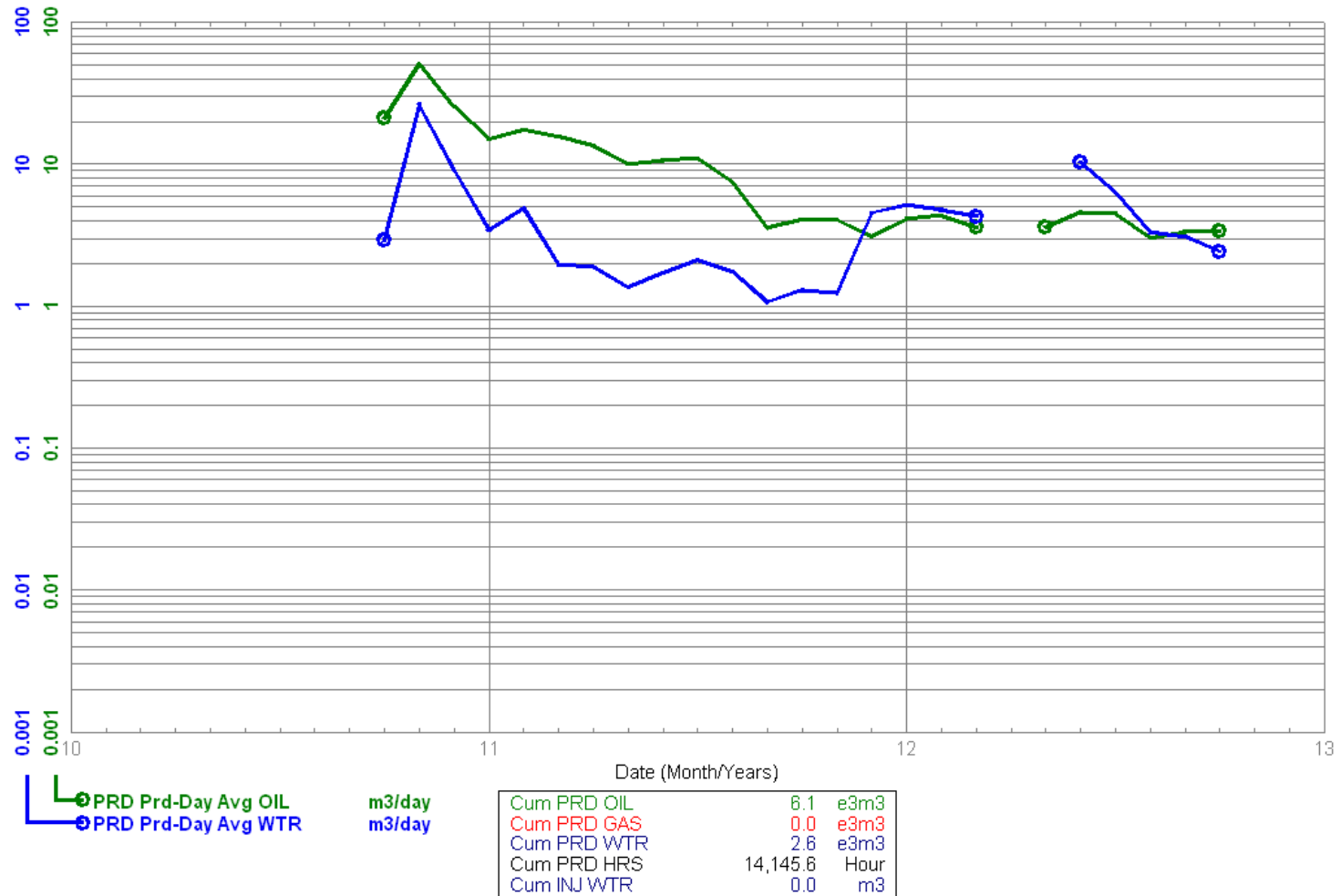
PRD Prd-Day Avg OIL m3/day
 PRD Prd-Day Avg WTR m3/day

Cum PRD OIL	2.4	e3m3
Cum PRD GAS	0.0	e3m3
Cum PRD WTR	3.0	e3m3
Cum PRD HRS	9,645.6	Hour
Cum INJ WTR	0.0	m3

Data As Of: 2012-10 (MB)
 From: 2010-10
 To: 2012-10

103/14-36-001-26W1/00
 Waskada Unit No. 3 HZNTL
 Capable Of Oil Prod

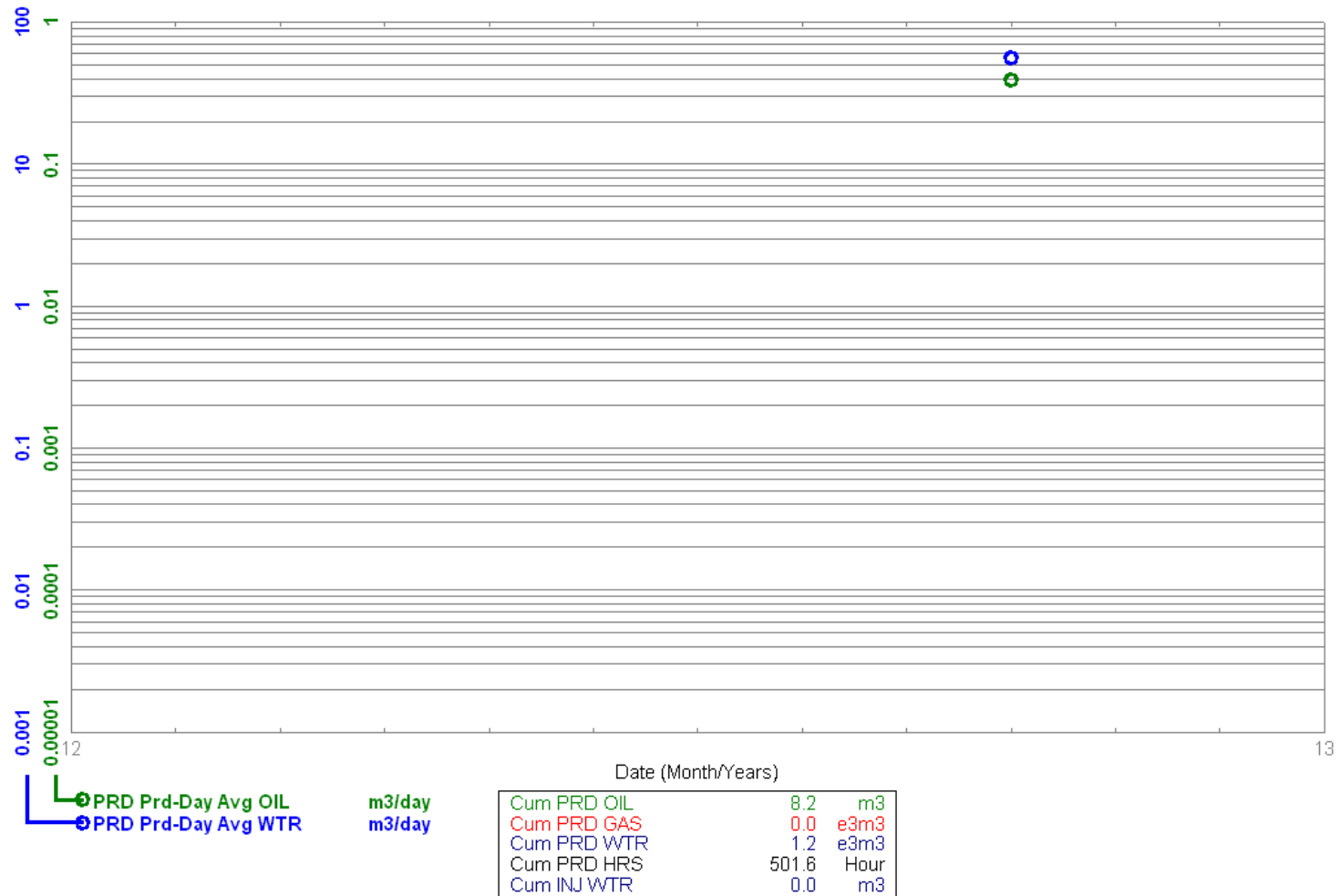
Field: WASKADA (03)
 Pool: LOWER AMARANTH A (29A)
 Unit: WASKADA UNIT NO. 3



Data As Of: 2012-10 (MB)
 From: 2012-10
 To: 2012-10

103/16-30-001-25W1/00
 Waskada Unit No. 3 HZNTL
 Capable Of Oil Prod

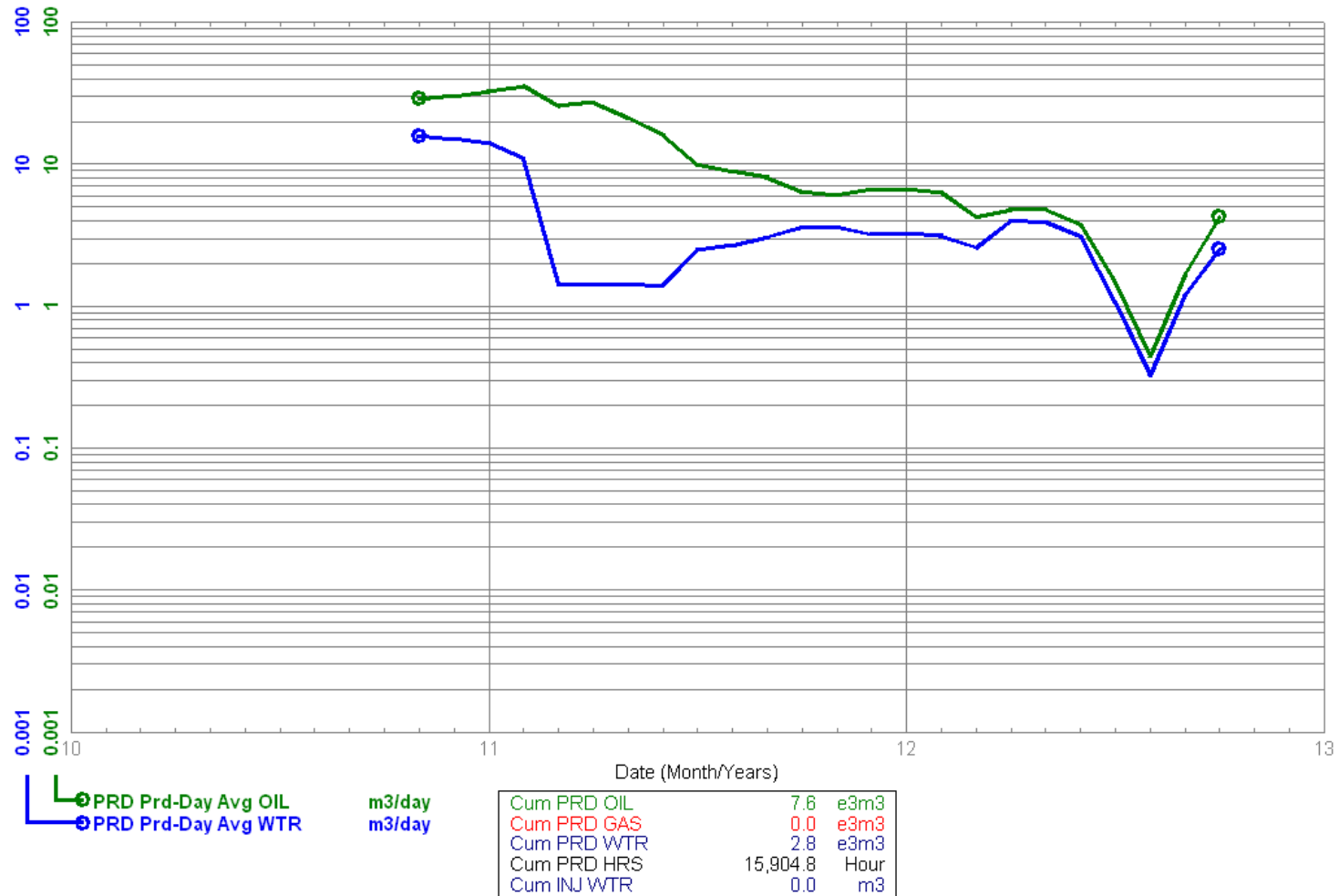
Field: WASKADA (03)
 Pool: LOWER AMARANTH A (29A)
 Unit: WASKADA UNIT NO. 3



Data As Of: 2012-10 (MB)
 From: 2010-11
 To: 2012-10

103/16-36-001-26W1/00
 Waskada Unit No. 3 HZNTL
 Capable Of Oil Prod

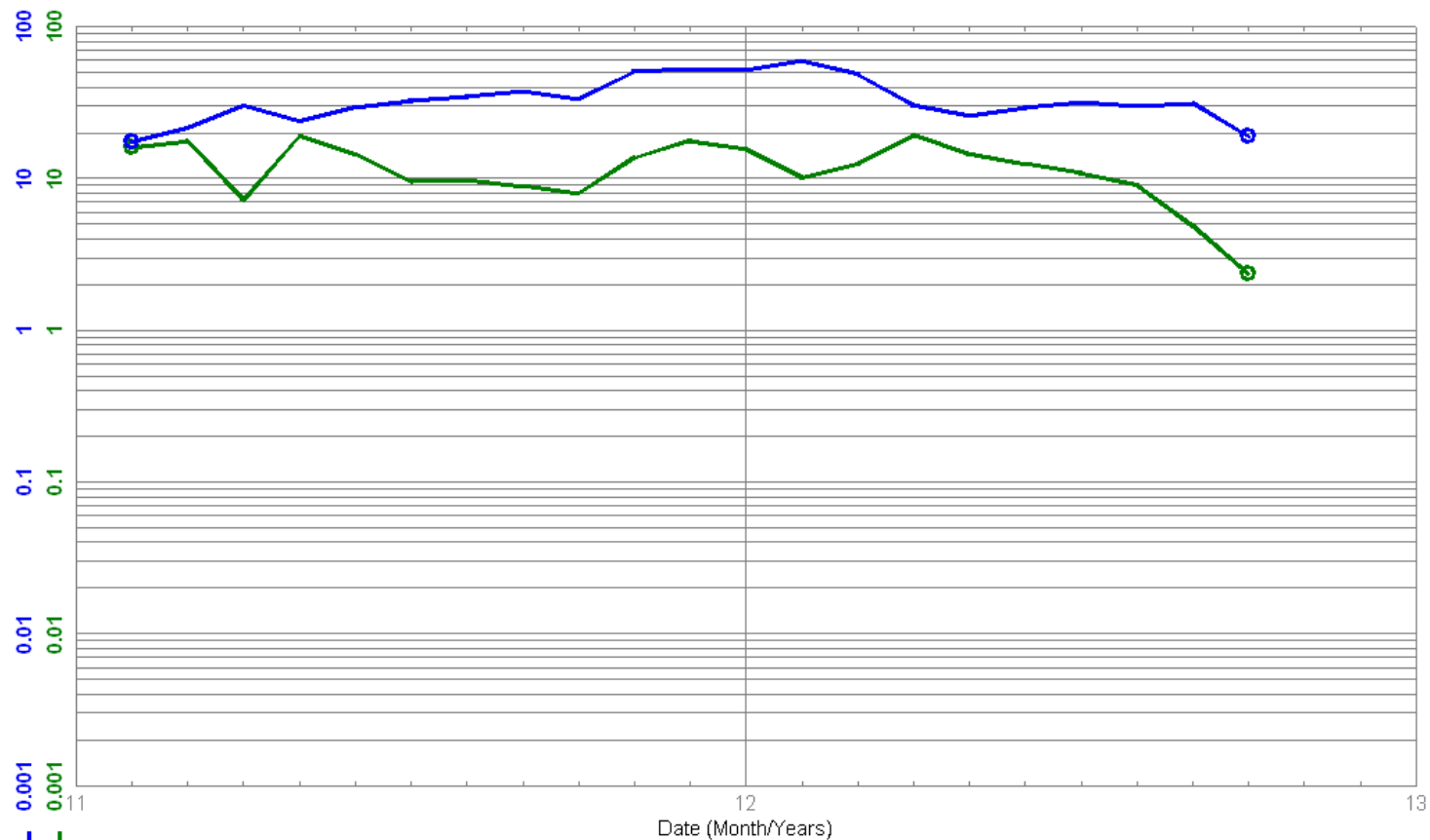
Field: WASKADA (03)
 Pool: LOWER AMARANTH A (29A)
 Unit: WASKADA UNIT NO. 3



Data As Of: 2012-10 (MB)
 From: 2011-02
 To: 2012-10

104/01-05-002-25W1/00
 Waskada Unit No. 3 HZNTL
 Capable Of Oil Prod

Field: WASKADA (03)
 Pool: LOWER AMARANTH A (29A)
 Unit: WASKADA UNIT NO. 3



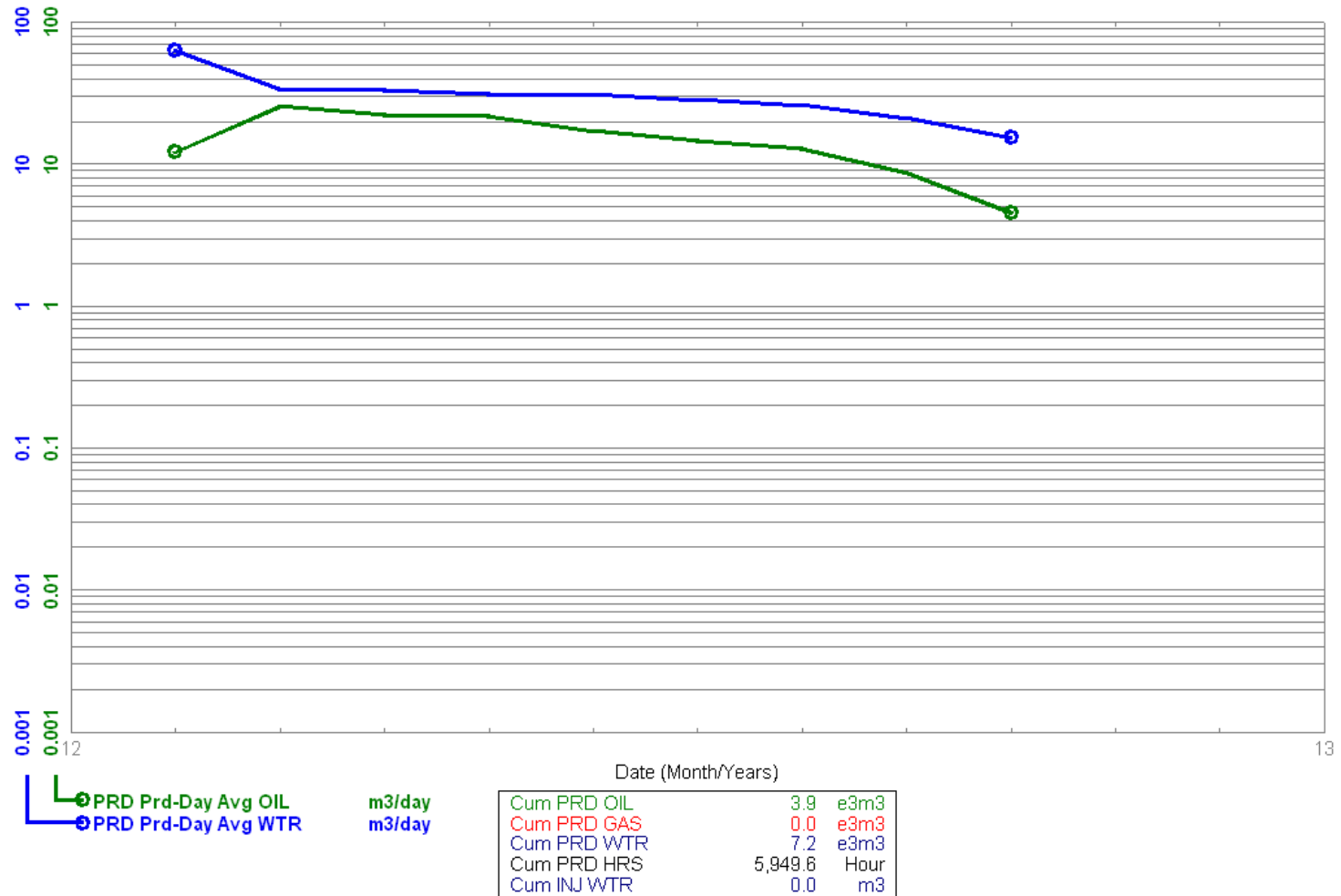
PRD Prd-Day Avg OIL m3/day
 PRD Prd-Day Avg WTR m3/day

Cum PRD OIL	7.0	e3m3
Cum PRD GAS	0.0	e3m3
Cum PRD WTR	20.4	e3m3
Cum PRD HRS	14,133.6	Hour
Cum INJ WTR	0.0	m3

Data As Of: 2012-10 (MB)
 From: 2012-02
 To: 2012-10

104/04-05-002-25W1/00
 Waskada Unit No. 3 HZNTL
 Capable Of Oil Prod

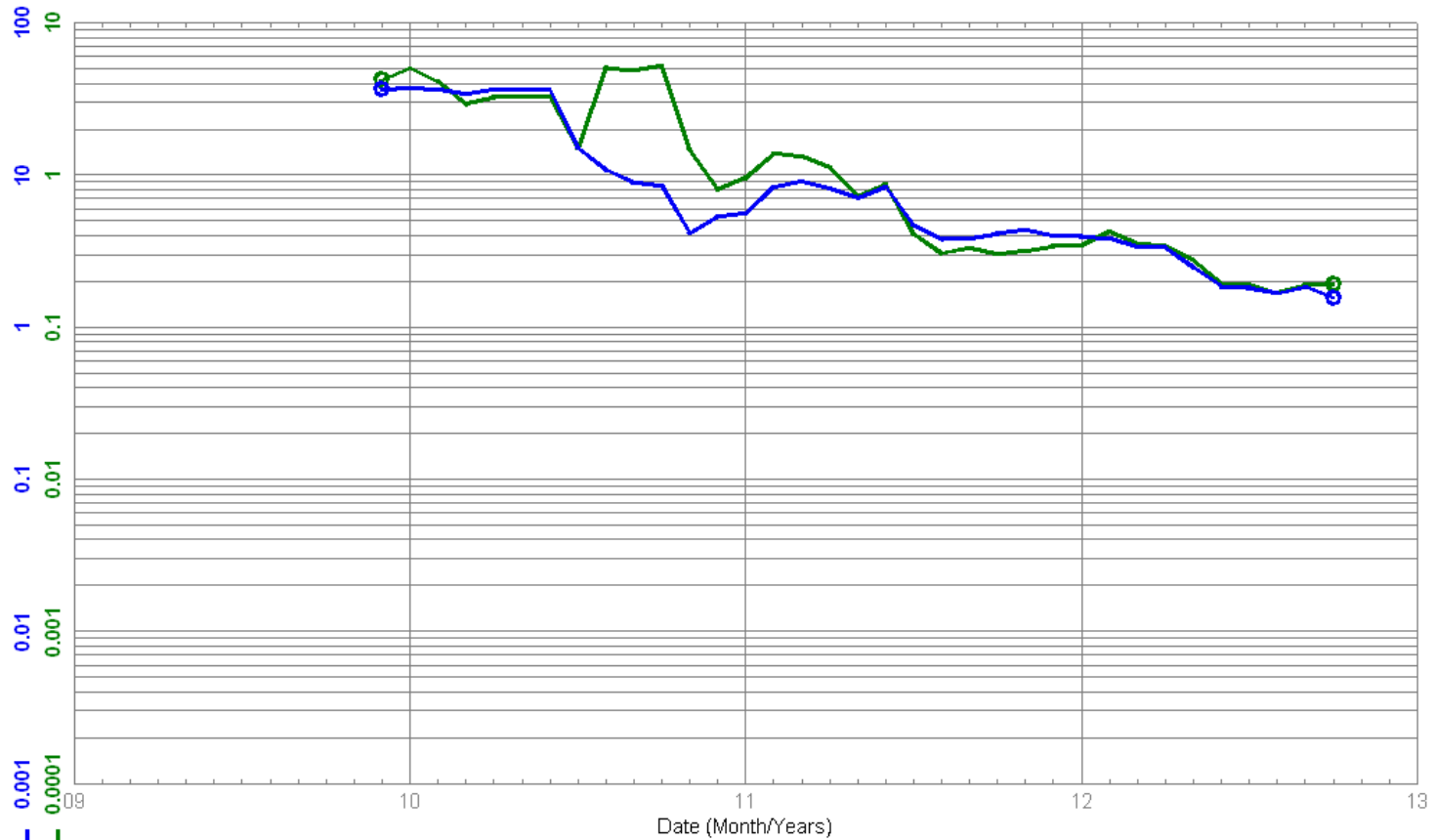
Field: WASKADA (03)
 Pool: LOWER AMARANTH A (29A)
 Unit: WASKADA UNIT NO. 3



Data As Of: 2012-10 (MB)
 From: 2009-12
 To: 2012-10

104/04-31-001-25W1/00
 Waskada Unit No. 3 HZNLT
 Capable Of Oil Prod

Field: WASKADA (03)
 Pool: LOWER AMARANTH A (29A)
 Unit: WASKADA UNIT NO. 3



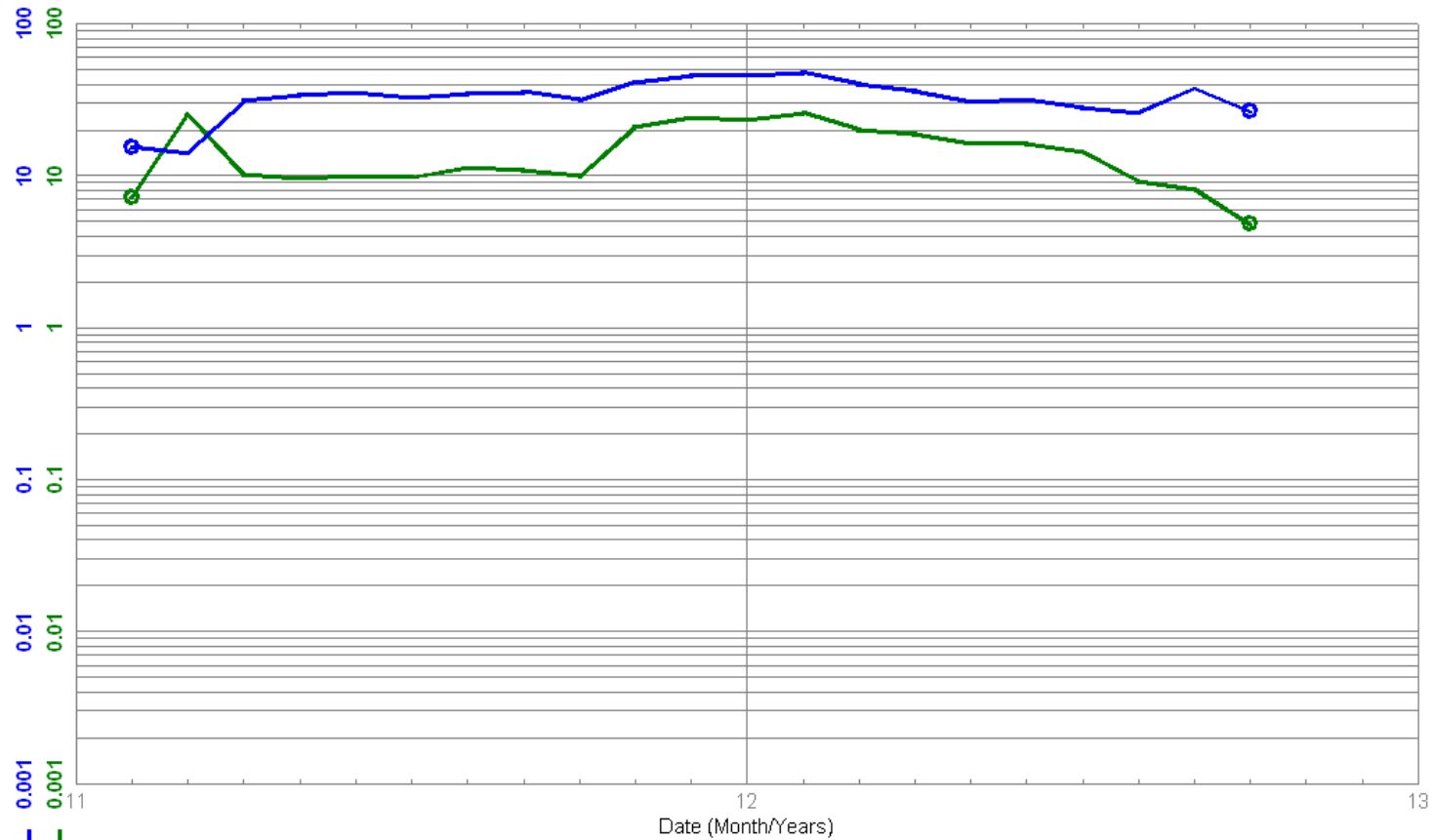
PRD Prd-Day Avg OIL m3/day
 PRD Prd-Day Avg WTR m3/day

Cum PRD OIL	1.5	e3m3
Cum PRD GAS	0.0	e3m3
Cum PRD WTR	11.3	e3m3
Cum PRD HRS	23,832.0	Hour
Cum INJ WTR	0.0	m3

Data As Of: 2012-10 (MB)
 From: 2011-02
 To: 2012-10

104/08-05-002-25W1/00
 Waskada Unit No. 3 HZNTL
 Capable Of Oil Prod

Field: WASKADA (03)
 Pool: LOWER AMARANTH A (29A)
 Unit: WASKADA UNIT NO. 3



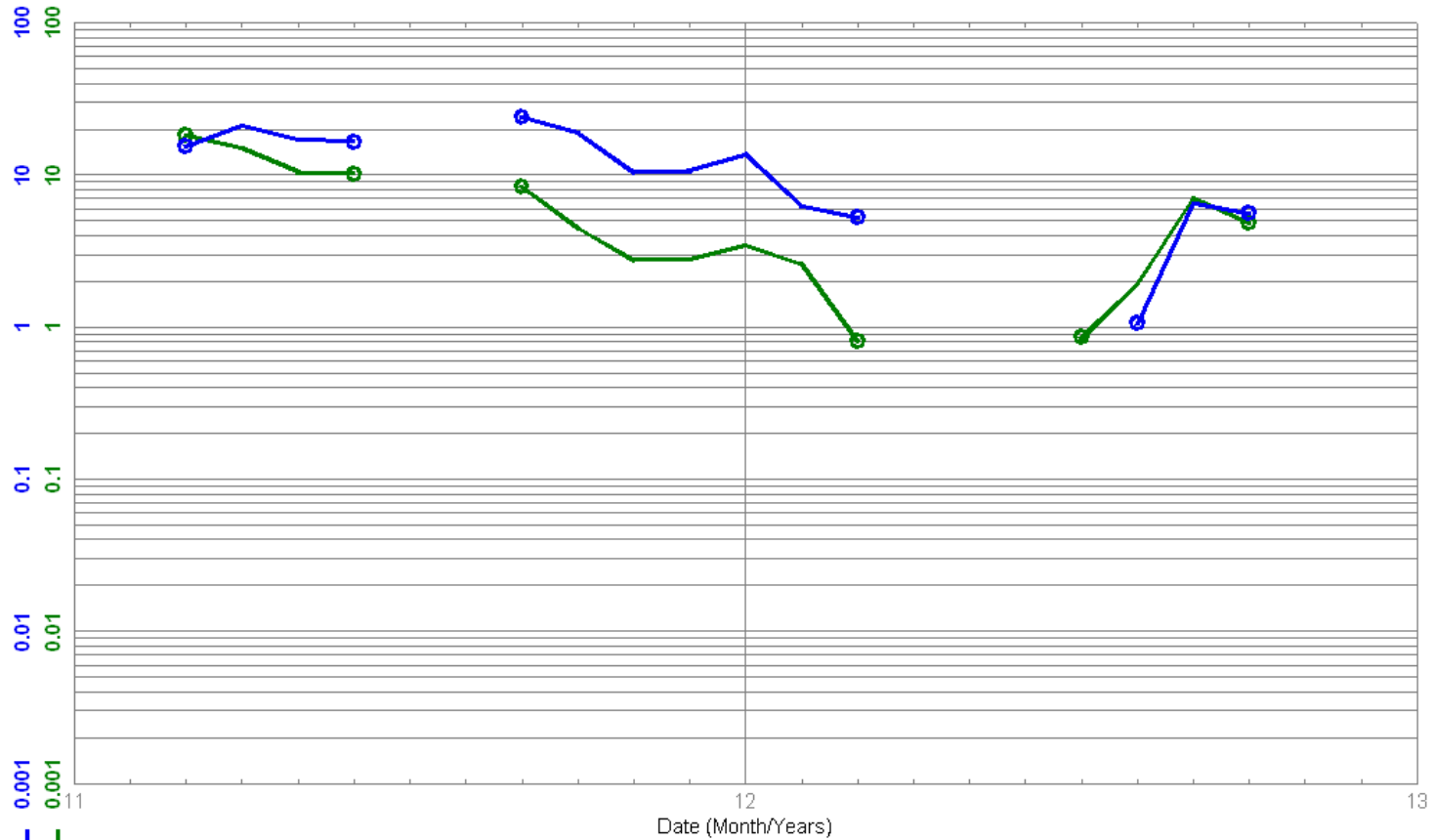
PRD Prd-Day Avg OIL m3/day
 PRD Prd-Day Avg WTR m3/day

Cum PRD OIL	8.7	e3m3
Cum PRD GAS	0.0	e3m3
Cum PRD WTR	20.0	e3m3
Cum PRD HRS	14,030.4	Hour
Cum INJ WTR	0.0	m3

Data As Of: 2012-10 (MB)
 From: 2011-03
 To: 2012-10

104/09-36-001-26W1/00
 Waskada Unit No. 3 HZNTL
 Capable Of Oil Prod

Field: WASKADA (03)
 Pool: LOWER AMARANTH A (29A)
 Unit: WASKADA UNIT NO. 3



PRD Prd-Day Avg OIL m3/day
 PRD Prd-Day Avg WTR m3/day

Cum PRD OIL	2.1	e3m3
Cum PRD GAS	0.0	e3m3
Cum PRD WTR	4.0	e3m3
Cum PRD HRS	7,732.8	Hour
Cum INJ WTR	0.0	m3

