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MAR 31 2009

PUBLIC SERVICE  
COMMISSION

March 31, 2009

Mr. Jeff DeRouen  
Executive Director  
Kentucky Public Service Commission  
211 Sower Boulevard  
P. O. Box 615  
Frankfort, KY 40602

Dear Mr. DeRouen,

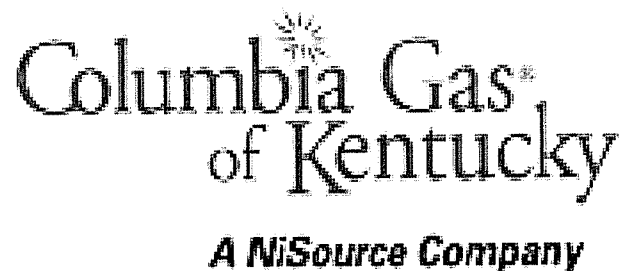
Pursuant to the Commission's Order of February 26, 2001 in Case No. 2000-429, Columbia Gas of Kentucky, Inc. hereby files its annual report for the Statistical Meter Testing Plan. An original and three copies are enclosed.

If you have any questions, please call me at (859) 288-0242. Thank you.

Sincerely,



Judy M. Cooper  
Director, Regulatory Policy



# Columbia Gas of Kentucky, Inc.

2009

## Meter Sampling Annual Report, for program year 2008

Columbia Gas of Kentucky, Inc.  
A NiSource Company  
P.O. Box 14241  
2001 Mercer Road  
Lexington, KY 40512-4241

March 2009

<b>1</b>	<b>2008 Meter Sample Annual Report</b>
<b>2</b>	<b>Exhibit A Identification of Control Groups</b>
<b>3</b>	<b>Exhibit B Domestic Meters Test Results</b>
<b>4</b>	<b>Exhibit C Large Volume Meters Test Results</b>
<b>5</b>	<b>Exhibit D Percentage of Domestic Meter Accuracy by Family</b>
<b>6</b>	<b>Exhibit E Percentage of Large Volume Meter Accuracy by Family</b>
<b>7</b>	<b>Exhibit F Cost Savings</b>
<b>8</b>	<b>Exhibit G Test Results of New Meters</b>



**COLUMBIA GAS OF KENTUCKY INC.**

**2008 METER SAMPLING ANNUAL REPORT**

Columbia Gas of Kentucky completed the thirteenth year of their meter-sampling program in December 2008.

A total of 4832 meters making up 34 homogenous groups were sampled in 2008. One poor performing sub-group was also removed and retired. Details are listed in the Evaluation of Data and Corrective Actions below.

In 2008 Columbia Gas of Kentucky service personnel made 42,532 visits to our customers' premises working orders that involved inspecting house lines and / or appliances. Columbia inspected 54,937 meter set assemblies in conjunction with the Customer Service Line Survey program.

No regulator failure in 2008 resulted in overpressure being delivered to the customer's piping.

Columbia continues to promote safety through:

News Releases

- 5/13/08 – Call before you dig release

Bill Inserts

- Monthly – The “Welcome to Columbia Gas of Kentucky” insert is sent to new customers and includes information about maintenance of customer-owned buried gas lines and Kentucky 811.
- 1/08 – For Your Safety & Comfort bill insert to all residential and small commercial customers included information about carbon monoxide poisoning prevention.

- 1/08 – Gaslines customer newsletter included articles about preventing carbon monoxide poisoning and the dangers associated with energy theft.
- 2/08 – Scratch-n-sniff bill insert provides odor of gas awareness to all residential and small commercial customers. Insert also runs in initial customer bills.
- 4/08 – Gaslines customer newsletter included article about how to detect a natural gas leak and what to do if one is suspected. Also included article about Kentucky 811.
- 6/08 – Bill message to all residential and small commercial customers in meter locations 02, 10, 26, 68 and 70 regarding customer-owned gas lines.
- 7/08 – Gaslines customer newsletter included article about gas connectors.
- 10/08 – Gaslines customer newsletter included articles about what to do in case of flooding and carbon monoxide.

### Web Site

- Safety tips (English & Spanish)
- Kentucky 811 information and link
- Speaker Request Form where groups can request a speaker regarding natural gas safety
- Ask Us form where customers can email safety-related and other questions to CKY staff
- Current and previous issues of Gaslines customer newsletter and other bill inserts
- Press releases

### Community Outreach

- Customer letters, door hangers and neighborhood presentations associated with large pipeline replacement projects
- 7/10/08 – Participated with Kentucky Public Service Commission and Kentucky 811 in press conference about new damage prevention legislation

### Message On Hold

- Customers waiting to speak with a customer service representative hear messages on a variety of topics, including Call Before You Dig, carbon monoxide, how to recognize a gas leak and what to do, meter tampering, appliance safety, etc.

### Advertising

Two safety ads – focusing on Call Before You Dig and leak recognition – were placed in print and online publications in April-June and October-November. Print publication locations included: Lexington, Ashland, Floyd County, Maysville, Winchester, Paris, Frankfort, Mt. Sterling, and Irvine. Online banner ads appeared on DailyIndependent.com and Kentucky.com.

### Excavator/Emergency Responder Training

Sponsored natural gas safety training sessions for excavators and first responders in May-June. Locations included: Mt. Sterling, Olive Hill, Prestonsburg, Hazard, Richmond, Lexington and Maysville.

Columbia Gas of Kentucky feels we are continuing to improve the quality of measurement provided to our customer through the meter-sampling program. In 2008 we improved the overall performance of meters removed for meter sampling. We have seen a 2.0% improvement of domestic meters that test within tolerance and a 7.1% improvement of large volume meters that test within tolerance since our meter sampling program began.

### Evaluation of Data

- A total of 4648 domestic meters making up 28 homogenous Control Groups were sampled in 2008.
  - Of the 4648 meters sampled 146 tested outside the required accuracy of +/- 2% and were classified a failed meter.
  - 3.1% of the domestic meters pulled for meter sampling failed
  - 27 homogenous Control Groups passed the requirements of American National Standards Institute / American Society for Quality Control Z 1.4
  - Control group NSP02, did not pass the requirements of American National Standards Institute / American Society for Quality Control Z 1.4  
7 meters in NSP02 were classified as failed meters.  
Columbia has identified this group of 181 meters which will be removed from service and retired prior to December 2009.

- A total of 184 Large Volume meters making up 6 homogenous Control Groups were sampled in 2008.
- Of the 184 meters sampled 0 tested outside the required accuracy of +/- 2% and were classified a failed meter
- 0.0% of Columbia Gas of Kentucky's Large Volume meters failed.
- All 6 Large Volume homogenous Control Groups passed the requirements of American National Standards Institute / American Society for Quality Control Z 1.4

#### Failed Group

- In 2008, based on the requirements of American National Standards Institute / American Society for Quality Control Z 1.4, Control group NSP02 consisting of new Sprague Metris 760 meters purchased in 1997 failed. As stated in the evaluation data these will be removed and retired prior to December 2009.

#### Aggressive Group

- As a result of the 2007 Sampling Program, the sub-group KYRAMAG from Control Group KYRAM01 and KYRAM02, was identified as a group of poor performing meters. This group consisted of repaired American meters installed from 1985 through 1988, was removed and retired. The sub-group consisted of 1425 domestic American meters, 137 or 9.6% failed the required accuracy of +/- 2%.

#### Aggressive Removal of Poor Performers

By removing subgroups from KYRAM01 and KYRAM02 we have maintained the performance of that group. It continues to perform well within accepted tolerance. However, due to the past performance of this group, Columbia has made a decision to remove and retire a sub-group of 292 meters by the end of 2009.

The sub-group will consist of repaired American meters installed between 1985 & 1987.

Columbia also identified group RSP02 as performing poorly and has made a decision to remove and retire this group of 68 meters by the end of 2009.



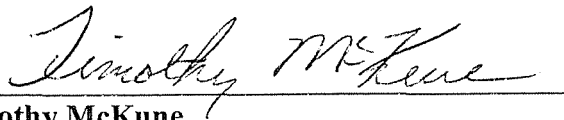
### Corrective Action

- Sub group from Control Group KYRAM01 was removed from service and retired in 2008.
- Sub-group KYRAM01 from poor performing, repaired American meters installed between 1985 & 1987 will be removed and retired by the end of 2009.
- Group RSP02 is performing poorly and will be removed and retired by the end of 2009.
- Columbia Gas of Kentucky will continue to in-test and retire, when pulled from service, meters that have established a poor performance record though their group has not failed. In previous filings we have listed individual meters that are retired due to poor performance. We are now in-testing and retiring all meters purchased prior to 1994. This eliminates a poor performing meters from being re- installed.

### Regulator Failures

- Columbia Gas of Kentucky had 14 regulator failures in 2008. Due to full internal relief of the regulator, none resulted in an overpressure situation for the customer.
  - 11 regulators had gas leakage from the vent.
  - 3 regulators would not adjust or lock up correctly.

Should you have any questions contact Timothy McKune at (859) 288-0241.



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Timothy McKune  
Compliance Specialist  
Columbia Gas of Kentucky

**EXHIBIT A**

**IDENTIFICATION OF EACH CONTROL GROUP**  
**OR METER FAMILIES**

**A five-character number identifies each Control Group or Family. 1-2-3-4-5**

**1 Identifies if Control Group or Family is new or repaired meters**

**N = New**  
**R = Repaired**

**2-3 Identifies Meter Manufacturer**

**AM = American**  
**RO = Rockwell**  
**LA = Lancaster**  
**SP = Sprague**

**4-5 Identifies the age of the Group or Family**

**Example – Identifier RAM01 indicates a Repaired American Meter. The 01 represents the oldest group of repaired American meters. A detail of the age of each group is found in Exhibit D & E.**

**Large Volume meters 500 – 1500 CFH follow the same format with a “B” in front of the identifier.**

**EXHIBIT B**

**2008 COLUMBIA GAS OF KENTUCKY DOMESTIC  
METER SAMPLING TEST RESULTS**

**Page 1 & 2 of Exhibit B gives a summary of each Domestic (0 – 500 CFH) Family. Listed on page 1 & 2 of exhibit are:**

- 1. Name of the Family Codes**
- 2. Total number of meters in that family on the customer's premises**
- 3. Total number of meters in that family required to be sampled**
- 4. Total number of meters sampled**
- 5. Total number of meters in-testing outside the required +/- 2%**
- 6. Total number of meters allowed to fail**
- 7. Passed/Failed Status of Meter Family**
- 8. Percentage of meters failed per Family**
- 9. Number of meters failed fast**
- 10. Number of meters failed slow**

**Page 3 of Exhibit B identifies in graph form the percentages of meters within tolerance since Columbia Gas of Kentucky began sampling in 1996. This is a combined listing of all domestic meter groups.**

**Page 4 shows the test results of the 2008 aggressive family.**

## 2008 COLUMBIA GAS OF KENTUCKY METER SAMPLING RESULTS

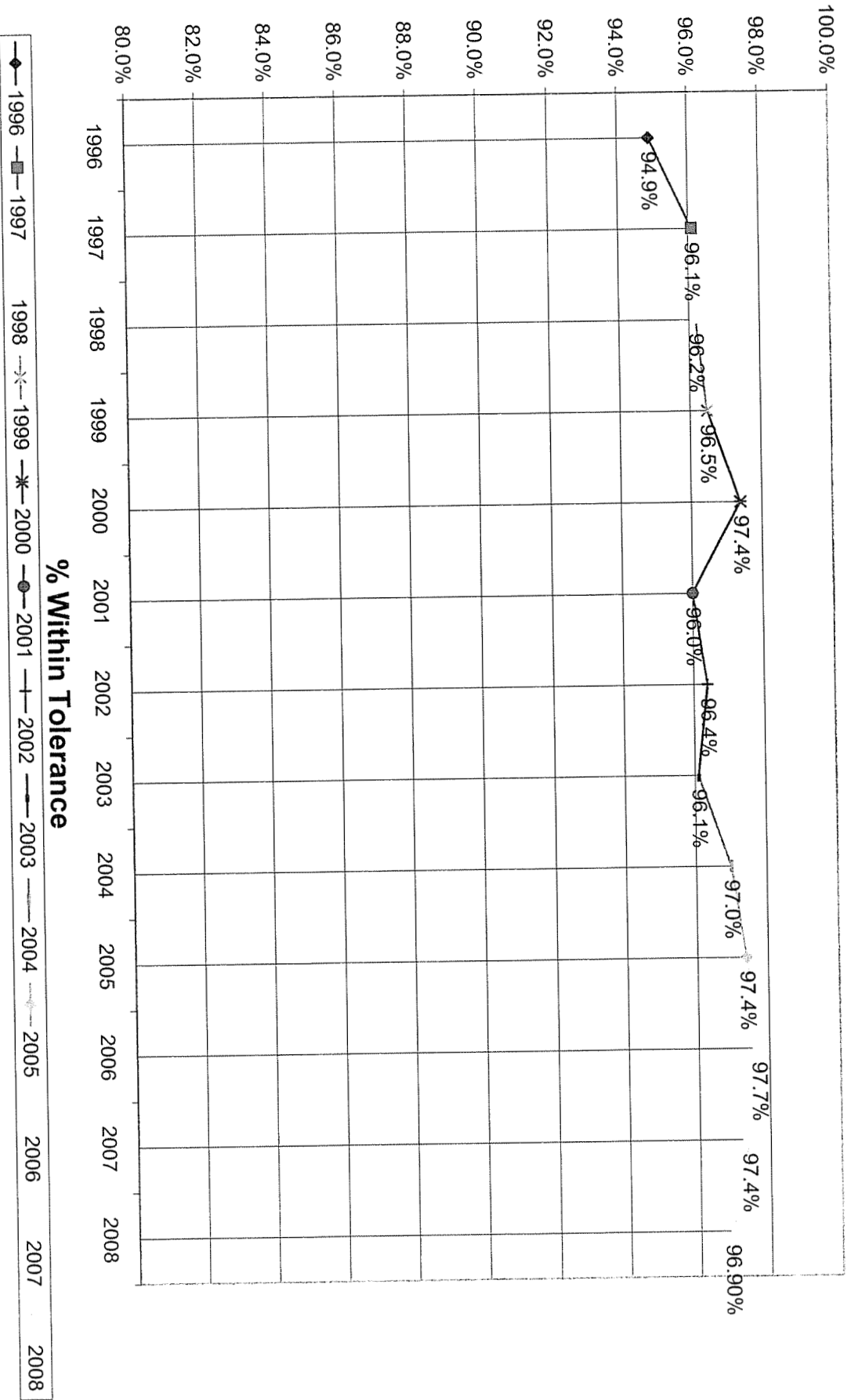
Samples taken between 2008-01-01 and 2008-12-31  
**"A" Class Meters 0-500 CFH**

FAMILY CODES	TOTAL MTRS. IN FAMILY	TOTAL MTRS REQ'D IN PROGRAM	TOTAL SAMPLED	TOTAL FAILED METERS	TOTAL REJECTS ALLOWABLE	2008 FAMILY STATUS	RATIO FAILED (d/c=g)		NUMBER FAILED	
							(c)	(d)	(e)	(f)
NAM01	2249	125	129	3	14	PASSED	2.3%	2	1	
NAM02	5104	200	206	4	21	PASSED	1.9%	0	4	
NAM03	3827	200	208	4	21	PASSED	1.9%	2	2	
NAM04	2955	200	204	3	21	PASSED	1.5%	0	3	
NAM05	813	80	80	1	10	PASSED	1.3%	0	1	
NAM06	6309	200	204	5	21	PASSED	2.5%	0	5	
NAM07	4228	200	201	5	21	PASSED	2.5%	3	2	
NAM08	8892	200	206	6	21	PASSED	2.9%	5	1	
NAM09	1696	200	205	2	21	PASSED	1.0%	1	1	
NLA01	1449	125	127	7	14	PASSED	5.5%	3	4	
NLA02	6134	200	211	2	21	PASSED	0.9%	0	2	
NRO01	5122	200	201	5	21	PASSED	2.5%	4	1	
NRO02	8428	200	204	11	21	PASSED	5.4%	8	3	
NSP01	108	50	50	0	7	PASSED	0.0%	0	0	

Samples taken between 2008-01-01 and 2008-12-31  
**"A" Class Meters 0-500 CFH**

FAMILY CODES	TOTAL MTRS. IN		TOTAL SAMPLED	TOTAL FAILED METERS		TOTAL REJECTS ALLOWABLE	2008 FAMILY STATUS	RATIO FAILED	NUMBER FAILED	
	FAMILY	IN PROGRAM		(a)	(b)				(c)	(d)
NSP02	159	32	33	7	5	FAILED	21.2%	0	7	
RAM01	402	50	53	3	7	PASSED	5.7%	1	2	
RAM02	1604	125	131	5	14	PASSED	3.8%	4	1	
RAM03	2154	125	129	8	14	PASSED	6.2%	4	4	
RAM04	5915	200	210	8	21	PASSED	3.8%	6	2	
RAM05	6340	200	206	5	21	PASSED	2.4%	4	1	
RAM06	6543	200	203	2	21	PASSED	1.0%	0	2	
RLA03	3656	200	205	1	21	PASSED	0.5%	1	0	
RRO01	5055	200	204	11	21	PASSED	5.4%	6	5	
RRO02	5439	200	206	9	21	PASSED	4.4%	1	8	
RRO03	4726	200	207	10	21	PASSED	4.8%	5	5	
RRO04	3248	200	205	9	21	PASSED	4.4%	6	3	
RSP01	5408	200	207	8	21	PASSED	3.9%	3	5	
RSP02	68	13	13	2	2	PASSED	15.4%	2	0	
<b>TOTAL</b>	<b>108031</b>	<b>4525</b>	<b>4648</b>	<b>146</b>	<b>-</b>		<b>3.1%</b>	<b>71</b>	<b>75</b>	

Columbia Gas of Kentucky Inc.  
 "A" Meter Program  
 Overall Results



<b>2008 COLUMBIA GAS OF KENTUCKY AGGRESIVE FAMILY RESULTS</b>
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Results of 2008 Aggresive family changed due to historical poor performance

<u>FAMILY CODES</u>	<u>TOTAL MTRS. IN FAMILY</u>	<u>TOTAL REMOVED</u>	<u>TOTAL FAILED METERS</u>	<u>RATIO FAILED</u>
KYRAMAG	1425	1425	137	9.6%
<b>TOTAL</b>	<b>1425</b>	<b>1425</b>	<b>137</b>	<b>9.6%</b>

**EXHIBIT C**

**2008 COLUMBIA GAS OF KENTUCKY LARGE VOLUME  
METER SAMPLING TEST RESULTS**

**Page 1 of Exhibit C gives a summary of each Large Volume (500 - 1500 CFH) Family. Listed on page 1 of exhibit are:**

- 1. Name of the Family Codes**
- 2. Total number of meters in that family on the customer's premises**
- 3. Total number of meters in that family required to be sampled**
- 4. Total number of meters sampled**
- 5. Total number of meters in-testing outside the required +/- 2%**
- 6. Total number of meters allowed to fail**
- 7. Passed/Failed Status of Meter Family**
- 8. Percentage of meters failed per Family**
- 9. Number of meters failed fast**
- 10. Number of meters failed slow**

**Page 2 of Exhibit C identifies in graph form the percentages of meters within tolerance since Columbia Gas of Kentucky began sampling in 1996. This is a combined listing of all large volume groups.**

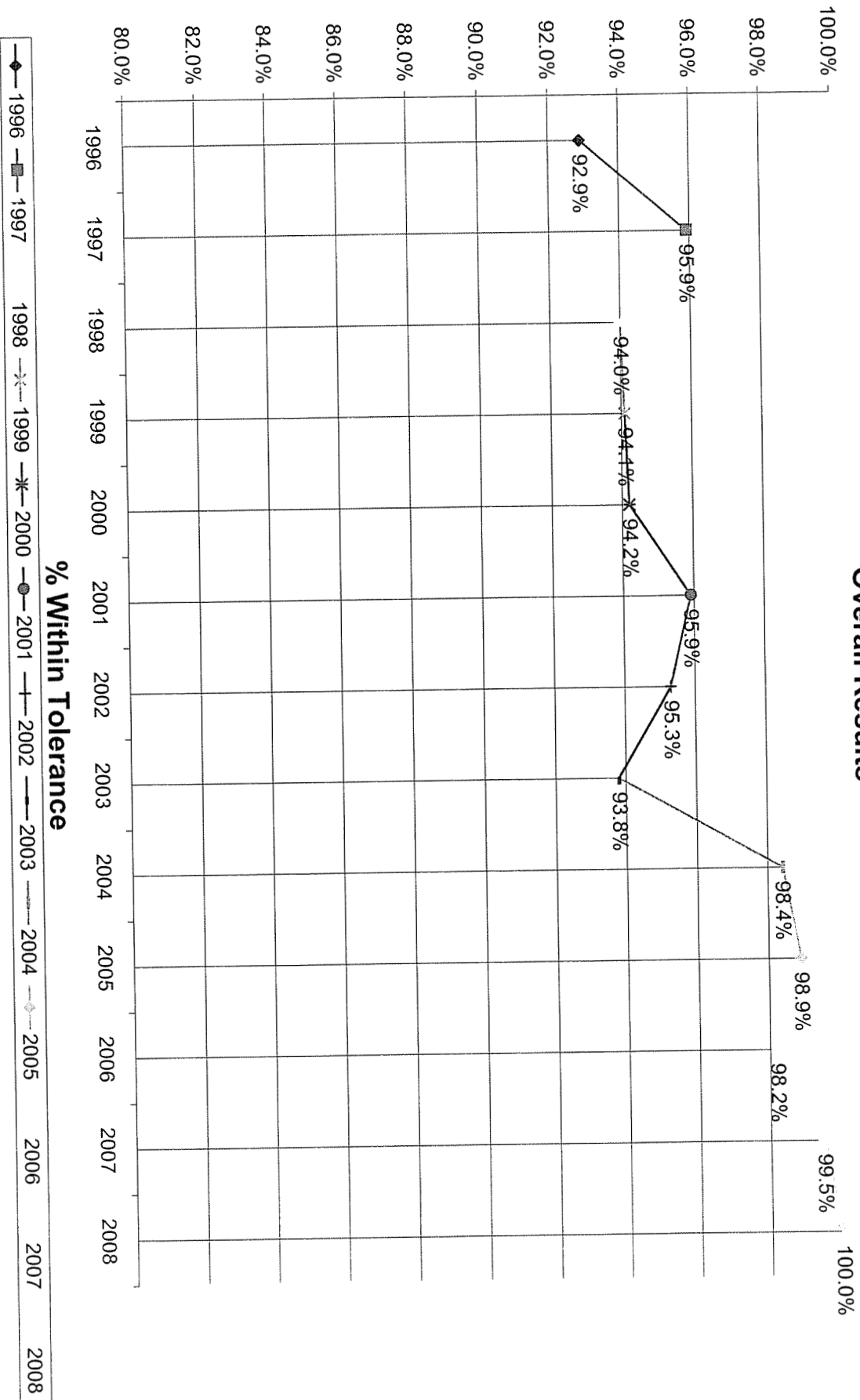


## 2008 COLUMBIA GAS OF KENTUCKY METER SAMPLING RESULTS

Samples taken between 2008-01-01 and 2008-12-31  
**"B" Class Meters 500 - 1500 CFH**

FAMILY CODES	TOTAL		TOTAL MTRS REQ'D IN PROGRAM	TOTAL		TOTAL REJECTS ALLOWABLE	2008 FAMILY STATUS	RATIO FAILED (d/c=g)	NUMBER	
	MTRS. IN FAMILY	(a)		SAMPLED	(c)				FAILED METERS	(d)
BNAM01	351		50	50	0	7	PASSED	0.0%		
BNRO01	34		8	8	0	1	PASSED	0.0%		
BNSP01	17		5	5	0	0	PASSED	0.0%		
BRAM01	682		80	80	0	10	PASSED	0.0%		
BRRO01	205		32	33	0	5	PASSED	0.0%		
BRSP01	32		8	8	0	1	PASSED	0.0%		
<b>TOTAL</b>	<b>1321</b>		<b>183</b>	<b>184</b>	<b>0</b>			<b>0.0%</b>	<b>0</b>	<b>0</b>

Columbia Gas of Kentucky Inc.  
 "B" Meter Program  
 Overall Results



**EXHIBIT D**

**PERCENTAGE OF DOMESTIC METER ACCURACY**  
**BY FAMILY**

**Exhibit D - represents the percentage of meters sampled in 2008 that were within the +/- 2% rate, identified by homogenous group. We also show previous results of meter families sampled in prior years.**

**NAM01 = New American meters purchased between 1981 & 1990**

**NAM02 = New American meters purchased between 1991 & 1993**

**NAM03 = New American meters purchased in 1994**

**NAM04 = New American meters purchased in 1995**

**NAM05 = New American meters purchased in 1996**

**NAM06 = New American meters purchased in 1999 & 2000**

**NAM07 = New American meters purchased in 2002**

**NAM08 = New American meters purchased in 2004**

**NAM09 = New American meters purchased in 2006**

**NLA01 = New Lancaster meters purchased in 1987**

**NLA02 = New Lancaster meters purchased between 1989 & 1992**

**NLA03 = New Lancaster meters purchased between 1990 & 2004**

**NRO01 = New Rockwell meters purchased between 1983 & 1996**

**NRO02 = New Rockwell meters purchased between 1997 & 1999**

**NSP01 = New Sprague meters purchased between 1982 & 1997**

**NSP02 = New Sprague meters purchased in 1997**

**RAM01 = Repaired American meters installed in 1987**

**RAM02 = Repaired American meters installed in 1988 & 1989**

**RAM03 = Repaired American meters installed in 1990 & 1991**

**RAM04 = Repaired American meters installed between 1992 & 1994**

**RAM05 = Repaired American meters installed between 1995 & 1999**

**RAM06 = Repaired American meters installed in 2000, 2002, 2004, & 2006,**

**RLA03 = Repaired Lancaster meters installed between 1990 & 2004**

**RRO01 = Repaired Rockwell meters installed between 1980 & 1989**

**RRO02 = Repaired Rockwell meters installed between 1990 & 1993**

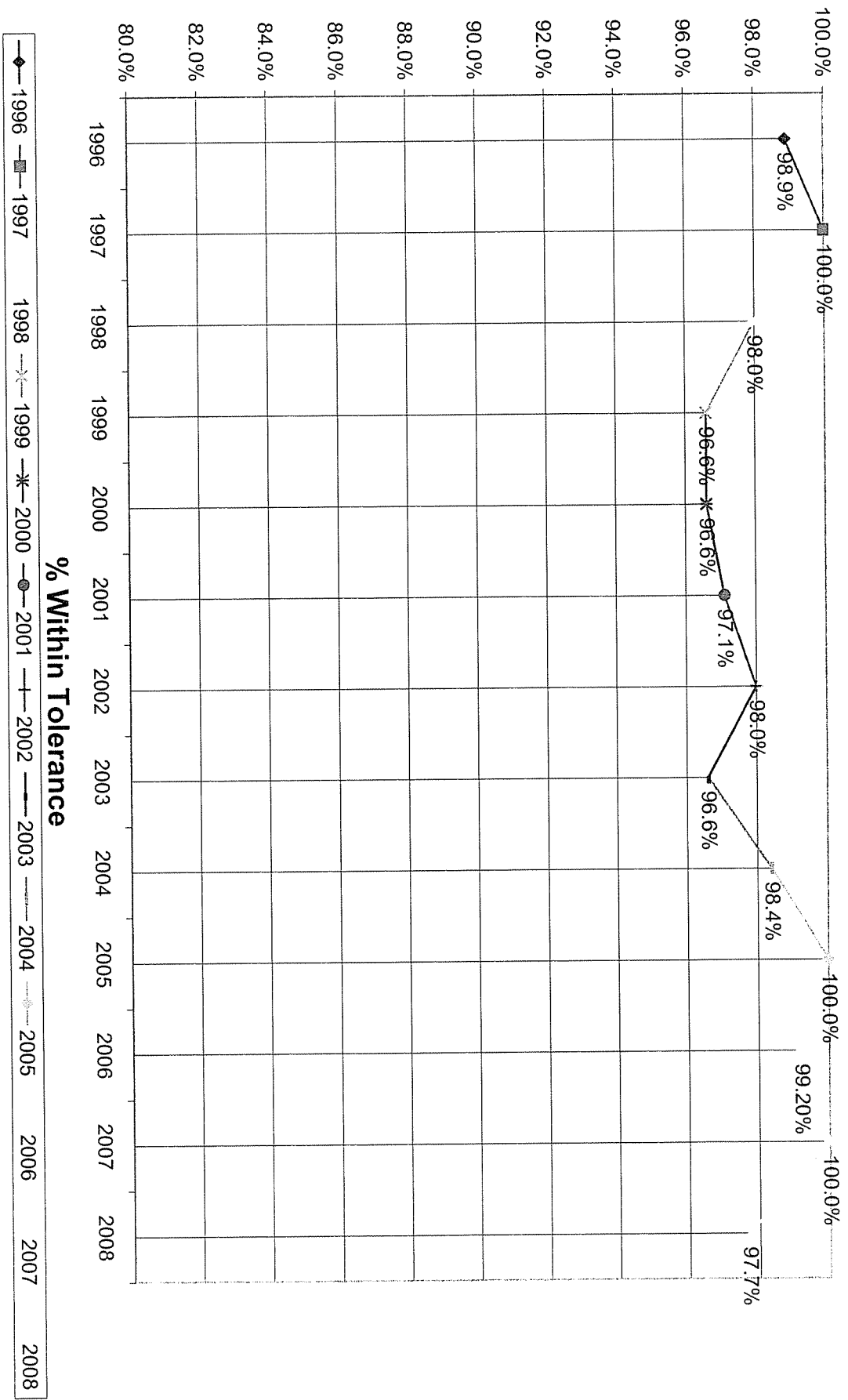
**RRO03 = Repaired Rockwell meters installed in 1994 & 1999**

**RRO04 = Repaired Rockwell meters installed in 2000, 2002, 2004, & 2006,**

**RSP01 = Repaired Sprague meters installed between 1983 & 2004**

**RSP02 = Repaired Sprague meters installed in 2000, 2002 & 2004**

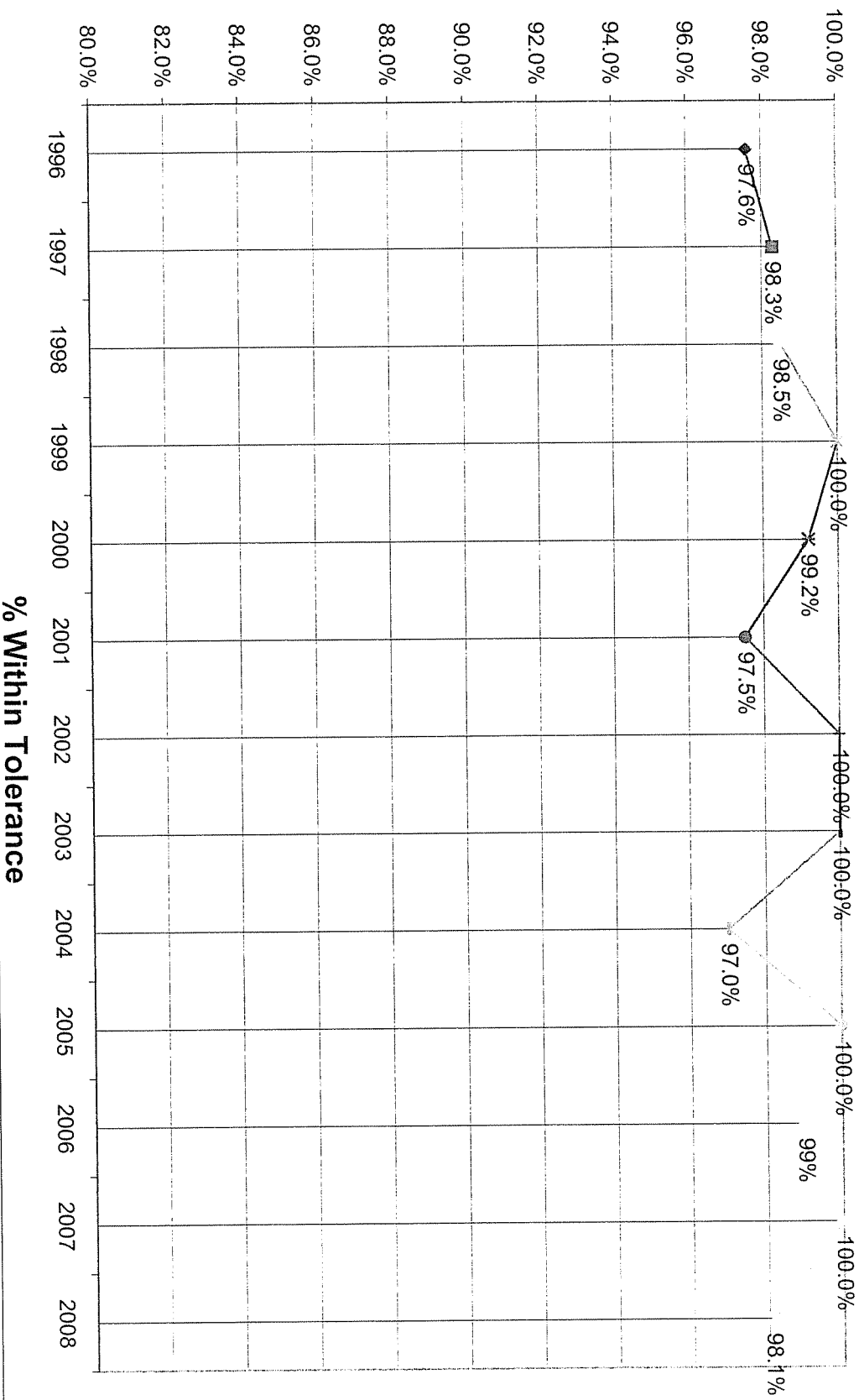
# NAM01



**% Within Tolerance**

1996
  1997
  1998
  1999
  2000
  2001
  2002
  2003
  2004
  2005
  2006
  2007
  2008

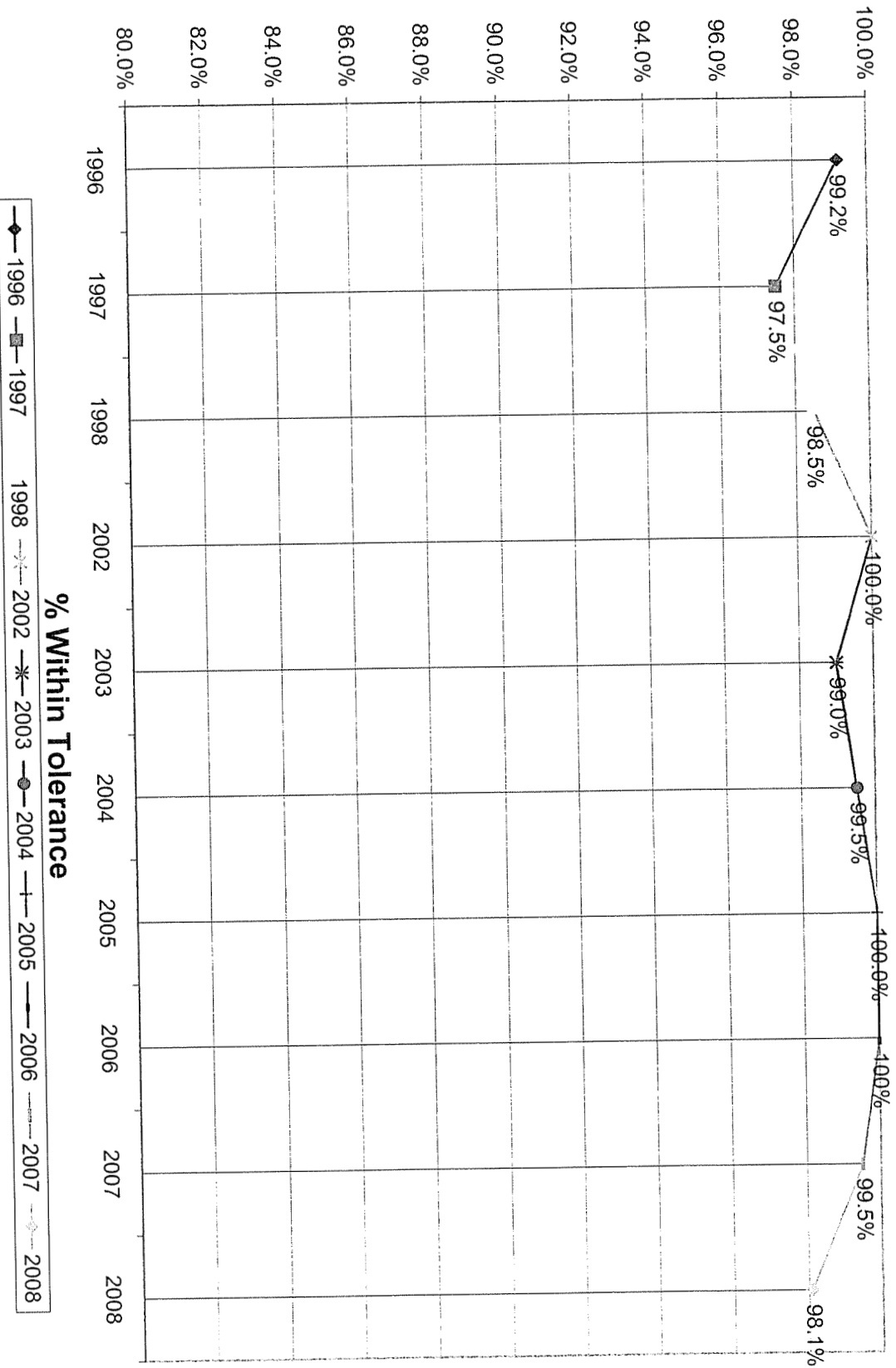
# NAM02



1996
  1997
  1998
  1999
  2000
  2001
  2002
  2003
  2004
  2005
  2006
  2007
  2008

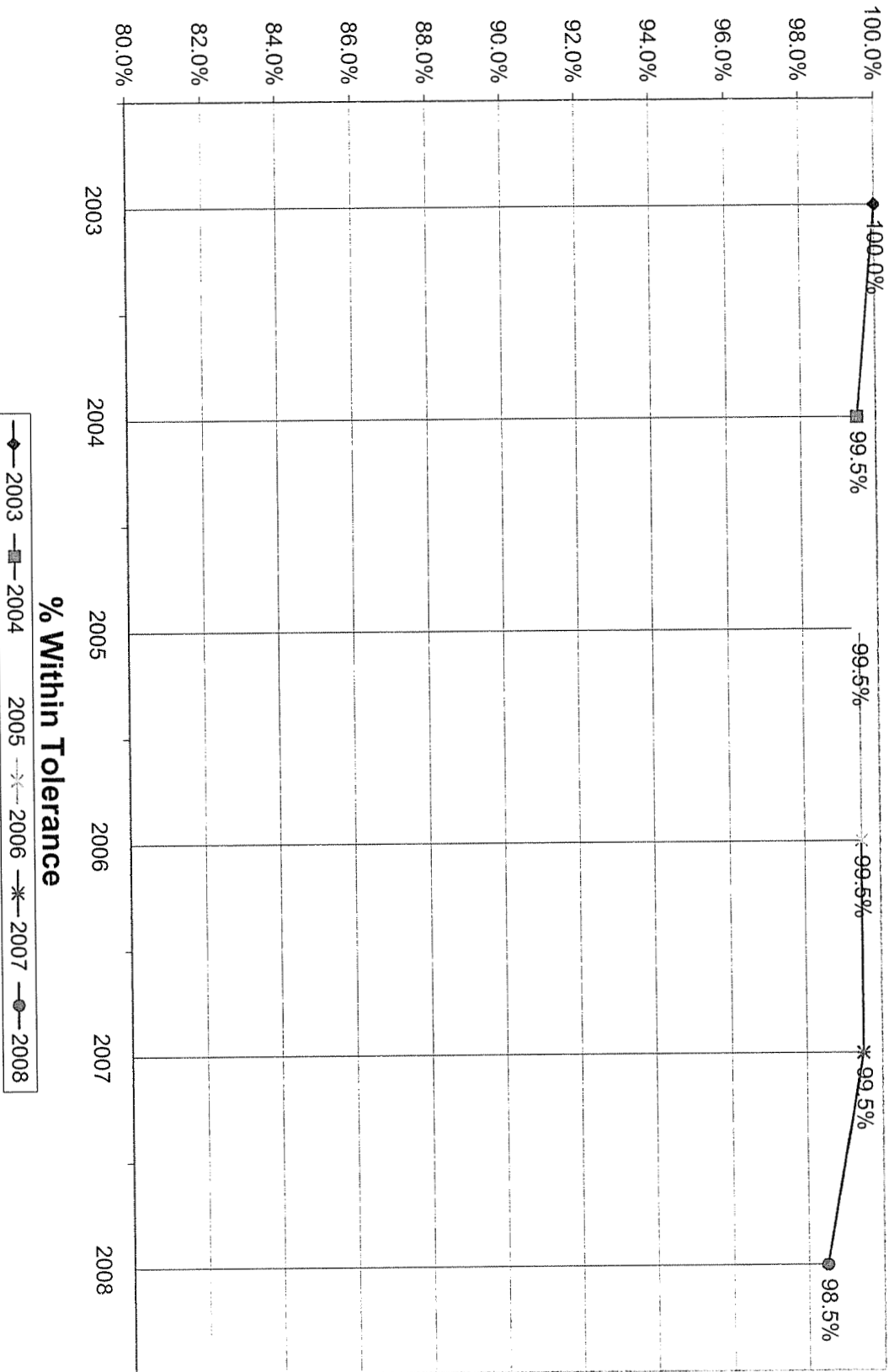
# NAM03

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of Kentucky



# NAM04

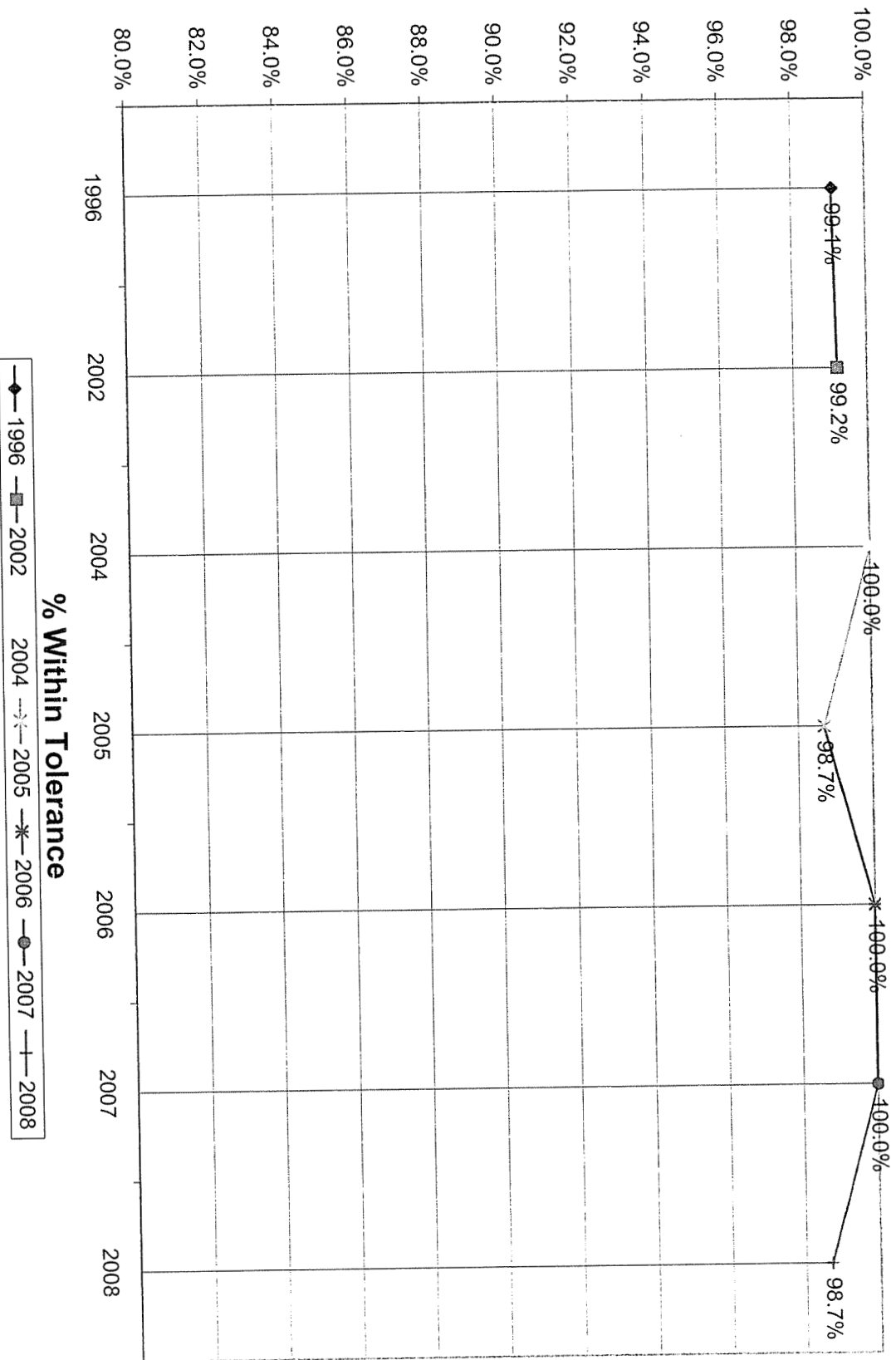
Columbia Gas  
of Kentucky





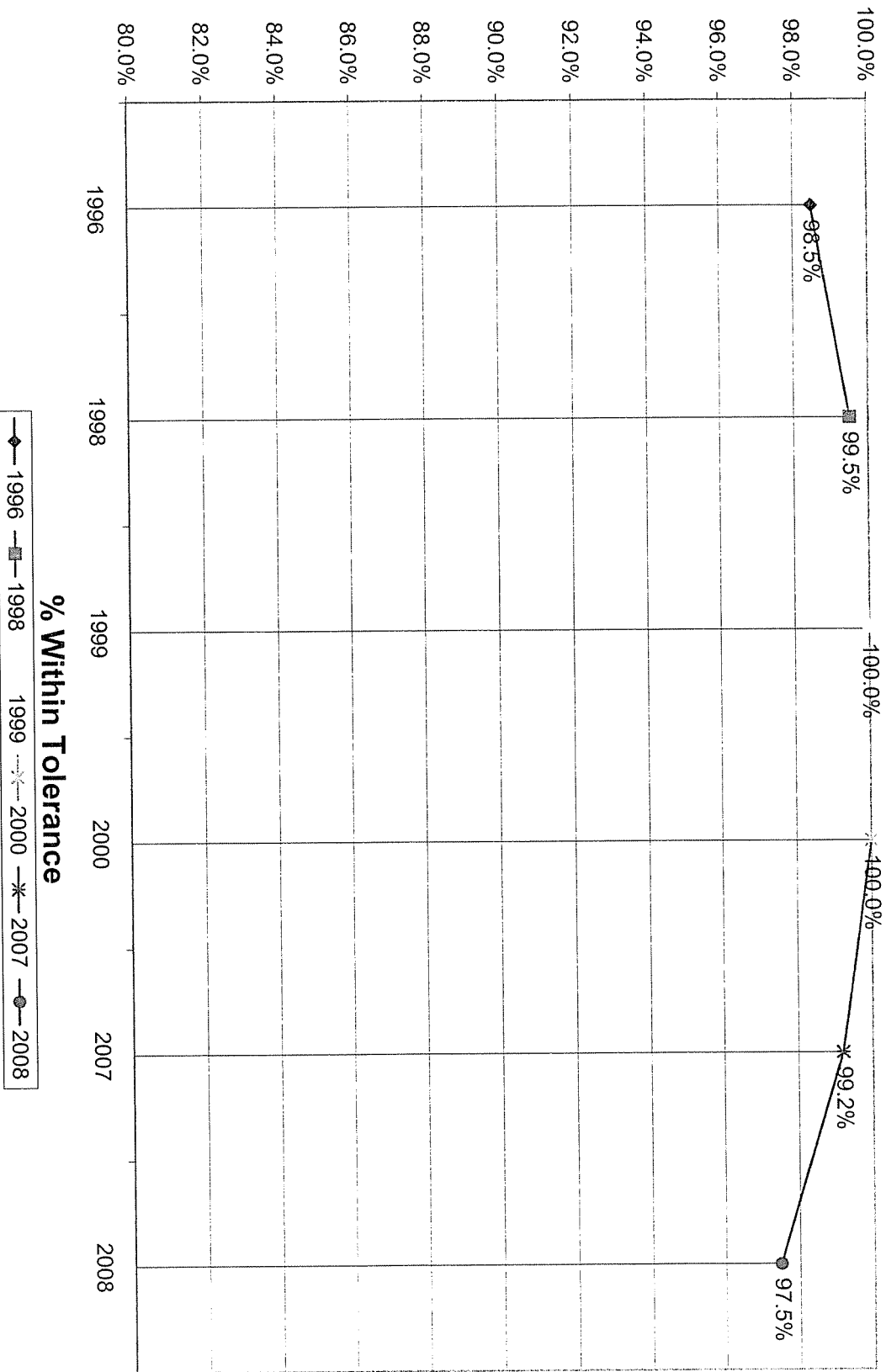
# NAM05

Columbia Gas of Kentucky

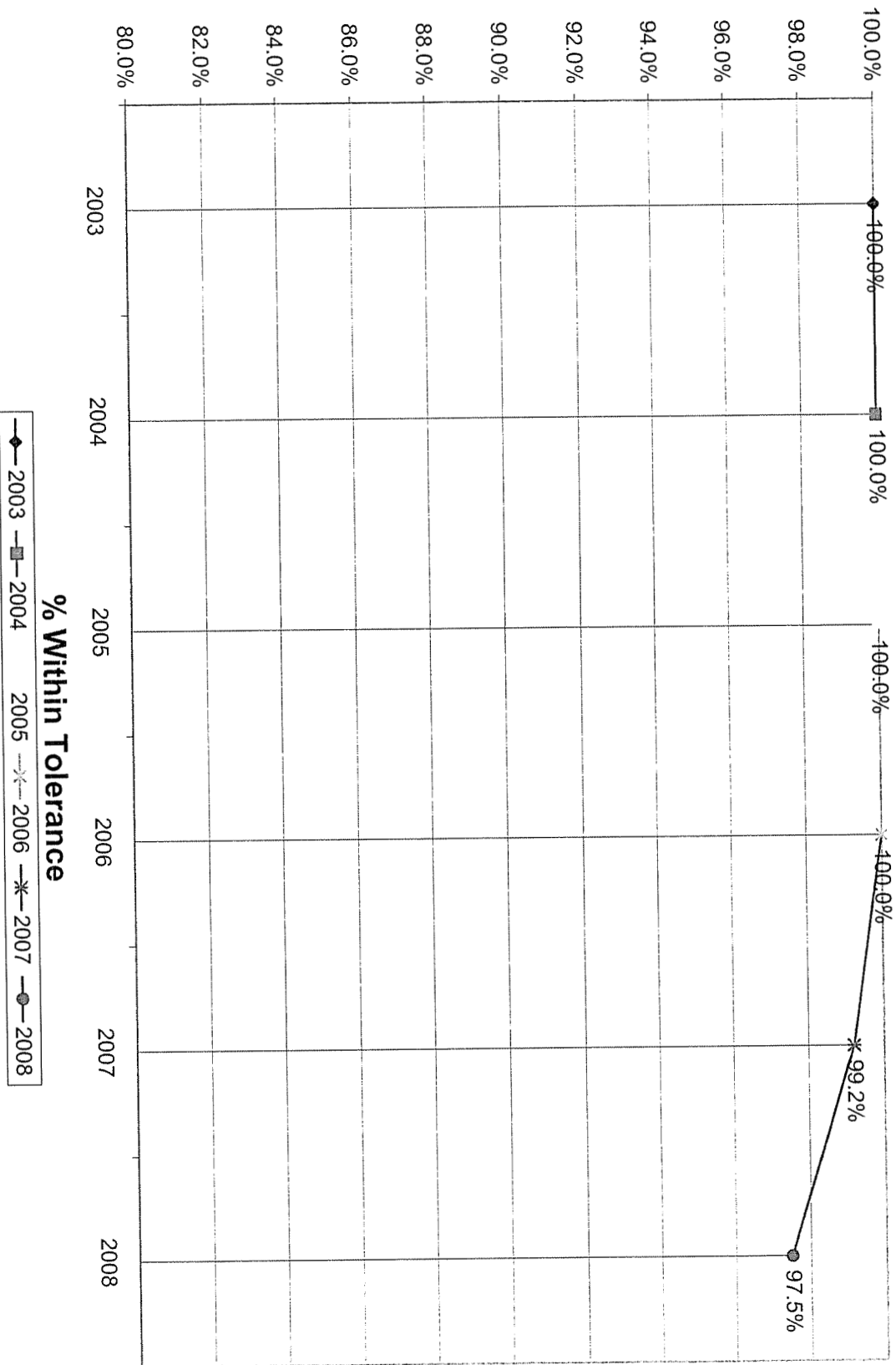


# NAM06

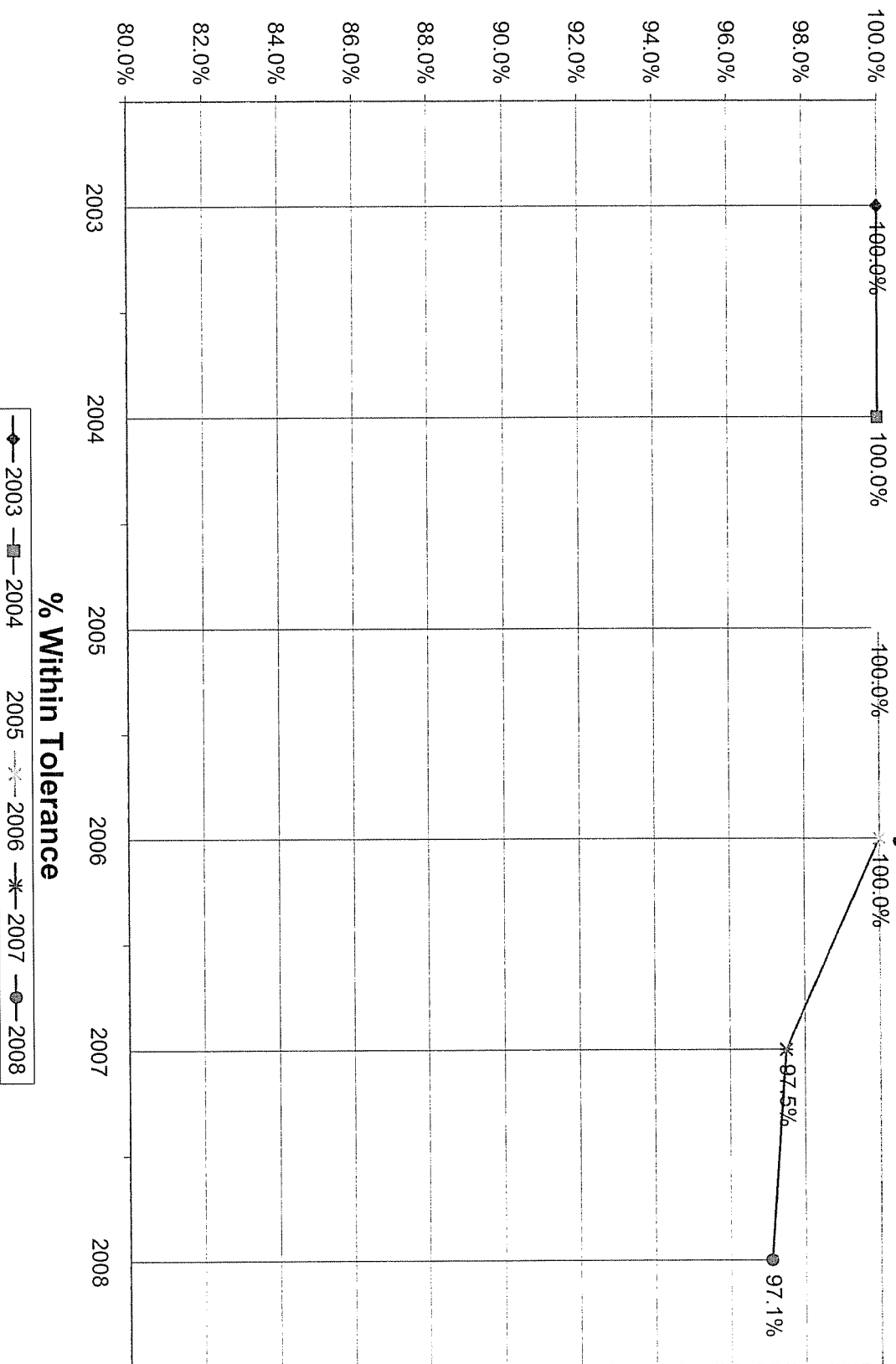
Columbia Gas of Kentucky



### NAM07 Meters in Service 6 years

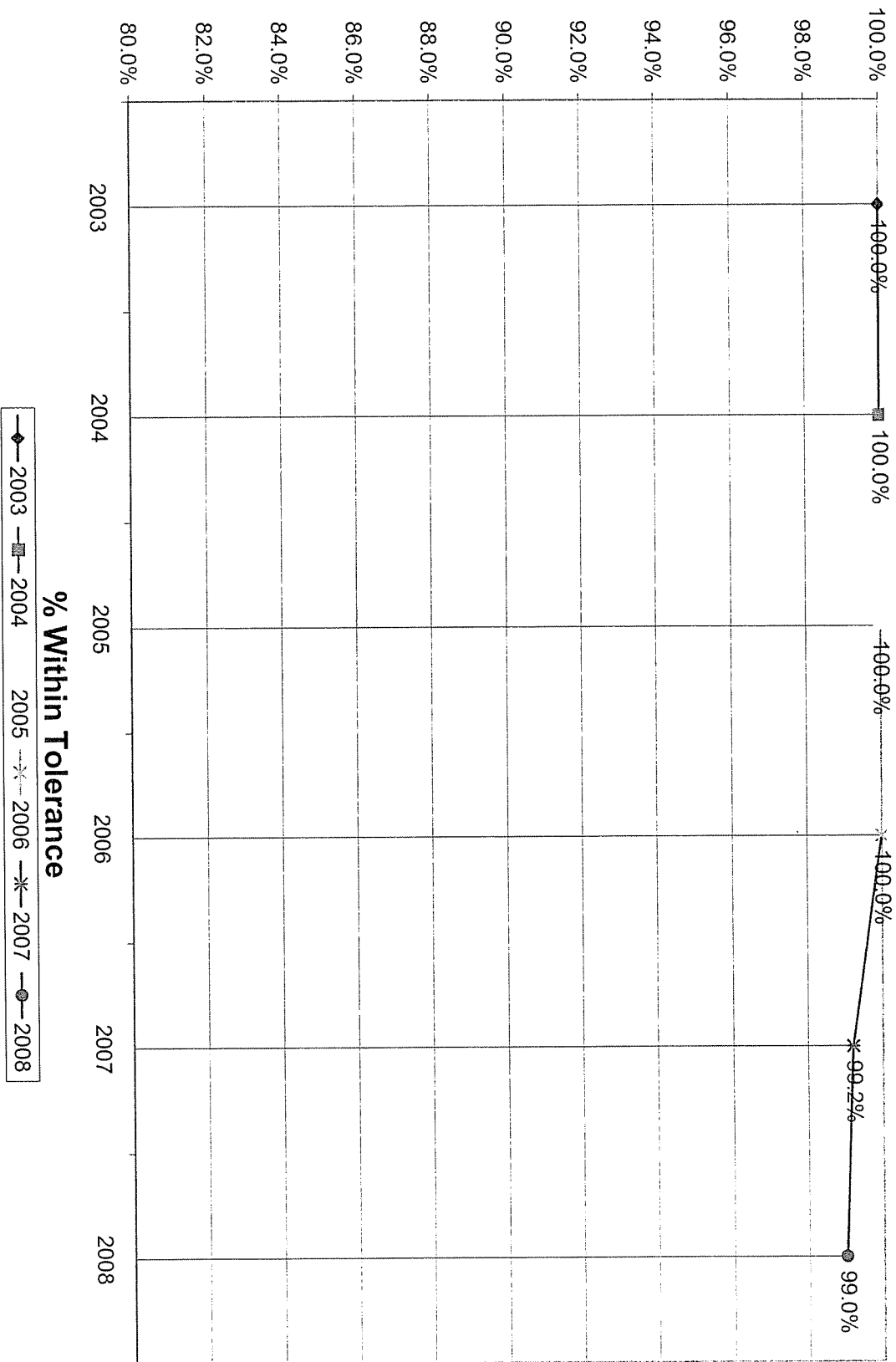


### NAM08 Meters in Service 4 years



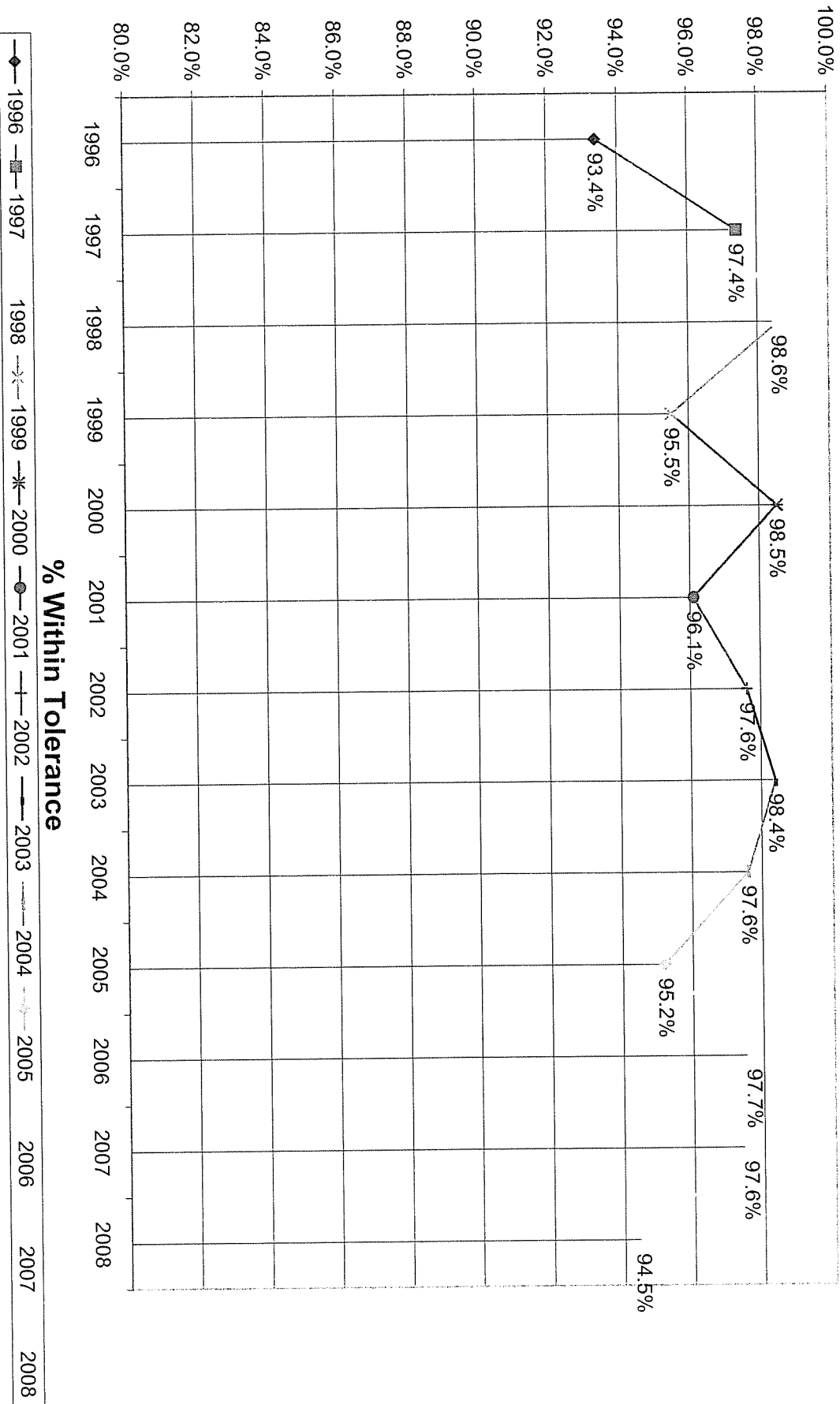
# NAM09 Meters in Service 2 years

Columbia Gas  
of Kentucky



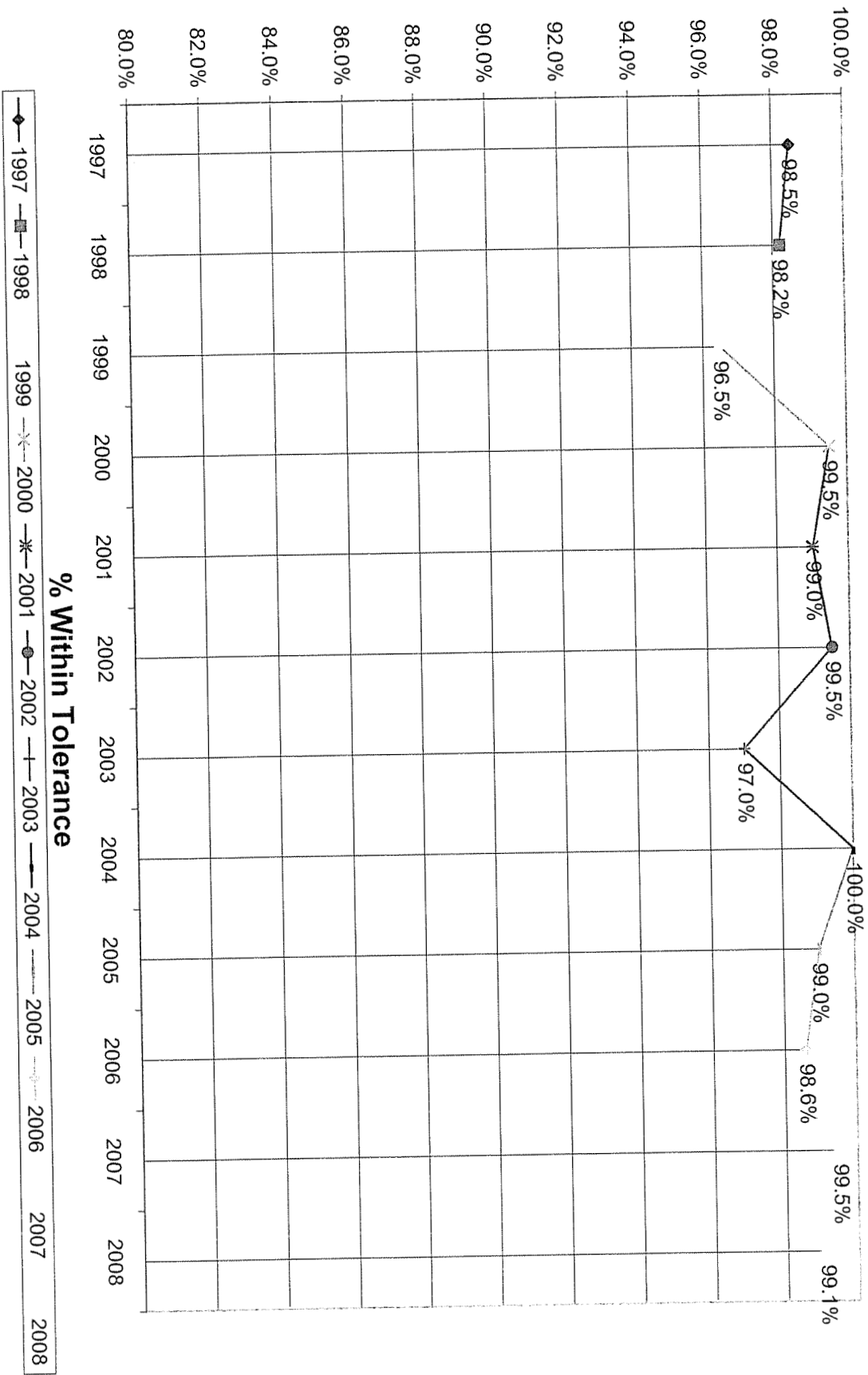
NLA01

Columbia Gas  
of Kentucky



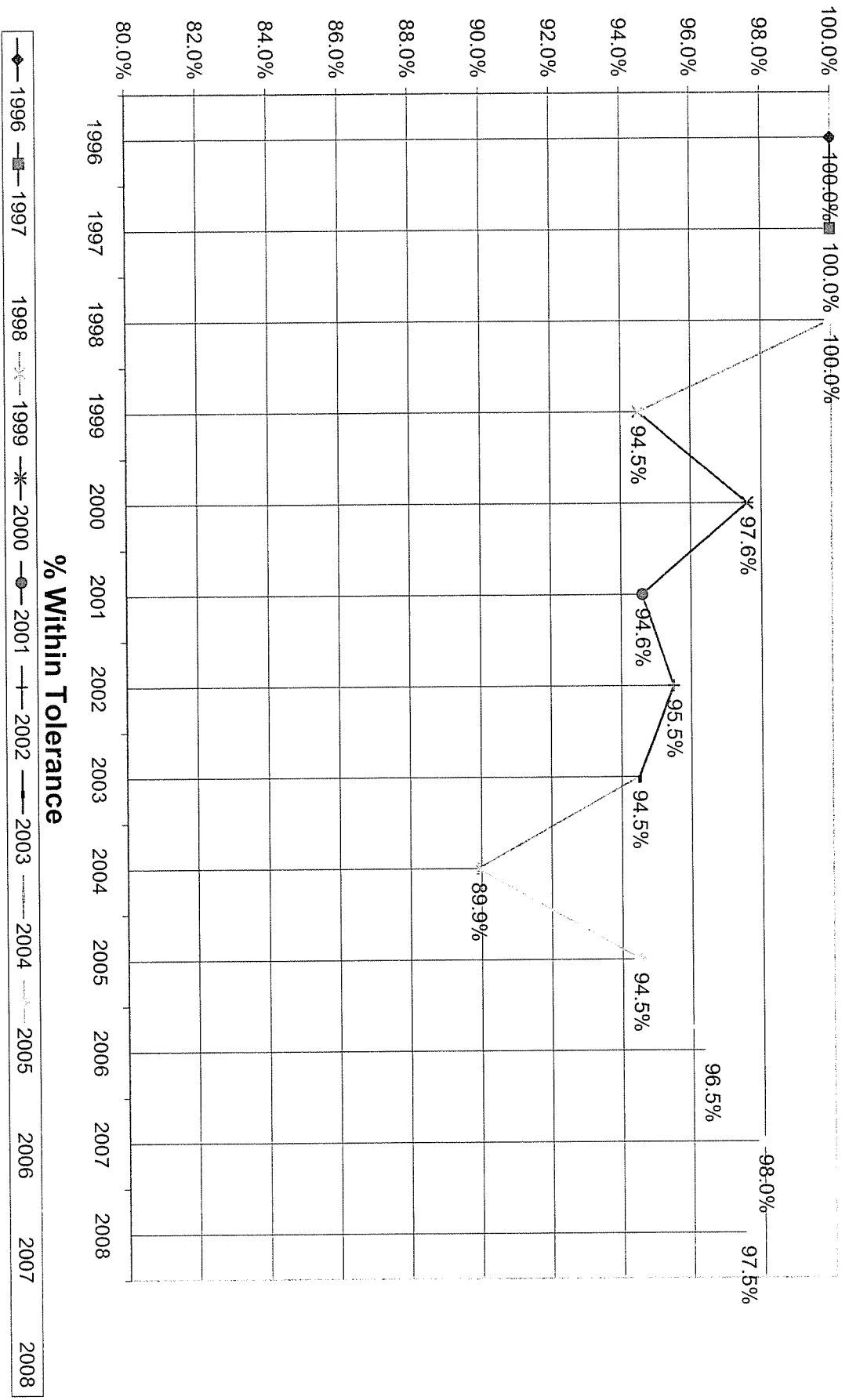
NLA02

Columbia Gas<sup>®</sup>  
of Kentucky



# NRR001

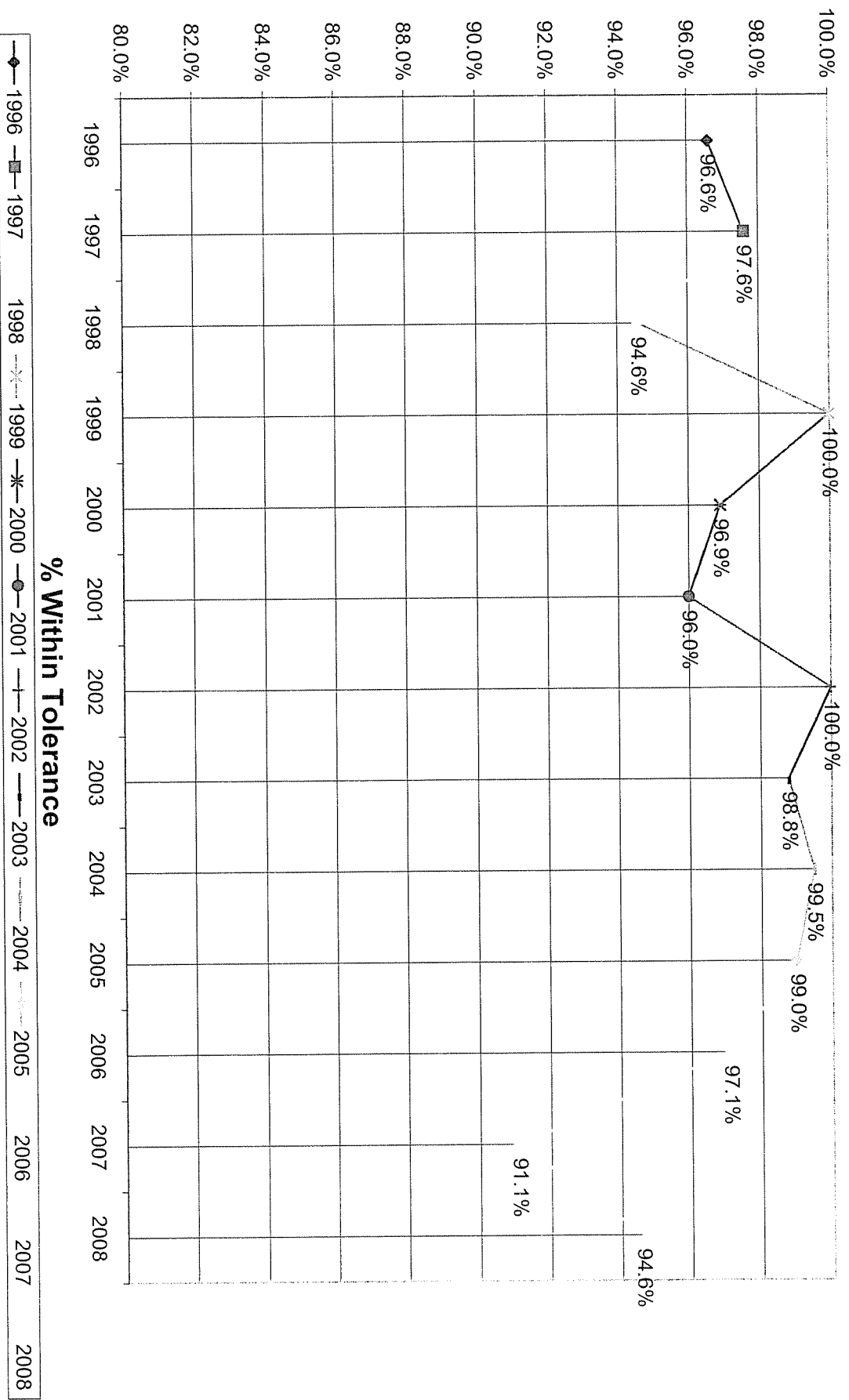
Columbia Gas<sup>SM</sup>  
of Kentucky





# NR002

Columbia Gas  
of Kentucky

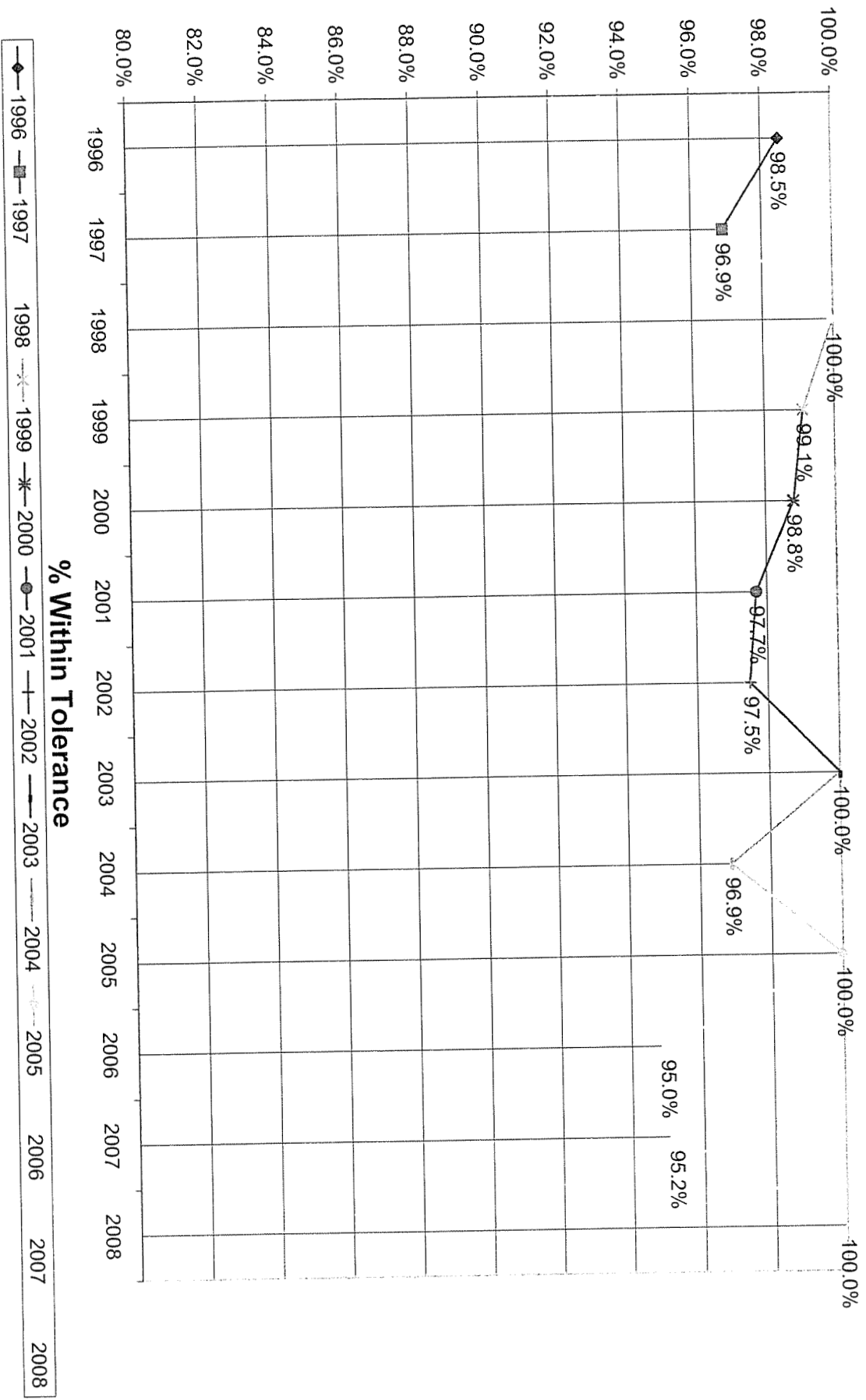


**% Within Tolerance**

Legend: 1996 (diamond), 1997 (square), 1998 (triangle), 1999 (asterisk), 2000 (x), 2001 (circle), 2002 (plus), 2003 (dash), 2004 (asterisk), 2005 (square), 2006 (circle), 2007 (plus), 2008 (asterisk)

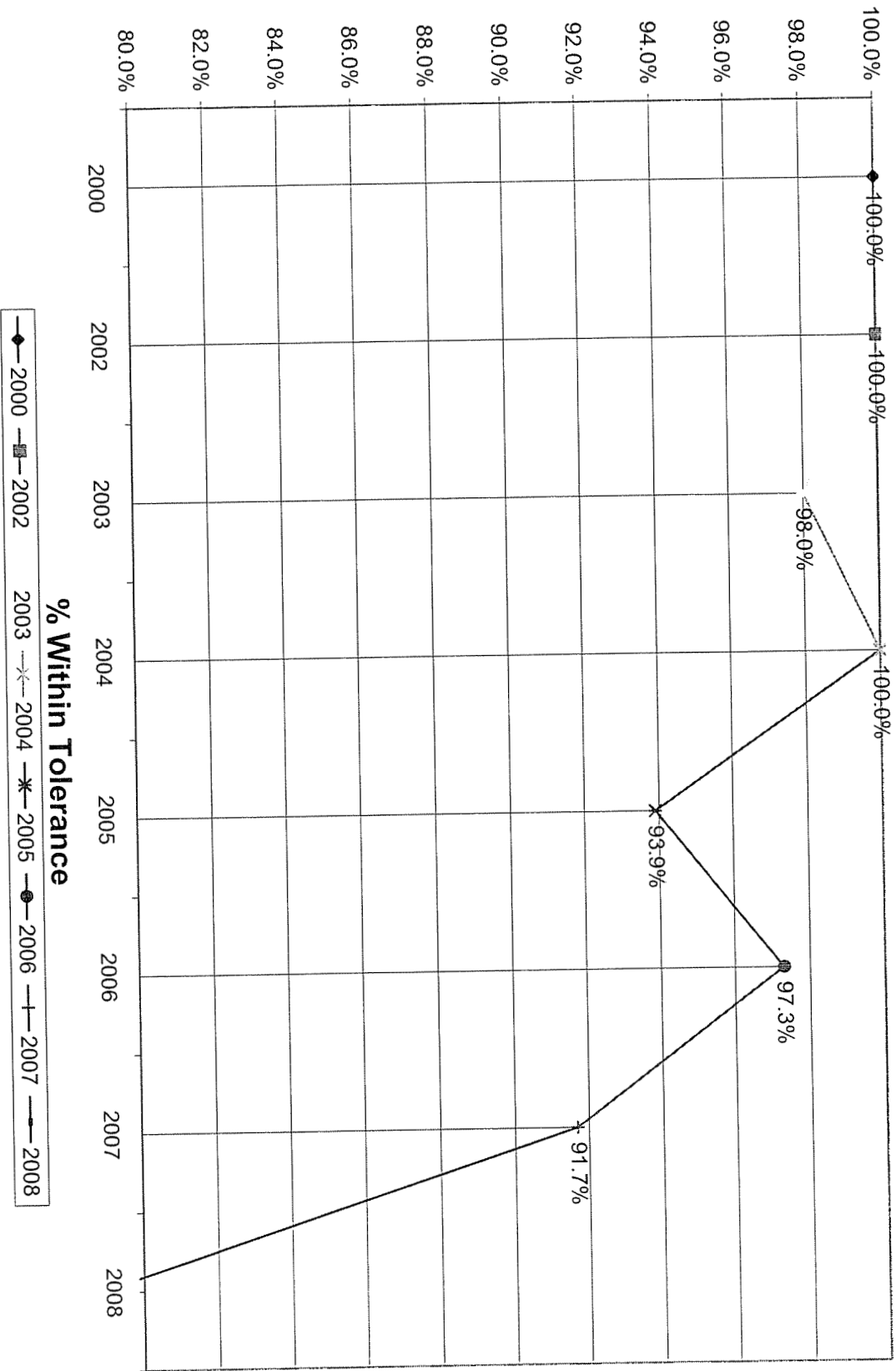
# NSP01

Columbia Gas<sup>SM</sup>  
of Kentucky



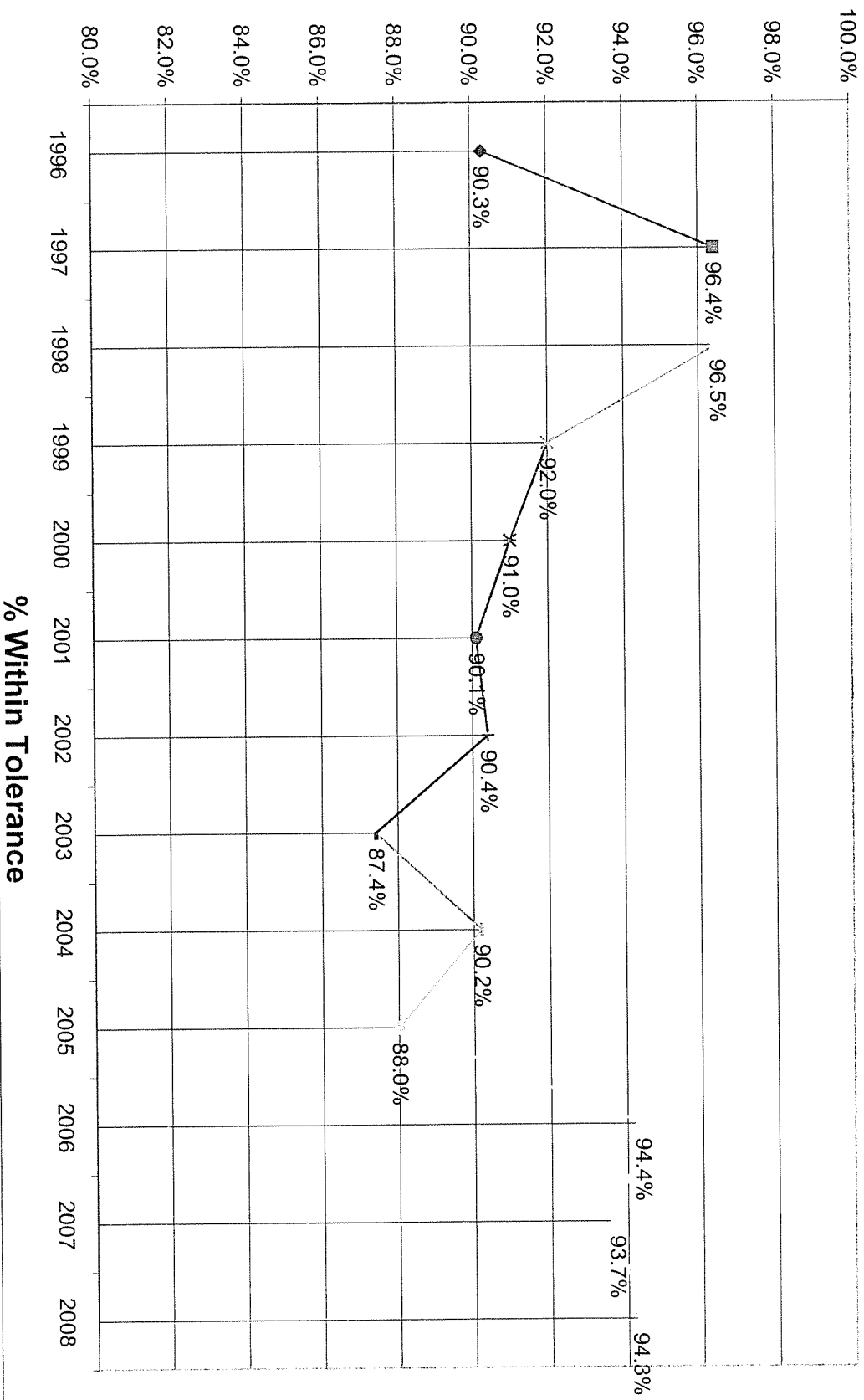
# NSP02

Columbia Gas  
of Kentucky



# RAM01

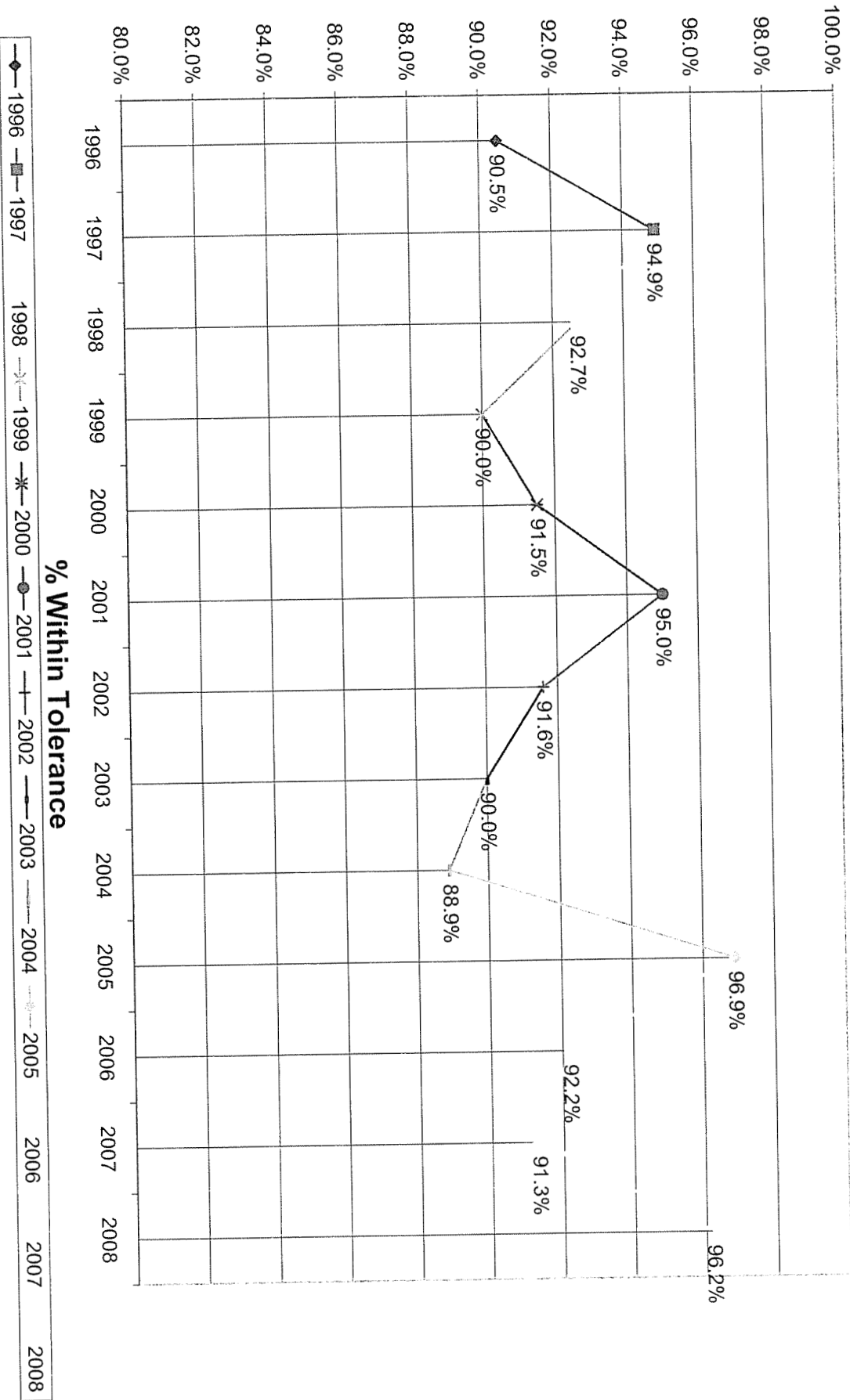
Columbia Gas  
of Kentucky



1996
  1997
  1998
  1999
  2000
  2001
  2002
  2003
  2004
  2005
  2006
  2007
  2008

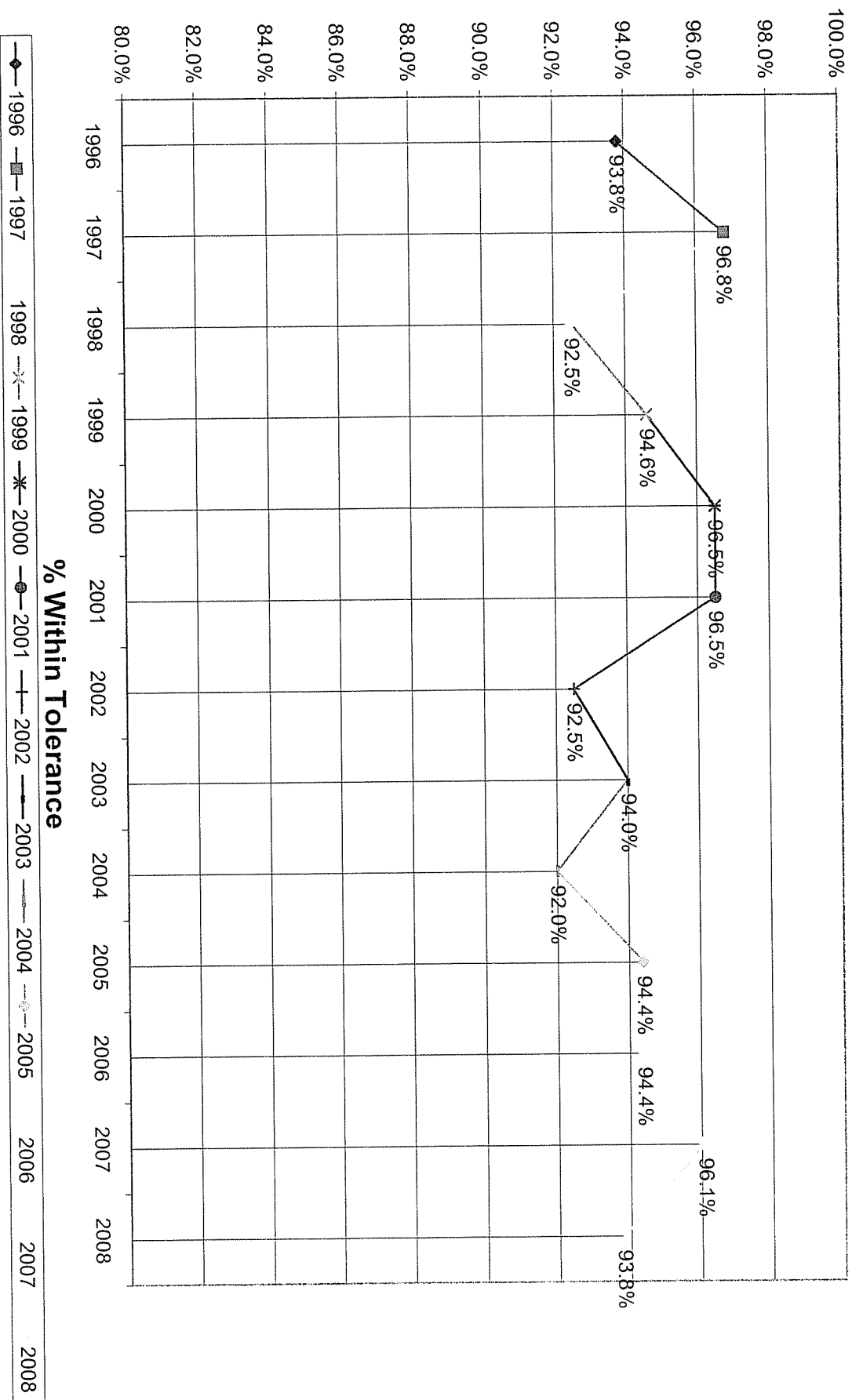
# RAM02

Columbia Gas  
of Kentucky

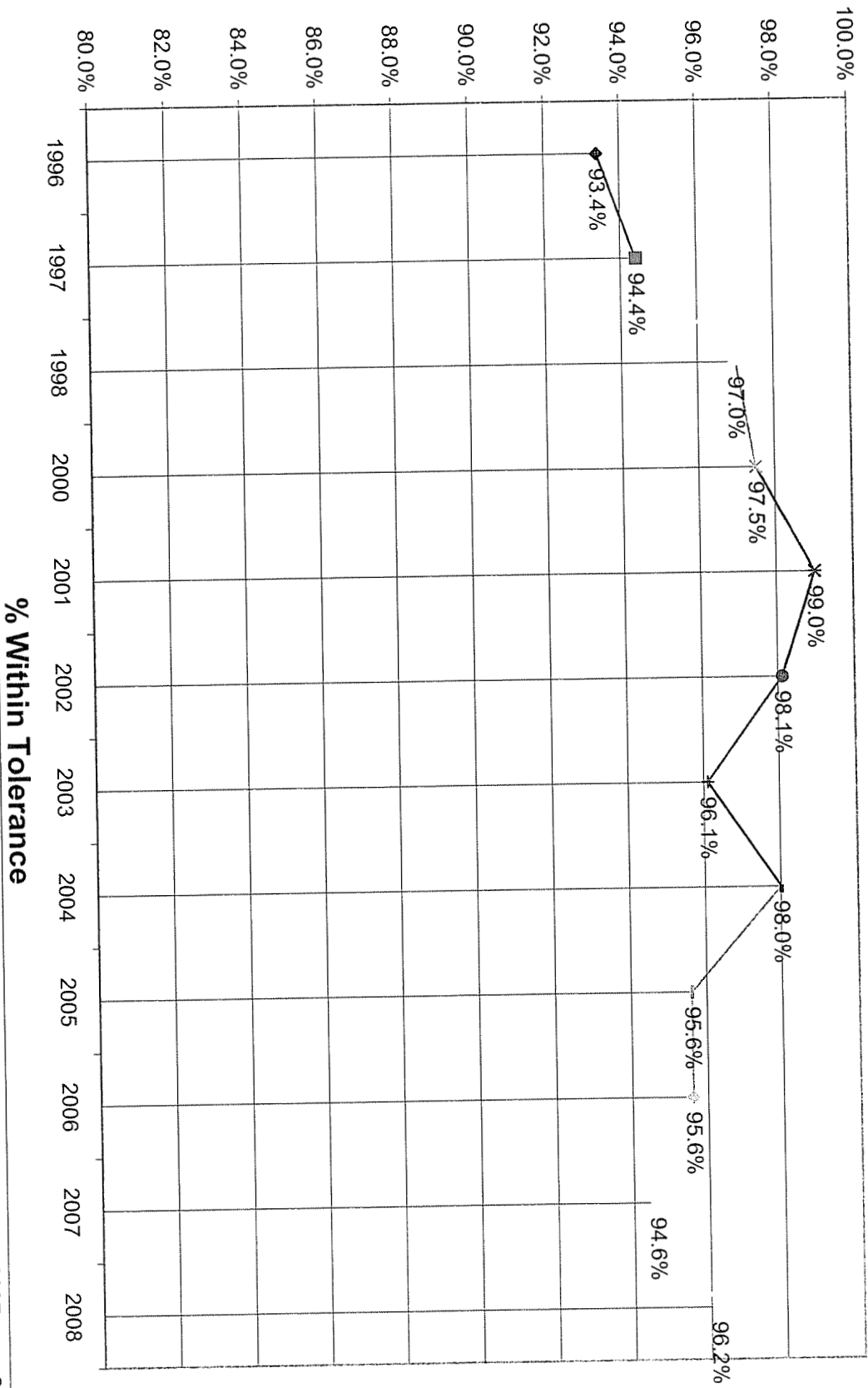


# RAM03

Columbia Gas<sup>®</sup>  
of Kentucky



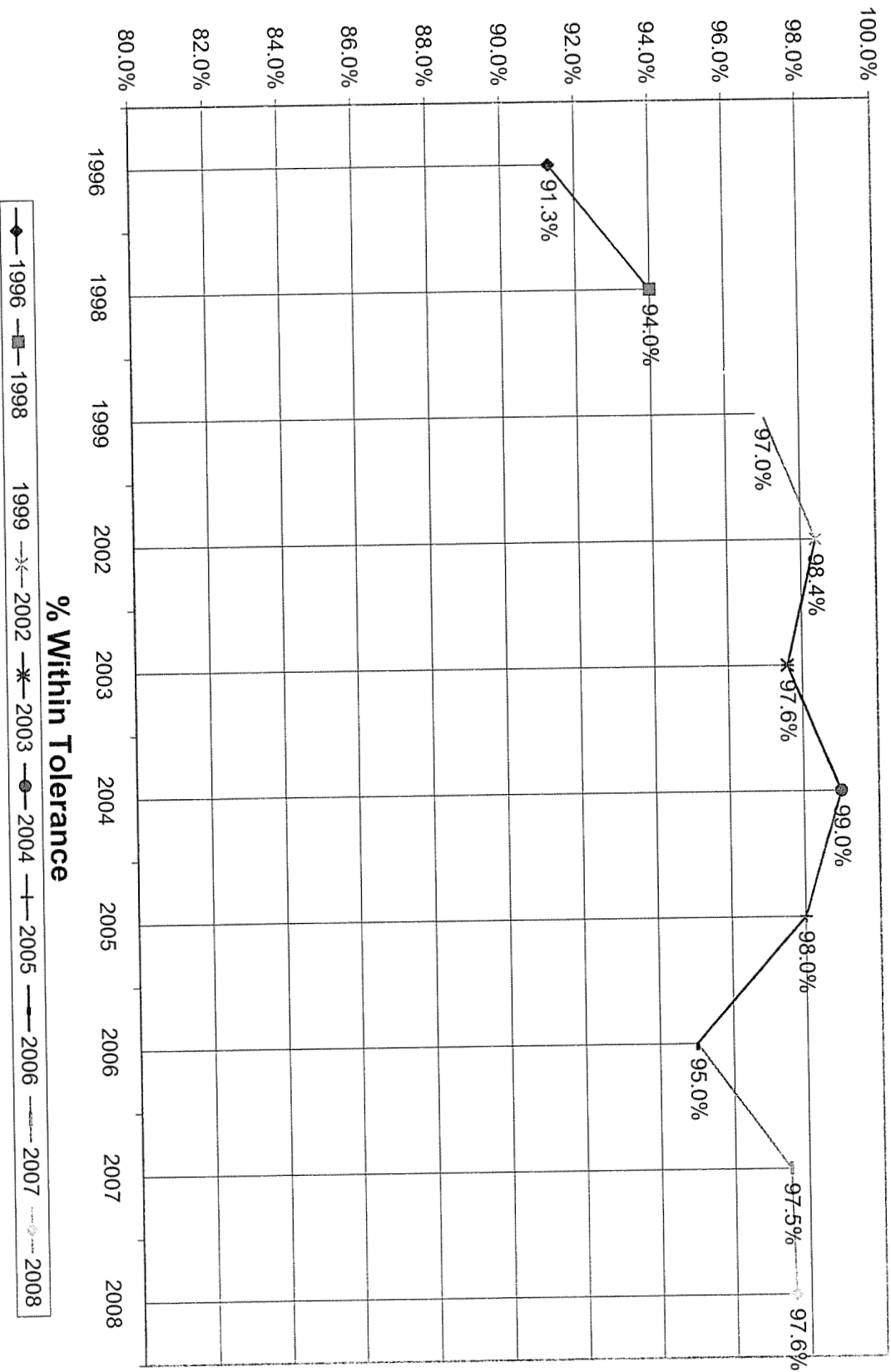
# RAM04



Legend for % Within Tolerance:  
1996 (diamond marker)  
1997 (square marker)  
1998 (asterisk marker)  
2000 (cross marker)  
2001 (asterisk marker)  
2002 (circle marker)  
2003 (plus marker)  
2004 (square marker)  
2005 (dashed line)  
2006 (diamond marker)  
2007 (square marker)  
2008 (square marker)

# RAM05

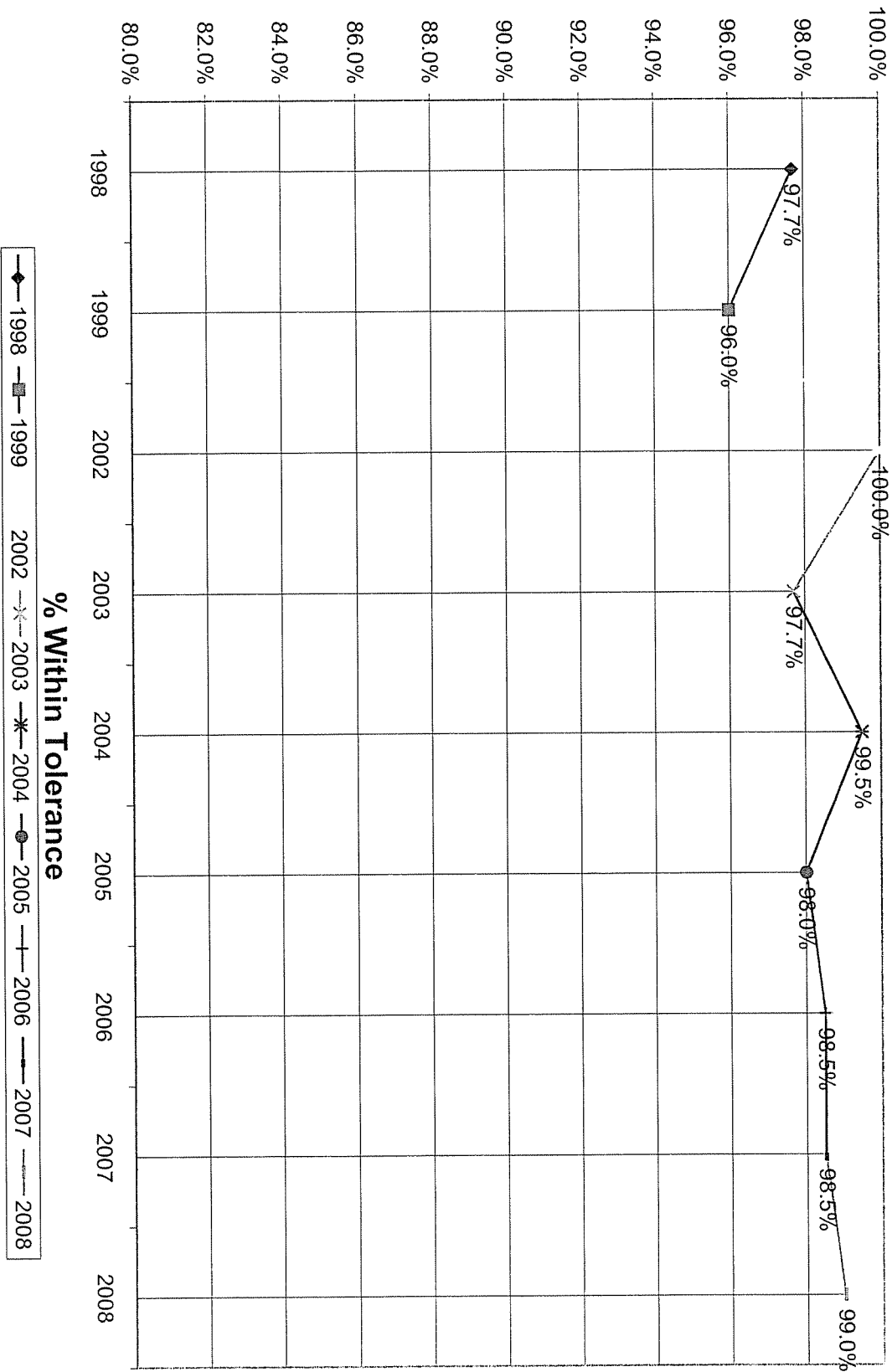
Columbia Gas  
of Kentucky



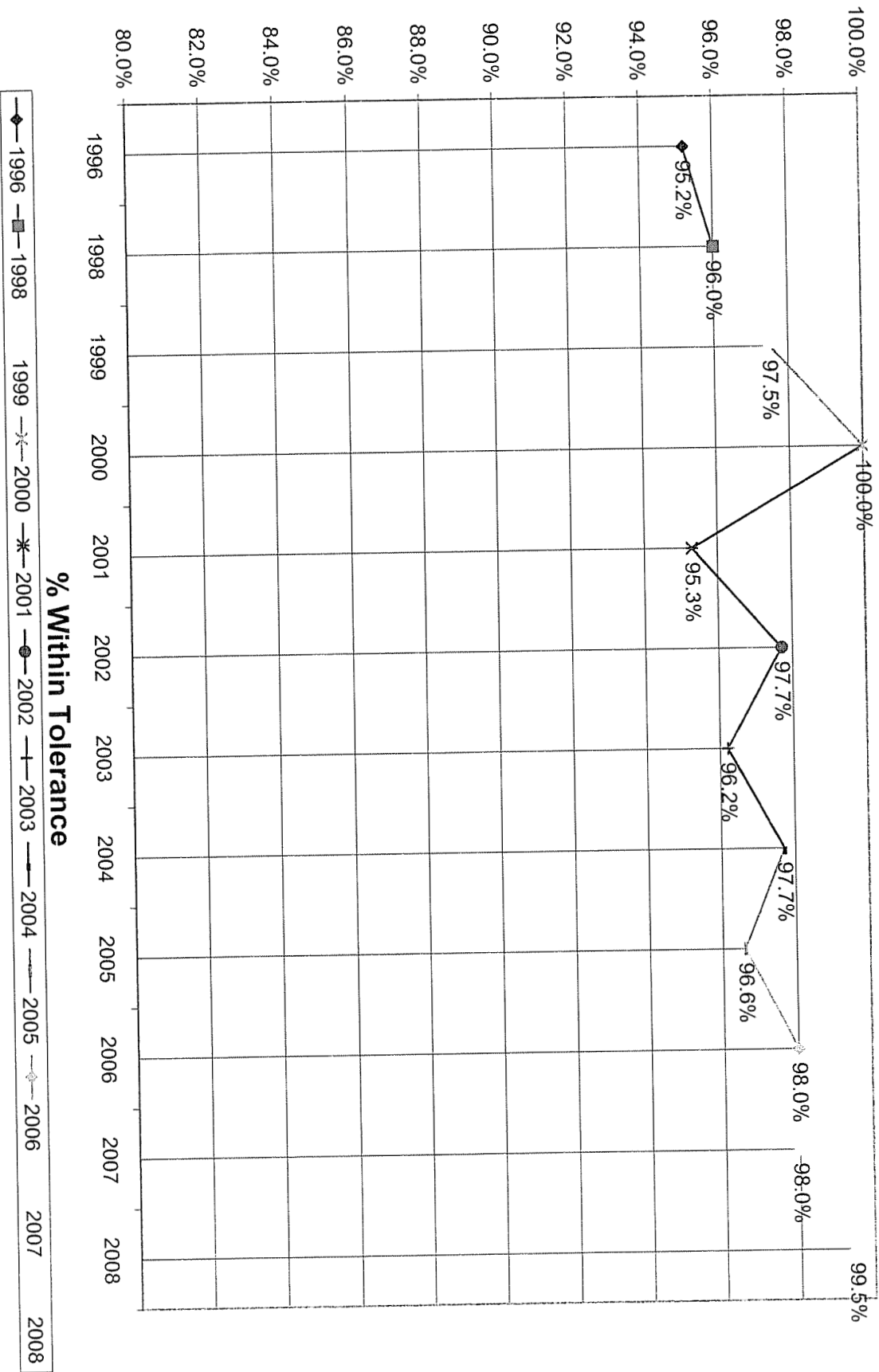


# RAM06

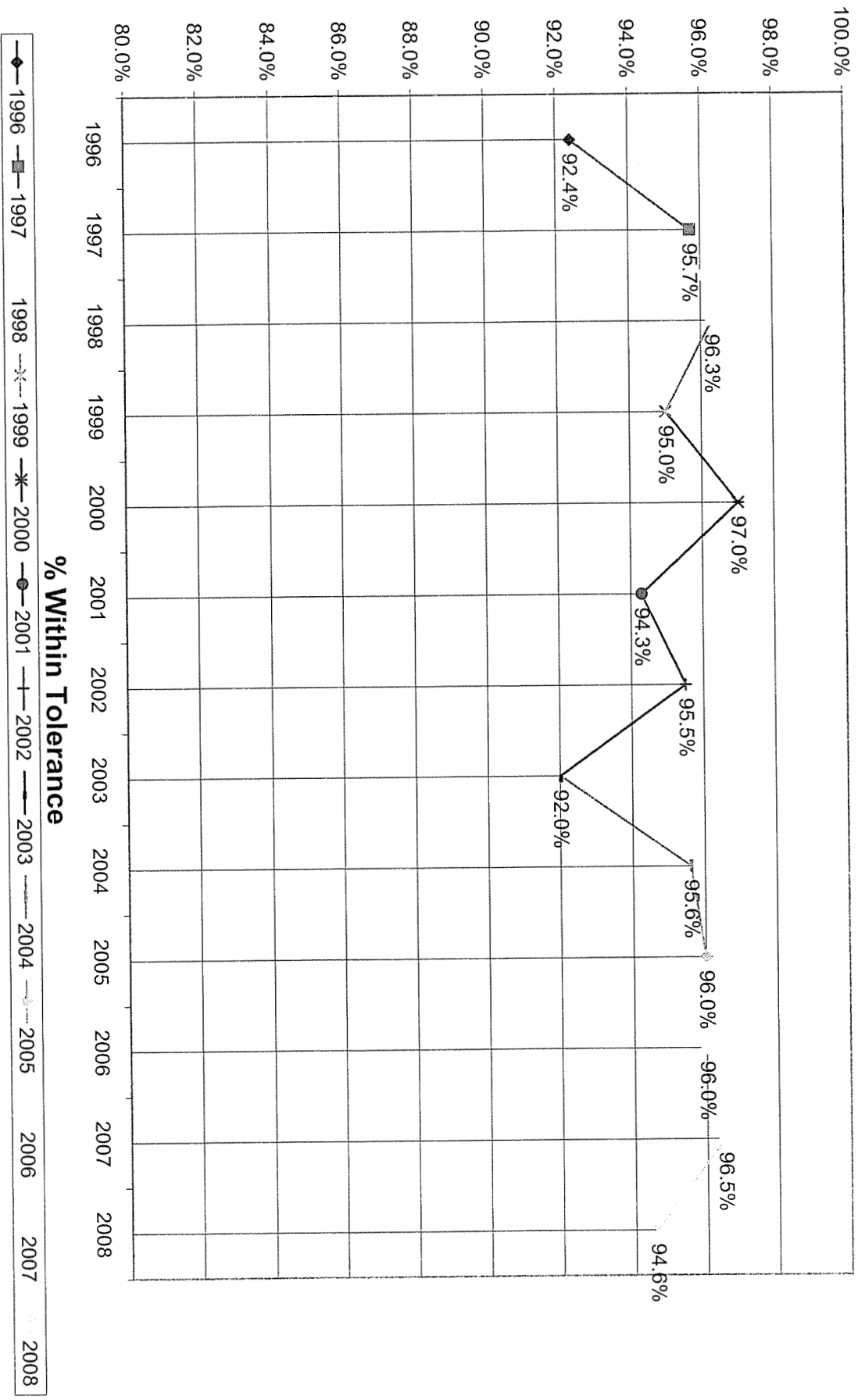
Columbia Gas  
of Kentucky



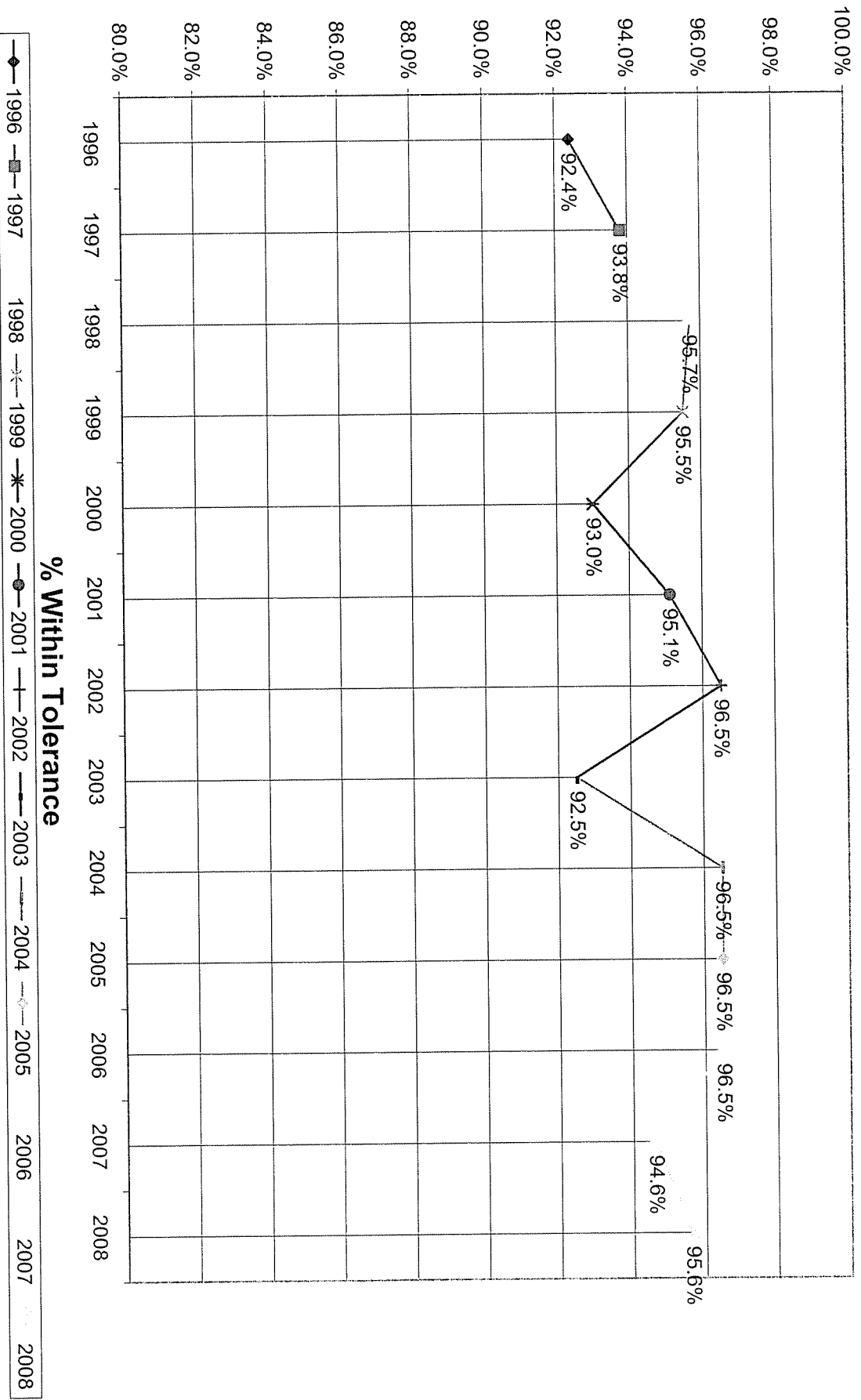
# RLA03



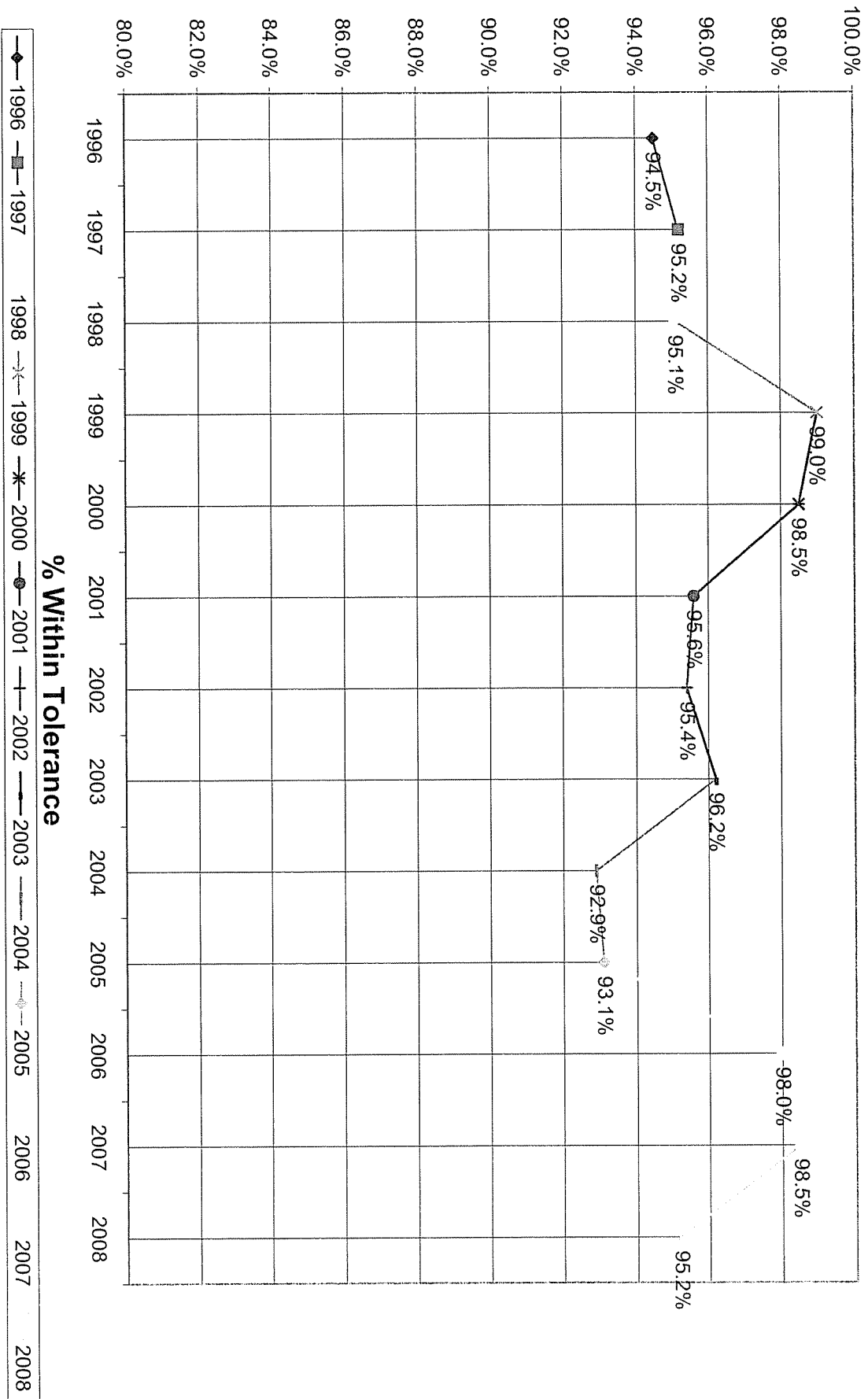
# RR001



# RR002



# RR003

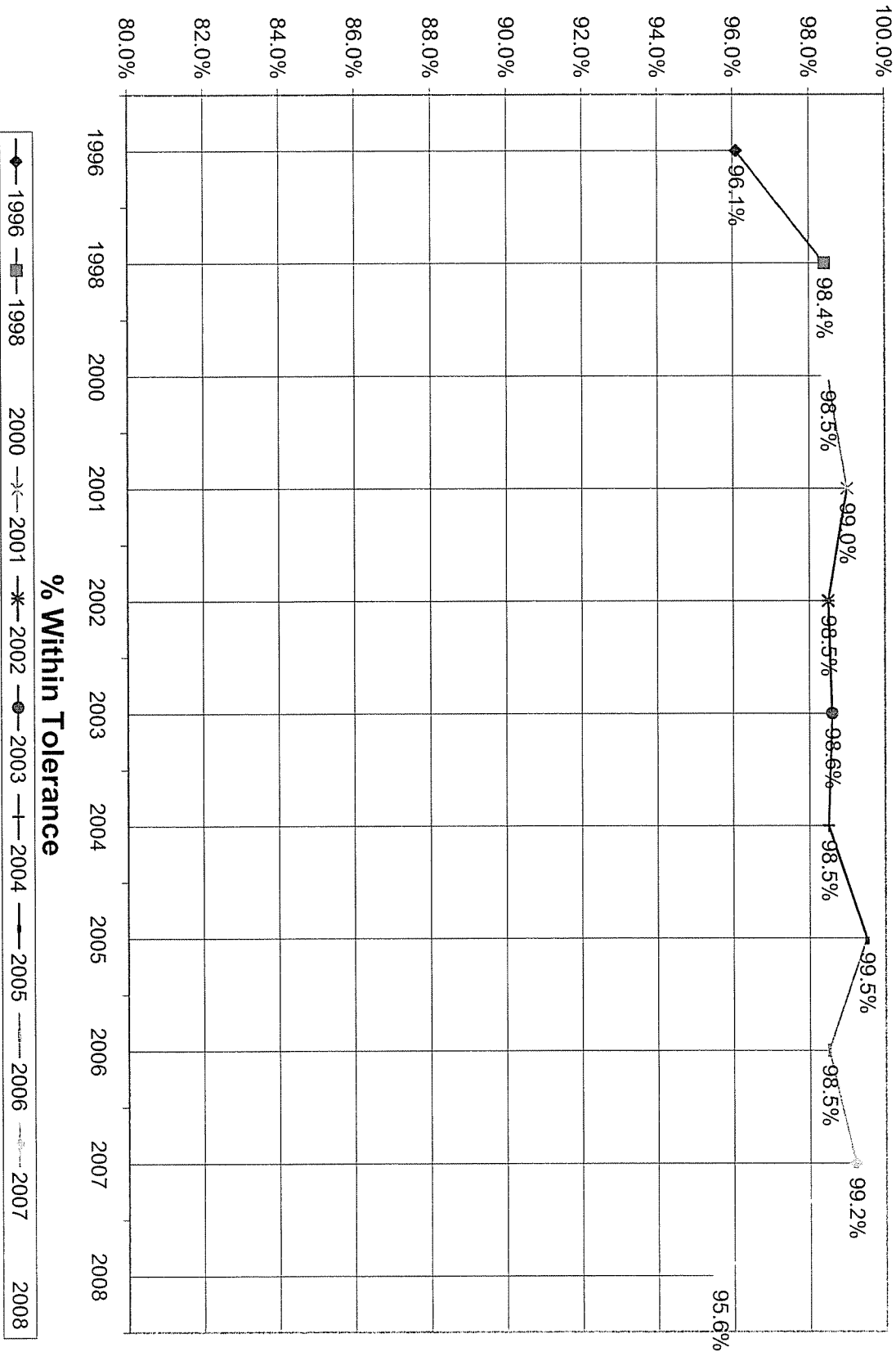


**% Within Tolerance**

Legend: 1996 (diamond), 1997 (square), 1998 (asterisk), 1999 (cross), 2000 (asterisk), 2001 (circle), 2002 (plus), 2003 (asterisk), 2004 (asterisk), 2005 (circle), 2006 (asterisk), 2007 (asterisk), 2008 (asterisk)

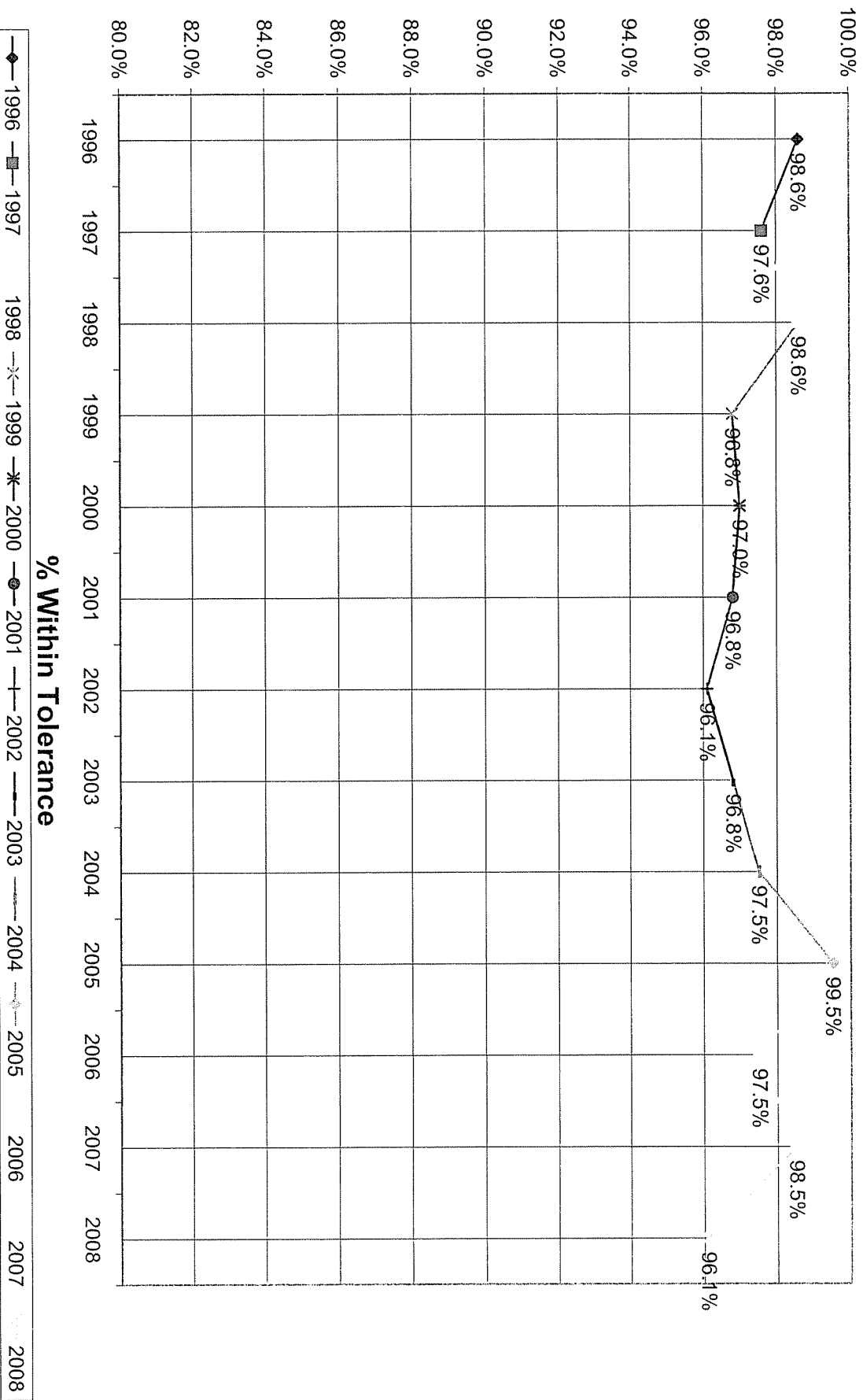
# RR004

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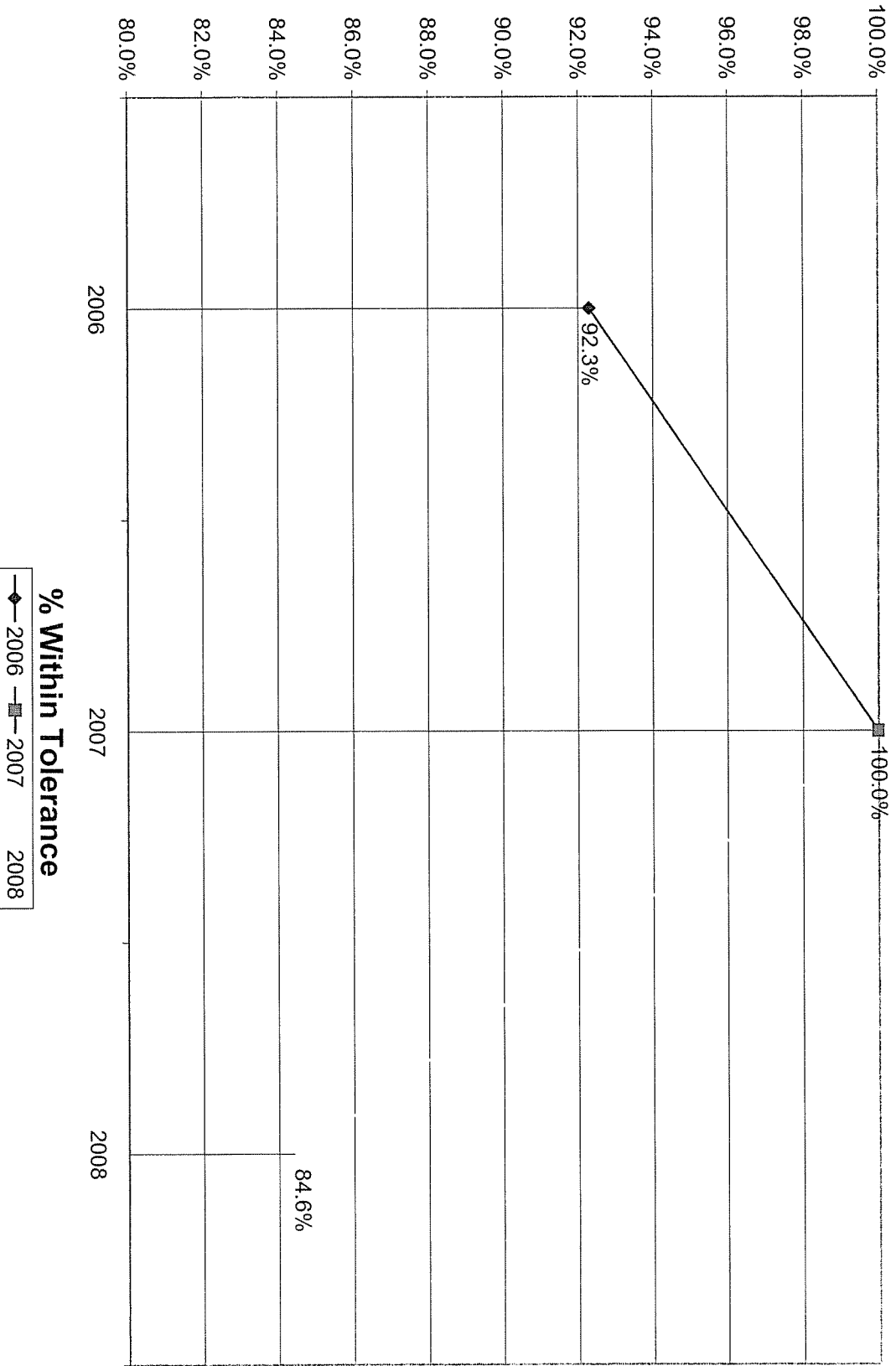
# RSP01

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of Kentucky



# RSP02

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**% Within Tolerance**

◆ 2006    ■ 2007    2008



**EXHIBIT E**

**PERCENTAGE OF LARGE VOLUME METER  
ACCURACY BY FAMILY**

**Exhibit E - represents the percentage of Large Volume meters sampled in 2008 that were within the +/- 2% rate, identified by homogenous group. We also show previous results of meter families sampled in prior years.**

**BRAM01 = Repaired American meters installed between 1998 & 2006**

**BRRO01 = Repaired Rockwell meters installed between 1998 & 2006**

**BRSP01 = Repaired Sprague meters installed between 1998 & 2006**

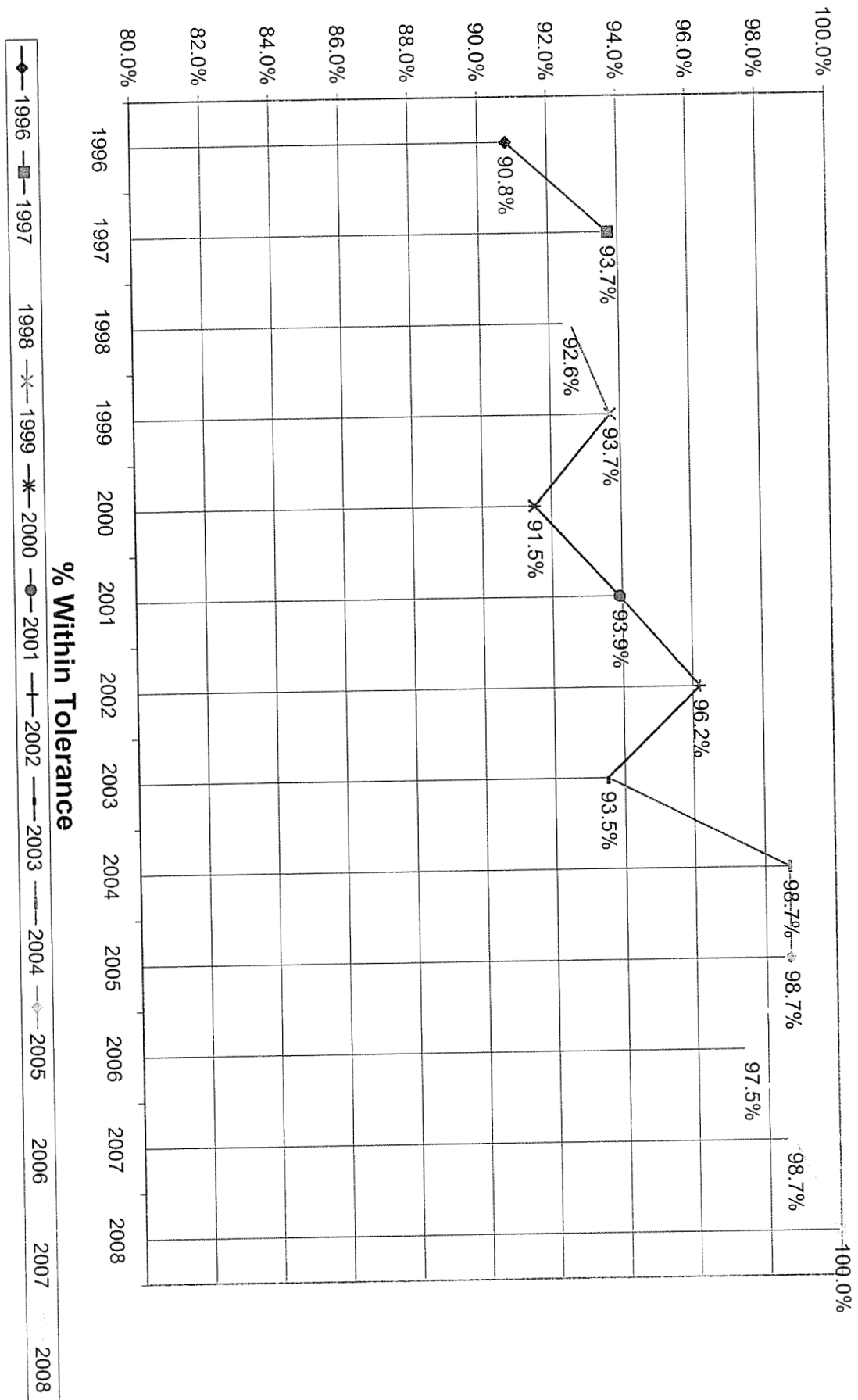
**BNAM01 = New American meters purchased between 1999 & 2006**

**BNRO01 = New Rockwell meters purchased in 1998 & 1999**

**BNSP01 = New Sprague meters purchased in 1998 & 1999**

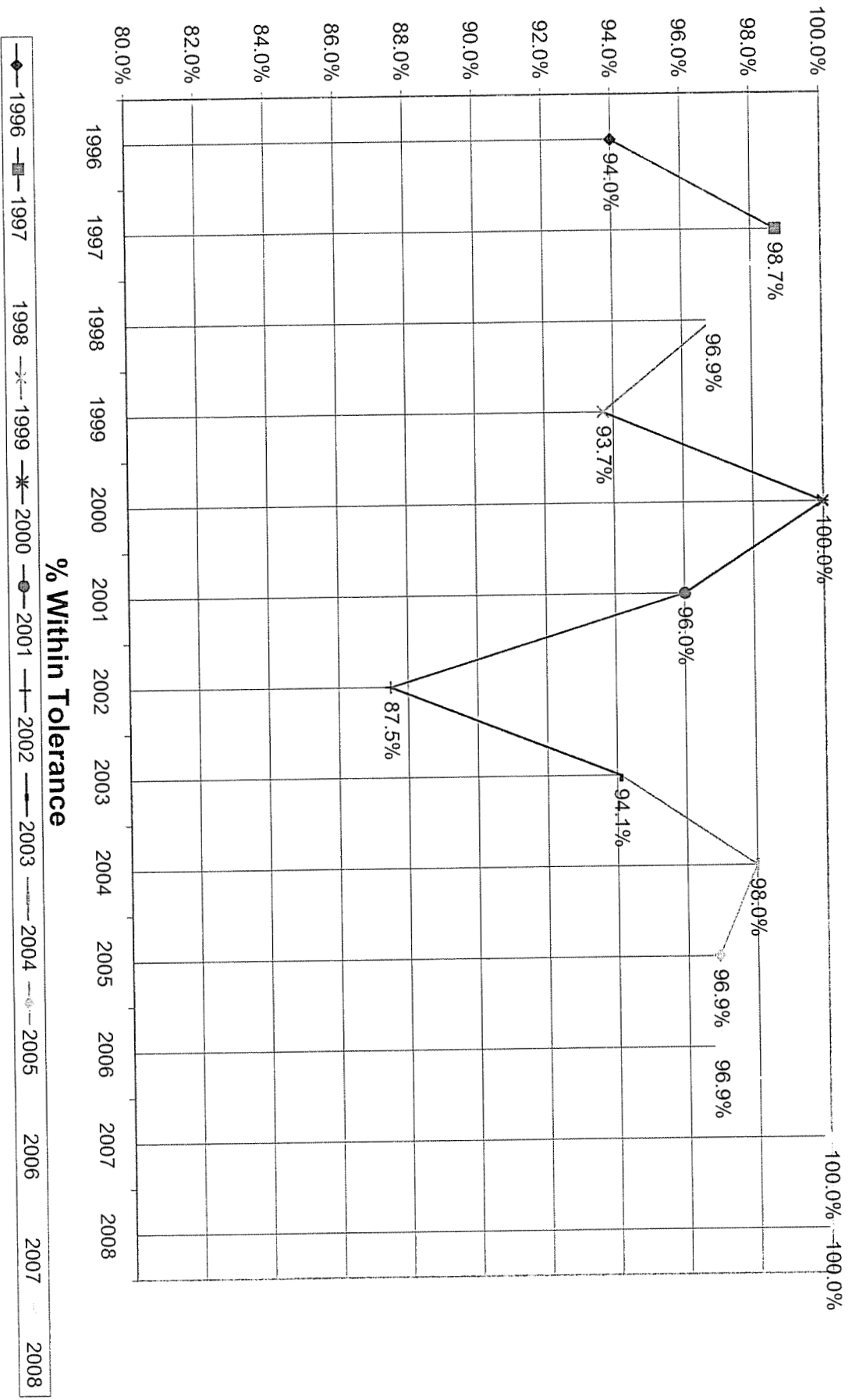
# BRAM01

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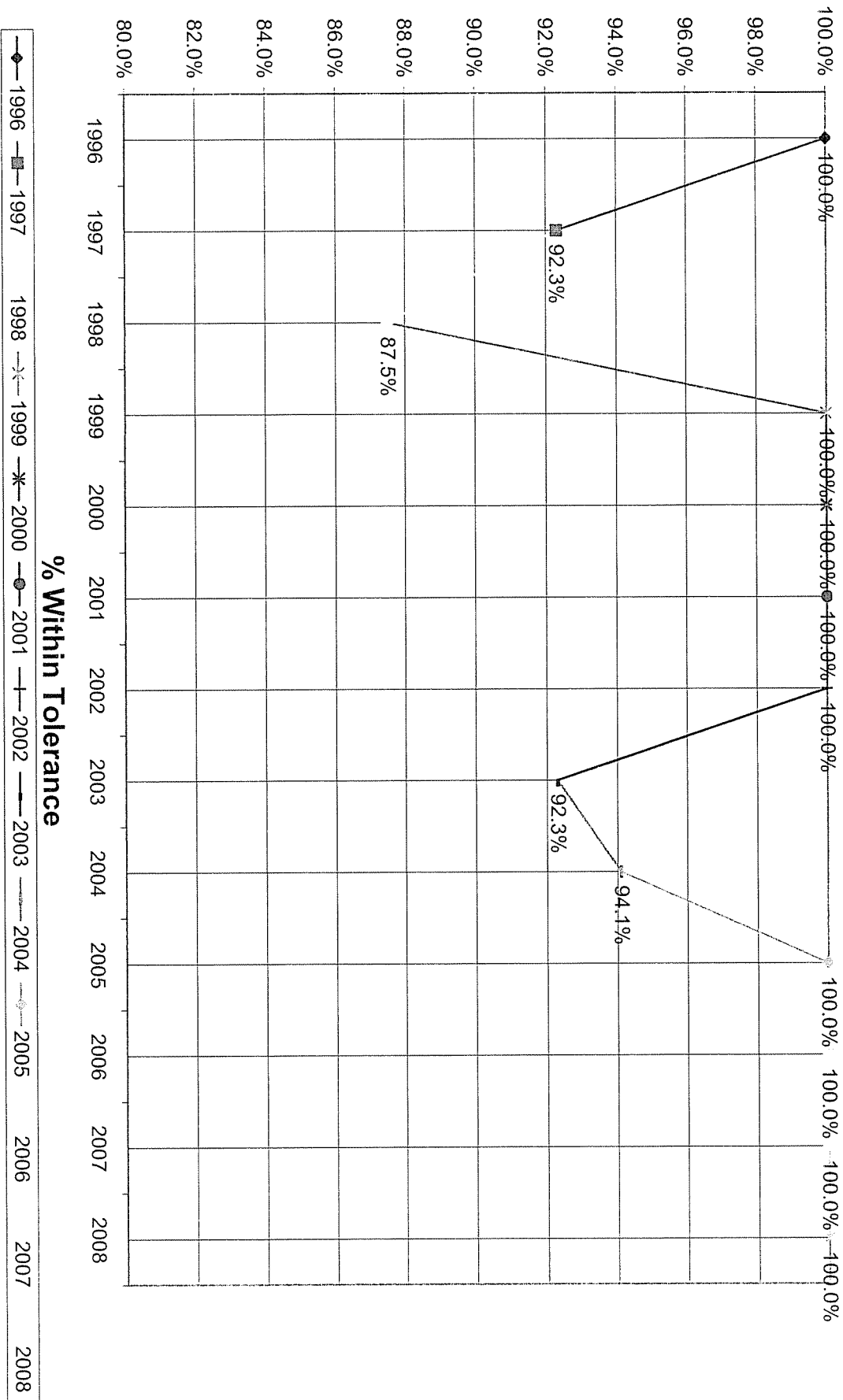
BRR001

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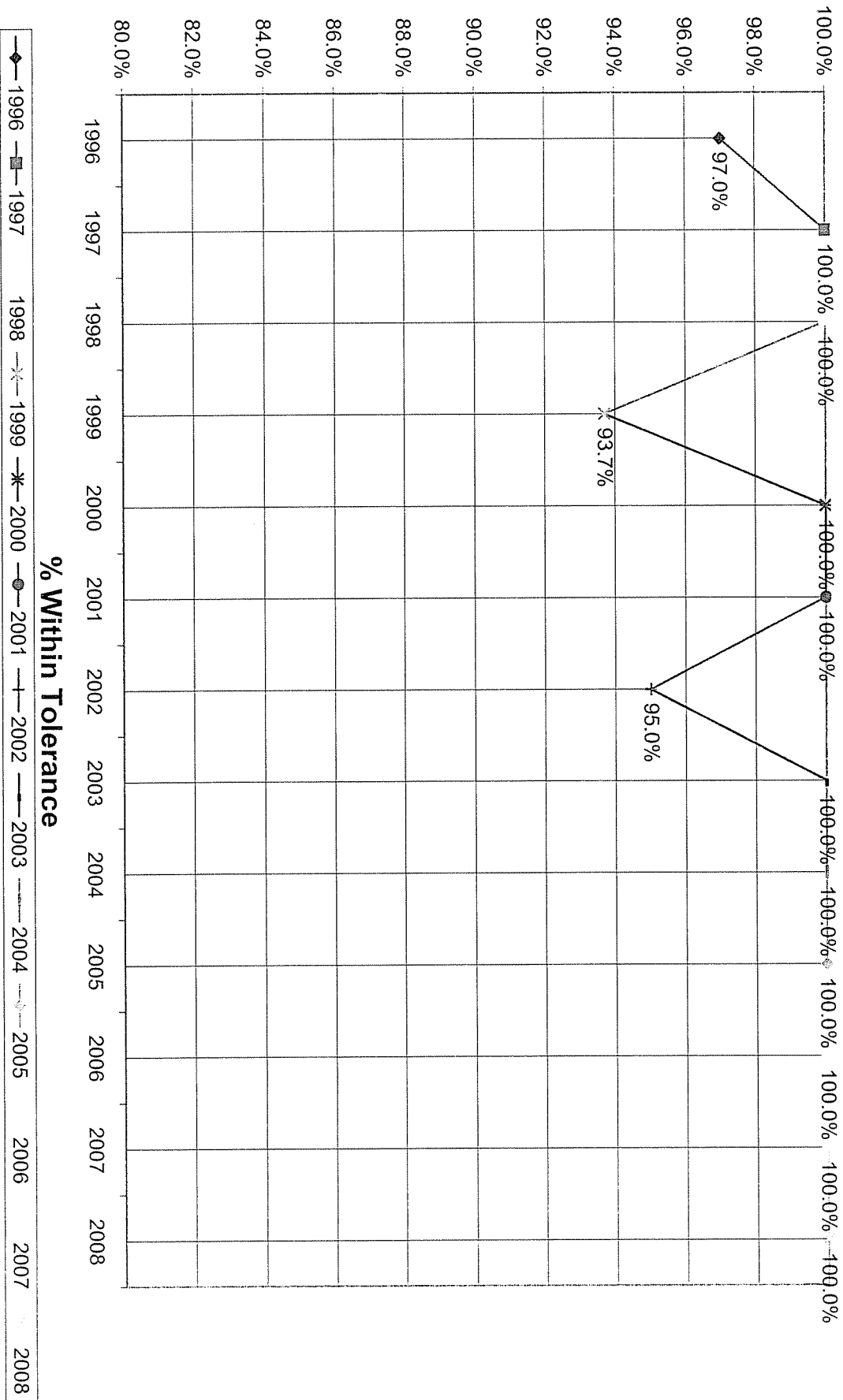


# BRSP01

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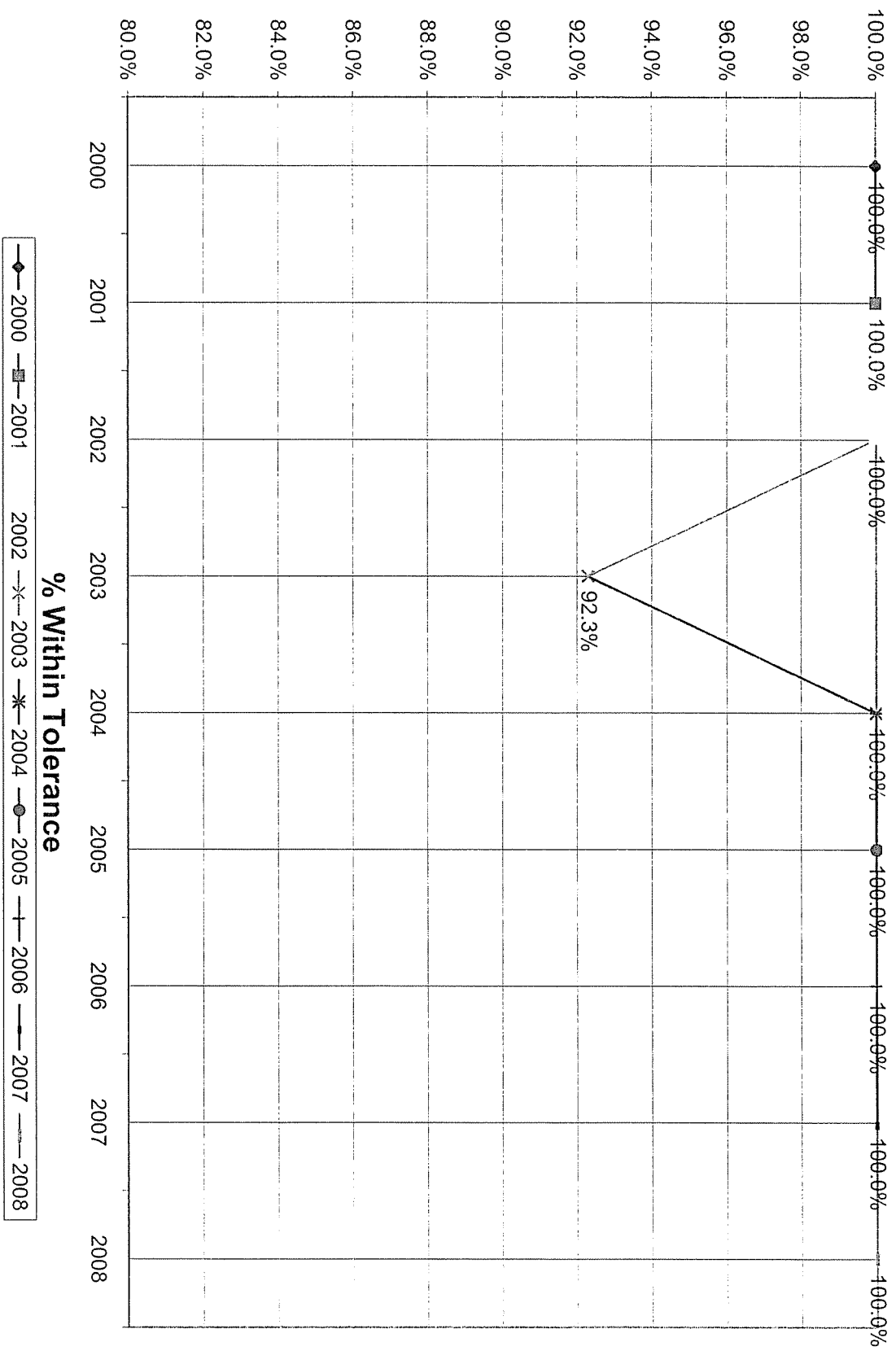


# BNAM01



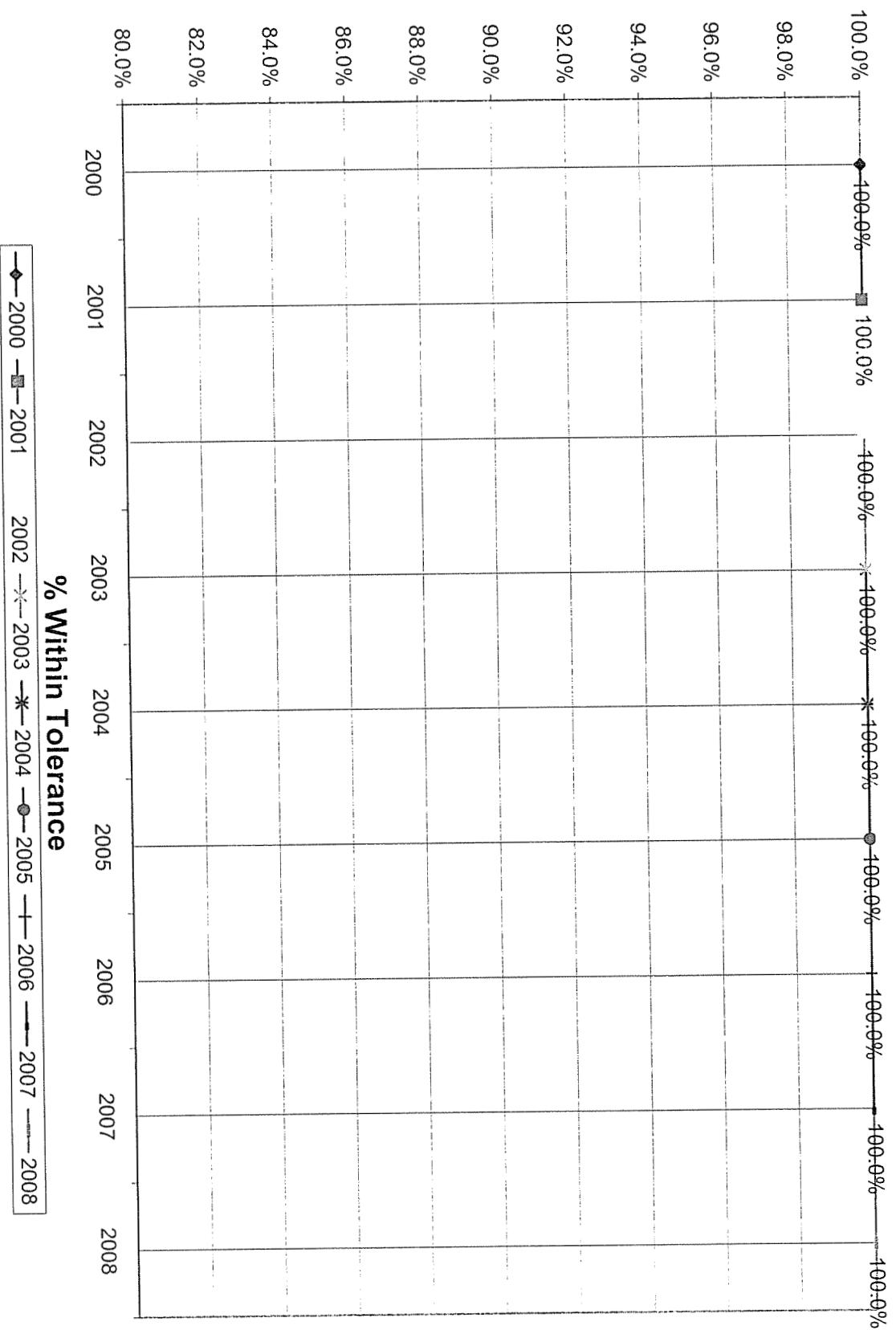
# BNR001

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# BNSP01

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**EXHIBIT F**

**COST SAVINGS**

**The 2008 sampling program resulted in changing 5296 fewer meters than would have been changed under the 14-year plan Columbia Gas of Kentucky was following prior to meter sampling and changing 9,432 fewer meters than would have been required under a 10-year change-out program.**

**This represents yearly savings of \$720,256 compared to a 14-year plan**

**This represents yearly savings of \$1,282,752 compared to a 10-year plan**

**EXHIBIT G**

**TEST RESULTS OF NEW METERS**

**Columbia Gas of Kentucky purchased 4968 new meters in 2008. The factory test sheets for the new meters purchased in 2008 are on file in the Lexington office.**

**No problems were found in the new 2008 purchases.**