

Missouri-American Water Company
Case No. WR-2003-0500

Usage Unaccounted For

The data as adjusted by 219,349 thousands of gallons for new Florissant customers leads to the regression model:

YEAR	GCD	DNSHORT	UNCOUNT
1993	262.75710	-2.18583	0
1994	293.84699	0.13807	0
1995	282.00387	-0.82838	0
1996	284.50282	-0.95675	0
1997	287.21737	-0.15905	0
1998	270.92365	-1.59080	0
1999	294.56215	0.02134	0
2000	281.84581	-0.66038	0
2001	286.82671	-0.26983	0
2002	279.34781	0.56437	1

SUMMARY OUTPUT

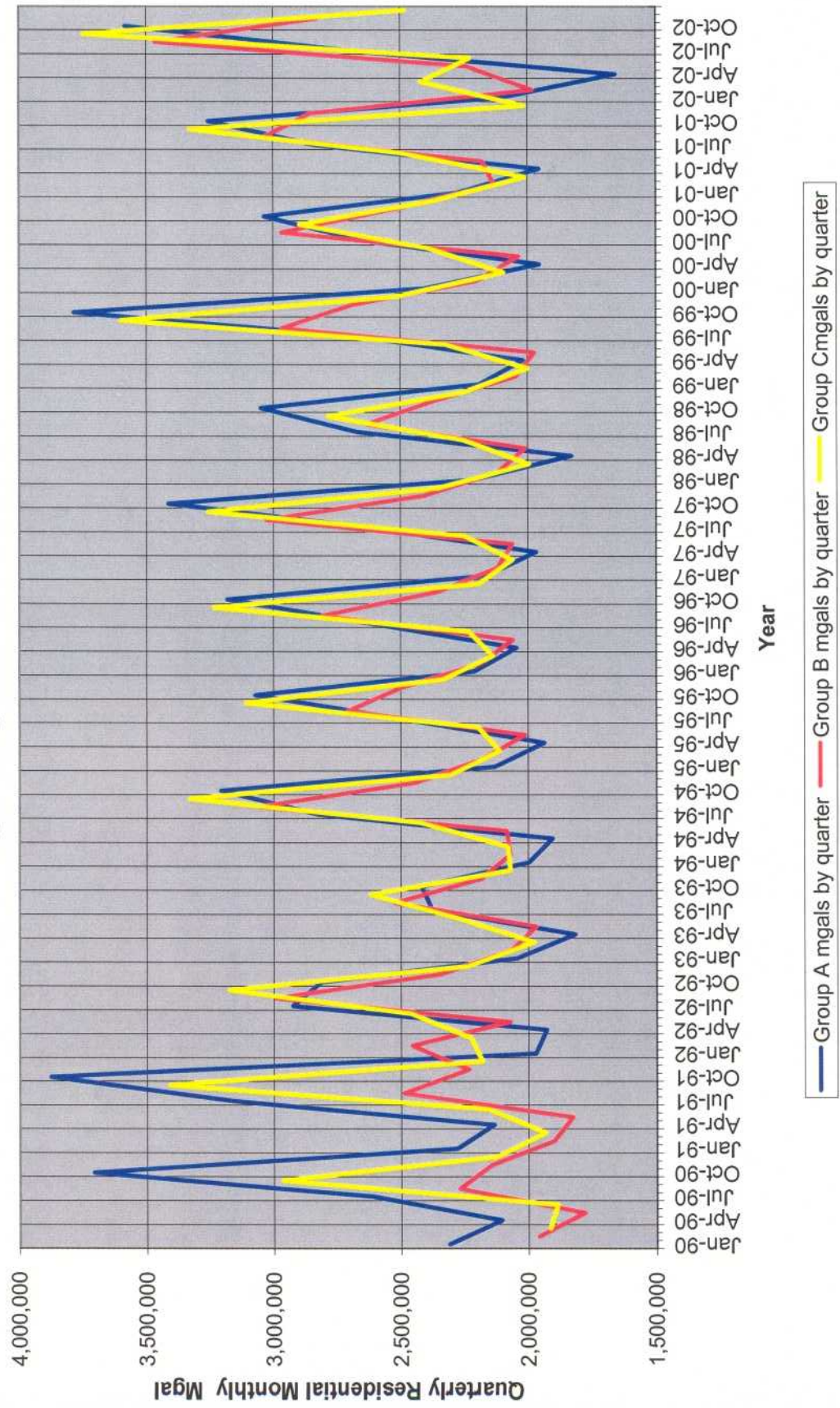
<i>Regression Statistics</i>	
Multiple R	0.974141099
R Square	0.948950881
Adjusted R Square	0.934365419
Standard Error	2.494869145
Observations	10

ANOVA

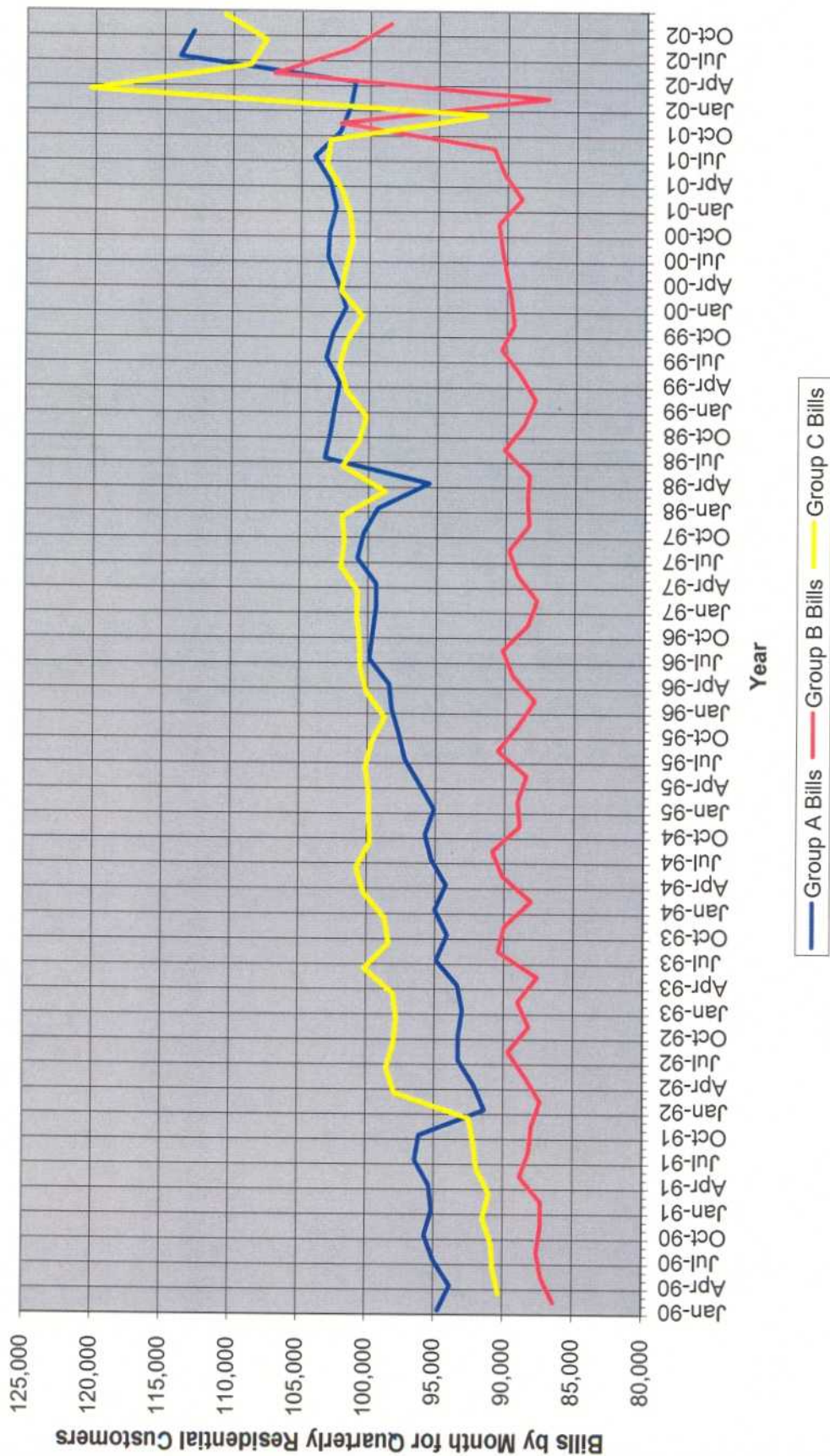
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	2	809.9329485	404.9664742	65.06141842	3.00579E-05
Residual	7	43.57060434	6.224372048		
Total	9	853.5035528			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	292.0487573	1.169979527	249.6186903	4.37204E-15	289.2821973	294.8153173
DNSHORT	12.93244208	1.140949364	11.33480809	9.31445E-06	10.23452747	15.63035668
UNCOUNT	-19.99961924	3.011259207	-6.641613315	0.000292786	-27.12011069	-12.87912779

Missouri-American Water Company
 District: St. Louis County Water
 Class: Quarterly Residential
 Issue: Mgal/ons by Month Within Quarter



Missouri-American Water Company
 District: St. Louis County Water
 Class: Quarterly Residential
 Issue: Distribution of Customer Bills Among Billing Cycles



Missouri-American Water Company
Case No. WR-2003-0500

Usage Unaccounted For: UNCOUNT

The data as adjusted by adding 219,349 thousands of gallons for new Florissant customers in 2002,
and as adjusted by adding 336,534 thousands of gallons for April billing cycles in 2002,
leads to the regression model:

YEAR	GCD	DNSHORT	UNCOUNT
1993	262.75710	-2.18583	0
1994	293.84699	0.13807	0
1995	282.00387	-0.82838	0
1996	284.50282	-0.95675	0
1997	287.21737	-0.15905	0
1998	270.92365	-1.59080	0
1999	294.56215	0.02134	0
2000	281.84581	-0.66038	0
2001	286.82671	-0.26983	0
2002	282.31584	0.56437	1

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.973827544
R Square	0.948340085
Adjusted R Square	0.933580109
Standard Error	2.494869145
Observations	10

ANOVA					
	df	SS	MS	F	Significance F
Regression	2	799.8416229	399.9208115	64.25078841	3.13356E-05
Residual	7	43.57060434	6.224372048		
Total	9	843.4122272			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	292.0487573	1.169979527	249.6186903	4.37204E-15	289.2821973	294.8153173
DNSHORT	12.93244208	1.140949364	11.33480809	9.31445E-06	10.23452747	15.63035668
UNCOUNT	-17.03158825	3.011259207	-5.655968843	0.000769689	-24.15207971	-9.911096798

Missouri-American Water Company

Case No. WR-2003-0500

District And Class: St. Louis County Water Quarterly Residential

Issue: Quarterly Bills By Month Within Quarter

Schedule 5

Year	Month	Quarter	yyyyqq	yyyyq4	Ending Date	Monthly Bills	Average Monthly Bills	Average Total Bills	Group A Bills	Group B Bills	Group C Bills	Group A Qtr to Qtr Change	Group B Qtr to Qtr Change	Group C Qtr to Qtr Change	Sum of Qtr-to-Qtr Changes	Sum of Annual Changes
2001	1	1	200101	200104	1/31/01	102,443	98,635	295,906	102,443	#N/A	#N/A	(486)				
2001	2	1	200101	200104	2/28/01	88,961	98,635	295,906	#N/A	88,961	#N/A		(1,670)			
2001	3	1	200101	200104	3/31/01	102,052	98,635	295,906	#N/A	#N/A	102,052			647	(1,509)	
2001	4	2	200102	200104	4/30/01	102,888	98,635	295,906	102,888	#N/A	#N/A	445				
2001	5	2	200102	200104	5/31/01	90,255	98,635	295,906	#N/A	90,255	#N/A		1,294			
2001	6	2	200102	200104	6/30/01	103,139	98,635	295,906	#N/A	#N/A	103,139			1,087	2,826	
2001	7	3	200103	200104	7/31/01	104,036	98,635	295,906	104,036	#N/A	#N/A	1,148				
2001	8	3	200103	200104	8/31/01	91,003	98,635	295,906	#N/A	91,003	#N/A		748			
2001	9	3	200103	200104	9/30/01	102,907	98,635	295,906	#N/A	#N/A	102,907			(232)	1,664	
2001	10	4	200104	200104	10/31/01	102,182	98,635	295,906	102,182	#N/A	#N/A	(1,854)				
2001	11	4	200104	200104	11/30/01	102,148	98,635	295,906	#N/A	102,148	#N/A		11,145			
2001	12	4	200104	200104	12/31/01	91,610	98,635	295,906	#N/A	#N/A	91,610			(11,297)	(2,006)	975
2002	1	1	200201	200204	1/31/02	101,440	105,880	317,639	101,440	#N/A	#N/A	(742)				
2002	2	1	200201	200204	2/28/02	87,040	105,880	317,639	#N/A	87,040	#N/A		(15,108)			
2002	3	1	200201	200204	3/31/02	120,354	105,880	317,639	#N/A	#N/A	120,354			28,744	12,894	
2002	4	2	200202	200204	4/30/02	101,091	105,880	317,639	101,091	#N/A	#N/A	(349)				
2002	5	2	200202	200204	5/31/02	107,006	105,880	317,639	#N/A	107,006	#N/A		19,966			
2002	6	2	200202	200204	6/30/02	108,726	105,880	317,639	#N/A	#N/A	108,726			(11,628)	7,989	
2002	7	3	200203	200204	7/31/02	113,872	105,880	317,639	113,872	#N/A	#N/A	12,781				
2002	8	3	200203	200204	8/31/02	101,441	105,880	317,639	#N/A	101,441	#N/A		(5,565)			
2002	9	3	200203	200204	9/30/02	107,590	105,880	317,639	#N/A	#N/A	107,590			(1,136)	6,080	
2002	10	4	200204	200204	10/31/02	112,873	105,880	317,639	112,873	#N/A	#N/A	(999)				
2002	11	4	200204	200204	11/30/02	98,510	105,880	317,639	#N/A	98,510	#N/A		(2,931)			
2002	12	4	200204	200204	12/31/02	110,614	105,880	317,639	#N/A	#N/A	110,614			3,024	(906)	26,057

Missouri-American Water Company
Case No. WR-2003-0500

Usage Unaccounted For: UNCOUNT

The data as adjusted by adding 219,349 thousands of gallons for new Florissant customers in 2002,
as adjusted by adding 336,534 thousands of gallons for April billing cycles in 2002,
as adjusted by adding 41,024 thousands of gallons (31 days base usage for 5,565 customers),
and as adjusted by adding 16,478 thousands of gallons (61 days base usage for 1,136 customers),
all leads to the regression model:

YEAR	GCD	DNSHORT	UNCOUNT
1993	262.75710	-2.18583	0
1994	293.84699	0.13807	0
1995	282.00387	-0.82838	0
1996	284.50282	-0.95675	0
1997	287.21737	-0.15905	0
1998	270.92365	-1.59080	0
1999	294.56215	0.02134	0
2000	281.84581	-0.66038	0
2001	286.82671	-0.26983	0
2002	282.82298	0.56437	1

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.973823199
R Square	0.948331623
Adjusted R Square	0.93356923
Standard Error	2.494869145
Observations	10

ANOVA

	df	SS	MS	F	Significance F
Regression	2	799.7035023	399.8517511	64.23969326	3.13536E-05
Residual	7	43.57060434	6.224372048		
Total	9	843.2741066			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	292.0487573	1.169979527	249.6186903	4.37204E-15	289.2821973	294.8153173
DNSHORT	12.93244208	1.140949364	11.33480809	9.31445E-06	10.23452747	15.63035668
UNCOUNT	-16.52444596	3.011259207	-5.487553486	0.000918577	-23.64493741	-9.403954503