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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 7
901 N. 5th STREET
KANSAS CITY, KANSAS 66101

AIR PERMITTING AND
COMPLIANCE BRANCH

November 9, 2006

Clark Duffy
Kansas Department of Health & Environment
Bureau of Air and Radiation
1000 S.W. Jackson Street, Suite 310
Topeka, KS 66612-1366

Dear Mr. Duffy,

We appreciate the opportunity to review and provide comments on the proposed PSD permit for the Sunflower Holcomb Station Expansion Project. Our comments focus on recommendations to improve the enforceability of permit conditions, highlight concerns about the SO₂ BACT limit and offers suggestions for the continuous emission monitoring portions of the permit.

The underlying assumptions used in the SO₂ BACT analysis continues to be our most significant concern. This issue, which we describe in detail in Attachment A and was discussed during the Sunflower pre-application meeting, is one which we have commented on in previous coal-fired projects in Region 7. We hope our analysis helps inform applicants and permit review agencies on a more appropriate selection of the baseline sulfur potential for coal from the Powder River Basin. We encourage KDHE to carefully consider our comments and either establish a firm performance requirement for the scrubber or a range of BACT limits corresponding to the fuels that will be combusted in the Holcomb units. We intend to make similar comments on the other coal-fired projects now under consideration and plan to share these comments with the other Region 7 states.

As always, we appreciate KDHE's efforts in carrying out the PSD program. If you have any questions, please contact Jon Knodel at (913) 551-7622 or at knodel.jon@epa.gov.

Sincerely,

JoAnn Heiman, Acting Chief
Air Permitting and Compliance Branch

Exhibit 9

Attachments:

Attachment A – EPA Region 7 Comments on Sunflower Holcomb Station Expansion Project for New Units H2, H3 and H4

Attachment B – SO₂ Baseline Emissions at Region 7 NSPS Subpart D Units

Attachment C – SO₂ Emissions at Public Power Plants in Region 7

Attachment D – Sunflower Holcomb Summary of Subpart Da Emission Reports from July '98 through June '06

Attachment E – Burlington Northern “Guide to Coal Mines” Analysis

Attachment F – Excerpts from KCPL-Hawthorn Scrubber Performance Analysis

Attachment G – Excerpt from City Utilities of Springfield “BACT Emission Limitations for PC Boilers Firing Western Subbituminous Coal”

Attachment H – Excerpts from Draft PSD permit for Longleaf Energy Associates, LLC C/o LS Power Development, LLC

Attachment A
EPA Region 7 Comments on
Sunflower Holcomb Station Expansion Project
for New Units H2, H3 and H4

SO2 BACT and Baseline Assumptions

The SO₂ baseline selected by Sunflower Holcomb to evaluate BACT appears not to be representative of the Powder River Basin (PRB) coals historically used in Region 7, including Holcomb Unit 1, and should be reevaluated consistent with the comments below.

The department proposes a SO₂ BACT limit of 0.095 #/mmBtu, 30-day rolling average. The limit is premised on the use of a worst case "baseline" fuel with a SO₂ inlet potential of 1.23 #/mmBtu in conjunction with a 92 percent removal using a dry spray dry adsorber (SDA).

The BACT limit would apply at all times, except during periods of startup, shutdown, and malfunction. In the absence of a percent removal requirement the BACT limit would presumably allow for lesser scrubber performance if lower sulfur fuels are burned. While conceivable that Sunflower Holcomb might have occasion to use a higher sulfur coal, during periods when the lower sulfur coal is unavailable or otherwise uneconomical, or when they blend with bituminous fuels as a mercury reduction strategy, the long term use of such a baseline fuel appears to be unlikely based on historical trends observed over the last 26 years for uncontrolled NSPS utility boilers in Region 7.

To help determine what an appropriate baseline for PRB coal might be, we looked at CEMS data for all uncontrolled NSPS Subpart D utility boilers from 1980 through 2005. The data indicate that SO₂ inlet concentrations range from 0.62 to 0.87 #SO₂/mmBtu, annual average, respectively. In the years prior to implementation of the acid rain program, uncontrolled NSPS utility units in Region 7 burned coal with a SO₂ potential of 0.73 - 0.87 #SO₂/mmBtu, with the trend generally declining. In the years following implementation of the acid rain program, uncontrolled NSPS utility units in Region 7 burned coal with a SO₂ potential of 0.62 - 0.71 #SO₂/mmBtu, again with a lowering trend. Despite the requirement to comply with the 1.2 #SO₂/mmBtu standard under NSPS Subpart D and to hold sufficient allowances under the title IV Acid Rain Program, it appears these units continue to make fuel choices, based on other incentives that result in SO₂ emissions well below their compliance obligations. This indicates that such coals are readily available and have been for many years. Please see Attachment B for more details.

Between 1995 and 2005, the highest average SO₂ inlet concentration for a single, uncontrolled NSPS unit in Region 7 was 0.81 #SO₂/mmBtu. This occurred at the Nearman Creek facility in Kansas City, Kansas in 2002. Nearman Creek is appropriate for comparison to the Sunflower Holcomb Power Station since both are public power facilities and both likely face similar constraints when purchasing compliance coal (e.g. low bid contracts, small purchaser). All annual average emissions data evaluated since 1995 were at or below 0.81 #SO₂/mmBtu. Likewise, all emissions data analyzed for uncontrolled NSPS Subpart D utility boilers since 1990, including over 217 utility years of certified emissions data, were below a maximum annual

potential SO₂ inlet concentration of 0.92 #SO₂/mmBtu. Given the long history and utility-wide nature of this information, it appears that the baseline used in the Sunflower Holcomb SO₂ BACT demonstration may not be representative of pre-control emissions expected while combusting PRB coal.

But, annual average SO₂ inlet concentrations may not tell the whole story. Sulfur in coal is variable and can impact short term emission averages. Over longer averaging periods the effects of variability are minimized. Since BACT emission limitations generally must be established using shorter term averages, adjustments to the annual average data may be appropriate. To estimate the magnitude of an annual-to-30-day-rolling-average adjustment, we looked at the monthly variability for the Nearman plant and seven other public power facilities in Region 7 from 1997 through 2002. During this period, monthly emissions – which are similar to those that might be observed using a 30-day rolling average – showed 97% of the SO₂ concentrations were less than 0.82 #SO₂/mmBtu and 99% were less than 0.90 #SO₂/mmBtu. Two of the 846 utility-months of data analyzed had SO₂ inlet concentrations greater than 1.0 #SO₂/mmBtu and were clearly outliers. See Attachment C for a summary of the analysis.

While clear that utilities included in the Region 7 analysis have periodically used higher sulfur fuels during times when their preferred fuel supply was unavailable, these infrequent events should not serve as the basis for setting a long term BACT standard. In fact, these periods of higher emissions are already reflected in the annual and monthly data analyses described above. Again, this analysis shows that the baseline used in the Sunflower Holcomb SO₂ BACT demonstration may not be representative of pre-control emissions likely to occur while combusting PRB coal. It is also important to note that when multiple assumptions are used to determine a BACT emission limit they should be evaluated on a consistent time basis. In this case, the BACT limit is derived from applying a 92% removal efficiency to a design sulfur inlet concentration. But, if the 1.23 #SO₂/mmBtu value presented by Sunflower represents a short-term, peak (e.g. instantaneous or 1-hr) inlet concentration and the 92% spray dry adsorber (SDA) removal efficiency represents performance over an extended period such as a year, then this apples-to-oranges comparison does not provide a meaningful result. Scrubber performance is usually based on long term performance guarantees and can have higher performance results over the short term. When considered together on a consistent time basis, long term scrubber performance and inlet SO₂ potentials appear to result in a substantially lower SO₂ BACT limit than proposed in the PSD permit.

In Footnote 3 of “Supplement 3 – Summary of Permit Activity Since Completion of BACT”, Sunflower notes the Holcomb Expansion Project, including new Units H2, H3, and H4, has been planned to make maximum use of existing on-site fuel and reagent supplies and handling equipment and will utilize the same supplies of approximately 0.5 percent western low sulfur coal. While past performance doesn’t necessarily indicate future performance, it is instructive to look at historical emission trends when determining if the assumptions used in the BACT analysis are reasonable. To better understand performance at Holcomb Unit H1 over the past several years, we used Sunflower’s quarterly NSPS Subpart Da emission reports to

compile a summary of daily, 30-day compliance averages, for Sunflower H1 from July, 1998 to the present. These analyses offer insights on trends of inlet and outlet SO₂ concentrations, the effectiveness of the dry scrubber and outlet NO_x and CO emissions.

In general, pre-control inlet SO₂ concentrations at Holcomb are consistent with those observed at other Region 7 utilities using PRB coal. Inlet SO₂ concentrations, based on 2,620 daily observations made by certified CEMS, range from 0.50 to 0.95 with over 99% of the data below 0.91 #SO₂/mmBtu. These data suggest that the design baseline for Holcomb Units H2, H3 and H4 may be too high and should be re-evaluated in light of these actual on site data. Further, the Holcomb data indicates that had it complied with a 92% level of scrubber control – a hypothetical value based on the BACT level of control for the new units – it would have been able to meet a BACT limit of 0.075 #SO₂/mmBtu over 100 percent of its operating time. For more information, see excerpts from the spreadsheet titled “Sunflower Subpart Da Emissions Data.xls” in Attachment D and on the enclosed CD.

A report prepared by Burlington Northern and Santa Fe Railway, titled a “Guide to Coal Mines”[<http://www.bnsf.com/markets/coal/pdf/mineguide.pdf>], offers additional insights into coal quality in the region. The report contains general information on the coal mines it serves, many of which are located in the Powder River Basin regions of Wyoming and Montana. We extracted pertinent data for each of the mines and prepared a summary report which is included in Attachment E. The summary shows the SO₂ equivalent of PRB-Wyoming to be 0.74 - 0.76 lbSO₂/mmBtu, on average. These BNSF data suggest that at a 92% control efficiency or better, the corresponding emissions would be in the range of 0.06 #SO₂/mmBtu on a 30 day rolling average.

Setting SO₂ BACT at 0.095#SO₂/mmBtu, without a corresponding percent reduction requirement, effectively allows Sunflower to operate the SDA at an efficiencies of 83.8% and 90.3% when burning PRB coals with an average SO₂ inlet concentration of 0.59 #SO₂/mmBtu and 0.98 #SO₂/mmBtu, respectively. These SO₂ inlet concentrations represent the average and worst case monthly average inlet concentrations for all NSPS Subpart D affected public power units in Region 7 between 1997 and 2005. If realized in practice, this level of scrubber performance falls well short of the long-term design performance anticipated for a SDA as BACT. We have observed this trend first hand at the Kansas City Power and Light Hawthorn Unit 5, where the BACT emission limitation was based on a “worst-case” PRB design baseline that has yet to be utilized. Since 2003, Hawthorn has achieved sustained removal efficiencies of 77 - 82%. Because the permit provides no incentive to reduce further, Hawthorn appears to be operating the scrubber well below its design capability even though it is meeting its BACT limit. Portions of this analysis can be found in Attachment F.

The Sunflower application and permit record could benefit from further evaluation of “better than 92 percent” BACT strategies for SO₂. The application and permit record make only brief mention of more rigorous removal options but provide no meaningful discussion on why these strategies were eliminated. However, recent permitting actions for Newmont, LS Power Longleaf, and even the City Utilities of Springfield Southwest projects evaluated, and in some

Attachment B
SO₂ Baseline Emissions at
Region 7 NSPS Subpart D Units

SO₂ Emissions Data for NSPS Subpart D (unscrubbed) Units

Medium										
										Swing from
										Average
										(min)
1980–2005		1980–2005		1980–2005		1980–2005		1980–2005		1980–2005
2005		2004		2003		2002		2001		2000
2006		2005		2004		2003		2002		1998
SO2 Rate		1980		1985		1987		1990		1998
Ames 8	1.12	0.41	0.40	0.42	0.44	0.36	0.36	0.34	0.34	0.36
CBE/C 3	0.85	0.66	0.76	0.70	0.73	0.73	0.74	0.68	0.65	0.65
Neal 3	1.13	1.32	0.73	0.83	0.73	0.72	0.68	0.66	0.72	0.67
Nest 4	1.13	0.73	0.77	0.71	0.76	0.77	0.73	0.65	0.71	0.63
Lansing 4	1.16	0.70	0.67	0.69	0.61	0.58	0.77	0.66	0.65	0.65
Louisville 101	0.79	0.75	0.76	0.77	0.75	0.72	0.70	0.64	0.59	0.58
Otiumwa 1	0.82	0.72	0.71	0.71	0.71	0.72	0.70	0.66	0.65	0.60
LaCygne 2	4.14	0.94	0.83	0.85	0.70	0.77	0.75	0.73	0.68	0.65
Neaman 1	0.82	0.75	0.72	0.67	0.72	0.76	0.84	0.72	0.78	0.61
Iatan 1	0.66	0.77	0.72	0.72	0.75	0.76	0.74	0.65	0.61	0.61
GG 1	0.73	0.72	0.62	0.63	0.47	0.47	0.52	0.57	0.56	0.49
GG 2	0.73	0.72	0.61	0.62	0.48	0.51	0.47	0.50	0.57	0.53
Whelan 1	0.91	0.50	0.52	0.68	0.63	0.64	0.72	0.64	0.61	0.66
Lon Wright	0.72	0.88	0.86	0.82	0.61	0.56	0.46	0.48	0.44	0.47
NE City 1	0.90	0.92	0.70	0.79	0.72	0.76	0.53	0.71	0.67	0.70
Platte 1	0.87	0.83	0.75	0.75	0.66	0.64	0.84	0.72	0.60	0.58
Weighted Average					0.71	0.67	0.68	0.64	0.62	0.64
SO2 Tons		1980		1985		1987		1990		1998
Ames 8	0	1,220	596	387	693	770	22,662	656	772	829
CBE/C 3	11,408	14,782	12,780	18,780	17,914	17,279	18,515	17,716	18,001	17,143
Neal 3	13,955	8,879	10,284	14,834	10,327	11,563	14,504	12,419	13,073	10,076
Neal 4	20,153	14,650	16,325	18,527	19,025	18,675	16,223	17,658	14,973	16,105
Lansing 4	7,686	4,011	4,092	3,109	2,920	4,797	5,701	4,882	5,701	4,489
Louisia 101	0	7,718	11,388	13,213	17,274	16,166	17,640	16,466	14,779	14,304
Otiumwa 1	0	12,192	13,110	18,601	17,773	16,277	20,198	18,392	18,415	17,276
LaCygne 2	0	12,879	12,879	22,284	22,284	11,303	18,915	20,083	20,309	19,356
Neaman 1	0	6,290	5,663	6,200	5,841	6,620	7,739	6,355	7,596	8,388
Iatan 1	11,886	16,174	15,394	19,289	18,713	19,296	17,397	13,430	16,283	16,856
GG 1	9,356	8,176	9,354	14,545	13,492	11,167	10,688	9,604	16,694	15,681
GG 2	0	12,135	11,677	13,417	12,534	11,237	11,917	10,806	12,988	14,603
Whelan 1	0	1,052	655	1,158	2,072	1,700	1,894	2,251	2,184	2,005
Lon Wright	989	1,244	1,244	989	914	1,086	928	987	841	1,088
NE City 1	8,757	11,444	11,230	17,138	13,469	12,233	12,832	17,697	15,227	16,206
Platte 1	0	1,521	1,779	1,729	2,213	2,004	2,782	2,564	2,497	2,436
Sum	84,141	134,477	144,440	184,637	176,727	159,403	184,372	178,852	168,842	182,048
Heat Input Ames 8		1980		1985		1987		1990		1998
CBE/C 3	33,415,067	34,693,600	38,779,014	48,493,286	51,499,851	31,773,385	40,046,978	36,869,523	33,331,686	49,978,862
Neal 3	24,760,176	13,465,981	28,297,632	45,233,380	51,806,380	48,134,375	48,865,106	41,961,014	48,490,272	45,750,310
Neal 4	35,723,677	40,432,288	45,253,308	51,806,380	51,806,380	10,484,851	10,076,882	12,897,356	18,549,631	14,974,831
Lansing 4	13,178,280	11,541,000	12,211,136	8,996,610	44,876,944	44,876,944	44,876,944	47,805,857	48,700,944	48,700,944
Louisia 101	0	19,428,025	30,171,044	35,921,287	46,803,200	50,070,339	47,766,100	45,841,344	45,841,344	45,841,344
Otiumwa 1	0	20,825,416	36,555,218	52,070,139	45,803,035	56,279,697	52,697,255	55,464,741	52,885,255	54,110,578
LaCygne 2	0	27,152,272	45,230,987	63,357,738	55,415,981	30,279,155	48,739,770	52,383,662	61,500,633	56,316,554
Neaman 1	0	15,369,366	15,170,225	18,144,298	17,535,384	19,715,821	20,970,307	22,549,849	24,520,940	24,520,940
Iatan 1	35,899,829	42,130,380	42,130,380	51,832,368	51,832,368	47,891,197	50,507,803	68,905,347	52,141,377	52,368,339
GG 1	25,461,324	22,784,110	25,653,820	46,803,200	43,986,229	43,986,229	46,803,200	48,766,100	48,836,292	48,359,038
GG 2	0	33,454,441	32,393,500	44,180,936	40,499,988	47,170,856	46,312,970	52,320,894	50,989,608	53,919,191
Whelan 1	0	32,076,761	46,161,536	5,395,551	4,988,353	3,224,196	6,277,040	6,766,152	6,671,029	6,582,721
Lon Wright	2,743,950	2,820,150	2,848,429	2,101,794	2,988,353	3,514,086	4,292,982	4,470,941	4,475,420	5,626,441
NE City 1	21,840,893	24,868,328	32,252,616	43,336,246	37,182,515	49,520,464	45,168,470	47,859,791	49,802,382	44,426,103
Platte 1	0	3,120,000	4,748,344	5,248,669	6,791,756	6,218,873	6,068,078	7,124,489	8,118,457	8,234,073
Sum	84,141	134,477	144,440	184,637	176,727	159,403	184,372	178,852	168,842	182,048
Heat Input Ames 8		1980		1985		1987		1990		1998
CBE/C 3	33,415,067	34,693,600	38,779,014	48,493,286	51,499,851	31,773,385	40,046,978	36,869,523	33,331,686	49,978,862
Neal 3	24,760,176	13,465,981	28,297,632	45,233,380	51,806,380	48,134,375	48,865,106	41,961,014	48,490,272	45,750,310
Neal 4	35,723,677	40,432,288	45,253,308	51,806,380	51,806,380	10,484,851	10,076,882	12,897,356	18,549,631	14,974,831
Lansing 4	13,178,280	11,541,000	12,211,136	8,996,610	44,876,944	44,876,944	44,876,944	47,805,857	48,700,944	48,700,944
Louisia 101	0	19,428,025	30,171,044	35,921,287	46,803,200	50,070,339	47,766,100	45,841,344	45,841,344	45,841,344
Otiumwa 1	0	20,825,416	36,555,218	52,070,139	45,803,035	56,279,697	52,697,255	55,464,741	52,885,255	54,110,578
LaCygne 2	0	27,152,272	45,230,987	63,357,738	55,415,981	30,279,155	48,739,770	52,383,662	61,500,633	56,316,554
Neaman 1	0	15,369,366	15,170,225	18,144,298	17,535,384	19,715,821	20,970,307	22,549,849	24,520,940	24,520,940
Iatan 1	35,899,829	42,130,380	42,130,380	51,832,368	51,832,368	47,891,197	50,507,803	68,905,347	52,141,377	52,368,339
GG 1	25,461,324	22,784,110	25,653,820	46,803,200	43,986,229	43,986,229	46,803,200	48,766,100	48,836,292	48,359,038
GG 2	0	33,454,441	32,393,500	44,180,936	40,499,988	47,170,856	46,312,970	52,320,894	50,989,608	53,919,191
Whelan 1	0	32,076,761	46,161,536	5,395,551	4,988,353	3,224,196	6,277,040	6,766,152	6,671,029	6,582,721
Lon Wright	2,743,950	2,820,150	2,848,429	2,101,794	2,988,353	3,514,086	4,292,982	4,470,941	4,475,420	5,626,441
NE City 1	21,840,893	24,868,328	32,252,616	43,336,246	37,182,515	49,520,464	45,168,470	47,859,791	49,802,382	44,426,103
Platte 1	0	3,120,000	4,748,344	5,248,669	6,791,756	6,218,873	6,068,078	7,124,489	8,118,457	8,234,073
Sum	84,141	134,477	144,440	184,637	176,727	159,403	184,372	178,852	168,842	182,048
Heat Input Ames 8		1980		1985		1987		1990		1998
CBE/C 3	33,415,067	34,693,600	38,779,014	48,493,286	51,499,851	31,773,385	40,046,978	36,869,523	33,331,686	49,978,862
Neal 3	24,760,176	13,465,981	28,297,632	45,233,380	51,806,380	48,134,375	48,865,106	41,961,014	48,490,272	45,750,310
Neal 4	35,723,677	40,432,288	45,253,308	51,806,380	51,806,380	10,484,851	10,076,882	12,897,356	18,549,631	14,974,831
Lansing 4	13,178,280	11,541,000	12,211,136	8,996,610	44,876,944	44,876,944	44,876,944	47,805,857	48,700,944	48,700,944
Louisia 101	0	19,428,025	30,171,044	35,921,287	46,803,200	50,070,339	47,766,100	45,841,344	45,841,344	45,841,344
Otiumwa 1	0	20,825,416	36,555,218	52,070,139	55,415,981	30,279,155	48,739,770	52,383,662	51,816,535	52,320,894
LaCygne 2	0	27,152,272	45,230,987	63,357,738	55,415,981	32,224,196	4,292,982	4,470,941	4,475,420	5,626,441
Neaman 1	0	15,369,366	15,170,225	18,144,298	17,535,384	19,715,821	45,168,470	47,859,791	49,802,382	44,426,103
Iatan 1	35,899,829	42,130,380	42,130,380	51,832,368	51,832,368	47,891,197	50,507,803	68,905,347	52,141,377	52,368,339
GG 1	2									

Attachment C
SO₂ Emissions at Public Power Plants in Region 7

Region 7 Public Power
SO2 Data
1997-2005

STATE	FACILITY_NAME	ORISPL_C	UNITID	OP_YEAR	OP_MONTH	SO2 Mass	SO2 Rate	Average	Max Rate	Min Rate	Max Difference from Average
IA	Ames	1122	8	1997	1	87	0.44				
IA	Ames	1122	8	1997	2	69	0.44				
IA	Ames	1122	8	1997	3	28	0.39				
IA	Ames	1122	8	1997	4	68	0.51				
IA	Ames	1122	8	1997	5	96	0.46				
IA	Ames	1122	8	1997	6	71	0.46				
IA	Ames	1122	8	1997	7	82	0.39				
IA	Ames	1122	8	1997	8	82	0.43				
IA	Ames	1122	8	1997	9	71	0.41				
IA	Ames	1122	8	1997	10	79	0.44				
IA	Ames	1122	8	1997	11	37	0.39				
IA	Ames	1122	8	1997	12			0.44	0.51	0.39	0.07
IA	Ames	1122	8	1998	1	7	0.36				
IA	Ames	1122	8	1998	2	45	0.33				
IA	Ames	1122	8	1998	3	75	0.35				
IA	Ames	1122	8	1998	4	39	0.34				
IA	Ames	1122	8	1998	5	45	0.36				
IA	Ames	1122	8	1998	6	74	0.37				
IA	Ames	1122	8	1998	7	83	0.37				
IA	Ames	1122	8	1998	8	77	0.36				
IA	Ames	1122	8	1998	9	53	0.40				
IA	Ames	1122	8	1998	10	66	0.36				
IA	Ames	1122	8	1998	11	61	0.36				
IA	Ames	1122	8	1998	12	71	0.35	0.36	0.40	0.33	0.04
IA	Ames	1122	8	1999	1	58	0.36				
IA	Ames	1122	8	1999	2	64	0.36				
IA	Ames	1122	8	1999	3	53	0.35				
IA	Ames	1122	8	1999	4	81	0.37				
IA	Ames	1122	8	1999	5	18	0.35				
IA	Ames	1122	8	1999	6	77	0.35				
IA	Ames	1122	8	1999	7	86	0.36				
IA	Ames	1122	8	1999	8	83	0.37				
IA	Ames	1122	8	1999	9	69	0.35				
IA	Ames	1122	8	1999	10	51	0.36				
IA	Ames	1122	8	1999	11	47	0.38				
IA	Ames	1122	8	1999	12	86	0.38	0.36	0.38	0.35	0.02
IA	Ames	1122	8	2000	1	99	0.42				
IA	Ames	1122	8	2000	2	88	0.39				
IA	Ames	1122	8	2000	3	93	0.36				
IA	Ames	1122	8	2000	4	20	0.36				
IA	Ames	1122	8	2000	5						
IA	Ames	1122	8	2000	6	46	0.38				
IA	Ames	1122	8	2000	7	81	0.41				
IA	Ames	1122	8	2000	8	79	0.37				
IA	Ames	1122	8	2000	9	76	0.37				
IA	Ames	1122	8	2000	10	68	0.34				
IA	Ames	1122	8	2000	11						
IA	Ames	1122	8	2000	12	7	0.32	0.38	0.42	0.32	0.06
IA	Ames	1122	8	2001	1	76	0.36				
IA	Ames	1122	8	2001	2	76	0.33				
IA	Ames	1122	8	2001	3	93	0.36				
IA	Ames	1122	8	2001	4	77	0.35				
IA	Ames	1122	8	2001	5	78	0.33				
IA	Ames	1122	8	2001	6	47	0.32				
IA	Ames	1122	8	2001	7	66	0.35				
IA	Ames	1122	8	2001	8	66	0.34				
IA	Ames	1122	8	2001	9	68	0.33				
IA	Ames	1122	8	2001	10	72	0.36				
IA	Ames	1122	8	2001	11	43	0.34				
IA	Ames	1122	8	2001	12	26	0.33	0.34	0.36	0.32	0.02
IA	Ames	1122	8	2002	1	72	0.34				
IA	Ames	1122	8	2002	2	63	0.35				
IA	Ames	1122	8	2002	3	64	0.37				
IA	Ames	1122	8	2002	4	75	0.37				
IA	Ames	1122	8	2002	5	61	0.38				
IA	Ames	1122	8	2002	6	76	0.37				
IA	Ames	1122	8	2002	7	74	0.38				
IA	Ames	1122	8	2002	8	74	0.36				
IA	Ames	1122	8	2002	9	71	0.35				
IA	Ames	1122	8	2002	10	65	0.34				
IA	Ames	1122	8	2002	11	62	0.34				
IA	Ames	1122	8	2002	12	71	0.34	0.36	0.38	0.34	0.02
IA	Ames	1122	8	2003	1	78	0.34				
IA	Ames	1122	8	2003	2	76	0.34				
IA	Ames	1122	8	2003	3	51	0.34				
IA	Ames	1122	8	2003	4	2	0.32				
IA	Ames	1122	8	2003	5	66	0.35				
IA	Ames	1122	8	2003	6	65	0.36				
IA	Ames	1122	8	2003	7	66	0.36				
IA	Ames	1122	8	2003	8	70	0.30				
IA	Ames	1122	8	2003	9	70	0.31				

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IA	Ames	1122	8	2003	10	64	0.33				
IA	Ames	1122	8	2003	11	39	0.36				
IA	Ames	1122	8	2003	12	82	0.36	0.34	0.36	0.30	0.04
IA	Ames	1122	8	2004	1	76	0.30				
IA	Ames	1122	8	2004	2	61	0.34				
IA	Ames	1122	8	2004	3	97	0.37				
IA	Ames	1122	8	2004	4	5	0.33				
IA	Ames	1122	8	2004	5	65	0.34				
IA	Ames	1122	8	2004	6	70	0.34				
IA	Ames	1122	8	2004	7	83	0.37				
IA	Ames	1122	8	2004	8	72	0.32				
IA	Ames	1122	8	2004	9	77	0.38				
IA	Ames	1122	8	2004	10	62	0.39				
IA	Ames	1122	8	2004	11	49	0.30				
IA	Ames	1122	8	2004	12	74	0.33	0.34	0.39	0.30	0.06
IA	Ames	1122	8	2005	1	82	0.33				
IA	Ames	1122	8	2005	2	67	0.34				
IA	Ames	1122	8	2005	3	81	0.33				
IA	Ames	1122	8	2005	4	2	0.32				
IA	Ames	1122	8	2005	5	60	0.38				
IA	Ames	1122	8	2005	6	82	0.36				
IA	Ames	1122	8	2005	7	83	0.35				
IA	Ames	1122	8	2005	8	78	0.31				
IA	Ames	1122	8	2005	9	75	0.33				
IA	Ames	1122	8	2005	10	65	0.32				
IA	Ames	1122	8	2005	11	38	0.33				
IA	Ames	1122	8	2005	12	72	0.34	0.34	0.38	0.31	0.04
KS	Nearman Creek	6064	N1	1997	1	517	0.65				
KS	Nearman Creek	6064	N1	1997	2	464	0.64				
KS	Nearman Creek	6064	N1	1997	3	426	0.63				
KS	Nearman Creek	6064	N1	1997	4	605	0.68				
KS	Nearman Creek	6064	N1	1997	5	311	0.74				
KS	Nearman Creek	6064	N1	1997	6	589	0.67				
KS	Nearman Creek	6064	N1	1997	7	587	0.63				
KS	Nearman Creek	6064	N1	1997	8	527	0.52				
KS	Nearman Creek	6064	N1	1997	9	683	0.74				
KS	Nearman Creek	6064	N1	1997	10	664	0.76				
KS	Nearman Creek	6064	N1	1997	11	611	0.75				
KS	Nearman Creek	6064	N1	1997	12	636	0.70	0.67	0.76	0.52	0.15
KS	Nearman Creek	6064	N1	1998	1	582	0.70				
KS	Nearman Creek	6064	N1	1998	2	639	0.75				
KS	Nearman Creek	6064	N1	1998	3	662	0.71				
KS	Nearman Creek	6064	N1	1998	4	783	0.81				
KS	Nearman Creek	6064	N1	1998	5	313	0.81				
KS	Nearman Creek	6064	N1	1998	6	714	0.77				
KS	Nearman Creek	6064	N1	1998	7	761	0.76				
KS	Nearman Creek	6064	N1	1998	8	480	0.72				
KS	Nearman Creek	6064	N1	1998	9	733	0.79				
KS	Nearman Creek	6064	N1	1998	10	559	0.82				
KS	Nearman Creek	6064	N1	1998	11	723	0.77				
KS	Nearman Creek	6064	N1	1998	12	689	0.75	0.76	0.82	0.70	0.06
KS	Nearman Creek	6064	N1	1999	1	743	0.82				
KS	Nearman Creek	6064	N1	1999	2	668	0.84				
KS	Nearman Creek	6064	N1	1999	3	633	0.84				
KS	Nearman Creek	6064	N1	1999	4						
KS	Nearman Creek	6064	N1	1999	5	387	1.25				
KS	Nearman Creek	6064	N1	1999	6	648	0.88				
KS	Nearman Creek	6064	N1	1999	7	500	0.89				
KS	Nearman Creek	6064	N1	1999	8	407	0.96				
KS	Nearman Creek	6064	N1	1999	9	335	0.80				
KS	Nearman Creek	6064	N1	1999	10	680	0.78				
KS	Nearman Creek	6064	N1	1999	11	662	0.78				
KS	Nearman Creek	6064	N1	1999	12	691	0.77	0.84	1.25	0.77	0.41
KS	Nearman Creek	6064	N1	2000	1	545	0.73				
KS	Nearman Creek	6064	N1	2000	2	393	0.66				
KS	Nearman Creek	6064	N1	2000	3	597	0.72				
KS	Nearman Creek	6064	N1	2000	4	664	0.66				
KS	Nearman Creek	6064	N1	2000	5	351	0.68				
KS	Nearman Creek	6064	N1	2000	6	681	0.70				
KS	Nearman Creek	6064	N1	2000	7	763	0.72				
KS	Nearman Creek	6064	N1	2000	8	806	0.74				
KS	Nearman Creek	6064	N1	2000	9	754	0.76				
KS	Nearman Creek	6064	N1	2000	10	791	0.78				
KS	Nearman Creek	6064	N1	2000	11	739	0.78				
KS	Nearman Creek	6064	N1	2000	12	511	0.70	0.72	0.78	0.66	0.06
KS	Nearman Creek	6064	N1	2001	1	802	0.75				
KS	Nearman Creek	6064	N1	2001	2	654	0.78				
KS	Nearman Creek	6064	N1	2001	3	804	0.74				
KS	Nearman Creek	6064	N1	2001	4	740	0.76				
KS	Nearman Creek	6064	N1	2001	5	415	0.73				
KS	Nearman Creek	6064	N1	2001	6	689	0.74				

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KS	Nearman Creek	6064	N1	2001	7	721	0.78				
KS	Nearman Creek	6064	N1	2001	8	708	0.79				
KS	Nearman Creek	6064	N1	2001	9	764	0.82				
KS	Nearman Creek	6064	N1	2001	10	592	0.80				
KS	Nearman Creek	6064	N1	2001	11	715	0.82				
KS	Nearman Creek	6064	N1	2001	12	783	0.84	0.78	0.84	0.73	0.06
KS	Nearman Creek	6064	N1	2002	1	762	0.79				
KS	Nearman Creek	6064	N1	2002	2	671	0.87				
KS	Nearman Creek	6064	N1	2002	3	704	0.80				
KS	Nearman Creek	6064	N1	2002	4	229	0.77				
KS	Nearman Creek	6064	N1	2002	5	735	0.82				
KS	Nearman Creek	6064	N1	2002	6	708	0.82				
KS	Nearman Creek	6064	N1	2002	7	742	0.81				
KS	Nearman Creek	6064	N1	2002	8	741	0.82				
KS	Nearman Creek	6064	N1	2002	9	702	0.80				
KS	Nearman Creek	6064	N1	2002	10	722	0.81				
KS	Nearman Creek	6064	N1	2002	11	179	0.78				
KS	Nearman Creek	6064	N1	2002	12	729	0.82	0.81	0.87	0.77	0.05
KS	Nearman Creek	6064	N1	2003	1	705	0.76				
KS	Nearman Creek	6064	N1	2003	2	761	0.85				
KS	Nearman Creek	6064	N1	2003	3	556	0.85				
KS	Nearman Creek	6064	N1	2003	4	567	0.71				
KS	Nearman Creek	6064	N1	2003	5	837	0.81				
KS	Nearman Creek	6064	N1	2003	6	686	0.82				
KS	Nearman Creek	6064	N1	2003	7	832	0.77				
KS	Nearman Creek	6064	N1	2003	8	838	0.76				
KS	Nearman Creek	6064	N1	2003	9	800	0.76				
KS	Nearman Creek	6064	N1	2003	10	576	0.76				
KS	Nearman Creek	6064	N1	2003	11	716	0.72				
KS	Nearman Creek	6064	N1	2003	12	854	0.76	0.77	0.85	0.71	0.07
KS	Nearman Creek	6064	N1	2004	1	794	0.81				
KS	Nearman Creek	6064	N1	2004	2	786	0.83				
KS	Nearman Creek	6064	N1	2004	3	818	0.84				
KS	Nearman Creek	6064	N1	2004	4	273	0.76				
KS	Nearman Creek	6064	N1	2004	5	780	0.79				
KS	Nearman Creek	6064	N1	2004	6	665	0.74				
KS	Nearman Creek	6064	N1	2004	7	572	0.76				
KS	Nearman Creek	6064	N1	2004	8	577	0.81				
KS	Nearman Creek	6064	N1	2004	9	658	0.81				
KS	Nearman Creek	6064	N1	2004	10	777	0.77				
KS	Nearman Creek	6064	N1	2004	11	658	0.74				
KS	Nearman Creek	6064	N1	2004	12	686	0.72	0.78	0.84	0.72	0.07
KS	Nearman Creek	6064	N1	2005	1	743	0.75				
KS	Nearman Creek	6064	N1	2005	2	435	0.79				
KS	Nearman Creek	6064	N1	2005	3	583	0.75				
KS	Nearman Creek	6064	N1	2005	4	342	0.82				
KS	Nearman Creek	6064	N1	2005	5	560	0.82				
KS	Nearman Creek	6064	N1	2005	6	841	0.81				
KS	Nearman Creek	6064	N1	2005	7	780	0.75				
KS	Nearman Creek	6064	N1	2005	8	680	0.74				
KS	Nearman Creek	6064	N1	2005	9	688	0.80				
KS	Nearman Creek	6064	N1	2005	10	480	0.75				
KS	Nearman Creek	6064	N1	2005	11	498	0.72				
KS	Nearman Creek	6064	N1	2005	12	653	0.74	0.77	0.82	0.72	0.05
NE	Gerald Gentleman Station	6077	1	1997	1	1186	0.50				
NE	Gerald Gentleman Station	6077	1	1997	2	1041	0.45				
NE	Gerald Gentleman Station	6077	1	1997	3	849	0.42				
NE	Gerald Gentleman Station	6077	1	1997	4	1122	0.45				
NE	Gerald Gentleman Station	6077	1	1997	5	922	0.45				
NE	Gerald Gentleman Station	6077	1	1997	6	1022	0.48				
NE	Gerald Gentleman Station	6077	1	1997	7	989	0.47				
NE	Gerald Gentleman Station	6077	1	1997	8	886	0.48				
NE	Gerald Gentleman Station	6077	1	1997	9	979	0.50				
NE	Gerald Gentleman Station	6077	1	1997	10	856	0.47				
NE	Gerald Gentleman Station	6077	1	1997	11	957	0.47				
NE	Gerald Gentleman Station	6077	1	1997	12	836	0.46	0.47	0.50	0.42	0.05
NE	Gerald Gentleman Station	6077	1	1998	1	803	0.45				
NE	Gerald Gentleman Station	6077	1	1998	2	974	0.49				
NE	Gerald Gentleman Station	6077	1	1998	3	846	0.45				
NE	Gerald Gentleman Station	6077	1	1998	4	870	0.50				
NE	Gerald Gentleman Station	6077	1	1998	5	861	0.43				
NE	Gerald Gentleman Station	6077	1	1998	6	998	0.46				
NE	Gerald Gentleman Station	6077	1	1998	7	887	0.44				
NE	Gerald Gentleman Station	6077	1	1998	8	1140	0.51				
NE	Gerald Gentleman Station	6077	1	1998	9	885	0.46				
NE	Gerald Gentleman Station	6077	1	1998	10	1188	0.50				
NE	Gerald Gentleman Station	6077	1	1998	11	960	0.47				
NE	Gerald Gentleman Station	6077	1	1998	12	976	0.44	0.47	0.51	0.43	0.05
NE	Gerald Gentleman Station	6077	1	1999	1	934	0.47				
NE	Gerald Gentleman Station	6077	1	1999	2	872	0.43				
NE	Gerald Gentleman Station	6077	1	1999	3	135	0.36				

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NE	Gerald Gentleman Station	6077	1	1999	4	797	0.40				
NE	Gerald Gentleman Station	6077	1	1999	5	814	0.40				
NE	Gerald Gentleman Station	6077	1	1999	6	930	0.47				
NE	Gerald Gentleman Station	6077	1	1999	7	1190	0.49				
NE	Gerald Gentleman Station	6077	1	1999	8	1088	0.48				
NE	Gerald Gentleman Station	6077	1	1999	9	800	0.44				
NE	Gerald Gentleman Station	6077	1	1999	10	1056	0.54				
NE	Gerald Gentleman Station	6077	1	1999	11	1075	0.57				
NE	Gerald Gentleman Station	6077	1	1999	12	1008	0.49	0.47	0.57	0.36	0.11
NE	Gerald Gentleman Station	6077	1	2000	1	989	0.56				
NE	Gerald Gentleman Station	6077	1	2000	2	965	0.55				
NE	Gerald Gentleman Station	6077	1	2000	3	1130	0.53				
NE	Gerald Gentleman Station	6077	1	2000	4	945	0.54				
NE	Gerald Gentleman Station	6077	1	2000	5	1060	0.52				
NE	Gerald Gentleman Station	6077	1	2000	6	917	0.54				
NE	Gerald Gentleman Station	6077	1	2000	7	852	0.42				
NE	Gerald Gentleman Station	6077	1	2000	8	1030	0.50				
NE	Gerald Gentleman Station	6077	1	2000	9	403	0.47				
NE	Gerald Gentleman Station	6077	1	2000	10						
NE	Gerald Gentleman Station	6077	1	2000	11	0	0.02				
NE	Gerald Gentleman Station	6077	1	2000	12	1313	0.56	0.52	0.56	0.02	0.50
NE	Gerald Gentleman Station	6077	1	2001	1	1538	0.56				
NE	Gerald Gentleman Station	6077	1	2001	2	1393	0.55				
NE	Gerald Gentleman Station	6077	1	2001	3	1543	0.56				
NE	Gerald Gentleman Station	6077	1	2001	4	1421	0.54				
NE	Gerald Gentleman Station	6077	1	2001	5	1442	0.56				
NE	Gerald Gentleman Station	6077	1	2001	6	1391	0.58				
NE	Gerald Gentleman Station	6077	1	2001	7	1423	0.54				
NE	Gerald Gentleman Station	6077	1	2001	8	1456	0.58				
NE	Gerald Gentleman Station	6077	1	2001	9	1271	0.58				
NE	Gerald Gentleman Station	6077	1	2001	10	967	0.66				
NE	Gerald Gentleman Station	6077	1	2001	11	1412	0.59				
NE	Gerald Gentleman Station	6077	1	2001	12	1438	0.56	0.57	0.66	0.54	0.09
NE	Gerald Gentleman Station	6077	1	2002	1	1528	0.60				
NE	Gerald Gentleman Station	6077	1	2002	2	1414	0.62				
NE	Gerald Gentleman Station	6077	1	2002	3	1531	0.60				
NE	Gerald Gentleman Station	6077	1	2002	4	1495	0.61				
NE	Gerald Gentleman Station	6077	1	2002	5	1398	0.60				
NE	Gerald Gentleman Station	6077	1	2002	6	1408	0.60				
NE	Gerald Gentleman Station	6077	1	2002	7	1486	0.57				
NE	Gerald Gentleman Station	6077	1	2002	8	1359	0.55				
NE	Gerald Gentleman Station	6077	1	2002	9	942	0.59				
NE	Gerald Gentleman Station	6077	1	2002	10	512	0.59				
NE	Gerald Gentleman Station	6077	1	2002	11	1344	0.58				
NE	Gerald Gentleman Station	6077	1	2002	12	1266	0.56	0.59	0.62	0.55	0.04
NE	Gerald Gentleman Station	6077	1	2003	1	1491	0.57				
NE	Gerald Gentleman Station	6077	1	2003	2	1207	0.53				
NE	Gerald Gentleman Station	6077	1	2003	3	1453	0.55				
NE	Gerald Gentleman Station	6077	1	2003	4	1368	0.54				
NE	Gerald Gentleman Station	6077	1	2003	5	1496	0.59				
NE	Gerald Gentleman Station	6077	1	2003	6	1357	0.55				
NE	Gerald Gentleman Station	6077	1	2003	7	1375	0.54				
NE	Gerald Gentleman Station	6077	1	2003	8	1330	0.57				
NE	Gerald Gentleman Station	6077	1	2003	9	1422	0.58				
NE	Gerald Gentleman Station	6077	1	2003	10	1337	0.54				
NE	Gerald Gentleman Station	6077	1	2003	11	1300	0.56				
NE	Gerald Gentleman Station	6077	1	2003	12	1477	0.58	0.56	0.59	0.53	0.03
NE	Gerald Gentleman Station	6077	1	2004	1	1495	0.60				
NE	Gerald Gentleman Station	6077	1	2004	2	1433	0.59				
NE	Gerald Gentleman Station	6077	1	2004	3	577	0.81				
NE	Gerald Gentleman Station	6077	1	2004	4	550	0.60				
NE	Gerald Gentleman Station	6077	1	2004	5	1488	0.60				
NE	Gerald Gentleman Station	6077	1	2004	6	1378	0.64				
NE	Gerald Gentleman Station	6077	1	2004	7	1534	0.64				
NE	Gerald Gentleman Station	6077	1	2004	8	1519	0.60				
NE	Gerald Gentleman Station	6077	1	2004	9	1323	0.61				
NE	Gerald Gentleman Station	6077	1	2004	10	1237	0.57				
NE	Gerald Gentleman Station	6077	1	2004	11	1414	0.57				
NE	Gerald Gentleman Station	6077	1	2004	12	1505	0.58	0.60	0.64	0.57	0.04
NE	Gerald Gentleman Station	6077	1	2005	1	1329	0.51				
NE	Gerald Gentleman Station	6077	1	2005	2	978	0.41				
NE	Gerald Gentleman Station	6077	1	2005	3	862	0.33				
NE	Gerald Gentleman Station	6077	1	2005	4	576	0.52				
NE	Gerald Gentleman Station	6077	1	2005	5	1389	0.53				
NE	Gerald Gentleman Station	6077	1	2005	6	1125	0.54				
NE	Gerald Gentleman Station	6077	1	2005	7	1353	0.53				
NE	Gerald Gentleman Station	6077	1	2005	8	1248	0.51				
NE	Gerald Gentleman Station	6077	1	2005	9	1279	0.53				
NE	Gerald Gentleman Station	6077	1	2005	10	1245	0.52				
NE	Gerald Gentleman Station	6077	1	2005	11	1297	0.52				
NE	Gerald Gentleman Station	6077	1	2005	12	1320	0.50	0.49	0.54	0.33	0.16

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STATE	FACILITY_NAME	ORISPL_C	UNITID	OP_YEAR	OP_MONTH	SO2 Mass	SO2 Rate	Average	Max Rate	Min Rate	Max Difference from Average
NE	Gerald Gentleman Station	6077	2	1997	1	1044	0.46				
NE	Gerald Gentleman Station	6077	2	1997	2	761	0.46				
NE	Gerald Gentleman Station	6077	2	1997	3	930	0.42				
NE	Gerald Gentleman Station	6077	2	1997	4	974	0.44				
NE	Gerald Gentleman Station	6077	2	1997	5	752	0.47				
NE	Gerald Gentleman Station	6077	2	1997	6	741	0.46				
NE	Gerald Gentleman Station	6077	2	1997	7	1056	0.46				
NE	Gerald Gentleman Station	6077	2	1997	8	909	0.46				
NE	Gerald Gentleman Station	6077	2	1997	9	819	0.51				
NE	Gerald Gentleman Station	6077	2	1997	10	995	0.56				
NE	Gerald Gentleman Station	6077	2	1997	11	1121	0.54				
NE	Gerald Gentleman Station	6077	2	1997	12	1137	0.50	0.48	0.56	0.42	0.08
NE	Gerald Gentleman Station	6077	2	1998	1	928	0.46				
NE	Gerald Gentleman Station	6077	2	1998	2	959	0.49				
NE	Gerald Gentleman Station	6077	2	1998	3	946	0.51				
NE	Gerald Gentleman Station	6077	2	1998	4	935	0.53				
NE	Gerald Gentleman Station	6077	2	1998	5	1096	0.51				
NE	Gerald Gentleman Station	6077	2	1998	6	940	0.52				
NE	Gerald Gentleman Station	6077	2	1998	7	1090	0.51				
NE	Gerald Gentleman Station	6077	2	1998	8	1064	0.56				
NE	Gerald Gentleman Station	6077	2	1998	9	590	0.50				
NE	Gerald Gentleman Station	6077	2	1998	10	1069	0.50				
NE	Gerald Gentleman Station	6077	2	1998	11	1129	0.53				
NE	Gerald Gentleman Station	6077	2	1998	12	1171	0.49	0.51	0.56	0.46	0.05
NE	Gerald Gentleman Station	6077	2	1999	1	1070	0.48				
NE	Gerald Gentleman Station	6077	2	1999	2	890	0.43				
NE	Gerald Gentleman Station	6077	2	1999	3	1197	0.50				
NE	Gerald Gentleman Station	6077	2	1999	4	65	0.45				
NE	Gerald Gentleman Station	6077	2	1999	5	363	0.41				
NE	Gerald Gentleman Station	6077	2	1999	6	985	0.51				
NE	Gerald Gentleman Station	6077	2	1999	7	1235	0.49				
NE	Gerald Gentleman Station	6077	2	1999	8	1082	0.46				
NE	Gerald Gentleman Station	6077	2	1999	9	797	0.44				
NE	Gerald Gentleman Station	6077	2	1999	10	1019	0.45				
NE	Gerald Gentleman Station	6077	2	1999	11	1017	0.46				
NE	Gerald Gentleman Station	6077	2	1999	12	1085	0.46	0.47	0.51	0.41	0.05
NE	Gerald Gentleman Station	6077	2	2000	1	1231	0.52				
NE	Gerald Gentleman Station	6077	2	2000	2	903	0.48				
NE	Gerald Gentleman Station	6077	2	2000	3	1367	0.57				
NE	Gerald Gentleman Station	6077	2	2000	4	1308	0.57				
NE	Gerald Gentleman Station	6077	2	2000	5	1241	0.52				
NE	Gerald Gentleman Station	6077	2	2000	6	852	0.49				
NE	Gerald Gentleman Station	6077	2	2000	7	1203	0.49				
NE	Gerald Gentleman Station	6077	2	2000	8	1220	0.50				
NE	Gerald Gentleman Station	6077	2	2000	9	945	0.50				
NE	Gerald Gentleman Station	6077	2	2000	10	1198	0.52				
NE	Gerald Gentleman Station	6077	2	2000	11	899	0.40				
NE	Gerald Gentleman Station	6077	2	2000	12	621	0.34	0.50	0.57	0.34	0.16
NE	Gerald Gentleman Station	6077	2	2001	1	1343	0.55				
NE	Gerald Gentleman Station	6077	2	2001	2	1075	0.57				
NE	Gerald Gentleman Station	6077	2	2001	3	1392	0.60				
NE	Gerald Gentleman Station	6077	2	2001	4						
NE	Gerald Gentleman Station	6077	2	2001	5	856	0.56				
NE	Gerald Gentleman Station	6077	2	2001	6	1281	0.57				
NE	Gerald Gentleman Station	6077	2	2001	7	1349	0.52				
NE	Gerald Gentleman Station	6077	2	2001	8	1465	0.56				
NE	Gerald Gentleman Station	6077	2	2001	9	1371	0.58				
NE	Gerald Gentleman Station	6077	2	2001	10	1532	0.61				
NE	Gerald Gentleman Station	6077	2	2001	11	1431	0.59				
NE	Gerald Gentleman Station	6077	2	2001	12	1507	0.58	0.57	0.61	0.52	0.06
NE	Gerald Gentleman Station	6077	2	2002	1	1549	0.60				
NE	Gerald Gentleman Station	6077	2	2002	2	1399	0.61				
NE	Gerald Gentleman Station	6077	2	2002	3	1532	0.59				
NE	Gerald Gentleman Station	6077	2	2002	4	1449	0.59				
NE	Gerald Gentleman Station	6077	2	2002	5	681	0.59				
NE	Gerald Gentleman Station	6077	2	2002	6	1383	0.59				
NE	Gerald Gentleman Station	6077	2	2002	7	1497	0.56				
NE	Gerald Gentleman Station	6077	2	2002	8	1374	0.55				
NE	Gerald Gentleman Station	6077	2	2002	9	1348	0.54				
NE	Gerald Gentleman Station	6077	2	2002	10	1372	0.53				
NE	Gerald Gentleman Station	6077	2	2002	11	1435	0.55				
NE	Gerald Gentleman Station	6077	2	2002	12	1453	0.54	0.57	0.61	0.53	0.04
NE	Gerald Gentleman Station	6077	2	2003	1	1368	0.53				
NE	Gerald Gentleman Station	6077	2	2003	2	1146	0.49				
NE	Gerald Gentleman Station	6077	2	2003	3	1210	0.50				
NE	Gerald Gentleman Station	6077	2	2003	4	769	0.51				
NE	Gerald Gentleman Station	6077	2	2003	5	111	0.43				
NE	Gerald Gentleman Station	6077	2	2003	6	1297	0.54				
NE	Gerald Gentleman Station	6077	2	2003	7	1379	0.54				
NE	Gerald Gentleman Station	6077	2	2003	8	1458	0.56				
NE	Gerald Gentleman Station	6077	2	2003	9	1427	0.58				

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STATE	FACILITY_NAME	ORISPL_C	UNITID	OP_YEAR	OP_MONTH	SO2 Mass	SO2 Rate	Average	Max Rate	Min Rate	Max Difference from Average	
NE	Gerald Gentleman Station	6077	2	2003	10	1395	0.53					
NE	Gerald Gentleman Station	6077	2	2003	11	1462	0.57					
NE	Gerald Gentleman Station	6077	2	2003	12	1453	0.55					
NE	Gerald Gentleman Station	6077	2	2004	1	1561	0.59					
NE	Gerald Gentleman Station	6077	2	2004	2	1244	0.56					
NE	Gerald Gentleman Station	6077	2	2004	3	1492	0.59					
NE	Gerald Gentleman Station	6077	2	2004	4	1550	0.62					
NE	Gerald Gentleman Station	6077	2	2004	5	885	0.56					
NE	Gerald Gentleman Station	6077	2	2004	6	1040	0.59					
NE	Gerald Gentleman Station	6077	2	2004	7	1239	0.61					
NE	Gerald Gentleman Station	6077	2	2004	8	1538	0.58					
NE	Gerald Gentleman Station	6077	2	2004	9	1406	0.57					
NE	Gerald Gentleman Station	6077	2	2004	10	1540	0.57					
NE	Gerald Gentleman Station	6077	2	2004	11	1490	0.57					
NE	Gerald Gentleman Station	6077	2	2004	12	1587	0.59	0.58	0.62	0.56	0.03	
NE	Gerald Gentleman Station	6077	2	2005	1	1450	0.57					
NE	Gerald Gentleman Station	6077	2	2005	2	1316	0.53					
NE	Gerald Gentleman Station	6077	2	2005	3	1437	0.54					
NE	Gerald Gentleman Station	6077	2	2005	4	1282	0.52					
NE	Gerald Gentleman Station	6077	2	2005	5							
NE	Gerald Gentleman Station	6077	2	2005	6	740	0.51					
NE	Gerald Gentleman Station	6077	2	2005	7	1421	0.53					
NE	Gerald Gentleman Station	6077	2	2005	8	1305	0.53					
NE	Gerald Gentleman Station	6077	2	2005	9	1289	0.54					
NE	Gerald Gentleman Station	6077	2	2005	10	1357	0.54					
NE	Gerald Gentleman Station	6077	2	2005	11	1262	0.53					
NE	Gerald Gentleman Station	6077	2	2005	12	1332	0.49	0.53	0.57	0.49	0.04	
NE	Gerald Whelan Energy Center	60	1	1997	1	168	0.56					
NE	Gerald Whelan Energy Center	60	1	1997	2	143	0.54					
NE	Gerald Whelan Energy Center	60	1	1997	3	65	0.56					
NE	Gerald Whelan Energy Center	60	1	1997	4	0	1.95					
NE	Gerald Whelan Energy Center	60	1	1997	5	101	0.50					
NE	Gerald Whelan Energy Center	60	1	1997	6	159	0.65					
NE	Gerald Whelan Energy Center	60	1	1997	7	198	0.64					
NE	Gerald Whelan Energy Center	60	1	1997	8	194	0.68					
NE	Gerald Whelan Energy Center	60	1	1997	9	160	0.59					
NE	Gerald Whelan Energy Center	60	1	1997	10	159	0.66					
NE	Gerald Whelan Energy Center	60	1	1997	11	172	0.75					
NE	Gerald Whelan Energy Center	60	1	1997	12	181	0.76	0.63	1.95	0.50	1.32	
NE	Gerald Whelan Energy Center	60	1	1998	1	159	0.69					
NE	Gerald Whelan Energy Center	60	1	1998	2	81	0.38					
NE	Gerald Whelan Energy Center	60	1	1998	3	97	0.42					
NE	Gerald Whelan Energy Center	60	1	1998	4	42	0.43					
NE	Gerald Whelan Energy Center	60	1	1998	5	144	0.53					
NE	Gerald Whelan Energy Center	60	1	1998	6	203	0.71					
NE	Gerald Whelan Energy Center	60	1	1998	7	211	0.67					
NE	Gerald Whelan Energy Center	60	1	1998	8	217	0.71					
NE	Gerald Whelan Energy Center	60	1	1998	9	222	0.76					
NE	Gerald Whelan Energy Center	60	1	1998	10	161	0.68					
NE	Gerald Whelan Energy Center	60	1	1998	11	179	0.74					
NE	Gerald Whelan Energy Center	60	1	1998	12	178	0.70	0.64	0.78	0.38	0.25	
NE	Gerald Whelan Energy Center	60	1	1999	1	198	0.73					
NE	Gerald Whelan Energy Center	60	1	1999	2	179	0.71					
NE	Gerald Whelan Energy Center	60	1	1999	3	156	0.74					
NE	Gerald Whelan Energy Center	60	1	1999	4	41	0.73					
NE	Gerald Whelan Energy Center	60	1	1999	5	207	0.74					
NE	Gerald Whelan Energy Center	60	1	1999	6	228	0.73					
NE	Gerald Whelan Energy Center	60	1	1999	7	254	0.74					
NE	Gerald Whelan Energy Center	60	1	1999	8	231	0.72					
NE	Gerald Whelan Energy Center	60	1	1999	9	194	0.72					
NE	Gerald Whelan Energy Center	60	1	1999	10	154	0.70					
NE	Gerald Whelan Energy Center	60	1	1999	11	197	0.71					
NE	Gerald Whelan Energy Center	60	1	1999	12	212	0.71	0.72	0.74	0.70	0.02	
NE	Gerald Whelan Energy Center	60	1	2000	1	207	0.69					
NE	Gerald Whelan Energy Center	60	1	2000	2	201	0.70					
NE	Gerald Whelan Energy Center	60	1	2000	3	213	0.68					
NE	Gerald Whelan Energy Center	60	1	2000	4	56	0.69					
NE	Gerald Whelan Energy Center	60	1	2000	5	195	0.64					
NE	Gerald Whelan Energy Center	60	1	2000	6	192	0.64					
NE	Gerald Whelan Energy Center	60	1	2000	7	208	0.64					
NE	Gerald Whelan Energy Center	60	1	2000	8	179	0.55					
NE	Gerald Whelan Energy Center	60	1	2000	9	167	0.58					
NE	Gerald Whelan Energy Center	60	1	2000	10	155	0.63					
NE	Gerald Whelan Energy Center	60	1	2000	11	182	0.62					
NE	Gerald Whelan Energy Center	60	1	2000	12	210	0.67	0.64	0.70	0.55	0.09	
NE	Gerald Whelan Energy Center	60	1	2001	1	190	0.62					
NE	Gerald Whelan Energy Center	60	1	2001	2	176	0.64					
NE	Gerald Whelan Energy Center	60	1	2001	3	187	0.64					
NE	Gerald Whelan Energy Center	60	1	2001	4	110	0.55					
NE	Gerald Whelan Energy Center	60	1	2001	5	149	0.61					
NE	Gerald Whelan Energy Center	60	1	2001	6	148	0.59					

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STATE	FACILITY_NAME	ORISPL_C	UNITID	OP_YEAR	OP_MONTH	SO2 Mass	SO2 Rate	Average	Max Rate	Min Rate	Max Difference from Average
NE	Gerald Whelan Energy Center	60	1	2001	7	179	0.54				
NE	Gerald Whelan Energy Center	60	1	2001	8	222	0.70				
NE	Gerald Whelan Energy Center	60	1	2001	9	156	0.55				
NE	Gerald Whelan Energy Center	60	1	2001	10	153	0.63				
NE	Gerald Whelan Energy Center	60	1	2001	11	175	0.52				
NE	Gerald Whelan Energy Center	60	1	2001	12	162	0.57	0.61	0.70	0.54	0.10
NE	Gerald Whelan Energy Center	60	1	2002	1	159	0.56				
NE	Gerald Whelan Energy Center	60	1	2002	2	145	0.55				
NE	Gerald Whelan Energy Center	60	1	2002	3	76	0.52				
NE	Gerald Whelan Energy Center	60	1	2002	4	27	0.61				
NE	Gerald Whelan Energy Center	60	1	2002	5	203	0.71				
NE	Gerald Whelan Energy Center	60	1	2002	6	213	0.69				
NE	Gerald Whelan Energy Center	60	1	2002	7	241	0.75				
NE	Gerald Whelan Energy Center	60	1	2002	8	201	0.67				
NE	Gerald Whelan Energy Center	60	1	2002	9	131	0.72				
NE	Gerald Whelan Energy Center	60	1	2002	10	182	0.63				
NE	Gerald Whelan Energy Center	60	1	2002	11	201	0.69				
NE	Gerald Whelan Energy Center	60	1	2002	12	227	0.77	0.67	0.77	0.52	0.14
NE	Gerald Whelan Energy Center	60	1	2003	1	187	0.61				
NE	Gerald Whelan Energy Center	60	1	2003	2	149	0.54				
NE	Gerald Whelan Energy Center	60	1	2003	3	151	0.52				
NE	Gerald Whelan Energy Center	60	1	2003	4	46	0.48				
NE	Gerald Whelan Energy Center	60	1	2003	5	164	0.59				
NE	Gerald Whelan Energy Center	60	1	2003	6	195	0.69				
NE	Gerald Whelan Energy Center	60	1	2003	7	264	0.82				
NE	Gerald Whelan Energy Center	60	1	2003	8	240	0.77				
NE	Gerald Whelan Energy Center	60	1	2003	9	190	0.70				
NE	Gerald Whelan Energy Center	60	1	2003	10	152	0.58				
NE	Gerald Whelan Energy Center	60	1	2003	11	179	0.61				
NE	Gerald Whelan Energy Center	60	1	2003	12	237	0.81	0.66	0.82	0.48	0.18
NE	Gerald Whelan Energy Center	60	1	2004	1	218	0.74				
NE	Gerald Whelan Energy Center	60	1	2004	2	220	0.79				
NE	Gerald Whelan Energy Center	60	1	2004	3	167	0.56				
NE	Gerald Whelan Energy Center	60	1	2004	4	76	0.49				
NE	Gerald Whelan Energy Center	60	1	2004	5	200	0.66				
NE	Gerald Whelan Energy Center	60	1	2004	6	202	0.69				
NE	Gerald Whelan Energy Center	60	1	2004	7	225	0.72				
NE	Gerald Whelan Energy Center	60	1	2004	8	220	0.70				
NE	Gerald Whelan Energy Center	60	1	2004	9	205	0.71				
NE	Gerald Whelan Energy Center	60	1	2004	10	173	0.69				
NE	Gerald Whelan Energy Center	60	1	2004	11	222	0.72				
NE	Gerald Whelan Energy Center	60	1	2004	12	221	0.71	0.59	0.79	0.49	0.20
NE	Gerald Whelan Energy Center	60	1	2005	1	184	0.59				
NE	Gerald Whelan Energy Center	60	1	2005	2	232	0.84				
NE	Gerald Whelan Energy Center	60	1	2005	3	188	0.73				
NE	Gerald Whelan Energy Center	60	1	2005	4	213	0.72				
NE	Gerald Whelan Energy Center	60	1	2005	5	204	0.68				
NE	Gerald Whelan Energy Center	60	1	2005	6	232	0.76				
NE	Gerald Whelan Energy Center	60	1	2005	7	234	0.73				
NE	Gerald Whelan Energy Center	60	1	2005	8	230	0.71				
NE	Gerald Whelan Energy Center	60	1	2005	9	249	0.82				
NE	Gerald Whelan Energy Center	60	1	2005	10	99	0.74				
NE	Gerald Whelan Energy Center	60	1	2005	11	250	0.83				
NE	Gerald Whelan Energy Center	60	1	2005	12	249	0.76	0.74	0.84	0.59	0.15
NE	Lon D Wright Power Plant	2240	8	1997	1	95	0.56				
NE	Lon D Wright Power Plant	2240	8	1997	2	101	0.61				
NE	Lon D Wright Power Plant	2240	8	1997	3	18	0.61				
NE	Lon D Wright Power Plant	2240	8	1997	4						
NE	Lon D Wright Power Plant	2240	8	1997	5	7	0.53				
NE	Lon D Wright Power Plant	2240	8	1997	6	113	0.57				
NE	Lon D Wright Power Plant	2240	8	1997	7	140	0.62				
NE	Lon D Wright Power Plant	2240	8	1997	8	127	0.56				
NE	Lon D Wright Power Plant	2240	8	1997	9	131	0.52				
NE	Lon D Wright Power Plant	2240	8	1997	10	143	0.56				
NE	Lon D Wright Power Plant	2240	8	1997	11	109	0.52				
NE	Lon D Wright Power Plant	2240	8	1997	12	101	0.52	0.56	0.62	0.52	0.06
NE	Lon D Wright Power Plant	2240	8	1998	1	60	0.52				
NE	Lon D Wright Power Plant	2240	8	1998	2	89	0.52				
NE	Lon D Wright Power Plant	2240	8	1998	3	49	0.53				
NE	Lon D Wright Power Plant	2240	8	1998	4	5	0.57				
NE	Lon D Wright Power Plant	2240	8	1998	5	124	0.59				
NE	Lon D Wright Power Plant	2240	8	1998	6	112	0.57				
NE	Lon D Wright Power Plant	2240	8	1998	7	154	0.57				
NE	Lon D Wright Power Plant	2240	8	1998	8	150	0.66				
NE	Lon D Wright Power Plant	2240	8	1998	9	108	0.62				
NE	Lon D Wright Power Plant	2240	8	1998	10						
NE	Lon D Wright Power Plant	2240	8	1998	11						
NE	Lon D Wright Power Plant	2240	8	1998	12	76	0.53	0.58	0.66	0.52	0.08
NE	Lon D Wright Power Plant	2240	8	1999	1	120	0.58				
NE	Lon D Wright Power Plant	2240	8	1999	2	104	0.59				
NE	Lon D Wright Power Plant	2240	8	1999	3	86	0.59				

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STATE	FACILITY_NAME	ORISPL_C	UNITID	OP_YEAR	OP_MONTH	SO2 Mass	SO2 Rate	Average	Max Rate	Min Rate	Max Difference from Average
NE	Lon D Wright Power Plant	2240	8	1999	4	20	0.38				
NE	Lon D Wright Power Plant	2240	8	1999	5	77	0.41				
NE	Lon D Wright Power Plant	2240	8	1999	6	95	0.41				
NE	Lon D Wright Power Plant	2240	8	1999	7	114	0.40				
NE	Lon D Wright Power Plant	2240	8	1999	8	107	0.42				
NE	Lon D Wright Power Plant	2240	8	1999	9	82	0.44				
NE	Lon D Wright Power Plant	2240	8	1999	10	25	0.42				
NE	Lon D Wright Power Plant	2240	8	1999	11	75	0.43				
NE	Lon D Wright Power Plant	2240	8	1999	12	84	0.44	0.46	0.59	0.38	0.13
NE	Lon D Wright Power Plant	2240	8	2000	1	2	0.40				
NE	Lon D Wright Power Plant	2240	8	2000	2						
NE	Lon D Wright Power Plant	2240	8	2000	3	0	0.00				
NE	Lon D Wright Power Plant	2240	8	2000	4	47	0.43				
NE	Lon D Wright Power Plant	2240	8	2000	5	105	0.51				
NE	Lon D Wright Power Plant	2240	8	2000	6	90	0.50				
NE	Lon D Wright Power Plant	2240	8	2000	7	130	0.60				
NE	Lon D Wright Power Plant	2240	8	2000	8	97	0.39				
NE	Lon D Wright Power Plant	2240	8	2000	9	74	0.38				
NE	Lon D Wright Power Plant	2240	8	2000	10	76	0.38				
NE	Lon D Wright Power Plant	2240	8	2000	11	82	0.53				
NE	Lon D Wright Power Plant	2240	8	2000	12	138	0.58	0.48	0.60	0.00	0.48
NE	Lon D Wright Power Plant	2240	8	2001	1	103	0.52				
NE	Lon D Wright Power Plant	2240	8	2001	2	115	0.56				
NE	Lon D Wright Power Plant	2240	8	2001	3	128	0.51				
NE	Lon D Wright Power Plant	2240	8	2001	4	116	0.52				
NE	Lon D Wright Power Plant	2240	8	2001	5	4	0.29				
NE	Lon D Wright Power Plant	2240	8	2001	6	133	0.56				
NE	Lon D Wright Power Plant	2240	8	2001	7	128	0.51				
NE	Lon D Wright Power Plant	2240	8	2001	8	138	0.48				
NE	Lon D Wright Power Plant	2240	8	2001	9	87	0.44				
NE	Lon D Wright Power Plant	2240	8	2001	10						
NE	Lon D Wright Power Plant	2240	8	2001	11	59	0.36				
NE	Lon D Wright Power Plant	2240	8	2001	12	77	0.38	0.49	0.56	0.29	0.20
NE	Lon D Wright Power Plant	2240	8	2002	1	77	0.37				
NE	Lon D Wright Power Plant	2240	8	2002	2	30	0.40				
NE	Lon D Wright Power Plant	2240	8	2002	3	75	0.38				
NE	Lon D Wright Power Plant	2240	8	2002	4	96	0.40				
NE	Lon D Wright Power Plant	2240	8	2002	5	96	0.45				
NE	Lon D Wright Power Plant	2240	8	2002	6	122	0.48				
NE	Lon D Wright Power Plant	2240	8	2002	7	118	0.47				
NE	Lon D Wright Power Plant	2240	8	2002	8	111	0.46				
NE	Lon D Wright Power Plant	2240	8	2002	9	79	0.53				
NE	Lon D Wright Power Plant	2240	8	2002	10						
NE	Lon D Wright Power Plant	2240	8	2002	11	87	0.48				
NE	Lon D Wright Power Plant	2240	8	2002	12	85	0.38	0.44	0.53	0.37	0.09
NE	Lon D Wright Power Plant	2240	8	2003	1	134	0.51				
NE	Lon D Wright Power Plant	2240	8	2003	2	67	0.45				
NE	Lon D Wright Power Plant	2240	8	2003	3	98	0.48				
NE	Lon D Wright Power Plant	2240	8	2003	4	94	0.51				
NE	Lon D Wright Power Plant	2240	8	2003	5	22	0.39				
NE	Lon D Wright Power Plant	2240	8	2003	6	75	0.43				
NE	Lon D Wright Power Plant	2240	8	2003	7	123	0.42				
NE	Lon D Wright Power Plant	2240	8	2003	8	141	0.51				
NE	Lon D Wright Power Plant	2240	8	2003	9	75	0.39				
NE	Lon D Wright Power Plant	2240	8	2003	10						
NE	Lon D Wright Power Plant	2240	8	2003	11	76	0.40				
NE	Lon D Wright Power Plant	2240	8	2003	12	111	0.42	0.45	0.51	0.39	0.07
NE	Lon D Wright Power Plant	2240	8	2004	1	116	0.45				
NE	Lon D Wright Power Plant	2240	8	2004	2	105	0.45				
NE	Lon D Wright Power Plant	2240	8	2004	3	26	0.42				
NE	Lon D Wright Power Plant	2240	8	2004	4	108	0.50				
NE	Lon D Wright Power Plant	2240	8	2004	5	122	0.49				
NE	Lon D Wright Power Plant	2240	8	2004	6	146	0.55				
NE	Lon D Wright Power Plant	2240	8	2004	7	141	0.51				
NE	Lon D Wright Power Plant	2240	8	2004	8	136	0.51				
NE	Lon D Wright Power Plant	2240	8	2004	9	103	0.42				
NE	Lon D Wright Power Plant	2240	8	2004	10	64	0.39				
NE	Lon D Wright Power Plant	2240	8	2004	11	17	0.32				
NE	Lon D Wright Power Plant	2240	8	2004	12	98	0.39	0.47	0.55	0.32	0.14
NE	Lon D Wright Power Plant	2240	8	2005	1	121	0.39				
NE	Lon D Wright Power Plant	2240	8	2005	2	111	0.41				
NE	Lon D Wright Power Plant	2240	8	2005	3	33	0.40				
NE	Lon D Wright Power Plant	2240	8	2005	4	124	0.49				
NE	Lon D Wright Power Plant	2240	8	2005	5	143	0.50				
NE	Lon D Wright Power Plant	2240	8	2005	6	137	0.47				
NE	Lon D Wright Power Plant	2240	8	2005	7	143	0.51				
NE	Lon D Wright Power Plant	2240	8	2005	8	124	0.45				
NE	Lon D Wright Power Plant	2240	8	2005	9	127	0.50				
NE	Lon D Wright Power Plant	2240	8	2005	10	63	0.55				
NE	Lon D Wright Power Plant	2240	8	2005	11	103	0.55				
NE	Lon D Wright Power Plant	2240	8	2005	12	103	0.48	0.47	0.55	0.39	0.08

Region 7 Public Power
SO2 Data
1997-2005

STATE	FACILITY_NAME	ORISPL_C	UNITID	OP_YEAR	OP_MONTH	SO2 Mass	SO2 Rate	Average	Max Rate	Min Rate	Max Difference from Average
NE	Nebraska City Station	6096	1	1997	1	1442	0.73				
NE	Nebraska City Station	6096	1	1997	2	1482	0.87				
NE	Nebraska City Station	6096	1	1997	3	1575	0.92				
NE	Nebraska City Station	6096	1	1997	4	1986	0.98				
NE	Nebraska City Station	6096	1	1997	5	1445	0.81				
NE	Nebraska City Station	6096	1	1997	6	1187	0.70				
NE	Nebraska City Station	6096	1	1997	7	1207	0.66				
NE	Nebraska City Station	6096	1	1997	8	977	0.55				
NE	Nebraska City Station	6096	1	1997	9	376	0.57				
NE	Nebraska City Station	6096	1	1997	10						
NE	Nebraska City Station	6096	1	1997	11	14	0.44				
NE	Nebraska City Station	6096	1	1997	12	541	0.57	0.76	0.98	0.44	0.32
NE	Nebraska City Station	6096	1	1998	1	1001	0.60				
NE	Nebraska City Station	6096	1	1998	2	973	0.68				
NE	Nebraska City Station	6096	1	1998	3	1626	0.67				
NE	Nebraska City Station	6096	1	1998	4	1580	0.69				
NE	Nebraska City Station	6096	1	1998	5	1463	0.64				
NE	Nebraska City Station	6096	1	1998	6	573	0.46				
NE	Nebraska City Station	6096	1	1998	7	937	0.44				
NE	Nebraska City Station	6096	1	1998	8	986	0.45				
NE	Nebraska City Station	6096	1	1998	9	929	0.49				
NE	Nebraska City Station	6096	1	1998	10	830	0.40				
NE	Nebraska City Station	6096	1	1998	11	865	0.39				
NE	Nebraska City Station	6096	1	1998	12	1059	0.45	0.53	0.69	0.39	0.16
NE	Nebraska City Station	6096	1	1999	1	918	0.52				
NE	Nebraska City Station	6096	1	1999	2						
NE	Nebraska City Station	6096	1	1999	3	1490	0.70				
NE	Nebraska City Station	6096	1	1999	4	1881	0.75				
NE	Nebraska City Station	6096	1	1999	5	1914	0.75				
NE	Nebraska City Station	6096	1	1999	6	1117	0.72				
NE	Nebraska City Station	6096	1	1999	7	1832	0.72				
NE	Nebraska City Station	6096	1	1999	8	1618	0.71				
NE	Nebraska City Station	6096	1	1999	9	1509	0.68				
NE	Nebraska City Station	6096	1	1999	10	2004	0.76				
NE	Nebraska City Station	6096	1	1999	11	1817	0.75				
NE	Nebraska City Station	6096	1	1999	12	1617	0.74	0.71	0.76	0.52	0.19
NE	Nebraska City Station	6096	1	2000	1	1477	0.72				
NE	Nebraska City Station	6096	1	2000	2	1197	0.70				
NE	Nebraska City Station	6096	1	2000	3	299	0.65				
NE	Nebraska City Station	6096	1	2000	4	1371	0.67				
NE	Nebraska City Station	6096	1	2000	5	1351	0.67				
NE	Nebraska City Station	6096	1	2000	6	1232	0.69				
NE	Nebraska City Station	6096	1	2000	7	1270	0.64				
NE	Nebraska City Station	6096	1	2000	8	1357	0.63				
NE	Nebraska City Station	6096	1	2000	9	1332	0.68				
NE	Nebraska City Station	6096	1	2000	10	1527	0.69				
NE	Nebraska City Station	6096	1	2000	11	1406	0.67				
NE	Nebraska City Station	6096	1	2000	12	1409	0.65	0.67	0.72	0.63	0.05
NE	Nebraska City Station	6096	1	2001	1	1467	0.68				
NE	Nebraska City Station	6096	1	2001	2	879	0.67				
NE	Nebraska City Station	6096	1	2001	3	1501	0.67				
NE	Nebraska City Station	6096	1	2001	4	1406	0.66				
NE	Nebraska City Station	6096	1	2001	5	1058	0.70				
NE	Nebraska City Station	6096	1	2001	6	1345	0.69				
NE	Nebraska City Station	6096	1	2001	7	1315	0.68				
NE	Nebraska City Station	6096	1	2001	8	1370	0.64				
NE	Nebraska City Station	6096	1	2001	9	1412	0.67				
NE	Nebraska City Station	6096	1	2001	10	1614	0.73				
NE	Nebraska City Station	6096	1	2001	11	1443	0.70				
NE	Nebraska City Station	6096	1	2001	12	1396	0.64	0.68	0.73	0.64	0.05
NE	Nebraska City Station	6096	1	2002	1	1258	0.63				
NE	Nebraska City Station	6096	1	2002	2	1108	0.58				
NE	Nebraska City Station	6096	1	2002	3	30	0.55				
NE	Nebraska City Station	6096	1	2002	4	329	0.68				
NE	Nebraska City Station	6096	1	2002	5	1420	0.64				
NE	Nebraska City Station	6096	1	2002	6	1030	0.61				
NE	Nebraska City Station	6096	1	2002	7	1429	0.64				
NE	Nebraska City Station	6096	1	2002	8	1017	0.63				
NE	Nebraska City Station	6096	1	2002	9	1327	0.66				
NE	Nebraska City Station	6096	1	2002	10	1303	0.62				
NE	Nebraska City Station	6096	1	2002	11	1193	0.59				
NE	Nebraska City Station	6096	1	2002	12	1375	0.66	0.63	0.68	0.55	0.07
NE	Nebraska City Station	6096	1	2003	1	1263	0.62				
NE	Nebraska City Station	6096	1	2003	2	1183	0.60				
NE	Nebraska City Station	6096	1	2003	3	1217	0.62				
NE	Nebraska City Station	6096	1	2003	4	813	0.58				
NE	Nebraska City Station	6096	1	2003	5	1042	0.55				
NE	Nebraska City Station	6096	1	2003	6	1300	0.61				
NE	Nebraska City Station	6096	1	2003	7	1547	0.66				
NE	Nebraska City Station	6096	1	2003	8	1466	0.64				
NE	Nebraska City Station	6096	1	2003	9	1380	0.63				

Region 7 Public Power
SO2 Data
1997-2005

STATE	FACILITY_NAME	ORISPL_C	UNITID	OP_YEAR	OP_MONTH	SO2 Mass	SO2 Rate	Average	Max Rate	Min Rate	Max Difference from Average
NE	Nebraska City Station	6096	1	2003	10	1448	0.72				
NE	Nebraska City Station	6096	1	2003	11	1113	0.60				
NE	Nebraska City Station	6096	1	2003	12	1280	0.60	0.62	0.72	0.55	0.10
NE	Nebraska City Station	6096	1	2004	1	1425	0.66				
NE	Nebraska City Station	6096	1	2004	2	1374	0.72				
NE	Nebraska City Station	6096	1	2004	3	1480	0.69				
NE	Nebraska City Station	6096	1	2004	4	1348	0.67				
NE	Nebraska City Station	6096	1	2004	5						
NE	Nebraska City Station	6096	1	2004	6	735	0.66				
NE	Nebraska City Station	6096	1	2004	7	1350	0.65				
NE	Nebraska City Station	6096	1	2004	8	1500	0.73				
NE	Nebraska City Station	6096	1	2004	9	1563	0.74				
NE	Nebraska City Station	6096	1	2004	10	1577	0.72				
NE	Nebraska City Station	6096	1	2004	11	1480	0.69				
NE	Nebraska City Station	6096	1	2004	12	1760	0.76	0.70	0.76	0.65	0.06
NE	Nebraska City Station	6096	1	2005	1	1664	0.73				
NE	Nebraska City Station	6096	1	2005	2	238	0.65				
NE	Nebraska City Station	6096	1	2005	3	1663	0.72				
NE	Nebraska City Station	6096	1	2005	4	1474	0.71				
NE	Nebraska City Station	6096	1	2005	5	1437	0.74				
NE	Nebraska City Station	6096	1	2005	6	1645	0.73				
NE	Nebraska City Station	6096	1	2005	7	1676	0.73				
NE	Nebraska City Station	6096	1	2005	8	1619	0.73				
NE	Nebraska City Station	6096	1	2005	9	1491	0.74				
NE	Nebraska City Station	6096	1	2005	10	1464	0.68				
NE	Nebraska City Station	6096	1	2005	11	1537	0.76				
NE	Nebraska City Station	6096	1	2005	12	1643	0.73	0.73	0.76	0.65	0.07
NE	Platte	59	1	1997	1	220	0.65				
NE	Platte	59	1	1997	2	189	0.65				
NE	Platte	59	1	1997	3	190	0.65				
NE	Platte	59	1	1997	4	163	0.66				
NE	Platte	59	1	1997	5	203	0.63				
NE	Platte	59	1	1997	6	222	0.69				
NE	Platte	59	1	1997	7	223	0.63				
NE	Platte	59	1	1997	8	218	0.64				
NE	Platte	59	1	1997	9	79	0.67				
NE	Platte	59	1	1997	10						
NE	Platte	59	1	1997	11	119	0.62				
NE	Platte	59	1	1997	12	180	0.60	0.64	0.69	0.60	0.05
NE	Platte	59	1	1998	1	278	0.90				
NE	Platte	59	1	1998	2	217	0.95				
NE	Platte	59	1	1998	3	238	0.88				
NE	Platte	59	1	1998	4	200	0.82				
NE	Platte	59	1	1998	5	163	0.75				
NE	Platte	59	1	1998	6	190	0.67				
NE	Platte	59	1	1998	7	241	0.72				
NE	Platte	59	1	1998	8	273	0.82				
NE	Platte	59	1	1998	9	250	0.86				
NE	Platte	59	1	1998	10	185	0.97				
NE	Platte	59	1	1998	11	259	0.89				
NE	Platte	59	1	1998	12	292	0.92	0.84	0.97	0.67	0.17
NE	Platte	59	1	1999	1	244	0.75				
NE	Platte	59	1	1999	2	188	0.69				
NE	Platte	59	1	1999	3	228	0.70				
NE	Platte	59	1	1999	4	179	0.75				
NE	Platte	59	1	1999	5	233	0.73				
NE	Platte	59	1	1999	6	216	0.71				
NE	Platte	59	1	1999	7	323	0.72				
NE	Platte	59	1	1999	8	241	0.70				
NE	Platte	59	1	1999	9	201	0.68				
NE	Platte	59	1	1999	10	130	0.70				
NE	Platte	59	1	1999	11	191	0.79				
NE	Platte	59	1	1999	12	188	0.71	0.72	0.79	0.68	0.07
NE	Platte	59	1	2000	1	236	0.74				
NE	Platte	59	1	2000	2	208	0.70				
NE	Platte	59	1	2000	3	195	0.68				
NE	Platte	59	1	2000	4	199	0.69				
NE	Platte	59	1	2000	5	252	0.69				
NE	Platte	59	1	2000	6	215	0.65				
NE	Platte	59	1	2000	7	212	0.56				
NE	Platte	59	1	2000	8	213	0.57				
NE	Platte	59	1	2000	9	89	0.61				
NE	Platte	59	1	2000	10	180	0.79				
NE	Platte	59	1	2000	11	255	0.66				
NE	Platte	59	1	2000	12	243	0.61	0.66	0.79	0.56	0.14
NE	Platte	59	1	2001	1	237	0.63				
NE	Platte	59	1	2001	2	214	0.61				
NE	Platte	59	1	2001	3	203	0.60				
NE	Platte	59	1	2001	4	236	0.62				
NE	Platte	59	1	2001	5	200	0.59				
NE	Platte	59	1	2001	6	216	0.64				

Region 7 Public Power
SO2 Data
1997-2005

STATE	FACILITY_NAME	ORISPL_C	UNITID	OP_YEAR	OP_MONTH	SO2 Mass	SO2 Rate	Average	Max Rate	Min Rate	Max Difference from Average
NE	Platte	59	1	2001	7	225	0.61				
NE	Platte	59	1	2001	8	216	0.59				
NE	Platte	59	1	2001	9	167	0.56				
NE	Platte	59	1	2001	10	136	0.55				
NE	Platte	59	1	2001	11	187	0.60				
NE	Platte	59	1	2001	12	198	0.58	0.60	0.64	0.55	0.05
NE	Platte	59	1	2002	1	221	0.64				
NE	Platte	59	1	2002	2	182	0.59				
NE	Platte	59	1	2002	3	271	0.69				
NE	Platte	59	1	2002	4	174	0.65				
NE	Platte	59	1	2002	5	242	0.69				
NE	Platte	59	1	2002	6	193	0.54				
NE	Platte	59	1	2002	7	231	0.60				
NE	Platte	59	1	2002	8	215	0.59				
NE	Platte	59	1	2002	9	155	0.58				
NE	Platte	59	1	2002	10	0	0.07				
NE	Platte	59	1	2002	11	145	0.64				
NE	Platte	59	1	2002	12	220	0.60	0.62	0.69	0.07	0.55
NE	Platte	59	1	2003	1	193	0.51				
NE	Platte	59	1	2003	2	191	0.54				
NE	Platte	59	1	2003	3	217	0.56				
NE	Platte	59	1	2003	4	167	0.55				
NE	Platte	59	1	2003	5	200	0.54				
NE	Platte	59	1	2003	6	179	0.53				
NE	Platte	59	1	2003	7	197	0.52				
NE	Platte	59	1	2003	8	193	0.52				
NE	Platte	59	1	2003	9	173	0.55				
NE	Platte	59	1	2003	10	105	0.54				
NE	Platte	59	1	2003	11	179	0.51				
NE	Platte	59	1	2003	12	199	0.54	0.53	0.56	0.51	0.03
NE	Platte	59	1	2004	1	207	0.54				
NE	Platte	59	1	2004	2	197	0.52				
NE	Platte	59	1	2004	3	210	0.55				
NE	Platte	59	1	2004	4	162	0.54				
NE	Platte	59	1	2004	5	196	0.53				
NE	Platte	59	1	2004	6	169	0.49				
NE	Platte	59	1	2004	7	168	0.46				
NE	Platte	59	1	2004	8	178	0.50				
NE	Platte	59	1	2004	9	177	0.54				
NE	Platte	59	1	2004	10	90	0.49				
NE	Platte	59	1	2004	11	173	0.51				
NE	Platte	59	1	2004	12	235	0.64	0.53	0.64	0.46	0.11
NE	Platte	59	1	2005	1	210	0.54				
NE	Platte	59	1	2005	2	189	0.55				
NE	Platte	59	1	2005	3	181	0.59				
NE	Platte	59	1	2005	4	225	0.62				
NE	Platte	59	1	2005	5	228	0.59				
NE	Platte	59	1	2005	6	214	0.58				
NE	Platte	59	1	2005	7	230	0.59				
NE	Platte	59	1	2005	8	229	0.60				
NE	Platte	59	1	2005	9	215	0.62				
NE	Platte	59	1	2005	10	152	0.59				
NE	Platte	59	1	2005	11	192	0.58				
NE	Platte	59	1	2005	12	212	0.62	0.59	0.62	0.54	0.04
					505034		0.59				

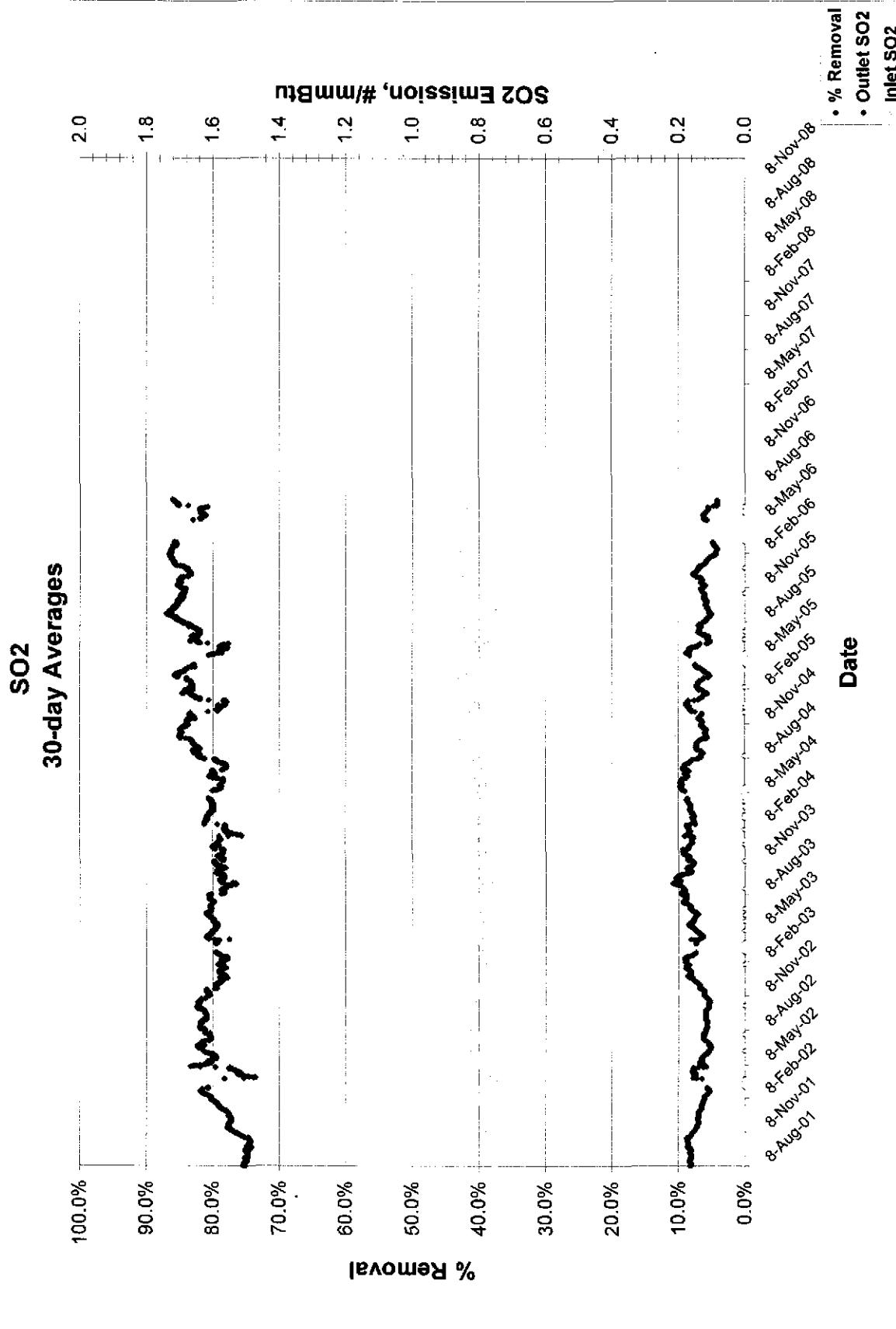
Percentile of
Monthly
SO2 Rates

50	0.57
95	0.81
97	0.82
99	0.90
99.5	0.96
100	1.95

Attachment D
Sunflower Holcomb
Summary of Subpart Da Emission Reports
from July '98 through June '06

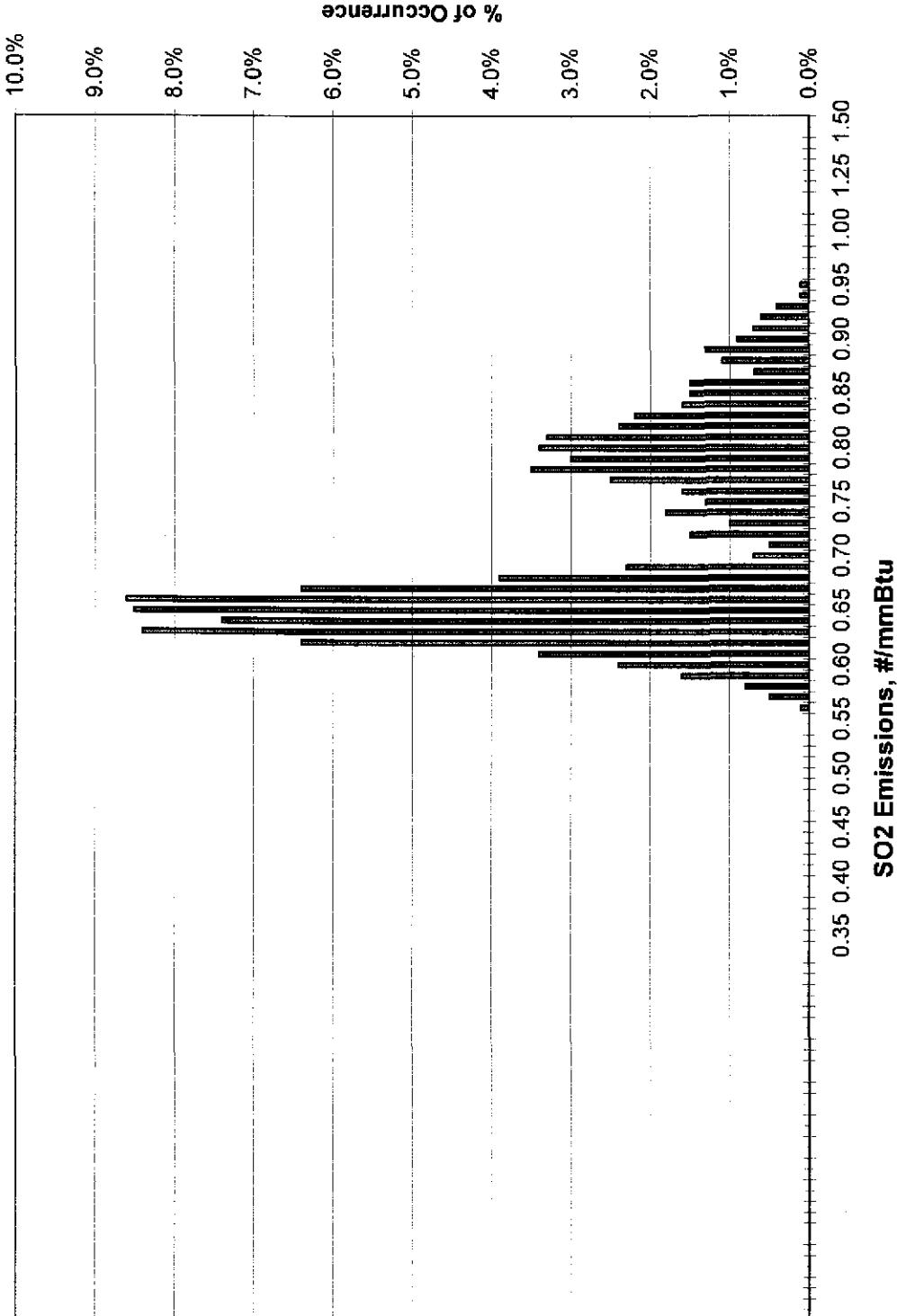
Sunflower Electric Cooperative
Holcomb Unit H1
SO₂ Emissions Scrubber Performance

Sunflower Electric Cooperative
Holcomb Unit H1



Distribution of Inlet SO₂ Concentrations
30-day rolling average

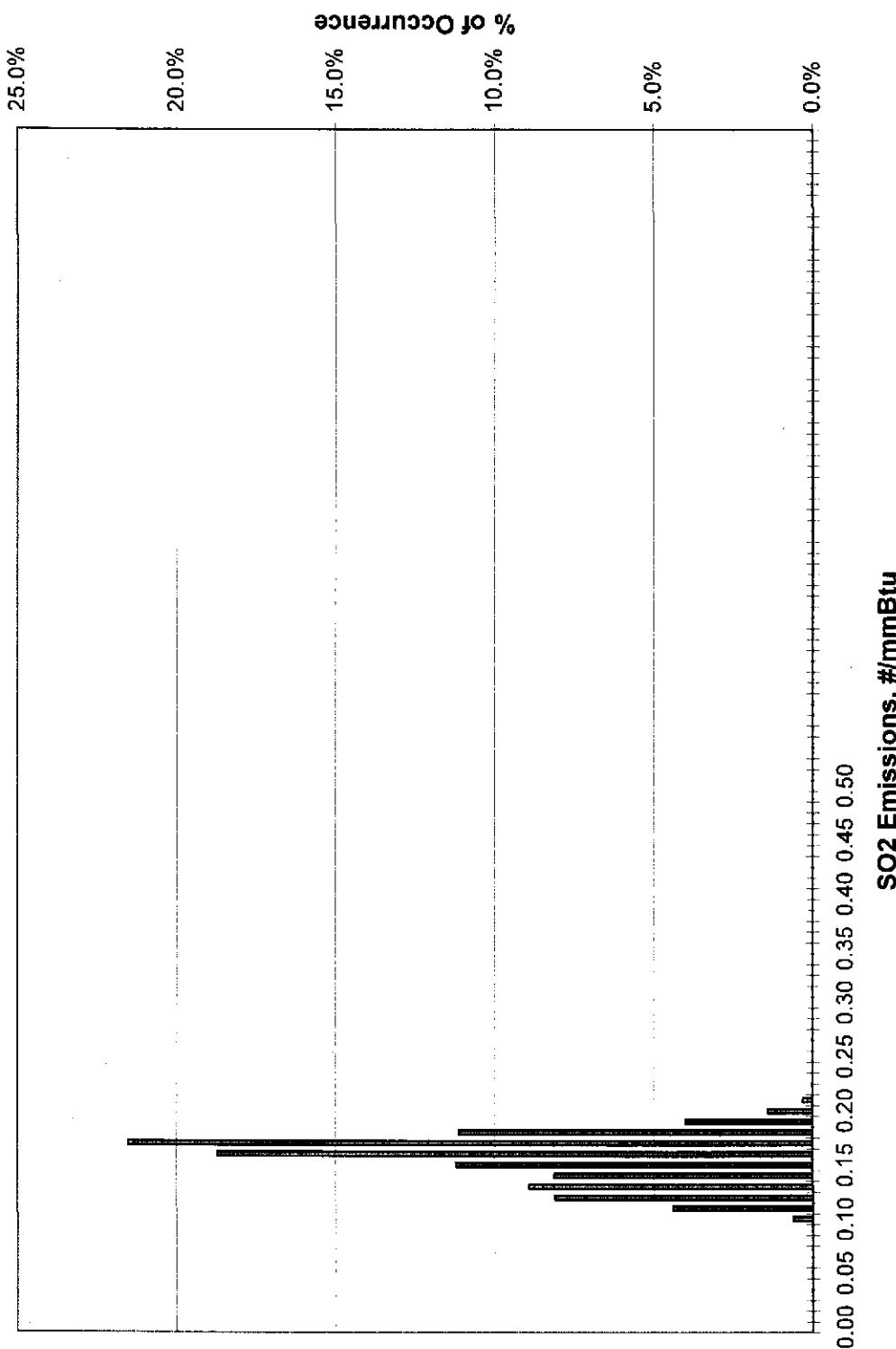
■ Inlet SO₂
Concentration



Sunflower Electric Cooperative
Holcomb Unit H1

**Distribution of Outlet SO₂ Concentrations
30-day rolling average**

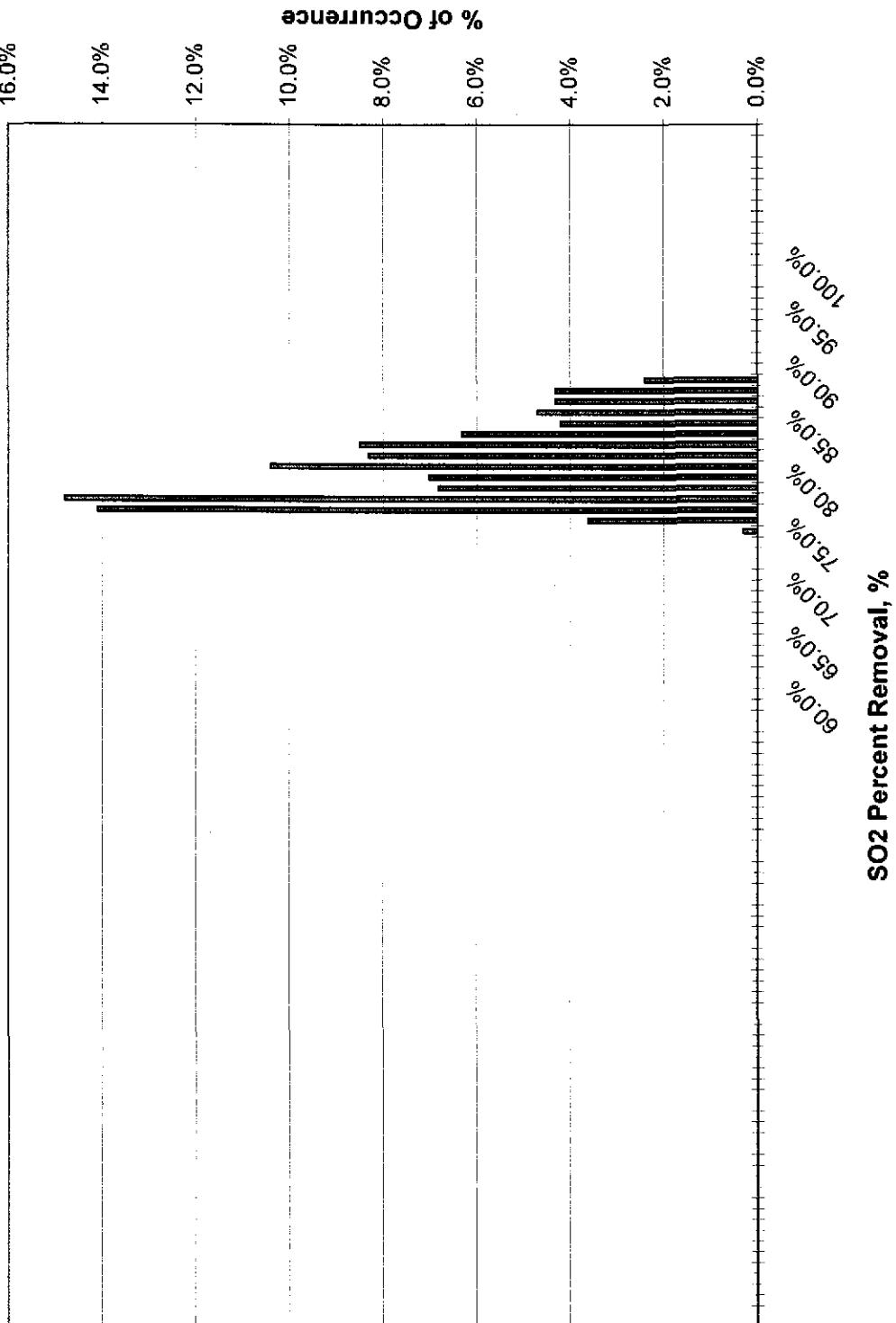
■ Outlet SO₂
Concentration



Sunflower Electric Cooperative
Holcomb Unit H1

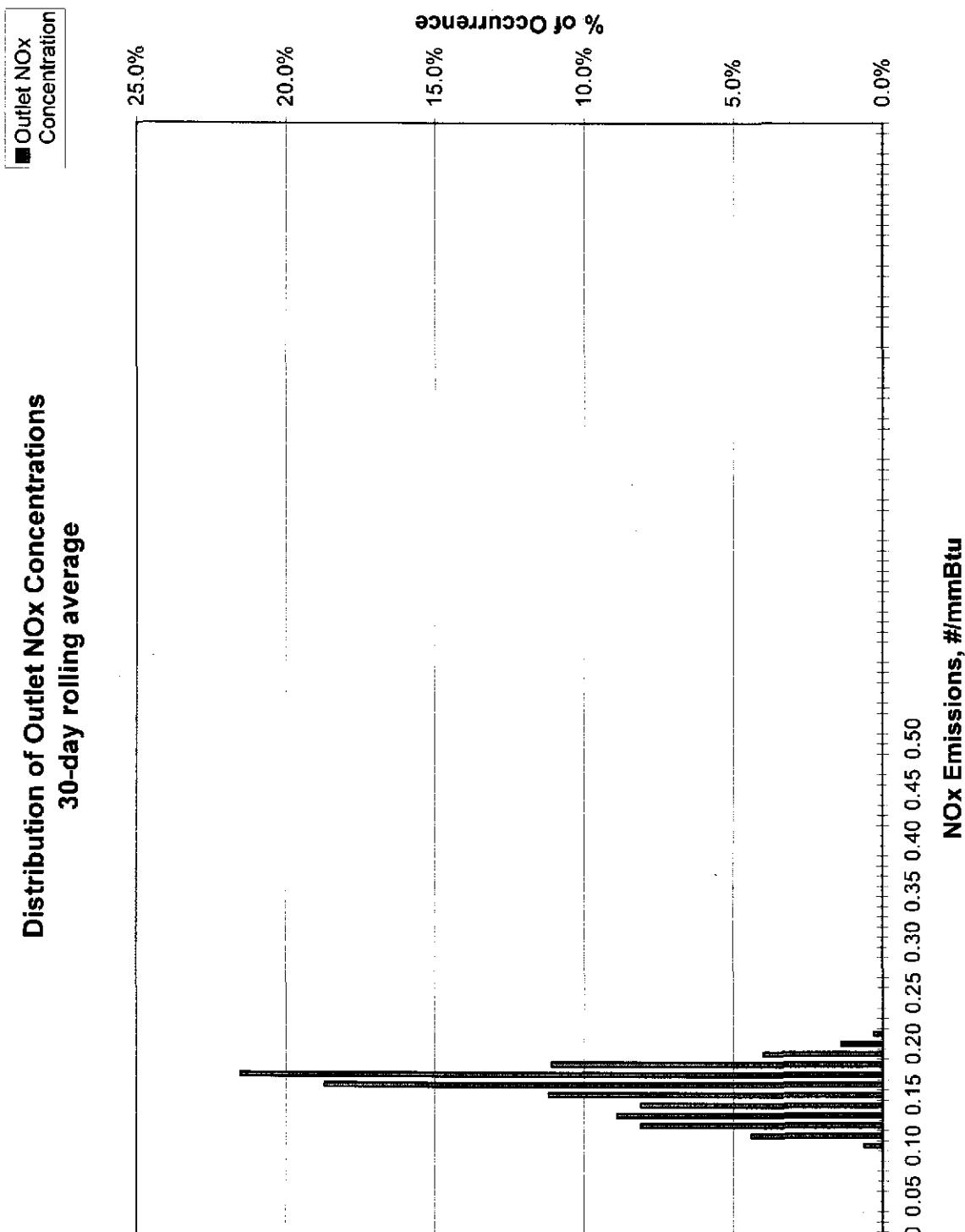
**Distribution of SO₂ Percent Removal
30-day rolling average**

■ SO₂ Percent Removal



Sunflower Electric Cooperative
Holcomb Unit H1

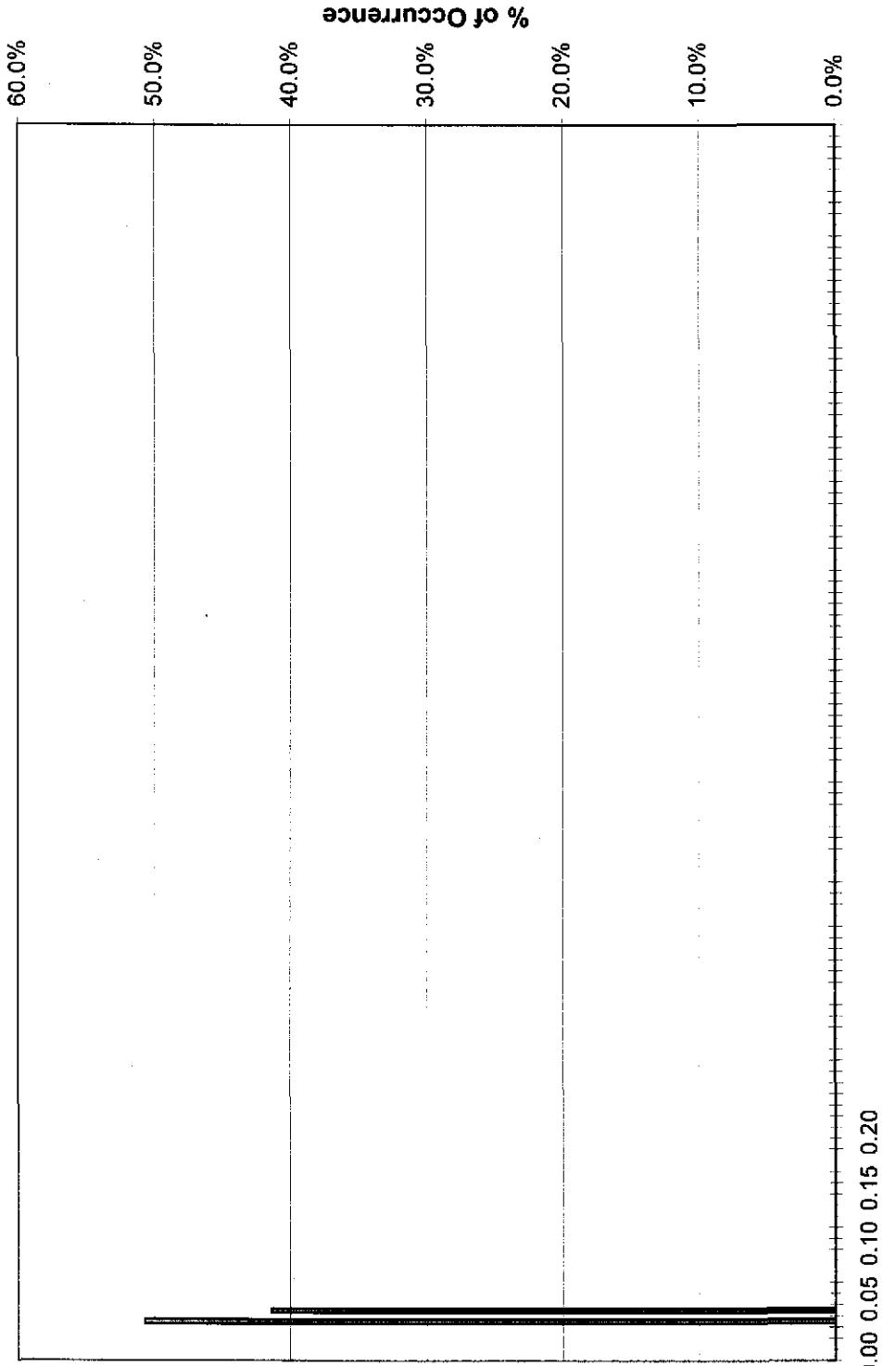
Distribution of Outlet NOx Concentrations
30-day rolling average

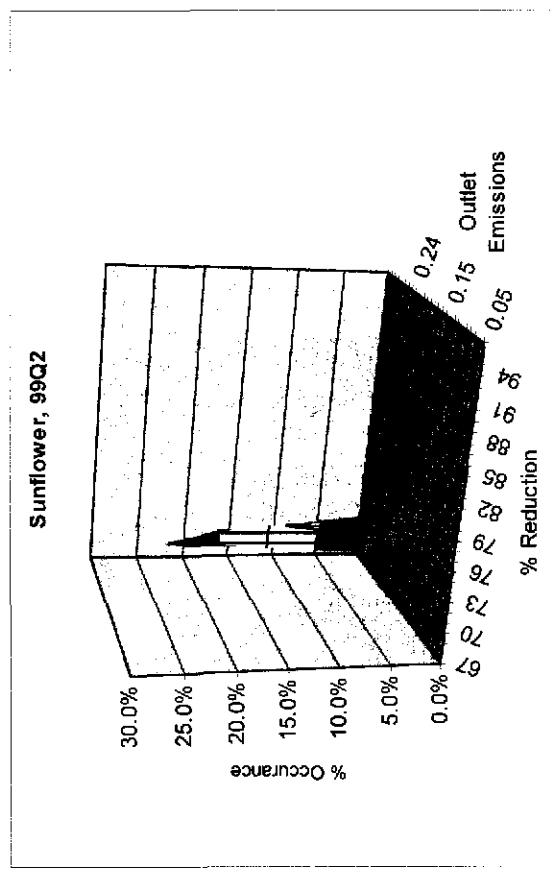
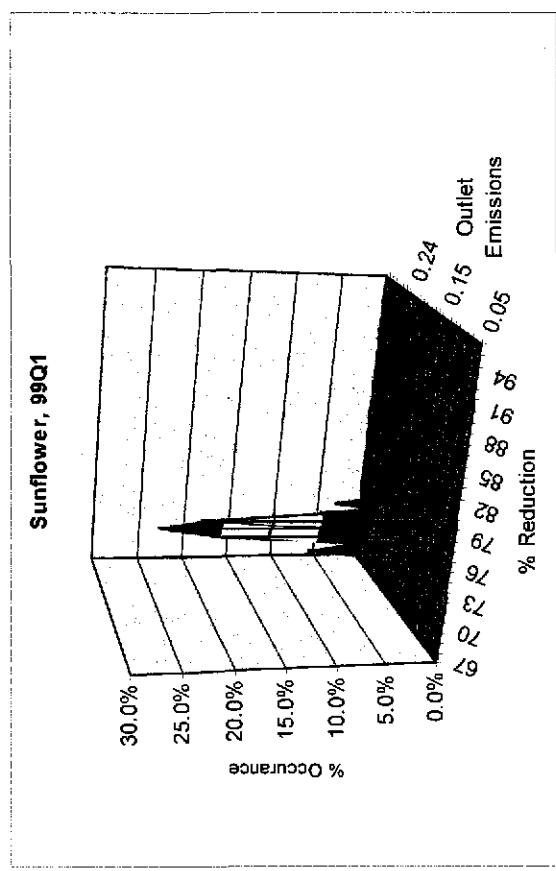
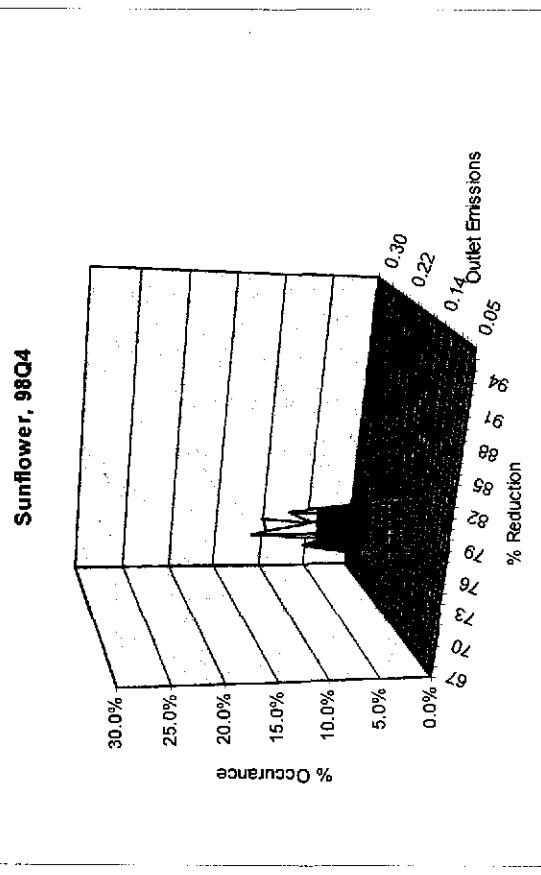
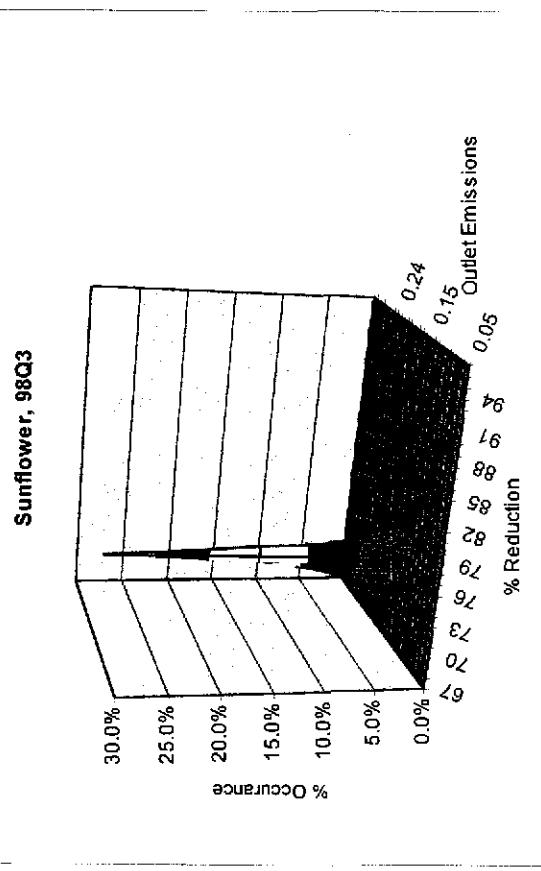


Sunflower Electric Cooperative
Holcomb Unit H1

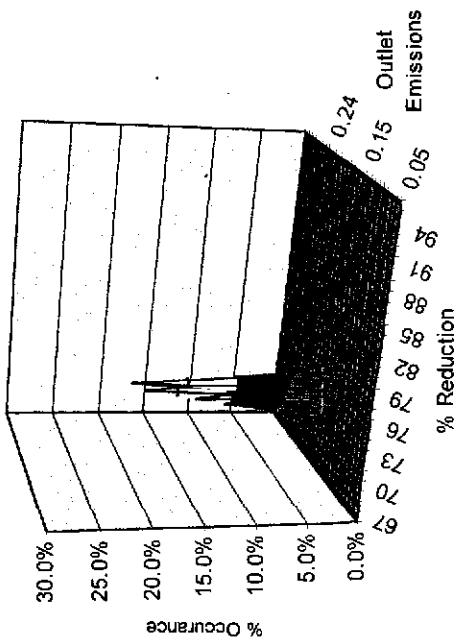
Distribution of Outlet CO Concentrations
30-day rolling average

■ Outlet NO_x
Concentration

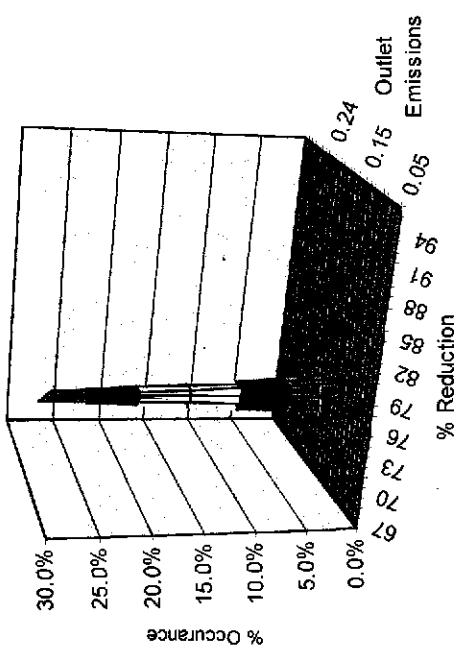




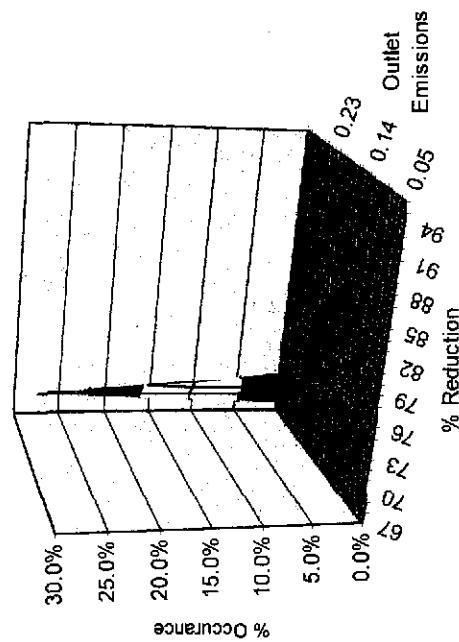
Sunflower, 99Q3



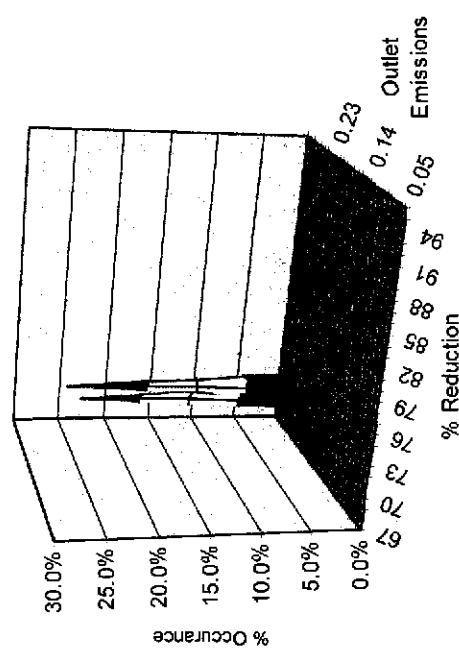
Sunflower, 99Q4



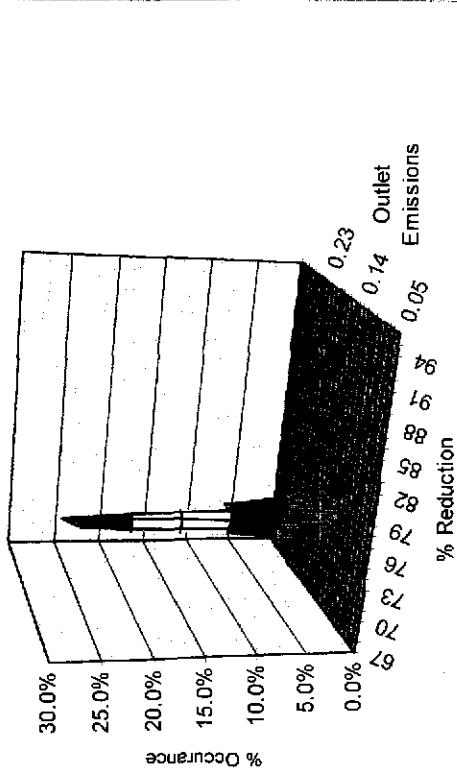
Sunflower, 00Q1



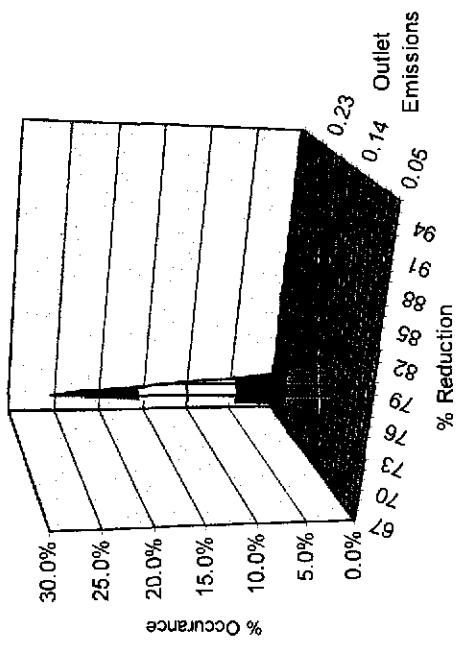
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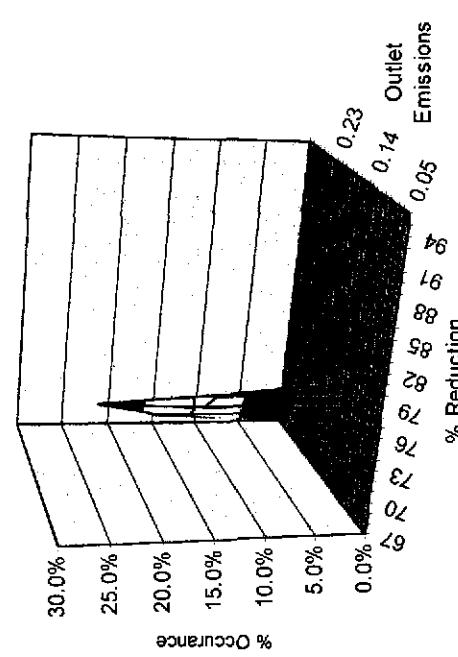
Sunflower, 00Q3



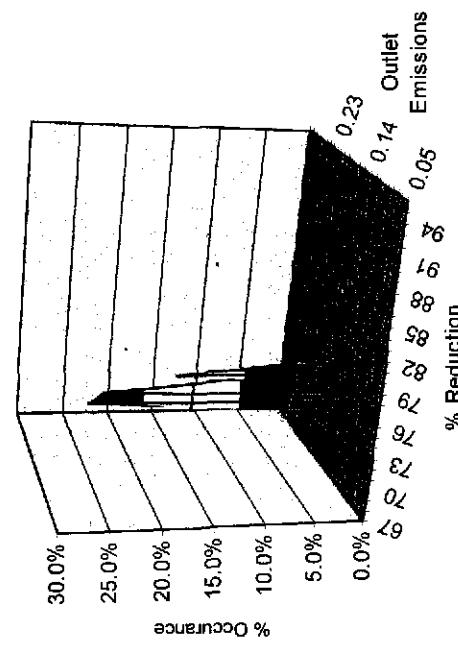
Sunflower, 00Q4



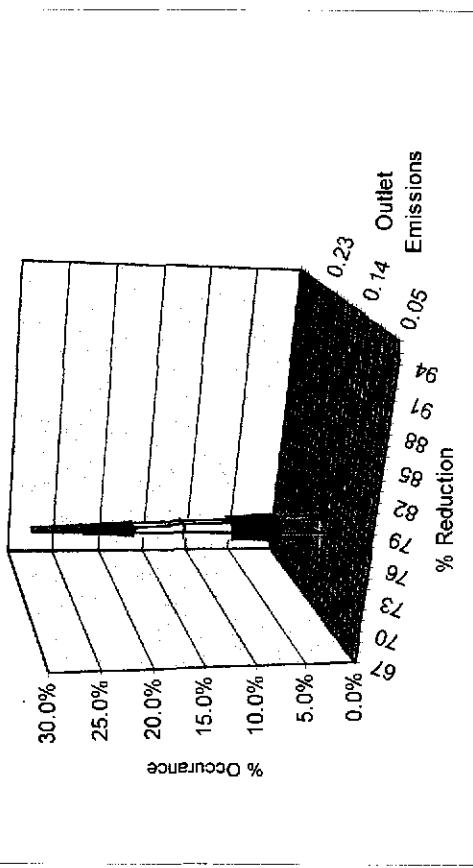
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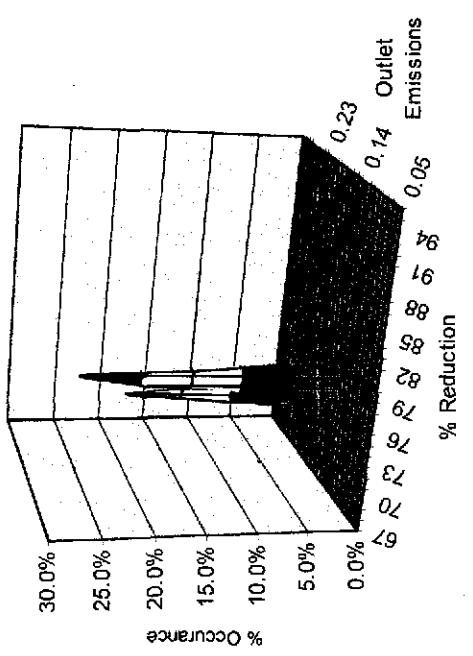
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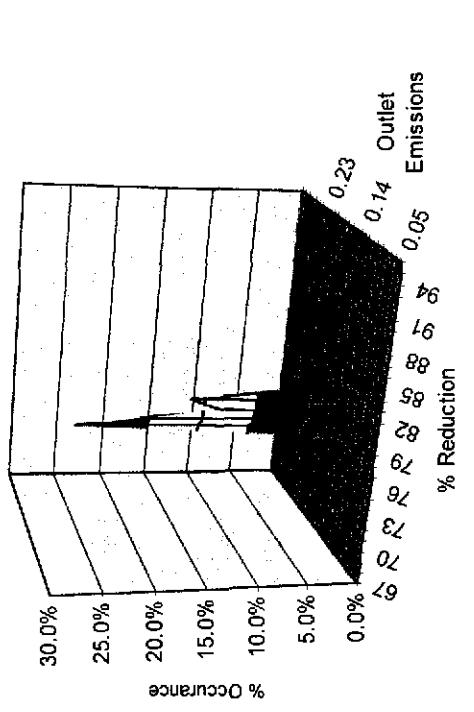
Sunflower, 01Q3



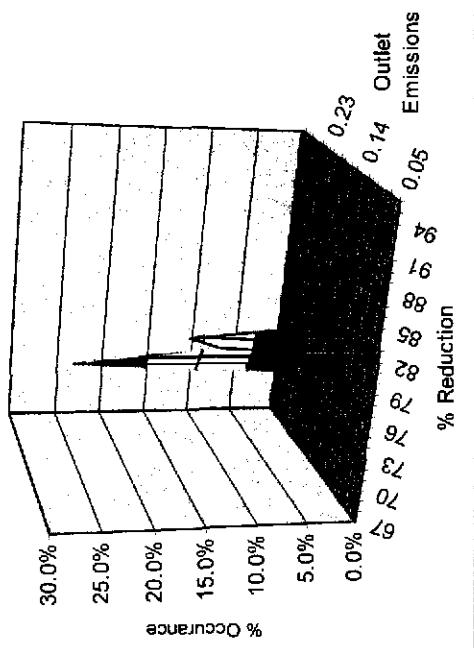
Sunflower, 01Q4



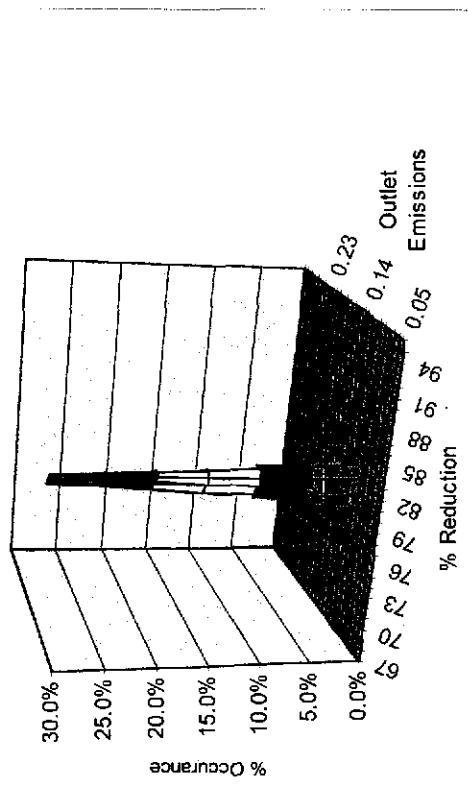
Sunflower, 02Q1



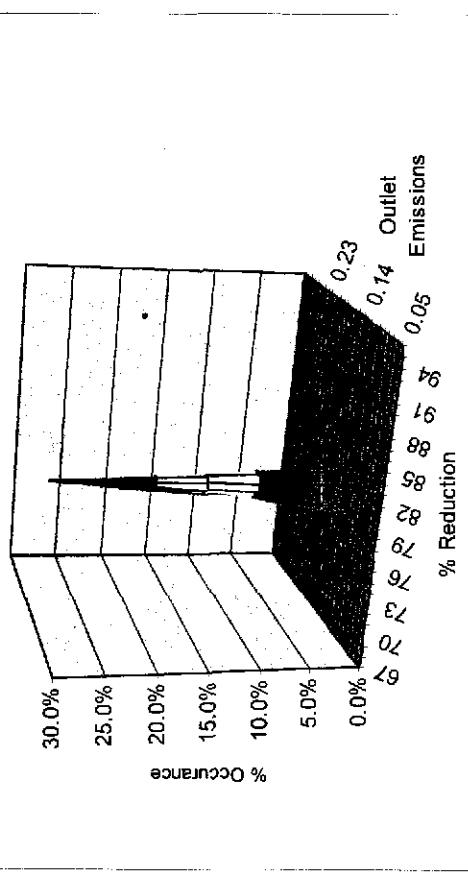
Sunflower, 02Q2



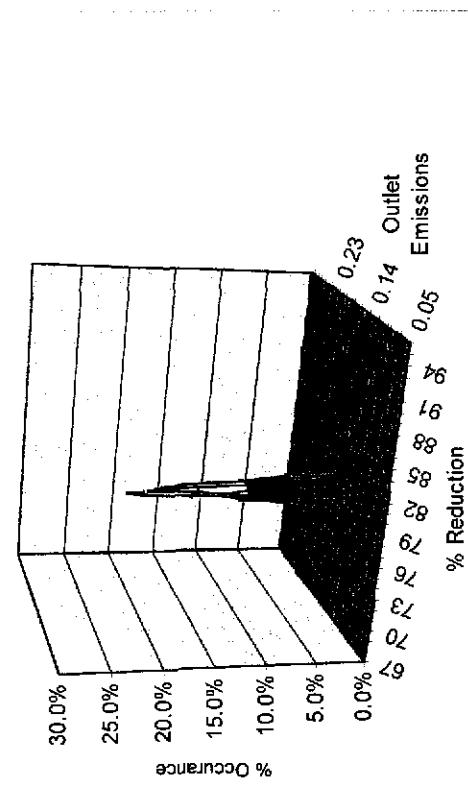
Sunflower, 02Q3



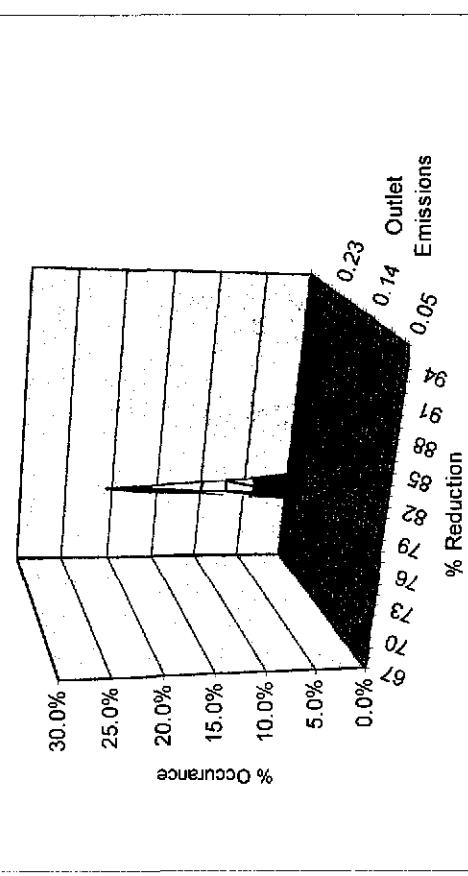
Sunflower, 02Q4



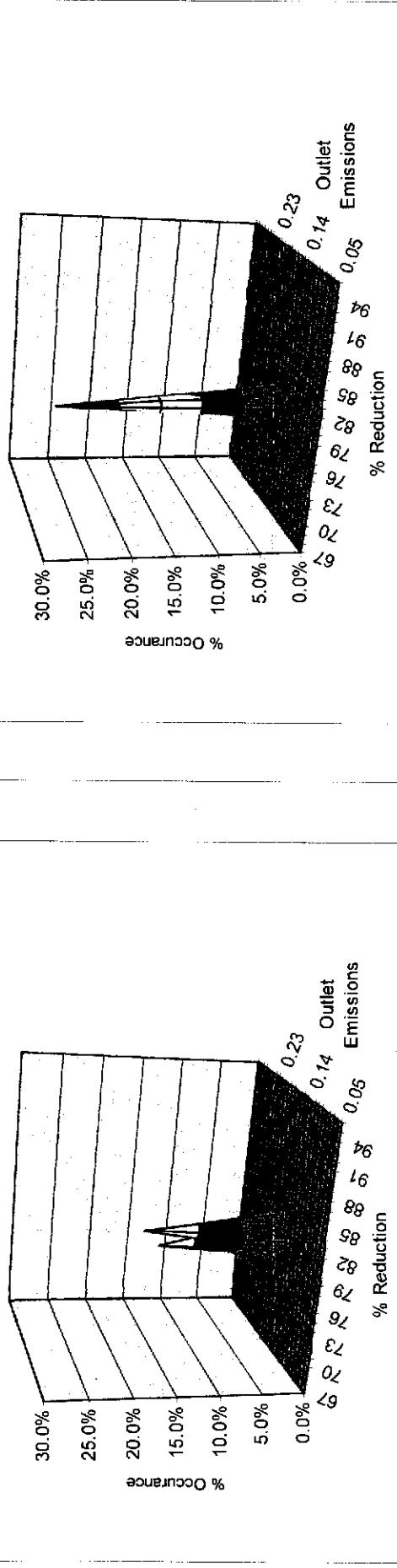
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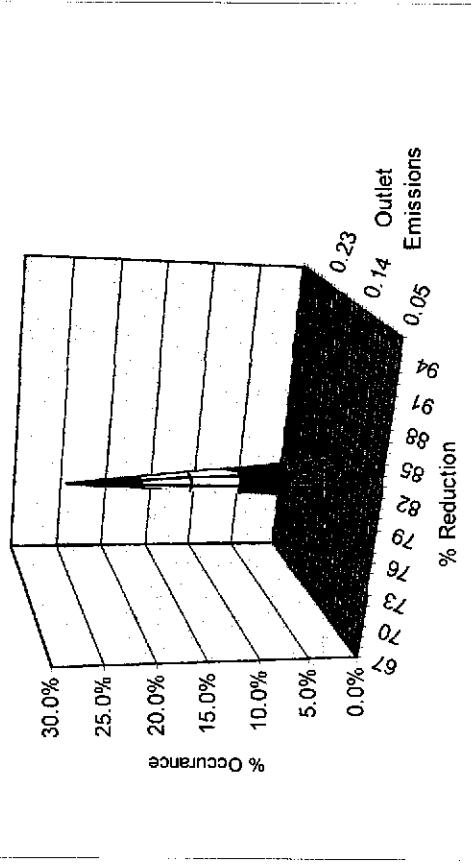
Sunflower, 03Q2



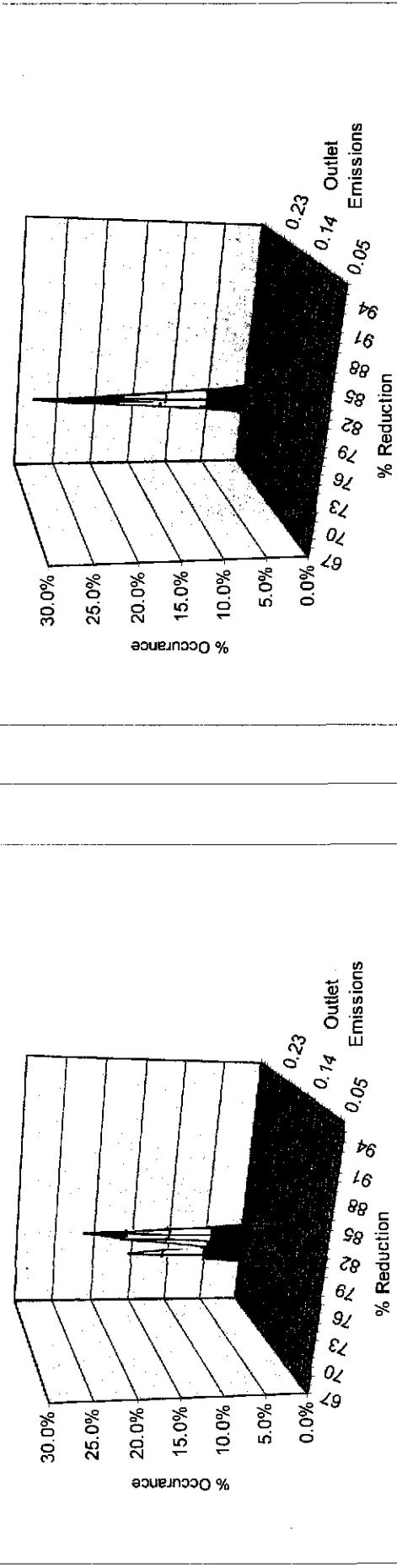
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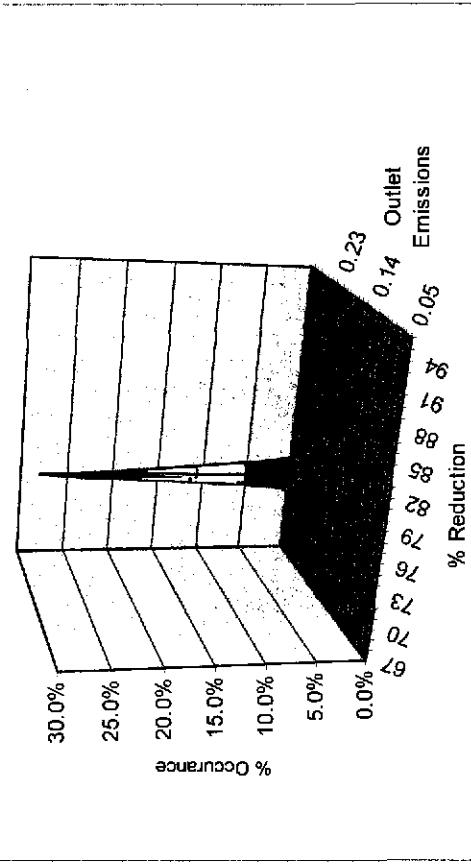
Sunflower, 03Q4



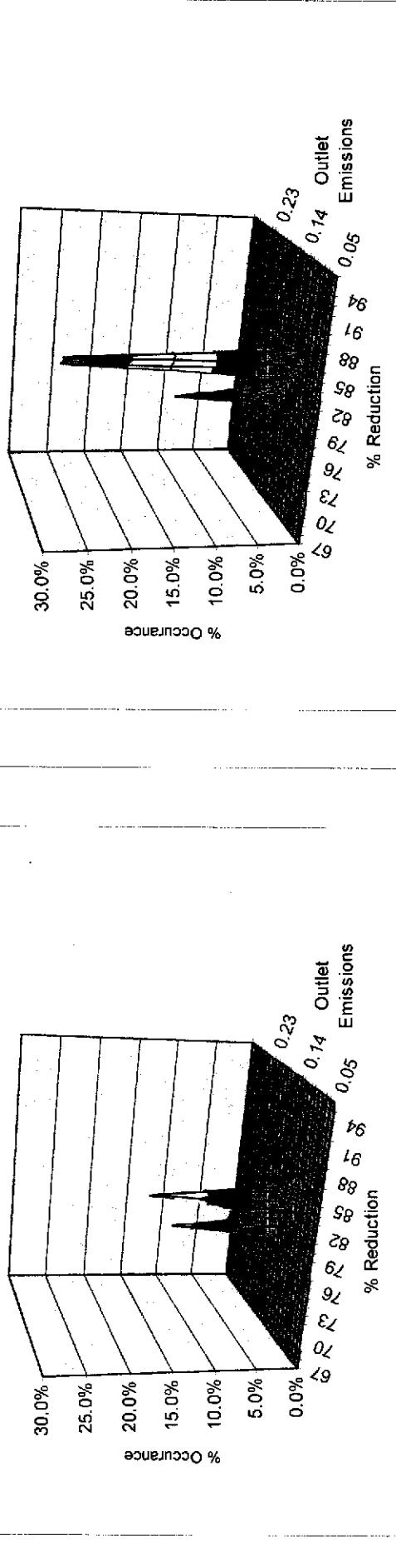
Sunflower, 04Q1



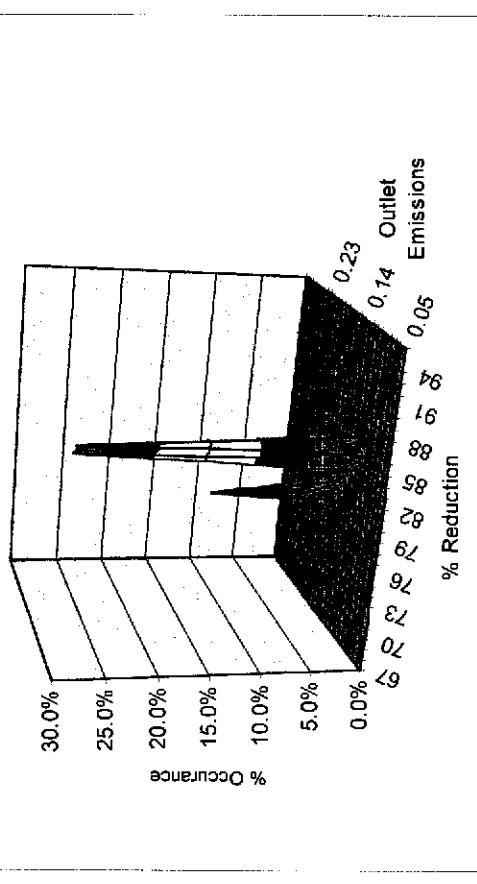
Sunflower, 04Q2



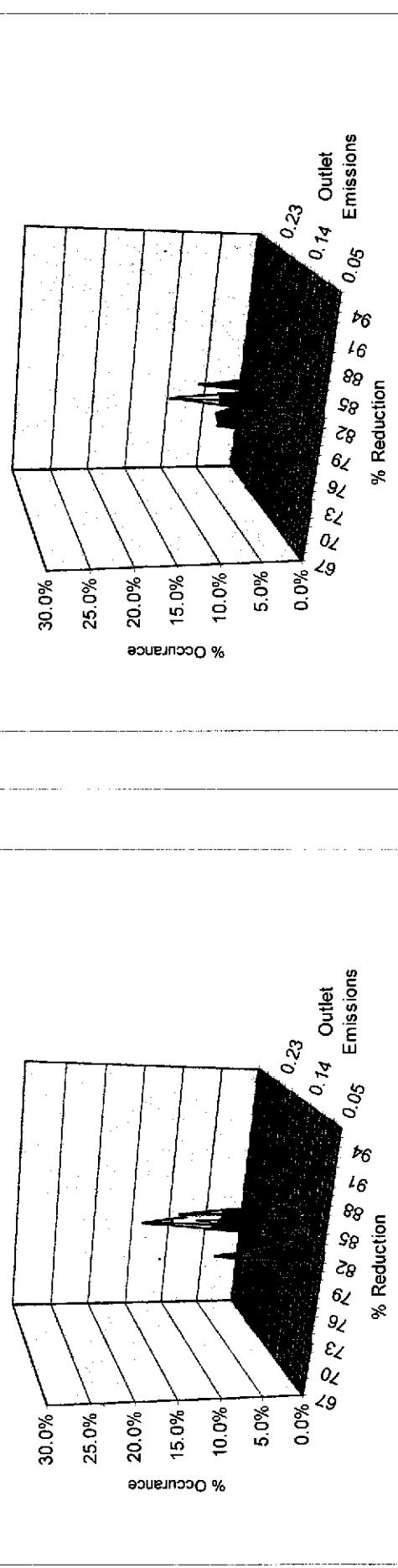
Sunflower, 04Q3



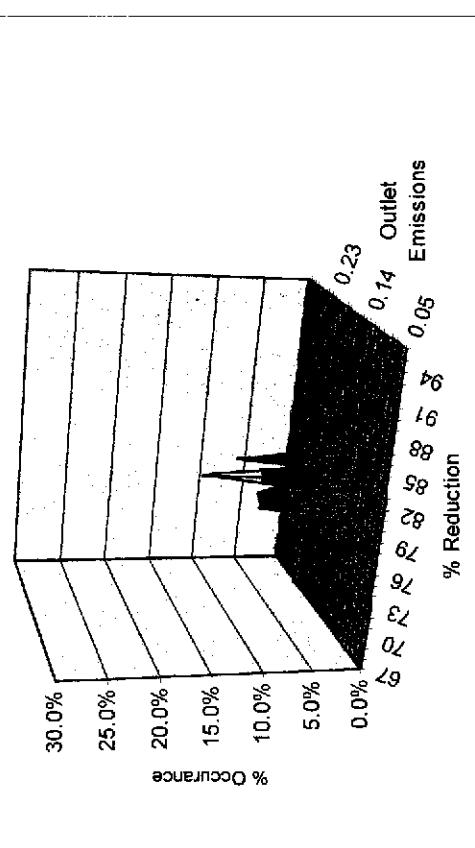
Sunflower, 04Q4



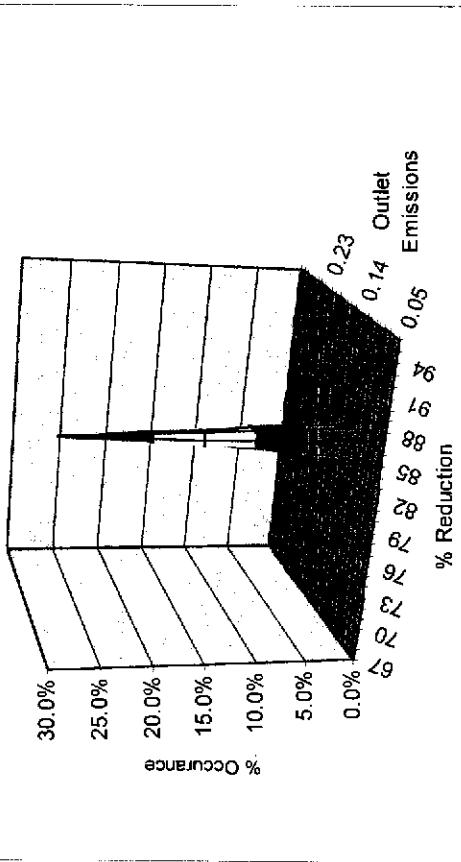
Sunflower, 05Q1



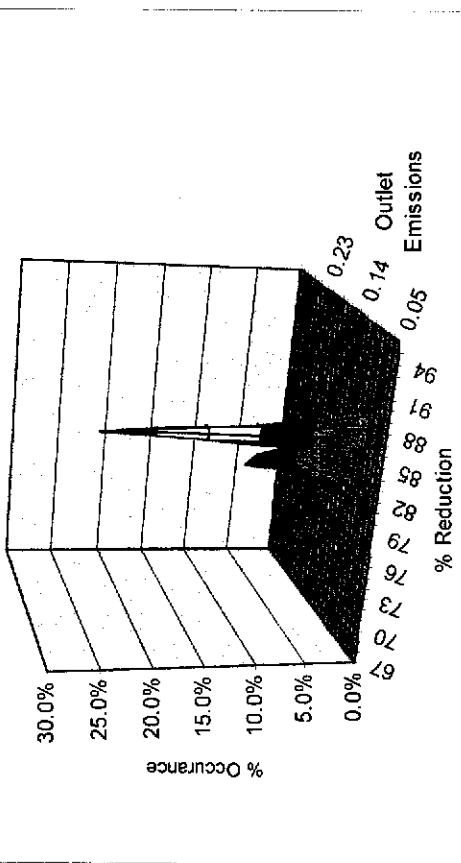
Sunflower, 05Q2



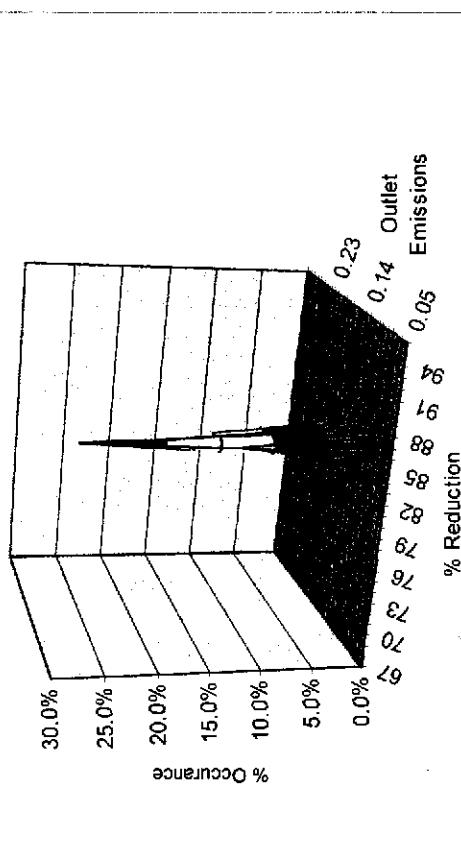
Sunflower, 05Q3



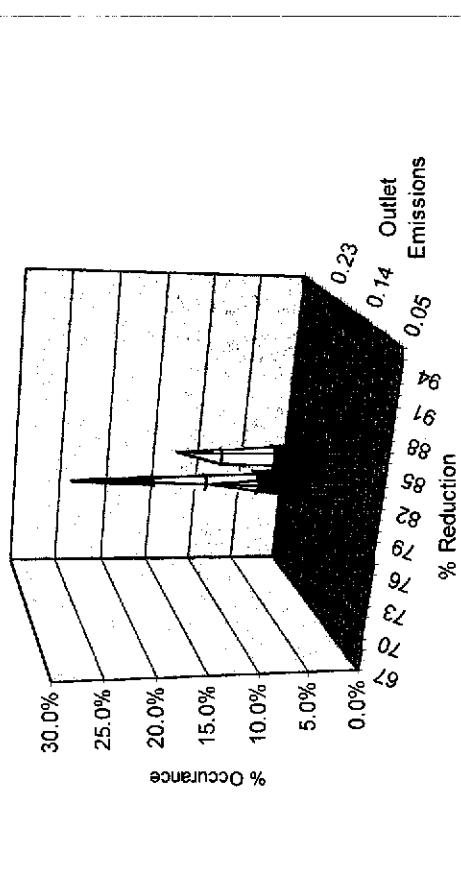
Sunflower, 05Q4



Sunflower, 06Q1



Sunflower, 06Q2



Attachment E
Burlington Northern "Guide to Coal Mines" Analysis

Coal Region	Mine	Sulfur, GHV, Btu/lb			#SO2/mmBtu	Permitted Annual Production, million tpy	Annual Production, million tpy (1996)	Production Weighted #SO2/mmBtu
		Mt	%wt	Btu/lb				
PRB-Montana	Decker	0.40	9,500	0.84	14	11		
PRB-Montana	Bull Mountain No. 1	0.50	10,450	0.96	6	0.3		
PRB-Montana	Absaloka	0.65	8,750	1.49	7	4.7		
PRB-Montana	Rosebud	0.80	8,750	1.83	18	8		
PRB-Montana	Big Sky	0.95	8,800	2.16	5	1.41	5	1.43
PRB-Wyoming	Rochelle	0.21	8,750	0.48	30	26.2		
PRB-Wyoming	Antelope	0.22	8,800	0.50	30	12		
PRB-Wyoming	North Rochelle	0.23	8,800	0.52	15			
PRB-Wyoming	North Antelope	0.24	8,800	0.55	35	28.6		
PRB-Wyoming	Black Thunder	0.28	8,850	0.63	44	39.2		
PRB-Wyoming	Belle Ayr	0.30	8,549	0.70	25	20		
PRB-Wyoming	Caballo Rojo	0.32	8,450	0.76	30	15.1		
PRB-Wyoming	Coal Creek	0.33	8,380	0.79	10	5.8		
PRB-Wyoming	Rawhide	0.36	8,320	0.87	24	15		
PRB-Wyoming	Cordero	0.37	8,350	0.89	24	13		
PRB-Wyoming	Caballo	0.38	8,500	0.89	35	22		
PRB-Wyoming	Dry Fork	0.37	8,175	0.91	15	2.9		
PRB-Wyoming	Buckskin	0.40	8,450	0.95	20	11.9		
PRB-Wyoming	Eagle Butte	0.41	8,350	0.98	20	15.7		
PRB-Wyoming	Jacobs Ranch	0.45	8,695	1.04	35	24.6		
PRB-Wyoming	Wyodak Clovis Point	0.42	8,050	1.04	10	0.2		
PRB-Wyoming	Fair Union	0.42	7,990	1.05	8.2	0.74	1	0.74
Colorado-NM	York Canon	0.50	12,000	0.83	6			
Colorado-NM	Lorencto	0.60	12,800	0.94	2.5			
Colorado-NM	King	0.67	12,900	1.05	9	0.3		
Colorado-NM	McKinley	0.54	9,907	1.09	9	5.3		
Colorado-NM	Lee Ranch	0.76	9,150	1.70	6	1.13	4.3	1.27
Illinois	Rend Lake	1.10	12,100	1.82	3.5	3.3		
Illinois	Crown II	3.35	10,700	6.26	2.5	3.54	1.7	3.21
North Dakota	Freedom	0.70	6,775	2.07				
North Dakota	Beulah	0.90	7,000	2.57	4.5	2.57	2.6	2.14
Utah	Surco	0.35	11,450	0.61				
Utah	Deer Creek	0.41	11,615	0.71				
Utah	Bear Canyon #1	0.50	12,400	0.81				
Utah	Willow Creek	0.50	11,950	0.84	5	4.2		
Utah	Soldier Canyon	0.50	11,800	0.85				
Utah	Skyline	0.50	11,750	0.85				
Utah	Cypress Plateau	0.55	11,700	0.94	3	4.4		
Utah	Crandall Canyon	0.60	12,300	0.98				
Utah	Aberdeen	0.60	12,000	1.00				
Washington	John Henry	0.80	11,800	1.36	0.33	0.88	2.5	0.82
						1.36	0.19	1.36