Second Quarter 2003

CEMS Report

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Monitoring System Performance

And

Excess Emission Summary

Unit 1

Monitor Downtime Report
AES Puerto Rico.
Unit #1
OPACITY

Report for 04/01/2003 to 06/30/2003
Today's Date: 07/29/2003

1. Monitor Availability

Reasons for Missing or Unacceptable Data	Downtime (minutes)	% Downtime to Operating Time
a. Monitor Malfunctions	0	0.00
b. Non-Monitor Equipment Malfunctions	6	0.01
c. Quality Assurance	0	0.00
d. Other Known Causes	150	0.21
e. Unknown Causes	0	0.00
Total CMS Downtime	156	0.22

Total Online Operating Time in Minutes	71778
[Total CMS Downtime] x 100 / [Total source operating time]. (%)	0.22

B. Excess Emissions Summary

1. Number of 6 Minute Averages	11963
2. Number of 6 Minute Averages in Excess of Limit	36

3. Reasons for Excess Emissions Based on 6 Minute Rolling Average	Duration (Minutes)	% E.E. Time To Operating Time
I. Startup / Shutdown	48	0.07
II. Control Equipment Malfunction	0	0.00
III. Process Malfunction	0	0.00
IV. Unknown Causes	0	0.00
V. Other Known Causes	288	0.40
TOTAL	336	

Total Monitored Facility Operating Minutes	71622
Total duration of excess emissions x 100 / [Total source operating time]. (%)	0.47

U1 Opacity Monitor Downtime Report

^L^M
Monitor Span Exceedance Summary for OPACITY

Instrument Span: 80
Span Range Exceedances

DATE	TIME
06/26/2003	5:12
06/26/2003	5:18
06/26/2003	5:24
06/26/2003	5:30

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^L^M
Changes since last quarter in CMS, process or controls for OPACITY:

Software error was noted in the CEMS Reporting and flagging for opacity exceedences. On July 28,2003 Spcetrum Systems, Inc. personnel corrected this error. Reporting and flagging of opacity exceedences is now consistent with the facilities PSD Permit and Construction Permit language as follows: "Opacity of emissions shall not exceed 20% (6 minute average) except for one 6 minute set per hour which shall not exceed 27%. Excess emissions shall be defined as any 6-minute period during which the average opacity as measured by the COM system, exceeds 20% opacity, except for one which shall not exceed 27% per each 1-hour period.

I certify that the information contained in this report is true, accurate, and complete.

William G. Vela
Name

Signature

Environmental Compliance/ Engineering Group
Title

7/29/03
Date

Monitor Downtime Report
AES Puerto Rico.
Unit #1
NOX

Report for 04/01/2003 to 06/30/2003
Today's Date: 07/03/2003

1. Monitor Availability

Reasons for Missing or Unacceptable Data	Downtime (hours)	% Downtime to Operating Time
a. Monitor Malfunctions	0.00	0.00
b. Non-Monitor Equipment Malfunctions	0.00	0.00
c. Quality Assurance	0.00	0.00
d. Other Known Causes	0.00	0.00
e. Unknown Causes	0.00	0.00
Total CMS Downtime	0.00	0.00

Total Online Operating Hours	1027.50
[Total CMS Downtime] x 100 / [Total source operating time]. (%)	0.00

2. Excess Emissions

Reasons for Missing Excess Emission	Duration of Time (hours)	% Excess Emission to Operating Time
a. Startup / Shutdown	1.00	0.10
b. Control Equipment Malfunction	0.00	0.00
c. Process Problems	0.00	0.00
d. Other Known Causes	2.00	0.19
e. Unknown Causes	0.00	0.00
Total duration of excess emission	3.00	0.29

Total Monitored Operating Hours in Period	1027.50
Total duration of excess emissions x 100 / [Total source operating time]. (%)	0.29

Monitor Span Exceedance Summary for NOX

Instrument Span: 200

w Range Exceedances
istrument Low Range: 100

DATE	HOUR
04/05/2003	22

The instrument did not exceed its span during the reporting period.

Changes since last quarter in CMS, process or controls for NOX:

I certify that the information contained in this report is true, accurate, and complete.

William G. Vela

Name

William G. Vela

Signature

Engineering Group

Title

7/29/03

Monitor Downtime Report
AES Puerto Rico.
Unit #1
SO2

Report for 04/01/2003 to 06/30/2003
Today's Date: 07/03/2003

1. Monitor Availability

Reasons for Missing or Unacceptable Data	Downtime (hours)	% Downtime to Operating Time
a. Monitor Malfunctions	0.00	0.00
b. Non-Monitor Equipment Malfunctions	0.00	0.00
c. Quality Assurance	0.00	0.00
d. Other Known Causes	5.00	0.49
e. Unknown Causes	0.00	0.00
Total CMS Downtime	5.00	0.49

Total Online Operating Hours	1027.50
[Total CMS Downtime] x 100 / [Total source operating time]. (%)	0.49

2. Excess Emissions

Reasons for Missing Excess Emission	Duration of Time (hours)	% Excess Emission to Operating Time
a. Startup / Shutdown	0.00	0.00
b. Control Equipment Malfunction	0.00	0.00
c. Process Problems	0.00	0.00
d. Other Known Causes	13.00	1.27
e. Unknown Causes	0.00	0.00
Total duration of excess emission	13.00	1.27

Total Monitored Operating Hours in Period	1022.50
Total duration of excess emissions x 100 / [Total source operating time]. (%)	1.27

Monitor Span Exceedance Summary for SO2

Instrument Span: 50

w Range Exceedances
Instrument Low Range: 20

DATE	HOUR
04/05/2003	17
04/05/2003	18
05/10/2003	21

The instrument did not exceed its span during the reporting period.

Changes since last quarter in CMS, process or controls for SO2:

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William G. Vela

Name

William G. Vela

Signature

Engineering Group

Title

7/29/03

Monitor Downtime Report
AES Puerto Rico.
Unit #1
CO

Report for 04/01/2003 to 06/30/2003
Today's Date: 07/03/2003

1. Monitor Availability

Reasons for Missing or Unacceptable Data	Downtime (hours)	% Downtime to Operating Time
a. Monitor Malfunctions	0.00	0.00
b. Non-Monitor Equipment Malfunctions	0.00	0.00
c. Quality Assurance	0.00	0.00
d. Other Known Causes	0.00	0.00
e. Unknown Causes	0.00	0.00
Total CMS Downtime	0.00	0.00

Total Online Operating Hours	1027.50
[Total CMS Downtime] x 100 / [Total source operating time]. (%)	0.00

2. Excess Emissions

Reasons for Missing Excess Emission	Duration of Time (hours)	% Excess Emission to Operating Time
a. Startup / Shutdown	2.00	0.19
b. Control Equipment Malfunction	0.00	0.00
c. Process Problems	0.00	0.00
d. Other Known Causes	0.00	0.00
e. Unknown Causes	0.00	0.00
Total duration of excess emission	2.00	0.19

Total Monitored Operating Hours in Period	1027.50
Total duration of excess emissions x 100 / [Total source operating time]. (%)	0.19

Monitor Span Exceedance Summary for CO

Instrument Span: 1000

Low Range Exceedances
Instrument Low Range: 200

DATE	HOUR
04/05/2003	16
04/05/2003	17
04/05/2003	18
04/05/2003	19
04/05/2003	20
04/06/2003	1
04/06/2003	8
04/06/2003	9
04/06/2003	10

The instrument did not exceed its span during the reporting period.

Changes since last quarter in CMS, process or controls for CO:

I certify that the information contained in this report is true, accurate, and complete.

William G. Vela
Name

William G Vela
Signature

Engineering Group
Title

7/29/03

Monitoring System Performance

And

Excess Emission Summary

Unit 2

Monitor Downtime Report
AES Puerto Rico.
Unit #2
OPACITY

Report for 04/01/2003 to 06/30/2003
Today's Date: 07/29/2003

1. Monitor Availability

Reasons for Missing or Unacceptable Data	Downtime (minutes)	% Downtime to Operating Time
a. Monitor Malfunctions	0	0.00
b. Non-Monitor Equipment Malfunctions	138	0.11
c. Quality Assurance	0	0.00
d. Other Known Causes	60	0.05
e. Unknown Causes	0	0.00
Total CMS Downtime	198	0.15

Total Online Operating Time in Minutes	131040
[Total CMS Downtime] x 100 / [Total source operating time]. (%)	0.15

B. Excess Emissions Summary

1. Number of 6 Minute Averages	21840
2. Number of 6 Minute Averages in Excess of Limit	41

3. Reasons for Excess Emissions Based on 6 Minute Rolling Average	Duration (Minutes)	% E.E. Time To Operating Time
I. Startup / Shutdown	72	0.06
II. Control Equipment Malfunction	0	0.00
III. Process Malfunction	0	0.00
IV. Unknown Causes	0	0.00
V. Other Known Causes	528	0.40
TOTAL	600	

Total Monitored Facility Operating Minutes	130842
Total duration of excess emissions x 100 / [Total source operating time]. (%)	0.46

U2 Opacity Monitor Downtime Report

^L^M
Monitor Span Exceedance Summary for OPACITY

Instrument Span: 80

The instrument did not exceed its span during the reporting period.

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^L^M
Changes since last quarter in CMS, process or controls for OPACITY:

Software error was noted in the CEMS Reporting and flagging for opacity exceedences. On July 28,2003 Spcetrum Systems, Inc. personnel corrected this error. Reporting and flagging of opacity exceedences is now consistent with the facilities PSD Permit and Construction Permit language as follows: "Opacity of emissions shall not exceed 20% (6 minute average) except for one 6 minute set per hour which shall not exceed 27%. Excess emissions shall be defined asany 6-minute period during which the average opacity as measured by the COM system, exceeds 20% opacity, except for one 27% per each 1-hour period.

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William G. Vela
Name

William G. Vela
Signature

Engineering Group
Title

7/29/03
Date

Monitor Downtime Report
AES Puerto Rico.
Unit #2
NOX

Report for 04/01/2003 to 06/30/2003
Today's Date: 07/03/2003

1. Monitor Availability

Reasons for Missing or Unacceptable Data	Downtime (hours)	% Downtime to Operating Time
a. Monitor Malfunctions	0.00	0.00
b. Non-Monitor Equipment Malfunctions	0.00	0.00
c. Quality Assurance	0.00	0.00
d. Other Known Causes	0.75	0.03
e. Unknown Causes	0.00	0.00
Total CMS Downtime	0.75	0.03

Total Online Operating Hours	2178.00
[Total CMS Downtime] x 100 / [Total source operating time]. (%)	0.03

2. Excess Emissions

Reasons for Missing Excess Emission	Duration of Time (hours)	% Excess Emission to Operating Time
a. Startup / Shutdown	0.00	0.00
b. Control Equipment Malfunction	0.00	0.00
c. Process Problems	0.00	0.00
d. Other Known Causes	0.00	0.00
e. Unknown Causes	0.00	0.00
Total duration of excess emission	0.00	0.00

Total Monitored Operating Hours in Period	2177.25
Total duration of excess emissions x 100 / [Total source operating time]. (%)	0.00

Monitor Span Exceedance Summary for NOX

Instrument Span: 200

Low Range Exceedances
Instrument Low Range: 100

DATE	HOUR
04/05/2003	7

The instrument did not exceed its span during the reporting period.

Changes since last quarter in CMS, process or controls for NOX:

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William G. Vela

Name

William G. Vela

Signature

Engineering Group

Title

7/29/03

Monitor Downtime Report
AES Puerto Rico.
Unit #2
SO2

Report for 04/01/2003 to 06/30/2003
Today's Date: 07/03/2003

1. Monitor Availability

Reasons for Missing or Unacceptable Data	Downtime (hours)	% Downtime to Operating Time
a. Monitor Malfunctions	0.00	0.00
b. Non-Monitor Equipment Malfunctions	0.00	0.00
c. Quality Assurance	0.00	0.00
d. Other Known Causes	5.75	0.26
e. Unknown Causes	0.00	0.00
Total CMS Downtime	5.75	0.26

Total Online Operating Hours	2178.00
[Total CMS Downtime] x 100 / [Total source operating time]. (%)	0.26

2. Excess Emissions

Reasons for Missing Excess Emission	Duration of Time (hours)	% Excess Emission to Operating Time
a. Startup / Shutdown	0.00	0.00
b. Control Equipment Malfunction	0.00	0.00
c. Process Problems	0.00	0.00
d. Other Known Causes	12.00	0.55
e. Unknown Causes	0.00	0.00
Total duration of excess emission	12.00	0.55

Total Monitored Operating Hours in Period	2172.25
Total duration of excess emissions x 100 / [Total source operating time]. (%)	0.55

Monitor Span Exceedance Summary for SO2

Instrument Span: 50

he instrument did not exceed its low range during the reporting period.

The instrument did not exceed its span during the reporting period.

Changes since last quarter in CMS, process or controls for SO2:

I certify that the information contained in this report is true, accurate, and complete.

William G Vela

Name

William G Vela

Signature

Engineering Group

Title

7/29/03

Monitor Downtime Report
AES Puerto Rico.
Unit #2
CO

Report for 04/01/2003 to 06/30/2003
Today's Date: 07/03/2003

1. Monitor Availability

Reasons for Missing or Unacceptable Data	Downtime (hours)	% Downtime to Operating Time
a. Monitor Malfunctions	0.00	0.00
b. Non-Monitor Equipment Malfunctions	0.00	0.00
c. Quality Assurance	0.00	0.00
d. Other Known Causes	1.00	0.05
e. Unknown Causes	0.00	0.00
Total CMS Downtime	1.00	0.05

Total Online Operating Hours	2178.00
[Total CMS Downtime] x 100 / [Total source operating time]. (%)	0.05

2. Excess Emissions

Reasons for Missing Excess Emission	Duration of Time (hours)	% Excess Emission to Operating Time
a. Startup / Shutdown	0.00	0.00
b. Control Equipment Malfunction	0.00	0.00
c. Process Problems	0.00	0.00
d. Other Known Causes	0.00	0.00
e. Unknown Causes	0.00	0.00
Total duration of excess emission	0.00	0.00

Total Monitored Operating Hours in Period	2177.00
Total duration of excess emissions x 100 / [Total source operating time]. (%)	0.00

Monitor Span Exceedance Summary for CO

Instrument Span: 1000

)w Range Exceedances
.nstrument Low Range: 200

DATE	HOUR
05/29/2003	1
06/06/2003	15

The instrument did not exceed its span during the reporting period.

Changes since last quarter in CMS, process or controls for CO:

I certify that the information contained in this report is true, accurate, and complete.

William G. Vela
Name

William G Vela
Signature

Engineering Group
Title

7/29/03

Excess Emissions Report

Unit 1

Second Quarter 2003

April 1, 2003

Through

June 30, 2003

Opacity Excess Emissions Report
AES Puerto Rico.
Unit #1

Opacity Excess Emission Limit: 20.0 %

Today's Date: 07/29/2003
Time: 07:43:42

Reporting Period
04/01/2003 - 06/30/2003

Date	Time	ID	Value	Reason / Action / Comment
04/05/2003	0830	OPACITY1	45.500%	R: SHUTDOWN/UNIT TRIP A: NOTIFIED CONTROLS SHOP C: UNIT TRIP
04/08/2003	0330	OPACITY1	41.900%	R: PRECIPITATOR TROUBLE A: NOTIFIED CONTROLS SHOP C: problems with ESP
04/08/2003	0424	OPACITY1	34.900%	R: PRECIPITATOR TROUBLE A: NOTIFIED CONTROLS SHOP C: problems with ESP RV
04/08/2003	0430	OPACITY1	30.000%	R: PRECIPITATOR TROUBLE C: problems with ESP RV
04/08/2003	0530	OPACITY1	26.000%	R: LOADSWING A: NOTIFIED CONTROLS SHOP C: raising load
04/10/2003	0124	OPACITY1	45.000%	R: MISC.EQUIPMENT TROUBLE C: AIR HTR TRIPPED CAUSING CDS S/D
04/10/2003	0142	OPACITY1	35.300%	R: MISC.EQUIPMENT TROUBLE C: AIR HTR TRIPPED CAUSING CDS S/D
04/10/2003	0148	OPACITY1	43.800%	R: MISC.EQUIPMENT TROUBLE C: AIR HTR TRIPPED CAUSING CDS S/D
04/10/2003	0200	OPACITY1	42.000%	R: MISC.EQUIPMENT TROUBLE A: NOTIFIED BTO C: AIR HTR TRIPPED CAUSING CDS S/D
04/10/2003	1848	OPACITY1	29.700%	R: PRECIPITATOR TROUBLE C: lowered load
04/14/2003	2112	OPACITY1	45.300%	R: MISC.EQUIPMENT TROUBLE A: NOTIFIED CONTROLS SHOP C: Air Heater Trip

excess opacity u1 quarter 2

04/15/2003 0018	OPACITY1	35.100%	R: MISC.EQUIPMENT TROUBLE A: NOTIFIED CONTROLS SHOP C: Air Heater Trip
04/15/2003 0024	OPACITY1	51.700%	R: MISC.EQUIPMENT TROUBLE C: Air Heater Trip
04/15/2003 1648	OPACITY1	68.800%	R: MISC.EQUIPMENT TROUBLE C: AIR PREHEATER TRIPPED
04/15/2003 1654	OPACITY1	47.800%	R: MISC.EQUIPMENT TROUBLE A: NOTIFIED BTO C: AIR PREHEATER TRIPPED
05/16/2003 1530	OPACITY1	20.400%	R: MISC.EQUIPMENT TROUBLE A: NOTIFIED MAINTENANCE SHOP C: Rotary Valve Trouble
06/26/2003 0400	OPACITY1	35.000%	R: STARTUP A: NOTIFIED CONTROLS SHOP C: PERFORMING AIR TESTING
06/26/2003 0512	OPACITY1	68.500%	R: STARTUP C: PERFORMING TESTING
06/26/2003 0518	OPACITY1	80.600%	R: STARTUP C: PERFORMING TESTING
06/26/2003 0524	OPACITY1	80.600%	R: STARTUP C: PERFORMING TESTING
06/26/2003 0530	OPACITY1	80.600%	R: STARTUP C: PERFORMING TESTINNG
06/26/2003 0536	OPACITY1	80.600%	R: STARTUP C: PERFORMING TESTING
06/26/2003 0542	OPACITY1	76.300%	R: STARTUP C: PERFORMING TESTING
06/26/2003 0548	OPACITY1	65.500%	R: STARTUP C: PERFORMING TESTING
06/26/2003 0554	OPACITY1	57.100%	R: STARTUP C: PERFORMING TESTING
06/26/2003 0600	OPACITY1	50.300%	R: STARTUP C: PERFORMING TESTING
06/26/2003 0606	OPACITY1	43.700%	R: STARTUP C: PERFORMING TESTING
06/26/2003 0612	OPACITY1	39.700%	R: STARTUP C: PERFORMING TESTING
06/26/2003 0618	OPACITY1	36.800%	R: STARTUP C: PERFORMING TESTING
06/26/2003 0624	OPACITY1	34.300%	R: STARTUP C: PERFORMING TESTING
06/26/2003 0630	OPACITY1	30.800%	R: STARTUP

excess opacity u1 quarter 2

				C: PERFORMING TESTING
06/26/2003	0636	OPACITY1	29.800%	R: STARTUP C: PERFORMING TESTING
06/26/2003	0642	OPACITY1	27.900%	R: STARTUP C: PERFORMING TESTING
06/26/2003	0654	OPACITY1	23.900%	R: STARTUP C: PERFORMING TESTING
06/26/2003	0706	OPACITY1	22.600%	R: STARTUP C: PERFORMING TESTING
06/26/2003	0712	OPACITY1	20.600%	R: STARTUP C: PERFORMING TESTING

Hourly Excess Emissions Report
AES Puerto Rico.
Unit #1

NOx 24 Hour Rolling Average Limits: 57 ppmvd corrected to 7% Oxygen
0.10 lb/mmBtu
246.1 lb/hr

CO 8 Hour Rolling Average Limits: 94 ppmvd corrected to 7% Oxygen
0.10 lb/mmBtu
246.1 lb/hr

SO2 3 Hour Rolling Average Limits: 9.00 ppmvd corrected to 7% Oxygen
0.022 lb/mmBtu
54.1 lb/hr

Today's Date: 07/02/2003
Time: 13:52:01

Reporting Period
04/01/2003 - 06/30/2003

Date	Time	ID	Value		Reason / Action / Comment
04/05/2003	2300	SO2_3HR	14.30	ppmvd	C: UNIT START UP
04/05/2003	2300	SO2_3HR_RT	0.035	lb/mmBtu	R: STARTUP C: UNIT START UP
4/06/2003	1600	CO1_8HR	227	ppmvd	R: STARTUP C: EXCEEDANCE WHILE UNIT ON START-UP
04/06/2003	1600	CO1_8HR_RT	0.24	lb/mmBtu	R: STARTUP C: EXCEEDANCE WHILE UNIT ON START-UP
04/06/2003	1700	CO1_8HR	121	ppmvd	R: STARTUP C: EXCEEDANCE WHILE UNIT ON START-UP
04/06/2003	1700	CO1_8HR_RT	0.13	lb/mmBtu	R: STARTUP C:
04/07/2003	0800	NOX_24HR	58	ppmvd	R: STARTUP A: NOTIFIED BTO C: EXCEEDANCE WHILE UNIT ON START-UP
04/07/2003	0900	NOX_24HR	58	ppmvd	C:
4/07/2003	1000	NOX_24HR	58	ppmvd	C:
04/19/2003	2100	SO2_3HR	10.50	ppmvd	R: MISC.EQUIPMENT TROUBLE

					C: problem with l/s feed b
04/19/2003	2100	SO2_3HR_RT	0.026	lb/mmBtu	R: MISC.EQUIPMENT TROUBLE C: problem l/s feeder b
4/19/2003	2100	SO2_3HR_ME	63.2	lb/hr	R: MISC.EQUIPMENT TROUBLE A: NOTIFIED BTO C: problem with l/s feeder b
04/19/2003	2200	SO2_3HR	9.30	ppmvd	R: COALFEEDER/MILL TROUBLE C: COAL CHUTES PLUGGING OPENED HOT PA
04/19/2003	2200	SO2_3HR_RT	0.023	lb/mmBtu	R: COALFEEDER/MILL TROUBLE C: COAL CHUTES PLUGGING OPENED HOT PA
04/19/2003	2200	SO2_3HR_ME	55.8	lb/hr	R: COALFEEDER/MILL TROUBLE A: NOTIFIED BTO C: COAL CHUTES PLUGGING OPENED HOT PA
04/24/2003	1700	SO2_3HR_ME	54.8	lb/hr	R: COALFEEDER/MILL TROUBLE A: NOTIFIED ELECTRIC SHOP C: lost coal feeder H
04/24/2003	1800	SO2_3HR	10.70	ppmvd	R: COALFEEDER/MILL TROUBLE C: problems with coal feeder H
04/24/2003	1800	SO2_3HR_RT	0.026	lb/mmBtu	R: COALFEEDER/MILL TROUBLE C: problems with coal feeder H
04/24/2003	1800	SO2_3HR_ME	67.6	lb/hr	R: COALFEEDER/MILL TROUBLE A: NOTIFIED ELECTRIC SHOP C: problems with coal feeder H
04/24/2003	1900	SO2_3HR_ME	55.1	lb/hr	R: COALFEEDER/MILL TROUBLE C: problems with coal feeder H
04/25/2003	1300	SO2_3HR	9.30	ppmvd	R: MISC.EQUIPMENT TROUBLE C: Various l/s feeder trips
04/25/2003	1300	SO2_3HR_RT	0.023	lb/mmBtu	R: MISC.EQUIPMENT TROUBLE C: Various l/s feeder trips
04/25/2003	1300	SO2_3HR_ME	60.3	lb/hr	R: MISC.EQUIPMENT TROUBLE A: NOTIFIED BTO C: Various l/s feeder trips
04/25/2003	1400	SO2_3HR_ME	57.8	lb/hr	C: Various l/s feeder trips.
05/10/2003	2100	SO2_3HR	9.50	ppmvd	R: MISC.EQUIPMENT TROUBLE A: NOTIFIED BTO C: CDS PLUGGED
/10/2003	2100	SO2_3HR_RT	0.023	lb/mmBtu	R: MISC.EQUIPMENT TROUBLE C: CDS PLUGGED
05/10/2003	2100	SO2_3HR_ME	57.4	lb/hr	R: MISC.EQUIPMENT TROUBLE

					C: CDS PLUGGED
05/10/2003	2200	SO2_3HR	13.50	ppmvd	R: MISC.EQUIPMENT TROUBLE A: REDUCE LOAD C: CDS PLUGGED
05/10/2003	2200	SO2_3HR_RT	0.033	lb/mmBtu	R: MISC.EQUIPMENT TROUBLE C: CDS PLUGGED
05/10/2003	2200	SO2_3HR_ME	77.7	lb/hr	R: MISC.EQUIPMENT TROUBLE C: CDS PLUGGED
05/10/2003	2300	SO2_3HR	16.00	ppmvd	R: MISC.EQUIPMENT TROUBLE C: CDS PLUGGED
05/10/2003	2300	SO2_3HR_RT	0.039	lb/mmBtu	R: MISC.EQUIPMENT TROUBLE C: CDS PLUGGED
05/10/2003	2300	SO2_3HR_ME	84.7	lb/hr	R: MISC.EQUIPMENT TROUBLE C: CDS PLUGGED
05/11/2003	0000	SO2_3HR	13.10	ppmvd	R: MISC.EQUIPMENT TROUBLE C: CDS PLUGGED
05/11/2003	0000	SO2_3HR_RT	0.032	lb/mmBtu	R: MISC.EQUIPMENT TROUBLE C: CDS PLUGGED
05/11/2003	0000	SO2_3HR_ME	60.7	lb/hr	R: MISC.EQUIPMENT TROUBLE C: CDS PLUGGED
05/11/2003	0100	SO2_3HR	9.30	ppmvd	R: MISC.EQUIPMENT TROUBLE C: CDS PLUGGED
05/11/2003	0100	SO2_3HR_RT	0.023	lb/mmBtu	R: MISC.EQUIPMENT TROUBLE C: CDS PLUGGED

Excess Emissions Report

Unit 2

Second Quarter 2003

April 1, 2003

Through

June 30, 2003

Opacity Excess Emissions Report
AES Puerto Rico.
Unit #2

Opacity Excess Emission Limit: 20.0 %

Today's Date: 07/29/2003
Time: 07:55:23

Reporting Period
04/01/2003 - 06/30/2003

Date	Time	ID	Value	Reason / Action / Comment
04/05/2003	1954	OPACITY2	26.700%	R: SHUTDOWN/UNIT TRIP C: ALL ROTARY VLV CLOSED/MANUAL DUN P SEQ. STARTED
04/05/2003	2024	OPACITY2	38.900%	R: SHUTDOWN/UNIT TRIP C: CLOSE ALL ROTARY VLV. AND WAIT!! !!!!
04/05/2003	2236	OPACITY2	28.100%	R: SHUTDOWN/UNIT TRIP C: CLOSED ALL ROTARY VLV
04/05/2003	2300	OPACITY2	27.300%	R: SHUTDOWN/UNIT TRIP C: CLOSE ALL ROTARY VLV.
04/09/2003	0630	OPACITY2	22.100%	R: PRECIPITATOR TROUBLE C: ESP rotary valves problems
04/10/2003	1554	OPACITY2	26.700%	R: PRECIPITATOR TROUBLE C: close all rotary vlv.
04/11/2003	1030	OPACITY2	29.600%	R: PRECIPITATOR TROUBLE A: NOTIFIED CONTROLS SHOP C: close all rotary vlv./ adjust as necessary
04/11/2003	1130	OPACITY2	31.200%	R: PRECIPITATOR TROUBLE A: NOTIFIED CONTROLS SHOP C: close all rotary vlv./ adjust sl ide gates
04/11/2003	1330	OPACITY2	24.600%	R: PRECIPITATOR TROUBLE A: NOTIFIED CONTROLS SHOP C: close all rotary vlv./ adjust as necessary
04/18/2003	1900	OPACITY2	30.800%	R: MISC.EQUIPMENT TROUBLE C: hyd lime plugged
04/20/2003	1906	OPACITY2	35.800%	R: COALFEEDER/MILL TROUBLE C: Stop rotary's valves rows 430, 4 40 &450.
04/21/2003	0506	OPACITY2	29.100%	R: MISC.EQUIPMENT TROUBLE A: NOTIFIED MAINTENANCE SHOP C: Stops rotary's valves rows 430,

excess opacity u2 quarter 2
440 & 450.

04/21/2003 0818	OPACITY2	22.900%	R: MISC.EQUIPMENT TROUBLE A: NOTIFIED CONTROLS SHOP C:
04/22/2003 1924	OPACITY2	38.900%	R: COALFEEDER/MILL TROUBLE C:
04/22/2003 1930	OPACITY2	30.200%	R: PRECIPITATOR TROUBLE C:
04/22/2003 1954	OPACITY2	21.000%	R: PRECIPITATOR TROUBLE C:
04/22/2003 2000	OPACITY2	50.100%	R: PRECIPITATOR TROUBLE C:
04/22/2003 2048	OPACITY2	33.400%	R: PRECIPITATOR TROUBLE C:
04/22/2003 2106	OPACITY2	36.900%	R: PRECIPITATOR TROUBLE C:
04/22/2003 2118	OPACITY2	30.800%	R: PRECIPITATOR TROUBLE C:
04/22/2003 2212	OPACITY2	22.800%	R: PRECIPITATOR TROUBLE C:
04/22/2003 2230	OPACITY2	25.000%	R: PRECIPITATOR TROUBLE C:
04/22/2003 2242	OPACITY2	32.200%	R: PRECIPITATOR TROUBLE C:
04/22/2003 2248	OPACITY2	59.200%	R: PRECIPITATOR TROUBLE C:
04/22/2003 2254	OPACITY2	23.000%	R: PRECIPITATOR TROUBLE A: NOTIFIED ELECTRIC SHOP C:
04/22/2003 2324	OPACITY2	27.100%	R: COALFEEDER/MILL TROUBLE C:
04/23/2003 0012	OPACITY2	20.800%	R: COALFEEDER/MILL TROUBLE C:

excess opacity u2 quarter 2

04/23/2003 0018	OPACITY2	23.800%	R: COALFEEDER/MILL TROUBLE C:
04/23/2003 1506	OPACITY2	36.200%	R: MISC.EQUIPMENT TROUBLE C: lost cds water pump
04/24/2003 2018	OPACITY2	49.600%	R: MONITOR SYSTEM TROUBLE A: NOTIFIED ELECTRIC SHOP C: Analizer was frozen at 9%
04/27/2003 0742	OPACITY2	43.300%	R: PRECIPITATOR TROUBLE A: NOTIFIED CONTROLS SHOP C: close all rotary valves/ manual dump seq.
04/28/2003 2242	OPACITY2	38.500%	R: MONITOR SYSTEM TROUBLE A: NOTIFIED CONTROLS SHOP C: loss of control air pressure
04/28/2003 2248	OPACITY2	57.500%	R: MISC.EQUIPMENT TROUBLE C: loss of control air pressure
05/16/2003 0536	OPACITY2	35.100%	R: LOADSWING A: NOTIFIED CONTROLS SHOP C: close rotary vlv
05/16/2003 0900	OPACITY2	28.000%	R: MISC.EQUIPMENT TROUBLE C:
05/16/2003 2206	OPACITY2	29.500%	R: MISC.EQUIPMENT TROUBLE C: Rotary Valve Trouble
05/18/2003 1424	OPACITY2	45.700%	R: MISC.EQUIPMENT TROUBLE C: close all rotary vlv, adjusting rotaries
05/18/2003 1536	OPACITY2	27.700%	R: MISC.EQUIPMENT TROUBLE A: NOTIFIED CONTROLS SHOP C: close all rotary vlv, adjusting rotary sprokect
05/18/2003 1542	OPACITY2	23.000%	R: MISC.EQUIPMENT TROUBLE A: NOTIFIED CONTROLS SHOP C: close all rotary vlv, adjusting vlv.
05/23/2003 0442	OPACITY2	28.100%	R: SHUTDOWN/UNIT TRIP C: SHUTDOWN CDS FOR INSPECTION AS A LSTOM PERSONEL REQUEST.
05/29/2003 0706	OPACITY2	40.700%	R: STARTUP A: NOTIFIED BTO C: CDS Start UP Problems With Temp Control

Hourly Excess Emissions Report
AES Puerto Rico.
Unit #2

NOx 24 Hour Rolling Average Limits: 57 ppmvd corrected to 7% Oxygen
0.10 lb/mmBtu
246.1 lb/hr

CO 8 Hour Rolling Average Limits: 94 ppmvd corrected to 7% Oxygen
0.10 lb/mmBtu
246.1 lb/hr

SO2 3 Hour Rolling Average Limits: 9.00 ppmvd corrected to 7% Oxygen
0.022 lb/mmBtu
54.1 lb/hr

Today's Date: 07/02/2003
Time: 13:55:15

Reporting Period
04/01/2003 - 06/30/2003

Date	Time	ID	Value		Reason / Action / Comment
04/17/2003	1700	SO2_3HR	9.50	ppmvd	R: MISC.EQUIPMENT TROUBLE C: hyd lime system plugged
04/17/2003	1700	SO2_3HR_RT	0.023	lb/mmBtu	R: MISC.EQUIPMENT TROUBLE C: hyd lime system plugged
4/17/2003	1800	SO2_3HR	11.50	ppmvd	R: MISC.EQUIPMENT TROUBLE C: hyd lime system plugged
04/17/2003	1800	SO2_3HR_RT	0.028	lb/mmBtu	R: MISC.EQUIPMENT TROUBLE C: hyd lime system plugged
04/17/2003	1800	SO2_3HR_ME	61.4	lb/hr	R: MISC.EQUIPMENT TROUBLE C: hyd lime system plugged
04/19/2003	0700	SO2_3HR	11.00	ppmvd	R: SO3 SYSTEM TROUBLE C: Hydrated lime rotary valve , it' s stuck.
04/19/2003	0700	SO2_3HR_RT	0.027	lb/mmBtu	R: SO3 SYSTEM TROUBLE C: Hydrated lime rotary valve, it' s stuck.
04/19/2003	0700	SO2_3HR_ME	54.4	lb/hr	R: SO3 SYSTEM TROUBLE A: NOTIFIED ELECTRIC SHOP C: Hydrated lime rotary valve , it' s stuck.
04/19/2003	0800	SO2_3HR	12.80	ppmvd	R: SO3 SYSTEM TROUBLE C: Hydrated lime rotary valve , it' s stuck.
/19/2003	0800	SO2_3HR_RT	0.031	lb/mmBtu	R: SO3 SYSTEM TROUBLE C: hydrated lime rotary valve, it' s stuck.

04/19/2003	0800	SO2_3HR_ME	65.4	lb/hr	R: SO3 SYSTEM TROUBLE A: NOTIFIED ELECTRIC SHOP C: Hydrated lime rotary valve , it' s stuck.
?/06/2003	0600	SO2_3HR	9.70	ppmvd	R: COALFEEDER/MILL TROUBLE C: ADJUST O2 BIAS, LS & HYDRATED L IME.
06/06/2003	0600	SO2_3HR_RT	0.024	lb/mmBtu	R: COALFEEDER/MILL TROUBLE C: ADJUST O2, LS & HYDRATED LIME.
06/06/2003	0600	SO2_3HR_ME	64.2	lb/hr	R: COALFEEDER/MILL TROUBLE C: ADJUST O2, LS & HYDRATED LIME.
06/06/2003	0700	SO2_3HR	13.80	ppmvd	R: COALFEEDER/MILL TROUBLE C: ADJUST 2ND DAMPERS, LS, O2 & HY DRATED LIME.
06/06/2003	0700	SO2_3HR_RT	0.034	lb/mmBtu	R: COALFEEDER/MILL TROUBLE C: ADJUST 2 ND DAMPERS, O2, HYDRATE D LIME & LS.
06/06/2003	0700	SO2_3HR_ME	91.2	lb/hr	R: COALFEEDER/MILL TROUBLE C: ADJUST LS, HYDRATED LIME, 2ND DA MPERS & O2.
06/06/2003	0800	SO2_3HR	18.00	ppmvd	R: COALFEEDER/MILL TROUBLE C: ADJUST, LS, HYDRATED LIME, O2 & 2ND. DAMPERS.
/06/2003	0800	SO2_3HR_RT	0.044	lb/mmBtu	R: COALFEEDER/MILL TROUBLE A: NOTIFIED ELECTRIC SHOP C: ADJUST 2ND. DAMPERS, LS, HYDRATE D LIME & O2.
06/06/2003	0800	SO2_3HR_ME	119.2	lb/hr	R: COALFEEDER/MILL TROUBLE C: ADJUST O2, LS , HYDRATED LIME & 2ND DAMPERS.
06/06/2003	0900	SO2_3HR	14.60	ppmvd	R: COALFEEDER/MILL TROUBLE C: ADJUST 02 & 2ND DAMPERS.
06/06/2003	0900	SO2_3HR_RT	0.036	lb/mmBtu	R: COALFEEDER/MILL TROUBLE C: ADJUST O2 & 2ND DAMPERS.
06/06/2003	0900	SO2_3HR_ME	96.2	lb/hr	R: COALFEEDER/MILL TROUBLE C: ADJUST 2ND DAMPERS & 02.
06/06/2003	1000	SO2_3HR	9.40	ppmvd	R: COALFEEDER/MILL TROUBLE C: ADJUST O2 & DAMPERS.
06/06/2003	1000	SO2_3HR_RT	0.023	lb/mmBtu	R: COALFEEDER/MILL TROUBLE C: ADJUST O2 & DAMPERS. ADJUST HYDR TAED LIME FLOW.
/06/2003	1000	SO2_3HR_ME	62.0	lb/hr	R: COALFEEDER/MILL TROUBLE C: ADJUST HYDRATED LIME FLOW.
06/15/2003	0600	SO2_3HR	10.50	ppmvd	R: MISC.EQUIPMENT TROUBLE

					C:
06/15/2003	0600	SO2_3HR_RT	0.026	lb/mmBtu	R: MISC.EQUIPMENT TROUBLE C: hydrated lime duct plug
06/15/2003	0600	SO2_3HR_ME	66.7	lb/hr	R: MISC.EQUIPMENT TROUBLE C: duct plug in hydrate header
06/15/2003	0700	SO2_3HR	12.00	ppmvd	R: MISC.EQUIPMENT TROUBLE C: hydrated duct plug
06/15/2003	0700	SO2_3HR_RT	0.030	lb/mmBtu	R: MISC.EQUIPMENT TROUBLE C: hydrated lime duct plug
06/15/2003	0700	SO2_3HR_ME	77.5	lb/hr	R: MISC.EQUIPMENT TROUBLE C: hydrated lime duct plug
06/15/2003	0800	SO2_3HR	11.00	ppmvd	R: MISC.EQUIPMENT TROUBLE C: hydrated duct plugged
06/15/2003	0800	SO2_3HR_RT	0.027	lb/mmBtu	R: MISC.EQUIPMENT TROUBLE C: hydrated lime duct plug
06/15/2003	0800	SO2_3HR_ME	70.9	lb/hr	R: MISC.EQUIPMENT TROUBLE C: hydrated lime header plug

Daily Emissions Report

Unit 1

Second Quarter 2003

April 1, 2003

Through

June 30, 2003

30 Day Rolling Averages Report
AES Puerto Rico.
Unit #1

Date and Time Report Generated:
07/03/2003 19:09:03

Reporting Period
Start: 04/01/2003
End : 06/30/2003

DATE	OP HOURS DAY	SO2 DAILY AVERAGE lb/mmBtu	SO2 VALID HOURS DAY	SO2 30-DAY AVERAGE lb/mmBtu	SO2 VALID DAYS	NOX DAILY AVERAGE lb/mmBtu	NOX VALID HOURS DAY	NOX 30-DAY AVERAGE lb/mmBtu	NOX VALID DAYS
04/01/2003	24	0.001	24	0.007	29	0.090	24	0.090	30
04/02/2003	24	0.001	24	0.007	29	0.090	24	0.090	30
04/03/2003	24	0.001	24	0.007	29	0.083	24	0.090	30
04/04/2003	24	0.003	24	0.006	29	0.082	24	0.090	30
04/05/2003	16	0.000	0	0.006	29	0.000	0	0.090	30
04/06/2003	22	0.000	0	0.006	29	0.000	0	0.090	30
04/07/2003	24	0.005	24	0.006	29	0.090	24	0.090	30
04/08/2003	24	0.004	24	0.006	29	0.091	24	0.090	30
04/09/2003	24	0.001	24	0.006	29	0.090	24	0.090	30
04/10/2003	24	0.003	24	0.006	29	0.090	24	0.090	30
04/11/2003	24	0.001	24	0.005	29	0.090	24	0.090	30
04/12/2003	24	0.003	24	0.005	29	0.087	24	0.090	30
04/13/2003	24	0.002	24	0.005	29	0.066	24	0.090	30
04/14/2003	24	0.003	24	0.005	29	0.088	24	0.090	30
04/15/2003	24	0.008	24	0.004	29	0.090	24	0.090	30
04/16/2003	24	0.007	24	0.004	29	0.090	24	0.090	30
04/17/2003	24	0.007	24	0.004	29	0.085	24	0.090	30
04/18/2003	24	0.005	24	0.004	29	0.089	24	0.090	30
04/19/2003	24	0.012	24	0.005	29	0.090	24	0.090	30
04/20/2003	24	0.003	20	0.004	29	0.085	24	0.090	30
04/21/2003	24	0.004	24	0.004	29	0.083	24	0.090	30
04/22/2003	24	0.003	24	0.004	29	0.084	24	0.090	30
04/23/2003	24	0.009	24	0.004	29	0.087	24	0.090	30
04/24/2003	24	0.009	24	0.004	30	0.086	24	0.090	30
04/25/2003	24	0.006	24	0.004	30	0.083	24	0.090	30
04/26/2003	24	0.007	24	0.004	30	0.084	24	0.090	30
04/27/2003	24	0.006	24	0.004	30	0.083	24	0.090	30
04/28/2003	24	0.007	24	0.005	30	0.085	24	0.090	30
04/29/2003	24	0.005	24	0.005	30	0.086	24	0.090	30
04/30/2003	24	0.004	24	0.005	30	0.085	24	0.090	30
05/01/2003	24	0.007	24	0.005	30	0.084	24	0.090	30
05/02/2003	24	0.004	24	0.005	30	0.083	24	0.090	30
05/03/2003	24	0.003	24	0.005	30	0.083	24	0.090	30
05/04/2003	24	0.003	24	0.005	30	0.084	24	0.090	30
05/05/2003	24	0.001	24	0.005	30	0.084	24	0.090	30
05/06/2003	24	0.003	24	0.005	30	0.084	24	0.090	30
05/07/2003	24	0.001	24	0.005	30	0.081	24	0.090	30
05/08/2003	24	0.001	24	0.005	30	0.083	24	0.090	30
05/09/2003	24	0.001	24	0.005	30	0.081	24	0.080	30
05/10/2003	24	0.007	24	0.005	30	0.084	24	0.080	30
05/11/2003	24	0.003	23	0.005	30	0.089	24	0.080	30

05/12/2003	24	0.005	24	0.005	30	0.084	24	0.080	30
05/13/2003	24	0.001	24	0.005	30	0.084	24	0.090	30
05/14/2003	3	0.000	0	0.005	30	0.000	0	0.090	30
05/15/2003	0	0.000	0	0.005	30	0.000	0	0.090	30
05/16/2003	0	0.000	0	0.005	30	0.000	0	0.090	30
05/17/2003	0	0.000	0	0.005	30	0.000	0	0.090	30
05/18/2003	0	0.000	0	0.005	30	0.000	0	0.090	30
05/19/2003	0	0.000	0	0.005	30	0.000	0	0.090	30
05/20/2003	0	0.000	0	0.005	30	0.000	0	0.090	30
05/21/2003	0	0.000	0	0.005	30	0.000	0	0.090	30
05/22/2003	0	0.000	0	0.005	30	0.000	0	0.090	30
05/23/2003	0	0.000	0	0.005	30	0.000	0	0.090	30
05/24/2003	0	0.000	0	0.005	30	0.000	0	0.090	30
05/25/2003	0	0.000	0	0.005	30	0.000	0	0.090	30
05/26/2003	0	0.000	0	0.005	30	0.000	0	0.090	30
05/27/2003	0	0.000	0	0.005	30	0.000	0	0.090	30
05/28/2003	0	0.000	0	0.005	30	0.000	0	0.090	30
05/29/2003	0	0.000	0	0.005	30	0.000	0	0.090	30
05/30/2003	0	0.000	0	0.005	30	0.000	0	0.090	30
05/31/2003	0	0.000	0	0.005	30	0.000	0	0.090	30
06/01/2003	0	0.000	0	0.005	30	0.000	0	0.090	30
06/02/2003	0	0.000	0	0.005	30	0.000	0	0.090	30
06/03/2003	0	0.000	0	0.005	30	0.000	0	0.090	30
06/04/2003	0	0.000	0	0.005	30	0.000	0	0.090	30
06/05/2003	0	0.000	0	0.005	30	0.000	0	0.090	30
06/06/2003	0	0.000	0	0.005	30	0.000	0	0.090	30
06/07/2003	0	0.000	0	0.005	30	0.000	0	0.090	30
06/08/2003	0	0.000	0	0.005	30	0.000	0	0.090	30
06/09/2003	0	0.000	0	0.005	30	0.000	0	0.090	30
06/10/2003	0	0.000	0	0.005	30	0.000	0	0.090	30
06/11/2003	0	0.000	0	0.005	30	0.000	0	0.090	30
06/12/2003	0	0.000	0	0.005	30	0.000	0	0.090	30
06/13/2003	0	0.000	0	0.005	30	0.000	0	0.090	30
06/14/2003	0	0.000	0	0.005	30	0.000	0	0.090	30
06/15/2003	0	0.000	0	0.005	30	0.000	0	0.090	30
06/16/2003	0	0.000	0	0.005	30	0.000	0	0.090	30
06/17/2003	0	0.000	0	0.005	30	0.000	0	0.090	30
06/18/2003	0	0.000	0	0.005	30	0.000	0	0.090	30
06/19/2003	0	0.000	0	0.005	30	0.000	0	0.090	30
06/20/2003	0	0.000	0	0.005	30	0.000	0	0.090	30
06/21/2003	0	0.000	0	0.005	30	0.000	0	0.090	30
06/22/2003	0	0.000	0	0.005	30	0.000	0	0.090	30
06/23/2003	0	0.000	0	0.005	30	0.000	0	0.090	30
06/24/2003	0	0.000	0	0.005	30	0.000	0	0.090	30
06/25/2003	0	0.000	0	0.005	30	0.000	0	0.090	30
06/26/2003	0	0.000	0	0.005	30	0.000	0	0.090	30
06/27/2003	0	0.000	0	0.005	30	0.000	0	0.090	30
06/28/2003	0	0.000	0	0.005	30	0.000	0	0.090	30
06/29/2003	0	0.000	0	0.005	30	0.000	0	0.090	30
06/30/2003	0	0.000	0	0.005	30	0.000	0	0.090	30

Fuel Factors used in calculations:

	Fc	Fd
Coal	1800	9780
Oil	1420	9190

* indicates non-compliance

Data Excluded from 30 Day Rolling Averges
Reporting Period: 04/01/2003 - 06/30/2003

DATE	HOUR	REASON
03/09/2003	3	SHUTDOWN
03/09/2003	4	SHUTDOWN
03/09/2003	5	SHUTDOWN
03/09/2003	6	SHUTDOWN
03/09/2003	7	SHUTDOWN
03/09/2003	8	SHUTDOWN

STARTUP is defined in PSD Permit Attachment II, Section XIV, paragraph 8(a)
SHUTDOWN is defined in PSD Permit Attachment II, Section XIV, paragraph 8(b)

Boiler Operating Days with less than 18 hours of valid SO2 data:

DATE	REASON/ACTION
03/23/2003	Drift Exceeded / Manual Calibration

There were no boiler operating days with less than 18 hours of valid NOx data during the report period.

All boiler operating days were in compliance with the SO2 standard during the report period.

All boiler operating days were in compliance with the NOx standard during the report period.

Daily Emissions Report

Unit 2

Second Quarter 2003

April 1, 2003

Through

June 30, 2003

30 Day Rolling Averages Report
AES Puerto Rico.
Unit #2

Date and Time Report Generated:
07/03/2003 19:10:25

Reporting Period
Start: 04/01/2003
End : 06/30/2003

DATE	OP HOURS DAY	SO2 DAILY AVERAGE lb/mmBtu	SO2 VALID HOURS DAY	SO2 30-DAY AVERAGE lb/mmBtu	SO2 VALID DAYS	NOX DAILY AVERAGE lb/mmBtu	NOX VALID HOURS DAY	NOX 30-DAY AVERAGE lb/mmBtu	NOX VALID DAYS
04/01/2003	24	0.012	24	0.014	29	0.090	24	0.090	29
04/02/2003	24	0.006	24	0.014	29	0.090	24	0.090	29
04/03/2003	24	0.007	24	0.014	29	0.093	24	0.100	29
04/04/2003	24	0.005	24	0.014	29	0.094	24	0.100	29
04/05/2003	24	0.009	24	0.014	29	0.093	24	0.100	29
04/06/2003	24	0.009	24	0.014	29	0.090	24	0.100	29
04/07/2003	24	0.012	24	0.014	29	0.090	24	0.100	29
04/08/2003	24	0.006	24	0.014	29	0.090	24	0.100	29
04/09/2003	24	0.011	24	0.014	29	0.090	24	0.100	29
04/10/2003	24	0.007	24	0.014	29	0.090	24	0.100	29
04/11/2003	24	0.007	24	0.014	29	0.090	24	0.100	29
04/12/2003	24	0.010	24	0.014	29	0.088	24	0.100	29
04/13/2003	24	0.009	24	0.014	29	0.085	24	0.100	29
04/14/2003	24	0.015	24	0.014	29	0.090	24	0.100	29
04/15/2003	24	0.014	24	0.015	29	0.090	24	0.100	29
04/16/2003	24	0.012	24	0.015	29	0.090	24	0.100	29
04/17/2003	24	0.009	24	0.015	29	0.090	24	0.100	29
04/18/2003	24	0.003	24	0.015	29	0.090	24	0.100	29
04/19/2003	24	0.006	24	0.014	29	0.092	24	0.100	29
04/20/2003	24	0.006	19	0.011	29	0.089	24	0.090	29
04/21/2003	24	0.010	23	0.010	29	0.083	23	0.090	29
04/22/2003	24	0.007	24	0.009	30	0.071	24	0.090	30
04/23/2003	24	0.006	24	0.009	30	0.074	24	0.090	30
04/24/2003	24	0.008	24	0.009	30	0.081	24	0.090	30
04/25/2003	24	0.007	24	0.009	30	0.090	24	0.090	30
04/26/2003	24	0.007	24	0.009	30	0.087	24	0.090	30
04/27/2003	24	0.010	24	0.009	30	0.089	24	0.090	30
04/28/2003	24	0.009	24	0.009	30	0.089	24	0.090	30
04/29/2003	24	0.005	24	0.009	30	0.089	24	0.090	30
04/30/2003	24	0.009	24	0.008	30	0.083	24	0.090	30
05/01/2003	24	0.010	24	0.008	30	0.090	24	0.090	30
05/02/2003	24	0.009	24	0.008	30	0.085	24	0.090	30
05/03/2003	24	0.009	24	0.009	30	0.081	24	0.090	30
05/04/2003	24	0.006	24	0.009	30	0.080	24	0.090	30
05/05/2003	24	0.003	24	0.008	30	0.080	24	0.090	30
05/06/2003	24	0.002	24	0.008	30	0.088	24	0.090	30
05/07/2003	24	0.003	24	0.008	30	0.090	24	0.090	30
05/08/2003	24	0.003	24	0.008	30	0.090	24	0.090	30
05/09/2003	24	0.003	24	0.007	30	0.090	24	0.090	30
05/10/2003	24	0.001	24	0.007	30	0.090	24	0.090	30
05/11/2003	24	0.003	24	0.007	30	0.094	24	0.090	30

05/12/2003	24	0.007	24	0.007	30	0.088	24	0.090	30
05/13/2003	24	0.002	24	0.007	30	0.083	24	0.090	30
05/14/2003	24	0.006	23	0.007	30	0.083	23	0.090	30
05/15/2003	24	0.000	17	0.006	29	0.098	24	0.090	30
05/16/2003	24	0.009	20	0.006	29	0.092	24	0.090	30
05/17/2003	24	0.008	24	0.006	29	0.090	24	0.090	30
05/18/2003	24	0.006	24	0.006	29	0.090	24	0.090	30
05/19/2003	24	0.004	23	0.006	29	0.090	24	0.090	30
05/20/2003	24	0.006	24	0.006	29	0.090	24	0.090	30
05/21/2003	24	0.007	24	0.006	29	0.090	24	0.090	30
05/22/2003	24	0.009	24	0.006	29	0.090	24	0.090	30
05/23/2003	24	0.004	24	0.006	29	0.090	24	0.090	30
05/24/2003	24	0.009	24	0.006	29	0.090	24	0.090	30
05/25/2003	24	0.013	24	0.006	29	0.090	24	0.090	30
05/26/2003	24	0.012	24	0.006	29	0.090	24	0.090	30
05/27/2003	24	0.012	24	0.007	29	0.090	24	0.090	30
05/28/2003	18	0.000	0	0.007	29	0.000	0	0.090	30
05/29/2003	23	0.000	0	0.007	29	0.000	0	0.090	30
05/30/2003	24	0.011	24	0.007	29	0.090	24	0.090	30
05/31/2003	24	0.012	24	0.007	29	0.090	24	0.090	30
06/01/2003	24	0.012	24	0.007	29	0.090	24	0.090	30
06/02/2003	24	0.013	24	0.007	29	0.090	24	0.090	30
06/03/2003	24	0.012	20	0.007	29	0.090	24	0.090	30
06/04/2003	24	0.012	24	0.007	29	0.090	24	0.090	30
06/05/2003	24	0.013	24	0.007	29	0.090	24	0.090	30
06/06/2003	23	0.000	0	0.007	29	0.000	0	0.090	30
06/07/2003	24	0.012	24	0.008	29	0.090	24	0.090	30
06/08/2003	24	0.011	24	0.008	29	0.090	24	0.090	30
06/09/2003	24	0.010	24	0.008	29	0.090	24	0.090	30
06/10/2003	24	0.012	24	0.009	29	0.090	24	0.090	30
06/11/2003	24	0.012	24	0.009	29	0.090	24	0.090	30
06/12/2003	24	0.011	24	0.009	29	0.090	24	0.090	30
06/13/2003	24	0.011	24	0.010	29	0.088	24	0.090	30
06/14/2003	24	0.008	24	0.010	29	0.083	24	0.090	30
06/15/2003	24	0.008	24	0.010	29	0.088	24	0.090	30
06/16/2003	24	0.001	24	0.010	29	0.083	24	0.090	30
06/17/2003	24	0.002	24	0.009	30	0.082	24	0.090	30
06/18/2003	24	0.009	24	0.009	30	0.082	24	0.090	30
06/19/2003	24	0.011	24	0.009	30	0.083	24	0.090	30
06/20/2003	24	0.007	19	0.010	30	0.083	24	0.090	30
06/21/2003	24	0.005	24	0.010	30	0.083	24	0.090	30
06/22/2003	24	0.003	24	0.009	30	0.081	24	0.090	30
06/23/2003	24	0.001	24	0.009	30	0.082	24	0.090	30
06/24/2003	24	0.002	24	0.009	30	0.082	24	0.090	30
06/25/2003	24	0.006	18	0.009	30	0.108	24	0.090	30
06/26/2003	24	0.008	23	0.009	30	0.082	24	0.090	30
06/27/2003	24	0.009	24	0.009	30	0.083	24	0.090	30
06/28/2003	24	0.010	24	0.009	30	0.083	24	0.090	30
06/29/2003	24	0.013	24	0.009	30	0.084	24	0.090	30
06/30/2003	24	0.014	24	0.009	30	0.080	24	0.090	30

Fuel Factors used in calculations:

	Fc	Fd
Coal	1800	9780
Oil	1420	9190

* indicates non-compliance

Data Excluded from 30 Day Rolling Averges
Reporting Period: 04/01/2003 - 06/30/2003

DATE	HOUR	REASON
05/15/2003	1	SHUTDOWN
05/15/2003	2	SHUTDOWN
05/15/2003	3	SHUTDOWN
05/15/2003	4	SHUTDOWN
05/15/2003	5	SHUTDOWN
05/15/2003	6	SHUTDOWN
05/15/2003	7	SHUTDOWN
05/16/2003	2	SHUTDOWN
05/16/2003	3	SHUTDOWN
05/16/2003	4	SHUTDOWN
05/16/2003	5	SHUTDOWN
05/19/2003	18	SHUTDOWN
06/03/2003	4	SHUTDOWN
06/03/2003	9	SHUTDOWN
06/03/2003	18	SHUTDOWN
06/03/2003	19	SHUTDOWN
06/06/2003	14	SHUTDOWN
06/06/2003	15	SHUTDOWN
06/06/2003	16	SHUTDOWN
06/06/2003	17	SHUTDOWN
06/20/2003	2	SHUTDOWN
06/20/2003	3	SHUTDOWN
06/20/2003	4	SHUTDOWN
06/20/2003	5	SHUTDOWN
06/20/2003	6	SHUTDOWN
06/25/2003	18	SHUTDOWN
06/25/2003	19	SHUTDOWN
06/25/2003	20	SHUTDOWN
06/25/2003	21	SHUTDOWN
06/25/2003	22	SHUTDOWN
06/25/2003	23	SHUTDOWN
06/26/2003	0	SHUTDOWN

STARTUP is defined in PSD Permit Attachment II, Section XIV, paragraph 8(a)
SHUTDOWN is defined in PSD Permit Attachment II, Section XIV, paragraph 8(b)

Boiler Operating Days with less than 18 hours of valid SO2 data:

DATE	REASON/ACTION
03/23/2003	Drift Exceeded / Manual Calibration
05/15/2003	Unit Shutdown

Boiler Operating Days with less than 18 hours of valid NOx data:

DATE	REASON/ACTION
03/23/2003	O2 Drift Exceeded / Manual Calibration

All boiler operating days were in compliance with the SO2 standard during the report period.

All boiler operating days were in compliance with the NOx standard during the report period.

Availability Report

Unit 1

Second Quarter 2003

April 1, 2003

Through

June 30, 2003

Missing Data Log
AES Puerto Rico
Unit #1

REPORT PERIOD: 04/01/2003 to 06/30/2003
TODAY'S DATE: 07/03/2003

Missing OPACITY
From date: 04/05/2003 hour: 7
To date: 04/05/2003 hour: 7 Duration: 6 minutes
Reason: Other Known Causes
Action: Insufficient Data, Start Fan

Missing OPACITY
From date: 04/25/2003 hour: 14
To date: 04/25/2003 hour: 14 Duration: 48 minutes
Reason: Calibration / QA
Action: Clear Path Calibration

Missing OPACITY
From date: 04/29/2003 hour: 14
To date: 04/29/2003 hour: 14 Duration: 6 minutes
Reason: Monitor Accessories Malfunction
Action: Repear Connection Problem

Missing OPACITY
From date: 05/13/2003 hour: 8
To date: 05/13/2003 hour: 9 Duration: 84 minutes
Reason: Calibration / QA
Action: Clear Path Calibration

Missing OPACITY
From date: 05/15/2003 hour: 23
To date: 05/16/2003 hour: 0 Duration: 6 minutes
Reason: Other Known Causes
Action: Insufficient Data, Start Fan

Missing OPACITY
From date: 06/26/2003 hour: 3
To date: 06/26/2003 hour: 4 Duration: 6 minutes
Reason: Other Known Causes
Action: Insufficient Data, Start Fan

Missing Data Log
AES Puerto Rico
Unit #1

REPORT PERIOD: 04/01/2003 to 06/30/2003
TODAY'S DATE: 07/03/2003

Missing SO2
From date: 04/20/2003 hour: 8
To date: 04/20/2003 hour: 12 Duration: 240 minutes
Reason: Out of Control
Action: RUN MANUAL CALIBRATION

Missing SO2
From date: 05/11/2003 hour: 8
To date: 05/11/2003 hour: 9 Duration: 60 minutes
Reason: Out of Control
Action: RUN MANUAL CALIBRATION

Availability Report

Unit 2

Second Quarter 2003

April 1, 2003

Through

June 30, 2003

Missing Data Log
AES Puerto Rico
Unit #2

REPORT PERIOD: 04/01/2003 to 06/30/2003
TODAY'S DATE: 07/03/2003

Missing OPACITY
From date: 04/25/2003 hour: 9
To date: 04/25/2003 hour: 9 Duration: 36 minutes
Reason: Monitor Accessories Malfunction
Action: Trouble Shoting

Missing OPACITY
From date: 04/25/2003 hour: 10
To date: 04/25/2003 hour: 11 Duration: 96 minutes
Reason: Monitor Accessories Malfunction
Action: Replace RCU

Missing OPACITY
From date: 04/25/2003 hour: 11
To date: 04/25/2003 hour: 12 Duration: 6 minutes
Reason: Monitor Accessories Malfunction
Action: Clean lens

Missing OPACITY
From date: 04/25/2003 hour: 13
To date: 04/25/2003 hour: 14 Duration: 60 minutes
Reason: Calibration / QA
Action: Clear Path Calibration

Missing Data Log
AES Puerto Rico
Unit #2

REPORT PERIOD: 04/01/2003 to 06/30/2003
TODAY'S DATE: 07/03/2003

Missing NOX
From date: 05/14/2003 hour: 11
To date: 05/14/2003 hour: 12 Duration: 45 minutes
Reason: Calibration / QA
Action: CGA Test

Missing Data Log
AES Puerto Rico
Unit #2

REPORT PERIOD: 04/01/2003 to 06/30/2003
TODAY'S DATE: 07/03/2003

Missing SO2
From date: 04/20/2003 hour: 7
To date: 04/20/2003 hour: 12 Duration: 300 minutes
Reason: Out of Control
Action: Run Manual Calibration

Missing SO2
From date: 05/14/2003 hour: 11
To date: 05/14/2003 hour: 12 Duration: 45 minutes
Reason: Calibration / QA
Action: CGA Test

Missing Data Log
AES Puerto Rico
Unit #2

REPORT PERIOD: 04/01/2003 to 06/30/2003
TODAY'S DATE: 07/03/2003

Missing CO
From date: 04/21/2003 hour: 8
To date: 04/21/2003 hour: 9 Duration: 15 minutes
Reason: Calibration / QA
Action: SO2 Manual Calibration

Missing CO
From date: 05/14/2003 hour: 11
To date: 05/14/2003 hour: 12 Duration: 45 minutes
Reason: Calibration / QA
Action: CGA Test

CGA
Report

Unit 1

Second Quarter 2003

Calibration Gas Audit Report

Record Number= 7
U 1 NOx SO2 CO2 Start Time: 10:20 Date: 6/25/03 End Time: 10:45 Date: 6/25/03

Analyzer NOx	LOW	HIGH
REF GAS VALUE	24.70	54.60
DATE	06/25/2003	06/25/2003
TIME	10:22	10:26
RUN 1	24.30	54.60
DATE	06/25/2003	06/25/2003
TIME	10:31	10:34
RUN 2	24.30	54.40
DATE	06/25/2003	06/25/2003
TIME	10:39	10:41
RUN 3	24.30	54.20
AVERAGE=SUM/3	24.30	54.40
% ACCURACY	-1.62	-0.37
OUT OF CONTROL	NO	NO
SERIAL NUMBER	AAL20437	ALM031443
CERTIFICATION DATE	03/28/2003	06/01/2003

Analyzer SO2	LOW	HIGH
REF GAS VALUE	5.27	10.70
DATE	06/25/2003	06/25/2003
TIME	10:22	10:26
RUN 1	5.26	10.70
DATE	06/25/2003	06/25/2003
TIME	10:31	10:34
RUN 2	5.27	10.62
DATE	06/25/2003	06/25/2003
TIME	10:39	10:41
RUN 3	5.54	10.84
AVERAGE=SUM/3	5.36	10.72
% ACCURACY	1.71	0.19
OUT OF CONTROL	NO	NO
SERIAL NUMBER	AAL20437	ALM031443
CERTIFICATION DATE	03/28/2003	06/01/2003

Analyzer CO2	LOW	HIGH
REF GAS VALUE	5.62	11.08
DATE	06/25/2003	06/25/2003
TIME	10:22	10:26
RUN 1	5.73	11.07
DATE	06/25/2003	06/25/2003
TIME	10:31	10:34
RUN 2	5.73	11.07
DATE	06/25/2003	06/25/2003
TIME	10:39	10:41
RUN 3	5.74	11.06
AVERAGE=SUM/3	5.73	11.07
% ACCURACY	1.96	-0.09
OUT OF CONTROL	NO	NO
SERIAL NUMBER	AAL20437	ALM031443
CERTIFICATION DATE	03/28/2003	06/01/2003

Calibration Gas Audit Report

Record Number= 4

U 1 CO O2 Start Time: 11:30 Date: 6/25/03 End Time: 11:45 Date: 6/25/03

Analyzer CO	LOW	HIGH
REF GAS VALUE	51.20	110.00
DATE	06/25/2003	06/25/2003
TIME	11:30	11:33
RUN 1	49.90	108.10
DATE	06/25/2003	06/25/2003
TIME	11:36	11:38
RUN 2	50.00	108.60
DATE	06/25/2003	06/25/2003
TIME	11:41	11:43
RUN 3	50.40	108.60
AVERAGE=SUM/3	50.10	108.43
% ACCURACY	-2.15	-1.43
OUT OF CONTROL	NO	NO
SERIAL NUMBER	ALM038693	ALM053920
CERTIFICATION DATE	04/18/2002	10/23/2002

Analyzer OXY	LOW	HIGH
REF GAS VALUE	5.13	11.50
DATE	06/25/2003	06/25/2003
TIME	11:30	11:33
RUN 1	5.00	11.28
DATE	06/25/2003	06/25/2003
TIME	11:36	11:38
RUN 2	5.00	11.30
DATE	06/25/2003	06/25/2003
TIME	11:41	11:43
RUN 3	5.21	11.34
AVERAGE=SUM/3	5.07	11.31
% ACCURACY	-1.17	-1.65
OUT OF CONTROL	NO	NO
SERIAL NUMBER	ALM038693	ALM053920
CERTIFICATION DATE	04/18/2002	10/23/2002

Calibration Gas Audit Report

Record Number= 4
U 1 Hi NOx SO2 Start Time: 13:25 Date: 6/25/03 End Time: 13:45 Date: 6/25/03

Analyzer NOx High	LOW	HIGH
REF GAS VALUE	110.20	184.00
DATE	06/25/2003	06/25/2003
TIME	13:28	13:34
RUN 1	109.30	180.30
DATE	06/25/2003	06/25/2003
TIME	13:37	13:39
RUN 2	109.20	180.70
DATE	06/25/2003	06/25/2003
TIME	13:42	13:44
RUN 3	108.40	180.10
AVERAGE=SUM/3	108.97	180.37
% ACCURACY	-1.12	-1.97
OUT OF CONTROL	NO	NO
SERIAL NUMBER	ALM011207	CC166835
CERTIFICATION DATE	04/23/2003	05/09/2003

Analyzer SO2 High	LOW	HIGH
REF GAS VALUE	28.10	43.80
DATE	06/25/2003	06/25/2003
TIME	13:28	13:34
RUN 1	28.52	43.71
DATE	06/25/2003	06/25/2003
TIME	13:37	13:39
RUN 2	28.06	45.23
DATE	06/25/2003	06/25/2003
TIME	13:42	13:44
RUN 3	29.02	43.63
AVERAGE=SUM/3	28.53	44.19
% ACCURACY	1.53	0.89
OUT OF CONTROL	NO	NO
SERIAL NUMBER	ALM011207	CC166835
CERTIFICATION DATE	04/23/2003	05/09/2003

Scott Specialty Gases
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COMPLIANCE CLASS

Dual-Analyzed Calibration Standard

6141 EASTON ROAD, BLDG 1,PLUMSTEADVILLE,PA 18949-0310 Phone: 800-331-4953 Fax

CERTIFICATE OF ACCURACY: EPA Protocol Gas

Assay Laboratory

SCOTT SPECIALTY GASES
6141 EASTON ROAD, BLDG 1
PLUMSTEADVILLE,PA 18949-0310

P.O. No.: 03-0275
Project No.: 01-87652-001

Customer
AES PUERTO RICO

BO. JOBOS CARR
#3 KM. 142.0
GUAYAMA PR 00784

ANALYTICAL INFORMATION

This certification was performed according to EPA Traceability Protocol For Assay & Certifi
of Gaseous Calibration Standards; Procedure G-1; September, 1997.
Cylinder Number: AAL20437 Certification Date: 28Mar2003 Exp. Date: 26Sep2003
Cylinder Pressure***: 2000 PSIG

COMPONENT	CERTIFIED CONCENTRATION (Moles)		ACCURACY**	TRACEABILITY
CARBON DIOXIDE	5.62	%	+/- 2%	NIST and NMi
NITRIC OXIDE	24.7	PPM	+/- 2%	NIST and NMi
SULFUR DIOXIDE *	5.27	PPM	+/- 2%	NIST and NMi
ITROGEN - OXYGEN FREE		BALANCE		
OTAL OXIDES OF NITROGEN	24.8	PPM		Reference Value Onl

*** Do not use when cylinder pressure is below 150 psig.
** Analytical accuracy is based on the requirements of EPA Protocal procedures , September 1
* This Protocol has been certified using corrected NIST SO2 standard values, per EPA guidanc
7/24/96 and will not correlate with uncorrected Protocols.

REFERENCE STANDARD

TYPE/SRM NO.	EXPIRATION DATE	CYLINDER NUMBER	CONCENTRATION	COMPONENT
NTRM 1675	01Jun2004	K001509	13.93	CARBON DIOXIDE
NTRM 1683	01Nov2006	AAL069896	48.80PM	NITRIC OXIDE
NTRM 1693	01Jul2005	AAL15198	51.04PM	SULFUR DIOXIDE

INSTRUMENTATION

INSTRUMENT/MODEL/SERIAL#	DATE LAST CALIBRATED	ANALYTICAL PRINCIPLE
MTI/M200/170927	03Mar2003	GC-TCD
HORIBA/CLA220/5708850810	20Mar2003	CHEMILUMINESCENCE
HORIBA SO2/AIA-210/571325043	14Mar2003	NDIR

APPROVED BY: (signature on file)
TANESHA CASH

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RATA CLASS

Dual-Analyzed Calibration Standard

6141 EASTON ROAD, BLDG 1,PLUMSTEADVILLE,PA 18949-0310 Phone: 800-331-4953 Fax

TM
CERTIFICATE OF ACCURACY: Interference Free Multi-Component EPA Protocol Gas

Assay Laboratory
SCOTT SPECIALTY GASES
6141 EASTON ROAD, BLDG 1
PLUMSTEADVILLE,PA 18949-0310

P.O. No.: 03-0564
Project No.: 01-91369-001

Customer
AES PUERTO RICO

BO. JOBOS CARR
#3 KM. 142.0
GUAYAMA PR 00784

ANALYTICAL INFORMATION

This certification was performed according to EPA Traceability Protocol For Assay & Certifi of Gaseous Calibration Standards; Procedure G-1; September, 1997.
Cylinder Number: ALM031443 Certification Date: 01Jun2003 Exp. Date: 30Nov2003
Cylinder Pressure***: 2000 PSIA

COMPONENT	CERTIFIED CONCENTRATION (Moles)		ACCURACY**	TRACEABILITY
ARBON DIOXIDE	11.08	%	+/- 1%	Direct NIST and NMi
NITRIC OXIDE	54.6	PPM	+/- 1%	Direct NIST and NMi
SULFUR DIOXIDE *	10.70	PPM	+/- 1%	Direct NIST and NMi
NITROGEN - OXYGEN FREE		BALANCE		
TOTAL OXIDES OF NITROGEN	54.6	PPM		Reference Value Onl

*** Do not use when cylinder pressure is below 150 psig.
** Analytical accuracy is based on the requirements of EPA Protocol Procedure G1, September Product certified as +/- 1% analytical accuracy is directly traceable to NIST or NMI stand
* This Protocol has been certified using corrected NIST SO2 standard values, per EPA guidanc 7/24/96 and will not correlate with uncorrected Protocols.

REFERENCE STANDARD

TYPE/SRM NO.	EXPIRATION DATE	CYLINDER NUMBER	CONCENTRATION	COMPONENT
NTRM 1685	01Jun2004	1D2061	13.93	CO2/N2
NTRM 1683	01Nov2006	AAL069900	48.80PM	NO/N2
NTRM 1693	01Jul2005	AAL8297	51.04PM	SO2/N2

INSTRUMENTATION

INSTRUMENT/MODEL/SERIAL#	DATE LAST CALIBRATED	ANALYTICAL PRINCIPLE
FTIR System/8220/AAB9300174	29May2003	Scott Enhanced FTIR
FTIR System/8220/AAB9300174	29May2003	Scott Enhanced FTIR
FTIR System/8220/AAB9300174	29May2003	Scott Enhanced FTIR

ANALYZER READINGS

(Z=Zero Gas R=Reference Gas T=Test Gas r=Correlation Coefficient)

First Triad Analysis Second Triad Analysis Calibration Curve

CARBON DIOXIDE
Date: 25May2003Resp Unit:
Z1=0.000901=13.919101=11.08170
R2=13.92907=0.00490T2=11.07852
Z3=0.005703=11.084803=13.94183
Avg. Conc: 11.08 %

Concentration=A+Bx+Cx2+Dx3+
r=0.999990
Constants: A=0.000000
B=1.000000 C=0.000000
D=0.000000 E=0.000000

NITRIC OXIDE

Date: 25May2003Resp Unit:	Date: 01Jun2003Resp Unit: PPM	Concentration=A+Bx+Cx2+Dx3+
Z1=-0.17570=48.928111=54.67377	Z1=-0.70990=48.82389=54.72470	r=0.999990
R2=48.81513=-0.009602=54.40478	R2=48.75658=-0.67540=54.73179	Constants: A=0.000000
Z3=-0.38660=54.574403=48.65674	Z3=-0.50480=54.66028=48.81950	B=1.000000 C=0.000000
Avg. Conc: 54.55 PPM	Avg. Conc: 54.71 PPM	D=0.000000 E=0.000000

SULFUR DIOXIDE *

Date: 25May2003Resp Unit:	Date: 01Jun2003Resp Unit: PPM	Concentration=A+Bx+Cx2+Dx3+
Z1=-0.01310=51.023351=10.69077	Z1=-0.01070=51.04915=10.69449	r=0.999990
R2=51.10282=0.00530T2=10.70027	R2=51.04676=-0.00480=10.72414	Constants: A=0.000000
Z3=0.005303=10.695193=50.99382	Z3=0.008903=10.71489=51.02408	B=1.000000 C=0.000000
Avg. Conc: 10.69 PPM	Avg. Conc: 10.71 PPM	D=0.000000 E=0.000000

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RATA CLASS

Dual-Analyzed Calibration Standard

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TM
CERTIFICATE OF ACCURACY: Interference Free Multi-Component EPA Protocol Gas

Assay Laboratory
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P.O. No.: 03-0564
Project No.: 01-91369-001

Customer
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#3 KM. 142.0
GUAYAMA PR 00784

ANALYTICAL INFORMATION
This certification was performed according to EPA Traceability Protocol For Assay & Certifi
of Gaseous Calibration Standards; Procedure G-1; September, 1997.
Cylinder Number: ALM031443 Certification Date: 01Jun2003 Exp. Date: 30Nov2003
Cylinder Pressure***: 2000 PSIA

ANALYZER READINGS
(Z=Zero Gas R=Reference Gas T=Test Gas r=Correlation Coefficient)

First Triad Analysis Second Triad Analysis Calibration Curve

APPROVED BY: (signature on file)
Michael A. Kuhns

Scott Specialty Gases
www.scottgas.com

RATA CLASS

Dual-Analyzed Calibration Standard

6141 EASTON ROAD, BLDG 1,PLUMSTEADVILLE,PA 18949-0310 Phone: 800-331-4953 Fax

CERTIFICATE OF ACCURACY: EPA Protocol Gas

Assay Laboratory

SCOTT SPECIALTY GASES
6141 EASTON ROAD, BLDG 1
PLUMSTEADVILLE,PA 18949-0310

P.O. No.: 02-0200
Project No.: 01-70231-005

Customer
AES PUERTO RICO

CARR. #3 KM 142.0
GUAYAMA PR 00784

ANALYTICAL INFORMATION

This certification was performed according to EPA Traceability Protocol For Assay & Certifi of Gaseous Calibration Standards; Procedure G-1; September, 1997.
Cylinder Number: ALM038693 Certification Date: 18Apr2002 Exp. Date: 25Apr2005
Cylinder Pressure***: 2000 PSIG

COMPONENT	CERTIFIED CONCENTRATION (Moles)		ANALYTICAL ACCURACY**	TRACEABILITY
CARBON MONOXIDE	51.2	PPM	+/- 1%	Direct NIST and NMi
OXYGEN	5.13	%	+/- 1%	Direct NIST and NMi
NITROGEN		BALANCE		

*** Do not use when cylinder pressure is below 150 psig.
** Analytical accuracy is based on the requirements of EPA Protocol Procedure G1, September Product certified as +/- 1% analytical accuracy is directly traceable to NIST or NMI stand

EFERENCE STANDARD

TYPE/SRM NO.	EXPIRATION DATE	CYLINDER NUMBER	CONCENTRATION	COMPONENT
NTRM 2636	03Apr2003	ALM033274	246.7PM	CARBON MONOXIDE
NTRM 2350	01Feb2004	A4341	23.51	OXYGEN

INSTRUMENTATION

INSTRUMENT/MODEL/SERIAL#	DATE LAST CALIBRATED	ANALYTICAL PRINCIPLE
SIEMENS/6E/KN-240	27Mar2002	NDIR
BECKMAN/755/2002571	18Mar2002	PARAMAGNETIC

ANALYZER READINGS

(Z=Zero Gas R=Reference Gas T=Test Gas r=Correlation Coefficient)

CARBON MONOXIDE

First Triad Analysis	Second Triad Analysis	Calibration Curve
Date: 16Apr2002Resp Unit:VOLTS	Date: 25Apr2002Resp Unit: VOLTS	Concentration=A+Bx+Cx2+Dx3+
Z1=-0.00450=1.21040T1=0.24870	Z1=-0.00490=1.208901=0.24830	r=0.99999 2636
R2=1.210402=-0.004402=0.24900	R2=1.209002=-0.00490=0.24830	Constants: A=6.9000E-0
Z3=-0.00450=0.24900R3=1.21180	Z3=-0.00520=0.247703=1.20550	B=2.0368E+02 C=
Avg. Conc: 51.20 PPM	Avg. Conc: 51.30 PPM	D= E=

OXYGEN

Date: 18Apr2002Resp Unit:VOLTS		Concentration=A+Bx+Cx2+Dx3+
Z1=0.001201=0.94940T1=0.20810		r=0.99999 2350
R2=0.949502=0.00180T2=0.20800		Constants: A=-3.0003E-
Z3=0.001603=0.20790R3=0.95000		B=2.4772E+01 C=
Avg. Conc: 5.130 %		D= E=

APPROVED BY: (signature on file)
B. LEWIS, JR.

Scott Specialty Gases
www.scottgas.com

RATA CLASS

Dual-Analyzed Calibration Standard

6141 EASTON ROAD, BLDG 1, PLUMSTEADVILLE, PA 18949-0310 Phone: 800-331-4953 Fax

CERTIFICATE OF ACCURACY: EPA Protocol Gas

Assay Laboratory

SCOTT SPECIALTY GASES
6141 EASTON ROAD, BLDG 1
PLUMSTEADVILLE, PA 18949-0310

P.O. No.: 02-0653
Project No.: 01-79450-004

Customer
AES PUERTO RICO
PO # 02-0653
BO. JOBOS CARR
#3 KM. 142.0
GUAYAMA PR 00784

ANALYTICAL INFORMATION

This certification was performed according to EPA Traceability Protocol For Assay & Certifi of Gaseous Calibration Standards; Procedure G-1; September, 1997.
Cylinder Number: ALM053920 Certification Date: 23Oct2002 Exp. Date: 22Oct2005
Cylinder Pressure***: 2000 PSIG

COMPONENT	CERTIFIED CONCENTRATION (Moles)		ANALYTICAL ACCURACY**	TRACEABILITY
CARBON MONOXIDE	110	PPM	+/- 1%	Direct NIST and NMi
OXYGEN	11.5	%	+/- 1%	Direct NIST and NMi
NITROGEN		BALANCE		

*** Do not use when cylinder pressure is below 150 psig.
** Analytical accuracy is based on the requirements of EPA Protocol Procedure G1, September Product certified as +/- 1% analytical accuracy is directly traceable to NIST or NMI stand

REFERENCE STANDARD

TYPE/SRM NO.	EXPIRATION DATE	CYLINDER NUMBER	CONCENTRATION	COMPONENT
NTRM 2636	03Apr2003	AAL9126	246.7PM	CARBON MONOXIDE
NTRM 2350	01Feb2004	A4341	23.51	OXYGEN

INSTRUMENTATION

INSTRUMENT/MODEL/SERIAL#	DATE LAST CALIBRATED	ANALYTICAL PRINCIPLE
SIEMENS/6E/KN-240	14Oct2002	NDIR
BECKMAN/755/2002571	15Oct2002	PARAMAGNETIC

ANALYZER READINGS

(Z=Zero Gas R=Reference Gas T=Test Gas r=Correlation Coefficient)

CARBON MONOXIDE

First Triad Analysis	Second Triad Analysis	Calibration Curve
Date: 16Oct2002 Resp Unit: VOLTS	Date: 23Oct2002 Resp Unit: VOLTS	Concentration=A+Bx+Cx2+Dx3+
Z1=0.004901=1.20960T1=0.54200	Z1=0.004901=1.209301=0.54200	r=.9999 2636
R2=1.209902=0.00430T2=0.54200	R2=1.209302=0.004902=0.54200	Constants: A=7.1129E-0
Z3=0.004503=0.54240R3=1.20850	Z3=0.004903=0.542003=1.20910	B=2.0384E+02 C=
Avg. Conc: 109.9 PPM	Avg. Conc: 110.0 PPM	D= E=

OXYGEN

Date: 17Oct2002 Resp Unit: VOLTS	Concentration=A+Bx+Cx2+Dx3+
Z1=0.001001=0.94550T1=0.46350	r=.999999 2350
R2=0.945402=0.00180T2=0.46360	Constants: A=-3.7683E-
Z3=0.001603=0.46360R3=0.94650	B=2.4910E+01 C=
Avg. Conc: 11.50 %	D= E=

APPROVED BY: (signature on file)
JOHN C. FITZ

Scott Specialty Gases
www.scottgas.com

RATA CLASS

Dual-Analyzed Calibration Standard

6141 EASTON ROAD, BLDG 1,PLUMSTEADVILLE,PA 18949-0310 Phone: 800-331-4953 Fax

TM
_CERTIFICATE_OF_ACCURACY:_Interference_Free__Multi-Component_EPA_Protocol_Gas_____

Assay_Laboratory
SCOTT SPECIALTY GASES
6141 EASTON ROAD, BLDG 1
PLUMSTEADVILLE,PA 18949-0310

P.O. No.: 03-0422
Project No.: 01-89715-002

Customer_
AES PUERTO RICO

CARMEN ORTIZ/WAREHOUSE
BO. JOBOS CARR
#3 KM. 142.0
GUAYAMA PR 00784

_ANALYTICAL_INFORMATION_____
This certification was performed according to EPA Traceability Protocol For Assay & Certifi
of Gaseous Calibration Standards; Procedure G-1; September, 1997.
Cylinder Number: ALM011207 Certification Date: 23Apr2003 Exp. Date: 22Oct2003
Cylinder Pressure***: 1988 PSIA

COMPONENT___	CERTIFIED_CONCENTRATION_(Moles)		_ACCURACY**_	TRACEABILITY__
ITRIC OXIDE	110.2	PPM	+/- 1%	Direct NIST and NMi
JLFUR DIOXIDE *	28.1	PPM	+/- 1%	Direct NIST and NMi
ITROGEN - OXYGEN FREE		BALANCE		
TOTAL OXIDES OF NITROGEN	110.2	PPM		Reference Value Onl

*** Do not use when cylinder pressure is below 150 psig.
** Analytical accuracy is based on the requirements of EPA Protocol Procedure G1, September
Product certified as +/- 1% analytical accuracy is directly traceable to NIST or NMI stand
* This Protocol has been certified using corrected NIST SO2 standard values, per EPA guidanc
__7/24/96_and_will_not_correlate_with_uncorrected_Protocols._____

REFERENCE_STANDARD_____

TYPE/SRM_NO._	EXPIRATION_DATE	CYLINDER_NUMBER__	CONCENTRATION____	COMPONENT____
NTRM 1684	01Aug2006	AAL069456	97.20PM	NO/N2
NTRM 1693	01Jul2005	AAL8297	51.04PM	SO2/N2

INSTRUMENTATION____

INSTRUMENT/MODEL/SERIAL#_____	DATE_LAST_CALIBRATED____	ANALYTICAL_PRINCIPLE_
FTIR System/8220/AAB9300174	28Mar2003	Scott Enhanced FTIR
FTIR System/8220/AAB9300174	28Mar2003	Scott Enhanced FTIR

_ANALYZER_READINGS_____
(Z=Zero Gas R=Reference Gas T=Test Gas r=Correlation Coefficient)

First Triad Analysis	Second Triad Analysis	Calibration Curve
NITRIC OXIDE		
)ate: 16Apr2003Resp Unit:	Date: 23Apr2003Resp Unit: PPM	Concentration=A+Bx+Cx2+Dx3+
Z1=-0.40690=97.092091=110.3065	Z1=-0.19340=97.18878=110.1578	r=0.999990
R2=97.29187=-0.584902=110.2331	R2=97.23586=-0.32700=110.0308	Constants: A=0.000000

Z3=-0.20580=110.21273=97.21601	Z3=-0.18370=110.2590=97.17534	B=1.000000	C=0.000000
Avg. Conc: 110.3 PPM	Avg. Conc: 110.1 PPM	D=0.000000	E=0.000000

SULFUR DIOXIDE *

Date: 16Apr2003Resp Unit:	Date: 23Apr2003Resp Unit: PPM	Concentration=A+Bx+Cx2+Dx3+
Z1=-0.00710=51.007901=28.06663	Z1=-0.01430=51.02261=28.04653	r=0.999990
R2=51.04422=0.00280T2=28.08139	R2=51.07736=0.004802=28.03184	Constants: A=0.000000
Z3=0.044603=28.087583=51.06787	Z3=-0.00280=28.01736=51.02001	B=1.000000 C=0.000000
Avg. Conc: 28.08 PPM	Avg. Conc: 28.03 PPM	D=0.000000 E=0.000000

APPROVED BY: (signature on file)
Michael A. Kuhns

AGA
Member of the Linde Gas Group

Linde

Certificate of Analysis

EPA Protocol

Performed according to EPA-600/R-97/121, Procedure G1

Notice: This Cylinder is not to be used when pressure is under 150 psig.

Manufactured and certified at:

AGA Gas, Inc.
Maumee Specialty Gas Plant
6421 Monclova Road
MAUMEE OH 43537
419-893-7226

Produced for customer:

AGA GENERAL GASES & SUPPLIES
SAN JUAN PR 00936
USA
800-981-7455

Material:	2179	**Blend Tolerance:**	5 % Relative
MISC 3 COMPONENT EPA		**Store/Use Temp:**	35 to 90 F
Production #:	100067367	**Blend Type:**	EPA Protocol
Lot #:	02499D3250BE	**Cyl. Pressure:**	2000 psig
Cylinder #:	CC166835	**Balance Gas:**	Nitrogen
Expiration Date:	5/9/2005	**CGA:**	660
Shelf Life:	24 months	**Volume:**	143 cf

CAS #	Certified Component	Requested Concentration	Concentration and Uncertainty	Date of Certification
7446-09-5	Sulfur Dioxide	45	43.8 +/- 0.4 ppm	05/09/2003
10102-43-9	Nitric Oxide	180	184 +/- 2 ppm	05/09/2003
7727-37-9	Nitrogen		Balance	05/09/2003

CAS #	Analyzed (For Ref Use Only)	Concentration	Analysis Date
N/A 2	NOx	184 ppm	05/09/2003

CAS #	Reference Standard	Cylinder/Standard #	Concentration	Expire Date
10102-43-9	Nitric Oxide	HA3904 , GMIS	499.3 ppm	03/07/2005
10102-43-9	Nitric Oxide	CC100831 , GMIS	100.7 ppm	04/04/2005

Instrument	Serial #	Analytical Principle	Calibration Date
Horiba CLA-510SS	568093024	Chemiluminescence	04/07/2003
Horiba VIA-510	4131546004	Non-Dispersive Infrared	03/03/2003

This product is manufactured using equipment which has been calibrated with NIST traceable, or equivalent, standards, weights, or equipment.

Analytical report approved by Jim Healy

HiQ Analysis Certificate

CGA
Report

Unit 2

Second Quarter 2003

Calibration Gas Audit Report

Record Number= 5

U 2 NOx SO2 CO2 Start Time: 11:05 Date: 6/25/03 End Time: 11:25 Date: 6/25/03

Analyzer NOx	LOW	HIGH
REF GAS VALUE	24.70	54.60
DATE	06/25/2003	06/25/2003
TIME	11:06	11:09
RUN 1	24.50	54.70
DATE	06/25/2003	06/25/2003
TIME	11:12	11:15
RUN 2	24.60	54.40
DATE	06/25/2003	06/25/2003
TIME	11:18	11:21
RUN 3	24.40	54.50
AVERAGE=SUM/3	24.50	54.53
% ACCURACY	-0.81	-0.13
OUT OF CONTROL	NO	NO
SERIAL NUMBER	AAL20437	ALM031443
CERTIFICATION DATE	03/28/2003	06/01/2003

Analyzer SO2	LOW	HIGH
REF GAS VALUE	5.27	10.70
DATE	06/25/2003	06/25/2003
TIME	11:06	11:09
RUN 1	5.26	10.64
DATE	06/25/2003	06/25/2003
TIME	11:12	11:15
RUN 2	5.35	10.84
DATE	06/25/2003	06/25/2003
TIME	11:18	11:21
RUN 3	5.39	10.64
AVERAGE=SUM/3	5.33	10.71
% ACCURACY	1.14	0.09
OUT OF CONTROL	NO	NO
SERIAL NUMBER	AAL20437	ALM031443
CERTIFICATION DATE	03/28/2003	06/01/2003

Analyzer CO2	LOW	HIGH
REF GAS VALUE	5.62	11.08
DATE	06/25/2003	06/25/2003
TIME	11:06	11:09
RUN 1	5.66	11.01
DATE	06/25/2003	06/25/2003
TIME	11:12	11:15
RUN 2	5.66	11.02
DATE	06/25/2003	06/25/2003
TIME	11:18	11:21
RUN 3	5.67	10.98
ERAGE=SUM/3	5.66	11.00
CCURACY	0.71	-0.72
OF CONTROL	NO	NO
SERIAL NUMBER	AAL20437	ALM031443
CERTIFICATION DATE	03/28/2003	06/01/2003

Calibration Gas Audit Report

Record Number= 6

U 2 CO O2 Start Time: 12:55 Date: 6/25/03 End Time: 13:15 Date: 6/25/03

Analyzer CO	LOW	HIGH
REF GAS VALUE	51.20	110.00
DATE	06/25/2003	06/25/2003
TIME	12:58	13:01
RUN 1	50.30	110.00
DATE	06/25/2003	06/25/2003
TIME	13:05	13:07
RUN 2	50.30	109.70
DATE	06/25/2003	06/25/2003
TIME	13:12	13:14
RUN 3	50.30	110.00
AVERAGE=SUM/3	50.30	109.90
% ACCURACY	-1.76	-0.09
OUT OF CONTROL	NO	NO
SERIAL NUMBER	ALM038693	ALM053920
CERTIFICATION DATE	04/18/2002	10/23/2002

Analyzer OXY	LOW	HIGH
REF GAS VALUE	5.13	11.50
DATE	06/25/2003	06/25/2003
TIME	12:58	13:01
RUN 1	5.08	11.45
DATE	06/25/2003	06/25/2003
TIME	13:05	13:07
RUN 2	5.10	11.47
DATE	06/25/2003	06/25/2003
TIME	13:12	13:14
RUN 3	5.10	11.46
AVERAGE=SUM/3	5.09	11.46
% ACCURACY	-0.78	-0.35
OUT OF CONTROL	NO	NO
SERIAL NUMBER	ALM038693	ALM053920
CERTIFICATION DATE	04/18/2002	10/23/2002

Calibration Gas Audit Report

Record Number= 4
U 2 Hi NOx SO2 Start Time: 13:55 Date: 6/25/03 End Time: 14:25 Date: 6/25/03

Analyzer NOx High	LOW	HIGH
REF GAS VALUE	110.20	184.00
DATE	06/25/2003	06/25/2003
TIME	13:58	14:01
RUN 1	110.00	181.90
DATE	06/25/2003	06/25/2003
TIME	14:06	14:08
RUN 2	110.20	181.60
DATE	06/25/2003	06/25/2003
TIME	14:23	14:25
RUN 3	108.60	181.60
AVERAGE=SUM/3	109.60	181.70
% ACCURACY	-0.54	-1.25
OUT OF CONTROL	NO	NO
SERIAL NUMBER	ALM011207	CC166835
CERTIFICATION DATE	04/23/2003	05/09/2003

Analyzer SO2 High	LOW	HIGH
REF GAS VALUE	28.10	43.80
DATE	06/25/2003	06/25/2003
TIME	13:58	14:01
RUN 1	28.33	43.92
DATE	06/25/2003	06/25/2003
TIME	14:06	14:08
RUN 2	29.06	43.52
DATE	06/25/2003	06/25/2003
TIME	14:23	14:25
RUN 3	29.11	43.63
AVERAGE=SUM/3	28.83	43.69
% ACCURACY	2.60	-0.25
OUT OF CONTROL	NO	NO
SERIAL NUMBER	ALM011207	CC166835
CERTIFICATION DATE	04/23/2003	05/09/2003

Scott Specialty Gases

www.scottgas.com

COMPLIANCE CLASS

Dual-Analyzed Calibration Standard

6141 EASTON ROAD, BLDG 1,PLUMSTEADVILLE,PA 18949-0310 Phone: 800-331-4953 Fax

CERTIFICATE OF ACCURACY: EPA Protocol Gas

Assay Laboratory

SCOTT SPECIALTY GASES
6141 EASTON ROAD, BLDG 1
PLUMSTEADVILLE,PA 18949-0310

P.O. No.: 03-0275
Project No.: 01-87652-001

Customer
AES PUERTO RICO

BO. JOBOS CARR
#3 KM. 142.0
GUAYAMA PR 00784

ANALYTICAL INFORMATION

This certification was performed according to EPA Traceability Protocol For Assay & Certifi of Gaseous Calibration Standards; Procedure G-1; September, 1997.

Cylinder Number: AAL20437 Certification Date: 28Mar2003 Exp. Date: 26Sep2003

Cylinder Pressure***: 2000 PSIG

COMPONENT	CERTIFIED CONCENTRATION (Moles)		ACCURACY**	TRACEABILITY
CARBON DIOXIDE	5.62	%	+/- 2%	NIST and NMi
NITRIC OXIDE	24.7	PPM	+/- 2%	NIST and NMi
SULFUR DIOXIDE *	5.27	PPM	+/- 2%	NIST and NMi
NITROGEN - OXYGEN FREE		BALANCE		
TOTAL OXIDES OF NITROGEN	24.8	PPM		Reference Value Onl

*** Do not use when cylinder pressure is below 150 psig.

** Analytical accuracy is based on the requirements of EPA Protocal procedures , September 1

* This Protocol has been certified using corrected NIST SO2 standard values, per EPA guidanc 7/24/96 and will not correlate with uncorrected Protocols.

REFERENCE STANDARD

TYPE/SRM NO.	EXPIRATION DATE	CYLINDER NUMBER	CONCENTRATION	COMPONENT
NTRM 1675	01Jun2004	K001509	13.93	CARBON DIOXIDE
NTRM 1683	01Nov2006	AAL069896	48.80PM	NITRIC OXIDE
NTRM 1693	01Jul2005	AAL15198	51.04PM	SULFUR DIOXIDE

INSTRUMENTATION

INSTRUMENT/MODEL/SERIAL#	DATE LAST CALIBRATED	ANALYTICAL PRINCIPLE
MTI/M200/170927	03Mar2003	GC-TCD
HORIBA/CLA220/5708850810	20Mar2003	CHEMILUMINESCENCE
HORIBA SO2/AIA-210/571325043	14Mar2003	NDIR

APPROVED BY: (signature on file)
TANESHA CASH

Scott Specialty Gases
www.scottgas.com

RATA CLASS

Dual-Analyzed Calibration Standard

6141 EASTON ROAD, BLDG 1,PLUMSTEADVILLE,PA 18949-0310 Phone: 800-331-4953 Fax

CERTIFICATE OF ACCURACY: EPA Protocol Gas

Assay Laboratory

SCOTT SPECIALTY GASES
6141 EASTON ROAD, BLDG 1
PLUMSTEADVILLE,PA 18949-0310

P.O. No.: 02-0200
Project No.: 01-70231-005

Customer
AES PUERTO RICO

CARR. #3 KM 142.0
GUAYAMA PR 00784

ANALYTICAL INFORMATION

This certification was performed according to EPA Traceability Protocol For Assay & Certifi
of Gaseous Calibration Standards; Procedure G-1; September, 1997.
Cylinder Number: ALM038693 Certification Date: 18Apr2002 Exp. Date: 25Apr2005
Cylinder Pressure***: 2000 PSIG

COMPONENT	CERTIFIED CONCENTRATION (Moles)		ANALYTICAL ACCURACY**	TRACEABILITY
CARBON MONOXIDE	51.2	PPM	+/- 1%	Direct NIST and NMi
OXYGEN	5.13	%	+/- 1%	Direct NIST and NMi
NITROGEN		BALANCE		

*** Do not use when cylinder pressure is below 150 psig.
* Analytical accuracy is based on the requirements of EPA Protocol Procedure G1, September
Product certified as +/- 1% analytical accuracy is directly traceable to NIST or NMI stand

REFERENCE STANDARD

TYPE/SRM NO.	EXPIRATION DATE	CYLINDER NUMBER	CONCENTRATION	COMPONENT
NTRM 2636	03Apr2003	ALM033274	246.7PM	CARBON MONOXIDE
NTRM 2350	01Feb2004	A4341	23.51	OXYGEN

INSTRUMENTATION

INSTRUMENT/MODEL/SERIAL#	DATE LAST CALIBRATED	ANALYTICAL PRINCIPLE
SIEMENS/6E/KN-240	27Mar2002	NDIR
BECKMAN/755/2002571	18Mar2002	PARAMAGNETIC

ANALYZER READINGS

(Z=Zero Gas R=Reference Gas T=Test Gas r=Correlation Coefficient)

CARBON MONOXIDE

First Triad Analysis	Second Triad Analysis	Calibration Curve
Date: 16Apr2002Resp Unit:VOLTS	Date: 25Apr2002Resp Unit: VOLTS	Concentration=A+Bx+Cx2+Dx3+
Z1=-0.00450=1.21040T1=0.24870	Z1=-0.00490=1.208901=0.24830	r=0.99999 2636
R2=1.210402=-0.004402=0.24900	R2=1.209002=-0.00490=0.24830	Constants: A=6.9000E-0
Z3=-0.00450=0.24900R3=1.21180	Z3=-0.00520=0.247703=1.20550	B=2.0368E+02 C=
Avg. Conc: 51.20 PPM	Avg. Conc: 51.30 PPM	D= E=

OXYGEN

Date: 18Apr2002Resp Unit:VOLTS	Concentration=A+Bx+Cx2+Dx3+
Z1=0.001201=0.94940T1=0.20810	r=0.99999 2350
R2=0.949502=0.00180T2=0.20800	Constants: A=-3.0003E-
Z3=0.001603=0.20790R3=0.95000	B=2.4772E+01 C=
Avg. Conc: 5.130 %	D= E=

APPROVED BY: (signature on file)
B. LEWIS, JR.

Scott Specialty Gases

www.scottgas.com

RATA CLASS

Dual-Analyzed Calibration Standard

6141 EASTON ROAD, BLDG 1,PLUMSTEADVILLE,PA 18949-0310 Phone: 800-331-4953 Fax

CERTIFICATE OF ACCURACY: EPA Protocol Gas

Assay Laboratory

SCOTT SPECIALTY GASES
6141 EASTON ROAD, BLDG 1
PLUMSTEADVILLE,PA 18949-0310

P.O. No.: 02-0653
Project No.: 01-79450-004

Customer
AES PUERTO RICO
PO # 02-0653
BO. JOBOS CARR
#3 KM. 142.0
GUAYAMA PR 00784

ANALYTICAL INFORMATION

This certification was performed according to EPA Traceability Protocol For Assay & Certifi
of Gaseous Calibration Standards; Procedure G-1; September, 1997.
Cylinder Number: ALM053920 Certification Date: 23Oct2002 Exp. Date: 22Oct2005
Cylinder Pressure***: 2000 PSIG

COMPONENT	CERTIFIED CONCENTRATION (Moles)		ANALYTICAL ACCURACY**	TRACEABILITY
CARBON MONOXIDE	110	PPM	+/- 1%	Direct NIST and NMi
OXYGEN	11.5	%	+/- 1%	Direct NIST and NMi
NITROGEN		BALANCE		

*** Do not use when cylinder pressure is below 150 psig.
** Analytical accuracy is based on the requirements of EPA Protocol Procedure G1, September
Product certified as +/- 1% analytical accuracy is directly traceable to NIST or NMI stand

REFERENCE STANDARD

TYPE/SRM NO.	EXPIRATION DATE	CYLINDER NUMBER	CONCENTRATION	COMPONENT
NTRM 2636	03Apr2003	AAL9126	246.7PM	CARBON MONOXIDE
NTRM 2350	01Feb2004	A4341	23.51	OXYGEN

INSTRUMENTATION

INSTRUMENT/MODEL/SERIAL#	DATE LAST CALIBRATED	ANALYTICAL PRINCIPLE
SIEMENS/6E/KN-240	14Oct2002	NDIR
BECKMAN/755/2002571	15Oct2002	PARAMAGNETIC

ANALYZER READINGS

(Z=Zero Gas R=Reference Gas T=Test Gas r=Correlation Coefficient)

CARBON MONOXIDE

First Triad Analysis
Date: 16Oct2002Resp Unit:VOLTS
Z1=0.004901=1.20960T1=0.54200
R2=1.209902=0.00430T2=0.54200
Z3=0.004503=0.54240R3=1.20850
Avg. Conc: 109.9 PPM

Second Triad Analysis
Date: 23Oct2002Resp Unit: VOLTS
Z1=0.004901=1.209301=0.54200
R2=1.209302=0.004902=0.54200
Z3=0.004903=0.542003=1.20910
Avg. Conc: 110.0 PPM

Calibration Curve
Concentration=A+Bx+Cx2+Dx3+
r=.9999 2636
Constants: A=7.1129E-0
B=2.0384E+02 C=
D= E=

OXYGEN

Date: 17Oct2002Resp Unit:VOLTS
Z1=0.001001=0.94550T1=0.46350
R2=0.945402=0.00180T2=0.46360
Z3=0.001603=0.46360R3=0.94650
Avg. Conc: 11.50 %

Concentration=A+Bx+Cx2+Dx3+
r=.999999 2350
Constants: A=-3.7683E-
B=2.4910E+01 C=
D= E=

APPROVED BY: (signature on file)
JOHN C. FITZ

Scott Specialty Gases
www.scottgas.com

RATA CLASS

Dual-Analyzed Calibration Standard

6141 EASTON ROAD, BLDG 1,PLUMSTEADVILLE,PA 18949-0310 Phone: 800-331-4953 Fax

TM
_CERTIFICATE_OF_ACCURACY:_Interference_Free__Multi-Component_EPA_Protocol_Gas_____

Assay_Laboratory
SCOTT SPECIALTY GASES
6141 EASTON ROAD, BLDG 1
PLUMSTEADVILLE,PA 18949-0310

P.O. No.: 03-0564
Project No.: 01-91369-001

Customer_
AES PUERTO RICO

BO. JOBOS CARR
#3 KM. 142.0
GUAYAMA PR 00784

_ANALYTICAL_INFORMATION_____
This certification was performed according to EPA Traceability Protocol For Assay & Certifi
of Gaseous Calibration Standards; Procedure G-1; September, 1997.
Cylinder Number: ALM031443 Certification Date: 01Jun2003 Exp. Date: 30Nov2003
Cylinder Pressure***: 2000 PSIA

COMPONENT	CERTIFIED_CONCENTRATION_(Moles)		ACCURACY**	TRACEABILITY
ARBON DIOXIDE	11.08	%	+/- 1%	Direct NIST and NMi
NITRIC OXIDE	54.6	PPM	+/- 1%	Direct NIST and NMi
SULFUR DIOXIDE *	10.70	PPM	+/- 1%	Direct NIST and NMi
NITROGEN - OXYGEN FREE		BALANCE		
TOTAL OXIDES OF NITROGEN	54.6	PPM		Reference Value Onl

*** Do not use when cylinder pressure is below 150 psig.
** Analytical accuracy is based on the requirements of EPA Protocol Procedure G1, September
Product certified as +/- 1% analytical accuracy is directly traceable to NIST or NMI stand
* This Protocol has been certified using corrected NIST SO2 standard values, per EPA guidanc
__7/24/96_and_will_not_correlate_with_uncorrected_Protocols._____

REFERENCE_STANDARD_____

TYPE/SRM_NO.	EXPIRATION_DATE	CYLINDER_NUMBER	CONCENTRATION____	COMPONENT____
NTRM 1685	01Jun2004	1D2061	13.93	CO2/N2
NTRM 1683	01Nov2006	AAL069900	48.80PM	NO/N2
NTRM 1693	01Jul2005	AAL8297	51.04PM	SO2/N2

INSTRUMENTATION____

INSTRUMENT/MODEL/SERIAL#_____	DATE_LAST_CALIBRATED____	ANALYTICAL_PRINCIPLE_
FTIR System/8220/AAB9300174	29May2003	Scott Enhanced FTIR
FTIR System/8220/AAB9300174	29May2003	Scott Enhanced FTIR
FTIR System/8220/AAB9300174	29May2003	Scott Enhanced FTIR

_ANALYZER_READINGS_____
(Z=Zero Gas R=Reference Gas T=Test Gas r=Correlation Coefficient)

First Triad Analysis Second Triad Analysis Calibration Curve

CARBON DIOXIDE
Date: 25May2003Resp Unit:
Z1=0.000901=13.919101=11.08170
R2=13.92907=0.00490T2=11.07852
Z3=0.005703=11.084803=13.94183
Avg. Conc: 11.08 %

Concentration=A+Bx+Cx2+Dx3+
r=0.999990
Constants: A=0.000000
B=1.000000 C=0.000000
D=0.000000 E=0.000000

NITRIC OXIDE

Date: 25May2003Resp Unit:	Date: 01Jun2003Resp Unit: PPM	Concentration=A+Bx+Cx2+Dx3+
Z1=-0.17570=48.928111=54.67377	Z1=-0.70990=48.82389=54.72470	r=0.999990
R2=48.81513=-0.009602=54.40478	R2=48.75658=-0.67540=54.73179	Constants: A=0.000000
Z3=-0.38660=54.574403=48.65674	Z3=-0.50480=54.66028=48.81950	B=1.000000 C=0.000000
Avg. Conc: 54.55 PPM	Avg. Conc: 54.71 PPM	D=0.000000 E=0.000000

SULFUR DIOXIDE *

Date: 25May2003Resp Unit:	Date: 01Jun2003Resp Unit: PPM	Concentration=A+Bx+Cx2+Dx3+
Z1=-0.01310=51.023351=10.69077	Z1=-0.01070=51.04915=10.69449	r=0.999990
R2=51.10282=0.00530T2=10.70027	R2=51.04676=-0.00480=10.72414	Constants: A=0.000000
Z3=0.005303=10.695193=50.99382	Z3=0.008903=10.71489=51.02408	B=1.000000 C=0.000000
Avg. Conc: 10.69 PPM	Avg. Conc: 10.71 PPM	D=0.000000 E=0.000000

Scott Specialty Gases
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RATA CLASS

Dual-Analyzed Calibration Standard

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TM
_CERTIFICATE_OF_ACCURACY:_Interference_Free__Multi-Component_EPA_Protocol_Gas_____

Assay_Laboratory
SCOTT SPECIALTY GASES
6141 EASTON ROAD, BLDG 1
PLUMSTEADVILLE,PA 18949-0310

P.O. No.: 03-0564
Project No.: 01-91369-001

Customer_
AES PUERTO RICO

BO. JOBOS CARR
#3 KM. 142.0
GUAYAMA PR 00784

_ANALYTICAL_INFORMATION_____
This certification was performed according to EPA Traceability Protocol For Assay & Certifi
of Gaseous Calibration Standards; Procedure G-1; September, 1997.
Cylinder Number: ALM031443 Certification Date: 01Jun2003 Exp. Date: 30Nov2003
Cylinder Pressure***: 2000 PSIA

_ANALYZER_READINGS_____
(Z=Zero Gas R=Reference Gas T=Test Gas r=Correlation Coefficient)

First Triad Analysis Second Triad Analysis Calibration Curve

APPROVED BY: (signature on file)
Michael A. Kuhns

Scott Specialty Gases
www.scottgas.com

RATA CLASS

Dual-Analyzed Calibration Standard

6141 EASTON ROAD, BLDG 1,PLUMSTEADVILLE,PA 18949-0310 Phone: 800-331-4953 Fax

TM
CERTIFICATE OF ACCURACY: Interference Free Multi-Component EPA Protocol Gas

Assay Laboratory
SCOTT SPECIALTY GASES
6141 EASTON ROAD, BLDG 1
PLUMSTEADVILLE,PA 18949-0310

P.O. No.: 03-0422
Project No.: 01-89715-002

Customer
AES PUERTO RICO

CARMEN ORTIZ/WAREHOUSE
BO. JOBOS CARR
#3 KM. 142.0
GUAYAMA PR 00784

ANALYTICAL INFORMATION

This certification was performed according to EPA Traceability Protocol For Assay & Certifi
of Gaseous Calibration Standards; Procedure G-1; September, 1997.
Cylinder Number: ALM011207 Certification Date: 23Apr2003 Exp. Date: 22Oct2003
Cylinder Pressure***: 1988 PSIA

COMPONENT	CERTIFIED CONCENTRATION (Moles)		ACCURACY**	TRACEABILITY
NITRIC OXIDE	110.2	PPM	+/- 1%	Direct NIST and NMi
SULFUR DIOXIDE *	28.1	PPM	+/- 1%	Direct NIST and NMi
NITROGEN - OXYGEN FREE		BALANCE		
TOTAL OXIDES OF NITROGEN	110.2	PPM		Reference Value Onl

*** Do not use when cylinder pressure is below 150 psig.
** Analytical accuracy is based on the requirements of EPA Protocol Procedure G1, September
Product certified as +/- 1% analytical accuracy is directly traceable to NIST or NMI stand
* This Protocol has been certified using corrected NIST SO2 standard values, per EPA guidanc
7/24/96 and will not correlate with uncorrected Protocols.

REFERENCE STANDARD TYPE/SRM NO.	EXPIRATION DATE	CYLINDER NUMBER	CONCENTRATION	COMPONENT
NTRM 1684	01Aug2006	AAL069456	97.20PM	NO/N2
NTRM 1693	01Jul2005	AAL8297	51.04PM	SO2/N2

INSTRUMENTATION INSTRUMENT/MODEL/SERIAL#	DATE LAST CALIBRATED	ANALYTICAL PRINCIPLE
FTIR System/8220/AAB9300174	28Mar2003	Scott Enhanced FTIR
FTIR System/8220/AAB9300174	28Mar2003	Scott Enhanced FTIR

ANALYZER READINGS

(Z=Zero Gas R=Reference Gas T=Test Gas r=Correlation Coefficient)

First Triad Analysis	Second Triad Analysis	Calibration Curve
NITRIC OXIDE		
Date: 16Apr2003Resp Unit:	Date: 23Apr2003Resp Unit: PPM	Concentration=A+Bx+Cx2+Dx3+
Z1=-0.40690=97.092091=110.3065	Z1=-0.19340=97.18878=110.1578	r=0.999990
R2=97.29187=-0.584902=110.2331	R2=97.23586=-0.32700=110.0308	Constants: A=0.000000

Z3=-0.20580=110.21273=97.21601	Z3=-0.18370=110.2590=97.17534	B=1.000000	C=0.000000
Avg. Conc: 110.3 PPM	Avg. Conc: 110.1 PPM	D=0.000000	E=0.000000

SULFUR DIOXIDE *

Date: 16Apr2003Resp Unit:	Date: 23Apr2003Resp Unit: PPM	Concentration=A+Bx+Cx2+Dx3+	
Z1=-0.00710=51.007901=28.06663	Z1=-0.01430=51.02261=28.04653	r=0.999990	
R2=51.04422=0.00280T2=28.08139	R2=51.07736=0.004802=28.03184	Constants:	A=0.000000
Z3=0.044603=28.087583=51.06787	Z3=-0.00280=28.01736=51.02001	B=1.000000	C=0.000000
Avg. Conc: 28.08 PPM	Avg. Conc: 28.03 PPM	D=0.000000	E=0.000000

APPROVED BY: (signature on file)
Michael A. Kuhns

AGA
Member of the Linde Gas Group

Linde

Certificate of Analysis

EPA Protocol

Performed according to EPA-600/R-97/121, Procedure G1

Notice: This Cylinder is not to be used when pressure is under 150 psig.

Manufactured and certified at:

AGA Gas, Inc.
Maumee Specialty Gas Plant
6421 Monclova Road
MAUMEE OH 43537
419-893-7226

Produced for customer:

AGA GENERAL GASES & SUPPLIES
SAN JUAN PR 00936
USA
800-981-7455

Material:	2179	**Blend Tolerance:**	5 % Relative
MISC 3 COMPONENT EPA		**Store/Use Temp:**	35 to 90 F
Production #:	100067367	**Blend Type:**	EPA Protocol
Lot #:	02499D3250BE	**Cyl. Pressure:**	2000 psig
Cylinder #:	CC166835	**Balance Gas:**	Nitrogen
Expiration Date:	5/9/2005	**CGA:**	660
Shelf Life:	24 months	**Volume:**	143 cf

CAS #	Certified Component	Requested Concentration	Concentration and Uncertainty	Date of Certification
7446-09-5	Sulfur Dioxide	45	43.8 +/- 0.4 ppm	05/09/2003
10102-43-9	Nitric Oxide	180	184 +/- 2 ppm	05/09/2003
7727-37-9	Nitrogen		Balance	05/09/2003

CAS #	Analyzed (For Ref Use Only)	Concentration	Analysis Date
N/A 2	NOx	184 ppm	05/09/2003

CAS #	Reference Standard	Cylinder/Standard #	Concentration	Expire Date
10102-43-9	Nitric Oxide	HA3904 , GMIS	499.3 ppm	03/07/2005
10102-43-9	Nitric Oxide	CC100831 , GMIS	100.7 ppm	04/04/2005

Instrument	Serial #	Analytical Principle	Calibration Date
Horiba CLA-510SS	568093024	Chemiluminescence	04/07/2003
Horiba VIA-510	4131546004	Non-Dispersive Infrared	03/03/2003

This product is manufactured using equipment which has been calibrated with NIST traceable, or equivalent, standards, weights, or equipment.

nalytical report approved by Jim Healy

HiQ Analysis Certificate