UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF ENFORCEMENT

EPA-330/1-80-004

OMEGA-1 LIDAR: DATA ANALYSIS REPORT

COLUMBUS AND SOUTHERN OHIO ELECTRIC COMPANY CONESVILLE GENERATING STATION

Conesville, Ohio

October 1980

NATIONAL ENFORCEMENT INVESTIGATIONS CENTER
Denver, Colorado

EPA

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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I. INTRODUCTION

The National Enforcement Investigations Center (NEIC) conducted an investigation of visible emissions from three stationary sources at the Conesville Generating Station, operated by the Columbus and Southern Ohio Electric Company, in Conesville, Ohio, in late afternoon on June 9, 1980, and morning and late afternoon of June 10, 1980. Opacities of visible emissions were measured remotely with a new instrumentation method* using the NEIC Omega-1 Lidar. Figure 1 shows the location of the lidar during the observations and the location of the sources. Lidar location 1 was used for measurements made on the afternoon of June 9, and the morning of June 10. Lidar location 2 was used for measurements made during the afternoon of June 10.

The Conesville Station contains six coal-fired boiler turbine units. Each boiler is equipped with an electrostatic precipitator for particulate control. Units 5 and 6 are equipped with lime slurry-based flue gas desulfurization systems for SO_2 control. Units 1 and 2 have a capacity of 130 megawatts each and are vented to Stack 1. Unit 3 has a capacity of 155 megawatts and is vented to Stack 2. Unit 4 has a capacity of 800 megawatts and is vented to Stack 3. Units 5 and 6 each have a capacity of 400 megawatts and are vented to Stack 4. Stacks 1 and 2 are each 450 ft tall; Stacks 3 and 4 are 800 ft tall. Unit 4 was not operating on June 9 and 10 since it did not have an operating permit.

Units 2, 3, 4, 5, and 6 have reportedly been in violation of the Ohio regulation for particulate loading based on stack tests results submitted by the utility. Stack 1 (Units 1 and 2) and Stack 2 (Unit 3) have reportedly been in violation of Ohio visible emission regulations.

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* This method has been proposed in the Federal Register, Vol. 45, No. 128, Tuesday, July 1, 1980, pages 44329 through 44351, as an alternate method to Reference Method 9.

Figure 1. Location Map

On April 21, 1980, the Enforcement Division of EPA Region V, Chicago, Illinois, requested assistance from NEIC in documenting the opacity of emissions from the Conesville Station during early morning and late afternoon periods of peak load.

To provide the requested assistance to Region V, NEIC conducted the investigation with the following objectives.

1. Document the opacity of visible emissions from Stacks 1, 2, and 4.

2. Evaluate the compliance of the observed emissions with the appropriate regulation: (a) Ohio SIP for Stacks 1 and 2, and (b) New Source Performance Standards for Stack 4.

II. SUMMARY AND CONCLUSIONS

SUMMARY OF INVESTIGATIONS

The opacity of visible emissions from the three operating stationary sources within the Conesville Generating Station, Columbus and Southern Ohio Electric Company (C&SOE), Conesville, Ohio, was measured during the late afternoon on June 9, 1980, and during morning and late afternoon on June 10, 1980. The sources investigated were Stacks 1, 2, and 4. All measurements were conducted remotely from off the plant site.

Opacities were measured remotely with the NEIC Omega-1 Lidar which is a new instrumentation method. This method has been proposed in the Federal Register as Alternate Method 1 to Reference Method 9.

Nine sets of opacity measurements were made, the total of which was about 1,225 individual measurements made over a total observation time of about 3 hours. The measurement sets varied in length from 11 to 30 minutes. Individual measurements were made approximately once about every 9 seconds.

All opacity measurements were subsequently analyzed and reduced using the NEIC laboratory computer according to the methods given in Alternate Method 1 (proposed).

The results of the lidar observations are summarized in Table 1 according to the official designation of each stationary source.

CONCLUSIONS

The visible emissions from Stack 2 (Unit 3) exceeded the maximum allowable limit of the Ohio State Implementation Plan (20% for a 6-minute average) during the first, fifth, and sixth runs (Table 1). During the

Table 1

DATA ANALYSIS SUMMARY
C&SOE, CONESVILLE GENERATING STATION
Conesville, Ohio

Source Designation	Applicable Opacity Limit (%)	Date June 1980	Time Interval (hr min sec)	Approx. length of Observation (min)	Approx Time Exceeding Limit (min)	% of Time in Excess of limit	± Max Lidar Calibration Peak Opacity (6-min avg)	Error Mag (%) [From 0% to 80%]
Stack 2	20	9	17 04·28 17.19 18	15	8	53	37	-0 6, +0 0
Stack 2	20	9	17 24 51 17 35 44	11	0	0	17	-0.6, +0 0
Stack 2	20	10	8.12:45 8 27 38	15	0	0	19	-0 5, +0 5
Stack 1	20	10	8.56.29 9 11·09	15	0	0	1	-0.1, +0.3
Stack 2	20	10	16 09 28 16 38 03	30	30	100	67	-0 2, +0 4
Stack 2	20	10	16.43 54 17·13 10	30	30	100	65	-0 2, +0 4
Stack 4	20	10	17·45 53 18.15 16	30	0	0	16	-0 3, +0 2
Stack 4	20	10	18.21·29 18.36 05	15	0	0	17	-0 3, +0 2

first run the opacity of the emissions exceeded the limit for 8 minutes or 53% of the observation time. During the fifth and sixth runs the opacity of the emissions exceeded the limit for 30 minutes or 100% of the observation time in each case. The emissions from Stack 2 were observed for two additional observation periods of 11 minutes and 15 minutes, during which time the emission opacity did not exceed the SIP opacity limit.

The emissions from Stack 1 (Units 1 and 2) were observed for one observation period of 15 minutes during which the emission opacity did not exceed the the SIP opacity limit (20% for a 6-minute average).

The emissions from Stack 4 (Units 5 and 6) were observed for two observation periods, one 30-minutes and the other 15-minutes in length, during which time the emission opacity did not exceed the maximum opacity limit specified in the New Source Performance Standards. These measurements were made in the residual part of the plume after condensed water had evaporated. The emissions from Stack 4 were also observed for 25 minutes on the afternoon of June 9, 1980. These observations are not reported because the plume contained condensed water.

III. METHODS

LIDAR OPACITY MEASUREMENTS

Alternate Method 1 (proposed) employs a lidar (lasar radar) which is an optical system installed in a truck-mounted van enclosure. This mobile lidar is specifically designed and fabricated for measuring the opacity of visible emissions from a given stationary source during both day and nighttime ambient lighting conditions. The laser transmitter within the lidar emits a short pulse of light. The lidar receiver collects the laser light backscattered from the atmospheric aerosols before and beyond the visible plume as well as that from the aerosols (particulates) within the plume. The lidar receiver converts the backscattered optical signals to electronic signals or data. The Lidar has an inherent data processing capability that calculates the opacity values from the backscatter data from just before and beyond the plume. It subsequently records these opacity values in hard copy form, and also records the original lidar receiver data (signal amplitude vs range) on magnetic tape for future reference or use.

The nominal data gathering rate of the lidar is an opacity measurement or determination once every 10 seconds. This data rate can be maintained in continuous operation for minutes or even hours. The lidar method is intended for use during nighttime, as well as during the day.

The Omega-1 Lidar is internally calibrated in the field periodically over the opacity values of 0, 10, 20, 40, 60, and 80%.

DATA ANALYSIS AND REDUCTION

The lidar data were analyzed in accordance with Section 2 of Alternate Method 1 (proposed) using the NEIC PDP-11-70 laboratory computer. The

individual opacity values were calculated using the backscatter data recorded on magnetic tape, with the opacity equation given in Section 2.4.1. The associated statistics which includes the standard deviation, S_o, of each individual opacity value, were calculated using the appropriate equations in Section 2.4.1. The running- or sliding-average, $\bar{O}p$, of the individual opacity values was calculated over the 6-minute averaging interval, given in the New Source Performance Standards (NSPS) and the Ohio State Implementation Plan (SIP), according to the requirements of Section 2.4.2.

The number of opacity values included in the running-average is nominally 36 (six measurements/minute for 6 minutes according to the NSPS and SIP). The 6-minute interval remains constant although the number of opacity values may vary above or below the nominal. In accordance with the Opacity Data Acceptance/Rejection Criterion in Section 2.4.3, if the standard deviation, S_o, for a given opacity value is greater than 8% (full scale) then that value is discarded from the running-average set decreasing the total number by one. The number of opacity values in the 6-minute interval may be greater than 36 which is caused by the lidar data rate being set faster than six opacity measurements/minute (one opacity measurement every 10 seconds).

DATA PRESENTATION

The opacity values are presented in two separate formats in Section IV of this data analysis report. For each data run the values are given in tabular form followed by graphic plots. An identification header is located across the top of the tabular form which provides the following information:

- EPA-NEIC identification block.
- EPA-NEIC Omega control number (evidentiary parameter).
- Official designation for the stationary source.
- Facility name.
- Facility location.
- Location of the lidar during tests.
- Length of the running average interval.

This tabular presentation provides the applicable data in columns identified as follows:

- Date of data run.
- Time of the opacity measurement (nearest second).
- Opacity values as calculated in %.
- Standard deviation SO (S_0 in Alternate Method 1) in %.
- Individual violation flags, not applicable in Ohio.
- Average opacity (%) calculated over the running-average interval.
- Average standard deviation (%) calculated over the running-average interval.
- Average opacity violation flag, applicable in Ohio.
- Number of opacity values discarded due to the Opacity Data Acceptance/Rejection Criterion (§ 2.4.3 of the Alternate Method 1).

In the average opacity violation column, any violations that occurred over and above the respective 20% (NSPS) or the 20% (SIP) average opacity limits are indicated with a flag of four asterisks.

Referring to the first and second sheets of the tabular data output, Section IV, for the fifth data run, (Omega-0057), the average opacity violation flag (column 8 in the tabular format) does not show up until the average opacity (6 minutes of data has been averaged) has exceeded 20%. As soon as the average opacity is greater than 20%, then the first violation flag occurs at the end of the first 6-minute interval and continues until the average opacity drops below the regulation limit or the data run is completed. This data run began at 16:09:28 and the individual opacity values were all above 20% (column 3). The average opacity (column 6) reads zero until 6 minutes of data has been recorded. At the end of the first 6-minute interval the average opacity was 66% (16:09:28 to 16:15:16) and the first average opacity violation flag is indicated.

The running-average permits one to easily locate the 6-minute interval(s) which has the highest average opacity. In the example of the fifth

data run (Omega-0057), the highest average occurred for the 6-minute interval ending at 16:15:34 (sheet 1). However, the first violation occurred for the 6-minute time interval ending at 16:15:16. The next violation does not occur until 6 minutes after 16:15:16 or 16:21:24 which had an average opacity of 65%.

The computer graphical plots, located in Section IV immediately after each respective tabular data set, show the individual opacity values (column 3 of the tabular data set) along with their respective standard deviations as error bars (column 4 of the tabular data set). The standard deviation gives an indication of the magnitude of the error associated with each opacity value due to atmospheric noise along the lidar line-of-sight. The magnitude of the average opacity established in the NSPS or the SIP is indicated on each plot by the dashed line at the 20% value. Each graphical plot is fixed in time along the horizontal axis, being 10 minutes in length.

The lidar internal calibration data are presented in Table 1 of Section II for each respective observation period as the extreme values that occurred throughout the opacity range given above. A negative value indicates that the lidar was determining opacity low or below the respective standard while a positive value indicates a high value with respect to the standard.

IV. DATA ANALYSIS PRESENTATION

OMEGA-0053

COLUMBUS AND SOUTHERN OHIO ELECTRIC COMPANY

CONESVILLE STATION

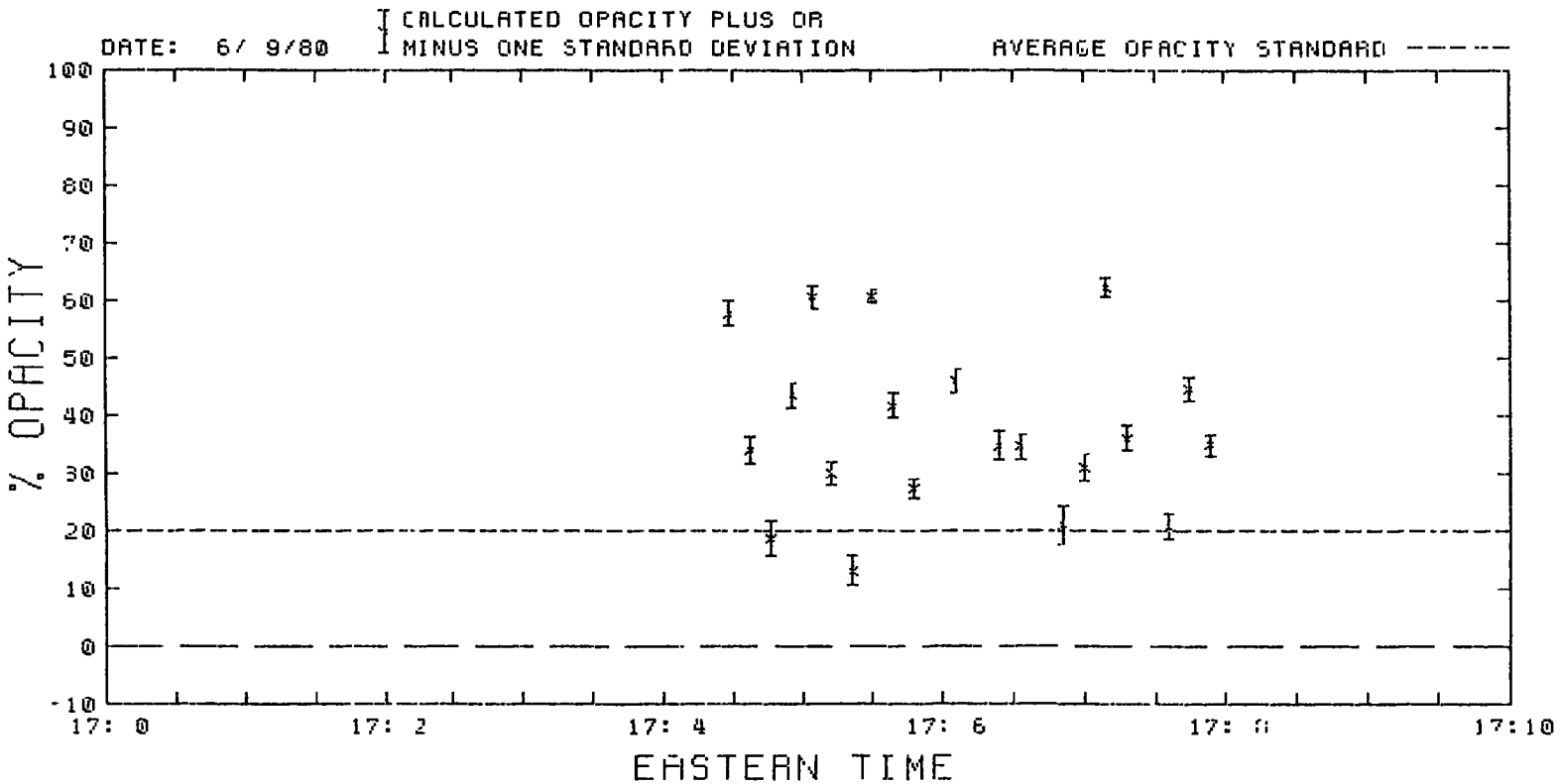
STACK 2

June 9, 1980, 17:04:28 to 17:16:35

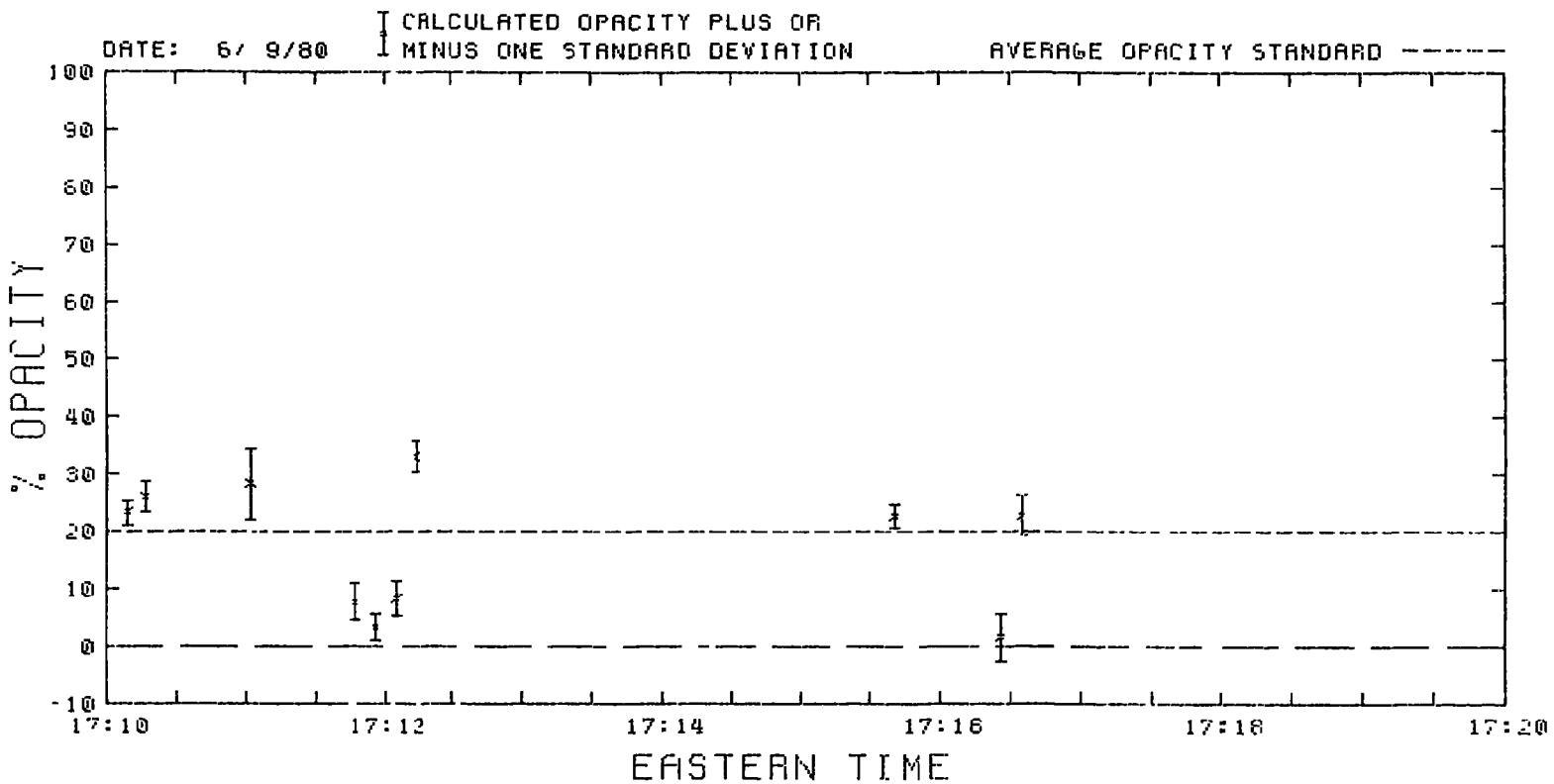
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
NATIONAL ENFORCEMENT INVESTIGATIONS CENTER
DENVER, COLORADO 80225

OMEGA-0053, STACK 2, C&SOE CONESVILLE STATION, CONESVILLE, OHIO FROM THE WEST SIX MINUTE AVERAGES

DATE	TIME	OPACITY	SO	VIOLATION	AVERAGE OPACITY	AVERAGE SO	VIOLATION	NUMBER DISCARDED
6/ 9/80	17 4 28	58	2		0	0		0 OF 0
6/ 9/80	17 4 37	34	2		0	0		0 OF 0
6/ 9/80	17 4 46	19	3		0	0		0 OF 0
6/ 9/80	17 4 55	44	2		0	0		0 OF 0
6/ 9/80	17 5 4	61	2		0	0		0 OF 0
6/ 9/80	17 5 12	30	2		0	0		0 OF 0
6/ 9/80	17 5 21	13	2		0	0		0 OF 0
6/ 9/80	17 5 30	61	1		0	0		0 OF 0
6/ 9/80	17 5 39	42	2		0	0		0 OF 0
6/ 9/80	17 5 48	27	2		0	0		0 OF 0
6/ 9/80	17 6 6	46	2		0	0		0 OF 0
6/ 9/80	17 6 24	35	2		0	0		0 OF 0
6/ 9/80	17 6 33	35	2		0	0		0 OF 0
6/ 9/80	17 6 51	21	3		0	0		0 OF 0
6/ 9/80	17 7 0	31	2		0	0		0 OF 0
6/ 9/80	17 7 9	62	2		0	0		0 OF 0
6/ 9/80	17 7 18	36	2		0	0		0 OF 0
6/ 9/80	17 7 36	21	2		0	0		0 OF 0
6/ 9/80	17 7 45	45	2		0	0		0 OF 0
6/ 9/80	17 7 54	35	2		0	0		0 OF 0
6/ 9/80	17 10 9	23	2		37	2	****	0 OF 21
6/ 9/80	17 10 17	26	3		37	2	****	0 OF 22
6/ 9/80	17 11 2	28	6		36	2	****	0 OF 19
6/ 9/80	17 11 47	8	3		32	2	****	0 OF 15
6/ 9/80	17 11 56	3	2		30	3	****	0 OF 15
6/ 9/80	17 12 5	8	3		29	3	****	0 OF 16
6/ 9/80	17 12 14	33	3		28	3	****	0 OF 16
6/ 9/80	17 15 41	23	2		0	0		0 OF 0
6/ 9/80	17 16 26	2	4		0	0		0 OF 0
6/ 9/80	17 16 35	23	4		0	0		0 OF 0



STACK 2, CASOE CONESVILLE STATION, CONESVILLE, OH



STACK 2, C&SOE CONESVILLE STATION, CONESVILLE, OH

OMEGA-0053

COLUMBUS AND SOUTHERN OHIO ELECTRIC COMPANY

CONESVILLE STATION

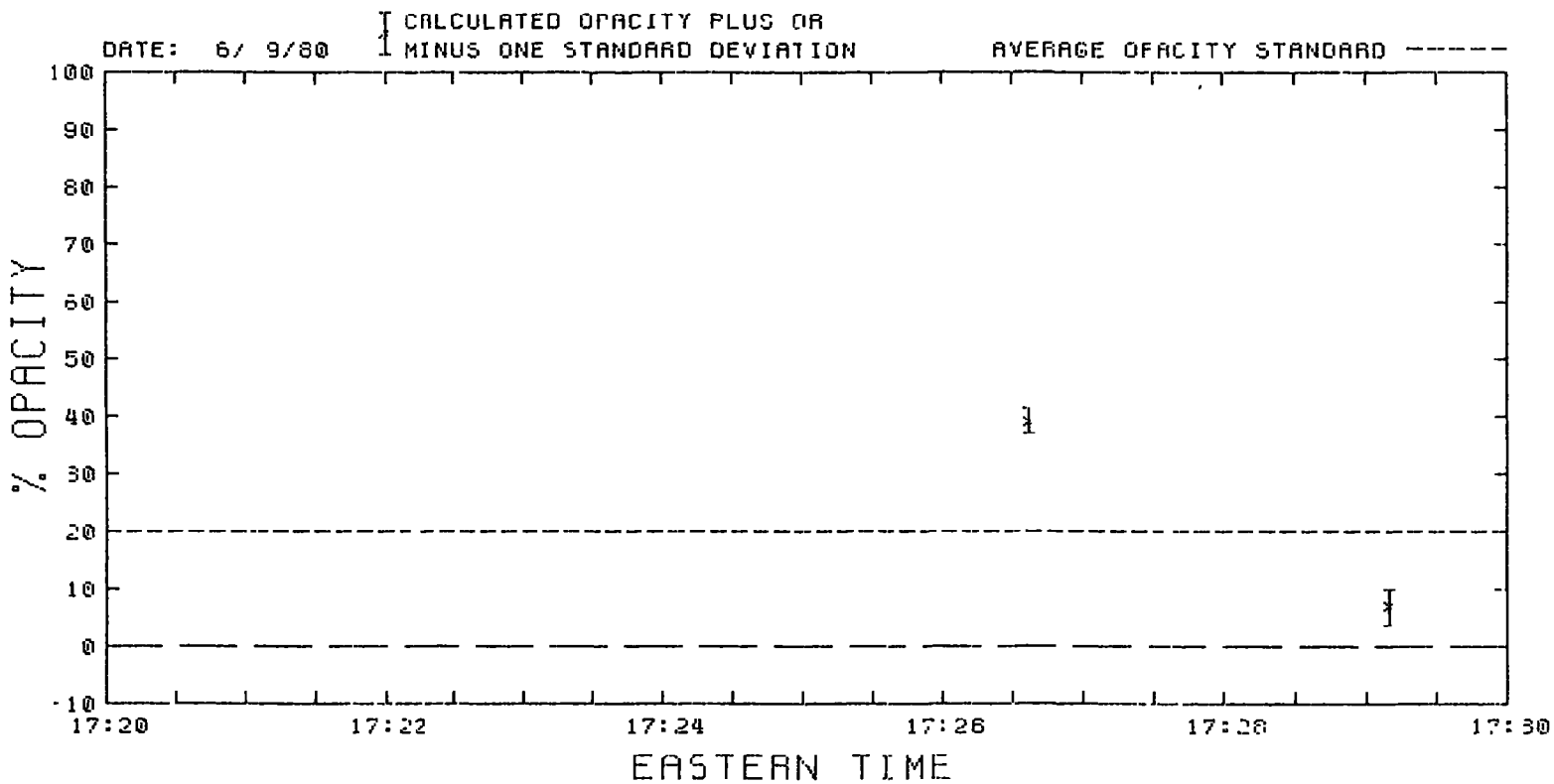
STACK 2

June 9, 1980, 17:26:37 to 17:35:44

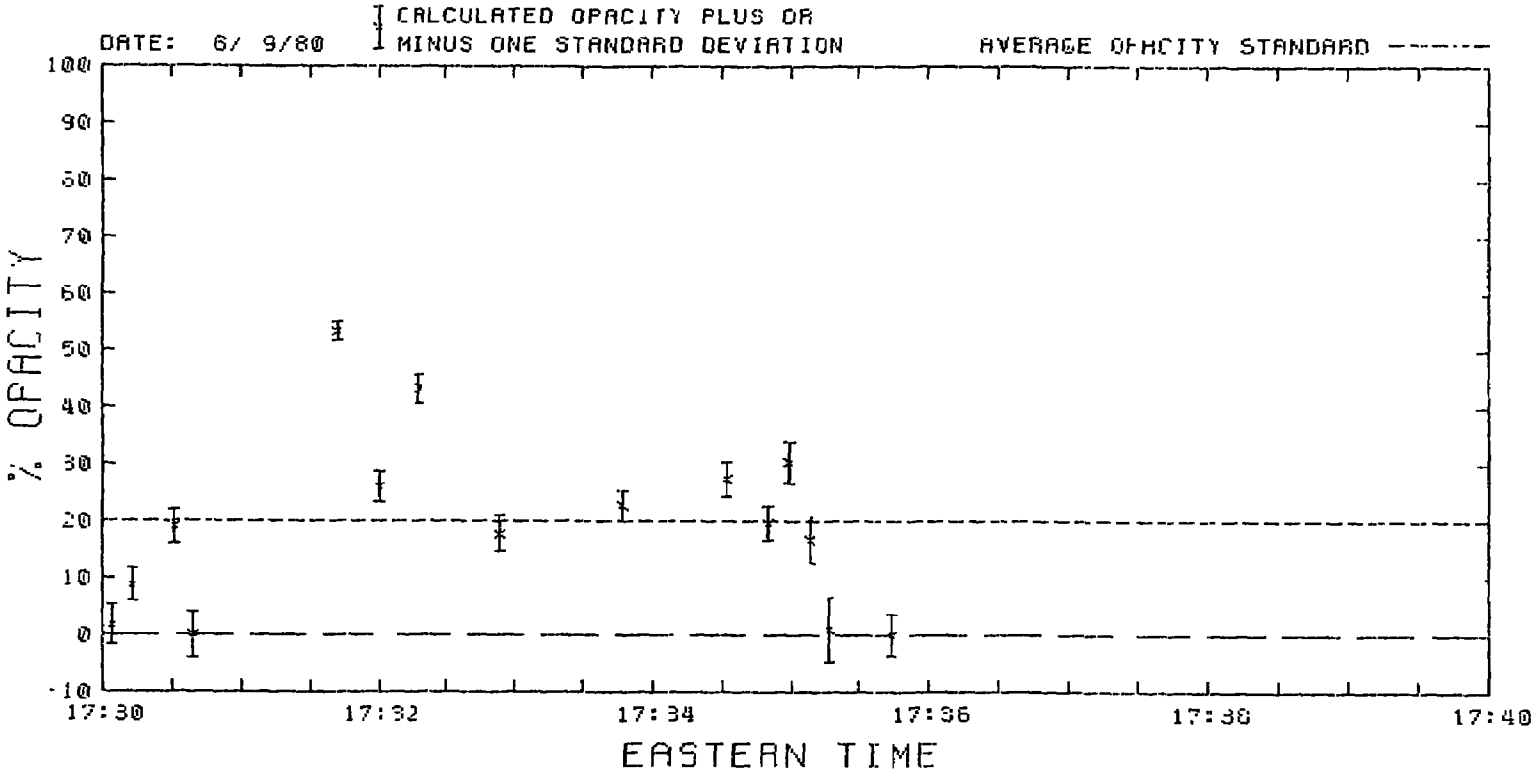
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
NATIONAL ENFORCEMENT INVESTIGATIONS CENTER
DENVER, COLORADO 80225

OMEGA-0053, STACK 2, C&SOE CONESVILLE STATION, CONESVILLE, OHIO FROM THE WEST SIX MINUTE AVERAGES

DATE	TIME	OPACITY	SO	VIOLATION	AVERAGE OPACITY	AVERAGE SO	VIOLATION	NUMBER DISCARDED
6/ 9/80	17 26 07	39	2		0	0		0 OF 0
6/ 9/80	17 29 10	7	3		0	0		0 OF 0
6/ 9/80	17 30 4	2	4		0	0		0 OF 0
6/ 9/80	17 30 13	9	3		0	0		0 OF 0
6/ 9/80	17 30 31	19	3		0	0		0 OF 0
6/ 9/80	17 30 39	0	4		0	0		0 OF 0
6/ 9/80	17 31.42	53	2		0	0		0 OF 0
6/ 9/80	17 32 0	26	3		0	0		0 OF 0
6/ 9/80	17 32 18	43	2		16	3		0 OF 9
6/ 9/80	17 32 54	18	3		0	0		0 OF 0
6/ 9/80	17 33 47	23	3		0	0		0 OF 0
6/ 9/80	17 34 32	27	3		0	0		0 OF 0
6/ 9/80	17 34 50	20	3		0	0		0 OF 0
6/ 9/80	17 34 59	30	4		17	3		0 OF 13
6/ 9/80	17 35 8	17	4		17	3		0 OF 14
6/ 9/80	17 35 17	1	6		0	0		0 OF 0
6/ 9/80	17 35 44	0	4		0	0		0 OF 0



STACK 2, CASOE CONESVILLE STATION, CONESVILLE, OH



STACK 2, C&SOE CONESVILLE STATION, CONESVILLE, OH

OMEGA-0055

COLUMBUS AND SOUTHERN OHIO ELECTRIC COMPANY

CONESVILLE STATION

STACK 2

June 10, 1980, 8:12:45 to 8:27:38

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
NATIONAL ENFORCEMENT INVESTIGATIONS CENTER
DENVER, COLORADO 80225

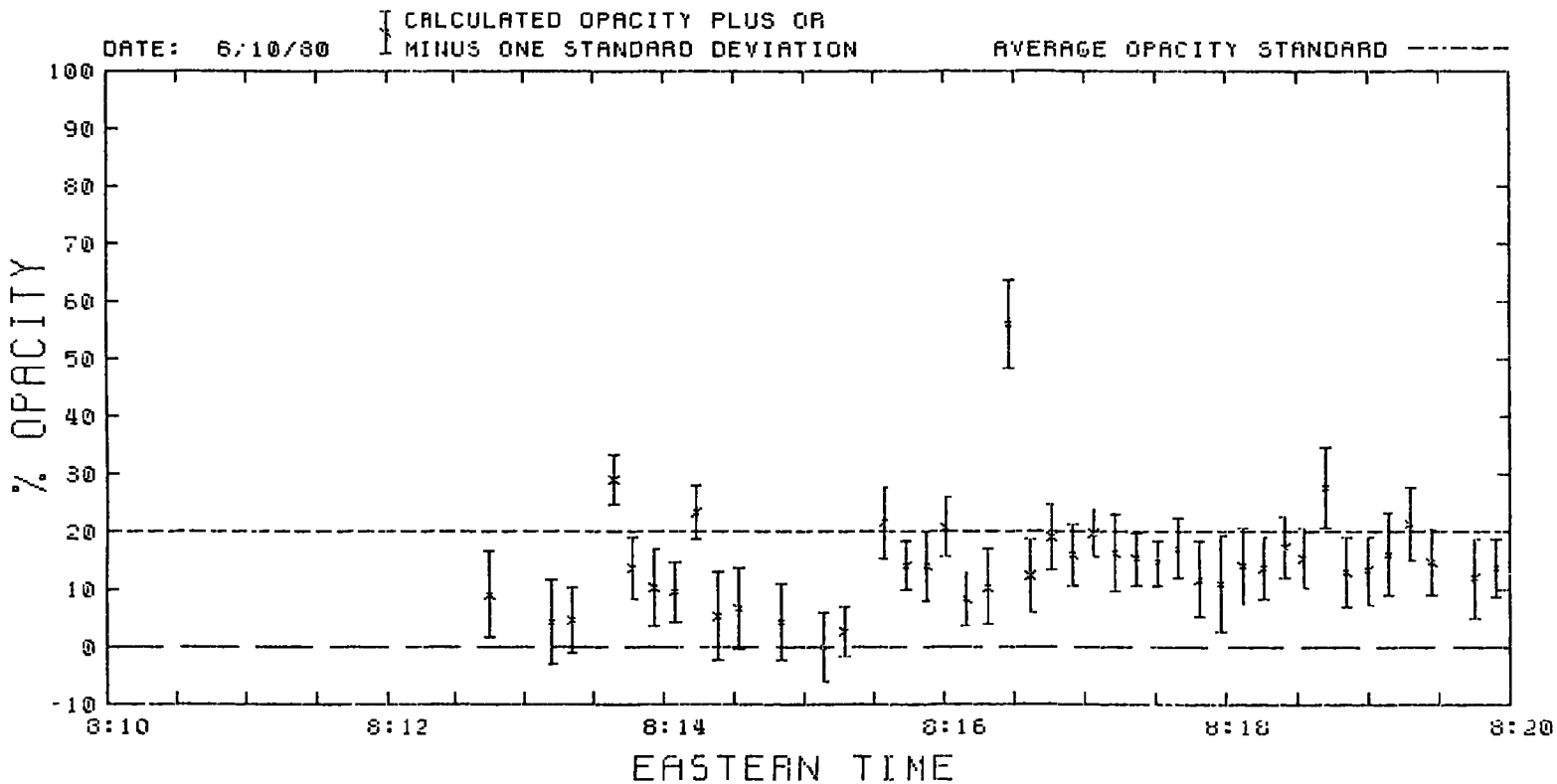
OMEGA-0055, STACK 2, C&SOE CONESVILLE STATION, CONESVILLE, OHIO FROM THE WEST SIX MINUTE AVERAGES

DATE	TIME	OPACITY	SO	VIOLATION	AVERAGE OPACITY	AVERAGE SO	VIOLATION	NUMBER DISCARDED
6/10/80	8 12 45	9	7		0	0		0 OF 0
6/10/80	8 13 12	4	7		0	0		0 OF 0
6/10/80	8 13 21	5	6		0	0		0 OF 0
6/10/80	8 13 39	29	4		0	0		0 OF 0
6/10/80	8 13 47	14	5		0	0		0 OF 0
6/10/80	8 13 56	10	7		0	0		0 OF 0
6/10/80	8 14 5	10	5		0	0		0 OF 0
6/10/80	8 14 14	23	5		0	0		0 OF 0
6/10/80	8 14 23	5	8		0	0		0 OF 0
6/10/80	8 14 32	7	7		0	0		0 OF 0
6/10/80	8 14 50	4	7		0	0		0 OF 0
6/10/80	8 15 8	0	6		0	0		0 OF 0
6/10/80	8 15 17	3	4		0	0		0 OF 0
6/10/80	8 15 35	22	6		0	0		0 OF 0
6/10/80	8 15 44	14	4		0	0		0 OF 0
6/10/80	8 15 53	14	6		0	0		0 OF 0
6/10/80	8 16 1	21	5		0	0		0 OF 0
6/10/80	8 16 10	8	5		0	0		0 OF 0
6/10/80	8 16 19	10	7		0	0		0 OF 0
6/10/80	8 16 28	56	8		0	0		0 OF 0
6/10/80	8 16 37	12	6		0	0		0 OF 0
6/10/80	8 16 46	19	6		0	0		0 OF 0
6/10/80	8 16 55	16	5		0	0		0 OF 0
6/10/80	8 17 4	20	4		0	0		0 OF 0
6/10/80	8 17 13	16	7		0	0		0 OF 0
6/10/80	8 17 22	15	5		0	0		0 OF 0
6/10/80	8 17 31	15	4		0	0		0 OF 0
6/10/80	8 17 40	17	5		0	0		0 OF 0
6/10/80	8 17 49	12	6		0	0		0 OF 0
6/10/80	8 17 58	11	8		0	0		0 OF 0
6/10/80	8 18 7	14	7		0	0		0 OF 0
6/10/80	8 18 16	14	5		0	0		0 OF 0
6/10/80	8 18 25	17	5		0	0		0 OF 0
6/10/80	8 18 33	15	5		14	6		0 OF 35
6/10/80	8 18 42	28	7		14	6		0 OF 36
6/10/80	8 18 51	13	6		0	0		0 OF 0
6/10/80	8 19 0	13	6		14	6		0 OF 37
6/10/80	8 19 9	16	7		14	6		0 OF 38
6/10/80	8 19 18	21	6		15	6		0 OF 38
6/10/80	8 19 27	15	6		15	6		0 OF 38
6/10/80	8 19 45	12	7		15	6		0 OF 38
6/10/80	8 19 54	14	5		15	6		0 OF 38
6/10/80	8 20 3	6	6		15	6		0 OF 38
6/10/80	8 20 12	20	5		15	6		0 OF 38
6/10/80	8 20 21	29	5		15	6		0 OF 38
6/10/80	8 20 30	12	7		15	6		0 OF 38
6/10/80	8 20 39	21	6		16	6		0 OF 38
6/10/80	8 20 47	19	6		16	6		0 OF 38
6/10/80	8 20 56	31	4		17	6		0 OF 38
6/10/80	8 21 5	19	4		17	6		0 OF 39

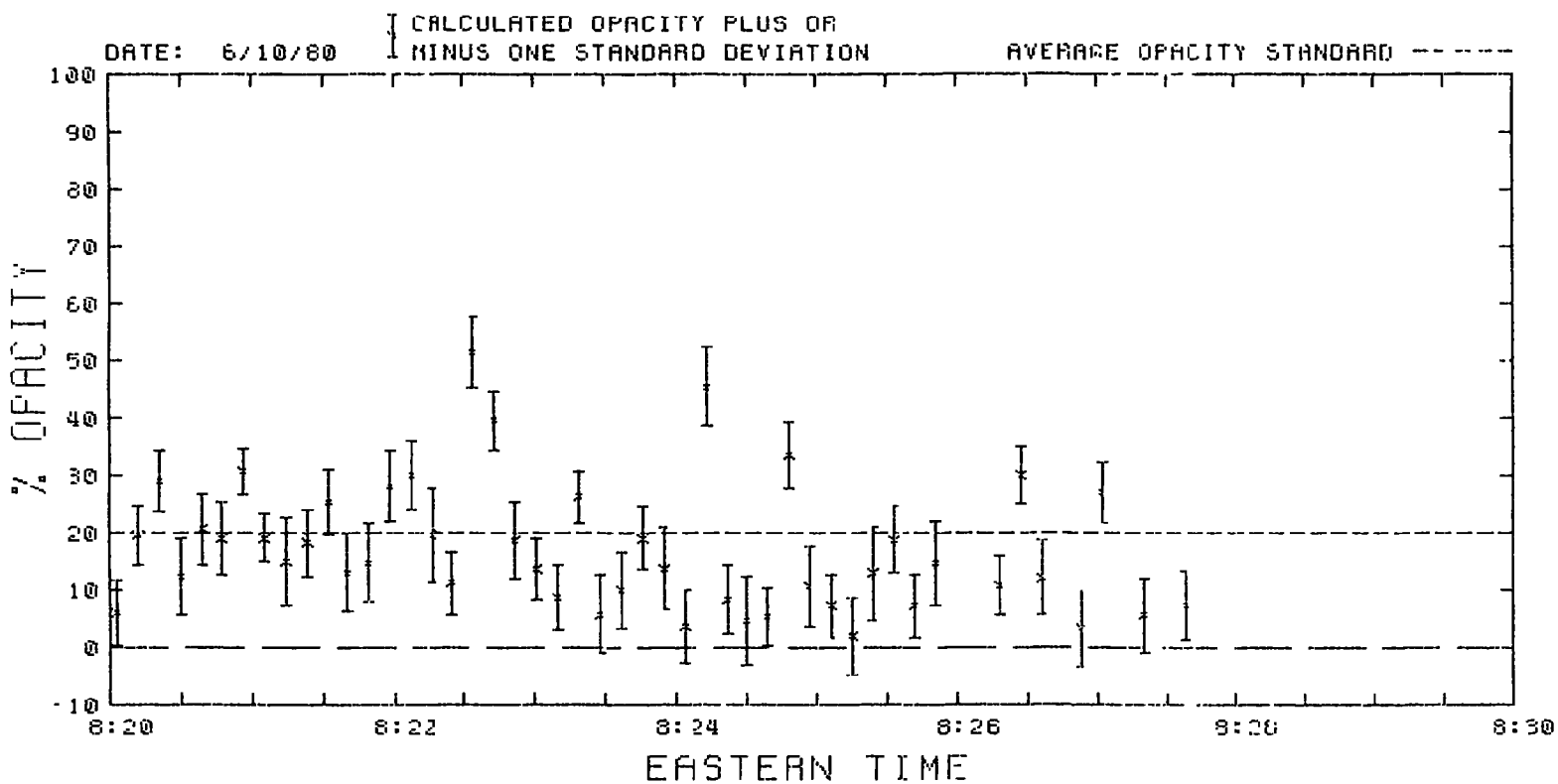
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
NATIONAL ENFORCEMENT INVESTIGATIONS CENTER
DENVER, COLORADO 80225

OMEGA-0055, STACK 2, C&SOE CONESVILLE STATION, CONESVILLE, OHIO FROM THE WEST SIX MINUTE AVERAGES

DATE	TIME	OPACITY	SO	VIOLATION	AVERAGE OPACITY	AVERAGE SO	VIOLATION	NUMBER DISCARDED
6/10/80	8 21 14	15	8		17	6		0 OF 39
6/10/80	8 21 23	18	6		17	6		0 OF 39
6/10/80	8 21 32	25	6		18	6		0 OF 40
6/10/80	8 21 40	13	7		17	6		0 OF 40
6/10/80	8 21 49	15	7		17	6		0 OF 40
6/10/80	8 21 58	26	6		18	6		0 OF 40
6/10/80	8 22 7	30	6		18	6		0 OF 40
6/10/80	8 22 16	20	8		18	6		0 OF 40
6/10/80	8 22 25	11	6		18	6		0 OF 40
6/10/80	8 22 34	51	6		18	6		0 OF 40
6/10/80	8 22 43	40	5		19	6		0 OF 40
6/10/80	8 22 52	19	7		19	6		0 OF 40
6/10/80	8 23 1	14	5		19	6		0 OF 40
6/10/80	8 23 10	9	6		19	6		0 OF 40
6/10/80	8 23 19	26	5		19	6		0 OF 40
6/10/80	8 23 28	6	7		19	6		0 OF 40
6/10/80	8 23 37	10	7		18	6		0 OF 40
6/10/80	8 23 46	19	6		19	6		0 OF 40
6/10/80	8 23 55	14	7		19	6		0 OF 40
6/10/80	8 24 4	4	6		18	6		0 OF 40
6/10/80	8 24 13	45	7		19	6		0 OF 40
6/10/80	8 24 22	8	6		19	6		0 OF 40
6/10/80	8 24 30	5	8		19	6		0 OF 40
6/10/80	8 24 39	5	5		18	6		0 OF 40
6/10/80	8 24 48	34	6		19	6		0 OF 40
6/10/80	8 24 57	11	7		19	6		0 OF 40
6/10/80	8 25 6	7	6		18	6		0 OF 40
6/10/80	8 25 15	2	7		18	6		0 OF 40
6/10/80	8 25 24	13	8		18	6		0 OF 40
6/10/80	8 25 33	19	6		18	6		0 OF 40
6/10/80	8 25 42	7	5		18	6		0 OF 41
6/10/80	8 25 51	15	7		18	6		0 OF 41
6/10/80	8 26 18	11	5		18	6		1 OF 41
6/10/80	8 26 27	30	5		18	6		1 OF 41
6/10/80	8 26 36	12	7		18	6		1 OF 41
6/10/80	8 26 53	3	7		17	6		1 OF 40
6/10/80	8 27 2	27	5		17	6		1 OF 40
6/10/80	8 27 20	6	7		17	6		1 OF 39
6/10/80	8 27 38	7	6		16	6		1 OF 38



STACK 2, C&SOE CONESVILLE STATION, CONESVILLE, OH



STACK 2, C&SOE CONESVILLE STATION, CONESVILLE, OH

OMEGA-0056

COLUMBUS AND SOUTHERN OHIO ELECTRIC COMPANY

CONESVILLE STATION

STACK 1

June 10, 1980, 8:56:29 to 9:11:09

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
NATIONAL ENFORCEMENT INVESTIGATIONS CENTER
DENVER, COLORADO 80225

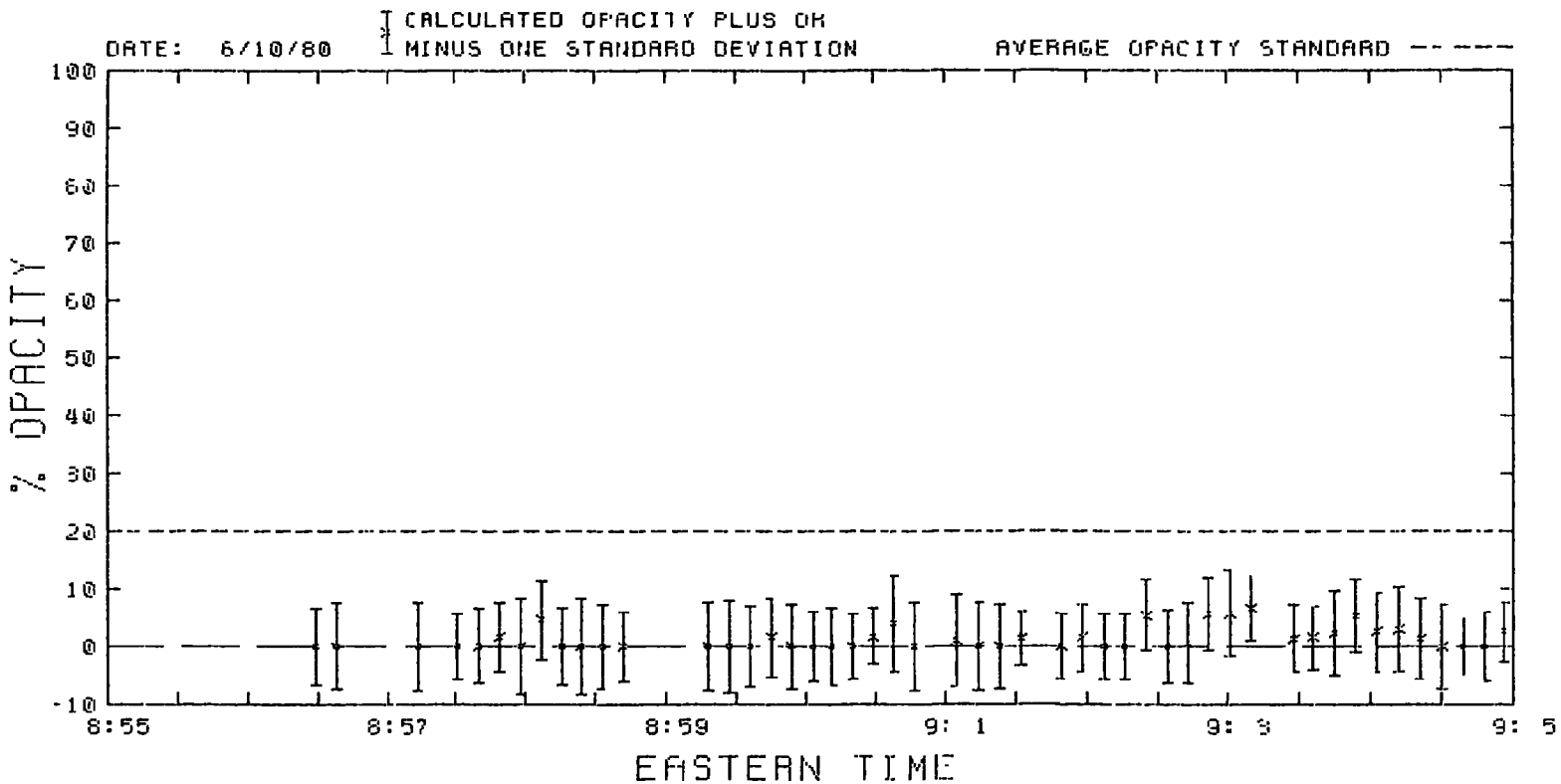
OMEGA-0056, STACK 1, C&SOE CONESVILLE STATION, CONESVILLE, OHIO FROM THE WEST SIX MINUTE AVERAGES

DATE	TIME	OPACITY	SO	VIOLATION	AVERAGE OPACITY	AVERAGE SO	VIOLATION	NUMBER DISCARDED
6/10/80	8 56 29	0	7		0	0		0 OF 0
6/10/80	8 56 38	0	7		0	0		0 OF 0
6/10/80	8 57 13	0	8		0	0		0 OF 0
6/10/80	8 57 31	0	6		0	0		0 OF 0
6/10/80	8 57 40	0	7		0	0		0 OF 0
6/10/80	8 57 49	2	6		0	0		0 OF 0
6/10/80	8 57 58	0	8		0	0		0 OF 0
6/10/80	8 58 7	5	7		0	0		0 OF 0
6/10/80	8 58 16	0	7		0	0		0 OF 0
6/10/80	8 58 24	0	8		0	0		0 OF 0
6/10/80	8 58 33	0	7		0	0		0 OF 0
6/10/80	8 58 42	0	6		0	0		0 OF 0
6/10/80	8 59 18	0	8		0	0		0 OF 0
6/10/80	8 59 27	0	8		0	0		0 OF 0
6/10/80	8 59 36	0	7		0	0		0 OF 0
6/10/80	8 59 45	2	7		0	0		0 OF 0
6/10/80	8 59 54	0	7		0	0		0 OF 0
6/10/80	9 0 3	0	6		0	0		0 OF 0
6/10/80	9 0 11	0	7		0	0		0 OF 0
6/10/80	9 0 20	0	6		0	0		0 OF 0
6/10/80	9 0 29	2	5		0	0		0 OF 0
6/10/80	9 0 38	4	8		0	0		0 OF 0
6/10/80	9 0 47	0	8		0	0		0 OF 0
6/10/80	9 1 5	1	8		0	0		0 OF 0
6/10/80	9 1 14	0	8		0	0		0 OF 0
6/10/80	9 1 23	0	7		0	0		0 OF 0
6/10/80	9 1 32	1	5		0	0		0 OF 0
6/10/80	9 1 49	0	6		0	0		0 OF 0
6/10/80	9 1 58	2	6		0	0		0 OF 0
6/10/80	9 2 7	0	6		0	0		0 OF 0
6/10/80	9 2 16	0	6		0	7		1 OF 32
6/10/80	9 2 25	5	6		0	7		1 OF 33
6/10/80	9 2 34	0	6		0	7		1 OF 33
6/10/80	9 2 43	0	7		0	0		0 OF 0
6/10/80	9 2 52	6	6		0	0		0 OF 0
6/10/80	9 3 1	6	7		0	7		1 OF 35
6/10/80	9 3 10	7	6		0	7		1 OF 36
6/10/80	9 3 28	1	6		0	7		0 OF 35
6/10/80	9 3 36	2	6		0	7		0 OF 35
6/10/80	9 3 45	2	7		0	7		0 OF 35
6/10/80	9 3 54	5	6		0	7		0 OF 35
6/10/80	9 4 3	2	7		0	7		0 OF 35
6/10/80	9 4 12	3	7		0	7		0 OF 35
6/10/80	9 4 21	1	7		0	7		0 OF 35
6/10/80	9 4 30	0	7		0	7		0 OF 35
6/10/80	9 4 39	0	5		0	7		0 OF 35
6/10/80	9 4 48	0	6		0	0		0 OF 0
6/10/80	9 4 56	2	5		0	0		0 OF 0
6/10/80	9 5 5	0	6		0	7		0 OF 37
6/10/80	9 5 14	1	5		0	7		0 OF 38

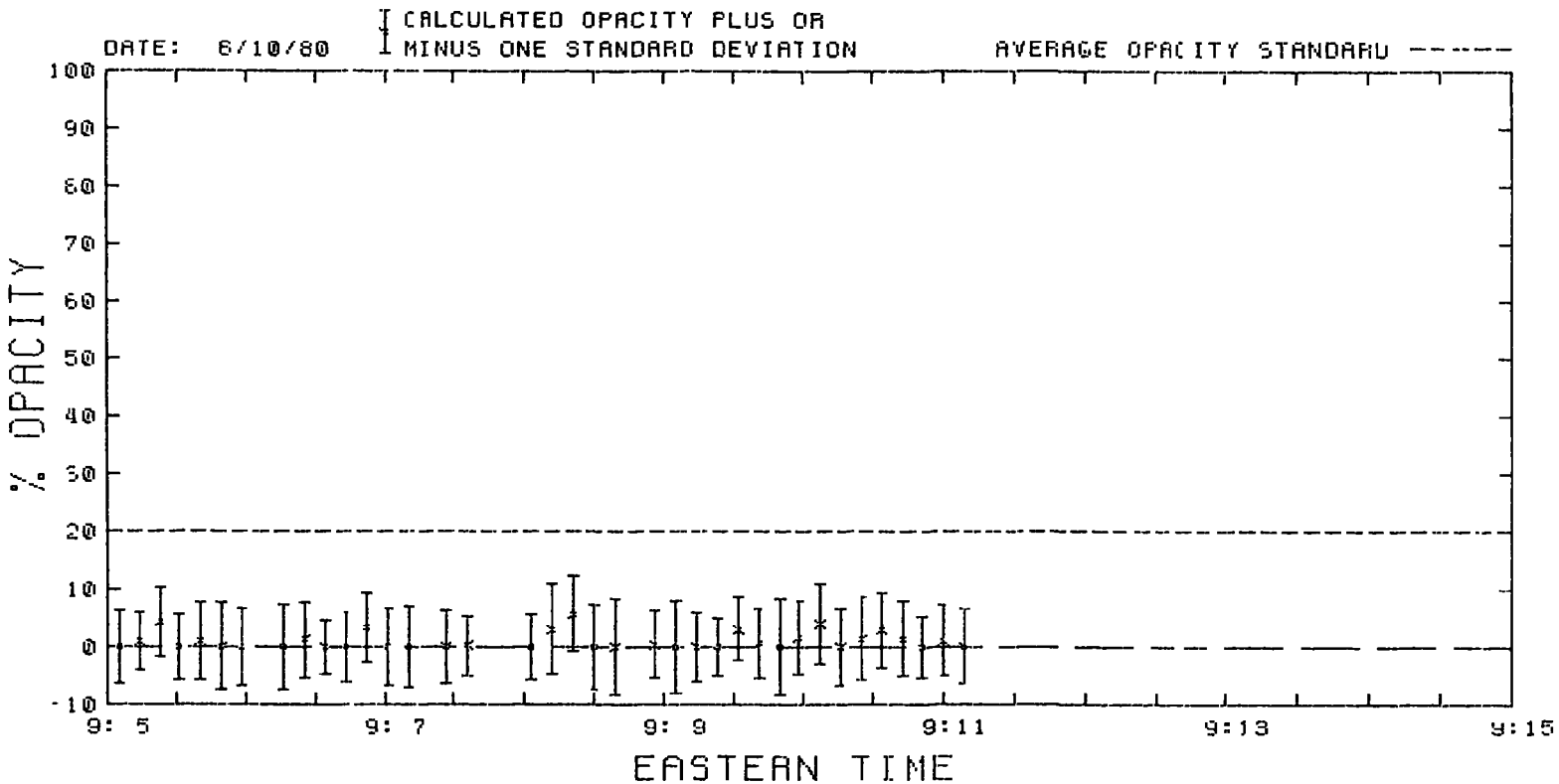
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
NATIONAL ENFORCEMENT INVESTIGATIONS CENTER
DENVER, COLORADO 80225

OMEGA-0056, STACK 1, C&SOE CONESVILLE STATION, CONESVILLE, OHIO FROM THE WEST SIX MINUTE AVERAGES

DATE	TIME	OPACITY	SO	VIOLATION	AVERAGE OPACITY	AVERAGE SO	VIOLATION	NUMBER DISCARDED
6/10/80	9 5 23	4	6		0	6		0 OF 38
6/10/80	9 5 31	0	6		0	6		0 OF 38
6/10/80	9 5 40	1	7		0	6		0 OF 38
6/10/80	9 5 49	0	8		0	6		0 OF 38
6/10/80	9 5 58	0	7		0	6		0 OF 38
6/10/80	9 6 16	0	7		0	6		0 OF 37
6/10/80	9 6 25	1	7		0	6		0 OF 37
6/10/80	9 6 34	0	5		0	6		0 OF 37
6/10/80	9 6 43	0	6		0	6		0 OF 37
6/10/80	9 6 52	3	6		0	6		0 OF 37
6/10/80	9 7 1	0	7		0	6		0 OF 38
6/10/80	9 7 10	0	7		0	6		0 OF 38
6/10/80	9 7 27	0	6		0	6		0 OF 37
6/10/80	9 7 36	0	5		0	6		0 OF 37
6/10/80	9 8 3	0	6		0	6		0 OF 36
6/10/80	9 8 12	3	8		0	6		0 OF 36
6/10/80	9 8 21	6	7		1	6		0 OF 36
6/10/80	9 8 30	0	7		0	6		0 OF 36
6/10/80	9 8 39	0	8		0	6		0 OF 36
6/10/80	9 8 56	0	6		0	6		0 OF 35
6/10/80	9 9 5	0	8		0	6		0 OF 35
6/10/80	9 9 14	0	6		0	6		0 OF 35
6/10/80	9 9 23	0	5		0	6		0 OF 36
6/10/80	9 9 32	3	5		0	6		0 OF 36
6/10/80	9 9 41	1	6		0	6		0 OF 36
6/10/80	9 9 50	0	8		0	6		0 OF 36
6/10/80	9 9 58	2	6		0	6		0 OF 36
6/10/80	9 10 7	4	7		0	6		0 OF 36
6/10/80	9 10 16	0	7		0	6		0 OF 36
6/10/80	9 10 25	1	7		0	6		0 OF 36
6/10/80	9 10 34	3	7		0	6		0 OF 36
6/10/80	9 10 43	1	7		0	6		0 OF 36
6/10/80	9 10 51	0	5		0	6		0 OF 36
6/10/80	9 11 0	1	6		0	6		0 OF 36
6/10/80	9 11 9	0	7		0	6		0 OF 36



STACK 1, C&SOE CONESVILLE STATION, CONESVILLE, OH



STACK 1. C&SOE CONESVILLE STATION, CONESVILLE, OH

OMEGA-0057

COLUMBUS AND SOUTHERN OHIO ELECTRIC COMPANY

CONESVILLE STATION

STACK 2

June 10, 1980, 16:09:28 to 16:38:03

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
NATIONAL ENFORCEMENT INVESTIGATIONS CENTER
DENVER, COLORADO 80225

OMEGA-0057, STACK 2, C&SOE CONESVILLE STATION, CONESVILLE, OHIO FROM THE NORTH SIX MINUTE AVERAGES

DATE	TIME	OPACITY	SO	VIOLATION	AVERAGE OPACITY	AVERAGE SO	VIOLATION	NUMBER DISCARDED
6/10/80	16 9 28	53	7		0	0		0 OF 0
6/10/80	16 9 37	57	5		0	0		0 OF 0
6/10/80	16 9 46	62	2		0	0		0 OF 0
6/10/80	16 9 54	62	2		0	0		0 OF 0
6/10/80	16 10 3	63	4		0	0		0 OF 0
6/10/80	16 10 12	68	2		0	0		0 OF 0
6/10/80	16 10 21	65	3		0	0		0 OF 0
6/10/80	16 10 30	67	3		0	0		0 OF 0
6/10/80	16 10 38	62	2		0	0		0 OF 0
6/10/80	16 10 47	62	3		0	0		0 OF 0
6/10/80	16 10 56	67	4		0	0		0 OF 0
6/10/80	16 11 5	69	5		0	0		0 OF 0
6/10/80	16 11 14	73	3		0	0		0 OF 0
6/10/80	16 11 23	72	5		0	0		0 OF 0
6/10/80	16 11 32	74	3		0	0		0 OF 0
6/10/80	16 11 41	75	4		0	0		0 OF 0
6/10/80	16 11 50	76	4		0	0		0 OF 0
6/10/80	16 11 59	69	3		0	0		0 OF 0
6/10/80	16 12 7	65	6		0	0		0 OF 0
6/10/80	16 12 16	65	4		0	0		0 OF 0
6/10/80	16 12 25	69	5		0	0		0 OF 0
6/10/80	16 12 34	64	2		0	0		0 OF 0
6/10/80	16 12 43	67	4		0	0		0 OF 0
6/10/80	16 12 52	65	4		0	0		0 OF 0
6/10/80	16 13 1	68	3		0	0		0 OF 0
6/10/80	16 13 10	61	5		0	0		0 OF 0
6/10/80	16 13 19	66	4		0	0		0 OF 0
6/10/80	16 13 28	58	3		0	0		0 OF 0
6/10/80	16 13 37	70	4		0	0		0 OF 0
6/10/80	16 13 46	64	2		0	0		0 OF 0
6/10/80	16 13 55	76	2		0	0		0 OF 0
6/10/80	16 14 4	74	4		0	0		0 OF 0
6/10/80	16 14 13	71	4		0	0		0 OF 0
6/10/80	16 14 22	73	2		0	0		0 OF 0
6/10/80	16 14 31	71	2		0	0		0 OF 0
6/10/80	16 14 40	71	3		0	0		0 OF 0
6/10/80	16 14 49	61	3		0	0		0 OF 0
6/10/80	16 14 58	63	3		0	0		0 OF 0
6/10/80	16 15 7	62	4		0	0		0 OF 0
6/10/80	16 15 16	59	3		66	3	****	0 OF 40
6/10/80	16 15 25	66	5		66	3	****	0 OF 41
6/10/80	16 15 34	62	2		67	3	****	0 OF 41
6/10/80	16 15 43	70	2		67	3	****	0 OF 41
6/10/80	16 15 52	67	2		67	3	****	0 OF 41
6/10/80	16 16 1	64	4		67	3	****	0 OF 41
6/10/80	16 16 10	68	3		67	3	****	0 OF 41
6/10/80	16 16 19	60	4		67	3	****	0 OF 41
6/10/80	16 16 28	58	2		67	3	****	0 OF 41
6/10/80	16 16 37	62	3		67	3	****	0 OF 41
6/10/80	16 16 45	59	3		67	3	****	0 OF 41

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
NATIONAL ENFORCEMENT INVESTIGATIONS CENTER
DENVER, COLORADO 80225

OMEGA-0057, STACK 2, C&SOE CONESVILLE STATION, CONESVILLE, OHIO FROM THE NORTH SIX MINUTE AVERAGES

DATE	TIME	OPACITY	SO	VIOLATION	AVERAGE OPACITY	AVERAGE SO	VIOLATION	NUMBER DISCARDED
6/10/80	16 16 54	67	4		67	3	****	0 OF 41
6/10/80	16 17 3	68	3		67	3	****	0 OF 41
6/10/80	16 17 12	75	5		67	3	****	0 OF 41
6/10/80	16 17 21	73	7		67	3	****	0 OF 41
6/10/80	16 17 30	70	2		67	3	****	0 OF 41
6/10/80	16 17 39	72	4		67	3	****	0 OF 41
6/10/80	16 17 48	62	3		67	3	****	0 OF 41
6/10/80	16 17 57	65	3		66	3	****	0 OF 41
6/10/80	16 18 6	71	4		66	3	****	0 OF 41
6/10/80	16 18 15	69	4		66	3	****	0 OF 41
6/10/80	16 18 24	63	2		66	3	****	0 OF 41
6/10/80	16 18 33	60	4		66	3	****	0 OF 41
6/10/80	16 18 42	50	4		66	3	****	0 OF 41
6/10/80	16 18 51	57	4		66	3	****	0 OF 41
6/10/80	16 19 0	69	5		66	3	****	0 OF 41
6/10/80	16 19 9	62	3		66	3	****	0 OF 41
6/10/80	16 19 18	62	5		66	3	****	0 OF 41
6/10/80	16 19 27	58	2		65	3	****	0 OF 41
6/10/80	16 19 36	55	3		65	3	****	0 OF 41
6/10/80	16 19 45	68	2		65	3	****	0 OF 41
6/10/80	16 19 54	73	2		66	3	****	0 OF 41
6/10/80	16 20 3	72	2		65	3	****	0 OF 41
6/10/80	16 20 12	67	5		65	3	****	0 OF 41
6/10/80	16 20 21	69	5		65	3	****	0 OF 41
6/10/80	16 20 30	71	5		65	3	****	0 OF 41
6/10/80	16 20 39	73	1		65	3	****	0 OF 41
6/10/80	16 20 48	70	2		65	3	****	0 OF 41
6/10/80	16 20 57	60	3		65	3	****	0 OF 41
6/10/80	16 21 6	58	2		65	3	****	0 OF 41
6/10/80	16 21 15	56	4		65	3	****	0 OF 41
6/10/80	16 21 24	63	3		65	3	****	0 OF 41
6/10/80	16 21 33	65	4		65	3	****	0 OF 41
6/10/80	16 21 42	55	3		65	3	****	0 OF 41
6/10/80	16 21 51	56	3		65	3	****	0 OF 41
6/10/80	16 22 0	57	3		64	3	****	0 OF 41
6/10/80	16 22 9	60	2		64	3	****	0 OF 41
6/10/80	16 22 18	50	2		64	3	****	0 OF 41
6/10/80	16 22 27	61	5		64	3	****	0 OF 41
6/10/80	16 22 44	65	3		64	3	****	0 OF 40
6/10/80	16 22 53	67	3		64	3	****	0 OF 40
6/10/80	16 23 2	66	3		64	3	****	0 OF 40
6/10/80	16 23 11	63	4		64	3	****	0 OF 40
6/10/80	16 23 29	74	2		64	3	****	0 OF 39
6/10/80	16 23 38	72	4		64	3	****	0 OF 39
6/10/80	16 23 47	75	3		64	3	****	0 OF 39
6/10/80	16 23 56	68	2		64	3	****	0 OF 39
6/10/80	16 24 5	69	2		64	3	****	0 OF 39
6/10/80	16 24 23	57	3		64	3	****	0 OF 38
6/10/80	16 24 32	59	5		64	3	****	0 OF 38
6/10/80	16 24 41	58	4		64	3	****	0 OF 38

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
NATIONAL ENFORCEMENT INVESTIGATIONS CENTER
DENVER, COLORADO 80225

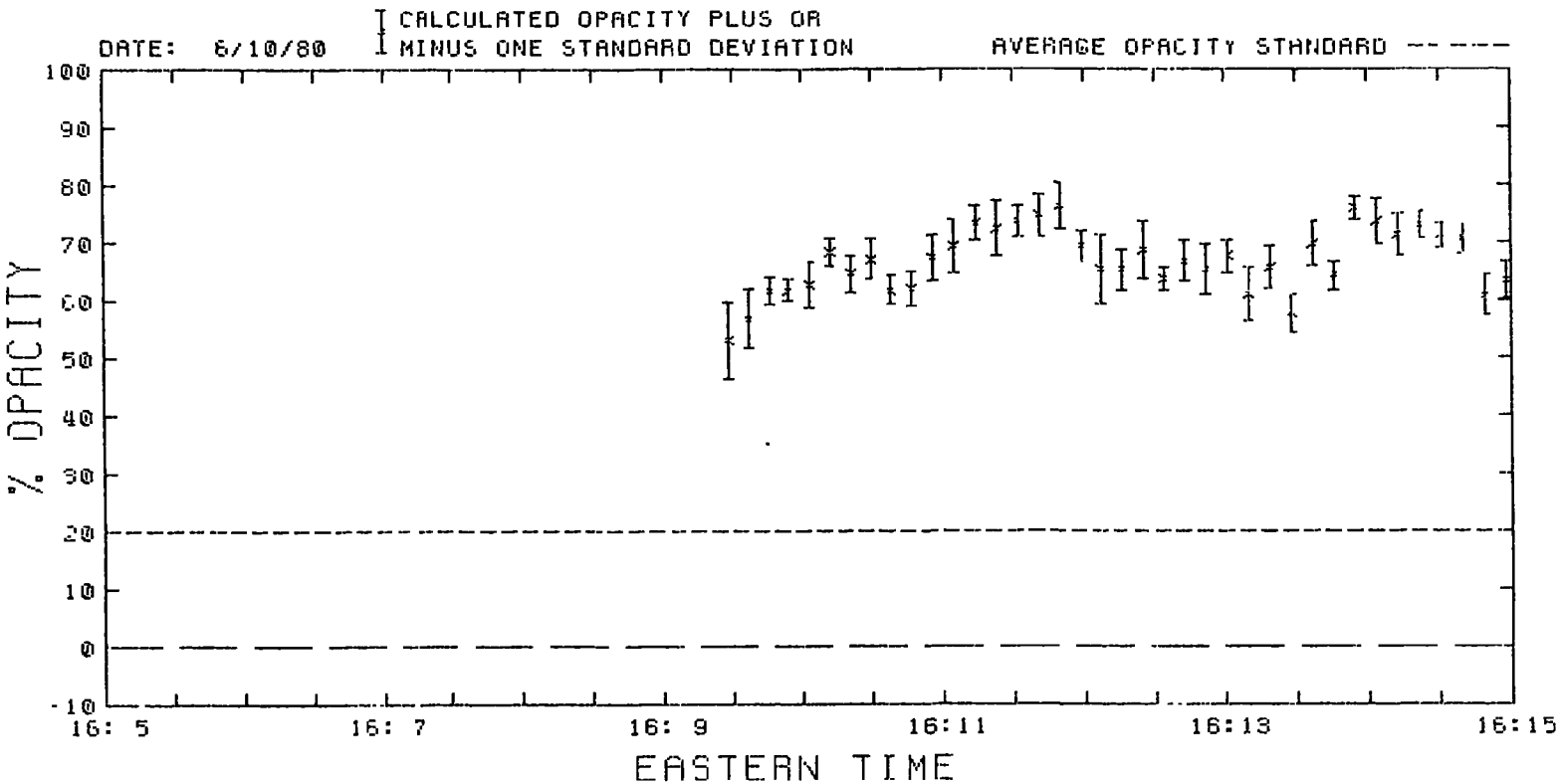
OMEGA-0057, STACK 2, C&SOE CONESVILLE STATION, CONESVILLE, OHIO FROM THE NORTH SIX MINUTE AVERAGES

DATE	TIME	OPACITY	SO	VIOLATION	AVERAGE OPACITY	AVERAGE SO	VIOLATION	NUMBER DISCARDED
6/10/80	16 24 59	57	4		64	3	****	0 OF 37
6/10/80	16 25 8	51	4		63	3	****	0 OF 37
6/10/80	16 25 17	58	4		63	3	****	0 OF 37
6/10/80	16 25 26	50	5		63	3	****	0 OF 37
6/10/80	16 25 35	58	4		63	3	****	0 OF 37
6/10/80	16 25 44	63	4		63	3	****	0 OF 37
6/10/80	16 25 53	71	4		63	3	****	0 OF 37
6/10/80	16 26 2	65	6		63	3	****	0 OF 37
6/10/80	16 26 11	71	5		63	3	****	0 OF 37
6/10/80	16 26 20	76	5		63	3	****	0 OF 37
6/10/80	16 26 29	70	3		63	3	****	0 OF 37
6/10/80	16 26 38	76	2		63	3	****	0 OF 37
6/10/80	16 26 47	73	5		63	3	****	0 OF 37
6/10/80	16 26 56	74	2		64	3	****	0 OF 37
6/10/80	16 27 5	64	3		64	3	****	0 OF 37
6/10/80	16 27 14	57	3		64	3	****	0 OF 37
6/10/80	16 27 23	52	4		63	3	****	0 OF 37
6/10/80	16 27 32	34	4		63	3	****	0 OF 37
6/10/80	16 27 41	50	5		62	3	****	0 OF 37
6/10/80	16 27 50	53	3		62	3	****	0 OF 37
6/10/80	16 27 58	58	3		62	3	****	0 OF 37
6/10/80	16 28 7	52	3		62	3	****	0 OF 37
6/10/80	16 28 16	61	3		62	3	****	0 OF 37
6/10/80	16 28 25	54	2		62	3	****	0 OF 37
6/10/80	16 28 34	62	4		62	3	****	0 OF 37
6/10/80	16 28 43	54	4		62	3	****	0 OF 38
6/10/80	16 28 52	37	4		61	4	****	0 OF 38
6/10/80	16 29 1	61	3		61	4	****	0 OF 38
6/10/80	16 29 10	62	6		61	4	****	0 OF 38
6/10/80	16 29 37	70	7		61	4	****	0 OF 37
6/10/80	16 29 46	64	4		61	4	****	0 OF 37
6/10/80	16 29 55	68	5		61	4	****	0 OF 37
6/10/80	16 30 4	69	7		61	4	****	0 OF 37
6/10/80	16 30 13	68	4		61	4	****	0 OF 37
6/10/80	16 30 22	62	3		61	4	****	0 OF 38
6/10/80	16 30 31	56	6		61	4	****	0 OF 38
6/10/80	16 30 39	64	8		61	4	****	0 OF 38
6/10/80	16 30 48	59	4		61	4	****	0 OF 38
6/10/80	16 30 57	60	3		61	4	****	0 OF 39
6/10/80	16 31 6	57	4		61	4	****	0 OF 39
6/10/80	16 31 14	54	4		61	4	****	0 OF 39
6/10/80	16 31 23	54	5		61	4	****	0 OF 39
6/10/80	16 31 32	56	5		61	4	****	0 OF 39
6/10/80	16 31 41	56	4		61	4	****	0 OF 39
6/10/80	16 31.50	69	4		61	4	****	0 OF 39
6/10/80	16 31 59	70	2		61	4	****	0 OF 39
6/10/80	16 32 8	64	5		61	4	****	0 OF 39
6/10/80	16 32 17	71	4		61	4	****	0 OF 39
6/10/80	16 32 26	72	7		61	4	****	0 OF 39
6/10/80	16 32 35	72	6		61	4	****	0 OF 39

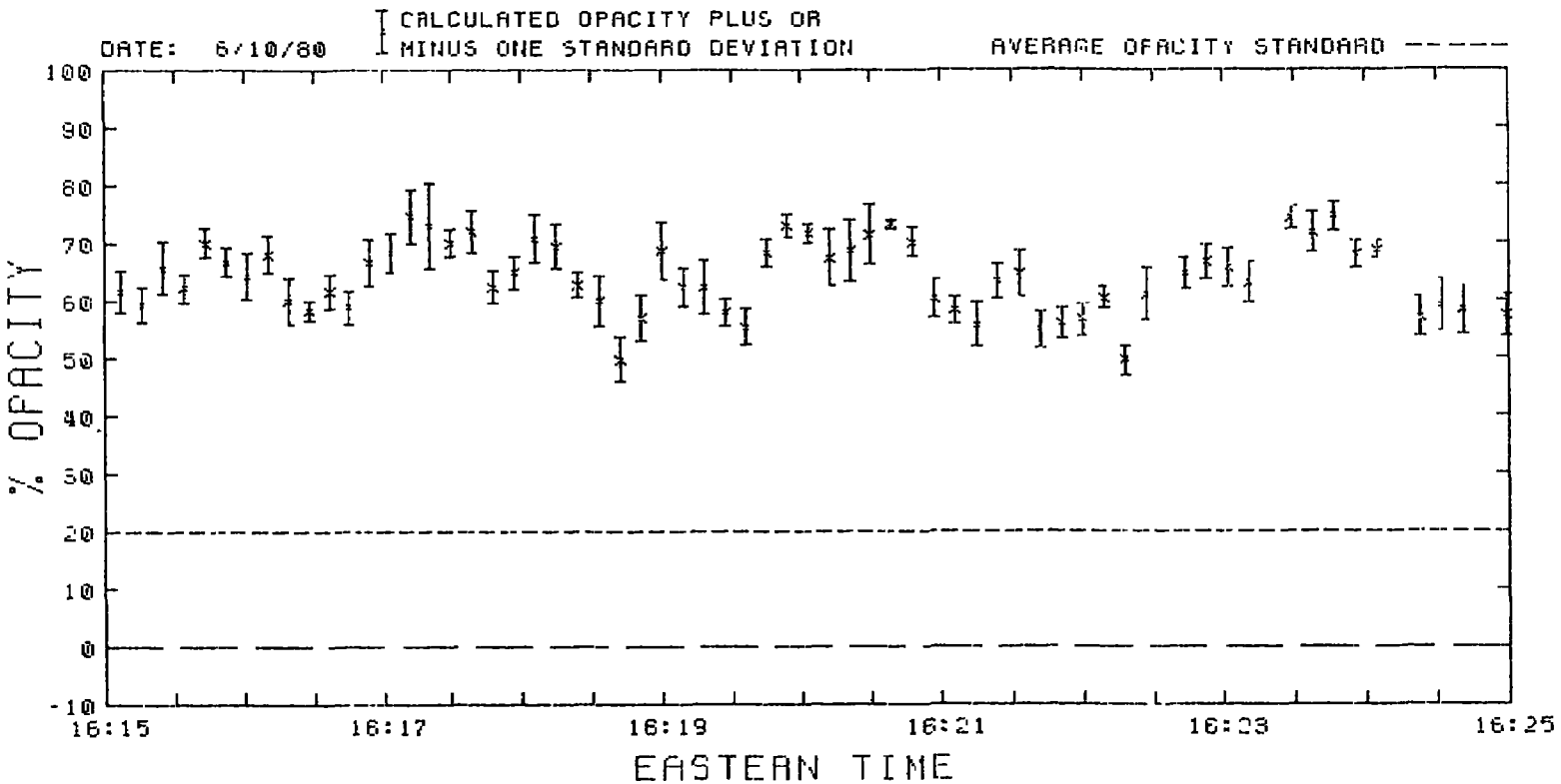
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
NATIONAL ENFORCEMENT INVESTIGATIONS CENTER
DENVER, COLORADO 80225

OMEGA-C057, STACK 2, C&SOE CONESVILLE STATION, CONESVILLE, OHIO FROM THE NORTH SIX MINUTE AVERAGES

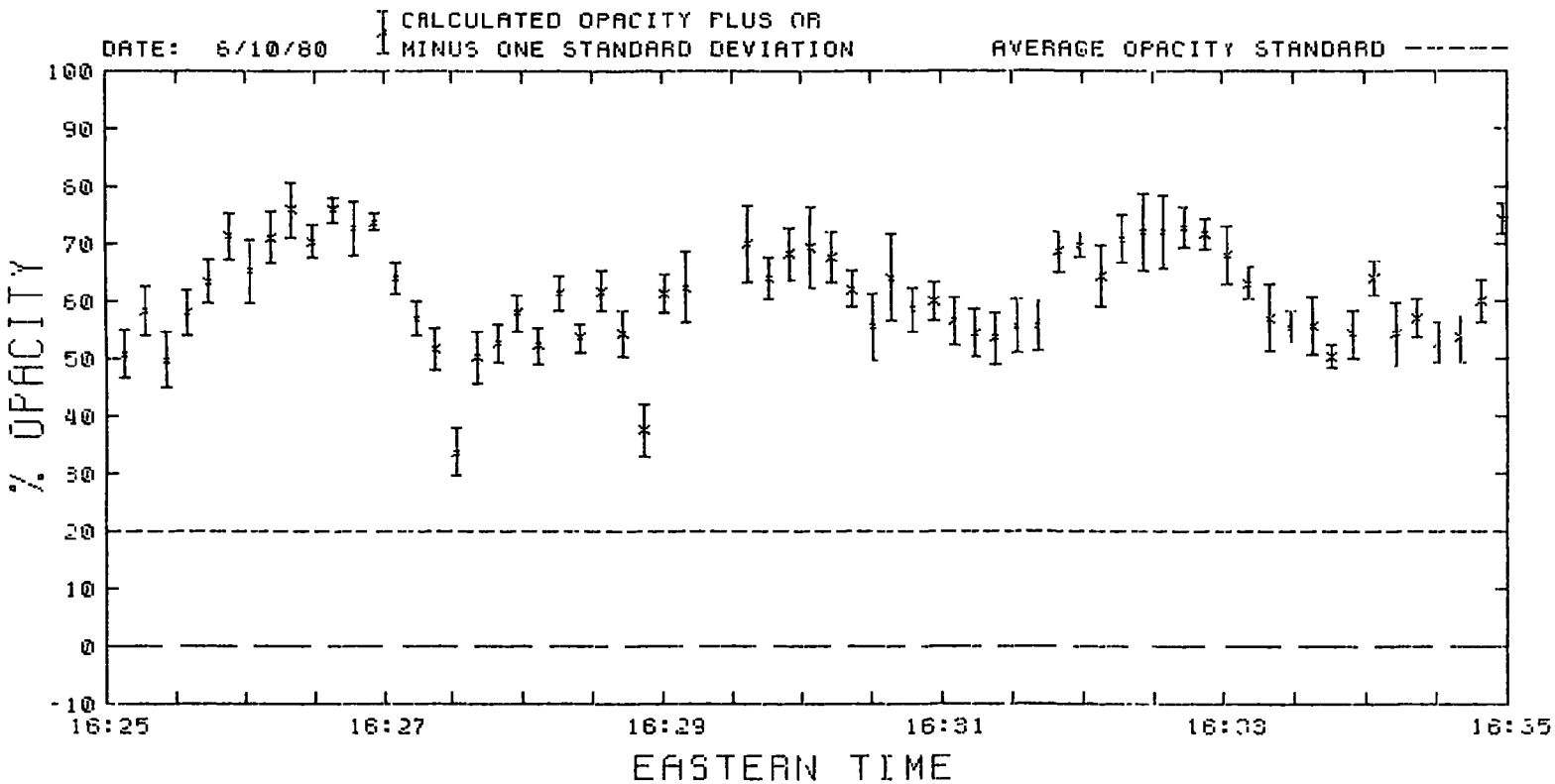
DATE	TIME	OPACITY	SO	VIOLATION	AVERAGE OPACITY	AVERAGE SO	VIOLATION	NUMBER DISCARDED
6/10/80	16 32 44	73	4		61	4	****	0 OF 39
6/10/80	16 32 53	72	3		61	4	****	0 OF 39
6/10/80	16 33 2	68	5		61	4	****	0 OF 39
6/10/80	16 33 11	63	3		60	4	****	0 OF 39
6/10/80	16 33 20	57	6		60	4	****	0 OF 39
6/10/80	16 33 29	55	3		61	4	****	0 OF 39
6/10/80	16 33 38	56	5		61	4	****	0 OF 39
6/10/80	16 33 46	50	2		61	4	****	0 OF 39
6/10/80	16 33 55	54	4		61	4	****	0 OF 39
6/10/80	16 34 4	64	3		61	4	****	0 OF 39
6/10/80	16 34 13	54	6		61	4	****	0 OF 39
6/10/80	16 34 22	57	3		61	4	****	0 OF 39
6/10/80	16 34 31	53	4		61	4	****	0 OF 39
6/10/80	16 34 40	54	4		61	4	****	0 OF 39
6/10/80	16 34 49	60	4		61	4	****	0 OF 39
6/10/80	16 34 58	74	3		62	4	****	0 OF 39
6/10/80	16 35 7	72	6		62	4	****	0 OF 39
6/10/80	16 35 15	75	4		0	0		0 OF 0
6/10/80	16 35 24	75	4		63	4	****	0 OF 40
6/10/80	16 35 33	78	3		63	4	****	0 OF 41
6/10/80	16 35 42	77	4		64	4	****	0 OF 41
6/10/80	16.35 51	78	3		64	4	****	0 OF 41
6/10/80	16 36 0	69	4		64	4	****	0 OF 41
6/10/80	16 36 9	66	4		64	4	****	0 OF 41
6/10/80	16 36 18	59	3		64	4	****	0 OF 41
6/10/80	16 36 27	65	3		64	4	****	0 OF 41
6/10/80	16 36 36	65	7		64	4	****	0 OF 41
6/10/80	16 36 45	65	2		64	4	****	0 OF 41
6/10/80	16 36 53	58	3		64	4	****	0 OF 41
6/10/80	16 37 2	66	2		64	4	****	0 OF 41
6/10/80	16 37 11	63	2		64	4	****	0 OF 41
6/10/80	16 37 20	67	4		65	4	****	0 OF 41
6/10/80	16 37 28	61	4		65	4	****	0 OF 41
6/10/80	16 37 37	59	4		65	4	****	0 OF 41
6/10/80	16 37 46	60	3		65	4	****	0 OF 41
6/10/80	16 37 55	55	3		65	4	****	0 OF 41
6/10/80	16 38 3	65	4		64	4	****	0 OF 41



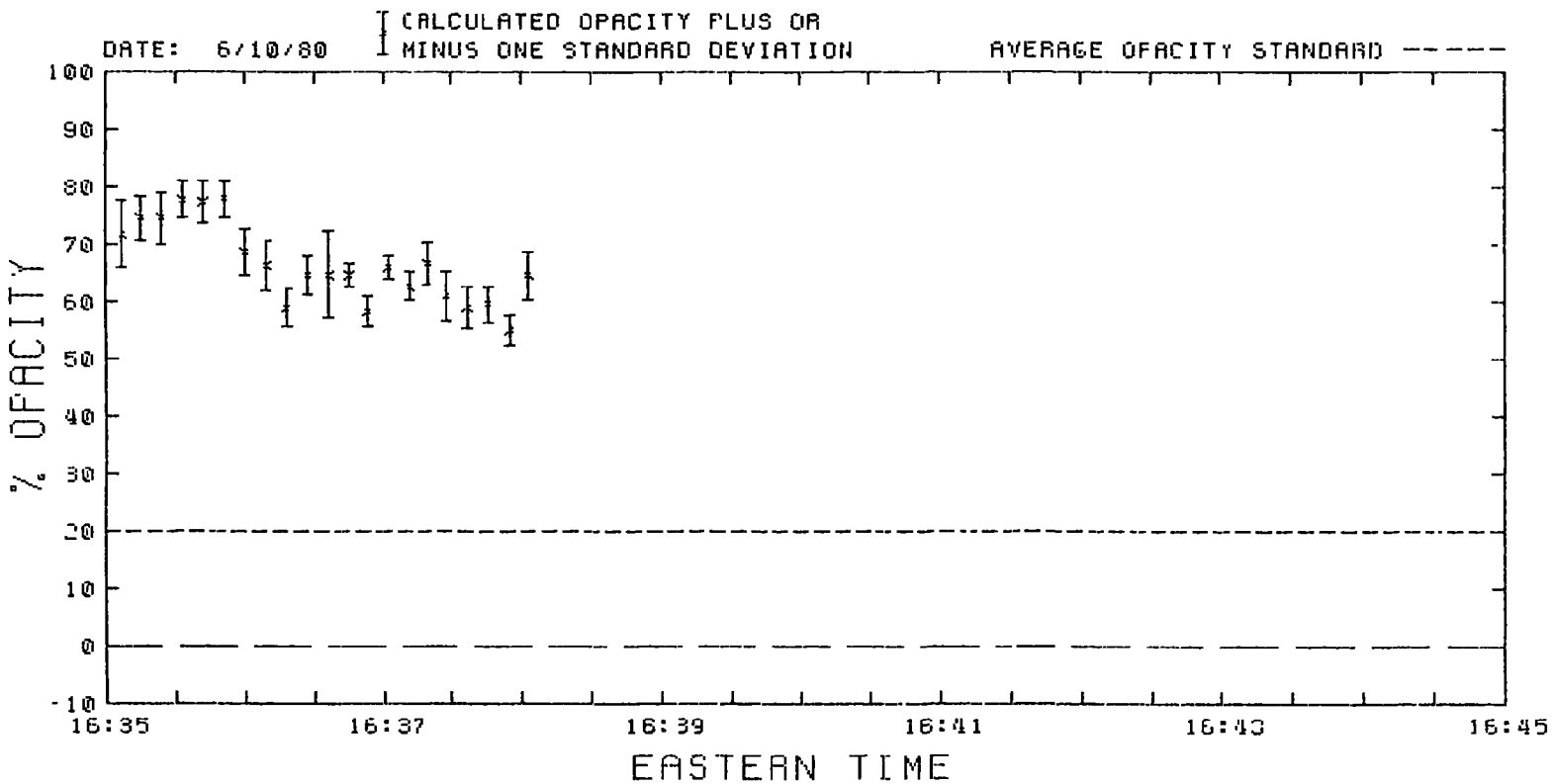
STACK 2, C&SOE CONESVILLE STATION, CONESVILLE, OH



STACK 2, C&SOE CONESVILLE STATION, CONESVILLE, OH



STACK 2, C&SOE CONESVILLE STATION, CONESVILLE, OH



STACK 2, C&SOE CONESVILLE STATION, CONESVILLE, OH

OMEGA-0057

COLUMBUS AND SOUTHERN OHIO ELECTRIC COMPANY

CONESVILLE STATION

STACK 2

June 10, 1980, 16:43:54 to 17:13:10

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
NATIONAL ENFORCEMENT INVESTIGATIONS CENTER
DENVER, COLORADO 80225

OMEGA-0057, STACK 2, C&SOE CONESVILLE STATION, CONESVILLE, OHIO FROM THE NORTH SIX MINUTE AVERAGES

DATE	TIME	OPACITY	SO	VIOLATION	AVERAGE OPACITY	AVERAGE SO	VIOLATION	NUMBER DISCARDED
6/10/80	16 43 54	57	2		0	0		0 OF 0
6/10/80	16 44 3	61	4		0	0		0 OF 0
6/10/80	16 44 12	70	2		0	0		0 OF 0
6/10/80	16 44 21	66	1		0	0		0 OF 0
6/10/80	16 44 30	70	6		0	0		0 OF 0
6/10/80	16 44 38	68	3		0	0		0 OF 0
6/10/80	16 44 47	79	8		0	0		0 OF 0
6/10/80	16 44 56	75	5		0	0		0 OF 0
6/10/80	16 45 5	75	5		0	0		0 OF 0
6/10/80	16 45 13	76	4		0	0		0 OF 0
6/10/80	16 45 22	67	2		0	0		0 OF 0
6/10/80	16 45 31	61	5		0	0		0 OF 0
6/10/80	16 45 40	67	3		0	0		0 OF 0
6/10/80	16 45 48	56	5		0	0		0 OF 0
6/10/80	16 45 57	55	4		0	0		0 OF 0
6/10/80	16 46 6	56	5		0	0		0 OF 0
6/10/80	16 46 15	52	2		0	0		0 OF 0
6/10/80	16 46 23	53	4		0	0		0 OF 0
6/10/80	16 46 32	54	2		0	0		0 OF 0
6/10/80	16 46 41	56	4		0	0		0 OF 0
6/10/80	16 46 49	49	4		0	0		0 OF 0
6/10/80	16 46 58	65	3		0	0		0 OF 0
6/10/80	16 47 7	70	2		0	0		0 OF 0
6/10/80	16 47 16	71	4		0	0		0 OF 0
6/10/80	16 47 25	68	5		0	0		0 OF 0
6/10/80	16 47 33	67	5		0	0		0 OF 0
6/10/80	16 47 42	70	2		0	0		0 OF 0
6/10/80	16 47 51	68	4		0	0		0 OF 0
6/10/80	16 47 59	65	4		0	0		0 OF 0
6/10/80	16 48 8	59	3		0	0		0 OF 0
6/10/80	16 48 17	56	4		0	0		0 OF 0
6/10/80	16 48 25	57	3		0	0		0 OF 0
6/10/80	16 48 34	51	3		0	0		0 OF 0
6/10/80	16 48 43	46	4		0	0		0 OF 0
6/10/80	16 48 51	39	3		0	0		0 OF 0
6/10/80	16 49 0	45	4		0	0		0 OF 0
6/10/80	16 49 9	43	2		0	0		0 OF 0
6/10/80	16 49 18	58	4		0	0		0 OF 0
6/10/80	16 49 27	36	3		0	0		0 OF 0
6/10/80	16 49 36	29	4		60	4	****	0 OF 40
6/10/80	16 49 44	40	2		59	4	****	0 OF 41
6/10/80	16 49 53	73	7		60	4	****	0 OF 42
6/10/80	16 50 2	66	3		60	4	****	0 OF 42
6/10/80	16 50 10	73	3		60	4	****	0 OF 42
6/10/80	16 50 19	71	2		60	4	****	0 OF 42
6/10/80	16 50 28	65	2		60	4	****	0 OF 42
6/10/80	16 50 36	79	4		60	4	****	0 OF 42
6/10/80	16 50 45	70	3		60	4	****	0 OF 42
6/10/80	16 50 54	78	5		60	4	****	0 OF 42
6/10/80	16 51 2	72	4		60	4	****	0 OF 42

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
NATIONAL ENFORCEMENT INVESTIGATIONS CENTER
DENVER, COLORADO 80225

OMEGA-0057, STACK 2, C3SOE CONESVILLE STATION, CONESVILLE, OHIO FROM THE NORTH SIX MINUTE AVERAGES

DATE	TIME	OPACITY	SO	VIOLATION	AVERAGE OPACITY	AVERAGE SO	VIOLATION	NUMBER DISCARDED
6/10/80	16 51 11	75	5		60	4	****	0 OF 42
6/10/80	16 51 20	70	5		60	4	****	0 OF 42
6/10/80	16 51 29	71	3		60	4	****	0 OF 42
6/10/80	16 51 37	74	4		60	4	****	0 OF 42
6/10/80	16 51 46	63	4		60	4	****	0 OF 42
6/10/80	16 51 55	64	2		61	4	****	0 OF 42
6/10/80	16 52 3	72	7		61	4	****	0 OF 42
6/10/80	16 52 12	61	4		61	4	****	0 OF 42
6/10/80	16 52 21	62	3		61	4	****	0 OF 42
6/10/80	16 52 30	59	6		62	4	****	0 OF 42
6/10/80	16 52 38	68	2		62	4	****	0 OF 42
6/10/80	16 52 47	67	2		62	4	****	0 OF 42
6/10/80	16 52 56	57	2		62	4	****	0 OF 42
6/10/80	16 53 4	65	2		62	4	****	0 OF 42
6/10/80	16 53 13	71	5		62	4	****	0 OF 42
6/10/80	16 53 22	68	8		62	4	****	0 OF 42
6/10/80	16 53 31	72	3		62	4	****	0 OF 42
6/10/80	16 53 39	71	3		62	4	****	0 OF 42
6/10/80	16 53 48	69	5		62	4	****	0 OF 42
6/10/80	16 53 57	62	5		62	4	****	0 OF 42
6/10/80	16 54 5	72	2		62	4	****	0 OF 42
6/10/80	16 54 14	67	4		63	4	****	0 OF 42
6/10/80	16 54 23	61	2		63	4	****	0 OF 42
6/10/80	16 54 32	61	5		63	4	****	0 OF 42
6/10/80	16 54 40	56	6		63	4	****	0 OF 42
6/10/80	16 54 49	60	5		63	4	****	0 OF 42
6/10/80	16 54 58	53	5		64	4	****	0 OF 42
6/10/80	16 55 6	43	5		64	4	****	0 OF 42
6/10/80	16 55 15	48	3		64	4	****	0 OF 42
6/10/80	16 55 24	37	7		63	4	****	0 OF 42
6/10/80	16 55 41	35	7		64	4	****	0 OF 41
6/10/80	16 55 50	34	6		64	4	****	0 OF 41
6/10/80	16 55 58	59	6		63	4	****	0 OF 41
6/10/80	16 56 7	65	4		63	4	****	0 OF 41
6/10/80	16 56 15	74	3		63	4	****	0 OF 41
6/10/80	16 56 24	69	2		63	4	****	0 OF 41
6/10/80	16 56 33	69	5		64	4	****	0 OF 41
6/10/80	16 56 41	74	7		63	4	****	0 OF 41
6/10/80	16 56 50	34	7		62	4	****	0 OF 41
6/10/80	16 57 16	25	5		61	4	****	0 OF 39
6/10/80	16 57 24	59	3		60	4	****	0 OF 39
6/10/80	16 57 33	58	4		60	4	****	0 OF 39
6/10/80	16 57 40	49	4		59	4	****	0 OF 39
6/10/80	16 57 49	56	4		59	4	****	0 OF 39
6/10/80	16 57 58	50	3		59	4	****	0 OF 39
6/10/80	16 58 6	62	4		59	4	****	0 OF 39
6/10/80	16 58 15	31	7		58	4	****	0 OF 39
6/10/80	16 58 41	35	4		57	4	****	0 OF 37
6/10/80	16 59 24	58	4		55	5	****	2 OF 35
6/10/80	16 59 33	56	6		55	5	****	2 OF 35

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
NATIONAL ENFORCEMENT INVESTIGATIONS CENTER
DENVER, COLORADO 80225

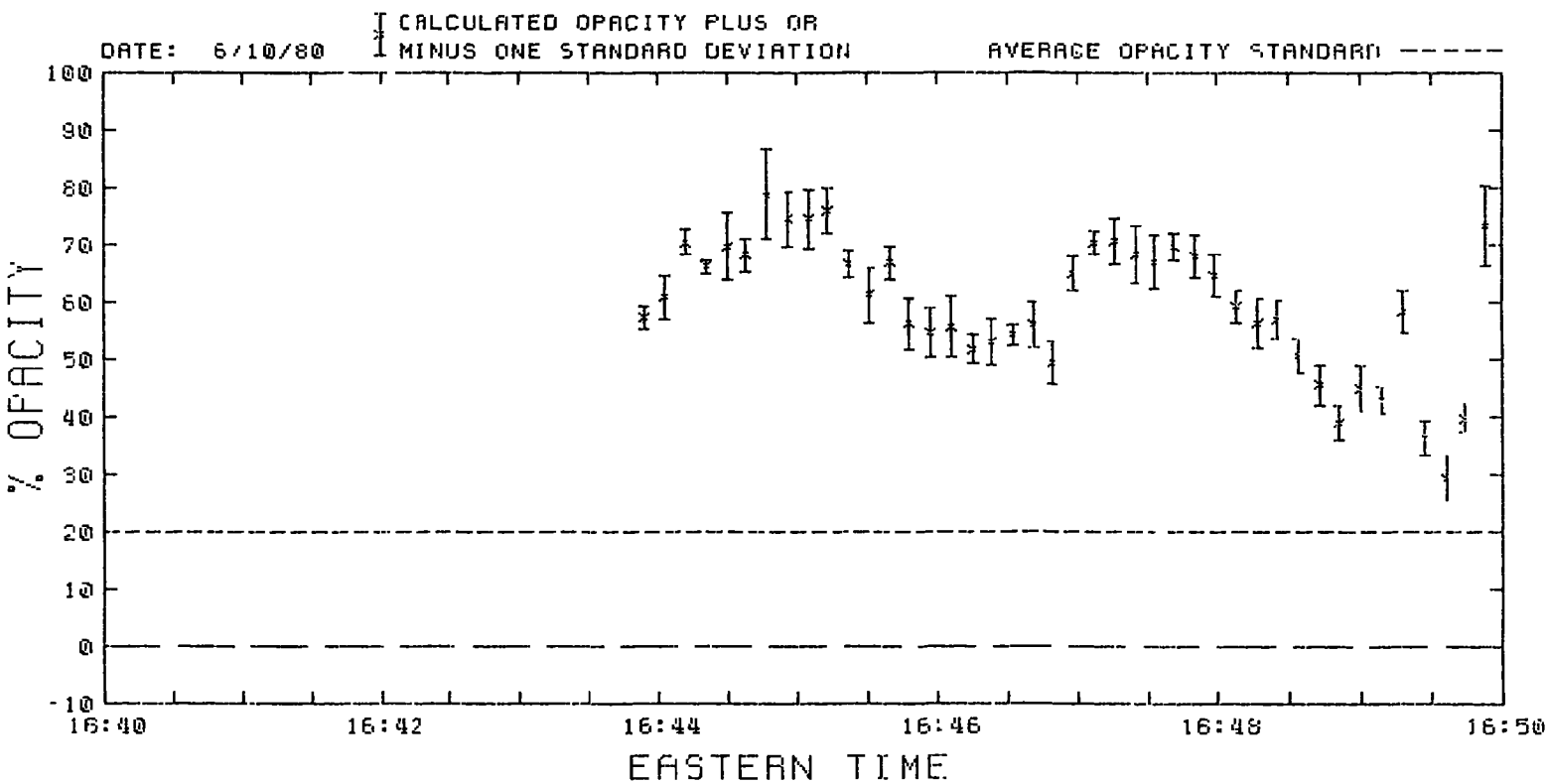
OMEGA-0057, STACK 2, C&SOE CONESVILLE STATION, CONESVILLE, OHIO FROM THE NORTH SIX MINUTE AVERAGES

DATE	TIME	OPACITY	SO	VIOLATION	AVERAGE OPACITY	AVERAGE SO	VIOLATION	NUMBER DISCARDED
6/10/80	16 59 50	57	5		54	5	****	2 OF 34
6/10/80	16 59 59	25	6		53	5	****	2 OF 34
6/10/80	17 0 52	34	8		50	6	****	4 OF 31
6/10/80	17 1 1	31	7		49	6	****	4 OF 31
6/10/80	17 2 27	45	8		48	7	****	7 OF 26
6/10/80	17 2 36	55	4		47	7	****	7 OF 26
6/10/80	17 2 45	17	8		44	7	****	7 OF 26
6/10/80	17 2 54	60	3		0	0		0 OF 0
6/10/80	17 3 2	50	5		46	7	****	7 OF 27
6/10/80	17 3 37	34	7		45	7	****	9 OF 27
6/10/80	17 3 46	42	5		44	7	****	9 OF 27
6/10/80	17 4 12	51	5		43	8	****	10 OF 26
6/10/80	17 4 21	35	5		0	0		0 OF 0
6/10/80	17 4 47	58	4		44	7	****	10 OF 26
6/10/80	17 4 56	65	3		45	7	****	9 OF 26
6/10/80	17 5 23	67	4		47	7	****	10 OF 28
6/10/80	17 5 31	40	7		46	7	****	10 OF 28
6/10/80	17 5 40	44	8		45	7	****	10 OF 28
6/10/80	17 6 7	50	3		46	7	****	11 OF 28
6/10/80	17 6 25	19	6		44	7	****	10 OF 28
6/10/80	17 6 42	27	6		43	7	****	10 OF 29
6/10/80	17 7 26	41	7		44	7	****	12 OF 30
6/10/80	17 7 35	51	4		45	7	****	11 OF 30
6/10/80	17 7 44	51	5		45	7	****	10 OF 30
6/10/80	17 7 53	46	6		0	0		0 OF 0
6/10/80	17 8 10	71	5		46	7	****	10 OF 32
6/10/80	17 8 19	68	7		47	7	****	10 OF 33
6/10/80	17 8 28	72	2		48	7	****	10 OF 33
6/10/80	17 8 36	69	4		49	7	****	10 OF 34
6/10/80	17 8 45	63	5		50	7	****	10 OF 34
6/10/80	17 8 54	69	6		52	7	****	10 OF 34
6/10/80	17 9 3	71	2		52	7	****	10 OF 33
6/10/80	17 9 11	61	4		53	6	****	10 OF 34
6/10/80	17 9 20	72	2		54	6	****	9 OF 34
6/10/80	17 9 29	72	5		54	6	****	8 OF 34
6/10/80	17 9 38	74	3		56	6	****	8 OF 34
6/10/80	17 9 47	68	4		57	6	****	8 OF 34
6/10/80	17 9 56	68	3		57	6	****	8 OF 35
6/10/80	17 10 5	69	2		58	6	****	7 OF 35
6/10/80	17 10 14	67	5		58	6	****	7 OF 35
6/10/80	17 10 22	69	4		0	0		0 OF 0
6/10/80	17 10 31	70	3		60	6	****	7 OF 36
6/10/80	17 10 40	68	2		60	6	****	7 OF 37
6/10/80	17 10 49	70	4		60	6	****	7 OF 37
6/10/80	17 10 57	70	3		61	6	****	7 OF 37
6/10/80	17 11 6	75	4		61	5	****	6 OF 37
6/10/80	17 11 15	73	2		61	5	****	5 OF 37
6/10/80	17 11 24	71	4		62	5	****	5 OF 37
6/10/80	17 11 32	70	4		62	5	****	5 OF 37
6/10/80	17 11 41	70	5		63	5	****	5 OF 37

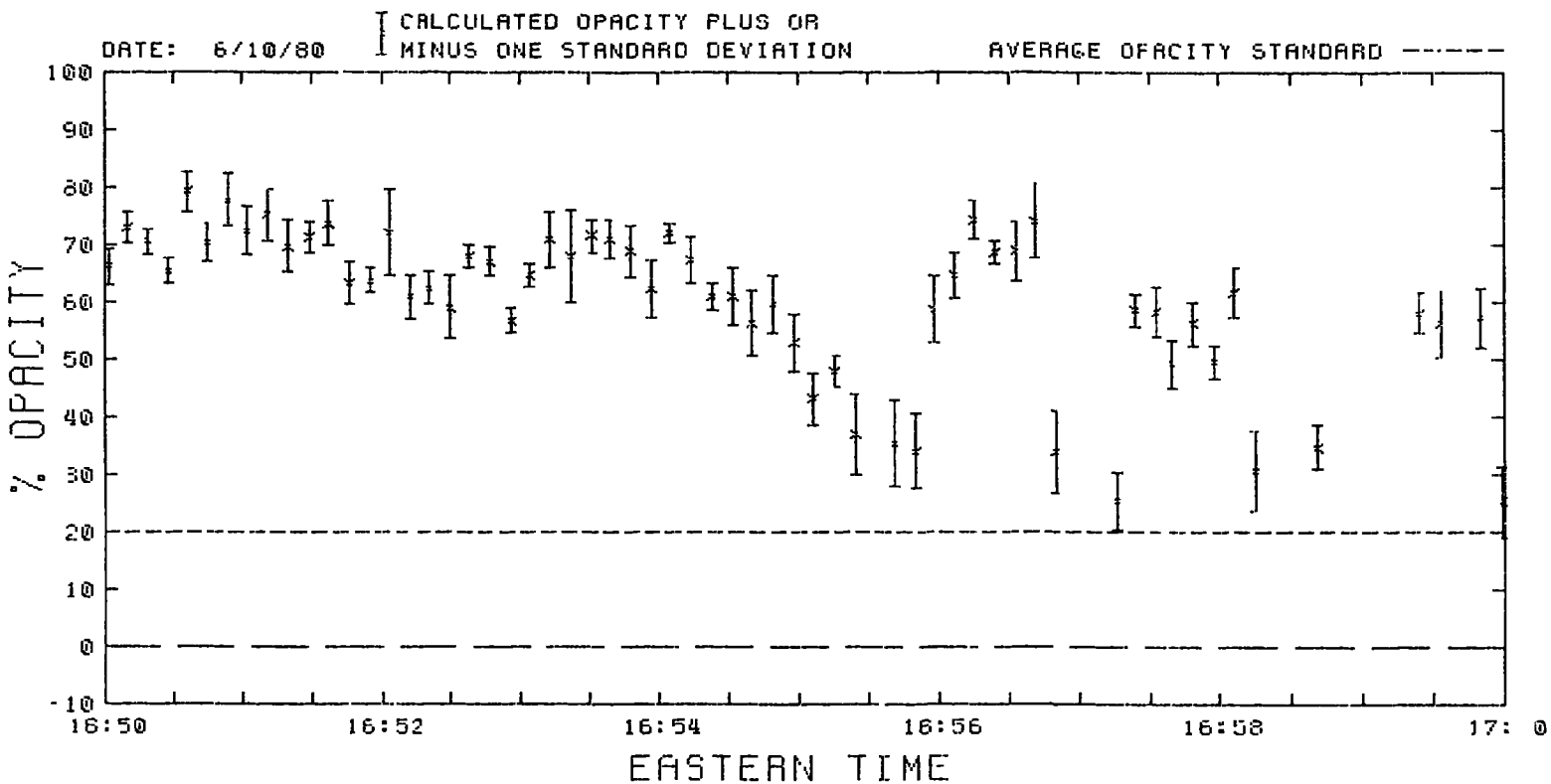
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
NATIONAL ENFORCEMENT INVESTIGATIONS CENTER
DENVER, COLORADO 80225

OMEGA-0057, STACK 2, C&SOE CONESVILLE STATION, CONESVILLE, OHIO FROM THE NORTH SIX MINUTE AVERAGES

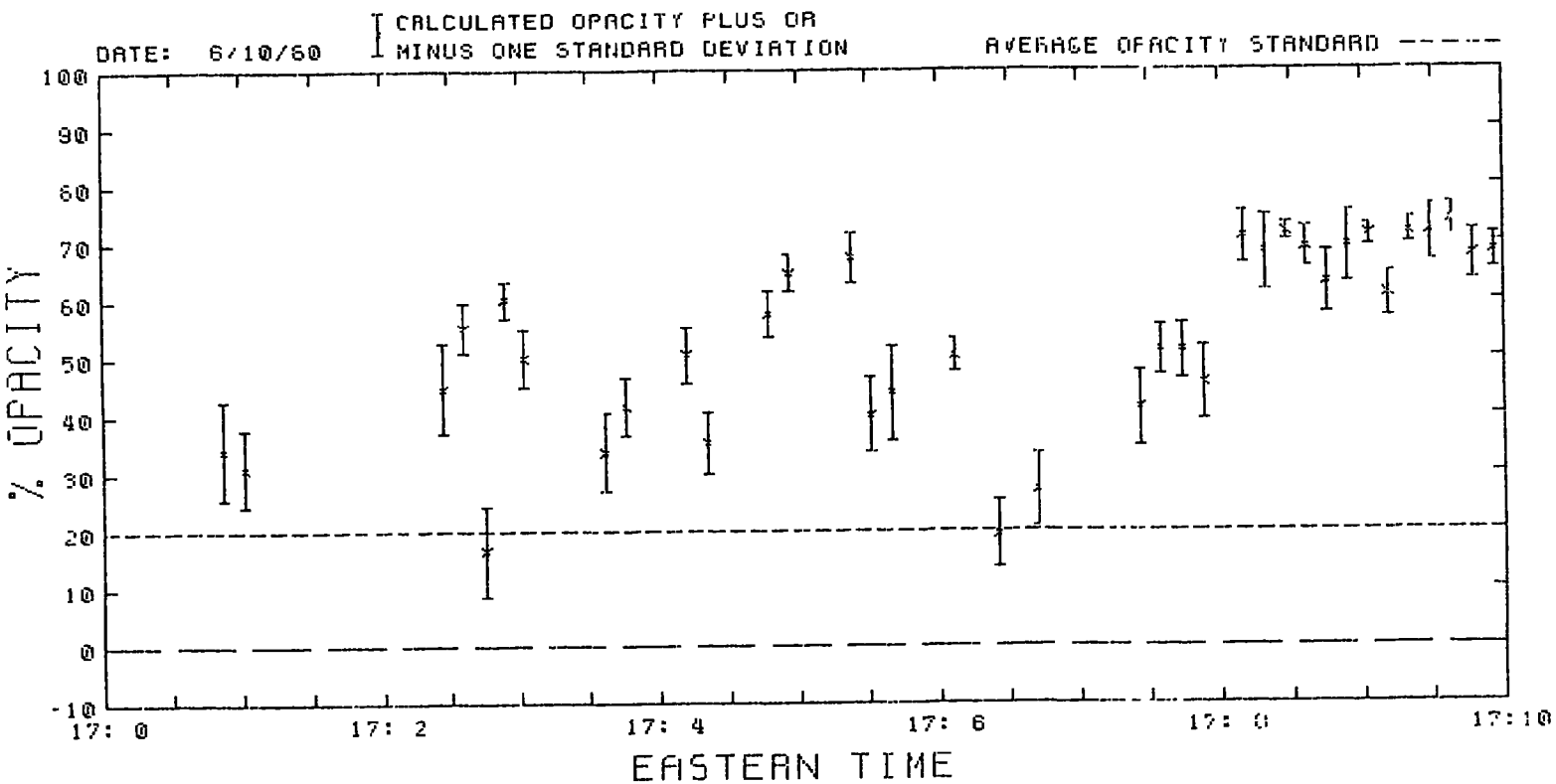
DATE	TIME	OPACITY	SO	VIOLATION	AVERAGE OPACITY	AVERAGE SO	VIOLATION	NUMBER DISCARDED
6/10/80	17 11 50	71	5		64	5	****	5 OF 38
6/10/80	17 11 59	72	5		64	5	****	4 OF 38
6/10/80	17 12 8	68	4		64	5	****	4 OF 38
6/10/80	17 12 26	65	4		65	5	****	4 OF 39
6/10/80	17 12 44	54	3		65	5	****	5 OF 40
6/10/80	17 12 53	59	7		65	5	****	5 OF 41
6/10/80	17 13 1	69	3		65	5	****	4 OF 41
6/10/80	17 13 10	67	2		65	5	****	3 OF 41



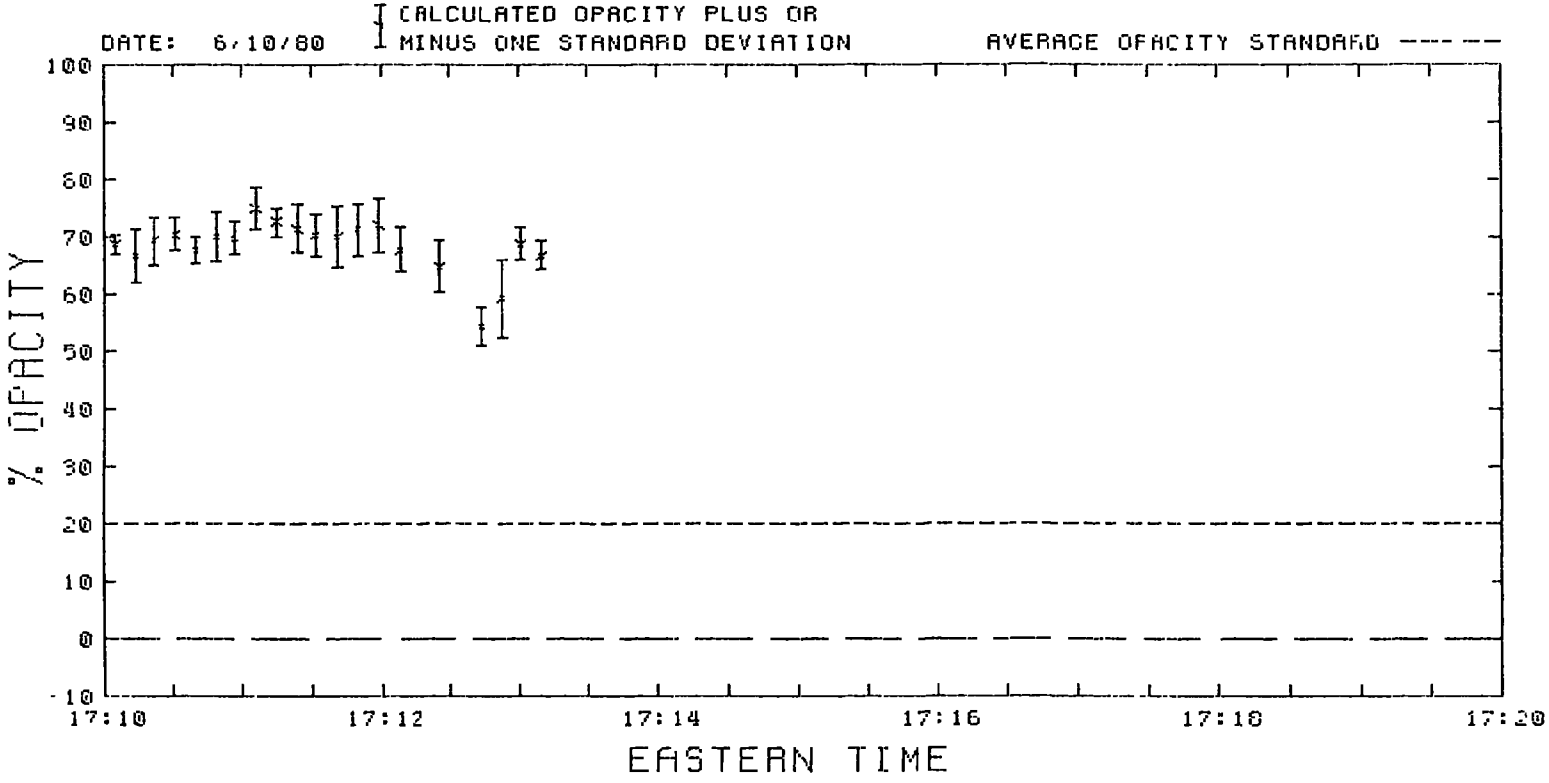
STACK 2, C&SOE CONESVILLE STATION, CONESVILLE, OH



STACK 2, C&SOE CONESVILLE STATION, CONESVILLE, OH



STACK 2. C&SOE CONESVILLE STATION, CONESVILLE, OH



STACK 2, C&SOE CONESVILLE STATION, CONESVILLE, OH

OMEGA-0058

COLUMBUS AND SOUTHERN OHIO ELECTRIC COMPANY

CONESVILLE STATION

STACK 4

June 10, 1980, 17:45:53 to 18:15:16

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
NATIONAL ENFORCEMENT INVESTIGATIONS CENTER
DENVER, COLORADO 80225

OMEGA-0058, STACK 4, C&SOE CONESVILLE STATION, CONESVILLE, OHIO FROM THE NORTH SIX MINUTE AVERAGES

DATE	TIME	OPACITY	SO	VIOLATION	AVERAGE OPACITY	AVERAGE SO	VIOLATION	NUMBER	DISCARDED
6/10/80	17 45 53	7	3		0	0		0 OF	0
6/10/80	17 46 2	2	3		0	0		0 OF	0
6/10/80	17 46 11	1	3		0	0		0 OF	0
6/10/80	17 46 19	25	3		0	0		0 OF	0
6/10/80	17 46 28	5	3		0	0		0 OF	0
6/10/80	17 46 37	0	2		0	0		0 OF	0
6/10/80	17 46 46	4	3		0	0		0 OF	0
6/10/80	17 46 55	12	4		0	0		0 OF	0
6/10/80	17 47 4	23	4		0	0		0 OF	0
6/10/80	17 47 12	31	3		0	0		0 OF	0
6/10/80	17 47 21	1	4		0	0		0 OF	0
6/10/80	17 47 30	4	3		0	0		0 OF	0
6/10/80	17 47 39	1	2		0	0		0 OF	0
6/10/80	17 47 48	0	4		0	0		0 OF	0
6/10/80	17 47 57	15	4		0	0		0 OF	0
6/10/80	17 48 6	0	3		0	0		0 OF	0
6/10/80	17 48 15	12	4		0	0		0 OF	0
6/10/80	17 48 23	0	4		0	0		0 OF	0
6/10/80	17 48 32	2	3		0	0		0 OF	0
6/10/80	17 48 41	5	3		0	0		0 OF	0
6/10/80	17 48 50	14	4		0	0		0 OF	0
6/10/80	17 48 59	21	2		0	0		0 OF	0
6/10/80	17 49 8	19	3		0	0		0 OF	0
6/10/80	17 49 17	14	4		0	0		0 OF	0
6/10/80	17 49 26	9	4		0	0		0 OF	0
6/10/80	17 49 35	6	2		0	0		0 OF	0
6/10/80	17 49 43	8	4		0	0		0 OF	0
6/10/80	17 49 52	9	3		0	0		0 OF	0
6/10/80	17 50 1	15	3		0	0		0 OF	0
6/10/80	17 50 10	22	5		0	0		0 OF	0
6/10/80	17 50 19	13	3		0	0		0 OF	0
6/10/80	17 50 28	1	5		0	0		0 OF	0
6/10/80	17 50 37	5	5		0	0		0 OF	0
6/10/80	17 50 46	10	4		0	0		0 OF	0
6/10/80	17 50 54	3	4		0	0		0 OF	0
6/10/80	17 51 3	10	3		0	0		0 OF	0
6/10/80	17 51 12	9	3		0	0		0 OF	0
6/10/80	17 51 21	9	3		0	0		0 OF	0
6/10/80	17 51 30	7	3		0	0		0 OF	0
6/10/80	17 51 39	2	4		9	4		0 OF	40
6/10/80	17 51 48	7	4		9	4		0 OF	41
6/10/80	17 51 57	7	2		9	4		0 OF	41
6/10/80	17 52 5	9	3		9	4		0 OF	41
6/10/80	17 52 14	10	3		9	4		0 OF	41
6/10/80	17 52 23	13	3		9	4		0 OF	41
6/10/80	17 52 32	12	3		9	4		0 OF	41
6/10/80	17 52 41	11	4		9	4		0 OF	41
6/10/80	17 52 50	12	4		10	4		0 OF	41
6/10/80	17 52 59	3	2		9	4		0 OF	41
6/10/80	17 53 7	15	4		9	4		0 OF	41

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
NATIONAL ENFORCEMENT INVESTIGATIONS CENTER
DENVER, COLORADO 80225

OMEGA-0058, STACK 4, C&SOE CONESVILLE STATION, CONESVILLE, OHIO FROM THE NORTH SIX MINUTE AVERAGES

DATE	TIME	OPACITY	SO	VIOLATION	AVERAGE OPACITY	AVERAGE SO	VIOLATION	NUMBER DISCARDED
6/10/80	17 53 16	19	3		9	4		0 OF 41
6/10/80	17 53 25	8	3		9	4		0 OF 41
6/10/80	17 53 34	11	3		9	4		0 OF 41
6/10/80	17 53 43	11	4		9	4		0 OF 41
6/10/80	17 53 52	1	4		10	4		0 OF 41
6/10/80	17 54 1	4	4		9	4		0 OF 41
6/10/80	17 54 10	5	4		9	4		0 OF 41
6/10/80	17 54 18	1	5		9	4		0 OF 41
6/10/80	17 54 27	2	4		9	4		0 OF 41
6/10/80	17 54 36	1	3		9	4		0 OF 41
6/10/80	17 54 45	7	4		9	4		0 OF 41
6/10/80	17 54 54	1	5		9	4		0 OF 41
6/10/80	17 55 3	2	6		8	4		0 OF 41
6/10/80	17 55 12	2	5		8	4		0 OF 41
6/10/80	17 55 21	1	5		8	4		0 OF 41
6/10/80	17 55 29	7	4		8	4		0 OF 41
6/10/80	17 55 38	10	4		8	4		0 OF 41
6/10/80	17 55 47	12	3		8	4		0 OF 41
6/10/80	17 55 56	14	3		8	4		0 OF 41
6/10/80	17 56 5	8	3		8	4		0 OF 41
6/10/80	17 56 14	17	5		8	4		0 OF 41
6/10/80	17 56 23	13	2		8	4		0 OF 41
6/10/80	17 56 32	8	4		8	4		0 OF 41
6/10/80	17 56 40	18	3		8	4		0 OF 41
6/10/80	17 56 49	8	3		8	4		0 OF 41
6/10/80	17 56 58	8	3		8	4		0 OF 41
6/10/80	17 57 7	10	5		8	4		0 OF 41
6/10/80	17 57 16	8	3		8	4		0 OF 41
6/10/80	17 57 25	11	2		8	4		0 OF 41
6/10/80	17 57 34	16	2		8	4		0 OF 41
6/10/80	17 57 42	6	3		9	4		0 OF 41
6/10/80	17 57 51	9	4		9	4		0 OF 41
6/10/80	17 58 0	16	7		9	4		0 OF 41
6/10/80	17 58 9	6	5		9	4		0 OF 41
6/10/80	17 58 18	15	3		9	4		0 OF 41
6/10/80	17 58 27	13	4		9	4		0 OF 41
6/10/80	17 58 36	8	3		9	4		0 OF 41
6/10/80	17 58 44	1	4		9	4		0 OF 41
6/10/80	17 58 53	4	6		8	4		0 OF 41
6/10/80	17 59 2	11	3		9	4		0 OF 41
6/10/80	17 59 11	12	5		8	4		0 OF 41
6/10/80	17 59 20	1	5		8	4		0 OF 41
6/10/80	17 59 29	9	4		8	4		0 OF 41
6/10/80	17 59 38	9	4		8	4		0 OF 41
6/10/80	17 59 47	20	4		8	4		0 OF 41
6/10/80	17 59 55	10	3		8	4		0 OF 41
6/10/80	18 0 4	4	5		8	4		0 OF 41
6/10/80	18 0 13	12	5		9	4		0 OF 41
6/10/80	18 0 22	7	4		9	4		0 OF 41
6/10/80	18 0 31	11	4		9	4		0 OF 41

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
NATIONAL ENFORCEMENT INVESTIGATIONS CENTER
DENVER, COLORADO 80225

OMEGA-0058, STACK 4, C&SOE CONESVILLE STATION, CONESVILLE, OHIO FROM THE NORTH SIX MINUTE AVERAGES

DATE	TIME	OPACITY	SO	VIOLATION	AVERAGE OPACITY	AVERAGE SO	VIOLATION	NUMBER DISCARDED
6/10/80	18 0 40	11	5		9	4		0 OF 41
6/10/80	18 0 49	2	3		9	4		0 OF 41
6/10/80	18 0 58	1	4		9	4		0 OF 41
6/10/80	18 1 6	2	5		9	4		0 OF 41
6/10/80	18 1 15	0	3		9	4		0 OF 41
6/10/80	18 1 24	6	3		9	4		0 OF 41
6/10/80	18 1 33	0	3		9	4		0 OF 41
6/10/80	18 1 42	0	4		9	4		0 OF 41
6/10/80	18 1 51	17	3		9	4		0 OF 41
6/10/80	18 2 0	40	3		9	4		0 OF 41
6/10/80	18 2 8	21	3		10	4		0 OF 41
6/10/80	18 2 17	0	4		9	4		0 OF 41
6/10/80	18 2 26	0	3		9	4		0 OF 41
6/10/80	18 2 35	8	4		9	4		0 OF 41
6/10/80	18 2 44	3	4		8	4		0 OF 41
6/10/80	18 3 10	25	5		9	4		0 OF 37
6/10/80	18 3 19	27	3		9	4		0 OF 39
6/10/80	18 3 28	33	3		10	4		0 OF 39
6/10/80	18 3 37	14	3		10	4		0 OF 39
6/10/80	18 3 46	26	4		10	4		0 OF 39
6/10/80	18 3 55	43	2		11	4		0 OF 39
6/10/80	18 4 4	22	3		11	4		0 OF 39
6/10/80	18 4 12	9	4		12	4		0 OF 39
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6/10/80	18 4 39	37	3		12	4		0 OF 38
6/10/80	18 4 48	17	5		13	4		0 OF 38
6/10/80	18 4 57	45	4		14	4		0 OF 38
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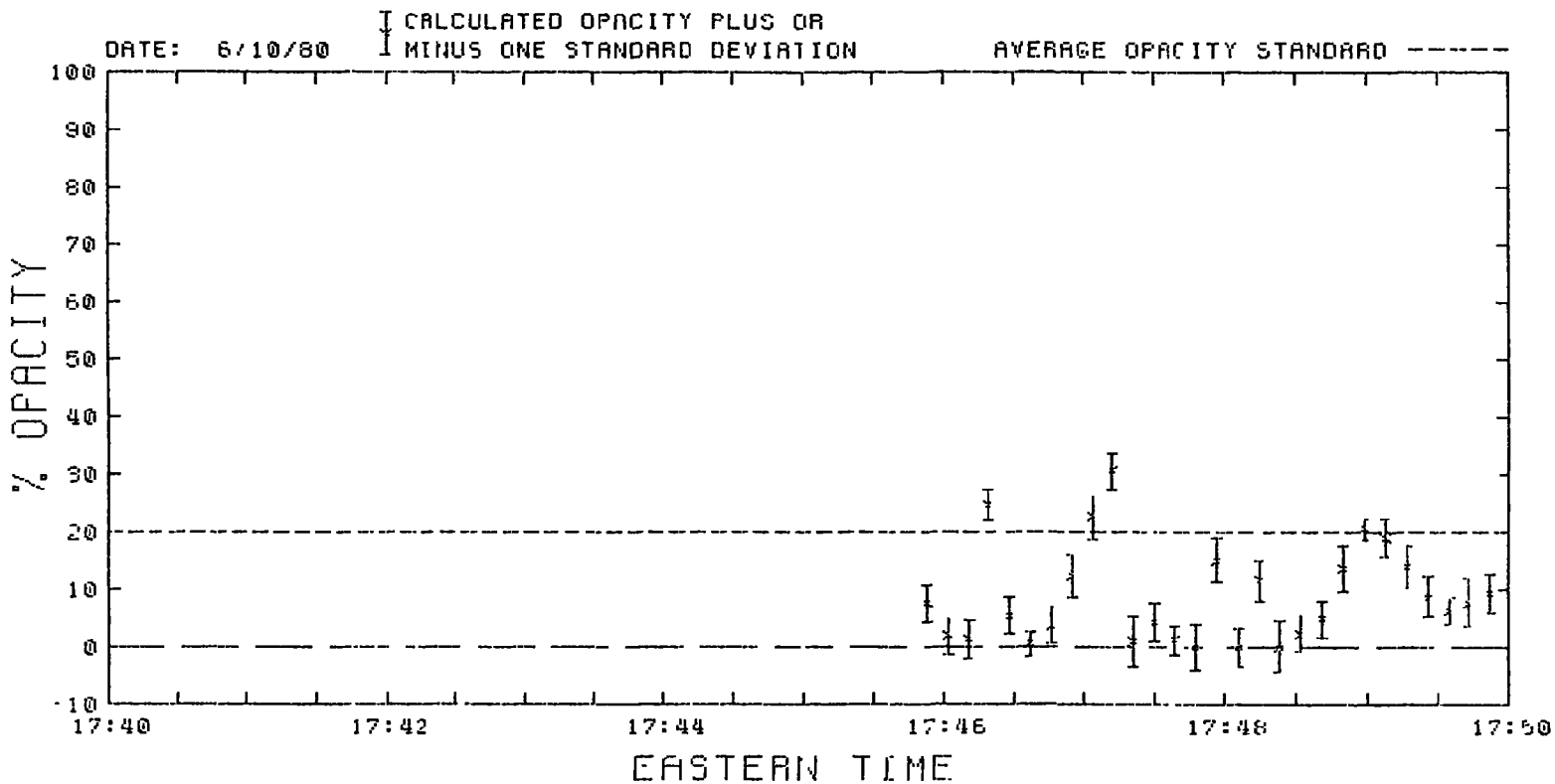
6/10/80	18 5 15	8	4		13	4		0 OF 38
6/10/80	18 5 23	3	2		13	4		0 OF 38
6/10/80	18 5 32	0	4		13	4		0 OF 38
6/10/80	18 5 40	0	4		13	4		0 OF 38
6/10/80	18 5 49	1	4		12	4		0 OF 38
6/10/80	18 5 58	8	3		12	4		0 OF 38
6/10/80	18 6 7	24	4		13	4		0 OF 38
6/10/80	18 6 16	12	3		13	4		0 OF 38
6/10/80	18 6 24	21	3		13	4		0 OF 38
6/10/80	18 6 33	18	3		13	4		0 OF 38
6/10/80	18 6 42	13	3		13	4		0 OF 38
6/10/80	18 6 51	14	4		14	4		0 OF 38
6/10/80	18 7 0	9	3		14	4		0 OF 38
6/10/80	18 7 9	18	4		14	3		0 OF 38
6/10/80	18 7 18	6	4		15	4		0 OF 38
6/10/80	18 7 26	16	4		15	4		0 OF 38
6/10/80	18 7 35	19	3		15	4		0 OF 38
6/10/80	18 7 44	11	4		16	4		0 OF 38
6/10/80	18 7 53	17	4		16	4		0 OF 38
6/10/80	18 8 2	5	4		15	4		0 OF 38
6/10/80	18 8 11	14	4		15	4		0 OF 38
6/10/80	18 8 20	15	5		15	4		0 OF 38

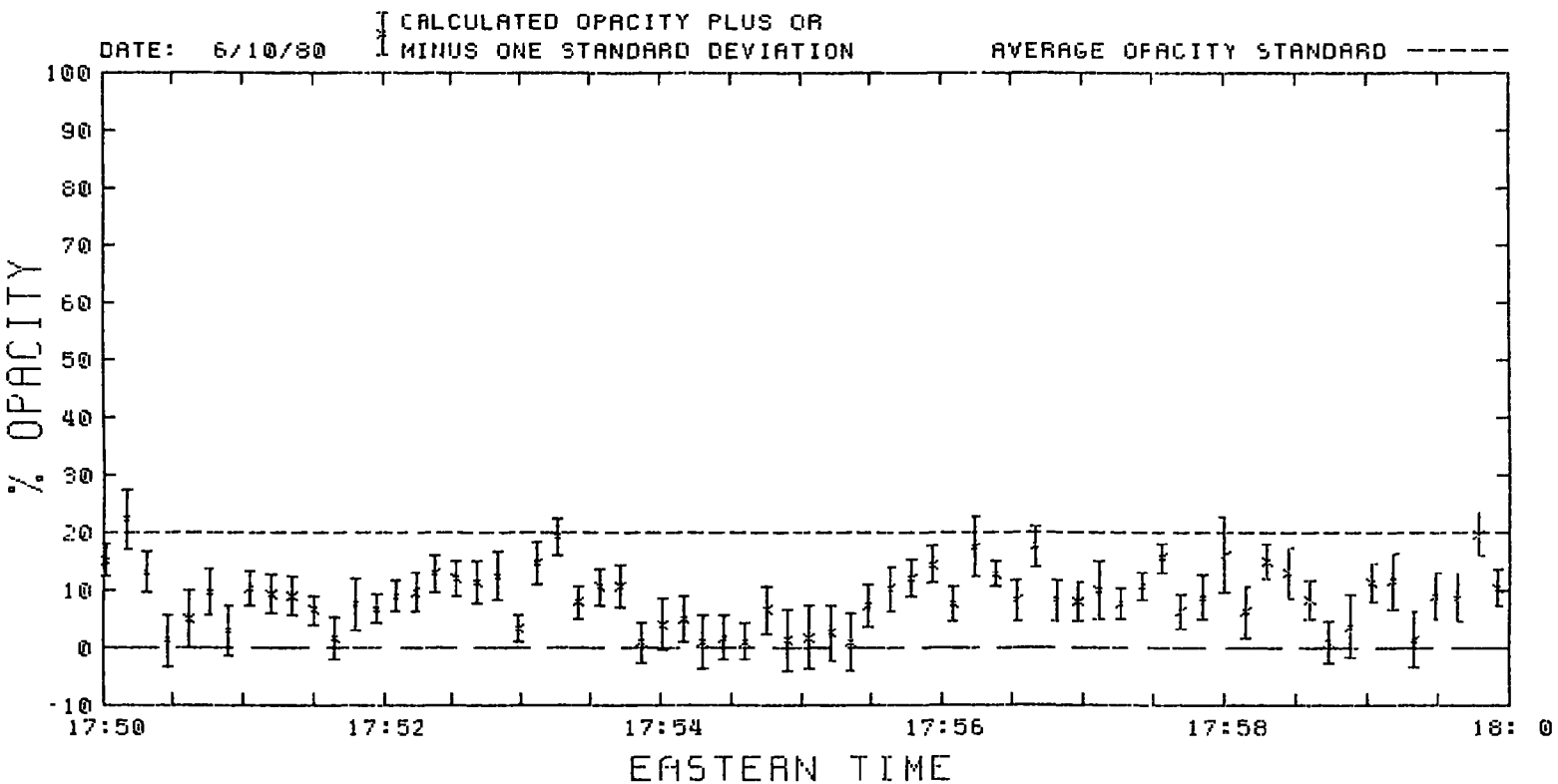
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
NATIONAL ENFORCEMENT INVESTIGATIONS CENTER
DENVER, COLORADO 80225

OMEGA-0058, STACK 4, C&SOE CONESVILLE STATION, CONESVILLE, OHIO FROM THE NORTH SIX MINUTE AVERAGES

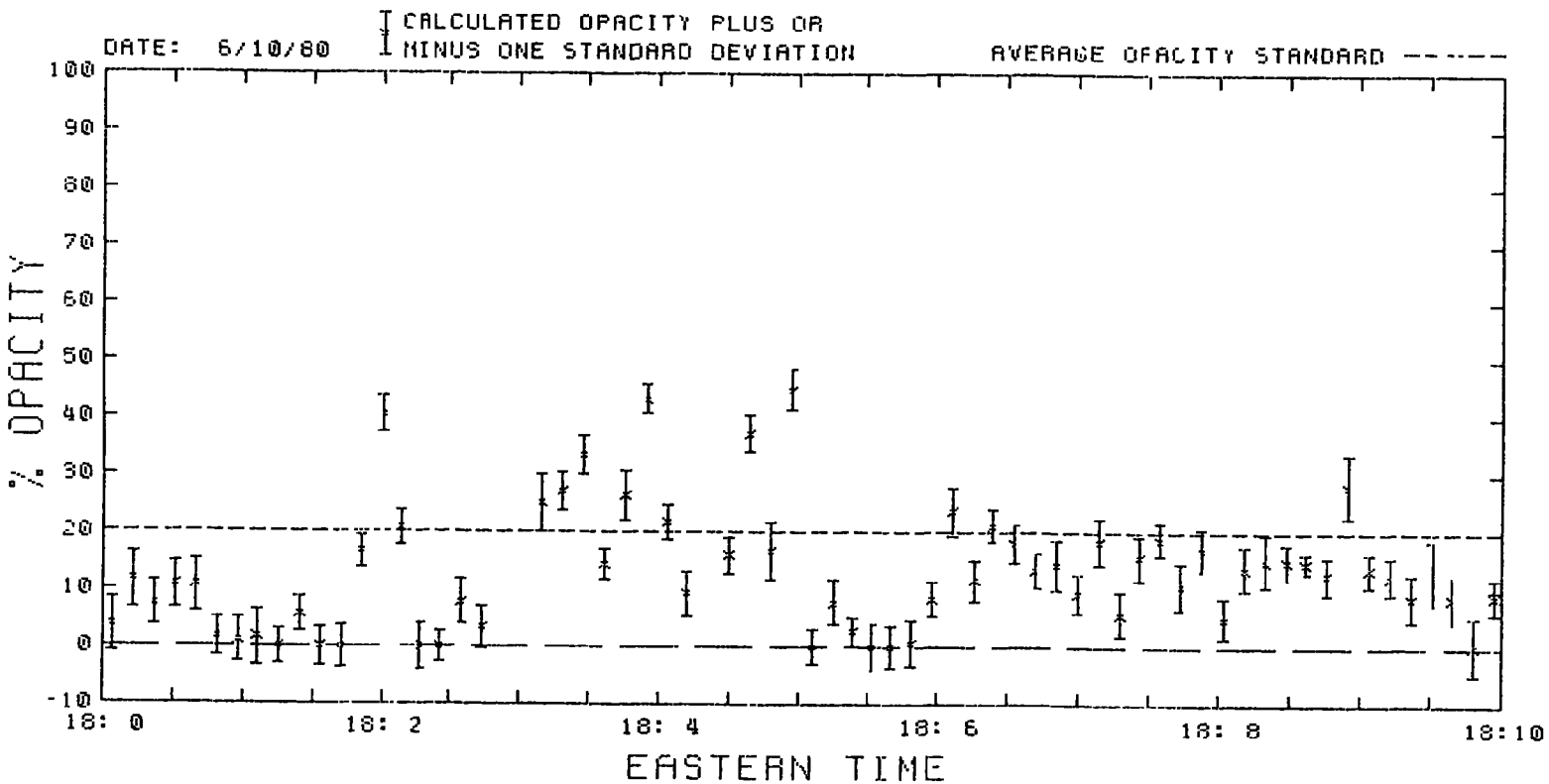
DATE	TIME	OPACITY	SO	VIOLATION	AVERAGE OPACITY	AVERAGE SO	VIOLATION	NUMBER DISCARDED
6/10/80	18 8 29	15	3		16	4		0 OF 38
6/10/80	18 8 37	15	2		16	4		0 OF 38
6/10/80	18 8 46	12	3		0	0		0 OF 0
6/10/80	18 8 55	28	5		16	4		0 OF 39
6/10/80	18 9 4	14	3		16	4		0 OF 40
6/10/80	18 9 13	12	3		16	4		0 OF 40
6/10/80	18 9 22	9	4		15	4		0 OF 40
6/10/80	18 9 31	13	6		15	4		0 OF 40
6/10/80	18 9 39	9	4		15	4		0 OF 40
6/10/80	18 9 48	0	5		14	4		0 OF 40
6/10/80	18 9 57	9	3		13	4		0 OF 40
6/10/80	18 10 6	12	3		13	4		0 OF 40
6/10/80	18 10 15	12	4		13	4		0 OF 40
6/10/80	18 10 24	8	4		13	4		0 OF 41
6/10/80	18 10 33	4	5		13	4		0 OF 41
6/10/80	18 10 42	30	4		12	4		0 OF 41
6/10/80	18 10 50	10	2		12	4		0 OF 41
6/10/80	18 10 59	33	5		12	4		0 OF 41
6/10/80	18 11 8	19	3		12	4		0 OF 41
6/10/80	18 11 17	22	3		13	4		0 OF 41
6/10/80	18 11 26	34	2		14	4		0 OF 41
6/10/80	18 11 35	11	5		14	4		0 OF 41
6/10/80	18 11 44	16	3		14	4		0 OF 41
6/10/80	18 11 52	27	4		15	4		0 OF 41
6/10/80	18 12 10	18	4		15	4		0 OF 40
6/10/80	18 12 19	13	2		15	4		0 OF 40
6/10/80	18 12 28	24	4		15	4		0 OF 40
6/10/80	18 12 37	4	5		15	4		0 OF 40
6/10/80	18 12 45	27	6		15	4		0 OF 40
6/10/80	18 12 54	15	3		15	4		0 OF 40
6/10/80	18 13 3	10	3		15	4		0 OF 40
6/10/80	18 13 12	12	3		15	4		0 OF 40
6/10/80	18 13 21	16	2		15	4		0 OF 40
6/10/80	18 13 30	20	2		15	4		0 OF 40
6/10/80	18 13 39	12	5		15	4		0 OF 40
6/10/80	18 13 47	16	2		15	4		0 OF 40
6/10/80	18 13 56	15	5		15	4		0 OF 40
6/10/80	18 14 5	13	2		15	4		0 OF 40
6/10/80	18 14 14	13	2		15	4		0 OF 40
6/10/80	18 14 23	12	4		15	4		0 OF 40
6/10/80	18 14 32	10	3		15	4		0 OF 40
6/10/80	18 14 41	13	4		15	4		0 OF 40
6/10/80	18 14 49	8	3		15	4		0 OF 40
6/10/80	18 14 58	10	4		15	4		0 OF 40
6/10/80	18 15 7	15	2		15	4		0 OF 40
6/10/80	18 15 16	9	3		15	4		0 OF 40



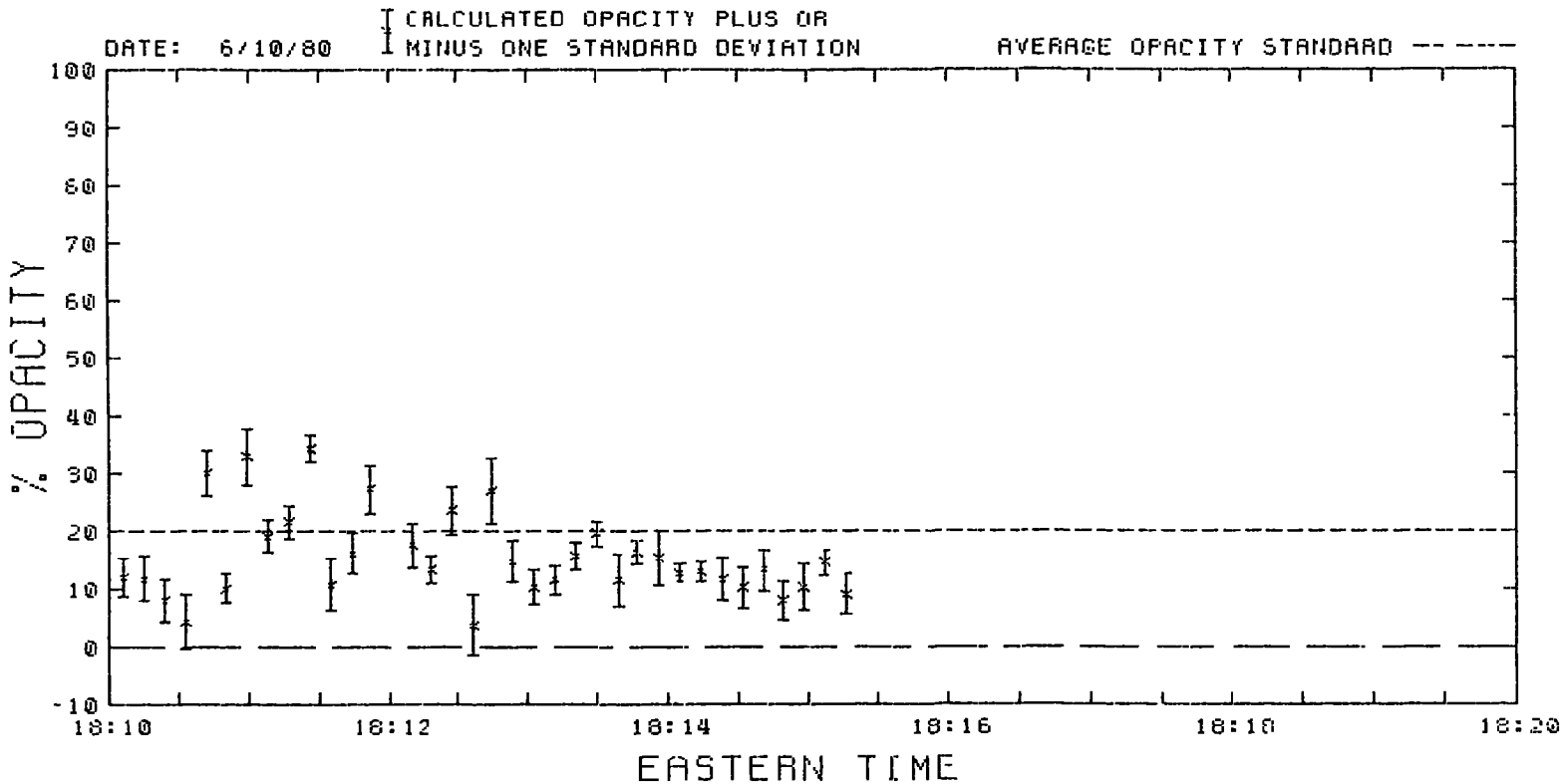
STACK 4, C&SOE CONESVILLE STATION, CONESVILLE, OH



STACK 4, C&SOE CONESVILLE STATION, CONESVILLE, OH



STACK 4, C&SOE CONESVILLE STATION, CONESVILLE, OH



STACK 4, C&SOE CONESVILLE STATION, CONESVILLE, OH

OMEGA-0058

COLUMBUS AND SOUTHERN OHIO ELECTRIC COMPANY

CONESVILLE STATION

STACK 4

June 10, 1980, 18:21:29 to 18:36:05

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
NATIONAL ENFORCEMENT INVESTIGATIONS CENTER
DENVER, COLORADO 80225

OMEGA-0058, STACK 4, C&SOE CONESVILLE STATION, CONESVILLE, OHIO FROM THE NORTH SIX MINUTE AVERAGES

DATE	TIME	OPACITY	SO	VIOLATION	AVERAGE OPACITY	AVERAGE SO	VIOLATION	NUMBER	DISCARDED
6/10/80	18 21 29	25	4		0	0		0 OF	0
6/10/80	18 21 38	12	4		0	0		0 OF	0
6/10/80	18 21 47	19	3		0	0		0 OF	0
6/10/80	18 21 55	4	5		0	0		0 OF	0
6/10/80	18 22 4	11	4		0	0		0 OF	0
6/10/80	18 22 13	17	4		0	0		0 OF	0
6/10/80	18 22 22	10	4		0	0		0 OF	0
6/10/80	18 22 31	6	4		0	0		0 OF	0
6/10/80	18 22 40	8	5		0	0		0 OF	0
6/10/80	18 22 48	35	3		0	0		0 OF	0
6/10/80	18 22 57	13	3		0	0		0 OF	0
6/10/80	18 23 6	13	5		0	0		0 OF	0
6/10/80	18 23 15	34	4		0	0		0 OF	0
6/10/80	18 23 24	24	4		0	0		0 OF	0
6/10/80	18 23 33	23	3		0	0		0 OF	0
6/10/80	18 23 42	24	4		0	0		0 OF	0
6/10/80	18 23 50	22	3		0	0		0 OF	0
6/10/80	18 23 59	11	5		0	0		0 OF	0
6/10/80	18 24 8	26	5		0	0		0 OF	0
6/10/80	18 24 17	14	3		0	0		0 OF	0
6/10/80	18 24 26	19	3		0	0		0 OF	0
6/10/80	18 24 35	17	4		0	0		0 OF	0
6/10/80	18 24 44	18	3		0	0		0 OF	0
6/10/80	18 24 52	17	4		0	0		0 OF	0
6/10/80	18 25 1	16	3		0	0		0 OF	0
6/10/80	18 25 10	8	4		0	0		0 OF	0
6/10/80	18 25 19	9	4		0	0		0 OF	0
6/10/80	18 25 28	22	3		0	0		0 OF	0
6/10/80	18 25 37	10	4		0	0		0 OF	0
6/10/80	18 25 46	18	4		0	0		0 OF	0
6/10/80	18 25 54	15	4		0	0		0 OF	0
6/10/80	18 26 3	14	4		0	0		0 OF	0
6/10/80	18 26 12	16	4		0	0		0 OF	0
6/10/80	18 26 21	7	3		0	0		0 OF	0
6/10/80	18 26 30	2	6		0	0		0 OF	0
6/10/80	18 26 39	14	5		0	0		0 OF	0
6/10/80	18 26 48	15	5		0	0		0 OF	0
6/10/80	18 26 56	8	5		0	0		0 OF	0
6/10/80	18 27 5	13	4		0	0		0 OF	0
6/10/80	18 27 14	21	2		16	4		0 OF	40
6/10/80	18 27 23	7	6		16	4		0 OF	41
6/10/80	18 27 32	28	3		16	4		0 OF	41
6/10/80	18 27 41	24	3		16	4		0 OF	41
6/10/80	18 27 50	10	4		16	4		0 OF	41
6/10/80	18 27 59	26	5		16	4		0 OF	41
6/10/80	18 28 7	15	4		16	4		0 OF	41
6/10/80	18 28 16	12	4		16	4		0 OF	41
6/10/80	18 28 25	15	4		16	4		0 OF	41
6/10/80	18 28 34	25	2		17	4		0 OF	41
6/10/80	18 28 43	16	3		17	4		0 OF	41

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
NATIONAL ENFORCEMENT INVESTIGATIONS CENTER
DENVER, COLORADO 80225

OMEGA-0058, STACK 4, C?EOC CONESVILLE STATION, CONESVILLE, OHIO FROM THE NORTH SIX MINUTE AVERAGES

DATE	TIME	OPACITY	SO	VIOLATION	AVERAGE OPACITY	AVERAGE SO	VIOLATION	NUMBER DISCARDED
6/10/80	18 29 0	4	4		16	4		0 OF 40
6/10/80	18 29 9	2	4		16	4		0 OF 40
6/10/80	18 29 18	10	6		15	4		0 OF 40
6/10/80	18 29 27	18	4		15	4		0 OF 40
6/10/80	18 29 36	17	3		15	4		0 OF 40
6/10/80	18 29 45	25	4		15	4		0 OF 40
6/10/80	18 29 54	11	3		15	4		0 OF 40
6/10/80	18 30 2	11	4		15	4		0 OF 40
6/10/80	18 30 11	9	4		14	4		0 OF 40
6/10/80	18 30 20	14	2		14	4		0 OF 40
6/10/80	18 30 29	9	3		14	4		0 OF 40
6/10/80	18 30 38	15	3		14	4		0 OF 40
6/10/80	18 30 47	4	5		14	4		0 OF 40
6/10/80	18 30 56	12	5		14	4		0 OF 40
6/10/80	18 31 4	7	4		13	4		0 OF 40
6/10/80	18 31 13	15	3		14	4		0 OF 40
6/10/80	18 31 22	19	5		14	4		0 OF 40
6/10/80	18 31 31	15	3		14	4		0 OF 40
6/10/80	18 31 40	6	4		14	4		0 OF 40
6/10/80	18 31 49	14	4		13	4		0 OF 40
6/10/80	18 31 58	12	4		13	4		0 OF 40
6/10/80	18 32 6	12	5		13	4		0 OF 40
6/10/80	18 32 15	11	5		13	4		0 OF 40
6/10/80	18 32 24	23	4		14	4		0 OF 40
6/10/80	18 32 33	7	4		14	4		0 OF 40
6/10/80	18 32 41	14	5		14	4		0 OF 40
6/10/80	18 32 50	9	4		14	4		0 OF 40
6/10/80	18 32 59	16	4		14	4		0 OF 40
6/10/80	18 33 8	14	4		14	4		0 OF 40
6/10/80	18 33 17	10	4		14	4		0 OF 40
6/10/80	18 33 26	5	6		13	4		0 OF 40
6/10/80	18 33 34	15	4		13	4		0 OF 40
6/10/80	18 33 43	9	4		13	4		0 OF 40
6/10/80	18 33 52	25	3		13	4		0 OF 40
6/10/80	18 34 1	11	5		13	4		0 OF 40
6/10/80	18 34 10	26	3		13	4		0 OF 40
6/10/80	18 34 19	15	3		13	4		0 OF 40
6/10/80	18 34 28	11	2		13	4		0 OF 40
6/10/80	18 34 36	22	3		13	4		0 OF 40
6/10/80	18 34 45	12	5		13	4		0 OF 40
6/10/80	18 34 54	9	4		13	4		0 OF 41
6/10/80	18 35 3	7	5		13	4		0 OF 41
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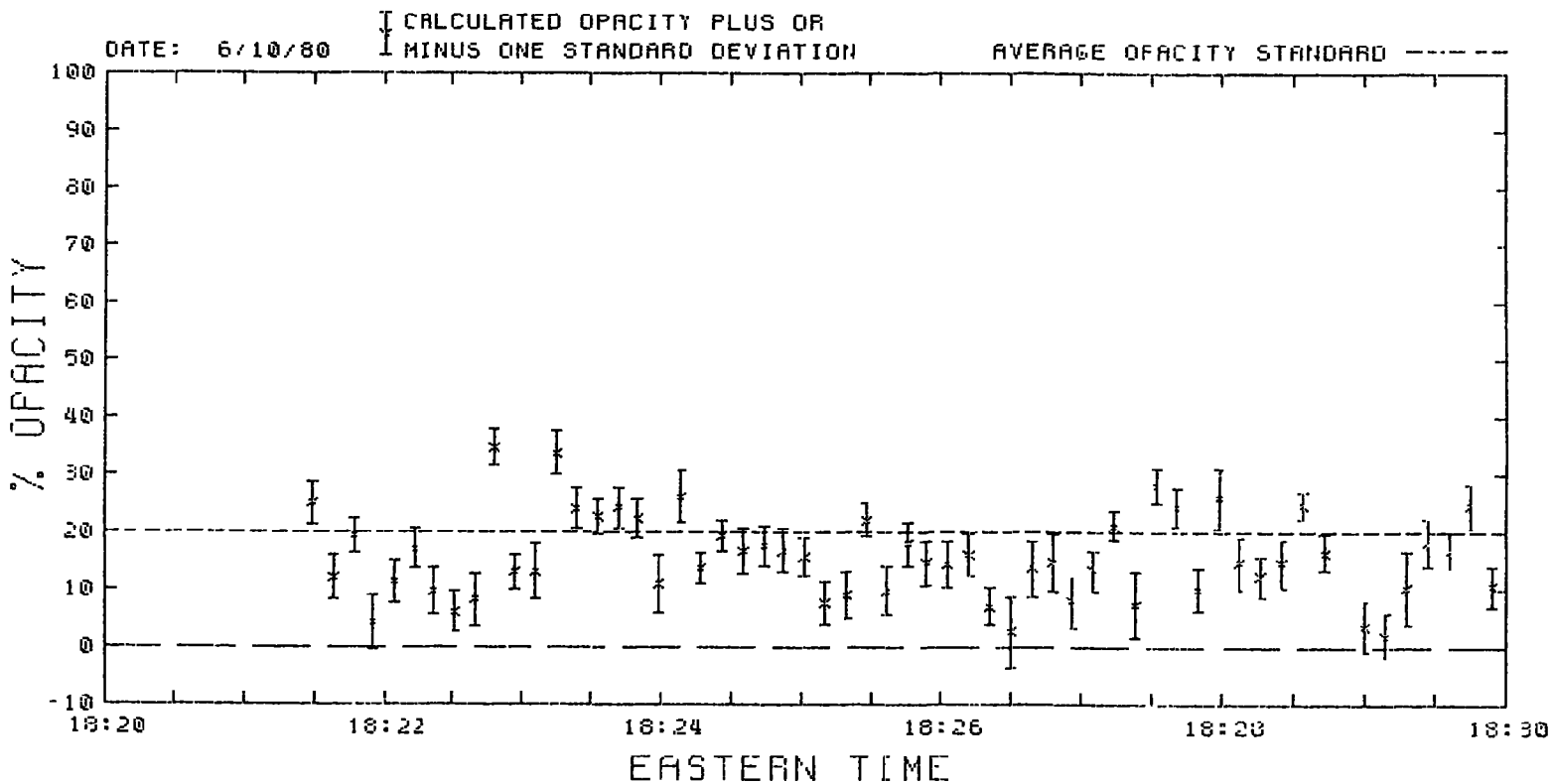
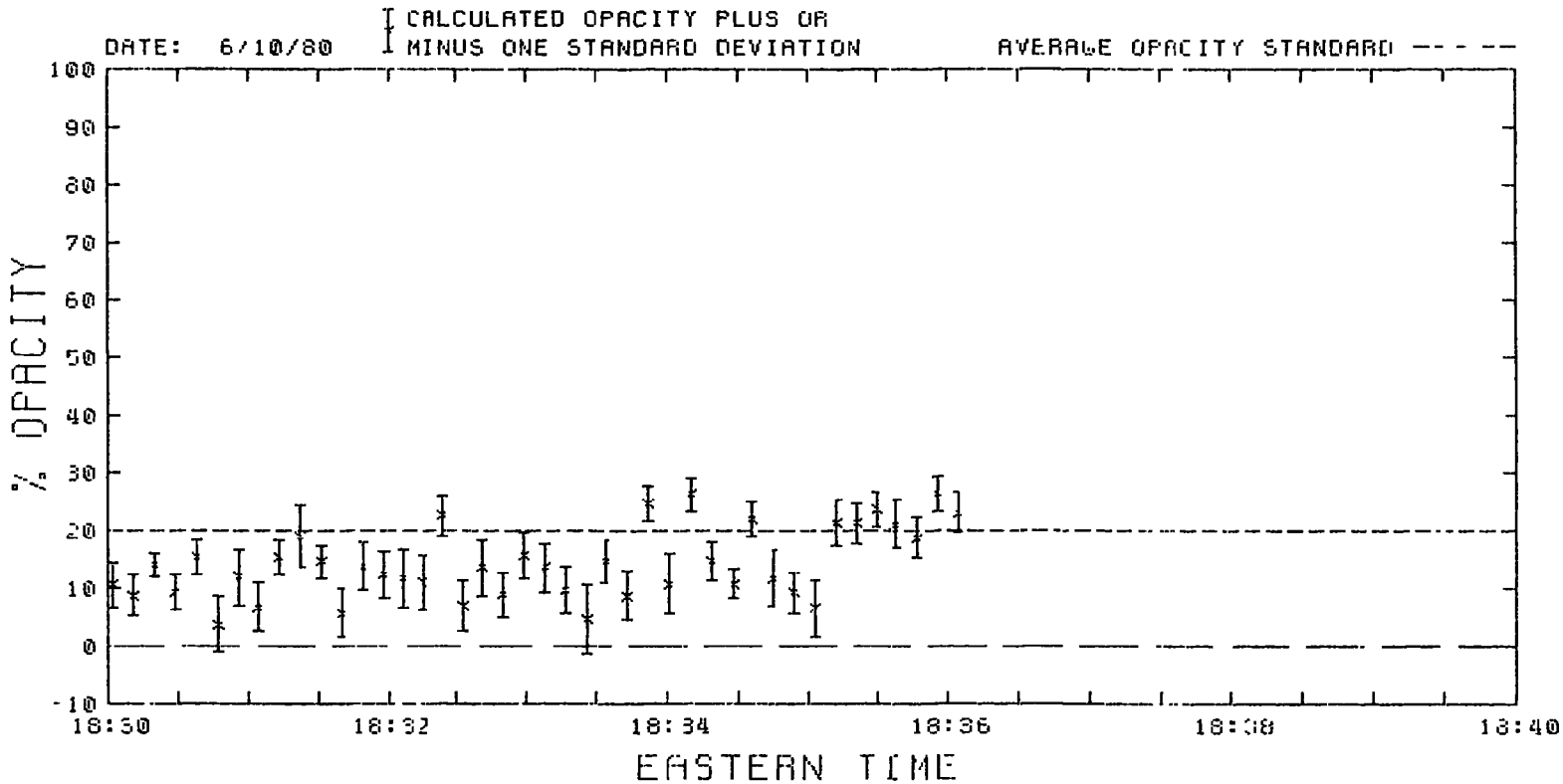
6/10/80	18 35 21	21	4		14	4		0 OF 41
6/10/80	18 35 30	24	3		14	4		0 OF 41
6/10/80	18 35 38	21	4		14	4		0 OF 41
6/10/80	18 35 47	19	4		14	4		0 OF 41
6/10/80	18 35 56	26	3		14	4		0 OF 41
6/10/80	18 36 5	23	4		14	4		0 OF 41



STACK 4, CASDE CONESVILLE STATION, CONESVILLE, OH



STACK 4, C&SOE CONESVILLE STATION, CONESVILLE, OH