

DER

DEC 24 1985

BAQM

NITRAM, INC.

5321 Hartford St. • P.O. Box 2968 • Tampa, Florida 33601 • Phone (813) 626-2181

December 20, 1985

Mr. Henry Robert Lue
Air Permitting Engineer
Hillsborough County Environmental
Protection Agency
1900 - 9th Avenue
Tampa, Florida 33605

Dear Mr. Lue:

This letter is in response to your letter of December 4, 1985.

Your Item 1: During design and construction of the nitric acid plant, Nitram was not certain that the plant could effectively operate with one air compressor and one absorption column. Because of this uncertainty, Specific Condition #13 was included in the permit. During start-up of the plant, it was determined that the plant would, in fact, operate well at reduced production rates.

When long term mechanical problems developed with one air compression system, Nitram requested and was granted permission to operate using only one air compressor and absorption column, with the proviso that the operating stack be compliance tested. The stack was successfully tested and the plant operated until June 12, 1985 with one air compressor and one absorption column. From that date forward, the plant has operated with both air compressors and absorption columns.

It was Nitram's understanding that, following the compliance test while using only one compressor and absorption column, Specific Condition 13 would be deleted from the Operating Permit, since all production rates below design are regulated by 40CFR60 to 3.0 pounds of NOx per ton of 100% nitric acid produced. We would like to take this opportunity to formally request that this condition be omitted from the Operating Permit.

As a related topic, Specific Condition #4 of the Construction Permit states: "Nitrogen oxides expressed as NO₂ shall not exceed 3.0 lb/ton HNO₃ (100%), 101 lb/hr, and 2100 lb/day..." Specific Condition 2 states, "Maximum production rate of nitric acid at this facility shall not exceed 33.5 TPH and 700 TPD, expressed as 100 percent HNO₃".

1-13-86
Talked to Henry Lue
said Nitram should
send request to
Tallahassee as it is
a change in a construction
permit condition.
For HCEPC to hold
permit to operate
until BAQM
processes request to
change construction
permit. *WMB*

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Nitram suggests that, since Specific Condition #4 limits NOx emissions at all rates below design to 3.0 lbs/ton, and also limits daily emissions to 2100 lbs NOx, Specific Condition #2 does not affect the permitted emissions, and could therefore be deleted from the Operating Permit. Nitram therefore requests that this condition be deleted from the Operating Permit.

Your Item 2: As you have pointed out there were brief excursions above the compliance level of 269 ppm NOx during the start-up on November 22 at 0230, 0250 and 0315.

Nitram had been experiencing difficulty achieving compliance within two hours, and we do appreciate the Commissions patience during our start-up problems. On November 22, we were successful for the first time, and some instability was experienced after compliance was achieved.

Since that date, however, one of the causes of the instability has been discovered in the original piping configuration, and the piping has been modified to eliminate the problem. While the plant was out of compliance for 1 hour 51 minutes on November 22, during two subsequent start-ups compliance has been achieved in 1 hour 26 minutes and 1 hour 25 minutes, and subsequent "spikes" have been greatly reduced.

As we understand the regulation, excursions above 3 lbs NOx ton HNO₃ are tolerated up to two hours in a twenty-four hour period; "start-up" is not mentioned per se. Following that logic, then, the spikes must then add to the excursion experienced during start-up.

The enclosed copy of the Continuous Emissions Monitor chart for December 16 shows that compliance was achieved originally within 1 hour 26 minutes, and there were then thirteen very short term excursions. The total time of non-compliance for the twenty-four hour period is still slightly below two hours.

We cannot promise to eliminate the short excursions. The abatement reaction depends on the relative concentrations of natural gas, oxygen and NOx, and these change during start-up. We will continue to minimize both the magnitude and duration of NOx excursions, and we are confident we can remain at less than two hours non-compliance in twenty-four hours, even when the twenty-four hours include a start-up.

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We trust this response is sufficient to your purposes, and that processing of our application can now proceed. If you have further questions, please contact the writer.

Sincerely yours,

NITRAM, INC.

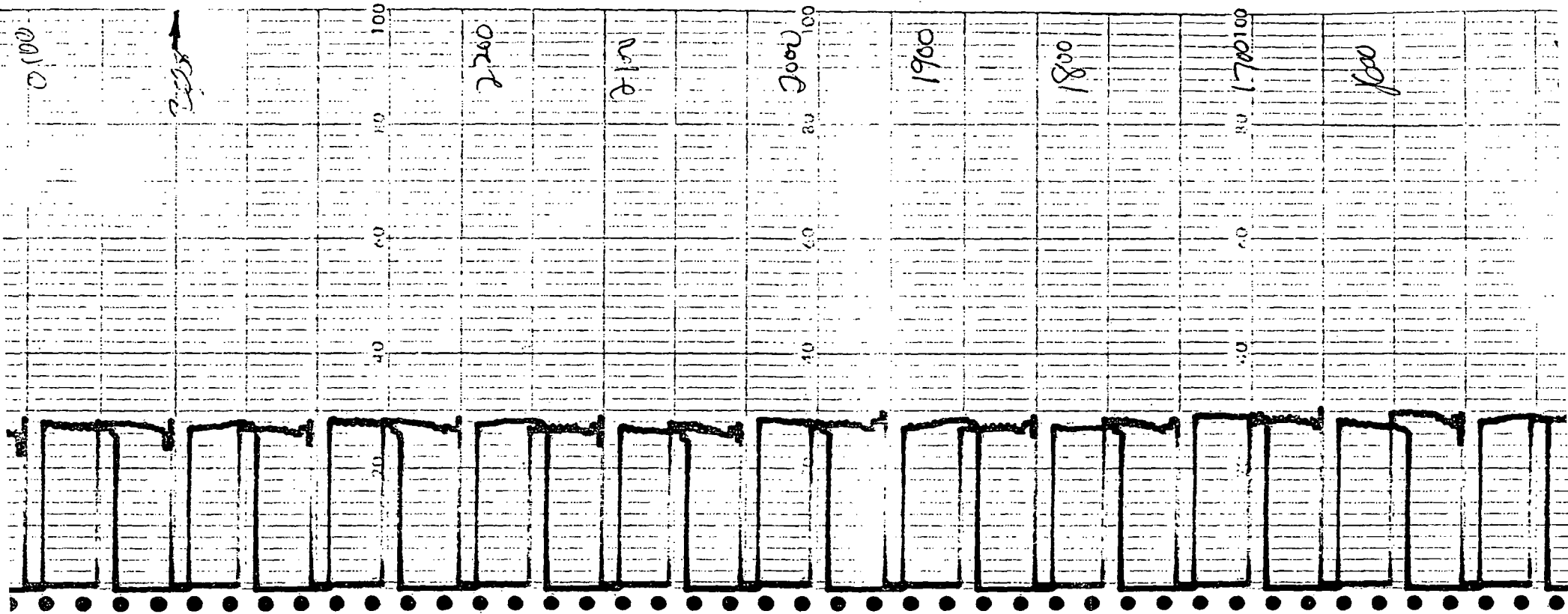


Daniel R. Ross, P.E.
Technical Manager

DER/ss

att.

cc: William Thomas, Department Environmental Regulation
A. G. Suarez, Operations Manager, Nitram
J. F. Harris, President, Nitram
R. L. Pepper, Plant Manager, Nitram



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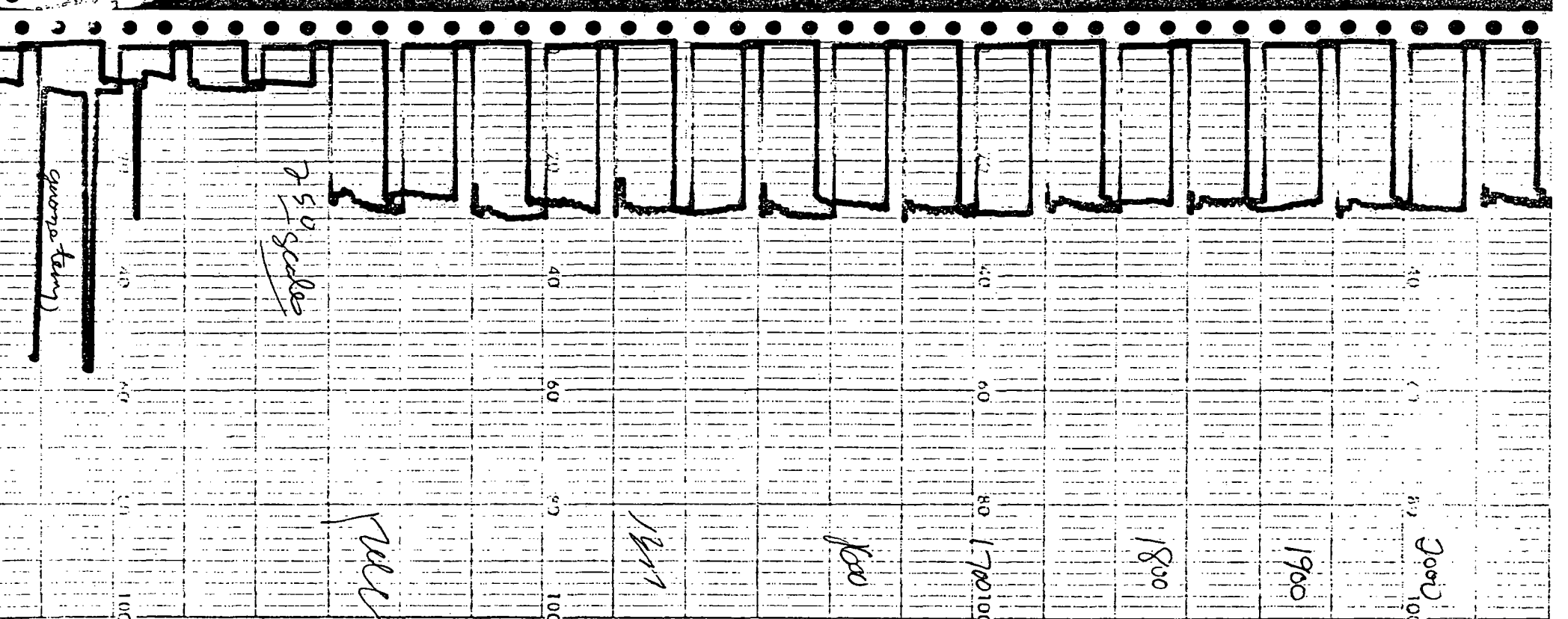
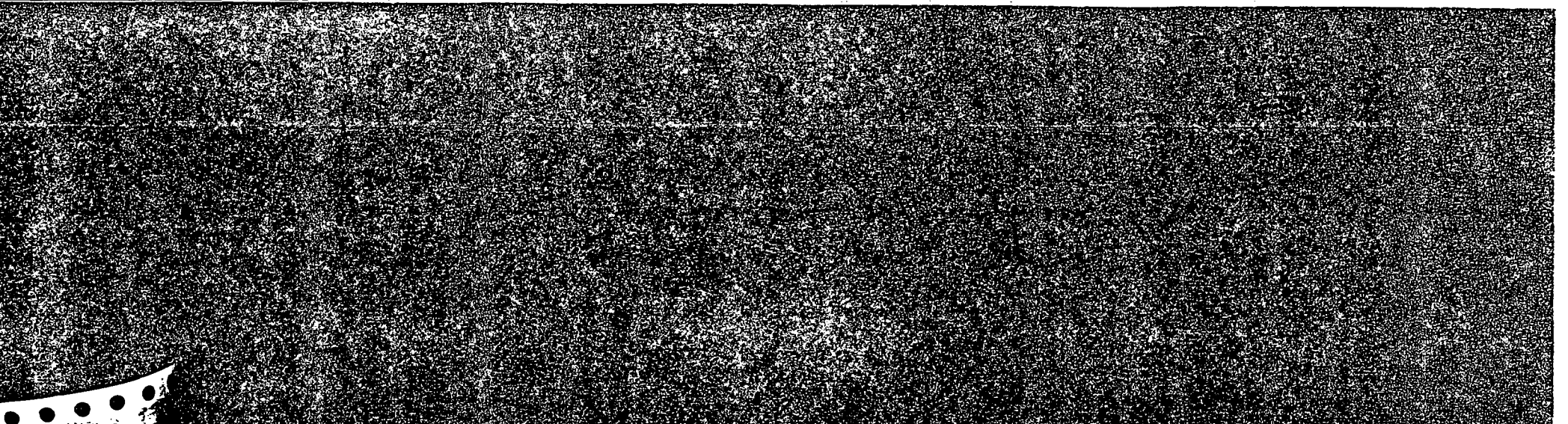
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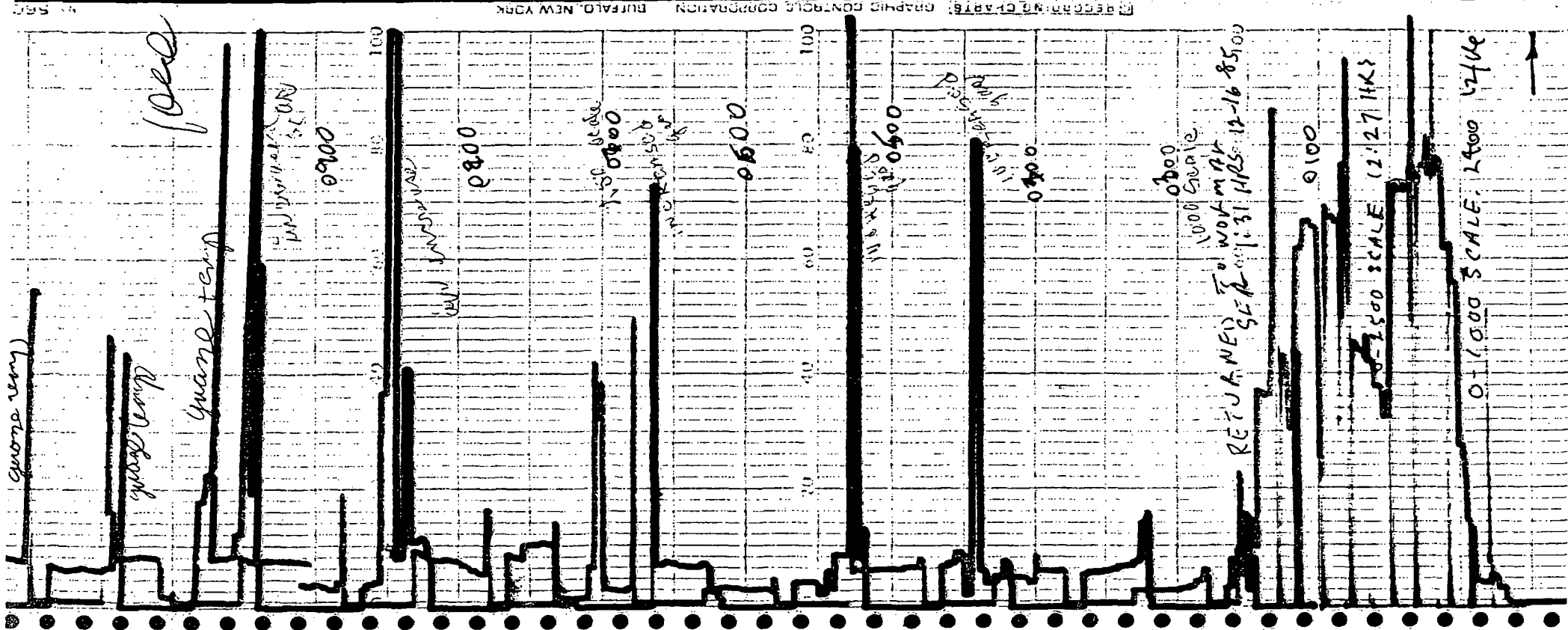
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