

ENCLOSURE 3

F. Rosa



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

APR 15 1982

MEMORANDUM FOR: Karl Kniel, Chief, Generic Issues Branch
Division of Safety Technology

FROM: Faust Rosa, Chief, Instrumentation & Control Systems Branch
Division of Systems Integration

SUBJECT: TASK ACTION PLAN FOR USI A-47, "SAFETY IMPLICATIONS OF
CONTROL SYSTEMS"

ICSB has reviewed the latest draft (attached to concurrence package) of the Task Action Plan for Unresolved Safety Issue (USI) A-47, "Safety Implications of Control Systems" and has the following comments:

- 1) Providing that the contractors successfully complete the work described in the Task Action Plan, stay within the delineated scope, and adequately document their evaluations and recommendations, the effort should be of considerable value in bringing the issue of control system effects on safety to a conclusion. In general, the plan is well formulated and directed at the proper problems.
- 2) Consideration should be given to asking each of the four vendors to make a presentation early in the study to the key contractor personnel and NRC staff members involved in this program on the design philosophy that they have used for control systems. In particular, they should be asked to discuss their design philosophy in the context of the problems addressed by the Task Action Plan for A-47.
- 3) Task 3.4 of the plan should be modified to specifically include an evaluation for the need of additional protection system functions such as safety grade interlocks to override malfunctioning control systems (This should also be reflected in the title of Task 3.4). ICSB continues to consider this the best and probably most cost-effective approach to resolving problems caused by control system failures since this approach would not involve an expansion of the regulatory scope. New criteria for the reliability or surveillance test-

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ing of non-safety grade control systems would, in our opinion, significantly increase the regulatory scope.

- 4) Task 4: The concern is loss of power to the non-safety grade instrumentation and controls, and this is not limited to loss of just non-safety grade power supplies. We recommend that the fourth sentence of the opening paragraph be revised to read as follows:

"The purpose of this task is to evaluate the effects of loss or degradation of the power supplies, safety grade and non-safety grade, which provide power to the non-safety grade instrumentation and control systems."

- 5) Task 4.2: The scope of IE Bulletin 79-27 includes both safety grade and non-safety grade power supply failures. Therefore, we recommend deletion of the words "non-safety grade" from the second sentence of Task 4.2.
- 6) Task 4.3 of the plan should be modified to specifically include an assessment of the effect of implementation of Regulatory Guide 1.97, Revision 2, "Instrumentation for Light-Water Cooled Nuclear Power Plants to Assess Plant and Environs Conditions During and Following an Accident" on any problems found as a result of an assumed loss of power to display instrumentation. ICSB considers that the implementation of Regulatory Guide 1.97, Revision 2, will be very significant in eliminating problems caused by single failures in display systems or in the power supplies used for display systems.

Additionally, for the same reason as Item 4 above, we recommend that the words "non-safety grade" be deleted from the first sentence of Task 4.3.

- 7) As currently written, the second and third paragraphs on page A-47/13 may imply that the staff intends to prepare Supplemental Safety Evaluation Report input to address licensee actions taken on IE Information Notice 79-22 for each operating plant. This is not the case. Staff action is essentially complete on IE Information Notice 79-22 for operating plants and did not include the preparation of Supplemental Safety Evaluation Report input. The wording of these paragraphs should, thus, be revised.

K. Kniel

- 3 -

Should you have any questions, please contact C. E. Rossi in ICSB.

Faust Rosa

Faust Rosa, Chief
Instrumentation & Control Systems Branch
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UNITED STATES
NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT
WASHINGTON, D.C. 20555

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November 30, 1979

IE Bulletin No. 79-27

LOSS OF NON-CLASS-1-E INSTRUMENTATION AND CONTROL POWER SYSTEM BUS
DURING OPERATION

Description of Circumstances:

On November 10, 1979, an event occurred at the Oconee Power Station, Unit 3, that resulted in loss of power to a non-class-1-F 120 Vac single phase power panel that supplied power to the Integrated Control System (ICS) and the Non-Nuclear Instrumentation (NNI) System. This loss of power resulted in control system malfunctions and significant loss of information to the control room operator.

Specifically, at 3:16 p.m., with Unit 3 at 100 percent power, the main condensate pumps tripped, apparently as a result of a technician performing maintenance on the hotwell level control system. This led to reduced feedwater flow to the steam generators, which resulted in a reactor trip due to high coolant system pressure and simultaneous turbine trip at 3:16:57 p.m. At 3:17:15 p.m., the non-class-1-E inverter power supply feeding all power to the integrated control system (which provides proper coordination of the reactor, steam generator feedwater control, and turbine) and to one NNI channel tripped and failed to automatically transfer its loads from the DC power source to the regulated AC power source. The inverter tripped due to blown fuses. Loss of power to the NNI rendered control room indicators and recorders for the reactor coolant system (except for one wide-range RCS pressure recorder) and most of the secondary plant systems inoperable, causing loss of indication for systems used for decay heat removal and water addition to the reactor vessel and steam generators. Upon loss of power, all valves controlled by the ICS assumed their respective failure positions. The loss of power existed for approximately three minutes, until an operator could reach the equipment room and manually switch the inverter to the regulated AC source.

The above event was discussed in IE Information Notice No. 79-29, issued November 16, 1979.

NUREG 0600 "Investigation into the March 28, 1979 TMI Accident" also discusses TMI LER 78-021-03L whereby the RCS depressurized and Safety Injection occurred on loss of a vital bus due to inverter failure.

Actions to Be Taken by Licensees

For all power reactor facilities with an operating license and for those nearing completion of construction (North Anna 2, Diablo Canyon, McGuire, Salem 2, Sequoyah, and Zimmer):

Due ~ 2-29-80

1. Review the class-1-E and non-class 1-E buses supplying power to safety and non-safety related instrumentation and control systems which could affect the ability to achieve a cold shutdown condition using existing procedures or procedures developed under item 2 below. For each bus:
 - a) identify and review the alarm and/or indication provided in the control room to alert the operator to the loss of power to the bus.
 - b) identify the instrument and control system loads connected to the bus and evaluate the effects of loss of power to these loads including the ability to achieve a cold shutdown condition.
 - c) describe any proposed design modifications resulting from these reviews and evaluations, and your proposed schedule for implementing those modifications.
2. Prepare emergency procedures or review existing ones that will be used by control room operators, including procedures required to achieve a cold shutdown condition, upon loss of power to each class 1-E and non-class 1-E bus supplying power to safety and non-safety related instrument and control systems. The emergency procedures should include:
 - a) the diagnostics/alarms/indicators/symptom resulting from the review and evaluation conducted per item 1 above.
 - b) the use of alternate indication and/or control circuits which may be powered from other non-class 1-E or class 1-E instrumentation and control buses.
 - c) methods for restoring power to the bus.

Describe any proposed design modification or administrative controls to be implemented resulting from these procedures, and your proposed schedule for implementing the changes.

3. Re-review IE Circular No. 79-02, Failure of 120 Volt Vital AC Power Supplies, dated January 11, 1979, to include both class 1-E and non-class 1-E safety related power supply inverters. Based on a review of operating experience and your re-review of IE Circular No. 79-02, describe any proposed design modifications or administrative controls to be implemented as a result of the re-review.
4. Within 90 days of the date of this Bulletin, complete the review and evaluation required by this Bulletin and provide a written response describing your reviews and actions taken in response to each item.

Reports should be submitted to the Director of the appropriate NRC Regional Office and a copy should be forwarded to the NRC Office of Inspection and Enforcement, Division of Reactor Operations Inspection, Washington, D.C. 20555.

If you desire additional information regarding this matter, please contact the IE Regional Office.

Approved by GAO B180225 (R0072); clearance expires 7/31/80. Approval was given under a blanket clearance specifically for identified generic problems.



SMUD

SACRAMENTO MUNICIPAL UTILITY DISTRICT □ 6201 S Street, Box 15830, Sacramento, California 95813; (916) 452-3211

February 22, 1980

Nuclear Regulatory Commission
Attention: Mr. R. H. Engelken, Director
Region V Office of Inspection &
Enforcement

1990 North California Boulevard
Walnut Creek Plaza, Suite 202
Walnut Creek, California 94596



Docket No. 50-312
Rancho Seco Nuclear Generating
Station, Unit No. 1
IE Bulletin 79-27

Dear Mr. Engelken:

The Sacramento Municipal Utility District has reviewed IE Bulletin 79-27 concerning the loss of non-class-1-E instrumentation and control power system bus during operation. The following information is provided in response to the items in this Bulletin.

1. Review the class 1-E and non-class 1-E buses supplying power to safety and non-safety related instrumentation and control systems which could affect the ability to achieve a cold shutdown condition using existing procedures developed under item 2 below, for each bus.
 - a. Identify and review the alarm and/or indication provided in the control room to alert the operator to the loss of power to the bus.

1.a. Answer

Rancho Seco has seven buses supplying instrumentation and control systems for the plant. Of the seven, four are class 1-E, and the remaining three are non-class 1-E systems. The identification of each power source is:

- | | |
|-----------------------|-----|
| 1. Vital power source | 1-A |
| 2. Vital power source | 1-B |
| 3. Vital power source | 1-C |
| 4. Vital power source | 1-D |
| 5. Power source | 1-E |
| 6. Power source | 1-F |
| 7. Power source | 1-J |

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Each of the above systems has annunciator indication of either trouble or failure within the control room. The identification of each follows:

1. Vital power bus 1A trouble; 125v DC bus A trouble (two separate points)
2. Vital power bus 1B trouble; 125v DC bus B trouble (two separate points)
3. Vital power bus 1C trouble; 125v DC bus C trouble (two separate points)
4. Vital power bus 1D trouble; 125v DC bus D trouble (two separate points)
5. Turbine plant 120v AC bus 1E and 1F trouble;
6. 125v DC bus E trouble; 125v DC bus F trouble (two separate points)
7. Channel "A" power failure (for indication of loss of Safety Features "A" digital power)
8. Channel "B" power failure (for indication of loss of Safety Features "B" digital power)
9. NNI "X" power fail - Note: This power source is supplied from vital bus 1-D.
10. NNI "Y" or "Z" power failure - Note supplied from 1-J
11. ICS or "fan" power failure - Note: This power source is supplied from vital bus 1-C.
12. ICS or NNI 120v AC power transfer. - Note: The source of power when transfer occurs is taken from the 1-J bus.

Therefore, indication of trouble or bus loss for either the class 1-E or non-class 1-E is adequately indicated to the operator.

- b. Identify the instrument and control system loads connected to the bus and evaluate the effects of loss of power to those loads including the ability to achieve a cold shutdown condition.

1.b. Answer

The instrument and control loads connected to each bus is as follows:

1. Vital bus "A" (Class 1E)
 - Safety Features actuation Channel "A" analog
 - Safety Features actuation Channel "A" digital
 - Reactor Protection system Channel "A"
 - Control rod trip breaker "A"
2. Vital bus "B" (Class 1E)
 - Safety Features actuation Channel "B" analog
 - Safety Features actuation Channel "B" digital
 - Reactor protection system Channel "B"
 - Control rod trip breaker "B"
3. Vital bus "C" (Class 1E)
 - Safety Features actuation Channel "C" analog
 - Reactor protection system Channel "C"
 - Integrated control system "X"
 - Control rod drive system logic
4. Vital bus "D" (Class 1E)
 - Reactor protection system Channel "D"
 - Non-nuclear instrumentation system "X"
 - Non-nuclear instrumentation system "Y"
 - Control rod drive system logic
5. Bus 1E (non Class 1-E)
 - Polishing demin control
 - Console and vertical board instruments
 - Plant instrument power
 - Plant miscellaneous control
 - Reactor building instrument power
6. Bus 1F (non Class 1-E)
 - Make-up demin control
 - Pressurizer control
 - Reactor instrument power
 - Pressurizer level control
7. Bus 1J (non Class 1-E)
 - Control rod drive system logic
 - Integrated control system alternate
 - Non-nuclear instrumentation alternate "X"
 - Non-nuclear instrumentation alternate "Y"
 - Auxiliary boilers E-360 and E-365 control

1b Continued

The effects of a loss of Class 1E power to the loads.

1. Safety Features actuation Channel "A" analog
 - a. The effect of a loss of power to this channel results in a channel trip on the analog subsystem.

1b Continued

2. Safety Features Actuation Channel "A" digital
 - a. The effect of a loss of power to this channel will result in a subsystem trip, however, no actuation to the end devices connected to the system will result. This system requires power to actuate the output relays within the system. However, if either of the other two active channels sense a trip requirement, the "B" subsystem devices will be actuated.
3. Reactor Protection System Channel "A"
 - a. The effect of a loss of power to this channel will result in a channel trip.
4. Control Rod Trip Breaker "A"
 - a. The effect of a loss of power to this system will cause a breaker to trip open.
5. Safety Features Actuation Channel "B" Analog
 - a. The effect of a loss of power to this channel is the same as item "1" above.
6. Safety Features Actuation Channel "B" Digital
 - a. The effect of a loss of power to this channel is the same as item "2" above. ("A" devices will actuate)
7. Reactor Protection System Channel "B"
 - a. The effect of a loss of power to this channel will result in a channel trip.
8. Control Rod Trip Breaker "B"
 - a. The effect of a loss of power to this channel will result in the breaker tripping open.
9. Safety Features Actuation Channel "C" Analog
 - a. The effect of a power loss to this subsystem will result in a channel trip, thus resulting in a 1 out of 2 of the remaining channels to actuate all end devices.
10. Reactor Protection System Channel "C"
 - a. The effect of a power loss to this channel

February 22, 1980

11. Integrated Control System (Supplied from "C")
- The effect of a loss of power to the ICS will result in a power transfer of the ICS via a automatic transfer to a non-Class 1E bus. Therefore, a loss of power on this channel will have no affect on the operation of the ICS. However, if the assumption is taken that a non 1E bus is not available then the ICS failure mode is that all controlled devices will revert to their 50% position.

12. Control Rod Drive System Logic (Supplied from "C")
- The effect of a loss of power from this source would not affect the operation of the control rod drive system. Redundant power supplies are fed from a separate Class 1E source which would take over the load independently.

13. Reactor Protection System Channel "D"
- The effect of a power loss to this channel will result in a channel trip.

14. Non-nuclear Instrumentation System "X" Power and "Y" Power (Supplied from "D")

- The effect of a loss of power from this source would cause the following:
 - Each source of power, one to the "X" supply and one to the "Y", is backed with an automatic transfer switch. If the entire source was lost, both would be transfered to a non-Class 1E bus. Therefore, no adverse affects would be noted.

15. Control Rod Drive System Logic (Supplied from "D")

- The effect would be the same as 12 above. The redundant power supplies will assume all load for the system.

The following lists the effect of power loss to non-Class 1E buses and addresses only those items essential to plant operation as far as instrumentation and control is concerned.

16. Polishing Demineralizer Control (Supplied from E)

- A loss of power to this subsystem would effectively cause a loss of feedwater which would result in transferring to the auxiliary feedwater system. In addition,

16.a Continued

Rancho Seco has the capability of manually bypassing the polishing system which would allow returning to the normal feedwater system if desired. The bypass could be initiated within 10 minutes if this mode was required.

17. Console and Vertical Board Instruments

- a. The instruments and indicators fed from bus "E" are not essential to plant operation, therefore, loss of power would have no adverse affect.

18. Plant Instrument Power, Plant Miscellaneous Control, and Reactor Building Instrument Power

- a. The systems listed here are not essential to plant operations, therefore, loss of power to this system would have no adverse affect.

19. Make-up Demin Control Fed From the "F" Bus

- a. The make-up demin system is not essential to obtaining a cold shutdown, therefore, loss of power to this system would have no adverse affect. In addition, a manual bypass of the system can be initiated to maintain flow in the system for letdown and make-up.
- b. Rancho Seco has the capability through cross ties between this bus (F) and the power system (J) to maintain both buses on the line on a failure of either. To initiate this cross tie would take approximately 5 minutes to restore the power to the lost system. Operating procedures are available to cover this requirement.

- 20. Any other system, fed by either the "F" bus or the "J" bus, necessary for a controlled shutdown of the plant, can be handled in the same manner as stated in item 19.b.

- c. Describe any proposed design modifications resulting from these reviews and evaluations, and your proposed schedule for implementing those modifications.

1.c. Answer

Based on the results of this review, no design modifications are proposed.

2. Prepare emergency procedures or review existing ones that will be used by control room operators, including procedures required to achieve a cold shutdown condition, upon loss of power to each class 1-E and non-class 1-E bus supplying power to safety and non-safety related instrument and control systems. The emergency procedures should include:

- a. The diagnostics/alarms/indicators/symptom resulting from the review and evaluation conducted per item 1 above.
- b. the use of alternate indication and/or control circuits which may be powered from other non-class 1-E or class 1-E instrumentation and control buses.
- c. methods for restoring power to the bus.

Describe any proposed design modification or administrative controls to be implemented resulting from these procedures, and your proposed schedule for implementing the changes.

Answer

As described in response to Question 1.b upon loss of power to each class 1-E and non-class 1-E bus supplying power to safety and non-safety related instrument and control systems that may be required to achieve a cold shutdown condition there is an automatic transfer to another power source. Therefore, no additional emergency procedures are required.

3. Re-review IE Circular No. 79-02, Failure of 120 Volt Vital AC Power Supplies, dated January 11, 1979, to include both class 1-E and non-class 1-E safety related power supply inverters. Based on a review of operating experience and your re-review of IE Circular No. 79-02, describe any proposed design modification or administrative controls to be implemented as a result of the re-review.

Answer

As a result of the District's re-review of IE Circular No. 79-02 Failure of 120 Volt Vital AC Power Supplies, it has been determined that no additional changes are required in either design or administrative control.

Mr. Engelken

-8-

February 22, 1980

Please advise if we can provide any additional information; however, we consider this response to complete the requirements for the subject bulletin and will take no further action unless so advised.

Sincerely yours,

W. S. Bossenmaier

W. S. Bossenmaier
Acting General Manager

cc: Office of Inspection and Enforcement
Division of Reactor Operations Inspection

SMUD

SACRAMENTO MUNICIPAL UTILITY DISTRICT □ 6201 S Street, Box 15830, Sacramento, California 95813; (916) 452-3211

March 12, 1980

Nuclear Regulatory Commission
Attention: Mr. R. H. Engelken, Director
Region V Office of Inspection & Enforcement
1990 North California Boulevard
Walnut Creek Plaza, Suite 202
Walnut Creek, California 94596



Re: Docket No. 50-312
Rancho Seco Nuclear Generating
Station, Unit No. 1
IE Bulletin 79-27

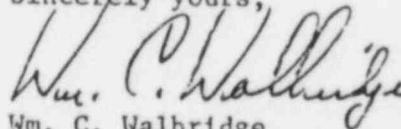
Dear Mr. Engelken:

The Sacramento Municipal Utility District reviewed IE Bulletin 79-27 and responded by letter addressed to you dated February 22, 1980. As a result of the Crystal River Unit No. 3 Nuclear Station reactor trip on February 26, 1980, the Director, Office of Nuclear Reactor Regulation, issued a request for information dated March 6, 1980. Within that request, all B&W licensees were directed to expand their review under IE Bulletin 79-27 to include the implications of the Crystal River Unit No. 3 event.

Attached is the response to the request for information from the Office of Nuclear Reactor Regulation. Please consider this as a supplement to SMUD's response of February 22, 1980, to IE Bulletin 79-27.

Please advise if we can provide any additional information; however, we consider this response to complete the requirements of the subject bulletin and the NRR request for information letter of March 6, 1980. We will take no further action unless so advised.

Sincerely yours,



Wm. C. Walbridge
General Manager

WCW:RPO:jim
Attachment

cs: Nuclear Regulatory Commission
Office of Inspection and Enforcement
Division of Reactor Operations Inspection
Washington, D. C. 20555

SACRAMENTO MUNICIPAL UTILITY DISTRICT

RESPONSE TO

NUCLEAR REGULATORY COMMISSION

OFFICE OF NUCLEAR REACTOR REGULATION

REQUEST FOR INFORMATION DATED MARCH 6, 1980

1. REQUEST: Summarize power upset events on NNI/ICS that have previously occurred at your plant.

RESPONSE:

EVENT #1, 11-2-74, Rx @ 32% FP:

Momentary loss of NNI "Y" and "Z" DC power supplies due to tripping of "J" inverter during manual switching. Some control room instrumentation was lost (~12 seconds).

EVENT #2, 12-26-74, Rx @ 40% FP:

Loss of ICS X power due to a component failure (SCR) in the "C" inverter. Manual control of steam and feedwater was required.

EVENT #3, 12-28-74, Rx @ 40% FP:

Loss of ICS X power due to a component failure (3 ϕ Bridge) in the "C" inverter. Manual control of steam and feedwater was required.

EVENT #4, 12-31-74, Rx @ 40% FP:

Momentary loss of NNI Y and Z and ICS Y power supplies due to tripping "J" inverter during manual switching. Some control room instrumentation was lost (~45 seconds).

Following these events above, parallel inverter supply was added to the ICS and NNI DC supplies. In addition, an automatic bus transfer was added to the 118 VAC instrumentation supply. See Figure 1 for initial power supply configuration and Figure 2 for modification performed.

EVENT #5, 4-16-75, Rx @ 35% FP:

Reactor tripped due to loss of "B" inverter which resulted in a loss of neutron power signal to the ICS.

A two-input Auctioneer was added to select the highest of the average of two neutron signals to prevent a recurrence. The two inputs are powered by different inverters.

EVENT #6, 3-20-78:

See response to Item 3.

EVENT #7, 1-2-79, Rx @ 100% FP:

A reactor trip resulted from the loss of reactor coolant flow indication to the ICS. The flow signal originates in the "A" Reactor Protection Channel which was depowered by a trip of the "A" inverter. ICS responded correctly during post trip control.

EVENT #8, 1-5-79, Rx @ 100% FP:

During maintenance, a short to ground caused ICS power supplies to trip. Automatic control was lost. Excessive cooldown resulted from subsequent SFAS initiation of auxiliary feedwater.

A Safety Grade Auxiliary Feedwater Control, independent of SFAS or ICS, is being designed.

EVENT #9, 4-22-79, Rx @ 100% FP:

A reactor trip resulted from the loss of reactor coolant flow indication to the ICS. The flow signal originates in the "A" Reactor Protection Channel which was depowered by a trip of the "A" inverter. ICS responded correctly during post trip control.

2. REQUEST: Specifically review the Crystal River event, and address your susceptibility to it in general.

RESPONSE: SMUD has reviewed the Crystal River event, both the cause and sequence of events.

Bailey Meter Company has informed the Sacramento Municipal Utility District that the cause of the Crystal River event was the improper insertion of a buffer card (Part No. 6624609L1) into a buffer module (Part No. 6624610). This improper insertion resulted in a short of 24 volts to common with a total loss of non-nuclear instrument X power supply.

Bailey also supplied installation instructions on the proper method of buffer card replacement. These instructions will be covered within a training program with all Instrument and Control Technicians during the present refueling outage. In addition, these instructions will be added to applicable procedures.

To ensure that all buffer cards presently installed have been installed properly, Rancho Seco will inspect all modules containing these buffer cards during the present refueling outage. The inspection will consist of ensuring proper alignment of the bifurcated contacts, no bent contacts and the contacts are properly seated.

Concerning the sequence of events, SMUD contends that with the modifications made to the Rancho Seco NNI systems and the addition of selected instrumentation available to the operators which is not dependent on NNI power, the primary code safety valves would not have been challenged. Not challenging the code safety valves would therefore prevent filling the pressurizer relief tank, rupturing the rupture disc and spilling reactor coolant into the reactor containment building.

The modifications made to the Rancho Seco NNI systems and the dedicated instruments independent of the NNI power is explained in response number 3.

SMUD's contention that reactor coolant would not spill into the reactor containment building is based on the fact that the instrumentation which is independent of NNI would provide information to the operator, so the subcooling margin could be determined and high pressure injection reduced, preventing solid plant conditions. This instrumentation would also provide steam generator level information, allowing the operator to utilize the Class 1 auxiliary feed system to supply feedwater, if necessary.

3. REQUEST: Set forth the information presented by each licensee in the meeting on March 4.

RESPONSE: The SMUD representative at the March 4 meeting described Rancho Seco's NNI transient of March 20, 1978, and corrective action taken.

Approximately 0425 on March 20, 1978, the NNI-Y channel tripped. This trip was caused by a control room operator who was replacing a burned-out light bulb in a back-lighted pushbutton switch on one of the control consoles. The DC power for this switch is provided from the "Y" portion of the Non-Nuclear Instrumentation. To change out the light bulb, the light assembly was pulled out from the panel and flipped down, exposing the bulbs. During the change, a bulb was dropped into the open light assembly cavity, creating a short to ground. The current-limiting and undervoltage protection for the NNI-Y DC power supplies actuated during the current surge, cutting off AC power to all NNI-Y DC power supplies.

This transient was reported to the NRC by Reportable Occurrence 78-1 dated March 31, 1978. The SMUD Management Safety Review Committee (MSRC) held a meeting on March 22, 1978, at which time a three-member committee was established. This committee was directed to investigate the Rancho Seco transient and recommend corrective action to prevent future recurrence of this or a similar problem. The committee members were:

- a. SMUD Supervising Electrical Engineer
- b. SMUD Supervising Mechanical Engineer
- c. SMUD Nuclear Engineer who held an NRC Senior License

This committee presented a report to the MSRC on June 19, 1978. The recommendations and corrective action taken were as follows:

- a. RECOMMENDATION: Nuclear Operations should develop a nonconducting plastic cap or rectangular foam rubber plug to insert in or cover the open back-lighted pushbutton modules whenever the lamp bulb section of the module is lifted out.

ACTION TAKEN: Nuclear Operations developed and instituted the use of a rectangular foam rubber plug.

- b. RECOMMENDATION: Transport the upper bulb fixture portion of the module to a remote location for removal and replacement of bulbs.

ACTION TAKEN: This practice has been instituted with all fixtures which are removable.

- c. RECOMMENDATION: Perform tests on the existing NNI-Y power supply system to determine the following conditions:

- 1) Trip point of the power supply monitors (22 V)
- 2) Time delay to trip circuit breakers S1 and S2 (0.5 sec.)
- 3) The ampere limiting point of the 24-volt DC NNI-Y power supplies (7.5)
- 4) Transfer voltage point of the AC automatic transfer switch, relay 83 (100 V)
- 5) Overcurrent test at least 3 of the 5A fuses and compare test data with the manufacturer's curves.
- 6) Conduct an actual short circuit test similar to the accident case and verify protective device coordination using an oscillograph.

ACTION TAKEN: Testing was performed as recommended. The figures in parentheses are the results of the tests. In all cases, acceptance criteria were met.

- d. RECOMMENDATION: For the NNI-Y power circuit, measure or calculate the amperes in the backlighted pushbutton-auxiliary relay circuits, and determine the possibility of using lower-rated fuses. Possibly lower-rated fuses would carry the load of the lamp bulbs and relay coils and would provide faster clearing of faults and prevent tripping at the 120 volt AC input circuit breakers.

ACTION TAKEN: As a result of the recommendation, all 5A fuses are being replaced with 0.75A fuses. This will be completed during the present refueling outage.

- e. RECOMMENDATION: Provide a separate power supply module for the NNI instrument selector switches, associated indicating lamps and auxiliary relays. This circuit would be similar to that shown in Figure No. 3 attached. This change would not be likely to prevent a plant trip, but it would reduce the quantity of instrumentation lost for a short circuit condition identical to that of March 20, 1978.

ACTION TAKEN: A design was produced as shown in Figure No. 4. Equipment was ordered and the modifications are being made during the present refueling outage.

- f. RECOMMENDATION: Make a study of all circuits connected to the NNI-X and Y power supplies that are not fused. Presently, there are several devices which are tied solid (no fuse) to the DC and AC source supplies. In order to provide proper isolation for short circuits, the addition of fuses is recommended.

ACTION TAKEN: This recommended study was performed. As a result, a design has been produced which will fuse all circuits leaving the NNI panels and all internal AC circuits. This modification will be completed during the present refueling outage.

- g. RECOMMENDATION: Make a study on the possibility of using a lower-rated fuse rather than the universal 5A fuse now in use. A preliminary check on some of the devices, now protected by 5A fuses, revealed that this fuse may be oversized. Since the power supplies are automatic current limited to 7A, it is critical that the lowest possible fuse size be used. Possibly a 1 or 2-amp fuse would provide the fast operation necessary to prevent tripping of the input breakers for faults that should be cleared by the fuses.

ACTION TAKEN: This recommended study was performed. As a result, all 5A fuses are being replaced with fuses sized by an analysis of the load during the present refueling outage. The majority are 0.75A.

- h. RECOMMENDATION: Make a study to determine if it is reasonably possible to improve the present NNI DC power supply configuration. For the NNI-Y system, the existing scheme provides redundancy for a single power supply failure and/or opening of one of the two AC source input breakers. However, because of design of the power supply monitor tripping scheme, the redundancy is negated for a low voltage condition on one bus because the monitor trips both AC input breakers at the same time.

ACTION TAKEN: A study was performed to determine if the power supply monitor tripping scheme could be changed. It was determined that the present scheme is the best. The auctioneered concept is to provide redundancy for the loss of either input voltage or the power supply itself. The function of the power supply monitor trip is to prevent operation of instrumentation below 22 VCD or single phase. Operation in this region would have unknown results on instrument response. It is therefore a better situation to trip the instruments rather than have the instruments display or control with false signals. As a result, the power supply monitor tripping scheme will not be modified.

- i. RECOMMENDATION: Study the practicability of providing the following instrument indications for both RCS loops in the control room even though NNI-X or NNI-Y power supply is inoperative. Computer readout of these indications is satisfactory.

- 2 - Uncompensated pressurizer levels
- 1 - Wide range RCS pressure
- 1 - Wide range RCS Loop A T_c
- 1 - Wide range RCS Loop B T_c
- 1 - RCS Loop A T_h
- 1 - RCS Loop B T_h
- 1 - OTSG A Startup level
- 1 - OTSG B Startup level
- 1 - OTSG A pressure
- 1 - OTSG B pressure
- 1 - Makeup tank level
- 1 - Source range nuclear instrument

ACTION TAKEN: In conjunction with the above recommendation and the Fire Hazards Analysis Report, new instrumentation has been installed with readout capability on the plant computer in the control room.

With the exception of the uncompensated pressurizer levels, all the instrumentation listed above is independent of both NNI-X and Y. The control room computer has four (4) uncompensated pressurizer level inputs. One input is totally independent of NNI-X or Y, two are supplied by NNI-X and one is supplied by NNI-Y. This instrumentation meets the recommendation, that is, there will always be two uncompensated pressurizer levels available for loss of NNI-X or NNI-Y.

Additional instrumentation beyond that listed above also made available are:

- 2 - Incore thermocouples, range 0-2000°F
- 1 - Wide range RCS pressure
- 1 - Source range nuclear instrument

This instrumentation is completely independent of both NNI-X and Y power. These indications are available to the operator on the computer.

Directions have been placed on the computer console, excerpts from procedures discussed in j. below, directing the operator to place the following points on the computer trend recorders:

- 1 - Uncompensated pressurizer level (independent of NNI-Y and X)
- 1 - Wide range RCS pressure
- 1 - Wide range RCS Loop A T_c
- 1 - Wide range RCS Loop B T_c
- 1 - OTSG A startup level
- 1 - OTSG B startup level

All remaining points have been placed in an operator's group. This group will be called up by procedure to print every minute. The line printer used for this function is completely independent of the alarm line printer and cannot be overloaded due to alarms.

- j. RECOMMENDATION: Nuclear Operations should prepare a procedure for safety shutting down the plant upon total loss of both the NNI-X and NNI-Y power supplies and associated instrumentation. Because these systems are non-Class I and non-redundant, their continuous availability cannot be assured; consequently, the total loss of both systems should be expected to occur at some time during the life of the plant.

ACTION TAKEN: Procedures have been written for loss of NNI-Y, NNI-X and both NNI-Y and X simultaneously. The instrumentation discussed above is utilized within all procedures. Licensed Operators have been trained in these procedures.

4. REQUEST: Address information available to the operator following various NNI/ICS power upset events, including a discussion of:

- how the operator determines which information is reliable;
- what information is needed to bring the plant to cold shutdown.

RESPONSE: The information available to the operator independent of either NNI power supplies or the ICS power supply was discussed in 3.i. above. This information was selected for presentation to the operator with the intent of bringing the plant to a cold shutdown condition. The design objective of this instrument selection was to remove any doubt from the operator, when experiencing a power upset on NNI/ICS power supply, that the information presented was anything but reliable. By having a completely independent group of instruments; cumbersome procedures did not have to be written; any power upset in the NNI or ICS power supplies could be handled quickly; and the mistake of reading a bad instrument and controlling on that bad instrument could be eliminated. It is SMUD's contention that completely independent instrumentation is the preferred method of responding to NNI or ICS power supply upset events.

5. REQUEST: Address the feasibility of performing a test to verify reliable information that remains following various NNI/ICS power upsets.

RESPONSE: A test will be performed which will prove that the instrumentation listed in 3.i. above is in fact independent of NNI/ICS power upsets. This test will show that the turning off of each of the NNI/ICS power supplies will not affect the information being used by the operator in the computer for such upsets. This test will be performed during the current refueling outage.

6. REQUEST: Address each CR-3 proposed corrective action in terms of applicability to your plant.

RESPONSE: CR-3 IMMEDIATE PROPOSED CORRECTIVE ACTION

- a. CR-3: Thorough testing of NNI system to determine cause of failure.

RS: See item 2 response concerning SMUD action taken as a result of the CR-3 cause of failure.

- b. CR-3: Modify PORV so that NNI failure closes valve.

RS: SMUD is modifying the PORV circuitry so that failure of the NNI power supply will fail the PORV close. This modification will be installed during the current refueling outage. A test will be performed to verify that failure of the NNI power supply will fail the PORV close. This test will duplicate the sequential loss of power as experienced at CR-3.

- c. CR-3: Modify the pressurizer spray valve so that the valve doesn't open on NNI failure.

RS: SMUD is modifying both spray valves circuitry so that failure of the NNI power supply will not cause either of the two spray valves to open. This modification will be installed during the current refueling outage. A test will be performed to verify that failure of the NNI power supply will not cause the spray valve to open.

- d. CR-3: Provide positive indication of all three relief or safety valves.

RS: NUREG-0578 item 2.1.3a required SMUD to install direct indication of power-operated relief valve (PORV) and safety valve position. In SMUD letter, J. J. Mattimoe to Harold R. Denton, dated January 16, 1980, it was explained that equipment located within the reactor building to perform the positive indication function should be installed during the present refueling outage. It was also explained that delivery of equipment to be located outside the reactor building (signal processing equipment) has a reasonable delivery date of May 1, 1980.

In response to SMUD letter of January 16, 1980, NRC letter of February 1, 1980, Harold R. Denton to J. J. Mattimoe, recognizes that late delivery of the signal processing equipment. This letter requires implementation of positive indication of the PORV and safety valves within 30 days of receipt of the equipment but no later than June 1, 1980.

- e. CR-3: Establish procedural control of NNI selector switches.

RS: The intent of the procedural controls planned by CR-3 is to have all indications displayed from one NNI power supply. This will allow the operator to shift indication if that power supply should fail. As an example, if all of the instrumentation displayed was from the NNI-X power supply, and the NNI-Y power supply failed, the operator would know that the displayed indication was accurate. Then again, if the NNI-X power supply failed, the operator could shift to other inputs, which would be NNI-Y supplied, thereby presenting accurate indication.

At SMUD, as a result of the study explained in item 3, procedural control of NNI selector switches was not practical. This was due to the cross pollination of NNI-X and Y power to various instruments, switches and buffers within instrument strings. This was one of the reasons SMUD decided to install instrumentation completely independent of either NNI-X or Y. The instruments supplied to the control room are explained in item 3.1.

- f. CR-3: Train all operators in response to NNI failures.

RS: SMUD has developed procedures for loss of NNI-X, NNI-Y and both NNI-X and Y. These procedures are presently being reviewed and revised to incorporate the instrumentation being installed this refueling outage. Prior to completion of the refueling outage, all operators will receive training in the new procedures and refresher training in the methods of restoring failed NNI power supplies.

- g. CR-3: Move 120 V ICS X power to a vital bus.

RS: At Rancho Seco, NNI-Y, NNI-X and the ICS power supplies receive their input power from both a vital bus, Class I, 118 VAC battery backup inverter and a Class II, 118 VAC battery backup inverter. Figure 4 attached is a typical diagram of either NNI or ICS power supplies.

There are two +24 V power supplies, one being supplied from the vital bus and one supplied from the secondary plant bus. The output from these two +24 V power supplies is auctioneered to supply the load. A loss of either the vital bus supply or the secondary supply will therefore not cause a loss of +24 V. This explanation is the same for the -24V supply. The NNI-X, NNI-Y and ICS power supplies are installed in this manner.

The 118 VAC power supply for NNI or ICS is protected through an auto-transfer switch. This is shown on Figure 4. The auto-transfer switch normal lineup is to the vital bus supply. On decreasing voltage (100V), the auto-transfer switch transfers to the secondary plant bus. This transfer is alarmed in the control room and local indicating lights display from which source the auto-transfer switch is receiving power. Operator action is required to reposition the auto-transfer back to the vital bus.

- h. CR-3: Initiate more extensive program for events recorder system.

RS: Rancho Seco utilizes a Bailey 855 computer system. The software for this system is updated and verified to be operable each refueling outage by a Bailey Meter Company representative. This includes the post trip review portion.

In addition, SMUD is installing a new computer system. This new system will be a backup to the Bailey 855. This new system has an independent post trip review capability, thereby providing Rancho Seco with two independent post trip recording packages. It is expected that the new system will be operable by mid year.

- i. CR-3: Provide operator with redundant indication of main plant parameters.

RS: As explained in item 3.i., SMUD is installing instrumentation which is totally independent of either NNI power supply. This new instrumentation meets the intent of this CR-3 corrective action.

CR-3 AT NEXT REFUELING (SEPTEMBER 1980) PROPOSED CORRECTIVE ACTION

- j. CR-3: Install indication lights on all panels to know if power on panel.

RS: The NNI-Y and NNI-X power supplies have both ampere meters and voltage meters which are used to determine that the power supply is operating. The new power supplies for indicating lamps and auxiliary relays will initially have lights on their front panels indicating proper operation. Ampere meters and voltage meters are on order and will be installed in the near future. A future modification to the panel doors which house the power supply will be to install clear plexiglass windows, thereby not requiring the unlocking and opening of the panel doors to determine the power supplies are operating.

- k. CR-3: Quick access to fuses is being designed into cabinets.

RS: Rancho Seco utilizes GLD fuses in HKA self-indicating holders. If a fuse should fail, the self-indicating holder would illuminate, and the control room would receive an alarm. Each fuse is labeled indicating the equipment that power source supplies. The operator is able to quickly determine which fuse has failed by viewing through the plexiglass panels which will be installed on the cabinet doors.

- l. CR-3: Modify EFW pump circuit to start pumps on any low steam generator level signal.

RS: The SMUD representative at the March 4, 1980, meeting did not record this corrective action statement in the same context as listed above. The SMUD representative recorded this corrective action as follows:

"Modify EF pump auto start circuit and reactor trip circuit so that any power failure will not prevent activation on low SG level."

The EFW pumps at Rancho Seco start on three different signals:

1. Loss of all reactor coolant pumps;
2. Low main feed pump discharge pressure for both pumps (850 psig).
3. SFAS initiation (1600 psig RCS pressure).

All of these auto starting circuits are independent of NNI and ICS power supplies.

Rancho Seco's EFW pumps do not auto start on reactor trip or low SG level. As a result, no circuit changes are contemplated.

CR-3 LONG TERM PROPOSED CORRECTIVE ACTION

- m. CR-3: Investigate upgrade of NNI capabilities - total loss of NNI.

RS: As explained within item 3, Rancho Seco has performed a study and is presently upgrading both the NNI power supplies and adding instrumentation to the control room which is independent of NNI. With this upgrade and new instrumentation, Rancho Seco operators will be able to respond to a total loss of NNI without repeating the CR-3 transient.

- n. CR-3: Remote shutdown is being designed.

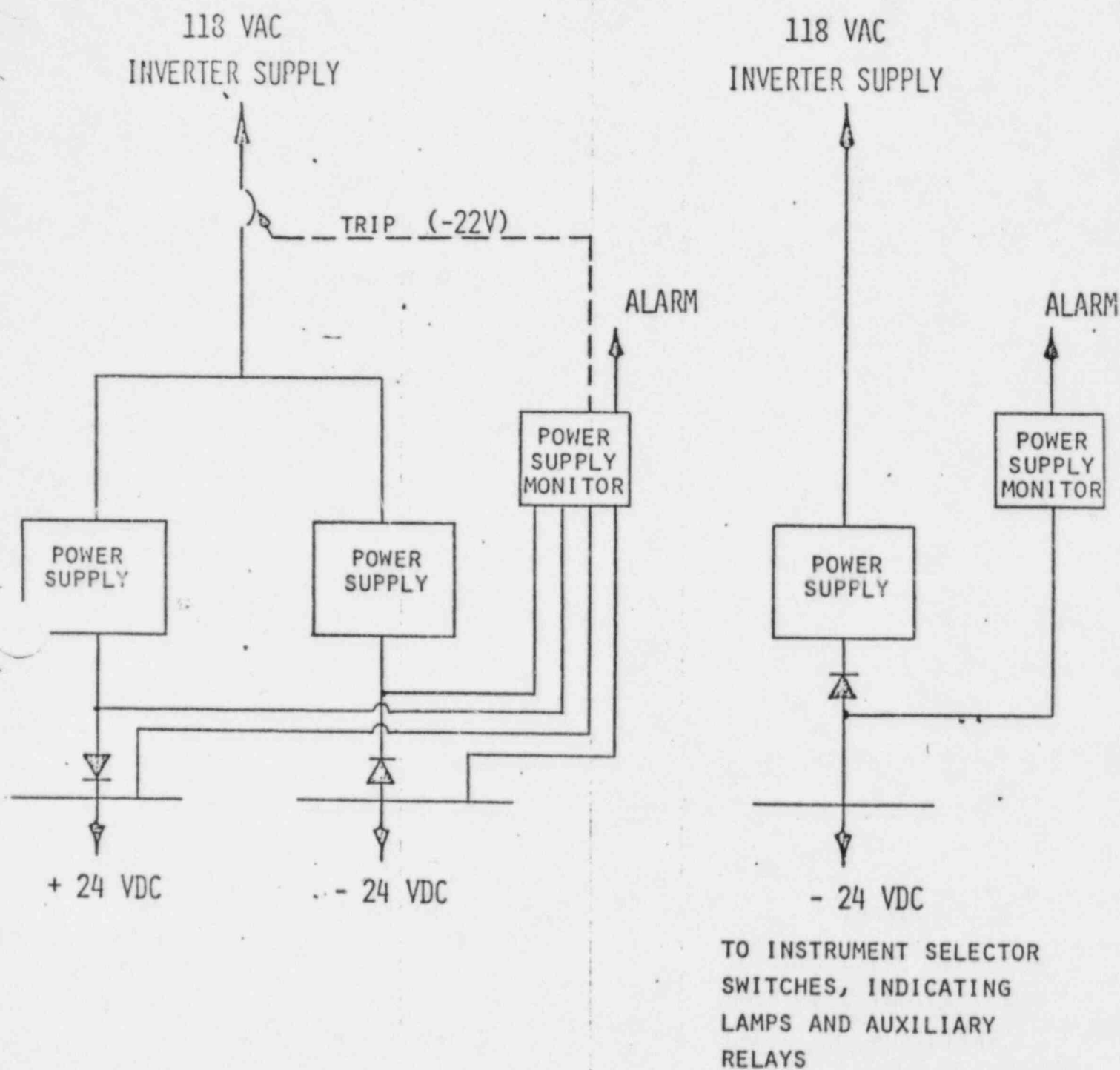
RS: The new instrumentation as explained in item 3 is first routed to the Rancho Seco emergency shutdown panel. This panel is located on the grade level within the Auxiliary Building in the A, 4160 V switchgear room. As a result, the remote shutdown, as stated by CR-3, is being upgraded to be independent of both NNI and ICS power supplies.

- o. CR-3: Provide backup AC sources to inverters with automatic transfer.

RS: Figure 4, attached, displays the typical arrangement of NNI-Y, NNI-X and ICS power supplies. As can be seen, each of these power supplies receives its primary source of AC supply from a vital bus. Secondary plant inverters supply backup AC sources. Therefore, SMUD has already modified the NNI and ICS power supplies to meet the intent of this CR-3 long-term corrective action.

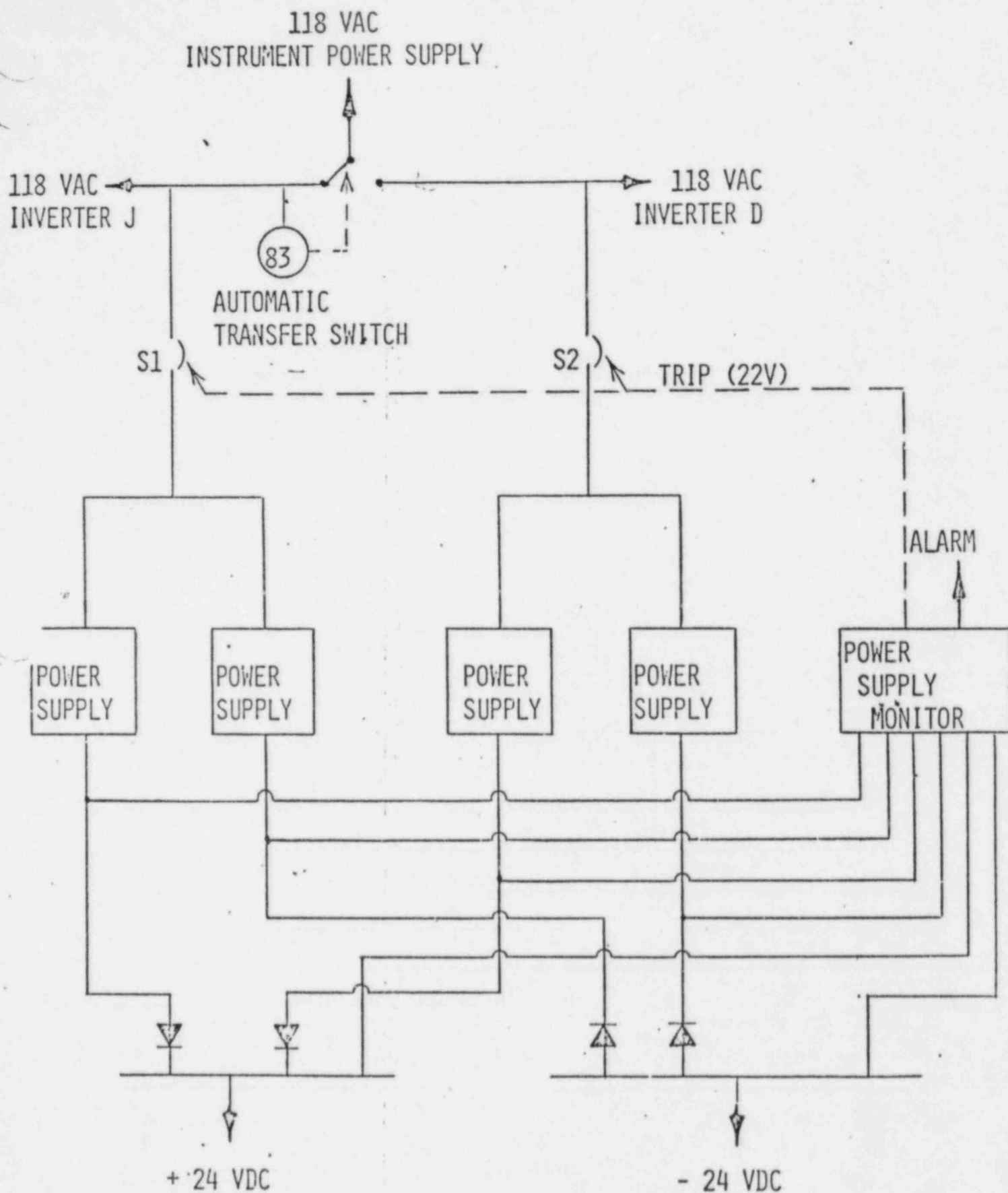
7. REQUEST: Expand your review under IE Bulletin 79-27 to include the implications of the CR-3 event. Inform us of your schedule for completion of this expanded review as discussed on March 4, 1980.

RESPONSE: SMUD has performed an in-depth study of the NNI and ICS power supplies. As explained within this report, the changes and modifications being instituted at Rancho Seco fully respond to the CR-3 event. A copy of this report will be forwarded to I&E Region V as a supplement to the SMUD letter of February 22, 1980, which was the response to IE Bulletin 79-27. SMUD, therefore, feels the expanded review is complete.



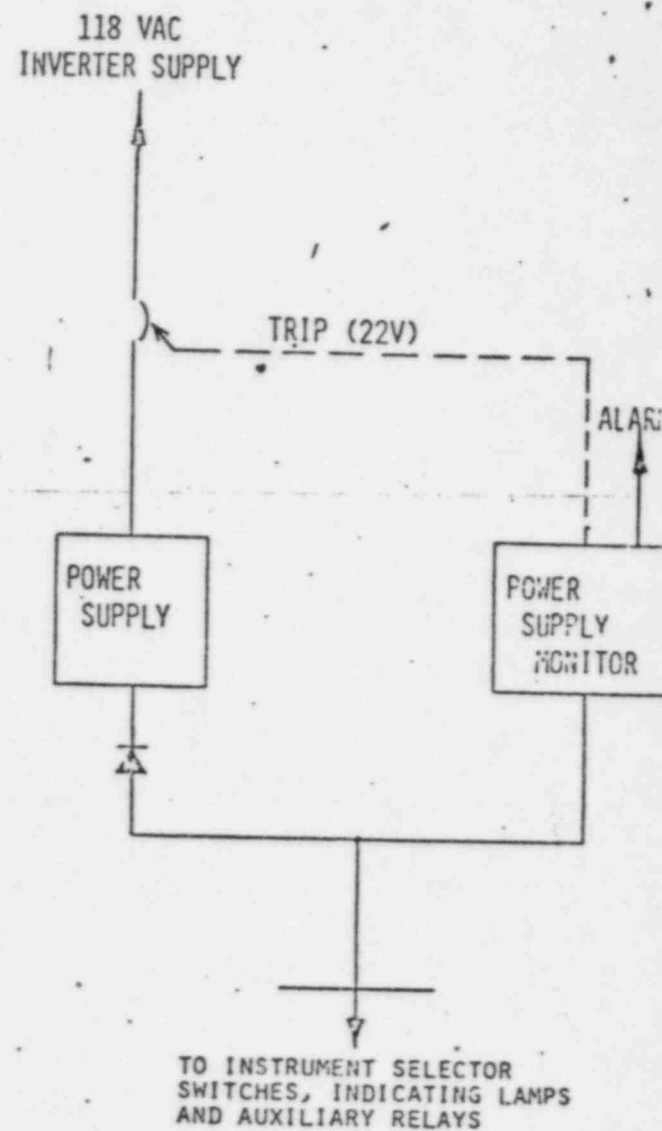
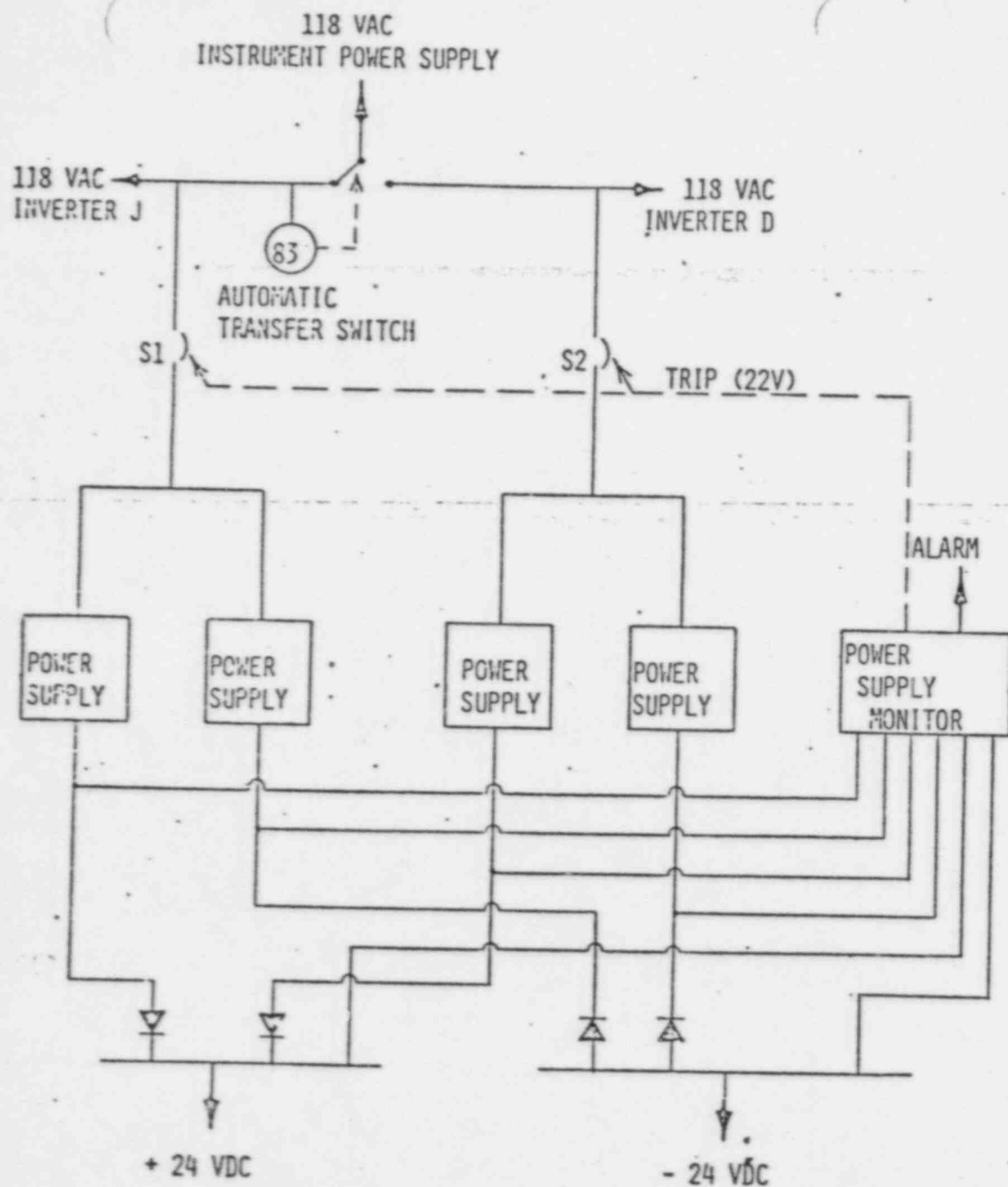
ORIGINAL POWER SUPPLY DISTRIBUTION

FIGURE 1



1975 POWER SUPPLY MODIFICATION

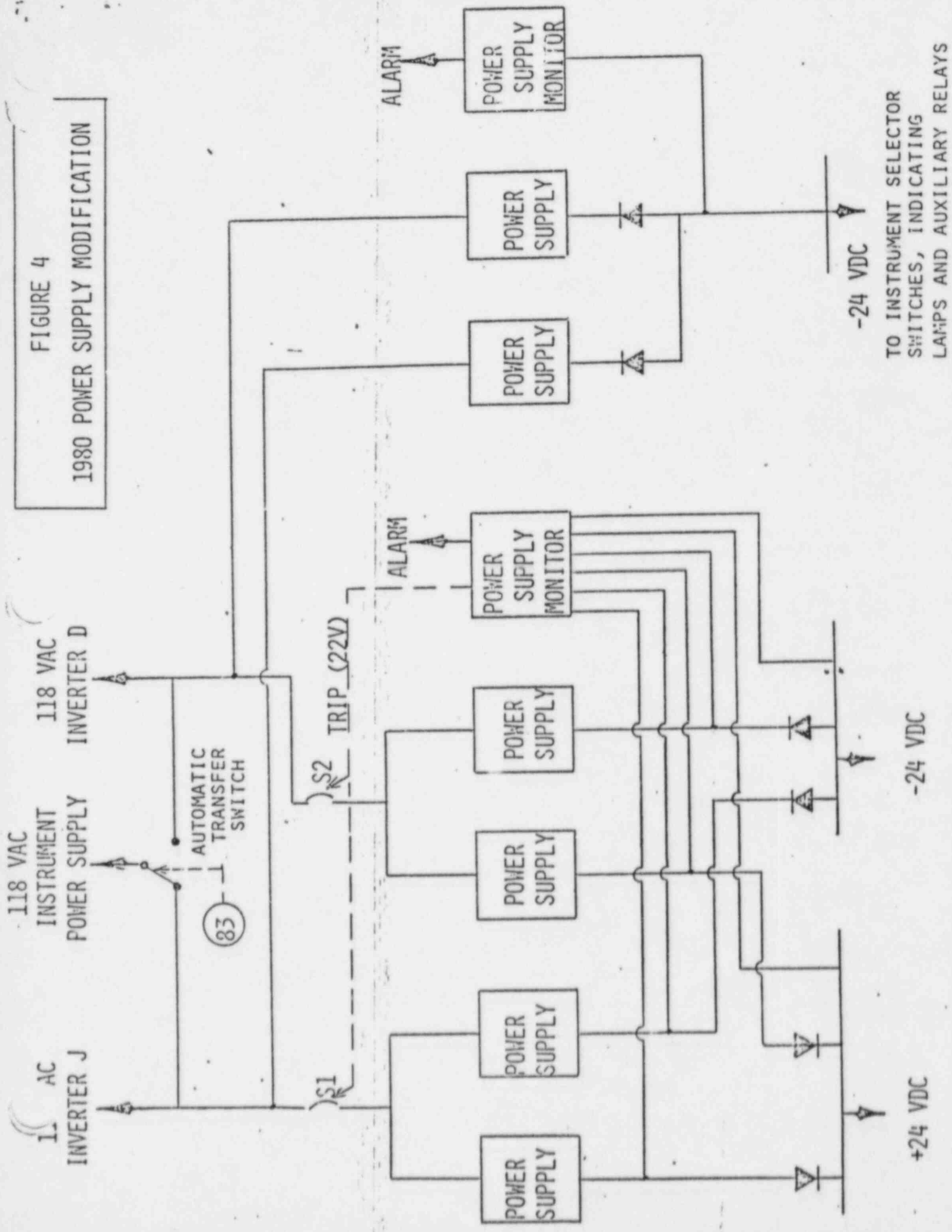
FIGURE 2



NNI COMMITTEE RECOMMENDED MODIFICATION

FIGURE 3

FIGURE 4
1980 POWER SUPPLY MODIFICATION



TO INSTRUMENT SELECTOR
SWITCHES, INDICATING
LAMPS AND AUXILIARY RELAYS

GRAPHS FOR:
RANCHO SECO REACTOR TRIP
DECEMBER 26, 1985

January 3, 1986

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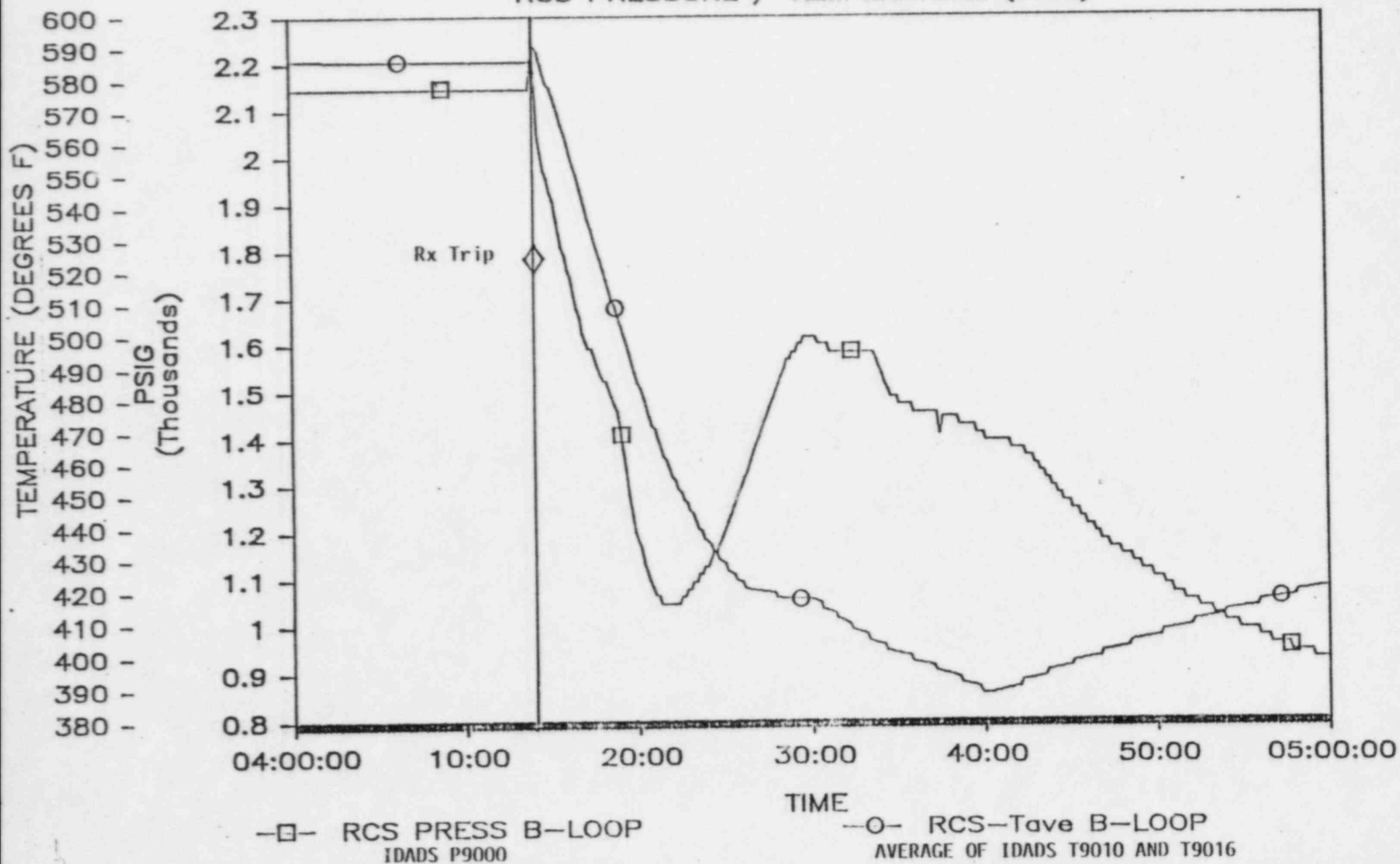
1. IDADS Computer Point Identifications
2. RCS Pressure/Temperature (Tave)
3. RCS Pressure B-Loop
4. RCS Average Temperature
5. RCS Pressure/PZR Level
6. RCS Hot Leg Temperature vs. TSAT
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21. Pressure - Temperature to Tech. Spec. Cooldown Curve
22. Make Up Tank Level

1DADS COMPUTER POINT IDENTIFICATIONS

PT ID	PT SOURCE	DESCRIPTION	UNITS	INSTRUMENT RANGE	COMMENTS
E0603	LoveJoy	VOLTS DC BFP A SPEED TO LOVEJOY (M5)	VOLTS DC	10.000	
E0614	LoveJoy	VOLTS DC BFP B SPEED TO LOVEJOY (M5)	VOLTS DC	10.000	
F1660	FT-31802	AFW FLOW TO OTSG A	GPM	1300.0	
F1663	FT-31903	AFW FLOW TO OTSG B	GPM	1300.0	
F9000	FT-23603	MAKEUP FLOW	GPM	250.00	
F9001	FT-23805	HPI LOOP A FLOW	GPM	600.00	
F9002	FT-23806	HPI LOOP B FLOW	GPM	600.00	
F9003	FT-23807	HPI LOOP A FLOW	GPM	600.00	
F9004	FT-23808	HPI LOOP B FLOW	GPM	600.00	
F9600	FI-20563	MFW FLOW B	GPM	600.00	
F9601	FI-20535	MFW FLOW A	MBL/HR	6.5000	
L1805	LT-20503C	OTSG A SU RNG	MBL/HR	6.5000	UNCOMPENSATED
L1807	LT-20504C	OTSG B SU RNG	IN H2O	250.00	UNCOMPENSATED
L9000	LT-23502A	MAKEUP TANK LEVEL	IN H2O	250.00	UNCOMPENSATED
L9005	LT-21503A	PZR LEVEL	IN H2O	100.00	UNCOMPENSATED
L9801	LT-20501	OTSG A LEVEL FULL RNG	IN H2O	320.00	UNCOMPENSATED
L9802	LT-20502	OTSG B LEVEL FULL RNG	IN H2O	600.00	UNCOMPENSATED
P9000	PT-21050	RCS PRES LOOP B	IN H2O	600.00	UNCOMPENSATED
P9300	PI-20520B	OTSG PRESSURE B	PSIG	3000.0	
P9301	PI-20519B	OTSG PRESSURE A	PSIG	1200.0	
T9010	TY-21031C	RCS LOOP B HOT LEG TEMP	PSIG	1200.0	
T9016	TI-21024A	RCS LOOP B COLD LEG TEMP	DEG F	920.00	
			DEG F	650.00	

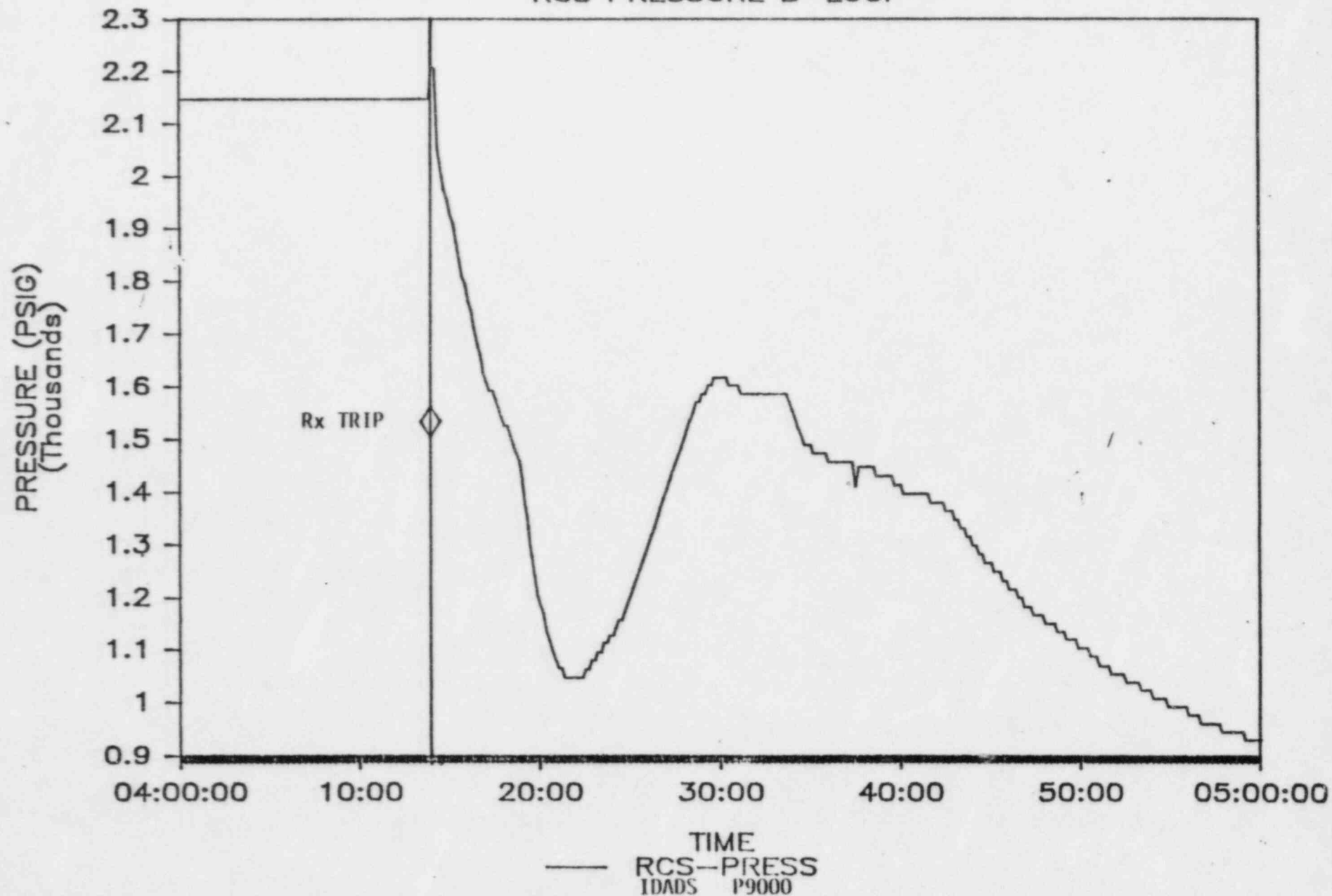
REACTOR TRIP DEC. 26, 1985

RCS PRESSURE / TEMPERATURE (Tave)



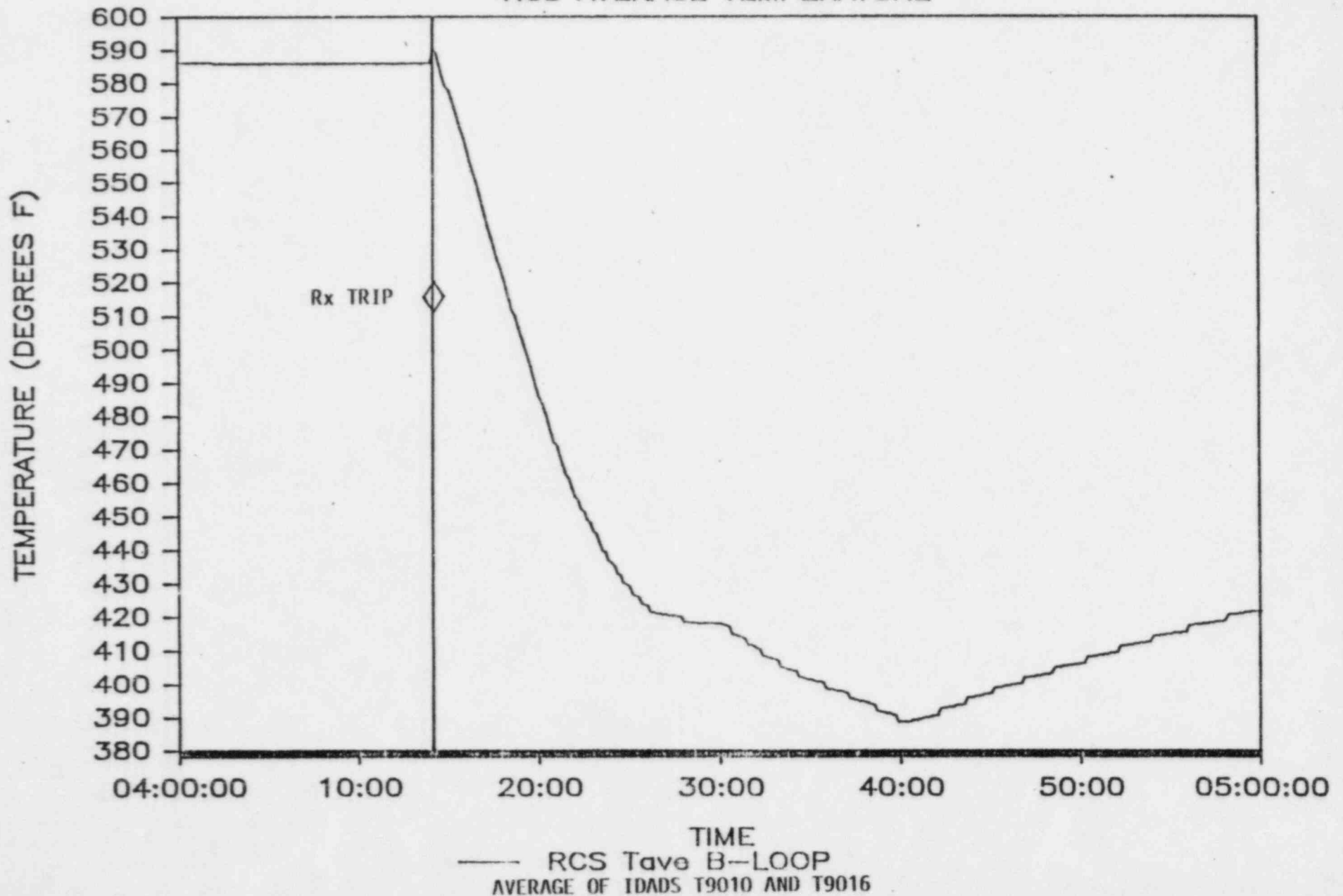
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RCS PRESSURE B-LOOP



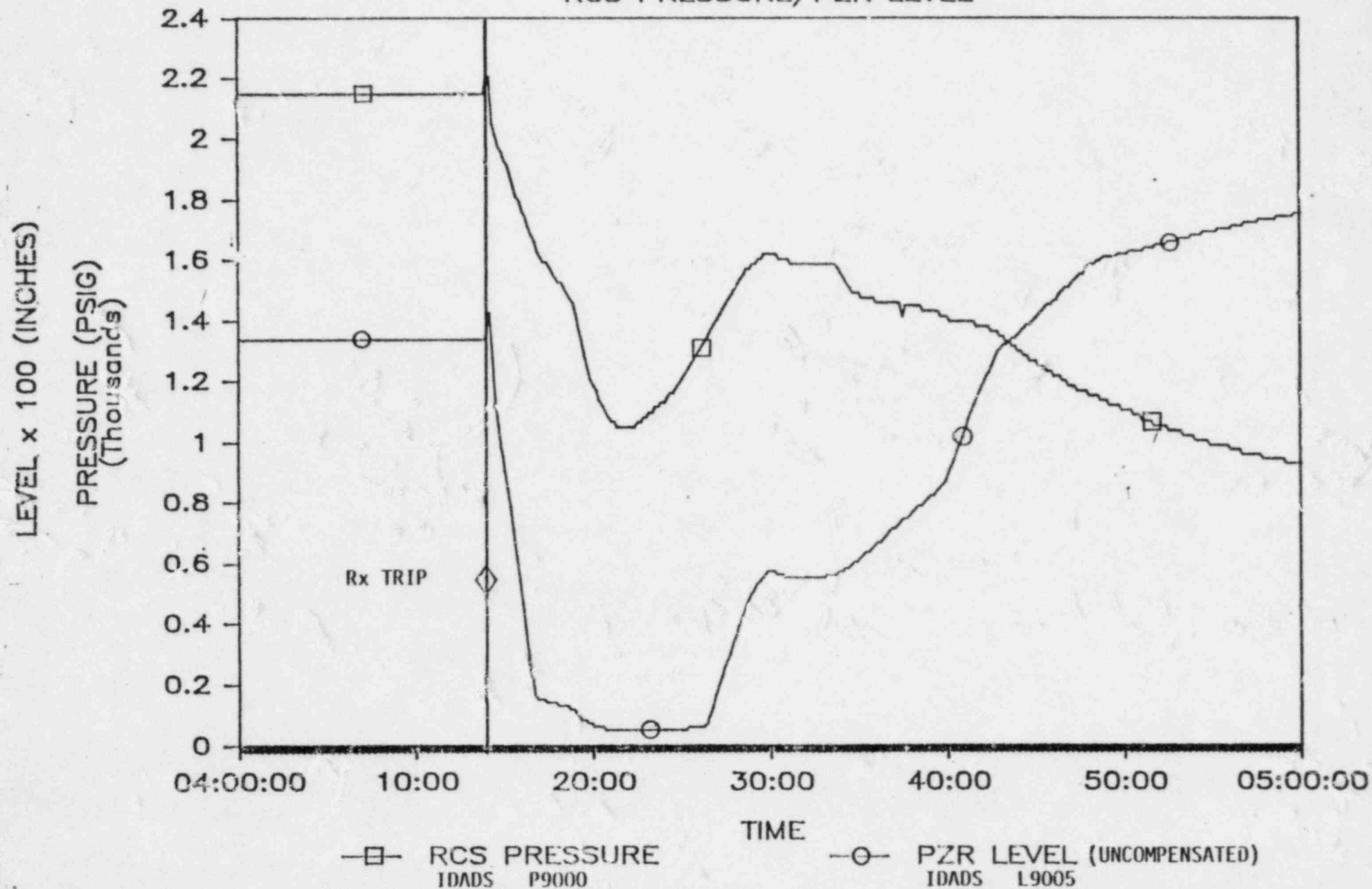
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RCS AVERAGE TEMPERATURE



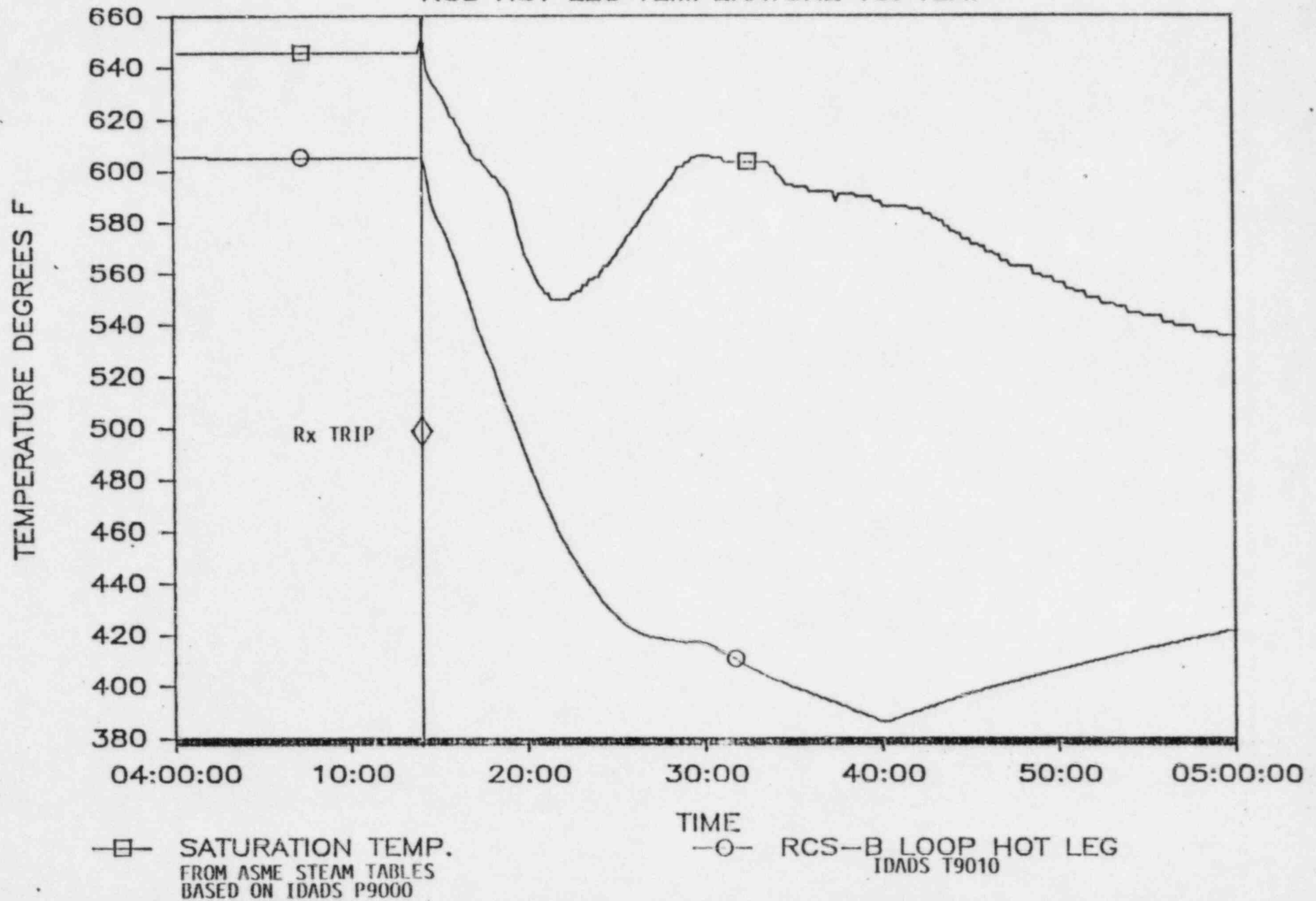
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RCS PRESSURE/PZR LEVEL



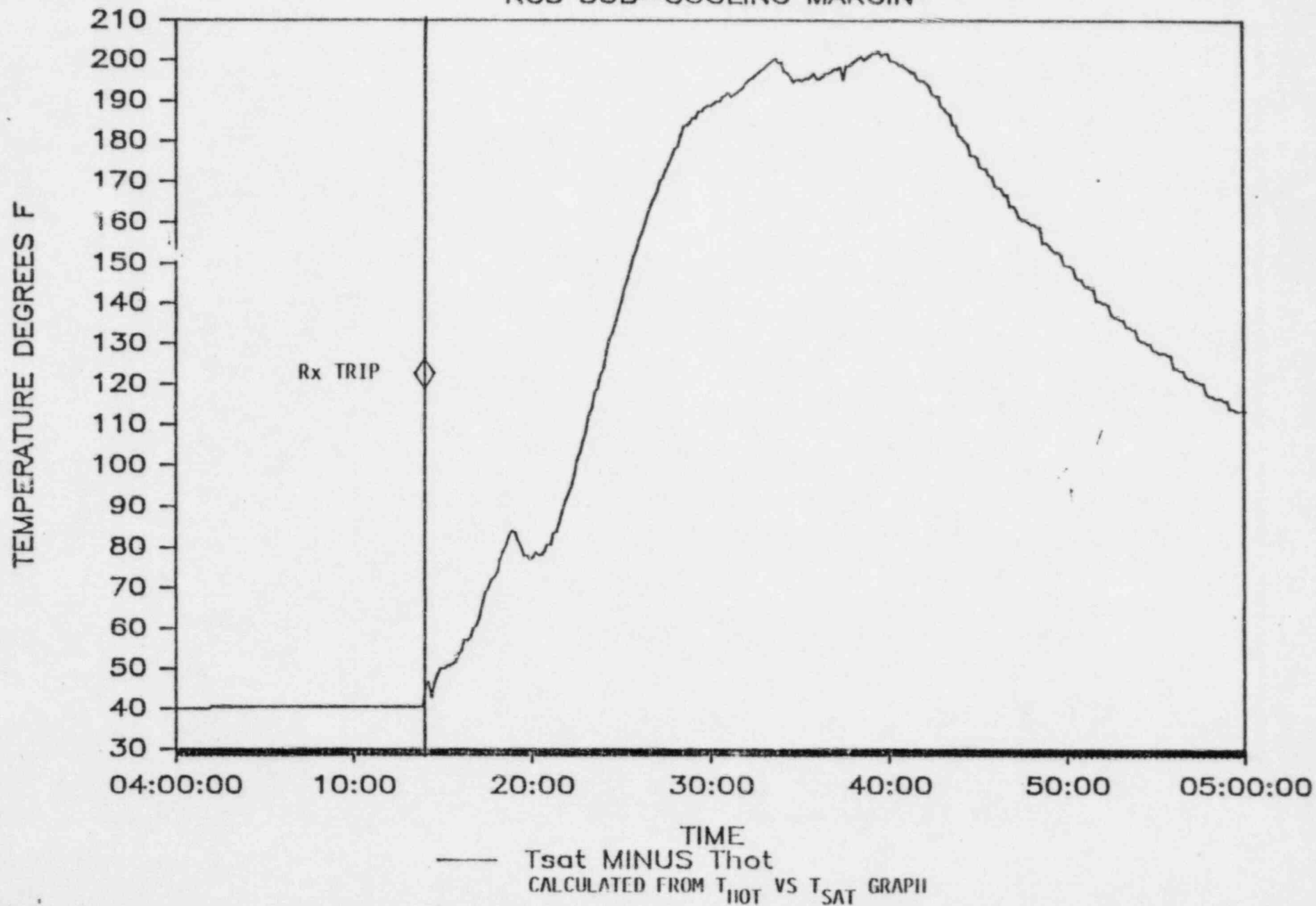
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RCS HOT LEG TEMPERATURE VS. TSAT



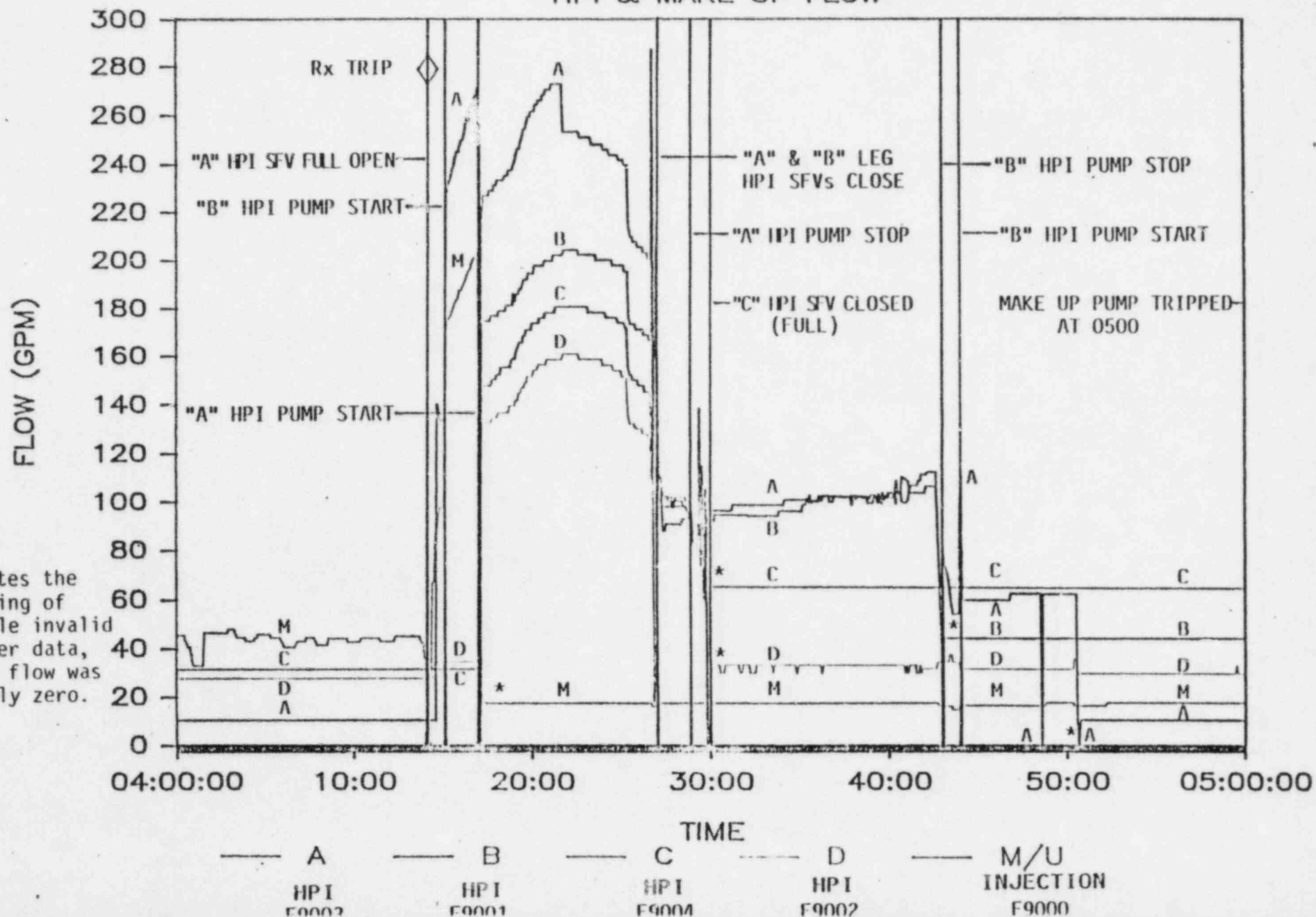
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RCS SUB-COOLING MARGIN



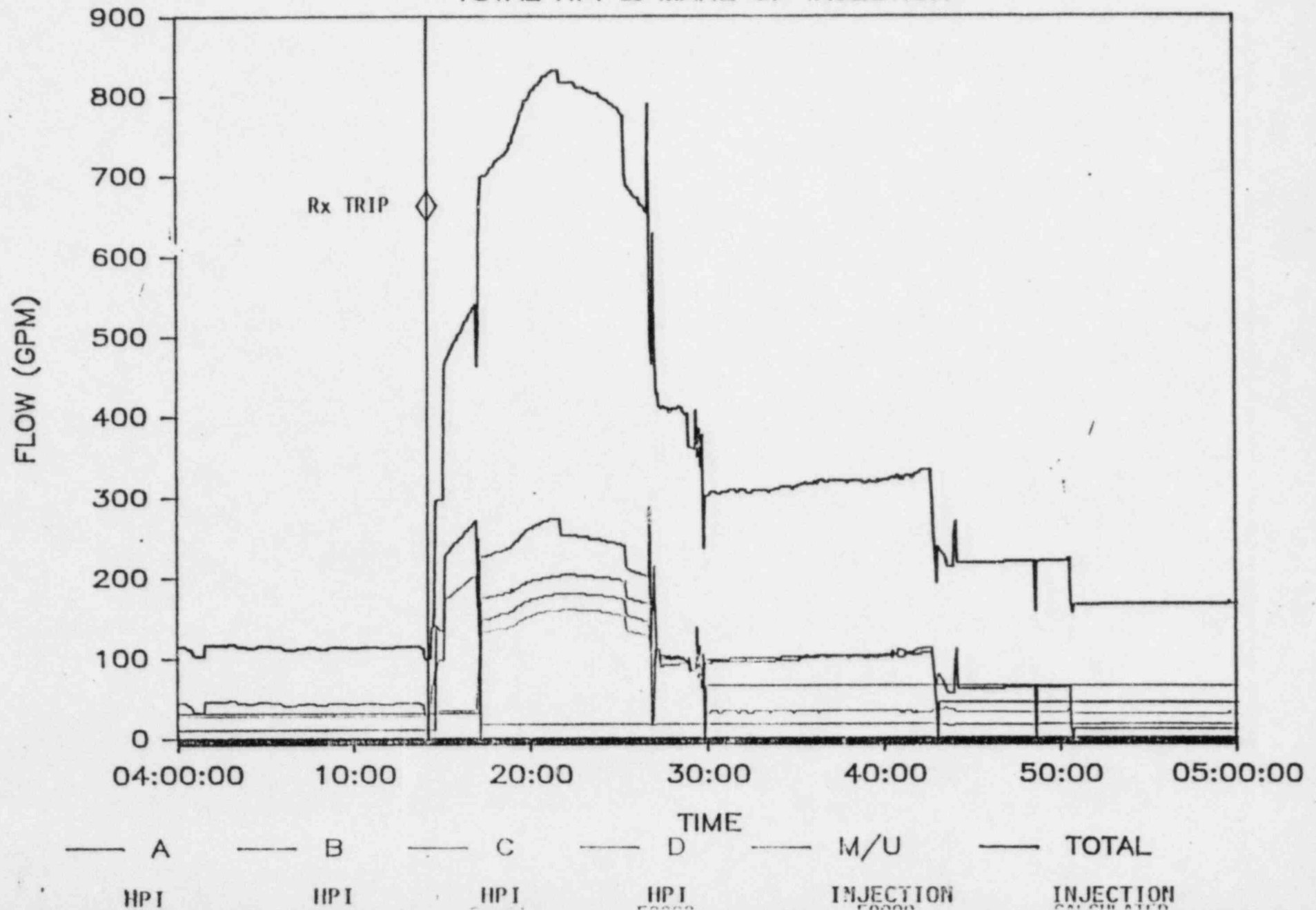
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HPI & MAKE UP FLOW



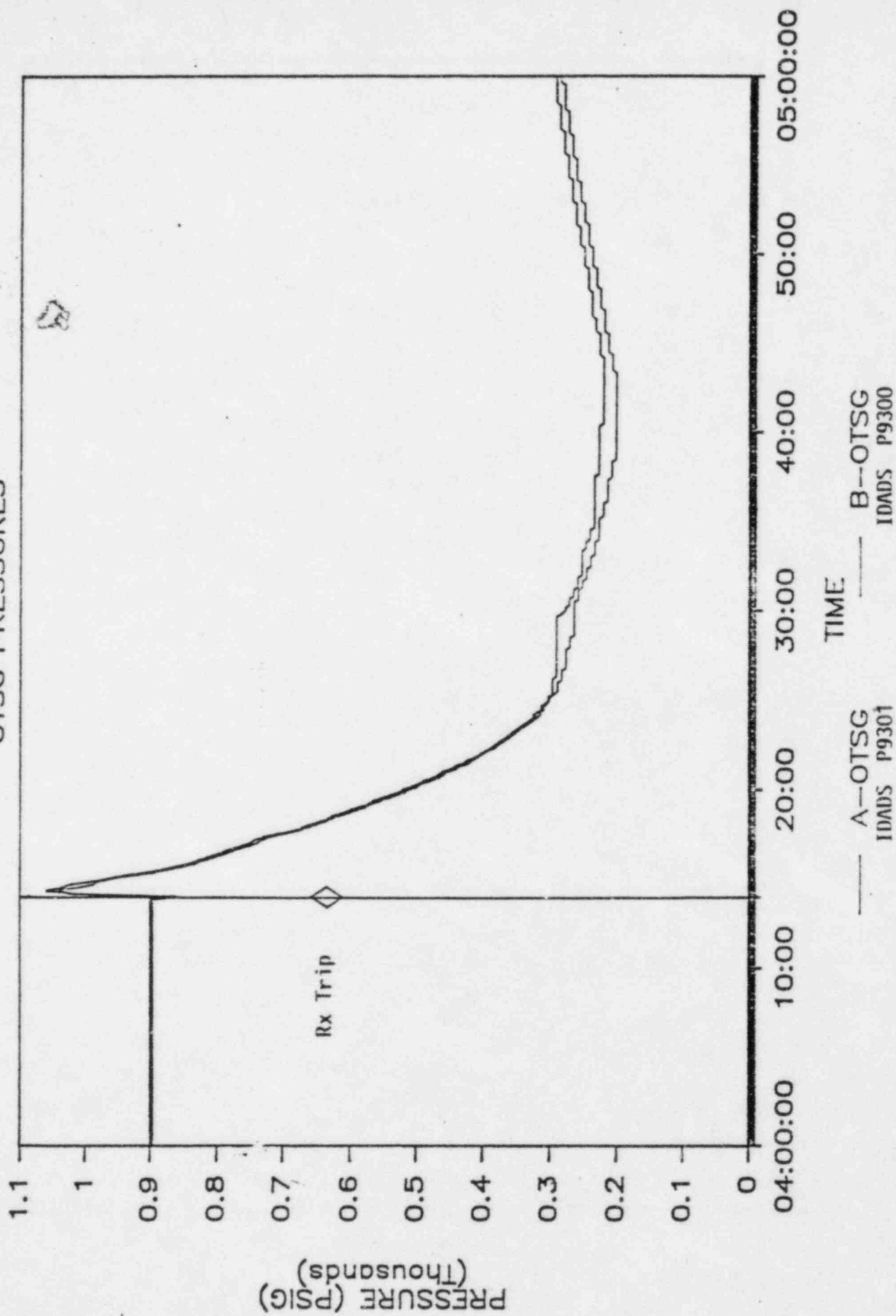
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TOTAL HPI & MAKE UP INJECTION



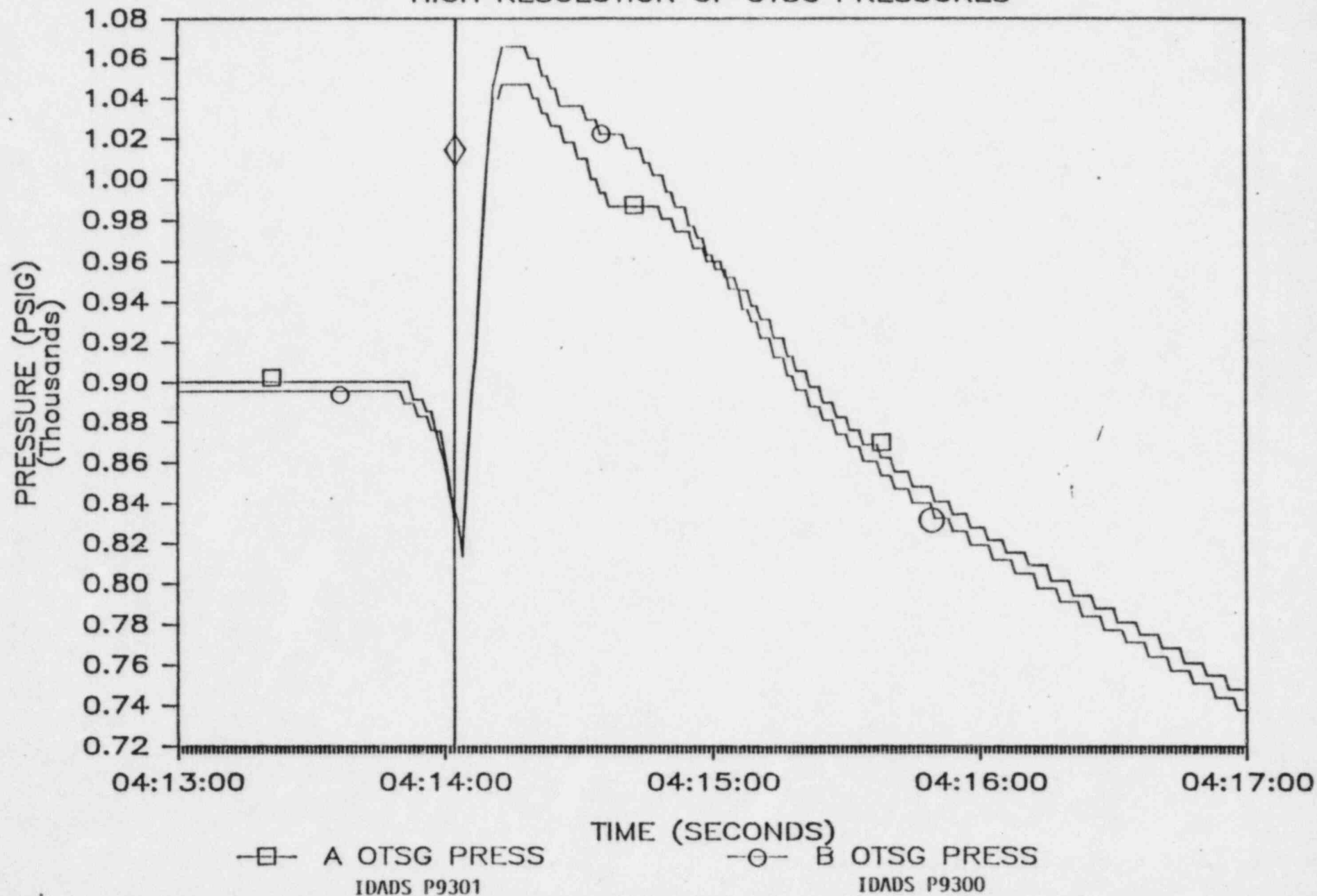
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OTSG PRESSURES



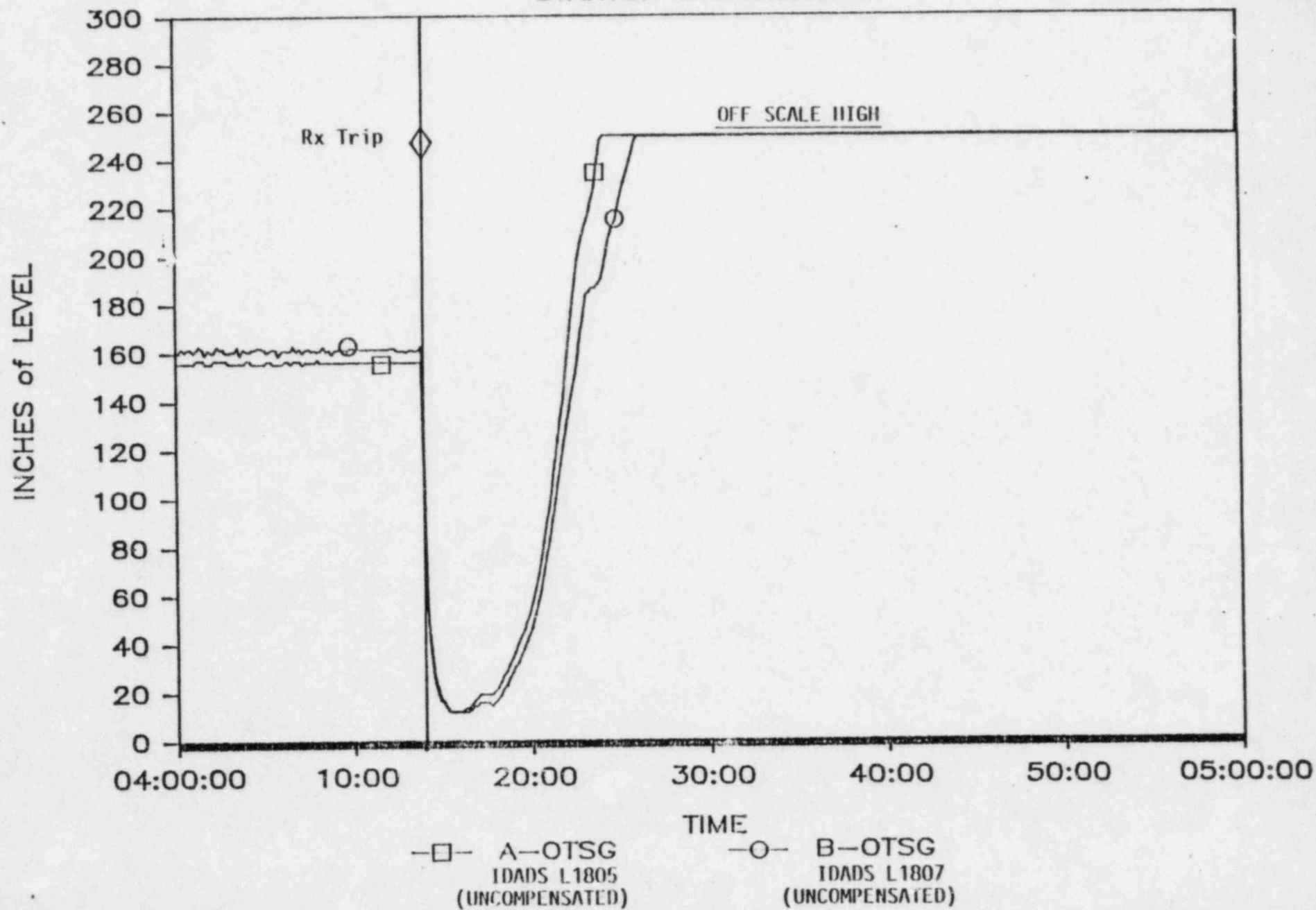
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HIGH RESOLUTION OF OTSG PRESSURES



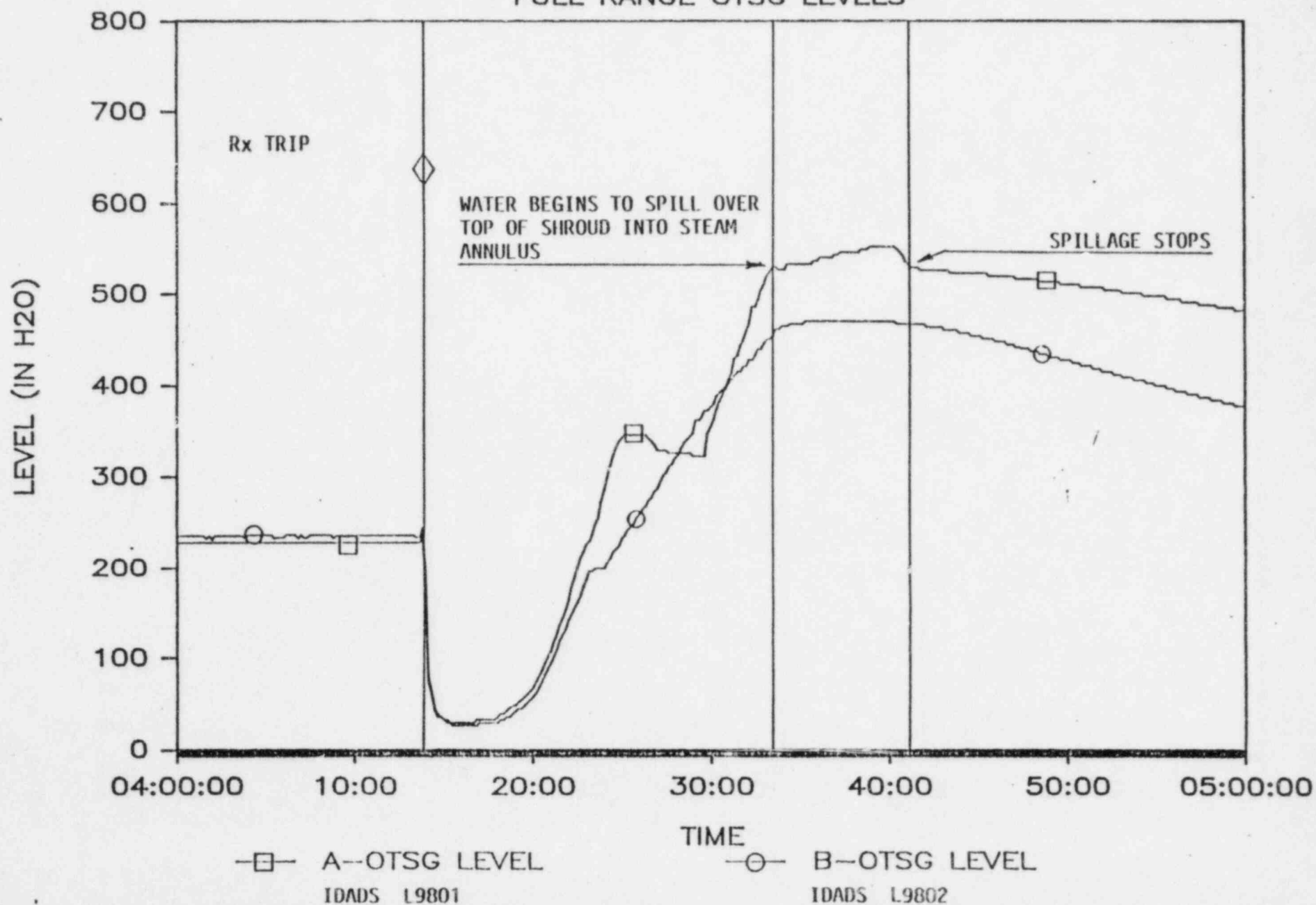
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STARTUP OTSG LEVELS



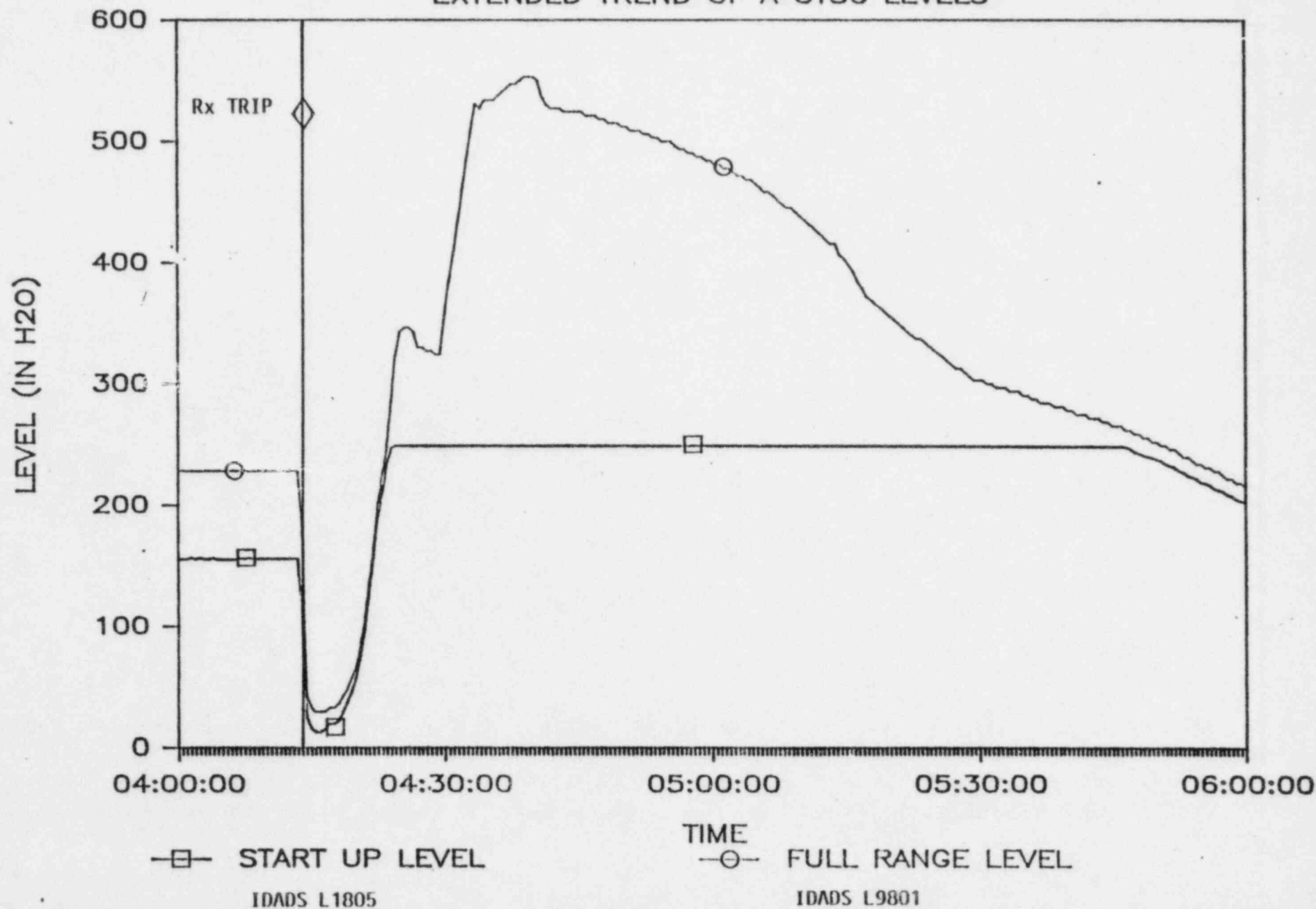
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FULL RANGE OTSG LEVELS



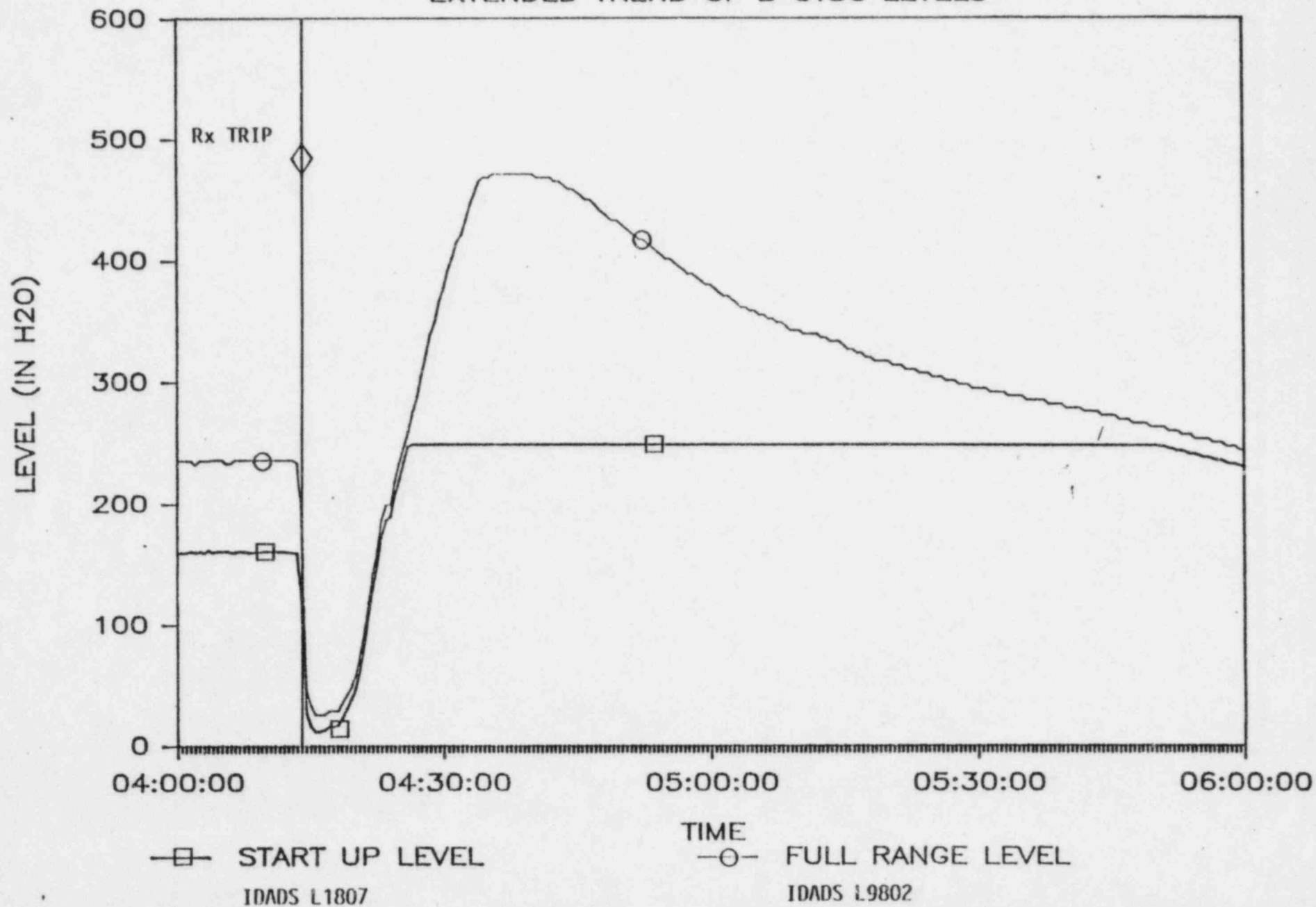
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EXTENDED TREND OF A OTSG LEVELS



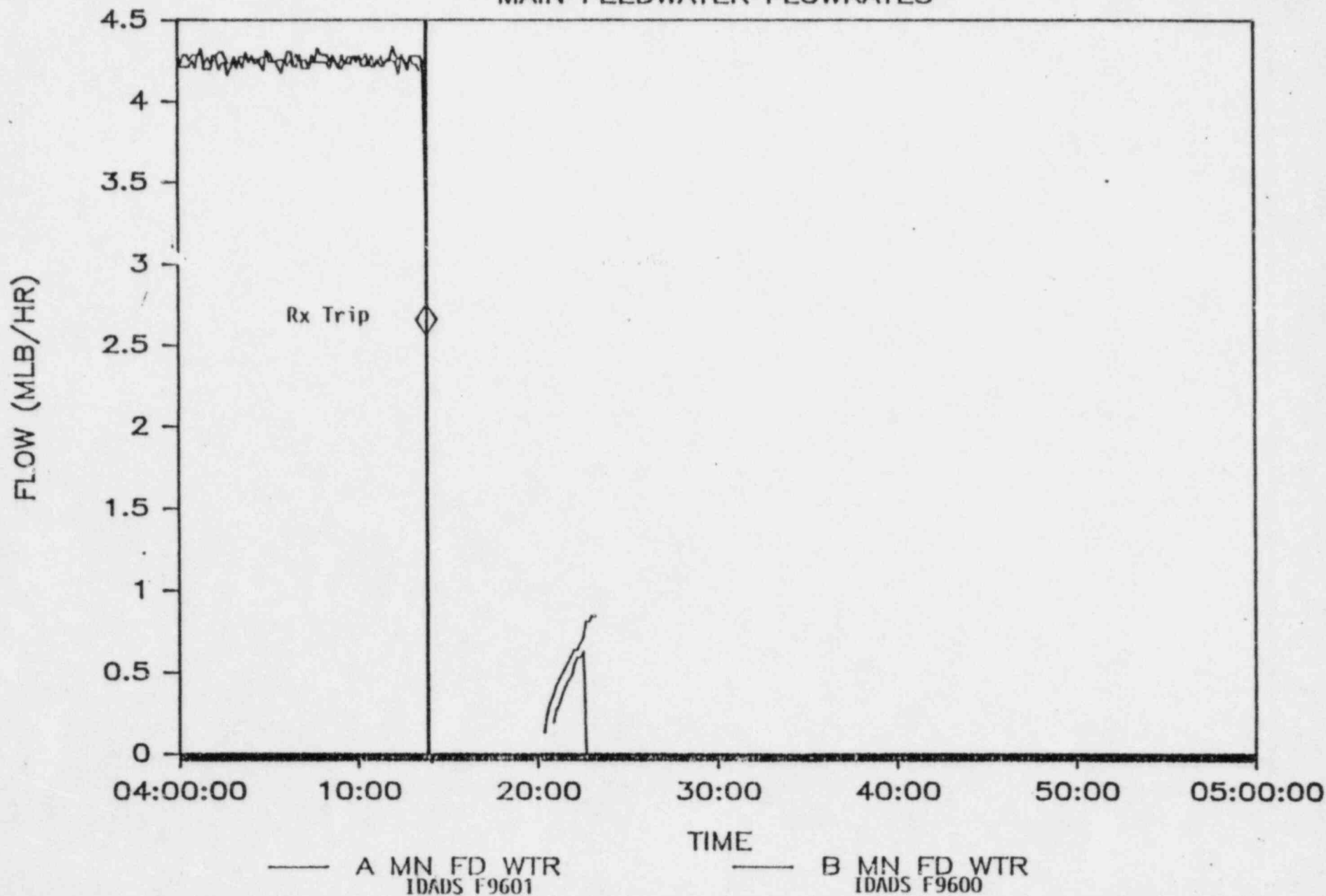
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EXTENDED TREND OF B OTSG LEVELS



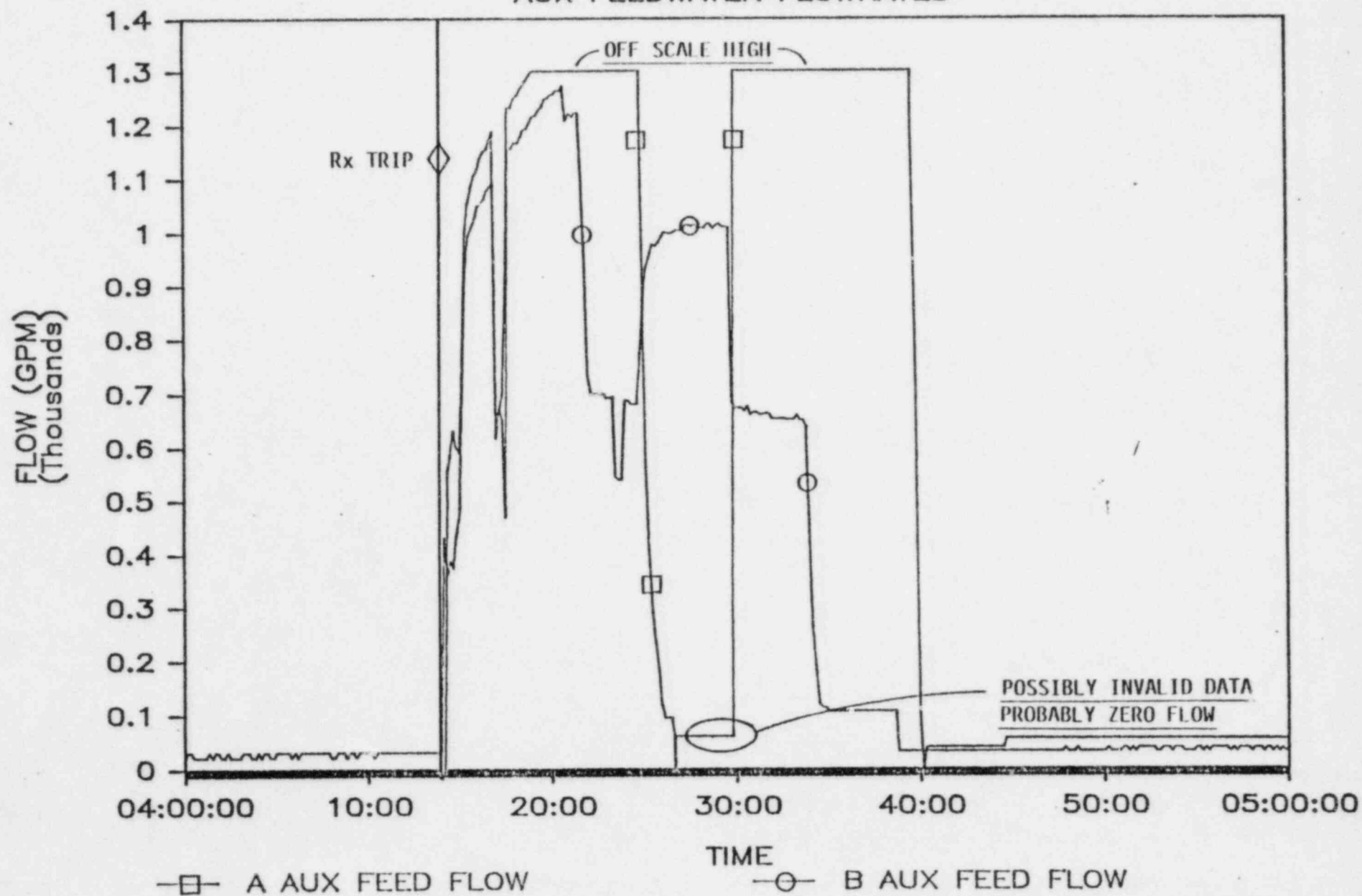
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MAIN FEEDWATER FLOWRATES



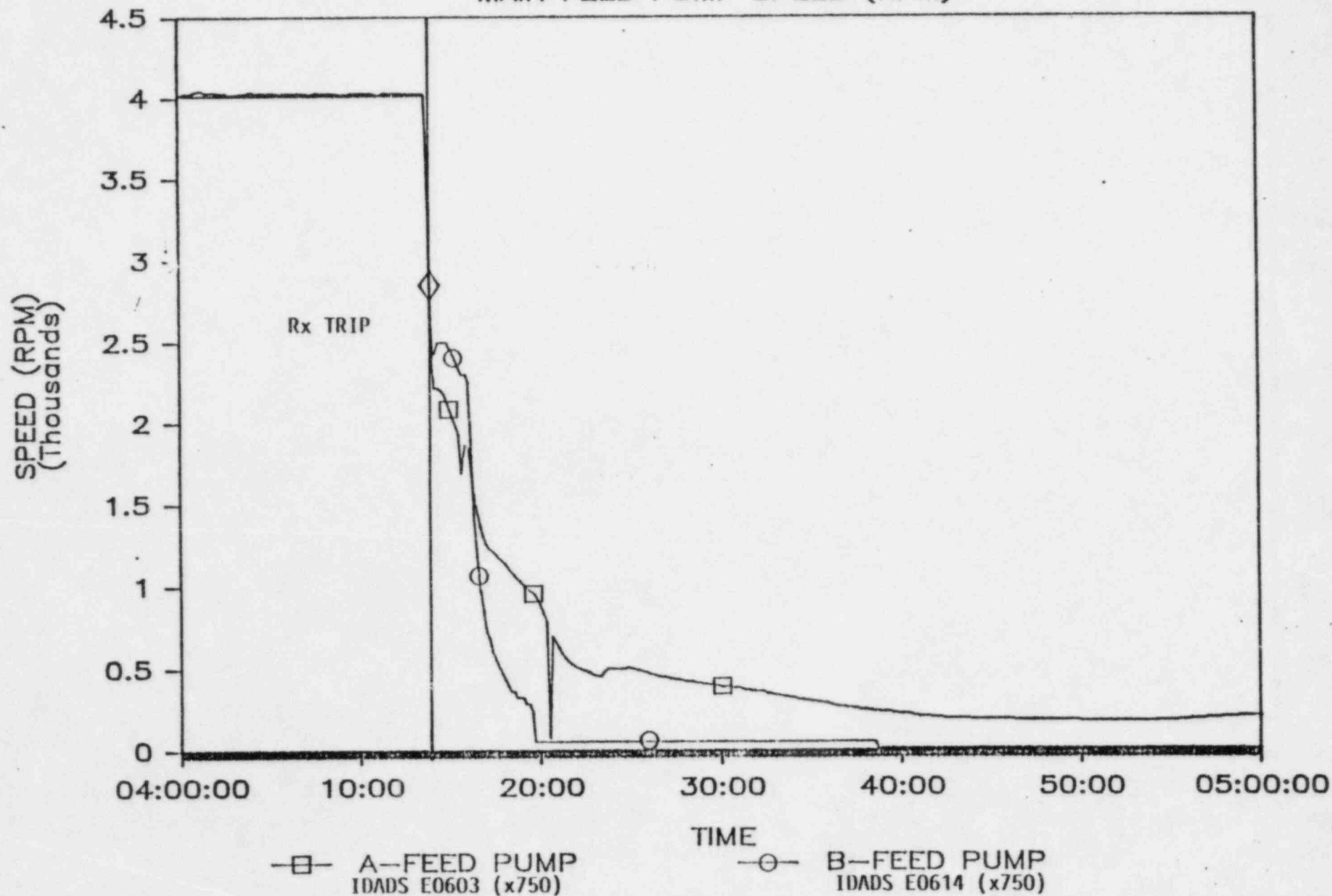
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AUX FEEDWATER FLOWRATES



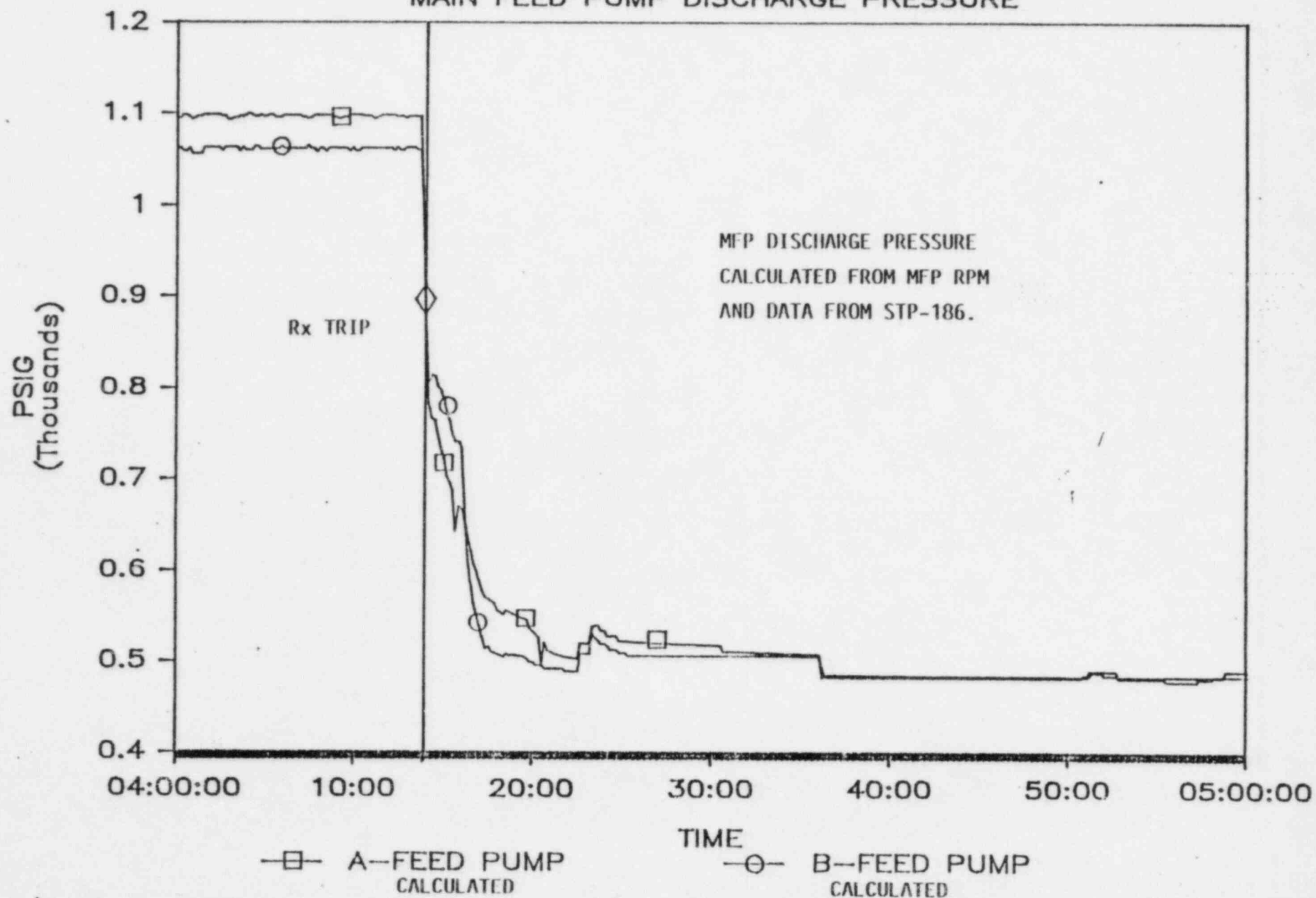
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MAIN FEED PUMP SPEED (RPM)



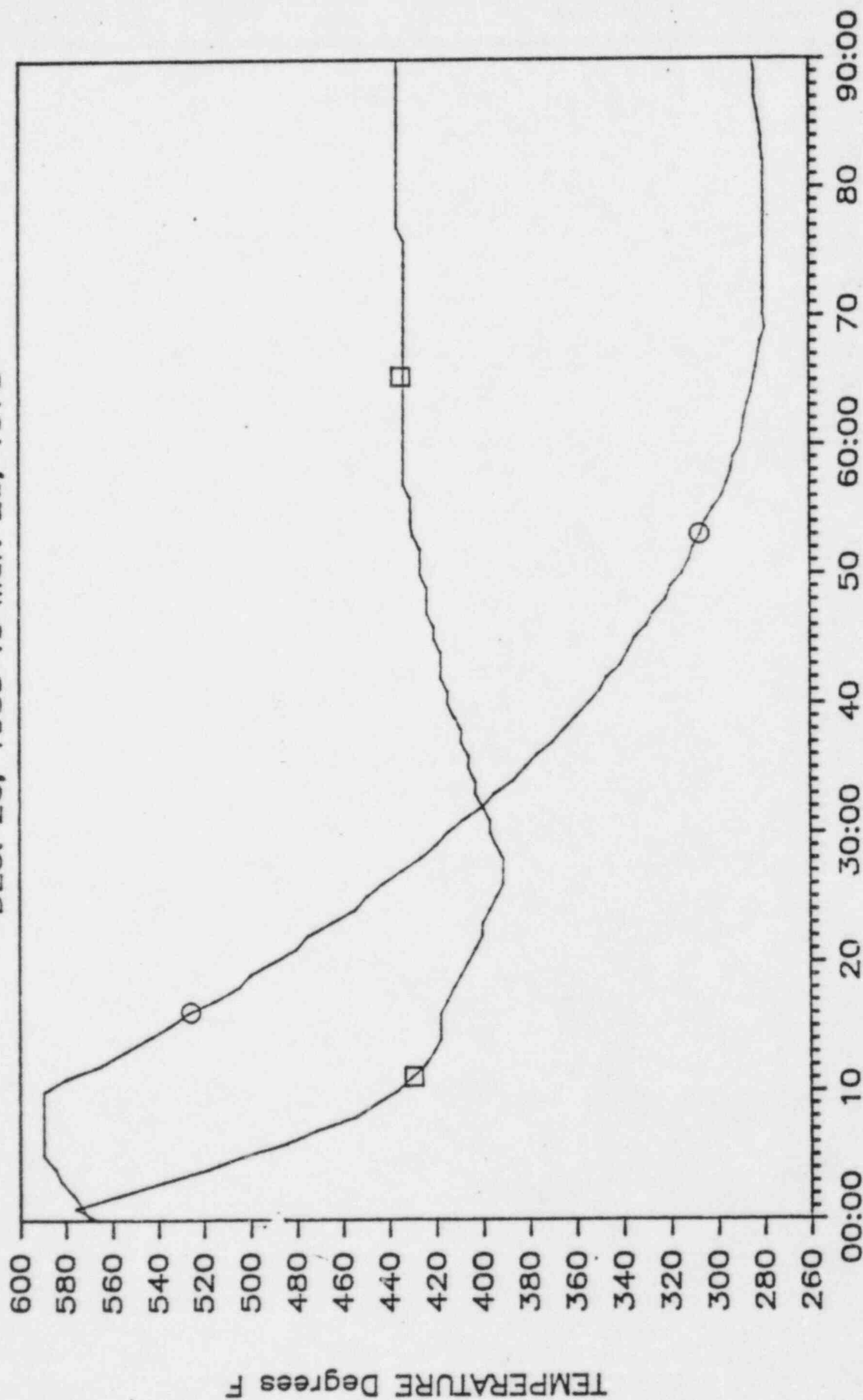
REACTOR TRIP DEC. 26, 1985

MAIN FEED PUMP DISCHARGE PRESSURE



Rx TRIP COMPARISON

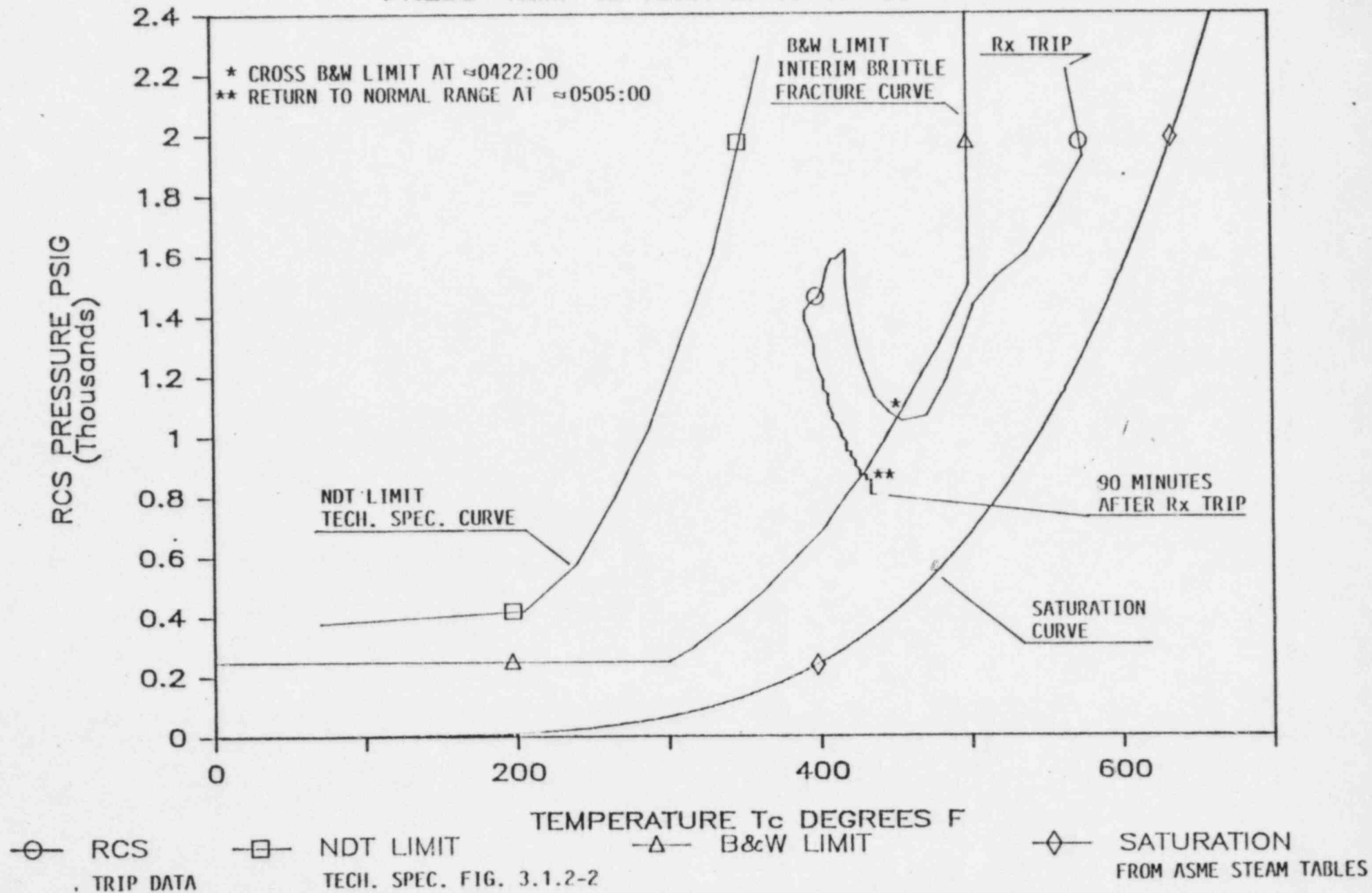
DEC. 26, 1985 vs Mar. 20, 1978



TIME -- Minutes from Rx Trip
 --○-- 3/20/78 TRIP--Tc B
 --□-- 12/26/85 TRIP--Tc B

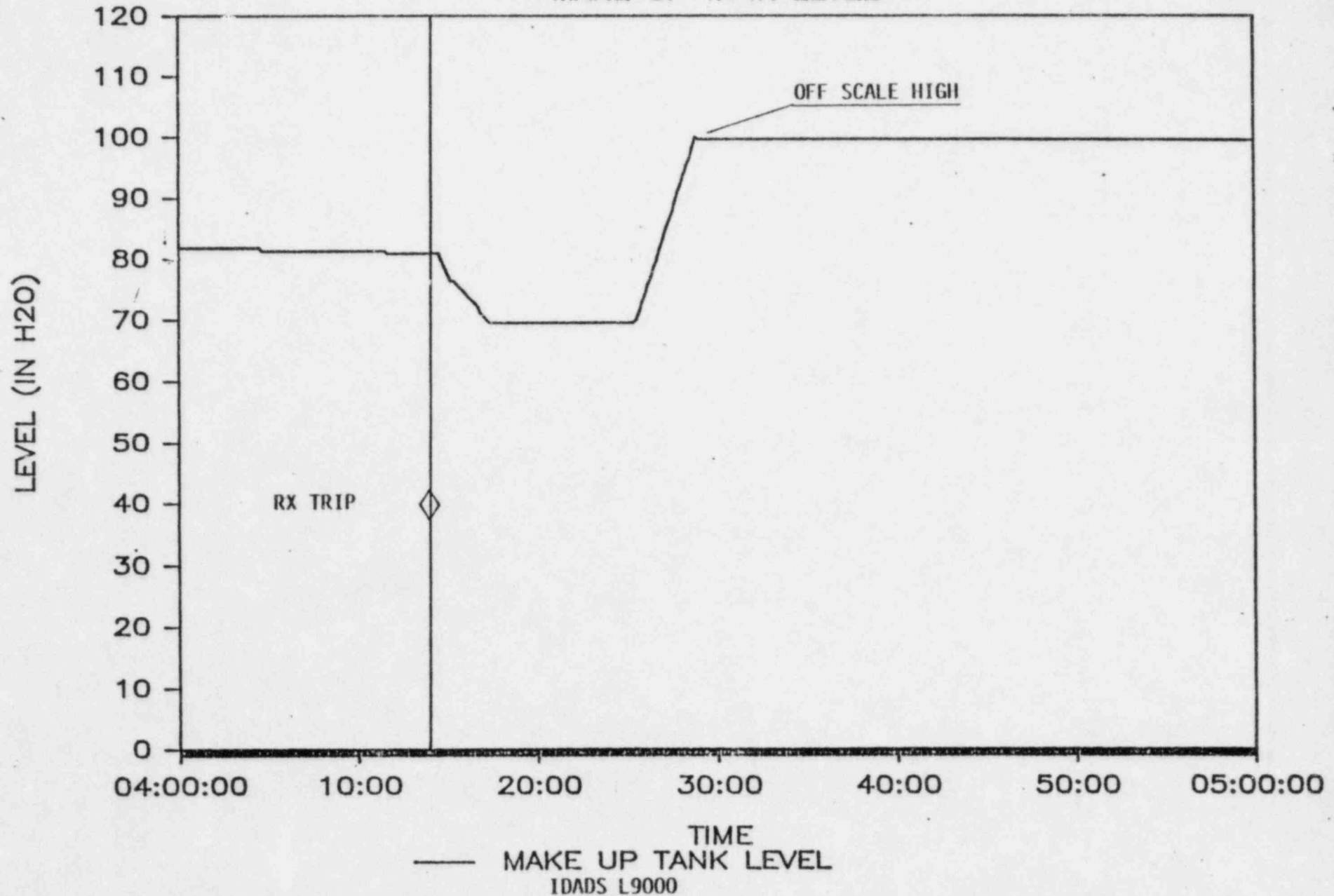
Rx TRIP COMPARISON

PRESS-TEMP to TECH SPEC COOLDOWN CURVE



REACTOR TRIP DEC. 26, 1985

MAKE UP TANK LEVEL

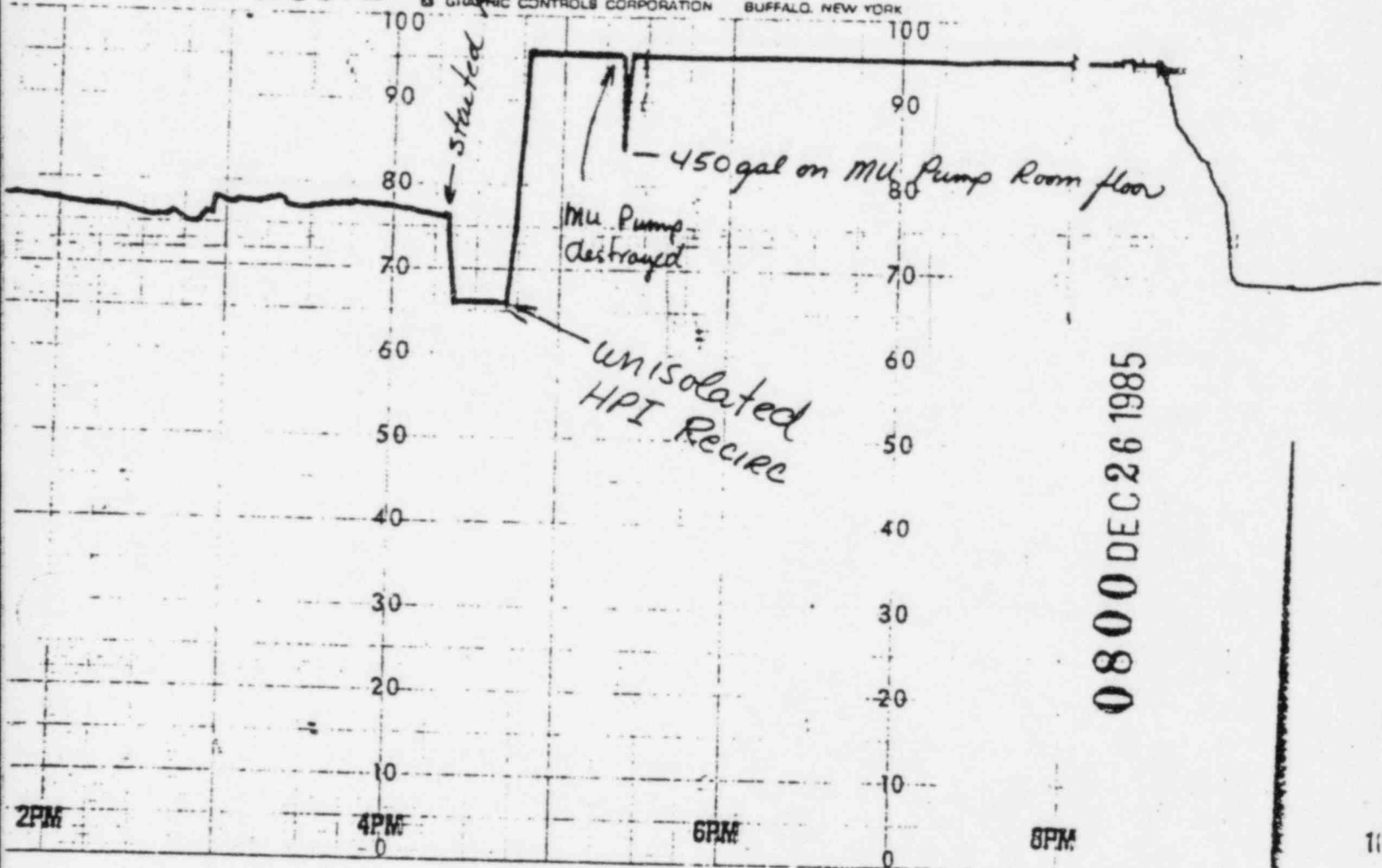


w/c (12)

LR-23502

MU Tank Level

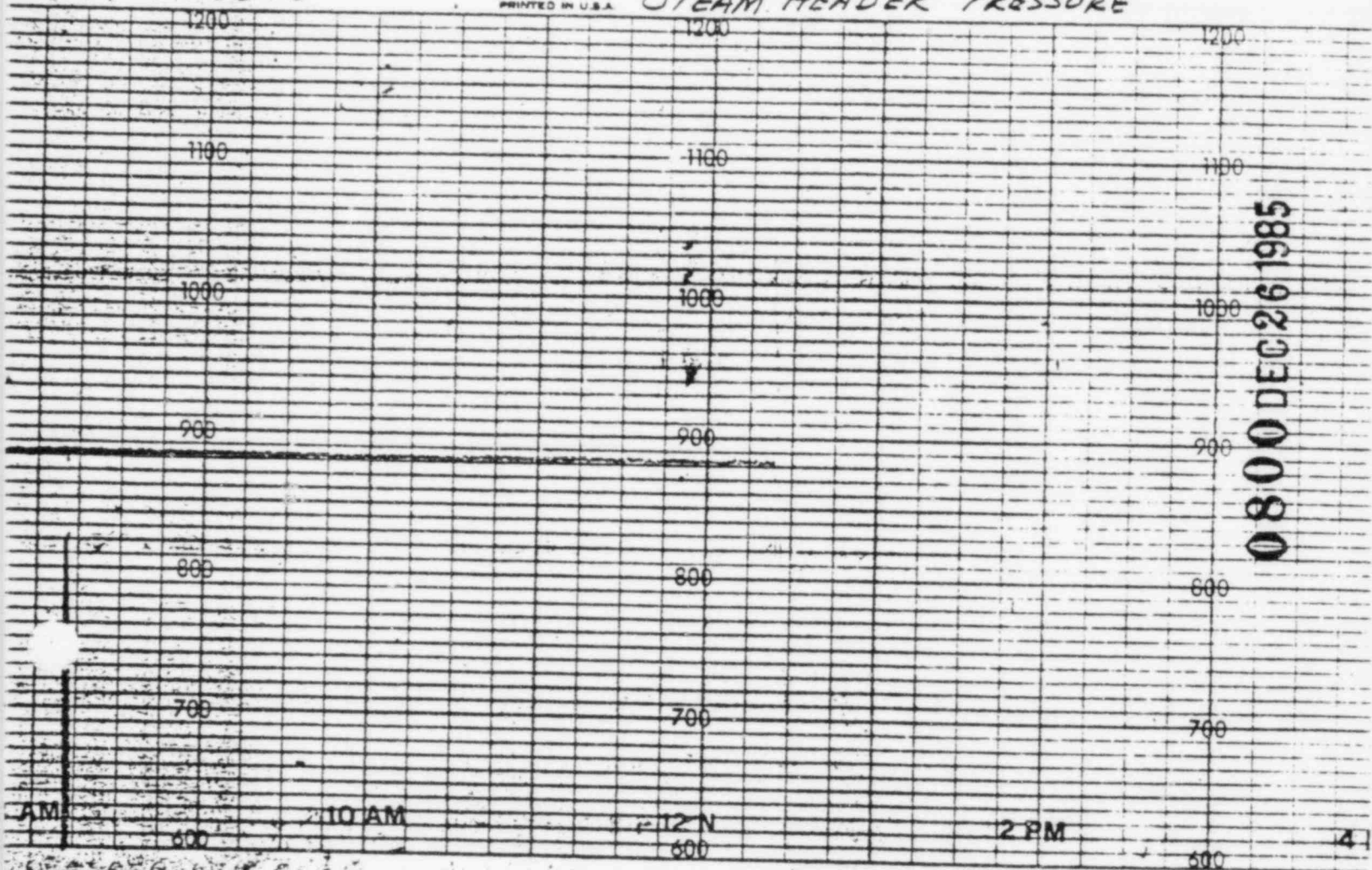
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STEAM HEADER PRESSURE

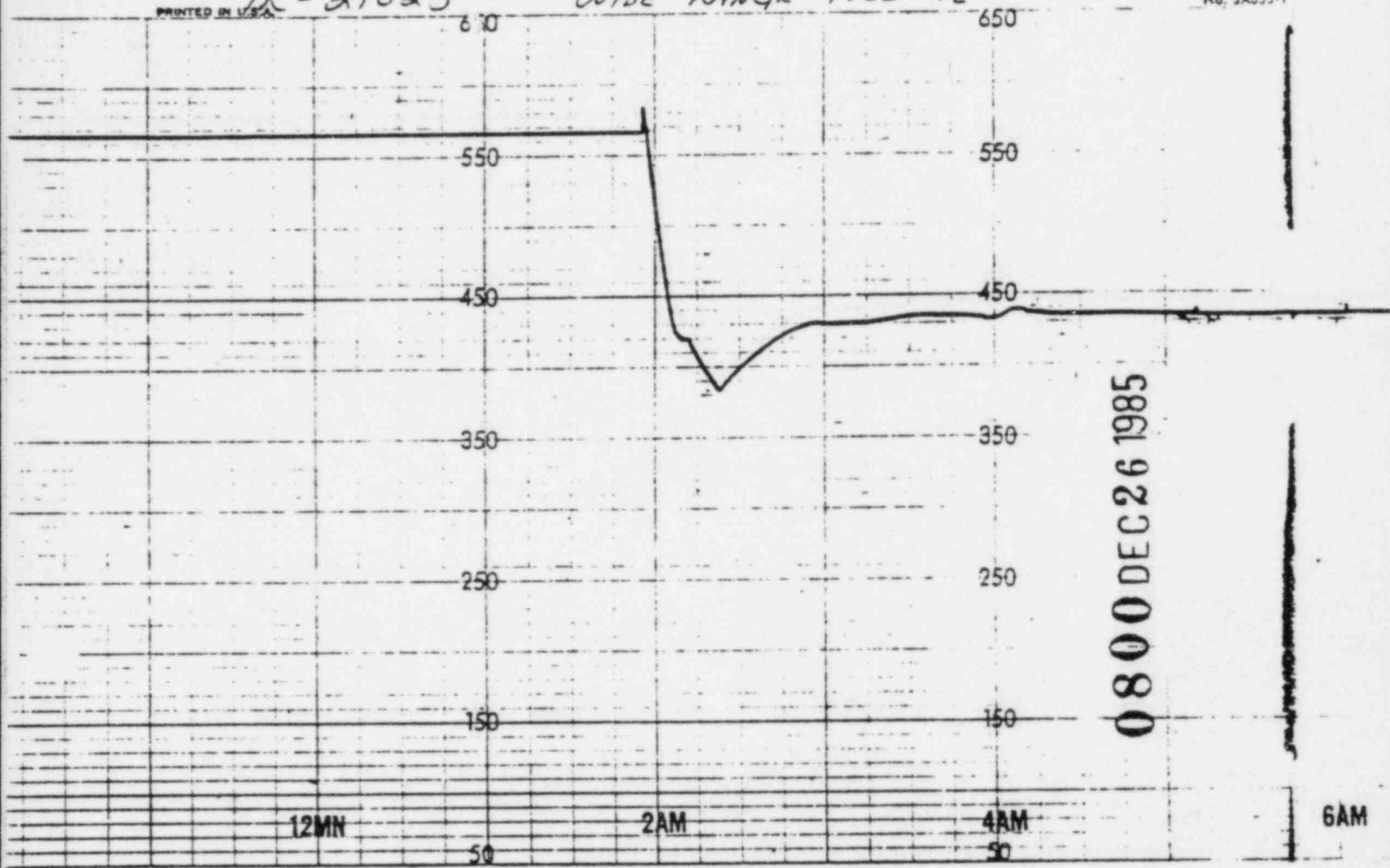


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TR-21023

WIDE RANGE RCS TC

No. SA652-1



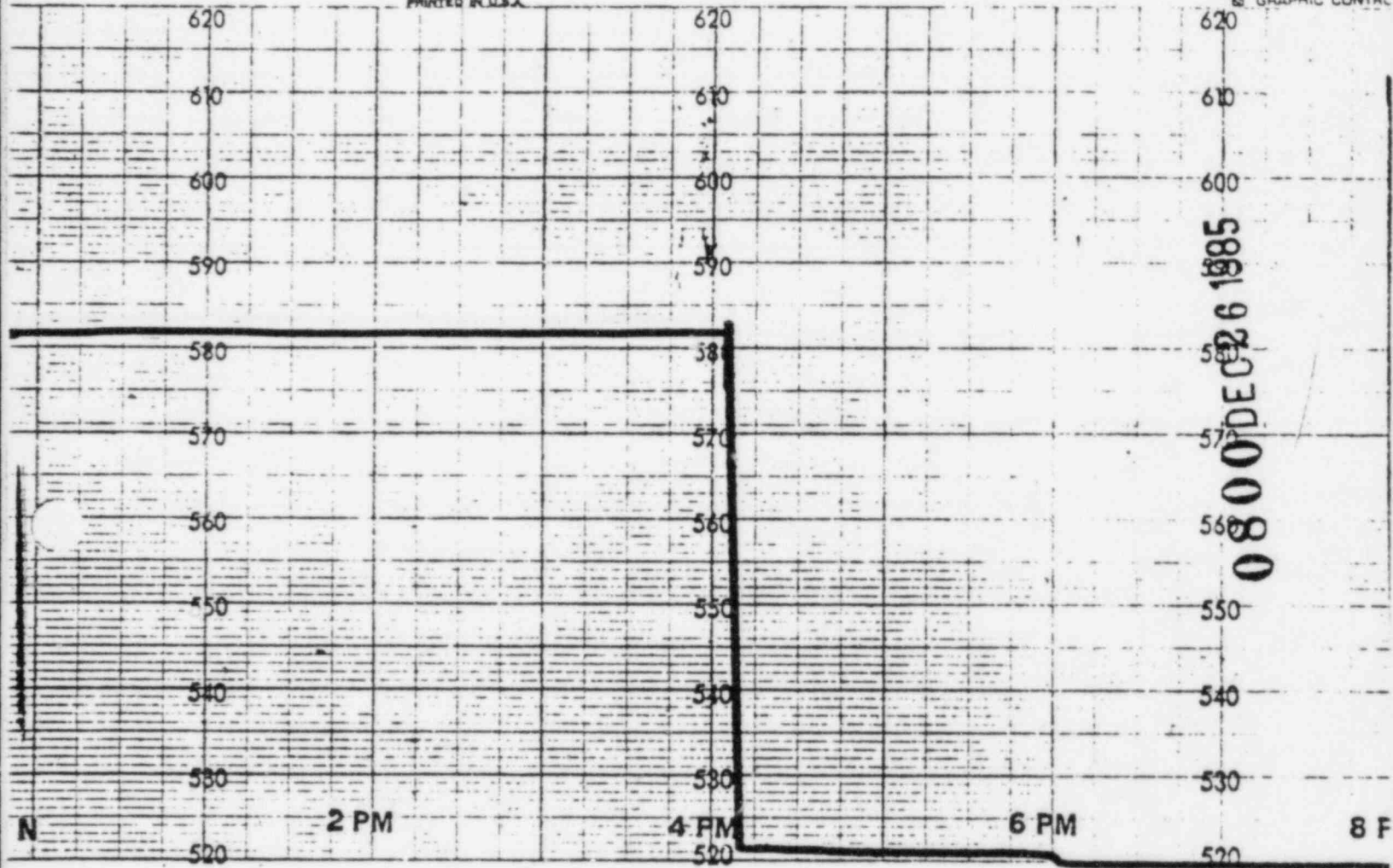
0800 DEC 26 1985

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GRAPHIC CONTR

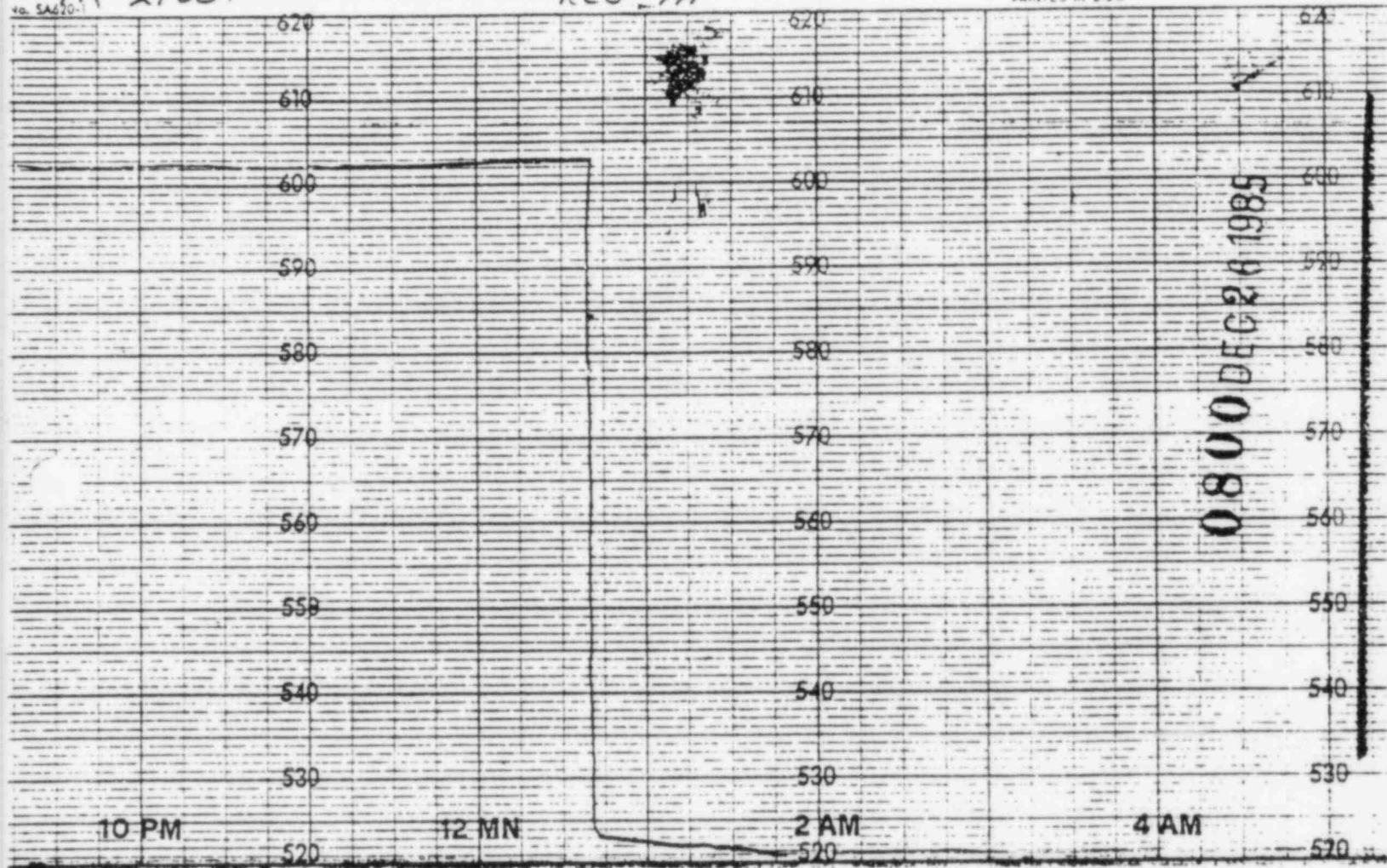


0800 DEC 26 1985

TR 21031

RCS TH

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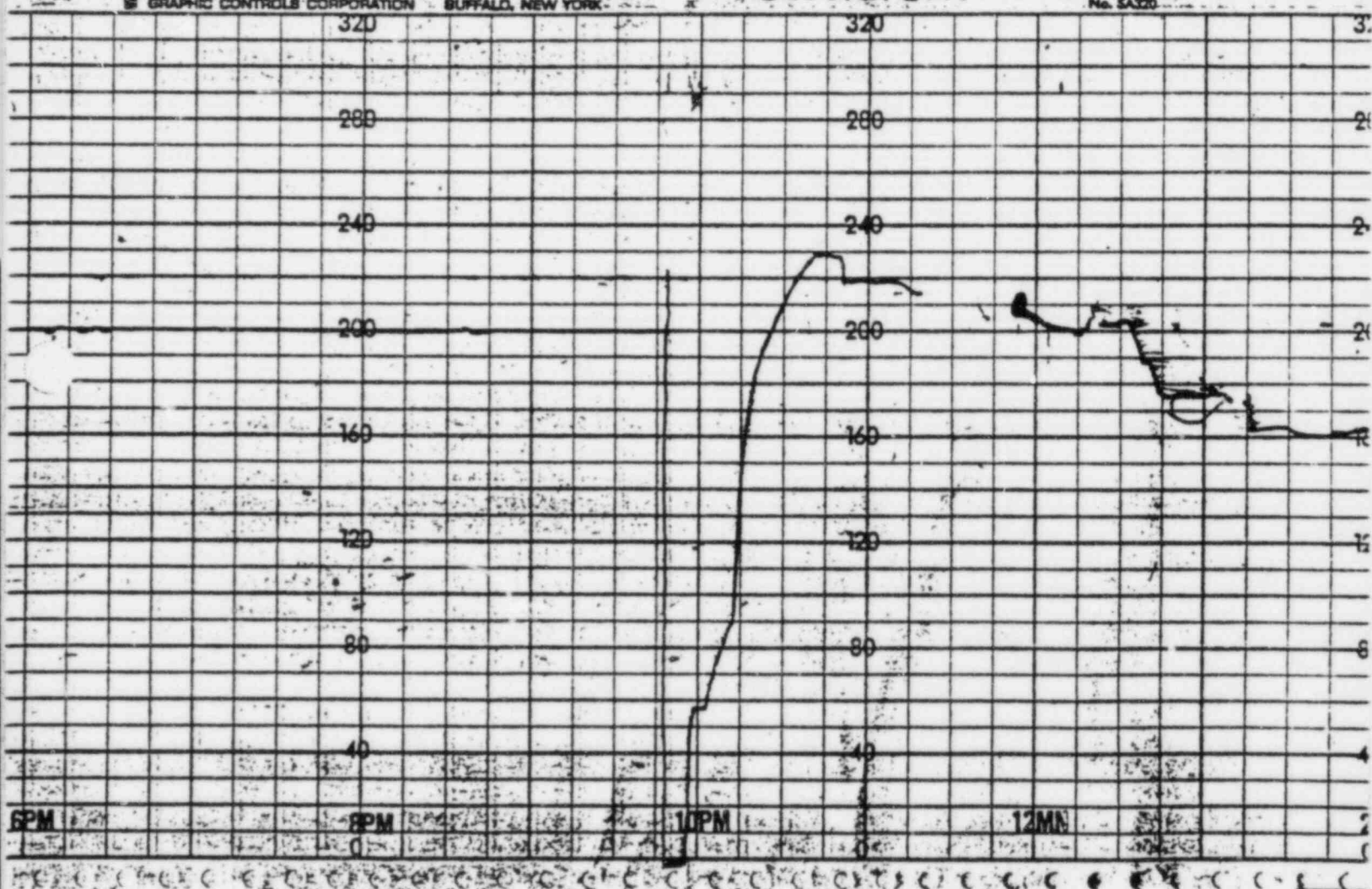


LR 21503

GRAPHIC CONTROLS CORPORATION BUFFALO, NEW YORK

PRESSURIZER LEVEL

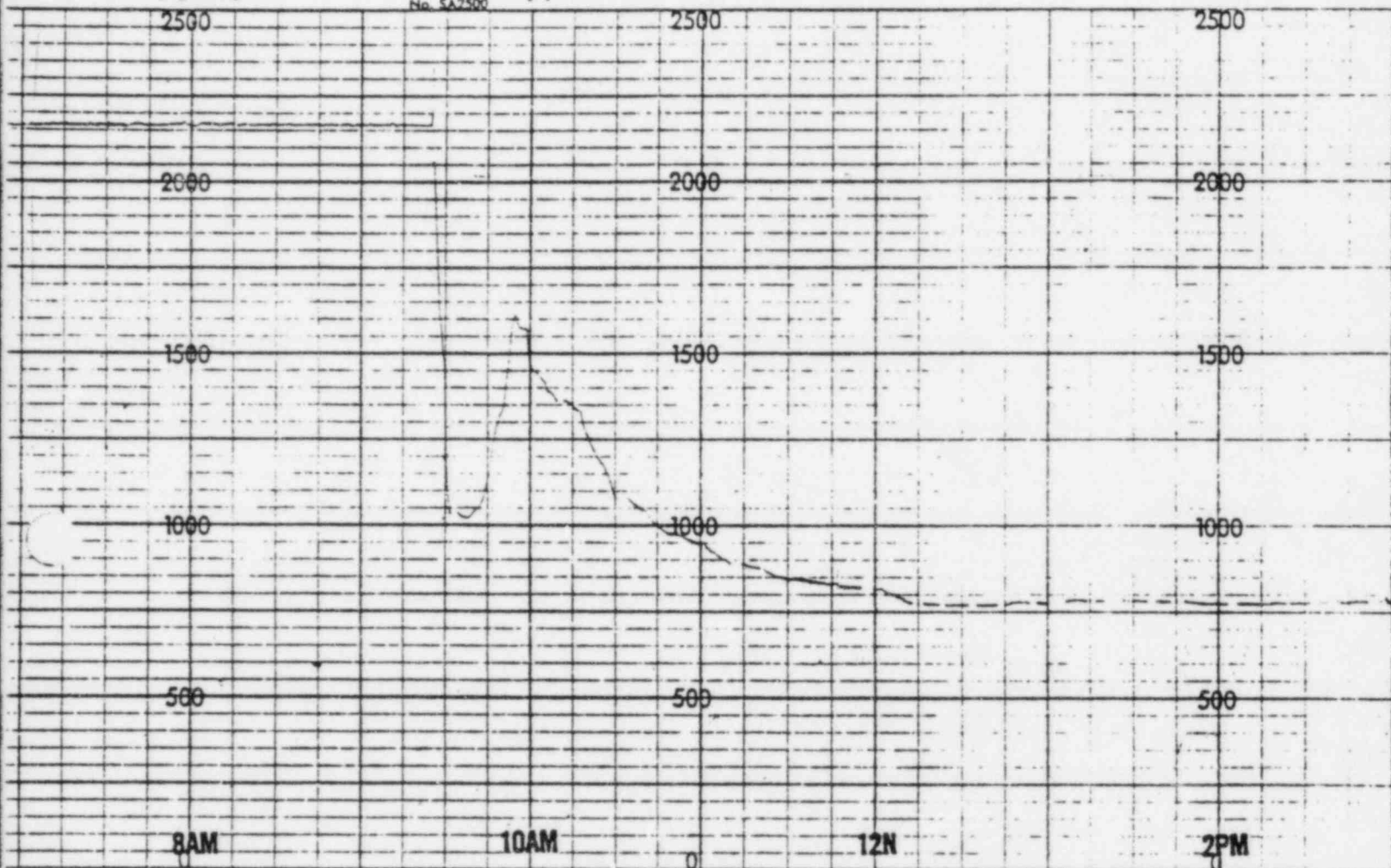
No. SA320



PR 21092

No. 5A2500

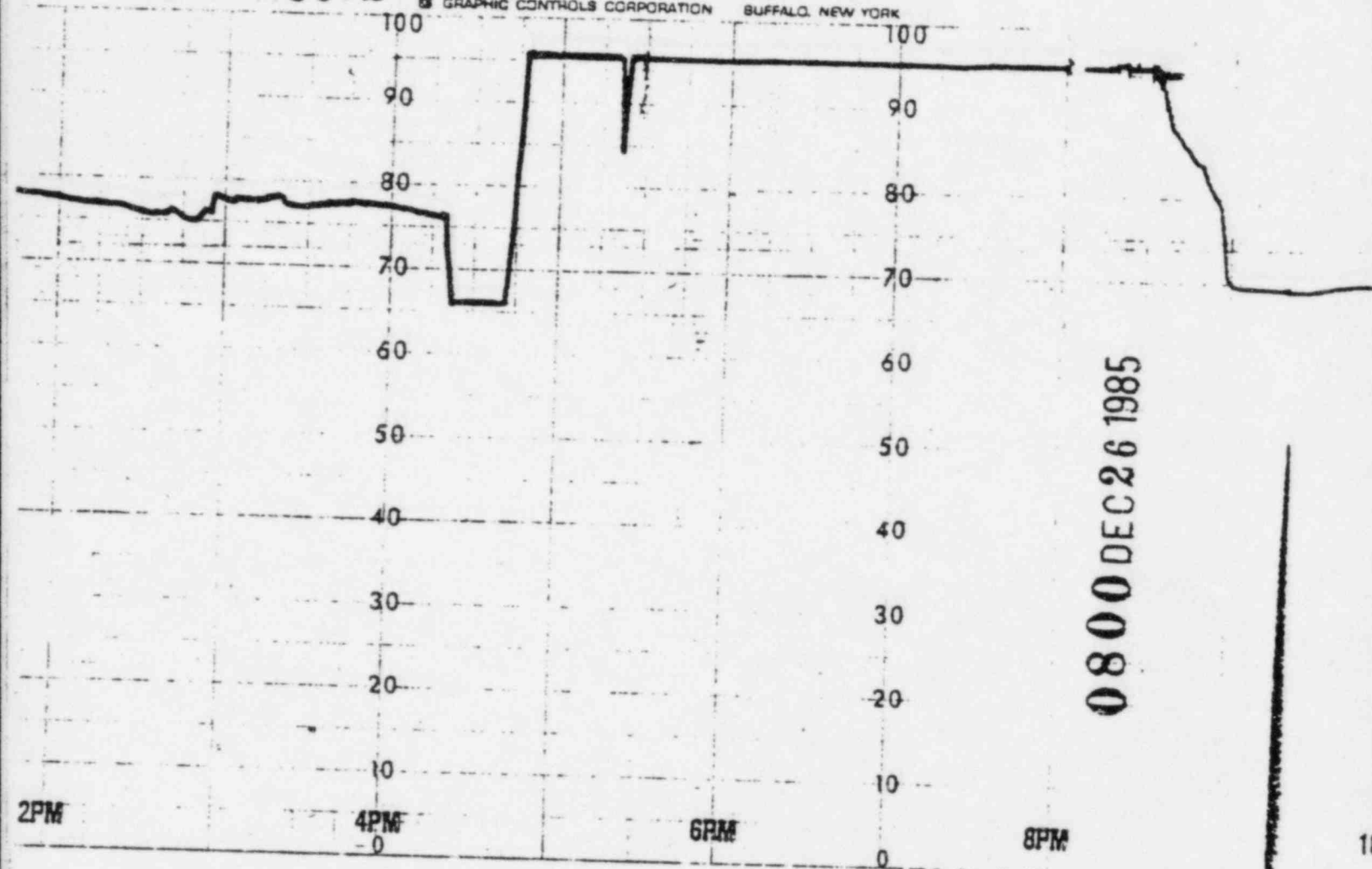
RCS WR PRESSURE



LR-23502

MU Tank Level

GRAPHIC CONTROLS CORPORATION BUFFALO, NEW YORK

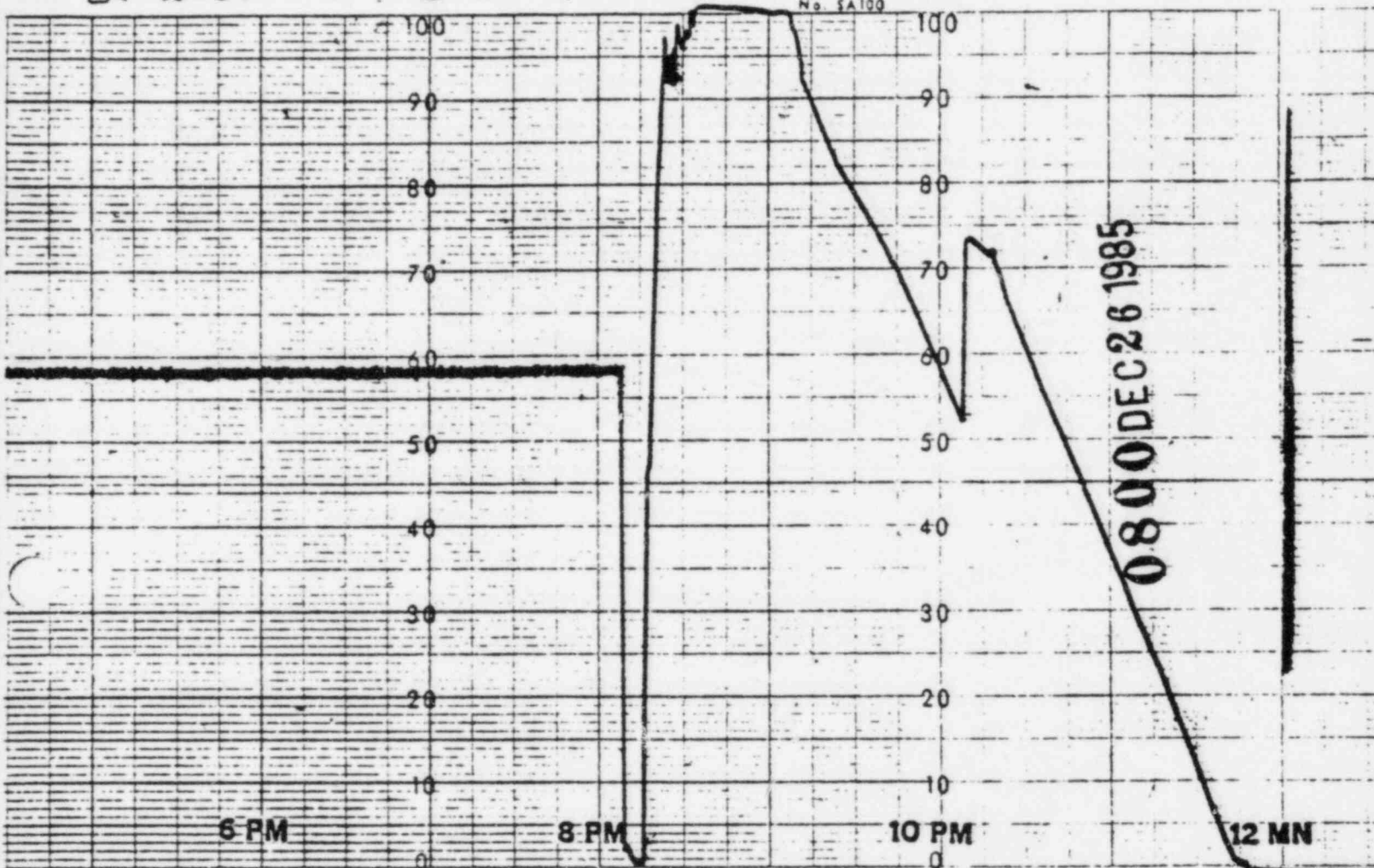


0800 DEC 26 1985

LR 20504

B OTSG OPERATE LEVEL

No. SA100



0800 DEC 26 1985

LR-20503

A OTSG OPERATE RANGE LEVEL

NO SA 100

RECEIVED BY NAME

0800 DEC 26 1985

12N

2PM

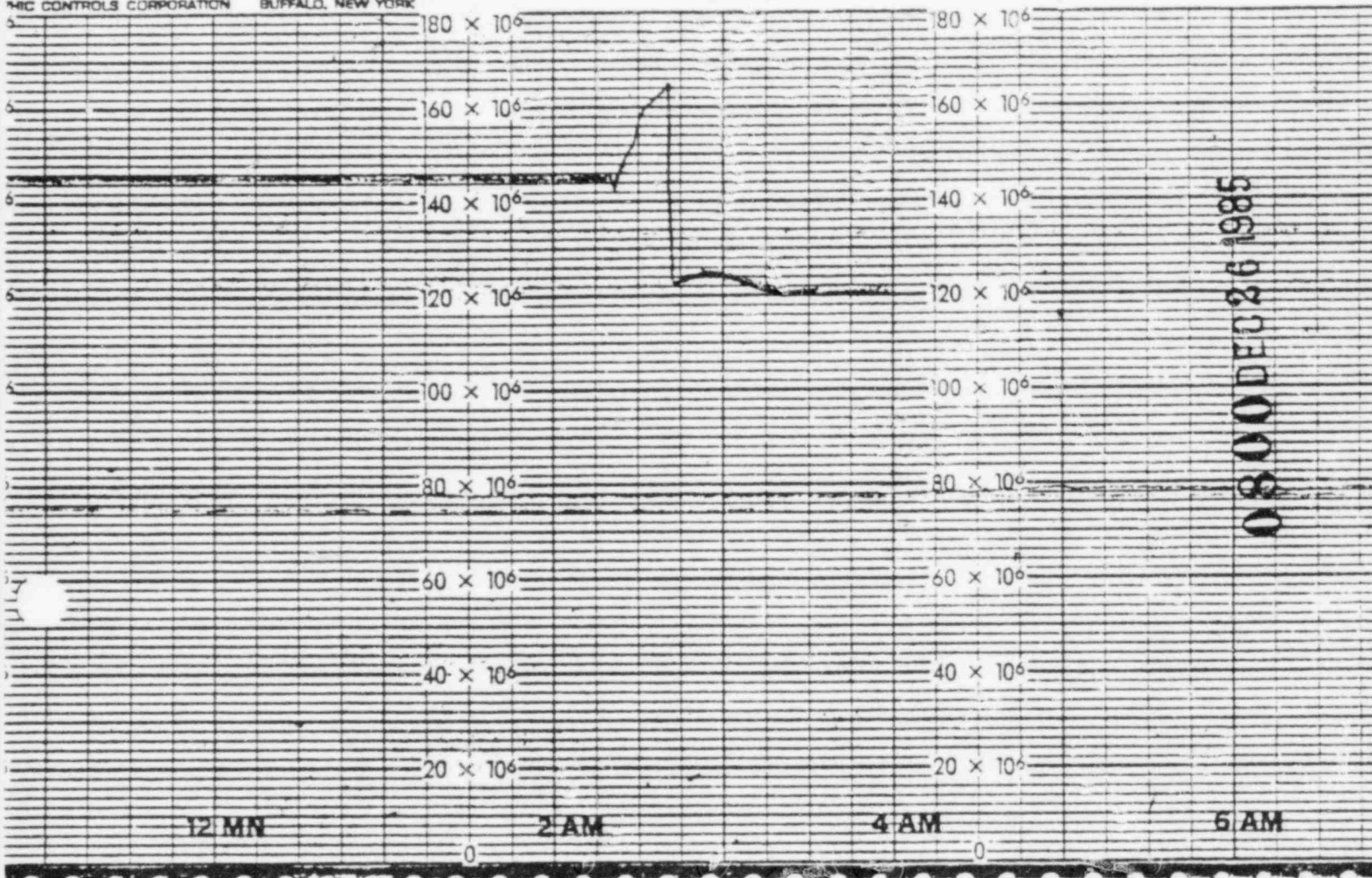
4PM

6PM

FR 21027

RC TOTAL FLOW

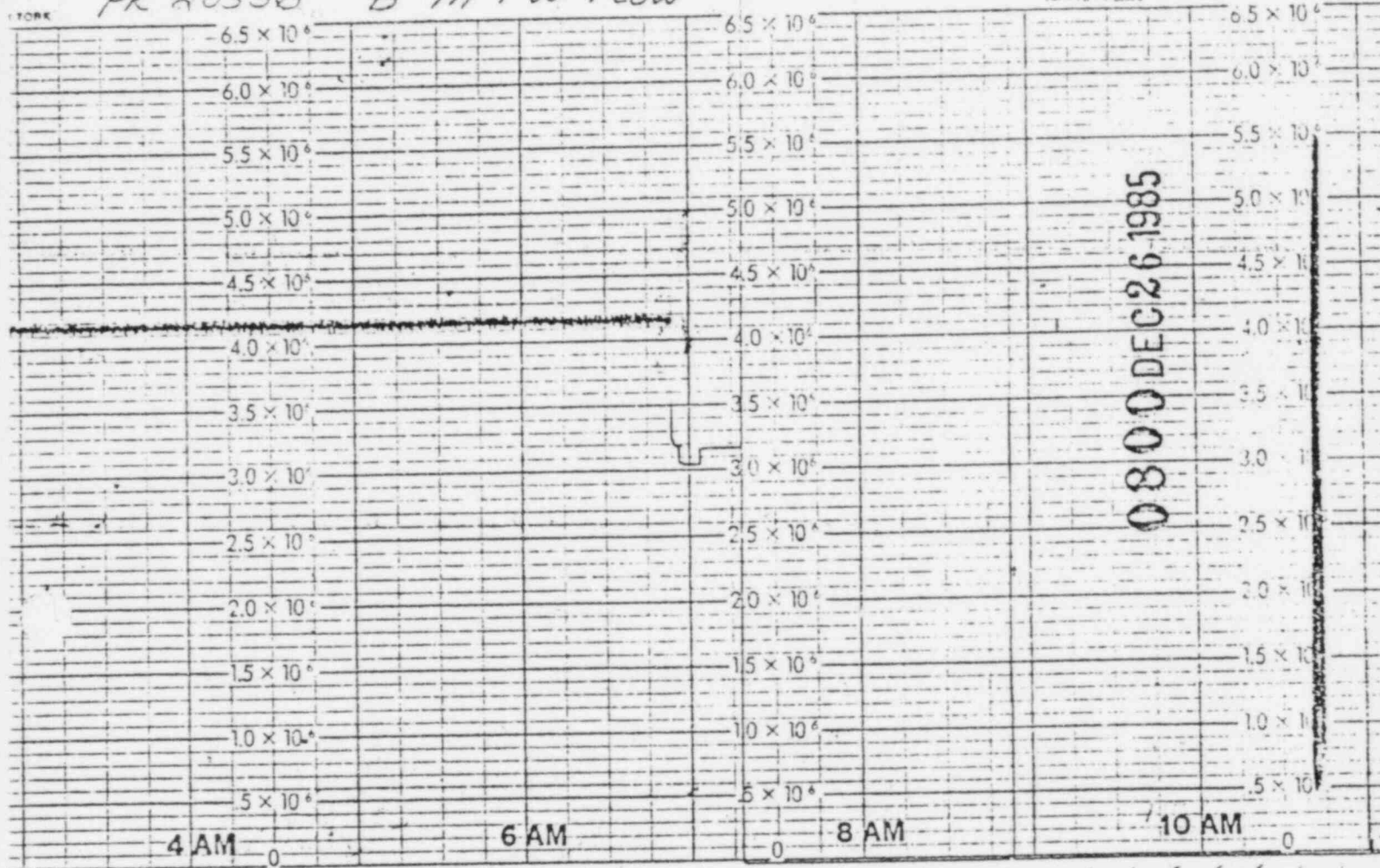
MIC CONTROLS CORPORATION BUFFALO, NEW YORK



0800DEC26 1985

FR 20536 B in FW FLOW

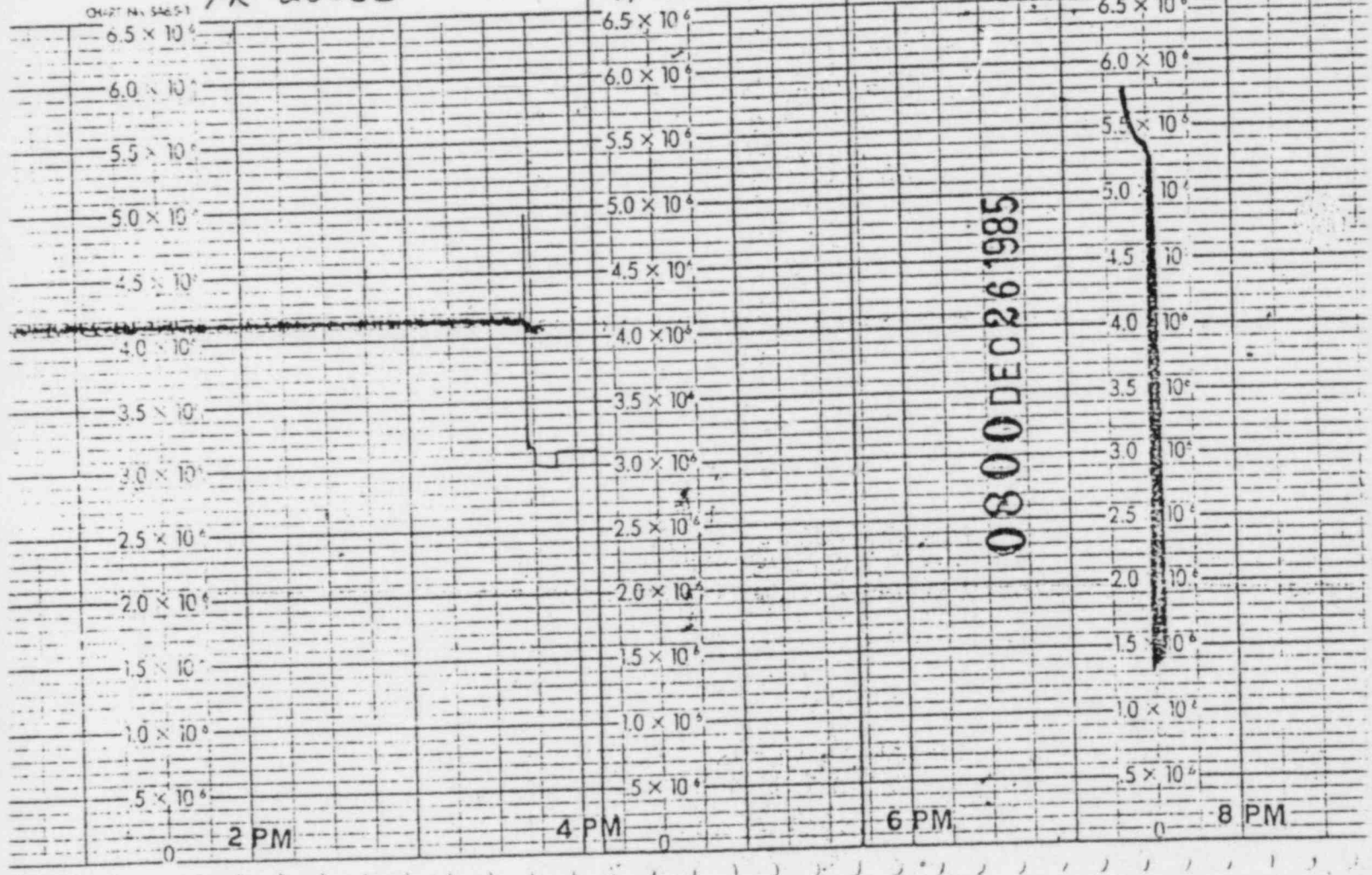
WENT TO IN LCA



FR-20535

A MFW FLOW

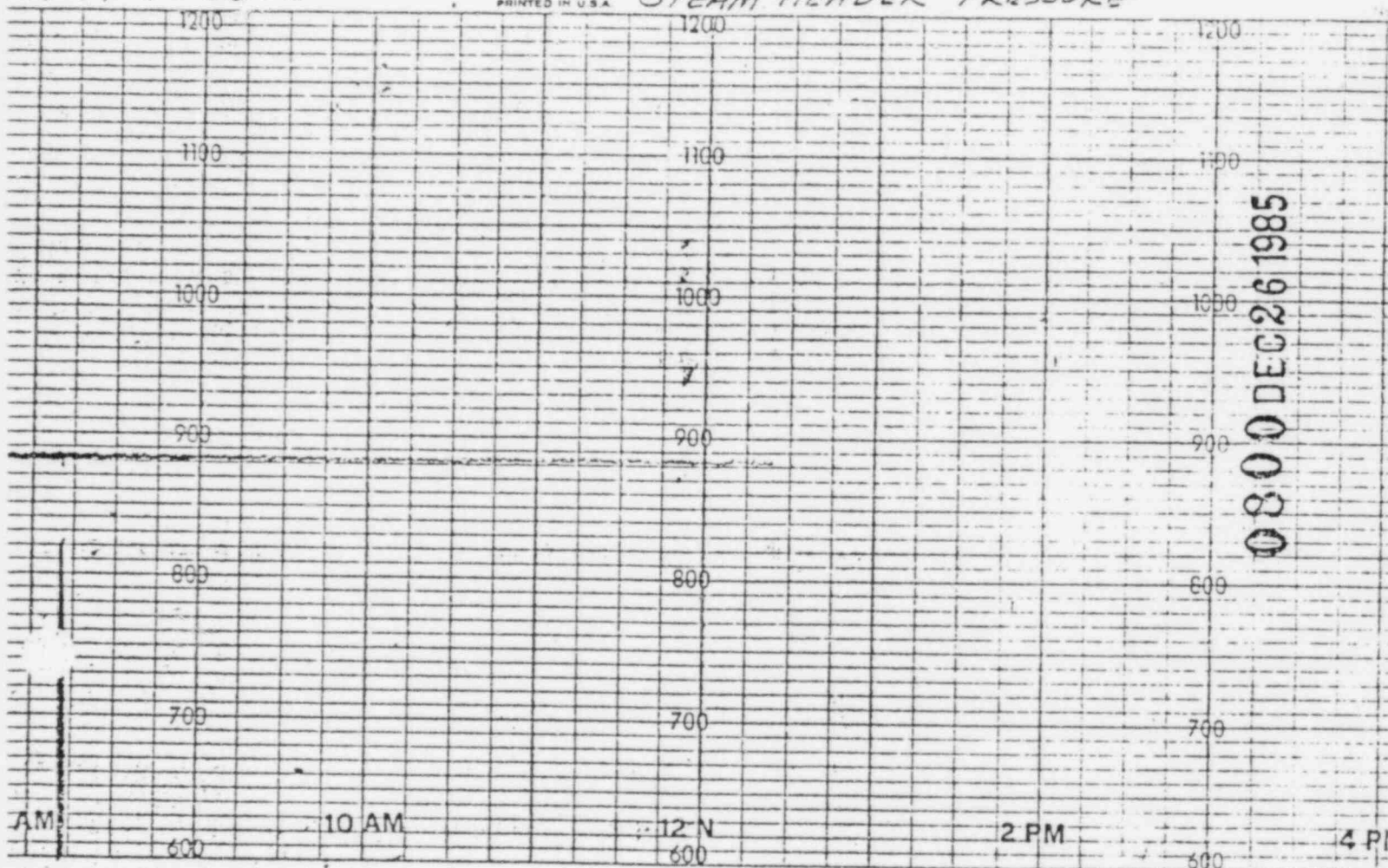
GRAPHIC CONTROLS CORPORATION BUFFALO, N.Y.



PR 20543

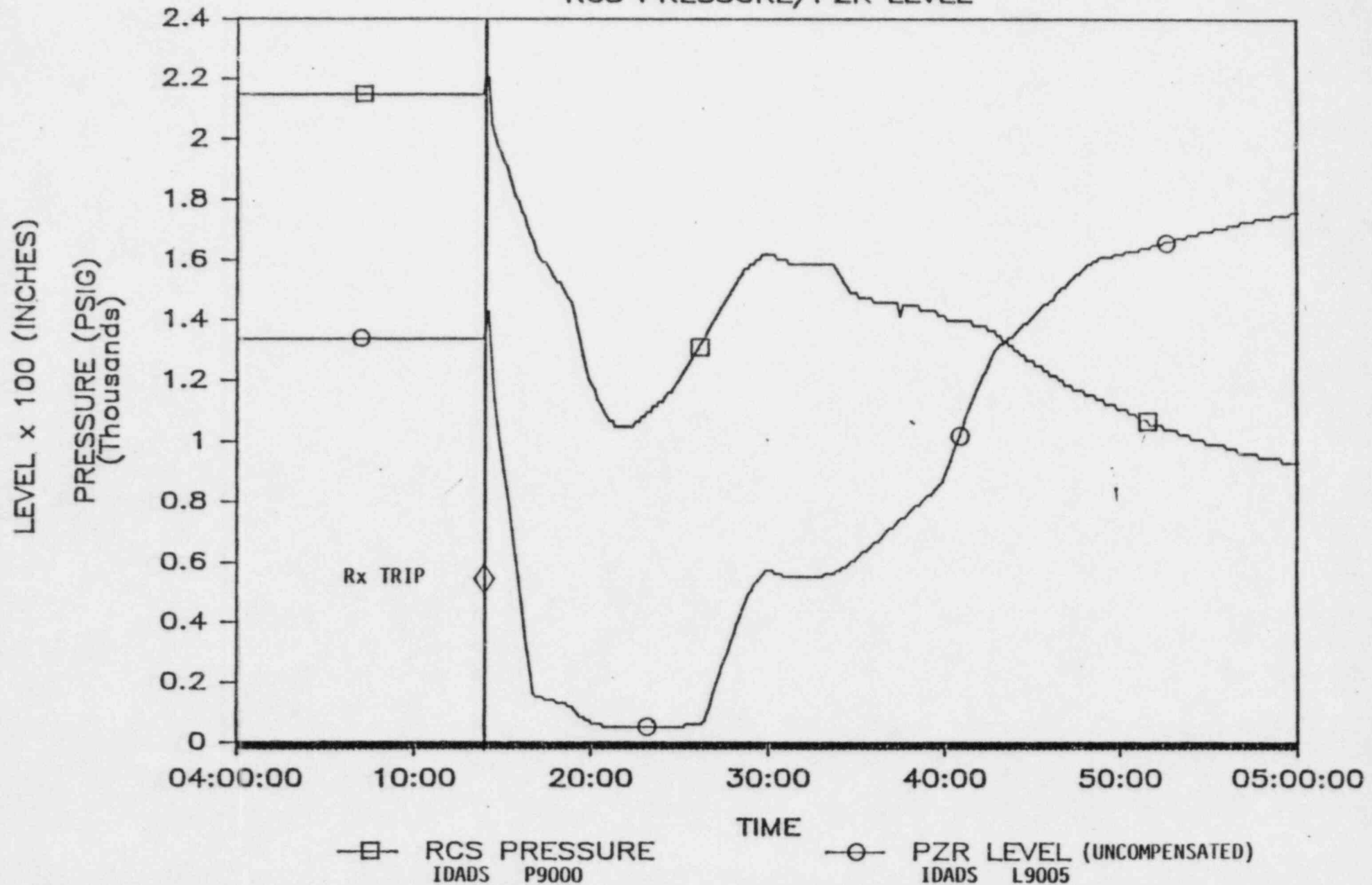
PRINTED IN U.S.A.

STEAM HEADER PRESSURE



REACTOR TRIP DEC. 26, 1985

RCS PRESSURE/PZR LEVEL



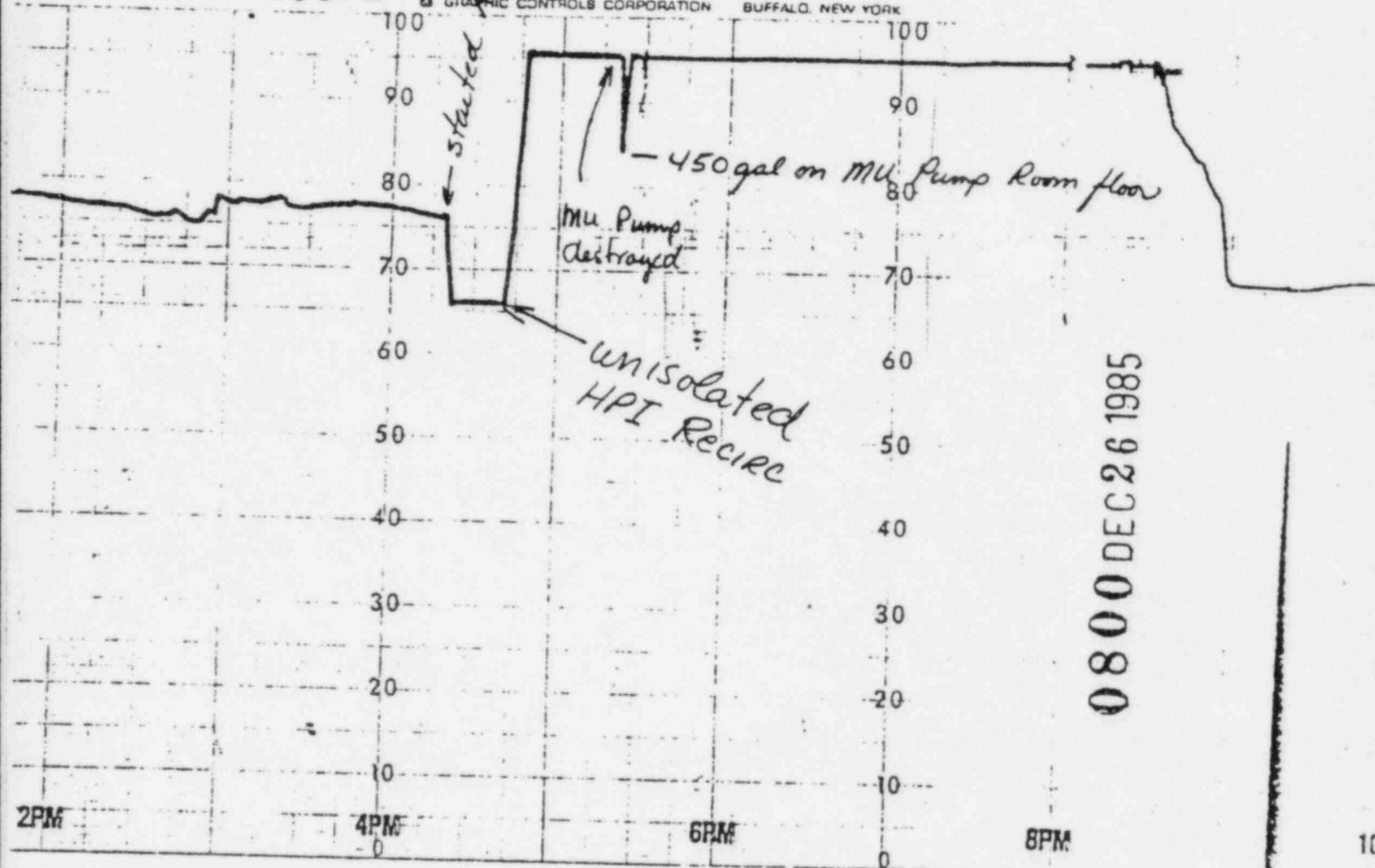
w/c

(12)

LR-23502

MU Tank Level

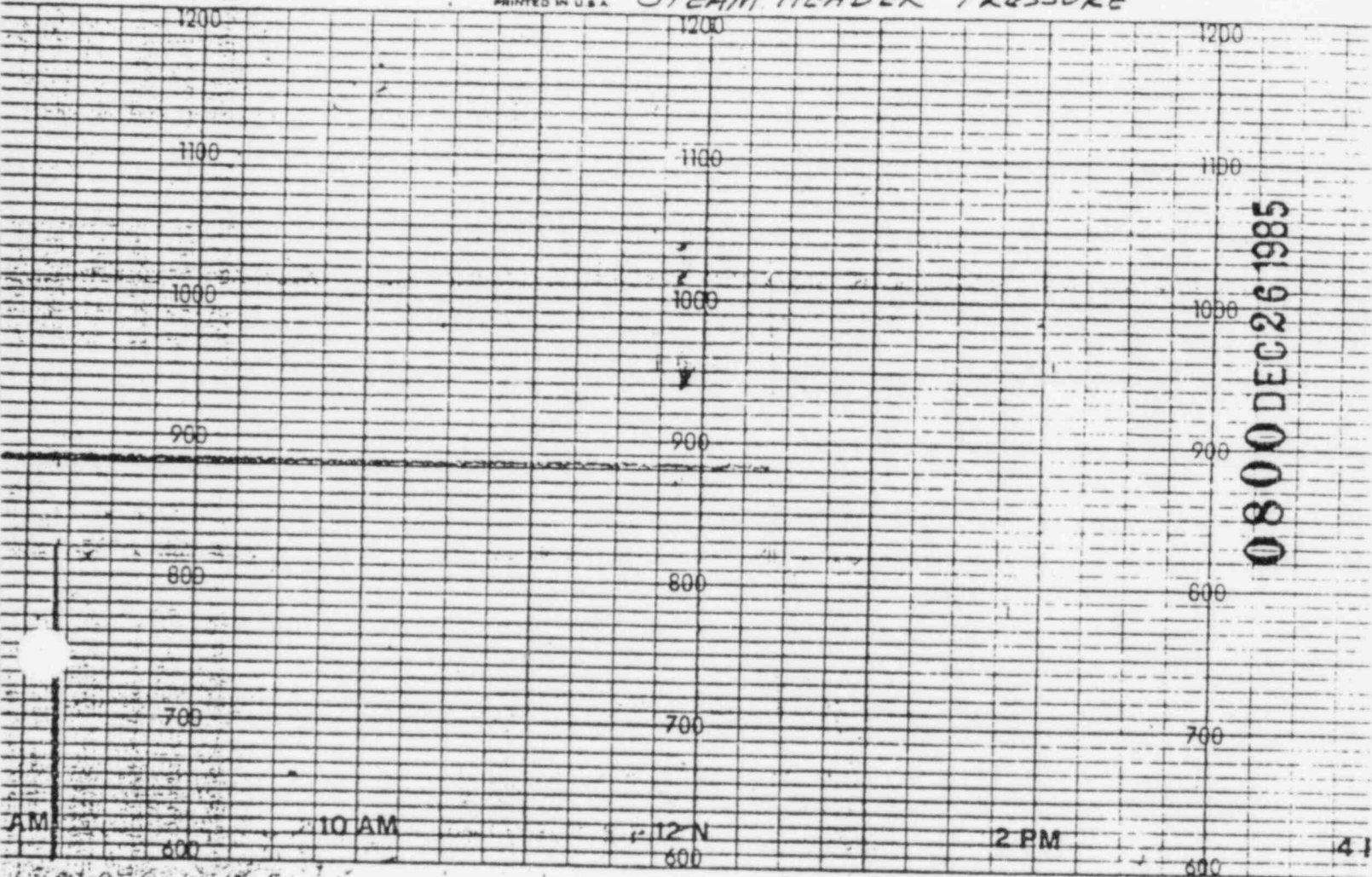
GRAPHIC CONTROLS CORPORATION BUFFALO, NEW YORK



PR 20543

PRINTED IN U.S.A.

STEAM HEADER PRESSURE



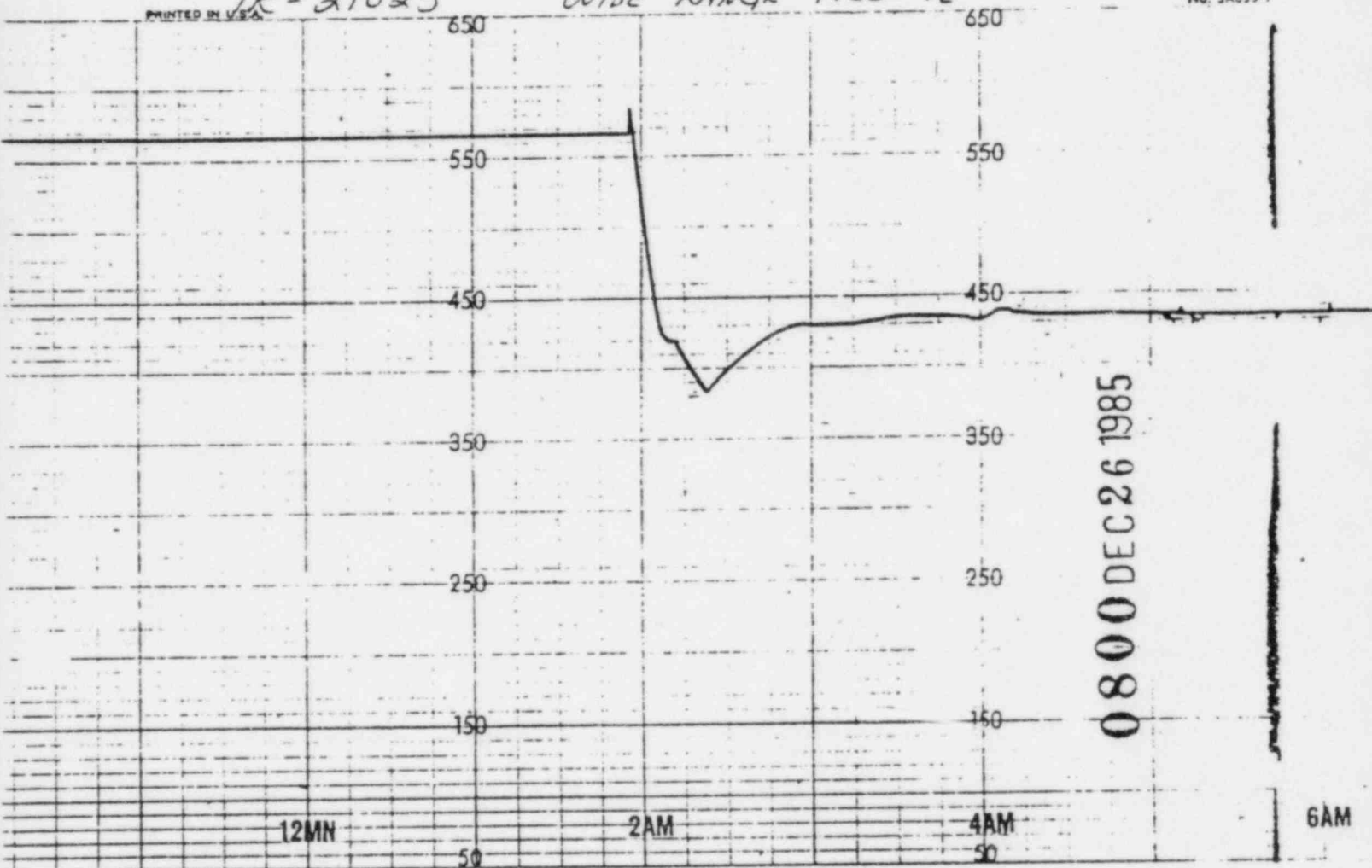
0800 DEC 26 1985

PRINTED IN U.S.A.

TR-21023

WIDE RANGE RCS TC

No. 5A55-1



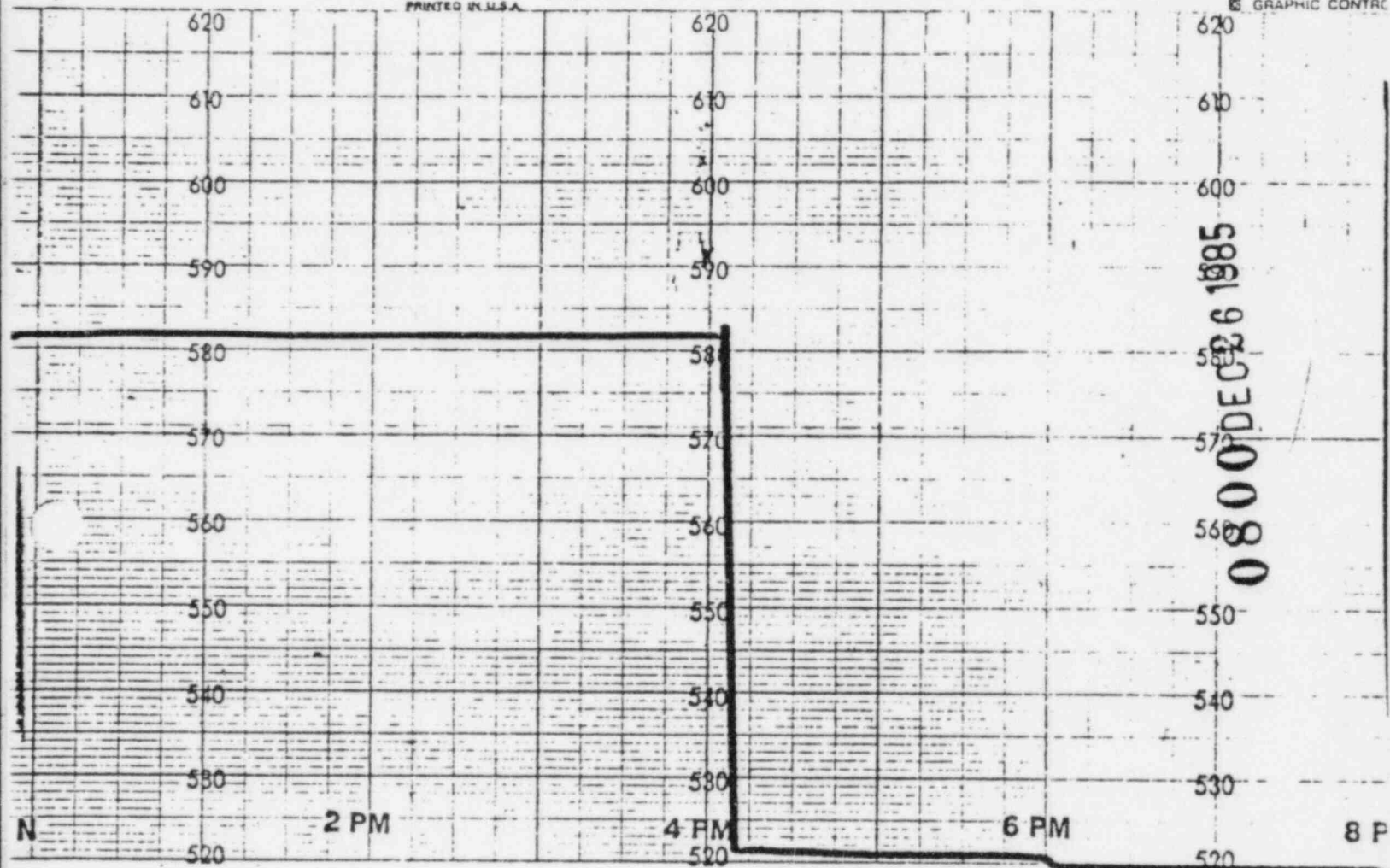
0800 DEC 26 1985

TR 21025

RC5 TAVG

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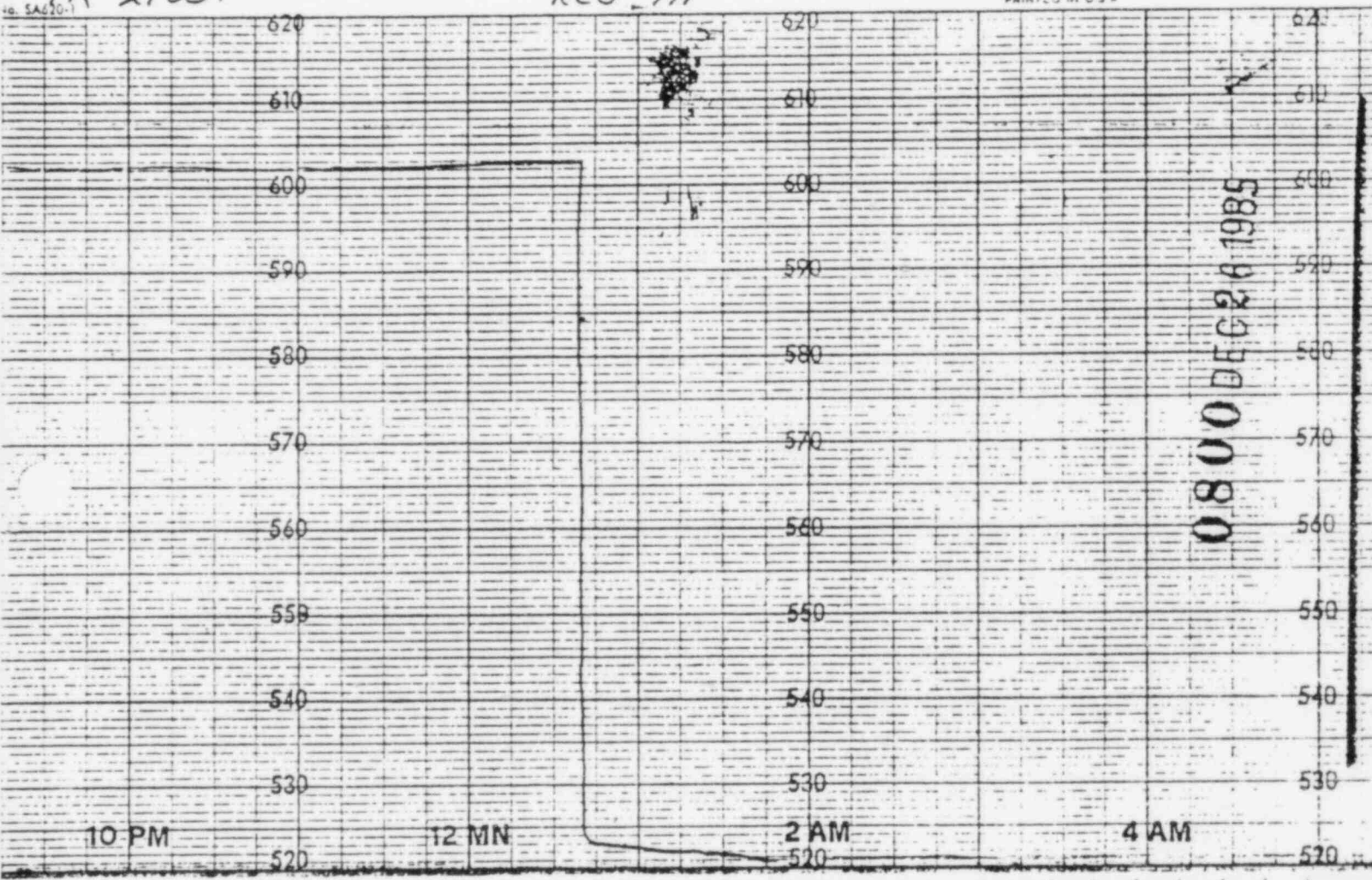
GRAPHIC CONTR



TR 21031

RCS TH

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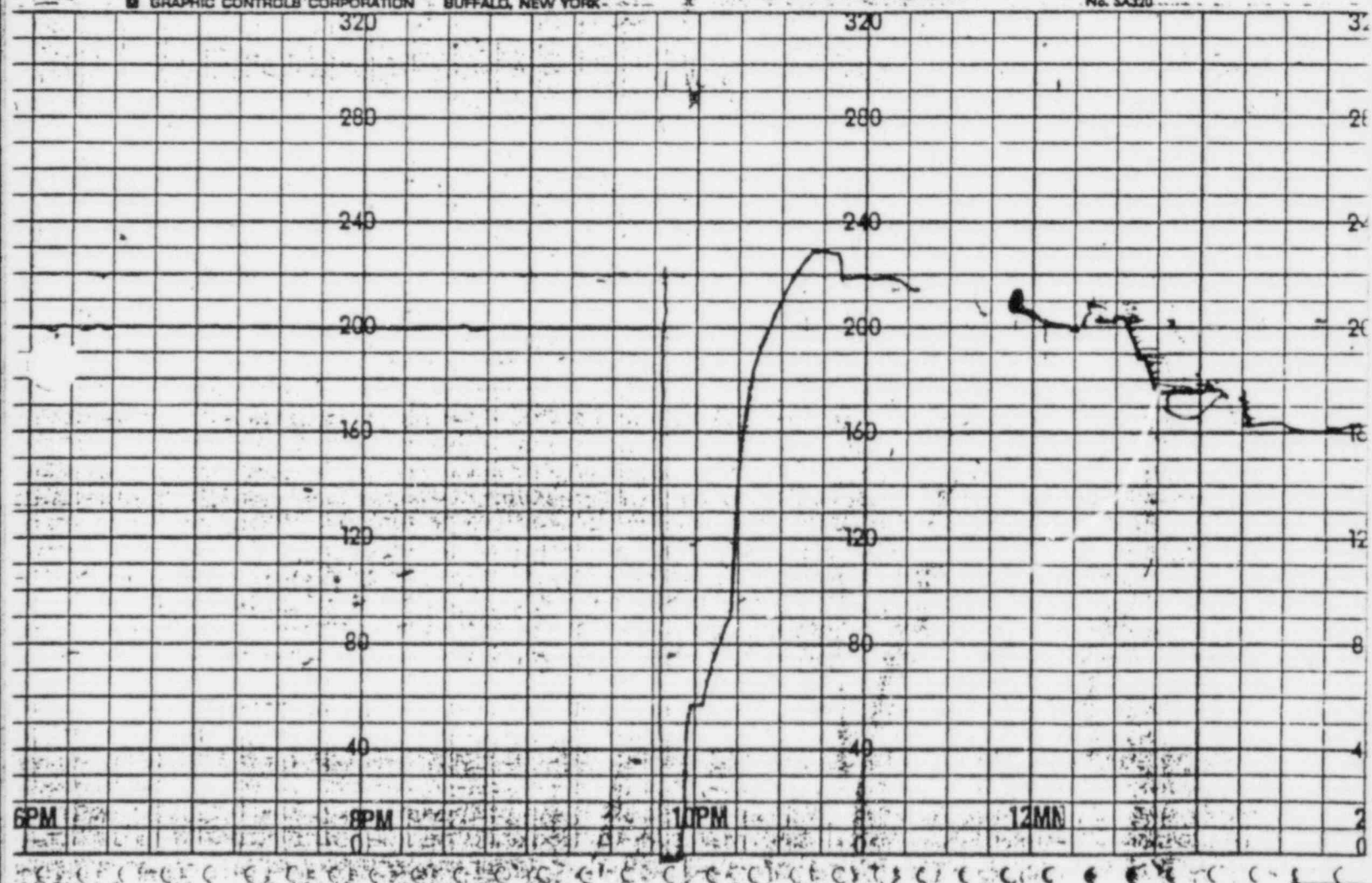


LR 21503

GRAPHIC CONTROLS CORPORATION BUFFALO, NEW YORK

PRESSURIZER LEVEL

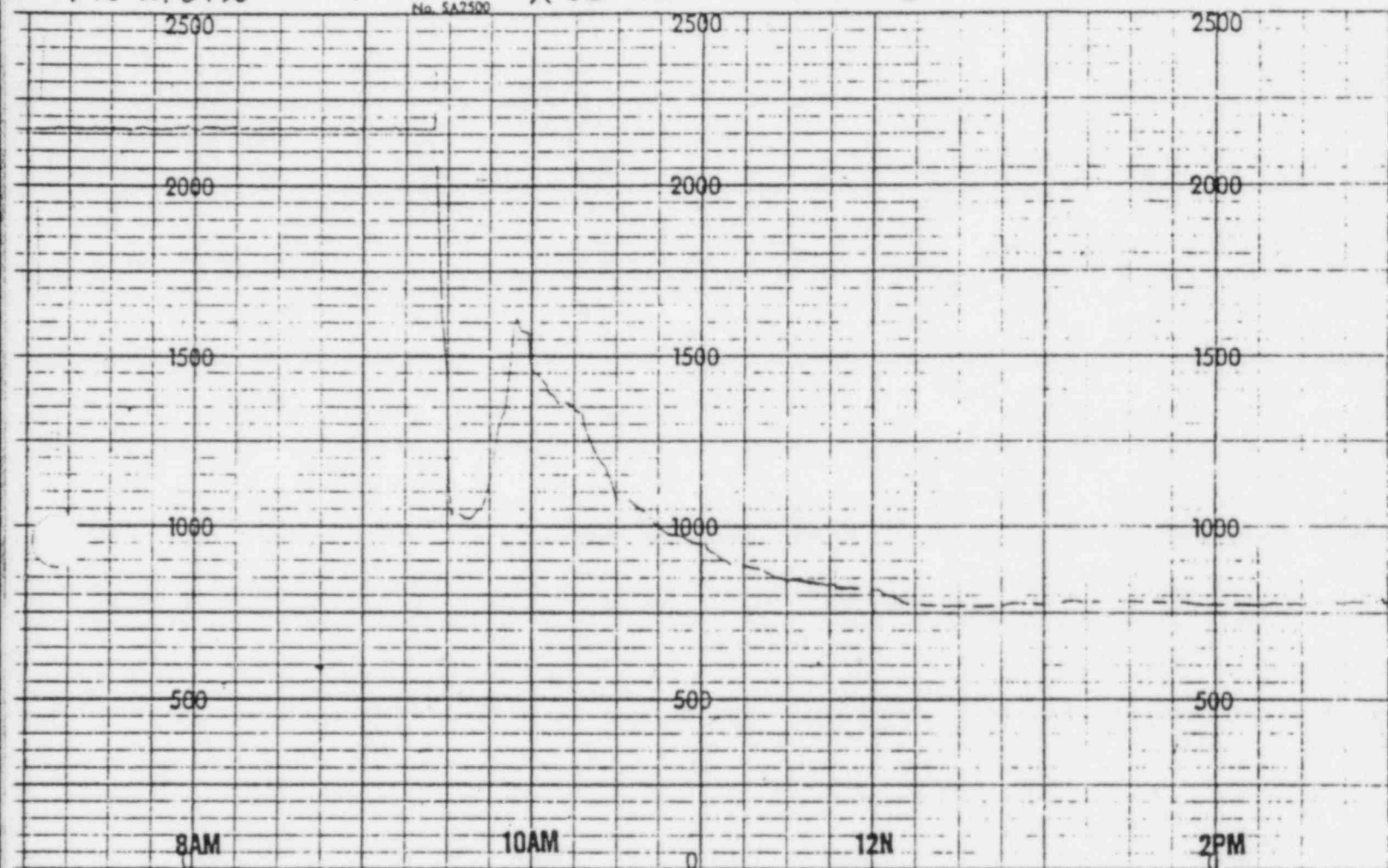
No. SA320



PR 21092

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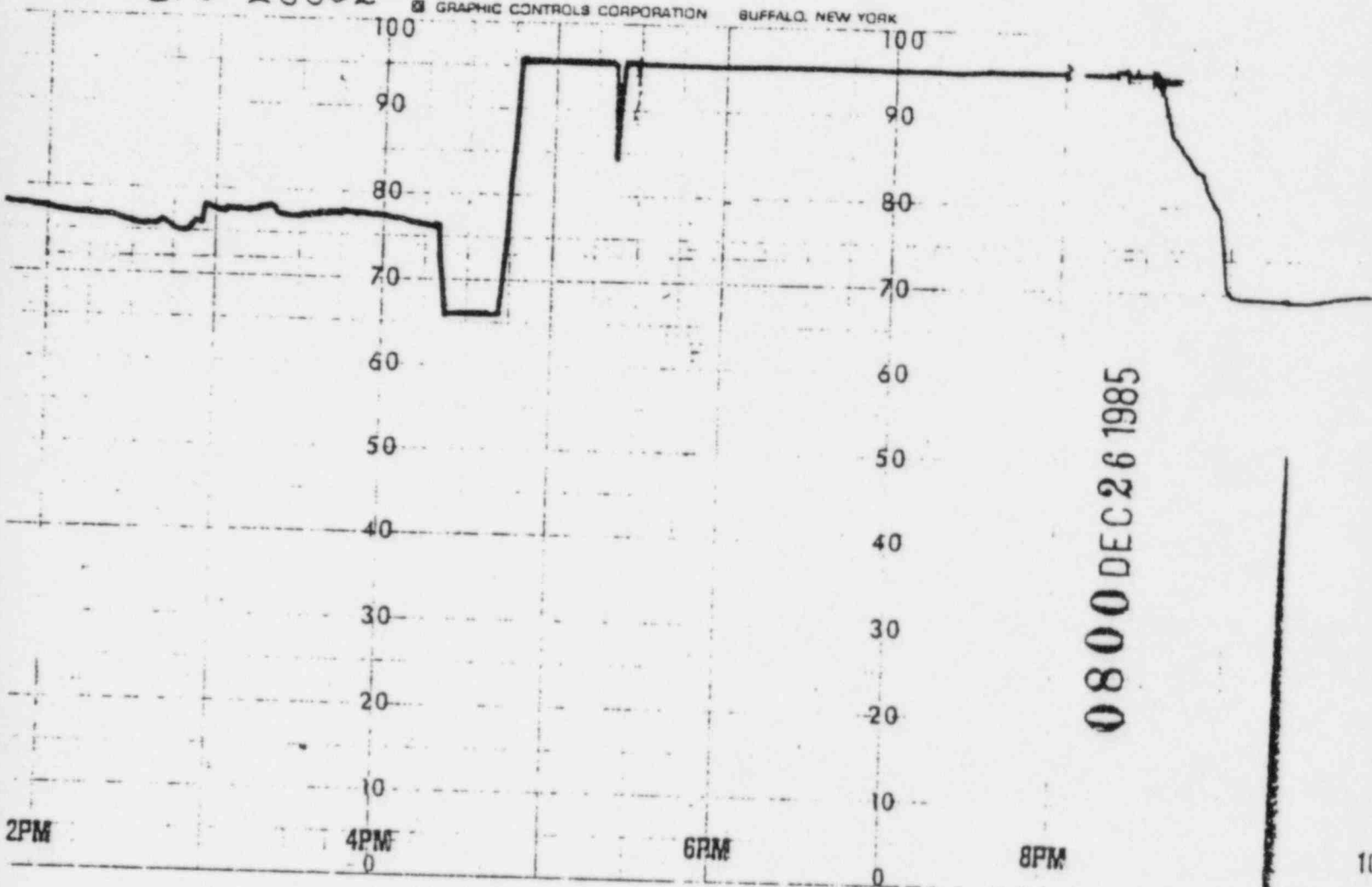
RCS WR PRESSURE



LR-23502

MU Tank Level

GRAPHIC CONTROLS CORPORATION BUFFALO, NEW YORK

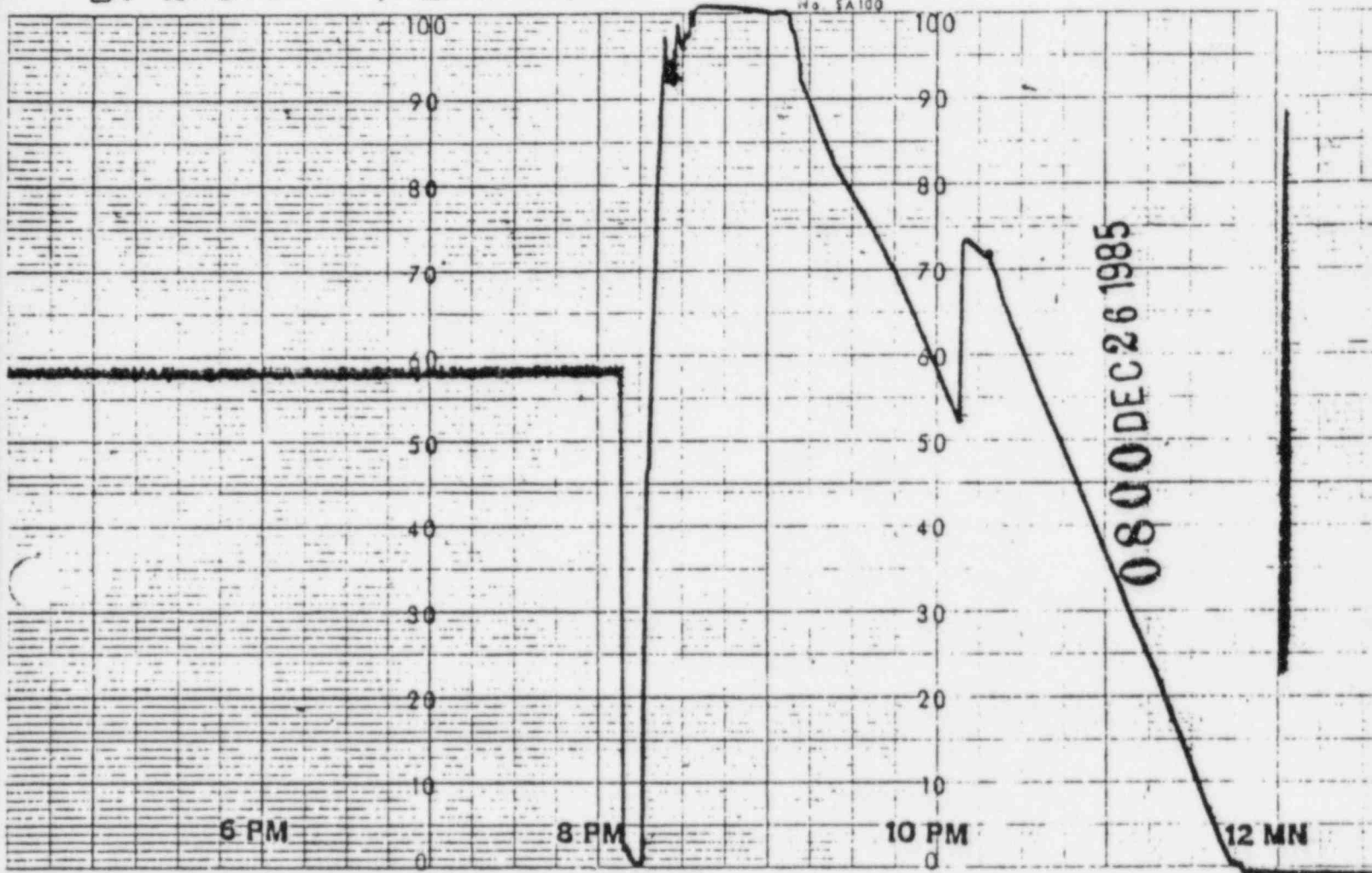


0800 DEC 26 1985

LR 20504

B OTSG OPERATE LEVEL

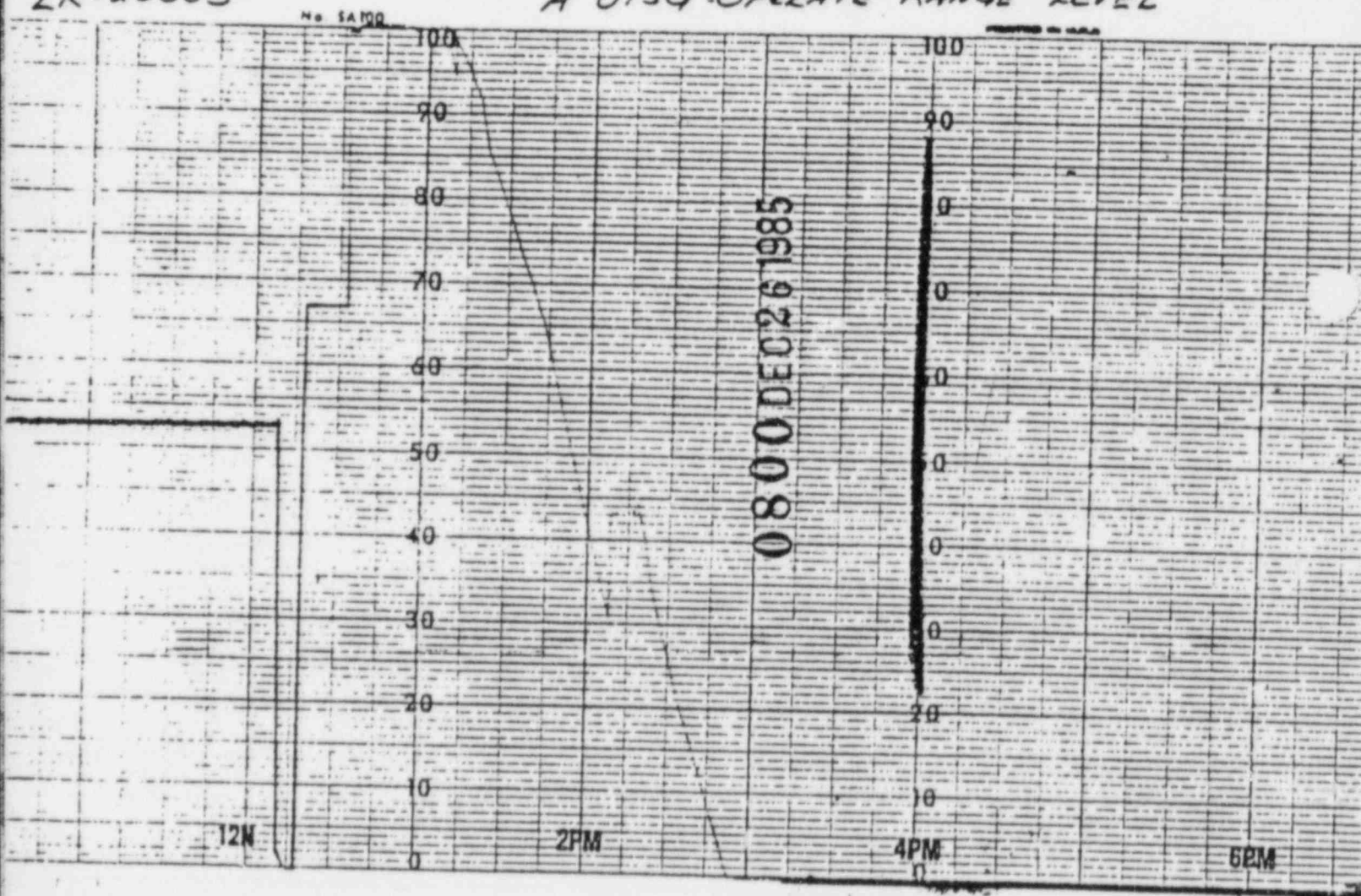
40 5A100



0800 DEC 26 1985

LR-20503

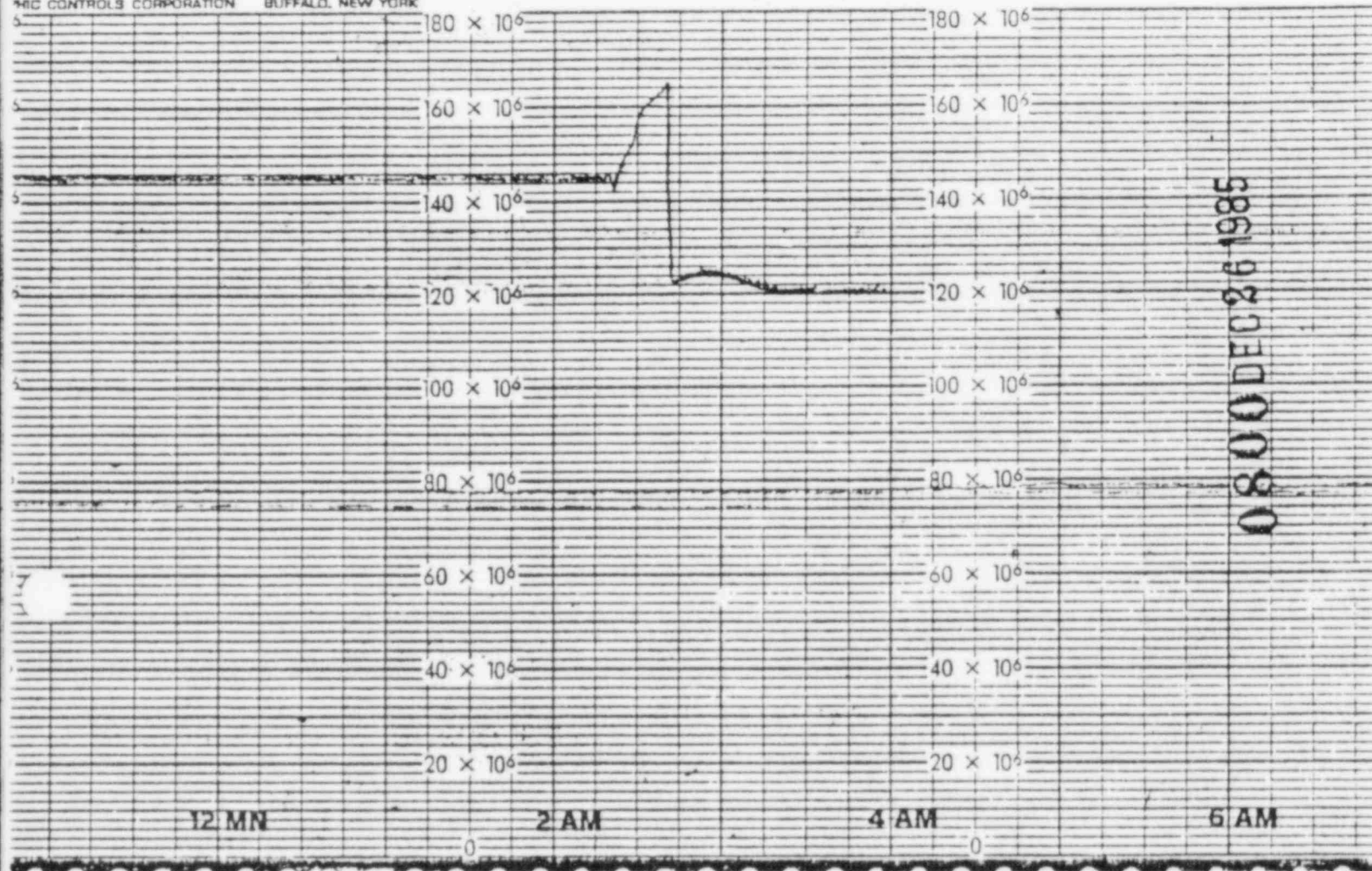
A OTSG OPERATE RANGE LEVEL



FR 21027

RC TOTAL FLOW

ARC CONTROLS CORPORATION BUFFALO, NEW YORK



0800 DEC 26 1985

12/25/85	11:21:40	PST	X8076	TRouble: ZONE 70-NSEB A ELEC EQPT	GOOD	ACK	ACKNOWLEDGE
12/25/85	11:22:51	PST	X8076	ACS PRES LOOP B	GOOD	NORMAL	NORMAL
12/25/85	11:23:56	PST	X8077	TRouble: ZONE 77-NSEB B ELEC EQPT	GOOD	ALARM	ALARM STATE
12/25/85	11:24:56	PST	X8078	TRouble: ZONE 78-NSEB A ELEC EQPT	GOOD	NORMAL	NORMAL
12/25/85	11:25:57	PST	X8052	RD PRESSURE	GOOD	NORM	NORMAL
12/25/85	11:26:05	PST	X8077	TRouble: ZONE 77-NSEB B ELEC EQPT	GOOD	ACK	ACKNOWLEDGE
12/25/85	11:27:05	PST	X8077	TRouble: ZONE 77-NSEB B ELEC EQPT	GOOD	NORMAL	NORMAL
12/25/85	11:28:26	PST	X8076	ACS PRES LOOP B	1465.	PS16	ALARM LIMIT LOW
12/25/85	11:51:24	PST	X8076	ACS PRES LOOP B	2151.	PS18	RETURN TO NORMAL
12/25/85	12:17:55	PST	X8075	TRouble: ZONE 75-NSEB SWGR RM B	GOOD	ALARM	ALARM STATE
12/25/85	12:18:08	PST	X8075	TRouble: ZONE 75-NSEB SWGR RM B	GOOD	ACK	ACKNOWLEDGE
12/25/85	12:18:40	PST	X8075	TRouble: ZONE 75-NSEB SWGR RM B	GOOD	NORMAL	NORMAL
12/25/85	12:18:55	PST	X8076	TRouble: ZONE 76-NSEB SWGR RM A	GOOD	ALARM	ALARM STATE
12/25/85	12:19:04	PST	X8076	TRouble: ZONE 76-NSEB SWGR RM A	GOOD	ACK	ACKNOWLEDGE
12/25/85	12:20:06	PST	L1601	COND STORAGE TK LVL	440.0	K GAL	NORMAL
12/25/85	12:20:10	PST	X8076	TRouble: ZONE 76-NSEB SWGR RM A	GOOD	NORMAL	NORMAL
12/25/85	12:21:55	PST	X8070	TRouble: ZONE 70-NSEB A ELEC EQPT	GOOD	ALARM	ALARM STATE
12/25/85	12:21:25	PST	X8078	TRouble: ZONE 78-NSEB A ELEC EQPT	GOOD	RETURN	RETURN TO NORMAL
12/25/85	12:21:40	PST	X8077	TRouble: ZONE 77-NSEB B ELEC EQPT	GOOD	ALARM	ALARM STATE
12/25/85	12:22:10	PST	X8077	TRouble: ZONE 77-NSEB B ELEC EQPT	GOOD	RETURN	RETURN TO NORMAL
12/25/85	13:17:25	PST	X8075	TRouble: ZONE 75-NSEB SWGR RM B	GOOD	ALARM	ALARM STATE
12/25/85	13:17:34	PST	X8075	TRouble: ZONE 75-NSEB SWGR RM B	GOOD	ACK	ACKNOWLEDGE
12/25/85	13:17:34	PST	X8077	TRouble: ZONE 77-NSEB B ELEC EQPT	GOOD	NORMAL	NORMAL
12/25/85	13:17:34	PST	X8070	TRouble: ZONE 70-NSEB A ELEC EQPT	GOOD	NORMAL	NORMAL
12/25/85	13:18:10	PST	X8075	TRouble: ZONE 75-NSEB SWGR RM B	GOOD	NORMAL	NORMAL
12/25/85	13:18:25	PST	X8076	TRouble: ZONE 76-NSEB SWGR RM A	GOOD	ALARM	ALARM STATE
12/25/85	13:19:17	PST	X8076	TRouble: ZONE 76-NSEB SWGR RM A	GOOD	ACK	ACKNOWLEDGE
12/25/85	13:19:40	PST	X8076	TRouble: ZONE 76-NSEB SWGR RM A	GOOD	NORMAL	NORMAL
12/25/85	13:20:25	PST	X8070	TRouble: ZONE 70-NSEB A ELEC EQPT	GOOD	ALARM	ALARM STATE
12/25/85	13:20:36	PST	X8070	TRouble: ZONE 70-NSEB A ELEC EQPT	GOOD	ACK	ACKNOWLEDGE
12/25/85	13:20:55	PST	X8077	TRouble: ZONE 77-NSEB B ELEC EQPT	GOOD	ALARM	ALARM STATE
12/25/85	13:20:55	PST	X8070	TRouble: ZONE 70-NSEB A ELEC EQPT	GOOD	NORMAL	NORMAL
12/25/85	13:21:03	PST	X8077	TRouble: ZONE 77-NSEB B ELEC EQPT	GOOD	ACK	ACKNOWLEDGE
12/25/85	13:21:55	PST	X8077	TRouble: ZONE 77-NSEB B ELEC EQPT	GOOD	NORMAL	NORMAL
12/25/85	14:17:10	PST	X8075	TRouble: ZONE 75-NSEB SWGR RM B	GOOD	ALARM	ALARM STATE
12/25/85	14:17:27	PST	X8075	TRouble: ZONE 75-NSEB SWGR RM B	GOOD	ACK	ACKNOWLEDGE
12/25/85	14:17:55	PST	X8075	TRouble: ZONE 75-NSEB SWGR RM B	GOOD	NORMAL	NORMAL
12/25/85	14:18:10	PST	X8076	TRouble: ZONE 76-NSEB SWGR RM A	GOOD	ALARM	ALARM STATE
12/25/85	14:18:19	PST	X8076	TRouble: ZONE 76-NSEB SWGR RM A	GOOD	ACK	ACKNOWLEDGE
12/25/85	14:19:10	PST	X8076	TRouble: ZONE 76-NSEB SWGR RM A	GOOD	NORMAL	NORMAL
12/25/85	14:19:55	PST	X8070	TRouble: ZONE 70-NSEB A ELEC EQPT	GOOD	ALARM	ALARM STATE
12/25/85	14:20:02	PST	X8070	TRouble: ZONE 70-NSEB A ELEC EQPT	GOOD	ACK	ACKNOWLEDGE
12/25/85	14:20:25	PST	X8077	TRouble: ZONE 77-NSEB B ELEC EQPT	GOOD	ALARM	ALARM STATE
12/25/85	14:20:25	PST	X8070	TRouble: ZONE 70-NSEB A ELEC EQPT	GOOD	NORMAL	NORMAL
12/25/85	14:20:35	PST	X8077	TRouble: ZONE 77-NSEB B ELEC EQPT	GOOD	ACK	ACKNOWLEDGE
12/25/85	14:21:10	PST	X8077	TRouble: ZONE 77-NSEB B ELEC EQPT	GOOD	NORMAL	NORMAL
12/25/85	15:18:24	PST	X8075	TRouble: ZONE 75-NSEB SWGR RM B	GOOD	ALARM	ALARM STATE
12/25/85	15:18:34	PST	X8075	TRouble: ZONE 75-NSEB SWGR RM B	GOOD	ACK	ACKNOWLEDGE
12/25/85	15:19:09	PST	X8075	TRouble: ZONE 75-NSEB SWGR RM B	GOOD	NORMAL	NORMAL
12/25/85	15:19:09	PST	X8076	TRouble: ZONE 76-NSEB SWGR RM A	GOOD	ALARM	ALARM STATE
12/25/85	15:19:10	PST	X8076	TRouble: ZONE 76-NSEB SWGR RM A	GOOD	ACK	ACKNOWLEDGE
12/25/85	15:20:09	PST	X8076	TRouble: ZONE 76-NSEB SWGR RM A	GOOD	NORMAL	NORMAL
12/25/85	15:21:09	PST	X8070	TRouble: ZONE 70-NSEB A ELEC EQPT	GOOD	ALARM	ALARM STATE
12/25/85	15:21:34	PST	X8070	TRouble: ZONE 70-NSEB A ELEC EQPT	GOOD	ACK	ACKNOWLEDGE
12/25/85	15:21:39	PST	X8077	TRouble: ZONE 77-NSEB B ELEC EQPT	GOOD	ALARM	ALARM STATE
12/25/85	15:21:39	PST	X8070	TRouble: ZONE 70-NSEB A ELEC EQPT	GOOD	NORMAL	NORMAL
12/25/85	15:21:51	PST	X8077	TRouble: ZONE 77-NSEB B ELEC EQPT	GOOD	ACK	ACKNOWLEDGE
12/25/85	15:22:09	PST	X8077	TRouble: ZONE 77-NSEB B ELEC EQPT	GOOD	NORMAL	NORMAL
12/25/85	15:28:22	PST	X8076	ACS PRES LOOP B	1465.	PS16	ALARM LIMIT LOW
12/25/85	15:28:23	PST	X8076	ACS PRES LOOP B	2151.	PS16	RETURN TO NORMAL
12/25/85	16:17:24	PST	X8075	TRouble: ZONE 75-NSEB SWGR RM B	GOOD	ALARM	ALARM STATE
12/25/85	16:18:39	PST	X8075	TRouble: ZONE 75-NSEB SWGR RM B	GOOD	RETURN	RETURN TO NORMAL
12/25/85	16:18:39	PST	X8076	TRouble: ZONE 76-NSEB SWGR RM A	GOOD	ALARM	ALARM STATE
12/25/85	16:19:01	PST	X8075	TRouble: ZONE 75-NSEB SWGR RM B	GOOD	NORMAL	NORMAL
12/25/85	16:19:01	PST	X8076	TRouble: ZONE 76-NSEB SWGR RM A	GOOD	ACK	ACKNOWLEDGE
12/25/85	16:21:54	PST	X8076	TRouble: ZONE 76-NSEB SWGR RM A	GOOD	NORMAL	NORMAL

[illegible]

12/25/85	20:19:55	PCT	X0076	TROUBLE, ZONE 76-NGED CWGR RM B	GOOD	NORMAL	NORMAL
12/25/85	20:19:55	PCT	X0076	TROUBLE, ZONE 76-NGED CWGR RM A	GOOD	NORMAL	NORMAL
12/25/85	20:19:55	PCT	X0077	TROUBLE, ZONE 77-NGED B ELEC EQPT	GOOD	ACK	ACKNOWLEDGE
12/25/85	20:19:55	PCT	X0078	TROUBLE, ZONE 78-NGED A ELEC EQPT	GOOD	NORMAL	NORMAL
12/25/85	20:20:07	PCT	X0077	TROUBLE, ZONE 77-NGED B ELEC EQPT	GOOD	NORMAL	NORMAL
12/25/85	20:20:07	PCT	X0078	TROUBLE, ZONE 78-NGED A ELEC EQPT	GOOD	ALARM	ALARM STATE
12/25/85	20:20:52	PCT	X0078	TROUBLE, ZONE 78-NGED A ELEC EQPT	GOOD	RETURN	RETURN TO NORMAL
12/26/86	21:10:36	PCT	X0076	TROUBLE, ZONE 76-NGED CWGR RM B	GOOD	ALARM	ALARM STATE
12/25/85	21:19:36	PCT	X0076	TROUBLE, ZONE 76-NGED CWGR RM B	GOOD	RETURN	RETURN TO NORMAL
12/25/85	21:19:36	PCT	X0076	TROUBLE, ZONE 76-NGED CWGR RM A	GOOD	ALARM	ALARM STATE
12/25/85	21:20:51	PCT	X0076	TROUBLE, ZONE 76-NGED CWGR RM A	GOOD	RETURN	RETURN TO NORMAL
12/25/85	21:21:51	PCT	X0077	TROUBLE, ZONE 77-NGED B ELEC EQPT	GOOD	ALARM	ALARM STATE
12/25/85	21:22:36	PCT	X0077	TROUBLE, ZONE 77-NGED B ELEC EQPT	GOOD	RETURN	RETURN TO NORMAL
12/25/85	21:23:36	PCT	X0078	TROUBLE, ZONE 78-NGED A ELEC EQPT	GOOD	ALARM	ALARM STATE
12/25/85	21:23:57	PCT	P9052	RD PRESSURE PT-53622 133.7	GOOD	ALARM	ALARM LIMIT HIGH
12/25/85	21:23:59	PCT	P9052	RD PRESSURE PT-53622 0.5342	GOOD	RETURN	RETURN TO NORMAL
12/25/85	21:24:51	PCT	X0078	TROUBLE, ZONE 78-NGED A ELEC EQPT	GOOD	RETURN	RETURN TO NORMAL
12/25/85	21:40:14	PCT	P9036	RCE FREG LOOP B 1104.	GOOD	ALARM	ALARM LIMIT LOW
12/26/86	21:40:16	PCT	P9036	RCE FREG LOOP B 2154.	GOOD	RETURN	RETURN TO NORMAL
12/25/85	21:40:37	PCT	P9036	RCE FREG LOOP B	GOOD	NORMAL	NORMAL
12/25/85	21:44:47	PCT	PLEVTPTNT	PLANT EVENT POINT	GOOD	ALARM	CONVERSION BAD
12/25/85	21:45:25	PCT	PLEVTPTNT	PLANT EVENT POINT	GOOD	RETURN	RETURN TO NORMAL
12/26/86	21:50:47	PCT	PLEVTPTNT	PLANT EVENT POINT	GOOD	ALARM	CONVERSION BAD
12/26/86	22:06:07	PCT	PLEVTPTNT	PLANT EVENT POINT	GOOD	RETURN	RETURN TO NORMAL
12/25/85	22:17:21	PCT	X0076	TROUBLE, ZONE 76-NGED CWGR RM B	GOOD	ALARM	ALARM STATE
12/25/85	22:18:04	PCT	X0076	TROUBLE, ZONE 76-NGED CWGR RM B	GOOD	RETURN	RETURN TO NORMAL
12/25/85	22:18:21	PCT	X0076	TROUBLE, ZONE 76-NGED CWGR RM A	GOOD	ALARM	ALARM STATE
12/25/85	22:19:21	PCT	X0076	TROUBLE, ZONE 76-NGED CWGR RM A	GOOD	RETURN	RETURN TO NORMAL
12/25/85	22:20:21	PCT	X0077	TROUBLE, ZONE 77-NGED B ELEC EQPT	GOOD	ALARM	ALARM STATE
12/26/86	22:20:51	PCT	X0077	TROUBLE, ZONE 77-NGED B ELEC EQPT	GOOD	RETURN	RETURN TO NORMAL
12/25/85	22:21:00	PCT	X0075	TROUBLE, ZONE 75-NGED CWGR RM B	GOOD	NORMAL	NORMAL
12/25/85	22:21:00	PCT	X0076	TROUBLE, ZONE 76-NGED CWGR RM A	GOOD	NORMAL	NORMAL
12/25/85	22:21:00	PCT	X0077	TROUBLE, ZONE 77-NGED B ELEC EQPT	GOOD	NORMAL	NORMAL
12/25/85	22:21:00	PCT	X0078	TROUBLE, ZONE 78-NGED A ELEC EQPT	GOOD	NORMAL	NORMAL
12/25/85	22:21:06	PCT	X0078	TROUBLE, ZONE 78-NGED A ELEC EQPT	GOOD	ALARM	ALARM STATE
12/25/85	22:21:16	PCT	X0078	TROUBLE, ZONE 78-NGED A ELEC EQPT	GOOD	ACK	ACKNOWLEDGE
12/25/85	22:21:51	PCT	X0078	TROUBLE, ZONE 78-NGED A ELEC EQPT	GOOD	NORMAL	NORMAL
12/26/86	22:57:07	PCT	PLEVTPTNT	PLANT EVENT POINT	GOOD	ALARM	CONVERSION BAD
12/25/85	23:06:40	PCT	PLEVTPTNT	PLANT EVENT POINT	GOOD	RETURN	RETURN TO NORMAL
12/26/86	23:17:04	PCT	X0076	TROUBLE, ZONE 76-NGED CWGR RM B	GOOD	ALARM	ALARM STATE
12/26/86	23:17:20	PCT	X0076	TROUBLE, ZONE 76-NGED CWGR RM B	GOOD	ACK	ACKNOWLEDGE
12/25/85	23:18:04	PCT	X0076	TROUBLE, ZONE 76-NGED CWGR RM B	GOOD	NORMAL	NORMAL
12/25/85	23:18:04	PCT	X0076	TROUBLE, ZONE 76-NGED CWGR RM A	GOOD	ALARM	ALARM STATE
12/25/85	23:18:30	PCT	X0076	TROUBLE, ZONE 76-NGED CWGR RM A	GOOD	ACK	ACKNOWLEDGE
12/26/86	23:18:30	PCT	PLEVTPTNT	PLANT EVENT POINT	GOOD	NORMAL	NORMAL
12/25/85	23:19:04	PCT	X0076	TROUBLE, ZONE 76-NGED CWGR RM A	GOOD	NORMAL	NORMAL
12/25/85	23:20:04	PCT	X0077	TROUBLE, ZONE 77-NGED B ELEC EQPT	GOOD	ALARM	ALARM STATE
12/25/85	23:20:22	PCT	X0077	TROUBLE, ZONE 77-NGED B ELEC EQPT	GOOD	ACK	ACKNOWLEDGE
12/25/85	23:20:29	PCT	P9052	RD PRESSURE PT-53622	GOOD	NORMAL	NORMAL
12/25/85	23:20:51	PCT	X0077	TROUBLE, ZONE 77-NGED B ELEC EQPT	GOOD	NORMAL	NORMAL
12/25/85	23:20:51	PCT	X0078	TROUBLE, ZONE 78-NGED A ELEC EQPT	GOOD	ALARM	ALARM STATE
12/25/85	23:21:11	PCT	X0078	TROUBLE, ZONE 78-NGED A ELEC EQPT	GOOD	ACK	ACKNOWLEDGE
12/25/85	23:21:34	PCT	X0078	TROUBLE, ZONE 78-NGED A ELEC EQPT	GOOD	NORMAL	NORMAL
12/26/86	00:14:50	PCT	X0076	TROUBLE, ZONE 76-NGED CWGR RM B	GOOD	ALARM	ALARM STATE
12/26/86	00:17:04	PCT	X0076	TROUBLE, ZONE 76-NGED CWGR RM B	GOOD	ACK	ACKNOWLEDGE
12/26/86	00:17:50	PCT	X0076	TROUBLE, ZONE 76-NGED CWGR RM B	GOOD	NORMAL	NORMAL
12/26/86	00:17:50	PCT	X0076	TROUBLE, ZONE 76-NGED CWGR RM A	GOOD	ALARM	ALARM STATE
12/26/86	00:18:22	PCT	X0076	TROUBLE, ZONE 76-NGED CWGR RM A	GOOD	ACK	ACKNOWLEDGE
12/26/86	00:19:05	PCT	X0076	TROUBLE, ZONE 76-NGED CWGR RM A	GOOD	NORMAL	NORMAL
12/26/86	00:19:50	PCT	X0077	TROUBLE, ZONE 77-NGED B ELEC EQPT	GOOD	ALARM	ALARM STATE
12/26/86	00:20:36	PCT	X0077	TROUBLE, ZONE 77-NGED B ELEC EQPT	GOOD	RETURN	RETURN TO NORMAL
12/26/86	00:20:36	PCT	X0076	TROUBLE, ZONE 76-NGED A ELEC EQPT	GOOD	ALARM	ALARM STATE
12/26/86	00:21:05	PCT	X0077	TROUBLE, ZONE 77-NGED B ELEC EQPT	GOOD	NORMAL	NORMAL
12/26/86	00:21:05	PCT	X0078	TROUBLE, ZONE 78-NGED A ELEC EQPT	GOOD	ACK	ACKNOWLEDGE
12/26/86	00:21:05	PCT	X0078	TROUBLE, ZONE 78-NGED A ELEC EQPT	GOOD	NORMAL	NORMAL
12/26/86	00:24:27	PCT	P9036	RCE FREG LOOP B 1279.	GOOD	ALARM	ALARM LIMIT LOW

[illegible]

12/26/85	03:21:43	PCT	X8070	THROUBLE ZONE 70-NECB A ELEC EQPT	NORMAL		GOOD	NORMAL	NORMAL
12/26/85	03:22:04	PST	X8070	THROUBLE ZONE 70-NECB A ELEC EQPT	NORMAL		GOOD	NORMAL	NORMAL
12/26/85	03:29:03	PCT	F9036	RCE FREG LOOP B			GOOD	NORMAL	NORMAL
12/26/85	03:49:20	PCT	F9036	RCE FREG LOOP A	592.4	PSIG	GOOD	ALARM	ALARM LIMIT LOW
12/26/85	03:49:29	PCT	F9036	RCE FREG LOOP A	2161.	PSIG	GOOD	RETURN	RETURN TO NORMAL
12/26/85	04:01:34	PCT	F9036	RCE FREG LOOP A			GOOD	NORMAL	NORMAL
12/26/85	04:06:37	PCT	X1001	RD H2 MON HEAT TRACING	TROUBLE		GOOD	ALARM	ALARM STATE
12/26/85	04:06:39	PCT	X1001	RD H2 MON HEAT TRACING	NORMAL		GOOD	RETURN	RETURN TO NORMAL
12/26/85	04:06:41	PCT	X1001	RD H2 MON HEAT TRACING	TROUBLE		GOOD	ALARM	ALARM STATE
12/26/85	04:06:50	PCT	X1001	RD H2 MON HEAT TRACING			GOOD	ACK	ACKNOWLEDGE
12/26/85	04:11:49	PCT	Z1004	CODE SAFETY VALVE PCV-20544	OPEN		GOOD	ALARM	ALARM STATE
12/26/85	04:13:51	PCT	Z1022	ATMOSPHERIC DUMP VALVE PV-20562B	OPEN		GOOD	ALARM	ALARM STATE
12/26/85	04:13:56	PCT	Z1022	ATMOSPHERIC DUMP VALVE PV-20562B	NOT OPEN		GOOD	RETURN	RETURN TO NORMAL
12/26/85	04:13:57	PCT	Z1022	ATMOSPHERIC DUMP VALVE PV-20562B	OPEN		GOOD	ALARM	ALARM STATE
12/26/85	04:13:59	PCT	F9030	OTGG PRESSURE B	858.9	PSIG	GOOD	ALARM	ALARM LIMIT LOW
12/26/85	04:14:00	PCT	F9036	RCE FREG LOOP A	2233.	PSIG	GOOD	ALARM	ALARM LIMIT HIGH
12/26/85	04:14:00	PCT	F9036	RCE FREG LOOP B	2239.	PSIG	GOOD	ALARM	ALARM LIMIT HIGH
12/26/85	04:14:00	PCT	F9031	OTGG PRESSURE A	852.2	PSIG	GOOD	ALARM	ALARM LIMIT LOW
12/26/85	04:14:00	PCT	Z1022	ATMOSPHERIC DUMP VALVE PV-20562B	NOT OPEN		GOOD	RETURN	RETURN TO NORMAL
12/26/85	04:14:01	PCT	F9601	NFW FLOW A	0.7302E-01	MLB/HR	GOOD	ALARM	INSTRUMENT LOW
12/26/85	04:14:03	PCT	G1005	CH A MAIN TURBINE TRIPPED	TRIPPED		GOOD	ALARM	ALARM STATE
12/26/85	04:14:03	PCT	PLEVTPT	PLANT EVENT POINT	TRIPPED		GOOD	ALARM	ALARM STATE
12/26/85	04:14:03	PCT	G1007	CH A MAIN TURBINE TRIP	TRIPPED		GOOD	ALARM	ALARM STATE
12/26/85	04:14:03	PCT	G1012	CH B MAIN TURBINE TRIPPED	TRIPPED		GOOD	ALARM	ALARM STATE
12/26/85	04:14:03	PCT	G1014	CH D MAIN TURBINE TRIP	TRIPPED		GOOD	ALARM	ALARM STATE
12/26/85	04:14:03	PCT	G1019	CH C MAIN TURBINE TRIPPED	TRIPPED		GOOD	ALARM	ALARM STATE
12/26/85	04:14:03	PCT	G1021	CH C MAIN TURBINE TRIP	TRIPPED		GOOD	ALARM	ALARM STATE
12/26/85	04:14:03	PCT	G1026	CH D MAIN TURBINE TRIPPED	TRIPPED		GOOD	ALARM	ALARM STATE
12/26/85	04:14:03	PCT	G1028	CH D MAIN TURBINE TRIP	TRIPPED		GOOD	ALARM	ALARM STATE
12/26/85	04:14:03	PCT	G7020	REACTOR TRIP	TRIPPED		GOOD	ALARM	ALARM STATE
12/26/85	04:14:03	PCT	Z1021	CODE SAFETY VALVE PCV-36012A	OPEN		GOOD	ALARM	ALARM STATE
12/26/85	04:14:04	PCT	G1004	CH A HFP TRIP BYPASS	BYPASSED		GOOD	ALARM	ALARM STATE
12/26/85	04:14:04	PCT	G1006	CH A MAIN TURBINE BYPASS	BYPASSED		GOOD	ALARM	ALARM STATE
12/26/85	04:14:04	PCT	G1007	CH A MAIN TURBINE TRIP	NORMAL		GOOD	RETURN	RETURN TO NORMAL
12/26/85	04:14:04	PCT	G1011	CH B HFP TRIP BYPASS	BYPASSED		GOOD	ALARM	ALARM STATE
12/26/85	04:14:04	PCT	G1013	CH B MAIN TURBINE BYPASS	BYPASSED		GOOD	ALARM	ALARM STATE
12/26/85	04:14:04	PCT	G1014	CH B MAIN TURBINE TRIP	NORMAL		GOOD	RETURN	RETURN TO NORMAL
12/26/85	04:14:04	PCT	G1018	CH C HFP TRIP BYPASS	BYPASSED		GOOD	ALARM	ALARM STATE
12/26/85	04:14:04	PCT	G1020	CH C MAIN TURBINE BYPASS	BYPASSED		GOOD	ALARM	ALARM STATE
12/26/85	04:14:04	PCT	G1021	CH C MAIN TURBINE TRIP	NORMAL		GOOD	RETURN	RETURN TO NORMAL
12/26/85	04:14:04	PCT	G1025	CH D HFP TRIP BYPASS	BYPASSED		GOOD	ALARM	ALARM STATE
12/26/85	04:14:04	PCT	G1027	CH D MAIN TURBINE BYPASS	BYPASSED		GOOD	ALARM	ALARM STATE
12/26/85	04:14:04	PCT	G1028	CH D MAIN TURBINE TRIP	NORMAL		GOOD	RETURN	RETURN TO NORMAL
12/26/85	04:14:04	PCT	Z1020	CODE SAFETY VALVE PCV-36012A	OPEN		GOOD	ALARM	ALARM STATE
12/26/85	04:14:04	PCT	W8004	BYE ACT. ZONE 104-TEC	EYE ACTD		GOOD	ALARM	ALARM STATE
12/26/85	04:14:05	PCT	F9030	OTGG PRESSURE B	899.8	PSIG	GOOD	RETURN	RETURN TO NORMAL
12/26/85	04:14:05	PCT	F9031	OTGG PRESSURE A	894.7	PSIG	GOOD	RETURN	RETURN TO NORMAL
12/26/85	04:14:05	PCT	Z1022	ATMOSPHERIC DUMP VALVE PV-20562B	OPEN		GOOD	ALARM	ALARM STATE
12/26/85	04:14:06	PCT	F9030	OTGG PRESSURE B	900.7	PSIG	GOOD	ALARM	ALARM LIMIT HIGH
12/26/85	04:14:06	PCT	F9031	OTGG PRESSURE A	992.5	PSIG	GOOD	ALARM	ALARM LIMIT HIGH
12/26/85	04:14:09	PCT	Z1005	CODE SAFETY VALVE PCV-20545	OPEN		GOOD	ALARM	ALARM STATE
12/26/85	04:14:09	PCT	Z1009	CODE SAFETY VALVE PCV-20549	OPEN		GOOD	ALARM	ALARM STATE
12/26/85	04:14:10	PCT	F9035	RCE FREG LOOP A	2109.	PSIG	GOOD	RETURN	RETURN TO NORMAL
12/26/85	04:14:10	PCT	F9036	RCE FREG LOOP B	2195.	PSIG	GOOD	RETURN	RETURN TO NORMAL
12/26/85	04:14:10	PCT	Z1004	CODE SAFETY VALVE PCV-20544	OPEN		GOOD	ALARM	ALARM STATE
12/26/85	04:14:10	PCT	Z1012	CODE SAFETY VALVE PCV-20552	OPEN		GOOD	ALARM	ALARM STATE
12/26/85	04:14:10	PCT	Z1021	CODE SAFETY VALVE PCV-36012A	NOT OPEN		GOOD	RETURN	RETURN TO NORMAL
12/26/85	04:14:11	PCT	F1660	AFW FLOW TO OTGG A	530.4	GPM	GOOD	SUSPECT	NORMAL
12/26/85	04:14:11	PCT	F9461	AFW FLOW TO OTGG A	534.0	GPM	GOOD	SUSPECT	NORMAL
12/26/85	04:14:11	PCT	F9462	AFW FLOW TO OTGG B	342.0	GPM	GOOD	SUSPECT	NORMAL
12/26/85	04:14:11	PCT	Z1009	CODE SAFETY VALVE PCV-20548	OPEN		GOOD	ALARM	ALARM STATE
12/26/85	04:14:11	PCT	Z1010	CODE SAFETY VALVE PCV-20550	OPEN		GOOD	ALARM	ALARM STATE
12/26/85	04:14:12	PCT	Z1021	CODE SAFETY VALVE PCV-36012A	OPEN		GOOD	ALARM	ALARM STATE
12/26/85	04:14:15	PCT	F2904	EFU WF-A-7A TOTAL DELTA P	NORMAL		GOOD	NORMAL	NORMAL
12/26/85	04:14:15	PCT	Z1005	CODE SAFETY VALVE PCV-20545	NOT OPEN		GOOD	RETURN	RETURN TO NORMAL
12/26/85	04:14:16	PCT	F9035	RCE FREG LOOP A	2052.	PSIG	GOOD	ALARM	ALARM LIMIT LOW

12/26/05	04:14:20	PST	Z1022	ATMOSPHERIC DUMP VALVE PV-20562B	NOT OPEN	GOOD	RETURN	RETURN TO NORMAL	
12/26/05	04:14:21	PST	Z1022	ATMOSPHERIC DUMP VALVE PV-20562B	OPEN	GOOD	ALARM	ALARM STATE	
12/26/05	04:14:23	PST	Z1022	ATMOSPHERIC DUMP VALVE PV-20562B	NOT OPEN	GOOD	RETURN	RETURN TO NORMAL	
12/26/05	04:14:25	PST	Z1010	CODE SAFETY VALVE PGV-20559	NOT OPEN	GOOD	RETURN	RETURN TO NORMAL	
12/26/05	04:14:28	PST	Z1012	CODE SAFETY VALVE PGV-20552	NOT OPEN	GOOD	RETURN	RETURN TO NORMAL	
12/26/05	04:14:29	PST	Z1012	CODE SAFETY VALVE PGV-20552	OPEN	GOOD	ALARM	ALARM STATE	
12/26/05	04:14:29	PST	Z1021	CODE SAFETY VALVE PGV-36012A	NOT OPEN	GOOD	RETURN	RETURN TO NORMAL	
12/26/05	04:14:29	PST	Z1022	ATMOSPHERIC DUMP VALVE PV-20562B	OPEN	GOOD	ALARM	ALARM STATE	
12/26/05	04:14:30	PST	Z1012	CODE SAFETY VALVE PGV-20552	NOT OPEN	GOOD	RETURN	RETURN TO NORMAL	
12/26/05	04:14:30	PST	Z1022	ATMOSPHERIC DUMP VALVE PV-20562B	NOT OPEN	GOOD	RETURN	RETURN TO NORMAL	
12/26/05	04:14:31	PST	Z1021	CODE SAFETY VALVE PGV-36012A	OPEN	GOOD	ALARM	ALARM STATE	
12/26/05	04:14:34	PST	Z1009	CODE SAFETY VALVE PGV-20549	NOT OPEN	GOOD	RETURN	RETURN TO NORMAL	
12/26/05	04:14:35	PST	Z1004	CODE SAFETY VALVE PGV-20546	NOT OPEN	GOOD	RETURN	RETURN TO NORMAL	
12/26/05	04:14:35	PST	Z1000	CODE SAFETY VALVE PGV-20540	NOT OPEN	GOOD	RETURN	RETURN TO NORMAL	
12/26/05	04:14:35	PST	Z1022	ATMOSPHERIC DUMP VALVE PV-20562B	OPEN	GOOD	ALARM	ALARM STATE	
12/26/05	04:14:35	PST	Z1022	ATMOSPHERIC DUMP VALVE PV-20562B	NOT OPEN	GOOD	RETURN	RETURN TO NORMAL	
12/26/05	04:14:36	PST	Z1022	ATMOSPHERIC DUMP VALVE PV-20562B	NOT OPEN	GOOD	RETURN	RETURN TO NORMAL	
12/26/05	04:14:38	PST	Z1021	CODE SAFETY VALVE PGV-36012A	NOT OPEN	GOOD	RETURN	RETURN TO NORMAL	
12/26/05	04:14:43	PST	Z1022	ATMOSPHERIC DUMP VALVE PV-20562B	OPEN	GOOD	ALARM	ALARM STATE	
12/26/05	04:14:44	PST	G9004	POWER RANGE C	0.9150E-01	XFP	BAD	ALARM	INSTRUMENT LOW
12/26/05	04:14:44	PST	Z1022	ATMOSPHERIC DUMP VALVE PV-20562B	NOT OPEN	GOOD	RETURN	RETURN TO NORMAL	
12/26/05	04:14:54	PST	Z1022	ATMOSPHERIC DUMP VALVE PV-20562B	OPEN	GOOD	ALARM	ALARM STATE	
12/26/05	04:14:53	PST	Z1022	ATMOSPHERIC DUMP VALVE PV-20562B	NOT OPEN	GOOD	RETURN	RETURN TO NORMAL	
12/26/05	04:14:57	PST	Z1022	ATMOSPHERIC DUMP VALVE PV-20562B	OPEN	GOOD	ALARM	ALARM STATE	
12/26/05	04:14:57	PST	Z1022	ATMOSPHERIC DUMP VALVE PV-20562B	NOT OPEN	GOOD	RETURN	RETURN TO NORMAL	
12/26/05	04:14:58	PST	Z1022	ATMOSPHERIC DUMP VALVE PV-20562B	NOT OPEN	GOOD	RETURN	RETURN TO NORMAL	
12/26/05	04:14:59	PST	G9005	POWER RANGE B	0.3350	XFP	BAD	ALARM	INSTRUMENT LOW
12/26/05	04:15:01	PST	Z1022	ATMOSPHERIC DUMP VALVE PV-20562B	OPEN	GOOD	ALARM	ALARM STATE	
12/26/05	04:15:02	PST	Z1021	CODE SAFETY VALVE PGV-36012A	OPEN	GOOD	ALARM	ALARM STATE	
12/26/05	04:15:02	PST	Z1022	ATMOSPHERIC DUMP VALVE PV-20562B	NOT OPEN	GOOD	RETURN	RETURN TO NORMAL	
12/26/05	04:15:03	PST	G9000	GT66 PRESSURE B	945.9	PSIG	GOOD	RETURN	RETURN TO NORMAL
12/26/05	04:15:03	PST	Z1021	CODE SAFETY VALVE PGV-36012A	NOT OPEN	GOOD	RETURN	RETURN TO NORMAL	
12/26/05	04:15:04	PST	Z1022	ATMOSPHERIC DUMP VALVE PV-20562B	OPEN	GOOD	ALARM	ALARM STATE	
12/26/05	04:15:05	PST	G9001	GT66 PRESSURE A	945.3	PSIG	GOOD	RETURN	RETURN TO NORMAL
12/26/05	04:15:05	PST	Z1021	CODE SAFETY VALVE PGV-36012A	OPEN	GOOD	ALARM	ALARM STATE	
12/26/05	04:15:05	PST	Z1022	ATMOSPHERIC DUMP VALVE PV-20562B	NOT OPEN	GOOD	RETURN	RETURN TO NORMAL	
12/26/05	04:15:06	PST	Z1021	CODE SAFETY VALVE PGV-36012A	NOT OPEN	GOOD	RETURN	RETURN TO NORMAL	
12/26/05	04:15:06	PST	Z1023	ATMOSPHERIC DUMP VALVE PV-20562A	OPEN	GOOD	ALARM	ALARM STATE	
12/26/05	04:15:10	PST	Z1023	ATMOSPHERIC DUMP VALVE PV-20562A	NOT OPEN	GOOD	RETURN	RETURN TO NORMAL	
12/26/05	04:15:15	PST	Z1022	ATMOSPHERIC DUMP VALVE PV-20562D	OPEN	GOOD	ALARM	ALARM STATE	
12/26/05	04:15:16	PST	Z1022	ATMOSPHERIC DUMP VALVE PV-20562D	NOT OPEN	GOOD	RETURN	RETURN TO NORMAL	
12/26/05	04:15:16	PST	Z1023	ATMOSPHERIC DUMP VALVE PV-20562A	OPEN	GOOD	ALARM	ALARM STATE	
12/26/05	04:15:18	PST	G9007	POWER RANGE D	0.5495	XFP	BAD	ALARM	INSTRUMENT LOW
12/26/05	04:15:18	PST	Z1023	ATMOSPHERIC DUMP VALVE PV-20562A	NOT OPEN	GOOD	RETURN	RETURN TO NORMAL	
12/26/05	04:15:21	PST	G9004	POWER RANGE A	0.5495	XFP	BAD	ALARM	INSTRUMENT LOW
12/26/05	04:15:24	PST	Z1021	CODE SAFETY VALVE PGV-36012A	OPEN	GOOD	ALARM	ALARM STATE	
12/26/05	04:15:24	PST	Z1022	ATMOSPHERIC DUMP VALVE PV-20562B	OPEN	GOOD	ALARM	ALARM STATE	
12/26/05	04:15:24	PST	Z1021	CODE SAFETY VALVE PGV-36012A	NOT OPEN	GOOD	RETURN	RETURN TO NORMAL	
12/26/05	04:15:25	PST	Z1021	CODE SAFETY VALVE PGV-36012A	NOT OPEN	GOOD	RETURN	RETURN TO NORMAL	
12/26/05	04:15:25	PST	Z1022	ATMOSPHERIC DUMP VALVE PV-20562B	NOT OPEN	GOOD	RETURN	RETURN TO NORMAL	
12/26/05	04:15:30	PST	Z1021	CODE SAFETY VALVE PGV-36012A	OPEN	GOOD	ALARM	ALARM STATE	
12/26/05	04:15:31	PST	Z1021	CODE SAFETY VALVE PGV-36012A	NOT OPEN	GOOD	RETURN	RETURN TO NORMAL	
12/26/05	04:15:37	PST	G9000	GT66 PRESSURE B	952.9	PSIG	GOOD	ALARM	ALARM LIMIT LOW
12/26/05	04:15:38	PST	Z1021	CODE SAFETY VALVE PGV-36012A	OPEN	GOOD	ALARM	ALARM STATE	
12/26/05	04:15:39	PST	Z1021	CODE SAFETY VALVE PGV-36012A	NOT OPEN	GOOD	RETURN	RETURN TO NORMAL	
12/26/05	04:15:40	PST	G9001	GT66 PRESSURE A	955.7	PSIG	GOOD	ALARM	ALARM LIMIT LOW
12/26/05	04:15:41	PST	Z1022	ATMOSPHERIC DUMP VALVE PV-20562B	OPEN	GOOD	ALARM	ALARM STATE	
12/26/05	04:15:42	PST	Z1021	CODE SAFETY VALVE PGV-36012A	OPEN	GOOD	ALARM	ALARM STATE	
12/26/05	04:15:42	PST	Z1022	ATMOSPHERIC DUMP VALVE PV-20562B	NOT OPEN	GOOD	RETURN	RETURN TO NORMAL	
12/26/05	04:15:43	PST	Z1021	CODE SAFETY VALVE PGV-36012A	NOT OPEN	GOOD	RETURN	RETURN TO NORMAL	
12/26/05	04:15:43	PST	Z1022	ATMOSPHERIC DUMP VALVE PV-20562B	OPEN	GOOD	ALARM	ALARM STATE	
12/26/05	04:15:44	PST	Z1022	ATMOSPHERIC DUMP VALVE PV-20562B	NOT OPEN	GOOD	RETURN	RETURN TO NORMAL	
12/26/05	04:15:45	PST	Z1021	CODE SAFETY VALVE PGV-36012A	OPEN	GOOD	ALARM	ALARM STATE	
12/26/05	04:15:46	PST	Z1021	CODE SAFETY VALVE PGV-36012A	NOT OPEN	GOOD	RETURN	RETURN TO NORMAL	
12/26/05	04:15:50	PST	Z1022	ATMOSPHERIC DUMP VALVE PV-20562B	OPEN	GOOD	ALARM	ALARM STATE	
12/26/05	04:15:51	PST	Z1022	ATMOSPHERIC DUMP VALVE PV-20562B	NOT OPEN	GOOD	RETURN	RETURN TO NORMAL	
12/26/05	04:15:56	PST	Z1022	ATMOSPHERIC DUMP VALVE PV-20562B	OPEN	GOOD	ALARM	ALARM STATE	

12/26/85	04:15:57	PST	21022	ATMOSPHERIC DUMP VALVE PV-20542B	OPEN	GOOD	ALARM	ALARM STATE
12/26/85	04:16:00	PST	21022	ATMOSPHERIC DUMP VALVE PV-20542B	NOT OPEN	GOOD	RETURN	RETURN TO NORMAL
12/26/85	04:16:02	PST	21022	ATMOSPHERIC DUMP VALVE PV-20542B	OPEN	GOOD	ALARM	ALARM STATE
12/26/85	04:16:02	PST	61001	CH A HFP A TRIPPED	TRIPPED	GOOD	ALARM	ALARM STATE
12/26/85	04:16:02	PST	61002	CH B HFP A TRIPPED	TRIPPED	GOOD	ALARM	ALARM STATE
12/26/85	04:16:02	PST	61015	CH C HFP A TRIPPED	TRIPPED	GOOD	ALARM	ALARM STATE
12/26/85	04:16:02	PST	61022	CH D HFP A TRIPPED	TRIPPED	GOOD	ALARM	ALARM STATE
12/26/85	04:16:02	PST	21022	ATMOSPHERIC DUMP VALVE PV-20542B	NOT OPEN	GOOD	RETURN	RETURN TO NORMAL
12/26/85	04:16:04	PST	61002	CH A HFP B TRIPPED	TRIPPED	GOOD	ALARM	ALARM STATE
12/26/85	04:16:04	PST	61009	CH B HFP B TRIPPED	TRIPPED	GOOD	ALARM	ALARM STATE
12/26/85	04:16:04	PST	61016	CH C HFP B TRIPPED	TRIPPED	GOOD	ALARM	ALARM STATE
12/26/85	04:16:04	PST	61023	CH D HFP B TRIPPED	TRIPPED	GOOD	ALARM	ALARM STATE
12/26/85	04:16:06	PST	21022	ATMOSPHERIC DUMP VALVE PV-20542B	OPEN	GOOD	ALARM	ALARM STATE
12/26/85	04:16:07	PST	21021	CODE SAFETY VALVE PSV-14012A	OPEN	GOOD	ALARM	ALARM STATE
12/26/85	04:16:07	PST	21022	ATMOSPHERIC DUMP VALVE PV-20542B	NOT OPEN	GOOD	RETURN	RETURN TO NORMAL
12/26/85	04:16:09	PST	21021	CODE SAFETY VALVE PSV-14012A	NOT OPEN	GOOD	RETURN	RETURN TO NORMAL
12/26/85	04:16:09	PST	21022	ATMOSPHERIC DUMP VALVE PV-20542B	OPEN	GOOD	ALARM	ALARM STATE
12/26/85	04:16:10	PST	21022	ATMOSPHERIC DUMP VALVE PV-20542B	NOT OPEN	GOOD	RETURN	RETURN TO NORMAL
12/26/85	04:16:12	PST	21021	CODE SAFETY VALVE PSV-14012A	OPEN	GOOD	ALARM	ALARM STATE
12/26/85	04:16:13	PST	21021	CODE SAFETY VALVE PSV-14012A	NOT OPEN	GOOD	RETURN	RETURN TO NORMAL
12/26/85	04:16:20	PST	21022	ATMOSPHERIC DUMP VALVE PV-20542B	OPEN	GOOD	ALARM	ALARM STATE
12/26/85	04:16:21	PST	21022	ATMOSPHERIC DUMP VALVE PV-20542B	NOT OPEN	GOOD	RETURN	RETURN TO NORMAL
12/26/85	04:16:22	PST	21022	ATMOSPHERIC DUMP VALVE PV-20542B	OPEN	GOOD	ALARM	ALARM STATE
12/26/85	04:16:23	PST	21022	ATMOSPHERIC DUMP VALVE PV-20542B	NOT OPEN	GOOD	RETURN	RETURN TO NORMAL
12/26/85	04:16:31	PST	21021	CODE SAFETY VALVE PSV-14012A	OPEN	GOOD	ALARM	ALARM STATE
12/26/85	04:16:31	PST	21022	ATMOSPHERIC DUMP VALVE PV-20542B	OPEN	GOOD	ALARM	ALARM STATE
12/26/85	04:16:32	PST	21021	CODE SAFETY VALVE PSV-14012A	NOT OPEN	GOOD	RETURN	RETURN TO NORMAL
12/26/85	04:16:57	PST	E1402	62A2 BUS VOLTAGE	FAILURE	GOOD	ALARM	ALARM STATE
12/26/85	04:16:57	PST	69021	6FAS CH 1A TRIP	TRIPPED	GOOD	ALARM	ALARM STATE
12/26/85	04:16:57	PST	69025	6FAS CH 1B TRIP	TRIPPED	GOOD	ALARM	ALARM STATE
12/26/85	04:16:58	PST	21004	CODE SAFETY VALVE PSV-20544	NOT OPEN	GOOD	RETURN	RETURN TO NORMAL
12/26/85	04:16:59	PST	21004	CODE SAFETY VALVE PSV-20544	OPEN	GOOD	ALARM	ALARM STATE
12/26/85	04:17:06	PST	21022	ATMOSPHERIC DUMP VALVE PV-20542B	NOT OPEN	GOOD	RETURN	RETURN TO NORMAL
12/26/85	04:17:07	PST	21021	CODE SAFETY VALVE PSV-14012A	OPEN	GOOD	ALARM	ALARM STATE
12/26/85	04:17:08	PST	F9001	HPI LOOP A FLOW FT-21805	155.1 GPM	SUSPECT	NORMAL	NORMAL
12/26/85	04:17:08	PST	21021	CODE SAFETY VALVE PSV-14012A	NOT OPEN	GOOD	RETURN	RETURN TO NORMAL
12/26/85	04:17:09	PST	F9004	HPI LOOP B FLOW FT-21808	118.7 GPM	SUSPECT	NORMAL	NORMAL
12/26/85	04:17:14	PST	L9903	OTCS A OPR RNG LT-20503A	1.018 %	GOOD	ALARM	ALARM LIMIT LOW
12/26/85	04:17:15	PST	F2902	EFU 6F-A-7B FLOW FT-54702	4422 SCFH	GOOD	ALARM	ALARM LIMIT HIGH
12/26/85	04:17:15	PST	22977	NORM AHU US01A ISO DMFR HV-50126	NOT OPEN	GOOD	ALARM	ALARM STATE
12/26/85	04:17:15	PST	22979	NORM AHU US01A ISO DMFR HV-50127	NOT OPEN	GOOD	ALARM	ALARM STATE
12/26/85	04:17:15	PST	22980	NORM AHU RET ISO DMFR HV-55307	NOT OPEN	GOOD	ALARM	ALARM STATE
12/26/85	04:17:15	PST	22991	NORM AHU RET ISO DMFR HV-55310	NOT OPEN	GOOD	ALARM	ALARM STATE
12/26/85	04:17:17	PST	21022	ATMOSPHERIC DUMP VALVE PV-20542B	OPEN	GOOD	ALARM	ALARM STATE
12/26/85	04:17:18	PST	21022	ATMOSPHERIC DUMP VALVE PV-20542B	NOT OPEN	GOOD	RETURN	RETURN TO NORMAL
12/26/85	04:17:22	PST	21004	CODE SAFETY VALVE PSV-20544	NOT OPEN	GOOD	RETURN	RETURN TO NORMAL
12/26/85	04:17:23	PST	21004	CODE SAFETY VALVE PSV-20544	OPEN	GOOD	ALARM	ALARM STATE
12/26/85	04:17:28	PST	21004	CODE SAFETY VALVE PSV-20544	NOT OPEN	GOOD	RETURN	RETURN TO NORMAL
12/26/85	04:17:29	PST	21004	CODE SAFETY VALVE PSV-20544	OPEN	GOOD	ALARM	ALARM STATE
12/26/85	04:17:35	PST	21004	CODE SAFETY VALVE PSV-20544	NOT OPEN	GOOD	RETURN	RETURN TO NORMAL
12/26/85	04:17:36	PST	21004	CODE SAFETY VALVE PSV-20544	OPEN	GOOD	ALARM	ALARM STATE
12/26/85	04:17:37	PST	21004	CODE SAFETY VALVE PSV-20544	NOT OPEN	GOOD	RETURN	RETURN TO NORMAL
12/26/85	04:17:38	PST	21022	ATMOSPHERIC DUMP VALVE PV-20542B	OPEN	GOOD	ALARM	ALARM STATE
12/26/85	04:17:40	PST	21022	ATMOSPHERIC DUMP VALVE PV-20542B	NOT OPEN	GOOD	RETURN	RETURN TO NORMAL
12/26/85	04:17:42	PST	21022	ATMOSPHERIC DUMP VALVE PV-20542B	OPEN	GOOD	ALARM	ALARM STATE
12/26/85	04:17:44	PST	21022	ATMOSPHERIC DUMP VALVE PV-20542B	NOT OPEN	GOOD	RETURN	RETURN TO NORMAL
12/26/85	04:17:52	PST	21004	CODE SAFETY VALVE PSV-20544	OPEN	GOOD	ALARM	ALARM STATE
12/26/85	04:17:53	PST	21004	CODE SAFETY VALVE PSV-20544	NOT OPEN	GOOD	RETURN	RETURN TO NORMAL
12/26/85	04:17:59	PST	21022	ATMOSPHERIC DUMP VALVE PV-20542B	OPEN	GOOD	ALARM	ALARM STATE
12/26/85	04:18:01	PST	21004	CODE SAFETY VALVE PSV-20544	OPEN	GOOD	ALARM	ALARM STATE
12/26/85	04:18:02	PST	21004	CODE SAFETY VALVE PSV-20544	NOT OPEN	GOOD	RETURN	RETURN TO NORMAL
12/26/85	04:18:02	PST	21022	ATMOSPHERIC DUMP VALVE PV-20542B	NOT OPEN	GOOD	RETURN	RETURN TO NORMAL
12/26/85	04:18:03	PST	21004	CODE SAFETY VALVE PSV-20544	OPEN	GOOD	ALARM	ALARM STATE
12/26/85	04:18:04	PST	21004	CODE SAFETY VALVE PSV-20544	NOT OPEN	GOOD	RETURN	RETURN TO NORMAL
12/26/85	04:18:07	PST	21004	CODE SAFETY VALVE PSV-20544	OPEN	GOOD	ALARM	ALARM STATE
12/26/85	04:18:09	PST	21004	CODE SAFETY VALVE PSV-20544	NOT OPEN	GOOD	RETURN	RETURN TO NORMAL

12/26/05	04:10:11	PST	21004	CODE SAFETY VALVE	PGV-20544	OPEN	GOOD	ALARM	ALARM STATE	
12/26/05	04:10:12	PST	21004	CODE SAFETY VALVE	PGV-20544	NOT OPEN	GOOD	RETURN	RETURN TO NORMAL	
12/26/05	04:10:14	PST	21004	CODE SAFETY VALVE	PGV-20544	OPEN	GOOD	ALARM	ALARM STATE	
12/26/05	04:10:15	PST	21004	CODE SAFETY VALVE	PGV-20544	NOT OPEN	GOOD	RETURN	RETURN TO NORMAL	
12/26/05	04:10:16	PST	21004	CODE SAFETY VALVE	PGV-20544	OPEN	GOOD	ALARM	ALARM STATE	
12/26/05	04:10:17	PST	21004	CODE SAFETY VALVE	PGV-20544	NOT OPEN	GOOD	RETURN	RETURN TO NORMAL	
12/26/05	04:10:19	PST	X0075	TROUBLE, ZONE 75-NGEB SWGR RM B		TROUBLE	GOOD	ALARM	ALARM STATE	
12/26/05	04:10:31	PST	21022	ATMOSPHERIC BUMP VALUE PV-20562B		OPEN	GOOD	ALARM	ALARM STATE	
12/26/05	04:10:32	PST	21022	ATMOSPHERIC BUMP VALUE PV-20562B		NOT OPEN	GOOD	RETURN	RETURN TO NORMAL	
12/26/05	04:10:32	PST	21004	CODE SAFETY VALVE	PGV-20544	OPEN	GOOD	ALARM	ALARM STATE	
12/26/05	04:10:33	PST	21004	CODE SAFETY VALVE	PGV-20544	NOT OPEN	GOOD	RETURN	RETURN TO NORMAL	
12/26/05	04:10:34	PST	21021	CODE SAFETY VALVE	PGV-36012A	OPEN	GOOD	ALARM	ALARM STATE	
12/26/05	04:10:35	PST	21021	CODE SAFETY VALVE	PGV-36012A	NOT OPEN	GOOD	RETURN	RETURN TO NORMAL	
12/26/05	04:10:46	PST	21021	CODE SAFETY VALVE	PGV-36012A	OPEN	GOOD	ALARM	ALARM STATE	
12/26/05	04:10:47	PST	21021	CODE SAFETY VALVE	PGV-36012A	NOT OPEN	GOOD	RETURN	RETURN TO NORMAL	
12/26/05	04:10:50	PST	21021	CODE SAFETY VALVE	PGV-36012A	OPEN	GOOD	ALARM	ALARM STATE	
12/26/05	04:10:51	PST	21021	CODE SAFETY VALVE	PGV-36012A	NOT OPEN	GOOD	RETURN	RETURN TO NORMAL	
12/26/05	04:10:51	PST	21022	ATMOSPHERIC BUMP VALUE PV-20562B		OPEN	GOOD	ALARM	ALARM STATE	
12/26/05	04:10:52	PST	21021	CODE SAFETY VALVE	PGV-36012A	OPEN	GOOD	ALARM	ALARM STATE	
12/26/05	04:10:52	PST	21022	ATMOSPHERIC BUMP VALUE PV-20562B		NOT OPEN	GOOD	RETURN	RETURN TO NORMAL	
12/26/05	04:10:53	PST	21021	CODE SAFETY VALVE	PGV-36012A	NOT OPEN	GOOD	RETURN	RETURN TO NORMAL	
12/26/05	04:10:59	PST	L1003	OTGG B OPR RNG	LT-20504A	0.9157	%	GOOD	ALARM	ALARM LIMIT LOW
12/26/05	04:19:04	PST	21021	CODE SAFETY VALVE	PGV-36012A	OPEN	GOOD	ALARM	ALARM STATE	
12/26/05	04:19:04	PST	X0075	TROUBLE, ZONE 75-NGEB SWGR RM B		NORMAL	GOOD	RETURN	RETURN TO NORMAL	
12/26/05	04:19:05	PST	21021	CODE SAFETY VALVE	PGV-36012A	NOT OPEN	GOOD	RETURN	RETURN TO NORMAL	
12/26/05	04:19:10	PST	21021	CODE SAFETY VALVE	PGV-36012A	OPEN	GOOD	ALARM	ALARM STATE	
12/26/05	04:19:11	PST	21022	ATMOSPHERIC BUMP VALUE PV-20562B		OPEN	GOOD	ALARM	ALARM STATE	
12/26/05	04:19:12	PST	21022	ATMOSPHERIC BUMP VALUE PV-20562B		NOT OPEN	GOOD	RETURN	RETURN TO NORMAL	
12/26/05	04:19:15	PST	62910	NORM A/C UNIT U-501A FAN STATUS		OFF	GOOD	ALARM	ALARM STATE	
12/26/05	04:19:15	PST	62911	NORM A/C UNIT U-501B FAN STATUS		OFF	GOOD	ALARM	ALARM STATE	
12/26/05	04:19:15	PST	62912	NORM RET EXH FAN EF-553A STATUS		OFF	GOOD	ALARM	ALARM STATE	
12/26/05	04:19:15	PST	62913	NORM RET EXH FAN EF-553B STATUS		OFF	GOOD	ALARM	ALARM STATE	
12/26/05	04:19:16	PST	21021	CODE SAFETY VALVE	PGV-36012A	NOT OPEN	GOOD	RETURN	RETURN TO NORMAL	
12/26/05	04:19:19	PST	X0074	TROUBLE, ZONE 74-NGEB SWGR RM A		TROUBLE	GOOD	ALARM	ALARM STATE	
12/26/05	04:19:20	PST	21021	CODE SAFETY VALVE	PGV-36012A	OPEN	GOOD	ALARM	ALARM STATE	
12/26/05	04:20:01	PST	21021	CODE SAFETY VALVE	PGV-36012A	NOT OPEN	GOOD	RETURN	RETURN TO NORMAL	
12/26/05	04:20:04	PST	X0074	TROUBLE, ZONE 74-NGEB SWGR RM A		NORMAL	GOOD	RETURN	RETURN TO NORMAL	
12/26/05	04:20:33	PST	L9003	OTGG A OPR RNG	LT-20503A	2.456	%	GOOD	RETURN	RETURN TO NORMAL
12/26/05	04:20:40	PST	L1003	OTGG B OPR RNG	LT-20504A	2.320	%	GOOD	RETURN	RETURN TO NORMAL
12/26/05	04:20:49	PST	F9601	MFW FLOW A		0.1921	MLB/HR	SUSPECT	RETURN TO NORMAL	
12/26/05	04:21:13	PST	69000	SOURCE RANGE A LOG CPG		3.120	LOGCPG	SUSPECT	NORMAL	
12/26/05	04:21:13	PST	69001	SOURCE RANGE B LOG CPG		3.224	LOGCPG	SUSPECT	NORMAL	
12/26/05	04:21:19	PST	L1402	COND STORAGE TK LVL	LT-15010	43.80	FT	GOOD	ALARM	ALARM LIMIT LOW
12/26/05	04:21:19	PST	X0077	TROUBLE, ZONE 77-NGEB B ELEC EQPT		TROUBLE	GOOD	ALARM	ALARM STATE	
12/26/05	04:22:19	PST	X0077	TROUBLE, ZONE 77-NGEB B ELEC EQPT		NORMAL	GOOD	RETURN	RETURN TO NORMAL	
12/26/05	04:22:44	PST	F9601	MFW FLOW A		0.2016	MLB/HR	BAD	ALARM	INSTRUMENT LOW
12/26/05	04:23:15	PST	P1061	MAIN STM PRESS PGL 20601		LOW	GOOD	ALARM	ALARM STATE	
12/26/05	04:23:15	PST	P1062	MAIN STM PRESS PGL 20602		LOW	GOOD	ALARM	ALARM STATE	
12/26/05	04:23:15	PST	P1063	MAIN STM PRESS PGL 20603		LOW	GOOD	ALARM	ALARM STATE	
12/26/05	04:23:15	PST	P1064	MAIN STM PRESS PGL 20604		LOW	GOOD	ALARM	ALARM STATE	
12/26/05	04:23:15	PST	P1065	MAIN STM PRESS PGL 20605		LOW	GOOD	ALARM	ALARM STATE	
12/26/05	04:23:15	PST	P1066	MAIN STM PRESS PGL 20606		LOW	GOOD	ALARM	ALARM STATE	
12/26/05	04:23:15	PST	P1067	MAIN STM PRESS PGL 20607		LOW	GOOD	ALARM	ALARM STATE	
12/26/05	04:23:27	PST	G1619	AFP P-319 RUNOUT		VEG	GOOD	ALARM	ALARM STATE	
12/26/05	04:23:27	PST	G1620	AFP P-318 RUNOUT		VEG	GOOD	ALARM	ALARM STATE	
12/26/05	04:23:54	PST	G1619	AFP P-319 RUNOUT		NO	GOOD	ALARM	ALARM STATE	
12/26/05	04:23:54	PST	G1620	AFP P-318 RUNOUT		NO	GOOD	RETURN	RETURN TO NORMAL	
12/26/05	04:24:03	PST	L9006	OTGG A CU RNG	LT-20503B	249.6	IN H2O	BAD	ALARM	INSTRUMENT HIGH
12/26/05	04:24:04	PST	L1005	OTGG A CU RNG	LT-20503C	249.8	IN H2O	BAD	ALARM	INSTRUMENT HIGH
12/26/05	04:24:16	PST	P1068	MAIN STM PRESS PGL 20608		LOW	GOOD	ALARM	ALARM STATE	
12/26/05	04:25:05	PST	69003	INTERMED RANGE B LOG AMP		-10.96	AMP	BAD	ALARM	INSTRUMENT LOW
12/26/05	04:25:34	PST	69002	INTERMED RANGE A LOG AMP		-10.96	AMP	BAD	ALARM	INSTRUMENT LOW
12/26/05	04:26:05	PST	L9008	OTGG B CU RNG	LT-20504B	249.9	IN H2O	BAD	ALARM	INSTRUMENT HIGH
12/26/05	04:26:00	PST	L1007	OTGG B CU RNG	LT-20504C	249.2	IN H2O	BAD	ALARM	INSTRUMENT HIGH
12/26/05	04:26:19	PST	F2902	EFU SF-A-7B FLOW	FT-54702	2200.	SCFH	GOOD	RETURN	RETURN TO NORMAL
12/26/05	04:26:19	PST	F9601	MFW FLOW TO OTGG A	FT-11003	22.70	CM	BAD	ALARM	CONVERSION BAD

12/26/85	04:25:55	PST	L9000	MAKEUP TANK LEVEL	FT-31002	90.35	IN H2O	GOOD	ALARM	ALARM LIMIT HIGH
12/26/85	04:27:46	PST	L9000	MAKEUP TANK LEVEL		99.50	IN H2O	BAD	ALARM	INSTRUMENT HIGH
12/26/85	04:29:41	PST	Q1419	AFP P-319 RUNOUT		YES		GOOD	ALARM	ALARM STATE
12/26/85	04:29:41	PST	Q1420	AFP P-318 RUNOUT		YES		GOOD	ALARM	ALARM STATE
12/26/85	04:29:42	PST	Q1419	AFP P-319 RUNOUT		NO		GOOD	RETURN	RETURN TO NORMAL
12/26/85	04:29:42	PST	Q1420	AFP P-318 RUNOUT		NO		GOOD	RETURN	RETURN TO NORMAL
12/26/85	04:29:51	PST	F1460	AFW FLOW TO DTGG A	FT-31002	1300.	GPM	SUSPECT	RETURN	RETURN TO NORMAL
12/26/85	04:29:51	PST	F5004	HPI LOOP D FLOW	FT-21000	65.46	GPM	BAD	ALARM	CONVERSION BAD
12/26/85	04:29:51	PST	F9661	AFW FLOW TO DTGG A	FT-31003	1300.	GPM	SUSPECT	RETURN	RETURN TO NORMAL
12/26/85	04:31:04	PST	Q1420	AFP P-318 RUNOUT		YES		GOOD	ALARM	ALARM STATE
12/26/85	04:31:07	PST	Q1419	AFP P-319 RUNOUT		YES		GOOD	ALARM	ALARM STATE
12/26/85	04:31:36	PST	Q1419	AFP P-319 RUNOUT		NO		GOOD	RETURN	RETURN TO NORMAL
12/26/85	04:31:59	PST	Q1419	AFP P-319 RUNOUT		YES		GOOD	ALARM	ALARM STATE
12/26/85	04:33:56	PST	Q1419	AFP P-319 RUNOUT		NO		GOOD	RETURN	RETURN TO NORMAL
12/26/85	04:33:57	PST	Q1420	AFP P-318 RUNOUT		NO		GOOD	RETURN	RETURN TO NORMAL
12/26/85	04:37:35	PST	L1601	COND STORAGE TK LVL	LT-35009	394.4	K GAL	GOOD	ALARM	ALARM LIMIT LOW
12/26/85	04:38:52	PST	F9662	AFW FLOW TO DTGG B	FT-31002	32.11	GPM	BAD	ALARM	CONVERSION BAD
12/26/85	04:40:09	PST	F9661	AFW FLOW TO DTGG A	FT-31003	39.33	GPM	BAD	ALARM	CONVERSION BAD
12/26/85	04:40:10	PST	F1460	AFW FLOW TO DTGG A	FT-31002	39.33	GPM	BAD	ALARM	CONVERSION BAD
12/26/85	04:43:02	PST	F9001	HPI LOOP A FLOW	FT-21005	44.47	GPM	BAD	ALARM	CONVERSION BAD
12/26/85	04:44:34	PST	F1460	AFW FLOW TO DTGG A	FT-31002	55.63	GPM	SUSPECT	RETURN	RETURN TO NORMAL
12/26/85	04:44:40	PST	F1460	AFW FLOW TO DTGG A	FT-31002	55.63	GPM	BAD	ALARM	CONVERSION BAD
12/26/85	04:51:20	PST	L1601	COND STORAGE TK LVL	LT-35009	401.3	K GAL	GOOD	RETURN	RETURN TO NORMAL
12/26/85	04:54:15	PST	Z2977	NORM AHU US010 ISO DMFR HV-50126	OPEN			GOOD	RETURN	RETURN TO NORMAL
12/26/85	04:54:15	PST	Z2991	NORM AHU RET ISO DMFR HV-55310	OPEN			GOOD	RETURN	RETURN TO NORMAL
12/26/85	04:55:15	PST	Z2979	NORM AHU US01A ISO DMFR HV-50127	OPEN			GOOD	RETURN	RETURN TO NORMAL
12/26/85	04:56:15	PST	Z2989	NORM AHU RET ISO DMFR HV-55307	OPEN			GOOD	RETURN	RETURN TO NORMAL
12/26/85	04:56:15	PST	G2910	NORM A/C UNIT U-501A FAN STATUS	ON			GOOD	RETURN	RETURN TO NORMAL
12/26/85	04:56:15	PST	G2911	NORM A/C UNIT U-501B FAN STATUS	ON			GOOD	RETURN	RETURN TO NORMAL
12/26/85	04:56:15	PST	G2912	NORM RET EXH FAN CF-553A STATUS	ON			GOOD	RETURN	RETURN TO NORMAL
12/26/85	04:56:15	PST	G2913	NORM RET EXH FAN CF-553B STATUS	ON			GOOD	RETURN	RETURN TO NORMAL
12/26/85	05:02:06	PST	L9000	MAKEUP TANK LEVEL		97.17	IN H2O	SUSPECT	ALARM	ALARM LIMIT HIGH
12/26/85	05:04:49	PST	L9000	MAKEUP TANK LEVEL		99.73	IN H2O	BAD	ALARM	INSTRUMENT HIGH
12/26/85	05:17:49	PST	X8075	TROUBLE: ZONE 75-NCEB GWGR RM B		TRouble		GOOD	ALARM	ALARM STATE
12/26/85	05:18:49	PST	X8075	TROUBLE: ZONE 75-NCEB GWGR RM B		NORMAL		GOOD	RETURN	RETURN TO NORMAL
12/26/85	05:18:49	PST	X8076	TROUBLE: ZONE 76-NCEB GWGR RM A		TRouble		GOOD	ALARM	ALARM STATE
12/26/85	05:19:49	PST	X8076	TROUBLE: ZONE 76-NCEB GWGR RM A		NORMAL		GOOD	RETURN	RETURN TO NORMAL
12/26/85	05:20:49	PST	X8077	TROUBLE: ZONE 77-NCEB B ELEC EQPT		TRouble		GOOD	ALARM	ALARM STATE
12/26/85	05:21:19	PST	X8077	TROUBLE: ZONE 77-NCEB B ELEC EQPT		NORMAL		GOOD	RETURN	RETURN TO NORMAL
12/26/85	05:21:19	PST	X8078	TROUBLE: ZONE 78-NCEB A ELEC EQPT		TRouble		GOOD	ALARM	ALARM STATE
12/26/85	05:21:49	PST	X8078	TROUBLE: ZONE 78-NCEB A ELEC EQPT		NORMAL		GOOD	RETURN	RETURN TO NORMAL
12/26/85	05:20:15	PST	P1061	MAIN STM PRESS LOW PCL 20601		NORMAL		GOOD	RETURN	RETURN TO NORMAL
12/26/85	05:20:15	PST	P1062	MAIN STM PRESS PCL 20602		NORMAL		GOOD	RETURN	RETURN TO NORMAL
12/26/85	05:20:15	PST	P1063	MAIN STM PRESS PCL 20603		NORMAL		GOOD	RETURN	RETURN TO NORMAL
12/26/85	05:20:15	PST	P1064	MAIN STM PRESS PCL 20604		NORMAL		GOOD	RETURN	RETURN TO NORMAL
12/26/85	05:20:15	PST	P1065	MAIN STM PRESS PCL 20605		NORMAL		GOOD	RETURN	RETURN TO NORMAL
12/26/85	05:20:15	PST	P1066	MAIN STM PRESS PCL 20606		NORMAL		GOOD	RETURN	RETURN TO NORMAL
12/26/85	05:20:15	PST	P1067	MAIN STM PRESS PCL 20607		NORMAL		GOOD	RETURN	RETURN TO NORMAL
12/26/85	05:20:15	PST	P1068	MAIN STM PRESS PCL 20608		NORMAL		GOOD	RETURN	RETURN TO NORMAL
12/26/85	05:46:05	PST	L1806	DTGG A GU RING	LT-20503C	249.4	IN H2O	SUSPECT	RETURN	RETURN TO NORMAL
12/26/85	05:46:25	PST	L1806	DTGG A GU RING	LT-20503D	249.3	IN H2O	SUSPECT	RETURN	RETURN TO NORMAL
12/26/85	05:49:30	PST	L1807	DTGG B GU RING	LT-20504C	249.4	IN H2O	SUSPECT	RETURN	RETURN TO NORMAL
12/26/85	05:50:17	PST	L1808	DTGG B GU RING	LT-20504D	249.7	IN H2O	SUSPECT	RETURN	RETURN TO NORMAL
12/26/85	05:50:33	PST	X8104	TROUBLE: ZONE 104-TCC		TRouble		GOOD	ALARM	ALARM STATE
12/26/85	05:50:40	PST	X8104	TROUBLE: ZONE 104-TCC		NORMAL		GOOD	RETURN	RETURN TO NORMAL
12/26/85	05:52:40	PST	X8104	TROUBLE: ZONE 104-TCC		TRouble		GOOD	ALARM	ALARM STATE
12/26/85	05:53:03	PST	X8104	TROUBLE: ZONE 104-TCC		NORMAL		GOOD	RETURN	RETURN TO NORMAL
12/26/85	06:00:40	PST	L1602	COND STORAGE TK LVL	LT-35010	44.69	FT	GOOD	RETURN	RETURN TO NORMAL
12/26/85	06:13:00	PST	F9601	HEW FLOW A		0.1010	MLB/HR	SUSPECT	RETURN	RETURN TO NORMAL
12/26/85	06:13:10	PST	Z1904	CODE SAFETY VALVE	PSV-20544	OPEN		GOOD	ALARM	ALARM STATE
12/26/85	06:13:40	PST	F9601	HEW FLOW A		0.1206	MLB/HR	BAD	ALARM	INSTRUMENT LOW
12/26/85	06:13:49	PST	Z1904	CODE SAFETY VALVE	PSV-20544	NOT OPEN		GOOD	RETURN	RETURN TO NORMAL
12/26/85	06:13:59	PST	L1806	DTGG A GU RING	LT-20504D	249.6	IN H2O	BAD	ALARM	INSTRUMENT HIGH
12/26/85	06:14:01	PST	L1807	DTGG B GU RING	LT-20504C	249.9	IN H2O	BAD	ALARM	INSTRUMENT HIGH
12/26/85	06:15:00	PST	FLEVTPT	PLANT EVENT POINT				GOOD	ACK	ACKNOWLEDGE

[illegible]

TIME	DATE	TIME	TIME	DESCRIPTION	STATUS	VALUE	UNIT	STATUS	STATUS	STATUS
12/26/85	06:19:40	PST	X0074	REACTOR TRIP	TROUBLE	GOOD		NORMAL	ALARM	ALARM STATE
12/26/85	06:20:07	PST	09020	REACTOR TRIP	TRIPPED	GOOD		NORMAL	ALARM	ALARM STATE
12/26/85	06:20:15	PST	09020	REACTOR TRIP	NORMAL	GOOD		NORMAL	RETURN	RETURN TO NORMAL
12/26/85	06:20:23	PST	X0076	TROUBLE, ZONE 76-NGEB SWGR RM A	NORMAL	GOOD		NORMAL	RETURN	RETURN TO NORMAL
12/26/85	06:21:11	PST	X0076	TRC ACT, ZONE 104-TGC		GOOD		NORMAL	ACK	ACKNOWLEDGE
12/26/85	06:21:11	PST	X0076	TROUBLE, ZONE 75-NGEB SWGR RM B		GOOD		NORMAL	NORMAL	NORMAL
12/26/85	06:21:11	PST	X0076	TROUBLE, ZONE 76-NGEB SWGR RM A		GOOD		NORMAL	NORMAL	NORMAL
12/26/85	06:21:11	PST	X0077	TROUBLE, ZONE 77-NGEB B ELEC EQPT		GOOD		NORMAL	NORMAL	NORMAL
12/26/85	06:21:11	PST	X0077	TROUBLE, ZONE 78-NGEB A ELEC EQPT		GOOD		NORMAL	NORMAL	NORMAL
12/26/85	06:21:11	PST	X0104	TROUBLE, ZONE 104-TGC		GOOD		NORMAL	NORMAL	NORMAL
12/26/85	06:24:52	PST	L1007	OTGG B GU RNG	LT-20504C	249.5	IN H2O	SUSPECT	NORMAL	NORMAL
12/26/85	06:25:23	PST	L9000	OTGG B GU RNG	LT-20504D	249.4	IN H2O	SUSPECT	NORMAL	NORMAL
12/26/85	06:25:33	PST	X0077	TROUBLE, ZONE 77-NGEB B ELEC EQPT	TROUBLE	GOOD		NORMAL	ALARM	ALARM STATE
12/26/85	06:26:03	PST	X0077	TROUBLE, ZONE 77-NGEB B ELEC EQPT	NORMAL	GOOD		NORMAL	RETURN	RETURN TO NORMAL
12/26/85	06:26:03	PST	X0079	TROUBLE, ZONE 76-NGEB A ELEC EQPT	TROUBLE	GOOD		NORMAL	ALARM	ALARM STATE
12/26/85	06:26:33	PST	X0079	TROUBLE, ZONE 76-NGEB A ELEC EQPT	NORMAL	GOOD		NORMAL	RETURN	RETURN TO NORMAL
12/26/85	06:26:41	PST	09020	REACTOR TRIP	TRIPPED	GOOD		NORMAL	ALARM	ALARM STATE
12/26/85	06:26:49	PST	09020	REACTOR TRIP	NORMAL	GOOD		NORMAL	RETURN	RETURN TO NORMAL
12/26/85	06:41:48	PST	X0104	TROUBLE, ZONE 104-TGC	TROUBLE	GOOD		NORMAL	ALARM	ALARM STATE
12/26/85	06:51:41	PST	X0077	TROUBLE, ZONE 77-NGEB B ELEC EQPT		GOOD		NORMAL	NORMAL	NORMAL
12/26/85	06:51:41	PST	X0079	TROUBLE, ZONE 76-NGEB A ELEC EQPT		GOOD		NORMAL	NORMAL	NORMAL
12/26/85	06:51:41	PST	X0104	TROUBLE, ZONE 104-TGC		GOOD		NORMAL	NORMAL	NORMAL
12/26/85	06:56:21	PST	L9003	OTGG A OPR RNG	LT-20503A	1.099	X	GOOD	ALARM	ALARM LIMIT LOW
12/26/85	06:56:40	PST	L9003	OTGG A OPR RNG	LT-20503A			GOOD	ACK	ACKNOWLEDGE
12/26/85	06:56:40	PST	Z1004	CODE SAFETY VALVE	PGV-20544			GOOD	NORMAL	NORMAL
12/26/85	06:56:40	PST	Z1005	CODE SAFETY VALVE	PGV-20545			GOOD	NORMAL	NORMAL
12/26/85	06:56:40	PST	Z1006	CODE SAFETY VALVE	PGV-20546			GOOD	NORMAL	NORMAL
12/26/85	06:57:41	PST	L9003	OTGG A OPR RNG	LT-20503A	0.1050E-01	X	GOOD	ALARM	INSTRUMENT LOW
12/26/85	06:57:52	PST	L1004	OTGG A OPR RNG	LT-20503B	0.6410	X	GOOD	ALARM	ALARM LIMIT LOW
12/26/85	07:00:10	PST	L1004	OTGG A OPR RNG	LT-20503B			GOOD	ACK	ACKNOWLEDGE
12/26/85	07:00:10	PST	L5003	OTGG A OPR RNG	LT-20503A			GOOD	ACK	ACKNOWLEDGE
12/26/85	07:00:10	PST	Z1009	CODE SAFETY VALVE	PGV-20540			GOOD	NORMAL	NORMAL
12/26/85	07:00:10	PST	Z1009	CODE SAFETY VALVE	PGV-20549			GOOD	NORMAL	NORMAL
12/26/85	07:00:27	PST	Z1010	CODE SAFETY VALVE	PGV-20550			GOOD	NORMAL	NORMAL
12/26/85	07:00:27	PST	Z1012	CODE SAFETY VALVE	PGV-20552			GOOD	NORMAL	NORMAL
12/26/85	07:13:40	PST	Z9130	CRD GROUPS 2-7 POS		OUT		GOOD	NORMAL	NORMAL
12/26/85	07:13:41	PST	Z9130	CRD GROUPS 2-7 POS		IN		GOOD	ALARM	ALARM STATE
12/26/85	07:17:03	PST	X0075	TROUBLE, ZONE 75-NGEB SWGR RM B	TROUBLE	GOOD		NORMAL	ALARM	ALARM STATE
12/26/85	07:18:03	PST	X0075	TROUBLE, ZONE 75-NGEB SWGR RM B	NORMAL	GOOD		NORMAL	RETURN	RETURN TO NORMAL
12/26/85	07:18:03	PST	X0074	TROUBLE, ZONE 76-NGEB SWGR RM A	TROUBLE	GOOD		NORMAL	ALARM	ALARM STATE
12/26/85	07:19:03	PST	X0074	TROUBLE, ZONE 76-NGEB SWGR RM A	NORMAL	GOOD		NORMAL	RETURN	RETURN TO NORMAL
12/26/85	07:19:40	PST	X0079	TROUBLE, ZONE 78-NGEB A ELEC EQPT	TROUBLE	GOOD		NORMAL	ALARM	ALARM STATE
12/26/85	07:20:06	PST	Z9130	CRD GROUPS 2-7 POS		GOOD		NORMAL	ACK	ACKNOWLEDGE
12/26/85	07:20:13	PST	X0075	TROUBLE, ZONE 75-NGEB SWGR RM B		GOOD		NORMAL	NORMAL	NORMAL
12/26/85	07:20:13	PST	X0074	TROUBLE, ZONE 76-NGEB SWGR RM A		GOOD		NORMAL	NORMAL	NORMAL
12/26/85	07:20:13	PST	X0079	TROUBLE, ZONE 78-NGEB A ELEC EQPT		GOOD		NORMAL	ACK	ACKNOWLEDGE
12/26/85	07:20:18	PST	X0077	TROUBLE, ZONE 77-NGEB B ELEC EQPT	TROUBLE	GOOD		NORMAL	ALARM	ALARM STATE
12/26/85	07:20:18	PST	X0079	TROUBLE, ZONE 78-NGEB A ELEC EQPT	NORMAL	GOOD		NORMAL	NORMAL	NORMAL
12/26/85	07:21:03	PST	X0077	TROUBLE, ZONE 77-NGEB B ELEC EQPT	NORMAL	GOOD		NORMAL	RETURN	RETURN TO NORMAL
12/26/85	07:26:59	PST	L9000	HALEUP TANK LEVEL	99.76	IN H2O		SUSPECT	ACK	ALARM LIMIT HIGH
12/26/85	07:30:20	PST	L1900	TURB GEN SEAL OIL H2 SIDE	HIGH	GOOD		NORMAL	ALARM	ALARM STATE
12/26/85	07:30:29	PST	Z9130	CRD GROUPS 2-7 POS	OUT	GOOD		NORMAL	NORMAL	NORMAL
12/26/85	07:30:42	PST	Z9130	CRD GROUPS 2-7 POS	IN	GOOD		NORMAL	ALARM	ALARM STATE
12/26/85	07:34:21	PST	L9000	HALEUP TANK LEVEL	99.77	IN H2O		GOOD	NORMAL	NORMAL
12/26/85	07:39:34	PST	X0077	TROUBLE, ZONE 77-NGEB B ELEC EQPT		GOOD		NORMAL	NORMAL	NORMAL
12/26/85	07:39:42	PST	Z9130	CRD GROUPS 2-7 POS		GOOD		NORMAL	ACK	ACKNOWLEDGE
12/26/85	07:39:50	PST	L1900	TURB GEN SEAL OIL H2 SIDE		GOOD		NORMAL	ACK	ACKNOWLEDGE
12/26/85	07:40:15	PST	09021	GEAS CH 1A TRIP		GOOD		NORMAL	NORMAL	NORMAL
12/26/85	07:40:26	PST	09025	GEAS CH 1B TRIP		GOOD		NORMAL	NORMAL	NORMAL
12/26/85	07:40:14	PST	L1003	OTGG B OPR RNG	LT-20504A	1.099	X	GOOD	ALARM	ALARM LIMIT LOW
12/26/85	07:40:34	PST	L1003	OTGG B OPR RNG	LT-20504A			GOOD	ACK	ACKNOWLEDGE
12/26/85	07:40:35	PST	Z1021	CODE SAFETY VALVE	PGV-36012A			GOOD	NORMAL	NORMAL
12/26/85	07:40:02	PST	L9004	OTGG B OPR RNG	LT-20504B	0.9463	X	GOOD	ALARM	ALARM LIMIT LOW
12/26/85	07:52:20	PST	61054	RCC PRESS (-450) WITHOUT LTDP	VEG	GOOD		NORMAL	ALARM	ALARM STATE
12/26/85	07:52:20	PST	61054	RCC PRESS (-450) WITHOUT LTDP	NO	GOOD		NORMAL	RETURN	RETURN TO NORMAL

		LT-205040					
12/26/05	07:58:59 PGT	G1054	RCG PRECC <-450 WITHOUT LTOP		GOOD	NORMAL	NORMAL
12/26/05	08:14:47 PGT	X0076	TRouble: ZONE 76-NEED SWGR RM B	TRouble	GOOD	ALARM	ALARM STATE
12/26/05	08:17:15 PGT	X0075	TRouble: ZONE 75-NEED SWGR RM B		GOOD	ACK	ACKNOWLEDGE
12/26/05	08:18:02 PGT	X0075	TRouble: ZONE 76-NEED SWGR RM B	NORMAL	GOOD	NORMAL	NORMAL
12/26/05	08:18:02 PGT	X0076	TRouble: ZONE 76-NEED SWGR RM A	TRouble	GOOD	ALARM	ALARM STATE
12/26/05	08:18:13 PGT	X0076	TRouble: ZONE 76-NEED SWGR RM A		GOOD	ACK	ACKNOWLEDGE
12/26/05	08:19:17 PGT	X0076	TRouble: ZONE 76-NEED SWGR RM A	NORMAL	GOOD	NORMAL	NORMAL
12/26/05	08:20:12 PGT	X0070	TRouble: ZONE 77-NEED A ELEC EQPT	TRouble	GOOD	ALARM	ALARM STATE
12/26/05	08:21:02 PGT	X0077	TRouble: ZONE 77-NEED B ELEC EQPT	TRouble	GOOD	ALARM	ALARM STATE
12/26/05	08:21:02 PGT	X0070	TRouble: ZONE 70-NEED A ELEC EQPT	NORMAL	GOOD	RETURN	RETURN TO NORMAL
12/26/05	08:21:14 PGT	E1402	C2A2 DUC VOLTAGE	NORMAL	GOOD	NORMAL	NORMAL
12/26/05	08:21:14 PGT	X0077	TRouble: ZONE 77-NEED B ELEC EQPT		GOOD	ACK	ACKNOWLEDGE
12/26/05	08:21:14 PGT	X0070	TRouble: ZONE 70-NEED A ELEC EQPT		GOOD	NORMAL	NORMAL
12/26/05	08:21:47 PGT	X0077	TRouble: ZONE 77-NEED B ELEC EQPT	NORMAL	GOOD	ALARM	INSTRUMENT LOW
12/26/05	08:23:10 PGT	L1003	OTCG B OPR RNG	LT-20504A	0.3050E-01	%	SUSPECT
12/26/05	08:23:21 PGT	L1003	OTCG B OPR RNG	LT-20504A	0.6103E-01	%	ALARM
12/26/05	08:23:21 PGT	L1003	OTCG B OPR RNG	LT-20504A	0.6103E-01	%	ACK
12/26/05	08:23:25 PGT	L1003	OTCG B OPR RNG	LT-20504A			ACK
12/26/05	08:23:28 PGT	L1003	OTCG B OPR RNG	LT-20504A	0.3050E-01	%	SUSPECT
12/26/05	08:23:33 PGT	L1003	OTCG B OPR RNG	LT-20504A	0.9155E-01	%	ALARM
12/26/05	08:24:42 PGT	L1003	OTCG B OPR RNG	LT-20504A	0.3050E-01	%	SUSPECT
12/26/05	08:25:03 PGT	L1003	OTCG B OPR RNG	LT-20504A			ACK
12/26/05	08:26:21 PGT	L1003	OTCG B OPR RNG	LT-20504A	0.6103E-01	%	ALARM
12/26/05	08:26:33 PGT	L1003	OTCG B OPR RNG	LT-20504A			ACK
12/26/05	08:26:40 PGT	L1003	OTCG B OPR RNG	LT-20504A	0.3050E-01	%	SUSPECT
12/26/05	08:27:09 PGT	L1003	OTCG B OPR RNG	LT-20504A	0.3050E-01	%	ACK
12/26/05	08:27:20 PGT	L1003	OTCG B OPR RNG	LT-20504A	0.6103E-01	%	ALARM
12/26/05	08:27:22 PGT	L1003	OTCG B OPR RNG	LT-20504A	0.6103E-01	%	SUSPECT
12/26/05	08:27:24 PGT	L1003	OTCG B OPR RNG	LT-20504A	0.3050E-01	%	ALARM
12/26/05	08:27:27 PGT	L1003	OTCG B OPR RNG	LT-20504A	0.3050E-01	%	ACK
12/26/05	08:27:29 PGT	L1003	OTCG B OPR RNG	LT-20504A	0.3050E-01	%	SUSPECT
12/26/05	08:27:30 PGT	L1003	OTCG B OPR RNG	LT-20504A	0.3050E-01	%	ACK
12/26/05	08:27:36 PGT	L1003	OTCG B OPR RNG	LT-20504A	0.6103E-01	%	ALARM
12/26/05	08:27:37 PGT	L1003	OTCG B OPR RNG	LT-20504A	0.6103E-01	%	SUSPECT
12/26/05	08:27:47 PGT	L1003	OTCG B OPR RNG	LT-20504A	0.9155E-01	%	ACK
12/26/05	08:27:50 PGT	L1003	OTCG B OPR RNG	LT-20504A			ALARM
12/26/05	08:28:09 PGT	L1003	OTCG B OPR RNG	LT-20504A	0.9155E-01	%	ACK
12/26/05	08:28:14 PGT	L1003	OTCG B OPR RNG	LT-20504A			ALARM
12/26/05	08:28:45 PGT	G1054	RCG PRECC <-450 WITHOUT LTOP	YES	GOOD	RETURN	RETURN TO NORMAL
12/26/05	08:28:46 PGT	G1054	RCG PRECC <-450 WITHOUT LTOP	NO	GOOD	ACK	ALARM LIMIT LOW
12/26/05	08:29:05 PGT	L1003	OTCG B OPR RNG	LT-20504A	0.3050E-01	%	SUSPECT
12/26/05	08:29:17 PGT	X0076	TRouble: ZONE 76-NEED SWGR RM A	TRouble	GOOD	ALARM	ALARM STATE
12/26/05	08:29:29 PGT	L1003	OTCG B OPR RNG	LT-20504A	0.3050E-01	%	ACK
12/26/05	08:29:34 PGT	L1003	OTCG B OPR RNG	LT-20504A			ACK
12/26/05	08:29:34 PGT	L1003	OTCG B OPR RNG	LT-20504A	0.3050E-01	%	SUSPECT
12/26/05	08:29:36 PGT	L1003	OTCG B OPR RNG	LT-20504A	0.3050E-01	%	ALARM
12/26/05	08:29:42 PGT	X0076	TRouble: ZONE 76-NEED SWGR RM A		GOOD	ACK	ACKNOWLEDGE
12/26/05	08:29:50 PGT	L1003	OTCG B OPR RNG	LT-20504A			ACK
12/26/05	08:29:50 PGT	G1054	RCG PRECC <-450 WITHOUT LTOP		GOOD	NORMAL	NORMAL
12/26/05	08:30:13 PGT	Z1022	ATMOSPHERIC DUMP VALVE PV-20562B		GOOD	NORMAL	NORMAL
12/26/05	08:30:13 PGT	Z1023	ATMOSPHERIC DUMP VALVE PV-20562A		GOOD	NORMAL	NORMAL
12/26/05	08:30:17 PGT	L1003	OTCG B OPR RNG	LT-20504A	0.6103E-01	%	SUSPECT
12/26/05	08:30:12 PGT	G2920	REACTOR TRIP		GOOD	NORMAL	NORMAL
12/26/05	08:30:45 PGT	L1003	OTCG B OPR RNG	LT-20504A	0.6103E-01	%	ACK
12/26/05	08:30:47 PGT	X0076	TRouble: ZONE 76-NEED SWGR RM A	NORMAL	GOOD	NORMAL	NORMAL
12/26/05	08:30:49 PGT	F2902	EFU CF-A-70 FLOW	FT-54702			NORMAL
12/26/05	08:30:49 PGT	G2910	NORM A/C UNIT U-501A FAN STATUS		GOOD	NORMAL	NORMAL
12/26/05	08:30:49 PGT	G2911	NORM A/C UNIT U-501D FAN STATUS		GOOD	NORMAL	NORMAL
12/26/05	08:30:49 PGT	G2912	NORM RET EXH FAN CF-551A STATUS		GOOD	NORMAL	NORMAL
12/26/05	08:30:49 PGT	G2913	NORM RET EXH FAN CF-551D STATUS		GOOD	NORMAL	NORMAL
12/26/05	08:30:49 PGT	Z2977	NORM AHU US010 ICD DHFR:HV-50124		GOOD	NORMAL	NORMAL
12/26/05	08:30:49 PGT	Z2979	NORM AHU US01A ICD DHFR:HV-50127		GOOD	NORMAL	NORMAL
12/26/05	08:30:49 PGT	Z2989	NORM AHU RET ICD DHFR:HV-55107		GOOD	NORMAL	NORMAL
12/26/05	08:30:54 PGT	Z2991	NORM AHU RET ICD DHFR:HV-55110		GOOD	NORMAL	NORMAL
12/26/05	08:31:02 PGT	L1003	OTCG B OPR RNG	LT-20504A			ACK

12/26/85	00:32:10	PST	LT-20504A	0.1050E-01	X	BAD	ALARM	INSTRUMENT LOW
12/26/85	00:32:10	PST	LT-20504A	0.1050E-01	X	BAD	ACK	ACKNOWLEDGE
12/26/85	00:39:10	PST	LT-20504A	0.1050E-01	X	SUSPECT	ACK	ALARM LIMIT LOW
12/26/85	00:47:39	PST	LT-20504A	0.1050E-01	X	GOOD	NORMAL	NORMAL
12/26/85	00:57:06	PST	DEWHIT2	HAC TAPE TWO STATING		BAD	ALARM	INSTRUMENT LOW
12/26/85	00:50:39	PST	LT-20504A	0.1221	X	BAD	ACK	ACKNOWLEDGE
12/26/85	00:50:47	PST	LT-20504A	0.1221	X	SUSPECT	ACK	ALARM LIMIT LOW
12/26/85	00:50:50	PST	LT-20504A	0.1031	X	BAD	ALARM	INSTRUMENT LOW
12/26/85	00:59:54	PST	LT-20504A	0.1524	X	SUSPECT	ALARM	ALARM LIMIT LOW
12/26/85	09:00:29	PST	LT-20504A	0.1524	X	GOOD	ACK	ACKNOWLEDGE
12/26/85	09:00:47	PST	LT-20501A	0.1031	X	BAD	ALARM	INSTRUMENT LOW
12/26/85	09:01:10	PST	LT-20504A	0.1031	X	BAD	ACK	ACKNOWLEDGE
12/26/85	09:01:29	PST	LT-20504A	0.1031	X	SUSPECT	ACK	ALARM LIMIT LOW
12/26/85	09:01:57	PST	LT-20504A	0.1031	X	BAD	ALARM	INSTRUMENT LOW
12/26/85	09:02:36	PST	LT-20504A	0.1031	X	BAD	ACK	ACKNOWLEDGE
12/26/85	09:03:21	PST	LT-20504A	0.1524	X	SUSPECT	ACK	ALARM LIMIT LOW
12/26/85	09:03:20	PST	LT-20504A	0.1524	X	BAD	ALARM	INSTRUMENT LOW
12/26/85	09:04:02	PST	LT-20504A	0.1524	X	BAD	ACK	ACKNOWLEDGE
12/26/85	09:04:36	PST	LT-20504A	0.2134	X	SUSPECT	ACK	ALARM LIMIT LOW
12/26/85	09:05:00	PST	LT-20504A	0.1524	X	BAD	ALARM	INSTRUMENT LOW
12/26/85	09:05:40	PST	LT-20504A	0.1524	X	BAD	ACK	ACKNOWLEDGE
12/26/85	09:05:59	PST	LT-20504A	0.1524	X	SUSPECT	ACK	ALARM LIMIT LOW
12/26/85	09:06:32	PST	LT-20504A	0.1524	X	BAD	ALARM	INSTRUMENT LOW
12/26/85	09:07:08	PST	LT-20504A	0.2134	X	SUSPECT	ALARM	ALARM LIMIT LOW
12/26/85	09:08:06	PST	LT-20504A	0.1524	X	BAD	ALARM	INSTRUMENT LOW
12/26/85	09:08:32	PST	LT-20504A	0.1524	X	BAD	ACK	ACKNOWLEDGE
12/26/85	09:08:52	PST	LT-20504A	0.1031	X	SUSPECT	ACK	ALARM LIMIT LOW
12/26/85	09:09:39	PST	LT-20504A	0.1031	X	BAD	ALARM	INSTRUMENT LOW
12/26/85	09:10:11	PST	LT-20504A	0.1031	X	SUSPECT	ALARM	ALARM LIMIT LOW
12/26/85	09:11:00	PST	LT-20504A	0.1031	X	BAD	ALARM	INSTRUMENT LOW
12/26/85	09:11:30	PST	LT-20504A	0.1221	X	SUSPECT	ALARM	ALARM LIMIT LOW
12/26/85	09:12:41	PST	LT-20504A	0.1221	X	GOOD	ACK	ACKNOWLEDGE
12/26/85	09:12:49	PST	LT-20504A	0.1221	X	BAD	ALARM	INSTRUMENT LOW
12/26/85	09:13:07	PST	LT-20504A	0.1221	X	SUSPECT	ALARM	ALARM LIMIT LOW
12/26/85	09:14:06	PST	LT-20504A	0.1221	X	GOOD	ALARM	ALARM STATE
12/26/85	09:14:10	PST	GT054	RCG PRESS <-450 WITHOUT LTOP	YES	GOOD	RETURN	RETURN TO NORMAL
12/26/85	09:14:19	PST	GT054	RCG PRESS <-450 WITHOUT LTOP	NO	GOOD	ALARM	INSTRUMENT LOW
12/26/85	09:14:41	PST	LT-20504A	0.0155E-01	X	BAD	ACK	ACKNOWLEDGE
12/26/85	09:15:20	PST	LT-20504A	0.1221	X	BAD	ACK	ALARM LIMIT LOW
12/26/85	09:15:33	PST	LT-20504A	0.1031	X	SUSPECT	ALARM	INSTRUMENT LOW
12/26/85	09:16:00	PST	LT-20504A	0.1031	X	BAD	ACK	ACKNOWLEDGE
12/26/85	09:16:25	PST	LT-20504A	0.1031	X	SUSPECT	ACK	ALARM LIMIT LOW
12/26/85	09:17:02	PST	LT-20504A	0.1524	X	BAD	ALARM	INSTRUMENT LOW
12/26/85	09:17:25	PST	LT-20504A	0.1524	X	GOOD	ALARM	ALARM STATE
12/26/85	09:17:32	PST	LT-20504A	0.1524	X	SUSPECT	ALARM	ALARM STATE
12/26/85	09:17:32	PST	LT-20504A	0.1524	X	GOOD	RETURN	RETURN TO NORMAL
12/26/85	09:18:17	PST	LT-20504A	0.1524	X	GOOD	ALARM	ALARM STATE
12/26/85	09:18:24	PST	LT-20504A	0.1524	X	GOOD	NORMAL	NORMAL
12/26/85	09:18:24	PST	LT-20504A	0.1524	X	GOOD	NORMAL	NORMAL
12/26/85	09:18:24	PST	LT-20504A	0.1524	X	GOOD	NORMAL	NORMAL
12/26/85	09:18:25	PST	LT-20504A	0.1524	X	GOOD	NORMAL	NORMAL
12/26/85	09:18:25	PST	LT-20504A	0.1524	X	GOOD	NORMAL	NORMAL
12/26/85	09:18:25	PST	LT-20504A	0.1524	X	GOOD	NORMAL	NORMAL
12/26/85	09:18:25	PST	LT-20504A	0.1524	X	GOOD	NORMAL	NORMAL
12/26/85	09:18:25	PST	LT-20504A	0.1524	X	GOOD	NORMAL	NORMAL
12/26/85	09:18:25	PST	LT-20504A	0.1524	X	GOOD	NORMAL	NORMAL
12/26/85	09:18:25	PST	LT-20504A	0.1524	X	GOOD	NORMAL	NORMAL
12/26/85	09:18:25	PST	LT-20504A	0.1524	X	GOOD	NORMAL	NORMAL
12/26/85	09:18:25	PST	LT-20504A	0.1524	X	GOOD	NORMAL	NORMAL
12/26/85	09:18:25	PST	LT-20504A	0.1524	X	GOOD	NORMAL	NORMAL
12/26/85	09:18:25	PST	LT-20504A	0.1524	X	GOOD	NORMAL	NORMAL
12/26/85	09:18:25	PST	LT-20504A	0.1524	X	GOOD	NORMAL	NORMAL
12/26/85	09:18:25	PST	LT-20504A	0.1524	X	GOOD	NORMAL	NORMAL
12/26/85	09:18:25	PST	LT-20504A	0.1524	X	GOOD	NORMAL	NORMAL
12/26/85	09:18:25	PST	LT-20504A	0.1524	X	GOOD	NORMAL	NORMAL
12/26/85	09:18:25	PST	LT-20504A	0.1524	X	GOOD	NORMAL	NORMAL
12/26/85	09:18:25	PST	LT-20504A	0.1524	X	GOOD	NORMAL	NORMAL
12/26/85	09:18:25	PST	LT-20504A	0.1524	X	GOOD	NORMAL	NORMAL
12/26/85	09:18:25	PST	LT-20504A	0.1524	X	GOOD	NORMAL	NORMAL
12/26/85	09:18:25	PST	LT-20504A	0.1524	X	GOOD	NORMAL	NORMAL
12/26/85	09:18:25	PST	LT-20504A	0.1524	X	GOOD	NORMAL	NORMAL
12/26/85	09:18:25	PST	LT-20504A	0.1524	X	GOOD	NORMAL	NORMAL
12/26/85	09:18:25	PST	LT-20504A	0.1524	X	GOOD	NORMAL	NORMAL
12/26/85	09:18:25	PST	LT-20504A	0.1524	X	GOOD	NORMAL	NORMAL
12/26/85	09:18:25	PST	LT-20504A	0.1524	X	GOOD	NORMAL	NORMAL
12/26/85	09:18:25	PST	LT-20504A	0.1524	X	GOOD	NORMAL	NORMAL
12/26/85	09:18:25	PST	LT-20504A	0.1524	X	GOOD	NORMAL	NORMAL
12/26/85	09:18:25	PST	LT-20504A	0.1524	X	GOOD	NORMAL	NORMAL
12/26/85	09:18:25	PST	LT-20504A	0.1524	X	GOOD	NORMAL	NORMAL
12/26/85	09:18:25	PST	LT-20504A	0.1524	X	GOOD	NORMAL	NORMAL
12/26/85	09:18:25	PST	LT-20504A	0.1524	X	GOOD	NORMAL	NORMAL
12/26/85	09:18:25	PST	LT-20504A	0.1524	X	GOOD	NORMAL	NORMAL
12/26/85	09:18:25	PST	LT-20504A	0.1524	X	GOOD	NORMAL	NORMAL
12/26/85	09:18:25	PST	LT-20504A	0.1524	X	GOOD	NORMAL	NORMAL
12/26/85	09:18:25	PST	LT-20504A	0.1524	X	GOOD	NORMAL	NORMAL
12/26/85	09:18:25	PST	LT-20504A	0.1524	X	GOOD	NORMAL	NORMAL
12/26/85	09:18:25	PST	LT-20504A	0.1524	X	GOOD	NORMAL	NORMAL
12/26/85	09:18:25	PST	LT-20504A	0.1524	X	GOOD	NORMAL	NORMAL
12/26/85	09:18:25	PST	LT-20504A	0.1524	X	GOOD	NORMAL	NORMAL
12/26/85	09:18:25	PST	LT-20504A	0.1524	X	GOOD	NORMAL	NORMAL
12/26/85	09:18:25	PST	LT-20504A	0.1524	X	GOOD	NORMAL	NORMAL
12/26/85	09:18:25	PST	LT-20504A	0.1524	X	GOOD	NORMAL	NORMAL
12/26/85	09:18:25	PST	LT-20504A	0.1524	X	GOOD	NORMAL	NORMAL
12/26/85	09:18:25	PST	LT-20504A	0.1524	X	GOOD	NORMAL	NORMAL
12/26/85	09:18:25	PST	LT-20504A	0.1524	X	GOOD	NORMAL	NORMAL
12/26/85	09:18:25	PST	LT-20504A	0.1524	X	GOOD	NORMAL	NORMAL
12/26/85	09:18:25	PST	LT-20504A	0.1524	X	GOOD	NORMAL	NORMAL
12/26/85	09:18:25	PST	LT-20504A	0.1524	X	GOOD	NORMAL	NORMAL
12/26/85	09:18:25	PST	LT-20504A	0.1524	X	GOOD	NORMAL	NORMAL
12/26/85	09:18:25	PST	LT-20504A	0.1524	X	GOOD	NORMAL	NORMAL
12/26/85	09:18:25	PST	LT-20504A	0.1524	X	GOOD	NORMAL	NORMAL

DATE	TIME	TYPE	DESCRIPTION	LT-103370	0.1221	2	SUSPECT	ACK	RETURN TO NORMAL
12/26/05	11:17:31 PGT	X0075	TROUBLE: ZONE 75-NGCB SWGR RM B	TROUBLE	GOOD	ALARM	ALARM STATE		
12/26/05	11:18:16 PGT	X0075	TROUBLE: ZONE 75-NGCB SWGR RM B	NORMAL	GOOD	RETURN	RETURN TO NORMAL		
12/26/05	11:18:16 PGT	X0076	TROUBLE: ZONE 76-NGCB SWGR RM A	TROUBLE	GOOD	ALARM	ALARM STATE		
12/26/05	11:18:33 PGT	X0076	TROUBLE: ZONE 76-NGCB SWGR RM B		GOOD	NORMAL	NORMAL		
12/26/05	11:18:33 PGT	X0076	TROUBLE: ZONE 76-NGCB SWGR RM A		GOOD	ACK	ACKNOWLEDGE		
12/26/05	11:19:14 PGT	X0076	TROUBLE: ZONE 76-NGCB SWGR RM A	NORMAL	GOOD	NORMAL	NORMAL		
12/26/05	11:20:14 PGT	X0077	TROUBLE: ZONE 77-NGCB B ELEC EOPT	TROUBLE	GOOD	ALARM	ALARM STATE		
12/26/05	11:20:47 PGT	X0077	TROUBLE: ZONE 77-NGCB B ELEC EOPT	NORMAL	GOOD	RETURN	RETURN TO NORMAL		
12/26/05	11:20:47 PGT	X0070	TROUBLE: ZONE 70-NGCB A ELEC EOPT	TROUBLE	GOOD	ALARM	ALARM STATE		
12/26/05	11:21:14 PGT	L1003	OTGG B OPR RING	LT-20504A	0.3050E-01	X	BAD	ALARM	INSTRUMENT LOW
12/26/05	11:21:17 PGT	X0070	TROUBLE: ZONE 70-NGCB A ELEC EOPT	NORMAL	GOOD	RETURN	RETURN TO NORMAL		
12/26/05	11:21:27 PGT	L1003	OTGG B OPR RING	LT-20504A	0.3050E-01	X	SUSPECT	ALARM	ALARM LIMIT LOW
12/26/05	11:21:29 PGT	L1003	OTGG B OPR RING	LT-20504A	0.3050E-01	X	BAD	ALARM	INSTRUMENT LOW
12/26/05	11:21:31 PGT	L1003	OTGG B OPR RING	LT-20504A	0.3050E-01	X	SUSPECT	ALARM	ALARM LIMIT LOW
12/26/05	11:21:37 PGT	L1003	OTGG B OPR RING	LT-20504A	0.3050E-01	X	BAD	ALARM	INSTRUMENT LOW
12/26/05	11:21:39 PGT	L1003	OTGG B OPR RING	LT-20504A	0.3050E-01	X	SUSPECT	ALARM	ALARM LIMIT LOW
12/26/05	11:22:31 PGT	L1003	OTGG B OPR RING	LT-20504A	0.1526	X	BAD	ALARM	INSTRUMENT LOW
12/26/05	11:23:45 PGT	L1003	OTGG B OPR RING	LT-20504A	0.3050E-01	X	SUSPECT	ALARM	ALARM LIMIT LOW
12/26/05	11:23:47 PGT	L1003	OTGG B OPR RING	LT-20504A			SUSPECT	ACK	ACKNOWLEDGE
12/26/05	11:25:12 PGT	L1003	OTGG B OPR RING	LT-20504A	0.1221	X	BAD	ALARM	INSTRUMENT LOW
12/26/05	11:25:14 PGT	L1003	OTGG B OPR RING	LT-20504A	0.4103E-01	X	SUSPECT	ALARM	ALARM LIMIT LOW
12/26/05	11:25:20 PGT	L1003	OTGG B OPR RING	LT-20504A	0.4103E-01	X	BAD	ALARM	INSTRUMENT LOW
12/26/05	11:25:21 PGT	L1003	OTGG B OPR RING	LT-20504A	0.3050E-01	X	SUSPECT	ALARM	ALARM LIMIT LOW
12/26/05	11:25:21 PGT	L1003	OTGG B OPR RING	LT-20504A			SUSPECT	ACK	ACKNOWLEDGE
12/26/05	11:26:46 PGT	PLEVTPNT	PLANT EVENT POINT	TRIPPED	SUSPECT	ACK	ALARM STATE		
12/26/05	11:27:38 PGT	PLEVTPNT	PLANT EVENT POINT	TRIPPED	BAD	ALARM	CONVERSION BAD		
12/26/05	11:28:25 PGT	PLEVTPNT	PLANT EVENT POINT	TRIPPED	SUSPECT	ALARM	ALARM STATE		
12/26/05	12:00:29 PGT	L1003	OTGG B OPR RING	LT-20504A	0.4103E-01	X	BAD	ALARM	INSTRUMENT LOW
12/26/05	12:00:35 PGT	L1003	OTGG B OPR RING	LT-20504A	0.3050E-01	X	SUSPECT	ALARM	ALARM LIMIT LOW
12/26/05	12:00:36 PGT	L1003	OTGG B OPR RING	LT-20504A	0.3050E-01	X	BAD	ALARM	INSTRUMENT LOW
12/26/05	12:00:38 PGT	L1003	OTGG B OPR RING	LT-20504A	0.4103E-01	X	SUSPECT	ALARM	ALARM LIMIT LOW
12/26/05	12:00:45 PGT	PLEVTPNT	PLANT EVENT POINT		GOOD	ACK	ACKNOWLEDGE		
12/26/05	12:00:57 PGT	L1003	OTGG B OPR RING	LT-20504A			GOOD	ACK	ACKNOWLEDGE
12/26/05	12:17:31 PGT	X0076	TROUBLE: ZONE 76-NGCB SWGR RM B	TROUBLE	GOOD	ALARM	ALARM STATE		
12/26/05	12:18:16 PGT	X0076	TROUBLE: ZONE 76-NGCB SWGR RM B	NORMAL	GOOD	RETURN	RETURN TO NORMAL		
12/26/05	12:18:16 PGT	X0076	TROUBLE: ZONE 76-NGCB SWGR RM A	TROUBLE	GOOD	ALARM	ALARM STATE		
12/26/05	12:18:26 PGT	L1003	OTGG B OPR RING	LT-20504A	0.4103E-01	X	BAD	ALARM	INSTRUMENT LOW
12/26/05	12:18:33 PGT	L1003	OTGG B OPR RING	LT-20504A			BAD	ACK	ACKNOWLEDGE
12/26/05	12:18:44 PGT	L1003	OTGG B OPR RING	LT-20504A	0.3050E-01	X	SUSPECT	ACK	ALARM LIMIT LOW
12/26/05	12:18:52 PGT	X0075	TROUBLE: ZONE 75-NGCB SWGR RM B		GOOD	NORMAL	NORMAL		
12/26/05	12:18:52 PGT	X0076	TROUBLE: ZONE 76-NGCB SWGR RM A		GOOD	ACK	ACKNOWLEDGE		
12/26/05	12:18:52 PGT	X0077	TROUBLE: ZONE 77-NGCB B ELEC EOPT		GOOD	NORMAL	NORMAL		
12/26/05	12:18:52 PGT	X0070	TROUBLE: ZONE 70-NGCB A ELEC EOPT		GOOD	NORMAL	NORMAL		
12/26/05	12:19:00 PGT	L1003	OTGG B OPR RING	LT-20504A	0.3050E-01	X	BAD	ALARM	INSTRUMENT LOW
12/26/05	12:19:03 PGT	L1003	OTGG B OPR RING	LT-20504A	0.3050E-01	X	SUSPECT	ALARM	ALARM LIMIT LOW
12/26/05	12:19:04 PGT	L1003	OTGG B OPR RING	LT-20504A	0.3050E-01	X	BAD	ALARM	INSTRUMENT LOW
12/26/05	12:19:10 PGT	L1003	OTGG B OPR RING	LT-20504A	0.3050E-01	X	SUSPECT	ALARM	ALARM LIMIT LOW
12/26/05	12:19:11 PGT	L1003	OTGG B OPR RING	LT-20504A	0.3050E-01	X	BAD	ALARM	INSTRUMENT LOW
12/26/05	12:19:15 PGT	L1003	OTGG B OPR RING	LT-20504A			BAD	ACK	ACKNOWLEDGE
12/26/05	12:19:16 PGT	L1003	OTGG B OPR RING	LT-20504A	0.4103E-01	X	SUSPECT	ACK	ALARM LIMIT LOW
12/26/05	12:19:16 PGT	X0076	TROUBLE: ZONE 76-NGCB SWGR RM A	NORMAL	GOOD	NORMAL	NORMAL		
12/26/05	12:19:51 PGT	L1003	OTGG B OPR RING	LT-20504A	0.4103E-01	X	BAD	ALARM	INSTRUMENT LOW
12/26/05	12:19:54 PGT	L1003	OTGG B OPR RING	LT-20504A	0.4103E-01	X	SUSPECT	ALARM	ALARM LIMIT LOW
12/26/05	12:19:55 PGT	L1003	OTGG B OPR RING	LT-20504A	0.4103E-01	X	BAD	ALARM	INSTRUMENT LOW
12/26/05	12:20:04 PGT	L1003	OTGG B OPR RING	LT-20504A			BAD	ACK	ACKNOWLEDGE
12/26/05	12:20:06 PGT	L1003	OTGG B OPR RING	LT-20504A	0.4103E-01	X	SUSPECT	ACK	ALARM LIMIT LOW
12/26/05	12:20:31 PGT	X0077	TROUBLE: ZONE 77-NGCB B ELEC EOPT	TROUBLE	GOOD	ALARM	ALARM STATE		
12/26/05	12:20:51 PGT	X0077	TROUBLE: ZONE 77-NGCB B ELEC EOPT		GOOD	ACK	ACKNOWLEDGE		
12/26/05	12:20:52 PGT	L1003	OTGG B OPR RING	LT-20504A	0.3050E-01	X	BAD	ALARM	INSTRUMENT LOW
12/26/05	12:20:59 PGT	L1003	OTGG B OPR RING	LT-20504A			BAD	ACK	ACKNOWLEDGE
12/26/05	12:21:16 PGT	X0077	TROUBLE: ZONE 77-NGCB B ELEC EOPT	NORMAL	GOOD	NORMAL	NORMAL		
12/26/05	12:21:16 PGT	X0070	TROUBLE: ZONE 70-NGCB A ELEC EOPT	TROUBLE	GOOD	ALARM	ALARM STATE		
12/26/05	12:21:30 PGT	L1003	OTGG B OPR RING	LT-20504A	0.3050E-01	X	SUSPECT	ACK	ALARM LIMIT LOW
12/26/05	12:21:39 PGT	L1003	OTGG B OPR RING	LT-20504A	0.3050E-01	X	BAD	ALARM	INSTRUMENT LOW
12/26/05	12:21:44 PGT	X0070	TROUBLE: ZONE 70-NGCB A ELEC EOPT	NORMAL	GOOD	RETURN	RETURN TO NORMAL		

DATE/TIME	OPERATOR	STATUS	DESCRIPTION	ALARM	ACKNOWLEDGE	REFERENCE
12/26/05 09:20:35	PST	G1007	CH A MAIN TURBINE TRIP	NORMAL	NORMAL	
12/26/05 09:20:47	PST	X0077	TRouble, ZONE 77-NGCD B ELEC COPT	ALARM	ALARM STATE	
12/26/05 09:20:47	PST	X0070	TRouble, ZONE 70-NGCD A ELEC COPT	RETURN	RETURN TO NORMAL	
12/26/05 09:20:49	PST	G9004	POWER RANGE A	BAD	ACK	ACKNOWLEDGE
12/26/05 09:21:04	PST	X0075	TRouble, ZONE 75-NGCD SWGR RM B	GOOD	NORMAL	NORMAL
12/26/05 09:21:04	PST	X0076	TRouble, ZONE 76-NGCD SWGR RM A	GOOD	NORMAL	NORMAL
12/26/05 09:21:04	PST	X0077	TRouble, ZONE 77-NGCD B ELEC COPT	GOOD	ACK	ACKNOWLEDGE
12/26/05 09:21:04	PST	X0070	TRouble, ZONE 70-NGCD A ELEC COPT	GOOD	NORMAL	NORMAL
12/26/05 09:21:17	PST	X0077	TRouble, ZONE 77-NGCD B ELEC COPT	NORMAL	NORMAL	NORMAL
12/26/05 09:21:30	PST	L1003	OTCG B OPR RNG LT-20504A 0.1526 %	SUSPECT	ACK	ALARM LIMIT LOW
12/26/05 09:21:54	PST	L1003	OTCG B OPR RNG LT-20504A 0.1526 %	BAD	ALARM	INSTRUMENT LOW
12/26/05 09:22:06	PST	L1003	OTCG B OPR RNG LT-20504A	BAD	ACK	ACKNOWLEDGE
12/26/05 09:22:56	PST	L1003	OTCG B OPR RNG LT-20504A 0.1526 %	SUSPECT	ACK	ALARM LIMIT LOW
12/26/05 09:23:20	PST	L1003	OTCG B OPR RNG LT-20504A 0.9155E-01 %	BAD	ALARM	INSTRUMENT LOW
12/26/05 09:23:36	PST	L1003	OTCG B OPR RNG LT-20504A	BAD	ACK	ACKNOWLEDGE
12/26/05 09:24:22	PST	L1003	OTCG B OPR RNG LT-20504A 0.1526 %	SUSPECT	ACK	ALARM LIMIT LOW
12/26/05 09:24:44	PST	L1003	OTCG B OPR RNG LT-20504A 0.1221 %	BAD	ALARM	INSTRUMENT LOW
12/26/05 09:24:52	PST	G1011	CH B MFP TRIP BYPASS	NORMAL	NORMAL	NORMAL
12/26/05 09:24:52	PST	G1013	CH B MAIN TURBINE BYPASS	NORMAL	NORMAL	NORMAL
12/26/05 09:24:53	PST	G1011	CH B MFP TRIP BYPASS	BYPASSED	ALARM	ALARM STATE
12/26/05 09:24:53	PST	G1013	CH B MAIN TURBINE BYPASS	BYPASSED	ALARM	ALARM STATE
12/26/05 09:25:26	PST	G9005	POWER RANGE B 4.151 %FP	SUSPECT	NORMAL	NORMAL
12/26/05 09:25:40	PST	L1003	OTCG B OPR RNG LT-20504A 0.1221 %	SUSPECT	ALARM	ALARM LIMIT LOW
12/26/05 09:25:50	PST	G9005	POWER RANGE B 4.426 %FP	BAD	ALARM	INSTRUMENT LOW
12/26/05 09:26:00	PST	L1003	OTCG B OPR RNG LT-20504A 0.1221 %	BAD	ALARM	INSTRUMENT LOW
12/26/05 09:26:17	PST	L1003	OTCG B OPR RNG LT-20504A	BAD	ACK	ACKNOWLEDGE
12/26/05 09:26:26	PST	G1011	CH B MFP TRIP BYPASS	NORMAL	GOOD	RETURN TO NORMAL
12/26/05 09:26:26	PST	G1013	CH B MAIN TURBINE BYPASS	NORMAL	GOOD	RETURN TO NORMAL
12/26/05 09:26:27	PST	G1011	CH B MFP TRIP BYPASS	BYPASSED	GOOD	ALARM STATE
12/26/05 09:26:27	PST	G1013	CH B MAIN TURBINE BYPASS	BYPASSED	GOOD	ALARM STATE
12/26/05 09:26:34	PST	G1011	CH B MFP TRIP BYPASS	GOOD	ACK	ACKNOWLEDGE
12/26/05 09:26:35	PST	G1013	CH B MAIN TURBINE BYPASS	GOOD	ACK	ACKNOWLEDGE
12/26/05 09:26:44	PST	G9005	POWER RANGE B	BAD	ACK	ACKNOWLEDGE
12/26/05 09:27:16	PST	L1003	OTCG B OPR RNG LT-20504A 0.1221 %	SUSPECT	ACK	ALARM LIMIT LOW
12/26/05 09:27:35	PST	L1003	OTCG B OPR RNG LT-20504A 0.1221 %	BAD	ALARM	INSTRUMENT LOW
12/26/05 09:27:52	PST	L1003	OTCG B OPR RNG LT-20504A	BAD	ACK	ACKNOWLEDGE
12/26/05 09:28:43	PST	L1003	OTCG B OPR RNG LT-20504A 0.1526 %	SUSPECT	ACK	ALARM LIMIT LOW
12/26/05 09:29:02	PST	L1003	OTCG B OPR RNG LT-20504A 0.1526 %	BAD	ALARM	INSTRUMENT LOW
12/26/05 09:30:06	PST	G9006	POWER RANGE C 3.907 %FP	SUSPECT	NORMAL	NORMAL
12/26/05 09:30:07	PST	L1003	OTCG B OPR RNG LT-20504A 0.4103E-01 %	SUSPECT	ALARM	ALARM LIMIT LOW
12/26/05 09:30:23	PST	L1003	OTCG B OPR RNG LT-20504A 0.4103E-01 %	BAD	ALARM	INSTRUMENT LOW
12/26/05 09:30:53	PST	G9006	POWER RANGE C 3.724 %FP	BAD	ALARM	INSTRUMENT LOW
12/26/05 09:31:20	PST	L1003	OTCG B OPR RNG LT-20504A	BAD	ACK	ACKNOWLEDGE
12/26/05 09:31:31	PST	L1003	OTCG B OPR RNG LT-20504A 0.9155E-01 %	SUSPECT	ACK	ALARM LIMIT LOW
12/26/05 09:31:40	PST	G9006	POWER RANGE C	BAD	ACK	ACKNOWLEDGE
12/26/05 09:31:50	PST	L1003	OTCG B OPR RNG LT-20504A 0.9155E-01 %	BAD	ALARM	INSTRUMENT LOW
12/26/05 09:32:08	PST	L1003	OTCG B OPR RNG LT-20504A 0.9155E-01 %	SUSPECT	ALARM	ALARM LIMIT LOW
12/26/05 09:33:05	PST	L1003	OTCG B OPR RNG LT-20504A	GOOD	ACK	ACKNOWLEDGE
12/26/05 09:33:16	PST	L1003	OTCG B OPR RNG LT-20504A 0.9155E-01 %	BAD	ALARM	INSTRUMENT LOW
12/26/05 09:34:20	PST	L1003	OTCG B OPR RNG LT-20504A 0.1221 %	SUSPECT	ALARM	ALARM LIMIT LOW
12/26/05 09:34:26	PST	G9007	POWER RANGE D 3.999 %FP	SUSPECT	NORMAL	NORMAL
12/26/05 09:34:37	PST	L1003	OTCG B OPR RNG LT-20504A 0.9155E-01 %	BAD	ALARM	INSTRUMENT LOW
12/26/05 09:35:11	PST	G9007	POWER RANGE D 0.3663 %FP	BAD	ALARM	INSTRUMENT LOW
12/26/05 09:35:46	PST	L1003	OTCG B OPR RNG LT-20504A 0.1526 %	SUSPECT	ALARM	ALARM LIMIT LOW
12/26/05 09:36:02	PST	L1003	OTCG B OPR RNG LT-20504A 0.1221 %	BAD	ALARM	INSTRUMENT LOW
12/26/05 09:36:07	PST	L1003	OTCG B OPR RNG LT-20504A	BAD	ACK	ACKNOWLEDGE
12/26/05 09:36:25	PST	G9007	POWER RANGE D	BAD	ACK	ACKNOWLEDGE
12/26/05 09:37:11	PST	L1003	OTCG B OPR RNG LT-20504A 0.9155E-01 %	SUSPECT	ACK	ALARM LIMIT LOW
12/26/05 09:37:31	PST	L1003	OTCG B OPR RNG LT-20504A 0.1526 %	BAD	ALARM	INSTRUMENT LOW
12/26/05 09:38:39	PST	L1003	OTCG B OPR RNG LT-20504A 0.1526 %	SUSPECT	ALARM	ALARM LIMIT LOW
12/26/05 09:39:55	PST	L1003	OTCG B OPR RNG LT-20504A 0.1221 %	BAD	ALARM	INSTRUMENT LOW
12/26/05 09:40:04	PST	L1003	OTCG B OPR RNG LT-20504A 0.9155E-01 %	SUSPECT	ALARM	ALARM LIMIT LOW
12/26/05 09:40:20	PST	L1003	OTCG B OPR RNG LT-20504A	SUSPECT	ACK	ACKNOWLEDGE
12/26/05 09:40:21	PST	L1003	OTCG B OPR RNG LT-20504A 0.9155E-01 %	BAD	ALARM	INSTRUMENT LOW
12/26/05 09:41:26	PST	L1003	OTCG B OPR RNG LT-20504A 0.9155E-01 %	SUSPECT	ALARM	ALARM LIMIT LOW

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12/26/05	10:21:21	PGT	LT-20504A	0.1221	%	SUSPECT	ACK	ALARM LIMIT LOW	
12/26/05	10:21:46	PGT	LT-20504A	0.1050E-01	%	BAD	ALARM	INSTRUMENT LOW	
12/26/05	10:21:47	PGT	X0075	TROUBLE, ZONE 75-NGED GWR RM B	TROUBLE	GOOD	ALARM	ALARM STATE	
12/26/05	10:21:47	PGT	X0074	TROUBLE, ZONE 74-NGED GWR RM A	TROUBLE	GOOD	ALARM	ALARM STATE	
12/26/05	10:24:47	PGT	X0075	TROUBLE, ZONE 75-NGED GWR RM B	NORMAL	GOOD	RETURN	RETURN TO NORMAL	
12/26/05	10:25:02	PGT	X0074	TROUBLE, ZONE 74-NGED GWR RM A	NORMAL	GOOD	RETURN	RETURN TO NORMAL	
12/26/05	10:25:17	PGT	LT-20504A	0.9155E-01	%	SUSPECT	ALARM	ALARM LIMIT LOW	
12/26/05	10:25:27	PGT	LT-20504A			GOOD	ACK	ACKNOWLEDGE	
12/26/05	10:25:32	PGT	LT-20504A	0.6103E-01	%	BAD	ALARM	INSTRUMENT LOW	
12/26/05	10:26:51	PGT	LT-20504A	0.1221	%	SUSPECT	ALARM	ALARM LIMIT LOW	
12/26/05	10:27:06	PGT	LT-20504A	0.1050E-01	%	BAD	ALARM	INSTRUMENT LOW	
12/26/05	10:28:31	PGT	LT-20504A	0.1221	%	SUSPECT	ALARM	ALARM LIMIT LOW	
12/26/05	10:28:44	PGT	LT-20504A			SUSPECT	ACK	ACKNOWLEDGE	
12/26/05	10:28:47	PGT	LT-20504A	0.6103E-01	%	BAD	ALARM	INSTRUMENT LOW	
12/26/05	10:30:09	PGT	LT-20504A	0.1221	%	SUSPECT	ALARM	ALARM LIMIT LOW	
12/26/05	10:30:20	PGT	LT-20504A	0.9155E-01	%	BAD	ALARM	INSTRUMENT LOW	
12/26/05	10:30:38	PGT	LT-20504A			BAD	ACK	ACKNOWLEDGE	
12/26/05	10:31:50	PGT	LT-20504A	0.1031	%	SUSPECT	ACK	ALARM LIMIT LOW	
12/26/05	10:32:00	PGT	LT-20504A	0.9155E-01	%	BAD	ALARM	INSTRUMENT LOW	
12/26/05	10:33:30	PGT	LT-20504A	0.1221	%	SUSPECT	ALARM	ALARM LIMIT LOW	
12/26/05	10:33:48	PGT	LT-20504A	0.6103E-01	%	BAD	ALARM	INSTRUMENT LOW	
12/26/05	10:35:09	PGT	LT-20504A	0.1221	%	SUSPECT	ALARM	ALARM LIMIT LOW	
12/26/05	10:35:23	PGT	LT-20504A	0.1050E-01	%	BAD	ALARM	INSTRUMENT LOW	
12/26/05	10:36:40	PGT	LT-20504A	0.1526	%	SUSPECT	ALARM	ALARM LIMIT LOW	
12/26/05	10:36:57	PGT	LT-20504A			SUSPECT	ACK	ACKNOWLEDGE	
12/26/05	10:37:03	PGT	LT-20504A	0.6103E-01	%	BAD	ALARM	INSTRUMENT LOW	
12/26/05	10:37:13	PGT	LT-20504A			BAD	ACK	ACKNOWLEDGE	
12/26/05	10:38:20	PGT	LT-20504A	0.1526	%	SUSPECT	ACK	ALARM LIMIT LOW	
12/26/05	10:38:50	PGT	LT-20504A	0.1221	%	BAD	ALARM	INSTRUMENT LOW	
12/26/05	10:40:05	PGT	LT-20504A	0.1526	%	SUSPECT	ALARM	ALARM LIMIT LOW	
12/26/05	10:40:20	PGT	LT-20504A	0.9155E-01	%	BAD	ALARM	INSTRUMENT LOW	
12/26/05	10:40:37	PGT	LT-20504A			BAD	ACK	ACKNOWLEDGE	
12/26/05	10:41:42	PGT	LT-20504A	0.2136	%	SUSPECT	ACK	ALARM LIMIT LOW	
12/26/05	10:42:07	PGT	LT-20504A	0.1221	%	BAD	ALARM	INSTRUMENT LOW	
12/26/05	10:42:19	PGT	LT-20504A	0.1526	%	SUSPECT	ALARM	ALARM LIMIT LOW	
12/26/05	10:42:49	PGT	LT-20504A	0.1221	%	BAD	ALARM	INSTRUMENT LOW	
12/26/05	10:44:59	PGT	LT-20504A	0.1526	%	SUSPECT	ALARM	ALARM LIMIT LOW	
12/26/05	10:45:22	PGT	LT-20504A	0.1221	%	BAD	ALARM	INSTRUMENT LOW	
12/26/05	10:46:37	PGT	LT-20504A	0.1221	%	SUSPECT	ALARM	ALARM LIMIT LOW	
12/26/05	10:47:05	PGT	LT-20504A	0.9155E-01	%	BAD	ALARM	INSTRUMENT LOW	
12/26/05	10:47:16	PGT	LT-20504A			BAD	ACK	ACKNOWLEDGE	
12/26/05	10:48:13	PGT	LT-20504A	0.1526	%	SUSPECT	ACK	ALARM LIMIT LOW	
12/26/05	10:48:41	PGT	LT-20504A	0.9155E-01	%	BAD	ALARM	INSTRUMENT LOW	
12/26/05	10:49:51	PGT	LT-20504A	0.9155E-01	%	SUSPECT	ALARM	ALARM LIMIT LOW	
12/26/05	10:50:31	PGT	X0104	TROUBLE, ZONE 104-TEC	NORMAL	GOOD	NORMAL	NORMAL	
12/26/05	10:50:39	PGT	LT-20504A	0.1221	%	BAD	ALARM	INSTRUMENT LOW	
12/26/05	10:51:46	PGT	LT-20504A	0.1526	%	SUSPECT	ALARM	ALARM LIMIT LOW	
12/26/05	10:52:34	PGT	LT-20504A	0.1526	%	BAD	ALARM	INSTRUMENT LOW	
12/26/05	10:52:46	PGT	LT-20504A			BAD	ACK	ACKNOWLEDGE	
12/26/05	10:53:34	PGT	LT-20504A	0.1221	%	SUSPECT	ACK	ALARM LIMIT LOW	
12/26/05	10:54:26	PGT	LT-20504A	0.1221	%	BAD	ALARM	INSTRUMENT LOW	
12/26/05	10:54:34	PGT	LT-20504A			BAD	ACK	ACKNOWLEDGE	
12/26/05	10:55:15	PGT	P9052	RR PRESSURE	PT-57622	133.7	PGTG	GOOD	ALARM LIMIT HIGH
12/26/05	10:55:16	PGT	P9052	RR PRESSURE	PT-57622	0.2604E-01	PGTG	GOOD	RETURN
12/26/05	10:55:24	PGT	LT-20504A	0.1221	%	SUSPECT	ACK	ALARM LIMIT LOW	
12/26/05	10:56:14	PGT	LT-20504A	0.1221	%	BAD	ALARM	INSTRUMENT LOW	
12/26/05	10:56:23	PGT	LT-20504A			BAD	ACK	ACKNOWLEDGE	
12/26/05	10:57:11	PGT	LT-20504A	0.1221	%	SUSPECT	ACK	ALARM LIMIT LOW	
12/26/05	10:58:01	PGT	LT-20504A	0.1221	%	BAD	ALARM	INSTRUMENT LOW	
12/26/05	10:59:00	PGT	LT-20504A	0.1221	%	SUSPECT	ALARM	ALARM LIMIT LOW	
12/26/05	10:59:20	PGT	LT-20504A			GOOD	ACK	ACKNOWLEDGE	
12/26/05	11:00:02	PGT	LT-20504A	0.1221	%	BAD	ALARM	INSTRUMENT LOW	
12/26/05	11:00:09	PGT	LT-20504A			BAD	ACK	ACKNOWLEDGE	
12/26/05	11:01:01	PGT	X0077	TROUBLE, ZONE 77-NGED B ELEC EOPT	TROUBLE	GOOD	ALARM	ALARM STATE	
12/26/05	11:01:02	PGT	LT-20504A	0.1221	%	SUSPECT	ACK	ALARM LIMIT LOW	
12/26/05	11:01:16	PGT	X0076	TROUBLE, ZONE 76-NGED GWR RM B		GOOD	NORMAL	NORMAL	

12/26/05	11:01:16 PGT	X0072	TRouble: ZONE 74-NGED SWGR RM A	GOOD	NORMAL	NORMAL
12/26/05	11:01:16 PGT	X0072	TRouble: ZONE 77-NGED B ELEC EQPT	GOOD	ACK	ACKNOWLEDGE
12/26/05	11:01:20 PGT	F9052	RD FREQUENCY	GOOD	NORMAL	NORMAL
12/26/05	11:01:50 PGT	L1003	OTGG B OPR RNG LT-20504A 0.1524 X	BAD	ALARM	INSTRUMENT LOW
12/26/05	11:02:00 PGT	L1003	OTGG B OPR RNG LT-20504A 0.3050E-01 X	SUSPECT	ALARM	ALARM LIMIT LOW
12/26/05	11:02:01 PGT	X0077	TRouble: ZONE 77-NGED B ELEC EQPT	NORMAL	NORMAL	NORMAL
12/26/05	11:02:01 PGT	X0070	TRouble: ZONE 70-NGED A ELEC EQPT	GOOD	ALARM	ALARM STATE
12/26/05	11:02:03 PGT	L1003	OTGG B OPR RNG LT-20504A 0.3050E-01 X	BAD	ALARM	INSTRUMENT LOW
12/26/05	11:02:04 PGT	L1003	OTGG B OPR RNG LT-20504A	BAD	ACK	ACKNOWLEDGE
12/26/05	11:02:17 PGT	X0070	TRouble: ZONE 70-NGED A ELEC EQPT	GOOD	ACK	ACKNOWLEDGE
12/26/05	11:02:46 PGT	X0070	TRouble: ZONE 70-NGED A ELEC EQPT	GOOD	NORMAL	NORMAL
12/26/05	11:02:54 PGT	L1003	OTGG B OPR RNG LT-20504A 0.9155E-01 X	SUSPECT	ACK	ALARM LIMIT LOW
12/26/05	11:03:01 PGT	X0104	EYE ACT: ZONE 104-TCG	NORMAL	GOOD	NORMAL
12/26/05	11:03:14 PGT	X0075	TRouble: ZONE 75-NGED SWGR RM B	GOOD	NORMAL	NORMAL
12/26/05	11:03:20 PGT	X0075	TRouble: ZONE 75-NGED SWGR RM B	GOOD	ALARM	ALARM STATE
12/26/05	11:03:51 PGT	L1003	OTGG B OPR RNG LT-20504A 0.1524 X	BAD	ALARM	INSTRUMENT LOW
12/26/05	11:04:00 PGT	L1003	OTGG B OPR RNG LT-20504A	BAD	ACK	ACKNOWLEDGE
12/26/05	11:04:45 PGT	L1003	OTGG B OPR RNG LT-20504A 0.1221 X	SUSPECT	ACK	ALARM LIMIT LOW
12/26/05	11:05:14 PGT	X0075	TRouble: ZONE 75-NGED SWGR RM B	NORMAL	GOOD	NORMAL
12/26/05	11:05:40 PGT	L1003	OTGG B OPR RNG LT-20504A 0.2124 X	BAD	ALARM	INSTRUMENT LOW
12/26/05	11:06:17 PGT	FLEVTENT	PLANT EVENT POINT	BAD	ALARM	CONVERGION BAD
12/26/05	11:06:33 PGT	FLEVTENT	PLANT EVENT POINT	BAD	ACK	ACKNOWLEDGE
12/26/05	11:06:35 PGT	L1003	OTGG B OPR RNG LT-20504A 0.3050E-01 X	SUSPECT	ALARM	ALARM LIMIT LOW
12/26/05	11:06:49 PGT	L1003	OTGG B OPR RNG LT-20504A	SUSPECT	ACK	ACKNOWLEDGE
12/26/05	11:07:44 PGT	L1003	OTGG B OPR RNG LT-20504A 0.1524 X	BAD	ALARM	INSTRUMENT LOW
12/26/05	11:08:07 PGT	L1003	OTGG B OPR RNG LT-20504A	BAD	ACK	ACKNOWLEDGE
12/26/05	11:08:20 PGT	L1003	OTGG B OPR RNG LT-20504A 0.3050E-01 X	SUSPECT	ACK	ALARM LIMIT LOW
12/26/05	11:08:24 PGT	L1003	OTGG B OPR RNG LT-20504A 0.3050E-01 X	BAD	ALARM	INSTRUMENT LOW
12/26/05	11:08:27 PGT	L1003	OTGG B OPR RNG LT-20504A 0.6103E-01 X	SUSPECT	ALARM	ALARM LIMIT LOW
12/26/05	11:09:05 PGT	L1003	OTGG B OPR RNG LT-20504A 0.1524 X	EAD	ALARM	INSTRUMENT LOW
12/26/05	11:09:47 PGT	L1003	OTGG B OPR RNG LT-20504A 0.3050E-01 X	SUSPECT	ALARM	ALARM LIMIT LOW
12/26/05	11:09:40 PGT	L1003	OTGG B OPR RNG LT-20504A 0.3050E-01 X	BAD	ALARM	INSTRUMENT LOW
12/26/05	11:09:49 PGT	L1003	OTGG B OPR RNG LT-20504A 0.6103E-01 X	SUSPECT	ALARM	ALARM LIMIT LOW
12/26/05	11:09:53 PGT	L1003	OTGG B OPR RNG LT-20504A 0.6103E-01 X	BAD	ALARM	INSTRUMENT LOW
12/26/05	11:09:55 PGT	L1003	OTGG B OPR RNG LT-20504A 0.3050E-01 X	SUSPECT	ALARM	ALARM LIMIT LOW
12/26/05	11:09:50 PGT	L1003	OTGG B OPR RNG LT-20504A	SUSPECT	ACK	ACKNOWLEDGE
12/26/05	11:09:59 PGT	L1003	OTGG B OPR RNG LT-20504A 0.3050E-01 X	BAD	ALARM	INSTRUMENT LOW
12/26/05	11:10:02 PGT	L1003	OTGG B OPR RNG LT-20504A	BAD	ACK	ACKNOWLEDGE
12/26/05	11:10:24 PGT	L1003	OTGG B OPR RNG LT-20504A 0.1524 X	SUSPECT	ACK	ALARM LIMIT LOW
12/26/05	11:11:27 PGT	L1003	OTGG B OPR RNG LT-20504A 0.1524 X	BAD	ALARM	INSTRUMENT LOW
12/26/05	11:11:36 PGT	L1003	OTGG B OPR RNG LT-20504A	BAD	ACK	ACKNOWLEDGE
12/26/05	11:11:36 PGT	L1003	OTGG B OPR RNG LT-20504A 0.3050E-01 X	SUSPECT	ACK	ALARM LIMIT LOW
12/26/05	11:11:39 PGT	L1003	OTGG B OPR RNG LT-20504A 0.3050E-01 X	BAD	ALARM	INSTRUMENT LOW
12/26/05	11:11:42 PGT	L1003	OTGG B OPR RNG LT-20504A 0.3050E-01 X	SUSPECT	ALARM	ALARM LIMIT LOW
12/26/05	11:11:47 PGT	L1003	OTGG B OPR RNG LT-20504A	SUSPECT	ACK	ACKNOWLEDGE
12/26/05	11:11:51 PGT	L1003	OTGG B OPR RNG LT-20504A 0.3050E-01 X	BAD	ALARM	INSTRUMENT LOW
12/26/05	11:12:07 PGT	L1003	OTGG B OPR RNG LT-20504A 0.6103E-01 X	SUSPECT	ALARM	ALARM LIMIT LOW
12/26/05	11:13:12 PGT	L1003	OTGG B OPR RNG LT-20504A 0.9155E-01 X	BAD	ALARM	INSTRUMENT LOW
12/26/05	11:13:14 PGT	L1003	OTGG B OPR RNG LT-20504A 0.3050E-01 X	SUSPECT	ALARM	ALARM LIMIT LOW
12/26/05	11:13:16 PGT	L1003	OTGG B OPR RNG LT-20504A 0.3050E-01 X	BAD	ALARM	INSTRUMENT LOW
12/26/05	11:13:38 PGT	L1003	OTGG B OPR RNG LT-20504A	BAD	ACK	ACKNOWLEDGE
12/26/05	11:14:04 PGT	L1003	OTGG B OPR RNG LT-20504A 0.6103E-01 X	SUSPECT	ACK	ALARM LIMIT LOW
12/26/05	11:15:17 PGT	L1003	OTGG B OPR RNG LT-20504A 0.1524 X	BAD	ALARM	INSTRUMENT LOW
12/26/05	11:15:19 PGT	L1003	OTGG B OPR RNG LT-20504A 0.3050E-01 X	SUSPECT	ALARM	ALARM LIMIT LOW
12/26/05	11:15:23 PGT	L1003	OTGG B OPR RNG LT-20504A 0.3050E-01 X	BAD	ALARM	INSTRUMENT LOW
12/26/05	11:15:27 PGT	L1003	OTGG B OPR RNG LT-20504A 0.3050E-01 X	SUSPECT	ALARM	ALARM LIMIT LOW
12/26/05	11:15:29 PGT	L1003	OTGG B OPR RNG LT-20504A 0.3050E-01 X	BAD	ALARM	INSTRUMENT LOW
12/26/05	11:15:34 PGT	L1003	OTGG B OPR RNG LT-20504A 0.3050E-01 X	SUSPECT	ALARM	ALARM LIMIT LOW
12/26/05	11:15:35 PGT	L1003	OTGG B OPR RNG LT-20504A 0.3050E-01 X	BAD	ALARM	INSTRUMENT LOW
12/26/05	11:15:37 PGT	L1003	OTGG B OPR RNG LT-20504A	BAD	ACK	ACKNOWLEDGE
12/26/05	11:15:39 PGT	L1003	OTGG B OPR RNG LT-20504A 0.3050E-01 X	SUSPECT	ACK	ALARM LIMIT LOW
12/26/05	11:15:41 PGT	L1003	OTGG B OPR RNG LT-20504A 0.3050E-01 X	BAD	ALARM	INSTRUMENT LOW
12/26/05	11:15:44 PGT	L1003	OTGG B OPR RNG LT-20504A	BAD	ACK	ACKNOWLEDGE
12/26/05	11:15:52 PGT	L1003	OTGG B OPR RNG LT-20504A 0.6103E-01 X	SUSPECT	ACK	ALARM LIMIT LOW
12/26/05	11:15:55 PGT	L1003	OTGG B OPR RNG LT-20504A 0.6103E-01 X	BAD	ALARM	INSTRUMENT LOW
12/26/05	11:15:56 PGT	L1003	OTGG B OPR RNG LT-20504A 0.3050E-01 X	SUSPECT	ALARM	ALARM LIMIT LOW
12/26/05	11:16:07 PGT	L1003	OTGG B OPR RNG LT-20504A	SUSPECT	ALARM	ALARM LIMIT LOW

DATE	TIME	UNIT	DESCRIPTION	STATUS	ALARM	ACK	RESET
12/26/05	11:17:31	PST	TR0UBLE, ZONE 75-NGED SWGR RM B	TR0UBLE	GOOD	ALARM	ALARM STATE
12/26/05	11:18:16	PST	TR0UBLE, ZONE 75-NGED SWGR RM B	NORMAL	GOOD	RETURN	RETURN TO NORMAL
12/26/05	11:18:16	PST	TR0UBLE, ZONE 75-NGED SWGR RM A	TR0UBLE	GOOD	ALARM	ALARM STATE
12/26/05	11:18:32	PST	TR0UBLE, ZONE 75-NGED SWGR RM B	GOOD	GOOD	NORMAL	NORMAL
12/26/05	11:18:33	PST	TR0UBLE, ZONE 74-NGED SWGR RM A	GOOD	GOOD	ACK	ACKNOWLEDGE
12/26/05	11:19:16	PST	TR0UBLE, ZONE 76-NGED SWGR RM A	NORMAL	GOOD	NORMAL	NORMAL
12/26/05	11:20:14	PST	TR0UBLE, ZONE 77-NGED B ELEC EOFT	TR0UBLE	GOOD	ALARM	ALARM STATE
12/26/05	11:20:47	PST	TR0UBLE, ZONE 77-NGED B ELEC EOFT	NORMAL	GOOD	RETURN	RETURN TO NORMAL
12/26/05	11:20:47	PST	TR0UBLE, ZONE 70-NGED A ELEC EOFT	TR0UBLE	GOOD	ALARM	ALARM STATE
12/26/05	11:21:16	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	DAD
12/26/05	11:21:17	PST	TR0UBLE, ZONE 70-NGED A ELEC EOFT	NORMAL	GOOD	RETURN	RETURN TO NORMAL
12/26/05	11:21:27	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	SUSPECT
12/26/05	11:21:29	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	DAD
12/26/05	11:21:31	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	SUSPECT
12/26/05	11:21:37	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	DAD
12/26/05	11:21:39	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	SUSPECT
12/26/05	11:21:41	PST	OTGG B OPR RNG	LT-20504A	0.1526	X	DAD
12/26/05	11:21:45	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	SUSPECT
12/26/05	11:21:47	PST	OTGG B OPR RNG	LT-20504A			SUSPECT
12/26/05	11:25:12	PST	OTGG B OPR RNG	LT-20504A	0.1221	X	DAD
12/26/05	11:25:14	PST	OTGG B OPR RNG	LT-20504A	0.4103E-01	X	SUSPECT
12/26/05	11:25:20	PST	OTGG B OPR RNG	LT-20504A	0.4103E-01	X	DAD
12/26/05	11:25:21	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	SUSPECT
12/26/05	11:25:21	PST	OTGG B OPR RNG	LT-20504A			SUSPECT
12/26/05	11:25:46	PST	PLANT EVENT POINT	TRIPPED	SUSPECT	ACK	ALARM STATE
12/26/05	11:25:39	PST	PLANT EVENT POINT	TRIPPED	DAD	ALARM	CONVECTION BAD
12/26/05	11:25:39	PST	PLANT EVENT POINT	TRIPPED	SUSPECT	ALARM	ALARM STATE
12/26/05	11:25:23	PST	OTGG B OPR RNG	LT-20504A	0.4103E-01	X	DAD
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	SUSPECT
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	DAD
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.4103E-01	X	SUSPECT
12/26/05	11:25:25	PST	PLANT EVENT POINT		GOOD	ACK	ACKNOWLEDGE
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	SUSPECT
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	DAD
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	SUSPECT
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	DAD
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	SUSPECT
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	DAD
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	SUSPECT
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	DAD
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	SUSPECT
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	DAD
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	SUSPECT
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	DAD
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	SUSPECT
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	DAD
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	SUSPECT
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	DAD
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	SUSPECT
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	DAD
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	SUSPECT
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	DAD
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	SUSPECT
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	DAD
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	SUSPECT
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	DAD
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	SUSPECT
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	DAD
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	SUSPECT
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	DAD
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	SUSPECT
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	DAD
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	SUSPECT
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	DAD
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	SUSPECT
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	DAD
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	SUSPECT
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	DAD
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	SUSPECT
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	DAD
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	SUSPECT
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	DAD
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	SUSPECT
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	DAD
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	SUSPECT
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	DAD
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	SUSPECT
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	DAD
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	SUSPECT
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	DAD
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	SUSPECT
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	DAD
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	SUSPECT
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	DAD
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	SUSPECT
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	DAD
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	SUSPECT
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	DAD
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	SUSPECT
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	DAD
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	SUSPECT
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	DAD
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	SUSPECT
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	DAD
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	SUSPECT
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	DAD
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	SUSPECT
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	DAD
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	SUSPECT
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	DAD
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	SUSPECT
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	DAD
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	SUSPECT
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	DAD
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	SUSPECT
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	DAD
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	SUSPECT
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	DAD
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	SUSPECT
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	DAD
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	SUSPECT
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	DAD
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	SUSPECT
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	DAD
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	SUSPECT
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	DAD
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	SUSPECT
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	DAD
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	SUSPECT
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	DAD
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	SUSPECT
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	DAD
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	SUSPECT
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	DAD
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	SUSPECT
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	DAD
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	SUSPECT
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	DAD
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	SUSPECT
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	DAD
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	SUSPECT
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	DAD
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	SUSPECT
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	DAD
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	SUSPECT
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	DAD
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	SUSPECT
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	DAD
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	SUSPECT
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	DAD
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	SUSPECT
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	DAD
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050E-01	X	SUSPECT
12/26/05	11:25:25	PST	OTGG B OPR RNG	LT-20504A	0.3050		

[illegible][illegible]

SUSPECT	ALARM	ALARM LIMIT LOW
BAD	ALARM	INSTRUMENT LOW
SUSPECT	ALARM	ALARM LIMIT LOW
BAD	ALARM	INSTRUMENT LOW
SUSPECT	ALARM	ALARM LIMIT LOW
SUSPECT	ACK	ACKNOWLEDGE
BAD	ALARM	INSTRUMENT LOW
BAD	ACK	ACKNOWLEDGE
SUSPECT	ACK	ALARM LIMIT LOW
BAD	ALARM	INSTRUMENT LOW
BAD	ACK	ACKNOWLEDGE
SUSPECT	ACK	ALARM LIMIT LOW
BAD	ALARM	INSTRUMENT LOW
SUSPECT	ALARM	ALARM LIMIT LOW

ACKNOWLEDGE
INSTRUMENT LOW