UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

In the Matter of:

IE TMI INVESTIGATION INTERVIEW

of Gary P. Miller, Station Manager

Trailer #203
NRC Investigation Site
TMI Nuclear Power Plant
Middletown, Pennsylvania

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NRC PERSONNEL:
Dale E. Donaldson
Owen C. Shackleton
Dorwin R. Hunter

SHACKLETON: This is an interview of Mr. Gary P. Miller. Mr. Miller is presently the Station Manager for the Three Mile Island Nuclear Power Station for the Metropolitan Edison Company. The time of this interview is 11:08 a.m. Eastern Daylight Time, May 7, 1979. This interview is being conducted in a trailer parked just south of the south security gate of the Three Mile Island Installation. At Mr. Miller's request, present from his company is Mr. William H. Behrle. Mr. Behrle is a Project Engineer with the Metropolitan Edison Company. Present from the U.S. Nuclear Regulatory Commission to conduct this interview is Mr. Dale E. Donaldson. Mr. Donaldson is a Radiation Specialist assigned to Region I. Also present is Mr. Dorwin R. Hunter. Mr. Hunter is an Inspection Specialist with the Performance Appraisal Branch, Inspection and Enforcement, Reactor Construction and Inspection. My name is Owen C. Shackleton. I'm an investigator assigned to Region V. Just prior to this interview going on tape, I presented to Mr. Miller a two-page document from the U.S. Nuclear Regulatory Commission setting forth the purpose and scope of this investigation, and explaining the authority of the U.S. Nuclear Regulatory Commission to conduct this investigation. This document also sets forth Mr. Miller's rights to refuse to be interviewed, to have any person of his choice present, and to refuse to give any signed statements. On the second page of this two-page document are three questions and Mr. Miller answered all three in the affirmative. At this time, to make it a matter of record on this tape, I'm going to repeat these questions. Mr. Miller, did you understand the text of the referred to document?

MILLER: Yes, I understood.

SHACKLETON: And do we have your permission to tape this interview?

MILLER: Yes.

SHACKLETON: And would you like a copy of the tape and a copy of the transcript?

MILLER: Yes

SHACKLETON: All right, sir. They will be provided. And now, Mr. Miller, for the now benefit of those persons who will be listening to this tape, would you please give your background and training and work experience in the nuclear field.

MILLER: One thing that I'd like to state in the beginning is, I have personally made up and written down a document for testimony in conjunction with the various hearings. That document is one I'm willing to testify under oath to, it contains some thirty pages, approximately. And I believe this document should be used as a reference to this tape. It was done . . . the basics were done at a time within two weeks of the accident, and I believe, that my recall and my logic for that day are best represented, to the best of my ability, on that document. My background, basically . . . I graduated from college

from the United States Merchant Marine Academy in 1963. At that time, I was involved in, essentially, Mechanical Engineering, plus I had advantage of taking the courses and participating in the Simulator program for the ship . . . the Nuclear Ship, Savanna. Following that, I sailed on Merchant vessels with my Merchant License for approximately a year, and worked for the government for a period of months, with the Maritime Administration. Following that, I became employed at the Newport News Shipbuilding and Drydock Company, in February of 1965. At Newport News Shipbuilding, I participated in, first as a Ship Test Engineer, then as a Chief Test Engineer, on various nuclear vessels, numbering approximately 15. I was qualified on the Nuclear Supply Units for submarines, carriers, cruisers and DLGM's. My last position at Newport News was Manager of Construction for the carriers Nimitz and Eisenhower. These were nuclear vessels. I came to Metropolitan Edison-GPU Company in 1973, January. My position at that time was Test Superintendent in charge of Acceptance Testing for Three Mile, Unit No. 1. Following successful commercial operation of TMI Unit 1, I was appointed Metropolitan Edison Unit 2 Superintendent. My basic function at that time was the planning, organization and intial staffing and preparation for the Met Ed portion of TMI 2. In 1977, I was named Station Superintendent for both Units of Three Mile Island. I held that position, plus the Unit 2 Superintendent position, until Unit 2 was commercial in December of 1978. In January, and it could have been February, of 1979, I was appointed Station Manager, Three Mile Island, reporting directly to Jack Herbein, Vice President-Generation, Met Ed. This same chronology is contained within my testimony.

SHACKLETON: Thank you very much. I'll turn the meeting over now to the Specialists from NRC. Mr. Donaldson, you want to begin the questioning please?

DONALDSON: Thank you. Gary, what I'd like to start with is just some background information regarding the Emergency Planning Program. I've listened to several of the other tapes that you made earlier in the month, and I just want to pick up a few loose ends. Do you have an individual who is assigned essentially as an Emergency Planning Coordinator at the site?

MILLER: Yes. I would have to ask your definition of Emergency Planning Coordinator, though.

DONALDSON: What I mean by that is, someone who has essentially a prime responsibility for, kind of massaging everything together and ensuring that the various training programs and the various equipment maintenance activities, procedures are kept up to speed and implemented, implementation rating status.

MILLER: We do not have an individual assigned to only that function. My version, or my statement there, would be that our Chemistry and Health Physics Supervisor, Richard Dubiel, and our Training Supervisor, Dick Zeckman, are essentially responsible for that function. Additionally, each year when we prepare and conduct the emergency drills . . .

the preparation is to conduct that runs from about June until October, and I could be off a month or two . . . we generally assign a special supervisor the duties of that coordination, where we try to assure that the plan is brought up to speed and kept current for the drill each year.

DONALDSON: What is your understanding of Mr. Landry's position or involvement with the emergency plan?

MILLER: My understanding of Mr. Landry's involvement is that he would be the primary man, under Mr. Dubiel's structure, responsible for emergency planning. And he, in my mind, picked up the ball from Mr. Tsagaris who helped with this function in years past. This is not Landry's only duty, to my knowledge.

DONALDSON: I understand . . . be colateral with other duties.

MILLER: Right.

DONALDSON: Has this job function at all been assigned, either by yourself or by Mr. Dubiel, in any sort of a formal fashion, that is, through the issuance of a memo, so that station personnel are aware who the focal point for either comments, suggestions or problems with the emergency planning program might be directed?

MILLER: I believe I issued memos to that effect, but my recall is not good enough to pinpoint that. Additionally, each year following the drill, I assigned to specific senior persons, actions to clean up and make current items we found, and that I followed myself, along with people like Jim Seelinger, the Unit 1 Superintendent.

DONALDSON: Then Mr. Lanary in his preparedness functions, would be operating under the authority or direction of Mr. Dubiel, the Supervisor of Radiation Protection and Chemistry?

MILLER: That's true, but additionally, since it involved the emergency plan, if he were not obtaining the required cooperation then it would be under my authority that I would have him proceed.

DONALDSON: I would like to turn now very briefly to the training program and the training status in the area of emergency planning prior to the 28th. Could you briefly describe the training program and your input or support of the training program?

MILLER: In my mind, there are at least two phases to the program. One of them is an ongoing phase where the training department, under Zeckman in coordination with Dubiel and Landry, constantly, as a part of our recall effort, run training on the emergency plan, and so forth, and the actions required. Separate from that, on a yearly basis, for the station we do have the preparation for a series of

drills. We typically here conduct anywhere from five to eight drills. This is so that all the senior people get exposure and that all the shifts get exposure, and that we run, as we like to call them, advanced scenarios. And in this function we involve essentially all the personnel and contractors at the station.

DONALDSON: In relation to a drill, approximately what time frame is the annual retraining of the emergency response organization performed?

MILLER: There is one drill a year, even though there are five or six rehearsals, so to speak, on different shifts. The basic drill is either run at one or five o'clock, depending on the Station's Superintendent's decision . . . or Station Manager's, in my case.

DONALDSON: Is the training of the various teams . . .

MILLER: I should correct that. I proposed those times. I was specifically not told when the drill was run, as I participated, so I would have to back off there. I picked . . . I told people early in the year that they should pick those times.

DONALDSON: Is the actual training program performed just prior to the beginning of the drill sequencing, or is it conducted 6 months before, or approximately what time frame?

MILLER: To my knowledge, the training program for operations and other departments is ongoing during the year. About 2 to 3 months before the actual drill, we commence the preparation stage, which includes a lot of training, for and for persons like myself, that is my training, essentially.

DONALDSON: As of the 28th, were you aware that, or had you been apprised of the status of training at any time? Did you receive periodic reports of the status of the organizational posture?

MILLERL I had received periodic status. To go back a little bit . . . following the emergency drill in 1978, in which we participated and and the NRC witnessed the drill, we then took our action items and I reviewed those monthly with the superintendents and Landry, and the training people, as appropriate. Additionally, I participated, and I'm not totally sure I can remember the exact time frame, but I interfaced with the local fire departments at least once in 78. Additionally, I interfaced with all the civil defense people and the State people, once in 78 to discuss interface and communications in our plan. Additionally, I attended the State Emergency Drill . . . which is not run just for radiation emergencies, it's run for a typical emergency . . . over at the State in December of 1978. That, I guess, would describe my involvement with the plan.

DONALDSON: As the Station Manager, were you apprised or kept up to date on the progression of the training program, as far as the response teams, went, ahead of schedule, behind schedule?

MILLER: Not in a great frequency, but yes, by exception . . . if something was not in its frequency probably closer monitoring was conducted by Mr. Dubiel and/or Mr. Seelinger, Unit 1 Superintendent.

DONALDSON: Do you know if, at any time immediately prior to the March 28, or a month or two before that, you might of received any status reports regarding the training posture of the organization?

MILLER: Not specifically, to my memory. I can't remember specifically.

DONALDSON: In looking at the training program and the drill program, it appears they're run within, say, a two or three month period. Have you had the opportunity, or have you thought at all, how that impacts on the, perhaps the cyclic nature . . . is there any cycling of preparedness that results in that kind of a schedule?

MILLER: I'd answer that question, but I think some of it would have to be taken as my opinion. I believe any time you prepare for something like a drill, you would be hard pressed not to say there was cyclic occurrence there, because you do tend to get more prepared when you know something is coming. But I felt, from my experience . . . the

four or five years I've run this drill . . . that you can run this drill at 2:00 in the morning probably better than we run it 1:00 in the afternoon with a full crew of people that are there on day shift, because the people you need are always on shift and they're always in the recall status. The communications we need for the drill are tested independently of all of this discussion . . . they are tested at a frequency to assure their operations. So I feel preparedness was adequate, probably peaks for the drills, the way I see it.

DONALDSON: I'd like to turn from that aspect and talk just briefly about the provisions of the coordination aspects that exist in the plan, or your understanding of the aspects that exists, in terms of coordination with Met Ed Division personnel, GPU, and consultants . . . their authority, responsibility, and so on, so forth. Why don't we start with Met Ed, GPU, Mr. Arnold, Mr. Herbein.

MILLER: Normally, with respect to the emergency plan, and not discussing an accident as we've been through, I would have interface with Jack Herbein and it would be his responsibility to contact GPU. I would not have . . . hesistate to contact GPU, but our organization normally functions such that I would, either him or I would of done that automatically. But as a part of the plan and a needed part of the plan to accomplish it, I don't need GPU.

DONALDSON: In a response scheme, had you ever included the interface with, say, Jack Herbein, in any of your drills to test the inner working . . . the interface?

MILLER: The Jack Herbein interface was tested in every drill. I might also state that it's pretty normal for me to call Jack Herbein on instances of much less consequence that this to assure that he was cognizant of the activity because of the importance of these units to our company.

DONALDSON: Does this interface normally take the shape of coordination, or in other words, with you actually running the station operation, in keeping Mr. Herbein apprised, or is it more group decision-making, if you will, in terms of what actions to be taken?

MILLER: With respect to the emergency plan, it would of been a notification with the decision-making fully mine. That would of been the initial way you would go with that and there would be no need to have any group decision-making. As you get into any situation, from this type or a technical problem, the discussion and interface would be one where it would be a mutual, beneficial type thing to draw on everybody's experience but the decisions were clearly at my level at the station, as far as initiating the plan and carrying it out.

DONALDSON: As an event progresses . . . and I guess we can relate to it, in fact, that as this event progressed, and you had fulfilled your responsibilities under the response plan, I think we can assume that people don't always have a meeting of the minds. Who, to your understanding, either prior to this event or during the event, had ultimate authority and responsibility for final decision making in various actions?

MILLER: With respect to the station and the emergency plan, for that first number of hours up to . . . in my testimony I have placed the time at about 8 PM . . until 8 PM at night on the 28th, I made the decisions with respect to the emergency plan, the station, and the actions taken within the unit. As I stated in my testimony, I formed my own, as I call them "emergency command team." I drew on them. They talked to other people in both my management, in GPU management, and B&W, but decisions that were made in the NRC, as a matter of communication, took advice from all sources, but the decision making was done at my level and there was no question of that.

DONALDSON: After 8 PM, did you or Mr. Herbein have a discussion as to whether or not you would move to a new posture, that is, he would begin to assume more of the directive actions?

MILLER: Yes, and I'm guessing at 8 PM. It could of been 8:30 or 9 or 7:30, but somewhere in that evening, following . . . the closest event

that I could pin is after the reactor coolant pump was running and the stability of the unit was kind of, a lot better than it had been earlier. Jack took charge of the operation and I reported directly to him. I essentially stayed on shift as the Emergency Director and as the Superintendent on shift.

DONALDSON: I think . . . does this kind of fit in with the recovery procedure? Would you say in your own mind you entered the recovery phase?

MILLER: In my own mind, I entered the recovery phase. But if we had had a small leak or something, it would of been in the recovery phase and looking to go back. This obviously was of a much larger scope so the recovery phase was much longer.

DONALDSON: I wanted to make that distinction because it's important to know when the command and control shifts.

MILLER: Yes, in my mind, it shifted after we started that pump. The unit was stable and we're looking at recovery and looking at longer term.

DONALDSON: Then at what time, or how did Mr. Arnold begin to phase in or fit into the organization in relation to yourself and Mr. Herbein?

MILLER: I'm not sure of the exact timing there, but I believe probably by the next day, the senior company officials in GPU and Met Ed had formed an organization where Arnold was in charge of the recovery, with Herbein having the operations portion reporting directly to Arnold, and myself reporting to Herbein. Arnold also had other functions under him, such as engineering, and advisory groups that were formed in a very quick fashion to look at increasing the stability of the unit and towards recovery and stopping of the release.

DONALDSON: There're about 4 or 5 things that relate to this inter-coordination between the division support and station, I'd like to pursue just to get an idea of how this intercoordination worked. I believe there were some discussions between yourself and Mr. Herbein relating to turning off the ventilation system in the plant - do you recall when that system was turned off, first of all?

MILLER: I recall that the discussion but I don't recall when that ventilation system was turned off, specifically.

DONALDSON: Who made the final decision that it would be turned off?

MILLER: Are you discussing on the 28th?

DONALDSON: I believe this was the 28th when you had the backup of the activity in the buildings, and eventually you restarted the ventilation system.

MILLER: Thinking back now, I do recall some discussion. I had the final decision. Jack and I did have considerable discussion on the ventilation systems and, at appropriate points I did secure it to attempt to see what it did. At the time we secured it, as I remember it, the activity level in the control rooms became such that I was worried about them becoming inhabitable, and therefore I made the decision to turn them back on because in my mind we weren't stopping the release.

DONALDSON: Your discussions . . . were they in the form of, in total agreement with one another, was there any pressure from one end?

MILLER: There was pressure from his end . . . there was pressure from Jack's end in two areas: one was that the outside world felt that I was releasing radioactive steam. In fact, I was not. The steam that was being released was coming from the alpha "A" Steam Generator which had been sampled and we had a guy up on the roof. But there was a conflict in information. People thought that the "B" Steam Generator was steaming. To my knowledge, it was not. Secondly, the ventilation . . . as the wind died during the day, the readings onsite got to levels of 70 and 80 at various points. It would be like you get bursts of it. Of course, we had taken people of the site and sent people home and taken this kind of actions, searched all the buildings. Jack was trying, was pressuring me to stop the release. I didn't think we could stop the release. I was of the opinion we should run

through the filters. Jack and I did have some discussions where we were not in total agreement, but I made the decision of turning on and off ventilation, and for the most part, I ended up with it back on on the 28th, to my memory, because of what it was doing to us in the control rooms and the Emergency Control Center, etc.

DONALDSON: Outside of that discussion, would it of ever have occurred to you to turn off the ventilation system.

MILLER: I considered turning it off. The discussions we had, and the personnel that I had advising me, I didn't feel like it stopped the release. We were taking action on . . . Jack was not totally aware of all the internal action I was taking. I think it's . . . you've got to remember that the number of items, and the number of calls that I participated in were of a very . . . I don't know how to describe it, but the distress level was very high. I was trying to proceed in a caution fashion with the information that I knew existed. I didn't feel Jack had all the information I did, and I was clearly in charge of the event, and he never disputed that. He discussed with me why I would not do something he would request, and we discussed that fairly openly, as we have open discussions from day 1 on this site. I felt we were designed to ventilate, as we were ventilating . . . I didn't think we were designed for this accident . . . but I felt that ventilation, knowing we had filters, I felt shutting it off would not stop the release, would just simply contain it inside and it would possibly

leak out anyway, as most of the buildings are negative pressure design, and I was more concerned with it not getting out unfiltered in that case. We were doing a couple other things. We were trying to : . . we toured the auxiliary building. We were looking for areas where the release was occurring from. We had checked Containment Isolation. We were trying to troubleshoot the vent header. We were laying poly on the floors, attempting to cover the water. We thought we might be offgasing or getting it that way. The thing that was making this so slow and painful was there was a lot of radiation levels in the auxiliary building that were very prohibitive. So with Richard Dubiel's help, we were proceeding very cautiously to avoid overexposures, to the practical extent, which was an item we had to be very careful of because the operators, maintenance and technicians were willing to do about anything to help us that day, and I was trying to be careful we didn't overexposure somebody without the benefit of being involved, that I clearly understood.

DONALDSON: You mentioned that you thought, perphaps, these discussions or the idea to turn off the ventilation, came from conflicting information that people had received . . . Jack was receiving pressure from outside sources. I wonder if we could, just for a minute, touch on the established provisions for press releases and getting information to the public, what is the normal method we would have expected to see, for the release of information?

MILLER: The normal method, to my knowledge, within Metropolitan Edison would be through the communications persons . . . Mr. Schweiker is Vice President, and Mr. Fabian is the normal man I deal with.

DONALDSON: These releases then, these press releases . . . they are coordinated through you, from the site?

MILLER: For normal times and even for problem areas, generally myself and Jack Herbein have an input to their information, and the Communications Department puts out the actual information. We have an input to it to assure its accuracy.

DONALDSON: Do you have provisions for coordinating any press releases or public statements with the State of Pennsylvania?

MILLER: I just don't remember. I think we do, but I don't remember specifically. On the 28th, I specifically instructed all the people in the control room. They did not talk to anyone in the media or the press, that anything was, anybody who called in was told to call Mr. Fabian, who I expected to handle the State or the media interface.

DONALDSON: I think Owen would like to interrupt here.

SHACKLETON: We'll take a break for just a minute while I change the tape. The time is now 11:37 AM, Eastern Daylight Time, May 7, 1979.

SHACKLETON: This is a continuation of the interview of Mr. Gary P. Miller. The time is now 11:39 AM, Eastern Daylight Time, May 7, 1979. Continue, please.

DONALDSON: When we turned the tape over, Gary, we were talking about press releases, dissemination of information to the public, I believe on the afternoon of the 28th, that you were called from the plant . . . I don't know if "called" is the right word . . . we'll say you left the plant to proceed to the Capital to brief the Governor, is that correct?

MILLER: I was requested, and essentially directed, to attend a briefing . . . I thought it was with the Governor, but I think it was the Lieutenant Governor representing the Governor, in Harrisburg. I was also told to collect as much information as I could prior to going to Harrisburg. I assigned a Senior Engineer to collect information so that we could provide a briefing in Harrisburg.

DONALDSON: You mentioned you were directed . . . by whom were you directed?

MILLER: I was directed by my management, Jack Herbein.

DONALDSON: Did you have any discussion as to the prudent nature of you leaving the plant?

MILLER: In a personal sense, I objected to leaving the plant. That was based on the fact that I, at the time, didn't see how I could leave the plant. I was fairly totally involved in the operation. I, in my own mind, did leave the plant at the time I chose, and I did put Mr. Joe Logan, Unit 2 Superintendent, in charge before I left. And he was fully cognizant of all the situations. The plant was not in, what I considered, it's final stable condition, but we had accomplished what I had hoped to up to that point, and I did not consider it unsafe to leave the plant. I did not agree with having to leave the plant, but I didn't consider the safety of the public was compromised or I would not have left. Additionally, I carried a beeper. And I arrived in Harrisburg . . . I had a man on the phone with the Unit, so that I could keep in constant touch with what we were doing. So even though I left the Unit, I felt I left it in capable hands and I was communicating with it.

DONALDSON: Was there any thought or any discussion that possibly the Lieutenant Governor could of been briefed over the phone? What was the thought process that it had to be an inperson kind of thing?

MILLER: I don't specifically know how the decision was made to go to the Governor's . . . the Lieutenant Governor's office. I strongly objected to that occurring at that time in the afternoon. Strictly from an internal selfish standpoint, I didn't think it was an appropriate time. But of course, I was not looking at it as my responsibility to

worry about the Governor. My responsibility was to make sure that the emergency plan and that the unit conditions were conducted properly, and that's the way I viewed it.

DONALDSON: I wonder if you could, if you would, tell us of the discussions that might of gone on in the car . . . let me back up. Did anyone, did you take anyone else from the plant with you?

MILLER: Yes, I had Mr. George Kunder, who was the Unit 2 Technical Superintendent. I had him do the assembling of information in the hour or two before we left the plant. We actually . . . I believe I had notification somewhere around noon I was to go to the Lieutenant Governor's or Governor's office. I, at that time, was also told to assemble some pertinent data and information and I was attempting to do that through George Kunder so that it did not remove my direction effort within the unit. So I took George with me to Harrisburg to brief both Herbein and myself on the way over.

DONALDSON: I believe you mentioned that the time at which you left, you chose to leave, and that was based upon your evaluation that, at least the plant was in such a condition that the public health and safety would not be jeopardized. I wonder if you could just elaborate on the evaluation of the situation, as you saw it, at that time. Were the releases continuing, were the releases going down?

MILLER: At that time, I think . . . at that time, my evaluation . . . I think, number one I should state that the discussion preliminary to me going to Harrisburg was a very strong discussion between Herbein and myself, but that is not untypical in the kind of discussion that Jack Herbein and I have on typical problems within these units. It's frank and it's open and it's direct, had I had any question of the safety of the public or the unit, I would have not left the unit. My evaluation was based on a couple of items. Number 1, at that time in the day . . . that's talking around noon to 1 o'clock . . . I don't have memory of any offsite readings, other than a few, that were greater than 1 mR per hour. I don't have memory of iodines being above background. Our device was showing above background, but we had sent out and had a separate calibration run on a sample and we had found our device was reading above background but the actual reading was below so I had no offsite readings that I was aware of. The emergency plan and all communications were fully in effect and working. The biggest item in my mind was that we were on the phone with the Bureau of Radiological Health, they had no disagreement, at that time, of our actions. There was no preparation for evacuation; things were in alert. The Unit itself . . . we had just . . . and also this is backed up in my testimony in more detail . . . we spent the morning, within our own minds in that control room, not being totally convinced the core was covered. We couldn't start pumps, they cavitated. We knew we had steam bubbles. We knew we had to pull pressurizer. I had told Mr. Ross that we did not secure HP injection without me personnally

being involved. We were not, in our minds, convinced the core was totally covered. And therefore, we had made a decision to go down in pressure to the core flood level in pressure, which is like 600 pounds or lower, and therefore, that core flood comes in two separate nozzles on top of the reactor; our theory or speculation was, from a technical standpoint, were the vessels significantly empty, the core flood tanks would drain. We had gotten down to about 440 psig with a small level decrease in the core flood tanks. When I left I felt that . . . number 1, the Emergency Plan was in effect; number 2, we were not near an evacuation criteria, and did not appear to be approaching one; number 3, the unit was essentially stable, certainly not ultimately stable. I was convinced the core was covered and we were some getting some heat removal, and thirdly we had sent all but essential people home. We had no one I knew of, that was becoming overexposed or obtaining radiation readings to any significant level.

DONALDSON: At that point, when you left, did you feel that you had at least a perspective that you felt things were going to be able to be placed under control, or were you still unsure as to which direction you were going to take? What was your feeling? Were you still unsure, or were you certain that things were, you had a handle on the situation?

MILLER: I was sure that we were stable. I had not convinced, we had not convinced, I had not convinced myself or the group I was using for my command group, that we at a nearer point of getting on decay heat,

or getting a reactor coolant pump running, which were the two, conditions we would of like to have gotten to at that time. We were not approaching those, but we essentially had water to the core, we had the ablity to steam, so we felt the Unit was stable, but certainly not . . . we certainly weren't in our final direction yet, nor were we that close to it.

DONALDSON: What was your feeling about the potential for more significant problems developing, and by problems, I mean primarily in the terms of releases of radioactive material offsite. You stated that the plant itself . . . the releases were low and at that time things appeared to be stabilized. Had you, in your own mind, formed a picture of the potential for more serious consequences?

MILLER: That's a hard question to answer. We weren't to . . . if I look at Friday, the 30th, I realize more about the releases on Friday than I did on Wednesday. On Wednesday, we had not seen the releases to any extent. And the worst problem we had in the Unit was the auxiliary building, which had a lot of airborne, had a lot of radiation, so I hadn't seen a public consequence and I didn't feel that there was a potential to be more, I thought if anything it would be getting to get towards terminating the incident, not being cognizant of what I know now about the iodines and all the things that occurred in the next 2 - 3 days.

DONALDSON: At this point in time, were you technically convinced that a bubble had existed in the primary system?

MILLER: I was technically convinced at 7:00 in the morning that we had bubbles in the hot legs, and none in the pressurizer, and one in the dome of the reactor. I must say that I also was convinced that we had failed fuel, to some extent, because of, I believe, the radiation monitoring system. I did not feel that it was to the extent that we've now seen printed. I didn't need to . . . I guess the best way I could describe that is I didn't need to evaluate whether we had 1% or 100% failed fuel, I was convinced we had a serious radiation problem from the beginning and that we had steam bubbles.

DONALDSON: Then, at this point in time, containment was fairly high, I believe?

MILLER: Yes, you're talking in the order of 50,000 R on the dome monitor.

DONALDSON: Did you at all evaluate and, in trying to get your head in order for discussions with the Lieutenant Governor, place through your mind the potential for unplanned releases from containment, or from other airtraps, or liquid sources in the facility?

MILLER: The containment, we felt, was stable. The reasoning there would be that, up till 2 o'clock, and I'm aware we had a hydrogen excursion, I was aware at 2 o'clock we had an excursion, but up till that point, we had not seen anything above 4 - 5 pounds in the building. The building in the containment isolation had been verified more than once, and we didn't have releases from the building that I knew of. Now we did have communications paths with the primary system, which were causing some releases through things like the makeup tank and the vent header. We were trying to get a handle on those. We did not have a good handle on them, but the people who were doing that continued to do that in my absence. The vent header is a complicated system and it . . . with the radiation levels we had, it was very hard to troubleshoot.

DONALDSON: On the car on the way up, what discussions ensued between yourself, Mr. Kunder and Mr. Herbein, regarding, "what are we going to tell the Lieutentant Governor, what's the situation in which, what direction is it heading? "

MILLER: We basically, briefed Jack Herbein on the plant status from the time I had arrived that morning at about 7 o'clock, went over that him, went over our course of action with respect to our goal of getting either on decay heat or getting a reactor coolant pump started, and informed him of the current status. We probably spent . . . and this not totally clear . . . probably spent most of the time, as I remember, discussing the readings we had, and where the wind was from the

time we started, and the basis of the emergency plan and the communications that were set up, so that he clearly understood why we hadn't recommended and the State had agreed on any evacuation of any part of the town, or of any protective action.

DONALDSON: Did you at all have any discussions revolving around the tone that your discussions would take. In order words, you had reached some agreement or understanding with other technical elements of the State that the potential for increased effects offsite could certainly be handled within the constraints, that now you were going up to talk to the Lieutenant Governor . . . Did you at all feel that perhaps he might not understand what you were telling him? I guess what I'm saying, was there an attempt to make it simple, so he would understand?

MILLER: Dale, there was an attempt to put 15 years of nuclear power into 5 minutes, as far as making the conditions simple, and making the understanding simple and making the . . . And also, there was a clear discussion of the fact that we would be very honest and very frank and put out exactly what we knew at that moment. And that's the way it went. Now, I'm not aware of why we were even going to Lieutenant Governor's office. I was not involved in the decision to go. In other words, I wasn't involved in the discussions of going to there. I don't know who in the company even made that decision. I know who told me to go.

DONALDSON: When you did arrive at the Lieutenant Governor's office, basically, if you can, in another one minute, summarize it even further, and let us know . . . was he apprised of that fact that you had thought the core was uncovered, that there was core damage, a bubble existed, and the direction that you were heading?

MILLER: When you say core uncovered, we had all, I think, come to the realization there was fuel damage. I don't know that we were sophisticated enough to discuss core uncovering, but we did feeling that cooling hadn't been adequate. We knew that from our experience and we knew we had some damage from the readings. We didn't discuss percent at failed fuel or percent of uncovering, like you would as an analyst afterwards. But there was a discussion of how the trip had . . . you know, we went through the sequence of events from the trip, to the pressurizer, to the fact that we knew we had steam bubbles in the loops, we couldn't run a pump, and, you know, that we were still on HP injection . . . this sort of technical discussion. And then Jack picked that up and attempted to explain that in the Lieutenant Governor's office in a technical sense.

DONALDSON: Did anyone discuss the status of the radiological end, that is, the amount of radioactivity, in general terms, that was in the containment, that was on the island, available for release . . . anything of this nature?

MILLER: I don't remember that specifically. I know we discussed the specific readings of the monitors in the building and of some of the other radiation monitors. From that extent, yeah. I don't know that we, at that time, even thought about what was in the building ever getting released. I guess we assumed the building would handle its integrity, in other words, the potential . . . if you took the building away, there would be a tremendous release in the area. I don't believe we put it in those kind of terms.

DONALDSON: In other words, your discussions were more positive in nature, that is we have this stuff in here but our engineered safeguards, so on and so forth, are such to take care of it. You didn't deal too much in the potential of the "what ifs".

MILLER: We didn't deal with potential if the building was to, say, disappear, and there would be a release. We dealt more with the fact that we had a damaged plant, we were trying to correct it, and then very strongly dealt with the readings we had on and offsite and the bases for our decision-making. And also we dealt . . . it turns out that Geruski I think was there, Mr. Geruski of BRH (Bureau of Radiological Health) to back up that information or that communication.

DONALDSON: Let's turn from that ...

MILLER: I think you should also clearly . . . I don't believe myself or Herbein, on that day on the way to the Governor's office, really conceived that we were into a year and half recovery. I think we conceived we had a damaged unit which we could put back together in a scheduled planned fashion, and it was talking days or weeks rather than years. Now, I'm saying our minds had not grasped . . . mine didn't until two days afterwards . . . the magnitude of the damage we had incurred. So our discussions were framed around "here's what we got, this is how it happened to our knowledge now, this is what's offsite, and this is the action we're taking, and why."

DONALDSON: It was framed in the reference of your technical knowledge and trust in the way your various systems operate.

MILLER: Yes.

DONALDSON: What I'd like to do is turn from that interface, that is, interface with the State, Lieutenant Governor, Met Ed, GPU, and discuss any other interfaces you may have had with other agencies, NRC included, that may have requested or directed that certain actions be performed, certain samples be taken, during the first three days. Now, we're interested in the period from 28th through midnight on the 30th. Were you receiving what you perceive to be, requests or orders from other agencies, other people, other than Jack Herbein, to do certain things?

MILLER: In my mind you have to, from my part of this operation, you have to separate the 28th from the 29th and the 30th. On the 28th, we had called, specifically called the NRC, both Region I, the RAP (Radiological Assistance Plan) team which came in here; we had a plane overhead and so forth; people like Sid Porter of Porter-Gertz, a Consultant in Radiation; Radiation Management Corporation. We had drawn on all these, plus our engineering organization, through Dick Kling (phoenetic). We had drawn on all these people, and the State, to help us in the coordination and the samples that we should be taking. And that was handled, not by me specifically, but through Dick Dubiel, mainly, that first day. And he was interfacing with various personnel and probably had a lot of conversations I was not aware of. He was briefing me every twenty to thirty minutes, and he was briefing me on the problem areas. I'm sure he was sampling, he was aware of a lot of other discussions about things. Now, from the 29th and 30th on, through Jack Herbein and his organization, I think we did a lot of increased sampling, and we had a whole sampling program underway, that I'm not aware of the details on.

DONALDSON: There are three instances that seemed to continue to crop up, and we've been trying to find out who had requested that these actions take place, and we get this nebulous "they did". And I think . . . let me just mention these and maybe you can shed some light on who "they" turned out be. The first item was the reactor coolant sample on the morning of the 28th, and that was after, of course, the

high activity had been found in the sample lines. Do you recall where the request for that sample came from?

MILLER: Do you mean the sample that helped lead us to the fact that we had the radiation?

DONALDSON: It would of been the one that Mr. Houser and Mr. Velez took ...

MILLER: Before 7:00 in the morning?

DONALDSON: No, it would of been after. It was the first one after the sample lines had been measured as having ...

MILLER: Okay.

DONALDSON: . . . High activity. Someone then requested that a primary coolant sample be taken.

MILLER: That would of had to have been between Mr. Ross, who was in charge of operations, and Mr. Dubiel, that the decision would of been made to request that sample.

DONALDSON: You don't know whether it came from outside of your organization, or whether it ...

MILLER: I do not specifically know.

DONALDSON: There was another entry that was made and it had to do with, I believe, adjusting of seal water flow . . . Do you recall who within the organization, requested that?

MILLER: Are you talking reactor coolant pumps seals?

DONALDSON: I believe it was. Do you know Dorwin, which one was it?

HUNTER: I believe it was, yeah.

MILLER; There were two areas that caused this concern, to my memory. One was that we wanted to keep . . . we had problems with letdown: we didn't have letdown. You know, if I had to pick three items within the unit, we had the pressurizer full and we didn't have many heaters. We were trying to work on that. We had reactor coolant pumps having problems with their lift pumps, their oil pumps. Additionally, we were trying to keep the seals in position to give us the maximum possibility for pump restart, which was one of the things we felt would help us. And letdown was something that didn't exist too well. We couldn't read letdown because it was so low and we were injecting seal water. We decided . . . and I think that through me . . we decided to isolate as many seals, as much seal injection as we could, as I remember. And we were down and actually manually did that, to my

knowledge. In an attempt ... you know, our goal was to essentially end up with a full plant with pressurizer control. And my memory was that we made that decision to isolate those seals on that basis.

DONALDSON: Under your emergency organization, what group or emergency group would have performed that action?

MILLER: Underneath Mr. Ross, to request that action and approve it through me, it would have been Mr. Dubiel who would have provided the Health Physics monitoring and input, and I would have actually looked to Dubiel to tell me that . . . to approve the entry as far as radiation is concerned and exposure to the people.

DONALDSON: Would the repair party have performed that action?

MILLER: Dan Shovlin, Maintenance, would have actually, along with Ross, would have made the decision who was the best man to go in. I might state that it might turn out to be an operator in this case, since we were interested in someone that knew exactly where to go. The decision would have been based on who would have known where to go, what valve to turn, so we wouldn't fumble around doing it.

DONALDSON: Under the normal organization, to whom does the repair party report?

MILLER: Dan Shovlin.

DONALDSON: And to whom does Mr. Shovlin report to?

MILLER: At 7:00 in the morning, I appointed Dan as in charge of emergency maintenance, so from 7:00 . . . when I made the assignment, say, at 10 after 7:00, I placed Dan in charge of emergency maintenance for the day.

DONALDSON: Then does . . . do you have Mr. Shovlin working directly under you?

MILLER: Yes. And in fact, when we sent maintenance people home that day to minimize the number of people on the site, he made the decision over who stayed and who went in maintenance, for that very reason.

DONALDSON: There was another request, and I believe another one of these nebulous "theys", requested that some filters be changed, and I believe they were demin [demineralizer] filters, and the dose rates in the area were approximately 1,000 R per hour at the time. And from information we have from other interviews, the job is approximately a one half to a 45 minute job, and there was some discussion between the people who had been asked to change these filters and some individuals who were requesting that these filters be changed. Did you have any involvement with that discussion at all?

MILLER: When you say demin !demineralizerl filters, is that the seal injection filters or is it purification demin?

DONALDSON: They were not sure of which filters they were. They might have been . . .

MILLER: My guess would be demin . . . my guess would be purification system filters in an attempt to figure out why letdown was zero. I vaguely remember some discussion, not specifics, but that would of been between Mr. Ross and Mr. Shovlin and Mr. Dubiel, it would seem to me it would have had to be amongst that group.

DONALDSON: In your technical opinion, were there any maintenance activities, repair activities, either suggested or actually performed, primarily, during the period of the 28th through the 30th, that were emergency in nature, and by that I mean, had a direct bearing on the continued stabilization of the plant and that if the maintenance were not performed it would result in a degradation of conditions and a possible increase in the impact?

MILLER: That's a hard question, when you get to specifics, and I would have to depend on discussions with people like Shovlin and Mike Ross and Dick Dubiel to help further bring out items. But I still separate the 28th from the other two days. On the 28th, items associated

with pressurizer heaters, with letdown, with the lift pumps for the reactor coolant pumps, with the sump pumps for the auxiliary building . . . items of that nature were considered by me to be, and reading of things like incore temperatures and also installing of recorders for primary, those items I considered to be vital to the stability, or the defintion of stability, for the Unit. On the 29th and the 30th, I think you could have expanded that further in the area, such as ventilation filter systems, where there might have been required changes or discussions of changes or checking of lineups, this type of thing, invoiving the . . . I would have considered, because we would have considered a release to the public, as much as anything else, to contributing to the stability of the event.

DONALDSON: Under your emergency organization, and keeping in mind the fact that you have to make re-entries for any number of reasons, who in the emergency organization is authorized to authorize people to take exposures that are consistent with, say, the NCRP or ICRP recommendations for emergency risk doses?

MILLER: I think we should state openly for this tape that I'm using no reference material in the room here. During the 28th and 29th and 30th, I would of used . . . I think it's fair to remember I would not of, I used my procedures and my plans as to, as clear reference documents or I had someone read them to me. You out of tape?

SHACKLETON: No go ahead and finish.

MILLER: What I'm trying to say is that I would have . . . I'm operat off the top of my head now, I not have been that day . . . I would have said "please to show me the emergency procedure or the emergency plan or the RWP procedures, so I know what I'm looking at." I was the guy who clearly authorized any exposure that day. Dick Dubiel, I gave the authority to authorize stuff that would not be an exception. For instance, if we, if Dick, if a guy was going to get within his weekly limit or his quarterly limit, Dick Dubiel could authorize that, but if a guy was going to be in an area of over that, where could get more than that, or where he would be in a very high area, Dubiel would personally come and get my approval. So I approved all exposures that day under my umbrella and, specifically, any of them that were significant would be run through me, and were.

SHACKLETON: Gentlemen, we'll turn the tape again and the time is now 12:08 PM, Eastern Daylight Time, May 7, 1979.

TMI DOCUMENTS

DOCUMENT NO: TM-0320

COPY MADE ON 5/8/79 OF DOCUMENT PROVIDED BY

METROPOLITAN EDISON COMPANY.

WRM

Wilda R. Mullinix, NRC

SHIFT RELIEVED J. Conaway TIME 2300 DATE 3/27/79
Signature

SHIFT ASSUMED BY F J Sherman
Signature

PLANT CONDITIONS: RCS TEMPERATURE 582 of MWE GROSS 416 MWE
RCS PRESSURE 2155 psig RX POWER 97.6 %
RCS BORON CONC. 1027 ppmb C.R. POS. 1-4 100 %
5 100 %
PLANT CONDI... 6 95 %
7 95 %
8 27 %

0400 Turbine trip, Reactor trip, H.P. injection ES
0527 Isolated S/G "B"

SHIFT RELIEVED F S Sherman TIME 0700 DATE 3-28-79
Signature

SHIFT ASSUMED BY A Miller
Signature

PLANT CONDITIONS: RCS TEMPERATURE 330 of MWE GROSS 0 MWE
RCS PRESSURE 650 psig RX POWER 0 %
RCS BORON CONC. ppmb C.R. POS. 1-4 0 %
5 0 %
PLANT CONDI... S/SPECIAL REMARKS: Recovering from E.S. actuation 6 0 %
7 0 %
8 27 %

1315 Bypassed HPI, core flood slowly going into Rx vessel
1350 Received Rx Bldg. Clg & Isol Signal — Pressure spiked up to ~5#, then dropped back to 1.5 psig - defeated RB I&C signal
1428 Moved bubble in "A" loop — temperature dropped

PLANT CONDI... 5 100 %
6 95 %
7 95 %
8 27 %

0400 Turbine trip, Reactor trip, H.P. injection ES
0527 Isolated S/G "B"

SHIFT RELIEVED F S Sherman TIME 0700 DATE 3-28-79
Signature
SHIFT ASSUMED BY A M Allen
Signature

PLANT CONDITIONS: RCS TEMPERATURE 330 of MWE GROSS 0 MWE
RCS PRESSURE 650 psig RX POWER 0 %
RCS BORON CONC. ppmb C.R. POS. 1-4 0 %
5 0 %
PLANT CONDITIONS/SPECIAL REMARKS: Recovering from ES actuation
6 0 %
7 0 %
8 27 %

1315 Bypassed HPI, core flood slowly going into Rx vessel
1350 Received Rx Bldg. Clg & Isol. Signal — Pressure sp... up to ~5#, then dropped back to 1.5 psig - det... RBI&C signal
1428 Moved bubble in "A" loop — temperature dropped rapidly and then slowly came back
1510 Given OK to remove respirators in control room
1530 Method of cool down: 1 HPI pump and core flo...
1720 "A" Hot Leg bubble collapsing: pressurizer level dropping & RCS pressure dropping
2 HPI pumps — 925 gpm; Seal Inj. 60 gpm
BWST level 26.5 feet
1732 Pressure bottomed out at 623 psig - started increasing
1745 Started steaming "A" S/G
1800 RCS pressure 860# T_c 450 BWST level 24 feet

RCS pressure 1200#; BWST level 23 feet
Closed MU-V 16B; HPI flow 120 gpm; RCS press - 2080#
Throttling back on MU-V 16C; HPI flow 105 gpm
Closed MU-V16C; RCS pressure 2275
Holding RCS pressure at 2300#; Opening up bypass valves on "A" S/G to provide more cooldown
Attempting to collapse bubbles in A & B Hot Legs
T_{HA} at 550°F; Tc at 395°F; pressurizer level at 400" +
Vacuum in condenser re-established
Started CO-P-2B to fill "B" S/G to ~390"
Started RC-P-1A DC Lift Pump
Raised level in "B" S/G and secured CO-P-2B
Started RC-P-1A for 10 sec. and returned to off
RCS pressure dropping at 1450 psig and decreasing; T_{HB} at 615°F & decreasing; Tc at 310°F & decreasing
Started RC-P-1A
T_{C_A} 340°F; T_{C_B} 338°F
T_{C_A} 330°F; T_{C_B} 325°F RCS pressure at 1250 psig, Pressurizer level at >400"
2155 VA-R-748 Hi & Alert Range Alarm cleared
2200 IC-R-1091 Hi & Alert Alarm Cleared
2130 Started transferring contents of WDL-T-8B to Unit I MWHT.
2146 Placed A, B, C, & D RPS channels in Shutdown Bypass
2125 Opened ~~DH-V-186A~~ & DH-V-187 AM in preparation for placing DH system into service

SHIFT RELIEVED A Miller Signature TIME 0000 DATE 3-29-79

SHIFT ASSUMED BY M Lancaster Signature

PLANT CONDITIONS: RCS TEMPERATURE 295 of LWE GPOOS 0 MWE
RCS PRESSURE 1100 PSIG RX POWER

1900 Attempting to collapse bubbles in A & B Hot Legs
1915 T_{HA} at 550 °F ; Tc at 395 °F ; pressurizer level at 400" +
1916 Vacuum in condenser re-established
1917 Started CO-P-2B to fill "B" S/G to ~390"
1917 Started RC-P-1A DC Lift Pump
1930 Raised level in "B" S/G and secured CO-P-2B
1932 Started RC-P-1A for 10 sec and returned to off
1940 RCS pressure dropping at 1450 psig and decreasing ; T_{HB} at 615 °F & decreasing ; Tc at 310 °F & decreasing
1950 Started RC-P-1A
1953 T_{C_A} 340 °F ; T_{C_B} 338 °F
2017 T_{C_A} 330 °F ; T_{C_B} 325 °F RCS pressure at 1250 psig, Pressurizer level at >400"
2055 VA-R-748 Hi & Alert Range Alarm cleared
2100 IC-R-1091 Hi & Alert Alarm Cleared
2130 Started transferring contents of WDL-T-9B to Unit I RMWHT.
2146 Placed A, B, C, & D RPS channels in Shutdown Bypass
2125 Opened ~~DH-V-186~~ AM & DH-V-187 in preparation for placing DH system into service

SHIFT RELIEVED K Miller Signature TIME 0000 DATE 3-29-79

SHIFT ASSUMED BY M Lancaster Signature

PLANT CONDITIONS: RCS TEMPERATURE 295 of NWE GROSS 0 MWE
RCS PRESSURE 1100 psig RX POWER 0 %
RWE BORON CONC. ppmb C.R POS. 1-4 0 %
5 0 %
PLANT CONDITIONS/SPECIAL REMARKS: plant cooldown / 6 0 %
depress in progress / RCP operating 7 0 %
8 %

CE 2130 CF-T-1A/B N2 pressurizer line isolated at N2 regulator
2215 line up to sample A/B OTSG

2218 Bubble established in pressurizer
2230 holding cooldown at 300°F 1000 psi
2235 lost letdown flow - filters or demins appear plugged
0024 letdown prefilters high ΔP jmp
0055 secured aux + fuel handling buildings ventilation
0020 secured transfer of WDC-T-8B to unit 1
0121 MU-V-100 open - block orifice bypass - in attempt to establish letdown flow - no real help pressz still filling
0121 Reset WDC-P-1B Brkr - compressor running in auto
0149 VA-R-748 in alarm condition
0210 started aux + fuel handling buildings ventilation
0211 HP-R-220 in alert, particulate and high alarm gas - everyone in respirators
0300 A Tc 281°F, A loop press 1028 psi, pzr temp 549°F pzr level and RC press slowly coming down
0301 CTSC sample line up secured
0315 Removed respirators airborn activity in control room down
0435 Vented MU-T-1 to vent header
0500 high RCP seal water temp on non operating pump
0507 high RCP seal water temp cleared - temporarily increas seal flow found NS-V-67 closed - will open
0545 Re opened NS-V-67 clg water supply to seal return clgr throttle closed
0630 sprayed down pzr level increased from 343 to 38 press dropped 50 psi
0631 letdown flow returned ~ 25 gpm after increasing ICCW temp ~ 100°F
0700 Re energized 2-32A
0710 pzr level 352 press 899
0715 started pumping sump bldg sump tk to WDC-T-8B
0716 RC letdown shifted MU-T-1 to "B" RCDT due to increasing press in MU-T-1 - if press is vented radiation levels in aux bldg increas

SHIFT RELIEVED [illegible] TIME 0900 DATE 3/29/79

0121 MU-V-100 open - block orifice bypass - in attempt to establish letdown flow - no real help pressurizer still filling

0121 Reset WDG-P-1B Blr - compressor running in auto

0148 VA-R-748 in alarm condition

0210 started aux + fuel handling buildings ventilation

0211 HP-R-220 in alert, particulate and high alarm gas - everyone in respirators

0300 A Tc 281°F, A loop press 1028 PSI, pzr temp 549°F - pzr level and RC press slowly coming down

0301 OTSG sample line up secured

0315 Removed respirators airborn activity in control room down

0435 Vented MU-T-1 to vent header

0500 high RCP seal water temp on non operating pumps

0537 high RCP seal water temp cleared - temporarily increased seal flow found NS-V-67 closed - will open

0545 Re-opened NS-V-67 clg water supply to seal return clgs throttled closed

0630 Sprayed down pzr level increased from 343 to 385 press dropped 50 PSI

0631 letdown flow returned ~ 25 gpm after increasing ICCW temp ~100°F

0700 Re energized 2-32A

0710 pzr level 352 press 899

0715 started pumping aux bldg sump tk to WDL-T-8B

0716 RC letdown shifted MU-T-1 to "B" RCBT due to increasing press in MU-T-1 - if press is vented radiation levels in aux bldg increase

SHIFT RELIEVED: [signature] TIME 0900 DATE 3/29/79
Signature

SHIFT ASSUMED BY: [signature]
Signature

PLANT CONDITIONS:	RCS TEMPERATURE	285	of	MWE GROSS	0 MWE
	RCS PRESSURE	915	psig	RX POWER	0 %
	RCS BORON CONC.		ppmb	C.R. POS. 1-4	0 %
				5	0 %
				6	0 %
				7	0 %

PLANT CONDITIONS/SPECIAL REMARKS: plant cooldown - Rx System depressurization - RC-P-1A running

0845 Started transferring WDL-T-8A to Unit I MCWHT
0900 CO-P-2B tagged out - due to excessive inboard pump seal leakage
0915 AH-E-11B breaker does not reset

1240 Turbine Bldg., Control Bldg. Area, & Control & Service Bldg. Sump Pumps turned off due to high level in Tunnels.
1320 AH-E-11B breaker reset
1455 WDL-T-8A xfer to Unit I completed

SHIFT RELIEVED A Miller Signature TIME 1600 DATE 3-29-79

SHIFT ASSUMED BY Signature

PLANT CONDITIONS:

RCS TEMPERATURE	280°	of	MWE GROSS	0	MWE
RCS PRESSURE	950	psig	RX POWER	0	%
RCS BORON CONC.	1521	ppmb	C.R. POS. 1-4	0	%
			5	0	%
			6	0	%
			7	6	%
			8	0	%

PLANT CONDITIONS/SPECIAL REMARKS:

1650 Placed jumper on MU-V-8 to allow continuous feed + bleed
1600 Pumped Aux Bldg sump tank to WDL-T-8A.
2030 Vented MU-T-1 to Waste Gas header to lower pressure to 255 psig.
2100 Pumped Aux Bld. Sump tank to WDL-T-8A, aux building sump to aux building sump tank.
L.E. 1920 Letdown flow indicator started working.
2000 RB outside dome reads 3 mr/hr.
IK Pzr level LT-2 failed high, then came back to normal, initiated work request.
2130 RC-P-1A bottom seal cavity press. indication on

1240 Turbine Bldg., Control Bldg. Area, & Control Service Bldg. Sump Pumps turned off due to high level in IWTS.

1320 AH-E-11B breaker reset

1455 WDL-T-8A xfer to Unit I completed

SHIFT RELIEVED A Miller TIME 1600 DATE 3-29-79
Signature

SHIFT ASSUMED BY C[illegible]
Signature

PLANT CONDITIONS:					
RCS TEMPERATURE	280°	of	MWE GROSS	0	MWE
RCS PRESSURE	950	psig	RX POWER	0	%
RCS BORON CONC.	1521	ppmb	C.R. POS. 1-4	0	%
			5	0	%
			6	0	%
			7	0	%
			8	0	%

PLANT CONDITIONS/SPECIAL REMARKS:

1650 Placed jumper on MU-V-8 to allow continuous feed + bleed.

LE 1600 Pumped Aux Bldg sump tank to WDL-T-8A.

2030 Vented MU-T-1 to Waste Gas header to lower pressure to 255 psig.

2100 Pumped Aux Bld. Sump tank to WDL-T-8A, aux building sump to aux building sump tank.

L.E. ≈ 1920 Letdown flow indicator started working.

LE ≈ 2000 R.B outside dome reads ≈ 3 mr/hr.

2115 Przr level LT-2 failed high, then came back to normal, initiated work request.

2130 RC-P-1A lower seal cavity press. indication on panel 8 failed low, wk in.

2200 Indications of OTSG (B) during shift show that it appears there was no tube leak or else it has sealed itself.

SH[illegible] C Adams TIME 2400 DATE 3-29-79
Signature

SHI[illegible] F J Wiltermann
Signature

PL[illegible] [illegible]: R S TEMPERATURE 280 of MWE GROSS 0 MWE
R S PRESSURE 1060 psig RX POWER 0 %
R S [illegible] CONC. 1521 ppmb C.R. POS. 1-4 0 %
5 0 %
PLA[illegible] [illegible]/SPECIAL REMARKS: 6 0 %
7 0 %
8 0 %

0040 Energized pressurizer heaters Banks 3+2
0058 Deenergized pressurizer heaters Banks 3+2 MUT pressure w[illegible] increasing while level decreased. Pzr level dropped and p[illegible] mary pressure increased.
0130 Shut turbine bypass valves for 5 minutes causing tempera[illegible] to increase 8°F
0150 ~~Vented waste gas~~ Vented makeup tank to waste decay tan[illegible] Decay tank pressures "A" 50# "B" 75#
0155 Stopped pumping ABST to WDL-T8A level 9¼' in 8A
0215 Shut off all sump pumps in Turbine Bldg + Control Bldg area
0215 Stopped venting MUT-1
0220 Jacked "B" MFP by hand
0315 Pumped Control Building area sumps with temp pump[illegible]
0330 Venting MU-T1 to waste gas tank
0345 WDL-T8A full - stopped pumping to it
0346 Cycled MU-V376
0350 Stopped venting MU-T-1 "A" 50# "B" 80#
0351 Closed door between Aux Bldg + model room
0430 IWTS filter system started. Sump level 76%
0435 MU-T1 level dropped straight down, shut MU-V12 Seal flow dropped off. Attempted to pump from "B" RCBT to MUT no flow could be obtained
[illegible]

PLANT OPERATIONAL REMARKS:

5 0 %
6 0 %
7 0 %
8 0 %

0040 Energized pressurizer heaters Banks 3+2
0058 Deenergized pressurizer heaters Banks 3+2 MUT pressure wa
increasing while level decreased. Pzr level dropped and pri
mary pressure increased.
0130 Shut turbine bypass valves for 5 minutes causing temperat
to increase 8°F
0158 ~~Vented waste gas~~ Vented makeup tank to waste decay tank
Decay tank pressures "A" 50# "B" 75#
0155 Stopped pumping ABST to WDL-T8A level 9¼' in 8A
0215 Shut off all sump pumps in Turbine Bldg + Control
Bldg area
0215 Stopped venting MUT-1
0220 Jacked "B" MFP by hand
0315 Pumped Control Building area sumps with temp pump
0330 Venting MU-T1 to waste gas tank
0345 WDL-T8A full - stopped pumping to it
0346 Cycled MU-V376
0350 Stopped venting MU-T-1 "A" 50# "B" 80#
0351 Closed door between Aux Bldg + model room
0430 IWIS filter system started. Sump level 76%
0435 MU-T1 level dropped straight down, shut MU-V12
Seal flow dropped off. Attempted to pump from "B"
RCBT to MUT no flow could be obtained
0530 Adjusted makeup seal flow to ~7 gpm/pump
0607 Energized PZR heaters Baks 2+3 @ 1065#
0614 Energized Bank 5 at 1069#
0617 Deenergized all heaters except Bank 1
0710 Started venting MUT1

SHIFT RELIEVED F J Sherman TIME 0710 DATE 3/30/79
Signature

SHIFT ASSUMED BY A Miller
Signature

PLANT CONDITIONS: RCS TEMPERATURE 278 of KWE GROSS 0 MWE
RCS PRESSURE 1050 psig RX POWER 0 %
RCS BORON CONC. 1521 ppmb C.R. POS. 1-4 0 %
5 0 %
6 0 %
7 0 %
8 27 %

PLANT CONDITIONS/SPECIAL REMARKS:

0740 Start all Pzr heaters
0750 Started WDL-P-5A to MU-T-1
0753 Stopped WDL-P-5A, commenced adding D.I. H_2O to MU-T-1 and Boric acid from CA-T-1
0810 Stopped adding Demin H_2O and Boric acid to MU-T-1. Demin H_2O 50K Tank level is 7'3".
0815 Shut off seal injection to RC-P-1B & RC-P-2B
0815 Shut DH-V-5A and commenced adding to MU-T-1 (Boric acid and Demin H_2O)
0820 Stopped adding to MU-T-1 (added 300 gallons)
0830 Stopped all Pzr heaters except one group (maintaining ~1100 psig in RCS)
0855 J. Manoskey and D. Boltz went to test H_2 Recombiner
0901 Venting of MU-T-1
0902 Shut DH-V-5B
0940 Stopped Steaming "A" S/G in order to heat RCS to 280°F
0947 Restarted Steaming "A" S/G
1020 Put Pzr level control in Auto
1000 Waste Gas Decay Tanks A & B at 79 psig (both WDG-V 26A & B are open)
1020 Put Pzr level control in Auto
1045 Put MU-V-17 to hand and shut it. Commenced bleeding letdown to "A" RCBT. Started Pzr heater bank 2.

RCS BORON CONC. 1521 ppmb C.R. POS. 1-4 0 %

5 0 %

PLANT CONDITIONS/SPECIAL REMARKS:

6 0 %

7 0 %

8 27 %

0740 Start all Pzr heaters
0750 Started WDL-P-5A to MU-T-1
0753 Stopped WDL-P-5A, commenced adding DI H_2O to MU-T-1 and Boric acid from CA-T-1
0810 Stopped adding Demin H_2O and Boric acid to MU-T-1. Demin. H_2O 50K Tank level is 7'3".
0815 Shut off seal injection to RC-P-1B & RC-P-2B
0815 Shut DH-V-5A and commenced adding to MU-T-1 (Boric acid and Demin H_2O)
0820 Stopped adding to MU-T-1 (added 300 gallons)
0830 Stopped all Pheaters on Pzr except one group (maintaining ~1100 psig in RCS)
0855 J. Manoskey and D. Boltz went to test H_2 Recombiner
0901 Venting to MU-T-1
0902 Shut DH-V-5B
0940 Stopped Steaming "A" S/G in order to heat RCS to 280°F
0947 Restarted Steaming "A" S/G
1020 Put Pzr level control in Auto
1000 Waste Gas Decay Tanks A & B at 79 psig (both WDG-V 26A & B are open)
1020 Put Pzr level control in Auto
1045 Put MU-V 17 to hand and shut it. Commenced bleeding letdown to "A" RCBT. Started Pzr heater bank 2. Reducing Pzr level to 100".
1052 Started Pzr heater Bank 3
1058 Start Pzr heater Bank 4
1100 "A" RCBT at 9.5 ft.
1115 Pzr Heater banks 2, 3, & 5 off.
1143 MU-V 8 to normal
1210 Pzr heater banks 2, 3, & 5 on
1220 Commenced transfer of MWHT to Unit I
1223 Pzr heater banks 2, 3, & 5 off
1243 Pzr heater bank #1 off

1340 Went to defeat on interlocks for WDG-R-1480, 1485, 1486, 1356 Pzr heater bank #1 on
1404 Opening WDG-V 30B to put WDG-T-1 into Rx. Bldg via BS-V 130A
1405 WDG-V 30B wouldn't open (suspect flow interlock setpoint cranked down to zero)
1409 Bleeding RCS letdown to "A" RCBT
1420 MU-V1B to normal, MU-V17 in auto
1440 WDG-T1A at 84 psig, 1B at 83 psig
1444 Start Pzr heater banks 1, 2, 3, & 5
1445 MW 4T level is 5ft.
L.E. 1440 WDG-V 30B opened - putting WDG-T-1A into Rx Bldg.
~~1444 Start Pzr heater banks 1, 2, 3, & 5 - AM~~
~~1445 AM~~
1450 Went to normal on interlocks for WDG-R-1480, 1485, 1486, & HP-R219 - thereby shutting WDG-V30B.
1500 Stopped Pzr heater banks 2, 3, & 5
1500 80# in WDG-T-1A & 1B
1502 Added 462 gal. of "A" RCBT to MU-T-1
1530 Filled 50k to 12 ft.

SHIFT RELIEVED A Miller TIME 1600 DATE 3-30-79
Signature

SHIFT ASSUMED BY C Ada
Signature

PLANT CONDITIONS: RCS TEMPERATURE 280 of MWE GROSS 0 MWE
RCS PRESSURE 1100 psig RX POWER 0 %
RCS BORON CONC. ppmb C.R. POS. 1-4 0 %
5 0 %
PLANT CONDITIONS/SPECIAL REMARKS: 6 0 %
7 0 %
8 22 %

1634 Turned off all pressurizer heaters to calculate pressure drop rate to see how big of a gas bubble is in the pressurizer.
1853 Halliburton commenced pumping water to BWST.

1414 Bleeding RCS letdown to RCBT
1420 MU-V8 to normal, MU-V17 in auto
1440 WDG-T-1A at 84 psig, 1B at 83 psig
1444 Start PZR heater banks 1, 2, 3, & 5
1445 MU-1-T level is 5 ft.
L.E. 1440 WDG-V-30B opened — putting WDG-T-1A to Rx Bldg.
~~1444 Start PZR heater banks 1, 2, 3, & 5 AM~~
~~1445 AM~~
1450 Went to normal on interlocks for WDG-R-1480, 1485, 1486, & HP-R219 — thereby shutting WDG-V-30B.
1500 Stopped PZR heater banks 2, 3, & 5
1500 80F in WDG-T-1A & 1B
1502 Added 462 gal. of "A" RCBT to MU-T-1
1530 Filled SUR to 12 ft.

SHIFT RELIEVED A. Miller TIME 1600 DATE 3-30-79
Signature

SHIFT ASSUMED BY C Adams
Signature

PLANT CONDITIONS: RCS TEMPERATURE 280 of MWE GROSS 0 MWE
RCS PRESSURE 1100 psig RX POWER 0 %
RCS BORON CONC. ppmb C.R. POS. 1-4 0 %
5 0 %
~~PLANT CONDITIONS/SPECIAL REMARKS:~~ 6 0 %
7 0 %
8 22 %

1634 Turned off all pressurizer heaters to calculate pressure drop rate to see how big of a gas bubble is in the pressurizer.
1853 Halliburton commenced pumping water to BWST.
1907 Energized pressurizer heater bank 1 press RCS 1050 psig
1920 Switched letdown to RCBT(C), RCBT(B) was full.
1921 Energized press heater group 2.
2001 Energized press. heater group 1.
2029 Turned off press heaters, press 1100 psig.
2053 Isolated FW to (A) OTSG to boil it down to ≈ 200" on SU range.
2120 Energized press heater bank 4.
2128 Commenced venting PRZR to RCDT via RC-V137.
2242 Shut RC-V137

2240 "~~In~~ Commenced feeding OTSG (A), SU level +200"

SHIFT [illegible] TIME 0000 DATE 3-30-79
Signature

SHIFT A[illegible] E. BY
Signature

PL[illegible] DI.I.NS: R S TEMPERATURE 285 of MWE GROSS 0 MWE
R S PR[illegible]SURE 1075 psig RX POWER 0 %
R S B[illegible]ON CO.C. ppmb C.R. POS. 1-4 0 %
5 0 %
PL - S/Sr[illegible] 6 0 %
7 0 %
8 27 %

2345 Continuing Lament, pzr via RC-V-137
2353 Began pzr spray
0000 stopped MUHT transfer to unit 1 BAST level 17.5'
0033 Added 300 gal to MU-T-1 from "A" RCBT - MU-T-1 press 39# at beginning of addition
0042 started RC-P-2B and air pumps for test
0043 stopped MU-T-1 H2O addition MU-T-1 press 43.5#
0045 secured RC-P-2B and air pumps
0105 Continuing pzr degas spray on heaters on MU-T-1 venting Lament hdr Pzr level 216" spray line temp ~~and~~ 256°F
0120 energized pzr heaters banks 4+5
0130 A RCBT boron 265 ppm placed C RCBT on recirc
0133 secured bank 5 pzr heaters
0138 secured bank 4 pzr heaters
0140 secured pzr degas closed RC-V-137, RC-V-3 + secured all pzr heaters
0145 Began pzr vent to RB thru RC-V-137
0152 energized Bank 3 heaters
0154 energized Bank 2 heaters
0155 energized Bank 1 heaters
0158 energized Bank 5 heaters secured bank 1 heaters

PL . . . ITEMS: R S TEMPERATURE 285 of MWE GROSS 0 MWE

R S PRESSURE 1075 psig RX POWER 0 %

R S BORON CO.C. ppmb C.R. POS. 1-4 0 %

5 0 %

PL . . . ITEMS: 6 0 %

7 0 %

8 27 %

2345 Continuing Lament, pzr via RC-V-137

2353 Began pzr spray

0000 stopped MWHT transfer to unit I BAST level 17.5'

0033 Added 300 gal to MU-T-1 from "A" RCBT - MU-T-1 press 39#
at beginning of addition

0042 started RC-P-2B and air pumps for test

0043 stopped MU-T-1 H2O addition MU-T-1, press 43.5#

0045 secured RC-P-2B and air pumps

0105 Continuing pzr degas spray on heaters on MU-T-1
venting Lament hdr Pzr level 216" spray line
temp ~~266~~ 256°F

0120 energized pzr heaters banks 4+5

0130 A RCBT boron 265 ppm placed C RCBT on recirc

0133 secured bank 5 pzr heaters

0138 secured bank 4 pzr heaters

0140 secured pzr degas closed RC-V-137, RC-V-3 +
secured all pzr heaters

0145 Began pzr vent to RB thru RC-V-137

0152 energized Bank 3 heaters

0154 energized Bank 2 heaters

0155 energized Bank 1 heaters

0158 energized Bank 5 heaters secured bank 1 heaters

0200 energized Bank 1 heaters

0203 RB equipment hatch 40 R/Hr contact - WDG-T-1A/B
contact reading 60 R/Hr

0215 secured Bank 5 pzr heaters

0228 energized Banks 4+5 heaters

0229 Began pzr spray opened RC-V-3

0315 secured pzr degas by closing RC-V-137 RC-V-3 de-
energized all pzr heaters - Waiting for Hz
recombiner to be placed in service

0325 B shift CRO'S SS/SF briefed on loss of RCP EP
0338 energized pzr bank 2 heaters
0400 de-energize Bank 2 heaters
0410 energized Bank 2 heaters
0440 de-energized Bank 2 heaters
0445 Added 150 gal to MU-T-1
0458 energized Bank 2 pzr heaters
0518 started HP-R-227 for RB H_2 sample
0525 C RCBT boron 318 ppm BWST 2289 ppm
0528 RCBT B on sample Recirc.
0547 Began 150 gal addition to MU-T-1 from B RCBT - initial press 32#
0549 pzr heater bank #2 off
0551 turbine bypass valve from 47% to 44% open
0624 pzr htr bank #2 on
0638 secured RB H_2 sample, HP-R-227 off isolation valve closed
0705 Began adding 150 gal to MU-T-1 from B RCBT initial press 23#
0707 secured MU-T-1 addition final press 24#
0730 secured pzr htrs bank 2
0735 Began pzr spray - reduce press from 1075 to 1025
0737 secured pzr spray
0745 energize pzr heater bank 2
~~0750~~ 0755 Began pzr degas and spray - all heaters on in manual
RC-V-137 and spray valve cracked open

SHIFT RELIEVED [signature] TIME 0800 DATE 3/31/79
Signature

SHIFT ASSUMED BY A Miller
Signature

PLANT CONDITIONS:	RCS TEMPERATURE	280	of	MWE GROSS	0	MWE
	RCS PRESSURE	1050	psig	RX POWER	0	%
	RCS BORON CONC.		ppmb	C.R. POS. 1-4	0	%
				5	0	%
PLANT CONDITIONS/SPECIAL REMARKS:				6	0	%
				7	0	%
				8	27	%

0458 energized Bank 2 pzr heaters
0518 started HP-R-227 for RB H2 sample
0525 C RCBT boron 318 ppm BWST 2289 ppm
0528 RCBT B on sample Recirc.
0547 Began 150 gal addition to MU-T-1 from B RCBT - initial press 32#
0549 pzr heater bank #2 off
0551 turbine bypass valve from 47% to 44% open
0624 pzr htr bank #2 open
0638 secured RB H2 sample, HP-R-227 off isolation valve closed
0705 Began adding 150 gal to MU-T-1 from B RCBT initial press 23#
0707 secured MU-T-1 addition final press 24#
0730 secured pzr htrs bank 2
0735 Began pzr spray - reduce press from 1075 to 1025
0737 secured pzr spray
0745 energize pzr heater bank 2
~~0750~~ 0755 Began pzr degas and spray - all heaters on in manual
RC-V-137 and spray valve cracked open

SHIFT RELIEVED: [signature] TIME 0800 DATE 3/31/79
Signature

SHIFT ASSUMED BY: A Miller
Signature

PLANT CONDITIONS: RCS TEMPERATURE 280 of MWE GROSS 0 MWE
RCS PRESSURE 1050 psig RX POWER 0 %
RCS BORON CONC. ppmb C.R. POS. 1-4 0 %
5 0 %
PLANT CONDITIONS/SPECIAL REMARKS: 6 0 %
7 0 %
8 27 %

0800 RC Loop A Inlet Temp 282°F
RC Pressure 1020#
Pzr level 230"
Pzr temp 550°F
HP-R-324 400
HP-R 232 125
BWST level 18.5 ft.
0803 Pzr vents and spray valve closed
0824 Fill Make-up Tank to 250"
0825 [illegible]

0828 Crack Pzr Vent Valve & Spray Valve
0830 Stopped filling makeup tank at 48" (added 5 66 gal.)
0837 Energize heater banks 4 & 5
0846 Closed Pzr Vent Valve
0900 Loop A Inlet Temp. 282°F
RCS Pressure 1010 #
Pzr level 225"
Pzr temp 550°F
HPR 3240 400
HPR 232 125
BWST level 18.5 ft.
0902 Closed Pzr Vent Valves
0907 Crack open Pzr Vent and Spray.
0917 Shut Spray & Vent Valves
0935 Opened Pzr Vent Valve
0956 Opened SF-V157 (xferring BWST from Unit I to Unit II BWST per SOP 1-79-78 → Unit I BWST to Unit I Spent Fuel Pool to Unit II Spent Fuel Surge Tank to Unit II BWST)
0957 Shut Pzr Vent Valve
1000 Loop A Inlet temp 282°F
RCS pressure 1010 #
Pzr level 205"
Pzr temp 550°F
HPR 3240 350
HPR 232 100
BWST level 20 ft.
L.E. 0930 MWHT = 7' Aux Sump Tank 3.4'
Aux Sump 3.2' DH Vault A 2.3'; B 2.1'
Waste Gas Tank A: 80#, B: 80#, Hdr. Press > 20#
Aux Sump Tank lined up to MWHT
1026 Closed SF-V157
1037 Opened Pzr Spray Valve
1042 Closed Pzr Spray Valve (reduced Plant pressure by 50 psi)
1045 Added 130 gal → MUT
1115 Opened SF-V157 to xfer water from SF Surg Tank to BWST

Pzr level 225"
Pzr temp 550°F
HPR 3240 40C
HPR 232 125
BWST level 18.5 ft.
0902 Closed Pzr vent valves
0907 Crack open Pzr Vent and Spray
0917 Shut Spray & Vent Valves
0925 Opened Pzr Vent Valve
0956 Opened SF-V157 (xferring BWST from Unit I to Unit II BWST per SOP 1-79-78 → Unit I BWST to Unit I Spent Fuel Pool to Unit II Spent Fuel Surge Tank to Unit II BWST)
0957 Shut Pzr Vent Valve.
1000 - Loop A Inlet temp 282°F
RCS pressure 1010#
Pzr level 205"
Pzr temp 550°F
HPR 3240 350
HPR 232 100
BWST level 20ft.
L.E. 0930 MWHT - 7' Aux Sump Tank 3.4'
Aux Sump 3.2' DH Vault A 2.3'; B 2.1'
Waste Gas Tank A: 80#, B: 80#, Hdr. Press > 20#
Aux Sump Tank lined up to MWHT
1026 Closed SF-V157
1037 Opened Pzr Spray Valve.
1042 Closed Pzr Spray Valve (reduced Plant pressure by 50psi)
1045 Added 130 gal → MUT
1115 Opened SF-V157 to xfer water from SF Surg Tank to BWST
1120 Added BHNT solution & water to MU-T-1 (~total 300 gal)
1130 Opened Pzr vent valve RC-V137
1133 Closed Pzr vent and opened spray valves
1142 Commenced H_2 vent and CO_2 purge of T G
1145 BWST Level 21.5'
1205 Closed Pzr spray valve
1210 Closed SF-V157
1230 BWST level 21.9', opened SF-V157

1300 Decreased PZR Level Control Setpoint
1301 RCS loop A Tc 280°F, Press. 1100#, pzr level 187", Pzr temp. 550°F, HP-R 3240 reading 300 mr/hr, HPR 232 reading 90 mr/hr
BWST level 23 ft.
1312 Cracked open pzr vent & spray valve.
1320 SF-V 157 closed
Gas Decay Tank pressures A-80#, B-80#
1340 Commenced ventilating H_2 from T/G
1344 Opened SF-V157 – There are now two sump pumps running in Unit I SF Pool to Unit II SF surge tank
1350 Closed RC-V137
1351 Started SF-P-1B to pump from SF surge tank to BWST
1410 Stopped SF-P-1A, left SF-V157 open
1426 Cracked vent valve on Pressurizer
1427 Added water (303 gal) to MU-T-1 from "B" RCBT and BAMT
1430 Started SF-P-1A
1435 Commenced shooting CO_2 to Gen Generator
1448 SF-P-1A off
1511 Closed SF-V157. Transfer of water from SF surge tank to BWST halted until Unit I SF Pool Level is restored
1530 Adding 413 gal. to MU-T-1 from RCBT "B" and BAMT
1537 Cracked pzr vent valve
1542 Secured Turbine Bldg. ventilation

SHIFT RELIEVED A Miller TIME 1600 DATE 3-31-79
Signature

SHIFT ASSUMED BY C Adams
Signature

PLANT CONDITIONS: RCS TEMPERATURE	280	of	MWE GROSS	0	MWE
RCS PRESSURE	1100	psig	RX POWER	0	%
RCS BORON CONC.		ppmb	C.R. POS. 1-4	0	%
			5	0	%
PLANT CONDITIONS/SPECIAL REMARKS:			6	0	%
			7	0	%
			8	22	%

1619 Shut RC-V137

Gas Decay Tank pressures A - 80#, B - 80#

1340 Commenced ventilating to from T/G

1344 Opened SF-V157 - There are now two sump pumps running in Unit I SF Pool to Unit I SF surge tank

1350 Closed RC-V137

1351 Started SF-P-1B to pump from SF surge tank to BWST

14__ Stopped SF-P-1A, left SF-V157 open

1426 Cracked vent valve on Pressurizer

1427 Added water (303 gal) to MU-T-1 from "B" RCBT and BAMT

1430 Started SF-P-1A

1435 Commenced shooting CO_2 to Main Generator

1448 SF-P-1A off

15__ Closed SF-V157 Transfer of water from SF surge tank to BWST halted until Unit I SF Pool Level is restored

1530 Adding 413 gal. to MU-T-1 from RCBT "B" and BAMT

1537 Cracked PZR vent valve

1542 Secured Turbine Bldg. ventilation

SHIFT RELIEVED [signature] TIME 1610 DATE 3-31-79
Signature

SHIFT ASSUMED BY [signature]
Signature

PLANT CONDITIONS: RCS TEMPERATURE	280	°F	MWE GROSS	0	MWE
RCS PRESSURE	1100	psig	RX POWER	0	%
RCS BORON CONC.		ppmb	C.R. POS. 1-4	0	%
			5	0	%
PLANT CONDITIONS/SPECIAL REMARKS:			6	0	%
			7	0	%
			8	22	%

1619 Shut RC-V137

1650 Jogged open RC-V137

1736 Completed SP 3301-W1 sat.

1737 Shut RC-V137.

1741 Closed MU-V13 due to low press in MU-T-1

1743 STARTED pumping contaminated drain tank (A) to Unit 1 MWST.

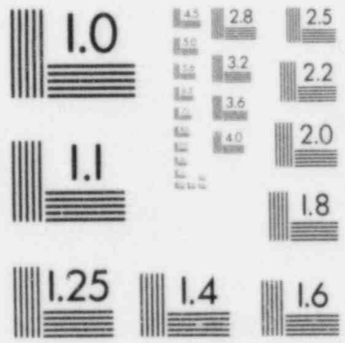
1815 Opened RC-V137

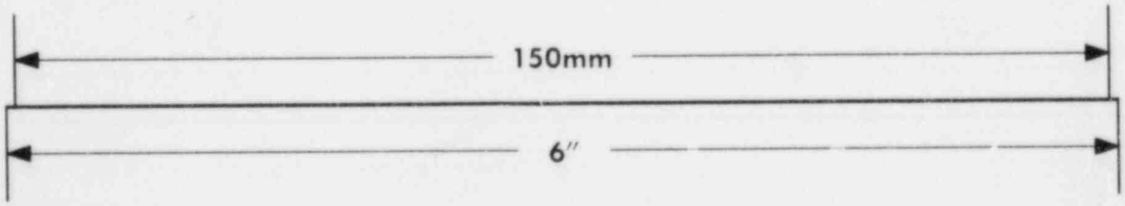
1842 Started DF-X-10 for SP 2303-M16D.

1848 Stopped DF-X-10 to Check cooling water.

1855 Started ~~OF~~ OF-X-1B for SP 2303-M16D.
1859 Opened MU-V13.
1950 Opened RC-V137.
2005 Stopped OF-X-1B
LE 1740 Rad waste panel readings
Aux Bldg Sump 2ft
MWHT 10 ft
DH vault (A) sump 2.35
DH vault (B) sump 2.15
RB spray vault (A) 2.3
RB spray vault (B) 1.75
Aux Sump tank 3.1
WDG-T-1A 82psi
WDG-T-1B 82psi
Vent Hdr. 4.25
LE. 1748 Vent Header press 3.8 psig
LE. 1857 Vent header press 3psig
LE. 2100 Rad waste readings
Aux Sump 22 ft
MWHT 10ft
DH(A) vault 2.3 ft.
DH(B) vault 2.2 ft
RB spray vault A 2.3 ft
RB spray vault B 1.75 ft
Aux Sump tank 3.1 ft
WDG-T-1A 84psig
WDG-T-1B 83psig
Vent Header 3psig
2126 Commenced pumping from Unit 1 SF pool to Unit 2 BU
Unit 2 BUST 22.5 ft
LE 2034 Closed RC-V137
LE 2110 Opened RC-V137
2139 Closed RC-V137
2224 Opened RC-V137
2245 Closed RC-V137

IMAGE EVALUATION
TEST TARGET (MT-3)





MWHT 10 ft
DH vault (A) sump 2.35
DH vault (B) sump 2.15
RB spray vault (A) 2.3
RB spray vault (B) 1.75
Aux Sump tank 3.1
WDG-T-1A 82psi
WDG-T-1B 82psi
Vent Hdr. 4.25

LE. 1748 Vent Header press 3.8 psig
LE. 1857 Vent header press 3psig
LE. 2100 Rad Waste readings
Aux Sump 22 ft
MWHT 10 ft
DH (A) vault 2.3 ft.
DH (B) vault 2.2 ft
RB spray vault A 2.3 ft
RB spray vault B 1.75 ft
Aux Sump tank 3.1 ft
WDG-T-1A 84 psig
WDG-T-1A 83 psig
Vent Header 3 psig

2126 Commenced pumping from Unit 1 SF pool to Unit 2 BU
Unit 2 BUST 27.5 ft
LE 2034 Closed RC-V137
LE 2110 Opened RC-V137
2139 Closed RC-V137
2224 Opened RC-V137
2245 Closed RC-V137
2320 WDG-T-1A, 1B at 84 psig.

SHIFT RELIEVED C Adams TIME 2355 DATE 3-31-79
Signature

SHIFT ASSUMED BY M Blanchard
Signature

PLANT CONDITIONS: RCS TEMPERATURE 240° of MWE GROSS 0 MWE
RCS PRESSURE 1050 psig RX POWER 0 %
RCS BORON CONC 2050 ppmb C.R. POS. 1-4 0 %
5 0 %
6 0 %
7 0 %
8 %

PLANT CONDITIONS/SPECIAL REMARKS:

2330
NC-2334 Added 370 gal B RCBT and 100 gal from BAMT to MV-T-1
2342 started SF-P-1A
2352 Closed RC-V-137
0009 stopped SF-P-1A
0015 shut IC-V-5 per B/W concurrence
0016 opened RC-V-137
0036 started SF-P-1A
0055 filled 50K tk
0056 cooled ICCW
0059 Closed RC-V-137
0101 stopped SF-P-1A
0112 Added 370 gal B RCBT + 100 gal from BAMT to MV-T-1
0120 opened AH-V-101 — 108 for RB cooling
0123 increased spray flow
0125 opened RC-V-137
0127 Added 370 gal B RCBT and 100 gal BAMT to MV-T-1
0130 started SF-P-1A
0147 stopped SF-P-1A and closed SF-V-157
0200 closed RC-V-137
0226 adjusted RC spray flow and opened RC-V-137
0228 Closed AH-V-101 — 108
0251 Closed RC-V-137
0325 Added 370 gal B RCBT + 100 gal from BAMT to MV-T-

5 0 %

PLANT CONDITIONS/SPECIAL EVENTS: 6 0 %

7 0 %

8 %

2330
WC 2334 Added 370 gal B RCBT and 100 gal from BAMT to MV-T-1
2342 started SF-P-1A
2352 Closed RC-V-137
0009 stopped. SF-P-1A
0015 shut IC-V-5 per B/W concurrence
0016 opened RC-V-137
0036 started SF-P-1A
0055 filled 50K tk
0056 cooled ICCW
0059 Closed RC-V-137
0101 stopped SF-P-1A
0112 Added 370 gal B RCBT + 100 gal from BAMT to MV-T-1
0120 opened AH-V-101 — 108 for RB sample
0123 increased spray flow
0125 opened RC-V-137
0127 Added 370 gal B RCBT and 100 gal BAMT to MV-T-1
0130 started SF-P-1A
0147 stopped SF-P-1A and closed SF-V-157
0200 closed RC-V-137
0226 adjusted RC spray flow and opened RC-V-137
0228 Closed AH-V-101—108
0251 Closed RC-V-137
0325 Added 370 gal B RCBT + 100 gal from BAMT to MV-T-
LE 0323 Opened RC-V-137 + increased spray
0350 closed BS-V-149 in preparation to sample B waste gas decay tank
0400 shut RC-V-137
WC 0435 0432 Added 370 gal B RCBT + 100 gal BAMT to MV-T-1
0451 adjusted RC-V-1 open
0454 closed RC-V-137
0456 adjusted closed RC-V-1
0458 adjusted closed RC-V-1

0545 Opened RC-V-137
0603 opened SF-V-157
0616 Closed RC-V-137
0625 started SF-P-1A shut NR-V-51B
0645 Added 370 gal "B" RCBT + 100 gal BAMT to MU-T-1
0652 opened RC-V-137
0659 stopped SF-P-1A
0600 Radwaste Readings
MWHT 10 ft
aux sump 2.5 ft
aux sump tk 3.2 ft
WDG-T-1A 85 psi
WDG-T-1B 85 psi
vent header 4.3 psi
0710 Opened AH-V-~~101~~ 108 for RB sample
0717 Closed AH-V-101-108
0725 started SF-P-1A

SHIFT RELIEVED [signature] TIME 0800 DATE 3/4/79
Signature
SHIFT ASSUMED BY [signature] / A. Miller
Signature

PLANT CONDITIONS:	RCS TEMPERATURE	280	°F	WE GROSS	0 MWE
	RCS PRESSURE	1000	psig	RX POWER	0 %
	RCS BORON CONC.	~~2050~~	ppm	C.R. POS. 1-4	0 %
				5	0 %
				6	0 %
				7	0 %
				8	27 %

PLANT CONDITIONS/SPECIAL REMARKS:

0728 Closed RC-V137
0740 Latest HPR-227 Sample - R.B. Atmosphere 1 Rem Activit
2.6 % H_2
0750 BWST level 40.5' Secured pumping from SF surge tan
and from Unit I SF tank. Closed SF-V157 and stopp
SF-P1A. Shut down Unit I sump pumps & SF recir

0659 stopped SF-P-1A

0600 Radwaste Readings

MWHT 10 ft

aux sump 2.5 ft

aux sump tk 3.2 ft

WDG-T-1A 85 psi

WDG-T-1B 85 psi

vent header 4.3 psi

0710 Opened AH-V-~~101~~ 108 for RB sample

0717 Closed AH-V-101-108

0725 started SF-P-1A

SHIFT RELIEVED [signature] TIME 0800 DATE 3rd 4/4/79

Signature

SHIFT ASSUMED BY [signature] / A. Miller

Signature

PLANT CONDITIONS:	RCS TEMPERATURE	280 °F	WE GROSS	0	MWE
	RCS PRESSURE	1000 psig	RX POWER	0	%
	RCS BORON CONC.	~~2050~~ ppmb	C.R. POS. 1-4	0	%
			5	0	%
PLANT CONDITIONS/SPECIAL REMARKS:			6	0	%
			7	0	%
			8	27	%

0728 Closed RC-V137

0740 Latest HPR-227 Sample - R.B. Atmosphere 1 Rem Activity

2.6 % H_2

0750 BWST level 40.5' Secured pumping from SF surge tank and from Unit I SF tank. Closed SF-V157 and stopped SF-P1A. Shut down Unit I sump pumps & SF recirc pump. No other changes

0754 Opened RC-V137

0815 Started filling 50 K tank due to low level

0825 Added 460 gallons to MUT from BAMT & "B" RCBT

0826 Closed RC-V137

0835 Stopped filling 50 K tank @ 12.5'

0845 Reset pressurizer heater groups 4,5,6+7

0902 Opened RC-V137

0904 Secured CW flume makeup. Level @ 3" from top

TMI DOCUMENTS

DOCUMENT NO: TM-0321

COPY MADE ON 5/8/79 OF DOCUMENT PROVIDED BY

METROPOLITAN EDISON COMPANY.

Wilda R. Mullinix, NRC

CONTROL ROOM OPERATORS LOG SHEET

LOG DAILY (SHIFT FOREMAN REVIEW)
AND RETURN TO OPS ENGINEER

LCR-0001

DATE: Nov 30, 1979

CONTROL BLDG 322' ELEV.			11-7	7-3	3-11
CHARTS	(DATE, TIME, & LINK CHARTS)	(✓OK)	✓		
ANNUNCIATORS	(TEST, REPLACE BULBS)	(✓)	✓		
SEND FOLLOWING TO NUC. ENG. @ 2400 HRS 1. COMPUTER GROUPS 20, 22, 32, 34, 36 @ 2400 2. PERIODIC TYPEWRITER LOG-DAILY SUMMARY 3. STATION DAILY LOG SHEET 4. RX PWR., BORON CONC., CORE BURNUP RECORDED		(✓)			
COLLECT ALL LOOSE COMPUTER UTILITY, ALARM AND PERIODIC TYPEWRITER SHEETS (OTHER THAN DAILY SUMMARY AND PRINTOUTS ABOVE) AND COVER SHEET TO FRONT AND FILE		(✓)			
FIRE BRIGADE LOG (ATTACHED) KEEP HANDY AT CONSOLE FOR EACH SHIFT		(✓)		✓	✓
CIRCLE MSR WHICH ARE HI-LEVEL REJECTING TO CONDENSER			1A 1B 2A	1A 1B 2A	1A 1B 2A

PANEL 10

RC PUMP VIBRATION/ECCENTRICITY (3-11) RECORD READINGS

ECC MTR				
X	Y	X	Y	RC-P-1A

ECC MTR				
X	Y	X	Y	RC-P-2A

ECC MTR				
X	Y	X	Y	RC-P-1B

ECC MTR				
X	Y	X	Y	RC-P-2B

LEAKAGE DETECTION TEMP. RECORDER 1. CHECK FOR INC. TEMP. TRENDS 2. NOTE ANY POINT > 200°F (Except Points 1-11)	(✓)	✓		✓

PANEL 8

CONTROL PWR SW-S-1C, 2C, 3 & DPC (4 Red Lites)	(ON)	✓		✓
SR DISCH. HDR. PRESSURE (19-21)	(PSIG)	21		21

PANEL 8

			11-7	7-3	3-11
RIVER WATER ΔT UNIT (Red Pen)	(Local/PNL 8)	(± °F)	11	2.4	+2.9
STATION (Green Pen)	(Local/PNL 8)	(± °F)	16	+6	+6
NR HDR "B" PRESSURE	(16-28)	(PSIG)	16	14	14
NR HDR "A" PRESSURE	(16-28)	(PSIG)	16	16	16
NR PUMP DISCH TEMP. (WHEN DE-ICING)	(38-48) (Pt 917/924)	(°F)	NA	/	NA
RCP NOISE MONITOR (CHECK ALL CHANNELS FOR ABNORMAL NOISE)		(✓OK)			
EFFLUENT FLOW	(MIN. 7.2)	(MGD)	88		90
SSCCW HEAD TK. LEVEL	(2'-6')	(FT.)	7'		7'
SSCCW SUPPLY TEMP. TI-484	(80-95°)	(°F)	51		51°
DHCCW HEAD TK. "A" LEVEL	(33-55")	(IN.)	4'2"		4
DHCCW HEAD TK. "B" LEVEL	(33-55")	(IN.)	3'7"		3.5
DHCCW TEMP. (LOOP INSERVICE A OR B)	(75-115)	(°F)	NIS		NIS
NSCCW SUPPLY TEMP.	(75-95)	(°F)	54		54
NSCCW HEAD TK. LEVEL	(18-75")	(IN.)	5'4"		5'
ICCW COOLER OUTLET TEMP.	(95-105)	(°F)	102		100
CRDM FLOW	(150-180)	(GPM)	147		140
ICCW HEAD TK. LEVEL	(14-20)	(IN)	22		23
BWST LEVEL SW. LIGHTS	(2 White Lites)	(ON)	(2)		#1

PANEL 12

RMS CHECK FOR ABNORMAL TRENDS (AT END OF SHIFT)

1.	CHECK RECORDER CHARTS FOR PREV. 8 HRS.	RM-R1	12		—
2.	IF ANY INC. ABOVE BKGROUND IS OBSERVED	RM-R2	1		—
	DETERMINE CAUSE AND MARK CHARTS	RM-R3	1		—
3.	TIME AND DATE CHARTS	RM-R4	1		—
4.	IF INC. IS NOTED RECORD BACKGROUND	RM-R5	1		—
	AND PEAK READING ON THIS SHEET	RM-R6			—
5.	LIQ. MONITOR FLOW LIGHTS				
	(9) GREEN (Except SF-R-3402 IF NIS)	(ON)	720, 1311		✓
	NOTIFY SS/SF AND HP DEPT. (✓OK/AVG CPM/PEAK CPM)				✓

PANEL 17

CW PUMPS DISCH. PRESS. (INSERVICE)	(33-#47)	(✓OK)	✓		✓
VACUUM PUMP CLR OUTLET TEMPS.	(MAX. 105°F)	(°F)	61 61 61		
CONDENSER ΔP (COLD-HOT)	LOOP A	(PSID)	8		
(NOM. 12 PSID)	LOOP B	(PSID)	7		
13TH STAGE HTR OUTLET TEMP. (If FW Hting	(180-250°)	(°F)	211		NA
LO-E-1 (MLO RESERV. EXH)	(RUNNING)	(✓)	✓		—
LO-E-2 (LUBE SEAL TK EXH)	(RUNNING)	(✓)	✓		—
FW-P-1A/B VAPOR EXTRACTORS (2)	(RUNNING)	(✓)	✓		✓
IA COMPRESSORS FLOW FAULT LIGHTS (2)	(AMBER)	(OUT)	OUT		OUT

PANEL 16

LP 1 INLET TEMP.	(≤10% 400°F, 490-505°F)	(°F)	150		NA
LP 2 INLET TEMP.	(≤10% 400°F, 490-505°F)	(°F)	150		NA

PANEL 19

STATION BATTERY 2-1 CHARGE/DISCH	(P & N)	(AMPS)	P	N	P	N	P	N
STATION BATTERY 2-2 CHARGE/DISCH	(P & N)	(AMPS)	P	N	P	N	P	N
VITAL BUSES 2-5, 2-1, 2-3	(ALT/NORM FEEDER) (NORM.)	(✓OK)	✓				✓	
VITAL BUSES 2-2, 2-4	(ALT/NORM FEEDER) (NORM.)	(✓OK)	✓				✓	

			11-7	7-3	3-11
PANEL 6					
WHITE PERMISSIVE LIGHTS 6900/4160 BKRS	(ALL ON)	(✓)	✓		✓
MCC'S WHITE PWR AVAIL. LIGHTS	(ALL ON)	(✓)	✓		✓
500 KV BUS VOLTS	4 BUS	(KVOLTS)	505		
	8 BUS	(KVOLTS)	495		
EXCITER VOLTAGE	( )	(VOLTS)	115		111
EXCITER VOLTAGE BALANCE	(± 1V.)	(V)	1		NA
EXCITER CURRENT	( )	(AMPS)			
PANEL 5					
CONDENSER HOTWELL LEVEL	(24.5-27.5)	(IN.)	26.5		26.5
COND. STORAGE TANK "A" LEVEL	(>14.5')	(FT)	16.5		16
COND. STORAGE TANK "B" LEVEL	(>14.5")	(FT)	16		18
GS HEADER PRESSURE	(135-140)	(PSIG)	95		110
GS HP SUPPLY PRESSURE	(3-5)	(PSIG)	2.7		4
TURB. L.O. PRESSURE	(14-18)	(PSIG)	22		22
EHC PRESSURE	(1600-1900)	(PSIG)	NIS		NIS
SSCCW ΔP (STABLE)	(42-44)	(PSID)	43		42
TURB. L.O. TEMP.	(90-120)	(^{o}F)	107		110
EXCITER COLD AIR TEMP.	(110-122^{o}F)	(^{o}F)	84		82
GEN. COLD AIR TEMP.	(110-118^{o})	(^{o}F)	75		82
SGFP 1B L.O. TEMP.	(100-120)	(^{o}F)	110		110
SGFP 1A L.O. TEMP.	(100-120)	(^{o}F)	84		85
SGFP 1B CONTROL OIL PRESS.	(100-110)	(PSIG)	110		
SGFP 1A CONTROL OIL PRESS.	(100-110)	(PSIG)	105		
SGFP 1B BEARING OIL PRESS.	(12-15)	(PSIG)	14.5		
SGFP 1A BEARING OIL PRESS.	(12-15)	(PSIG)	14		
PANEL 3					
RC-P-1A SEAL INJECTION FLOW	(8.5-10)	(GPM)	7		7
RC-P-1B SEAL INJECTION FLOW	(8.5-10)	(GPM)	9		9
RC-P-2A SEAL INJECTION FLOW	(8.5-10)	(GPM)	7.7		7.4
RC-P-2B SEAL INJECTION FLOW	(8.5-10)	(GPM)	8.3		8.2
MAKEUP TANK PRESSURE	(5-30)	(PSIG)	(15)		22
MAKEUP FILTER ΔP (INSERV. A OR B)	(25 MAX)	(PSID)	1		2
PURIF. & DEBOR. FILTER ΔP (INSERV. A OR B)	(25 MAX)	(PSID)	3		
SEAL INJECT. FILTER ΔP (INSERV. A OR B)	(25 MAX)	(PSID)	2		2
SEAL RETURN FILTER ΔP	(5 MAX)	(PSID)	0		0
R.B. PRESSURE (RECORDERS)	(-2 to +3)	(PSIG)	-1		-1
COMPUTER CONSOLE (Enter New Boron-Pt. 1496-in Computer)					
PANEL 8A					
RC PUMP TOTAL SEAL LEAKAGE	(MAX. 1.90 GPM)				
(16.1 ÷ Display) + Computer Pt 771	RCP-1A	(GPM)			
(14.3 ÷ Display) + Computer Pt 774	RCP-1B	(GPM)			
(14.1 ÷ Display) + Computer Pt 772	RCP-2A	(GPM)			
(13.6 ÷ Display) + Computer Pt 773	RCP-2B	(GPM)			
RC DRAIN TANK LEVEL	(75-77")	(")	<70		<70
RC DRAIN TANK TEMP.	(MAX. 126)	(^{o}F)	(145)		145
RC DRAIN TANK PRESS.	(2-5)	(PSIG)	20		0
LEAKAGE COOLER (COM.) OUTLET TEMP.	(MAX. 120")	(^{o}F)	105		105
RCDT LEAK RATE (GPM = $\frac{183\ (V2 - V1)}{60}$)	(From Patch Panel)	(GPM)			

			11-7	7-3	3-11
PANEL 25					
FUEL HND/AUX. BLDG. ΔP	(.1 to 2")	("WC)	.04		.04
AUX. BLDG/INTAKE TUNNEL ΔP	(.04-.1)	("WC)	.35		.32
R.B. (SOUTH) REL. HUMIDITY	( )	(%)			
R.B. (NORTH) REL. HUMIDITY	( )	(%)			
AUX. STEAM STATUS (NOTIFY CHEM. DEPT.)		(✓)	N/A		
CHECK IF RC EVAP. IS RUNNING (YES OR NO) CALL CHEMISTRY TO OBTAIN	FEED TK. SAMPLE DISTILLATE SAMPLE (IF RUNNING TIME CALLED)		N		
CHECK CONDUCTIVITY RECORDER	(NO INCREASING TREADS)	(✓OK)			
CHECK CRD POSITIONS (AT PROGRAMMERS TYPEWRITER) 1. TYPE "RODS": PRESS "RETURN" IN ABS.			N/A		N/A
2. TYPE "RODS": PRESS "RETURN" IN REL.			↓		↓
3. ASSURE NO ASSYMETRIC CONDITION			↓		↓
4. INDICATE DATE, SHIFT, SIGN AND RETURN TO OPS ENGINEER		(✓OK)	✓		↓

PANEL 40

OSCILLOGRAPH CHECKS [LOG ALL TRIP LIGHTS & DISPATCHER NOTIFICATIONS IN CRO LOG.]	(11 RED LIGHTS)	(TRIP/NOT TRIPPED)	N/S		N/S
		(DISPATCHER NOTIFIED CRO INITIAL)	↓		↓
		(CHART MARKED)	✓		↓

CONSOLE 5

HARRIS CONTROL SYSTEMS TESTS (EVEN DAYS 7-3 SHIFT) (CRO INITIALS) [ ]

a. TEST OPEN & CLOSE FUNCTION FOR B2-02, B2-04/05, B2-2602 & B2-2604/2608 AS FOLLOWS:

1. DEPRESS CLOSE/OPEN PB.
2. OBSERVE AMBER/POINT SELECTED LAMP LIGHTS.
3. DEPRESS CANCEL PB.

COMPUTER LOGS / DAILY RECORD STORAGE

COVER SHEET

NOTE:

1. Information to be filled in by CRO at the end of the day.

2. Attach all the loose computer printouts not sent to Ops. Engineer or Nuc. Engineer. These include all the printouts for this day such as utility typewriter, alarm typewriter and periodic log typewriter sheets.

3. Attach securely (ie. staple, etc.) and attach this cover sheet to the front of the pack (as neatly as practicable) and date below.

4. Place in record storage (temporary - kitchen/longterm chemical addition room; Aux. Building).

Computer Records for _____ _____
Date CRO Initial

Date: _____

Instructions: For each shift fill in the names of the persons who are designated as the fire Brigade. Those who are designated must be aware of that responsibility.

Position	Names of those Designated		
	11-7	7-3	3-11
UNIT 1 Aux. Operator #1			G. Schutt
UNIT 2 Aux. Operator #2			G. Shue
UNIT 1 Aux. Operator #2			C. Kretsen
UNIT 2 Aux. Operator #4			D. Wilson
HP Tech #5			W. Deimler
Shift Supervisor			B. Melker

NOTE: At end of day attach to the day's Control Room Operators Log.

Date: ______________

OPERATIONAL FUNCTIONS DATA SHEET

List All Noteworthy Functions As
Performed During Shift

2300-0700

1. CH-LS-20E2A out - [illegible] A-15'
2. ALL ATMOSPHERIC MONITORS IN AUX + F.H. BLDG increase as MU-T-1 vents
3.
4.
5.
6.
7.

0700-1500

1.
2.
3.
4.
5.
6.
7.

1500-2300

1.
2.
3.
4.
5.
6.
7.

	11-7	7-3	3-11
CRO SIGNATURE			[signature]
SHIFT FOREMAN SIGNATURE			[signature]

TMI DOCUMENTS

DOCUMENT NO: TM-0325

COPY MADE ON 5/8/79 OF DOCUMENT PROVIDED BY

METROPOLITAN EDISON COMPANY.

Wilda R. Mullinix, NRC

05-0034

04:00:01 03/29/79

04:06:34 DATA 1682 PLVL RC PRESSURIZER LVL (INH2O) 365.6 494

04:36:32 DATA 0011 CALIBRATE POINT 1.186

04:37:21 DATA 0011 CALIBRATE POINT 2.010 ~ 493
04:37:39 DATA 0011 CALIBRATE POINT 2.016 ~ 493
04:38:03 DATA 0011 CALIBRATE POINT 3.999 ~ 493

04:39:05 DATA 0011 CALIBRATE POINT -1.455 ~ 492
04:39:26 DATA 0011 CALIBRATE POINT -1.302 ~ 492

04:40:10 DATA 0011 CALIBRATE POINT 2.211 519

04:41:48 DATA 0011 CALIBRATE POINT -1.963

05-0034

20:13:43 GROUP TREND
OPERATOR GROUP B

	0474	0473	0400	0394	0389	0398	0393	1682
20:14:00	15.	19.	964.	223.1	545.3	941.	920.	296.5
20:14:44	15.	19.	963.	223.1	545.3	923.	895.	296.5
20:15:44	15.	18.	964.	223.1	545.3	937.	903.	296.3
20:16:44	15.	19.	965.	223.1	545.5	958.	917.	296.1
20:17:43	15.	19.	964.	223.1	545.3	939.	918.	296.0
20:18:44	16.	19.	962.	223.1	545.3	928.	887.	296.0
20:19:44	15.	18.	965.	223.1	545.4	938.	920.	295.9
20:20:43	15.	19.	965.	223.2	545.4	947.	924.	295.8
20:21:43	15.	18.	965.	223.2	545.3	924.	911.	295.6
20:22:44	15.	18.	960.	223.2	545.4	900.	871.	295.6
20:23:43	15.	17.	96[illegible]	[illegible]	[illegible]	939.	916.	295.4
20:24:43	15.	18.	964.	[illegible]	[illegible]	950.	[illegible]	[illegible]
20:25:43	15.	19.	965.	223.2	545.4	926.	897.	295.2
20:26:43	15.	19.	964.	223.2	545.4	945.	898.	295.1
20:27:44	15.	18.	964.	223.3	545.3	933.	908.	295.0
20:28:44	15.	19.	965.	223.3	545.5	944.	925.	294.9
20:29:43	15.	19.	963.	223.3	545.5	921.	895.	294.9
20:30:43	15.	19.	966.	223.3	545.6	953.	932.	294.9
20:31:44	15.	19.	963.	223.3	545.4	950.	923.	294.7
20:32:44	15.	20.	963.	223.4	545.4	931.	906.	294.5
20:33:44	15.	18.	965.	223.4	545.6	936.	918.	294.6
20:34:43	15.	19.	965.	223.4	545.4	949.	927.	294.3
20:35:44	15.	19.	964.	223.4	545.5	935.	910.	293.9
20:36:43	15.	19.	964.	223.4	545.5	942.	923.	293.4
20:37:43	15.	19.	963.	223.4	545.3	930.	905.	292.7
20:38:44	15.	19.	964.	223.4	545.5	938.	920.	292.2
20:39:43	15.	19.	963.	223.4	545.3	941.	926.	291.6
20:40:43	15.	18.	962.	223.4	545.4	933.	910.	291.1
20:41:44	15.	19.	962.	223.5	545.3	932.	894.	290.6
20:42:44	15.	19.	963.	223.5	545.3	947.	922.	289.9
20:43:44	15.	18.	964.	223.6	545.3	946.	928.	289.5
20:44:44	15.	18.	962.	223.6	545.2	945.	917.	288.8
20:45:44	15.	18.	963.	223.6	545.3	945.	920.	288.2
20:46:44	15.	19.	962.	223.6	545.3	940.	924.	287.6
20:47:43	15.	18.	962.	223.7	545.3	941.	915.	287.2
20:48:44	15.	18.	960.	223.7	545.1	930.	906.	286.6
20:49:43	15.	18.	962.	223.7	545.2	926.	920.	285.9
20:50:44	15.	18.	961.	223.7	545.3	938.	920.	285.3
20:51:44	15.	18.	961.	223.7	545.1	921.	899.	284.6
20:52:43	15.	18.	960.	223.7	545.2	930.	906.	284.5
20:53:43	15.	18.	961.	223.7	545.1	923.	908.	284.4
20:54:43	15.	18.	962.	223.7	545.1	927.	900.	284.2
20:55:44	15.	18.	962.	223.7	545.2	931.	907.	284.1
20:56:43	15.	18.	962.	223.7	545.2	936.	910.	284.0
20:57:44	15.	18.	962.	223.7	545.1	941.	919.	283.7
20:58:44	15.	18.	962.	223.7	545.2	933.	908.	283.6
20:59:43	15.	18.	962.	223.7	545.2	940.	928.	283.4
21:00:44	15.	18.	961.	223.7	545.3	928.	911.	283.4

4/25/79
Test Data 2107

21:01:34 DATA 0003 SP STM GEN B S-U RANGE LVL (IN) .0
21:01:43 GROUP TREND
OPERATOR GROUP B
0474 0473 0400 0394 0389 0388 0399 1682
21:01:58 15. 18. 962. 223.7 545.2 946. 921. 283.0
21:02:09 DATA 0331 CA BORIC ACID MIX TANK LVL (IN) 7.6
21:02:43 GROUP TREND
OPERATOR GROUP B
0474 0473 0400 0394 0389 0388 0399 1682
21:02:59 15. 18. 962. 223.7 545.1 920. 907. 282.3
21:03:43 15. 18. 962. 223.7 545.2 946. 921. 282.1
21:04:44 15. 18. 961. 223.7 545.1 945. 923. 281.6

19:55:27 DATA 0003 SP STM GEN B S-U RANGE LVL (IN) .0

19:55:50 GROUP TREND

OPERATOR GROUP B

	0474	0473	0400	0394	0389	0388	0339	1682
19:56:07	- 15.-	19.	963.	222.8	545.2	951.	912.	239.2
19:56:50	- 15.-	13.	963.	222.8	545.2	937.	909.	298.7
19:57:51	- 15.-	18.	962.	222.8	545.3	920.	895.	298.4
19:58:50	- 15.-	19.	963.	222.9	545.3	939.	927.	298.3
19:59:51	- 15.-	18.	963.	222.9	545.2	948.	928.	298.1
20:00:51	- 15.-	19.	963.	222.9	545.3	936.	905.	297.9
20:01:51	- 15.-	19.	964.	222.9	545.2	940.	921.	297.8
20:02:50	- 15.-	19.	961.	222.9	545.3	927.	888.	297.7
20:03:50	- 15.-	19.	963.	222.9	545.3	930.	920.	297.7
20:04:51	- 15.-	19.	963.	222.9	545.3	944.	919.	297.5
20:05:51	- 15.-	18.	963.	223.0	545.3	938.	916.	297.3
20:06:51	- 15.-	19.	963.	223.0	545.3	934.	913.	297.2

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19:24:50 GROUP TREND
OPERATOR GROUP B

	0474	0473	0400	0304	0389	0308	0399	1682
19:25:07	15.	18.	967.	222.7	545.9	941.	925.	314.5
19:25:51	15.	18.	968.	222.7	545.8	948.	931.	313.9
19:26:53	15.	18.	966.	222.7	545.6	925.	905.	313.3
19:27:53	15.	18.	966.	222.7	545.7	951.	871.	312.6
19:28:51	15.	18.	964.	222.7	545.6	924.	877.	312.1
19:29:51	15.	18.	966.	222.7	545.7	946.	930.	311.3
19:30:51	15.	19.	965.	222.7	545.6	940.	923.	310.9
19:31:51	15.	19.	966.	222.7	545.6	950.	928.	310.2
19:32:51	15.	18.	962.	222.7	545.6	920.	882.	309.7
19:33:51	15.	18.	965.	222.7	545.6	947.	926.	309.0
19:34:51	15.	19.	965.	222.7	545.5	924.	902.	308.3
19:35:50	15.	19.	965.	222.7	545.3	955.	894.	307.7
19:36:51	15.	19.	965.	222.7	545.5	923.	906.	307.1
19:37:51	15.	18.	965.	222.7	545.4	936.	911.	306.4
19:38:51	15.	19.	962.	222.7	545.4	903.	875.	305.8
19:39:50	15.	18.	964.	222.7	545.3	951.	909.	305.2
19:40:50	15.	19.	965.	222.7	545.2	945.	926.	304.6
19:41:51	15.	19.	965.	222.7	545.3	947.	925.	304.0
19:42:51	15.	19.	963.	222.7	545.3	937.	920.	303.4
19:43:50	15.	19.	964.	222.7	545.3	950.	929.	302.9
19:44:51	15.	19.	960.	222.7	545.3	908.	874.	302.3
19:45:51	15.	19.	963.	222.7	545.2	946.	920.	301.5
19:46:50	15.	19.	963.	222.7	545.1	931.	910.	300.9
19:47:50	15.	19.	963.	222.8	545.2	927.	904.	300.3
19:48:51	15.	19.	963.	222.8	545.2	936.	893.	300.1
19:49:50	15.	19.	963.	222.8	545.2	942.	916.	299.9
19:50:50	15.	19.	963.	222.8	545.3	948.	928.	299.9
19:51:51	15.	19.	963.	222.8	545.1	946.	920.	299.6
19:52:50	15.	19.	963.	222.8	545.2	928.	906.	299.4
19:53:51	15.	19.	962.	222.8	545.2	940.	916.	299.4
19:54:51	15.	19.	963.	222.8	545.2	941.	918.	299.2

Print Out 2

Z107
Test Data Z
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18:10:44 GROUP TREND
OPERATOR GROUP B

	0474	0473	0400	0394	0389	0398	0393	1682
18:11:01	15.	18.	969.	223.1	545.9	948.	918.	329.5
18:11:45	15.	18.	968.	223.1	546.0	938.	906.	323.5
18:12:45	15.	18.	969.	223.1	545.9	950.	920.	329.4
18:13:44	15.	18.	968.	223.1	545.8	940.	912.	329.2
18:14:44	15.	18.	970.	223.1	546.0	952.	935.	329.1
18:15:45	15.	18.	969.	223.2	545.9	953.	920.	329.0
18:16:45	15.	18.	970.	223.2	545.9	941.	926.	328.8
18:17:45	15.	18.	968.	223.2	545.9	945.	920.	328.6
18:18:45	15.	18.	970.	223.2	545.9	941.	921.	328.5
18:19:44	15.	18.	970.	223.2	545.8	941.	919.	328.4
18:20:44	15.	18.	968.	223.2	545.8	949.	926.	328.2
18:21:45	15.	18.	969.	223.2	545.9	948.	925.	328.1
18:22:45	15.	18.	970.	223.3	545.9	946.	928.	328.0
18:23:44	15.	18.	968.	223.3	545.9	921.	906.	327.8
18:24:44	15.	18.	966.	223.3	545.8	939.	903.	327.7
18:25:45	15.	18.	970.	223.2	545.9	946.	930.	327.5
18:26:45	15.	18.	969.	223.3	546.0	946.	923.	327.4
18:27:45	15.	18.	966.	223.3	545.8	935.	894.	327.2
18:28:45	15.	18.	967.	223.3	546.0	930.	896.	327.1
18:29:44	15.	18.	970.	223.3	545.7	935.	935.	326.9
18:30:44	15.	18.	969.	223.3	545.8	935.	929.	326.7
18:31:45	15.	18.	966.	223.3	545.9	943.	923.	326.6
18:32:45	15.	18.	968.	223.3	545.8	940.	924.	326.5
18:33:44	15.	18.	966.	223.3	545.9	930.	888.	326.3
18:34:44	15.	18.	969.	223.3	546.0	943.	916.	326.1
18:35:45	15.	18.	970.	223.3	545.8	938.	920.	326.0
18:36:45	15.	18.	969.	223.3	545.9	950.	931.	325.8
18:37:45	15.	18.	969.	223.3	545.9	947.	923.	325.7
18:38:45	15.	18.	970.	223.3	545.8	946.	931.	325.3
18:39:44	15.	18.	970.	223.3	546.0	951.	930.	325.4
18:40:45	15.	18.	970.	223.3	545.9	943.	927.	325.2
18:41:44	15.	18.	970.	223.3	545.8	948.	925.	325.0
18:42:45	15.	18.	970.	223.3	545.8	951.	926.	324.9
18:43:44	15.	18.	969.	223.3	545.8	948.	920.	324.7
18:44:44	15.	18.	970.	223.3	546.0	948.	920.	324.6
18:45:45	15.	18.	970.	223.3	545.9	940.	921.	324.4
18:46:45	15.	18.	968.	223.3	545.9	940.	905.	324.2
18:47:44	15.	18.	968.	223.3	545.9	944.	920.	324.1
18:48:44	15.	18.	970.	223.3	545.9	945.	926.	324.1
18:49:44	15.	18.	970.	223.3	546.0	943.	922.	323.8
[illegible]	15.	18.	968.	223.3	546.0	952.	915.	323.7
[illegible]	15.	18.	968.	223.3	545.8	951.	916.	323.5
18:52:44	15.	18.	970.	223.2	545.9	948.	917.	323.2
18:53:44	15.	18.	970.	223.2	545.9	936.	924.	323.0
18:54:44	15.	18.	968.	223.2	545.9	951.	915.	322.8
18:55:44	15.	18.	970.	223.1	546.0	945.	924.	322.7
18:56:44	15.	18.	968.	223.1	546.0	948.	925.	322.5
18:57:44	15.	18.	968.	223.1	546.0	947.	918.	322.3
18:58:45	15.	18.	968.	223.1	546.0	935.	918.	322.2
18:59:44	15.	18.	967.	223.1	545.9	921.	901.	321.8
19:00:45	15.	18.	968.	223.1	545.9	947.	927.	321.6
19:01:45	15.	18.	968.	223.0	545.9	935.	909.	321.5
19:02:44	15.	18.	969.	223.0	546.0	953.	931.	321.3
19:03:44	15.	18.	967.	223.0	545.9	924.	905.	321.2
19:04:45	15.	18.	966.	223.0	545.9	906.	861.	320.9
19:05:44	15.	18.	970.	223.0	546.0	945.	930.	320.8
19:06:44	15.	18.	970.	222.9	545.9	947.	927.	320.5
19:07:47	15.	18.	968.	222.9	545.9	941.	912.	320.2
19:08:45	15.	18.	969.	222.9	545.9	946.	921.	320.3
19:09:44	15.	18.	970.	222.8	545.9	941.	927.	319.9
19:10:44	15.	18.	967.	222.8	545.8	870.	880.	319.9
19:11:44	15.	18.	970.	222.8	546.0	953.	934.	319.6
19:12:45	15.	18.	969.	222.8	545.9	938.	915.	319.4
19:13:44	15.	18.	970.	222.8	546.0	950.	930.	319.4
19:14:45	15.	18.	969.	222.8	546.0	936.	932.	319.1
19:15:44	15.	18.	969.	222.8	545.8	952.	931.	319.0
19:16:44	15.	18.	958.	222.8	546.0	928.	891.	318.6
19:17:45	15.	18.	968.	222.8	546.0	929.	916.	318.6
19:18:44	15.	18.	969.	222.7	546.0	932.	910.	318.5

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Test Data

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16:09:03 GROUP TREND
OPERATOR GROUP B

	0474	0473	0400	0394	0389	0348	0339	1682
16:09:25	15.	19.	969.	222.8	545.9	947.	931.	347.3
16:10:11	15.	18.	970.	222.8	546.0	943.	916.	347.2
16:11:09	15.	19.	967.	222.8	545.9	943.	912.	347.1
16:12:09	15.	19.	969.	222.8	545.9	946.	920.	347.1
16:13:09	15.	18.	966.	222.8	545.9	943.	884.	346.9
16:14:09	15.	18.	970.	222.8	545.8	943.	931.	346.7
16:15:09	15.	18.	968.	222.8	545.9	948.	919.	346.6
16:16:09	15.	18.	969.	222.8	545.8	951.	922.	346.5
16:17:09	15.	19.	968.	222.8	545.9	945.	910.	346.2
16:18:09	15.	19.	970.	222.7	545.8	946.	933.	346.4
16:19:09	15.	18.	960.	222.7	545.9	943.	927.	346.1
16:20:09	16.	18.	966.	222.7	545.9	947.	899.	345.9
16:21:09	15.	19.	970.	222.7	545.9	950.	927.	345.8
16:22:09	16.	18.	969.	222.7	545.9	945.	935.	345.7
16:23:09	15.	19.	968.	222.7	545.9	940.	926.	345.6
16:24:09	15.	19.	969.	222.7	545.8	940.	921.	345.5
16:25:09	15.	19.	969.	222.7	545.9	947.	928.	345.3
16:26:09	15.	19.	969.	222.7	545.9	943.	931.	345.2
16:27:09	15.	19.	970.	222.7	545.9	945.	931.	345.1

GROUP 4
16:27:56
04/25/79

SEQUENCE OF EVENTS REVIEW

16:24:56:833 3193 RP YELLOW CH PWR/BAL/FL TRIP TRIP

16:28:10 GROUP TREND
OPERATOR GROUP B

	0474	0473	0400	0394	0389	0348	0339	1682
16:28:27	15.	19.	960.	222.7	545.9	933.	877.	344.9
16:29:09	15.	19.	968.	222.7	545.9	950.	905.	344.7
16:30:08	15.	18.	965.	222.7	545.9	938.	880.	344.6
16:31:09	15.	18.	970.	222.7	545.9	946.	935.	344.4
16:32:09	15.	19.	965.	222.7	545.7	943.	897.	344.2
16:33:09	15.	18.	969.	222.7	545.9	948.	926.	344.0
16:34:09	15.	19.	960.	222.7	545.7	938.	914.	343.9
16:35:09	15.	19.	968.	222.6	545.8	948.	925.	343.6
16:36:09	15.	18.	966.	222.7	545.8	939.	928.	343.5
16:37:09	15.	19.	958.	222.6	545.8	942.	913.	343.3
16:38:09	15.	18.	967.	222.6	545.7	946.	913.	343.1
16:39:09	15.	18.	968.	222.7	545.8	947.	918.	342.9
16:40:09	15.	18.	968.	222.6	545.8	945.	933.	342.9
16:41:09	15.	19.	968.	222.6	545.8	948.	928.	342.7
16:42:09	15.	19.	960.	222.7	545.8	940.	924.	342.5
16:43:09	15.	18.	968.	222.6	545.8	944.	928.	342.4
16:44:09	15.	19.	968.	222.6	545.8	947.	920.	342.1
16:45:08	15.	19.	960.	222.6	545.8	938.	881.	342.0
16:46:09	15.	18.	968.	222.6	545.9	942.	931.	341.9
16:47:09	15.	18.	969.	222.6	545.7	940.	927.	341.7
16:48:09	15.	18.	968.	222.6	545.9	945.	919.	341.5
16:49:09	15.	18.	967.	222.6	545.7	950.	922.	341.3
16:50:09	15.	19.	968.	222.6	545.9	950.	934.	341.2
16:51:08	15.	18.	963.	222.6	545.8	920.	880.	341.0
16:52:09	15.	18.	968.	222.6	545.9	942.	933.	340.9
16:53:09	15.	19.	968.	222.6	545.8	945.	931.	340.7
16:54:09	15.	18.	968.	222.6	545.8	948.	931.	340.5
16:55:09	15.	18.	960.	222.6	545.8	943.	924.	340.4
16:56:09	15.	18.	968.	222.6	545.7	949.	926.	340.1
16:57:09	15.	19.	964.	222.6	545.7	940.	875.	340.0
16:58:09	15.	18.	966.	222.6	545.9	943.	909.	340.0
16:59:09	15.	18.	968.	222.6	545.8	951.	928.	339.8
17:00:09	15.	19.	966.	222.6	545.7	941.	919.	339.6
17:01:09	16.	18.	968.	222.6	545.7	948.	929.	339.3
17:02:09	15.	18.	965.	222.6	545.8	942.	880.	339.4
17:03:09	15.	18.	967.	222.6	545.8	943.	910.	339.3
17:04:09	15.	18.	968.	222.7	545.7	945.	918.	338.9
17:05:09	15.	18.	969.	222.7	545.8	946.	933.	338.9
17:06:08	15.	18.	968.	222.6	545.8	943.	933.	338.6
17:07:09	15.	18.	960.	222.7	545.7	943.	933.	338.5
17:08:09	15.	19.	966.	222.7	545.9	931.	902.	338.6

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15:13:56 GROUP TREND
OPERATOR GROUP B

	0474	0473	0400	0304	0389	0308	0309	1682
15:14:13	-	15.-	18.	960.	223.1	544.8	943.	918.	337.4
15:14:55	-	15.-	18.	961.	223.1	544.8	958.	915.	337.3
15:15:55	-	15.-	18.	961.	223.1	544.8	928.	916.	337.2
15:16:55	-	15.-	18.	962.	223.1	544.8	935.	918.	337.0
15:17:56	-	15.-	18.	962.	223.2	544.9	924.	911.	337.0
15:18:56	-	15.-	18.	960.	223.2	544.9	930.	914.	336.9
15:19:56	-	15.-	18.	960.	223.2	544.7	940.	914.	336.6
15:20:56	-	15.-	19.	961.	223.2	544.9	931.	920.	336.7
15:21:55	-	15.-	18.	962.	223.2	544.7	944.	889.	336.4
15:22:55	-	15.-	18.	961.	223.2	544.7	906.	868.	336.3
15:23:56	-	15.-	18.	961.	223.2	544.8	937.	882.	336.4
15:24:56	-	15.-	18.	961.	223.2	544.8	929.	906.	336.3
15:25:55	-	15.-	18.	961.	223.2	544.9	928.	905.	336.1
15:26:55	-	15.-	18.	960.	223.2	544.9	936.	915.	336.0
15:27:56	-	15.-	19.	962.	223.2	544.8	905.	871.	335.9
15:28:55	-	15.-	18.	963.	223.3	545.0	941.	923.	335.8
15:29:56	-	15.-	18.	961.	223.2	545.0	938.	921.	335.7
15:30:55	-	15.-	18.	962.	223.2	545.0	941.	915.	336.0
15:31:56	-	15.-	18.	962.	223.2	545.1	932.	896.	336.5
15:32:56	-	15.-	18.	964.	223.2	544.9	937.	894.	336.9
15:33:55	-	15.-	18.	964.	223.2	544.9	936.	919.	337.4
15:34:56	-	15.-	18.	964.	223.1	545.1	945.	922.	338.0
15:35:55	-	15.-	18.	965.	223.1	545.2	943.	914.	338.6
15:36:55	-	15.-	18.	965.	223.1	545.3	928.	906.	339.3
15:37:55	-	15.-	18.	965.	223.1	545.3	926.	913.	339.8
15:38:56	-	15.-	18.	966.	223.1	545.2	941.	915.	340.2
15:39:55	-	15.-	18.	966.	223.1	545.4	935.	906.	340.7
15:40:56	-	15.-	18.	965.	223.1	545.3	943.	923.	341.2
15:41:56	-	15.-	18.	967.	223.1	545.4	935.	923.	341.7
15:42:55	-	15.-	18.	968.	223.1	545.5	928.	915.	342.4
15:43:55	-	15.-	19.	968.	223.1	545.4	930.	910.	342.8
15:44:55	-	15.-	18.	966.	223.1	545.5	943.	919.	343.4
15:45:55	-	15.-	18.	968.	223.1	545.6	921.	883.	344.1
15:46:55	-	15.-	18.	969.	223.1	545.7	948.	929.	344.4
15:47:55	-	15.-	18.	968.	223.1	545.5	946.	928.	345.0
15:48:55	-	15.-	18.	969.	223.0	545.5	945.	922.	345.5
15:49:55	-	15.-	19.	966.	223.0	545.6	931.	920.	346.2
15:50:55	-	15.-	19.	970.	223.0	545.7	950.	929.	346.6
15:51:55	-	15.-	18.	971.	223.0	545.7	939.	918.	347.1
15:52:55	-	15.-	18.	971.	223.0	545.8	950.	931.	347.8
15:53:56	-	15.-	18.	969.	223.0	545.9	946.	923.	348.4
15:54:56	-	15.-	18.	971.	223.0	545.9	931.	907.	348.9
15:55:55	-	16.-	18.	970.	223.0	546.0	954.	926.	349.2
15:56:55	-	15.-	18.	971.	223.0	545.9	935.	906.	348.9
15:57:55	-	15.-	19.	971.	223.0	546.0	931.	916.	348.9
15:58:56	-	15.-	19.	968.	223.0	546.0	920.	927.	348.9

15:59:08 DATA 0185 RB SUMP LEVEL -?.???

15:59:55 GROUP TREND
OPERATOR GROUP B

	0474	0473	0400	0304	0389	0308	0309	1682
16:00:12	-	15.-	18.	970.	223.0	546.0	936.	910.	348.8
16:00:55	-	15.-	18.	968.	223.0	546.0	958.	933.	348.6
16:01:55	-	15.-	18.	971.	223.0	546.0	941.	916.	348.6
16:02:55	-	15.-	19.	970.	223.0	546.0	933.	916.	348.5

14:05:39 GROUP TREND
OPERATOR GROUP B

	0474	0473	0400	0394	0389	0398	0399	1682
14:05:55	15.	18.	946.	222.6	543.2	946.	911.	344.0
14:06:31	15.	18.	949.	222.6	543.2	946.	896.	343.9

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14:07:31	15.	18.	945.	222.7	543.2	928.	910.	343.7
14:08:31	15.	18.	949.	222.6	543.4	936.	893.	343.7
14:09:30	15.	18.	950.	222.6	543.4	936.	913.	343.6
14:10:31	15.	18.	950.	222.6	543.4	929.	900.	343.5
14:11:31	15.	18.	950.	222.6	543.5	942.	890.	343.3
14:12:31	15.	18.	950.	222.6	543.6	945.	903.	343.2
14:13:30	15.	18.	952.	222.6	543.5	914.	885.	343.3
14:14:31	15.	18.	951.	222.7	543.5	924.	918.	343.1
14:15:31	15.	18.	950.	222.7	543.6	928.	909.	343.1
14:16:31	15.	18.	951.	222.7	543.8	936.	914.	342.9
14:17:31	15.	18.	950.	222.7	543.8	923.	900.	342.9
14:18:31	15.	18.	953.	222.7	543.7	931.	886.	342.8
14:19:30	15.	18.	953.	222.7	543.7	936.	913.	342.7
14:20:31	15.	18.	953.	222.8	543.7	902.	871.	342.6
14:21:31	15.	18.	953.	222.7	543.9	933.	911.	342.6
14:22:31	15.	18.	955.	222.8	543.9	938.	918.	342.5
14:23:31	15.	18.	955.	222.8	544.1	938.	913.	342.4
14:24:30	15.	18.	954.	222.8	543.9	931.	906.	342.5
14:25:31	15.	18.	955.	222.8	543.9	936.	914.	342.2
14:26:30	15.	18.	955.	222.8	544.1	936.	913.	342.3
14:27:31	15.	18.	956.	222.8	544.0	936.	906.	341.9
14:28:32	15.	18.	956.	222.8	544.1	941.	919.	342.0
14:29:31	15.	18.	956.	222.8	544.1	931.	909.	341.9
14:30:30	15.	18.	957.	222.8	544.2	933.	915.	341.8
14:31:31	15.	19.	956.	222.8	544.2	935.	919.	341.8
14:32:31	15.	18.	956.	222.8	544.1	936.	908.	341.4
14:33:31	15.	18.	956.	222.8	544.3	934.	902.	341.5
14:34:31	15.	18.	956.	222.9	544.3	936.	913.	341.4
14:35:31	15.	18.	956.	222.9	544.2	938.	920.	341.2
14:36:31	15.	18.	956.	222.9	544.4	941.	901.	341.2
14:37:31	15.	18.	958.	222.9	544.5	938.	910.	341.2
14:38:30	15.	18.	958.	222.9	544.5	941.	903.	341.0
14:39:30	15.	18.	958.	222.9	544.6	931.	884.	340.8
14:40:31	15.	18.	959.	222.9	544.3	936.	919.	340.8
14:41:30	15.	18.	956.	222.9	544.6	937.	884.	340.7
14:42:31	15.	18.	957.	222.9	544.6	934.	890.	340.5
14:43:31	15.	18.	958.	222.9	544.4	935.	915.	340.5
14:44:31	15.	18.	955.	223.0	544.5	941.	922.	340.4
14:45:31	15.	18.	959.	222.9	544.6	936.	911.	340.2
14:46:31	15.	18.	959.	223.0	544.6	939.	911.	340.0
14:47:30	15.	18.	959.	223.0	544.4	938.	910.	340.0
14:48:30	15.	18.	958.	223.0	544.6	931.	910.	340.0
14:49:30	15.	18.	956.	223.0	544.5	935.	899.	340.0
14:50:31	15.	18.	959.	223.0	544.4	940.	920.	339.8
14:51:31	15.	18.	959.	223.0	544.6	936.	895.	339.5
14:52:30	15.	18.	955.	223.0	544.6	945.	920.	339.6
14:53:31	15.	18.	958.	223.1	544.6	943.	881.	339.3
14:54:31	15.	18.	959.	223.1	544.6	937.	908.	339.5

14:55:07 DATA 1720 HDRCR HEAT/COOL RATE (DEGF/HR) .4

14:55:30 GROUP TREND
OPERATOR GROUP B

	0474	0473	0400	0394	0389	0398	0399	1682
14:55:46	15.	18.	959.	223.1	544.5	936.	904.	339.2
14:56:30	15.	18.	958.	223.1	544.6	942.	916.	339.3
14:57:31	15.	18.	959.	223.1	544.6	943.	923.	339.2
14:58:30	15.	18.	960.	223.1	544.6	945.	918.	338.8
14:59:30	15.	18.	960.	223.1	544.6	943.	921.	338.9
15:00:31	15.	19.	959.	223.1	544.6	933.	910.	338.9
15:01:30	15.	18.	959.	223.1	544.6	943.	915.	338.4
15:02:30	15.	18.	959.	223.1	544.7	921.	830.	338.5
15:03:30	15.	18.	960.	223.1	544.6	933.	911.	338.5
15:04:30	15.	18.	957.	223.1	544.6	950.	918.	338.3

22:10:13 GROUP TREND
OPERATOR GROUP B

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	0474	0473	0400	0304	0383	0348	0399	1082
22:10:29	-	15.-	18.	957.	224.3	544.6	943.	917.	254.0
22:11:13	-	15.-	18.	958.	224.4	544.6	930.	919.	253.7
22:12:13	-	15.-	18.	953.	224.4	544.6	923.	884.	253.1
22:13:13	-	15.-	18.	956.	224.4	544.6	927.	906.	252.5
22:14:12	-	15.-	18.	953.	224.4	544.6	918.	874.	252.1
22:15:12	-	15.-	18.	956.	224.4	544.6	928.	915.	252.1
22:16:12	-	15.-	18.	954.	224.4	544.5	903.	867.	251.7
22:17:13	-	15.-	18.	957.	224.4	544.6	931.	915.	251.9
22:18:12	-	15.-	18.	956.	224.4	544.6	915.	885.	251.5
22:19:12	-	15.-	18.	956.	224.4	544.6	938.	910.	251.5
22:20:12	-	15.-	18.	955.	224.4	544.6	931.	905.	250.6
22:21:13	-	15.-	18.	957.	224.4	544.6	942.	921.	250.4
22:22:13	-	15.-	18.	956.	224.4	544.5	936.	905.	249.5
22:23:12	-	15.-	18.	954.	224.4	544.5	903.	867.	249.1
22:24:12	-	15.-	18.	956.	224.5	544.6	942.	921.	248.6
22:25:13	-	15.-	18.	951.	224.5	544.5	895.	856.	247.7
22:26:12	-	15.-	18.	955.	224.5	544.6	931.	914.	247.2
22:27:13	-	15.-	18.	956.	224.5	544.4	936.	910.	246.6
22:28:13	-	15.-	18.	956.	224.5	544.5	931.	911.	246.2
22:29:12	-	15.-	18.	956.	224.5	544.4	932.	910.	245.6
22:30:13	-	15.-	18.	956.	224.6	544.3	941.	915.	245.1
22:31:13	-	15.-	18.	954.	224.6	544.2	918.	905.	244.6
22:32:12	-	15.-	18.	955.	224.6	544.4	933.	908.	243.9
22:33:13	-	15.-	18.	955.	224.6	544.2	927.	901.	243.4
22:34:12	-	15.-	18.	955.	224.6	544.3	933.	905.	242.8
22:35:12	-	15.-	18.	953.	224.6	544.3	942.	920.	242.3
22:36:12	-	14.-	18.	955.	224.6	544.2	933.	908.	241.6
22:37:12	-	15.-	18.	954.	224.6	544.3	933.	911.	241.1
22:38:12	-	14.-	18.	950.	224.6	544.2	905.	870.	240.4
22:39:12	-	15.-	18.	953.	224.6	544.1	920.	901.	239.8
22:40:13	-	15.-	18.	953.	224.7	544.2	933.	905.	239.4
22:41:12	-	15.-	18.	953.	224.7	544.2	935.	913.	238.8
22:42:13	-	15.-	18.	954.	224.7	544.1	928.	913.	238.2
22:43:13	-	15.-	18.	954.	224.6	544.1	933.	913.	237.6
22:44:12	-	15.-	18.	953.	224.6	544.1	928.	911.	236.9
22:45:13	-	15.-	18.	954.	224.6	544.1	930.	915.	236.4
22:46:12	-	15.-	18.	953.	224.6	544.2	929.	912.	235.7
22:47:13	-	15.-	18.	953.	224.6	544.0	931.	911.	234.9
22:48:12	-	15.-	18.	951.	224.6	544.0	908.	886.	234.3
22:49:12	-	15.-	18.	952.	224.6	544.0	921.	898.	233.8
22:50:12	-	15.-	18.	951.	224.6	544.0	930.	904.	233.1
22:51:12	-	15.-	18.	951.	224.6	544.0	927.	904.	232.5
22:52:12	-	15.-	18.	953.	224.6	543.9	925.	903.	232.0
22:53:12	-	15.-	18.	953.	224.6	544.0	934.	915.	231.9
22:54:13	-	15.-	18.	951.	224.6	544.0	909.	886.	231.9
22:55:12	-	15.-	18.	952.	224.6	544.0	932.	895.	231.5
22:56:13	-	15.-	18.	953.	224.6	544.0	936.	906.	231.7
22:57:12	-	15.-	18.	952.	224.6	543.9	908.	895.	231.2
22:58:13	-	15.-	18.	951.	224.6	544.1	903.	871.	231.1
22:59:12	-	15.-	18.	953.	224.6	544.0	928.	898.	231.2
23:00:13	-	15.-	18.	953.	224.5	544.1	930.	913.	231.1
23:01:12	-	14.-	18.	954.	224.5	544.1	934.	911.	231.0
23:02:12	-	15.-	18.	954.	224.5	544.1	938.	913.	230.8

21:11:28 GROUP TREND

OPERATOR GROUP B

	0474	0473	0400	0394	0389	0388	0399	1682
21:11:45	-	15.-	18.	961.	223.9	545.1	948.	926.	277.3
21:12:29	-	15.-	18.	950.	223.9	544.9	938.	895.	276.8
21:13:29	-	15.-	18.	957.	223.9	544.9	928.	907.	276.1
21:14:29	-	15.-	18.	960.	223.9	545.0	936.	911.	275.6
21:15:29	-	15.-	18.	960.	223.9	544.9	932.	915.	275.1
21:16:29	-	15.-	18.	958.	224.0	545.1	935.	915.	274.9
21:17:29	-	15.-	18.	959.	224.0	545.0	932.	907.	274.9
21:18:29	-	15.-	18.	960.	224.0	544.9	920.	890.	274.6
21:19:29	-	15.-	18.	960.	224.0	545.0	922.	890.	274.6
21:20:29	-	15.-	18.	960.	223.9	545.0	931.	914.	274.3
21:21:29	-	15.-	18.	959.	224.0	545.0	938.	913.	274.2
21:22:29	-	15.-	18.	960.	224.0	545.0	930.	908.	274.0
21:23:29	-	15.-	18.	960.	224.0	545.1	943.	921.	274.0
21:24:29	-	15.-	18.	961.	224.0	544.9	947.	918.	273.8
21:25:29	-	15.-	18.	961.	224.0	545.0	943.	923.	273.7
21:26:29	-	15.-	18.	961.	224.0	544.9	938.	922.	273.7
21:27:29	-	15.-	18.	961.	224.0	545.2	943.	911.	273.6
21:28:29	-	15.-	18.	961.	224.0	545.1	943.	915.	273.3
21:29:29	-	15.-	18.	960.	224.0	545.1	939.	891.	273.3
21:30:29	-	15.-	18.	961.	224.0	545.1	925.	902.	273.2
21:31:29	-	15.-	18.	957.	224.0	545.0	939.	900.	272.9
21:32:29	-	15.-	18.	962.	224.0	545.2	935.	923.	272.9
21:33:29	-	15.-	18.	961.	224.0	545.2	946.	920.	272.8
21:34:29	-	15.-	18.	961.	224.0	545.1	943.	915.	272.7
21:35:29	-	15.-	18.	960.	224.0	545.2	940.	924.	272.6
21:36:29	-	15.-	18.	961.	224.0	545.0	930.	913.	272.5
21:37:29	-	15.-	18.	961.	224.0	545.1	931.	903.	272.4
21:38:29	-	15.-	18.	961.	224.0	545.3	941.	920.	272.2
21:39:29	-	15.-	18.	961.	224.0	545.2	936.	904.	272.1
21:40:29	-	15.-	18.	957.	224.0	545.0	923.	896.	271.9
21:41:29	-	15.-	18.	960.	224.0	545.2	946.	924.	271.2
21:42:29	-	15.-	18.	961.	224.0	545.2	945.	923.	270.8
21:43:29	-	15.-	18.	961.	224.0	545.0	935.	906.	270.2
21:44:29	-	15.-	18.	961.	224.0	545.2	935.	918.	269.6
21:45:29	-	15.-	18.	960.	224.0	545.1	941.	920.	269.0
21:46:29	-	15.-	18.	961.	224.0	545.2	930.	889.	268.5
21:47:29	-	15.-	18.	960.	224.0	545.1	926.	895.	267.8
21:48:28	-	15.-	18.	961.	224.0	544.9	943.	925.	267.1
21:49:29	-	15.-	18.	960.	224.0	544.9	926.	913.	266.6
21:50:29	-	15.-	18.	958.	224.1	545.0	931.	908.	266.0
21:51:29	-	15.-	18.	958.	224.1	545.0	943.	921.	265.4
21:52:29	-	15.-	18.	960.	224.1	544.8	925.	911.	264.9
21:53:29	-	15.-	18.	959.	224.1	544.9	938.	910.	264.3
21:54:29	-	15.-	18.	958.	224.2	544.8	929.	904.	263.6
21:55:29	-	15.-	18.	960.	224.1	544.8	937.	918.	263.2
21:56:29	-	15.-	18.	960.	224.2	544.9	940.	916.	262.5
21:57:29	-	15.-	18.	960.	224.2	544.7	939.	905.	262.0
21:58:29	-	15.-	18.	958.	224.2	544.8	924.	893.	261.4
21:59:29	-	15.-	18.	958.	224.2	544.7	917.	909.	260.9
22:00:29	-	15.-	18.	959.	224.2	544.8	928.	906.	260.0
22:01:28	-	15.-	18.	956.	224.3	544.7	934.	920.	259.5
22:02:29	-	15.-	18.	958.	224.3	544.6	933.	910.	259.0
22:03:29	-	15.-	18.	958.	224.3	544.7	922.	893.	258.5

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Test 7107

TMI DOCUMENTS

DOCUMENT NO: TM-0323

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METROPOLITAN EDISON COMPANY.

Wilda R. Mullinix, NRC

08:05:10	NORM	0514	IM INCORE T/C 13-G TEMP	604.0
08:05:31	NORM	1367	BACKGROUND 2-G (NANOAMPS)	- 6.0
08:05:32	NORM	1371	FLUX 1-H LEVEL 4 (NANOAMPS)	78.
08:05:34	NORM	1390	FLUX 3-L LEVEL 7 (NANOAMPS)	30.
08:05:34	NORM	1391	BACKGROUND 3-L (NANOAMPS)	- 14.5
08:05:37	BAD	0451	IC RCP 1A COOL OUTLET TEMP	-???.?
08:05:38	NORM	1435	FLUX 7-R LEVEL 4 (NANOAMPS)	42.
08:05:38	NORM	1436	FLUX 7-R LEVEL 5 (NANOAMPS)	1014.
08:05:40	NORM	0525	IM INCORE T/C 4-E TEMP	619.3
08:05:41	BAD	1460	FLUX 12-O LEVEL 5 (NANOAMPS)	-????.
08:05:41	BAD	1461	FLUX 12-O LEVEL 6 (NANOAMPS)	-????.
08:05:41	BAD	1462	FLUX 12-O LEVEL 7 (NANOAMPS)	-????.
08:05:41	NORM	1466	FLUX 14-H LEVEL 3 (NANOAMPS)	734.
08:06:10	NORM	0516	IM INCORE T/C 12-F TEMP	604.0
08:06:30	CONT	2830	ES ACT A BLDG ISLN CH1 DEFEATED	NORM
08:06:30	CONT	2832	ES ACT A BLDG ISLN CH3 DEFEATED	DEFT
08:06:30	BAD	1359	BACKGROUND 3-F (NANOAMPS)	-???.?
08:06:33	NORM	1387	FLUX 3-L LEVEL 4 (NANOAMPS)	4.
08:06:33	NORM	1388	FLUX 3-L LEVEL 5 (NANOAMPS)	150.
08:06:37	NORM	0451	IC RCP 1A COOL OUTLET TEMP	.3
08:06:37	LOW	1720	HORCR HEAT/COOL RATE (DEGF/HR)	-164.9
08:06:38	NORM	1431	BACKGROUND 6-P (NANOAMPS)	175.5
08:06:38	BAD	1435	FLUX 7-R LEVEL 4 (NANOAMPS)	-????.
08:07:12	BAD	1171	FLUX 6-L LEVEL 4 (NANOAMPS)	-????.
08:07:18	CONT	2828	ES ACT A 2/3 LOGIC BLDG ISLN GP2	ISLN
08:07:21	BAD	1267	FLUX 12-F LEVEL 4 (NANOAMPS)	-????.
08:07:25	CONT	2828	ES ACT A 2/3 LOGIC BLDG ISLN GP2	NORM
08:07:27	CONT	2828	ES ACT A 2/3 LOGIC BLDG ISLN GP2	ISLN
08:07:36	NORM	1415	BACKGROUND 5-O (NANOAMPS)	- 15.5
08:07:38	CONT	2828	ES ACT A 2/3 LOGIC BLDG ISLN GP2	NORM
08:07:41	NORM	0533	IM INCORE T/C 4-N TEMP	23.7
08:08:12	BAD	1170	FLUX 6-L LEVEL 3 (NANOAMPS)	-????.
08:08:19	BAD	1246	FLUX 13-H LEVEL 7 (NANOAMPS)	-????.
08:08:36	BAD	1415	BACKGROUND 5-O (NANOAMPS)	-???.?
08:08:37	NORM	1423	BACKGROUND 6-O (NANOAMPS)	183.5
08:08:58	NORM	0456	IC LETDN COOL B OUTLET TEMP	75.7
08:08:58	BAD	1432	FLUX 7-R LEVEL 1 (NANOAMPS)	-????.
08:09:07	BAD	0451	IC RCP 1A COOL OUTLET TEMP	-???.?
08:09:12	BAD	1172	FLUX 6-L LEVEL 5 (NANOAMPS)	-????.
08:09:14	CONT	2963	RCP 1A PUMP TRIPPED	NORM
08:09:14	CONT	2995	RCP 1A VIBRASWITCH	HIGH
08:09:15	CONT	2967	RCP 1A OIL LIFT PMP DSCHG PRESS	LOW
10:00:05	03/28/79			
08:09:16	CONT	2971	RCP 1A FULL SPEED	NORM
08:09:17	CONT	2971	RCP 1A FULL SPEED	LOW
08:09:13	CONT	2959	RCP 1A LUBE OIL FLOW	NORM
08:09:13	CONT	2967	RCP 1A OIL LIFT PMP DSCHG PRESS	NORM
08:09:19	CONT	2967	RCP 1A OIL LIFT PMP DSCHG PRESS	- LOW
08:09:19	CONT	2971	RCP 1A FULL SPEED	NORM
08:09:20	BAD	1252	FLUX 13-G LEVEL 5 (NANOAMPS)	-????.
08:09:20	BAD	1253	FLUX 13-G LEVEL 6 (NANOAMPS)	-????.
08:09:22	NORM	1271	BACKGROUND 12-F (NANOAMPS)	38.5
08:09:25	CONT	2982	RCP 1A UPPER OIL POT LVL 2	NORM
08:09:34	BAD	1391	BACKGROUND 3-L (NANOAMPS)	-???.?
08:09:37	CONT	2975	RCP 1A BACKSTOP OIL FLOW	LOW
08:09:51	CONT	2963	RCP 1A PUMP TRIPPED	TRIP
08:10:00	BAD	1021	RB AIR CLG COILS B EMER DISCH	-???.?
08:10:20	BAD	1254	FLUX 13-G LEVEL 7 (NANOAMPS)	-????.
08:10:22	BAD	1271	BACKGROUND 12-F (NANOAMPS)	-???.?
08:10:23	BAD	1283	FLUX 11-E LEVEL 4 (NANOAMPS)	-????.

08:10:47	CONT	3246	INTMD CLG PMP ...	OFF
08:10:51	LOW	0151	INTER CLG PUMP DISCH PRESS	90.0
08:11:12	BAD	1174	FLUX 6-L LEVEL 7 (NANOAMPS)	-????.
08:11:15	CONT	2971	RCP 1A FULL SPEED	LOW
08:11:15	CONT	2975	RCP 1A BACKSTOP OIL FLOW	NORM
08:11:15	CONT	2967	RCP 1A OIL LIFT PMP DSCHG PRESS	NORM
08:11:18	CONT	2982	RCP 1A UPPER OIL POT LVL 2	LOW
08:11:19	BAD	1243	FLUX 13-H LEVEL 4 (NANOAMPS)	-????.
08:11:20	BAD	1343	BACKGROUND 5-D (NANOAMPS)	-???.?
08:11:35	NORM	1402	FLUX 4-N LEVEL 3 (NANOAMPS)	40.
08:11:35	NORM	1403	FLUX 4-N LEVEL 4 (NANOAMPS)	192.
08:11:35	NORM	1406	FLUX 4-N LEVEL 7 (NANOAMPS)	46.
08:12:12	BAD	1173	FLUX 6-L LEVEL 6 (NANOAMPS)	-????.
08:12:14	NORM	1191	BACKGROUND 8-N (NANOAMPS)	196.5
08:12:16	BAD	1219	FLUX 11-L LEVEL 4 (NANOAMPS)	-????.
08:12:17	NORM	1226	FLUX 11-K LEVEL 3 (NANOAMPS)	545.
08:12:20	NORM	1253	FLUX 13-G LEVEL 6 (NANOAMPS)	36.
08:12:20	NORM	1254	FLUX 13-G LEVEL 7 (NANOAMPS)	38.
08:12:31	CONT	2959	RCP 1A LUBE OIL FLOW	LOW
08:12:33	BAD	1386	FLUX 3-L LEVEL 3 (NANOAMPS)	-????.
08:12:36	NORM	1415	BACKGROUND 5-O (NANOAMPS)	20.0
08:12:44	NORM	1491	FLUX 13-C LEVEL 4 (NANOAMPS)	9.
08:13:17	BAD	1226	FLUX 11-K LEVEL 3 (NANOAMPS)	-????.
08:13:18	NORM	1230	FLUX 11-K LEVEL 7 (NANOAMPS)	232.
08:13:20	NORM	1252	FLUX 13-G LEVEL 5 (NANOAMPS)	16.
08:13:23	NORM	1283	FLUX 11-E LEVEL 4 (NANOAMPS)	20.
08:13:41	NORM	0532	IM INCORE T/C 3-M TEMP	694.7
08:13:41	BAD	1463	BACKGROUND 12-O (NANOAMPS)	-???.?
08:13:44	BAD	1491	FLUX 13-C LEVEL 4 (NANOAMPS)	-????.
08:14:18	BAD	1230	FLUX 11-K LEVEL 7 (NANOAMPS)	-????.
08:14:20	BAD	1252	FLUX 13-G LEVEL 5 (NANOAMPS)	-????.
08:14:32	BAD	1374	FLUX 1-H LEVEL 7 (NANOAMPS)	-????.
08:14:38	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
08:14:42	BAD	1475	FLUX 13-L LEVEL 4 (NANOAMPS)	-????.
08:14:43	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
08:15:06	NORM	0151	INTER CLG PUMP DISCH PRESS	119.6
08:15:10	NORM	0509	IM INCORE T/C 10-M TEMP	693.2
08:15:10	BAD	0516	IM INCORE T/C 12-F TEMP	-???.?
08:15:13	BAD	1182	FLUX 7-M LEVEL 7 (NANOAMPS)	-????.
08:15:17	CONT	3169	4 PSI RB PRESS YEL CH TRIP	HIGH
08:15:19	CONT	3005	RP CH C RCTR BLDG PRESS	HIGH
08:15:20	BAD	1253	FLUX 13-G LEVEL 6 (NANOAMPS)	-????.
08:15:20	BAD	1254	FLUX 13-G LEVEL 7 (NANOAMPS)	-????.
08:15:30	BAD	1359	BACKGROUND 3-F (NANOAMPS)	-???.?
08:15:40	NORM	0516	IM INCORE T/C 12-F TEMP	588.5
08:15:42	NORM	1475	FLUX 13-L LEVEL 4 (NANOAMPS)	1.
08:15:44	NORM	1491	FLUX 13-C LEVEL 4 (NANOAMPS)	23.
08:16:02	NORM	0027	8STG HTRB TO HD TK FL(KLB/H)	.0
08:16:20	BAD	1251	FLUX 13-G LEVEL 4 (NANOAMPS)	-????.
08:16:22	BAD	0027	8STG HTRB TO HD TK FL(KLB/H)	-???.?
08:16:27	NORM	0027	8STG HTRB TO HD TK FL(KLB/H)	.0
08:16:30	NORM	1359	BACKGROUND 3-F (NANOAMPS)	20.0
08:16:32	BAD	0027	8STG HTRB TO HD TK FL(KLB/H)	-???.?
08:16:41	NORM	1465	FLUX 14-M LEVEL 2 (NANOAMPS)	309.
08:16:57	NORM	0027	8STG HTRB TO HD TK FL(KLB/H)	.0
08:17:11	NORM	1167	BACKGROUND 5-K (NANOAMPS)	199.0
08:17:20	BAD	1255	BACKGROUND 13-G (NANOAMPS)	-???.?
08:17:21	NORM	0161	RC PUMP MAKE UP TANK TEMP	132.9
08:17:27	BAD	0027	8STG HTRB TO HD TK FL(KLB/H)	-???.?
08:17:30	BAD	1359	BACKGROUND 3-F (NANOAMPS)	-???.?
08:17:32	NORM	0027	8STG HTRB TO HD TK FL(KLB/H)	.0
08:17:36	BAD	1415	BACKGROUND 5-O (NANOAMPS)	-???.?
08:17:36	NORM	1413	FLUX 6-O LEVEL 3 (NANOAMPS)	404.

08:18:02	CONT	3167	4 PSI RB PRESS RED CH TRIP	HIGH
08:18:07	CONT	2971	RCP 1A FULL SPEED	NORM
08:18:07	BAD	0027	8STG HTRB TO HD TK FL(KLB/H)	-???.?
08:18:08	CONT	2971	RCP 1A FULL SPEED	LOW
08:18:12	NORM	0027	8STG HTRB TO HD TK FL(KLB/H)	.0
08:18:13	BAD	1180	FLUX 7-H LEVEL 5 (NANO/MPS)	-????.
08:18:17	BAD	0027	8STG HTRB TO HD TK FL(KLB/H)	-???.?
08:18:22	NORM	0027	8STG HTRB TO HD TK FL(KLB/H)	.0
08:18:27	BAD	0027	8STG HTRB TO HD TK FL(KLB/H)	-???.?
08:18:30	NORM	1359	BACKGROUND 3-F (NANO/MPS)	- 19.0
08:18:31	BAD	1363	FLUX 2-G LEVEL 4 (NANO/MPS)	-????.
08:18:42	NORM	0027	8STG HTRB TO HD TK FL(KLB/H)	.0
08:18:43	BAD	1482	FLUX 14-D LEVEL 3 (NANO/MPS)	-????.
08:18:52	BAD	0027	8STG HTRB TO HD TK FL(KLB/H)	-???.?
08:18:53	CONT	3172	RC MAKE-UP PMP 1A TRIPPED	NORM
08:18:56	CONT	3172	RC MAKE-UP PMP 1A TRIPPED	TRIP
08:19:13	NORM	1180	FLUX 7-H LEVEL 5 (NANO/MPS)	1990.
08:19:13	NORM	1182	FLUX 7-H LEVEL 7 (NANO/MPS)	769.
08:19:30	BAD	1359	BACKGROUND 3-F (NANO/MPS)	-???.?
08:19:31	NORM	1363	FLUX 2-G LEVEL 4 (NANO/MPS)	211.
08:19:37	NORM	1720	HORCR HEAT/COOL RATE (DEGF/HR)	-61.8
08:19:38	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
08:19:39	CONT	3246	INTMD CLG PMP IC-P-1B	ON
08:19:39	BAD	1441	FLUX 10-R LEVEL 2 (NANO/MPS)	-????.
08:19:42	CONT	2934	DHP A MTR STATUS	NORM
08:19:42	NORM	0027	8STG HTRB TO HD TK FL(KLB/H)	.0
08:19:42	CONT	2818	ES ACT A 2/3 LOGIC EMER INJ GP1	ACT
08:19:42	CONT	2819	ES ACT A 2/3 LOGIC EMER INJ GP2	ACT
08:19:42	CONT	2820	ES ACT A 2/3 LOGIC EMER INJ GP3	ACT
08:19:43	CONT	2827	ES ACT A 2/3 LOGIC BLDG ISLN GP1	ISLN
08:19:43	CONT	2828	ES ACT A 2/3 LOGIC BLDG ISLN GP2	ISLN
08:19:43	CONT	2829	ES ACT A 2/3 LOGIC BLDG ISLN GP3	ISLN
08:19:43	CONT	2834	ES BLDG ISLN SW ACT A CH2 TRIP	TRIP
08:19:43	CONT	3241	DH REMOVAL PMP 1A	ON
08:19:43	CONT	3245	INTMD CLG PMP IC-P-1A	OFF
08:19:43	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
08:19:50	LOW	0151	INTER CLG PUMP DISCH PRESS	106.2
08:19:52	BAD	0027	8STG HTRB TO HD TK FL(KLB/H)	-???.?
08:20:01	CONT	2818	ES ACT A 2/3 LOGIC EMER INJ GP1	NORM
08:20:01	CONT	2819	ES ACT A 2/3 LOGIC EMER INJ GP2	NORM
08:20:01	CONT	2820	ES ACT A 2/3 LOGIC EMER INJ GP3	NORM
08:20:01	CONT	2827	ES ACT A 2/3 LOGIC BLDG ISLN GP1	NORM
08:20:01	CONT	2828	ES ACT A 2/3 LOGIC BLDG ISLN GP2	NORM
08:20:01	CONT	2829	ES ACT A 2/3 LOGIC BLDG ISLN GP3	NORM
08:20:01	CONT	2830	ES ACT A BLDG ISLN CH1 DEFEATED	DEFT
08:20:05	NORM	0151	INTER CLG PUMP DISCH PRESS	159.9
08:20:06	CONT	3245	INTMD CLG PMP IC-P-1A	ON
08:20:06	BAD	1114	FLUX 9-E LEVEL 3 (NANO/MPS)	-????.
08:20:13	BAD	1180	FLUX 7-H LEVEL 5 (NANO/MPS)	-????.
08:20:13	BAD	1182	FLUX 7-H LEVEL 7 (NANO/MPS)	-????.
08:20:21	LOW	0150	INTER CLG PUMP SUCT PRESS	9.45
08:20:30	NORM	1359	BACKGROUND 3-F (NANO/MPS)	- 20.0
08:20:35	NORM	0150	INTER CLG PUMP SUCT PRESS	15.34
08:20:36	BAD	1418	FLUX 6-O LEVEL 3 (NANO/MPS)	-????.
08:20:39	NORM	1441	FLUX 10-R LEVEL 2 (NANO/MPS)	31.
08:20:39	BAD	1442	FLUX 10-R LEVEL 3 (NANO/MPS)	-????.
08:20:44	BAD	1401	FLUX 13-C LEVEL 4 (NANO/MPS)	-????.
08:21:12	BAD	1173	FLUX 7-H LEVEL 4 (NANO/MPS)	-????.
08:21:39	NORM	1442	FLUX 10-R LEVEL 3 (NANO/MPS)	- 17.
08:21:41	NORM	1463	BACKGROUND 12-O (NANO/MPS)	- 19.5
08:22:06	NORM	1114	FLUX 9-E LEVEL 3 (NANO/MPS)	- 11.
08:22:11	BAD	1167	BACKGROUND 5-K (NANO/MPS)	-???.?

03:22:48	CONT	2957	RC PUMP 2B SEAL LEAK TK LVL	HIGH
03:23:19	CONT	2957	RC PUMP 2B SEAL LEAK TK LVL	NORM
03:23:37	NORM	1424	FLUX G-P LEVEL 1 (NANOAMPS)	90.
08:23:40	NORM	0535	IN INCORE T/C 6-O TEMP	694.7
08:23:41	BAD	1463	BACKGROUND 12-O (NANOAMPS)	-???.?
08:24:19	BAD	1244	FLUX 13-H LEVEL 5 (NANOAMPS)	-????.
08:24:31	CONT	2674	PRESS HTR GROUP 1	NORM
08:24:31	BAD	1363	FLUX 2-G LEVEL 4 (NANOAMPS)	-????.
08:24:31	CONT	2675	PRESS HTR GROUP 2	NORM
08:24:31	CONT	2676	PRESS HTR GROUP 3	NORM
08:24:31	CONT	2677	PRESS HTR GROUP 4	NORM
08:24:31	CONT	2678	PRESS HTR GROUP 5	NORM
08:24:37	NORM	0451	IC RCP 1A COOL OUTLET TEMP	2.3 ?
08:24:39	BAD	1442	FLUX 10-R LEVEL 3 (NANOAMPS)	-????.
08:24:41	BAD	1466	FLUX 14-M LEVEL 3 (NANOAMPS)	-????.
08:25:10	CONT	2740	D-G ROOM AIR CPRSR DF-P-2C	NORM
08:25:12	NORM	1173	FLUX G-L LEVEL 6 (NANOAMPS)	- 16.
08:25:19	BAD	1242	FLUX 13-H LEVEL 3 (NANOAMPS)	-????.
08:25:32	NORM	1374	FLUX 1-H LEVEL 7 (NANOAMPS)	- 3.
08:25:35	BAD	1402	FLUX 4-N LEVEL 3 (NANOAMPS)	-????.
08:25:35	BAD	1403	FLUX 4-N LEVEL 4 (NANOAMPS)	-????.
08:25:42	NORM	1471	BACKGROUND 14-M (NANOAMPS)	- 17.0
08:26:06	BAD	1114	FLUX 9-E LEVEL 3 (NANOAMPS)	-????.
08:26:13	NORM	1182	FLUX 7-M LEVEL 7 (NANOAMPS)	211.
08:26:16	NORM	1219	FLUX 11-L LEVEL 4 (NANOAMPS)	- 7.
08:26:42	BAD	1471	BACKGROUND 14-M (NANOAMPS)	-???.?
08:26:59	HIGH	0994	LETDOWN CLR 1A OUTLET	137.7
08:26:59	HIGH	0995	LETDOWN CLR 1B OUTLET	137.4
08:27:03	BAD	0347	MU TANK LEVEL (INH2O)	-???.?
08:27:06	NORM	1114	FLUX 9-E LEVEL 3 (NANOAMPS)	646.
08:27:12	NORM	1179	FLUX 7-M LEVEL 4 (NANOAMPS)	1565.
08:27:13	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
08:27:13	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
08:27:21	BAD	1262	FLUX 13-F LEVEL 7 (NANOAMPS)	-????.
08:27:29	NORM	1348	FLUX 4-E LEVEL 5 (NANOAMPS)	10.
08:27:30	NORM	1350	FLUX 4-E LEVEL 7 (NANOAMPS)	- 16.
08:27:31	BAD	1367	BACKGROUND 2-G (NANOAMPS)	-???.?
08:27:35	NORM	0347	MU TANK LEVEL (INH2O)	95.8
08:27:35	BAD	1406	FLUX 4-M LEVEL 7 (NANOAMPS)	-????.
08:27:36	CONT	3174	RC MAKE-UP PMP 1C TRIPPED	NORM
08:27:37	BAD	1424	FLUX G-P LEVEL 1 (NANOAMPS)	-????.
08:27:37	CONT	3174	RC MAKE-UP PMP 1C TRIPPED	TRIP
08:27:39	CONT	2921	MUP P1C MTR STATUS	NORM
08:28:12	BAD	1177	FLUX 7-M LEVEL 2 (NANOAMPS)	-????.
08:28:13	NORM	1180	FLUX 7-M LEVEL 5 (NANOAMPS)	1467.
08:28:16	BAD	1219	FLUX 11-L LEVEL 4 (NANOAMPS)	-????.
08:28:18	BAD	1234	FLUX 12-K LEVEL 3 (NANOAMPS)	-????.
08:28:29	NORM	1347	FLUX 4-E LEVEL 4 (NANOAMPS)	0
08:28:30	BAD	1350	FLUX 4-E LEVEL 7 (NANOAMPS)	-????.
08:28:31	NORM	1367	BACKGROUND 2-G (NANOAMPS)	- 10.0
08:29:12	BAD	1173	FLUX G-L LEVEL 6 (NANOAMPS)	-????.
08:29:14	BAD	1191	BACKGROUND 8-M (NANOAMPS)	-???.?
08:29:17	BAD	1221	FLUX 11-L LEVEL 6 (NANOAMPS)	-????.
08:29:18	BAD	1235	FLUX 12-K LEVEL 4 (NANOAMPS)	-????.
08:29:32	BAD	1374	FLUX 1-H LEVEL 7 (NANOAMPS)	-????.
08:29:50	CONT	2740	D-G ROOM AIR CPRSR DF-P-2C	TRIP
08:30:06	BAD	1114	FLUX 9-E LEVEL 3 (NANOAMPS)	-????.
08:30:37	NORM	1424	FLUX G-P LEVEL 1 (NANOAMPS)	18.
08:30:39	NORM	1442	FLUX 10-R LEVEL 3 (NANOAMPS)	- 19.
08:31:06	NORM	1114	FLUX 9-E LEVEL 3 (NANOAMPS)	357.
08:31:07	CONT	2683	PRESS HTR GROUP 10	TRIP
08:31:10	BAD	0526	IN INCORE T/C 4-E TEMP	-???.?

08:31:25	CONT	3235	COND VAC PMP VA-P-1A	OFF
08:31:29	NORM	1346	FLUX 4-E LEVEL 3 (NANO/MPS)	- 6.
08:31:38	BAD	1433	FLUX 7-R LEVEL 2 (NANO/MPS)	-????.
08:32:12	NORM	1174	FLUX G-L LEVEL 7 (NANO/MPS)	- 3.
08:32:33	BAD	1389	FLUX 3-L LEVEL G (NANO/MPS)	-????.
08:32:35	NORM	1403	FLUX 4-N LEVEL 4 (NANO/MPS)	105.
08:32:35	NORM	1406	FLUX 4-N LEVEL 7 (NANO/MPS)	12.
08:32:43	BAD	0031	11STGB-13STGB HTR DRN FL(KLB/H)	-???.?
08:32:48	NORM	0031	11STGB-13STGB HTR DRN FL(KLB/H)	.0
08:33:37	HIGH	0452	IC RCP 2A COOL OUTLET TEMP	136.0
08:33:37	HIGH	0453	IC RCP 2B COOL OUTLET TEMP	136.4
08:33:38	NORM	1433	FLUX 7-R LEVEL 2 (NANO/MPS)	3.
08:33:53	BAD	0031	11STGB-13STGB HTR DRN FL(KLB/H)	-???.?
08:34:12	CONT	2757	13STG FDW HTR A LVL LOW	LOW
08:34:16	NORM	1210	FLUX 10-M LEVEL 3 (NANO/MPS)	95.
08:34:18	NORM	0031	11STGB-13STGB HTR DRN FL(KLB/H)	.0
08:34:33	BAD	0031	11STGB-13STGB HTR DRN FL(KLB/H)	-???.?
08:34:35	NORM	1402	FLUX 4-N LEVEL 3 (NANO/MPS)	8.
08:34:36	NORM	1415	BACKGROUND 5-O (NANO/MPS)	- 10.0
08:34:37	HIGH	0454	IC RCP 1B COOL OUTLET TEMP	136.0
08:34:38	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
08:34:41	NORM	1466	FLUX 14-M LEVEL 3 (NANO/MPS)	739.
08:34:43	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
08:34:53	NORM	0031	11STGB-13STGB HTR DRN FL(KLB/H)	.0
08:34:58	BAD	0031	11STGB-13STGB HTR DRN FL(KLB/H)	-???.?
08:35:07	NORM	0454	IC RCP 1B COOL OUTLET TEMP	132.4
08:35:12	BAD	1174	FLUX G-L LEVEL 7 (NANO/MPS)	-????.
08:35:12	NORM	1177	FLUX 7-M LEVEL 2 (NANO/MPS)	1999.
08:35:37	NORM	0453	IC RCP 2B COOL OUTLET TEMP	128.1
08:35:53	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
08:35:58	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
08:35:59	NORM	0995	LETDOWN CLR 1B OUTLET	130.1
08:36:06	BAD	1114	FLUX 9-E LEVEL 3 (NANO/MPS)	-????.
08:36:07	BAD	0451	IC RCP 1A COOL OUTLET TEMP	-???.?
08:36:07	NORM	0452	IC RCP 2A COOL OUTLET TEMP	124.7
08:36:09	NORM	0504	IM INCORE T/C G-L TEMP	653.0
08:36:14	NORM	1191	BACKGROUND 8-N (NANO/MPS)	200.0
08:36:28	NORM	0994	LETDOWN CLR 1A OUTLET	125.9
08:36:36	BAD	1415	BACKGROUND 5-O (NANO/MPS)	-???.?
08:36:37	NORM	1420	FLUX G-O LEVEL 5 (NANO/MPS)	57.
08:36:37	BAD	1424	FLUX G-P LEVEL 1 (NANO/MPS)	-????.
08:36:39	NORM	0519	IM INCORE T/C 10-O TEMP	693.0
08:36:50	CONT	2755	11STG FDW HTR A LVL LOW	LOW
08:37:37	NORM	1424	FLUX G-P LEVEL 1 (NANO/MPS)	- 10.
08:37:39	BAD	1441	FLUX 10-R LEVEL 2 (NANO/MPS)	-????.
08:37:41	NORM	1464	FLUX 14-M LEVEL 1 (NANO/MPS)	- 10.
08:38:14	BAD	1194	FLUX 9-N LEVEL 3 (NANO/MPS)	-????.
08:38:16	NORM	1221	FLUX 11-L LEVEL 6 (NANO/MPS)	89.
08:38:33	NORM	1389	FLUX 3-L LEVEL G (NANO/MPS)	103.
08:38:44	NORM	1491	FLUX 13-C LEVEL 4 (NANO/MPS)	- 10.
08:39:10	NORM	0531	IM INCORE T/C 3-L TEMP	216.9
08:39:11	NORM	1167	BACKGROUND 5-K (NANO/MPS)	196.0
08:39:29	BAD	1346	FLUX 4-E LEVEL 3 (NANO/MPS)	-????.
08:39:35	BAD	1406	FLUX 4-N LEVEL 7 (NANO/MPS)	-????.
08:39:38	BAD	1433	FLUX 7-R LEVEL 2 (NANO/MPS)	-????.
08:39:40	BAD	0531	IM INCORE T/C 3-L TEMP	-???.?
08:39:43	NORM	1439	FLUX 13-C LEVEL 2 (NANO/MPS)	- 18.
08:40:14	BAD	1191	BACKGROUND 8-N (NANO/MPS)	-???.?
08:40:14	BAD	1199	BACKGROUND 9-N (NANO/MPS)	-???.?
08:40:17	BAD	1236	FLUX 12-K LEVEL 5 (NANO/MPS)	-????.
08:40:35	NORM	1406	FLUX 4-N LEVEL 7 (NANO/MPS)	4.
08:40:38	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??

08:41:14	NORM	1191	BACKGROUND 8-H (NANOAMPS)	193.0
08:41:29	BAD	1347	FLUX 4-E LEVEL 4 (NANOAMPS)	-????.
08:41:33	BAD	1389	FLUX 3-L LEVEL 6 (NANOAMPS)	-????.
08:41:36	LOW	1720	HORCR HEAT/COOL RATE (DEGF/HR)	-102.6
08:42:00	NORM	1127	BACKGROUND 7-F (NANOAMPS)	- 10.5
08:42:00	NORM	0526	IM INCORE T/C 4-E TEMP	600.3
08:42:17	BAD	1221	FLUX 11-L LEVEL 6 (NANOAMPS)	-????.
08:42:19	NORM	1250	FLUX 13-G LEVEL 3 (NANOAMPS)	55.
08:42:30	NORM	1447	BACKGROUND 10-R (NANOAMPS)	197.5
08:42:43	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
08:42:51	CONT	3258	EMER FW PMP EF-P-2A	OFF
08:42:53	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	18.6
08:43:03	LOW	0118	EMER FD PMP 2A DISCH PRESS	197.
08:43:16	NORM	1221	FLUX 11-L LEVEL 6 (NANOAMPS)	13.
08:43:18	CONT	3117	FW TURB B LOW VACUUM TRIP	LOW
08:43:24	NORM	1308	FLUX 9-C LEVEL 5 (NANOAMPS)	170.
08:43:29	BAD	1348	FLUX 4-E LEVEL 5 (NANOAMPS)	-????.
08:43:32	NORM	1575	BACKGROUND 1-H (NANOAMPS)	190.9
08:43:35	NORM	0140	8STG FD WTR HTR A DRAIN PRESS	- 2.9
08:43:50	NORM	0141	8STG FD WTR HTR B DRAIN PRESS	- 2.8
08:43:53	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
08:43:54	CONT	2755	11STG FDW HTR A LVL LOW	NORM
08:43:58	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	18.9
08:44:14	BAD	1191	BACKGROUND 8-H (NANOAMPS)	-???.?
08:44:16	BAD	1221	FLUX 11-L LEVEL 6 (NANOAMPS)	-????.
08:44:19	NORM	0130	8STG A HTR BLEED ST PRESS	- 2.7
08:44:21	NORM	1262	FLUX 13-F LEVEL 7 (NANOAMPS)	13.
08:44:33	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
08:44:37	NORM	1720	HORCR HEAT/COOL RATE (DEGF/HR)	- 94.9
08:44:38	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	42.2
08:44:48	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
08:44:53	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
08:45:09	BAD	0526	IM INCORE T/C 4-E TEMP	-???.?
08:45:13	NORM	1784	8STG FDWTR HTR A PERFORMANCE	107.7
08:45:13	NORM	1785	8STG FDWTR HTR B PERFORMANCE	113.3
08:45:20	NORM	1261	FLUX 13-F LEVEL 6 (NANOAMPS)	15.
08:45:28	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
08:45:31	NORM	1363	FLUX 2-G LEVEL 4 (NANOAMPS)	28.
08:45:33	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	22.7
08:45:43	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
08:45:43	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
08:45:48	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
08:45:53	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	10.2
08:45:58	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
08:46:03	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	.0
08:46:06	BAD	1127	BACKGROUND 7-F (NANOAMPS)	-???.?
08:46:08	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
08:46:13	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	.0
08:46:13	NORM	1191	BACKGROUND 8-H (NANOAMPS)	193.0
08:46:26	CONT	3170	4 PSI RB PRESS BLUE CH TRIP	HIGH
08:46:28	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
08:46:29	NORM	1348	FLUX 4-E LEVEL 5 (NANOAMPS)	11.
08:46:33	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	15.4
08:46:37	BAD	1429	FLUX 6-P LEVEL 6 (NANOAMPS)	-????.
08:46:38	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
08:46:39	BAD	1442	FLUX 10-R LEVEL 3 (NANOAMPS)	-????.
08:46:42	NORM	1471	BACKGROUND 14-H (NANOAMPS)	- 6.5
08:46:44	NORM	1495	BACKGROUND 13-C (NANOAMPS)	- 19.5
08:46:49	BAD	0130	8STG A HTR BLEED ST PRESS	-???.?
08:46:58	CONT	2677	PRESS HTR GROUP 4	TRIP
08:46:58	CONT	2678	PRESS HTR GROUP 5	TRIP
08:47:04	BAD	1094	FLUX 9-H LEVEL 7 (NANOAMPS)	-???.

08:47:13	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
08:47:13	BAD	1197	FLUX 9-H LEVEL 6 (NANOAMPS)	-????.
08:47:18	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	.0
08:47:21	NORM	1266	FLUX 12-F LEVEL 3 (NANOAMPS)	3.
08:47:34	BAD	0130	3STG A HTR BLEED ST PRESS	-???.?
08:47:36	BAD	1424	FLUX G-P LEVEL 1 (NANOAMPS)	-????.
08:47:36	BAD	1426	FLUX G-P LEVEL 3 (NANOAMPS)	-????.
08:47:37	BAD	1430	FLUX G-P LEVEL 7 (NANOAMPS)	-????.
08:47:38	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
08:47:40	BAD	1468	FLUX 14-H LEVEL 5 (NANOAMPS)	-????.
08:47:43	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	.0
08:47:58	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
08:48:08	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	.0
08:48:18	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
08:48:19	NORM	0130	3STG A HTR BLEED ST PRESS	- 2.9
08:48:20	BAD	1261	FLUX 13-F LEVEL 6 (NANOAMPS)	-????.
08:48:28	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	38.1
08:48:34	BAD	0130	3STG A HTR BLEED ST PRESS	-???.?
08:48:39	BAD	0528	1M INCORE T/C 2-G TEMP	-???.?
08:48:41	BAD	1467	FLUX 14-H LEVEL 4 (NANOAMPS)	-????.
08:48:41	BAD	1471	BACKGROUND 14-H (NANOAMPS)	-???.?
08:48:43	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
08:48:58	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	.0
08:49:03	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
08:49:04	NORM	0130	3STG A HTR BLEED ST PRESS	- 2.9
08:49:07	BAD	0029	10STGB-11STGB HTR DRN FL(KLB/H)	-???.?
08:49:08	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	20.6
08:49:11	NORM	1167	BACKGROUND 5-K (NANOAMPS)	200.0
08:49:19	BAD	0130	3STG A HTR BLEED ST PRESS	-???.?
08:49:20	BAD	1262	FLUX 13-F LEVEL 7 (NANOAMPS)	-????.
08:49:23	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
08:49:30	BAD	1367	BACKGROUND 2-G (NANOAMPS)	-???.?
08:49:38	NORM	1435	FLUX 7-R LEVEL 4 (NANOAMPS)	- 10.
08:49:41	NORM	1469	FLUX 14-H LEVEL 6 (NANOAMPS)	- 17.
08:49:41	NORM	1471	BACKGROUND 14-H (NANOAMPS)	.0
08:50:03	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
08:50:08	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
08:50:10	BAD	1167	BACKGROUND 5-K (NANOAMPS)	-???.?
08:50:36	BAD	1420	FLUX G-O LEVEL 5 (NANOAMPS)	-????.
08:51:00	NORM	0511	1M INCORE T/C 11-K TEMP	600.9
08:51:23	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	.0
08:51:28	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
08:51:31	BAD	1363	FLUX 2-G LEVEL 4 (NANOAMPS)	-????.
08:51:33	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	.0
08:51:37	BAD	1425	FLUX G-P LEVEL 2 (NANOAMPS)	-????.
08:51:38	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
08:51:41	BAD	1471	BACKGROUND 14-H (NANOAMPS)	-???.?
08:51:48	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
08:51:53	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
08:52:08	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	20.2
08:52:29	BAD	1348	FLUX 4-E LEVEL 5 (NANOAMPS)	-????.
08:52:33	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
08:52:53	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	28.4
08:52:58	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
08:53:08	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	10.8

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08:53:18	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
08:53:21	NORM	1267	FLUX 12-F LEVEL 4 (NANOAMPS)	35.
08:53:29	NORM	1348	FLUX 4-E LEVEL 5 (NANOAMPS)	14.
08:53:33	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	14.9

08:53:41	BAD	1475	FLUX 13-L LEVEL 4 (NANO/MPS)	-????.
08:53:41	BAD	1477	FLUX 13-L LEVEL 6 (NANO/MPS)	-????.
08:53:53	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
08:54:03	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	26.6
08:54:13	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
08:54:20	NORM	1263	FLUX 12-F LEVEL 5 (NANO/MPS)	- 6.
08:54:28	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	32.5
08:54:36	BAD	1422	FLUX 6-O LEVEL 7 (NANO/MPS)	-????.
08:54:33	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
08:54:53	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	13.0
08:54:53	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
08:55:08	BAD	0496	IM INCORE T/C 8-F TEMP	-???.?
08:55:29	NORM	1347	FLUX 4-E LEVEL 4 (NANO/MPS)	24.
08:55:33	CONT	2969	RCP 2B OIL LIFT PMP DSCHG PRESS	LOW
08:55:34	CONT	2968	RCP 2A OIL LIFT PMP DSCHG PRESS	LOW
08:55:34	CONT	2970	RCP 1B OIL LIFT PMP DSCHG PRESS	LOW
08:55:35	CONT	2967	RCP 1A OIL LIFT PMP DSCHG PRESS	LOW
08:55:35	NORM	1418	FLUX 6-O LEVEL 3 (NANO/MPS)	152.
08:55:37	BAD	1420	FLUX 6-O LEVEL 5 (NANO/MPS)	-????.
08:55:37	HIGH	1720	HORCR HEAT/COOL RATE (DEGF/HR)	106.6
08:55:42	NORM	1477	FLUX 13-L LEVEL 6 (NANO/MPS)	6.
08:55:43	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	.0
08:55:45	CONT	2978	RCP 1B BACKSTOP OIL FLOW	LOW
08:55:49	CONT	2977	RCP 2B BACKSTOP OIL FLOW	LOW
08:55:54	CONT	2975	RCP 1A BACKSTOP OIL FLOW	LOW
08:55:54	CONT	2976	RCP 2A BACKSTOP OIL FLOW	LOW
08:56:03	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
08:56:08	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	17.4
08:56:18	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
08:56:29	BAD	1347	FLUX 4-E LEVEL 4 (NANO/MPS)	-????.
08:56:42	NORM	1475	FLUX 13-L LEVEL 4 (NANO/MPS)	1.
08:56:43	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	3.4
08:56:48	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
08:57:03	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	11.6
08:57:13	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
08:57:13	BAD	1191	BACKGROUND 8-H (NANO/MPS)	-???.?
08:57:23	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	27.0
08:57:28	BAD	1348	FLUX 4-E LEVEL 5 (NANO/MPS)	-????.
08:57:31	BAD	1366	FLUX 2-G LEVEL 7 (NANO/MPS)	-????.
08:57:33	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
08:57:36	NORM	1420	FLUX 6-O LEVEL 5 (NANO/MPS)	387.
08:57:41	NORM	1471	BACKGROUND 14-H (NANO/MPS)	.0
08:58:13	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	32.0
08:58:20	BAD	1263	BACKGROUND 13-F (NANO/MPS)	-???.?
08:58:28	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
08:58:33	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
08:58:36	BAD	1418	FLUX 6-O LEVEL 3 (NANO/MPS)	-????.
08:58:43	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
08:58:58	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	29.5
08:59:03	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
08:59:03	NORM	1004	FLUX 9-H LEVEL 7 (NANO/MPS)	82.
08:59:08	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	27.3
08:59:18	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
08:59:21	BAD	1268	FLUX 12-F LEVEL 5 (NANO/MPS)	-????.
08:59:23	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	33.0
08:59:31	NORM	1363	FLUX 2-G LEVEL 4 (NANO/MPS)	236.
08:59:33	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
08:59:36	NORM	1418	FLUX 6-O LEVEL 3 (NANO/MPS)	533.
08:59:36	BAD	1420	FLUX 6-O LEVEL 5 (NANO/MPS)	-????.
08:59:38	BAD	1446	FLUX 10-R LEVEL 7 (NANO/MPS)	-????.
08:59:58	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
09:00:03	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	9.0

09:00:30	NORM	0515	IM INCORE T/C 13-F TEMP	660.8
09:00:42	BAD	1475	FLUX 13-L LEVEL 4 (NANO/MPS)	-????.
09:00:58	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:01:18	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	12.3
09:01:21	NORM	1268	FLUX 12-F LEVEL 5 (NANO/MPS)	61.
09:01:31	BAD	1363	FLUX 2-G LEVEL 4 (NANO/MPS)	-????.
09:01:33	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:01:41	BAD	1471	BACKGROUND 14-M (NANO/MPS)	-???.?
09:01:41	NORM	1475	FLUX 13-L LEVEL 4 (NANO/MPS)	94.
09:01:43	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	32.4
09:01:48	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:01:58	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	20.5
09:02:03	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:02:13	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	35.7
09:02:18	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:02:28	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	33.0
09:02:29	NORM	1350	FLUX 4-E LEVEL 7 (NANO/MPS)	14.
09:02:30	NORM	1363	FLUX 2-G LEVEL 4 (NANO/MPS)	188.
09:02:38	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:02:42	NORM	1471	BACKGROUND 14-M (NANO/MPS)	.0
09:02:48	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	34.4
09:02:58	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:03:03	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	.0
09:03:13	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:03:23	BAD	1282	FLUX 11-E LEVEL 3 (NANO/MPS)	-????.
09:03:23	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	.0
09:03:27	NORM	1327	BACKGROUND 7-B (NANO/MPS)	200.0
09:03:36	NORM	1720	HORCR HEAT/COOL RATE (DEGF/HR)	96.3
09:03:38	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:03:41	BAD	1471	BACKGROUND 14-M (NANO/MPS)	-???.?
09:03:48	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	18.2
09:04:03	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:04:13	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	11.3
09:04:28	BAD	1338	FLUX 5-D LEVEL 3 (NANO/MPS)	-????.
09:04:28	BAD	1339	FLUX 5-D LEVEL 4 (NANO/MPS)	-????.
09:04:28	BAD	1340	FLUX 5-D LEVEL 5 (NANO/MPS)	-????.
09:04:28	BAD	1341	FLUX 5-D LEVEL 6 (NANO/MPS)	-????.
09:04:28	BAD	1342	FLUX 5-D LEVEL 7 (NANO/MPS)	-????.
09:04:28	NORM	1347	FLUX 4-E LEVEL 4 (NANO/MPS)	11.
09:04:28	NORM	1349	FLUX 4-E LEVEL 6 (NANO/MPS)	7.
09:04:31	NORM	1366	FLUX 2-G LEVEL 7 (NANO/MPS)	9.
09:04:33	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:04:36	HIGH	1720	HORCR HEAT/COOL RATE (DEGF/HR)	114.5
09:04:40	BAD	0535	IM INCORE T/C 6-O TEMP	-???.?
09:04:41	BAD	1465	FLUX 14-M LEVEL 2 (NANO/MPS)	-????.
09:04:48	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	4.4
09:05:14	BAD	1784	3STG FDWTR HTR A PERFORMANCE	-???.?
09:05:20	BAD	1267	FLUX 12-F LEVEL 4 (NANO/MPS)	-????.
09:05:21	BAD	1268	FLUX 12-F LEVEL 5 (NANO/MPS)	-????.
09:06:10	NORM	0535	IM INCORE T/C 6-O TEMP	657.6
09:06:13	NORM	1191	BACKGROUND 3-M (NANO/MPS)	197.5
09:06:16	BAD	1218	FLUX 11-L LEVEL 3 (NANO/MPS)	-????.
09:06:20	NORM	1261	FLUX 13-F LEVEL 6 (NANO/MPS)	40.
09:06:21	NORM	1268	FLUX 12-F LEVEL 5 (NANO/MPS)	73.
09:06:28	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:06:31	BAD	1366	FLUX 2-G LEVEL 7 (NANO/MPS)	-????.
09:06:33	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	16.1
09:06:41	NORM	1471	BACKGROUND 14-M (NANO/MPS)	6.5
09:07:13	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:07:24	BAD	1195	FLUX 9-N LEVEL 4 (NANO/MPS)	-????.
09:07:18	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	12.6
09:07:28	NORM	1346	FLUX 4-E LEVEL 3 (NANO/MPS)	11.
09:07:30	BAD	1363	FLUX 2-G LEVEL 4 (NANO/MPS)	-????.

09:08:28	NORM	1358	FLUX 5-D LEVEL 3 (NANO/MPS)	10.
09:08:29	NORM	1340	FLUX 5-D LEVEL 5 (NANO/MPS)	94.
09:08:29	NORM	1341	FLUX 5-D LEVEL 6 (NANO/MPS)	37.
09:08:29	BAD	1346	FLUX 4-E LEVEL 3 (NANO/MPS)	-????.
09:08:29	NORM	1351	BACKGROUND 4-E (NANO/MPS)	- 11.5
09:08:36	HIGH	1720	HORCR HEAT/COOL RATE (DEGF/HR)	103.0
09:08:42	BAD	1471	BACKGROUND 14-M (NANO/MPS)	-???.?
09:08:43	NORM	1487	BACKGROUND 14-D (NANO/MPS)	113.5
09:09:13	NORM	1191	BACKGROUND 8-N (NANO/MPS)	197.5
09:09:14	BAD	1195	FLUX 9-N LEVEL 4 (NANO/MPS)	-????.
09:09:20	NORM	1267	FLUX 12-F LEVEL 4 (NANO/MPS)	41.
09:09:29	NORM	1346	FLUX 4-E LEVEL 3 (NANO/MPS)	- 11.
09:09:36	NORM	1418	FLUX 6-O LEVEL 3 (NANO/MPS)	85.
09:09:37	NORM	1720	HORCR HEAT/COOL RATE (DEGF/HR)	95.1
09:09:41	BAD	1469	FLUX 14-M LEVEL 6 (NANO/MPS)	-????.
09:09:43	BAD	1486	FLUX 14-D LEVEL 7 (NANO/MPS)	-????.
09:09:43	BAD	1487	BACKGROUND 14-D (NANO/MPS)	-???.?
09:10:03	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
09:10:08	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
09:10:09	NORM	0521	IM INCORE T/C 9-C TEMP	699.7
09:10:13	BAD	1196	FLUX 9-N LEVEL 5 (NANO/MPS)	-????.
09:10:21	NORM	1265	FLUX 12-F LEVEL 2 (NANO/MPS)	7.
09:10:21	BAD	1267	FLUX 12-F LEVEL 4 (NANO/MPS)	-????.
09:10:28	BAD	1338	FLUX 5-D LEVEL 3 (NANO/MPS)	-????.
09:10:28	BAD	1341	FLUX 5-D LEVEL 6 (NANO/MPS)	-????.
09:10:35	BAD	1405	FLUX 4-N LEVEL 6 (NANO/MPS)	-????.
09:10:36	HIGH	1720	HORCR HEAT/COOL RATE (DEGF/HR)	109.8
09:11:21	BAD	1265	FLUX 12-F LEVEL 2 (NANO/MPS)	-????.
09:11:27	NORM	1338	FLUX 5-D LEVEL 3 (NANO/MPS)	0
09:11:28	NORM	1341	FLUX 5-D LEVEL 6 (NANO/MPS)	0
09:11:37	NORM	1422	FLUX 6-O LEVEL 7 (NANO/MPS)	- 1.
09:11:39	NORM	0507	IM INCORE T/C 9-N TEMP	611.7
09:12:09	BAD	0507	IM INCORE T/C 9-N TEMP	-???.?
09:12:11	NORM	1175	BACKGROUND 6-L (NANO/MPS)	- 2.0
09:12:18	BAD	1239	BACKGROUND 12-K (NANO/MPS)	-???.?
09:12:28	BAD	1338	FLUX 5-D LEVEL 3 (NANO/MPS)	-????.
09:12:28	BAD	1341	FLUX 5-D LEVEL 6 (NANO/MPS)	-????.
09:12:30	BAD	1364	FLUX 2-G LEVEL 5 (NANO/MPS)	-????.
09:12:35	NORM	1405	FLUX 4-N LEVEL 6 (NANO/MPS)	48.
09:13:11	BAD	1175	BACKGROUND 6-L (NANO/MPS)	-???.?
09:13:21	BAD	1264	FLUX 12-F LEVEL 1 (NANO/MPS)	-????.
09:13:21	NORM	1267	FLUX 12-F LEVEL 4 (NANO/MPS)	64.
09:13:28	BAD	1340	FLUX 5-D LEVEL 5 (NANO/MPS)	-????.
09:13:37	BAD	1422	FLUX 6-O LEVEL 7 (NANO/MPS)	-????.
09:13:37	NORM	1720	HORCR HEAT/COOL RATE (DEGF/HR)	4.0
09:14:22	BAD	1283	FLUX 11-E LEVEL 4 (NANO/MPS)	-????.
09:15:20	BAD	1267	FLUX 12-F LEVEL 4 (NANO/MPS)	-????.
09:15:29	BAD	1351	BACKGROUND 4-E (NANO/MPS)	-???.?
09:15:31	NORM	1364	FLUX 2-G LEVEL 5 (NANO/MPS)	- 17.
09:15:41	BAD	1475	FLUX 13-L LEVEL 4 (NANO/MPS)	-????.
09:16:09	NORM	0507	IM INCORE T/C 9-N TEMP	630.0
09:16:28	NORM	1340	FLUX 5-D LEVEL 5 (NANO/MPS)	14.
09:16:59	BAD	1021	RB AIR CLG COILS B EMER DISCH	-???.?
09:17:26	BAD	1326	FLUX 7-B LEVEL 7 (NANO/MPS)	-????.
09:17:29	NORM	1021	RB AIR CLG COILS B EMER DISCH	64.1
09:17:30	BAD	1364	FLUX 2-G LEVEL 5 (NANO/MPS)	-????.
09:17:37	NORM	1422	FLUX 6-O LEVEL 7 (NANO/MPS)	14.
09:18:21	BAD	1266	FLUX 12-F LEVEL 5 (NANO/MPS)	-????.
09:18:28	BAD	1340	FLUX 5-D LEVEL 5 (NANO/MPS)	-????.
09:18:41	NORM	1475	FLUX 13-L LEVEL 4 (NANO/MPS)	5.
09:19:03	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
09:19:08	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00

09:19:20	NORM	1266	FLUX 12-F LEVEL 3 (NANO/MPS)	40.
09:19:23	CONT	2934	DHP A MTR STATUS	TRIP
09:19:24	CONT	3241	DH REMOVAL PMP 1A	OFF
09:19:27	NORM	1326	FLUX 7-B LEVEL 7 (NANO/MPS)	12.
09:19:28	NORM	1338	FLUX 5-D LEVEL 3 (NANO/MPS)	60.
09:19:28	NORM	1340	FLUX 5-D LEVEL 5 (NANO/MPS)	150.
09:19:28	NORM	1341	FLUX 5-D LEVEL 6 (NANO/MPS)	30.
09:19:28	NORM	1342	FLUX 5-D LEVEL 7 (NANO/MPS)	3.
09:19:33	BAD	1387	FLUX 3-L LEVEL 4 (NANO/MPS)	-????.
09:19:33	BAD	1388	FLUX 3-L LEVEL 5 (NANO/MPS)	-????.
09:19:35	BAD	1405	FLUX 4-N LEVEL 6 (NANO/MPS)	-????.
09:19:36	BAD	1420	FLUX 6-O LEVEL 5 (NANO/MPS)	-????.
09:19:36	BAD	1422	FLUX 6-O LEVEL 7 (NANO/MPS)	-????.
09:19:41	BAD	1475	FLUX 13-L LEVEL 4 (NANO/MPS)	-????.
09:20:11	BAD	1172	FLUX 6-L LEVEL 5 (NANO/MPS)	-????.
09:20:20	BAD	1268	FLUX 12-F LEVEL 5 (NANO/MPS)	-????.
09:20:27	BAD	1327	BACKGROUND 7-B (NANO/MPS)	-???.?
09:20:32	NORM	1387	FLUX 3-L LEVEL 4 (NANO/MPS)	386.
09:20:32	NORM	1388	FLUX 3-L LEVEL 5 (NANO/MPS)	485.
09:20:36	NORM	1420	FLUX 6-O LEVEL 5 (NANO/MPS)	85.
09:21:20	BAD	1262	FLUX 13-F LEVEL 7 (NANO/MPS)	-????.
09:21:24	CONT	3170	4 PSI RB PRESS BLUE CH TRIP	NORM
09:21:42	BAD	1479	BACKGROUND 13-L (NANO/MPS)	-???.?
09:21:42	BAD	1481	FLUX 14-D LEVEL 2 (NANO/MPS)	-????.
09:22:31	BAD	1375	BACKGROUND 1-H (NANO/MPS)	-???.?
09:22:41	BAD	1478	FLUX 13-L LEVEL 7 (NANO/MPS)	-????.
09:23:17	BAD	1237	FLUX 12-K LEVEL 6 (NANO/MPS)	-????.
09:23:28	BAD	1341	FLUX 5-D LEVEL 6 (NANO/MPS)	-????.
09:23:31	NORM	1375	BACKGROUND 1-H (NANO/MPS)	43.5
09:23:37	BAD	1435	FLUX 7-R LEVEL 4 (NANO/MPS)	-????.
09:23:43	BAD	1491	FLUX 13-C LEVEL 4 (NANO/MPS)	-????.
09:24:10	CONT	3167	4 PSI RB PRESS RED CH TRIP	NORM
09:24:11	CONT	2818	ES ACT A 2/3 LOGIC EMER INJ GP1	ACT
09:24:11	CONT	2819	ES ACT A 2/3 LOGIC EMER INJ GP2	ACT
09:24:11	CONT	2820	ES ACT A 2/3 LOGIC EMER INJ GP3	ACT
09:24:11	CONT	2827	ES ACT A 2/3 LOGIC BLDG ISLN GP1	ISLN
09:24:11	CONT	2828	ES ACT A 2/3 LOGIC BLDG ISLN GP2	ISLN
09:24:11	CONT	2829	ES ACT A 2/3 LOGIC BLDG ISLN GP3	ISLN
09:24:11	CONT	2830	ES ACT A BLDG ISLN CH1 DEFEATED	NORM
09:24:11	CONT	2833	ES BLDG ISLN SW ACT A CH1 TRIP	NORM
09:24:11	CONT	3245	INTMD CLG PMP IC-P-1A	OFF
09:24:12	CONT	3280	ES BLDG ISLN SW ACT B CH-3 TRIP	NORM
09:24:12	CONT	3049	ES ACT B BLDG ISLN CH3 DEFEATED	NORM
09:24:13	BAD	1191	BACKGROUND 8-N (NANO/MPS)	-???.?
09:24:17	BAD	1238	FLUX 12-K LEVEL 7 (NANO/MPS)	-????.
09:24:20	LOW	0151	INTER CLG PUMP DISCH PRESS	105.7
09:24:22	BAD	1284	FLUX 11-E LEVEL 5 (NANO/MPS)	-????.
09:24:24	CONT	2818	ES ACT A 2/3 LOGIC EMER INJ GP1	NORM
09:24:24	CONT	2819	ES ACT A 2/3 LOGIC EMER INJ GP2	NORM
09:24:24	CONT	2820	ES ACT A 2/3 LOGIC EMER INJ GP3	NORM
09:24:24	CONT	2827	ES ACT A 2/3 LOGIC BLDG ISLN GP1	NORM
09:24:24	CONT	2828	ES ACT A 2/3 LOGIC BLDG ISLN GP2	NORM
09:24:24	CONT	2829	ES ACT A 2/3 LOGIC BLDG ISLN GP3	NORM
09:24:27	NORM	1327	BACKGROUND 7-B (NANO/MPS)	18.0
09:24:27	BAD	1338	FLUX 5-D LEVEL 3 (NANO/MPS)	-????.
09:24:28	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:24:28	BAD	1340	FLUX 5-D LEVEL 5 (NANO/MPS)	-????.
09:24:28	BAD	1342	FLUX 5-D LEVEL 7 (NANO/MPS)	-????.
09:24:30	NORM	1366	FLUX 2-G LEVEL 7 (NANO/MPS)	19.
09:24:34	CONT	3245	INTMD CLG PMP IC-P-1A	ON
09:24:35	LOW	0150	INTER CLG PUMP SUCT PRESS	2.35
09:24:35	NORM	0151	INTER CLG PUMP DISCH PRESS	159.7

09:24:41	BAD	1476	FLUX 13-L LEVEL 5 (NANOAMPS)	-????.
09:24:43	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:24:48	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	24.4
09:24:53	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:25:01	CONT	3169	4 PSI RB PRESS YEL CH TRIP	NORM
09:25:05	NORM	0150	INTER CLG PUMP SUCT PRESS	12.37
09:25:06	NORM	0451	IC RCP 1A COOL OUTLET TEMP	1.0
09:25:08	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	22.3
09:25:13	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:25:23	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	5.5
09:25:28	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:25:28	BAD	1349	FLUX 4-E LEVEL 6 (NANOAMPS)	-????.
09:25:30	NORM	1364	FLUX 2-G LEVEL 5 (NANOAMPS)	19.
09:25:30	BAD	1366	FLUX 2-G LEVEL 7 (NANOAMPS)	-????.
09:25:35	CONT	3048	ES ACT B BLDG ISLN CH2 DEFEATED	NORM
09:25:35	CONT	3279	ES BLDG ISLN SW ACT B CH-2 TRIP	NORM
09:25:36	NORM	1720	INCOR HEAT/COOL RATE (DEGF/HR)	-96.3
09:25:38	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	15.0
09:25:39	BAD	0507	IM INCORE T/C 9-N TEMP	-???.?
09:25:43	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:25:53	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	16.4
09:26:03	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:26:13	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	27.5
09:26:18	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:26:28	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	27.9
09:26:28	NORM	1349	FLUX 4-E LEVEL 6 (NANOAMPS)	33.
09:26:29	BAD	1358	FLUX 3-F LEVEL 7 (NANOAMPS)	-????.
09:26:30	BAD	1364	FLUX 2-G LEVEL 5 (NANOAMPS)	-????.
09:26:33	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:26:39	NORM	0507	IM INCORE T/C 9-N TEMP	675.4
09:26:43	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	15.0
09:26:43	BAD	0606	RP LOOP B RC DELTA PRESS (INH2O)	-???.?
09:26:53	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:26:53	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
09:26:58	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
09:27:03	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	33.2
09:27:13	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:27:13	NORM	0606	RP LOOP B RC DELTA PRESS (INH2O)	8.5
09:27:17	NORM	1238	FLUX 12-K LEVEL 7 (NANOAMPS)	17.
09:27:23	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	25.4
09:27:29	NORM	1358	FLUX 3-F LEVEL 7 (NANOAMPS)	17.
09:27:30	NORM	1364	FLUX 2-G LEVEL 5 (NANOAMPS)	4.
09:27:30	NORM	1366	FLUX 2-G LEVEL 7 (NANOAMPS)	20.
09:27:38	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:27:39	BAD	0515	IM INCORE T/C 13-F TEMP	-???.?
09:27:42	LOW	0594	RP CH A RC FLOW LOOP B (PCT)	.0
09:27:42	LOW	0596	RP CH B RC FLOW LOOP B (PCT)	.0
09:27:42	LOW	0598	RP CH C RC FLOW LOOP B (PCT)	.3
09:27:42	LOW	0600	RP CH D RC FLOW LOOP B (PCT)	7.8
09:27:53	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	33.5
09:27:58	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:28:13	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	24.3
09:28:17	NORM	1237	FLUX 12-K LEVEL 6 (NANOAMPS)	13.
09:28:28	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:28:35	BAD	1418	FLUX 6-O LEVEL 3 (NANOAMPS)	-????.
09:28:39	BAD	0521	IM INCORE T/C 9-C TEMP	-???.?
09:28:43	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	.0
09:28:58	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:29:11	CONT	3278	ES BLDG ISLN SW ACT B CH-1 TRIP	NORM
09:29:13	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	31.8
09:29:23	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:29:34	NORM	1405	FLUX 4-N LEVEL 6 (NANOAMPS)	13.
09:29:36	BAD	1420	FLUX 6-O LEVEL 5 (NANOAMPS)	

09:30:23	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	28.6
09:30:28	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:30:30	BAD	1366	FLUX 2-G LEVEL 7 (NANOAMPS)	-????.
09:30:31	CONT	2832	ES ACT A BLDG ISLN CH3 DEFEATED	NORM
09:30:31	CONT	2835	ES BLDG ISLN SW ACT A CH3 TRIP	NORM
09:30:37	NORM	1455	FLUX 7-R LEVEL 4 (NANOAMPS)	22.
09:30:40	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	.0
09:31:03	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:31:00	NORM	0515	111 INCORE T/C 13-F TEMP	637.3
09:31:10	CONT	3168	4 PSI RB PRESS GRN CH TRIP	NORM
09:31:11	CONT	2676	PRESS HTR GROUP 3	TRIP
09:31:13	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	9.8
09:31:23	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:31:30	NORM	1366	FLUX 2-G LEVEL 7 (NANOAMPS)	138.
09:31:43	BAD	0606	RP LOOP B RC DELTA PRESS (INH2O)	-???.?
09:31:48	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	13.5
09:32:03	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:32:16	NORM	1221	FLUX 11-L LEVEL 6 (NANOAMPS)	139.
09:32:16	NORM	1226	FLUX 11-K LEVEL 3 (NANOAMPS)	628.
09:32:16	NORM	1227	FLUX 11-K LEVEL 4 (NANOAMPS)	543.
09:32:22	BAD	1279	BACKGROUND 11-G (NANOAMPS)	-???.?
09:32:23	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	27.3
09:32:30	NORM	1367	BACKGROUND 2-G (NANOAMPS)	7.0
09:32:33	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:32:38	NORM	1442	FLUX 10-R LEVEL 3 (NANOAMPS)	23.
09:32:48	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	6.2
09:32:51	CONT	2738	D-G ROOM AIR CPRSR DF-P-2A	NORM
09:32:58	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:33:15	NORM	1218	FLUX 11-L LEVEL 3 (NANOAMPS)	10.
09:33:18	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	33.3
09:33:20	NORM	1268	FLUX 12-F LEVEL 5 (NANOAMPS)	135.
09:33:23	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:33:26	BAD	1327	BACKGROUND 7-B (NANOAMPS)	-???.?
09:33:31	BAD	1375	BACKGROUND 1-H (NANOAMPS)	-???.?
09:33:37	NORM	1453	FLUX 7-R LEVEL 2 (NANOAMPS)	4.
09:33:38	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	26.0
09:33:41	NORM	1477	FLUX 13-L LEVEL 6 (NANOAMPS)	2.
09:33:48	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:34:03	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	27.3
09:34:16	BAD	1221	FLUX 11-L LEVEL 6 (NANOAMPS)	-????.
09:34:18	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:34:20	BAD	1268	FLUX 12-F LEVEL 5 (NANOAMPS)	-????.
09:34:28	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	.0
09:34:37	NORM	1437	FLUX 7-R LEVEL 6 (NANOAMPS)	527.
09:34:37	NORM	1438	FLUX 7-R LEVEL 7 (NANOAMPS)	150.
09:34:38	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:34:38	NORM	1441	FLUX 10-R LEVEL 2 (NANOAMPS)	205.
09:34:41	NORM	1471	BACKGROUND 14-H1 (NANOAMPS)	.0
09:34:43	BAD	1495	BACKGROUND 13-C (NANOAMPS)	-???.?
09:34:58	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	31.9
09:34:58	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
09:35:03	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:35:03	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
09:35:15	BAD	1218	FLUX 11-L LEVEL 3 (NANOAMPS)	-????.
09:35:21	BAD	1274	FLUX 11-G LEVEL 3 (NANOAMPS)	-????.
09:35:28	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	27.8
09:35:31	NORM	1375	BACKGROUND 1-H (NANOAMPS)	155.0
09:35:33	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:35:34	NORM	0402	RC PRESS REL VLV RV2 OUT TEMP	192.0
09:35:34	NORM	0403	RC PRESS REL VLV RV1A OUT TEMP	192.9
09:35:40	BAD	1464	FLUX 14-H1 LEVEL 1 (NANOAMPS)	-????.
09:35:40	NORM	1465	FLUX 14-H1 LEVEL 2 (NANOAMPS)	42.

09:36:03	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	22.7
12:00:08	03/28/79			
09:36:13	NORM	1191	BACKGROUND 8-N (NANO/MPS)	199.0
09:36:15	NORM	1218	FLUX 11-L LEVEL 3 (NANO/MPS)	198.
09:36:18	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:36:29	NORM	1357	FLUX 3-F LEVEL 6 (NANO/MPS)	19.
09:36:38	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	22.7
09:36:43	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:37:03	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	23.2
09:37:10	CONT	2923	RC LOOP A PT3 PRESS < 1600 PSI	NO
09:37:11	CONT	3161	ES ACT A EMER INJ BT1 CH TRIP	NORM
09:37:11	CONT	3164	ES ACT B EMER INJ BT1 CH TRIP	NORM
09:37:13	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:37:15	BAD	1218	FLUX 11-L LEVEL 3 (NANO/MPS)	-????.
09:37:23	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	33.3
09:37:26	NORM	1327	BACKGROUND 7-B (NANO/MPS)	161.0
09:37:28	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:37:30	CONT	2738	D-G ROOM AIR CPRSR DF-P-2A	TRIP
09:37:30	BAD	1367	BACKGROUND 2-G (NANO/MPS)	-???.?
09:37:33	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	16.0
09:37:41	BAD	1471	BACKGROUND 14-M (NANO/MPS)	-???.?
09:37:43	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:37:57	CONT	2925	RC LOOP B PT3 PRESS < 1600 PSI	NO
09:37:58	CONT	3163	ES ACT A EMER INJ BT3 CH TRIP	NORM
09:37:58	CONT	3166	ES ACT B EMER INJ BT3 CH TRIP	NORM
09:38:03	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	21.1
09:38:03	CONT	2956	RC PUMP 2A SEAL LEAK TK LVL	NORM
09:38:08	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:38:24	BAD	1308	FLUX 9-C LEVEL 5 (NANO/MPS)	-????.
09:38:28	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	25.2
09:38:29	BAD	1357	FLUX 3-F LEVEL 6 (NANO/MPS)	-????.
09:38:33	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:38:41	NORM	1471	BACKGROUND 14-M (NANO/MPS)	18.5
09:38:41	BAD	1477	FLUX 13-L LEVEL 6 (NANO/MPS)	-????.
09:38:42	CONT	2924	RC LOOP A PT4 PRESS < 1600 PSI	NO
09:38:42	CONT	3162	ES ACT A EMER INJ BT2 CH TRIP	NORM
09:38:42	CONT	3165	ES ACT B EMER INJ BT2 CH TRIP	NORM
09:38:53	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	31.6
09:38:59	BAD	1021	RB AIR CLG COILS B EMER DISCH	-???.?
09:39:03	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:39:13	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	27.5
09:39:18	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:39:19	BAD	1250	FLUX 13-G LEVEL 3 (NANO/MPS)	-????.
09:39:28	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	14.2
09:39:29	NORM	1021	RB AIR CLG COILS B EMER DISCH	57.8
09:39:33	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:39:53	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	21.7
09:39:58	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:40:04	NORM	0398	RC LOOP A WIDE RANGE PRESS	1781.
09:40:04	NORM	0404	RC PRESS REL VLV RV1B OUT TEMP	192.9
09:40:13	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	25.2
09:40:23	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:40:38	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	30.1
09:40:43	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:40:58	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	16.4
09:41:03	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:41:04	NORM	0400	RC LOOP B WIDE RANGE PRESS	1791.
09:41:13	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	27.8
09:41:16	BAD	1226	FLUX 11-K LEVEL 3 (NANO/MPS)	-????.
09:41:23	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?

09:41:37	BAD	1438	FLUX 7-R LEVEL 7 (NANO/NMPS)	-????.
09:41:43	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:41:43	CONT	2821	ES ACT A EMER INJ CH1 BYPASSED	NORM
09:41:43	CONT	2846	ES ACT B EMER INJ CH1 BYPASSED	NORM
09:41:58	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	18.5
09:42:08	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:42:16	NORM	1229	FLUX 11-K LEVEL 6 (NANO/NMPS)	1999.
09:42:17	CONT	2823	ES ACT A EMER INJ CH3 BYPASSED	NORM
09:42:17	CONT	2848	ES ACT B EMER INJ CH3 BYPASSED	NORM
09:42:18	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	28.0
09:42:23	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
09:42:28	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:42:33	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
09:42:36	HIGH	1720	INCOR HEAT/COOL RATE (DEGF/HR)	109.8
09:42:37	BAD	1435	FLUX 7-R LEVEL 4 (NANO/NMPS)	-????.
09:42:38	NORM	1446	FLUX 10-R LEVEL 7 (NANO/NMPS)	- 14.
09:42:41	BAD	1471	BACKGROUND 14-H (NANO/NMPS)	-???.?
09:42:41	NORM	1476	FLUX 13-L LEVEL 5 (NANO/NMPS)	102.
09:42:41	NORM	1477	FLUX 13-L LEVEL 6 (NANO/NMPS)	1.
09:42:43	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	32.7
09:42:47	CONT	2822	ES ACT A EMER INJ CH2 BYPASSED	NORM
09:42:47	CONT	2847	ES ACT B EMER INJ CH2 BYPASSED	NORM
09:42:53	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:43:08	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	10.2
09:43:15	NORM	1218	FLUX 11-L LEVEL 3 (NANO/NMPS)	68.
09:43:16	NORM	1226	FLUX 11-K LEVEL 3 (NANO/NMPS)	789.
09:43:18	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:43:21	BAD	1277	FLUX 11-G LEVEL 6 (NANO/NMPS)	-????.
09:43:33	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	30.4
09:43:37	BAD	1437	FLUX 7-R LEVEL 6 (NANO/NMPS)	-????.
09:43:39	NORM	0517	IM INCORE T/C 11-G TEMP	381.7
09:43:43	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:44:04	HIGH	0402	RC PRESS REL VLV RV2 OUT TEMP	214.9
09:44:08	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	29.5
09:44:17	NORM	1236	FLUX 12-K LEVEL 5 (NANO/NMPS)	10.
09:44:18	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:44:20	NORM	1265	FLUX 12-F LEVEL 2 (NANO/NMPS)	33.
09:44:20	BAD	1266	FLUX 12-F LEVEL 3 (NANO/NMPS)	-????.
09:44:21	BAD	1273	FLUX 11-G LEVEL 2 (NANO/NMPS)	-????.
09:44:21	BAD	1275	FLUX 11-G LEVEL 4 (NANO/NMPS)	-????.
09:44:21	BAD	1276	FLUX 11-G LEVEL 5 (NANO/NMPS)	-????.
09:44:33	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	29.8
09:44:34	HIGH	0404	RC PRESS REL VLV RV1B OUT TEMP	205.4
09:44:38	BAD	1446	FLUX 10-R LEVEL 7 (NANO/NMPS)	-????.
09:44:39	BAD	0517	IM INCORE T/C 11-G TEMP	-???.?
09:44:48	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:45:03	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	27.3
09:45:13	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:45:17	BAD	1236	FLUX 12-K LEVEL 5 (NANO/NMPS)	-????.
09:45:20	BAD	1265	FLUX 12-F LEVEL 2 (NANO/NMPS)	-????.
09:45:23	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
09:45:28	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
09:45:38	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	11.8
09:45:41	BAD	1476	FLUX 13-L LEVEL 5 (NANO/NMPS)	-????.
09:45:43	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:45:58	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	5.2
09:46:13	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:46:20	NORM	1266	FLUX 12-F LEVEL 3 (NANO/NMPS)	335.
09:46:21	NORM	1271	BACKGROUND 12-F (NANO/NMPS)	- 18.5
09:46:23	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	.0
09:46:30	NORM	1367	BACKGROUND 2-G (NANO/NMPS)	- 19.0
09:46:33	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:46:36	NORM	1720	INCOR HEAT/COOL RATE (DEGF/HR)	84.6

09:47:13	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
09:47:14	CONT	2772	3STG FDW HTR B LVL TRIP	.00
09:47:16	NORM	1225	FLUX 11-K LEVEL 2 (NANO/AMPS)	TRIP
09:47:18	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	22.
09:47:20	NORM	1265	FLUX 12-F LEVEL 2 (NANO/AMPS)	.0
09:47:20	BAD	1266	FLUX 12-F LEVEL 3 (NANO/AMPS)	- 18.
09:47:21	BAD	1271	BACKGROUND 12-F (NANO/AMPS)	-????.
09:47:21	NORM	1273	FLUX 11-G LEVEL 2 (NANO/AMPS)	-???.?
09:47:23	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	- 115.
09:47:28	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-???.?
09:47:30	BAD	1367	BACKGROUND 2-G (NANO/AMPS)	-??.??
09:47:33	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:47:33	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	34.3
09:47:37	CONT	3246	INTMD CLG PMP 1C-P-1B	.00
09:47:39	NORM	0517	IM INCORE T/C 11-G TEMP	OFF
09:47:48	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	579.9
09:48:03	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:48:13	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	39.5
09:48:17	BAD	1237	FLUX 12-K LEVEL 6 (NANO/AMPS)	-???.?
09:48:17	BAD	1238	FLUX 12-K LEVEL 7 (NANO/AMPS)	-????.
09:48:18	NORM	1246	FLUX 13-H LEVEL 7 (NANO/AMPS)	-????.
09:48:20	BAD	1265	FLUX 12-F LEVEL 2 (NANO/AMPS)	37.
09:48:20	NORM	1266	FLUX 12-F LEVEL 3 (NANO/AMPS)	-????.
09:48:21	NORM	1271	BACKGROUND 12-F (NANO/AMPS)	374.
09:48:28	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	93.5
09:48:28	BAD	1347	FLUX 4-E LEVEL 4 (NANO/AMPS)	24.7
09:48:30	NORM	1367	BACKGROUND 2-G (NANO/AMPS)	-????.
09:48:33	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	- 17.0
09:48:38	NORM	1446	FLUX 10-R LEVEL 7 (NANO/AMPS)	-???.?
09:48:43	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	- 19.
09:48:53	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	.0
09:49:13	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:49:17	NORM	1237	FLUX 12-K LEVEL 6 (NANO/AMPS)	29.4
09:49:18	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	30.
09:49:21	BAD	1271	BACKGROUND 12-F (NANO/AMPS)	-???.?
09:49:22	CONT	3156	DIESEL DF-X-1A LUBEOIL PRESS LOW	-???.?
09:49:26	BAD	1327	BACKGROUND 7-B (NANO/AMPS)	LOW
09:49:28	BAD	1346	FLUX 4-E LEVEL 3 (NANO/AMPS)	-???.?
09:49:30	BAD	1367	BACKGROUND 2-G (NANO/AMPS)	-????.
09:49:33	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:49:38	BAD	1446	FLUX 10-R LEVEL 7 (NANO/AMPS)	8.1
09:49:48	CONT	3158	DIESEL GEN DF-X-1A FAULT	-????.
09:49:53	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	NORM
09:50:13	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:50:20	NORM	1264	FLUX 12-F LEVEL 1 (NANO/AMPS)	12.6
09:50:20	NORM	1265	FLUX 12-F LEVEL 2 (NANO/AMPS)	29.
09:50:20	BAD	1266	FLUX 12-F LEVEL 3 (NANO/AMPS)	257.
09:50:28	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-????.
09:50:28	NORM	1346	FLUX 4-E LEVEL 3 (NANO/AMPS)	-???.?
09:50:30	NORM	1367	BACKGROUND 2-G (NANO/AMPS)	- 11.
09:50:43	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	- 17.0
09:50:53	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	.0
09:50:58	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-???.?
09:51:03	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
09:51:13	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	.00
09:51:23	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	15.6
09:51:33	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:51:37	NORM	1435	FLUX - 7-R LEVEL 4 (NANO/AMPS)	24.6
09:51:38	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	- 1.
09:51:58	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:51:59	BAD	1021	RB AIR CLG COILS B EMER DISCH	18.2
09:52:03	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?

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09:52:16	BAD	1226	FLUX 11-K LEVEL 3 (NANO/MPS)	-????.
09:52:17	NORM	1238	FLUX 12-K LEVEL 7 (NANO/MPS)	4.
09:52:18	BAD	1246	FLUX 13-H LEVEL 7 (NANO/MPS)	-????.
09:52:20	BAD	1264	FLUX 12-F LEVEL 1 (NANO/MPS)	-????.
09:52:20	BAD	1265	FLUX 12-F LEVEL 2 (NANO/MPS)	-????.
09:52:20	NORM	1266	FLUX 12-F LEVEL 3 (NANO/MPS)	558.
09:52:23	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:52:28	BAD	1346	FLUX 4-E LEVEL 3 (NANO/MPS)	-????.
09:52:28	NORM	1021	RC AIR CLG COILS B EMER DISCH	55.9
09:52:37	BAD	1435	FLUX 7-R LEVEL 4 (NANO/MPS)	-????.
09:52:38	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	30.8
09:52:38	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
09:52:43	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
09:52:48	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:53:02	CONT	2956	RC PUMP 2A SEAL LEAK TK LVL	HIGH
09:53:08	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	7.9
09:53:13	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:53:23	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	.0
09:53:28	NORM	1346	FLUX 4-E LEVEL 3 (NANO/MPS)	5.
09:53:38	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:53:43	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	13.5
09:54:03	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:54:20	NORM	1265	FLUX 12-F LEVEL 2 (NANO/MPS)	54.
09:54:20	BAD	1266	FLUX 12-F LEVEL 3 (NANO/MPS)	-????.
09:54:23	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	25.2
09:54:23	CONT	3247	DECAY HT CL CLG WTR PMP DC-P-1A	OFF
09:54:23	CONT	3248	DECAY HT CL CLG WTR PMP DC-P-1B	OFF
09:54:33	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:54:33	LOW	0113	DECAY HT CL CLG PMP 1A DISCH	20.3
09:54:33	LOW	0114	DECAY HT CL CLG PMP 1B DISCH	20.1
09:54:53	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	27.3
09:55:03	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:55:08	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	.0
09:55:23	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:55:28	BAD	1346	FLUX 4-E LEVEL 3 (NANO/MPS)	-????.
09:55:38	BAD	1441	FLUX 10-R LEVEL 2 (NANO/MPS)	-????.
09:55:38	BAD	1442	FLUX 10-R LEVEL 3 (NANO/MPS)	-????.
09:55:48	CONT	2956	RC PUMP 2A SEAL LEAK TK LVL	NORM
09:56:23	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	.0
09:56:38	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:56:39	BAD	0507	IM INCORE T/C 9-H TEMP	-???.?
09:56:43	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	20.7
09:56:53	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:57:09	NORM	0507	IM INCORE T/C 9-H TEMP	539.6
09:57:13	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	10.8
09:57:16	NORM	1224	FLUX 11-K LEVEL 1 (NANO/MPS)	65.
09:57:20	NORM	1264	FLUX 12-F LEVEL 1 (NANO/MPS)	145.
09:57:23	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:57:28	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	9.2
09:57:28	NORM	1346	FLUX 4-E LEVEL 3 (NANO/MPS)	2.
09:57:38	NORM	1441	FLUX 10-R LEVEL 2 (NANO/MPS)	32.
09:57:38	NORM	1442	FLUX 10-R LEVEL 3 (NANO/MPS)	114.
09:57:53	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:58:00	BAD	0507	IM INCORE T/C 9-H TEMP	-???.?
09:58:16	BAD	1224	FLUX 11-K LEVEL 1 (NANO/MPS)	-????.
09:58:18	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	9.0
09:58:20	BAD	1264	FLUX 12-F LEVEL 1 (NANO/MPS)	-????.
09:58:28	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
09:58:33	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	10.4
09:58:38	BAD	1441	FLUX 10-R LEVEL 2 (NANO/MPS)	-????.
09:58:38	BAD	1442	FLUX 10-R LEVEL 3 (NANO/MPS)	-????.
09:58:40	BAD	1466	FLUX 14-H LEVEL 3 (NANO/MPS)	-????.
09:59:20	BAD	1265	FLUX 12-F LEVEL 2 (NANO/MPS)	-????.

10:00:38	NORM	1442	FLUX 10-R LEVEL 3 (NANOAMPS)	101.
10:00:39	BAD	0507	IM INCORE T/C 9-N TEMP	-???.?
10:01:17	NORM	1236	FLUX 12-K LEVEL 5 (NANOAMPS)	108.
10:01:38	BAD	1441	FLUX 10-R LEVEL 2 (NANOAMPS)	-????.
10:01:40	BAD	1465	FLUX 14-M LEVEL 2 (NANOAMPS)	-????.
10:02:16	BAD	1224	FLUX 11-K LEVEL 1 (NANOAMPS)	-????.
10:02:28	BAD	1346	FLUX 4-E LEVEL 3 (NANOAMPS)	-????.
10:02:38	BAD	1442	FLUX 10-R LEVEL 3 (NANOAMPS)	-????.
10:03:16	NORM	1224	FLUX 11-K LEVEL 1 (NANOAMPS)	74.
10:03:20	NORM	1264	FLUX 12-F LEVEL 1 (NANOAMPS)	15.
10:03:32	BAD	1387	FLUX 3-L LEVEL 4 (NANOAMPS)	-????.
10:03:38	NORM	1441	FLUX 10-R LEVEL 2 (NANOAMPS)	3.
10:03:38	NORM	1442	FLUX 10-R LEVEL 3 (NANOAMPS)	62.
10:03:41	BAD	1470	FLUX 14-M LEVEL 7 (NANOAMPS)	-????.
10:04:08	CONT	2956	RC PUMP 2A SEAL LEAK TK LVL	HIGH
10:04:16	NORM	1221	FLUX 11-L LEVEL 6 (NANOAMPS)	45.
10:04:20	BAD	1264	FLUX 12-F LEVEL 1 (NANOAMPS)	-????.
10:04:20	BAD	1265	FLUX 12-F LEVEL 2 (NANOAMPS)	-????.
10:04:20	NORM	1266	FLUX 12-F LEVEL 3 (NANOAMPS)	444.
10:04:28	NORM	1346	FLUX 4-E LEVEL 3 (NANOAMPS)	4.
10:04:32	BAD	1388	FLUX 3-L LEVEL 5 (NANOAMPS)	-????.
10:04:34	BAD	1402	FLUX 4-N LEVEL 3 (NANOAMPS)	-????.
10:05:13	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
10:05:13	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
10:05:20	NORM	1265	FLUX 12-F LEVEL 2 (NANOAMPS)	24.
10:05:20	BAD	1266	FLUX 12-F LEVEL 3 (NANOAMPS)	-????.
10:05:28	BAD	1346	FLUX 4-E LEVEL 3 (NANOAMPS)	-????.
10:05:32	NORM	1387	FLUX 3-L LEVEL 4 (NANOAMPS)	760.
10:05:32	NORM	1388	FLUX 3-L LEVEL 5 (NANOAMPS)	330.
10:05:34	NORM	1402	FLUX 4-N LEVEL 3 (NANOAMPS)	85.
10:05:38	BAD	1441	FLUX 10-R LEVEL 2 (NANOAMPS)	-????.
10:05:38	BAD	1442	FLUX 10-R LEVEL 3 (NANOAMPS)	-????.
10:05:41	NORM	1470	FLUX 14-M LEVEL 7 (NANOAMPS)	20.
10:06:02	NORM	1080	FLUX 8-H LEVEL 1 (NANOAMPS)	16.
10:06:16	BAD	1221	FLUX 11-L LEVEL 6 (NANOAMPS)	-????.
10:06:16	BAD	1224	FLUX 11-K LEVEL 1 (NANOAMPS)	-????.
10:06:20	BAD	1265	FLUX 12-F LEVEL 2 (NANOAMPS)	-????.
10:06:28	NORM	1346	FLUX 4-E LEVEL 3 (NANOAMPS)	3.
10:06:41	BAD	1470	FLUX 14-M LEVEL 7 (NANOAMPS)	-????.
10:07:02	BAD	1083	FLUX 8-H LEVEL 4 (NANOAMPS)	-????.
10:07:16	NORM	1224	FLUX 11-K LEVEL 1 (NANOAMPS)	277.
10:07:20	NORM	1264	FLUX 12-F LEVEL 1 (NANOAMPS)	63.
10:07:20	NORM	1265	FLUX 12-F LEVEL 2 (NANOAMPS)	261.
10:07:39	NORM	0507	IM INCORE T/C 9-N TEMP	654.3
10:07:48	NORM	0113	DECAY HT CL CLG PMP 1A DISCH	34.0
10:08:20	BAD	1264	FLUX 12-F LEVEL 1 (NANOAMPS)	-????.
10:08:20	BAD	1265	FLUX 12-F LEVEL 2 (NANOAMPS)	-????.
10:08:20	NORM	1266	FLUX 12-F LEVEL 3 (NANOAMPS)	276.
10:08:28	NORM	1347	FLUX 4-E LEVEL 4 (NANOAMPS)	15.
10:08:32	BAD	1387	FLUX 3-L LEVEL 4 (NANOAMPS)	-????.
10:08:32	BAD	1388	FLUX 3-L LEVEL 5 (NANOAMPS)	-????.
10:08:38	NORM	1441	FLUX 10-R LEVEL 2 (NANOAMPS)	32.
10:08:38	NORM	1442	FLUX 10-R LEVEL 3 (NANOAMPS)	246.
10:08:39	BAD	0507	IM INCORE T/C 9-N TEMP	-???.?
10:09:02	BAD	1080	FLUX 8-H LEVEL 1 (NANOAMPS)	-????.
10:09:03	LOW	0113	DECAY HT CL CLG PMP 1A DISCH	23.5
10:09:17	BAD	1236	FLUX 12-K LEVEL 5 (NANOAMPS)	-????.
10:09:19	NORM	1259	FLUX 13-F LEVEL 4 (NANOAMPS)	599.
10:09:20	NORM	1265	FLUX 12-F LEVEL 2 (NANOAMPS)	82.
10:09:20	BAD	1266	FLUX 12-F LEVEL 3 (NANOAMPS)	-????.
10:09:28	BAD	1347	FLUX 4-E LEVEL 4 (NANOAMPS)	-????.
10:09:32	NORM	1387	FLUX 3-L LEVEL 4 (NANOAMPS)	274.

10:10:17	NORM	1236	FLUX 12-K LEVEL 5 (NANOAMPS)	41.
10:10:19	BAD	1259	FLUX 13-F LEVEL 4 (NANOAMPS)	-????.
10:10:28	NORM	1347	FLUX 4-E LEVEL 4 (NANOAMPS)	- 17.
10:11:02	NORM	1030	FLUX 8-H LEVEL 1 (NANOAMPS)	- 7.
10:11:09	NORM	0507	IM INCORE T/C 9-N TEMP	642.3
10:11:16	NORM	1224	FLUX 11-K LEVEL 1 (NANOAMPS)	292.
10:11:18	NORM	1245	FLUX 13-H LEVEL 6 (NANOAMPS)	39.
10:11:19	NORM	1259	FLUX 13-F LEVEL 4 (NANOAMPS)	340.
10:11:20	BAD	1265	FLUX 12-F LEVEL 2 (NANOAMPS)	-????.
10:11:26	NORM	1327	BACKGROUND 7-B (NANOAMPS)	193.5
10:11:32	BAD	1387	FLUX 3-L LEVEL 4 (NANOAMPS)	-????.
10:11:32	BAD	1388	FLUX 3-L LEVEL 5 (NANOAMPS)	-????.
10:11:38	NORM	1441	FLUX 10-R LEVEL 2 (NANOAMPS)	29.
10:11:38	NORM	1442	FLUX 10-R LEVEL 3 (NANOAMPS)	104.
10:11:39	BAD	0515	IM INCORE T/C 13-F TEMP	-???.?
10:12:09	BAD	0507	IM INCORE T/C 9-N TEMP	-???.?
10:12:20	NORM	1265	FLUX 12-F LEVEL 2 (NANOAMPS)	- 14.
10:12:32	NORM	1387	FLUX 3-L LEVEL 4 (NANOAMPS)	153.
10:12:32	NORM	1388	FLUX 3-L LEVEL 5 (NANOAMPS)	219.
10:12:38	BAD	1441	FLUX 10-R LEVEL 2 (NANOAMPS)	-????.
10:13:16	NORM	1221	FLUX 11-L LEVEL 6 (NANOAMPS)	- 8.
10:13:16	BAD	1224	FLUX 11-K LEVEL 1 (NANOAMPS)	-????.
10:13:17	NORM	1235	FLUX 12-K LEVEL 4 (NANOAMPS)	- 13.
10:13:18	BAD	1245	FLUX 13-H LEVEL 6 (NANOAMPS)	-????.
10:13:20	BAD	1265	FLUX 12-F LEVEL 2 (NANOAMPS)	-????.
10:13:38	BAD	1442	FLUX 10-R LEVEL 3 (NANOAMPS)	-????.
10:14:09	NORM	0507	IM INCORE T/C 9-N TEMP	685.9
10:14:16	CONT	2674	PRESS HTR GROUP 1	TRIP
10:14:16	CONT	2675	PRESS HTR GROUP 2	TRIP
10:14:16	BAD	1221	FLUX 11-L LEVEL 6 (NANOAMPS)	-????.
10:14:17	BAD	1235	FLUX 12-K LEVEL 4 (NANOAMPS)	-????.
10:14:19	BAD	1259	FLUX 13-F LEVEL 4 (NANOAMPS)	-????.
10:14:20	NORM	1265	FLUX 12-F LEVEL 2 (NANOAMPS)	6.
10:14:32	BAD	1387	FLUX 3-L LEVEL 4 (NANOAMPS)	-????.
10:14:32	BAD	1388	FLUX 3-L LEVEL 5 (NANOAMPS)	-????.
10:14:34	BAD	0002	SP STM GEN A S-U RANGE LVL (IN)	-???.?
10:14:37	NORM	0002	SP STM GEN A S-U RANGE LVL (IN)	249.9
10:14:40	NORM	0539	IM INCORE T/C 10-O TEMP	672.0
10:14:42	BAD	0002	SP STM GEN A S-U RANGE LVL (IN)	-???.?
10:14:43	CONT	2674	PRESS HTR GROUP 1	NORM
10:14:43	CONT	2675	PRESS HTR GROUP 2	NORM
10:14:44	NORM	0002	SP STM GEN A S-U RANGE LVL (IN)	249.9
10:14:49	BAD	0002	SP STM GEN A S-U RANGE LVL (IN)	-???.?
10:14:50	NORM	0002	SP STM GEN A S-U RANGE LVL (IN)	249.9
10:14:51	BAD	0002	SP STM GEN A S-U RANGE LVL (IN)	-???.?
10:15:10	BAD	0539	IM INCORE T/C 10-O TEMP	-???.?
10:15:16	NORM	1221	FLUX 11-L LEVEL 6 (NANOAMPS)	15.
10:15:16	NORM	1224	FLUX 11-K LEVEL 1 (NANOAMPS)	480.
10:15:17	NORM	1234	FLUX 12-K LEVEL 3 (NANOAMPS)	7.
10:15:17	NORM	1235	FLUX 12-K LEVEL 4 (NANOAMPS)	115.
10:15:17	NORM	1239	BACKGROUND 12-K (NANOAMPS)	- 17.5
10:15:19	NORM	1259	FLUX 13-F LEVEL 4 (NANOAMPS)	302.
10:15:20	BAD	1265	FLUX 12-F LEVEL 2 (NANOAMPS)	-????.
10:15:25	CONT	2956	RC PUMP 2A SEAL LEAK TK LVL	NORM
10:15:28	BAD	1347	FLUX 4-E LEVEL 4 (NANOAMPS)	-????.
10:15:32	NORM	1387	FLUX 3-L LEVEL 4 (NANOAMPS)	94.
10:15:38	NORM	1441	FLUX 10-R LEVEL 2 (NANOAMPS)	47.
10:15:38	NORM	1442	FLUX 10-R LEVEL 3 (NANOAMPS)	98.
10:15:39	BAD	0507	IM INCORE T/C 9-N TEMP	-???.?
10:15:41	NORM	1476	FLUX 13-L LEVEL 5 (NANOAMPS)	13.
10:15:41	BAD	1477	FLUX 13-L LEVEL 6 (NANOAMPS)	-????.
10:15:53	CONT	2956	RC PUMP 2A SEAL LEAK TK LVL	HIGH

10:16:58	BAD	1442	FLUX 10-R LEVEL 3 (NANOAMPS)	-????.
10:17:16	BAD	1224	FLUX 11-K LEVEL 1 (NANOAMPS)	-????.
10:17:28	NORM	1347	FLUX 4-E LEVEL 4 (NANOAMPS)	10.
10:17:32	NORM	1387	FLUX 3-L LEVEL 4 (NANOAMPS)	41.
10:17:32	NORM	1388	FLUX 3-L LEVEL 5 (NANOAMPS)	95.
10:17:39	NORM	0507	IM INCORE T/C 9-N TEMP	596.9
10:17:41	NORM	1471	BACKGROUND 14-H (NANOAMPS)	20.0
10:17:41	BAD	1476	FLUX 13-L LEVEL 5 (NANOAMPS)	-????.
10:17:48	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
10:17:53	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
10:18:07	CONT	2956	RC PUMP 2A SEAL LEAK TK LVL	NORM
10:18:16	NORM	1224	FLUX 11-K LEVEL 1 (NANOAMPS)	235.
10:18:20	NORM	1264	FLUX 12-F LEVEL 1 (NANOAMPS)	69.
10:18:20	NORM	1265	FLUX 12-F LEVEL 2 (NANOAMPS)	244.
10:18:32	BAD	1387	FLUX 3-L LEVEL 4 (NANOAMPS)	-????.
10:18:32	BAD	1388	FLUX 3-L LEVEL 5 (NANOAMPS)	-????.
10:18:38	NORM	1441	FLUX 10-R LEVEL 2 (NANOAMPS)	20.
10:18:38	NORM	1442	FLUX 10-R LEVEL 3 (NANOAMPS)	79.
10:18:40	CONT	2956	RC PUMP 2A SEAL LEAK TK LVL	HIGH
10:18:40	CONT	2956	RC PUMP 2A SEAL LEAK TK LVL	NORM
10:18:41	BAD	1471	BACKGROUND 14-H (NANOAMPS)	-???.?
10:18:41	NORM	1476	FLUX 13-L LEVEL 5 (NANOAMPS)	73.
10:18:43	CONT	2956	RC PUMP 2A SEAL LEAK TK LVL	HIGH
10:18:44	CONT	2956	RC PUMP 2A SEAL LEAK TK LVL	NORM
10:18:45	CONT	2956	RC PUMP 2A SEAL LEAK TK LVL	HIGH
13:00:06	03/23/79			
10:19:20	BAD	1264	FLUX 12-F LEVEL 1 (NANOAMPS)	-????.
10:19:20	BAD	1265	FLUX 12-F LEVEL 2 (NANOAMPS)	-????.
10:19:39	BAD	0507	IM INCORE T/C 9-N TEMP	-???.?
10:20:00	NORM	0507	IM INCORE T/C 9-N TEMP	575.5
10:20:20	NORM	1265	FLUX 12-F LEVEL 2 (NANOAMPS)	2.
10:20:23	CONT	2740	D-G ROOM AIR CPRSR DF-P-2C	TRIP
10:20:38	BAD	1441	FLUX 10-R LEVEL 2 (NANOAMPS)	-????.
10:20:38	BAD	1442	FLUX 10-R LEVEL 3 (NANOAMPS)	-????.
10:20:39	BAD	0507	IM INCORE T/C 9-N TEMP	-???.?
10:20:41	NORM	1477	FLUX 13-L LEVEL 6 (NANOAMPS)	0
10:21:05	CONT	2956	RC PUMP 2A SEAL LEAK TK LVL	NORM
10:21:16	BAD	1224	FLUX 11-K LEVEL 1 (NANOAMPS)	-????.
10:21:40	NORM	0539	IM INCORE T/C 10-O TEMP	695.2
10:21:41	BAD	1476	FLUX 13-L LEVEL 5 (NANOAMPS)	-????.
10:22:00	NORM	0507	IM INCORE T/C 9-N TEMP	257.7
10:22:10	BAD	0539	IM INCORE T/C 10-O TEMP	-???.?
10:22:16	NORM	1224	FLUX 11-K LEVEL 1 (NANOAMPS)	135.
10:22:20	BAD	1265	FLUX 12-F LEVEL 2 (NANOAMPS)	-????.
10:22:28	BAD	1347	FLUX 4-E LEVEL 4 (NANOAMPS)	-????.
10:22:38	NORM	1441	FLUX 10-R LEVEL 2 (NANOAMPS)	47.
10:22:39	CONT	2956	RC PUMP 2A SEAL LEAK TK LVL	HIGH
10:22:41	NORM	1476	FLUX 13-L LEVEL 5 (NANOAMPS)	65.
10:22:59	BAD	1021	RB AIR CLG COILS B EMER DISCH	-???.?
10:23:09	BAD	0507	IM INCORE T/C 9-N TEMP	-???.?
10:23:28	BAD	1346	FLUX 4-E LEVEL 3 (NANOAMPS)	-????.
10:23:29	NORM	1021	RB AIR CLG COILS B EMER DISCH	57.3
10:23:30	BAD	1367	BACKGROUND 2-G (NANOAMPS)	-???.?
10:23:33	NORM	1442	FLUX 10-R LEVEL 3 (NANOAMPS)	143.
10:24:20	NORM	1265	FLUX 12-F LEVEL 2 (NANOAMPS)	4.
10:24:23	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
10:24:28	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
10:24:28	NORM	1346	FLUX 4-E LEVEL 3 (NANOAMPS)	2.
10:24:30	NORM	1367	BACKGROUND 2-G (NANOAMPS)	14.5
10:24:38	BAD	1441	FLUX 10-R LEVEL 2 (NANOAMPS)	-????.
10:24:38	BAD	1442	FLUX 10-R LEVEL 3 (NANOAMPS)	-????.

10:25:16	BAD	1224	FLUX 11-K LEVEL 1 (NANO/AMPS)	-????.
10:25:28	NORM	1347	FLUX 4-E LEVEL 4 (NANO/AMPS)	- 9.
10:25:39	NORM	0507	IM INCORE T/C 9-N TEMP	588.0
10:25:40	BAD	0539	IM INCORE T/C 10-O TEMP	-???.?
10:26:18	CONT	2956	RC PUMP 2A SEAL LEAK TK LVL	HIGH
10:26:20	BAD	1265	FLUX 12-F LEVEL 2 (NANO/AMPS)	-????.
10:26:28	BAD	1347	FLUX 4-E LEVEL 4 (NANO/AMPS)	-????.
10:26:30	BAD	1367	BACKGROUND 2-G (NANO/AMPS)	-???.?
10:26:38	NORM	1441	FLUX 10-R LEVEL 2 (NANO/AMPS)	104.
10:26:38	NORM	1442	FLUX 10-R LEVEL 3 (NANO/AMPS)	275.
10:26:39	BAD	0507	IM INCORE T/C 9-N TEMP	-???.?
10:26:39	NORM	0521	IM INCORE T/C 9-C TEMP	692.7
10:26:41	NORM	1476	FLUX 13-L LEVEL 5 (NANO/AMPS)	67.
13:08:15	ATRA	0394	RC LOOP A INLET TEMP WIDE 2	ATR 02 100.0/ 10.0
10:26:41	BAD	1477	FLUX 13-L LEVEL 6 (NANO/AMPS)	-????.
10:27:20	NORM	1265	FLUX 12-F LEVEL 2 (NANO/AMPS)	94.
10:27:38	BAD	1441	FLUX 10-R LEVEL 2 (NANO/AMPS)	-????.
10:27:38	BAD	1442	FLUX 10-R LEVEL 3 (NANO/AMPS)	-????.
10:27:41	BAD	1476	FLUX 13-L LEVEL 5 (NANO/AMPS)	-????.
13:09:07	ATRA	0394	RC LOOP A INLET TEMP WIDE 2	ATR 02 100.0/ 1.0
10:28:02	BAD	1081	FLUX 8-H LEVEL 2 (NANO/AMPS)	-????.
10:28:09	BAD	0521	IM INCORE T/C 9-C TEMP	-???.?
10:28:16	BAD	1221	FLUX 11-L LEVEL 6 (NANO/AMPS)	-????.
10:28:32	CONT	2956	RC PUMP 2A SEAL LEAK TK LVL	NORM
10:28:37	BAD	1436	FLUX 7-R LEVEL 5 (NANO/AMPS)	-????.
10:29:20	BAD	1265	FLUX 12-F LEVEL 2 (NANO/AMPS)	-????.
10:29:30	NORM	1367	BACKGROUND 2-G (NANO/AMPS)	- 18.0
10:29:38	CONT	2956	RC PUMP 2A SEAL LEAK TK LVL	HIGH
10:29:38	NORM	1441	FLUX 10-R LEVEL 2 (NANO/AMPS)	59.
10:29:38	NORM	1442	FLUX 10-R LEVEL 3 (NANO/AMPS)	71.
10:30:20	NORM	1265	FLUX 12-F LEVEL 2 (NANO/AMPS)	155.
10:30:28	NORM	1347	FLUX 4-E LEVEL 4 (NANO/AMPS)	- 17.
10:30:33	BAD	1390	FLUX 3-L LEVEL 7 (NANO/AMPS)	-????.
10:30:36	BAD	0451	IC RCP 1A COOL OUTLET TEMP	-???.?
10:30:38	BAD	1441	FLUX 10-R LEVEL 2 (NANO/AMPS)	-????.
10:30:38	BAD	1442	FLUX 10-R LEVEL 3 (NANO/AMPS)	-????.
10:31:06	NORM	0451	IC RCP 1A COOL OUTLET TEMP	1.5
10:31:17	BAD	1239	BACKGROUND 12-K (NANO/AMPS)	-???.?
10:31:20	NORM	1264	FLUX 12-F LEVEL 1 (NANO/AMPS)	11.
10:31:30	BAD	1367	BACKGROUND 2-G (NANO/AMPS)	-???.?
10:32:19	CONT	2956	RC PUMP 2A SEAL LEAK TK LVL	NORM
10:32:20	BAD	1264	FLUX 12-F LEVEL 1 (NANO/AMPS)	-????.
10:32:21	CONT	2956	RC PUMP 2A SEAL LEAK TK LVL	HIGH
10:32:38	NORM	1441	FLUX 10-R LEVEL 2 (NANO/AMPS)	29.
10:32:38	NORM	1442	FLUX 10-R LEVEL 3 (NANO/AMPS)	14.
10:33:06	BAD	0451	IC RCP 1A COOL OUTLET TEMP	-???.?
10:33:38	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
13:13:00	APTG	0487	SP STM GEN UPPER DOMCHR TEMP A1	GRP 13
10:33:38	BAD	1441	FLUX 10-R LEVEL 2 (NANO/AMPS)	-????.
10:33:38	BAD	1442	FLUX 10-R LEVEL 3 (NANO/AMPS)	-????.
10:33:43	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
13:13:29	APTG	0459	SP STM GEN A SHELL TEMP(EL 302)	GRP 13
10:34:10	NORM	0539	IM INCORE T/C 10-O TEMP	687.9
13:13:43	APTG	0463	SP STM GEN A SHELL TEMP(EL 341)	GRP 13
10:34:20	NORM	1264	FLUX 12-F LEVEL 1 (NANO/AMPS)	61.
13:13:58	APTG	0394	RC LOOP A INLET TEMP WIDE 2	GRP 13
10:34:36	NORM	0451	IC RCP 1A COOL OUTLET TEMP	- 3.0
10:35:07	NORM	1138	FLUX 6-G LEVEL 3 (NANO/AMPS)	- 19.
10:35:15	BAD	1218	FLUX 11-L LEVEL 3 (NANO/AMPS)	-????.
10:35:36	BAD	0451	IC RCP 1A COOL OUTLET TEMP	-???.?
10:35:48	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
10:35:53	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00

10:36:33	NORM	1441	FLUX 10-R LEVEL 2 (NANOAMPS)	8.
10:36:33	NORM	1442	FLUX 10-R LEVEL 3 (NANOAMPS)	59.
10:37:10	BAD	1163	FLUX 5-K LEVEL 4 (NANOAMPS)	-????.
10:37:20	NORM	1264	FLUX 12-F LEVEL 1 (NANOAMPS)	72.
10:37:20	NORM	1265	FLUX 12-F LEVEL 2 (NANOAMPS)	246.
10:37:28	BAD	1347	FLUX 4-E LEVEL 4 (NANOAMPS)	-????.
10:37:36	NORM	0451	IC RCP 1A COOL OUTLET TEMP	3.5
10:37:38	BAD	1441	FLUX 10-R LEVEL 2 (NANOAMPS)	-????.
10:37:38	BAD	1442	FLUX 10-R LEVEL 3 (NANOAMPS)	-????.
10:38:15	BAD	1218	FLUX 11-L LEVEL 3 (NANOAMPS)	-????.
10:38:30	NORM	1367	BACKGROUND 2-G (NANOAMPS)	- 19.0
10:39:18	NORM	1242	FLUX 13-H LEVEL 3 (NANOAMPS)	81.
10:39:20	BAD	1264	FLUX 12-F LEVEL 1 (NANOAMPS)	-????.
10:39:20	BAD	1265	FLUX 12-F LEVEL 2 (NANOAMPS)	-????.
10:39:28	NORM	1347	FLUX 4-E LEVEL 4 (NANOAMPS)	25.
10:39:38	NORM	1441	FLUX 10-R LEVEL 2 (NANOAMPS)	124.
10:39:38	NORM	1442	FLUX 10-R LEVEL 3 (NANOAMPS)	311.
10:40:15	HIGH	0009	SP STM GEN A OP RANGE LVL (PCT)	82.5
10:40:20	NORM	1265	FLUX 12-F LEVEL 2 (NANOAMPS)	91.
10:40:32	NORM	1388	FLUX 3-L LEVEL 5 (NANOAMPS)	2.
13:18:17	APTG	0473	SP STM GEN A STM PRESS	GRP 13
10:40:38	BAD	1441	FLUX 10-R LEVEL 2 (NANOAMPS)	-????.
10:40:38	BAD	1442	FLUX 10-R LEVEL 3 (NANOAMPS)	-????.
10:41:07	NORM	1137	FLUX 6-G LEVEL 2 (NANOAMPS)	- 17.
13:18:43	APTG	0469	SP STM GEN A DWNCMR TEMP	GRP 13
10:41:10	BAD	0539	IM INCORE T/C 10-O TEMP	-???.?
10:41:18	BAD	1242	FLUX 13-H LEVEL 3 (NANOAMPS)	-????.
10:42:20	BAD	1265	FLUX 12-F LEVEL 2 (NANOAMPS)	-????.
10:42:38	NORM	1441	FLUX 10-R LEVEL 2 (NANOAMPS)	12.
13:18:25	APTG	0438	SP STM GEN UPPER DWNCMR TEMP B1	GRP 13
10:42:43	NORM	1437	BACKGROUND 14-D (NANOAMPS)	- 11.0
10:43:05	NORM	1111	BACKGROUND 8-F (NANOAMPS)	- 10.5
10:43:13	BAD	1191	BACKGROUND 8-N (NANOAMPS)	-???.?
10:43:28	BAD	1347	FLUX 4-E LEVEL 4 (NANOAMPS)	-????.
10:43:33	BAD	1388	FLUX 3-L LEVEL 5 (NANOAMPS)	-????.
10:43:38	NORM	1442	FLUX 10-R LEVEL 3 (NANOAMPS)	292.
10:44:05	BAD	1111	BACKGROUND 8-F (NANOAMPS)	-???.?
10:44:28	NORM	1347	FLUX 4-E LEVEL 4 (NANOAMPS)	- 14.
10:44:33	NORM	1388	FLUX 3-L LEVEL 5 (NANOAMPS)	0
10:44:38	BAD	1441	FLUX 10-R LEVEL 2 (NANOAMPS)	-????.
10:44:38	BAD	1442	FLUX 10-R LEVEL 3 (NANOAMPS)	-????.
10:45:04	NORM	1107	FLUX 8-F LEVEL 4 (NANOAMPS)	- 8.
10:45:05	NORM	1111	BACKGROUND 8-F (NANOAMPS)	- 10.5
10:45:09	NORM	0507	IM INCORE T/C 9-N TEMP	15.2
10:45:28	BAD	1347	FLUX 4-E LEVEL 4 (NANOAMPS)	-????.
10:45:31	BAD	1367	BACKGROUND 2-G (NANOAMPS)	-???.?
10:45:38	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
10:45:43	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
10:46:09	BAD	0507	IM INCORE T/C 9-N TEMP	-???.?
10:46:30	NORM	1367	BACKGROUND 2-G (NANOAMPS)	- 13.0
10:46:33	NORM	1441	FLUX 10-R LEVEL 2 (NANOAMPS)	104.
10:46:33	NORM	1442	FLUX 10-R LEVEL 3 (NANOAMPS)	63.
10:46:39	NORM	0507	IM INCORE T/C 9-N TEMP	602.2
13:23:00	APTG	0472	SP MAIN STEAM TEMP B	GRP 13
10:47:09	BAD	0507	IM INCORE T/C 9-N TEMP	-???.?
10:47:23	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
13:23:23	APTG	0398	RC LOOP A WIDE RANGE PRESS	GRP 13
10:47:28	NORM	1347	FLUX 4-E LEVEL 4 (NANOAMPS)	- 14.
10:47:38	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	16.1
13:23:44	APTG	0462	SP STM GEN B SHELL TEMP(EL 341)	GRP 13
10:47:38	BAD	1441	FLUX 10-R LEVEL 2 (NANOAMPS)	-????.
10:47:38	BAD	1442	FLUX 10-R LEVEL 3 (NANOAMPS)	-????.

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10:48:09	BAD	0506	IM INCORE T/C 8-N TEMP	-???.?
10:48:20	NORM	1265	FLUX 12-F LEVEL 2 (NANOAMPS)	37.
10:48:23	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
10:48:29	BAD	1347	FLUX 4-E LEVEL 4 (NANOAMPS)	-????.
10:48:38	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	22.0
10:48:41	NORM	1477	FLUX 13-L LEVEL 6 (NANOAMPS)	1.
10:48:53	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
10:49:08	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	.0
10:49:09	BAD	0507	IM INCORE T/C 9-N TEMP	-???.?
10:49:17	BAD	1227	FLUX 11-K LEVEL 4 (NANOAMPS)	-????.
10:49:21	BAD	1265	FLUX 12-F LEVEL 2 (NANOAMPS)	-????.
10:49:28	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
10:49:28	NORM	1347	FLUX 4-E LEVEL 4 (NANOAMPS)	- 16.
10:49:33	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	.0
10:49:38	NORM	1441	FLUX 10-R LEVEL 2 (NANOAMPS)	- 11.
10:49:43	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
10:49:48	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
10:49:48	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
10:49:58	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	15.3
10:50:08	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
10:50:23	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	5.2
10:50:38	BAD	1441	FLUX 10-R LEVEL 2 (NANOAMPS)	-????.
10:50:38	NORM	1442	FLUX 10-R LEVEL 3 (NANOAMPS)	0
13:28:17	APTG	0389	RC PRESSURIZER TEMP	GRP 13
10:50:39	NORM	0507	IM INCORE T/C 9-N TEMP	242.5
10:50:53	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
13:28:42	APTG	0390	RC LOOP A OUTLET TEMP	GRP 13
10:51:03	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	.0
10:51:18	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
13:29:06	APTG	0386	RC PRESSURIZER WTR LVL 1 (DP)	GRP 13
10:51:20	BAD	1261	FLUX 13-F LEVEL 6 (NANOAMPS)	-????.
10:51:20	NORM	1265	FLUX 12-F LEVEL 2 (NANOAMPS)	36.
10:51:23	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	.0
10:51:35	BAD	1405	FLUX 4-N LEVEL 6 (NANOAMPS)	-????.
10:51:38	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
13:29:54	APTG	1032	REACTOR COOLANT DRAIN TANK TEMP	GRP 13
10:51:39	BAD	1442	FLUX 10-R LEVEL 3 (NANOAMPS)	-????.
10:51:53	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	5.5
10:52:18	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
10:52:21	NORM	1264	FLUX 12-F LEVEL 1 (NANOAMPS)	152.
10:52:23	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	.0
10:52:38	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
10:52:39	BAD	0507	IM INCORE T/C 9-N TEMP	-???.?
10:52:43	BAD	1487	BACKGROUND 14-D (NANOAMPS)	-???.?
10:52:48	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	.0
10:53:08	NORM	1136	FLUX 6-G LEVEL 1 (NANOAMPS)	- 9.
10:53:18	BAD	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	-???.?
10:53:20	NORM	1261	FLUX 13-F LEVEL 6 (NANOAMPS)	59.
10:53:20	BAD	1264	FLUX 12-F LEVEL 1 (NANOAMPS)	-????.
10:53:20	BAD	1265	FLUX 12-F LEVEL 2 (NANOAMPS)	-????.
10:53:23	NORM	0040	MS&R 1B DR TO 3STGA HD FL(KLB/H)	.0
10:53:32	CONT	3116	FW TURB A LOW VACUUM TRIP	LOW
10:53:35	BAD	1402	FLUX 4-N LEVEL 3 (NANOAMPS)	-????.
10:53:35	NORM	1405	FLUX 4-N LEVEL 6 (NANOAMPS)	305.
10:53:39	NORM	1441	FLUX 10-R LEVEL 2 (NANOAMPS)	158.
10:53:39	NORM	1442	FLUX 10-R LEVEL 3 (NANOAMPS)	334.
10:53:43	NORM	1437	BACKGROUND 14-D (NANOAMPS)	- 13.0
10:54:07	NORM	1127	BACKGROUND 7-F (NANOAMPS)	- 8.5
10:54:09	NORM	0507	IM INCORE T/C 9-N TEMP	428.6
10:54:20	BAD	1261	FLUX 13-F LEVEL 6 (NANOAMPS)	-????.
10:54:20	NORM	1265	FLUX 12-F LEVEL 2 (NANOAMPS)	36.

10:54:39	BAD	1442	FLUX 10-R LEVEL 3 (NANOAMPS)	-????.
10;55:08	NORM	1140	FLUX 5-G LEVEL 5 (NANOAMPS)	- 18.
10:56:05	NORM	1101	FLUX 9-G LEVEL 6 (NANOAMPS)	- 4.
10:56:09	BAD	0507	IM INCORE T/C 9-N TEMP	-???.?
10:56:20	NORM	1261	FLUX 13-F LEVEL 6 (NANOAMPS)	0
10:56:21	BAD	1265	FLUX 12-F LEVEL 2 (NANOAMPS)	-????.
10:56:25	NORM	1308	FLUX 9-C LEVEL 5 (NANOAMPS)	- 2.
10:56:34	NORM	1390	FLUX 3-L LEVEL 7 (NANOAMPS)	1352.
10:56:43	NORM	1486	FLUX 14-D LEVEL 7 (NANOAMPS)	- 17.
10:56:43	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
10:56:43	NORM	1491	FLUX 13-C LEVEL 4 (NANOAMPS)	- 19.
10:56:48	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
10:57:05	BAD	1111	BACKGROUND 8-F (NANOAMPS)	-???.?
10:57:06	NORM	1125	FLUX 7-F LEVEL 6 (NANOAMPS)	72.
10:57:08	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
10:57:13	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
10:57:21	BAD	1261	FLUX 13-F LEVEL 6 (NANOAMPS)	-????.
10:57:29	NORM	1347	FLUX 4-E LEVEL 4 (NANOAMPS)	- 14.
10:57:31	NORM	1367	BACKGROUND 2-G (NANOAMPS)	- 18.0
10:57:33	BAD	1390	FLUX 3-L LEVEL 7 (NANOAMPS)	-????.
10:57:35	BAD	1402	FLUX 4-N LEVEL 3 (NANOAMPS)	-????.
10:57:39	NORM	1441	FLUX 10-R LEVEL 2 (NANOAMPS)	28.
10:57:39	NORM	1442	FLUX 10-R LEVEL 3 (NANOAMPS)	45.
10:57:39	NORM	0507	IM INCORE T/C 9-N TEMP	229.7
10:57:42	BAD	1486	FLUX 14-D LEVEL 7 (NANOAMPS)	-????.
10:57:43	BAD	1491	FLUX 13-C LEVEL 4 (NANOAMPS)	-????.
10:58:21	NORM	1265	FLUX 12-F LEVEL 2 (NANOAMPS)	52.
10:58:29	BAD	1347	FLUX 4-E LEVEL 4 (NANOAMPS)	-????.
10:58:31	BAD	1367	BACKGROUND 2-G (NANOAMPS)	-???.?
10:58:34	NORM	1402	FLUX 4-N LEVEL 3 (NANOAMPS)	7.
10:58:39	BAD	1441	FLUX 10-R LEVEL 2 (NANOAMPS)	-????.
10:58:39	BAD	1442	FLUX 10-R LEVEL 3 (NANOAMPS)	-????.
10:58:39	BAD	0507	IM INCORE T/C 9-N TEMP	-???.?
10:59:05	NORM	1111	BACKGROUND 8-F (NANOAMPS)	- 19.5
10:59:31	NORM	1367	BACKGROUND 2-G (NANOAMPS)	- 19.0
10:59:54	CONT	2956	RC PUMP 2A SEAL LEAK TK LVL	NORM
11:00:05	BAD	1101	FLUX 9-G LEVEL 6 (NANOAMPS)	-????.
11:00:16	CONT	2956	RC PUMP 2A SEAL LEAK TK LVL	HIGH
11:00:21	BAD	1265	FLUX 12-F LEVEL 2 (NANOAMPS)	-????.
11:00:28	FLAG	3579	RC3A-PT1 INSTR CONDITION	GOOD
11:00:28	FLAG	3582	RC3B-PT2 INSTR CONDITION	GOOD
11:00:29	NORM	1347	FLUX 4-E LEVEL 4 (NANOAMPS)	- 20.
11:00:30	NORM	1441	FLUX 10-R LEVEL 2 (NANOAMPS)	77.
11:00:39	NORM	1442	FLUX 10-R LEVEL 3 (NANOAMPS)	104.
11:00:44	NORM	1491	FLUX 13-C LEVEL 4 (NANOAMPS)	- 18.
11:01:05	BAD	1111	BACKGROUND 8-F (NANOAMPS)	-???.?
11:01:09	NORM	1141	FLUX 6-G LEVEL 6 (NANOAMPS)	- 17.
11:01:09	NORM	0507	IM INCORE T/C 9-N TEMP	567.0
11:01:39	BAD	1441	FLUX 10-R LEVEL 2 (NANOAMPS)	-????.
11:01:39	BAD	1442	FLUX 10-R LEVEL 3 (NANOAMPS)	-????.
11:01:39	BAD	0507	IM INCORE T/C 9-N TEMP	-???.?
11:01:44	BAD	1491	FLUX 13-C LEVEL 4 (NANOAMPS)	-????.
11:02:05	NORM	1111	BACKGROUND 8-F (NANOAMPS)	- 20.0
11:02:21	NORM	1265	FLUX 12-F LEVEL 2 (NANOAMPS)	- 1.
11:02:39	NORM	0513	IM INCORE T/C 13-H TEMP	519.1
11:03:07	BAD	1125	FLUX 7-F LEVEL 6 (NANOAMPS)	-????.
11:03:09	BAD	0513	IM INCORE T/C 13-H TEMP	-???.?
11:03:29	BAD	1347	FLUX 4-E LEVEL 4 (NANOAMPS)	-????.
11:03:34	NORM	1390	FLUX 3-L LEVEL 7 (NANOAMPS)	1999.
11:03:43	NORM	1486	FLUX 14-D LEVEL 7 (NANOAMPS)	- 10.
11:03:44	NORM	1491	FLUX 13-C LEVEL 4 (NANOAMPS)	- 17.
11:04:11	BAD	1162	FLUX 5-K LEVEL 3 (NANOAMPS)	-????.

11:04:34	BAD	1390	FLUX 3-L LEVEL 7 (NANOAMPS)	-????.
11:04:35	NORM	1405	FLUX 4-N LEVEL 6 (NANOAMPS)	2.
11:04:39	NORM	1441	FLUX 10-R LEVEL 2 (NANOAMPS)	156.
11:04:39	NORM	1442	FLUX 10-R LEVEL 3 (NANOAMPS)	348.
11:04:39	NORM	0507	IM INCORE T/C 9-N TEMP	274.4
11:04:43	BAD	1486	FLUX 14-D LEVEL 7 (NANOAMPS)	-????.
11:04:44	BAD	1491	FLUX 13-C LEVEL 4 (NANOAMPS)	-????.
11:05:06	BAD	1111	BACKGROUND 8-F (NANOAMPS)	-???.?
11:05:07	NORM	1125	FLUX 7-F LEVEL 6 (NANOAMPS)	17.
11:05:09	BAD	1141	FLUX 6-G LEVEL 6 (NANOAMPS)	-????.
11:05:09	BAD	0507	IM INCORE T/C 9-N TEMP	-???.?
11:05:10	NORM	0521	IM INCORE T/C 9-C TEMP	536.7
11:05:14	BAD	1198	FLUX 9-N LEVEL 7 (NANOAMPS)	-????.
11:05:29	NORM	1347	FLUX 4-E LEVEL 4 (NANOAMPS)	2.
11:05:33	BAD	1387	FLUX 3-L LEVEL 4 (NANOAMPS)	-????.
11:05:35	BAD	1405	FLUX 4-N LEVEL 6 (NANOAMPS)	-????.
11:05:39	BAD	1441	FLUX 10-R LEVEL 2 (NANOAMPS)	-????.
11:05:39	BAD	1442	FLUX 10-R LEVEL 3 (NANOAMPS)	-????.
11:06:06	NORM	1111	BACKGROUND 8-F (NANOAMPS)	- 17.0
11:06:10	BAD	0521	IM INCORE T/C 9-C TEMP	-???.?
11:06:17	BAD	1229	FLUX 11-K LEVEL 6 (NANOAMPS)	-????.
11:06:21	NORM	1261	FLUX 13-F LEVEL 6 (NANOAMPS)	21.
11:07:07	BAD	1125	FLUX 7-F LEVEL 6 (NANOAMPS)	-????.
11:07:17	NORM	1229	FLUX 11-K LEVEL 6 (NANOAMPS)	410.
11:07:20	NORM	1250	FLUX 13-G LEVEL 3 (NANOAMPS)	- 8.
11:07:34	NORM	1390	FLUX 3-L LEVEL 7 (NANOAMPS)	1679.
11:07:39	NORM	1441	FLUX 10-R LEVEL 2 (NANOAMPS)	34.
11:07:39	NORM	1442	FLUX 10-R LEVEL 3 (NANOAMPS)	75.
11:07:39	NORM	0507	IM INCORE T/C 9-N TEMP	349.2
11:07:43	NORM	1486	FLUX 14-D LEVEL 7 (NANOAMPS)	- 1.
11:07:43	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
11:07:48	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
11:08:07	NORM	1125	FLUX 7-F LEVEL 6 (NANOAMPS)	9.
11:08:09	BAD	1140	FLUX 6-G LEVEL 5 (NANOAMPS)	-????.
11:08:10	NORM	0521	IM INCORE T/C 9-C TEMP	600.3
11:08:17	NORM	1227	FLUX 11-K LEVEL 4 (NANOAMPS)	30.
11:08:20	BAD	1250	FLUX 13-G LEVEL 3 (NANOAMPS)	-????.
11:08:21	NORM	1265	FLUX 12-F LEVEL 2 (NANOAMPS)	18.
11:08:34	BAD	1390	FLUX 3-L LEVEL 7 (NANOAMPS)	-????.
11:08:39	BAD	1441	FLUX 10-R LEVEL 2 (NANOAMPS)	-????.
11:08:39	BAD	1442	FLUX 10-R LEVEL 3 (NANOAMPS)	-????.
11:08:39	BAD	0507	IM INCORE T/C 9-N TEMP	-???.?
11:08:43	BAD	1486	FLUX 14-D LEVEL 7 (NANOAMPS)	-????.
11:09:05	NORM	1106	FLUX 8-F LEVEL 3 (NANOAMPS)	10.
11:09:07	BAD	1125	FLUX 7-F LEVEL 6 (NANOAMPS)	-????.
11:09:08	CONT	3258	EMER FW PMP EF-P-2A	ON
11:09:10	BAD	0521	IM INCORE T/C 9-C TEMP	-???.?
11:09:18	NORM	0113	EMER FD PMP 2A DISCH PRESS	1509.
11:09:40	NORM	0521	IM INCORE T/C 9-C TEMP	603.6
11:10:06	NORM	1110	FLUX 8-F LEVEL 7 (NANOAMPS)	37.
11:10:10	BAD	0521	IM INCORE T/C 9-C TEMP	-???.?
11:10:27	CONT	2956	RC PUMP 2A SEAL LEAK TK LVL	NORM
11:10:39	NORM	0513	IM INCORE T/C 13-H TEMP	52.0
11:11:03	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
11:11:08	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
11:11:09	NORM	0507	IM INCORE T/C 9-N TEMP	93.7
11:11:09	NORM	0521	IM INCORE T/C 9-C TEMP	525.1
11:11:21	BAD	1265	FLUX 12-F LEVEL 2 (NANOAMPS)	-????.
11:11:34	CONT	2956	RC PUMP 2A SEAL LEAK TK LVL	HIGH
11:11:34	NORM	1390	FLUX 3-L LEVEL 7 (NANOAMPS)	787.
11:11:39	NORM	1441	FLUX 10-R LEVEL 2 (NANOAMPS)	43.
11:11:39	NORM	1442	FLUX 10-R LEVEL 3 (NANOAMPS)	337.

11:12:54	BAD	1390	FLUX 3-L LEVEL 7 (NANOAMPS)	-????.
11:12:39	BAD	1441	FLUX 10-R LEVEL 2 (NANOAMPS)	-????.
11:12:39	BAD	1442	FLUX 10-R LEVEL 3 (NANOAMPS)	-????.
11:13:05	NORM	1105	FLUX 8-F LEVEL 2 (NANOAMPS)	279.
11:13:05	CONT	2956	RC PUMP 2A SEAL LEAK TK LVL	NORM
11:13:17	BAD	1229	FLUX 11-K LEVEL 6 (NANOAMPS)	-????.
11:13:21	BAD	1265	FLUX 12-F LEVEL 2 (NANOAMPS)	-????.
11:13:40	NORM	0513	IM INCORE T/C 13-H TEMP	643.6
11:15:09	BAD	0507	IM INCORE T/C 9-N TEMP	-???.?
11:15:17	NORM	1229	FLUX 11-K LEVEL 6 (NANOAMPS)	162.
11:15:39	NORM	1441	FLUX 10-R LEVEL 2 (NANOAMPS)	94.
11:15:39	NORM	1442	FLUX 10-R LEVEL 3 (NANOAMPS)	258.
11:15:52	CONT	2956	RC PUMP 2A SEAL LEAK TK LVL	HIGH
11:16:09	NORM	0507	IM INCORE T/C 9-N TEMP	426.8
11:16:39	BAD	1441	FLUX 10-R LEVEL 2 (NANOAMPS)	-????.
11:16:39	BAD	1442	FLUX 10-R LEVEL 3 (NANOAMPS)	-????.
11:16:43	BAD	1487	BACKGROUND 14-D (NANOAMPS)	-???.?
11:17:17	BAD	1229	FLUX 11-K LEVEL 6 (NANOAMPS)	-????.
11:17:27	CONT	2956	RC PUMP 2A SEAL LEAK TK LVL	NORM
11:17:38	CONT	3258	EMER FW PMP EF-P-2A	OFF
11:17:48	LOW	0118	EMER FD PMP 2A DISCH PRESS	201.
11:19:17	NORM	1229	FLUX 11-K LEVEL 6 (NANOAMPS)	795.
11:19:38	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
11:19:39	BAD	0507	IM INCORE T/C 9-N TEMP	-???.?
11:19:43	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
11:20:05	NORM	1104	FLUX 8-F LEVEL 1 (NANOAMPS)	8.
11:20:22	CONT	2956	RC PUMP 2A SEAL LEAK TK LVL	HIGH
11:20:39	NORM	1441	FLUX 10-R LEVEL 2 (NANOAMPS)	227.
11:20:39	NORM	1442	FLUX 10-R LEVEL 3 (NANOAMPS)	684.
11:20:43	NORM	1487	BACKGROUND 14-D (NANOAMPS)	- 18.5

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11:21:06	BAD	1110	FLUX 8-F LEVEL 7 (NANOAMPS)	-????.
11:21:06	BAD	1111	BACKGROUND 8-F (NANOAMPS)	-???.?
11:21:15	NORM	1206	FLUX 9-H LEVEL 7 (NANOAMPS)	54.
11:21:39	NORM	0507	IM INCORE T/C 9-N TEMP	173.6
11:21:40	BAD	0513	IM INCORE T/C 13-H TEMP	-???.?
11:21:43	BAD	1487	BACKGROUND 14-D (NANOAMPS)	-???.?
11:22:06	NORM	1111	BACKGROUND 8-F (NANOAMPS)	- 20.0
11:22:15	BAD	1206	FLUX 9-H LEVEL 7 (NANOAMPS)	-????.
11:22:23	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
11:22:33	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
11:22:39	BAD	1441	FLUX 10-R LEVEL 2 (NANOAMPS)	-????.
11:23:15	CONT	2956	RC PUMP 2A SEAL LEAK TK LVL	NORM
11:23:39	BAD	1442	FLUX 10-R LEVEL 3 (NANOAMPS)	-????.
11:23:43	NORM	1487	BACKGROUND 14-D (NANOAMPS)	- 20.0
11:24:43	BAD	1487	BACKGROUND 14-D (NANOAMPS)	-???.?
11:25:13	BAD	1137	FLUX 3-N LEVEL 4 (NANOAMPS)	-????.
11:25:31	BAD	1367	BACKGROUND 2-G (NANOAMPS)	-???.?
11:25:42	NORM	1471	BACKGROUND 14-H (NANOAMPS)	- 20.0
11:26:21	BAD	1261	FLUX 13-F LEVEL 6 (NANOAMPS)	-????.
11:26:39	BAD	0507	IM INCORE T/C 9-N TEMP	-???.?
11:26:42	BAD	1471	BACKGROUND 14-H (NANOAMPS)	-???.?
11:27:18	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
11:27:21	NORM	1261	FLUX 13-F LEVEL 6 (NANOAMPS)	66.
11:27:23	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
11:27:39	NORM	1441	FLUX 10-R LEVEL 2 (NANOAMPS)	134.
11:27:39	NORM	1442	FLUX 10-R LEVEL 3 (NANOAMPS)	56.
11:27:56	CONT	2956	RC PUMP 2A SEAL LEAK TK LVL	HIGH
11:28:21	BAD	1261	FLUX 13-F LEVEL 6 (NANOAMPS)	-????.
11:28:39	NORM	0506	IM INCORE T/C 3-N TEMP	608.5

11:29:13	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
11:29:39	BAD	1441	FLUX 10-R LEVEL 2 (NANOAMPS)	-????.
11:29:39	BAD	1442	FLUX 10-R LEVEL 3 (NANOAMPS)	-????.
11:30:16	CONT	2956	RC PUMP 2A SEAL LEAK TK LVL	NORM
11:30:21	NORM	1261	FLUX 13-F LEVEL 6 (NANOAMPS)	37.
11:30:21	NORM	1266	FLUX 12-F LEVEL 3 (NANOAMPS)	179.
11:31:05	NORM	1109	FLUX 8-F LEVEL 6 (NANOAMPS)	48.
11:32:21	BAD	1266	FLUX 12-F LEVEL 3 (NANOAMPS)	-????.
11:32:35	BAD	1402	FLUX 4-N LEVEL 3 (NANOAMPS)	-????.
11:33:39	BAD	0507	IM INCORE T/C 9-N TEMP	-???.?
11:34:09	NORM	0507	IM INCORE T/C 9-N TEMP	168.0
11:34:17	NORM	1221	FLUX 11-L LEVEL 6 (NANOAMPS)	48.
11:34:35	BAD	1406	FLUX 4-N LEVEL 7 (NANOAMPS)	-????.
11:34:39	NORM	0493	IM INCORE T/C 8-H TEMP	622.9
11:34:39	NORM	1441	FLUX 10-R LEVEL 2 (NANOAMPS)	253.
11:34:39	NORM	1442	FLUX 10-R LEVEL 3 (NANOAMPS)	527.
11:34:39	BAD	0507	IM INCORE T/C 9-N TEMP	-???.?
11:35:08	BAD	0493	IM INCORE T/C 8-H TEMP	-???.?
11:35:11	BAD	1166	FLUX 5-K LEVEL 7 (NANOAMPS)	-????.
11:35:35	NORM	1402	FLUX 4-N LEVEL 3 (NANOAMPS)	34.
11:35:35	NORM	1406	FLUX 4-N LEVEL 7 (NANOAMPS)	104.
11:35:39	NORM	0507	IM INCORE T/C 9-N TEMP	69.9
11:36:08	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
11:36:13	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
11:36:29	BAD	1347	FLUX 4-E LEVEL 4 (NANOAMPS)	-????.
11:36:39	BAD	1441	FLUX 10-R LEVEL 2 (NANOAMPS)	-????.
11:36:39	BAD	1442	FLUX 10-R LEVEL 3 (NANOAMPS)	-????.
11:39:06	NORM	1110	FLUX 8-F LEVEL 7 (NANOAMPS)	- 17.
11:39:21	BAD	1261	FLUX 13-F LEVEL 6 (NANOAMPS)	-????.
11:39:31	BAD	1366	FLUX 2-G LEVEL 7 (NANOAMPS)	-????.
11:40:06	BAD	1110	FLUX 8-F LEVEL 7 (NANOAMPS)	-????.
11:40:21	NORM	1261	FLUX 13-F LEVEL 6 (NANOAMPS)	139.
11:40:28	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
11:40:29	BAD	1349	FLUX 4-E LEVEL 6 (NANOAMPS)	-????.
11:40:33	BAD	1388	FLUX 3-L LEVEL 5 (NANOAMPS)	-????.
11:40:33	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
11:40:39	NORM	1441	FLUX 10-R LEVEL 2 (NANOAMPS)	31.
11:40:39	BAD	0507	IM INCORE T/C 9-N TEMP	-???.?
11:41:03	NORM	0493	IM INCORE T/C 8-H TEMP	663.5
11:41:09	NORM	0507	IM INCORE T/C 9-N TEMP	87.1
11:41:29	NORM	1347	FLUX 4-E LEVEL 4 (NANOAMPS)	15.
11:41:29	NORM	1349	FLUX 4-E LEVEL 6 (NANOAMPS)	- 14.
11:41:38	BAD	0493	IM INCORE T/C 8-H TEMP	-???.?
11:41:39	NORM	1442	FLUX 10-R LEVEL 3 (NANOAMPS)	864.
11:41:39	BAD	0507	IM INCORE T/C 9-N TEMP	-???.?
11:42:06	BAD	1111	BACKGROUND 8-F (NANOAMPS)	-???.?
11:42:12	CONT	2846	ES ACT B EMER INJ CH1 BYPASSED	BYPS
11:42:12	CONT	2847	ES ACT B EMER INJ CH2 BYPASSED	BYPS
11:42:12	CONT	2848	ES ACT B EMER INJ CH3 BYPASSED	BYPS
11:42:13	CONT	2821	ES ACT A EMER INJ CH1 BYPASSED	BYPS
11:42:13	CONT	2822	ES ACT A EMER INJ CH2 BYPASSED	BYPS
11:42:14	CONT	2823	ES ACT A EMER INJ CH3 BYPASSED	BYPS
11:42:17	BAD	1221	FLUX 11-L LEVEL 6 (NANOAMPS)	-????.
11:42:28	CONT	2956	RC PUMP 2A SEAL LEAK TK LVL	HIGH
11:42:29	CONT	2956	RC PUMP 2A SEAL LEAK TK LVL	NORM
11:42:29	CONT	2956	RC PUMP 2A SEAL LEAK TK LVL	HIGH
11:42:31	NORM	1366	FLUX 2-G LEVEL 7 (NANOAMPS)	- 4.
11:42:35	LOW	0398	RC LOOP A WIDE RANGE PRESS	1735.
11:42:35	LOW	0399	RC LOOP A WIDE RANGE PRESS	1716.
11:42:35	LOW	0400	RC LOOP B WIDE RANGE PRESS	1736.
11:43:11	NORM	1166	FLUX 5-K LEVEL 7 (NANOAMPS)	1301.
11:43:21	BAD	1261	FLUX 13-F LEVEL 6 (NANOAMPS)	-????.

X STOP

11:43:35	NORM	1405	FLUX 4-N LEVEL 6 (NANO/AMPS)	148.
11:43:38	CONT	2923	RC LOOP A PT3 PRESS < 1600 PSI	YES
11:43:38	CONT	3161	ES ACT A EMER INJ BT1 CH TRIP	TRIP
11:43:38	CONT	3164	ES ACT B EMER INJ BT1 CH TRIP	TRIP
11:43:38	NORM	0493	IM INCORE T/C 8-H TEMP	618.6
11:43:39	BAD	1441	FLUX 10-R LEVEL 2 (NANO/AMPS)	-????.
11:43:39	NORM	0507	IM INCORE T/C 9-N TEMP	49.2
11:43:39	CONT	2925	RC LOOP B PT3 PRESS < 1600 PSI	YES
11:43:39	CONT	3163	ES ACT A EMER INJ BT3 CH TRIP	TRIP
11:43:39	CONT	3166	ES ACT B EMER INJ BT3 CH TRIP	TRIP
11:43:40	BAD	0533	IM INCORE T/C 4-N TEMP	-???.?
11:43:43	NORM	1437	BACKGROUND 14-D (NANO/AMPS)	- 10.5
11:44:08	BAD	0493	IM INCORE T/C 8-H TEMP	-???.?
11:44:10	NORM	0533	IM INCORE T/C 4-N TEMP	16.9
11:44:11	BAD	1166	FLUX 5-K LEVEL 7 (NANO/AMPS)	-????.
11:44:21	CONT	2674	PRESS HTR GROUP 1	TRIP
11:44:21	CONT	2675	PRESS HTR GROUP 2	TRIP
11:44:23	CONT	2674	PRESS HTR GROUP 1	NORM
11:44:23	CONT	2675	PRESS HTR GROUP 2	NORM
11:44:35	BAD	1405	FLUX 4-N LEVEL 6 (NANO/AMPS)	-????.
11:45:17	CONT	2654	LEAKAGE TRF PMP MDL-P-9A	TRIP
11:45:17	CONT	2655	LEAKAGE TRF PMP MDL-P-9B	TRIP
11:45:25	NORM	1308	FLUX 9-C LEVEL 5 (NANO/AMPS)	73.
11:45:39	BAD	1442	FLUX 10-R LEVEL 3 (NANO/AMPS)	-????.
11:46:00	NORM	0493	IM INCORE T/C 8-H TEMP	635.7
11:46:33	NORM	1387	FLUX 3-L LEVEL 4 (NANO/AMPS)	- 16.
11:46:44	NORM	1495	BACKGROUND 13-C (NANO/AMPS)	- 20.0
11:47:06	NORM	1111	BACKGROUND 8-F (NANO/AMPS)	- 20.0
11:47:37	HIGH	1720	HORCR HEAT/COOL RATE (DEGF/HR)	118.1
11:47:42	NORM	1470	FLUX 14-M LEVEL 7 (NANO/AMPS)	- 3.
11:47:44	BAD	1495	BACKGROUND 13-C (NANO/AMPS)	-???.?
11:48:03	BAD	0493	IM INCORE T/C 8-H TEMP	-???.?
11:48:33	BAD	1387	FLUX 3-L LEVEL 4 (NANO/AMPS)	-????.
11:49:17	BAD	1225	FLUX 11-K LEVEL 2 (NANO/AMPS)	-????.
11:49:21	NORM	1261	FLUX 13-F LEVEL 6 (NANO/AMPS)	46.
11:49:39	BAD	1447	BACKGROUND 10-R (NANO/AMPS)	-???.?
11:50:04	NORM	1096	FLUX 9-G LEVEL 1 (NANO/AMPS)	6.
11:50:38	NORM	1437	FLUX 7-R LEVEL 6 (NANO/AMPS)	17.
11:50:39	NORM	0493	IM INCORE T/C 8-H TEMP	695.3
11:50:53	CONT	2674	PRESS HTR GROUP 1	TRIP
11:50:53	CONT	2675	PRESS HTR GROUP 2	TRIP
11:51:09	BAD	0493	IM INCORE T/C 8-H TEMP	-???.?
11:51:25	BAD	1308	FLUX 9-C LEVEL 5 (NANO/AMPS)	-????.
11:51:39	BAD	0507	IM INCORE T/C 9-N TEMP	-???.?
11:52:03	BAD	1086	FLUX 8-H LEVEL 7 (NANO/AMPS)	-????.
11:52:06	NORM	1110	FLUX 8-F LEVEL 7 (NANO/AMPS)	- 2.
11:53:04	BAD	1096	FLUX 9-G LEVEL 1 (NANO/AMPS)	-????.
11:53:29	BAD	1347	FLUX 4-E LEVEL 4 (NANO/AMPS)	-????.
11:53:30	BAD	1021	RB AIR CLG COILS B EMER DISCH	-???.?
11:54:00	NORM	1021	RB AIR CLG COILS B EMER DISCH	59.5
11:54:38	BAD	1437	FLUX 7-R LEVEL 6 (NANO/AMPS)	-????.
11:55:09	NORM	0493	IM INCORE T/C 8-H TEMP	674.4
11:55:29	BAD	1346	FLUX 4-E LEVEL 3 (NANO/AMPS)	-????.
11:55:31	BAD	1367	BACKGROUND 2-G (NANO/AMPS)	-???.?
11:55:39	BAD	0493	IM INCORE T/C 8-H TEMP	-???.?
11:56:09	NORM	0493	IM INCORE T/C 8-H TEMP	585.7
11:56:33	NORM	1387	FLUX 3-L LEVEL 4 (NANO/AMPS)	- 18.
11:56:39	BAD	0493	IM INCORE T/C 8-H TEMP	-???.?
11:57:04	NORM	1096	FLUX 9-G LEVEL 1 (NANO/AMPS)	- 17.
11:57:21	BAD	1261	FLUX 13-F LEVEL 6 (NANO/AMPS)	-????.
11:57:39	NORM	0493	IM INCORE T/C 8-H TEMP	687.8
11:58:04	BAD	1096	FLUX 9-G LEVEL 1 (NANO/AMPS)	-????.

11:58:59	BAD	0493	IM INCORE T/C 8-H TEMP	-???.?
11:59:21	NORM	1261	FLUX 13-F LEVEL 6 (NANOAMPS)	- 1.
11:59:31	BAD	1366	FLUX 2-G LEVEL 7 (NANOAMPS)	-????.
11:59:39	NORM	0493	IM INCORE T/C 8-H TEMP	672.5
12:00:09	BAD	0493	IM INCORE T/C 8-H TEMP	-???.?
12:00:17	NORM	1226	FLUX 11-K LEVEL 3 (NANOAMPS)	47.
12:00:21	BAD	1261	FLUX 13-F LEVEL 6 (NANOAMPS)	-????.
12:00:28	FLAG	3579	RC3A-PT1 INSTR CONDITION	BAD
12:00:28	FLAG	3582	RC3B-PT2 INSTR CONDITION	BAD
12:00:39	NORM	0493	IM INCORE T/C 8-H TEMP	676.6
12:01:09	BAD	0493	IM INCORE T/C 8-H TEMP	-???.?
12:01:30	BAD	1350	FLUX 4-E LEVEL 7 (NANOAMPS)	-????.
12:01:39	NORM	0493	IM INCORE T/C 8-H TEMP	676.2
12:01:59	HIGH	0995	LETDOWN CLR 1B OUTLET	140.0
12:02:10	NORM	0507	IM INCORE T/C 9-N TEMP	691.0
12:02:17	BAD	1226	FLUX 11-K LEVEL 3 (NANOAMPS)	-????.
12:02:33	NORM	1388	FLUX 3-L LEVEL 5 (NANOAMPS)	- 16.
12:02:40	BAD	0507	IM INCORE T/C 9-N TEMP	-???.?
12:03:17	NORM	1225	FLUX 11-K LEVEL 2 (NANOAMPS)	75.
12:03:33	BAD	1388	FLUX 3-L LEVEL 5 (NANOAMPS)	-????.
12:03:40	NORM	0507	IM INCORE T/C 9-N TEMP	693.6
12:04:23	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
12:04:28	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
12:04:37	NORM	1720	NORCR HEAT/COOL RATE (DEGF/HR)	37.7
12:04:39	BAD	0493	IM INCORE T/C 8-H TEMP	-???.?
12:05:17	BAD	1225	FLUX 11-K LEVEL 2 (NANOAMPS)	-????.
12:05:39	NORM	0493	IM INCORE T/C 8-H TEMP	646.7
12:07:00	BAD	1021	RB AIR CLG COILS B EMER DISCH	-???.?
12:07:09	BAD	0493	IM INCORE T/C 8-H TEMP	-???.?
12:07:09	NORM	1141	FLUX 6-G LEVEL 6 (NANOAMPS)	- 20.
12:07:30	NORM	1021	RB AIR CLG COILS B EMER DISCH	59.8
12:07:41	BAD	0539	IM INCORE T/C 10-O TEMP	-???.?
12:08:09	BAD	1141	FLUX 6-G LEVEL 6 (NANOAMPS)	-????.
12:08:17	BAD	1229	FLUX 11-K LEVEL 6 (NANOAMPS)	-????.
12:08:33	NORM	1388	FLUX 3-L LEVEL 5 (NANOAMPS)	- 15.
12:09:05	NORM	1101	FLUX 9-G LEVEL 6 (NANOAMPS)	- 19.
12:09:17	NORM	1225	FLUX 11-K LEVEL 2 (NANOAMPS)	39.
12:10:08	BAD	1138	FLUX 6-G LEVEL 3 (NANOAMPS)	-????.
12:10:29	BAD	1348	FLUX 4-E LEVEL 5 (NANOAMPS)	-????.
12:12:03	HIGH	0332	CF TANK A LVL(FTI120)	13.32
12:12:07	NORM	1120	FLUX 7-F LEVEL 1 (NANOAMPS)	- 16.
12:12:13	BAD	1183	BACKGROUND 7-H1 (NANOAMPS)	-???.?
12:12:33	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
12:12:38	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
12:14:13	NORM	1183	BACKGROUND 7-H1 (NANOAMPS)	- 1.0
12:14:17	BAD	1225	FLUX 11-K LEVEL 2 (NANOAMPS)	-????.
12:14:17	BAD	1227	FLUX 11-K LEVEL 4 (NANOAMPS)	-????.
12:14:42	NORM	1471	BACKGROUND 14-H1 (NANOAMPS)	- 15.0
12:15:59	HIGH	0994	LETDOWN CLR 1A OUTLET	137.4
12:16:08	NORM	1138	FLUX 6-G LEVEL 3 (NANOAMPS)	41.
12:17:35	NORM	0403	RC PRESS REL VLV RV1A OUT TEMP	192.9
12:18:22	CONT	2740	D-G ROOM AIR CPRSR DF-P-2C	NORM
12:19:07	BAD	1125	FLUX 7-F LEVEL 6 (NANOAMPS)	-????.
12:19:19	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
12:19:23	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
12:19:30	BAD	1021	RB AIR CLG COILS B EMER DISCH	-???.?
12:20:00	NORM	1021	RB AIR CLG COILS B EMER DISCH	59.4
12:21:07	BAD	1120	FLUX 7-F LEVEL 1 (NANOAMPS)	-????.
12:21:54	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
12:21:59	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
12:22:07	NORM	1120	FLUX 7-F LEVEL 1 (NANOAMPS)	- 19.
12:23:08	CONT	2740	D-G ROOM AIR CPRSR DF-P-2C	TRIP
12:23:35	NORM	0404	RC PRESS REL VLV RV1B OUT TEMP	191.9

12:27:40	BAD	0507	IM INCORE T/C 9-N TEMP	-???.?
12:28:35	BAD	1406	FLUX 4-N LEVEL 7 (NANOAMPS)	-????.
12:29:11	BAD	1165	FLUX 5-K LEVEL 6 (NANOAMPS)	-????.
12:29:33	BAD	1338	FLUX 3-L LEVEL 5 (NANOAMPS)	-????.
12:29:44	NORM	1491	FLUX 13-C LEVEL 4 (NANOAMPS)	- 14.
12:30:11	NORM	1165	FLUX 5-K LEVEL 6 (NANOAMPS)	160.
12:31:43	CONT	3247	DECAY HT CL CLG WTR PMP DC-P-1A	ON
12:31:43	CONT	3248	DECAY HT CL CLG WTR PMP DC-P-1B	ON
12:31:49	NORM	0113	DECAY HT CL CLG PMP 1A DISCH	33.4
12:31:49	NORM	0114	DECAY HT CL CLG PMP 1B DISCH	35.8
12:33:10	NORM	0507	IM INCORE T/C 9-N TEMP	683.3
12:33:29	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
12:33:34	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
12:33:40	BAD	0507	IM INCORE T/C 9-N TEMP	-???.?
12:35:35	NORM	1406	FLUX 4-N LEVEL 7 (NANOAMPS)	- 10.
12:37:35	BAD	1406	FLUX 4-N LEVEL 7 (NANOAMPS)	-????.
12:38:42	BAD	1471	BACKGROUND 14-M (NANOAMPS)	-???.?
12:39:11	NORM	1163	FLUX 5-K LEVEL 4 (NANOAMPS)	125.
12:39:31	BAD	1364	FLUX 2-G LEVEL 5 (NANOAMPS)	-????.
12:39:35	NORM	1406	FLUX 4-N LEVEL 7 (NANOAMPS)	- 17.
12:39:36	NORM	1415	BACKGROUND 5-O (NANOAMPS)	- 18.5
12:40:31	NORM	1364	FLUX 2-G LEVEL 5 (NANOAMPS)	- 17.
12:40:35	BAD	1406	FLUX 4-N LEVEL 7 (NANOAMPS)	-????.
12:42:11	BAD	1165	FLUX 5-K LEVEL 6 (NANOAMPS)	-????.
12:43:11	NORM	1165	FLUX 5-K LEVEL 6 (NANOAMPS)	- 16.
12:46:08	NORM	1112	FLUX 9-E LEVEL 1 (NANOAMPS)	- 17.
12:46:09	NORM	1141	FLUX 6-G LEVEL 6 (NANOAMPS)	- 18.
12:46:10	BAD	0517	IM INCORE T/C 11-G TEMP	-???.?
12:46:11	BAD	1165	FLUX 5-K LEVEL 6 (NANOAMPS)	-????.
12:46:40	NORM	0517	IM INCORE T/C 11-G TEMP	374.3
12:47:09	NORM	1140	FLUX 6-G LEVEL 5 (NANOAMPS)	- 14.
12:47:11	NORM	1165	FLUX 5-K LEVEL 6 (NANOAMPS)	39.
12:48:09	NORM	1142	FLUX 6-G LEVEL 7 (NANOAMPS)	- 17.
12:49:31	BAD	1364	FLUX 2-G LEVEL 5 (NANOAMPS)	-????.
12:49:36	BAD	1415	BACKGROUND 5-O (NANOAMPS)	-???.?
12:51:08	BAD	1138	FLUX 6-G LEVEL 3 (NANOAMPS)	-????.
12:52:36	NORM	1415	BACKGROUND 5-O (NANOAMPS)	- 19.0
12:53:21	NORM	1265	FLUX 12-F LEVEL 2 (NANOAMPS)	13.
12:55:21	NORM	1264	FLUX 12-F LEVEL 1 (NANOAMPS)	8.
12:55:33	NORM	0332	CF TANK A LVL(FTH2O)	13.13
12:55:38	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
12:55:44	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
12:56:35	NORM	1405	FLUX 4-N LEVEL 6 (NANOAMPS)	4.
12:56:36	BAD	1415	BACKGROUND 5-O (NANOAMPS)	-???.?
12:57:35	BAD	1405	FLUX 4-N LEVEL 6 (NANOAMPS)	-????.
12:59:21	NORM	1261	FLUX 13-F LEVEL 6 (NANOAMPS)	- 18.
13:02:11	BAD	1165	FLUX 5-K LEVEL 6 (NANOAMPS)	-????.
13:02:23	NORM	1282	FLUX 11-E LEVEL 3 (NANOAMPS)	43.
13:04:09	BAD	1141	FLUX 6-G LEVEL 6 (NANOAMPS)	-????.
13:04:24	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
13:04:28	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
13:04:55	CONT	2921	MUP P1C MTR STATUS	TRIP
13:05:13	BAD	1180	FLUX 7-M LEVEL 5 (NANOAMPS)	-????.
13:05:44	BAD	1491	FLUX 13-C LEVEL 4 (NANOAMPS)	-????.
13:06:03	BAD	1085	FLUX 8-H LEVEL 6 (NANOAMPS)	-????.
13:06:30	BAD	1358	FLUX 3-F LEVEL 7 (NANOAMPS)	-????.
13:06:35	NORM	1405	FLUX 4-N LEVEL 6 (NANOAMPS)	282.
13:06:54	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
13:06:59	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
13:07:03	NORM	1035	FLUX 8-N LEVEL 6 (NANOAMPS)	1909.
13:07:14	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
13:07:18	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00

13:08:41	BAD	0539	IM INCORE T/C 10-O TEMP	-???.?
13:08:44	NORM	1491	FLUX 13-C LEVEL 4 (NANO/AMPS)	- 17.
13:09:00	BAD	1021	RB AIR CLG COILS B EMER DISCH	-???.?
13:09:03	NORM	1035	FLUX 8-H LEVEL 6 (NANO/AMPS)	1900.
13:09:21	BAD	1264	FLUX 12-F LEVEL 1 (NANO/AMPS)	-????.
13:09:30	NORM	1021	RB AIR CLG COILS B EMER DISCH	57.8
13:09:30	BAD	1358	FLUX 3-F LEVEL 7 (NANO/AMPS)	-????.
13:09:44	BAD	1491	FLUX 13-C LEVEL 4 (NANO/AMPS)	-????.
13:10:03	BAD	1085	FLUX 8-H LEVEL 6 (NANO/AMPS)	-????.
13:10:11	NORM	0539	IM INCORE T/C 10-O TEMP	500.8
13:10:21	NORM	1264	FLUX 12-F LEVEL 1 (NANO/AMPS)	6.
13:10:24	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
13:10:27	BAD	1327	BACKGROUND 7-B (NANO/AMPS)	-???.?
13:10:28	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
13:11:11	BAD	1161	FLUX 5-K LEVEL 2 (NANO/AMPS)	-????.
13:11:11	NORM	1165	FLUX 5-K LEVEL 6 (NANO/AMPS)	5.
13:11:13	NORM	1180	FLUX 7-H LEVEL 5 (NANO/AMPS)	841.
13:11:21	BAD	1264	FLUX 12-F LEVEL 1 (NANO/AMPS)	-????.
13:11:30	BAD	1354	FLUX 3-F LEVEL 3 (NANO/AMPS)	-????.
13:11:35	BAD	1402	FLUX 4-N LEVEL 3 (NANO/AMPS)	-????.
13:11:43	BAD	1487	BACKGROUND 14-D (NANO/AMPS)	-???.?
13:12:11	BAD	0539	IM INCORE T/C 10-O TEMP	-???.?
13:12:11	BAD	1160	FLUX 5-K LEVEL 1 (NANO/AMPS)	-????.
13:12:11	BAD	1165	FLUX 5-K LEVEL 6 (NANO/AMPS)	-????.
13:12:21	NORM	1264	FLUX 12-F LEVEL 1 (NANO/AMPS)	1.
13:12:23	BAD	1282	FLUX 11-E LEVEL 3 (NANO/AMPS)	-????.
13:12:35	BAD	1404	FLUX 4-N LEVEL 5 (NANO/AMPS)	-????.
13:13:11	BAD	1163	FLUX 5-K LEVEL 4 (NANO/AMPS)	-????.
13:13:21	BAD	1261	FLUX 13-F LEVEL 6 (NANO/AMPS)	-????.
13:13:23	NORM	1282	FLUX 11-E LEVEL 3 (NANO/AMPS)	120.
13:13:35	BAD	1405	FLUX 4-N LEVEL 6 (NANO/AMPS)	-????.
13:13:36	NORM	1415	BACKGROUND 5-O (NANO/AMPS)	.0
13:14:10	NORM	0507	IM INCORE T/C 9-N TEMP	685.0
13:14:21	BAD	1264	FLUX 12-F LEVEL 1 (NANO/AMPS)	-????.
13:14:21	BAD	1265	FLUX 12-F LEVEL 2 (NANO/AMPS)	-????.
13:15:21	NORM	1265	FLUX 12-F LEVEL 2 (NANO/AMPS)	- 19.
13:15:41	NORM	0539	IM INCORE T/C 10-O TEMP	462.0
13:16:10	BAD	0507	IM INCORE T/C 9-N TEMP	-???.?
13:16:11	BAD	0539	IM INCORE T/C 10-O TEMP	-???.?
13:16:21	NORM	1264	FLUX 12-F LEVEL 1 (NANO/AMPS)	316.
13:16:32	BAD	1371	FLUX 1-H LEVEL 4 (NANO/AMPS)	-????.
13:16:43	BAD	1489	FLUX 13-C LEVEL 2 (NANO/AMPS)	-????.
13:17:35	NORM	0402	RC PRESS REL VLV RV2 OUT TEMP	192.7
13:18:39	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
13:18:43	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
13:19:42	BAD	1470	FLUX 14-M LEVEL 7 (NANO/AMPS)	-????.
13:20:03	BAD	1080	FLUX 8-H LEVEL 1 (NANO/AMPS)	-????.
13:20:03	BAD	1084	FLUX 8-H LEVEL 5 (NANO/AMPS)	-????.
13:20:29	NORM	0094	LETDOWN CLR 1A OUTLET	131.3
13:21:05	HIGH	0402	RC PRESS REL VLV RV2 OUT TEMP	220.4
13:22:18	CONT	2996	RCP 2A VIBRASWITCH	HIGH
13:22:35	BAD	1403	FLUX 4-N LEVEL 4 (NANO/AMPS)	-????.
13:24:18	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
13:24:24	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
13:25:12	BAD	1177	FLUX 7-H LEVEL 2 (NANO/AMPS)	-????.
13:26:41	NORM	0539	IM INCORE T/C 10-O TEMP	455.9
13:27:43	NORM	1487	BACKGROUND 14-D (NANO/AMPS)	- 7.5
13:28:21	NORM	1261	FLUX 13-F LEVEL 6 (NANO/AMPS)	- 20.
13:28:23	NORM	1284	FLUX 11-E LEVEL 5 (NANO/AMPS)	13.
13:30:27	BAD	1326	FLUX 7-B LEVEL 7 (NANO/AMPS)	-????.
13:31:12	NORM	1177	FLUX 7-H LEVEL 2 (NANO/AMPS)	338.
13:32:05	NORM	0402	RC PRESS REL VLV RV2 OUT TEMP	192.2
13:33:21	BAD	1264	FLUX 12-F LEVEL 1 (NANO/AMPS)	

13:34:33	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
13:34:39	BAD	0504	IM INCORE T/C G-L TEMP	-???.?
13:34:39	BAD	1445	FLUX 10-R LEVEL 6 (NANOAMPS)	-????.
13:35:09	NORM	0504	IM INCORE T/C G-L TEMP	605.9
13:35:10	NORM	0525	IM INCORE T/C 5-D TEMP	600.4
13:35:16	BAD	1210	FLUX 10-H LEVEL 3 (NANOAMPS)	-????.
13:35:21	BAD	1265	FLUX 12-F LEVEL 2 (NANOAMPS)	-????.
13:35:36	BAD	1415	BACKGROUND 5-O (NANOAMPS)	-???.?
13:35:39	NORM	1447	BACKGROUND 10-R (NANOAMPS)	193.5
13:36:08	BAD	1136	FLUX G-G LEVEL 1 (NANOAMPS)	-????.
13:37:03	CONT	2956	RC PUMP 2A SEAL LEAK TK LVL	NORM
13:38:10	BAD	0525	IM INCORE T/C 5-D TEMP	-???.?
13:38:13	BAD	1133	BACKGROUND 7-M (NANOAMPS)	-???.?
13:39:09	BAD	0504	IM INCORE T/C G-L TEMP	-???.?
13:40:36	LOW	0151	INTER CLG PUMP DISCH PRESS	94.8
13:40:41	CONT	3246	INTMD CLG PMP IC-P-1B	ON
13:40:51	NORM	0151	INTER CLG PUMP DISCH PRESS	146.4
13:42:29	NORM	0905	LETDOWN CLR 1B OUTLET	129.0
13:46:03	NORM	1137	FLUX G-C LEVEL 2 (NANOAMPS)	11.
13:46:09	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
13:46:14	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
13:47:03	BAD	1137	FLUX G-G LEVEL 2 (NANOAMPS)	-????.
13:47:30	BAD	1021	RB AIR CLG COILS B EMER DISCH	-???.?
13:48:00	NORM	1021	RB AIR CLG COILS B EMER DISCH	52.1

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15:02:13	ALARM	PRINTER RETURN-TO-NORMAL		
13:50:18	CONT	2984	RCP 2B UPPER OIL POT LVL 2	LOW
13:50:18	CONT	2986	RCP 1B UPPER OIL POT LVL 2	LOW
13:50:19	CONT	2983	RCP 2A UPPER OIL POT LVL 2	LOW
13:50:20	CONT	2934	DHP A MTR STATUS	NORM
13:50:20	CONT	2935	DHP B MTR STATUS	NORM
13:50:21	CONT	3167	4 PSI RB PRESS RED CH TRIP	HIGH
15:03:25	ATRA	0397	RC LOOP B INLET TEMP WIDE 2	ATR 02 200.0/ 2.0
13:50:21	CONT	3168	4 PSI RB PRESS GRN CH TRIP	HIGH
13:50:21	CONT	3169	4 PSI RB PRESS YEL CH TRIP	HIGH
13:50:21	CONT	3241	DH REMOVAL PMP 1A	ON
15:04:06	ATRA	0397	RC LOOP B INLET TEMP WIDE 2	ATR 02 150.0/ 2.0
13:50:21	CONT	3242	DH REMOVAL PMP 1B	ON
13:50:21	CONT	3245	INTMD CLG PMP IC-P-1A	OFF
13:50:21	CONT	3246	INTMD CLG PMP IC-P-1B	OFF
13:50:21	CONT	3278	ES BLDG ISLN SW ACT B CH-1 TRIP	TRIP
13:50:21	CONT	3279	ES BLDG ISLN SW ACT B CH-2 TRIP	TRIP
13:50:21	CONT	3280	ES BLDG ISLN SW ACT B CH-3 TRIP	TRIP
13:50:21	LOW	0151	INTER CLG PUMP DISCH PRESS	109.5
13:50:21	CONT	2818	ES ACT A 2/3 LOGIC EMER INJ GP1	ACT
13:50:21	CONT	2819	ES ACT A 2/3 LOGIC EMER INJ GP2	ACT
13:50:21	CONT	2820	ES ACT A 2/3 LOGIC EMER INJ GP3	ACT
13:50:21	CONT	2827	ES ACT A 2/3 LOGIC BLDG ISLN GP1	ISLN
13:50:21	CONT	2828	ES ACT A 2/3 LOGIC BLDG ISLN GP2	ISLN
13:50:21	CONT	2829	ES ACT A 2/3 LOGIC BLDG ISLN GP3	ISLN
13:50:21	CONT	2833	ES BLDG ISLN SW ACT A CH1 TRIP	TRIP
13:50:21	CONT	2834	ES BLDG ISLN SW ACT A CH2 TRIP	TRIP
13:50:21	CONT	2835	ES BLDG ISLN SW ACT A CH3 TRIP	TRIP
13:50:21	CONT	2843	ES ACT B 2/3 LOGIC EMER INJ GP1	ACT
13:50:21	CONT	2844	ES ACT B 2/3 LOGIC EMER INJ GP2	ACT
13:50:21	CONT	2845	ES ACT B 2/3 LOGIC EMER INJ GP3	ACT
13:50:21	CONT	2852	ES ACT B 2/3 LOGIC BLDG ISLN GP1	ISLN
13:50:21	CONT	2853	ES ACT B 2/3 LOGIC BLDG ISLN GP2	ISLN
13:50:21	CONT	2854	ES ACT B 2/3 LOGIC BLDG ISLN GP3	ISLN
13:50:21	CONT	2991	RCP 1A LOWER OIL POT LVL 4	LOW
13:50:22	CONT	3170	4 PSI RB PRESS BLUE CH TRIP	HIGH
13:50:22	CONT	2991	RCP 1A LOWER OIL POT LVL 4	NORM
13:50:23	CONT	2991	RCP 1A LOWER OIL POT LVL 4	LOW

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13:50:24	CONT	2904	RCP 1B LOWER OIL POT LVL 4	NORM
13:50:25	CONT	2903	RCP 2B LOWER OIL POT LVL 4	LOW
13:50:26	CONT	2953	BSP A MTR STATUS	NORM
13:50:26	CONT	2954	BSP B MTR STATUS	NORM
13:50:26	CONT	3264	ES BLDG SPRAY SW ACT B CH2 TRIP	TRIP
13:50:27	CONT	2836	ES BLDG SPRAY SW ACT A CH1 TRIP	SPRY
13:50:27	CONT	2837	ES BLDG SPRAY SW ACT A CH2 TRIP	SPRY
13:50:27	CONT	2838	ES BLDG SPRAY SW ACT A CH3 TRIP	SPRY
13:50:27	CONT	2839	ES ACT A 2/3 LOGIC RB SPRAY	ACT
13:50:27	CONT	2903	RCP 2B LOWER OIL POT LVL 4	NORM
13:50:27	CONT	3050	ES ACT B 2/3 LOGIC RB SPRAY	ACT
13:50:27	CONT	3265	ES BLDG SPRAY SW ACT B CH3 TRIP	TRIP
13:50:27	CONT	3231	ES BLDG SPRAY SW ACT B CH1 TRIP	TRIP
13:50:29	HIGH	0994	LETDOWN CLR 1A OUTLET	162.0
13:50:29	HIGH	0995	LETDOWN CLR 1B OUTLET	160.0
13:50:31	CONT	3265	ES BLDG SPRAY SW ACT B CH3 TRIP	NORM
13:50:31	CONT	3281	ES BLDG SPRAY SW ACT B CH1 TRIP	NORM
13:50:31	CONT	3050	ES ACT B 2/3 LOGIC RB SPRAY	NORM
13:50:32	CONT	3264	ES BLDG SPRAY SW ACT B CH2 TRIP	NORM
13:50:32	CONT	2836	ES BLDG SPRAY SW ACT A CH1 TRIP	NORM
13:50:32	CONT	2837	ES BLDG SPRAY SW ACT A CH2 TRIP	NORM
13:50:32	CONT	2838	ES BLDG SPRAY SW ACT A CH3 TRIP	NORM
13:50:32	CONT	2839	ES ACT A 2/3 LOGIC RB SPRAY	NORM
13:50:35	HIGH	0403	RC PRESS REL VLV RV1A OUT TEMP	203.7
13:50:35	HIGH	0404	RC PRESS REL VLV RV1B OUT TEMP	205.0
13:50:36	HIGH	0422	RCP 1A AIR TEMP DEGF	157.5
13:50:36	HIGH	0425	RCP 1B AIR TEMP DEGF	124.7
13:50:37	BAD	0451	IC RCP 1A COOL OUTLET TEMP	-???.?
13:50:38	BAD	0475	SP STARTUP FDWTR FLOW A (IN/H2O)	-???.?
13:50:39	CONT	2983	RCP 2A UPPER OIL POT LVL 2	NORM
13:50:40	CONT	2984	RCP 2B UPPER OIL POT LVL 2	NORM
13:50:40	CONT	2956	RC PUMP 2A SEAL LEAK TK LVL	NORM
13:50:41	CONT	2980	RCP 2A UPPER OIL POT LVL 1	HIGH
13:50:41	CONT	2981	RCP 2B UPPER OIL POT LVL 1	HIGH
13:50:41	CONT	2982	RCP 1A UPPER OIL POT LVL 2	NORM
13:50:41	CONT	2986	RCP 1B UPPER OIL POT LVL 2	NORM
13:50:42	CONT	2956	RC PUMP 2A SEAL LEAK TK LVL	HIGH
13:50:44	NORM	0505	RP LOOP A RC DELTA PRESS (INH2O)	.0
13:50:45	CONT	2979	RCP 1A UPPER OIL POT LVL 1	HIGH
13:50:45	CONT	2830	ES ACT A BLDG ISLN CH1 DEFEATED	DEFT
13:50:46	CONT	2818	ES ACT A 2/3 LOGIC EMER INJ GP1	NORM
13:50:46	CONT	2819	ES ACT A 2/3 LOGIC EMER INJ GP2	NORM
13:50:46	CONT	2820	ES ACT A 2/3 LOGIC EMER INJ GP3	NORM
13:50:46	CONT	2827	ES ACT A 2/3 LOGIC BLDG ISLN GP1	NORM
13:50:46	CONT	2828	ES ACT A 2/3 LOGIC BLDG ISLN GP2	NORM
13:50:46	CONT	2829	ES ACT A 2/3 LOGIC BLDG ISLN GP3	NORM
13:50:46	CONT	2832	ES ACT A BLDG ISLN CH3 DEFEATED	DEFT
13:50:46	CONT	3245	INTMD CLG PMP IC-P-1A	ON
13:50:47	CONT	3047	ES ACT B BLDG ISLN CH1 DEFEATED	DEFT
13:50:48	CONT	3049	ES ACT B BLDG ISLN CH3 DEFEATED	DEFT
13:50:48	CONT	3246	INTMD CLG PMP IC-P-1B	ON
13:50:48	CONT	2843	ES ACT B 2/3 LOGIC EMER INJ GP1	NORM
13:50:48	CONT	2844	ES ACT B 2/3 LOGIC EMER INJ GP2	NORM
13:50:48	CONT	2845	ES ACT B 2/3 LOGIC EMER INJ GP3	NORM
13:50:48	CONT	2852	ES ACT B 2/3 LOGIC BLDG ISLN GP1	NORM
13:50:48	CONT	2853	ES ACT B 2/3 LOGIC BLDG ISLN GP2	NORM
13:50:48	CONT	2854	ES ACT B 2/3 LOGIC BLDG ISLN GP3	NORM
13:50:49	CONT	2985	RCP 1B UPPER OIL POT LVL 1	HIGH
13:50:51	NORM	0151	INTER CLG PUMP DISCH PRESS	150.9
13:50:59	CONT	2901	RCP 1A LOWER OIL POT LVL 4	NORM
13:51:01	CONT	2921	MUP P1C MTR STATUS	TRIP
13:51:06	LOW	0150	INTER CLG PUMP SUCT PRESS	6.23
13:51:07	[illegible]	[illegible]	[illegible]	[illegible]

13:51:13	LOW	0599	RP CH D RC FLOW LOOP A (PCT)	.1
13:51:13	LOW	0601	RP CH A RC TOTAL FLOW (PCT)	.1
13:51:13	LOW	0602	RP CH B RC TOTAL FLOW (PCT)	.0
13:51:13	LOW	0603	RP CH C RC TOTAL FLOW (PCT)	3.1
13:51:13	LOW	0604	RP CH D RC TOTAL FLOW (PCT)	1.6
13:51:17	CONT	2629	480V MOT CONT CTR 2-32A BKR	OFF
13:51:17	CONT	2656	LEAKAGE CLSD CLG PUMP DC-P-2A	TRIP
13:51:18	BAD	1232	FLUX 12-K LEVEL 1 (NANOAMPS)	-????.
13:51:25	NORM	1284	FLUX 11-E LEVEL 5 (NANOAMPS)	1030.
13:51:27	NORM	1326	FLUX 7-B LEVEL 7 (NANOAMPS)	96.
13:51:32	CONT	2979	RCP 1A UPPER OIL POT LVL 1	NORM
13:51:36	NORM	0150	INTER CLG PUMP SUCT PRESS	16.87
13:51:36	NORM	0425	RCP 1B AIR TEMP DEGF	109.3
13:51:41	CONT	2985	RCP 1B UPPER OIL POT LVL 1	NORM
13:51:43	CONT	2981	RCP 2B UPPER OIL POT LVL 1	NORM
13:52:06	NORM	0422	RCP 1A AIR TEMP DEGF	114.9
13:52:07	NORM	1126	FLUX 7-F LEVEL 7 (NANOAMPS)	0
13:52:08	NORM	1137	FLUX 6-G LEVEL 2 (NANOAMPS)	54.
13:52:09	NORM	0501	IM INCORE T/C 5-G TEMP	623.7
13:52:09	NORM	1140	FLUX 6-G LEVEL 5 (NANOAMPS)	130.
13:52:13	NORM	1183	BACKGROUND 7-M (NANOAMPS)	160.5
13:52:18	NORM	1232	FLUX 12-K LEVEL 1 (NANOAMPS)	4.
13:52:31	CONT	2631	480V MOT CONT CTR 2-42A BKR	OFF
13:52:31	CONT	2657	LEAKAGE CLSD CLG PUMP DC-P-2B	TRIP
13:52:35	NORM	0402	RC PRESS REL VLV RV2 OUT TEMP	180.5
13:52:35	NORM	0403	RC PRESS REL VLV RV1A OUT TEMP	178.6
13:52:36	NORM	1415	BACKGROUND 5-O (NANOAMPS)	.0
13:52:39	CONT	2962	RCP 1B LUBE OIL FLOW	NORM
13:52:53	CONT	3170	4 PSI RB PRESS BLUE CH TRIP	NORM
13:53:05	HIGH	0402	RC PRESS REL VLV RV2 OUT TEMP	208.8
13:53:08	BAD	1134	FLUX 7-E LEVEL 7 (NANOAMPS)	-????.
13:53:10	BAD	0506	IM INCORE T/C 8-N TEMP	-???.?
13:53:14	CONT	3167	4 PSI RB PRESS RED CH TRIP	NORM
13:53:27	BAD	1326	FLUX 7-B LEVEL 7 (NANOAMPS)	-????.
13:53:32	CONT	3280	ES BLDG ISLN SW ACT B CH-3 TRIP	NORM
13:53:32	CONT	3049	ES ACT B BLDG ISLN CH3 DEFEATED	NORM
13:53:37	CONT	2830	ES ACT A BLDG ISLN CH1 DEFEATED	NORM
13:53:37	CONT	2833	ES BLDG ISLN SW ACT A CH1 TRIP	NORM
13:53:39	BAD	0501	IM INCORE T/C 5-G TEMP	-???.?
13:53:41	BAD	0539	IM INCORE T/C 10-O TEMP	-???.?
13:53:43	NORM	1487	BACKGROUND 14-D (NANOAMPS)	200.0
13:53:49	CONT	3169	4 PSI RB PRESS YEL CH TRIP	NORM
13:54:01	CONT	2834	ES BLDG ISLN SW ACT A CH2 TRIP	NORM
13:54:03	CONT	3279	ES BLDG ISLN SW ACT B CH-2 TRIP	NORM
13:54:08	BAD	1137	FLUX 6-G LEVEL 2 (NANOAMPS)	-????.
13:54:11	NORM	1162	FLUX 5-K LEVEL 3 (NANOAMPS)	1999.
13:54:25	NORM	1300	FLUX 10-C LEVEL 5 (NANOAMPS)	85.
13:54:29	NORM	0994	LETDOWN CLR 1A OUTLET	130.0
13:54:36	BAD	1415	BACKGROUND 5-O (NANOAMPS)	-???.?
13:54:41	NORM	0542	IM INCORE T/C 13-L TEMP	264.8
13:54:43	BAD	1487	BACKGROUND 14-D (NANOAMPS)	-???.?
13:55:05	NORM	0402	RC PRESS REL VLV RV2 OUT TEMP	177.3
13:55:07	BAD	1126	FLUX 7-F LEVEL 7 (NANOAMPS)	-????.
13:55:15	CONT	3047	ES ACT B BLDG ISLN CH1 DEFEATED	NORM
13:55:15	CONT	3278	ES BLDG ISLN SW ACT B CH-1 TRIP	NORM
13:55:18	BAD	1238	FLUX 12-K LEVEL 7 (NANOAMPS)	-????.
13:55:44	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
13:55:47	CONT	2681	PRESS HTR GROUP 8	TRIP
13:55:49	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
13:56:05	NORM	0404	RC PRESS REL VLV RV1B OUT TEMP	190.3
13:56:06	NORM	1114	FLUX 9-E LEVEL 3 (NANOAMPS)	1124.
13:56:07	CONT	2953	RSP A HTR STATUS	TRIP

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13:56:00	BAD	0490	SP STM GEN UPPER DWNCMR TEMP B2	-???.?
13:56:09	BAD	1140	FLUX G-G LEVEL 5 (NANOAMPS)	-????.
13:56:11	BAD	0542	IM INCORE T/C 13-L TEMP	-???.?
13:56:11	BAD	1162	FLUX 5-K LEVEL 3 (NANOAMPS)	-????.
13:56:30	NORM	0490	SP STM GEN UPPER DWNCMR TEMP B2	127.7
13:57:03	HIGH	0332	CF TANK A LVL(FTH2O)	13.72
13:57:06	BAD	1114	FLUX 9-E LEVEL 3 (NANOAMPS)	-????.
13:57:10	NORM	1155	FLUX 5-H LEVEL 4 (NANOAMPS)	43.
13:57:10	NORM	1156	FLUX 5-H LEVEL 5 (NANOAMPS)	202.
13:57:10	NORM	1158	FLUX 5-H LEVEL 7 (NANOAMPS)	176.
13:57:13	NORM	1238	FLUX 12-K LEVEL 7 (NANOAMPS)	1999.
13:57:35	CONT	2934	DHP A MTR STATUS	TRIP
13:57:35	CONT	2935	DHP B MTR STATUS	TRIP
13:57:36	CONT	3241	DH REMOVAL PMP 1A	OFF
13:57:36	CONT	3242	DH REMOVAL PMP 1B	OFF
13:57:40	BAD	0517	IM INCORE T/C 11-G TEMP	-???.?
13:58:03	NORM	0332	CF TANK A LVL(FTH2O)	12.85
13:58:05	BAD	1101	FLUX 9-G LEVEL 6 (NANOAMPS)	-????.
13:58:00	NORM	1140	FLUX G-G LEVEL 5 (NANOAMPS)	65.
13:58:10	BAD	1155	FLUX 5-H LEVEL 4 (NANOAMPS)	-????.
13:58:10	BAD	1156	FLUX 5-H LEVEL 5 (NANOAMPS)	-????.
13:58:10	BAD	1158	FLUX 5-H LEVEL 7 (NANOAMPS)	-????.
13:58:11	NORM	0530	IM INCORE T/C 10-O TEMP	447.5
13:58:13	BAD	1183	BACKGROUND 7-H (NANOAMPS)	-???.?
13:58:15	CONT	2832	ES ACT A BLDG ISLN CH3 DEFEATED	NORM
13:58:15	CONT	2835	ES BLDG ISLN SW ACT A CH3 TRIP	NORM
13:58:44	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
13:58:49	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
14:00:03	HIGH	0332	CF TANK A LVL(FTH2O)	13.39
14:00:33	NORM	0332	CF TANK A LVL(FTH2O)	12.92
14:00:39	NORM	0504	IM INCORE T/C G-L TEMP	637.2
14:00:41	NORM	0538	IM INCORE T/C 10-R TEMP	461.9
14:00:41	NORM	0542	IM INCORE T/C 13-L TEMP	666.7
14:01:10	NORM	0506	IM INCORE T/C 8-H TEMP	681.6
14:01:11	BAD	0538	IM INCORE T/C 10-R TEMP	-???.?
14:01:11	BAD	0542	IM INCORE T/C 13-L TEMP	-???.?
14:01:18	BAD	1238	FLUX 12-K LEVEL 7 (NANOAMPS)	-????.
14:01:33	HIGH	0332	CF TANK A LVL(FTH2O)	13.30
14:01:35	HIGH	0402	RC PRESS REL VLV RV2 OUT TEMP	206.7
14:01:41	NORM	0538	IM INCORE T/C 10-R TEMP	473.6
14:01:44	CONT	3168	4 PSI RB PRESS GRN CH TRIP	NORM
14:02:05	HIGH	0404	RC PRESS REL VLV RV1B OUT TEMP	200.0
14:02:23	NORM	1233	FLUX 11-E LEVEL 4 (NANOAMPS)	- 13.
14:02:34	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
14:02:39	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
14:03:06	NORM	1114	FLUX 9-E LEVEL 3 (NANOAMPS)	1611.
14:03:27	NORM	1326	FLUX 7-B LEVEL 7 (NANOAMPS)	- 10.
14:03:29	NORM	1348	FLUX 4-E LEVEL 5 (NANOAMPS)	3.
14:04:06	BAD	1114	FLUX 9-E LEVEL 3 (NANOAMPS)	-????.
14:04:29	NORM	1346	FLUX 4-E LEVEL 3 (NANOAMPS)	- 11.
14:04:32	NORM	1371	FLUX 1-H LEVEL 4 (NANOAMPS)	348.
14:05:26	NORM	1310	FLUX 9-C LEVEL 7 (NANOAMPS)	271.
14:05:26	NORM	1314	FLUX 8-B LEVEL 3 (NANOAMPS)	714.
14:05:33	NORM	0332	CF TANK A LVL(FTH2O)	12.81
14:06:02	CONT	2674	PRESS HTR GROUP 1	NORM
14:06:02	CONT	2675	PRESS HTR GROUP 2	NORM
14:06:09	BAD	1140	FLUX G-G LEVEL 5 (NANOAMPS)	-????.
14:06:26	BAD	1314	FLUX 8-B LEVEL 3 (NANOAMPS)	-????.
14:06:27	BAD	1326	FLUX 7-B LEVEL 7 (NANOAMPS)	-????.
14:06:30	NORM	1350	FLUX 4-E LEVEL 7 (NANOAMPS)	- 13.
14:07:26	BAD	1310	FLUX 9-C LEVEL 7 (NANOAMPS)	-????.
14:07:29	NORM	1347	FLUX 4-E LEVEL 4 (NANOAMPS)	- 11.

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14:09:32	BAD	1375	BACKGROUND 1-H (NANO/MPS)	-???.?
14:09:40	NORM	0517	IM INCORE T/C 11-G TEMP	635.9
14:10:25	BAD	1300	FLUX 10-C LEVEL 5 (NANO/MPS)	-????.
14:11:10	BAD	0506	IM INCORE T/C 8-N TEMP	-???.?
14:11:59	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
14:12:04	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
14:12:29	BAD	1347	FLUX 4-E LEVEL 4 (NANO/MPS)	-????.
14:12:44	BAD	0605	RP LOOP A RC DELTA PRESS (INH2O)	-???.?
14:13:39	BAD	1447	BACKGROUND 10-R (NANO/MPS)	-???.?
14:14:21	BAD	1261	FLUX 13-F LEVEL 6 (NANO/MPS)	-????.
14:14:30	BAD	1350	FLUX 4-E LEVEL 7 (NANO/MPS)	-????.
14:14:44	NORM	0605	RP LOOP A RC DELTA PRESS (INH2O)	- 8.9
14:15:11	NORM	1162	FLUX 5-K LEVEL 3 (NANO/MPS)	1000.
14:15:54	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
14:15:59	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
14:16:11	NORM	1167	BACKGROUND 5-K (NANO/MPS)	30.5
14:16:19	NORM	1244	FLUX 13-H LEVEL 5 (NANO/MPS)	322.
14:16:23	HIGH	0177	SSCC WATER HDTK LEVEL	6.332
14:16:33	HIGH	0332	CF TANK A LVL(FTH2O)	13.41
14:17:21	NORM	1261	FLUX 13-F LEVEL 6 (NANO/MPS)	35.
14:18:03	NORM	0332	CF TANK A LVL(FTH2O)	13.12
14:18:04	BAD	1092	FLUX 9-H LEVEL 5 (NANO/MPS)	-????.
14:18:11	BAD	1167	BACKGROUND 5-K (NANO/MPS)	-???.?
14:18:27	BAD	1321	FLUX 7-B LEVEL 2 (NANO/MPS)	-????.
14:18:29	NORM	1347	FLUX 4-E LEVEL 4 (NANO/MPS)	5.
14:18:30	NORM	1350	FLUX 4-E LEVEL 7 (NANO/MPS)	- 3.
14:18:33	HIGH	0332	CF TANK A LVL(FTH2O)	13.34
14:19:30	BAD	1350	FLUX 4-E LEVEL 7 (NANO/MPS)	-????.
14:20:11	NORM	1167	BACKGROUND 5-K (NANO/MPS)	.0
14:21:03	NORM	0332	CF TANK A LVL(FTH2O)	12.45
14:21:04	BAD	1094	FLUX 9-H LEVEL 7 (NANO/MPS)	-????.
14:21:07	BAD	1123	FLUX 7-F LEVEL 4 (NANO/MPS)	-????.
14:21:11	BAD	1167	BACKGROUND 5-K (NANO/MPS)	-???.?
14:21:15	CONT	2740	D-G ROOM AIR CPRSR DF-P-2C	NORM
14:21:23	BAD	1283	FLUX 11-E LEVEL 4 (NANO/MPS)	-????.
14:21:23	BAD	1284	FLUX 11-E LEVEL 5 (NANO/MPS)	-????.
14:21:29	BAD	1346	FLUX 4-E LEVEL 3 (NANO/MPS)	-????.
14:22:11	NORM	1167	BACKGROUND 5-K (NANO/MPS)	61.0
14:22:29	BAD	1348	FLUX 4-E LEVEL 5 (NANO/MPS)	-????.
14:23:12	BAD	1177	FLUX 7-H LEVEL 2 (NANO/MPS)	-????.
14:23:13	NORM	1245	FLUX 13-H LEVEL 6 (NANO/MPS)	161.
14:23:24	CONT	2738	D-G ROOM AIR CPRSR DF-P-2A	NORM
14:23:29	BAD	1347	FLUX 4-E LEVEL 4 (NANO/MPS)	-????.
14:24:06	NORM	1114	FLUX 9-E LEVEL 3 (NANO/MPS)	1000.
14:24:11	BAD	1167	BACKGROUND 5-K (NANO/MPS)	-???.?
14:24:23	BAD	1282	FLUX 11-E LEVEL 3 (NANO/MPS)	-????.
14:24:35	NORM	0404	RC PRESS REL VLV RV1B OUT TEMP	102.9
14:25:09	BAD	1142	FLUX 6-G LEVEL 7 (NANO/MPS)	-????.
14:25:54	CONT	2740	D-G ROOM AIR CPRSR DF-P-2C	TRIP
14:26:19	BAD	1249	FLUX 13-G LEVEL 2 (NANO/MPS)	-????.
14:26:29	NORM	1347	FLUX 4-E LEVEL 4 (NANO/MPS)	- 10.
14:26:30	NORM	1350	FLUX 4-E LEVEL 7 (NANO/MPS)	- 15.
14:27:05	NORM	1101	FLUX 9-G LEVEL 6 (NANO/MPS)	- 17.
14:27:18	BAD	1234	FLUX 12-K LEVEL 3 (NANO/MPS)	-????.
14:27:18	BAD	1235	FLUX 12-K LEVEL 4 (NANO/MPS)	-????.
14:27:18	BAD	1236	FLUX 12-K LEVEL 5 (NANO/MPS)	-????.
14:27:18	BAD	1237	FLUX 12-K LEVEL 6 (NANO/MPS)	-????.
14:27:22	BAD	1273	FLUX 11-G LEVEL 2 (NANO/MPS)	-????.
14:27:29	NORM	1346	FLUX 4-E LEVEL 3 (NANO/MPS)	- 12.
14:27:50	CONT	2738	D-G ROOM AIR CPRSR DF-P-2A	TRIP
14:28:13	BAD	1180	FLUX 7-H LEVEL 5 (NANO/MPS)	-????.
14:28:19	NORM	1249	FLUX 13-G LEVEL 2 (NANO/MPS)	914.

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14:31:04	BAD	1090	FLUX 9-H LEVEL 3 (NANOAMPS)	-????.
14:32:02	CONT	3174	RC MAKE-UP PMP 1C TRIPPED	NORM
14:32:03	HIGH	0332	CF TANK A LVL(FTH2O)	13.42
14:32:04	BAD	1091	FLUX 9-H LEVEL 4 (NANOAMPS)	-????.
14:32:05	CONT	3174	RC MAKE-UP PMP 1C TRIPPED	TRIP
14:32:07	CONT	2921	MUP P1C MTR STATUS	NORM
14:32:12	BAD	1178	FLUX 7-H LEVEL 3 (NANOAMPS)	-????.
14:32:22	NORM	1273	FLUX 11-G LEVEL 2 (NANOAMPS)	7.
14:33:13	CONT	2674	PRESS HTR GROUP 1	NORM
14:33:13	CONT	2675	PRESS HTR GROUP 2	NORM
14:33:21	BAD	1261	FLUX 13-F LEVEL 6 (NANOAMPS)	-????.
14:33:22	BAD	1273	FLUX 11-G LEVEL 2 (NANOAMPS)	-????.
14:33:29	BAD	1349	FLUX 4-E LEVEL 6 (NANOAMPS)	-????.
14:33:50	NORM	0995	LETDOWN CLR 1B OUTLET	131.8
14:34:21	NORM	1261	FLUX 13-F LEVEL 6 (NANOAMPS)	- 3.
14:35:00	BAD	1021	RB AIR CLG COILS B EMER DISCH	-???.?
14:35:11	NORM	1166	FLUX 5-K LEVEL 7 (NANOAMPS)	447.
14:35:11	NORM	1167	BACKGROUND 5-K (NANOAMPS)	127.0
14:35:22	NORM	1273	FLUX 11-G LEVEL 2 (NANOAMPS)	- 4.
14:35:23	NORM	1282	FLUX 11-E LEVEL 3 (NANOAMPS)	354.
14:35:30	NORM	1021	RB AIR CLG COILS B EMER DISCH	57.5
14:35:33	NORM	0332	CF TANK A LVL(FTH2O)	13.13
14:36:03	HIGH	0332	CF TANK A LVL(FTH2O)	13.40
14:36:11	BAD	1167	BACKGROUND 5-K (NANOAMPS)	-???.?
14:36:23	BAD	1282	FLUX 11-E LEVEL 3 (NANOAMPS)	-????.
14:36:24	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
14:36:27	NORM	1326	FLUX 7-B LEVEL 7 (NANOAMPS)	- 3.
14:36:29	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
14:36:32	CONT	2921	MUP P1C MTR STATUS	TRIP
14:38:11	BAD	1166	FLUX 5-K LEVEL 7 (NANOAMPS)	-????.
14:38:27	BAD	1326	FLUX 7-B LEVEL 7 (NANOAMPS)	-????.
14:39:34	CONT	2674	PRESS HTR GROUP 1	TRIP
14:39:34	CONT	2675	PRESS HTR GROUP 2	TRIP
14:40:18	BAD	1232	FLUX 12-K LEVEL 1 (NANOAMPS)	-????.
14:40:28	CONT	2674	PRESS HTR GROUP 1	NORM
14:40:28	CONT	2675	PRESS HTR GROUP 2	NORM
14:42:07	NORM	1123	FLUX 7-F LEVEL 4 (NANOAMPS)	- 19.
14:42:11	NORM	1165	FLUX 5-K LEVEL 6 (NANOAMPS)	545.
14:42:13	NORM	1130	FLUX 7-H LEVEL 5 (NANOAMPS)	1999.
14:43:11	NORM	1166	FLUX 5-K LEVEL 7 (NANOAMPS)	295.
14:44:11	BAD	1166	FLUX 5-K LEVEL 7 (NANOAMPS)	-????.
14:44:11	NORM	1167	BACKGROUND 5-K (NANOAMPS)	171.5
14:47:21	BAD	1261	FLUX 13-F LEVEL 6 (NANOAMPS)	-????.
14:47:27	NORM	1321	FLUX 7-B LEVEL 2 (NANOAMPS)	949.
14:47:29	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
14:47:34	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
14:48:22	BAD	1273	FLUX 11-G LEVEL 2 (NANOAMPS)	-????.
14:48:29	BAD	1346	FLUX 4-E LEVEL 3 (NANOAMPS)	-????.
14:48:29	BAD	1347	FLUX 4-E LEVEL 4 (NANOAMPS)	-????.
14:48:29	BAD	1348	FLUX 4-E LEVEL 5 (NANOAMPS)	-????.
14:48:30	BAD	1350	FLUX 4-E LEVEL 7 (NANOAMPS)	-????.
14:49:03	BAD	1089	FLUX 9-H LEVEL 2 (NANOAMPS)	-????.
14:49:11	BAD	1167	BACKGROUND 5-K (NANOAMPS)	-???.?
14:49:42	NORM	1475	FLUX 13-L LEVEL 4 (NANOAMPS)	1999.
14:50:59	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
14:51:04	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
14:51:13	NORM	1232	FLUX 12-K LEVEL 1 (NANOAMPS)	166.
14:52:06	BAD	1114	FLUX 9-E LEVEL 3 (NANOAMPS)	-????.
14:52:11	BAD	0532	IM INCORE T/C 3-H TEMP	-???.?
14:52:13	NORM	1234	FLUX 12-K LEVEL 3 (NANOAMPS)	- 11.
14:52:13	NORM	1235	FLUX 12-K LEVEL 4 (NANOAMPS)	74.
14:52:13	NORM	1236	FLUX 12-K LEVEL 5 (NANOAMPS)	30.

14:52:44	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
14:53:11	BAD	1165	FLUX 5-K LEVEL 6 (NANO/MPS)	.00
14:53:14	BAD	1192	FLUX 9-N LEVEL 1 (NANO/MPS)	-????.
14:54:13	NORM	1183	BACKGROUND 7-M (NANO/MPS)	-????.
14:54:14	NORM	1192	FLUX 9-N LEVEL 1 (NANO/MPS)	186.5
14:54:18	BAD	1232	FLUX 12-K LEVEL 1 (NANO/MPS)	194.
14:54:21	NORM	1261	FLUX 13-F LEVEL 6 (NANO/MPS)	-????.
14:54:29	NORM	1346	FLUX 4-E LEVEL 3 (NANO/MPS)	- 13.
14:55:13	BAD	1183	BACKGROUND 7-M (NANO/MPS)	34.
14:55:18	NORM	1232	FLUX 12-K LEVEL 1 (NANO/MPS)	-???.?
14:55:18	BAD	1234	FLUX 12-K LEVEL 3 (NANO/MPS)	508.
14:55:21	BAD	1261	FLUX 13-F LEVEL 6 (NANO/MPS)	-????.
14:56:18	BAD	1232	FLUX 12-K LEVEL 1 (NANO/MPS)	-????.
14:56:18	BAD	1236	FLUX 12-K LEVEL 5 (NANO/MPS)	-????.
14:56:29	BAD	1346	FLUX 4-E LEVEL 3 (NANO/MPS)	-????.
14:56:29	BAD	1348	FLUX 4-E LEVEL 5 (NANO/MPS)	-????.
14:57:09	NORM	1140	FLUX 6-G LEVEL 5 (NANO/MPS)	- 19.
14:57:13	NORM	1183	BACKGROUND 7-M (NANO/MPS)	190.0
14:57:14	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
14:57:14	BAD	1192	FLUX 9-N LEVEL 1 (NANO/MPS)	-????.
14:57:18	BAD	1235	FLUX 12-K LEVEL 4 (NANO/MPS)	-????.
14:57:21	NORM	1261	FLUX 13-F LEVEL 6 (NANO/MPS)	20.
14:57:24	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
14:57:29	BAD	1347	FLUX 4-E LEVEL 4 (NANO/MPS)	-????.
14:58:11	NORM	0532	IM INCORE T/C 3-M TEMP	698.1
14:58:12	NORM	1178	FLUX 7-M LEVEL 3 (NANO/MPS)	1999.
14:58:13	BAD	1183	BACKGROUND 7-M (NANO/MPS)	-???.?
14:58:18	NORM	1232	FLUX 12-K LEVEL 1 (NANO/MPS)	0
14:59:11	BAD	0532	IM INCORE T/C 3-M TEMP	-???.?
14:59:18	NORM	1235	FLUX 12-K LEVEL 4 (NANO/MPS)	- 12.
14:59:59	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
15:00:04	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
15:00:11	NORM	0532	IM INCORE T/C 3-M TEMP	690.2
15:00:18	NORM	1234	FLUX 12-K LEVEL 3 (NANO/MPS)	- 11.
15:00:18	NORM	1236	FLUX 12-K LEVEL 5 (NANO/MPS)	28.
15:00:41	BAD	0532	IM INCORE T/C 3-M TEMP	-???.?
15:02:18	BAD	1234	FLUX 12-K LEVEL 3 (NANO/MPS)	-????.
15:03:33	BAD	0332	CF TANK A LVL(FTH2O)	-??.??
15:04:18	BAD	1236	FLUX 12-K LEVEL 5 (NANO/MPS)	-????.
15:04:19	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
15:04:24	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
15:04:30	NORM	1347	FLUX 4-E LEVEL 4 (NANO/MPS)	89.
15:05:03	HIGH	0332	CF TANK A LVL(FTH2O)	13.99
15:05:11	NORM	0532	IM INCORE T/C 3-M TEMP	687.8
15:05:29	NORM	1346	FLUX 4-E LEVEL 3 (NANO/MPS)	- 2.
15:05:29	NORM	1348	FLUX 4-E LEVEL 5 (NANO/MPS)	136.
15:05:41	BAD	0532	IM INCORE T/C 3-M TEMP	-???.?
15:05:43	BAD	1475	FLUX 13-L LEVEL 4 (NANO/MPS)	-????.
15:06:19	BAD	1235	FLUX 12-K LEVEL 4 (NANO/MPS)	-????.
15:06:44	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
15:06:49	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
15:07:19	NORM	1235	FLUX 12-K LEVEL 4 (NANO/MPS)	42.
15:07:19	NORM	1236	FLUX 12-K LEVEL 5 (NANO/MPS)	- 1.
15:07:33	BAD	0332	CF TANK A LVL(FTH2O)	-??.??
15:07:41	NORM	0532	IM INCORE T/C 3-M TEMP	679.6
15:07:50	CONT	2962	RCP 1B LUBE OIL FLOW	LOW
15:08:11	BAD	0532	IM INCORE T/C 3-M TEMP	-???.?
15:08:18	BAD	1236	FLUX 12-K LEVEL 5 (NANO/MPS)	-????.
15:08:31	NORM	1350	FLUX 4-E LEVEL 7 (NANO/MPS)	58.
15:09:19	BAD	1235	FLUX 12-K LEVEL 4 (NANO/MPS)	-????.
15:09:30	BAD	1347	FLUX 4-E LEVEL 4 (NANO/MPS)	-????.
15:09:38	HIGH	1720	HORCR HEAT/COOL RATE (DEGF/HR)	118.5

15:13:14	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
15:13:19	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
15:14:22	NORM	1261	FLUX 13-F LEVEL 6 (NANOAMPS)	26.
15:14:40	NORM	0434	IH INCORE T/C 9-H TEMP	490.0
15:15:04	NORM	1682	PLVL RC PRESSURIZER LVL (INH2O)	253.9
15:16:38	NORM	0451	IC RCP 1A COOL OUTLET TEMP	.6
15:17:12	NORM	1165	FLUX 5-K LEVEL 6 (NANOAMPS)	- 15.
15:17:15	NORM	1177	FLUX 7-M LEVEL 2 (NANOAMPS)	1999.
15:17:22	BAD	1261	FLUX 13-F LEVEL 6 (NANOAMPS)	-????.
15:17:40	BAD	1444	FLUX 10-R LEVEL 5 (NANOAMPS)	-????.
15:18:13	BAD	1177	FLUX 7-M LEVEL 2 (NANOAMPS)	-????.
15:18:24	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
15:18:29	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
15:18:30	BAD	1348	FLUX 4-E LEVEL 5 (NANOAMPS)	-????.
15:19:04	LOW	1682	PLVL RC PRESSURIZER LVL (INH2O)	199.8
15:19:08	BAD	1123	FLUX 7-F LEVEL 4 (NANOAMPS)	-????.
15:19:11	CONT	2921	MUP P1C MTR STATUS	NORM
15:20:13	NORM	1177	FLUX 7-M LEVEL 2 (NANOAMPS)	2386.
15:24:00	HIGH	0995	LETDOWN CLR 1B OUTLET	135.8
15:24:23	NORM	1273	FLUX 11-G LEVEL 2 (NANOAMPS)	332.
15:25:01	BAD	1021	RB AIR CLG COILS B EMER DISCH	-???.?
15:25:06	NORM	0402	RC PRESS REL VLV RV2 OUT TEMP	101.9
15:25:31	NORM	1021	RB AIR CLG COILS B EMER DISCH	52.4
15:25:43	NORM	1470	FLUX 14-M LEVEL 7 (NANOAMPS)	174.
15:27:12	NORM	0532	IH INCORE T/C 3-M TEMP	636.8
15:27:22	NORM	1261	FLUX 13-F LEVEL 6 (NANOAMPS)	0
15:27:28	NORM	1326	FLUX 7-B LEVEL 7 (NANOAMPS)	389.
15:27:40	NORM	1444	FLUX 10-R LEVEL 5 (NANOAMPS)	43.
15:28:09	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
15:28:14	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
15:28:31	NORM	1358	FLUX 3-F LEVEL 7 (NANOAMPS)	165.
15:28:49	CONT	2921	MUP P1C MTR STATUS	TRIP
15:29:29	CONT	2674	PRESS HTR GROUP 1	TRIP
15:29:29	CONT	2675	PRESS HTR GROUP 2	TRIP
15:29:33	NORM	1375	BACKGROUND 1-H (NANOAMPS)	2.5
15:29:39	NORM	1431	BACKGROUND G-P (NANOAMPS)	- 15.0
15:29:55	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
15:30:00	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
15:30:04	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
15:30:08	BAD	0451	IC RCP 1A COOL OUTLET TEMP	-???.?
15:30:10	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
15:30:38	NORM	0451	IC RCP 1A COOL OUTLET TEMP	.0
15:30:38	NORM	1720	HORCR HEAT/COOL RATE (DEGF/HR)	.4
15:30:44	NORM	1436	FLUX 14-D LEVEL 7 (NANOAMPS)	84.
15:31:08	BAD	0451	IC RCP 1A COOL OUTLET TEMP	-???.?
15:31:22	NORM	1265	FLUX 12-F LEVEL 2 (NANOAMPS)	202.
15:31:41	NORM	1454	FLUX 10-O LEVEL 7 (NANOAMPS)	3.
15:32:22	BAD	1265	FLUX 12-F LEVEL 2 (NANOAMPS)	-????.
15:33:11	NORM	0506	IH INCORE T/C 8-H TEMP	691.8
15:33:14	CONT	2921	MUP P1C MTR STATUS	NORM
15:33:15	NORM	1192	FLUX 9-H LEVEL 1 (NANOAMPS)	302.
15:33:41	NORM	1450	FLUX 10-O LEVEL 3 (NANOAMPS)	199.
15:33:41	NORM	1455	BACKGROUND 10-O (NANOAMPS)	- 14.0
15:34:12	BAD	1162	FLUX 5-K LEVEL 3 (NANOAMPS)	-????.
15:34:21	CONT	3259	EMER FW PMP EF-P-2B	ON
15:34:35	NORM	0119	EMER FD PMP 2B DISCH PRESS	1555.
15:34:39	BAD	1431	BACKGROUND G-P (NANOAMPS)	-???.?
15:34:44	NORM	1437	BACKGROUND 14-D (NANOAMPS)	101.5
15:35:33	BAD	1375	BACKGROUND 1-H (NANOAMPS)	-???.?
15:35:38	NORM	0451	IC RCP 1A COOL OUTLET TEMP	.0
15:35:41	BAD	1454	FLUX 10-O LEVEL 7 (NANOAMPS)	-????.
15:36:15	BAD	1192	FLUX 9-H LEVEL 1 (NANOAMPS)	-????.

15:37:41	NORM	1454	FLUX 10-O LEVEL 7 (NANOAMPS)	- 11.
15:38:38	NORM	0451	IC RCP 1A COOL OUTLET TEMP	31.0
15:38:41	NORM	1450	FLUX 10-O LEVEL 3 (NANOAMPS)	226.
15:40:21	NORM	1258	FLUX 13-F LEVEL 3 (NANOAMPS)	211.
15:42:15	NORM	1192	FLUX 9-N LEVEL 1 (NANOAMPS)	106.
15:43:10	NORM	1206	FLUX 9-M LEVEL 7 (NANOAMPS)	- 2.
15:43:17	BAD	0003	SP STM GEN B S-U RANGE LVL (IN)	-???.?
15:43:25	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
15:43:30	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
15:43:38	HIGH	1720	NORCR HEAT/COOL RATE (DEGF/HR)	100.3
15:44:04	NORM	1632	PLVL RC PRESSURIZER LVL (INH2O)	205.6
15:45:31	BAD	1358	FLUX 3-F LEVEL 7 (NANOAMPS)	-????.
15:45:54	CONT	2675	PRESS HTR GROUP 2	NORM
15:45:55	CONT	2674	PRESS HTR GROUP 1	NORM
15:46:21	BAD	1258	FLUX 13-F LEVEL 3 (NANOAMPS)	-????.
15:46:38	BAD	0451	IC RCP 1A COOL OUTLET TEMP	-???.?
15:46:45	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
15:46:50	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
15:47:03	NORM	0451	IC RCP 1A COOL OUTLET TEMP	67.7
15:47:09	NORM	1136	FLUX 6-G LEVEL 1 (NANOAMPS)	41.
15:47:15	BAD	1192	FLUX 9-N LEVEL 1 (NANOAMPS)	-????.
15:47:19	HIGH	0001	SP STM GEN B OP RANGE LVL (PCT)	82.5
15:48:41	BAD	1450	FLUX 10-O LEVEL 3 (NANOAMPS)	-????.
15:48:41	BAD	1454	FLUX 10-O LEVEL 7 (NANOAMPS)	-????.
15:48:41	BAD	1455	BACKGROUND 10-O (NANOAMPS)	-???.?
15:48:50	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
15:48:55	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
15:49:43	BAD	1470	FLUX 14-M LEVEL 7 (NANOAMPS)	-????.
15:49:44	BAD	1486	FLUX 14-D LEVEL 7 (NANOAMPS)	-????.
15:52:22	NORM	1258	FLUX 13-F LEVEL 3 (NANOAMPS)	33.
15:52:41	CONT	3259	EMER FW PMP EF-P-2B	OFF
15:52:50	LOW	0119	EMER FD PMP 2B DISCH PRESS	173.
15:53:10	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
15:53:15	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
15:54:10	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
15:54:15	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
15:54:34	HIGH	1632	PLVL RC PRESSURIZER LVL (INH2O)	260.3
15:55:21	BAD	1258	FLUX 13-F LEVEL 3 (NANOAMPS)	-????.
15:58:15	NORM	1192	FLUX 9-N LEVEL 1 (NANOAMPS)	112.
15:58:20	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
15:58:25	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
15:58:41	BAD	0506	IM INCORE T/C 8-N TEMP	-???.?
15:58:45	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
15:58:50	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
15:59:21	NORM	1258	FLUX 13-F LEVEL 3 (NANOAMPS)	157.
16:00:00	FLAG	3584	RC4A-TE2 INSTR CONDITION	BAD
16:00:00	FLAG	3585	RC4A-TE3 INSTR CONDITION	GOOD
16:00:28	BAD	1326	FLUX 7-B LEVEL 7 (NANOAMPS)	-????.
16:01:40	BAD	1444	FLUX 10-R LEVEL 5 (NANOAMPS)	-????.
16:02:17	BAD	1206	FLUX 9-M LEVEL 7 (NANOAMPS)	-????.
16:02:23	BAD	1273	FLUX 11-G LEVEL 2 (NANOAMPS)	-????.
16:02:25	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
16:02:30	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
16:03:21	BAD	1258	FLUX 13-F LEVEL 3 (NANOAMPS)	-????.
16:04:10	NORM	1137	FLUX 6-G LEVEL 2 (NANOAMPS)	56.
16:04:10	NORM	1141	FLUX 6-C LEVEL 6 (NANOAMPS)	122.
16:04:15	BAD	1192	FLUX 9-N LEVEL 1 (NANOAMPS)	-????.
16:05:00	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
16:05:05	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
16:06:09	NORM	1138	FLUX 6-G LEVEL 3 (NANOAMPS)	4.
16:06:15	NORM	1192	FLUX 9-N LEVEL 1 (NANOAMPS)	57.
16:07:00	BAD	1137	FLUX 6-G LEVEL 2 (NANOAMPS)	-????

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16:09:31	BAD	1350	FLUX 4-E LEVEL 7 (NANO/NMPS)	-????.
16:10:15	BAD	1190	FLUX 8-N LEVEL 7 (NANO/NMPS)	-????.
16:12:09	BAD	1138	FLUX 6-G LEVEL 3 (NANO/NMPS)	-????.
16:12:55	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
16:13:00	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
16:13:08	BAD	1120	FLUX 7-F LEVEL 1 (NANO/NMPS)	-????.
16:14:15	BAD	1192	FLUX 9-N LEVEL 1 (NANO/NMPS)	-????.
16:15:08	NORM	1120	FLUX 7-F LEVEL 1 (NANO/NMPS)	- 19.
16:16:08	BAD	1120	FLUX 7-F LEVEL 1 (NANO/NMPS)	-????.
16:18:44	BAD	1487	BACKGROUND 14-D (NANO/NMPS)	-???.?
16:19:14	BAD	1189	FLUX 8-N LEVEL 6 (NANO/NMPS)	-????.
16:19:15	NORM	1192	FLUX 9-N LEVEL 1 (NANO/NMPS)	46.
16:20:15	BAD	1192	FLUX 9-N LEVEL 1 (NANO/NMPS)	-????.
16:20:55	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
16:21:00	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
16:22:12	BAD	0532	IM INCORE T/C 3-M TEMP	-???.?
16:23:10	BAD	0494	IM INCORE T/C 9-H TEMP	-???.?
16:23:15	NORM	1192	FLUX 9-N LEVEL 1 (NANO/NMPS)	104.
16:23:31	NORM	1350	FLUX 4-E LEVEL 7 (NANO/NMPS)	- 3.
16:26:02	CONT	2740	D-G ROOM AIR CPRSR DF-P-2C	NORM
16:28:38	NORM	1720	NORCR HEAT/COOL RATE (DEGF/HR)	76.5
16:30:42	CONT	2740	D-G ROOM AIR CPRSR DF-P-2C	TRIP
16:32:14	NORM	1189	FLUX 8-N LEVEL 6 (NANO/NMPS)	- 16.
16:34:13	NORM	1220	FLUX 11-L LEVEL 5 (NANO/NMPS)	20.
16:35:06	HIGH	0402	RC PRESS REL VLV RV2 OUT TEMP	233.0
16:35:36	HIGH	0404	RC PRESS REL VLV RV1B OUT TEMP	203.2
16:37:06	HIGH	0403	RC PRESS REL VLV RV1A OUT TEMP	201.4
16:37:14	BAD	1189	FLUX 8-N LEVEL 6 (NANO/NMPS)	-????.
16:37:20	NORM	1245	FLUX 13-H LEVEL 6 (NANO/NMPS)	1999.
16:37:27	BAD	1312	FLUX 8-B LEVEL 1 (NANO/NMPS)	-????.
16:38:08	NORM	1120	FLUX 7-F LEVEL 1 (NANO/NMPS)	- 10.
16:38:18	BAD	1220	FLUX 11-L LEVEL 5 (NANO/NMPS)	-????.
16:38:20	NORM	1245	FLUX 13-H LEVEL 4 (NANO/NMPS)	385.
16:38:43	NORM	1475	FLUX 13-L LEVEL 4 (NANO/NMPS)	1999.
16:39:05	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
16:39:08	NORM	1123	FLUX 7-F LEVEL 4 (NANO/NMPS)	- 12.
16:39:10	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
16:39:14	NORM	1189	FLUX 8-N LEVEL 6 (NANO/NMPS)	- 19.
16:39:15	BAD	1192	FLUX 9-N LEVEL 1 (NANO/NMPS)	-????.
16:39:18	NORM	1220	FLUX 11-L LEVEL 5 (NANO/NMPS)	7.
16:40:08	BAD	1123	FLUX 7-F LEVEL 4 (NANO/NMPS)	-????.
16:40:15	NORM	1192	FLUX 9-N LEVEL 1 (NANO/NMPS)	1449.
16:40:18	BAD	1220	FLUX 11-L LEVEL 5 (NANO/NMPS)	-????.
16:41:15	BAD	1189	FLUX 8-N LEVEL 6 (NANO/NMPS)	-????.
16:41:33	BAD	1371	FLUX 1-H LEVEL 4 (NANO/NMPS)	-????.
16:42:15	BAD	1192	FLUX 9-N LEVEL 1 (NANO/NMPS)	-????.
16:42:33	NORM	1371	FLUX 1-H LEVEL 4 (NANO/NMPS)	- 9.
16:43:15	NORM	1192	FLUX 9-N LEVEL 1 (NANO/NMPS)	76.
16:44:15	BAD	0605	RP LOOP A RC DELTA PRESS (INH2O)	-???.?
16:44:45	NORM	0605	RP LOOP A RC DELTA PRESS (INH2O)	.0
16:45:10	NORM	1137	FLUX 6-G LEVEL 2 (NANO/NMPS)	10.
16:45:14	NORM	1189	FLUX 8-N LEVEL 6 (NANO/NMPS)	- 15.
16:45:24	NORM	1282	FLUX 11-E LEVEL 3 (NANO/NMPS)	204.
16:46:10	NORM	0494	IM INCORE T/C 9-H TEMP	601.8
16:46:20	BAD	1243	FLUX 13-H LEVEL 4 (NANO/NMPS)	-????.
16:46:35	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
16:46:40	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
16:46:40	BAD	0494	IM INCORE T/C 9-H TEMP	-???.?
16:47:15	BAD	1192	FLUX 9-N LEVEL 1 (NANO/NMPS)	-????.
16:47:33	BAD	1371	FLUX 1-H LEVEL 4 (NANO/NMPS)	-????.
16:47:40	NORM	0494	IM INCORE T/C 9-H TEMP	604.4
16:47:41	NORM	0506	IM INCORE T/C 8-N TEMP	605.5
16:48:10	BAD	0494	IM INCORE T/C 9-H TEMP	-???.?

16:49:15	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
16:49:20	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
16:49:30	BAD	1346	FLUX 4-E LEVEL 3 (NANO/MPS)	-????.
16:49:40	BAD	0494	IM INCORE T/C 9-H TEMP	-???.?
16:50:10	NORM	0494	IM INCORE T/C 9-H TEMP	638.3
16:50:40	BAD	0494	IM INCORE T/C 9-H TEMP	-???.?
16:51:15	NORM	1192	FLUX 9-H LEVEL 1 (NANO/MPS)	566.
16:51:40	NORM	0494	IM INCORE T/C 9-H TEMP	685.8
16:52:08	BAD	0451	IC RCP 1A COOL OUTLET TEMP	-???.?
16:52:10	BAD	0494	IM INCORE T/C 9-H TEMP	-???.?
16:52:40	NORM	0494	IM INCORE T/C 9-H TEMP	670.1
16:53:08	NORM	0451	IC RCP 1A COOL OUTLET TEMP	31.7
16:53:15	NORM	1190	FLUX 8-H LEVEL 7 (NANO/MPS)	- 5.
16:54:10	BAD	0494	IM INCORE T/C 9-H TEMP	-???.?
16:54:15	NORM	0031	11STGB-13STGB HTR DRN FL(KLB/H)	.0
16:54:15	BAD	1190	FLUX 8-H LEVEL 7 (NANO/MPS)	-????.
16:54:30	BAD	0031	11STGB-13STGB HTR DRN FL(KLB/H)	-???.?
16:54:35	NORM	0031	11STGB-13STGB HTR DRN FL(KLB/H)	.0
16:54:40	NORM	0494	IM INCORE T/C 9-H TEMP	669.8
16:55:10	BAD	0494	IM INCORE T/C 9-H TEMP	-???.?
16:55:40	NORM	0494	IM INCORE T/C 9-H TEMP	668.3
16:56:05	BAD	0031	11STGB-13STGB HTR DRN FL(KLB/H)	-???.?
16:56:06	NORM	0130	8STG A HTR BLEED ST PRESS	- 2.9
16:56:10	NORM	0031	11STGB-13STGB HTR DRN FL(KLB/H)	.0
16:56:11	BAD	0506	IM INCORE T/C 8-N TEMP	-???.?
16:56:40	BAD	0494	IM INCORE T/C 9-H TEMP	-???.?
16:57:10	NORM	0494	IM INCORE T/C 9-H TEMP	666.5
16:57:50	BAD	0120	14STG A HTR BLEED ST PRESS(INHG)	-??.??
16:58:10	BAD	0494	IM INCORE T/C 9-H TEMP	-???.?
16:58:40	NORM	0494	IM INCORE T/C 9-H TEMP	662.2
16:59:10	BAD	0494	IM INCORE T/C 9-H TEMP	-???.?
16:59:36	NORM	0403	RC PRESS REL VLV RV1A OUT TEMP	192.2
17:00:10	NORM	0494	IM INCORE T/C 9-H TEMP	663.1
17:00:15	NORM	1784	8STG FDWTR HTR A PERFORMANCE	129.2
17:00:30	FLAG	3584	RC4A-TE2 INSTR CONDITION	GOOD
17:00:30	FLAG	3591	RC14-DPT3 INSTR CONDITION	BAD
17:00:44	NORM	1479	BACKGROUND 13-L (NANO/MPS)	- 16.0
17:01:10	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
17:01:15	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
17:01:42	CONT	3235	COND VAC PMP VA-P-1A	ON
17:02:06	CONT	3073	COND VAC PMP VA-P-1A	TRIP
17:02:06	CONT	3235	COND VAC PMP VA-P-1A	OFF
17:02:40	BAD	0494	IM INCORE T/C 9-H TEMP	-???.?
17:03:00	CONT	3237	COND VAC PMP VA-P-1C	ON
17:03:10	NORM	0494	IM INCORE T/C 9-H TEMP	660.3
17:03:35	NORM	0120	14STG A HTR BLEED ST PRESS(INHG)	- .27
17:03:40	BAD	0494	IM INCORE T/C 9-H TEMP	-???.?
17:03:44	BAD	1479	BACKGROUND 13-L (NANO/MPS)	-???.?
17:04:06	BAD	0130	8STG A HTR BLEED ST PRESS	-???.?
17:04:08	NORM	1122	FLUX 7-F LEVEL 3 (NANO/MPS)	- 3.
17:04:08	NORM	1123	FLUX 7-F LEVEL 4 (NANO/MPS)	118.
17:04:08	NORM	1125	FLUX 7-F LEVEL 6 (NANO/MPS)	- 13.
17:04:12	BAD	0533	IM INCORE T/C 4-N TEMP	-???.?
17:04:15	NORM	1190	FLUX 8-H LEVEL 7 (NANO/MPS)	208.
17:04:16	NORM	1208	FLUX 10-H1 LEVEL 1 (NANO/MPS)	68.
17:04:16	NORM	1209	FLUX 10-H1 LEVEL 2 (NANO/MPS)	94.
17:04:17	NORM	1211	FLUX 10-H1 LEVEL 4 (NANO/MPS)	45.
17:04:17	NORM	1212	FLUX 10-H1 LEVEL 5 (NANO/MPS)	31.
17:04:17	NORM	1213	FLUX 10-H1 LEVEL 6 (NANO/MPS)	21.
17:04:17	NORM	1214	FLUX 10-H1 LEVEL 7 (NANO/MPS)	35.
17:04:17	NORM	1215	BACKGROUND 10-H1 (NANO/MPS)	3.0
17:04:20	BAD	0031	11STGB-13STGB HTR DRN FL(KLB/H)	-???.?

17:04:27	NORM	1311	BACKGROUND 9-C (NANO/MPS)	- 19.0
17:04:33	CONT	2652	RB AIR CLG FAN AH-E-11B	TRIP
17:04:43	BAD	1475	FLUX 13-L LEVEL 4 (NANO/MPS)	-????.
17:05:00	BAD	1122	FLUX 7-F LEVEL 3 (NANO/MPS)	-????.
17:05:00	BAD	1123	FLUX 7-F LEVEL 4 (NANO/MPS)	-????.
17:05:00	BAD	1125	FLUX 7-F LEVEL 6 (NANO/MPS)	-????.
17:05:10	NORM	1138	FLUX 6-G LEVEL 3 (NANO/MPS)	198.
17:05:17	BAD	1208	FLUX 10-H LEVEL 1 (NANO/MPS)	-????.
17:05:17	BAD	1209	FLUX 10-H LEVEL 2 (NANO/MPS)	-????.
17:05:17	BAD	1211	FLUX 10-H LEVEL 4 (NANO/MPS)	-????.
17:05:17	BAD	1212	FLUX 10-H LEVEL 5 (NANO/MPS)	-????.
17:05:17	BAD	1213	FLUX 10-H LEVEL 6 (NANO/MPS)	-????.
17:05:17	BAD	1214	FLUX 10-H LEVEL 7 (NANO/MPS)	-????.
17:05:17	BAD	1215	BACKGROUND 10-H (NANO/MPS)	-???.?
17:05:24	BAD	1280	FLUX 11-E LEVEL 1 (NANO/MPS)	-????.
17:05:24	BAD	1281	FLUX 11-E LEVEL 2 (NANO/MPS)	-????.
17:05:24	BAD	1286	FLUX 11-E LEVEL 7 (NANO/MPS)	-????.
17:05:27	BAD	1311	BACKGROUND 9-C (NANO/MPS)	-???.?
17:05:38	BAD	0451	IC RCP 1A COOL OUTLET TEMP	-???.?
17:05:40	NORM	0494	IM INCORE T/C 9-H TEMP	604.4
17:06:05	NORM	0404	RC PRESS REL VLV RV1B OUT TEMP	102.8
17:06:07	BAD	0140	8STG FD WTR HTR A DRAIN PRESS	-???.?
17:06:10	BAD	0494	IM INCORE T/C 9-H TEMP	-???.?
17:06:12	NORM	0533	IM INCORE T/C 4-H TEMP	600.4
17:06:25	CONT	3116	FW TURB A LOW VACUUM TRIP	NORM
17:06:33	NORM	0451	IC RCP 1A COOL OUTLET TEMP	4.3
17:07:37	BAD	0141	8STG FD WTR HTR B DRAIN PRESS	-???.?
17:08:59	CONT	3117	FW TURB B LOW VACUUM TRIP	NORM
17:09:11	NORM	0506	IM ' CORE T/C 8-H TEMP	604.7
17:10:20	NORM	0031	11S GB-13STGB HTR DRN FL(KLB/H)	.0
17:10:35	BAD	0031	11STGB-13STGB HTR DRN FL(KLB/H)	-???.?
17:11:23	BAD	1261	FLUX 13-F LEVEL 6 (NANO/MPS)	-????.
17:12:35	NORM	0031	11STGB-13STGB HTR DRN FL(KLB/H)	.0
17:13:00	BAD	0031	11STGB-13STGB HTR DRN FL(KLB/H)	-???.?
17:13:08	CONT	3073	COND VAC PMP VA-P-1A	NORM
17:13:47	CONT	3235	COND VAC PMP VA-P-1A	ON
17:13:50	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
17:13:55	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
17:14:30	NORM	0031	11STGB-13STGB HTR DRN FL(KLB/H)	.0
17:14:50	BAD	0031	11STGB-13STGB HTR DRN FL(KLB/H)	-???.?
17:14:51	BAD	0131	8STG B HTR BLEED ST PRESS	-???.?
17:15:35	NORM	0031	11STGB-13STGB HTR DRN FL(KLB/H)	.0
17:16:00	BAD	0031	11STGB-13STGB HTR DRN FL(KLB/H)	-???.?
17:16:10	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
17:16:15	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
17:16:45	NORM	0031	11STGB-13STGB HTR DRN FL(KLB/H)	.0
17:17:20	BAD	0031	11STGB-13STGB HTR DRN FL(KLB/H)	-???.?
17:18:05	NORM	0031	11STGB-13STGB HTR DRN FL(KLB/H)	.0
17:18:35	BAD	0031	11STGB-13STGB HTR DRN FL(KLB/H)	-???.?
17:18:51	BAD	0133	3STG B HTR BLEED ST PRESS	-???.?
17:19:15	NORM	0031	11STGB-13STGB HTR DRN FL(KLB/H)	.0
17:19:35	NORM	1388	FLUX 3-L LEVEL 5 (NANO/MPS)	- 18.
17:19:50	BAD	0031	11STGB-13STGB HTR DRN FL(KLB/H)	-???.?
17:20:20	NORM	0031	11STGB-13STGB HTR DRN FL(KLB/H)	.0
17:20:44	NORM	0029	10STGB-11STGB HTR DRN FL(KLB/H)	.0
17:20:49	BAD	0029	10STGB-11STGB HTR DRN FL(KLB/H)	-???.?
17:20:59	NORM	0029	10STGB-11STGB HTR DRN FL(KLB/H)	.0
17:21:00	BAD	0031	11STGB-13STGB HTR DRN FL(KLB/H)	-???.?
17:21:06	BAD	0132	3STG A HTR BLEED ST PRESS	-???.?
17:21:10	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
17:21:15	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
17:21:25	NORM	0031	11STGB-13STGB HTR DRN FL(KLB/H)	.0

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17:21:49	NORM	0021	TOT FDW THRU A&B HTR (KLB/H)	0
17:22:07	BAD	0139	3STG FD WTR HTR B DRAIN PRESS	-???.?
17:22:20	BAD	1232	FLUX 12-K LEVEL 1 (NANOAMPS)	-????.
17:22:20	BAD	0031	11STGB-13STGB HTR DRN FL(KLB/H)	-???.?
17:22:28	NORM	1311	BACKGROUND 9-C (NANOAMPS)	- 19.5
17:22:30	NORM	0031	11STGB-13STGB HTR DRN FL(KLB/H)	.0
17:22:32	NORM	1350	FLUX 4-E LEVEL 7 (NANOAMPS)	62.
17:23:10	NORM	0494	IM INCORE T/C 9-H TEMP	609.5
17:23:25	BAD	0031	11STGB-13STGB HTR DRN FL(KLB/H)	-???.?
17:23:40	NORM	0031	11STGB-13STGB HTR DRN FL(KLB/H)	9.1
17:23:40	BAD	0494	IM INCORE T/C 9-H TEMP	-???.?
17:23:41	CONT	2021	MUP P1C HTR STATUS	NORM
17:24:10	NORM	0494	IM INCORE T/C 9-H TEMP	614.1
17:24:20	NORM	1232	FLUX 12-K LEVEL 1 (NANOAMPS)	30.
17:24:30	BAD	0031	11STGB-13STGB HTR DRN FL(KLB/H)	-???.?
17:24:45	NORM	0031	11STGB-13STGB HTR DRN FL(KLB/H)	14.4
17:25:30	NORM	0402	RC PRESS REL VLV RV2 OUT TEMP	192.9
17:25:40	BAD	0031	11STGB-13STGB HTR DRN FL(KLB/H)	-???.?
17:25:50	NORM	0031	11STGB-13STGB HTR DRN FL(KLB/H)	20.5
17:25:50	BAD	0042	NAT DFT CLG TWR MU FL(GPM)	-??.??
17:25:55	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
17:26:28	BAD	1311	BACKGROUND 9-C (NANOAMPS)	-???.?
17:26:40	BAD	0031	11STGB-13STGB HTR DRN FL(KLB/H)	-???.?
17:26:46	CONT	2674	PRESS HTR GROUP 1	TRIP
17:26:46	CONT	2675	PRESS HTR GROUP 2	TRIP
17:26:50	NORM	0031	11STGB-13STGB HTR DRN FL(KLB/H)	.0
17:27:04	BAD	0021	TOT FDW THRU A&B HTR (KLB/H)	-????.
17:27:00	NORM	0021	TOT FDW THRU A&B HTR (KLB/H)	0
17:27:45	BAD	0031	11STGB-13STGB HTR DRN FL(KLB/H)	-???.?
17:27:55	NORM	0031	11STGB-13STGB HTR DRN FL(KLB/H)	20.5
17:28:32	BAD	1350	FLUX 4-E LEVEL 7 (NANOAMPS)	-????.
17:28:50	BAD	0031	11STGB-13STGB HTR DRN FL(KLB/H)	-???.?
17:29:00	NORM	0031	11STGB-13STGB HTR DRN FL(KLB/H)	31.7
17:29:34	NORM	1371	FLUX 1-H LEVEL 4 (NANOAMPS)	115.
17:29:55	BAD	0031	11STGB-13STGB HTR DRN FL(KLB/H)	-???.?
17:30:00	NORM	0031	11STGB-13STGB HTR DRN FL(KLB/H)	32.4
17:30:28	NORM	1312	FLUX 8-B LEVEL 1 (NANOAMPS)	- 4.
17:30:44	NORM	1475	FLUX 13-L LEVEL 4 (NANOAMPS)	1009.
17:31:00	BAD	0031	11STGB-13STGB HTR DRN FL(KLB/H)	-???.?
17:31:05	NORM	0031	11STGB-13STGB HTR DRN FL(KLB/H)	38.3
17:32:05	BAD	0031	11STGB-13STGB HTR DRN FL(KLB/H)	-???.?
17:32:10	NORM	0031	11STGB-13STGB HTR DRN FL(KLB/H)	40.4
17:32:20	NORM	1327	BACKGROUND 7-B (NANOAMPS)	21.5
17:32:35	BAD	1388	FLUX 3-L LEVEL 5 (NANOAMPS)	-????.
17:33:16	BAD	1193	FLUX 9-H LEVEL 2 (NANOAMPS)	-????.
17:33:44	NORM	1479	BACKGROUND 13-L (NANOAMPS)	- 16.0
17:34:16	NORM	1198	FLUX 9-H LEVEL 7 (NANOAMPS)	314.
17:34:35	NORM	1388	FLUX 3-L LEVEL 5 (NANOAMPS)	- 7.
17:34:59	BAD	0021	TOT FDW THRU A&B HTR (KLB/H)	-????.
17:35:04	NORM	0021	TOT FDW THRU A&B HTR (KLB/H)	0
17:35:11	NORM	1140	FLUX 6-G LEVEL 5 (NANOAMPS)	35.
17:35:16	BAD	1198	FLUX 9-H LEVEL 7 (NANOAMPS)	-????.
17:35:19	BAD	0021	TOT FDW THRU A&B HTR (KLB/H)	-????.
17:35:24	NORM	0021	TOT FDW THRU A&B HTR (KLB/H)	0
17:35:29	NORM	1326	FLUX 7-B LEVEL 7 (NANOAMPS)	135.
17:35:44	BAD	1479	BACKGROUND 13-L (NANOAMPS)	-???.?
17:36:16	NORM	1198	FLUX 9-H LEVEL 7 (NANOAMPS)	444.
17:36:23	NORM	1265	FLUX 12-F LEVEL 2 (NANOAMPS)	45.
17:36:35	BAD	1388	FLUX 3-L LEVEL 5 (NANOAMPS)	-????.
17:36:44	NORM	1479	BACKGROUND 13-L (NANOAMPS)	- 17.0
17:37:23	BAD	1265	FLUX 12-F LEVEL 2 (NANOAMPS)	-????.
17:37:35	NORM	1388	FLUX 3-L LEVEL 5 (NANOAMPS)	- 8.

17:33:59	NORM	0042	MAT DFT CLG TWR MU FL(GPM)	.00
17:33:59	BAD	0021	TOT FDW THRU A&B HTR (KLB/H)	-????.
17:33:59	NORM	0021	TOT FDW THRU A&B HTR (KLB/H)	0
17:39:24	BAD	0021	TOT FDW THRU A&B HTR (KLB/H)	-????.
17:39:29	NORM	0021	TOT FDW THRU A&B HTR (KLB/H)	0
17:39:34	BAD	0021	TOT FDW THRU A&B HTR (KLB/H)	-????.
17:39:39	NORM	0021	TOT FDW THRU A&B HTR (KLB/H)	0
17:39:49	BAD	0021	TOT FDW THRU A&B HTR (KLB/H)	-????.
17:39:54	NORM	0021	TOT FDW THRU A&B HTR (KLB/H)	0
17:40:25	NORM	1265	FLUX 12-F LEVEL 2 (NANONIPS)	- 35.
17:40:35	BAD	1338	FLUX 3-L LEVEL 5 (NANONIPS)	-????.
17:40:45	NORM	1486	FLUX 14-D LEVEL 7 (NANONIPS)	85.
17:41:04	BAD	0021	TOT FDW THRU A&B HTR (KLB/H)	-????.
17:41:09	NORM	0021	TOT FDW THRU A&B HTR (KLB/H)	0
17:41:10	BAD	0042	MAT DFT CLG TWR MU FL(GPM)	-??.??
17:41:15	NORM	0042	MAT DFT CLG TWR MU FL(GPM)	.00
17:41:19	NORM	1104	FLUX 9-N LEVEL 3 (NANONIPS)	377.
17:41:21	NORM	1243	FLUX 13-N LEVEL 4 (NANONIPS)	43.
17:41:23	NORM	1264	FLUX 12-F LEVEL 1 (NANONIPS)	29.
17:41:35	NORM	1338	FLUX 3-L LEVEL 5 (NANONIPS)	- 15.
17:41:45	NORM	1481	FLUX 14-D LEVEL 2 (NANONIPS)	- 8.
17:41:45	NORM	1482	FLUX 14-D LEVEL 3 (NANONIPS)	- 9.
17:41:59	BAD	0021	TOT FDW THRU A&B HTR (KLB/H)	-????.
17:42:04	NORM	0021	TOT FDW THRU A&B HTR (KLB/H)	0
17:42:10	BAD	1104	FLUX 9-N LEVEL 3 (NANONIPS)	-????.
17:42:39	BAD	0021	TOT FDW THRU A&B HTR (KLB/H)	-????.
17:42:44	NORM	0021	TOT FDW THRU A&B HTR (KLB/H)	0
17:42:54	BAD	0021	TOT FDW THRU A&B HTR (KLB/H)	-????.
17:43:04	NORM	0021	TOT FDW THRU A&B HTR (KLB/H)	0
17:43:12	NORM	0532	IN INCORE T/C 3-H TEMP	695.9
17:43:16	NORM	1103	FLUX 9-N LEVEL 2 (NANONIPS)	- 7.
17:43:16	NORM	1105	FLUX 9-N LEVEL 4 (NANONIPS)	371.
17:43:20	NORM	1252	FLUX 12-K LEVEL 1 (NANONIPS)	74.
17:43:23	NORM	1510	FLUX 9-C LEVEL 7 (NANONIPS)	53.
17:43:55	BAD	0042	MAT DFT CLG TWR MU FL(GPM)	-??.??
17:44:00	NORM	0042	MAT DFT CLG TWR MU FL(GPM)	.00
17:44:03	BAD	1120	FLUX 7-F LEVEL 1 (NANONIPS)	-????.
17:44:09	BAD	0021	TOT FDW THRU A&B HTR (KLB/H)	-????.
17:44:14	NORM	0021	TOT FDW THRU A&B HTR (KLB/H)	0
17:44:16	BAD	1193	FLUX 9-N LEVEL 2 (NANONIPS)	-????.
17:44:16	BAD	1195	FLUX 9-N LEVEL 4 (NANONIPS)	-????.
17:44:24	NORM	1273	FLUX 11-G LEVEL 2 (NANONIPS)	49.
17:44:32	NORM	1358	FLUX 3-F LEVEL 7 (NANONIPS)	- 4.
17:44:49	BAD	0021	TOT FDW THRU A&B HTR (KLB/H)	-????.
17:44:59	NORM	0021	TOT FDW THRU A&B HTR (KLB/H)	0
17:45:03	CONT	2766	11STG FDW HTR B LVL HIGH	NORM
17:45:04	BAD	0021	TOT FDW THRU A&B HTR (KLB/H)	-????.
17:45:09	NORM	0021	TOT FDW THRU A&B HTR (KLB/H)	0
17:45:14	BAD	0021	TOT FDW THRU A&B HTR (KLB/H)	-????.
17:45:20	BAD	1327	BACKGROUND 7-B (NANONIPS)	-???.?
17:45:29	NORM	0021	TOT FDW THRU A&B HTR (KLB/H)	0
17:45:32	NORM	1354	FLUX 3-F LEVEL 3 (NANONIPS)	- 17.
17:45:44	NORM	1476	FLUX 13-L LEVEL 5 (NANONIPS)	83.
17:45:54	BAD	0021	TOT FDW THRU A&B HTR (KLB/H)	-????.
17:46:04	NORM	0021	TOT FDW THRU A&B HTR (KLB/H)	0
17:46:10	NORM	1139	FLUX 6-G LEVEL 4 (NANONIPS)	281.
17:46:16	NORM	1193	FLUX 9-N LEVEL 2 (NANONIPS)	175.
17:46:39	BAD	0451	IC RCP 1A COOL OUTLET TEMP	-???.?
17:46:39	BAD	0021	TOT FDW THRU A&B HTR (KLB/H)	-????.
17:46:41	NORM	1444	FLUX 10-R LEVEL 5 (NANONIPS)	18.
17:46:44	NORM	1470	FLUX 14-M LEVEL 7 (NANONIPS)	- 14.
17:46:44	NORM	0021	TOT FDW THRU A&B HTR (KLB/H)	0

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17:47:16	BAD	1190	FLUX 3-N LEVEL 7 (NANOAMPS)	-????.
17:47:19	NORM	0021	TOT FDW THRU A&B HTR (KLB/H)	0
17:47:20	NORM	1237	FLUX 12-K LEVEL 6 (NANOAMPS)	38.
17:47:20	NORM	0042	NAT DFT CLG TWR MU FL(GPM)	.00
17:47:20	BAD	0021	TOT FDW THRU A&B HTR (KLB/H)	-????.
17:47:34	NORM	0021	TOT FDW THRU A&B HTR (KLB/H)	0
17:47:30	BAD	0021	TOT FDW THRU A&B HTR (KLB/H)	-????.
17:47:40	NORM	0021	TOT FDW THRU A&B HTR (KLB/H)	0
17:48:04	BAD	0021	TOT FDW THRU A&B HTR (KLB/H)	-????.
17:48:07	NORM	0021	TOT FDW THRU A&B HTR (KLB/H)	0
17:48:10	NORM	1190	FLUX 3-N LEVEL 7 (NANOAMPS)	- 16.
17:48:16	BAD	1193	FLUX 9-N LEVEL 2 (NANOAMPS)	-????.
17:48:22	NORM	1255	BACKGROUND 13-G (NANOAMPS)	- 10.0
17:48:30	NORM	0475	SP STARTUP FDWTR FLOW A (LB/H2O)	.1
17:48:44	NORM	1470	BACKGROUND 13-L (NANOAMPS)	- 11.0
17:49:13	NORM	1162	FLUX 5-K LEVEL 3 (NANOAMPS)	276.
17:49:13	NORM	1163	FLUX 5-K LEVEL 4 (NANOAMPS)	179.
17:49:16	BAD	1190	FLUX 8-N LEVEL 7 (NANOAMPS)	-????.
17:49:20	NORM	1238	FLUX 12-K LEVEL 7 (NANOAMPS)	20.
17:49:22	NORM	1251	FLUX 13-G LEVEL 4 (NANOAMPS)	34.
17:49:23	BAD	1264	FLUX 12-F LEVEL 1 (NANOAMPS)	-????.
17:49:23	BAD	1265	FLUX 12-F LEVEL 2 (NANOAMPS)	-????.
17:49:27	NORM	1300	FLUX 9-C LEVEL 6 (NANOAMPS)	45.
17:49:30	BAD	0021	TOT FDW THRU A&B HTR (KLB/H)	-????.
17:49:40	NORM	0021	TOT FDW THRU A&B HTR (KLB/H)	0
17:49:59	BAD	0021	TOT FDW THRU A&B HTR (KLB/H)	-????.
17:50:04	NORM	0021	TOT FDW THRU A&B HTR (KLB/H)	0
17:50:10	BAD	1139	FLUX 6-G LEVEL 4 (NANOAMPS)	-????.
17:50:14	BAD	0021	TOT FDW THRU A&B HTR (KLB/H)	-????.
17:50:15	BAD	1139	FLUX 8-N LEVEL 6 (NANOAMPS)	-????.
17:50:19	NORM	0021	TOT FDW THRU A&B HTR (KLB/H)	0
17:50:22	NORM	1253	FLUX 13-G LEVEL 6 (NANOAMPS)	- 14.
17:50:22	NORM	1254	FLUX 13-G LEVEL 7 (NANOAMPS)	- 16.
17:50:23	NORM	1264	FLUX 12-F LEVEL 1 (NANOAMPS)	48.
17:50:23	NORM	1265	FLUX 12-F LEVEL 2 (NANOAMPS)	92.
17:50:27	BAD	1300	FLUX 9-C LEVEL 6 (NANOAMPS)	-????.
17:50:29	BAD	0021	TOT FDW THRU A&B HTR (KLB/H)	-????.
17:50:34	NORM	0021	TOT FDW THRU A&B HTR (KLB/H)	0
17:50:44	BAD	0021	TOT FDW THRU A&B HTR (KLB/H)	-????.
17:50:49	NORM	0021	TOT FDW THRU A&B HTR (KLB/H)	0
17:51:13	NORM	1166	FLUX 5-K LEVEL 7 (NANOAMPS)	206.
17:51:14	BAD	0021	TOT FDW THRU A&B HTR (KLB/H)	-????.
17:51:19	NORM	0021	TOT FDW THRU A&B HTR (KLB/H)	0
17:51:29	NORM	1327	BACKGROUND 7-B (NANOAMPS)	195.0
17:51:29	BAD	0021	TOT FDW THRU A&B HTR (KLB/H)	-????.
17:51:34	NORM	0021	TOT FDW THRU A&B HTR (KLB/H)	0
17:51:37	NORM	1405	FLUX 4-H LEVEL 6 (NANOAMPS)	79.
17:51:44	BAD	1470	FLUX 14-H LEVEL 7 (NANOAMPS)	-????.
17:51:44	BAD	0021	TOT FDW THRU A&B HTR (KLB/H)	-????.
17:51:45	NORM	1487	BACKGROUND 14-D (NANOAMPS)	194.0
17:51:49	NORM	0021	TOT FDW THRU A&B HTR (KLB/H)	0
17:52:13	BAD	1162	FLUX 5-K LEVEL 3 (NANOAMPS)	-????.
17:52:24	BAD	0021	TOT FDW THRU A&B HTR (KLB/H)	-????.
17:52:29	NORM	0021	TOT FDW THRU A&B HTR (KLB/H)	0
17:52:31	NORM	1349	FLUX 4-E LEVEL 6 (NANOAMPS)	1000.
17:52:32	BAD	1354	FLUX 3-F LEVEL 3 (NANOAMPS)	-????.
17:52:37	BAD	1405	FLUX 4-H LEVEL 6 (NANOAMPS)	-????.
17:52:48	NORM	0009	SP STM GEN A OP RANGE LVL (PCT)	31.3
17:53:14	BAD	0021	TOT FDW THRU A&B HTR (KLB/H)	-????.
17:53:19	NORM	0021	TOT FDW THRU A&B HTR (KLB/H)	0
17:53:22	NORM	1258	FLUX 13-F LEVEL 3 (NANOAMPS)	1.
17:53:24	BAD	0021	TOT FDW THRU A&B HTR (KLB/H)	

17:53:44	BAD	0021	TOT FDW THRU A&B HTR (KLB/H)	-????.
17:53:49	NORM	0021	TOT FDW THRU A&B HTR (KLB/H)	0
17:54:30	NORM	1338	FLUX 5-D LEVEL 3 (NANOAMPS)	53.
17:54:59	BAD	0021	TOT FDW THRU A&B HTR (KLB/H)	-????.
17:55:04	NORM	0021	TOT FDW THRU A&B HTR (KLB/H)	0
17:55:14	BAD	0021	TOT FDW THRU A&B HTR (KLB/H)	-????.
17:55:19	NORM	0021	TOT FDW THRU A&B HTR (KLB/H)	0
17:55:22	BAD	1251	FLUX 13-G LEVEL 4 (NANOAMPS)	-????.
17:55:24	BAD	1273	FLUX 11-G LEVEL 2 (NANOAMPS)	-????.
17:55:27	NORM	1300	FLUX 10-C LEVEL 5 (NANOAMPS)	- 14.
17:56:22	NORM	1251	FLUX 13-G LEVEL 4 (NANOAMPS)	71.
17:56:24	BAD	0021	TOT FDW THRU A&B HTR (KLB/H)	-????.
17:56:29	NORM	0021	TOT FDW THRU A&B HTR (KLB/H)	0
17:56:51	NORM	1342	FLUX 5-D LEVEL 7 (NANOAMPS)	- 5.
17:56:44	BAD	0021	TOT FDW THRU A&B HTR (KLB/H)	-????.
17:56:49	NORM	0021	TOT FDW THRU A&B HTR (KLB/H)	0
17:57:13	BAD	1163	FLUX 5-K LEVEL 4 (NANOAMPS)	-????.
17:57:24	BAD	0021	TOT FDW THRU A&B HTR (KLB/H)	-????.
17:57:27	NORM	1303	BACKGROUND 10-C (NANOAMPS)	- 20.0
17:57:29	NORM	0021	TOT FDW THRU A&B HTR (KLB/H)	0
17:58:09	BAD	0021	TOT FDW THRU A&B HTR (KLB/H)	-????.
17:58:14	NORM	0021	TOT FDW THRU A&B HTR (KLB/H)	0
17:58:27	BAD	1300	FLUX 10-C LEVEL 5 (NANOAMPS)	-????.
17:58:27	BAD	1303	BACKGROUND 10-C (NANOAMPS)	-???.?
17:58:32	NORM	1354	FLUX 3-F LEVEL 3 (NANOAMPS)	- 3.
17:58:39	BAD	0021	TOT FDW THRU A&B HTR (KLB/H)	-????.
17:58:44	NORM	0021	TOT FDW THRU A&B HTR (KLB/H)	0
17:58:54	BAD	0021	TOT FDW THRU A&B HTR (KLB/H)	-????.
17:58:59	NORM	0021	TOT FDW THRU A&B HTR (KLB/H)	0
17:59:00	BAD	0042	NAT DFT CLG TWR NU FL(GPM)	-??.??
17:59:04	BAD	0021	TOT FDW THRU A&B HTR (KLB/H)	-????.
17:59:05	NORM	0042	NAT DFT CLG TWR NU FL(GPM)	.00
17:59:07	HIGH	0009	SP STM GEN A OP RANGE LVL (PCT)	82.5
17:59:09	NORM	0021	TOT FDW THRU A&B HTR (KLB/H)	0
17:59:31	BAD	1349	FLUX 4-E LEVEL 6 (NANOAMPS)	-????.
18:00:00	FLAG	3583	RC4A-MS INSTR CONDITION	BAD
18:00:09	BAD	0021	TOT FDW THRU A&B HTR (KLB/H)	-????.
18:00:10	BAD	1157	FLUX 6-G LEVEL 2 (NANOAMPS)	-????.
18:00:14	NORM	0021	TOT FDW THRU A&B HTR (KLB/H)	0
18:00:27	NORM	1300	FLUX 10-C LEVEL 5 (NANOAMPS)	0
18:00:27	NORM	1303	BACKGROUND 10-C (NANOAMPS)	- 17.0
18:00:30	NORM	0027	3STG HTRB TO HD TK FL(KLB/H)	.0
18:00:44	BAD	0021	TOT FDW THRU A&B HTR (KLB/H)	-????.
18:00:44	BAD	0027	3STG HTRB TO HD TK FL(KLB/H)	-???.?
18:00:49	NORM	0021	TOT FDW THRU A&B HTR (KLB/H)	0
18:00:54	BAD	0021	TOT FDW THRU A&B HTR (KLB/H)	-????.
18:00:54	NORM	0021	TOT FDW THRU A&B HTR (KLB/H)	0
18:01:0	BAD	0021	TOT FDW THRU A&B HTR (KLB/H)	-????.
18:01:0	NORM	0021	TOT FDW THRU A&B HTR (KLB/H)	0
18:01:09	NORM	0027	3STG HTRB TO HD TK FL(KLB/H)	.0
18:01:11	NORM	0507	RM INCORE T/C 9-H TEMP	601.6
18:01:1	BAD	0021	TOT FDW THRU A&B HTR (KLB/H)	-????.
18:01:19	NORM	0021	TOT FDW THRU A&B HTR (KLB/H)	0
18:01:11	BAD	0027	3STG HTRB TO HD TK FL(KLB/H)	-???.?
18:01:27	BAD	1300	FLUX 10-C LEVEL 5 (NANOAMPS)	-????.
18:01:29	BAD	0021	TOT FDW THRU A&B HTR (KLB/H)	-????.
18:01:34	NORM	0027	3STG HTRB TO HD TK FL(KLB/H)	.0
18:01:44	NORM	1470	FLUX 14-H LEVEL 7 (NANOAMPS)	- 5.
18:01:44	NORM	0021	TOT FDW THRU A&B HTR (KLB/H)	0
18:01:59	BAD	0027	3STG HTRB TO HD TK FL(KLB/H)	-???.?
18:02:05	BAD	0042	NAT DFT CLG TWR NU FL(GPM)	-??.??
18:02:10	NORM	0042	NAT DFT CLG TWR NU FL(GPM)	.00

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first 4 pages only

TMI DOCUMENTS

DOCUMENT NO: TM-0319

COPY MADE ON 5/8/79 OF DOCUMENT PROVIDED BY

METROPOLITAN EDISON COMPANY.

Wilda R. Mullinix, NRC

(22)

COMPUTER LOGS / DAILY RECORD STORAGE

COVER SHEET

NOTE:

1. Information to be filled in by CRO at the end of the day.
2. Attach all the loose computer printouts not sent to Ops. Engineer or Nuc. Engineer. These include all the printouts for this day such as utility typewriter, alarm typewriter and periodic log typewriter sheets.
3. Attach securely (ie. staple, etc.) and attach this cover sheet to the front of the pack (as neatly as practicable) and date below.
4. Place in record storage (temporary - kitchen/longterm chemical addition room; Aux. Building).

Computer Records for 3/30/79 (Date) _____ (CRO Initial)

DATE 03/28/79
TIME 10:00

METROPOLITAN EDISON COMPANY
THREE MILE ISLAND STATION
UNIT 2

TIME	GENERATOR GENERATION MWH GROSS	AUX	NET	LOAD MW	MVAR	SOURCE PCF	CPS X 10 E NI 1	NI 2	INTERMEDIATE AMPS X 10 E NI 3	NI 4	REACTOR POWER % CH1	CH2	CH3	CH4	CONTROL ROD GROUPS % WITHDRAWN 1	2	3	4	5	6	7	8
10:01-	2-	12-	14-	2-	0	0	1.5E 2	9.1E	1-?.?E-??-?.?E-??		0	0	0	0	0	0	0	0	0	2	0	26

TIME	REACTOR COOLANT PRESS LP-A PSIG	LP-B	FLOW MLBH	LOOP A TH	TC1	TC2	LOOP B TH	TC1	TC2	PL3 LVL IN	MUTK LVL IN	MU FLOW GPM	INPUT BTU/ HRX1E9	STEAM GENERATORS STEAM PRESS A	B	STEAM TEMP A	B	LEVEL IN. A	B	FW FLOW KLB/HR A	B	HEAT RATE TG GROSS BTU/KWH	SG NET
10:01	2040	2031	3-???-	???-	???-	???-	???-	???-	???	404	61	52	9.2471	71	323	445	476	218	236	290	512-?????		0

TIME	TURBINE THROTTLE PRESS	TEMP	1ST STAGE PRESSURE A	B	LP EXH PRESS HGA COND C	COND H	CONDENSATE FLOW KLB/HR	TEMP F	BSTR PUMP F	COOLING TOWERS RANGE F	APPR. F	AMBIENT DB F	WB F
10:02	497	444-	1-	5	.08	.83	0	85.8	88.1	- .2	18.4	36.6	16 2

TIME	FEEDWATER TEMPERATURES 14 STG OUTLET 1A	1B	13 STG OUTLET 2A	2B	11 STG OUTLET 3A	3B	10 STG OUTLET 4A	4B	8 STG OUTLET 5A	5B	3 STG INLET 6A	6B	3 STG OUTLET 6A	6B	FEED PUMPS DISCH PRESS 1A	1B
10:03	88	88	90	90	91	90	90	91	91	91	132	103	322	363	174	145

TIME	MAIN CONDENSER IN A	B	OUT A	B	% CLEAN HOT	COLD	RIVER WATER STA DELT	RIVER TEMP
10:03	34.5	34.7	34.5	34.3-	??.??-	??.??	3.2	44.2

TILT/INBALANCE/INSERTION 03/28/79 03:55:48

	INCORE	NI5	NI6	NI7	NI8
NI POWER		97.50	97.22	97.50	97.25
INBALANCE	-2.64	-3.37	-3.91	-3.69	-3.59

CALCULATED ALLOWABLE INCORE IMBALANCE
FOR PRESENT POWER LEVEL NEG= -5.93 POS= 12.45

	WX	YZ	XY	ZW	
TILT	0.23	0.20	0.15	-0.57	NCORE
	0 14	-0.15	0.14	-0.12	OUT OF CORE

CALCULATED ALLOWABLE INCORE TILT
FOR PRESENT POWER LEVEL 2.30

ROD WITHDRAWAL INDEX 195.035

CALCULATED ALLOWABLE ROD INDEX
FOR PRESENT POWER LEVEL MIN=188.146 MAX=200.000

FOR PRESENT POWER LEVEL MIN=188.146 MAX=200.000

CORPW 2710.06 POWUP 1318.95 POWLW 1392.17

PERCENT FULL POWER 97.765

DATE 03/28/79
TIME 11:00

METROPOLITAN EDISON COMPANY
THREE MILE ISLAND STATION
UNIT 2

TIME	GENERATOR GENERATION MWH GROSS	AUX	NET	LOAD MW	MVAR	SOURCE PCP CPS X 10 E NI 1	NI 2	INTERMEDIATE AMPS X 10 E NI 3	NI 4	REACTOR POWER % CH1	CH2	CH3	CH4	CONTROL ROD GROUPS % WITHDRAWN 1	2	3	4	5	6	7	8
11:01	2	12-	14-	2	0	0 1.7E 2	6.6E 1	-?.?E-??	-?.?E-??	0	0	0	0	0	0	0	0	0	2	0	26

TIME	REACTOR COOLANT PRESS LP-A PSIG	LP-B	FLOW MLBH	LOOP A TH	TC1	TC2	LOOP B TH	TC1	TC2	PL3 LVL IN	MUTK LVL IN	MU FLOW GPM	INPUT BTU/ HRX1E9	STEAM GENERATORS STEAM PRESS A	B	STEAM TEMP A	B	LEVEL IN. A	B	FW FLOW KLB/HR A	B	HEAT RATE TG SG GROSS NET BTU/KWH
11:01	2003	2014	3-???	-???	-???	-???	-???	-???	-???	400	66	49	9.2471	7	305	431	467	351	233	296	505	-????? 0

TIME	TURBINE THROTTLE PRESS	TEMP	1ST STAGE PRESSURE A	B	LP EXH PRESS HGA COND C	COND H	CONDENSATE FLOW KLB/HR	TEMP BSTR PUMP F	F	COOLING TOWERS RANGE F	AMBIENT DB APPR. F	WB F
11:02	497	431-	1-	6	.10	.90	0	79.6	81.5	- .2	18.7	38.0 16.0

TIME	FEEDWATER TEMPERATURES 14 STG OUTLET 1A	1B	13 STG OUTLET 2A	2B	11 STG OUTLET 3A	3B	10 STG OUTLET 4A	4B	8 STG OUTLET 5A	5B	3 STG INLET 6A	6B	3 STG OUTLET 6A	6B	FEED PUMPS DISCH PRESS 1A	1B
11:03	81	81	83	83	85	84	84	85	86	86	100	92	219	220	174	147

TIME	MAIN CONDENSER IN A	B	OUT A	B	% CLEAN HOT	COLD	RIVER WATER STA DELT	RIVER TEMP
11:03	34.6	34.8	34.6	34.3	-??.??-??.??		3.5	44.5

TILT/IMBALANCE/INSERTION 03/28/79 03:55:48

	INCORE	NI5	NI6	NI7	NI8
NI POWER		97.50	97.22	97.50	97.25
IMBALANCE	-2.64	-3.37	-3.91	-3.69	-3.59

CALCULATED ALLOWABLE INCORE IMBALANCE
FOR PRESENT POWER LEVEL NEG= -5.93 POS= 12.45

	WX	YZ	XY	ZW	
TILT	0.23	0.20	0.15	-0.57	INCORE
	0.14	-0.15	0.14	-0.12	OUT OF CORE

CALCULATED ALLOWABLE INCORE TILT
FOR PRESENT POWER LEVEL 2.30

ROD WITHDRAWAL INDEX 195.035

CALCULATED ALLOWABLE ROD INDEX
FOR PRESENT POWER LEVEL MIN=188.146 MAX=200.000

PERCENT FULL POWER 97.765

DATE 03/28/79
TIME 12:00

METROPOLITAN EDISON COMPANY
THREE MILE ISLAND STATION
UNIT 2

TIME	GENERATOR GENERATION MWH GROSS	AUX	NET	LOAD MW	MVAR	SOURCE PCP CPS X 10 E NI 1	NI 2	INTERMEDIATE AMPS X 10 E NI 3	NI 4	REACTOR POWER % CH1	CH2	CH3	CH4	CONTROL ROD GROUPS % WITHDRAWN 1	2	3	4	5	6	7	8
12:01	-2	11-	13-	2	0	0 2.0E 2	7.0E 1	-?.?E-??	-?.?E-??	0	0	0	0	0	0	0	0	0	1	0	26

TIME	REACTOR COOLANT PRESS PSIG LP-A	LP-B	FLOW MLBH	LOOP A TH	TC1	TC2	LOOP B TH	TC1	TC2	PL3 LVL IN	MUTK LVL IN	MU FLOW GPM	INPUT BTU/ HRX1E9	STEAM GENERATORS STEAM PRESS A	B	STEAM TEMP A	B	LEVEL IN. A	B	FW FLOW KLB/HR A	B	HEAT RATE TG GROSS BTU/KWH	SG NET
12:01	1001	1004	3-???	-???	-???	-???	-???	-???	-???	395	71	49	9.2471-	8	319	421	457	373	228	276		523-?????	0

TIME	TURBINE THROTTLE PRESS	TEMP	1ST STAGE PRESSURE A	B	LP EXH PRESS MGA COND C	COND H	CONDENSATE FLOW KLB/HR	TEMP BSTR PUMP F	F	COOLING TOWERS RANGE F	APP.. F	AMBIENT DB F	WB F
12:02	497	421-	1-	6	.13	.?.	0	77.6	79.0	- .2	19.7	39.8	15.3

TIME	FEEDWATER TEMPERATURES 14 STG OUTLET 1A	1B	13 STG OUTLET 2A	2B	11 STG OUTLET 3A	3B	10 STG OUTLET 4A	4B	8 STG OUTLET 5A	5B	3 STG INLET 6A	6B	3 STG OUTLET 6A	6B	FEED PUMPS DISCH PRESS 1A	1B
12:03	79	79	79	80	80	80	79	80	80	80	101	95	225	234	174	145

TIME	MAIN CONDENSER IN A	B	OUT A	B	% CLEAN HOT	COLD	RIVER WATER STA DELT	RIVER TEMP
12:03	35.0	35.1	34.9	34.7-	??.??	-??.??	3.7	44.7

TILT/IMBALANCE/INSERTION 03/28/79 03:55:48

	INCORE	NI5	NI6	NI7	NI8
N. POWER		97.50	97.22	97.50	97.25
IMBALANCE	-2.64	-3.37	-3.91	-3.69	-3.59

CALCULATED ALLOWABLE INCORE IMBALANCE
FOR PRESENT POWER LEVEL NEG= -5.93 POS= 12.45

	WX	YZ	XY	ZW	
TILT	0.23	0.20	0.15	-0.57	INCORE
	0.14	-0.15	0.14	-0.12	OUT OF CORE

CALCULATED ALLOWABLE INCORE TILT
FOR PRESENT POWER LEVEL 2.30

ROD WITHDRAWAL INDEX 195.035

CALCULATED ALLOWABLE ROD INDEX
FOR PRESENT POWER LEVEL [illegible]

COPPU 2710.06 POWUP 1318.95 POWLW 1392.17

PERCENT FULL POWER 97.765

DATE 03/28/79
TIME 13:00

METROPOLITAN EDISON COMPANY
THREE MILE ISLAND STATION
UNIT 2

TIME	GENERATOR GENERATION MWH GROSS	AUX	NET	LOAD MW	MVAR	SOURCE PCF CPS X 10 E NI 1	NI 2	INTERMEDIATE AMPS X 10 E NI 3	NI 4	REACTOR POWER % CH1	CH2	CH3	CH4	CONTROL ROD GROUPS % WITHDRAWN 1	2	3	4	5	6	7	8
13:01-	2	11-	14-	2	0	0 2.6E 2	5.3E 1	-?.?E-??	-?.?E-??	0	0	0	0	0	0	0	0	0	2	0	26

TIME	REACTOR COOLANT PRESS LP-A PSIG	LP-B	FLOW MLBH	LOOP A TH	TC1	TC2	LOOP B TH	TC1	TC2	PL3 LVL IN	MUTK LVL IN	MU FLOW GPM	INPUT BTU/ HRX1E9	STEAM GENERATORS STEAM PRESS A	B	STEAM TEMP A	B	LEVEL IN. A	B	FW FLOW KLB/HR A	B	HEAT RATE TG GROSS BTU/KWH	SG NET
13:01	468	476	3-???	???	???	???	???	???	???	399	84	97	9.2471-	13	295	413	449	380	226	298	534-?????		0

TIME	TURBINE THROTTLE PRESS	TEMP	1ST STAGE PRESSURE A	B	LP EXH PRESS HGA COND C	COND H	CONDENSATE FLOW KLB/HR	TEMP F	BSTR PUMP F	COOLING TOWERS RANGE F	AMBIENT APPR. F	DB F	WB F
13:02	497	413-	2-	5	.16	.81	0	75.5	76.8 -	.3	15.5	42.0	19.8

TIME	FEEDWATER TEMPERATURES 14 STG OUTLET 1A	1B	13 STG OUTLET 2A	2B	11 STG OUTLET 3A	3B	10 STG OUTLET 4A	4B	8 STG OUTLET 5A	5B	3 STG INLET 6A	6B	3 STG OUTLET 6A	6B	FEED PUMPS DISCH PRESS 1A	1B
13:03	77	76	77	77	78	77	77	78	78	78	98	91	224	218	174	145

TIME	MAIN CONDENSER IN A	B	OUT A	B	% CLEAN HOT	COLD	RIVER WATER STA DELT	RIVER TEMP
-13:03	35.3	35.5	35.3	35.0	-??.??	-??.??	3.8	45.0

TILT/IMBALANCE/INSERTION 03/28/79 03:55:48

	INCORE	NI5	NI6	NI7	NI8
NI POWER		97.50	97.22	97.50	97.25
IMBALANCE	-2.64	-3.37	-3.91	-3.69	-3.59

CALCULATED ALLOWABLE INCORE IMBALANCE
FOR PRESENT POWER LEVEL NEG= -5.93 POS= 12.45

	WX	YZ	XY	ZX	
TILT	0.23	0.20	0.15	-0.57	INCORE
	0.14	-0.15	0.14	-0.12	OUT OF CORE

CALCULATED ALLOWABLE INCORE TILT
FOR PRESENT POWER LEVEL 2.30

ROD WITHDRAWAL INDEX 195.035

CALCULATED ALLOWABLE ROD INDEX
FOR PRESENT POWER LEVEL MIN=188.146 MAX=200.000

PERCENT FULL POWER 97.765

DATE 03/28/79
TIME 14:00

METROPOLITAN EDISON COMPANY
THREE MILE ISLAND STATION
UNIT 2

	GENERATOR GENERATION MWH			LOAD		SOURCE PCF CPS X 10 E		INTERMEDIATE AMPS X 10 E		REACTOR POWER %			CONTROL ROD GROUPS % WITHDRAWN							
TIME	GROSS	AUX	NET	MW	MVAR	NI 1	NI 2	NI 3	NI 4	CH1	CH2	CH3	CH4	1	2	3	4	5	6	7	8
14:01	2	11	13	2	0	0	2.7E 2	6.3E 1	-?.?E-??-?.?E-??	0	0	0	0	0	0	0	0	0	1	0	26

	REACTOR COOLANT													STEAM GENERATORS						HEAT RATE	
									PL3	MUTK	NU	INPUT		STEAM	STEAM		LEVEL	FW FLOW		TG	SG
TIME	PRESS LP-A PSIG	PRESS LP-B	FLOW MLBH	LOOP A TH	LOOP A TC1	LOOP A TC2	LOOP B TH	LOOP B TC1	LOOP B TC2	LVL IN	LVL IN	FLOW GPM	BTU/ HRX1E9	PRESS A	PRESS B	TEMP A	TEMP B	IN. A	IN. B	KLB/HR A	KLB/HR B	GROSS BTU/KWH	NET
14:02	520	528	3-???	???	???	???	???	???	???	400	73	113	9.2471-	10	281	405	440	395	225	268	562-?????		0

	TURBINE					CONDENSATE			COOLING TOWERS	AMBIENT	
		1ST STAGE PRESSURE		LP EXH PRESS HGA				BSTR PUMP	RANGE	DB APPR.	WB
TIME	THROTTLE PRESS	A	B	COND C	COND H	FLOW KLB/HR	TEMP F	F	F	F	F
14:02	497	405-	2-	6	.21	.86	0	73.9	75.3 -	.3	15.4	44.5	20.4

	FEEDWATER TEMPERATURES												FEED PUMPS DISCH PRESS	
	14 STG OUTLET	13 STG OUTLET	11 STG OUTLET	10 STG OUTLET	8 STG OUTLET					3 STG INLET	3 STG OUTLET			
TIME	1A	1B	2A	2B	3A	3B	4A	4B	5A	5B	6A	6B	6A	6B	1A	1B
14:03	75	75	75	76	76	75	75	76	76	76	95	89	225	222	174	144

	MAIN CONDENSER IN		OUT		% CLEAN		RIVER WATER STA DELT	RIVER TEMP
TIME	A	B	A	B	HOT	COLD		
14:04	35.8	36.0	35.7	35.5	-??.??	-??.??	4.1	45.2

TILT/IMBALANCE/INSERTION 03/28/79 03:55:48

	INCORE	NI5	NI6	NI7	NI8
NI POWER		97.50	97.22	97.50	97.25
IMBALANCE	-2.64	-3.37	-3.91	-3.69	-3.59

CALCULATED ALLOWABLE INCORE IMBALANCE
FOR PRESENT POWER LEVEL NEG= -5.93 POS= 12.45

	WX	YZ	XY	ZW	
TILT	0.23	0.20	0.15	-0.57	INCORE
	0.14	-0.15	0 14	-0.12	OUT OF CORE

CALCULATED ALLOWABLE INCORE TILT
FOR PRESENT POWER LEVEL 2.30

ROD WITHDRAWAL INDEX 195.035

CALCULATED ALLOWABLE ROD INDEX
FOR PRESENT POWER LEVEL MIN=188.146 MAX=200.000

COMPW 2710.06 POWUP 1318.95 POWLW 1392.17

PERCENT FULL POWER 97.765

DATE 03/28/79
TIME 15:00

METROPOLITAN EDISON COMPANY
THREE MILE ISLAND STATION
UNIT 2

TIME	GENERATOR GENERATION MWH GROSS	AUX	NET	LOAD MW	MVAR	SOURCE PCF CPS X 10 E NI 1	NI 2	INTERMEDIATE AMPS X 10 E NI 3	NI 4	REACTOR POWER % CH1	CH2	CH3	CH4	CONTROL ROD GROUPS % WITHDRAWN 1	2	3	4	5	6	7	8
15:01	2	11	13	2	0	0 3.4E 2	6.0E 1	-?.?E-??	-?.?E-??	0	0	0	0	0	0	0	0	0	2	0	26

TIME	REACTOR COOLANT PRESS LP-A PSIG	LP-B	FLOW MLBH	LOOP A TH	TC1	TC2	LOOP B TH	TC1	TC2	PL3 LVL IN	MUTK LVL IN	MU FLOW GPM	INPUT BTU/ HRX1E9	STEAM GENERATORS STEAM PRESS A	B	STEAM TEMP A	B	LEVEL IN. A	B	FW FLOW KLB/HR A	B	HEAT RATE TG GROSS BTU/KWH	SG NET
15:01	416	421	3	524-???	-???	-???	-???	-???	-???	376	73	95	9.2471	65	266	404	431	370	224	294		534-?????	0

TIME	TURBINE THROTTLE PRESS	TEMP	1ST STAGE PRESSURE A	B	LP EXH PRESS HGA COND C	COND H	CONDENSATE FLOW KLB/HR	TEMP BSTR PUMP F	F	COOLING TOWERS RANGE F	APPR. F	AMBIENT DB F	WB F
15:02	497	404-	2-	6	.25	.88	0	72.6	73.8	- .3	14.2	46.2	22.1

TIME	FEEDWATER TEMPERATURES 14 STG OUTLET 1A	1B	13 STG OUTLET 2A	2B	11 STG OUTLET 3A	3B	10 STG OUTLET 4A	4B	8 STG OUTLET 5A	5B	3 STG INLET 6A	6B	3 STG OUTLET 6A	6B	FEED PUMPS DISCH PRESS 1A	1B
15:03	74	74	74	74	75	74	74	74	75	74	93	88	225	224	174	144

TIME	MAIN CONDENSER IN A	B	OUT A	B	% CLEAN HOT	COLD	RIVER WATER STA DELT	RIVER TEMP
15:03	36.4	36.5	36.2	36.0	-??.??	-??.??	4.0	45.4

TILT/IMBALANCE/INSERTION 03/28/79 03:55:48

	INCORE	NI5	NI6	NI7	NI8
NI POWER		97.50	97.22	97.50	97.25
IMBALANCE	-2.64	-3.37	-3.91	-3.69	-3.59

CALCULATED ALLOWABLE INCORE IMBALANCE
FOR PRESENT POWER LEVEL NEG= -5.93 POS= 12.45

	WX	YZ	XY	ZW	
TILT	0.23	0.20	0.15	-0.57	INCORE
	0.14	-0.15	0.14	-0.12	OUT OF CORE

CALCULATED ALLOWABLE INCORE TILT
FOR PRESENT POWER LEVEL 2.30

ROD WITHDRAWAL INDEX 195.035

CALCULATED ALLOWABLE ROD INDEX
FOR PRESENT POWER LEVEL MIN=188.146 MAX=200.000

PERCENT FULL POWER 97.765

DATE 03/28/79
TIME 16:00

METROPOLITAN EDISON COMPANY
THREE MILE ISLAND STATION
UNIT 2

TIME	GENERATOR GENERATION MWH GROSS	AUX	NET	LOAD MW	MVAR	SOURCE PCP CPS X 10 E NI 1	NI 2	INTERMEDIATE AMPS X 10 E NI 3	NI 4	REACTOR POWER % CH1	CH2	CH3	CH4	CONTROL ROD GROUPS % WITHDRAWN 1	2	3	4	5	6	7	8
16:01-	2	11-	13-	2	0	0	3.8E 2	7.2E 1	-?.?E-??-	?.?E-??	0	0	0	0	0	0	0	0	0	1	0 26

TIME	REACTOR COOLANT PRESS PSIG	LP-A	LP-B	FLOW MLBH	LOOP A TH	TC1	TC2	LOOP B TH	TC1	TC2	PL3 LVL IN	MUTK LVL IN	MU FLOW GPM	INPUT BTU/ HRX1E9	STEAM GENERATORS STEAM PRESS A	B	STEAM TEMP A	B	LEVEL IN. A	B	FW FLOW KLB/HR A	B	HEAT RATE TG GROSS BTU/KWH	SG NET
16:02	556	571		3	590-???	-???	-???	-???	-???	-???	294	81	116	9.2471	44	166	394	422	365	336	298	523-?????		0

TIME	TURBINE THROTTLE PRESS	TEMP	1ST STAGE PRESSURE A	B	LP EXH PRESS HGA COND C	COND H	CONDENSATE FLOW KLB/HR	TEMP BSTR PUMP F	COOLING TOWERS RANGE F	AMBIENT DB F	WB APPR. F
16:02	497	394-	1-	6	.27	.88	0	70.2	71.5 - .3	13.7	46.9 23.2

TIME	FEEDWATER TEMPERATURES 14 STG OUTLET 1A	1B	13 STG OUTLET 2A	2B	11 STG OUTLET 3A	3B	10 STG OUTLET 4A	4B	8 STG OUTLET 5A	5B	3 STG INLET 6A	6B	3 STG OUTLET 6A	6B	FEED PUMPS DISCH PRESS 1A	1B
16:03	72	72	73	73	74	73	73	73	73	73	91	86	225	224	174	144

TIME	MAIN CONDENSER IN A	B	OUT A	B	% CLEAN HOT	COLD	RIVER WATER STA DELT	RIVER TEMP
16:03	37.0	37.1	36.8	36.6-??.??	-??.??		3.7	45.6

TILT/IMBALANCE/INSERTION 03/28/79 03:55:48

	INCORE	NI5	NI6	NI7	NI8
NI POWER		97.50	97.22	97.50	97.25
IMBALANCE	-2.64	-3.37	-3.91	-3.69	-3.59

CALCULATED ALLOWABLE INCORE IMBALANCE
FOR PRESENT POWER LEVEL NEG= -5.93 POS= 12.45

	WX	YZ	XY	ZW	
TILT	0.23	0.20	0.15	-0.57	INCORE
	0.14	-0.15	0.14	-0.12	OUT OF CORE

CALCULATED ALLOWABLE INCORE TILT
FOR PRESENT POWER LEVEL 2.30

ROD WITHDRAWAL INDEX 195.035

CALCULATED ALLOWABLE ROD INDEX
FOR PRESENT POWER LEVEL MIN=188.146 MAX=200.000

COMPW 2710.06 POWDP 1318.95 POWLN 1392.17

PERCENT FULL POWER 97.765

DATE 03/28/79
TIME 17:00

METROPOLITAN EDISON COMPANY
THREE MILE ISLAND STATION
UNIT 2

TIME	GENERATOR GENERATION GROSS	MWH AUX	NET	LOAD MW	MVAR	SOURCE PCP CPS X 10 E NI 1	NI 2	INTERMEDIATE AMPS X 10 E NI 3	NI 4	REACTOR POWER % CH1	CH2	CH3	CH4	CONTROL ROD GROUPS % WITHDRAWN 1	2	3	4	5	6	7	8
17:01-	2	11-	13-	2	0	0	4.3E 2	7.2E 1	-?.?E-??	-?.?E-??	0	0	0	0	0	0	0	0	0	2	0 26

TIME	REACTOR COOLANT PRESS LP-A PSIG	LP-B	FLOW MLBH	LOOP A TH	TC1	TC2	LOOP B TH	TC1	TC2	PL3 LVL IN	MUTK NU LVL IN	FLOW GPM	INPUT BTU/ HRX1E9	STEAM GENERATORS STEAM PRESS A	B	STEAM TEMP A	B	LEVEL IN. A	B	FW FLOW KLB/HR A	B	HEAT RATE TG GROSS BTU/KWH	SG NET
17:01	610	628	0	522-???	-???	-???	-???	-???	-???	365	80	128	9.2471	103	172	391	414	345	321	298	524-?????		0

TIME	TURBINE THROTTLE PRESS	TEMP	1ST STAGE PRESSURE A	B	LP EXH PRESS HGA COND C	COND H	CONDENSATE FLOW KLB/HR	TEMP F	BSTR PUMP F	COOLING TOWERS RANGE F	APPR. F	AMBIENT DB F	WB F
17:02	497	391-	1-	4	.00	.00	0	72.1	75.9 -	.3	12.2	46.7	25.3

TIME	FEEDWATER TEMPERATURES 14 STG OUTLET 1A	1B	13 STG OUTLET 2A	2B	11 STG OUTLET 3A	3B	10 STG OUTLET 4A	4B	8 STG OUTLET 5A	5B	3 STG INLET 6A	6B	3 STG OUTLET 6A	6B	FEED PUMPS DISCH PRESS 1A	1B
17:03	72	72	71	72	72	71	71	71	71	71	89	84	227	224	176	144

TIME	MAIN CONDENSER IN A	B	OUT A	B	% CLEAN HOT	COLD	RIVER WATER STA DELT	RIVER TEMP
17:03	37.5	37.8	37.5	37.2	-??.??-	??.??	4.3	45.6

TILT/INBALANCE/INSERTION 03/28/79 03:55:48

	INCORE	NI5	NI6	NI7	NI8
NI POWER		97.50	97.22	97.50	97.25
INBALANCE	-2.64	-3.37	-3.91	-3.69	-3.59

CALCULATED ALLOWABLE INCORE INBALANCE
FOR PRESENT POWER LEVEL NEG= -5.93 POS= 12.45

	WX	YZ	XY	ZW	
TILT	0.23	0.20	0.15	-0.57	INCORE
	0.14	-0.15	0.14	-0.12	OUT OF CORE

CALCULATED ALLOWABLE INCORE T.LT
FOR PRESENT POWER LEVEL 2.30

ROD WITHDRAWAL INDEX 195.035

CALCULATED ALLOWABLE ROD INDEX
FOR PRESENT POWER LEVEL MIN=188.146 MAX=200.000

CORPN 2710.06 POWUP 1318.95 POWLW 1392.17

PERCENT FULL POWER 97.765

DATE 03/28/79
TIME 18:00

METROPOLITAN EDISON COMPANY
THREE MILE ISLAND STATION
UNIT 2

TIME	GENERATOR GENERATION MWH GROSS	AUX	NET	LOAD MW	MVAR	SOURCE PCP CPS X 10 E NI 1	NI 2	INTERMEDIATE AMPS X 10 E NI 3	NI 4	REACTOR POWER % CH1	CH2	CH3	CH4	CONTROL ROD GROUPS % WITHDRAWN 1	2	3	4	5	6	7	8
18:01	- 2	11-	14-	2	0	0	4.6E 2	7.7E 1	-?.?E-??-?.?E-??	0	0	0	0	0	0	0	0	0	0	0	26

TIME	REACTOR COOLANT PRESS PSIG LP-A	LP-B	FLOW MLBH	LOOP A TH	TC1	TC2	LOOP B TH	TC1	TC2	PL3 LVL IN	MUTK MU LVL IN	MU FLOW GPM	INPUT BTU/ HRX1E9	STEAM GENERATORS STEAM PRESS A	B	STEAM TEMP A	B	LEVEL IN. A	B	FW FLOW KLB/HR A	B	HEAT RATE TG SG GROSS NET BTU/KWH
18:02	870	885	0	549-???	-???	-???	-???	-???	-???	320	66	43	9.2471	36	172	376	405	338	321	357	514-?????	0

TIME	TURBINE THROTTLE PRESS	TEMP	1ST STAGE PRESSURE A	B	LP EXH PRESS HGA COND C	COND H	CONDENSATE FLOW KLB/HR	TEMP F	BSTR PUMP F	COOLING TOWERS RANGE F	APPR. F	AMBIENT DB F	WB F
18:02	497	376-	14-????		27.65	27.00	0	82.9	85.7	.0	13.4	45.8	24 6

TIME	FEEDWATER TEMPERATURES 14 STG OUTLET 1A	1B	13 STG OUTLET 2A	2B	11 STG OUTLET 3A	3B	10 STG OUTLET 4A	4B	8 STG OUTLET 5A	5B	3 STG INLET 6A	6B	3 STG OUTLET 6A	6B	FEED PUMPS DISCH PRESS 1A	1B
18:03	82	83	81	81	81	80	80	80	81	79	84	82	173	174	159	128

TIME	MAIN CONDENSER IN A	B	OUT A	B	% CLEAN HOT	COLD	RIVER WATER STA DELT	RIVER TEMP
18:04	38.0	38.3	38.4	38.0	-??.??-??.??		3.5	45.5

TILT/INBALANCE/INSERTION 03/28/79 03:55:48

	INCORE	NI5	NI6	NI7	NI8
NI POWER		97.50	97.22	97.50	97.25
IMBALANCE	-2.64	-3.37	-3.91	-3.69	-3.59

CALCULATED ALLOWABLE INCORE IMBALANCE
FOR PRESENT POWER LEVEL NEG= -5.93 POS= 12.45

	WX	YZ	XY	ZW	
TILT	0.23	0.20	0.15	-0.57	INCORE
	0.14	-0.15	0.14	-0.12	OUT OF CORE

CALCULATED ALLOWABLE INCORE TILT
FOR PRESENT POWER LEVEL 2.30

ROD WITHDRAWAL INDEX 195.035

CALCULATED ALLOWABLE ROD INDEX
FOR PRESENT POWER LEVEL MIN=188.146 MAX=200.000

POWER 2318.95 FLOW 1392.17

PERCENT FULL POWER 97.765

DATE 03/28/79
TIME 19:00

METROPOLITAN EDISON COMPANY
THREE MILE ISLAND STATION
UNIT 2

	GENERATOR GENERATION						SOURCE		INTERMEDIATE		REACTOR POWER		CONTROL ROD GROUPS % WITHDRAWN								
TIME	MWH GROSS	AUX	NET	LOAD MW	MVAR	PCF	CPS X 10 E NI 1	NI 2	AMPS X 10 E NI 3	NI 4	% CH2	CH2	CH3	CH4	1	2	3	4	5	6	7	8
19:01-	2	11-	14-	2	0	0	4.1E 2	9.3E 1	-?.?E-??	-?.?E-??	0	0	0	0	0	0	0	0	0	2	0	26

	REACTOR COOLANT												STEAM GENERATORS								HEAT RATE	
TIME	PRESS LP-A PSIG	LP-B	FLOW MLBH	LOOP A TH	TC1	TC2	LOOP B TH	TC1	TC2	PL3 LVL IN	MUTK NU LVL IN	FLOW GPM	INPUT BTU/ HRX1E9	STEAM PRESS A	B	STEAM TEMP A	B	LEVEL IN. A	B	FW FLOW KLB/HR A	B	TG GROSS BTU/KWH	SG NET
19:02	2283	2303	0	556-	???	-???	-???	-???	-???	403	77	72	9.2471-	6	166	367	396	547	320	306	514-	?????	0

	TURBINE					CONDENSATE			COOLING TOWERS		AMBIENT	
TIME	THROTTLE PRESS	TEMP	1ST STAGE PRESSURE A	B	LP EXH PRESS HGA COND C	COND H	FLOW KLB/HR	TEMP BSTR PUMP F	F	RANGE F	APPR. F	DB F	WB F
19:02	497	367-	14-????		28.11	28.63	0	82.9	88.1	-	.0	15.8	44.4	23.0

	FEEDWATER TEMPERATURES												FEED PUMPS DISCH PRESS	
TIME	14 STG OUTLET 1A	1B	13 STG OUTLET 2A	2B	11 STG OUTLET 3A	3B	10 STG OUTLET 4A	4B	8 STG OUTLET 5A	5B	3 STG INLET 6A	6B	3 STG OUTLET 6A	6B	1A	1B
19:03	87	87	87	88	88	87	87	87	89	87	86	86	114	111	160	130

	MAIN CONDENSER IN		OUT		% CLEAN		RIVER WATER STA DELT	RIVER TEMP
TIME	A	B	A	B	HOT	COLD		
19:03	38.8	38.9	38.9	38.7-	??.??	-??.??	3.1	45.4

TILT/IMBALANCE/INSERTION 03/28/79 03:55:48

	INCORE	NI5	NI6	NI7	NI8
NI POWER		97.50	97.22	97.50	97.25
IMBALANCE	-2.64	-3.37	-3.91	-3.69	-3.59

CALCULATED ALLOWABLE INCORE IMBALANCE
FOR PRESENT POWER LEVEL NEG= -5.93 POS= 12.45

	WX	YZ	XY	ZW	
TILT	0.23	0.20	0.15	-0.57	INCORE
	0.14	-0.15	0.14	-0.12	OUT OF CORE

CALCULATED ALLOWABLE INCORE TILT
FOR PRESENT POWER LEVEL 2.30

ROD WITHDRAWAL INDEX 195.035

CALCULATED ALLOWABLE ROD INDEX
FOR PRESENT POWER LEVEL MIN=188.146 MAX=200.000

CORPW 2710.66 POWOP 1318.95 POWEW 1392.17

PERCENT FULL POWER 97.765

DATE 03/28/79
TIME 20:00

METROPOLITAN EDISON COMPANY
THREE MILE ISLAND STATION
UNIT 2

TIME	GENERATOR GENERATION MW GROSS	AUX	NET	LOAD MW	MVAR	SOURCE PCP CPS X 10 E NI 1	NI 2	INTERMEDIATE AMPS X 10 E NI 3	NI 4	REACTOR POWER % CH1	CH2	CH3	CH4	CONTROL ROD GROUPS % WITHDRAWN 1	2	3	4	5	6	7	8
20:[illegible]	2	17-	19-	2	0	0 4.8E 2	6.7E	1-?.?E-??-	?.?E-??	0	0	0	0	0	0	0	0	0	1	0	26

TIME	REACTOR COOLANT PRESS LP-A PSIG	LP-B	FLOW MLBH	LOOP A TH	TC1	TC2	LOOP B TH	TC1	TC2	PL3 LVL IN	MUTK LVL IN	MU FLOW GPM	INPUT BTU/ HRX1E9	STEAM GENERATORS STEAM PRESS A	B	STEAM TEMP A	B	LEVEL IN. A	B	FW FLOW KLB/HR A	B	HEAT RATE TG SG GROSS NET BTU/KWH
20:02	1310	1330	0-???	???	???	???	???	???	???	400	52	95	9 2471	76	99	337	389	414	393	307		542-????? 0

TIME	TURBINE THROTTLE PRESS	1ST STAGE PRESSURE TEMP	A	B	LP EXH PRESS HGA COND C	COND H	CONDENSATE FLOW KLB/HR	TEMP F	BSTR PUMP F	COOLING TOWERS RANGE F	APPR. F	AMBIENT DB F	WB F
20:02	497	337-????-	????		28.26	28.56	-????	85.8	90.0	.4	16.0	43.1	23.3

TIME	FEEDWATER TEMPERATURES 14 STG OUTLET 1A	1B	13 STG OUTLET 2A	2B	11 STG OUTLET 3A	3B	10 STG OUTLET 4A	4B	8 STG OUTLET 5A	5B	3 STG INLET 6A	6B	3 STG OUTLET 6A	6B	FEED PUMPS DISCH PRESS 1A	1B
20:03	90	90	88	89	91	89	90	90	91	90	89	92	103	96	168	138

TIME	MAIN CONDENSER IN A	B	OUT A	B	% CLEAN HOT	COLD	RIVER WATER STA DELT	RIVER TEMP
20:04	39.4	39.7	40.2	39.8	-??.??	99.81	3.2	45.3

TILT/IMBALANCE/INSERTION 03/28/79 03:55:48

	INCORE	NI5	NI6	NI7	NI8
NI POWER		97.50	97.22	97.50	97.25
IMBALANCE	-2.64	-3.37	-3.91	-3.69	-3.59

CALCULATED ALLOWABLE INCORE IMBALANCE
FOR PRESENT POWER LEVEL NEG= -5.93 POS= 12.45

	WX	YZ	XY	ZW	
TILT	0.23	0.20	0.15	-0.57	INCORE
	0.14	-0.15	0.14	-0.12	OUT OF CORE

CALCULATED ALLOWABLE INCORE TILT
FOR PRESENT POWER LEVEL 2.30

ROD WITHDRAWAL INDEX 195.035

CALCULATED ALLOWABLE ROD INDEX
FOR PRESENT POWER LEVEL MIN=188.146 MAX=200.000

PERCENT FULL POWER 97.765

DATE 03/28/79
TIME 21:00

METROPOLITAN EDISON COMPANY
THREE MILE ISLAND STATION
UNIT 2

TIME	GENERATOR GENERATION MWH GROSS	AUX	NET	LOAD MW	MVAR	SOURCE PCF CPS X 10 E NI 1	NI 2	INTERMEDIATE AMPS X 10 E NI 3	NI 4	REACTOR POWER % CH1	CH2	CH3	CH4	CONTROL ROD GROUPS % WITHDRAWN 1	2	3	4	5	6	7	8
21:01-	2	17-	19-	2	0	0 4.7E 2	6.7E 1	-?.?E-??-	?.?E-??	0	0	0	0	0	0	0	0	0	2	0	26

TIME	REACTOR COOLANT PRESS PSIG LP-A	LP-B	FLOW MLBH	LOOP A TH	TC1	TC2	LOOP B TH	TC1	TC2	PL3 LVL IN	MUTK NU LVL IN	FLOW GPM	INPUT BTU/ HRX1E9	STEAM GENERATORS STEAM PRESS A	B	STEAM TEMP A	B	LEVEL IN. A	B	FW FLOW KLB/HR A	B	HEAT RATE TG SG GROSS NET BTU/KWH
21:02	1038	1054	0-???	-???	-???	-???	-???	-???	-???	398	60	64	9.2471	46	68	320	379	410	386	325	544	-????? 0

TIME	TURBINE THROTTLE PRESS	1ST STAGE PRESSURE TEMP	A	B	LP EXH PRESS HGA COND C	COND H	CONDENSATE FLOW KLB/HR	TEMP BSTR PUMP F	F	COOLING TOWERS RANGE F	APPR. F	AMBIENT DB F	WB F
21:02	496	319-	13-????		24.44	24.66	-????	92.2	92.7	.1	15.1	42.5	25.3

TIME	FEEDWATER TEMPERATURES 14 STG OUTLET 1A	1B	13 STG OUTLET 2A	2B	11 STG OUTLET 3A	3B	10 STG OUTLET 4A	4B	8 STG OUTLET 5A	5B	3 STG INLET 6A	6B	3 STG OUTLET 6A	6B	FEED PUMPS DISCH PRESS 1A	1B
21:03	91	91	90	90	90	90	89	89	89	88	88	90	94	91	170	138

TIME	MAIN CONDENSER IN A	B	OUT A	B	% CLEAN HOT	COLD	RIVER WATER STA DELT	RIVER TEMP
21:03	40.4	40.6	40.8	40.5-	??.??	-??.??	3.2	45.3

TILT/IMBALANCE/INSERTION 03/28/79 03:55:48

	INCORE	NI5	NI6	NI7	NI8
NI POWER		97.50	97.22	97.50	97.25
IMBALANCE	-2.64	-3.37	-3.91	-3 69	-3.59

CALCULATED ALLOWABLE INCORE IMBALANCE
FOR PRESENT POWER LEVEL NEG= -5.93 POS= 12.45

	WX	YZ	XY	ZW	
TILT	0.23	0.20	0.15	-0.57	INCORE
	0.14	-0.15	0.14	-0.12	OUT OF CORE

CALCULATED ALLOWABLE INCORE TILT
FOR PRESENT POWER LEVEL 2.30

ROD WITHDRAWAL INDEX 195.035

CALCULATED ALLOWABLE ROD INDEX
FOR PRESENT POWER LEVEL M.N=188.146 MAX=200.000

PERCENT FULL POWER 97.765

DATE 03/28/79
TIME 22:00

METROPOLITAN EDISON COMPANY
THREE MILE ISLAND STATION
UNIT 2

TIME	GENERATOR GENERATION MWH GROSS	AUX	NET	LOAD MW	MVAR	SOURCE PCF CPS X 10 E NI 1	NI 2	INTERMEDIATE AMPS X 10 E NI 3	NI 4	REACTOR POWER % CH1	CH2	CH3	CH4	CONTROL ROD GROUPS % WITHDRAWN 1	2	3	4	5	6	7	8
22:00-	2	17-	19-	2	0	0 4.4E 2	6.4E 1	-?.?E-??-	?.?E-??	0	0	0	0	0	0	0	0	0	1	0	26

TIME	REACTOR COOLANT PRESS LP-A PSIG	LP-B	FLOW MLBH	LOOP A TH	TC1	TC2	LOOP B TH	TC1	TC2	PL3 LVL IN	MUTK LVL IN	MU FLOW GPM	INPUT BTU/ HRX1E9	STEAM GENERATORS STEAM PRESS A	B	STEAM TEMP A	B	LEVEL IN. A	B	FW FLOW KLB/HR A	B	HEAT RATE TG SG GROSS NET BTU/KWH
22:01	957	975	0-???	???	???	???	???	???	???	397	74	58	9.2471	35	56	307	374	404	381	325		542-????? 0

TIME	TURBINE THROTTLE PRESS	TEMP	1ST STAGE PRESSURE A	B	LP EXH PRESS HGA COND C	COND H	CONDENSATE FLOW KLB/HR	TEMP F	BSTR PUMP F	COOLING TOWERS RANGE F	APPR. F	AMBIENT DB F	WB F
22:02	497	307-????	-????		27.98	28.35	-????	92	1 95.8	.2	14.6	42.9	26.4

TIME	FEEDWATER TEMPERATURES 14 STG OUTLET 1A	1B	13 STG OUTLET 2A	2B	11 STG OUTLET 3A	3B	10 STG OUTLET 4A	4B	8 STG OUTLET 5A	5B	3 STG INLET 6A	6B	3 STG OUTLET 6A	6B	FEED PUMPS DISCH PRESS 1A	1B
22:03	96	95	97	97	98	97	97	97	99	97	94	100	94	91	168	138

TIME	MAIN CONDENSER IN A	B	OUT A	B	% CLEAN HOT	COLD	RIVER WATER STA DELT	RIVER TEMP
22:03	41.0	41.2	41.6	41.2-	??.??	-??.??	3.2	45.2

TILT/INBALANCE/INSERTION 03/28/79 03:55:48

	INCORE	NI5	NI6	NI7	NI8
NI POWER		97.50	97.22	97.50	97.25
INBALANCE	-2.64	-3.37	-3.91	-3.69	-3.59

CALCULATED ALLOWABLE INCORE INBALANCE
FOR PRESENT POWER LEVEL NEG= -5.93 POS= 12.45

	WX	YZ	XY	ZW	
TILT	0.23	0.20	0.15	-0.57	INCORE
	0.14	-0.15	0.14	-0.12	OUT OF CORE

CALCULATED ALLOWABLE INCORE TILT
FOR PRESENT POWER LEVEL 2.30

ROD WITHDRAWAL INDEX 195.035

CALCULATED ALLOWABLE ROD INDEX
FOR PRESENT POWER LEVEL MIN=188.146 MAX=200.000

PERCENT FULL POWER 97.765

DATE 03/28/79
TIME 23:00

METROPOLITAN EDISON COMPANY
THREE MILE ISLAND STATION
UNIT 2

TIME	GENERATOR GENERATION M&I GROSS	AUX	NET	LOAD MW	MVAR	SOURCE PCF CPS X 10 E NI 1	NI 2	INTERMEDIATE AMPS X 10 E NI 3	NI 4	REACTOR POWER % CH1	CH2	CH3	CH4	CONTROL ROD GROUPS % WITHDRAWN 1	2	3	4	5	6	7	8
23:01-	2	17-	19-	2	0	0 4.1E 2	6.4E	1-?.?E-??-	?.?E-??	0	0	0	0	0	0	0	0	0	2	0	26

TIME	REACTOR COOLANT PRESS LP-A PSIG	LP-B	FLOW MLBH	LOOP A TH	TC1	TC2	LOOP B TH	TC1	TC2	PL3 LVL IN	MUTK LVL IN	MU FLOW GPM	INPUT BTU/ HRX1E9	STEAM GENERATORS STEAM PRESS A	B	STEAM TEMP A	B	LEVEL IN. A	B	FW FLOW KLB/HR A	B	HEAT RATE TG GROSS BTU/KWH	SG NET
23:01	961	980	0-???	???	???	???	???	???	???	354	63	1	9.2471	30	50	301	366	404	379	325	542-?????		0

TIME	TURBINE THROTTLE PRESS	TEMP	1ST STAGE PRESSURE A	B	LP EXH PRESS HGA COND C	COND H	CONDENSATE FLOW KLB/HR	TEMP BSTR PUMP F	F	COOLING TOWERS RANGE F	APPR. F	AMBIENT DB F	WB F
23:02	497	301-	????	????	28.13	28.39	-????	90.1	94.3	.1	13.2	42.8	26.4

TIME	FEEDWATER TEMPERATURES 14 STG OUTLET 1A	1B	13 STG OUTLET 2A	2B	11 STG OUTLET 3A	3B	10 STG OUTLET 4A	4B	8 STG OUTLET 5A	5B	3 STG INLET 6A	6B	3 STG OUTLET 6A	6B	FEED PUMPS DISCH PRESS 1A	1B
23:03	94	94	94	94	95	94	94	94	96	94	95	98	95	95	168	136

TIME	MAIN CONDENSER IN A	B	OUT A	B	% CLEAN HOT	COLD	RIVER WATER STA DELT	RIVER TEMP
23:03	41.6	41.7	42.0	41.6	-??.??	-??.??	3.4	45.2

TILT/IMBALANCE/INSERTION 03/28/79 03:55:48

	INCORE	NI5	NI6	NI7	NI8
NI POWER		97.50	97.22	97.50	97.25
IMBALANCE	-2.64	-3.37	-3.91	-3.69	-3.59

CALCULATED ALLOWABLE INCORE IMBALANCE
FOR PRESENT POWER LEVEL NEG= -5.93 POS= 12.45

	WX	YZ	XY	ZW	
TILT	0.23	0.20	0.15	-0.57	INCORE
	0.14	-0.15	0.14	-0.12	OUT OF CORE

CALCULATED ALLOWABLE INCORE TILT
FOR PRESENT POWER LEVEL 2.30

ROD WITHDRAWAL INDEX 195.035

CALCULATED ALLOWABLE ROD INDEX
FOR PRESENT POWER LEVEL MIN=188.146 MAX=200.000

PERCENT FULL POWER 97.765

DATE 03/29/79
TIME 00:00

METROPOLITAN EDISON COMPANY
THREE MILE ISLAND STATION
UNIT 2

TIME	GENERATOR GENERATION MWH GROSS	AUX	NET	LOAD MW	MVAR	SOURCE PCF CPS X 10 E NI 1	NI 2	INTERMEDIATE AMPS X 10 E NI 3	NI 4	REACTOR POWER % CH1	CH2	CH3	CH4	CONTROL ROD GROUPS % WITHDRAWN 1	2	3	4	5	6	7	8
00:00-	2	17-	19-	2	0	0 3.8E 2	5.6E	1-?.?E-??-	?.?E-??	0	0	0	0	0	0	0	0	0	1	0	26

TIME	REACTOR COOLANT PRESS LP-A PSIG	LP-B	FLOW MLBH	LOOP A TH	TC1	TC2	LOOP B TH	TC1	TC2	PL3 LVL IN	MUTK LVL IN	MU FLOW GPM	INPUT BTU/ HRX1E9	STEAM GENERATORS STEAM PRESS A	B	STEAM TEMP A	B	LEVEL IN. A	B	FW FLOW KLB/HR A	B	HEAT RATE TG GROSS BTU/KWH	SG NET
00:01	1011	1030	0-???	???	-???	???	-???	???	-???	363	63-???	9.2471		25	45	294	359	428	378	307		542-?????	0

TIME	TURBINE THROTTLE PRESS	TEMP	1ST STAGE PRESSURE A	B	LP EXH PRESS HGA COND C	COND H	CONDENSATE FLOW KLB/HR	TEMP BSTR PUMP F	F	COOLING TOWERS RANGE F	APPR. F	AMBIENT DB F	WB F
00:02	497	294-????	-????		28.13	28.39	-????	89.6	93.6	.1	10.6	42.4	31.3

TIME	FEEDWATER TEMPERATURES 14 STG OUTLET 1A	1B	13 STG OUTLET 2A	2B	11 STG OUTLET 3A	3B	10 STG OUTLET 4A	4B	8 STG OUTLET 5A	5B	3 STG INLET 6A	6B	3 STG OUTLET 6A	6B	FEED PUMPS DISCH PRESS 1A	1B
00:03	93	93	93	93	94	93	93	93	95	93	94	97	99	98	168	138

TIME	MAIN CONDENSER IN A	B	OUT A	B	% CLEAN HOT	COLD	RIVER WATER STA DELT	RIVER TEMP
00:03	42.0	42.2	42.4	42.1-??.??	-??.??		3.5	45.1

TILT/IMBALANCE/INSERTION 03/28/79 03:55:48

	INCORE	NI5	NI6	NI7	NI8
NI POWER		97.50	97.22	97.50	97.25
IMBALANCE	-2.64	-3.37	-3.91	-3.69	-3.59

CALCULATED ALLOWABLE INCORE IMBALANCE
FOR PRESENT POWER LEVEL NEG= -5.93 POS= 12.45

	WX	YZ	XY	ZW	
TILT	0.23	0.20	0.15	-0.57	INCORE
	0.14	-0.15	0.14	-0.12	OUT OF CORE

CALCULATED ALLOWABLE INCORE TILT
FOR PRESENT POWER LEVEL 2.30

ROD WITHDRAWAL INDEX 195.035

CALCULATED ALLOWABLE ROD INDEX
FOR PRESENT POWER LEVEL MIN=188.146 MAX=200.000

PERCENT FULL POWER 97.765

DATE 03/29/79
TIME 00:05

METROPOLITAN EDISON COMPANY
THREE MILE ISLAND STATION
UNIT 2

TIME	GENERATOR GENERATION MWH GROSS	AUX	NET	LOAD MW	MVAR	SOURCE PCP CPS X 10 E NI 1	NI 2	INTERMEDIATE AMPS X 10 E NI 3	NI 4	REACTOR POWER % CH1	CH2	CH3	CH4	CONTROL ROD GROUPS % WITHDRAWN 1	2	3	4	5	6	7	8
01:00	917	43	873	917	107	96	-?.?E-?-?.?E-?	9.4E- 5	9.1E- 5	97	97	97	97	100	100	100	100	100	97	93	26
02:00	916	43	872	916	107	96	-?.?E-?-?.?E-?	9.3E- 5	9.0E- 5	97	97	97	97	100	99	100	100	100	97	93	26
03:00	919	43	875	918	92	96	-?.?E-?-?.?E-?	9.3E- 5	9.0E- 5	97	96	97	97	100	99	100	100	100	97	93	26
04:00	917	43	873	918	99	96	-?.?E-?-?.?E-?	9.3E- 5	9.0E- 5	97	97	97	97	100	99	100	100	100	95	93	26
05:00-	1	30-	32-	1	0	0	6.8E 2	4.7E 2	-?.?E-??-?.?E-??	0	0	0	0	0	0	0	0	0	2	0	26
06:00-	1	10-	12-	2	0	0	5.7E 3	4.6E 3	2.1E-11	2.1E-11	0	0	0	0	0	0	0	0	0	1	0	26
07:00-	1	11-	13-	2	0	0	1.5E 3	9.9E 2	-?.?E-??-?.?E-??		0	0	0	0	0	0	0	0	0	2	0	26
08:00-	2	12-	14-	2	0	0	3.8E 2	2.5E 2	-?.?E-??-?.?E-??		0	0	0	0	0	0	0	0	0	1	0	26
09:00-	2	13-	15-	2	0	0	2.0E 2	1.0E 2	-?.?E-??-?.?E-??		0	0	0	0	0	0	0	0	0	2	0	26
10:00-	2	12-	14-	2	0	0	1.6E 2	8.9E 1	-?.?E-??-?.?E-??		0	0	0	0	0	0	0	0	0	1	0	26
11:00-	2	12-	14-	2	0	0	1.7E 2	6.7E 1	-?.?E-??-?.?E-??		0	0	0	0	0	0	0	0	0	3	0	26
12:00-	2	11-	13-	2	0	0	2.0E 2	6.9E 1	-?.?E-??-?.?E-??		0	0	0	0	0	0	0	0	0	1	0	26
13:00-	2	11-	14-	2	0	0	2.5E 2	5.0E 1	-?.?E-??-?.?E-??		0	0	0	0	0	0	0	0	0	1	0	26
14:00-	2	11-	13-	2	0	0	2.7E 2	6.2E 1	-?.?E-??-?.?E-??		0	0	0	0	0	0	0	0	0	0	0	26
15:00-	2	11-	13-	2	0	0	3.4E 2	6.2E 1	-?.?E-??-?.?E-??		0	0	0	0	0	0	0	0	0	2	0	26
16:00-	2	11-	13-	2	0	0	3.8E 2	6 8E 1	-?.?E-??-?.?E-??		0	0	0	0	0	0	0	0	0	2	0	26
17:00-	2	11-	13-	2	0	0	4.4E 2	7.1E 1	-?.?E-??-?.?E-??		0	0	0	0	0	0	0	0	0	2	0	26
18:00-	2	11-	14-	2	0	0	4.5E 2	8.1E 1	-?.?E-??-?.?E-??		0	0	0	0	0	0	0	0	0	0	0	26
19:00-	2	11-	14-	2	0	0	4.1E 2	9.4E 1	-?.?E-??-?.?E-??		0	0	0	0	0	0	0	0	0	3	0	26
20:00-	2	17-	19-	2	0	0	4.8E 2	6.3E 1	-?.?E-??-?.?E-??		0	0	0	0	0	0	0	0	0	2	0	26
21:00-	2	17-	19-	2	0	0	4.7E 2	6.8E 1	-?.?E-??-?.?E-??		0	0	0	0	0	0	0	0	0	1	0	26
22:00-	2	17-	19-	2	0	0	4.3E 2	6.6E 1	-?.?E-??-?.?E-??		0	0	0	0	0	0	0	0	0	1	0	26
23:00-	2	17-	19-	2	0	0	4.1E 2	6.6E 1	-?.?E-??-?.?E-??		0	0	0	0	0	0	0	0	0	2	0	26
00:00-	2	17-	19-	2	0	0	3.7E 2	5.7E 1	-?.?E-??-?.?E-??		0	0	0	0	0	0	0	0	0	1	0	26

TOTAL GENERATION	KMWH	2778.
STATION USE	KMWH	426.
NET OUTPUT	KMWH	2760.
STEAM GENERATED	MLB	51.35

DATE 03/29/79
TIME 00:11

METROPOLITAN EDISON COMPANY
THREE MILE ISLAND STATION
UNIT 2

TIME	REACTOR COOLANT PRESS LP-A	PRESS LP-B	FLOW MLBH	LOOP A TH	TC1	TC2	LOOP B TH	TC1	TC2	PL3 LVL IN	MUTK LVL .N	MU FLOW GPM	INPUT BTU/ HRX1E9	STEAM GENERATORS STEAM PRESS A	B	STEAM TEMP A	B	LEVEL IN. A	B	FW FLOW KLB/HR A	B	HEAT RATE TG GROSS BTU/KWH	SG NET
01:00	2144	2128	138	605	558	556	605	557	557	218	81	69	9.2467	908	905	595	594	257	264	5781	5743	10193	10446
02:00	2166	2150	138	605	558	556	605	557	557	226	79	70	9.2607	908	905	595	594	257	264	5781	5718	10184	10444
03:00	2164	2146	138	605	558	557	605	557	557	228	77	70	9.2419	907	905	595	594	256	264	5798	5724	10174	10370
04:00	2164	2146	138	605	558	556	605	557	557	228	74	70	9.2471	908	906	595	594	257	264	5758	5772	10193	10449
05:00	1061	1041	103	550	547	546	550	547	547	399	64	102	9.2471	1003	1011	579	580	32	47	347	493-?????	-?????	
06:00	735	715	3	558-???	-???	528-???	-???			360	71	99	9.2471	685	190	536	532	154	79	350	520-?????	1789	
07:00	2051	2047	3-???	-???	-???	-???	-???	-???		372	65	124	9.2471	328	479	497	522	247	215	349	510-?????	0	
08:00	1460	1453	3-???	-???	-???	-???	-???	-???		381	66	8	9.2471	30	358	468	499	230	241	336	512-?????	0	
09:00	1305	1275	3-???	-???	-???	-???	-???	-???		399	66	59	9.2471	40	335	454	484	216	242	324	515-?????	0	
10:00	2091	2080	3-???	-???	-???	-???	-???	-???		403	61	54	9.2471	71	323	445	476	218	236	290	512-?????	0	
11:00	2039	2046	3-???	-???	-???	-???	-???	-???		400	66	51	9.2471	8	306	431	467	351	233	293	514-?????	0	
12:00	1035	1038	3-???	-???	-???	-???	-???	-???		395	65	16	9.2471-	7	320	422	458	374	228	294	523-?????	0	
13:00	473	480	3-???	-???	-???	-???	-???	-???		399	78	99	9.2471-	13	296	413	449	380	226	298	536-?????	0	
14:00	512	522	3-???	-???	-???	-???	-???	-???		401	73	112	9.2471-	10	282	406	440	395	225	249	560-?????	0	
15:00	415	421	3	525-???	-???	-???	-???	-???		378	73	96	9.2471	63	266	404	431	371	224	294	537-?????	0	
16:00	551	565	3	590-???	-???	-???	-???	-???		285	80	115	9.2471	45	165	394	422	365	338	298	526-?????	0	
17:00	613	631	0	522-???	-???	-???	-???	-???		379	79	129	9.2471	95	172	390	414	346	321	298	523-?????	0	
18:00	852	868	0	549-???	-???	-???	-???	-???		312	67	42	9.2471	42	172	376	405	325	321	356	524-?????	0	
19:00	2285	2304	0	557-???	-???	-???	-???	-???		403	76	75	9.2471-	6	167	367	397	550	321	306	514-?????	0	
20:00	1313	1334	0-???	-???	-???	-???	-???	-???		401	52	81	9.2471	78	100	337	389	430	393	307	542-?????	0	
21:00	1041	1058	0-???	-???	-???	-???	-???	-???		398	61	60	9.2471	47	68	320	379	409	386	325	544-?????	0	
22:00	958	975	0-???	-???	-???	-???	-???	-???		397	73	58	9.2471	35	56	308	374	404	381	325	542-?????	0	
23:00	957	976	0-???	-???	-???	-???	-???	-???		356	65-???		9.2471	30	50	301	367	400	379	329	542-?????	0	
00:00	1008	1026	0-???	-???	-???	-???	-???	-???		362	64-???		9.2471	25	45	294	360	429	378	307	542-?????	0	

DATE 03/29/79
TIME 00:17

METROPOLITAN EDISON COMPANY
THREE MILE ISLAND STATION
UNIT 2

TIME	THROTTLE PRESS	THROTTLE TEMP	TURBINE 1ST STAGE PRESSURE A	TURBINE 1ST STAGE PRESSURE B	LP EXH PRESS INCH COND C	LP EXH PRESS INCH COND H	CONDENSATE FLOW KLB/HR	CONDENSATE TEMP DSTR PUMP F	BSTR PUMP F	COOLING TOWERS RANGE F	COOLING TOWERS APPR. F	AMBIENT DB F	AMBIENT WB F
01:00	891	595	646	654	28.19	27.84	8256	82.1	107.5	29.1	49.3	35.6	17.0
02:00	890	595	646	653	28.20	27.86	8259	81.7	107.0	29.0	48.9	34.7	17.0
03:00	890	595	646	653	28.19	27.85	8306	81.5	106.8	28.9	48.7	35.0	16.9
04:00	891	595	646	652	28.23	27.91	8276	81.0	106.5	29.0	49.1	34.3	16.1
05:00	1009	579-	9-	14	28.88	28.95	-????	118.5	95.3	.9	33.4	33.2	18.4
06:00	687	536-	13-	????	28.80	28.90	376	91.7	102.9	.7	27.7	32.0	17.7
07:00	497	497-	13-	????	28.71	28.81	-????	91.8	107.6	.4	23.5	32.2	17.3
08:00	498	468-	14-	????	27.67	28.15	0	91.3	91.8	.2	20.3	34.2	16.7
09:00	497	454-	1-	5	09	.81	450	91.9	93.6-	.2	18.7	35.2	16.5
10:00	497	445-	1-	5	.08	.83	0	86.1	88.3-	.2	18.4	36.5	16.2
11:00	497	431-	2-	6	.10	.88	0	79.8	81.5-	.2	18.7	37.8	16.0
12:00	497	422-	1-	6	.13	.81	0	77.6	79.1-	.2	19.7	39.7	15.3
13:00	497	413-	2-	6	.17	.79	0	75.6	77.1-	.3	15.5	41.9	19.8
14:00	497	406-	2-	6	.21	.86	0	74.0	75.3-	.3	15.4	44.4	20.4
15:00	497	404-	2-	6	.25	.88	0	72.6	74.0-	.3	14.2	46.1	22.1
16:00	497	394-	2-	6	.27	.88	0	70.0	71.6-	.3	13.7	46.9	23.2
17:00	497	390-	1-	4	.00	.04	0	71.8	74.1-	.3	12.2	46.7	25.3
18:00	497	376-	14-	????	27.51	26.71	0	82.5	84.6	.0	13.4	45.9	24.6
19:00	497	367-	14-	????	28.12	28.63	0	82.8	88.0-	.0	15.8	44.4	23.0
20:00	497	337-	????	????	28.29	28.56	-????	85.6	90.6	.4	16.0	43.1	23.3
21:00	497	320-	13-	????	24.09	24.27	-????	92.1	92.4	.1	15.1	42.5	25.3
22:00	497	308-	????	????	27.99	28.32	-????	92.2	95.8	.2	14.6	42.8	26.4
23:00	497	301-	????	????	28.15	28.39	-????	90.1	94.3	.1	13.2	42.9	28.4
00:00	497	294-	????	????	28.14	28.39	-????	89.6	93.6	.1	10.6	42.4	31.3

DATE 03/29/79
TIME 00:21

METROPOLITAN EDISON COMPANY
THREE MILE ISLAND STATION
UNIT 2

FEEDWATER TEMPERATURES

TIME	14 STG OUTLET		13 STG OUTLET		11 STG OUTLET		10 STG OUTLET		8 STG OUTLET		3 STG INLET		3 STG OUTLET		FEED PUMPS DISCH PRESS	
	1A	1B	2A	2B	3A	3B	4A	4B	5A	5B	6A	6B	6A	6B	1A	1B
01:00	171	171	213	215	273	273	303	305	376	377	378	381	463	461	1045	987
02:00	170	171	213	215	273	273	303	304	376	376	378	381	463	460	1047	993
03:00	170	171	214	216	273	274	303	305	376	377	378	381	464	461	1045	996
04:00	170	171	214	215	273	273	303	304	376	377	378	381	464	461	1047	985
05:00	191	142	245	235	306	285	319	326	311	310	374	376	453	455	76	48
06:00	98	101	99	102	100	101	100	103	108	117	370	373	446	450	176	147
07:00	101	106	101	106	102	105	101	105	102	108	366	370	440	443	132	105
08:00	90	91	92	92	92	92	92	93	94	97	362	367	436	436	176	147
09:00	93	94	93	93	94	93	93	93	93	92	367	362	404	403	185	157
10:00	88	88	90	90	92	91	91	91	91	91	137	106	347	363	174	145
11:00	82	82	83	84	85	84	85	85	86	86	100	91	220	223	174	147
12:00	79	79	79	80	80	80	80	80	80	80	101	95	225	234	174	147
13:00	77	77	77	77	78	77	77	78	78	78	98	91	224	217	174	145
14:00	75	75	75	76	76	75	75	76	76	76	95	89	225	222	174	145
15:00	74	74	74	74	75	74	74	74	75	74	93	88	225	224	174	144
16:00	72	72	73	73	74	73	73	73	73	73	91	86	225	224	174	144
17:00	72	72	71	71	72	71	71	71	71	71	89	85	227	224	174	145
18:00	82	82	80	81	81	80	79	79	80	79	84	82	195	183	157	126
19:00	87	87	87	88	88	87	87	87	89	87	86	90	113	108	160	129
20:00	90	90	89	89	91	90	90	90	91	89	89	92	102	96	170	139
21:00	91	91	90	90	90	89	88	88	88	88	88	90	94	91	170	138
22:00	96	96	97	97	98	97	97	97	99	97	94	100	94	91	168	138
23:00	94	94	94	94	95	94	94	94	96	95	96	98	95	95	168	137
00:00	93	93	93	93	94	93	93	93	95	93	94	97	99	98	168	138

DATE 03/29/79
TIME 00:26

METROPOLITAN EDISON COMPANY
THREE MILE ISLAND STATION
UNIT 2

	CONDENSER IN		CONDENSER OUT		% CLEAN		STA	RIVER
	A	B	A	B	HOT	COLD	DELT	TEMP
01:00	66.6	66.2	95.7	95.2	96.23	97.32	4.7	44.7
02:00	66.0	65.8	95.2	94.7	96.25	97.34	4.5	44.7
03:00	65.9	65.6	95.0	94.5	96.35	97.39	4.5	44.8
04:00	65.2	65.0	94.5	94.0	96.26	97.34	4.6	44.8
05:00	51.4	51.4	52.4	52.2	-??.??	-??.??	4.2	44.6
06:00	45.3	45.2	46.2	45.9	-??.??	99.79	3.9	44.4
07:00	40.6	40.5	41.5	41.1	-??.??	99.84	3.2	44.2
08:00	37.0	37.0	37.3	37.0	-??.??	99.86	3.5	44.1
09:00	35.1	35.3	35.1	34.9	-??.??	-??.??	4.2	44.1
10:00	34.5	34.7	34.5	34.3	-??.??	-??.??	3.2	44.2
11:00	34.7	34.8	34.6	34.3	-??.??	-??.??	3.5	44.5
12:00	34.9	35.1	34.8	34.7	-??.??	-??.??	3.7	44.7
13:00	35.3	35.5	35.3	35.0	-??.??	-??.??	3.8	45.0
14:00	35.8	35.9	35.7	35.4	-??.??	-??.??	3.7	45.2
15:00	36.3	36.5	36.2	35.9	-??.??	-??.??	4.0	45.4
16:00	36.9	37.1	36.8	36.5	-??.??	-??.??	3.7	45.6
17:00	37.5	37.7	37.4	37.2	-??.??	-??.??	4.3	45.6
18:00	38.0	38.2	38.3	38.0	-??.??	-??.??	3.5	45.5
19:00	38.7	38.9	38.9	38.7	-??.??	-??.??	3.2	45.4
20:00	39.4	39.6	40.1	39.7	-??.??	99.81	3.1	45.3
21:00	40.4	40.5	40.8	40.5	-??.??	-??.??	3.2	45.3
22:00	41.0	41.2	41.5	41.1	-??.??	-??.??	3.2	45.2
23:00	41.5	41.7	42.0	41.6	-??.??	-??.??	3.4	45.2
00:00	42.0	42.1	42.4	42.1	-??.??	-??.??	3.5	45.1

DATE 03/29/79
TIME 01:00

METROPOLITAN EDISON COMPANY
THREE MILE ISLAND STATION
UNIT 2

	GENERATOR GENERATION MWH			LOAD		SOURCE		INTERMEDIATE		REACTOR POWER %				CONTROL ROD GROUPS % WITHDRAWN							
TIME	GROSS	AUX	NET	MW	MVAR	PCP	CPS X 10 E NI 1	NI 2	AMPS X 10 E NI 3	NI 4	CH1	CH2	CH3	CH4	1	2	3	4	5	6	7	8
01:01-	2	16-	18-	2	0	0	3.4E 2	6.1E 1	-?.?E-??	-?.?E-??	0	0	0	0	0	0	0	0	0	1	0	26

	REACTOR COOLANT											STEAM GENERATORS						HEAT RATE	
	PRESS PSIG		FLOW	LOOP A			LOOP B		PL3 LVL	MUTK LVL	MU FLOW	INPUT BTU/	STEAM PRESS		STEAM TEMP		LEVEL IN.		FW FLOW KLB/HR		TG	SG NET
TIME	LP-A	LP-B	MLBH	TH	TC1	TC2	TH	TC1	TC2	IN	IN	GPM	HRX1E9	A	B	A	B	A	B	A	B	GROSS	BTU/KWH
01:01	1098	1118	0-???	-???	-???	-???	-???	-???	-???	378	68	1	9.2471	42	42	290	353	392	378	325		531-?????	0

	TURBINE			CONDENSATE			COOLING	AMBIENT	
		1ST STAGE	LP EXH			BSTR	TOWERS	DB	WB
TIME	THROTTLE	PRESSURE	PRESS HGA		FLOW	TEMP	PUMP	RANGE	APPR.

The following statement was dictated to W. J. (Bubba) Marshall by ED FREDERICK & CRAIG FAUST (CRO) at approximately 0500, March 29, 1979. A copy of the handwritten transcript is attached.

FW-V16B in hand and closed, 97% power, ICS in full auto, pressurizer heaters and spray in manual - to equalize boron, 6/7 at 95%, 8 at 27%. Pressurizer pressure stable at approximately 2155, slight negative imbalance. 0400 Craig - first to notice something wrong - noticed ICS alarm and electrical alarm started from panel from S&T desk. Ed noticed 1st cond. pump trip, turbine trip and he was looking for runback at ICS when Rx tripped. Ed action: (1) pressurizer heater and spray to AUTO, and (2) verified trip by looking at rods and source range graph. Craig shut 376 and started MU-P-1A, pump did not start. At this time Ed noticed 2nd pump was not running and started MU-P-1A, this time it started, Ed opened MU-V16. Craig went to feed water panel and noticed that OTSG levels were rapidly decreasing, both both feed pumps were tripped and all 3 emergency feed pumps were running. After he verified emergency feed pumps on, he tripped generator breakers and turbine manually as part of emergency procedure. Returned to FDW and both OTSG levels indicated 10 in. Put EFV-11 in hand and went full open because he thought he wasn't feeding. While you were opening the EF-11's (which ind open) he noticed that the EF-V12's were shut. Then he opened the EF-V12's. SG levels began to increase, B S/G reached 30" first and A trailed by about 5 minutes, had trouble controlling levels, returned EF-11's to auto both generators level increased above 30". Return EF-11's to manual and ended up controlling 30" by cycling EF-12 open and shut. Reactor coolant pressure started to drop, secured 1B and 2B reactor coolant pumps. At this time PZR level

was pegged high. Prior to securing the RCP's had pegged high hotwell level - no decrease in vacuum at this time. Prior to tripping the RCP's and mostlikely prior to opening the EF-V12's, H.P. injection occurred. When this happed, MU-P-1B tripped and MU-P-1C started. PZR level had been turned and was increasing when the H.P. injection occurred. Shortly after ES actuation PZR level started to increase rapidly and ES was by-passed at approximately 385". All RCP's were operating. Started letdown at max rate but secured shortly thereafter because of HI TAVG, LOW PRESSURE AND HI PRESSURIZER LEVEL. This is when things began to look screwy. As HP injection flow was sustained pressure continued to come down, TAV hung up, PZR level stayed high. As letdown flow was established, PZR level stayed high. This occurred around 10 to 15 minutes into casualty. All during this time, "A" S/G pressure select and "B" S/G level was leading "A". When "B" RCP's were secured operator started feeding both S/G's up to 50% flow natural circulation cooldown. Prior to establishing 50% level - "A" loop RCP were secured. At 50% in the S/G's determined no flow across core because Th was not decreasing. Placed turbine bypass valves to manual and opened because pressure in S/G's was increasing and valves were not responding; Th was not decreasing either. At this time B S/G pressure started to decrease and "A" stayed the same. B S/G level was increasing. A level was constant. Primary pressure indicated 1100 to 1200 pounds. Operations determined B S/G tube leak and secured feed and steam on B S/G. We're investigating PZR high level, Th being pegged high, with PZR solid pressure increases were not significant. HP injection was secured at this time. Trying to establish natural circulation cooldown; by now vacuum had been lost and were using MS-V3's. During this time period, radiation levels in the aux building were beginning to increase. Operators determined

that without flow they could not determine if they were cooling down. Decided to start RCP's. Picked 1A & 2A because of PZR spray, but pumps would not start. Tried 2B, amps increased flow changed, 2 minutes later there were no amps on meter, no flow indication but Th has changed some. Decided that pump wasn't pumping or running and secured it. Noticed source range counts changed. This occurred prior to isolating B S/G, leak appeared to start when pump was started.

ED FREDRICK & CRAIG FAUST   CRO-D

FW-V16B in hand & close.

77% power, ICS in full auto, PZR heaters & spray in manual - to equalize boron, 6/7 at 95%, 8 at 27%. PZR pressure stable at ≅ 2155, slight negative imbalance.

0400 Craig - first to notice something wrong - noticed ICS alarm and electrical alarm started from panel from SS desk.

Ed notice 1st cond. pump trip, turbine trip looking for runback at ICS when Rx tripped.

Ed action 1st PZR heater & spray to AUTO
2. verified trip by looking at rods & source range graph

Craig shut 376 & started MU-P-1A, pump did not start. At this time Ed 2nd noticed pump was not running and started MUP-1A, this time it started. Ed opened MU-V

Craig went to FD water and noticed that OTSG levels were rapidly decreasing, that both feed pumps were tripped and all 3 emergency feed pumps were running pumps on (EF-11's open wide). After he verified emergency feed, he tripped generator breakers and turbine manually as part of EP. Return to FDW and both OTSG levels indicated 10 in. Put EF-11 in hand and went full open because he thought he wasn't feeding. While you were opening the EF-11's (which were open) he noticed that the EF-V12's were shut. Then he opened the EF-V12's. SG levels began to increase, B S/G reached 30" first & A trailed by about 5 minutes, had trouble controlling levels, returned EF-11's to Auto both generators levels increased above 30". Return EF-11's to manual

and indeed up controlling SG by cycling ER-12 open & shut. Reactor coolant pressure started to drop secured 1B and 2B reactor coolant pumps. At this PZR level was pegged high. Prior to securing the RCP's had pegged high hotwell level - no decrease in vacuum at this time.

Prior to tripping the RCP's and possibly prior to opening the ER-V12's H.P. injection occured. When this happened MU-P-1B tripped and MU-P-1C. PZR level had been tapped and was increasing when H.P. injection occured. Shortly after ES actuation PZR level started to increase rapidly and ES was bypassed at ≅ 385". All RCP's were operating. Started let down at max rate but secured shortly there after because of Hi TAVG, Low PRES AND Hi PRESSURIZER LEVEL. This is when things began to look screwy. As H.P. injection flow was sustained pressure continued to come down, TAVG hung up, PZR level stayed Hi. As letdown flow was established PZR level stayed Hi. ~~Soon~~ This occured around 10 to 15 min into casualty. All during this time 'A' S/G pressure selected and 'B' S/G level was leading 'A'. When 'B' RCP's were secured operator started feeding both S/G's up to 50% for natural circulation cooldown. Prior to establishing 50% level - 'A' loop RCP were secured at 50% in the S/G's determined no ~~flow~~ flow across core because Th was not decreasing. Placed turbine bypass valves to manual and opened because pressure in S/G's was increasing and valves were not responding. Th was not decreasing either.