TROJAN NUCLEAR PLANT

1990 EMERGENCY PREPAREDNESS EVALUATED EXERCISE

PREPARED FOR:

PORTLAND GENERAL ELECTRIC

IE-35
0/1

PREPARED BY:

HMM ASSOCIATES, INC.

ENGINEERS, ENVIRONMENTAL CONSULTANTS & PLANNERS

1.0 INTRODUCTION

PORTLAND GENERAL ELECTRIC
TROJAN NUCLEAR PLANT

1990 NRC EVALUATED EXERCISE

1.0 INTRODUCTION

1.1 Schedule

1.1.1 Controller Briefing

Date: To be determined
Time:
Location: Trojan North Building 1E1

1.1.2 Exercise

Date: Unannounced
Time: Unannounced

1.1.3 Post-Drill Facility Critique

Time: Following Drill termination
Location: In facility observed

1.1.4 Annual Exercise Critique

Date: Day following the Exercise
Time: 9:00 a.m.
Location: Visitors Information Center

1.1.5 NRC Exit Meeting

Date: To be determined
Time:
Location: Visitors Information Center

1.2 Participating Organizations

The following organizations and facilities will participate in the Annual Exercise.

Organization	Facility
PGE	Control Room (Simulator) Operations Support Center Technical support Center Company Support Center Emergency Operations Facility Emergency Operations Center Liaisons Joint Information Center One Field Team
Columbia County	Emergency Operations Center St. Helens EWC
Cowlitz County	Emergency Operations Center
Oregon	Emergency Operations Center Emergency Operations Facility Joint Information Center Two Field Teams Hillsboro Assistance Center
Washington	Emergency Operations Center Emergency Operations Facility Joint Information Center One Field Team

1.3 Purpose

1. To conduct an off-hours, unannounced Annual Exercise starting sometime in the week of November 5, 1990 between the hours of 6 PM to 4 AM. Included is the mobilization of Licensee, State and County support personnel and resources to adequately verify the capability to respond to an emergency at the Trojan Nuclear Plant.

2. To satisfy the requirements of Title 10, Code of Federal Regulations, Part 50, Appendix E, and guidance in NUREG 0654/FEMA REP-1, Rev. 1.

3. Reveal organizational conflicts, policy differences, and resource gaps.

4. Clarify roles and responsibilities.

5. Provide a means to instruct the emergency response personnel about dealing with radiological hazards and familiarize them with procedures they would use in an actual emergency.

6. Provide an opportunity to practice skills and improve individual performance under varying degrees of stress.

7. Ensure compatibility of communications and other equipment.

8. Allow participants to network and improve coordination of resources with other agencies and organizations.

9. To provide a means to educate and involve the public, media, and key community organizations in emergency planning.

1.4 Overall Participant Scope

This is the overall scope of play for the 1990 Trojan Exercise. It defines the extent of Exercise play and interaction between PGE, Oregon, Columbia County, Washington State and Cowlitz County.

1.4.1 Initial Notification - PGE will classify the event and initiate the notification process. The counties and states will carry out their notification schemes.

1.4.2 Activation - Activation of organizations and facilities will be carried out per the emergency plans. Participation will be:

PGE - Control Room staff
Operations Support Center staff
Technical Support Center staff
Company Support Center staff
Emergency Operations Facility staff

PGE (Cont'd) - Emergency Operations Center liaisons
Joint Information Center staff
One field team

Oregon, Columbia County, Washington, Cowlitz County non-evaluated limited scope. May elect to control cell most activation.

1.4.3 Field Monitoring - The field teams will:

- Communicate with the EOF by cellular phone or 2-way radio.
- Measure gamma and beta plus gamma dose rates, and perform airborne iodine and particulates sampling.
- Report and control their exposures.
- Supply and administer KI if the decision has been made to do so.

The EOF will demonstrate the ability to direct and control the field teams.

1.4.4 Dose Assessment - The EOF representatives from Oregon, Washington, and PGE will determine offsite doses based on field team and measured release data. They will also demonstrate the ability to coordinate protective action recommendations based on doses (if necessary).

1.4.5 Plant Assessment - PGE and ODOE will monitor and evaluate plant conditions. They will also coordinate protective action recommendations based on plant conditions (if necessary).

1.4.6 Decision Making - The EOCs will discuss and make consistent protective action decisions.

1.4.7 Public Instructions - Columbia County, Cowlitz County, and Oregon will provide coordinated instructions to the public at risk starting within 15 minutes of protective action decisions. Limitation: States and counties may elect to control cell this function.

1.4.8 Public Information - All organizations will develop and distribute public information on their activities. Key information will be coordinated in advance when practical. Otherwise, key information will be shared as soon as possible. Oregon, Washington, Columbia and Cowlitz Counties and PGE will handle the questions, concerns, and needs of individual members of the public. Limitation: States and counties may elect to control cell this function.

Before Joint Information Center (JIC) is established:

Public information will be developed and coordinated by PGE, the counties, and the states. Limitation: States and counties may elect to control cell this function.

After the JIC is established:

PGE will set up and manage the JIC. Oregon and Washington may send representatives to the JIC. Washington news releases will be developed and issued there. Oregon news releases will continue to be developed in the Oregon EOC and re-released from the JIC. Limitation: States and counties may elect to control cell this function.

1.5 Acronyms, Abbreviations and Definitions

1.5.1 Acronyms and Abbreviations

AC	Assistance Center
ALARA	As Low As Reasonably Achievable
ARM	Area Radiation Monitor(s)
ATWS	Anticipated Transient Without Scram
BIT	Boron Injection Tank
BOP	Balance of Plant
CAS	Central Alarm Station
CAC	Containment Air Coolers
CCP	Coolant Charging Pump
CCW	Component Coolant Water

CD	Civil Defense
CFR	Code of Federal Regulations
CS	Containment Spray
CSC	Company Support Center
CVCS	Chemical and Volume Control System
DOE	Department of Energy
DOE-IRAP	DOE Interagency Radiological Assistance Plan
EAL(s)	Emergency Action Level(s)
EBS	Emergency Broadcast System
EC	Emergency Coordinator
ECCS	Emergency Core Cooling System
EOC	Emergency Operating Center
EOF	Emergency Operations Facility
EOP	Emergency Operating Procedures
EPA	Environmental Protection Agency
EPC	Emergency Planning Coordinator
EPI	Emergency Public Information
EPZ	Emergency Planning Zone
ERF(s)	Emergency Response Facility(s)
ESF	Engineered Safeguards Features
EWC	Emergency Worker Center
FEMA	Federal Emergency Management Agency
FLD TMS	Field Teams
FRRP	Federal Radiological Response Plan
HP	Health Physicist
HPN	Health Physics Network
HUT	Hold-Up Tank
HVAC	Heating, Ventilation, Air Conditioning
INPO	Institute of Nuclear Power Operations
KI	Potassium Iodide
JIC	Joint Information Center
LABS	Radiation Analysis Laboratory
LCO	Limiting Condition of Operation
LOCA	Loss of Coolant Accident
MF	Medical Facility
MPC	Maximum Permissible Concentration
NAWAS	National Warning System
NRC	Nuclear Regulatory Commission

NSSS	Nuclear Steam Supply System
OSC	Operations Support Center
PAG(s)	Protective Action Guide(s)
PASS	Post Accident Sampling System
PRM(s)	Process Radiation Monitor(s)
RCCA	Rod Control Cluster Assembly
RCP	Reactor Coolant Pump
RCS	Reactor Coolant System
RHR	Residual Heat Removal
RMT	Radiation Monitoring Team
SAS	Secondary Alarm System
SCP	Security Control Point
SI	Safety Injection
SJAE	Steam Jet Air Ejector
SPDS	Safety Parameter Display System
SRO	Senior Reactor Operator
TBHX	Thermal Barrier Heat Exchanger
TIC	Technical Information Center
TSC	Technical Support Center
WGDT	Waste Gas Decay Tank
WGST	Waste Gas Surge Tank

Organizations

CLA/SKA	Clark/Skamania County
COL EOC	Columbia County
COW	Cowlitz County
DSHS	Washington Department of Social and Health Services
OEMD	Oregon Emergency Management Division
LEW	Lewis County
ODOE	Oregon Department of Energy
ORH	Oregon Health Division
PAC	Pacific County
WDEM	Washington Division of Emergency Management
WAK	Wahkiakum County
EMWK	Emergency Workers
ARC	American Red Cross

1.5.2 Definitions

Area Radiation Monitor (ARM) System - An instrumentation system designed to detect and indicate abnormal radiation levels in Plant areas.

Assessment Actions - Those actions taken during or after an accident to obtain and process information that is necessary to make decisions to implement specific emergency measures.

Assistance Centers - Facilities located outside the 10-mile plume exposure Emergency Planning Zone wherein evacuees can receive first aid and assistance in obtaining food and lodging. Limited housing of evacuees is provided at assistance centers or at nearby shelter areas.

Company Support Center (CSC) - PGE off-site facility, located at PGE Headquarters in Portland, Oregon, from which PGE corporate support for Trojan emergency actions is provided.

Corrective Actions - Those emergency measures taken to ameliorate or terminate an emergency situation in order to prevent an uncontrolled release of radioactive material or to reduce the magnitude of a release (eg, shutting down equipment, fire fighting, repair, and damage control).

Drill - A supervised instruction period aimed at testing, developing, and maintaining skills in a particular operation. A drill is often a component of an exercise.

Emergency - An off-normal situation at Trojan that might have a radiological impact upon the public health and safety. Such situations are categorized into four classes.

Emergency Action Levels (EALs) - Radiological dose rates; specific levels of airborne, waterborne, or surface-deposited concentrations of radioactive materials; or specific instrument indications that are used to designate a particular class of emergency, i.e., UNUSUAL EVENT, ALERT, SITE AREA EMERGENCY or GENERAL EMERGENCY. Each class of emergency requires prescribed notification of PGE, State, and County officials and subsequent activation of prescribed emergency facilities.

Emergency Coordinator - The PGE individual responsible for directing on-site actions during an emergency at Trojan. The Shift Supervisor initially serves in this position until the arrival of the Plant General Manager or his alternate. The Emergency Response Manager eventually assumes the Emergency Coordinator duties.

Emergency Operations Centers (EOCs) - Off-site facilities from which State and County emergency direction/coordination is provided.

Emergency Operations Facility (EOF) - PGE nearsite facility from which off-site communication, dose assessment, and emergency control are provided.

Emergency Planning Zones (EPZs) - Areas for which planning is done to assure prompt and effective actions can be taken to protect the public in the event of a radiological emergency at Trojan. A 10-mile Emergency Planning Zone and a 50-mile Emergency Planning Zone have been designated for plume exposure pathways and ingestion exposure pathways, respectively.

Emergency Worker - PGE, Federal, State, County, and other personnel who execute prescribed assessment, corrective, protective, or recovery actions.

Emergency Worker Centers - Off-site facilities where off-site emergency workers can be monitored and decontaminated, as required. Also, a place where off-site emergency worker personnel dosimetry is controlled. Such facilities are located at the Woodland City Hall, Cowlitz County Hall of Justice, and PGE's office in St. Helens.

Exclusion Area - Area surrounding a nuclear reactor, in which the reactor licensee has the authority to determine all activities including exclusion or removal of personnel and property from the area, as defined in Title 10, Code of Federal Regulations, Part 100.3(a).

Exercise - An event that tests the integrated capability and a major portion of the basic elements of emergency preparedness.

Federal Radiological Monitoring and Assessment Center (FRMAC) - A response center to be established by the U.S. Department of Energy. This center will be established outside the 10-mile planning zone. It will be the location for the performance and coordination of Federal off-site radiological measurement and assessment activities.

Federal Response Center (FRC) - A response center to be established by the Federal Emergency Management Agency. This center will be established outside the 10-mile planning zone. It will be the location for the various Federal Agencies to establish an operational base in order to facilitate the coordination and exchange of information and response efforts among the various Federal Agencies responding to a fixed nuclear facility incident.

Implementing Procedures - Specific procedures which implement the associated emergency response plan by delineating the response actions to be taken in the event of a radiological emergency at Trojan.

Ingestion Exposure Pathway - The potential pathway of radioactive materials to the public through consumption of radiologically contaminated water and food products.

Joint Information Center (JIC) - A Joint Information Center is a facility serving as a central point of contact for the news media. News media representatives will be kept informed of activities and events concerning all emergency response efforts of the State(s), local governments, PGE, and Federal response agencies.

This information will be made available via means such as news conferences/press briefings/technical briefings; electronic dissemination of prepared releases; and telephone teams who can be responsive to questions and answers.

Long-Term Emergency Operations - A period of time beginning when the Plant Staff is augmented by PGE Headquarters personnel and lasting until the Plant is in a safe shutdown condition.

Loss-of-Coolant Accident (LOCA) - A postulated accident that results from a break in the reactor coolant pressure boundary, with a subsequent loss of reactor coolant at a rate in excess of the normal operating makeup capacity.

Low Population Zone (LPZ) - The area within a 2.5-mile radius of Trojan and generally as defined in Title 10, Code of Federal Regulations, Part 100.3(b).

Non-Restricted Area - Any area surrounding Trojan to which access is not controlled by PGE for purposes of protecting individuals from exposure to radiation and radioactive materials.

Operational Support Center (OSC) - Trojan location where personnel required for in-Plant emergency actions can assemble.

Plan(s) - The individual documents which describe the state of preparedness of PGE, Oregon State, Columbia County, Washington State, Cowlitz County, U.S. Coast Guard, and medical facilities for responding to a radiological emergency at Trojan.

Plume Exposure Pathway - The potential pathway of radioactive materials to the public through external whole body exposure and inhalation of radioactive materials in air.

Post-Accident Sampling System (PASS) - A sampling system consisting of a reactor coolant sample panel located at Elevation 45 feet of the Auxiliary Building and a Containment atmosphere sample panel located at Elevation 93 feet of the Auxiliary Building.

Process and Effluent Radiation Monitor System (PERMS) - A Trojan instrumentation system designed to detect and indicate concentrations of radioactive materials in Plant process and effluent streams.

Protective Actions - Those emergency measures taken for the purpose of preventing or minimizing radiological exposures to persons.

Protective Action Guides (PAGs) - Projected or actual absorbed doses to individuals (general public and emergency workers), and/or Trojan Plant conditions, that serve as indicators for initiating protective actions.

Recovery - A period of time beginning when the Plant reaches a safe shutdown condition, and lasting until the Plant is restored to nearly as possible to its pre-emergency condition.

Site - The area controlled by PGE and within the exclusion area boundary as defined in Title 10, Code of Federal Regulations, Part 100.3(a).

Special Population - Groups of the public within the plume exposure EPZ who, in the event the general public is instructed to evacuate, may require special transportation or protective provisions due to institutional confinement or the need to man certain industrial plants or public utilities. Examples of such groups are members/staff of: (1) schools and day-care centers, (2) nursing homes, (3) hospitals, (4) retirement centers, (5) paper mills, (6) chemical plants, (7) telephone companies, (8) large dairies, and (9) Columbia River pleasure boats and commercial vessels.

Technical Specifications - The limits, operating conditions, and other requirements imposed by the NRC on Trojan operation.

Technical Support Center (TSC) - On-site Trojan facility which provides a location for PGE technical support of the reactor command and control functions of the Control Room.

UFSAR - Updated Final Safety Analysis Report, Trojan Nuclear Plant.

2.0 DRILL OBJECTIVES

PORTLAND GENERAL ELECTRIC
TROJAN NUCLEAR PLANT

1990 NRC EVALUATED EXERCISE

2.0 OBJECTIVES

2.1 General Objectives

1. Demonstrate the adequacy of the Radiological Emergency Plan and Radiological Response Plan Implementing Procedures.

2. Demonstrate the adequacy of communications among emergenc facilities, off-site agencies and field teams.

3. Demonstrate the ability of key personnel to make timely and effective decisions during a radiological emergency.

4. Demonstrate the ability of emergency facility managers to effectively utilize the resources of their facility to accomplish the goals of the Emergency Plan and the Emergency Procedures. This includes inter-facility communication, comprehensive verbal briefings of staff and requests for assistance, as required.

5. Demonstrate the timely activation of the emergency facilities, during an off-hours, unannounced exercise.

2.2 Specific On-Site Objectives

CONTROL ROOM

Demonstrate that Control Room staff can:

1. Assess plant conditions, classify the emergency and make appropriate protective action recommendations.

2. Make initial notifications of the emergency to appropriate individuals and organizations.

3. Take corrective actions to control the situation and mitigate the consequences.

4. Establish communications with the Technical Support Center and Operational Support Center during the process of activation of those facilities.

5. Turn over communication responsibility with the Nuclear Regulatory Commission to the Technical Support Center when it is activated. Limitation: NRC Headquarters play is at their option.

6. Coordinate operations-related tasks through the Operational Support Center after the Operational Support Center has become operational.

7. Maintain a formal log of events for the duration of the simulated emergency situation.

8. Demonstrate that the Shift Supervisor acting as Emergency Coordinator maintains overall command and control of the emergency situation until relieved of this responsibility by the Duty Plant General Manager in the Technical Support Center or the Emergency Response Manager in the Emergency Operations Facility.

TECHNICAL SUPPORT CENTER

Demonstrate that the Duty Plant General Manager:

1. Obtains detailed plant and emergency status briefing from the Shift Supervisor.

2. Assumes command and control of the emergency situation until relieved of this responsibility by the Emergency Response Manager.

3. Classify the emergency if the Emergency Response Manager has not assumed Emergency Coordinator duties at the Emergency Operations Facility.

4. Develops Protective Action Recommendations with the Technical Support Cente[illegible] (if the Emergency Response Manager has not assumed the role of Eme[illegible]cy Coordinator) utilizing plant conditions.

Demonstrate that Technical Support Center staff can:

5. Adequately staff and activate the Technical Support Center within 60 minutes of the ALERT classification.

6. Assume responsibility for Nuclear Regulatory Commission communication from the Control Room on activation of the Technical Support Center. Limitation: NRC Headquarters play is at their option.

7. Adequately monitor the three fission product barriers.

8. Support emergency functions of the Control Room and Emergency Operations Facility.

9. Perform analyses, monitor plant conditions and anticipate problems in carrying out the Emergency Operating Procedures to develop plans for corrective action.

10. Identify tasks to be performed by the Operational Support Center staff.

11. Provide direction to the Control Room to have plant paging system announcements made concerning accident status, plant status, radiological hazards, and any on-site protective actions.

12. Maintain a formal log of events for the duration of the simulated emergency situation.

13. Maintain current display of plant status.

14. Maintain current display of emergency activities.

OPERATIONAL SUPPORT CENTER

Demonstrate that the Operational Support Center staff can:

1. Adequately staff and activate the Operational Support Center within 60 minutes of the declaration of an ALERT.

2. Communicate and coordinate task assignments and Operational Support Center activities with the Control Room and Technical Support Center.

3. Assemble, brief, dispatch, communicate with, and track Operational Support Center teams to the completion of assigned tasks.

4. Track individual Operational Support Center member doses and control Operational Support Center personnel exposure.

5. Maintain contamination control in the Operational Support Center, including personnel, tools, and Self Contained Breathing Apparatus (if necessary). Demonstrate that Operational Support Center radiological habitability can be monitored.

6. Demonstrate that the Operational Support Center Supervisor can keep personnel in the Operational Support Center informed of current plant conditions.

POST ACCIDENT SAMPLING SYSTEM

1. Utilizing appropriate procedures, manipulate the PASS to collect samples of reactor coolant and containment atmosphere. Limitation: PASS Drill will be conducted prior to the Exercise.

2. Demonstrate proper use of procedures and equipment for maintaining radiological safeguards and transport of samples.

3. Demonstrate proper use of procedures and equipment for analysis of samples.

4. Provide analytical results for use in assessing core damage and containment integrity.

2.3 Specific Off-Site/Joint Objectives

EMERGENCY OPERATIONS FACILITY

Demonstrate that the Emergency Operations Facility staff can:

1. Adequately staff and activate the facility within 60 minutes of the declaration of an ALERT.

2. Classify the emergency if the Emergency Response Manager has assumed the role of Emergency Coordinator at the Emergency Operations Facility.

3. Obtain data from the Technical Support Center as required to supplement Safety Parameter Display System output.

4. Transmit the following information with updates as required to the Company Support Center and simulate these transmissions to the Oregon Emergency Operations Center, Washington Emergency Operations Center, Cowlitz County Emergency Operations Center, Columbia County Emergency Operations Center and Oregon Health:

   - Emergency Classification
   - Plant Data Summaries
   - Dose Assessment Results
   - Protective Action Recommendations

5. Provide access control at the Emergency Operations Facility.

6. Maintain a formal log of events for the duration of the simulated emergency situation.

7. Maintain current displays of the following information for the duration of the emergency.

   - Plant Status
   - Emergency Status
   - Off-site Protective Action Recommendations
   - Emergency Operations Center Decision-maker Board

8. Demonstrate that the Health Physics Supervisor issues thermoluminescent dosimeters to Emergency Operations Facility personnel upon declaration of an ALERT.

9. Demonstrate that the Public Information Representative provides information on a continuing basis to the Joint Information Center.

Demonstrate that the Emergency Response Manager:

10. Obtains a detailed plant and emergency status briefing prior to assuming the position of Emergency Coordinator.

11. Can develop a Protective Action Recommendation if the Emergency Response Manager has become the Emergency Coordinator.

EMERGENCY OPERATIONS FACILITY DOSE ASSESSMENT AREA

Demonstrate that the Radiological Manager can properly:

1. Manage the dose assessment activities by maintaining proper oversight of those activities.

Demonstrate that staff can properly:

2. Project dosage to the public via plume exposure based on calculations and field measurement.

3. Use dose projection results to develop any Protective Action Recommendations required by emergency conditions.

4. Plot field team data accurately and clearly.

5. Properly process Accident Assessment/Notification Forms and maintain control of those forms.

6. Obtain back-up meteorological information.

7. Make Ingestion Protective Action Recommendations and dose calculations.

RADIOLOGICAL FIELD MONITORING

Demonstrate that:

1. A PGE Field Team can be prepared to begin its monitoring activities within 60 minutes of declaration of an ALERT.

2. Field Teams can communicate with the Emergency Operations Facility using two-way radios or cellular phones and provide required information to the Emergency Operations Facility.

3. Demonstrate appropriate equipment and procedures for determining ambient radiation levels.

4. Demonstrate appropriate equipment and procedures for measurement of airborne radioiodine.

5. Field Team members properly report and control their exposures.

COMPANY SUPPORT CENTER

Demonstrate that Company Support Center staff can:

1. Document and track requests for assistance from the Technical Support Center, Emergency Operations Facility and other emergency centers.

2. Notify specified agencies and off-site groups of accident conditions.

3. Request and coordinate assistance as necessary from off-site organizations.

4. Periodically update the Emergency Operations Facility on the status of off-site organizations.

JOINT INFORMATION CENTER

1. Demonstrate the ability to set up and staff the JIC.

2. Demonstrate the ability to communicate via the Public Information Phone with other Public Information Officers.

3. Demonstrate the ability to coordinate the development and approval of news releases from the JIC.

4. Demonstrate the ability to conduct news media briefings at the JIC.

MEDICAL EMERGENCY DRILL (To be conducted independently)

The Medical Emergency Drill No. 1 (October 29) will:

1. Demonstrate ability of the Radiation Protection Emergency Team (RPET) to respond to a medical emergency involving a contaminated individual. In doing so, RPET will demonstrate its ability to:

a. Provide first aid to injured individuals.

b. Conduct surveys to determine the extent and location of contamination or direct radiation being emitted from the patient.

c. Decontaminate the injured person as much as possible without interfering with first aid priorities. ontrol any contamination which cannot be removed.

d. Obtain the information necessary to determine the extent of the injured person's exposure.

e. Prepare the patient for ambulance transportation.

f. Dispatch a RPET member to accompany the patient to the hospital to assist the ambulance and hospital staffs with radiological services.

g. Provide complete and accurate patient status information in a standardized format to the receiving hospital.

2. Demonstrate the ability of Control Room Shift Supervisor to respond to a medical emergency involving a contaminated individual. This will include:

a. Receipt and disposition of originating casualty report.

b. Activation of the Radiation Protection Emergency Team.

c. Notification of the Columbia County Communications Agency (C-COM).

d. Notification of the Medical Health Physicist.

3. Demonstrate the ability of Columbia County Emergency Service Organizations to respond to a medical emergency involving a contaminated individual at the Trojan site, including:

   a. Dispatch of ambulance service by C-COM.

   b. Timely arrival of the ambulance on-site.

4. Demonstrate the ability of PGE security to rapidly process an ambulance through the protected area boundary.

5. Demonstrate the ability of the ambulance crew and the RPET to transport a contaminated injured person to the hospital.

6. Demonstrate the adequacy of hospital facilities and procedures for receiving, handling and treating contaminated injured individuals. In doing so, the hospital will demonstrate:

   a. Availability of procedures and properly trained staff for dealing with radioactive contamination.

   b. Availability of necessary supplies and equipment including survey meters, anti-contamination clothing and decontamination supplies.

   c. Interaction with Medical Health Physicist and RPET member, allowing either of these individuals to take an assertive role in preventing cross contamination.

Medical Emergency Drill No. 2 (October 30) will:

1. Demonstrate the adequacy of hospital facilities, equipment and procedures for handling and treating contaminated injured individuals. In doing so, the hospital will demonstrate:

   a. Availability of procedures and properly trained staff for dealing with radioactive contamination.

b. Availability of necessary supplies and equipment including survey meters, anti-contamination clothing and decontamination supplies.

c. Interaction with Medical Health Physicist and RPET member, allowing either of these individuals to take an assertive role in preventing cross contamination.

2. Demonstrate the adequacy of vehicles, equipment, procedures and personnel for transporting contaminated injured individuals.

Medical Emergency Drill No. 3 (October 30) will:

1. Demonstrate the adequacy of hospital facilities, equipment and procedures for handling and treating contaminated injured individuals. In doing so, the hospital will demonstrate:

a. Availability of p. .cedures and properly trained staff for dealing with radioactive contamination.

b. Availability of necessary supplies and equipment including survey meters, anti-contamination clothing and decontamination supplies.

2.4 Specific Off-Site Objectives

Participation by Oregon, Columbia County, Washington State and Cowlitz County is intended for training purposes only as Federal Emergency Management Agency (FEMA) evaluation will not take place for this exercise. As such, formal objectives are not included in this section.

3.0 DRILL GUIDELINES

PORTLAND GENERAL ELECTRIC
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1990 NRC EVALUATED EXERCISE

3.0 GUIDELINES

3.1 General Guidelines

1. The Exercise shall be conducted in real time with the following exceptions:

   a. Counting time for samples will be reduced for Exercise time compression purposes.

2. Only one Portland General Electric off-site monitoring team will be used.

3. No on-site or off-site evacuations will be conducted.

4. The scenario will not include injured or contaminated workers on-site. This will be demonstrated in a separate drill.

5. A Portland General Electric Master Controller will be assigned to designate the beginning and termination of the exercise to ensure that the exercise proceeds in the manner that achieves the above objectives.

6. Use of the siren portion of the Trojan Site Warning System will be simulated. The public address portion of the system will be used.

7. On-site accountability will not be demonstrated.

8. Objectives and on-site actions will be demonstrated in as realistic a manner as possible based on actual scenario events. All Exercise participants will don anti-contamination clothing, use respiratory equipment, set up radiation barriers and follow procedures as required by the scenario.

9. No plant systems will be manipulated.

10. Identification of Participants, Controllers, Evaluators and Observers.

Arm bands will be used to identify Drill participants, controllers and evaluators.

Arm bands will be distributed by the controllers to participant.

a. Arm band color code:

PGE participant: Red
Controller: Yellow
Facilitator: Orange
Observer: Green

b. Emergency Operations Facility PGE and state participants will be issued a participant badge.

3.2 Observer Guidelines

1. The event times and scenario are confidential and should be kept so during the Exercise. Do not discuss these with the participants.

2. Observers should not participate in the Exercise, nor interfere in the actions taken by the Exercise Participants, Controllers or Evaluators.

3. Identification badges/hats/arm-bands/etc. are to be worn visibly by the Observers. Identification devices should be returned at the end of the Exercise or critique. Identify your self to the Exercise Controllers.

4. Questions should be directed to Controllers, not Participants.

5. Observers inside the Radiologically Controlled Area (RCA) shall adhere to all normal radiological control practices.

3.3 Participant Guidelines

All Participants (at least the leaders of the Participant groups) must read and follow the rules given below. This is important to the successful demonstration of emergency response capabilities.

1. **CONTROLLERS** serve an active role in the Exercise by providing messages or instructions to the participants. They may also serve to prompt or initiate certain actions to assure continuity of the events described in the Exercise scenario. They also serve as **EVALUATORS**, noting all actions, both good and bad.

2. **EVALUATORS** will be evaluating players in each facility and will note all actions, good and bad. They will be the main source of input to the Exercise critiques.

3. The Master Controller ensures that the overall progression of events occurs as designed.

4. Identify yourself by name and function to the Exercise Controllers and Evaluators.

5. Play out all actions, as much as possible, in accordance with the emergency plan and procedures as if it were a real emergency.

6. Identify your actions to the Controller. State whether you are going to play them out or simulate them. It is recommended that you play out your actions as much as possible to convincingly demonstrate the proper emergency response.

7. If you are in doubt, ask the Controller for clarification. The Controller will not prompt or coach you.

8. Periodically speak out loud, identifying your key actions and decisions to the Controllers and Evaluators. This may seem artificial, but it will assist in the evaluation process and is to your benefit.

9. Any messages transmitted over non-dedicated communication lines or radios shall be preceded and followed by the statement that "This is a Drill".

10. You may play as if radiation levels are actually present, in accordance with the information you have received. Unless otherwise specified, this will require normal radiological control measures including the wearing of protective clothing.

11. Non-Participants are exempt from acting on radiation levels specified for the emergency Drill. However, normal radiological control practices shall be followed throughout the course of the Drill.

12. Use of the Emergency Broadcast System and Emergency Planning Zone Sirens will be **SIMULATED**.

13. Plant and radiological parameters will be available on SPDS and driven by the simulator. These parameters will be available in the Control Room, the Technical Support Center and the Emergency Operations facility.

14. Should the simulator crash, only selected parameters and readings will be provided. The selected information will be sufficient to make decisions in accordance with plans and procedures.

15. DO NOT BECOME OVERLY CONCERNED WITH THE MECHANICS OF THE REACTOR OR THE CAUSE OF THE ACCIDENT. THIS EXERCISE IS DESIGNED TO TEST PLANS AND PROCEDURES AND IS NOT CONCERNED WITH ESTABLISHING THE PROBABILITY, FEASIBILITY OR DETAILED MECHANICS OF THE SIMULATED ACCIDENT.

16. There will be one or more Controllers at each important location. Controllers will provide information and clarification on which actions are to be simulated or are outside the scope of this Exercise in order to keep the Exercise progressing in accordance with the scenario. Controllers will also observe all aspects of the Exercise to prepare an in-house evaluation of plans, procedures and training.

17. If, during any part of the Exercise, you are having trouble accomplishing your required duties, confusion arises, or clarification is necessary, ask the Controller. Controller assistance or clarification does not necessarily imply failure on your part. The Controller will know the limitations of information that may be provided to you, and will assist you only to the extent necessary.

18. Keep a list of the items which you feel will improve your plans and procedures. Complete the Participant Evaluation Form that will be handed out near the end of the Exercise. Provide these to your Lead Controller. Remember, one of the main purposes of the Exercise is for YOU, the participant, to assure yourself that you are adequately prepared. Areas for improvement or lessons learned, when identified, will improve your overall emergency planning and preparedness.

19. Any Participants outside the plant property who encounter members of the news media during the Exercise should avoid responding to any questions regarding the simulated events or the success of the Exercise. All press inquiries should be directed to the Joint Information Center.

20. Do not take actions that would result in actual alterations of valve and switch positions in response to scenario simulations. Any event or operation outside the scenario that results in an actual or potential danger to plant operation or safety will take precedence over Exercise activity. Should an actual operational requirement for action occur during the Exercise, the Exercise activity will be suspended or cancelled at the discretion of the Shift Supervisor and Master Controller.

21. The Control Room phone number for participants' use during the Drill is ext. 7256.

PARTICIPANT EVALUATION FORM

NAME: _____ DATE: _____

FACILITY: _____

EMERGENCY RESPONSE POSITION: _____

1. Did Drill adequately test the procedures? YES _ NO _
(If NO, then please comment below. Also indicate any suggested improvements).

_____

_____

_____

2. Were the procedures and their accompanying tasks realistically implementable? YES ___ NO ___ (If NO, then please comment below. Also indicate any suggested improvements).

_____

_____

_____

3. Are facilities and equipment adequate? YES ___ NO ___ (If NO, then please comment below. Also indicate any suggested improvements).

_____

_____

_____

4. Did the Drill provide sufficient training for you to accomplish your task(s)? YES___ NO ___ (If NO, then please comment below. Also indicate any suggested improvements).

_____

_____

_____

5. What is your overall evaluation of this Drill. GOOD ___ FAIR ___ POOR ___
(Please comment below regarding your evaluation and any suggestions for improvement you wish to make).

_____

_____

_____

_____

3.4 Exercise Suspension and Restart

In the event of a problem arising during the course of the Exercise which requires the attention of Exercise participants to assure safe operation of the plant, it may be necessary to suspend Exercise activities. The decision to suspend Exercise activities shall be made by the Duty Plant General Manager. In the event this occurs, the Duty Plant General Manager should inform the Master Controller in the Emergency Operations Facility.

The Master Controller will then take the following action:

1. He will inform all other Controllers of the suspension and direct them to advise the players.

2. He will monitor the situation.

3. He will consult with the Duty Plant General Manager to determine if the players should be released for the remainder of the day or to stand by to resume Exercise activities.

An Exercise re-start time should be established as soon as possible by the Duty Plant General Manager. Once a time is established, the Master Controller will advise all Controllers. If time permits, key Controllers will assemble to review the situation and to establish the point in the scenario where the Exercise will resume. It may be necessary to conduct this review by telephone in which case the Master Controller will inform the Controllers of the restart time and the point at which play will resume.

The Controllers will be instructed to brief the players on the status of the scenario at the time play was suspended and of the time the Exercise will resume. The Exercise time will then be picked up at the appropriate point and play will continue.

If it is necessary to suspend Exercise activities until the following day, Controllers will assemble to discuss the resumption of the Exercise.

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1990 NRC EVALUATED EXERCISE

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PART I

GENERAL INFORMATION

4.0 CONTROLLER INFORMATION

PORTLAND GENERAL ELECTRIC
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4.0 CONTROLLER INFORMATION

4.1 Controller Guidelines

1. All Exercise Controllers shall pre-position themselves at least thirty (30) minutes prior to facility activation.

2. Prior to Exercise commencement, all Exercise telecommunications will be tested to ensure satisfactory communication between the Master Controller and other participating Controllers.

3. All Controllers will comply with instructions from the Master Controller.

4. All Controllers shall synchronize their watches to ensure that messages and time-related plant and radiological data are delivered on time. The governing time is that shown on the clock in the Control Room.

5. Read the Participant Guidelines.

6. Each Controller will have copies of the messages controlling the process of the Exercise scenario. All messages are noted with a number.

7. Unless otherwise instructed by the Master Controller, all messages shall be issued at their designated times. Time-related plant parameters and radiological data should be issued at the designated time by the appropriate Controller. Make sure the participants understand the message.

8. Issue contingency messages only if required to keep the play on schedule (as indicated on contingency message instruction).

9. Call the Master Controller immediately for advice if in doubt about what to do.

10. Allow the Participants reasonable flexibility to do their functions and demonstrate their skill, knowledge and initiative.

11. Call the Master Controller immediately for advice if the Participants depart significantly from scenario script. If necessary, intervene with Participant action and put play back on track.

12. Stop play and notify the Master Controller if plant or personnel safety is jeopardized.

13. Do not guide Participant's actions by offering suggestions, reminders or instructions.

14. Controllers shall not provide information concerning the scenario events or scenario data in advance of the times noted on the message or data sheets.

15. Some Participants may insist that certain portions of the scenario are unrealistic. Lead Facility Controllers will clarify any questions that may arise during the Exercise.

16. Each Controller will take detailed notes regarding the progress of the Exercise and the responses of Participants. All notes should be retained for the purpose of preparing a written critique of the Exercise. For those purposes, Controller Observation Sheets and Evaluation Material are included in this Exercise scenario manual.

17. Non-Participants are exempt from acting on simulated radiation levels specified for the emergency Exercise. However, all normal radiological control practices shall be followed throughout the course of the Exercise.

18. Controllers should ensure that contact between Participants and Observers (Visitors) is minimized. This may include the establishment of visitor areas in emergency response facilities.

19. Following the termination of the Exercise, each Facility Lead Controller will hold a critique of the Exercise activities at his assigned emergency response facility or with the field team to which he is assigned. This critique should last approximately thirty (30) minutes.

21. All Controller notes, completed evaluation material and attendance sheets should be forwarded to the Facility Lead Controller at the end of the Facility Critique.

4.2 Controller Organization

Controller Number	Assignment	Telephone No.	Names
C-1	TSC Controller	4626	Eric Schmieman
C-2	Control Room Controller (Simulator)	7777	Jim Connolly
C-2a	Control Room Lead Controller (Simulator)		Doug Wozlein
C-2b	Simulator Operator		Training Staff
C-3	Security	4450	C. Cox
C-4	OSC Lead Controller	4218	Chris McKeown
C-4a	OSC Team Controllers (9)		John Purcell
C-4b			Terry Nicholson
C-4c			Monty Hughs
C-4d			Dale Spicer
C-4e			Greg Zielinski
C-4f			Terry Moore
C-4g			(TBD)
C-4h			P.C. Moore
C-4i			J.A. VanWinkle
C-5	EOF Lead Controller/Master Controller	4336	Michael O'Hare
C-5a	EOF Dose Assessment		Paul Jones
C-6	Company Support Center	83-1000	Randy Hansell
C-7	PGE Environmental Monitoring Team		(TBD)

Evaluators
Jerry Thale (Rover)

4.3 Evaluation Checklists

In addition to taking detailed notes, each Controller should complete the applicable Evaluation Checklist(s) contained in this section of the Exercise Scenario Manual. The completed Evaluation Checklist(s) will then be utilized to document that the various Exercise objectives set forth in Section 2.0 were met and that any requirements for corrective actions are identified.

KEY TO EVALUATION CHECKLIST

M - Objective Met

N - Objective Not Met

NO - Objective Not Observed

NA - Not Applicable

PORTLAND GENERAL ELECTRIC COMPANY

TROJAN NUCLEAR POWER PLANT

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CONTROL ROOM EVALUATION FORM

PART I.

GENERAL OBJECTIVES

		Circle One			
1.	Demonstrate the adequacy of the Radiological Emergency Plan and Radiological Response Plan Implementing Procedures.	M	N	NO	NA
	COMMENTS: _____				
2.	Demonstrate the adequacy of communications among emergency facilities, off-site agencies and field teams.	M	N	NO	NA
	COMMENTS: _____				
3.	Demonstrate the ability of key personnel to make timely and effective decisions during a radiological emergency	M	N	NO	NA
	COMMENTS: _____				

KEY

M - Objective Met
N - Objective Not Met
NO - Objective Not Observed
NA - Not Applicable

CONTROL ROOM EVALUATION FORM (Cont'd)

PART I.

GENERAL OBJECTIVES

		Circle One			
4.	Demonstrate the ability of emergency facility managers to effectively utilize the resources of their facility to accomplish the goals of the Emergency Plan and the Emergency Procedures. This includes interfacility communication, comprehensive verbal briefings of staff and requests for assistance, as required.	M	N	NO	NA

COMMENTS: _____

_____

_____

_____

5.	Demonstrate the timely activation of emergency facilities during an off-hours, unannounced Exercise.	M	N	NO	NA

COMMENTS: _____

_____

_____

_____

PART II.

SPECIFIC ON-SITE OBJECTIVES

Circle One

Demonstrate that Control Room staff can:

1. Assess plant conditions, classify the emergency and make appropriate protective action recommendations. M N NO NA

   COMMENTS: _____

2. Make initial notifications of the emergency to appropriate individuals and organizations. M N NO NA

   COMMENTS: _____

3. Take corrective actions to control the situation and mitigate the consequences. M N NO NA

   COMMENTS: _____

PART II.

SPECIFIC ON-SITE OBJECTIVES

		Circle One			
4.	Establish communications with the Technical Support Center and Operational Support Center during the process of activation of those facilities.	M	N	NO	NA

COMMENTS: _____

_____

_____

_____

5.	Turn over communication responsibility with the Nuclear Regulatory Commission to the Technical Support Center when it is activated.	M	N	NO	NA

COMMENTS: _____

_____

_____

_____

6.	Coordinate operations-related tasks through the Operational Support Center after the Operational Support Center has become operational.	M	N	NO	NA

COMMENTS: _____

_____

_____

_____

PART II.

SPECIFIC ON-SITE OBJECTIVES

Circle One

7. Maintain a formal log of events for the duration of the simulated emergency situation. M N NO NA

COMMENTS: _____

_____

_____

_____

8. Demonstrate that the Shift Supervisor acting as Emergency Coordinator maintains overall command and control of the emergency situation until relieved of this responsibility by the Duty Plant General Manager in the Technical Support Center or the Emergency Response Manager in the Emergency Operations Facility. M N NO NA

COMMENTS: _____

_____

_____

_____

EVALUATOR: _____ DATE: _____

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1990 EMERGENCY PREPAREDNESS DRILL AND EXERCISE PROGRAM

TECHNICAL SUPPORT CENTER EVALUATION FORM

PART I.

GENERAL OBJECTIVES

		Circle One			
1.	Demonstrate the adequacy of the Radiological Emergency Plan and Radiological Response Plan Implementing Procedures in terms of management control of an emergency and usefulness of the procedures.	M	N	NO	NA
	COMMENTS: _____				
2.	Demonstrate the adequacy of communications among emergency facilities, off-site agencies and field teams.	M	N	NO	NA
	COMMENTS: _____				
3.	Demonstrate the ability of key personnel to make timely and effective decisions during a radiological emergency.	M	N	NO	NA
	COMMENTS: _____				

KEY

M - Objective Met
N - Objective Not Met
NO - Objective Not Observed
NA - Not Applicable

PART I.

GENERAL OBJECTIVES

		Circle One			
4.	Demonstrate the ability of emergency facility managers to effectively utilize the resources of their facility to accomplish the goals of the Emergency Plan and the Emergency Procedures. This includes interfacility communication, comprehensive verbal briefings of staff and requests for assistance, as required.	M	N	NO	NA
	COMMENTS: _____				
5.	Demonstrate the timely activation of emergency facilities during an off-hours unannounced Exercise.	M	N	NO	NA
	COMMENTS: _____				

TECHNICAL SUPPORT CENTER

PART II.

SPECIFIC ON-SITE OBJECTIVES

Circle One

Demonstrate that the Duty Plant General Manager:

1. Obtains detailed plant and emergency status briefing from the Shift Supervisor. M N NO NA

   COMMENTS: _____

2. Assumes command and control of the emergency situation until relieved of this responsibility by the Emergency Response Manager. M N NO NA

   COMMENTS: _____

3. Classifies the emergency if the Emergency Response Manager has not assumed Emergency Coordinator duties at the Emergency Operations Facility. M N NO NA

   COMMENTS: _____

PART II.

SPECIFIC ON-SITE OBJECTIVES

		Circle One			
4.	Develops Protective Action Recommendations with the Technical Support Center staff (if the Emergency Response Manager has not assumed the role of Emergency Coordinator) utilizing plant conditions.	M	N	NO	NA

COMMENTS: _____

_____

_____

_____

Demonstrate that Technical Support Center staff can:

5.	Adequately staff and activate the Technical Support Center within 60 minutes of the ALERT classification.	M	N	NO	NA

COMMENTS: _____

_____

_____

_____

6.	Assume responsibility for Nuclear Regulatory Commission communication from the Control Room on activation of the Technical Support Center.	M	N	NO	NA

COMMENTS: _____

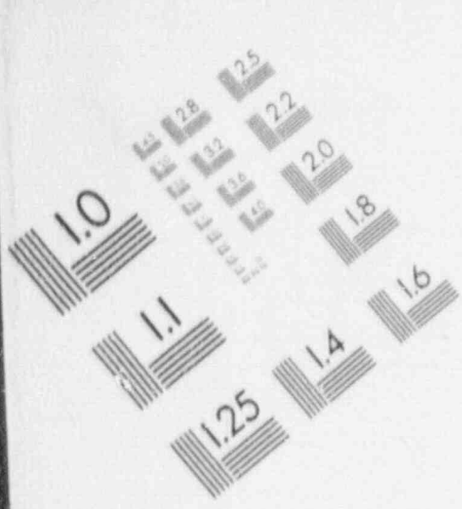
_____

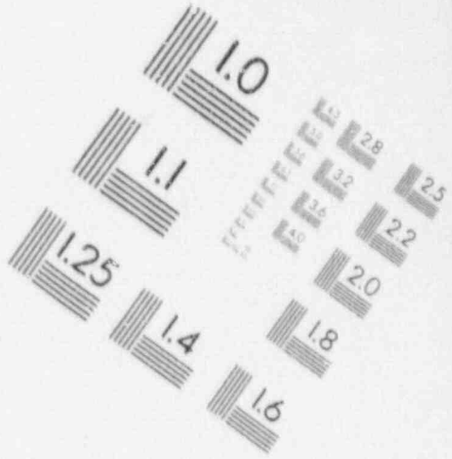
_____

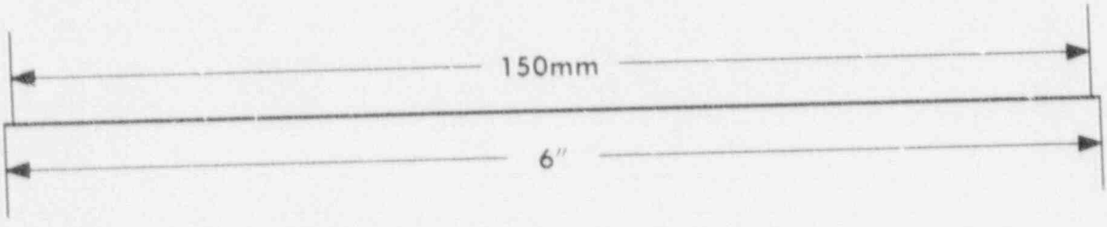
_____

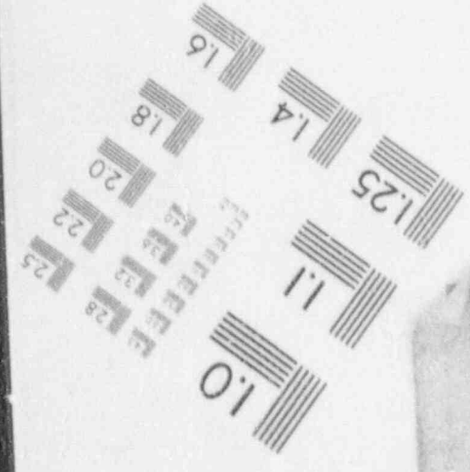
1

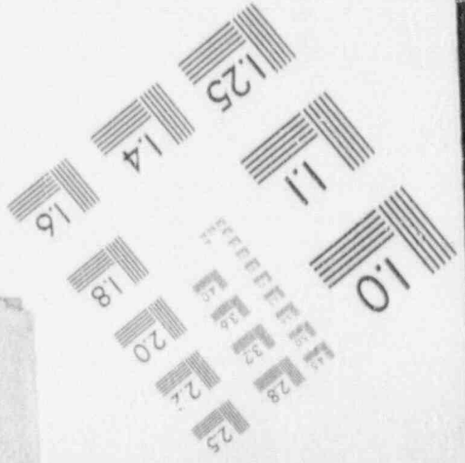
IMAGE EVALUATION TEST TARGET (MT-3)











PART II.

SPECIFIC ON-SITE OBJECTIVES

Circle One

7. Adequately monitor the three fission product barriers. M N NO NA

COMMENTS: _____

_____

_____

_____

8. Support emergency functions of the Control Room and Emergency Operations Facility. M N NO NA

COMMENTS: _____

_____

_____

_____

9. Perform analyses, monitor plant conditions and anticipate problems in carrying out the EOP's to develop plans for corrective action. M N NO NA

COMMENTS: _____

_____

_____

_____

10. Identify tasks to be performed by the Operational Support Center staff. M N NO NA

COMMENTS: _____

_____

_____

_____

PART II.

SPECIFIC ON-SITE OBJECTIVES

		Circle One			
11.	Provide direction to the CR to have plant paging system announcements made concerning accudebt status, plant status, radiological hazards and any on-site protective actions.	M	N	NO	NA
	COMMENTS: _____				
12.	Maintain a formal log of events for the duration of the simulated emergency situation.	M	N	NO	NA
	COMMENTS: _____				
13.	Maintain current display of plant status.	M	N	NO	NA
	COMMENTS: _____				
14.	Maintain current display of emergency activities.	M	N	NO	NA
	COMMENTS: _____				

PORTLAND GENERAL ELECTRIC COMPANY

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OPERATIONAL SUPPORT CENTER EVALUATION FORM

PART I.

GENERAL OBJECTIVES

		Circle One			
1.	Demonstrate the adequacy of the Radiological Emergency Plan and Radiological Response Plan Implementing Procedures.	M	N	NO	NA
	COMMENTS: _____				
2.	Demonstrate the adequacy of communications among emergency facilities, off-site agencies and field teams.	M	N	NO	NA
	COMMENTS: _____				
3.	Demonstrate the ability of key personnel to make timely and effective decisions during a radiological emergency.	M	N	NO	NA
	COMMENTS: _____				

KEY

M - Objective Met
N - Objective Not Met
NO - Objective Not Observed
NA - Not Applicable

PART I.

GENERAL OBJECTIVES

Circle One

4. Demonstrate the ability of emergency facility managers to effectively utilize the resources of their facility to accomplish the goals of the Emergency Plan and the Emergency Procedures. This includes interfacility communication, comprehensive verbal briefings of staff and requests for assistance, as required. M N NO NA

COMMENTS: _____

_____

_____

_____

5. Demonstrate the timely activation of emergency facilities during an off-hours unannounced Exercise. M N NO NA

COMMENTS: _____

_____

_____

_____

OPERATIONAL SUPPORT CENTER

PART II.

SPECIFIC ON-SITE OBJECTIVES

Circle One

Demonstrate that the Operational Support Center staff can:

1. Adequately staff and activate the Operational Support Center within 60 minutes of the declaration of an ALERT. M N NO NA

   COMMENTS: _____

2. Communicate and coordinate task assignments and Operational Support Center activities with the Control Room and Technical Support Center. M N NO NA

   COMMENTS: _____

3. Assemble, brief, dispatch, communicate with, and track Operational Support Center teams to the completion of assigned tasks. M N NO NA

   COMMENTS: _____

PART II.

SPECIFIC ON-SITE OBJECTIVES

		Circle One			
4.	Track individual Operational Support Center member doses and control Operational Support Center personnel exposure.	M	N	O	NA
	COMMENTS: _____				
5.	Maintain contamination control in the Operational Support Center, including personnel, tools, and Self Contained Breathing Apparatus (if necessary). Demonstrate that Operational Support Center radiological habitability can be monitored.	M	N	NO	NA
	COMMENTS: _____				
6.	Demonstrate that the Operational Support Center Supervisor can keep personnel in the Operational Support Center informed of current plant conditions.	M	N	NO	NA
	COMMENTS: _____				

PORTLAND GENERAL ELECTRIC COMPANY

TROJAN NUCLEAR POWER PLANT

1990 EMERGENCY PREPAREDNESS DRILL AND EXERCISE PROGRAM

POST ACCIDENT SAMPLING SYSTEM EVALUATION FORM

PART I.

GENERAL OBJECTIVES

		Circle One			
1.	Demonstrate the adequacy of the Radiological Emergency Plan and Radiological Response Plan Implementing Procedures.	M	N	NO	NA
	COMMENTS: _____				
2.	Demonstrate the adequacy of communications among emergency facilities, off-site agencies and field teams.	M	N	NO	NA
	COMMENTS: _____				
3.	Demonstrate the ability of key personnel to make timely and effective decisions during a radiological emergency.	M	N	NO	NA
	COMMENTS: _____				

KEY

M - Objective Met
N - Objective Not Met
NO - Objective Not Observed
NA - Not Applicable

PART I.

GENERAL OBJECTIVES

		Circle One			
4.	Demonstrate the ability of emergency facility managers to effectively utilize the resources of their facility to accomplish the goals of the Emergency Plan and the Emergency Procedures. This includes interfacility communication, comprehensive verbal briefings of staff and requests for assistance, as required.	M	N	NO	NA

COMMENTS: _____

_____

_____

_____

5.	Demonstrate the timely activation of emergency facilities during an off-hours, unannounced Exercise.	M	N	NO	NA

COMMENTS: _____

_____

_____

_____

POST ACCIDENT SAMPLING SYSTEM EVALUATION FORM (Cont'd)

PART II.

SPECIFIC OFF-SITE/JOINT OBJECTIVES

		Circle One			
1.	Utilizing appropriate procedures, manipulate the PASS to collect samples of reactor coolant and containment atmosphere.	M	N	NO	NA
	COMMENTS: _____				
2.	Demonstrate proper use of procedures and equipment for maintaining radiological safeguards and transport of samples.	M	N	NO	NA
	COMMENTS: _____				
3.	Demonstrate proper use of procedures and equipment for analysis of samples.	M	N	NO	NA
	COMMENTS: _____				

		Circle One			
4.	Provide analytical results for use in assessing core damage and containment integrity.	M	N	NO	NA

COMMENTS: _____

_____

_____

_____

EVALUATOR: _____ DATE: _____

PORTLAND GENERAL ELECTRIC COMPANY

TROJAN NUCLEAR POWER PLANT

1990 EMERGENCY PREPAREDNESS DRILL AND EXERCISE PROGRAM

EMERGENCY OPERATIONS FACILITY EVALUATION FORM

PART I.

GENERAL OBJECTIVES

		Circle One			
1.	Demonstrate the adequacy of the Radiological Emergency Plan and Radiological Response Plan Implementing Procedures.	M	N	NO	NA
	COMMENTS: _____				
2.	Demonstrate the adequacy of communications among emergency facilities, off-site agencies and field teams.	M	N	NO	NA
	COMMENTS: _____				
3.	Demonstrate the ability of key personnel to make timely and effective decisions during a radiological emergency.	M	N	NO	NA
	COMMENTS: _____				

KEY

M - Objective Met
N - Objective Not Met
NO - Objective Not Observed
NA - Not Applicable

PART I.

GENERAL OBJECTIVES

		Circle One
4.	Demonstrate the ability of emergency facility managers to effectively utilize the resources of their facility to accomplish the goals of the Emergency Plan and the Emergency Procedures. This includes interfacility communication, comprehensive verbal briefings of staff and requests for assistance, as required.	M N NO NA

COMMENTS: _____

_____

_____

_____

5.	Demonstrate the timely activation of emergency facilities during an off-hours unannounced Exercise.	M N NO NA

COMMENTS: _____

_____

_____

_____

EMERGENCY OPERATIONS FACILITY

PART II.

SPECIFIC ON-SITE OBJECTIVES

Circle One

Demonstrate that the Emergency Operations Facility staff can:

1. Adequately staff and activate the facility within 60 minutes of the declaration of an ALERT. M N NO NA

   COMMENTS: _____

2. Classify the emergency if the Emergency Response Manager has assumed the role of Emergency Coordinator at the Emergency Operations Facility. M N NO NA

   COMMENTS: _____

3. Obtain data from the Technical Support Center as required to supplement Safety Parameter Display System output. M N NO NA

   COMMENTS: _____

PART II

SPECIFIC ON-SITE OBJECTIVES

Circle One

4. Transmit the following information with updates as required to the Company Support Center and simulate these transmissions to the Oregon Emergency Operations Center, Washington Emergency Operations Center, Cowlitz County Emergency Operations Center, Columbia County Emergency Operations Center and Oregon Health: M N NO NA

- Emergency Classification
- Plant Data Summaries
- Dose Assessment Results
- Protective Action Recommendations

COMMENTS: _____

_____

_____

_____

5. Provide access control at the Emergency Operations Facility. M N NO NA

COMMENTS: _____

_____

_____

_____

PART II.

SPECIFIC ON-SITE OBJECTIVES

		Circle One			
6.	Maintain a formal log of events for the duration of the simulated emergency situation.	M	N	NO	NA

COMMENTS: _____

_____

_____

_____

7.	Maintain current displays of the following information for the duration of the emergency.	M	N	NO	NA

- Plant Status
- Emergency Status
- Off-site Protective Action Recommendations
- Emergency Operations Center Decision-maker Board

COMMENTS: _____

_____

_____

_____

8.	Demonstrate that the Health Physics Supervisor issues thermoluminescent dosimeters to Emergency Operations Facility personnel upon declaration of an ALERT.	M	N	NO	NA

COMMENTS: _____

_____

_____

_____

PART II.

SPECIFIC ON-SITE OBJECTIVES

		Circle One			
9.	Demonstrate that the Public Information Representative provides information on a continuing basis to the Joint Information Center.	M	N	NO	NA

Demonstrate that the Emergency Response Manager:

10.	Obtains a detailed plant and emergency status briefing prior to assuming the position of Emergency Coordinator.	M	N	NO	NA

COMMENTS: _____

_____

_____

_____

11.	Can develop a Protective Action Recommendation (if the Emergency Response Manager has become the Emergency Coordinator).	M	N	NO	NA

COMMENTS: _____

_____

_____

_____

PORTLAND GENERAL ELECTRIC COMPANY
TROJAN NUCLEAR POWER PLANT
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EMERGENCY OPERATIONS FACILITY
DOSE ASSESSMENT AREA EVALUATION FORM

PART I.

GENERAL OBJECTIVES

		Circle One			
1.	Demonstrate the adequacy of the Radiological Emergency Plan and Radiological Response Plan Implementing Procedures.	M	N	NO	NA
	COMMENTS: _____				
2.	Demonstrate the adequacy of communications among emergency facilities, off-site agencies and field teams.	M	N	NO	NA
	COMMENTS: _____				
3.	Demonstrate the ability of key personnel to make timely and effective decisions during a radiological emergency.	M	N	NO	NA
	COMMENTS: _____				

KEY

M - Objective Met
N - Objective Not Met
NO - Objective Not Observed
NA - Not Applicable

EMERGENCY OPERATIONS FACILITY
DOSE ASSESSMENT AREA EVALUATION FORM (Cont'd)

PART I.

GENERAL OBJECTIVES

		Circle One			
4.	Demonstrate the ability of emergency facility managers to effectively utilize the resources of their facility to accomplish the goals of the Emergency Plan and the Emergency Procedures. This includes interfacility communication, comprehensive verbal briefings of staff and requests for assistance, as required.	M	N	NO	NA
	COMMENTS: _____				
5.	Demonstrate the timely activation of emergency facilities during an off-hours unannounced Exercise.	M	N	NO	NA
	COMMENTS: _____				

EMERGENCY OPERATIONS FACILITY
DOSE ASSESSMENT AREA EVALUATION FORM

PART II.

SPECIFIC OFF-SITE/JOINT OBJECTIVES

Circle One

EMERGENCY OPERATIONS FACILITY DOSE ASSESSMENT AREA

Demonstrate that the Radiological Manager can properly:

1. Manage the dose assessment activities by maintaining proper oversight of those activities. M N NO NA

COMMENTS: _____

Demonstrate that staff can properly:

2. Project dosage to the public via plume exposure based on calculations and field measurement. M N NO NA

COMMENTS: _____

3. Use dose projection results to develop any Protective Action Recommendations required by emergency conditions. M N NO NA

COMMENTS: _____

EMERGENCY OPERATIONS FACILITY
DOSE ASSESSMENT AREA EVALUATION FORM (Cont'd)

PART II.

SPECIFIC OFF-SITE/JOINT OBJECTIVES

		Circle One			
4.	Plot field team data accurately and clearly.	M	N	NO	NA
	COMMENTS: _____				
5.	Properly process Accident Assessment/Notification Forms and maintain control of those forms.	M	N	NO	NA
	COMMENTS: _____				
6.	Obtain back-up meteorological information.	M	N	NO	NA
	COMMENTS: _____				
7.	Make Ingestion Protective Action Recommendations and dose calculations.	M	N	NO	NA
	COMMENTS: _____				

PORTLAND GENERAL ELECTRIC COMPANY

TROJAN NUCLEAR POWER PLANT

1990 EMERGENCY PREPAREDNESS DRILL AND EXERCISE PROGRAM

RADIOLOGICAL FIELD MONITORING EVALUATION FORM

PART I.

GENERAL OBJECTIVES

		Circle One			
1.	Demonstrate the adequacy of the Radiological Emergency Plan and Radiological Response Plan Implementing Procedures.	M	N	NO	NA
	COMMENTS: _____				
2.	Demonstrate the adequacy of communications among emergency facilities, off-site agencies and field teams.	M	N	NO	NA
	COMMENTS: _____				
3.	Demonstrate the ability of key personnel to make timely and effective decisions during a radiological emergency.	M	N	NO	NA
	COMMENTS: _____				

KEY

M - Objective Met
N - Objective Not Met
NO - Objective Not Observed
NA - Not Applicable

PART I.

GENERAL OBJECTIVES

		Circle One			
4.	Demonstrate the ability of emergency facility managers to effectively utilize the resources of their facility to accomplish the goals of the Emergency Plan and the Emergency Procedures. This includes interfacility communication, comprehensive verbal briefings of staff and requests for assistance, as required.	M	N	NO	NA
	COMMENTS: _____				
5.	Demonstrate the timely activation of emergency facilities during an off-hours unannounced Exercise.	M	N	NO	NA
	COMMENTS: _____				

RADIOLOGICAL FIELD MONITORING

PART II.

SPECIFIC OFF-SITE/JOINT OBJECTIVES

Circle One

Demonstrate that:

1. The Portland General Electric Field Team can be prepared to begin its monitoring activities within 60 minutes of a declaration of an ALERT. M N NO NA

   COMMENTS: _____

2. Field Teams can communicate with the Emergency Operations Facility using two-way radios or cellular phones and provide required information to the Emergency Operations Facility. M N NO NA

   COMMENTS: _____

3. Demonstrate appropriate equipment and procedures for determining ambient radiation levels. M N NO NA

   COMMENTS: _____

PART II.

SPECIFIC OFF-SITE/JOINT OBJECTIVES

		Circle One			
4.	Demonstrate appropriate equipment and procedures for measurement of airborne radioiodine.	M	N	NO	NA

COMMENTS: _____

_____

_____

_____

5.	Field Team members properly report and control their exposures.	M	N	NO	NA

COMMENTS: _____

_____

_____

_____

PORTLAND GENERAL ELECTRIC COMPANY

TROJAN NUCLEAR POWER PLANT

1990 EMERGENCY PREPAREDNESS DRILL AND EXERCISE PROGRAM

COMPANY SUPPORT CENTER EVALUATION FORM

PART I.

GENERAL OBJECTIVES

		Circle One			
1.	Demonstrate the adequacy of the Radiological Emergency Plan and Radiological Response Plan Implementing Procedures.	M	N	NO	NA
	COMMENTS: _____				
2.	Demonstrate the adequacy of communications among emergency facilities, off-site agencies and field teams.	M	N	NO	NA
	COMMENTS: _____				
3.	Demonstrate the ability of key personnel to make timely and effective decisions during a radiological emergency.	M	N	NO	NA
	COMMENTS: _____				

KEY

M - Objective Met
N - Objective Not Met
NO - Objective Not Observed
NA - Not Applicable

PART I.

GENERAL OBJECTIVES

		Circle One			
4.	Demonstrate the ability of emergency facility managers to effectively utilize the resources of their facility to accomplish the goals of the Emergency Plan and the Emergency Procedures. This includes interfacility communication, comprehensive verbal briefings of staff and requests for assistance, as required.	M	N	NO	NA
	COMMENTS: _____				
5.	Demonstrate the timely activation of emergency facilities during an off-hours unannounced Exercise.	M	N	NO	NA
	COMMENTS: _____				

COMPANY SUPPORT CENTER

PART II.

SPECIFIC OFF-SITE/JOINT OBJECTIVES

Circle One

Demonstrate that Company Support Center staff can:

1. Document and track requests for assistance from the Technical Support Center, Emergency Operations Facility and other emergency centers. M N NO NA

   COMMENTS: _____

2. Notify specified agencies and off-site groups of accident conditions. M N NO NA

   COMMENTS: _____

3. Request and coordinate assistance as necessary from off-site organizations. M N NO NA

   COMMENTS: _____

4. Periodically update the Emergency Operations Facility on the status of off-site organizations. M N NO NA

   COMMENTS: _____

PORTLAND GENERAL ELECTRIC COMPANY

TROJAN NUCLEAR POWER PLANT

1990 EMERGENCY PREPAREDNESS DRILL AND EXERCISE PROGRAM

JOINT INFORMATION CENTER EVALUATION FORM

PART I.

GENERAL OBJECTIVES

		Circle One			
1.	Demonstrate the adequacy of the Radiological Emergency Plan and Radiological Response Plan Implementing Procedures.	M	N	NO	NA
	COMMENTS: _____				
2.	Demonstrate the adequacy of communications among emergency facilities, off-site agencies and field teams.	M	N	NO	NA
	COMMENTS: _____				
3.	Demonstrate the ability of key personnel to make timely and effective decisions during a radiological emergency.	M	N	NO	NA
	COMMENTS: _____				

KEY

M - Objective Met
N - Objective Not Met
NO - Objective Not Observed
NA - Not Applicable

PART I.

GENERAL OBJECTIVES

		Circle One			
4.	Demonstrate the ability of emergency facility managers to effectively utilize the resources of their facility to accomplish the goals of the Emergency Plan and the Emergency Procedures. This includes interfacility communication, comprehensive verbal briefings of staff and requests for assistance, as required.	M	N	NO	NA
	COMMENTS: _____				
5.	Demonstrate the timely activation of emergency facilities during an off-hours, unannounced Exercise.	M	N	NO	NA
	COMMENTS: _____				

JOINT INFORMATION CENTER EVALUATION FORM (Cont'd)

PART II.

SPECIFIC ON-SITE OBJECTIVES

Circle One

Demonstrate that Joint Information Center staff can:

1. Demonstrate the ability to set up and staff the JIC. M N NO NA
   COMMENTS: _____
   _____
   _____
   _____

2. Demonstrate the ability to communicate via the Public Information Phone with other Public Information Officers. M N NO NA
   COMMENTS: _____
   _____
   _____
   _____

3. Demonstrate the ability to coordinate the development and approval of news releases from the JIC. M N NO NA
   COMMENTS: _____
   _____
   _____
   _____

4. Demonstrate the ability to conduct the news media briefings at the JIC. M N NO NA
   COMMENTS: _____
   _____
   _____
   _____

EVALUATOR: _____ DATE: _____

PORTLAND GENERAL ELECTRIC COMPANY

TROJAN NUCLEAR POWER PLANT

1990 EMERGENCY PREPAREDNESS DRILL AND EXERCISE PROGRAM

MEDICAL EMERGENCY DRILL EVALUATION FORM

PART I.

GENERAL OBJECTIVES

		Circle One			
1.	Demonstrate the adequacy of the Radiological Emergency Plan and Radiological Response Plan Implementing Procedures.	M	N	NO	NA
	COMMENTS: _____				
2.	Demonstrate the adequacy of communications among emergency facilities, off-site agencies and field teams.	M	N	NO	NA
	COMMENTS: _____				
3.	Demonstrate the ability of key personnel to make timely and effective decisions during a radiological emergency.	M	N	NO	NA
	COMMENTS: _____				

KEY

M - Objective Met
N - Objective Not Met
NO - Objective Not Observed
NA - Not Applicable

MEDICAL EMERGENCY DRILL EVALUATION FORM (Cont'd)

PART I.

GENERAL OBJECTIVES

		Circle One			
4.	Demonstrate the ability of emergency facility managers to effectively utilize the resources of their facility to accomplish the goals of the Emergency Plan and the Emergency Procedures. This includes interfacility communication, comprehensive verbal briefings of staff and requests for assistance, as required.	M	N	NO	NA

COMMENTS: _____

_____

_____

_____

PART II.

SPECIFIC ON-SITE OBJECTIVES

Circle One

The Medical Emergency Drill No. 1 (October 29) will:

1. Demonstrate ability of the Radiation Protection Emergency Team (RPET) to respond to a medical emergency involving a contaminated individual. In doing so, the RPET will demonstrate its ability to:

   a. Provide first aid to injured individuals. M N NO NA

   COMMENTS: _____

   _____

   _____

   _____

   b. Conduct surveys to determine the extent and location of contamination or direct radiation being emitted from the patient. M N NO NA

   COMMENTS: _____

   _____

   _____

   _____

   c. Decontaminate the injured person as much as possible, without interfering with first aid priorities
   Control any contamination which cannot be removed. M N NO NA

   COMMENTS: _____

   _____

   _____

   _____

PART II.

SPECIFIC ON-SITE OBJECTIVES

Circle One

d. Obtain the information necessary to determine the extent of the injured person's exposure. M N NO NA

COMMENTS: _____

e. Prepare the patient for ambulance transportation. M N NO NA

COMMENTS: _____

f. Dispatch a RPET member to accompany the patient to the hospital to assist the ambulance and hospital staffs with radiological services. M N NO NA

COMMENTS: _____

g. Provide complete and accurate patient status information in a standardized format to the receiving hospital. M N NO NA

COMMENTS: _____

PART II.

SPECIFIC ON-SITE OBJECTIVES

Circle One

2. Demonstrate the ability of Control Room Supervisor to respond to a medical emergency involving a contaminated individual. This will include:

a. Receipt and disposition of originating casualty report. M N NO NA

COMMENTS: _____

b. Activation of the Radiation Protection Emergency Team. M N NO NA

COMMENTS: _____

c. Notification of the Columbia County Communications Agency (C-COM). M N NO NA

COMMENTS: _____

d. Notification of the Medical Health Physicist. M N NO NA

COMMENTS: _____

PART II.

SPECIFIC ON-SITE OBJECTIVES

Circle One

3. Demonstrate the ability of Columbia County Emergency Service Organizations to respond to a medical emergency involving a contaminated individual at the Trojan site, including:

a. Dispatch of ambulance service by C-COM. M N NO NA

COMMENTS: _____

b. Timely arrival of the ambulance on-site. M N NO NA

COMMENTS: _____

4. Demonstrate the ability of PGE Security to rapidly process an ambulance through the protected area boundary. M N NO NA

COMMENTS: _____

5. Demonstrate the ability of the ambulance crew and the RPET to transport a contaminated injured person to the hospital. M N NO NA

COMMENTS: _____

PART II

SPECIFIC ON-SITE OBJECTIVES

Circle One

6. Demonstrate the adequacy of hospital facilities and procedures for receiving, handling and treating contaminated injured individuals. In doing so, the hospital will demonstrate:

a. Availability of procedures and properly trained staff for dealing with radioactive contamination. M N NO NA

COMMENTS: _____

_____

_____

_____

b. Availability of necessary supplies and equipment including survey meters, anti-contamination clothing and decontamination supplies. M N NO NA

COMMENTS: _____

_____

_____

_____

c. Interaction with Medical Health Physicist and RPET member, allowing either of these individuals to take an assertive role in preventing cross-contamination. M N NO NA

COMMENTS: _____

_____

_____

_____

PART II.

SPECIFIC ON-SITE OBJECTIVES

Circle One

Medical Emergency Drill No. 2 (October 30) will:

1. Demonstrate the adequacy of hospital facilities, equipment and procedures for handling and treating contaminated injured individuals. In doing so, the Hospital will demonstrate:

   a. Availability of procedures and properly trained staff for dealing with radioactive contamination. M N NO NA

   COMMENTS: _____

   b. Availability of necessary supplies and equipment including survey meters, anti-contamination clothing and decontamination supplies. M N NO NA

   COMMENTS: _____

   c. Interaction with Medical Health Physicist and RPET member, allowing either of these individuals to take an assertive role in preventing cross-contamination. M N NO NA

   COMMENTS: _____

PART II

SPECIFIC ON-SITE OBJECTIVES

Circle One

2. Demonstrate the adequacy of vehicles, equipment, procedures and personnel for transporting contaminated injured individuals. M N NO NA

COMMENTS: _____

_____

_____

_____

Medical Emergency Drill No. 3 (October 30) will:

1. Demonstrate the adequacy of hospital facilities, equipment and procedures for handling and treating contaminated injured individuals. In doing so, the Hospital will demonstrate:

   a. Availability of procedures and properly trained staff for dealing with radioactive contamination. M N NO NA

   COMMENTS: _____

   _____

   _____

   _____

   b. Availability of necessary supplies and equipment including survey meters, anti-contamination clothing and decontamination supplies. M N NO NA

   COMMENTS: _____

   _____

   _____

   _____

EVALUATOR: _____ DATE: _____

PORTLAND GENERAL ELECTRIC
TROJAN NUCLEAR PLANT

1990 TRAINING DRILLS

EXERCISE ATTENDANCE RECORD

DATE: _____

LOCATION: _____ TIME: _____

NAME (PRINT)	SIGNATURE	EMERGENCY POSITION

PORTLAND GENERAL ELECTRIC
TROJAN NUCLEAR PLANT

1990 TRAINING DRILLS

CONTROLLER OBSERVATION SHEET

Controller _____ Page _____ of _____

TIME	ACTIVITY OR EVENT

PART II

CONTROLLED INFORMATION

SECTION 5.0 DRILL SCENARIO

5.1 Narrative Summary

The scenario for this Exercise is based on a Loss of Coolant Accident (LOCA) from an interfacing system, resulting in a loss of RHR system recirculation capability. Reactor Coolant System makeup capacity is severely limited by the location of the leak. Core cooling capability is lost, fuel damage occurs, and a release of activity begins via the Auxiliary Building ventilation system to the environment. The basic scenario is derived from probabilistic risk assessments analyzed by the Industry Degraded Core Rulemaking Organization (IDCOR) which indicate this type of event is the most likely to produce actual core damage.

Initial conditions have the plant at 100% power, 100% core flow, late in core life with maximum decay heat. Evolutions in progress include: Maintenance on the "A" EDG output breaker. "A" train ECCS is out of service while the breaker is being repaired. Estimated completion time for this repair is 2 hours. "A" Coolant charging pump has a motor winding short, and is tagged out.

A cylinder of hydrogen gas in transit to it's stowage location near the cooling tower is dropped and ruptures. The bottle explodes, and fragments from the explosion penetrate the wall of the turbine building. An ALERT is declared per module 14 step 2, (Explosion in the general area causing damage to plant structures or equipment).

The LOCA begins when RHR isolation boundary valves MO-8701 and -8702 begin to leak by their shut seats. Low pressure RHR piping is over-pressurized and fails at the discharge side of RHR pump "A", and a leak begins into the Auxiliary Building. PRM-2 alarms. Operators declare a SITE AREA EMERGENCY, based on either Module 1 step 3 (High Dose Rate, based on PRM-2), or Module 2 step 5 (Loss of 2 Fission Product Barriers). Operators manually trip the reactor, initiate Safety Injection per EI-0, then transition to ECA 1.2. RHR pump "A" isolation valve MO-8700A (normally open) fails to close when the attempt is made to isolate the leak. The power supply cable to the motor operator grounds out and is damaged, requiring replacement.

Rising Auxiliary Building west side sump levels, and high humidity ground out "A" Safety Injection pump. Sump level continues to rise until it overflows and begins to fill the Auxiliary Building east sump.

The location of the coolant leak prevents recirculation operation of the RHR system. In addition, the reactor coolant lost begins to fill the Auxiliary Building sumps. High temperatures, steam, poor visibility and rising radiation levels in the Auxiliary Building make access for troubleshooting the LOCA, repairs to, or manual operation of MO-8700A extremely difficult. Long term concerns of the maintenance personnel in the drill should include replenishment of the RWST without recirculation capability, and repairs to MO-8700A, to allow leak isolation. Based on concern for RWST inventory operators may secure either "B" SI pump or "B" charging pump, in accordance with minimum ECCS flow requirements vs. time since shutdown, per ECA 1.1.

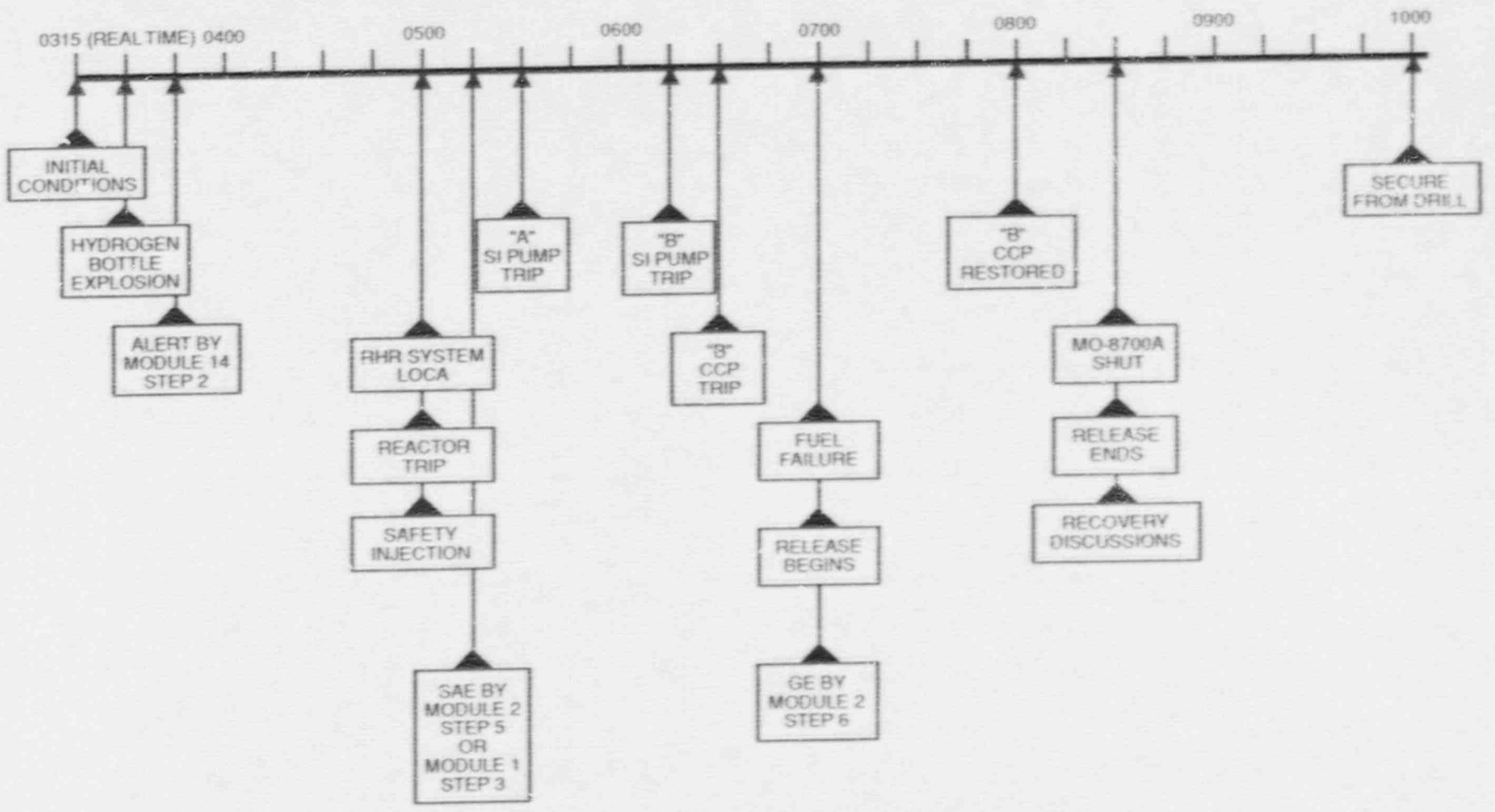
"B" Safety Injection pump grounds out (and trips, if running), due to progressive flooding of the east sump. Reactor Vessel Level Indication System (RVLIS) indicates lowering vessel level. "B" Charging pump is operated, and should supply sufficient water to cool the core per ECA-1.1 figure 1.

"B" Coolant Charging Pump trips on a breaker fault. "B" SI pump is grounded and inoperative. Minimum required ECCS flow cannot be maintained. Core thermocouples indicate rising temperatures in several areas, and fuel damage occurs. Rising activity is noted on the Auxiliary Building ARMs. Operators declare a GENERAL EMERGENCY based either on Module 2 Step 6 (Loss of 2 fission product barriers with imminent loss of the third), or on Module 1 Step 7 (High dose projection: ARMs or PRMs indicate greater than 1 Rem/hr whole body or 5 Rem/hr thyroid at the Exclusion area boundary).

"B" Coolant Charging Pump breaker is repaired, and makeup water is injected to cool the core. With the replacement of the power supply cable for MO-8700A, the valve can be shut to isolate the LOCA. The release is terminated.

With the termination of the leak, operators must be concerned with stabilizing the reactor, maintaining RWST level, and cleanup and restoration of the Auxiliary Building. When a recovery path to accomplish these objectives has been identified, the Exercise will be terminated.

5.2 Sequence of Events



TROJAN 1990 EVALUATED EXERCISE TIMELINE

Approximate Time		Key Event
0315	0000	INITIAL CONDITIONS: The plant is at 100% power, 100% core flow, late in core life with maximum decay heat. Evolutions in progress include: Maintenance on the "A" EDG output breaker. "A" train ECCS is out of service while the breaker is being repaired. Estimated completion time for this repair is 2 hours. "A" Coolant charging pump has a motor winding short, and is tagged out.
0330	0015	A cylinder of hydrogen gas in transit to it's stowage location near the cooling tower is dropped and ruptures. The bottle explodes, and fragments penetrate the nearby outside wall of the Turbine Building, resulting in minor structural damage to the building. Operators should inspect carefully and verify that no equipment has been damaged.
0345	0030	Operators declare an ALERT per module 14 step 2, (Explosion in the general area causing damage to plant structures or equipment) Emergency response facilities begin activation.
0500	0145	A Loss of Coolant Accident begins as RHR isolation boundary valves MO-8701 and -8702 begin to leak by their shut seats. Low pressure RHR piping is over-pressurized and fails at the discharge of RHR pump "A", and a leak begins into the Auxiliary Building. PRM-2D alarms. Operators manually trip the reactor initiate Safety Injection per EI-0, then transition to ECA 1.2. RHR pump "A" isolation valve MO-8700A (normally open) fails to close when the attempt is made to isolate the leak. The power supply cable to the motor operator grounds out and is damaged, requiring replacement.
0515	0200	Operators declare a SITE AREA EMERGENCY, based on either Module 1 step 3 (High Dose Rate, based on PRM-2), or Module 2 step 5 (Loss of 2 Fission Product Barriers).
0530	0215	Rising Auxiliary Building west side sump levels, and high humidity ground out "A" Safety Injection pump. "A" SI pump trips.

Approximate Time		Key Event
0545	0230	PLANT STATUS:
		The location of the coolant leak prevents recirculation operation of the RHR system. In addition, the reactor coolant lost begins to fill the Auxiliary Building sumps. High temperatures, steam, poor visibility and rising radiation levels in the Auxiliary Building make access for troubleshooting the LOCA, repairs to, or manual operation of MO-8700A extremely difficult. Long term concerns of the maintenance personnel in the drill should include replenishment of the RWST without recirculation capability, and repairs to MO-8700A, to allow leak isolation. Based on concern for RWST inventory operators may secure either "B" SI pump or "B" charging pump, in accordance with minimum ECCS flow requirements vs. time since shutdown, per ECA 1.1.
0615	0300	Auxiliary Building west sump level continues to rise until it overflows and begins to fill the Auxiliary Building east sump. "B" Safety Injection pump grounds out and trips (if running) due to progressive flooding of the east sump. Reactor Vessel Level Indication System (RVLIS) indicates lowering vessel level.
0630	0315	"B" Coolant Charging Pump trips on a breaker fault. "B" SI pump is grounded and inoperative. Minimum required ECCS flow cannot be maintained. Core thermocouples begin to indicate rising temperatures in several areas, and fuel damage starts to occur.
0645	0330	Several core thermocouples indicate temperatures in the vicinity of 714 degrees.
0700	0345	Operators declare a GENERAL EMERGENCY based either on Module 2 Step 6 (Loss of 2 fission product barriers with imminent loss of the third), or on Module 2 Step 4 (Loss of Core Cooling capability).
0700	0345	Rising activity is noted on some Auxiliary Building ARMs.
0800	0445	"B" Coolant Charging Pump breaker is repaired, and makeup water is injected to the core.

Approximate Time		Key Event
0830	0515	The power supply cable for MO-8700A is replaced. The valve can be shut to isolate the LOCA. The release is terminated. With the termination of the leak, operators must be concerned with stabilizing the reactor, maintaining RWST level, and cleanup and restoration of the Auxiliary Building. When a recovery path to accomplish these objectives has been identified, the Exercise will be terminated.
1000	0645	The Exercise is terminated

5.3 Scenario Controller Guide

SCENARIO CONTROLLER GUIDE

TIME	MSG. NO.	FROM	TO	EVENT SUMMARY	ANTICIPATED RESPONSE	CM	CONTROLLER NOTES
					ABBREVIATIONS USED IN THIS GUIDE AC All Controllers MSG No. Message Number FM From CM Contingency Message SS Operations Shift Supervisor -C Contingency Message (Preceded by Message Number) C- Controller Designation (Followed by Controller Number) AP All Players CO Control Operator AO Auxiliary Operator EC Emergency Coordinator IC Initial Conditions DPGM Duty Plant General Manager RT Repair Team MT Maintenance RO Radwaste Operator SAE SITE AREA EMERGENCY GE GENERAL EMERGENCY HP Health Physics Technician MO Manager, Operations (TSC) ERM Emergency Response Manager		

SCENARIO CONTROLLER GUIDE

TIME	MSG. NO.	FROM	TO	EVENT SUMMARY	ANTICIPATED RESPONSE	CM	CONTROLLER NOTES
0300	IC-1	AC	AP	INITIAL CONDITIONS: The plant is at 100% Power, 100% flow, Late in fuel cycle (Maximum decay heat). The following evolutions are in progress: - Maintenance on the "A" EDG output breaker. - "A" train ECCS is out of service while the breaker is being repaired. Estimated completion time for this repair is 2 hours. - "A" Coolant charging pump has a motor winding short, and is tagged out.			All personnel should be aware of plant conditions. "A" ECCS scheduled for completion on the day shift. "A" CCP scheduled to be rebuilt during the next outage.
0330	1	C-3	Sec. Guard at Access Cont.	You noticed a bright flash and a loud "boom" near the south end of the Turbine Building.	Security notify the control room, and send a guard to investigate.		Explosion of a hydrogen bottle near the south wall of the turbine building.
0330	2	C-4	-	Pass this message to Control Room: I just dropped the hydrogen bottle that I was carrying, and it fell on it's cap. The bottle sounded as if it might be	Worker brief security when they arrive. Security inform control room. SS direct a detailed inspection of the TB to determine damage. SS declare an ALERT per Module 14, Step 2	3-C	(0345) C-2 To ensure ALERT is declared. C-4 deliver this message as the worker.

TIME	MSG. NO.	FROM	TO	EVENT SUMMARY	ANTICIPATED RESPONSE	CM	CONTROLLER NOTES
0330 Contd				leaking. As I was going to call the Control Room, the bottle exploded. Fragments flew all over the place. Some appear to have penetrated into the Turbine Building.	(Explosion in the vicinity, causing damage to plant structures or equipment.)		Worker is unhurt. Fragments have penetrated the turbine building wall. No damage to equipment.
0345	3-C	C-2	SS	Declare an ALERT per Module 14, Step 2 (Explosion in the vicinity, causing damage to plant structures or equipment.)	CONTROL ROOM SS declare the ALERT. Activate TSC and OSC. Make required notifications.		Deliver this message only if an ALERT has not yet been declared at the above time.
0430	4	C-4	RT at Turb. Bldg.	Many sharp fragments of the hydrogen bottle are scattered over the roadway to the south of the building. Damage to the building seems mostly cosmetic, no structural frames have been found to be affected. There are several relatively large holes in the south wall of the turbine building, and the large garage access door is jammed shut. Further inspection for affected components is in progress. No component damage has been found.	Be aware of plant conditions.		

TIME	MSG. NO.	FROM	TO	EVENT SUMMARY	ANTICIPATED RESPONSE	CM	CONTROLLER NOTES
0430	5-C	C-4	RT at "A" EDG BKR.	The "A" EDG Breaker is tagged out for routine inspection and calibration. It is partially disassembled. Completion was scheduled for the morning shift.	Switchgear Room: RT inform OSC, OSC inform control room. RT, prepare to re-assemble the breaker.		Deliver this message if a repair team is despatched to the "A" EDG breaker. Allow the team to restore the breaker if they attempt to do so. Restoration of the breaker will not significantly affect the scenario.
0500	6-C	C-2	S S / CO	ANNUNCIATORS IN CONTROL ROOM K-12 "A" RHR Pmp Disch Press Hi K-12 "B" RHR Pmp Disch Press Hi K-01 PRM Trouble K-01 PRM-2 Radiation Alert K-01 PRM-2 Radiation High K-11 Pressurizer Control Level Low K-13 r Press Low Htrs On K-11 "A" CCP Auto Start INDICATIONS IN CONTROL ROOM RHR cooler outlet temp. ind. 400 F	CONTROL ROOM Operators take action for LOCA per EI-0: Trip the reactor and initiate manual Safety Injection.	8-C	(0515) C-1 Ensure SAE is Declared. Deliver this message only if proper indication is not available from the simulator. LOCA has started from MO-8791 and -8702 leaking by their shut seats.
0501	7-C	C-2	S S / CO	ANNUNCIATORS IN CONTROL ROOM K-21 Safety Injection Actuation	CONTROL ROOM Operators take action to complete EI-0 for a manual Reactor Trip, and transition		Deliver this message only if proper indication is

TIME	MSG. NO.	FROM	TO	EVENT SUMMARY	ANTICIPATED RESPONSE	CM	CONTROLLER NOTES
0501 Contd				K-16 Turbine Trip, Reactor Trip K-21 Rod Bottom K-21 Rods 2 or more at Bottom K-21 CIS "A" Actuation K-18 Feedwater Isolation K-15 "A" Main Feed Pump Turb Trip K-15 "B" Main Feed Pump Turb Trip K-21 "A" SI Pump Auto Start K-21 "B" SI Pump Auto Start K-11 Pressurizer Level < 17% K-12 "A" RHR Pump Auto Start K-12 "B" RHR Pump Auto Start K-12 "A" RHR Pump Flow Low K-12 "B" RHR Pump Flow Low	to ECA-1.2.		not available from the simulator, and after operators insert manual reactor trip, and initiate Safety Injection per EI-0.
0515	8-C	C-1	EC	Declare a SITE AREA EMERGENCY by Module 2, Step 5 (Loss of 2 Fission Product Barriers) OR by Module 1, Step 3 (High Dose Rate, based on PRM-2)	TSC EC declare the SAE. Activate EOF if not already done. Make required notifications.		Deliver this message only if a SITE AREA EMERGENCY has not yet been declared. EC may declare SAE based on Module 1 Step 3 if SS is delayed more than a few minutes in the analysis and reporting of the RHR system LOCA as a LOCA outside of the containment.

SCENARIO CONTROLLER GUIDE

TIME	MSG. NO.	FROM	TO	EVENT SUMMARY	ANTICIPATED RESPONSE	CM	CONTROLLER NOTES
0515	9-C	C-2	CO / SS	MO-8700A position indicator lights are out.	CONTROL ROOM CO inform SS. SS inform TSC and OSC. OSC Set up repair teams to investigate MO-8700A.		Deliver this message only if proper indication is not available from the simulator after CO attempts to shut MO-8700A to isolate the LOCA. Indicator lights fail when breaker trips, and stay out until the breaker is reset. Valve fails to operate electrically, due to failed power supply cable on the load side of the motor operator power supply breaker.
0530	10-C	C-2	SS / CO	ANNUNCIATORS IN CONTROL ROOM K-21 "A" SI Pump Motor Overload INDICATIONS IN CONTROL ROOM "A" SI Pump indicates tripped Aux Building Sump West level high.	CONTROL ROOM CO report to SS. SS report to TSC and OSC. CO may attempt to restart "A" SI pump. Pump will re-start and trip within a few seconds if tried.		Deliver this message only if proper indication is not available from the simulator. "A" SI Pump is flooded out by high humidity and rising reactor coolant level in the Aux Building west sump.

TIME	MSG. NO.	FROM	TO	EVENT SUMMARY	ANTICIPATED RESPONSE	CM	CONTROLLER NOTES
0600	11	C-4	RT for MO - 8700A	Conditions in the Auxiliary Building: Temperatures are above 130 F near the entrance to the building. Visibility is near zero in steam. Humidity is 100%.	AUX. BUILDING RT be aware of conditions in the Aux Building and take proper precautions.		Deliver to RT leader at the entrance to the Auxiliary Building. RT should realize heat stress and contamination are problems of great concern. If they elect to proceed, conditions will worsen to 150 F as they approach MO-8700A. Obtain local area radiation levels and contamination levels from inplant maps.
0600	12	C-4	RT at MO - 8700A Bkr.	MO-8700A Power Supply Breaker indicates tripped. No other abnormal indications. Cause of trip is worn insulation on load side cabling, causing short to ground.	Switchgear Room RT troubleshoot. When fault is determined, inform OSC, Control Room.		Deliver to RT troubleshooting the breaker when they arrive. Cause of trip is worn insulation on load side cabling. Cable is shorted to ground. If they replace the breaker with a spare and attempt to operate the valve electrically, the spare will trip. A slight smell of burning insulation will result from the second

TIME	MSG. NO.	FROM	TO	EVENT SUMMARY	ANTICIPATED RESPONSE	CM	CONTROLLER NOTES
0600 Contd							reset and trip. When RT removes the breaker again, the power cables on the load side are now visibly burned, and must be replaced. Enough cable must be burned to force warehouse participation, by requiring pulling of spare parts
0615	13	C-4	RT at MO-8700A	Conditions in the immediate vicinity of MO-8700A, temperatures 150 to 165 F, Visibility near zero. Valve body, piping, and operator are hot (~200 F), and are operating stiffly due to high temperature and flow through the valve.			Deliver to RT when they reach MO-8700A. Stay time in the area due to heat stress is very limited. Operators will feel faint after 1 Minute of operating MO-8700A, and will collapse after an additional minute if they do not stop.

SCENARIO CONTROLLER GUIDE

TIME	MSG. NO.	FROM	TO	EVENT SUMMARY	ANTICIPATED RESPONSE	CM	CONTROLLER NOTES
0615	14-C	C-2	CO / SS	ANNUNCIATORS IN CONTROL ROOM K-21 "B" SI Pump Motor Overload K-21 "B" SI Pump Auto Trip INDICATIONS IN CONTROL ROOM "B" SI Pump indicates tripped Aux Building Sump East level high.	CONTROL ROOM CO may start "B" CCP if not already running to supply core cooling. If CO attempts to re-start "B" SI Pump, it will immediately trip.		Deliver this message only if proper indication is not available from the simulator AND if "B" SI Pump is running at 0615. Pump trips on overload due to progressive flooding of the east sump by overflow from the west sump, and due to high humidity. If pump was not running at this time, it will trip on overload with the above indication when started.
0630	15-C	C-2	SS / CO	ANNUNCIATORS IN CONTROL ROOM K-11 "B" CCP Auto Trip INDICATIONS IN CONTROL ROOM "B" CCP Pump indicates tripped. Aux Building Sump East level high-high. Core exit thermocouple readings are rising.	CONTROL ROOM SS notify TSC and OSC. OSC Send a RT to investigate. TSC notify EOF. EOF EC declare a GENERAL EMERGENCY based on Mod. 2 Step 6 (Loss of 2 Fission Product Barriers, with imminent loss of the third).	16-C	(0700) C-5 Ensure GE is declared. Deliver this message only if proper indication is not available from the simulator. Loss of "B" CCP due to a fault in the supply breaker. Loss of all charging and SI. If CO attempts to restart "B" CCP, it will not start. If "B" SI pump was not running at 0615, CO may start "B" SI pump, if so, it will

TIME	MSG. NO.	FROM	TO	EVENT SUMMARY	ANTICIPATED RESPONSE	CM	CONTROLLER NOTES
0630 Contd							trip and controller will deliver message 14-C.
0645	-	-	-	Several Core Thermocouples indicate temperatures in the vicinity of 714F			Positive indication of challenge to the third fission product barrier.
0700	16-C	C-5	E O F / EC	Declare a GENERAL EMERGENCY by Module 2, Step 6 (Loss of 2 Fission Product Barriers, with imminent loss of the third.) OR by Module 1, Step 7 (High Dose Projection: ARMs or PRMs indicate greater than 1 R/hr WB or 5 R/hr to the thyroid at the Exclusion Area Boundary.)			Deliver this message only if a GENERAL EMERGENCY has not yet been declared. EC may declare GE based on Module 1 Step 7 if ARMs and PRMs show sufficient increase prior to other indications of fuel clad being endangered.
0700	17	C-4	RT at "B" C C P Bkr	"B" CCP Breaker indicates tripped.	Switchgear Room RT replace faulty CCP Breaker with a spare (either "A" CCP Breaker or "C" service water pump breaker. Complete ~0800		Deliver to RT when they arrive at "B" CCP breaker. Indications are: "B" phase overcurrent relay flag is up. Pump motor temperature is normal, motor resistance

TIME	MSG. NO.	FROM	TO	EVENT SUMMARY	ANTICIPATED RESPONSE	CM	CONTROLLER NOTES
							is greater than 5 Meg ohms. Fault on "B" phase, short to ground, requires breaker replacement or repair.
0700	-	-	-	STATUS OF THE PLANT: The plant has suffered a LOCA with failure of all ECCS due to a leak in the RHR system. Humidity and flooding from the LOCA has disabled both SI pumps. "B" CCP tripped due to an internal fault on it's supply breaker "B" phase, requiring breaker replacement, or ground location and correction.	Operators should concentrate on restoration of CCP "B" by switching power supply breakers to provide cooling for the core, and on repairs to the power supply cable for MO-8700A to isolate the LOCA and secure the release.		
0800	18-C	C-4	RT at "B" CCP Bkr.	Spare Breaker is installed for "B" CCP, Breaker resets normally.	Switchgear Room RT inform OSC, OSC inform SS. SS start "B" CCP to provide cooling for the core.		Deliver this message when RT has completed breaker replacement. Ensure C-2 in Simulator is informed prior to RT informing OSC of repair. CETs begin to lower on restoration of charging.

TIME	MSG. NO.	FROM	TO	EVENT SUMMARY	ANTICIPATED RESPONSE	CM	CONTROLLER NOTES
0830	19-C	C-4	RT at MO-8700A	MO-8700A power cable replacement is complete.	Switchgear Room RT inform OSC, OSC inform SS. SS clear tags and shut MO-8700A to terminate the release. All Facilities Commence recovery discussions.		Deliver this message when RT has completed cable repair.
1000	20	AC	AP	SECURE FROM THE DRILL			

SECTION 6.0 MESSAGES

6.1 Messages

***** THIS IS A DRILL *****

Real Time: 0300

Message No. IC-1

Elapsed Time: -0015

TROJAN NUCLEAR PLANT

EMERGENCY PREPAREDNESS EXERCISE MESSAGE FORM

Message For: AP

Message: ***** THIS IS A DRILL *****

INITIAL CONDITIONS:

The plant is at 100% Power, 100% flow, Late in fuel cycle (Maximum decay heat).

The following evolutions are in progress:

Maintenance on the "A" EDG output breaker. Breaker is tagged out and disassembled for routine internal inspection. "A" train ECCS is out of service while the breaker is being worked. Estimated completion time for this work is 2 hours additional work, scheduled for completion on the day shift.

"A" Coolant charging pump has a motor winding short, and is tagged out. Pump will be re-built during the upcoming outage.

FOR CONTROLLER USE ONLY

Controller Notes: All personnel should be aware of plant conditions.

Actions Expected:

***** THIS IS A DRILL *****

Real Time: 0330

Message No. 1

Elapsed Time: 0015

TROJAN NUCLEAR PLANT

EMERGENCY PREPAREDNESS EXERCISE MESSAGE FORM

Message For: Security Guard at Access Control Point

Message: ***** THIS IS A DRILL *****

You noticed a bright flash and a loud "boom" near the south end of the Turbine Building.

FOR CONTROLLER USE ONLY

Controller Notes: Explosion of a hydrogen bottle near the south wall of the turbine building.

Actions Expected: Security notify the control room, and send a guard to investigate.

***** THIS IS A DRILL *****

Real Time: 0330

Message No. 2

Elapsed Time: 0015

TROJAN NUCLEAR PLANT

EMERGENCY PREPAREDNESS EXERCISE MESSAGE FORM

Message For: C-4

Message: ***** THIS IS A DRILL *****

Controller pass the following report to the SS:

I just dropped a hydrogen cylinder that I was carrying and it fell on it's cap. The bottle sounded as if it might be leaking. As I was coming over to the phone to notify the Control Room, the bottle exploded. Fragments flew all over the place. Some appear to have penetrated the south wall of the Turbine Building.

FOR CONTROLLER USE ONLY

Controller Notes: Worker is unhurt. Fragments have penetrated the turbine building wall. No damage to equipment. Some of the area lighting around the south wall of the Turbine Building has been damaged by the blast, hindering inspection of the site.

Actions Expected: C-4 inform Control Room, and brief security if they go to inspect the scene. Security inform control room. SS direct a detailed inspection of the TB to determine damage. SS declare an ALERT per Module 14, Step 2 (Explosion in the vicinity, causing damage to plant structures or equipment.)

***** THIS IS A DRILL *****

Real Time: 0345

Message No. 3-C

Elapsed Time: 0040

TROJAN NUCLEAR PLANT

EMERGENCY PREPAREDNESS EXERCISE MESSAGE FORM

Message For: SS

Message: ***** THIS IS A DRILL *****

Declare an ALERT per Module 14, Step 2 (Explosion in the vicinity, causing damage to plant structures or equipment.)

FOR CONTROLLER USE ONLY

Controller Notes: Deliver this message only if an ALERT has not yet been declared at the above time.

Actions Expected: SS declare the ALERT. Activate TSC and OSC. Make required notifications.

Make the following PA announcement immediately prior to passing the ALERT declaration:

"Attention all personnel, We are now commencing an Emergency Drill. Designated personnel should respond to all announcements as though this were a real emergency. Unaffected personnel should remain at normal work stations. If an actual incident occurs, an announcement will be made directing the appropriate response.

*** THIS IS A DRILL ***

Real Time: 0430 *

Message No. 4

Elapsed Time: 0115 *

TROJAN NUCLEAR PLANT

EMERGENCY PREPAREDNESS EXERCISE MESSAGE FORM

Message For: RT at Turbine Building

Message: *** THIS IS A DRILL ***

Many sharp fragments of the hydrogen bottle are scattered over the roadway to the south of the building. Damage to the building seems mostly cosmetic, no structural frames have been seen to be affected. There are several relatively large holes in the south wall of the turbine building, and the large garage access door is jammed shut. Further inspection for affected components is in progress. No component damage has been found.

FOR CONTROLLER USE ONLY

Controller Notes: * Deliver this message upon Repair Team inspection of Turbine Building damage.

Actions Expected: Be aware of plant conditions.

*** THIS IS A DRILL ***

Real Time: 0430 *

Message No. 5-C

Elapsed Time: 0115 *

TROJAN NUCLEAR PLANT

EMERGENCY PREPAREDNESS EXERCISE MESSAGE FORM

Message For: Repair Team at "A" EDG Breaker

Message: *** THIS IS A DRILL ***

The "A" EDG Breaker is tagged out for routine inspection and calibration. It is partially disassembled. Completion was scheduled for the morning shift.

FOR CONTROLLER USE ONLY

Controller Notes: Deliver this message if a repair team is despatched to the "A" EDG breaker. Allow the team to restore the breaker if they attempt to do so. Restoration of the breaker will not significantly affect the scenario.

Actions Expected: RT inform OSC, OSC inform control room. RT, prepare to re-assemble the breaker.

***** THIS IS A DRILL *****

Real Time: 0500

Message No. 6-C

Elapsed Time: 0145

TROJAN NUCLEAR PLANT

EMERGENCY PREPAREDNESS EXERCISE MESSAGE FORM

Message For: SS/ CO

Message: * THIS IS A DRILL *****

ANNUNCIATORS IN CONTROL ROOM

K-12	"A" RHR Pump Discharge Pressure High		(C7)
K-12	"B" RHR Pump Discharge Pressure High		(C8)
K-01	PRM Trouble		(A1)
K-01	PRM-2 Radiation Alert		(B1)
K-01	PRM-2 Radiation High		(B1)
K-11	Pressurizer Control Level Low		(B1)
K-13	Pressurizer Pressure Low	Heaters On	(B2)
K-11	"B" CCP Auto Start		(D2)

INDICATIONS IN CONTROL ROOM

RHR cooler outlet temperature indicates 400 F

FOR CONTROLLER USE ONLY

Controller Notes: Deliver this message only if proper indication is not available from the simulator. LOCA has started from MO-8701 and -8702 leaking by their shut seats.

Actions Expected: Be aware of plant conditions. Operators take action for LOCA per EI-0: Trip the reactor and initiate manual Safety Injection.

***** THIS IS A DRILL *****

Real Time: 0501

Message No. 7-C

Elapsed Time: 0146

TROJAN NUCLEAR PLANT

EMERGENCY PREPAREDNESS EXERCISE MESSAGE FORM

Message For: SS/ CO

Message: * THIS IS A DRILL *****

ANNUNCIATORS IN CONTROL ROOM

K-21	Safety Injection Actuation	(A2)
K-16	Turbine Trip, Reactor Trip	(E1)
K-21	Rod Bottom	(F1)
K-21	Rods 2 or more at Bottom	(A6)
K-21	CIS "A" Actuation	(A6)
K-18	Feedwater Isolation	(E5)
K-15	"A" Main Feed Pump Turbine Trip	(F2)
K-15	"B" Main Feed Pump Turbine Trip	(F3)
K-21	"A" SI Pump Auto Start	(C3)
K-21	"B" SI Pump Auto Start	(C4)
K-11	Pressurizer Level < 17%	(A1)
K-12	"A" RHR Pump Auto Start	(A7)
K-12	"B" RHR Pump Auto Start	(A8)
K-12	"A" RHR Pump Flow Low	(C7)
K-12	"B" RHR Pump Flow Low	(C8)

FOR CONTROLLER USE ONLY

Controller Notes: Deliver this message only if proper indication is not available from the simulator, and after operators insert manual reactor trip, and initiate Safety Injection per EI-0.

Actions Expected: Operators take action to complete EI-0 for a manual Reactor Trip, and transition to ECA-1.2.

***** THIS IS A DRILL *****

Real Time: 0515

Message No. 8-C

Elapsed Time: 0200

TROJAN NUCLEAR PLANT

EMERGENCY PREPAREDNESS EXERCISE MESSAGE FORM

Message For: Emergency Coordinator

Message: ***** THIS IS A DRILL *****

Declare a SITE AREA EMERGENCY by Module 2, Step 5 (Loss of 2 Fission Product Barriers) OR by Module 1, Step 3 (High Dose Rate, based on PRM-2)

FOR CONTROLLER USE ONLY

Controller Notes: Deliver this message only if a SITE AREA EMERGENCY has not yet been declared. EC may declare SAE based on Module 1 Step 3 if SS is delayed more than a few minutes in the analysis and reporting of the RHR system LOCA as a LOCA outside of the containment.

Actions Expected: EC declare the SAE. Activate EOF if not already done. Make required notifications.

*** THIS IS A DRILL ***

Real Time: 0515

Message No. 9-C

Elapsed Time: 0200

TROJAN NUCLEAR PLANT

EMERGENCY PREPAREDNESS EXERCISE MESSAGE FORM

Message For: CO / SS

Message: *** THIS IS A DRILL ***

MO-8700A position indicator lights are out.

FOR CONTROLLER USE ONLY

Controller Notes: Deliver this message only if proper indication is not available from the simulator after CO attempts to shut MO-8700A to isolate the LOCA. Valve fails to operate electrically due to failed power supply cable on the load side of the motor operator power supply breaker.

Actions Expected: CO inform SS. SS inform TSC and OSC. OSC set up repair teams to investigate MO-8700A.

***** THIS IS A DRILL *****

Real Time: 0530

Message No. 10-C

Elapsed Time: 0215

TROJAN NUCLEAR PLANT

EMERGENCY PREPAREDNESS EXERCISE MESSAGE FORM

Message For: SS / CO

Message: ***** THIS IS A DRILL *****

ANNUNCIATORS IN CONTROL ROOM

K-21 "A" SI Pump Motor Overload (E3)

INDICATIONS IN CONTROL ROOM
"A" SI Pump indicates tripped
Aux Building Sump west level high.

FOR CONTROLLER USE ONLY

Controller Notes: Deliver this message only if proper indication is not available from the simulator. "A" SI Pump is flooded out by high humidity and rising reactor coolant level in the Aux Building west sump.

Actions Expected: CO report to SS. SS report to TSC and OSC. CO may attempt to restart "A" SI pump. Pump will re-start and trip within a few seconds if they do.

*** THIS IS A DRILL ***

Real Time: 0600

Message No. 11

Elapsed Time: 0245

TROJAN NUCLEAR PLANT

EMERGENCY PREPAREDNESS EXERCISE MESSAGE FORM

Message For: RT for MO-8700A

Message: *** THIS IS A DRILL ***

Conditions in the Auxiliary Building: Temperatures are above 130 F near the entrance to the building. Visibility is near zero in steam. Humidity is 100%.

FOR CONTROLLER USE ONLY

Controller Notes: Deliver to RT leader at the entrance to the Auxiliary Building. RT should realize heat stress and contamination are problems of great concern. If they elect to proceed, conditions will worsen to 150 F as they approach MO-8700A. Obtain local area radiation levels and contamination levels from inplant maps.

Actions Expected: RT be aware of conditions in the Aux Building and take proper precautions.

*** THIS IS A DRILL ***

Real Time: 0600

Message No. 12

Elapsed Time: 0245

TROJAN NUCLEAR PLANT

EMERGENCY PREPAREDNESS EXERCISE MESSAGE FORM

Message For: RT AT MO-8700A Breaker

Message: *** THIS IS A DRILL ***

MO-8700A Power Supply Breaker indicates tripped. No other abnormal indications are visible.

FOR CONTROLLER USE ONLY

Controller Notes: Deliver to RT troubleshooting the breaker when they arrive. Cause of trip is worn insulation on load side cabling. Cable is shorted to ground. If they replace the breaker with a spare and attempt to operate the valve electrically, the spare will trip. A slight smell of burning insulation will result from the second reset and trip. When RT pulls out the breaker again, the power cables on the load side are now visibly burned, and must be replaced. Enough cable must be burned to force warehouse participation, by requiring pulling of spare parts

Actions Expected: RT troubleshoot. When fault is determined, inform OSC, Control Room.

***** THIS IS A DRILL *****

Real Time: 0615

Message No. 13

Elapsed Time: 0300

TROJAN NUCLEAR PLANT

EMERGENCY PREPAREDNESS EXERCISE MESSAGE FORM

Message For: RT at MO-8700A

Message: ***** THIS IS A DRILL *****

Conditions in the immediate vicinity of MO-8700A, temperatures 150 to 165 F, Visibility near zero. Valve body, piping, and operator are hot (~200 F), and are operating stiffly.

FOR CONTROLLER USE ONLY

Controller Notes: Deliver to RT when they reach MO-8700A. Valve operates stiffly due to high temperature and flow through the valve. Stay time in the area due to heat stress is very limited. Operators will feel faint after 1 Minute of operating MO-8700A, and will collapse after an additional minute if they do not stop.

Actions Expected:

***** THIS IS A DRILL *****

Real Time: 0615

Message No. 14-C

Elapsed Time: 0300

TROJAN NUCLEAR PLANT

EMERGENCY PREPAREDNESS EXERCISE MESSAGE FORM

Message For: CO / SS

Message: * THIS IS A DRILL *****

ANNUNCIATORS IN CONTROL ROOM

K-21	"B" SI Pump Motor Overload	(E4)
K-21	"B" SI Pump Auto Trip	(D4)

INDICATIONS IN CONTROL ROOM

"B" SI Pump indicates tripped
Aux Building Sump East level high.

FOR CONTROLLER USE ONLY

Controller Notes: Deliver this message only if proper indication is not available from the simulator AND if "B" SI Pump is running at 0615. Pump trips on overload due to progressive flooding of the east sump by overflow from the west sump, and due to high humidity. If pump was not running at this time, it will trip on overload with the above indication when started. If OSC attempts to send a team into the Auxiliary building to investigate, high radiation levels (from in-plant maps) will be provided by controller to prevent access.

Actions Expected: CO may start "B" CCP if not already running to supply core cooling. If CO attempts to re-start "B" SI Pump, it will immediately trip.

***** THIS IS A DRILL *****

Real Time: 0630

Message No. 15-C

Elapsed Time: 0315

TROJAN NUCLEAR PLANT

EMERGENCY PREPAREDNESS EXERCISE MESSAGE FORM

Message For: SS / CO

Message: * THIS IS A DRILL *****

ANNUNCIATORS IN CONTROL ROOM

K-11 "B" CCP Auto Trip (E2)

INDICATIONS IN CONTROL ROOM
"B" CCP Pump indicates tripped.
Aux Building Sump East level high-high.

FOR CONTROLLER USE ONLY

Controller Notes: Deliver this message only if proper indication is not available from the simulator. Loss of "B" CCP due to a fault in the supply breaker. Loss of all charging and SI. If CO attempts to restart "B" CCP, it will not start. If "B" SI pump was not running at 0615, CO may start "B" SI pump, if so, it will trip and controller will deliver message 14-C.

Actions Expected: SS notify TSC and OSC. OSC send a RT to investigate. TSC notify EOF. EC declare a GENERAL EMERGENCY based on Mod. 2 Step 6 (Loss of 2 Fission Product Barriers, with imminent loss of the third).

***** THIS IS A DRILL *****

Real Time: 0700

Message No. 16-C

Elapsed Time: 0345

TROJAN NUCLEAR PLANT

EMERGENCY PREPAREDNESS EXERCISE MESSAGE FORM

Message For: EOF / EC

Message: ***** THIS IS A DRILL *****

Declare a GENERAL EMERGENCY by Module 2, Step 6 (Loss of 2 Fission Product Barriers, with imminent loss of the third.)

FOR CONTROLLER USE ONLY

Controller Notes: Deliver this message only if a GENERAL EMERGENCY has not yet been declared. EC may declare GE based on Module 1 Step 7 if ARMs and PRMs show sufficient increase prior to other indications of fuel clad being endangered.

Actions Expected:

***** THIS IS A DRILL *****

Real Time: 0700

Message No. 17

Elapsed Time: 0345

TROJAN NUCLEAR PLANT

EMERGENCY PREPAREDNESS EXERCISE MESSAGE FORM

Message For: RT at "B" CCP Breaker

Message: ***** THIS IS A DRILL *****

"B" CCP Breaker indicates tripped. "B" phase overcurrent relay flag is up.

FOR CONTROLLER USE ONLY

Controller Notes: Deliver to RT when they arrive at "B" CCP breaker. Pump tripped due to phase to ground fault in "B" phase internal to supply breaker. Device 150G, ground relay overcurrent flag is up, providing additional indication to the teams if they check.

Actions Expected: RT replace faulty CCP Breaker with a spare. Expected completion ~0800

***** THIS IS A DRILL *****

Real Time: 0800

Message No. 18-C

Elapsed Time: 0445

TROJAN NUCLEAR PLANT

EMERGENCY PREPAREDNESS EXERCISE MESSAGE FORM

Message For: Repair Team at "B" CCP Breaker

Message: ***** THIS IS A DRILL *****

Spare Breaker is installed for "B" CCP, Breaker resets normally.

FOR CONTROLLER USE ONLY

Controller Notes: Deliver to RT if they have not yet completed breaker replacement. Controller ensure that C-2 (Simulator) is informed prior to RT informing OSC of repair.

Actions Expected: Core Exit thermocouples begin to lower upon restoration of charging.

***** THIS IS A DRILL *****

Real Time: 0830

Message No. 19-C

Elapsed Time: 0515

TROJAN NUCLEAR PLANT

EMERGENCY PREPAREDNESS EXERCISE MESSAGE FORM

Message For: Repair Team at MO-8700A Breaker

Message: ***** THIS IS A DRILL *****

MO-8700A power cable replacement is complete.

FOR CONTROLLER USE ONLY

Controller Notes: Deliver this message when RT has completed cable repair. Controller ensure that C-2 (Simulator) is informed prior to RT informing OSC of repair.

Actions Expected: CO shut MO-8700A, and secure the release. All facilities, commence recovery discussions.

***** THIS IS A DRILL *****

Real Time: 1000

Message No. 20

Elapsed Time: 0645

TROJAN NUCLEAR PLANT

EMERGENCY PREPAREDNESS EXERCISE MESSAGE FORM

Message For: AP

Message: ***** THIS IS A DRILL *****

SECURE FROM THE DRILL

FOR CONTROLLER USE ONLY

Controller Notes:

Actions Expected:

SECTION 7.0 PLANT PARAMETERS

7.1 Plant Parameter Summary

TROJAN PLANT PARAMETER SUMMARY TABLE

TIME OF DAY	3:15	3:30	3:45	4:00	4:15	4:30
ELAPSED TIME	0:00	0:15	0:30	0:45	1:00	1:15
RCS Parameters						
1. RCS Pressure (Pzr)	2233.09	2233.06	2233.06	2233.06	2233.06	2233.06
Saturation Pressure	1965.60	1965.60	1965.60	1965.60	1965.60	1965.60
2. PZR Level (%)	61.34	61.54	61.54	61.54	61.54	61.54
Trend	0	0	0	0	0	0
3. PZR LIQ Temp/Steam Temp (deg F)	653/653	653/653	653/653	653/653	653/653	653/653
4. RVLIS SCALE	DYNAMIC	DYNAMIC	DYNAMIC	DYNAMIC	DYNAMIC	DYNAMIC
5. Reactor Vessel Lvl (%)	120.00	120.00	120.00	120.00	120.00	120.00
6. Auct High Nuclear Pwr (%)	99.31	99.30	99.30	99.30	99.30	99.30
7. CET Ave (deg F)	609.27	609.25	609.25	609.25	609.25	609.25
8. CET Hi (deg F)	629.02	629.00	629.00	629.00	629.00	629.00
9. S/C Margin (deg F)	25.74	25.76	25.76	25.76	25.76	25.76
10. L/D Rate (GPM)	77.23	77.23	77.23	77.23	77.23	77.23
Loop Parameters						
1. T Hot						
A	609.42	609.40	609.40	609.40	609.40	609.40
B	611.67	611.65	611.65	611.65	611.65	611.65
C	608.64	608.62	608.62	608.62	608.62	608.62
D	612.56	612.54	612.54	612.54	612.54	612.54
2. T Cold						
A	551.85	551.83	551.83	551.83	551.83	551.83
B	552.77	552.75	552.75	552.75	552.75	552.75
C	552.48	552.47	552.47	552.47	552.47	552.47
D	554.51	554.49	554.49	554.49	554.49	554.49
3. T Ave						
A	581.87	581.88	581.88	581.88	581.88	581.88
B	583.47	583.44	583.44	583.44	583.44	583.44
C	581.81	581.79	581.79	581.79	581.79	581.79
D	584.77	584.73	584.73	584.73	584.73	584.73
Trend - 0 +						
A	0	0	0	0	0	0
B	0	0	0	0	0	0
C	0	0	0	0	0	0
D	0	0	0	0	0	0
4. RCP Status						
A	RUN	RUN	RUN	RUN	RUN	RUN
B	RUN	RUN	RUN	RUN	RUN	RUN
C	RUN	RUN	RUN	RUN	RUN	RUN
D	RUN	RUN	RUN	RUN	RUN	RUN
FLOW (%)	100.14	100.15	100.15	100.15	100.15	100.15
5. S/G Press						
A	855.70	855.75	856.13	858.57	856.59	856.39
B	857.20	856.88	856.78	857.92	856.35	856.00
C	856.70	857.37	857.63	858.89	858.61	858.95
D	855.30	854.91	854.58	853.84	853.53	853.20
Trend - 0 +						
A	0	+	+	+	-	+
B	0	+	+	+	-	-

TROJAN PLANT PARAMETER SUMMARY TABLE

TIME OF DAY	3:15	3:30	3:45	4:00	4:15	4:30
ELAPSED TIME	0:00	0:15	0:30	0:45	1:00	1:15
C	0	-	+	+	+	-
D	0	-	+	-	+	-
6. S/G Level (NR)						
A	44.19	44.17	44.17	44.17	44.17	44.17
B	43.36	43.34	43.34	43.34	43.34	43.34
C	44.14	44.12	44.12	44.12	44.12	44.12
D	43.79	43.78	43.78	43.78	43.78	43.78
7. S/G Level (WR)						
A	55.27	55.26	55.26	55.26	55.26	55.26
B	55.04	55.03	55.03	55.03	55.03	55.03
C	55.25	55.25	55.25	55.25	55.25	55.25
D	55.16	55.15	55.15	55.15	55.15	55.15
Trend - 0 +						
A	0	0	0	0	0	0
B	0	0	0	0	0	0
C	0	0	0	0	0	0
D	0	0	0	0	0	0
8. Steam Flow (1.0E6 LB/HR)						
A	3.65	3.65	3.65	3.65	3.65	3.65
B	3.79	3.79	3.79	3.79	3.79	3.79
C	3.65	3.65	3.65	3.65	3.65	3.65
D	3.79	3.79	3.79	3.79	3.79	3.79
9. Feed Flow (1.0E6 LB/HR)						
A	3.68	3.68	3.68	3.68	3.68	3.68
B	3.83	3.83	3.83	3.83	3.83	3.83
C	3.68	3.68	3.68	3.68	3.68	3.68
D	3.82	3.83	3.83	3.83	3.83	3.83
10. MSIV Status						
A	NT CL	NT CL	NT CL	NT CL	NT CL	NT CL
B	NT CL	NT CL	NT CL	NT CL	NT CL	NT CL
C	NT CL	NT CL	NT CL	NT CL	NT CL	NT CL
D	NT CL	NT CL	NT CL	NT CL	NT CL	NT CL
11. AFW Flow (GPM)						
A	0.00	0.00	0.00	0.00	0.00	0.00
B	0.00	0.00	0.00	0.00	0.00	0.00
C	0.00	0.00	0.00	0.00	0.00	0.00
D	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00
12. CST Level (%)						
A	71.97	71.66	71.66	71.66	71.66	71.66
Engineered Safeguards Features						
1.Containment						
Pressure (PSIG)	-0.21	-0.21	-0.21	-0.21	-0.21	-0.21
Humidity (%)	41.60	41.69	41.69	41.69	41.69	41.69
Hydrogen Conc. (%)	0.00	0.00	0.00	0.00	0.00	0.00
NR Cont. Sump Lvl (IN.)	13.11	13.11	13.11	13.11	13.11	13.11
WR Cont. Lvl (IN.)	13.11	13.11	13.11	13.11	13.11	13.11

TROJAN PLANT PARAMETER SUMMARY TABLE

TIME OF DAY	3:15	3:30	3:45	4:00	4:15	4:30
ELAPSED TIME	0:00	0:15	0:30	0:45	1:00	1:15
Radiation Level (R/hr)	1.00	1.00	1.00	1.00	1.00	1.00
Containment Spray	NT ACT	NT ACT	NT ACT	NT ACT	NT ACT	NT ACT
NaOH Tank Level (%)	96.40	96.40	96.40	96.40	96.40	96.40
2. RWST Level	99.83	99.83	99.83	99.83	99.83	99.83
3. CIS	NO	NO	NO	NO	NO	NO
4. AFW TDAFWP	OFF	OFF	OFF	OFF	OFF	OFF
DAFWP	OFF	OFF	OFF	OFF	OFF	OFF
Elec. AFWP	OFF	OFF	OFF	OFF	OFF	OFF
5. Safety Injection Actuated	NOT ACT	NOT ACT	NOT ACT	NOT ACT	NOT ACT	NOT ACT
6. FWI Actuated	NOT ACT	NOT ACT	NOT ACT	NOT ACT	NOT ACT	NOT ACT
7. Equipment Status						
EDG						
Train A	OOS	OOS	OOS	OOS	OOS	OOS
Train B	AVAIL	AVAIL	AVAIL	AVAIL	AVAIL	AVAIL
EDG BKR						
Train A	OOS	OOS	OOS	OOS	OOS	OOS
Train A	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN
CCP						
Train A	OOS	OOS	OOS	OOS	OOS	OOS
Train B	OFF	OFF	OFF	OFF	OFF	OFF
Flow	0.00	0.00	0.00	0.00	0.00	0.00
SI (GPM)						
Train A	OFF	OFF	OFF	OFF	OFF	OFF
Train B	OFF	OFF	OFF	OFF	OFF	OFF
Flow	0.00	0.00	0.00	0.00	0.00	0.00
RHR (GPM)						
Train A	OFF	OFF	OFF	OFF	OFF	OFF
Train B	OFF	OFF	OFF	OFF	OFF	OFF
Flow	0.00	0.00	0.00	0.00	0.00	0.00
CCW						
Train A	ON	ON	ON	ON	ON	ON
Train B	OFF	OFF	OFF	OFF	OFF	OFF
SWS						
Train A	ON	ON	ON	ON	ON	ON
Train B	OFF	OFF	OFF	OFF	OFF	OFF
CSP						
Train A	OFF	OFF	OFF	OFF	OFF	OFF
Train B	OFF	OFF	OFF	OFF	OFF	OFF
CAC-VC201						
Train A	OFF	OFF	OFF	OFF	OFF	OFF
Train B	ON	ON	ON	ON	ON	ON
CAC-VC202						
Train A	OFF	OFF	OFF	OFF	OFF	OFF
Train B	ON	ON	ON	ON	ON	ON
CAC-VC203						
Train A	OFF	OFF	OFF	OFF	OFF	OFF
Train B	ON	ON	ON	ON	ON	ON

TROJAN PLANT PARAMETER SUMMARY TABLE

TIME OF DAY	3:15	3:30	3:45	4:00	4:15	4:30
ELAPSED TIME	0:00	0:15	0:30	0:45	1:00	1:15
CAC-VC204						
Train A	ON	ON	ON	ON	ON	ON
Train B	OFF	OFF	OFF	OFF	OFF	OFF
Major Equipment						
Reactor	NT TRIP	NT TRIP	NT TRIP	NT TRIP	NT TRIP	NT TRIP
Turbine	NT TRIP	NT TRIP	NT TRIP	NT TRIP	NT TRIP	NT TRIP
Generator	NT TRIP	NT TRIP	NT TRIP	NT TRIP	NT TRIP	NT TRIP
Electric Plant						
Emerg Busses	AVAIL	AVAIL	AVAIL	AVAIL	AVAIL	AVAIL
Offsite Power	AVAIL	AVAIL	AVAIL	AVAIL	AVAIL	AVAIL
Isolations						
Reactor Coolant						
PORV	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED
Safeties	NO FL	NO FL	NO FL	NO FL	NO FL	NO FL
Letdown	NT CL	NT CL	NT CL	NT CL	NT CL	NT CL
RCP Seal Return	NT CL	NT CL	NT CL	NT CL	NT CL	NT CL
Main Steam						
PORV	NT ISOL	NT ISOL	NT ISOL	NT ISOL	NT ISOL	NT ISOL
Safeties	NT AC	NT AC	NT AC	NT AC	NT AC	NT AC
AFW Turbine	NT ISOL	NT ISOL	NT ISOL	NT ISOL	NT ISOL	NT ISOL
FI-971 A/B	0	0	0	0	0	0
FI-970 A/B	0	0	0	0	0	0
CCW TRAIN C	OFF	OFF	OFF	OFF	OFF	OFF
SW TRAIN C	OFF	OFF	OFF	OFF	OFF	OFF

TROJAN PLANT PARAMETER SUMMARY TABLE

TIME OF DAY	4:45	5:00	5:15	5:30	5:45	6:00
ELAPSED TIME	1:30	1:45	2:00	2:15	2:30	2:45
RCS Parameters						
1. RCS Pressure (Pzr)	2233.06	2232.93	1700.00	1700.00	1700.00	1700.00
Saturation Pressure	1965.60	1965.60	1226.88	1097.55	931.17	784.76
2. PZR Level (%)	61.54	61.51	0.00	0.00	0.00	0.00
Trend	0	-	0	0	0	0
3. PZR LIQ Temp/Steam Temp (deg F)	653/653	653/653	555/555	547/547	529/529	502/502
4. RVLIS SCALE	DYNAMIC	DYNAMIC	FULL	FULL	FULL	FULL
5. Reactor Vessel Lvl (%)	120.00	120.00	92.03	89.12	86.21	83.30
6. Auct High Nuclear Pwr (%)	99.30	99.30	0.00	0.00	0.00	0.00
7. CET Ave (deg F)	609.25	609.24	550.99	540.63	523.14	502.48
8. CET Hi (deg F)	629.00	628.99	570.98	556.68	537.71	518.46
9. S/C Margin (deg F)	25.76	25.76	-13.34	-17.66	-18.12	-28.55
10. L/D Rate (GPM)	77.23	77.23	0.00	0.00	0.00	0.00
Loop Parameters						
1. T Hot						
A	609.40	609.39	554.44	538.44	516.02	505.25
B	611.65	611.65	555.78	539.67	525.57	499.06
C	608.62	608.61	553.98	538.12	519.96	524.56
D	612.54	612.53	556.10	539.80	516.77	501.21
2. T Cold						
A	551.83	551.82	518.96	519.87	507.01	397.15
B	552.75	552.74	520.42	515.92	496.49	428.99
C	552.47	552.46	519.48	520.24	468.26	401.11
D	554.49	554.48	520.12	501.20	499.67	414.47
3. T Ave						
A	580.62	580.61	536.70	529.15	511.52	451.20
B	582.20	582.19	538.10	527.80	511.03	464.03
C	580.54	580.54	536.73	529.18	494.11	462.83
D	583.52	583.51	538.11	520.50	508.22	457.84
Trend - 0 +						
A	-	-	-	-	-	-
B	-	-	-	-	-	-
C	-	-	-	-	-	-
D	-	-	-	-	+	-
4. RCP Status						
A	RUN	RUN	OFF	OFF	OFF	OFF
B	RUN	RUN	OFF	OFF	OFF	OFF
C	RUN	RUN	OFF	OFF	OFF	OFF
D	RUN	RUN	OFF	OFF	OFF	OFF
FLOW (%)	100.15	100.15	4.68	4.19	3.68	0.90
5. S/G Press						
A	857.22	857.72	1045.43	931.17	784.76	718.50
B	856.92	858.10	1097.55	931.17	855.58	656.61
C	858.52	859.38	1045.43	931.17	784.76	812.53
D	853.76	853.37	1097.55	931.17	784.76	680.86
Trend - 0 +						
A	-	+	-	+	-	+
B	+	+	-	+	+	-

TROJAN PLANT PARAMETER SUMMARY TABLE

TIME OF DAY	4:45	5:00	5:15	5:30	5:45	6:00
ELAPSED TIME	1:30	1:45	2:00	2:15	2:30	2:45
C	-	-	-	+	-	+
D	+	-	-	+	-	0
6. S/G Level (NR)						
A	44.17	44.21	0.00	0.00	1.39	2.08
B	43.34	43.37	0.00	0.00	0.82	1.67
C	44.12	44.17	0.00	0.00	1.34	1.92
D	43.78	43.80	0.00	0.00	0.82	1.43
7. S/G Level (WR)						
A	55.26	55.27	52.67	59.82	65.54	68.30
B	55.03	55.04	50.10	59.16	63.29	66.61
C	55.25	55.26	52.55	59.82	65.37	67.68
D	55.15	55.16	50.42	59.15	63.27	65.72
Trend - 0 +						
A	0	+	+	+	+	+
B	0	+	+	+	+	+
C	0	+	+	+	+	+
D	0	+	+	+	+	+
8. Steam Flow (1.0E6 LB/HR)						
A	3.65	3.65	0.00	0.00	0.00	0.00
B	3.79	3.79	0.00	0.00	0.00	0.00
C	3.65	3.65	0.00	0.00	0.00	0.00
D	3.79	3.79	0.00	0.00	0.00	0.00
9. Feed Flow (1.0E6 LB/HR)						
A	3.68	3.68	0.00	0.00	0.00	0.00
B	3.83	3.83	0.00	0.00	0.00	0.00
C	3.68	3.69	0.00	0.00	0.00	0.00
D	3.83	3.83	0.00	0.00	0.00	0.00
10. MSIV Status						
A	NT CL	NT CL	CLOSED	CLOSED	CLOSED	CLOSED
B	NT CL	NT CL	CLOSED	CLOSED	CLOSED	CLOSED
C	NT CL	NT CL	CLOSED	CLOSED	CLOSED	CLOSED
D	NT CL	NT CL	CLOSED	CLOSED	CLOSED	CLOSED
11. AFW Flow (GPM)						
A	0.00	0.00	323.27	198.66	86.30	99.53
B	0.00	0.00	294.66	197.78	96.36	113.75
C	0.00	0.00	324.91	198.94	57.76	85.31
D	0.00	0.00	294.62	196.58	79.85	94.08
TOTAL	0.00	0.00	1237.47	791.97	320.27	392.67
12. CST Level (%)						
A	71.66	71.50	68.63	66.54	65.44	64.27
Engineered Safeguards Features						
1.Containment						
Pressure (PSIG)	-0.21	-0.21	-0.65	-0.72	-0.75	-0.76
Humidity (%)	41.69	41.77	55.21	51.10	49.78	49.15
Hydrogen Conc. (%)	0.00	0.00	0.00	0.00	0.00	0.00
NR Cont. Sump Lvl (IN.)	13.11	13.11	13.11	13.11	13.11	13.11
WR Cont. Lvl (IN.)	13.11	13.11	13.11	13.11	13.11	13.11

TROJAN PLANT PARAMETER SUMMARY TABLE

TIME OF DAY	4:45	5:00	5:15	5:30	5:45	6:00
ELAPSED TIME	1:30	1:45	2:00	2:15	2:30	2:45
Radiation Level (R/hr)	1.00	1.00	1.00	1.00	1.00	1.00
Containment Spray	NT ACT	NT ACT	NT ACT	NT ACT	NT ACT	NT ACT
NaOH Tank Level (%)	96.40	96.40	96.40	96.40	96.40	96.40
2. RWST Level	99.83	99.83	97.45	94.45	91.71	89.51
3. CIS	NO	NO	A	A	A	A
4. AFW TDAFWP	OFF	OFF	ON	ON	ON	ON
DAFWP	OFF	OFF	ON	ON	ON	ON
Elec. AFWP	OFF	OFF	ON	ON	ON	ON
5. Safety Injection Actuated	NOT ACT	NOT ACT	ACT	ACT	ACT	ACT
6. FWI Actuated	NOT ACT	NOT ACT	ACT	ACT	ACT	ACT
7. Equipment Status						
EDG						
Train A	OOS	OOS	OOS	OOS	OOS	OOS
Train B	AVAIL	AVAIL	AVAIL	AVAIL	AVAIL	AVAIL
EDG BKR						
Train A	OOS	OOS	OOS	OOS	OOS	OOS
Train A	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN
CCP						
Train A	OOS	OOS	OOS	OOS	OOS	OOS
Train B	OFF	OFF	ON	ON	ON	ON
Flow	0.00	0.00	344.35	360.35	377.45	394.90
SI (GPM)						
Train A	OFF	OFF	ON	TRIP	TRIP	TRIP
Train B	OFF	OFF	ON	ON	ON	ON
Flow	0.00	0.00	428.94	393.86	0.00	491.84
RHR (GPM)						
Train A	OFF	OFF	OFF	OFF	OFF	OFF
Train B	OFF	OFF	OFF	OFF	OFF	OFF
Flow	0.00	0.00	0.00	0.00	0.00	0.00
CCW						
Train A	ON	ON	ON	ON	ON	ON
Train B	OFF	OFF	OFF	OFF	OFF	OFF
SWS						
Train A	ON	ON	ON	ON	ON	ON
Train B	OFF	OFF	OFF	OFF	OFF	OFF
CSP						
Train A	OFF	OFF	OFF	OFF	OFF	OFF
Train B	OFF	OFF	OFF	OFF	OFF	OFF
CAC-VC201						
Train A	OFF	OFF	OFF	OFF	OFF	OFF
Train B	ON	ON	ON	ON	ON	ON
CAC-VC202						
Train A	OFF	OFF	OFF	OFF	OFF	OFF
Train B	ON	ON	ON	ON	ON	ON
CAC-VC203						
Train A	OFF	OFF	OFF	OFF	OFF	OFF
Train B	ON	ON	ON	ON	ON	ON

TROJAN PLANT PARAMETER SUMMARY TABLE

TIME OF DAY	4:45	5:00	5:15	5:30	5:45	6:00
ELAPSED TIME	1:30	1:45	2:00	2:15	2:30	2:45
CAC-VC204						
Train A	ON	ON	ON	ON	ON	ON
Train B	OFF	OFF	OFF	OFF	OFF	OFF
Major Equipment						
Reactor	NT TRIP	NT TRIP	TRIP	TRIP	TRIP	TRIP
Turbine	NT TRIP	NT TRIP	TRIP	TRIP	TRIP	TRIP
Generator	NT TRIP	NT TRIP	TRIP	TRIP	TRIP	TRIP
Electric Plant						
Emerg Busses	AVAIL	AVAIL	AVAIL	AVAIL	AVAIL	AVAIL
Offsite Power	AVAIL	AVAIL	AVAIL	AVAIL	AVAIL	AVAIL
Isolations						
Reactor Coolant						
PORV	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED
Safeties	NO FL	NO FL	NO FL	NO FL	NO FL	NO FL
Letdown	NT CL	NT CL	NT CL	NT CL	NT CL	NT CL
RCP Seal Return	NT CL	NT CL	NT CL	NT CL	NT CL	NT CL
Main Steam						
PORV	NT ISOL	NT ISOL	NT ISOL	NT ISOL	NT ISOL	NT ISOL
Safeties	NT AC	NT AC	NT AC	NT AC	NT AC	NT AC
AFW Turbine	NT ISOL	NT ISOL	NT ISOL	NT ISOL	NT ISOL	NT ISOL
FI-971 A/B	0	0	0	0	0	0
FI-970 A/B	0	0	0	0	0	0
CCW TRAIN C	OFF	OFF	OFF	OFF	OFF	OFF
SW TRAIN C	OFF	OFF	OFF	OFF	OFF	OFF

TROJAN PLANT PARAMETER SUMMARY TABLE

TIME OF DAY	6:15	6:30	6:45	7:00	7:15	7:30
ELAPSED TIME	3:00	3:15	3:30	3:45	4:00	4:15
RCS Parameters						
1. RCS Pressure (Pzr)	1700.00	1700.00	1700.00	1700.00	1700.00	1700.00
Saturation Pressure	656.61	1431.50	3094.30	3094.30	3094.30	3094.30
2. PZR Level (%)	0.00	0.00	0.00	0.00	0.00	0.00
Trend	0	0	0	0	0	0
3. PZR LIQ Temp/Steam Temp (deg F)	497/497	536/536	531/531	527/527	529/529	452/452
4. RVLIS SCALE	FULL	FULL	FULL	FULL	FULL	FULL
5. Reactor Vessel Lvl (%)	81.36	81.36	70.68	60.00	59.78	59.38
6. Auct High Nuclear Pwr (%)	0.00	0.00	0.00	0.00	0.00	0.00
7. CET Ave (deg F)	477.80	463.72	459.25	460.97	458.61	449.33
8. CET HI (deg F)	498.32	590.75	714.00	714.00	714.00	714.00
9. S/C Margin (deg F)	-32.95	39.56	44.23	47.82	53.16	-21.34
10. L/D Rate (GPM)	0.00	0.00	0.00	0.00	0.00	0.00
Loop Parameters						
1. T Hot						
A	461.47	445.49	431.36	426.03	424.81	427.14
B	464.59	446.55	432.45	427.13	425.91	428.01
C	461.04	445.13	431.00	425.66	424.48	426.76
D	460.43	447.28	432.79	427.96	426.32	428.22
2. T Cold						
A	424.02	407.74	393.66	392.49	391.95	390.68
B	423.72	408.18	394.07	392.93	392.41	391.44
C	424.40	408.47	394.37	393.14	392.64	391.26
D	297.31	263.65	195.40	148.83	149.17	200.80
3. T Ave						
A	442.74	426.61	412.51	409.26	408.38	408.91
B	444.15	427.37	413.26	410.03	409.16	409.73
C	442.72	426.80	412.69	409.40	408.56	409.01
D	378.87	345.47	314.60	288.39	287.74	314.51
Trend - 0 +						
A	+	-	-	+	-	-
B	-	-	-	+	-	-
C	+	-	-	+	-	-
D	-	-	-	-	+	-
4. RCP Status						
A	OFF	OFF	OFF	OFF	OFF	OFF
B	OFF	OFF	OFF	OFF	OFF	OFF
C	OFF	OFF	OFF	OFF	OFF	OFF
D	OFF	OFF	OFF	OFF	OFF	OFF
FLOW (%)	3.32	3.26	3.12	2.94	2.92	3.29
5. S/G Press						
A	466.87	405.60	343.67	329.37	308.78	329.37
B	466.87	405.60	343.67	329.37	329.37	329.37
C	466.87	405.60	343.67	329.37	308.78	329.37
D	466.87	405.60	343.67	329.37	329.37	329.37
Trend - 0 +						
A	0	-	-	0	-	-
B	-	-	-	0	0	-

TROJAN PLANT PARAMETER SUMMARY TABLE

TIME OF DAY	6:15	6:30	6:45	7:00	7:15	7:30
ELAPSED TIME	3:00	3:15	3:30	3:45	4:00	4:15
C	0	-	-	0	0	-
D	-	-	-	0	0	-
6. S/G Level (NR)						
A	2.87	2.92	3.46	3.48	3.37	3.25
B	2.67	3.06	3.19	3.09	3.26	3.49
C	2.62	3.04	2.86	3.01	3.25	3.27
D	2.22	3.65	3.71	3.74	3.81	3.97
7. S/G Level (WR)						
A	71.49	71.69	73.84	73.94	73.46	73.01
B	70.66	72.25	72.76	72.34	73.04	73.95
C	70.48	72.17	71.43	72.05	72.99	73.07
D	68.90	74.59	74.83	74.96	75.23	75.87
Trend - 0 +						
A	+	+	-	-	+	+
B	+	-	+	+	+	+
C	+	-	-	+	+	+
D	+	+	-	+	-	+
8. Steam Flow (1.0E6 LB/HR)						
A	0.00	0.00	0.00	0.00	0.00	0.00
B	0.00	0.00	0.00	0.00	0.00	0.00
C	0.00	0.00	0.00	0.00	0.00	0.00
D	0.00	0.00	0.00	0.00	0.00	0.00
9. Feed Flow (1.0E6 LB/HR)						
A	0.00	0.00	0.00	0.00	0.00	0.00
B	0.00	0.00	0.00	0.00	0.00	0.00
C	0.00	0.00	0.00	0.00	0.00	0.00
D	0.00	0.00	0.00	0.00	0.00	0.00
10. MSIV Status						
A	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED
B	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED
C	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED
D	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED
11. AFW Flow (GPM)						
A	132.7	140.89	115.17	0.00	0.00	0.10
B	15	161.01	92.13	0.00	0.00	0.00
C	113.78	120.76	92.13	0.00	0.00	0.0
D	126.7	146.51	76.42	0.00	0.00	0.0
TOTAL	525.0	569.16	375.84	0.00	0.00	0.10
12. CST Level (%)						
A	63.05	61.50	59.89	59.94	59.94	60.17
Engineered Safeguards Features						
1.Containment						
Pressure (PSIG)	-0.78	-0.79	-0.80	-0.80	-0.80	-0.81
Humidity (%)	48.66	48.27	48.03	47.82	47.73	47.78
Hydrogen Conc. (%)	0.00	0.00	0.00	0.00	0.00	0.00
NR Cont. Sump Lvl (IN.)	13.11	13.11	13.11	13.11	13.11	13.11
WR Cont. Lvl (IN.)	13.11	13.11	13.11	13.12	13.12	13.12

TROJAN PLANT PARAMETER SUMMARY TABLE

TIME OF DAY	6:15	6:30	6:45	7:00	7:15	7:30
ELAPSED TIME	3:00	3:15	3:30	3:45	4:00	4:15
Radiation Level (R/hr)	1.00	1.00	1.00	1.00	1.00	1.00
Containment Spray	NT ACT	NT ACT	NT ACT	NT ACT	NT ACT	NT ACT
NaOH Tank Level (%)	96.40	96.40	96.40	96.40	96.40	96.40
2. RWST Level	85.85	82.40	79.55	76.34	73.18	71.99
3. CIS	A	A	A	A	A	A
4. AFW TDAFWP	ON	ON	ON	ON	ON	ON
DAFWP	ON	ON	ON	ON	ON	ON
Elec. AFWP	ON	ON	ON	ON	ON	ON
5. Safety Injection Actuated	ACT	ACT	ACT	ACT	ACT	ACT
6. FWI Actuated	ACT	ACT	ACT	ACT	ACT	ACT
7. Equipment Status						
EDG						
Train A	OOS	OOS	OOS	OOS	OOS	OOS
Train B	AVAIL	AVAIL	AVAIL	AVAIL	AVAIL	AVAIL
EDG BKR						
Train A	OOS	OOS	OOS	OOS	OOS	OOS
Train A	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN
CCP						
Train A	OOS	OOS	OOS	OOS	OOS	OOS
Train B	ON	ON	TRIP	TRIP	TRIP	TRIP
Flow	410.47	373.96	0.00	0.00	0.00	0.00
SI (GPM)						
Train A	TRIP	TRIP	TRIP	TRIP	TRIP	TRIP
Train B	ON	TRIP	TRIP	TRIP	TRIP	TRIP
Flow	532.37	434.82	434.12	423.60	416.90	0.00
RHR (GPM)						
Train A	OFF	OFF	OFF	OFF	OFF	OFF
Train B	OFF	OFF	OFF	OFF	OFF	OFF
Flow	0.00	0.00	0.00	0.00	0.00	0.00
CCW						
Train A	ON	ON	ON	ON	ON	ON
Train B	OFF	OFF	OFF	OFF	OFF	OFF
SWS						
Train A	ON	ON	ON	ON	ON	ON
Train B	OFF	OFF	OFF	OFF	OFF	OFF
CSP						
Train A	OFF	OFF	OFF	OFF	OFF	OFF
Train B	OFF	OFF	OFF	OFF	OFF	OFF
CAC-VC201						
Train A	OFF	OFF	OFF	OFF	OFF	OFF
Train B	ON	ON	ON	ON	ON	ON
CAC-VC202						
Train A	OFF	OFF	OFF	OFF	OFF	OFF
Train B	ON	ON	ON	ON	ON	ON
CAC-VC203						
Train A	OFF	OFF	OFF	OFF	OFF	OFF
Train B	ON	ON	ON	ON	ON	ON

TROJAN PLANT PARAMETER SUMMARY TABLE

TIME OF DAY	6:15	6:30	6:45	7:00	7:15	7:30
ELAPSED TIME	3:00	3:15	3:30	3:45	4:00	4:15
CAC-VC204						
Train A	ON	ON	ON	ON	ON	ON
Train B	OFF	OFF	OFF	OFF	OFF	OFF
Major Equipment						
Reactor	TRIP	TRIP	TRIP	TRIP	TRIP	TRIP
Turbine	TRIP	TRIP	TRIP	TRIP	TRIP	TRIP
Generator	TRIP	TRIP	TRIP	TRIP	TRIP	TRIP
Electric Plant						
Emerg Busses	AVAIL	AVAIL	AVAIL	AVAIL	AVAIL	AVAIL
Offsite Power	AVAIL	AVAIL	AVAIL	AVAIL	AVAIL	AVAIL
Isolations						
Reactor Coolant						
PORV	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED
Safeties	NO FL	NO FL	NO FL	NO FL	NO FL	NO FL
Letdown	NT CL	NT CL	NT CL	NT CL	NT CL	NT CL
RCP Seal Return	NT CL	NT CL	NT CL	NT CL	NT CL	NT CL
Main Steam						
PORV	NT ISOL	NT ISOL	NT ISOL	NT ISOL	NT ISOL	NT ISOL
Safeties	NT AC	NT AC	NT AC	NT AC	NT AC	NT AC
AFW Turbine	NT ISOL	NT ISOL	NT ISOL	NT ISOL	NT ISOL	NT ISOL
FI-971 A/B	0	0	0	0	0	0
FI-970 A/B	0	0	0	0	0	0
CCW TRAIN C	OFF	OFF	OFF	OFF	OFF	OFF
SW TRAIN C	OFF	OFF	OFF	OFF	OFF	OFF

TROJAN PLANT PARAMETER SUMMARY TABLE

TIME OF DAY	7:45	8:00	8:15	8:30	8:45	9:00
ELAPSED TIME	4:30	4:45	5:00	5:15	5:30	5:45
RCS Parameters						
1. RCS Pressure (Pzr)	1700.00	1700.00	1700.00	1700.00	1700.00	1700.00
Saturation Pressure	3094.30	3094.30	2301.70	1543.20	926.79	598.87
2. PZR Level (%)	0.00	0.00	0.00	0.00	0.00	0.00
Trend	0	0	0	0	0	0
3. PZR LIQ Temp/Steam Temp (deg F)	420/420	422/422	415/415	414/414	414/414	414/414
4. RVLIS SCALE	FULL	FULL	FULL	FULL	FULL	FULL
5. Reactor Vessel Lvl (%)	59.47	59.06	64.14	69.22	74.31	77.38
6. Auct High Nuclear Pwr (%)	0.00	0.00	0.00	0.00	0.00	0.00
7. CET Ave (deg F)	425.88	384.63	347.73	337.22	337.22	337.22
8. CET HI (deg F)	714.00	714.00	657.47	600.95	544.42	487.89
9. S/C Margin (deg F)	-30.34	-13.73	13.56	20.79	20.79	20.79
10. L/D Rate (GPM)	0.00	0.00	0.00	0.00	0.00	0.00
Loop Parameters						
1. T Hot						
A	402.86	376.18	355.97	340.73	340.73	340.73
B	403.83	377.10	356.80	341.81	341.81	341.81
C	402.55	375.95	355.64	340.38	340.38	340.38
D	404.10	377.64	354.49	342.10	342.10	342.10
2. T Cold						
A	370.86	336.96	323.68	309.51	309.51	309.51
B	371.35	337.27	323.61	309.53	309.53	309.53
C	371.33	337.31	323.61	309.53	309.53	309.53
D	204.98	236.40	291.47	309.76	309.76	309.76
3. T Ave						
A	386.86	356.57	339.82	325.12	325.12	325.12
B	387.59	357.19	340.20	325.67	325.67	325.67
C	386.94	356.63	339.63	324.96	324.96	324.96
D	304.54	307.02	322.98	325.93	325.93	325.93
Trend - 0 +						
A	+	-	-	0	0	0
B	+	-	-	0	0	0
C	+	-	-	0	0	0
D	-	+	+	0	0	0
4. RCP Status						
A	OFF	OFF	OFF	OFF	OFF	OFF
B	OFF	OFF	OFF	OFF	OFF	OFF
C	OFF	OFF	OFF	OFF	OFF	OFF
D	OFF	OFF	OFF	OFF	OFF	OFF
FLOW (%)	3.16	3.48	3.95	3.38	3.38	3.38
5. S/G Press						
A	247.26	186.52	145.42	117.99	117.99	117.99
B	247.26	186.52	145.42	117.99	117.99	117.99
C	247.26	186.52	145.42	117.99	117.99	117.99
D	247.26	186.52	134.60	117.99	117.99	117.99
Trend - 0 +						
A	+	-	-	0	0	0
B	0	-	-	0	0	0

TROJAN PLANT PARAMETER SUMMARY TABLE

TIME OF DAY	7:45	8:00	8:15	8:30	8:45	9:00
ELAPSED TIME	4:30	4:45	5:00	5:15	5:30	5:45
C	+	-	-	0	0	0
D	0	-	-	0	0	0
6. S/G Level (NR)						
A	3.33	3.87	3.57	3.74	3.85	3.64
B	3.67	3.64	3.37	3.51	3.77	3.97
C	3.46	3.52	3.71	3.60	3.49	3.33
D	4.39	4.77	4.40	5.12	4.86	5.08
7. S/G Level (WR)						
A	73.32	75.48	74.29	74.97	75.41	74.55
B	74.67	74.55	73.47	74.02	75.07	75.87
C	73.85	74.07	74.83	74.41	73.96	73.31
D	77.57	79.09	77.60	80.47	79.43	80.33
Trend - 0 +						
A	+	+	-	-	+	+
B	-	-	-	+	-	+
C	+	+	+	+	-	-
D	+	+	-	+	+	+
8. Steam Flow (1.0E6 LB/HR)						
A	0.00	0.00	0.00	0.00	0.00	0.00
B	0.00	0.00	0.00	0.00	0.00	0.00
C	0.00	0.00	0.00	0.00	0.00	0.00
D	0.00	0.00	0.00	0.00	0.00	0.00
9. Feed Flow (1.0E6 LB/HR)						
A	0.00	0.00	0.00	0.00	0.00	0.00
B	0.00	0.00	0.00	0.00	0.00	0.00
C	0.00	0.00	0.00	0.00	0.00	0.00
D	0.00	0.00	0.00	0.00	0.00	0.00
10. MSIV Status						
A	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED
B	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED
C	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED
D	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED
11. AFW Flow (GPM)						
A	0.00	175.68	107.42	110.19	110.19	110.19
B	46.62	186.32	117.65	103.44	103.44	103.44
C	46.62	186.31	129.79	96.74	96.74	96.74
D	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	93.23	548.30	354.86	310.36	310.36	310.36
12. CST Level (%)						
A	60.99	60.62	59.75	59.55	59.55	59.55
Engineered Safeguards Features						
1.Containment						
Pressure (PSIG)	-0.81	-0.82	-0.82	-0.83	-0.83	-0.83
Humidity (%)	47.51	47.38	47.17	46.99	46.99	46.99
Hydrogen Conc. (%)	0.00	0.00	0.00	0.00	0.00	0.00
NR Cont. Sump Lvl (IN.)	13.11	13.11	13.11	13.11	13.11	13.11
WR Cont. Lvl (IN.)	13.12	13.12	13.12	13.12	13.12	13.12

TROJAN PLANT PARAMETER SUMMARY TABLE

TIME OF DAY	7:45	8:00	8:15	8:30	8:45	9:00
ELAPSED TIME	4:30	4:45	5:00	5:15	5:30	5:45
Radiation Level (R/hr)	1.00	1.00	1.00	1.00	1.00	1.00
Containment Spray	NT ACT	NT ACT	NT ACT	NT ACT	NT ACT	NT ACT
NaOH Tank Level (%)	96.40	96.40	96.40	96.40	96.40	96.40
2. RWST Level	71.99	71.98	71.98	70.15	69.25	68.35
3. CIS	A	A	A	A	A	A
4. AFW TDAFWP	ON	ON	ON	ON	ON	ON
MDAFWP	ON	ON	ON	ON	ON	ON
Elec. AFWP	ON	ON	ON	ON	ON	ON
5. Safety Injection Actuated	ACT	ACT	ACT	ACT	ACT	ACT
6. FWI Actuated	ACT	ACT	ACT	ACT	ACT	ACT
7. Equipment Status						
EDG						
Train A	OOS	OOS	OOS	OOS	OOS	OOS
Train B	AVAIL	AVAIL	AVAIL	AVAIL	AVAIL	AVAIL
EDG BKR						
Train A	OOS	OOS	OOS	OOS	OOS	OOS
Train A	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN
CCP						
Train A	OOS	OOS	OOS	OOS	OOS	OOS
Train B	TRIP	ON	ON	ON	ON	ON
Flow	0.00	372.16	372.39	369.10	388.80	0.00
SI (GPM)						
Train A	TRIP	TRIP	TRIP	TRIP	TRIP	TRIP
Train B	TRIP	TRIP	TRIP	TRIP	TRIP	TRIP
Flow	0.00	0.00	0.00	0.00	0.00	0.00
RHR (GPM)						
Train A	OFF	OFF	OFF	OFF	OFF	OFF
Train B	OFF	OFF	OFF	OFF	OFF	OFF
Flow	0.00	0.00	0.00	0.00	0.00	0.00
CCW						
Train A	ON	ON	ON	ON	ON	ON
Train B	OFF	OFF	OFF	OFF	OFF	OFF
SWS						
Train A	ON	ON	ON	ON	ON	ON
Train B	OFF	OFF	OFF	OFF	OFF	OFF
CSP						
Train A	OFF	OFF	OFF	OFF	OFF	OFF
Train B	OFF	OFF	OFF	OFF	OFF	OFF
CAC-VC201						
Train A	OFF	OFF	OFF	OFF	OFF	OFF
Train B	ON	ON	ON	ON	ON	ON
CAC-VC202						
Train A	OFF	OFF	OFF	OFF	OFF	OFF
Train B	ON	ON	ON	ON	ON	ON
CAC-VC203						
Train A	OFF	OFF	OFF	OFF	OFF	OFF
Train B	ON	ON	ON	ON	ON	ON

TROJAN PLANT PARAMETER SUMMARY TABLE

TIME OF DAY	7:45	8:00	8:15	8:30	8:45	9:00
ELAPSED TIME	4:30	4:45	5:00	5:15	5:30	5:45
CAC-VC204						
Train A	ON	ON	ON	ON	ON	ON
Train B	OFF	OFF	OFF	OFF	OFF	OFF
Major Equipment						
Reactor	TRIP	TRIP	TRIP	TRIP	TRIP	TRIP
Turbine	TRIP	TRIP	TRIP	TRIP	TRIP	TRIP
Generator	TRIP	TRIP	TRIP	TRIP	TRIP	TRIP
Electric Plant						
Emerg Busses	AVAIL	AVAIL	AVAIL	AVAIL	AVAIL	AVAIL
Offsite Power	AVAIL	AVAIL	AVAIL	AVAIL	AVAIL	AVAIL
Isolations						
Reactor Coolant						
PORV	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED
Safeties	NO FL	NO FL	NO FL	NO FL	NO FL	NO FL
Letdown	NT CL	NT CL	NT CL	NT CL	NT CL	NT CL
RCP Seal Return	NT CL	NT CL	NT CL	NT CL	NT CL	NT CL
Main Steam						
PORV	NT ISOL	NT ISOL	NT ISOL	NT ISOL	NT ISOL	NT ISOL
Safeties	NT AC	NT AC	NT AC	NT AC	NT AC	NT AC
AFW Turbine	NT ISOL	NT ISOL	NT ISOL	NT ISOL	NT ISOL	NT ISOL
FI-971 A/B	0	0	0	0	0	0
FI-970 A/B	0	0	0	0	0	0
CCW TRAIN C	OFF	OFF	OFF	OFF	OFF	OFF
SW TRAIN C	OFF	OFF	OFF	OFF	OFF	OFF

TROJAN PLANT PARAMETER SUMMARY TABLE

TIME OF DAY	9:15	9:30	9:45	10:00	10:15
ELAPSED TIME	6:00	6:15	6:30	6:45	7:00
RCS Parameters					
1. RCS Pressure (Pzr)	1700.00	1700.00	1700.00	1700.00	1700.00
Saturation Pressure	343.67	173.34	145.42	145.42	145.42
2. PZR Level (%)	0.00	0.00	0.00	0.00	0.00
Trend	0	0	0	0	0
3. PZR LIQ Temp/Steam Temp (deg F)	414/414	414/414	414/414	414/414	414/414
4. RVLIS SCALE	FULL	FULL	FULL	FULL	FULL
5. Reactor Vessel Lvl (%)	78.18	78.19	77.37	77.33	77.58
6. Auct High Nuclear Pwr (%)	0.00	0.00	0.00	0.00	0.00
7. CET Ave (deg F)	337.22	337.22	337.22	337.22	337.22
8. CET Hi (deg F)	431.37	374.84	356.02	356.02	356.02
9. S/C Margin (deg F)	20.79	20.79	20.79	20.79	20.79
10. L/D Rate (GPM)	0.00	0.00	0.00	0.00	0.00
Loop Parameters					
1. T Hot					
A	340.73	340.73	340.73	340.73	340.73
B	341.81	341.81	341.81	341.81	341.81
C	340.38	340.38	340.38	340.38	340.38
D	342.10	342.10	342.10	342.10	342.10
2. T Cold					
A	309.51	309.51	309.51	309.51	309.51
B	309.53	309.53	309.53	309.53	309.53
C	309.53	309.53	309.53	309.53	309.53
D	309.76	309.76	309.76	309.76	309.76
3. T Ave					
A	325.12	325.12	325.12	325.12	325.12
B	325.67	325.67	325.67	325.67	325.67
C	324.96	324.96	324.96	324.96	324.96
D	325.93	325.93	325.93	325.93	325.93
Trend - 0 +					
A	0	0	0	0	0
B	0	0	0	0	0
C	0	0	0	0	0
D	0	0	0	0	0
4. RCP Status					
A	OFF	OFF	OFF	OFF	OFF
B	OFF	OFF	OFF	OFF	OFF
C	OFF	OFF	OFF	OFF	OFF
D	OFF	OFF	OFF	OFF	OFF
FLOW (%)	3.38	3.38	3.38	3.38	3.38
5. S/G Press					
A	117.99	117.99	117.99	117.99	117.99
B	117.99	117.99	117.99	117.99	117.99
C	117.99	117.99	117.99	117.99	117.99
D	117.99	117.99	117.99	117.99	117.99
Trend - 0 +					
A	0	0	0	0	0
B	0	0	0	0	0

TROJAN PLANT PARAMETER SUMMARY TABLE

TIME OF DAY	9:15	9:30	9:45	10:00	10:15
ELAPSED TIME	6:00	6:15	6:30	6:45	7:00
C	0	0	0	0	0
D	0	0	0	0	0
6. S/G Level (NR)					
A	4.02	3.91	3.69	3.59	3.18
B	4.17	3.94	3.63	3.53	3.62
C	3.21	3.62	3.51	3.88	4.12
D	5.44	5.33	4.91	4.97	5.24
7. S/G Level (WR)					
A	76.07	75.64	74.76	74.36	72.71
B	76.70	75.75	74.52	74.13	74.48
C	72.83	74.48	74.03	75.53	76.49
D	81.75	81.34	79.62	79.89	80.95
Trend - 0 +					
A	+	-	-	+	-
B	-	+	-	+	+
C	-	+	-	+	+
D	+	-	+	+	+
8. Steam Flow (1.0E6 LB/HR)					
A	0.00	0.00	0.00	0.00	0.00
B	0.00	0.00	0.00	0.00	0.00
C	0.00	0.00	0.00	0.00	0.00
D	0.00	0.00	0.00	0.00	0.00
9. Feed Flow (1.0E6 LB/HR)					
A	0.00	0.00	0.00	0.00	0.00
B	0.00	0.00	0.00	0.00	0.00
C	0.00	0.00	0.00	0.00	0.00
D	0.00	0.00	0.00	0.00	0.00
10. MSIV Status					
A	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED
B	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED
C	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED
D	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED
11. AFW Flow (GPM)					
A	110.19	110.19	110.19	110.19	110.19
B	103.44	103.44	103.44	103.44	103.44
C	96.74	96.74	96.74	96.74	96.74
D	0.00	0.00	0.00	0.00	0.00
TOTAL	310.36	310.36	310.36	310.36	310.36
12. CST Level (%)					
A	59.55	59.55	59.55	59.55	59.55
Engineered Safeguards Features					
1.Containment					0
Pressure (PSIG)	-0.83	-0.83	-0.83	-0.83	-0.83
Humidity (%)	46.99	46.99	46.99	46.99	46.99
Hydrogen Conc. (%)	0.00	0.00	0.00	0.00	0.00
NR Cont. Sump Lvl (IN.)	13.11	13.11	13.11	13.11	13.11
WR Cont. Lvl (IN.)	13.12	13.12	13.12	13.12	13.12

TROJAN PLANT PARAMETER SUMMARY TABLE

TIME OF DAY	9:15	9:30	9:45	10:00	10:15
ELAPSED TIME	6:00	6:15	6:30	6:45	7:00
Radiation Level (R/hr)	1.00	1.00	1.00	1.00	1.00
Containment Spray	NT ACT	NT ACT	NT ACT	NT ACT	NT ACT
NaOH Tank Level (%)	96.40	96.40	96.40	96.40	96.40
2. RWST Level	67.45	66.55	65.65	64.75	64.75
3. CIS	A	A	A	A	A
4. AFW TDAFWP	ON	ON	ON	ON	ON
DAFWP	ON	ON	ON	ON	ON
Elec. AFWP	ON	ON	ON	ON	ON
5. Safety Injection Actuated	ACT	ACT	ACT	ACT	ACT
6. FWI Actuated	ACT	ACT	ACT	ACT	ACT
7. Equipment Status					0.00
EDG					
Train A	OOS	OOS	OOS	OOS	OOS
Train B	AVAIL	AVAIL	AVAIL	AVAIL	AVAIL
EDG BKR					
Train A	OOS	OOS	OOS	OOS	OOS
Train A	OPEN	OPEN	OPEN	OPEN	OPEN
CCP					
Train A	OOS	OOS	OOS	OOS	OOS
Train B	ON	ON	ON	ON	ON
Flow	0.00	0.00	0.00	0.00	0.00
SI (GPM)					
Train A	TRIP	TRIP	TRIP	TRIP	TRIP
Train B	TRIP	TRIP	TRIP	TRIP	TRIP
Flow	0.00	0.00	0.00	0.00	0.00
RHR (GPM)					
Train A	OFF	OFF	OFF	OFF	OFF
Train B	OFF	OFF	OFF	OFF	OFF
Flow	0.00	0.00	0.00	0.00	0.00
CCW					
Train A	ON	ON	ON	ON	ON
Train B	OFF	OFF	OFF	OFF	OFF
SWS					
Train A	ON	ON	ON	ON	ON
Train B	OFF	OFF	OFF	OFF	OFF
CSP					
Train A	OFF	OFF	OFF	OFF	OFF
Train B	OFF	OFF	OFF	OFF	OFF
CAC-VC201					
Train A	OFF	OFF	OFF	OFF	OFF
Train B	ON	ON	ON	ON	ON
CAC-VC202					
Train A	OFF	OFF	OFF	OFF	OFF
Train B	ON	ON	ON	ON	ON
CAC-VC203					
Train A	OFF	OFF	OFF	OFF	OFF
Train B	ON	ON	ON	ON	ON

TROJAN PLANT PARAMETER SUMMARY TABLE

TIME OF DAY	9:15	9:30	9:45	10:00	10:15
ELAPSED TIME	6:00	6:15	6:30	6:45	7:00
CAC-VC204					
Train A	ON	ON	ON	ON	ON
Train B	OFF	OFF	OFF	OFF	OFF
Major Equipment					
Reactor	TRIP	TRIP	TRIP	TRIP	TRIP
Turbine	TRIP	TRIP	TRIP	TRIP	TRIP
Generator	TRIP	TRIP	TRIP	TRIP	TRIP
Electric Plant					
Emerg Busses	AVAIL	AVAIL	AVAIL	AVAIL	AVAIL
Offsite Power	AVAIL	AVAIL	AVAIL	AVAIL	AVAIL
Isolations					
Reactor Coolant					
PORV	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED
Safeties	NO FL	NO FL	NO FL	NO FL	NO FL
Letdown	NT CL	NT CL	NT CL	NT CL	NT CL
RCP Seal Return	NT CL	NT CL	NT CL	NT CL	NT CL
Main Steam					
PORV	NT ISOL	NT ISOL	NT ISOL	NT ISOL	NT ISOL
Safeties	NT AC	NT AC	NT AC	NT AC	NT AC
AFW Turbine	NT ISOL	NT ISOL	NT ISOL	NT ISOL	NT ISOL
FI-971 A/B	0	0	0	0	0
FI-970 A/B	0	0	0	0	0
CCW TRAIN C	OFF	OFF	OFF	OFF	OFF
SW TRAIN C	OFF	OFF	OFF	OFF	OFF

7.2 Plant Parameter Data

TROJAN NUCLEAR POWER PLANT SYSTEM PARAMETERS

REAL TIME 3:15 **ELAPSED TIME** 0:00

RCS Parameters

1. RCS Pressure	2233.09	PSIG		
2. PZR Level	61.3402	%	Trend	0
3. PZR Temp (liq/steam)	653/653	deg F		
4. RVLIS Scale	DYNAMIC	%		
5. Reactor Vessel Lvl	60	%		
6. Auct High Nuclear Pwr	99.3059	%		
7. CET Ave	609.2696923	deg F		
8. CET Hi	629.023	deg F		
9. S/C Margin	25.739	deg F		
10. L/D Rate	77.2346	GPM		

Loop Parameters	A	B	C	D
1. T Hot	609.421	611.672	608.639	612.058
2. T Cold	551.847	552.769	552.482	554.501
3. T Ave	581.874	583.468	581.812	584.766
Trend - 0 +	0	0	0	0
4. RCP Status	RUN	RUN	RUN	RUN
5. S/G Press	855.7	857.2	856.7	855.3
Trend - 0 +	0	0	0	0
6. S/G Level (NR)	44.2	44	44.2	44.1
7. S/G Level (WR)	55.2685	55.0367	55.2544	55.1561
Trend - 0 +	0	0	0	0
8. Steam Flow (1.0E6 LB/HR)	3.64578	3.79122	3.64796	3.79309
9. Feed Flow (1.0E6 LB/HR)	3.68149	3.83128	3.67989	3.82469
10. MSIV Status	NT CL	NT CL	NT CL	NT CL
11. AFW Flow (GPM)	0	0	0	0
12. CST Level (%)	71.9682			

Engineered Safeguards Features

1.Containment						
Pressure		-0.205	PSIG			
Humidity		41.597	%			
Hydrogen Conc.		0	%			
N Cont. Sump Lvl		13.1083	IN.			
WR Cont. Lvl		13.1089	IN.			
2. RWST Level		89.8326	%			
3. CIS		NO				
4. AFW	TDAFWP	OFF				
	DAFWP	OFF				
	Elec. AFWP	OFF				
5. Safety Injection Actuated		NOT ACT				
6. FWI Actuated		NOT ACT				

7. Equipment Status	Train A	Train B	Train C	Flow		
EDG	OOS	AVAIL				
CCP	OOS	OFF		0	GPM	
SI	OFF	OFF		0	GPM	
RHR	OFF	OFF		FI-971/970	0	0
CCW	ON	OFF	OFF			
SWS	ON	OFF	OFF			
CSP	OFF	OFF				
CAC-VC201	OFF	ON				
CAC-VC202	OFF	ON				
CAC-VC203	OFF	ON				
CAC-VC204	ON	OFF				

Major Equipment

Reactor	NT TRIP
Turbine	NT TRIP
Generator	NT TRIP

Electric Plant

Emerg Busses	AVAIL
Offsite Power	AVAIL

7.3 Safety Parameter Display System Screens

TROJAN PLANT PARAMETER DATA

TROJAN | REAL TIME | 3:15

RERP 1 REACTOR PLANT STATUS | OTSC | Nov-90

General Information

Reactor Shutdown	NT TRIP	
Offsite Power	AVAIL	
Fuel Damage	NONE	(MANUAL ENTRY)

Containment

Pressure	-0.2	PSIG	
Radiation	1.0	REM/HR	ARM-15
Spray Status	NT ACT		
NAOH TK LEVEL	96.4	%	

Emergency Core Cooling

	A	B	C	Total Flow	
Cent Charge	OOS	OFF		0.0	GPM
Safety Inj	OFF	OFF		0.0	GPM
RHR Pumps	OFF	OFF		0.0	GPM
Comport CW	ON	OFF	OFF		
Servc Wtr	ON	OFF	OFF		
Aux Fdwtr	OFF	OFF		0.0	GPM
EDG Status	OOS	AVAIL			
EDG Bus Bk	OOS	OPEN			

Inoperable Equipment (I ENTRY)

1
2 NOTE: MANUAL ENTRY (ME)
3
4
5

Isolation

Reactor Coolant		Main Steam	
Porv	CLOSED	Isol Vlvs	NT CL
Safeties	NO FL	Porv	NT ISOL
Letdown	NT CL	Safeties	NT ÁC
RCP Seal Return	NT CL	AFW T[illegible]	NT [illegible]

Reactor Coolant System

Pumps:	A	B	C	D
	RUN	RUN	RUN	RUN
Flow		100.1	%	
Pressurizer Pres		2233.1	PSIG	
Temperature (TAVG)		581.8	deg F	
T Hot (maximum)		612.6	deg F	
Incore T/C Temp Hi		629.0	deg F	
Average		609.3	deg F	
Pressurizer Level		61.3	%	
Rx Vessel Level		120.0	%	
Rx Subcooling Margin		25.7	deg F	
Saturation Pressure		1965.6	PSIG	
Leak Rate: Identified		(ME)	GPM	
Unidentified		(ME)	GPM	

Steam Generators

	A	B	C	D
Press (PSIG)	855.7	857.2	856.7	855.3
Level WR (%)	55.3	55.0	55.3	55.2
Level NR (%)	44.2	43.4	44.1	43.8

PRI/SEC Leak Rate: (ME) GPM IN: (ME) S/G

EOF 1. ON REST

EOF 2. ON REST

TROJAN PLANT PARAMETER DATA

REAL TIME 3:15

TROJAN

RERP 2 RADIOLOGY AND METEOROLOGY — OTSC — Nov 90

RADIATION MONITOR STATUS

PRM	1A (PART)	1839.2	CPM	PRM	2A (PART)	130.6	CPM	PRM	7 (LIQ)	742.6	CPM
	1B (IODINE)	7919.1	CPM		2B (IODINE)	58.4	CPM		8 (LIQ)	399.0	CPM
	1C (GAS-LO)	5710.6	CPM		2C (GAS-LO)	39.8	CPM		9 (LIQ)	800.0	CPM
	1D (GAS-HI)	21.3	CPM		2D (GAS-HI)	29.3	CPM		10 (LIQ)	1309.5	CPM
	1E (GAS-HI-HI)	[illegible]	MRHR						13 (LIQ)	29913.2	CPM
PRM	6A (GAS-LO)	2290.8	CPM	PRM	16A (GAS)	1.1	MRHR	ARM	15A (CNT)	1.0	RHR
	6B (GAS-HI)	41.0	CPM		16B (GAS)	1.1	MRHR		15B (CNT)	1.0	RHR
	6C (GAS-HI-Hi)	0.0	CPM		16C (GAS)	1.1	MRHR		22 (N SIT)	0.1	MRHR
					16D (GAS)	0.1	MRHR		23 (S SIT)	0.1	MRHR

PLANT STATUS

RCS PRESS (WR)	2233.1 PSIG			
RCS TEMP (WR)	612.6 DEG F			
PZR LEVEL (WR)	61.3 %			
PZR TEMP liq/stm	653/653 DEG F			
RX VESSEL LVL	120.0 %			
RX SUBCOOLING	25.7 DEG F			
INCORE T/C HI	629.0 DEG F :	AVE	609.3 DEG F	

STM GENERATOR	A	B	C	D
PRESS (PSIG)	855.7	857.2	856.7	855.3
LEVEL (%WR)	55.3	55.0	55.3	55.2

CONTAINMENT PRES	-0.2 PSIG
REACTOR SHUTDOWN	NT TRIP
CONTAINMENT ISOL	NO
SAFETY INJECTION	NOT ACT

METEOROLOGY

WIND DIRECTION

33 FT ELEV-FROM	5	DEG	AT	5.0	MPH
200 FT ELEV-FROM	7	DEG	AT	5.[illegible]	MPH
500 FT ELEV-FROM	10	DEG	AT	5.0	MPH
33 FT ELEVATION DIRECTION STD DEV				0.0	DEG

TEMPERATURE

33 FT ELEVATION	23.9	DEG C	75.0	DEG F
200 FT ELEVATION	21.1	DEG C	70.0	DEG F
VERT DIFF (200-33FT)	-2.8	DEG C		

TROJAN PLANT PARAMETER DATA

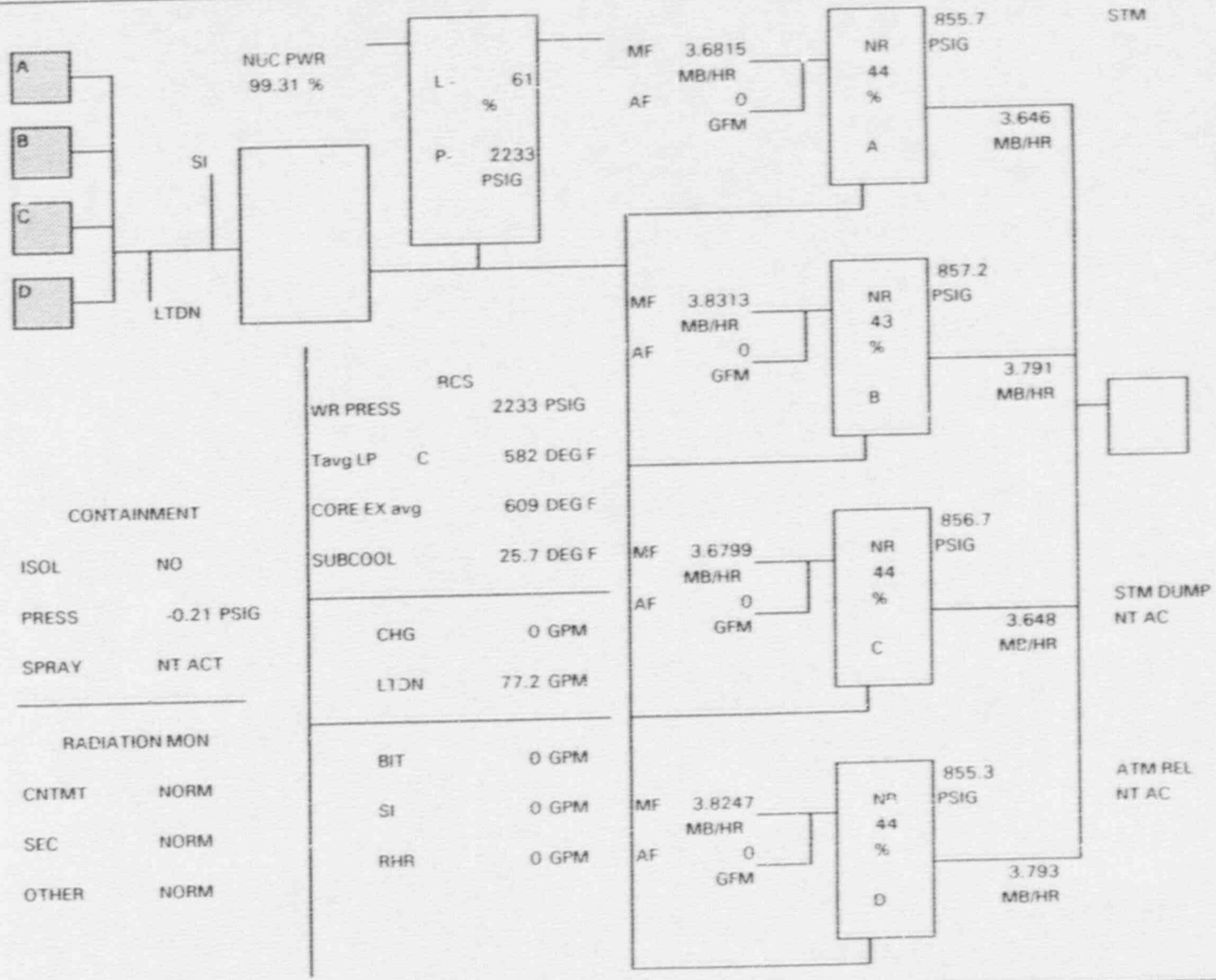
TROJAN

OTSC

REALTIME 3:15

Nov-90

2PS1 PL STAT



RCS

WR PRESS	2233 PSIG
Tavg LP C	582 DEG F
CORE EX avg	609 DEG F
SUBCOOL	25.7 DEG F
CHG	0 GPM
LTDN	77.2 GPM
BIT	0 GPM
SI	0 GPM
RHR	0 GPM

CONTAINMENT

ISOL	NO
PRESS	-0.21 PSIG
SPRAY	NT ACT

RADIATION MON

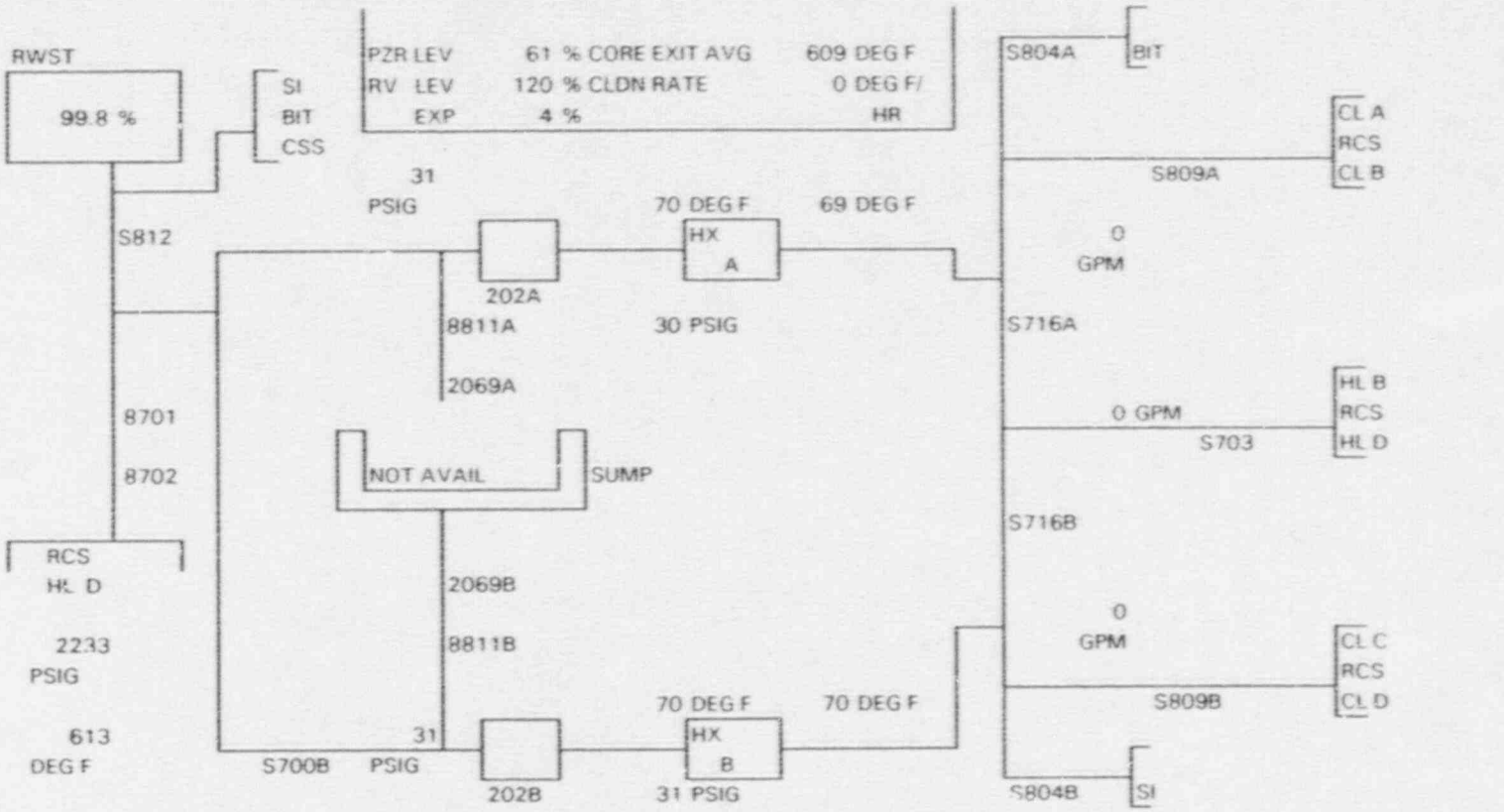
CNTMT	NORM
SEC	NORM
OTHER	NORM

TROJAN PLANT PARAMETER DATA

TROJAN

REALTIME 3:30

3RH1 RHR OTSC Nov-90



TROJAN PLANT PARAMETER DATA

4RM1 RAD | TROJAN OTSC | REAL TIME Nov 90 | 3:15

CONTAINMENT

AREA			
HI RANGE	:	1.0	RH ARM-15A
	:	1.0	ARM-15B
INCORE EQUIP	:	4.2	MRH ARM-6
INCORE GUIDE	:	350.6	ARM-21
MANIP CRANE		132.3	ARM-20
VENT EXHAUST			
PARTICULATE	:	1839.2	CPM PRM-1A
IODINE	:	7919.1	PRM-1B
NOBLE GAS			
LO	:	5710.6	PRM-1C
HI	:	21.3	PRM-1D
HI-HI	:	0.0	PRM-1E
SUMP DISCH	:	40.0	PRM-14

SECONDARY

SG BLOWDOWN	:	1309.5	CPM PRM-10
COND AIR EJECT			
NOBLE GAS			
LO	:	2290.8	CPM PRM-6A
HI	:	41.0	CPM PRM-6B
HI-HI	:	0.0	MHR PRM-6C

SITE BOUNDARY

NORTH	:	0.1	MRH ARM-22
SOUTH	:	0.1	MRH ARM-23

CCW

LOOP A	:	742.6	CPM PRM-7
LOOP B	:	399.0	CPM PRM-8

TROJAN PLANT PAAMETER DATA

4RM2 RAD

TROJAN
OTSC

REAL TIME
Nov 90

3:15

AUX BLDG

AREAS				
EL 5		:	0.1	MRH ARM-1
EL 25		:	0.1	ARM-2
EL 45		:	0.1	ARM-3
EL 45		:	0.1	ARM-4
EL 61		:	0.1	ARM-7
RADWASTE	EL 77	:	0.1	MRH ARM-9
CONC TK PM				
	EL 77	:	0.1	MRH ARM-10
MACH SHOP	EL 93	:	0.2	ARM-12
RADWASTE	EL 93	:	0.2	ARM-14
RHR A RM	EL 5	:	10.1	MRH ARM-16
RHR B RM	EL 5	:	9.2	ARM-17
VCT RM	EL 61	:	12.6	ARM-18
LTDN CHASE				
	EL 65	:	1.0	MRH ARM-19

RADWASTE			
VENT COLL DISCH	:	2998.9	CPM PRM-5
NOBLE GAS DISCH			
LO	:	25.8	CPM PRM-4A
HI	:	29969.9	PRM-4B
RCDT DISCH	:	800.0	CPM PRM-15
LIQUID DISCH	:	236.0	PRM-9
AUX/FUEL BLDG EXHAUST			
PARTICULATE	:	130.6	CPM PRM-2A
IODINE	:	58.4	PRM-2B
NOBLE GAS			
LO	:	39.8	CPM PRM-2C
HI	:	29.3	PRM-2D

FUEL BLDG				
POOL AREA	EL 45	:	0.1	MRH ARM-5
FUEL BLDG	EL 61	:	0.1	ARM-8
NEW FUEL	EL 93	:	0.2	ARM-13
SPENT FUEL POOL VENT		:	38.3	CPM PRM-3

CONTROL ROOM	:	0.1	MRH ARM-11

TROJAN PLANT PARAMETER DATA

TROJAN REAL TIME 3:15

3MT1MET OTSC Nov-90

WIND	(N = 0, 360 DEGREES)	
33 FT ELEV-FROM	005 AT	5 MPH
200 FT ELEV-FROM	007 AT	5 MPH
500 FT ELEV-FROM	010 AT	5 MPH
33 FT ELEVATION DIR STD DEV		0 DEG

TEMPERATURE	
33 FT ELEV	23.9 DEG C
	75 DEG F
VERT DIFF (200-33 FT)	-2.8 DEG C

TROJAN PLANT PARAMETER DATA

TROJAN

REALTIME 3:15

3TC1 T/C OTSC Nov-90

RCS WR PRESS 2040 PSIG CORE EXIT avg 475 DEG F

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
								475	475		475					
A		I	475		475					475				II		A
B			475					475				475	475			B
C			475				475		475							C
D		475		475		475		475		475				475		D
E					475				475		475	475			475	E
F		475		475				475	475		475					F
G	475		475		475			475	475		475		475	475		G
H							475			475						H
J			475		475						475		475		475	J
K								475	475			475		475		K
L	475	475			475					475		475	475			L
M									475				475			M
N		475	475		475		475									N
P											475					P
R		IV			475			475		475				III		R

SECTION 8.0 RADIATION DATA

8.1 Radiation Monitor Summary

TROJAN NUCLEAR PLANT RADIATION MONITOR SUMMARY

MONITOR #	UNITS	3:15 0:00	3:30 0:15	3:45 0:30	4:00 0:45	4:15 1:00	4:30 1:15
PRM-1A	cpm	1839.2	1839.2	1843.1	1843.7	1843.1	1843.1
PRM-1B	cpm	7919.1	7919.1	7919.1	7919.1	7919.1	7919.1
PRM-1C	cpm	5710.6	5710.6	5710.6	5710.6	5710.6	5710.6
PRM-1D	cpm	21.3	21.3	21.3	21.3	21.3	21.3
PRM-1E	mR/hr	1.00E-1	1.00E-1	1.00E-1	1.00E-1	1.00E-1	1.00E-1
PRM-2A	cpm	130.6	130.6	130.9	130.9	130.9	130.9
PRM-2B	cpm	58.4	58.4	58.4	58.4	58.4	58.4
PRM-2C	cpm	39.8	39.8	39.8	39.8	39.8	39.8
PRM-2D	cpm	3.0	3.0	3.0	3.0	3.0	3.0
PRM-3	cpm	38.3	38.3	38.3	38.3	38.3	38.3
PRM-4A	cpm	25.8	25.8	25.8	25.8	25.8	25.8
PRM-4B	cpm	29969.9	29969.9	29969.9	29969.9	29969.9	29969.9
PRM-5	cpm	2998.9	2998.9	2998.9	2998.8	2998.9	2998.9
PRM-6A	cpm	2290.8	2290.8	2290.8	2290.6	2290.8	2290.8
PRM-6B	cpm	41.0	41.0	41.0	41.0	41.0	41.0
PRM-6C	mR/hr	1.00E-1	1.00E-1	1.00E-1	1.00E-1	1.00E-1	1.00E-1
PRM-7	cpm	742.6	742.6	742.6	742.6	742.6	742.6
PRM-8	cpm	399.0	399.0	399.0	399.0	399.0	399.0
PRM-9	cpm	800.0	800.0	800.0	800.0	800.0	800.0
PRM-10	cpm	1309.5	1309.5	1309.5	1309.5	1309.5	1309.5
PRM-13	cpm	29913.2	29913.2	29913.4	29911.7	29913.4	29913.4
PRM-14	cpm	40.0	40.0	40.0	40.0	40.0	40.0
PRM-15	cpm	236.0	236.0	236.0	236.0	236.0	236.0
PRM-16A	mR/hr	1.12E+0	1.12E+0	1.12E+0	1.12E+0	1.12E+0	1.12E+0
PRM-16B	mR/hr	1.12E+0	1.12E+0	1.12E+0	1.12E+0	1.12E+0	1.12E+0
PRM-16C	mR/hr	1.12E+0	1.12E+0	1.12E+0	1.12E+0	1.12E+0	1.12E+0
PRM-16D	mR/hr	1.12E+0	1.12E+0	1.12E+0	1.12E+0	1.12E+0	1.12E+0
PRM-25A	cpm	0.1	0.1	0.1	0.1	0.1	0.1
PRM-25B	cpm	0.1	0.1	0.1	0.1	0.1	0.1
PRM-25C	cpm	0.1	0.1	0.1	0.1	0.1	0.1
AREA MONITORS							
ARM-1	mR/hr	9.95E-2	9.95E-2	9.95E-2	9.95E-2	9.95E-2	9.95E-2
ARM-2	mR/hr	7.25E-2	7.25E-2	7.25E-2	7.25E-2	7.25E-2	7.25E-2
ARM-3	mR/hr	1.00E+0	1.00E+0	1.00E+0	1.00E+0	1.00E+0	1.00E+0
ARM-4	mR/hr	9.19E-2	9.19E-2	9.19E-2	9.19E-2	9.19E-2	9.19E-2
ARM-5	mR/hr	1.03E-1	1.03E-1	1.03E-1	1.03E-1	1.03E-1	1.03E-1
ARM-6	mR/hr	4.18E+0	4.18E+0	4.18E+0	4.18E+0	4.18E+0	4.18E+0
ARM-7	mR/hr	9.64E-2	9.64E-2	9.64E-2	9.64E-2	9.64E-2	9.64E-2
ARM-8	mR/hr	9.30E-2	9.30E-2	9.30E-2	9.30E-2	9.30E-2	9.30E-2
ARM-9	mR/hr	1.12E-1	1.12E-1	1.12E-1	1.12E-1	1.12E-1	1.12E-1
ARM-10	mR/hr	1.06E-1	1.06E-1	1.06E-1	1.06E-1	1.06E-1	1.06E-1
ARM-11	mR/hr	8.00E-2	8.00E-2	8.00E-2	8.00E-2	8.00E-2	8.00E-2
ARM-12	mR/hr	1.71E-1	1.71E-1	1.71E-1	1.71E-1	1.71E-1	1.71E-1
ARM-13	mR/hr	1.77E-1	1.77E-1	1.77E-1	1.77E-1	1.77E-1	1.77E-1
ARM-14	mR/hr	1.65E-1	1.65E-1	1.65E-1	1.65E-1	1.65E-1	1.65E-1
ARM-15A	R/hr	1.00E+0	1.00E+0	1.00E+0	1.00E+0	1.00E+0	1.00E+0
ARM-15B	R/hr	1.00E+0	1.00E+0	1.00E+0	1.00E+0	1.00E+0	1.00E+0
ARM-16	mR/hr	1.01E+1	1.01E+1	1.01E+1	1.01E+1	1.01E+1	1.01E+1
ARM-17	mR/hr	9.18E+0	9.18E+0	9.18E+0	9.18E+0	9.18E+0	9.18E+0
ARM-18	mR/hr	1.26E+1	1.26E+1	1.26E+1	1.26E+1	1.26E+1	1.26E+1
ARM-19	mR/hr	1.04E+0	1.04E+0	1.04E+0	1.04E+0	1.04E+0	1.04E+0
ARM-20	mR/hr	1.32E+2	1.32E+2	1.32E+2	1.32E+2	1.32E+2	1.32E+2
ARM-21	mR/hr	3.51E+2	3.51E+2	3.51E+2	3.51E+2	3.51E+2	3.51E+2
ARM-22	mR/hr	7.01E-2	7.01E-2	7.01E-2	7.01E-2	7.01E-2	7.01E-2
ARM-23	mR/hr	7.11E-2	7.11E-2	7.11E-2	7.11E-2	7.11E-2	7.11E-2
ARM-24	mR/hr	7.01E-2	7.01E-2	7.01E-2	7.01E-2	7.01E-2	7.01E-2
ARM-25	mR/hr	1.00E+0	1.00E+0	1.00E+0	1.00E+0	1.00E+0	1.00E+0

TROJAN NUCLEAR PLANT RADIATION MONITOR SUMMARY

MONITOR #	UNITS	4:45 1:30	5:00 1:45	5:15 2:00	5:30 2:15	5:45 2:30	6:00 2:45
PRM-1A	cpm	1843.7	1839.2	1839.2	1839.2	1840.1	1840.1
PRM-1B	cpm	7919.1	7919.1	7919.1	7919.1	7919.1	7919.1
PRM-1C	cpm	5710.6	5710.6	5710.6	5710.6	5710.6	5710.6
PRM-1D	cpm	21.3	21.3	21.3	21.3	21.3	21.3
PRM-1E	mR/hr	1.00E-1	1.00E-1	1.00E-1	1.00E-1	1.00E-1	1.00E-1
PRM-2A	cpm	130.9	130.6	339796.4 **	354303.3 **	418522.0 **	430341.6 **
PRM-2B	cpm	58.4	58.4	144528.8 **	178353.3 **	190758.7 **	192510.1 **
PRM-2C	cpm	39.8	39.8	96385.4 **	118942.1 **	127215.7 **	128383.7 **
PRM-2D	cpm	3.0	3.0	3.3	4.1	4.4	4.4
PRM-3	cpm	38.3	38.3	38215.2 *	41033.2 *	43720.0 *	46311.2 *
PRM-4A	cpm	25.8	25.8	29451.5 **	34216.5 **	38844.4 **	43509.1 **
PRM-4B	cpm	29969.9	29969.9	2.85E+7 **	2.85E+7 **	2.85E+7 **	2.85E+7 **
PRM-5	cpm	2998.8	2998.8	81871.8 *	100652.9 *	107556.6 *	108528.2 *
PRM-6A	cpm	2290.6	2290.7	118.2	117.9	117.8	117.8
PRM-6B	cpm	41.0	41.0	41.0	41.0	41.0	41.0
PRM-6C	mR/hr	1.00E-1	1.00E-1	1.00E-1	1.00E-1	1.00E-1	1.00E-1
PRM-7	cpm	742.6	742.6	190287.3 **	204016.0 **	218494.9 **	232139.3 **
PRM-8	cpm	399.0	399.0	101255.5 **	110346.1 **	119119.8 **	128082.2 **
PRM-9	cpm	800.0	800.0	192028.6 **	206572.5 **	223727.6 **	239380.8 **
PRM-10	cpm	1309.5	1309.5	1300.0	1300.0	1300.0	1300.0
PRM-13	cpm	29911.7	29912.5	8748.0	8748.0	8748.0	8748.0
PRM-14	cpm	40.0	40.0	39117.5 **	42138.4 **	45096.7 **	48376.2 **
PRM-15	cpm	236.0	236.0	165587.5 *	210691.9 *	225483.3 *	241881.1 *
PRM-16A	mR/hr	1.12E+0	1.12E+0	1.12E+0	1.12E+0	1.12E+0	1.12E+0
PRM-16B	mR/hr	1.12E+0	1.12E+0	1.12E+0	1.12E+0	1.12E+0	1.12E+0
PRM-16C	mR/hr	1.12E+0	1.12E+0	1.12E+0	1.12E+0	1.12E+0	1.12E+0
PRM-16D	mR/hr	1.12E+0	1.12E+0	1.12E+0	1.12E+0	1.12E+0	1.12E+0
PRM-25A	cpm	0.1	0.1	0.1	0.1	0.1	0.1
PRM-25B	cpm	0.1	0.1	0.	0.1	0.1	0.1
PRM-25C	cpm	0.1	0.1	0.1	0.1	0.1	0.1
AREA MONITORS							
ARM-1	mR/hr	9.95E-2	9.95E-2	5.16E+2 **	6.52E+2 **	6.81E+2 **	6.89E+2 **
ARM-2	mR/hr	[illegible]	[illegible]	2.97E+2 **	3.67E+2 **	3.93E+2 **	3.96E+2 **
ARM-3	mR/hr	1.00E+0	1.00E+0	1.00E+0	1.00E+0	1.00E+0	1.00E+0
ARM-4	mR/hr	9.19E-2	9.19E-2	1.23E+2 **	1.47E+2 **	1.63E+2 **	1.64E+2 **
ARM-5	mR/hr	1.03E-1	1.03E-1	5.53E+1 **	6.67E+1 **	7.31E+1 **	7.36E+1 **
ARM-6	mR/hr	4.18E+0	4.18E+0	2.58E+0	2.58E+0	2.58E+0	2.58E+0
ARM-7	mR/hr	9.64E-2	9.64E-2	9.24E+1 **	1.07E+2 **	1.21E+2 **	1.22E+2 **
ARM-8	mR/hr	9.30E-2	9.30E-2	9.51E+1 **	1.03E+2 **	1.10E+2 **	1.17E+2 **
ARM-9	mR/hr	1.12E-1	1.12E-1	1.76E+2 **	2.17E+2 **	2.33E+2 **	2.35E+2 **
ARM-10	mR/hr	1.06E-1	1.06E-1	9.68E+1 **	1.06E+2 **	1.15E+2 **	1.23E+2 **
ARM-11	mR/hr	8.00E-2	8.00E-2	1.44E-1	1.59E-1	1.65E-1	1.66E-1
ARM-12	mR/hr	1.71E-1	1.71E-1	9.65E+1 **	1.05E+2 **	1.12E+2 **	1.21E+2 **
ARM-13	mR/hr	1.77E-1	1.77E-1	9.65E+0 *	1.00E+2 **	1.10E+2 **	1.20E+2 **
ARM-14	mR/hr	1.65E-1	1.65E-1	4.35E+1 **	5.10E+1 **	5.69E+1 **	5.75E+1 **
ARM-15A	R/hr	1.00E+0	1.00E+0	1.00E+0	1.00E+0	1.00E+0	1.00E+0
ARM-15B	R/hr	1.00E+0	1.00E+0	1.00E+0	1.00E+0	1.00E+0	1.00E+0
ARM-16	mR/hr	1.01E+1	1.01E+1	8.45E+2 *	1.06E+3 **	1.10E+3 **	1.12E+3 **
ARM-17	mR/hr	9.18E+0	9.18E+0	4.85E+2 *	6.09E+2 *	6.38E+2 *	6.45E+2 *
ARM-18	mR/hr	1.26E+1	1.26E+1	8.62E+1	1.08E+2 *	1.27E+2 *	1.34E+2 *
ARM-19	mR/hr	1.04E+0	1.04E+0	1.32E+2 *	1.58E+2 *	1.75E+2 *	1.76E+2 *
ARM-20	mR/hr	1.32E+2	1.32E+2	1.03E+1	1.03E+1	1.03E+1	1.03E+1
ARM-21	mR/hr	3.51E+2	3.51E+2	5.21E+0	5.21E+0	5.21E+0	5.21E+0
ARM-22	mR/hr	7.01E-2	7.01E-2	2.58E-1	2.83E-1	3.10E-1	3.18E-1
ARM-23	mR/hr	7.11E-2	7.11E-2	3.10E+0	3.50E+0	3.93E+0	4.06E+0
ARM-24	mR/hr	7.01E-2	7.01E-2	2.58E-1	2.83E-1	3.10E-1	3.18E-1
ARM-25	mR/hr	1.00E+0	1.00E+0	1.00E+0	1.00E+0	1.00E+0	1.00E+0

TROJAN NUCLEAR PLANT RADIATION MONITOR SUMMARY

MONITOR #	UNITS	6:15 3:00	6:30 3:15	6:45 3:30	7:00 3:45	7:15 4:00	7:30 4:15
PRM-1A	cpm	1840.1	1840.1	1840.1	1840.1	1840.1	1840.1
PRM-1B	cpm	7919.1	7919.1	7919.1	7919.1	7919.1	7919.1
PRM-1C	cpm	5710.6	5710.6	5710.6	5710.6	5710.6	5710.6
PRM-1D	cpm	21.3	21.3	21.3	21.3	21.3	21.3
PRM-1E	mR/hr	1.00E-1	1.00E-1	1.00E-1	1.00E-1	1.00E-1	1.00E-1
PRM-2A	cpm	436541.7 **	405955.1 **	299353.5 **	3.92E+8 **	3.92E+8 **	4.23E+8 **
PRM-2B	cpm	195153.0 **	145670.1 **	118965.3 **	3.55E+7 **	3.55E+7 **	3.83E+7 **
PRM-2C	cpm	130146.2 **	97146.8 **	79337.5 **	1.02E+7 **	1.28E+7 **	1.40E+7 **
PRM-2D	cpm	4.5	3.3	2.7	349.7 *	438.9 *	4.80E+2 *
PRM-3	cpm	47315.2 *	40444.3 *	33201.6 *	4277626.5 **	1.04E+7 **	1.04E+7 **
PRM-4A	cpm	44621.2 **	37341.2 **	30518.0 **	4081281.3 **	1.06E+7 **	1.03E+7 **
PRM-4B	cpm	2.85E+7 **	2.85E+7 **	2.85E+7 **	2.85E+7 **	2.85E+7 **	2.85E+7 **
PRM-5	cpm	109996.7 *	82521.1 *	67175.9 *	1.79E+8 **	1.79E+8 **	1.79E+8 **
PRM-6A	cpm	117.8	123.3	119.3	120.6	120.6	120.6
PRM-6B	cpm	41.0	41.0	41.0	41.0	41.0	41.0
PRM-6C	mR/hr	1.00E-1	1.00E-1	1.00E-1	1.00E-1	1.00E-1	1.00E-1
PRM-7	cpm	236518.7 **	198612.3 **	162487.3 **	2.04E+7 **	5.40E+7 **	5.20E+7 **
PRM-8	cpm	128952.1 **	116284.6 **	103066.2 **	1.96E+7 **	5.51E+7 **	5.20E+7 **
PRM-9	cpm	242851.3 **	207376.6 **	171862.9 **	2.44E+7 **	5.85E+7 **	5.20E+7 **
PRM-10	cpm	1300.0	1300.0	1300.0	1300.0	1300.0	1300.0
PRM-13	cpm	8748.0	8748.0	8748.0	8748.0	8748.0	8748.0
PRM-14	cpm	48822.9 **	41737.3 **	33972.6 **	4987317.4 **	1.15E+7 **	1.05E+7 **
PRM-15	cpm	244114.5 *	208686.5 *	169863.1 *	4238537.5 **	1.08E+7 **	1.05E+7 **
PRM-16A	mR/hr	1.12E+0	1.12E+0	1.12E+0	1.12E+0	1.12E+0	1.12E+0
PRM-16B	mR/hr	1.12E+0	1.12E+0	1.12E+0	1.12E+0	1.12E+0	1.12E+0
PRM-16C	mR/hr	1.12E+0	1.12E+0	1.12E+0	1.12E+0	1.12E+0	1.12E+0
PRM-16D	mR/hr	1.12E+0	1.12E+0	1.12E+0	1.12E+0	1.12E+0	1.12E+0
PRM-25A	cpm	0.1	0.1	0.1	0.1	0.1	0.1
PRM-25B	cpm	0.1	0.1	0.1	0.1	0.1	0.1
PRM-25C	cpm	0.1	0.1	0.1	0.1	0.1	0.1
AREA MONITORS							
ARM-1	mR/hr	6.98E+2 **	5.01E+2 **	4.19E+2 **	1.88E+6 **	1.88E+6 **	1.88E+6 **
ARM-2	mR/hr	4.02E+2 **	3.00E+2 **	2.45E+2 **	3.74E+5 **	3.74E+5 **	3.74E+5 **
ARM-3	mR/hr	1.00E+0	1.00E+0	1.00E+0	3.74E+3 **	3.74E+3 **	3.74E+3 **
ARM-4	mR/hr	1.66E+2 **	1.31E+2 **	1.04E+2 **	4.08E+4 **	4.08E+4 **	4.08E+4 **
ARM-5	mR/hr	7.47E+1 **	5.79E+1 **	4.62E+1 **	4.36E+4 **	4.36E+4 **	4.36E+4 **
ARM-6	mR/hr	2.58E+0	2.58E+0	2.58E+0	2.93E+0	2.93E+0	2.93E+0
ARM-7	mR/hr	1.24E+2 **	1.02E+2 **	7.86E+1 **	1.23E+4 **	1.23E+4 **	1.23E+4 **
ARM-8	mR/hr	1.18E+2 **	1.01E+2 **	8.33E+1 **	1.18E+4 **	2.83E+4 **	6.68E+4 **
ARM-9	mR/hr	2.38E+2 **	1.79E+2 **	1.46E+2 **	3.16E+5 **	3.16E+5 **	3.16E+5 **
ARM-10	mR/hr	1.26E+2 **	1.07E+2 **	8.47E+1 **	1.03E+4 **	2.68E+4 **	7.34E+4 **
ARM-11	mR/hr	1.67E-1	1.45E-1	1.33E-1	1.44E+0 *	1.84E+1 **	3.08E+1 **
ARM-12	mR/hr	1.22E+2 **	1.04E+2 **	8.39E+1 **	1.06E+4 **	2.56E+4 **	6.43E+4 **
ARM-13	mR/hr	6.01E+1 **	4.50E+1 **	3.67E+1 **	9.17E+4 **	9.17E+4 **	9.17E+4 **
ARM-14	mR/hr	5.83E+1 **	4.69E+1 **	3.67E+1 **	3.34E+4 **	3.34E+4 **	3.34E+4 **
ARM-15A	R/hr	1.00E+0	1.00E+0	1.00E+0	1.00E+0	1.00E+0	1.00E+0
ARM-15B	R/hr	1.00E+0	1.00E+0	1.00E+0	1.00E+0	1.00E+0	1.00E+0
ARM-16	mR/hr	1.13E+3 **	8.24E+2 *	6.95E+2 *	3.26E+6 **	3.26E+6 **	3.26E+6 **
ARM-17	mR/hr	6.53E+2 *	4.74E+2 *	3.97E+2 *	1.53E+6 **	1.53E+6 **	1.53E+6 **
ARM-18	mR/hr	1.65E+2 *	1.83E+2 *	1.76E+2 *	2.00E+5 **	2.00E+5 **	2.00E+5 **
ARM-19	mR/hr	1.79E+2 *	1.41E+2 *	1.11E+2 *	3.45E+4 **	3.45E+4 **	3.45E+4 **
ARM-20	mR/hr	1.03E+1	1.03E+1	1.03E+1	1.10E+1	1.10E+1	1.10E+1
ARM-21	mR/hr	5.21E+0	5.21E+0	5.21E+0	5.35E+0	5.35E+0	5.35E+0
ARM-22	mR/hr	3.23E-1	2.67E-1	2.27E-1	2.03E-1	7.74E-2	1.62E-1
ARM-23	mR/hr	4.13E+0	3.23E+0	2.60E+0	1.78E+3 **	1.78E+3 **	1.78E+3 **
ARM-24	mR/hr	3.23E-1	2.67E-1	2.27E-1	2.03E-1	7.74E-2	1.62E-1
ARM-25	mR/hr	1.00E+0	1.00E+0	1.00E+0	1.00E+0	1.00E+0	1.00E+0

TROJAN NUCLEAR PLANT RADIATION MONITOR SUMMARY

MONITOR #	UNITS	7:45 4:30	8:00 4:45	8:15 5:00	8:30 5:15	8:45 5:30	9:00 5:45
PRM-1A	cpm	1840.1	1840.1	1840.1	1840.1	1840.1	1840.1
PRM-1B	cpm	7919.1	7919.1	7919.1	7919.1	7919.1	7919.1
PRM-1C	cpm	5710.6	5710.6	5710.6	5710.6	5710.6	5710.6
PRM-1D	cpm	21.3	21.3	21.3	21.3	21.3	21.3
PRM-1E	mR/hr	1.00E-1	1.00E-1	1.00E-1	1.00E-1	1.00E-1	1.00E-1
PRM-2A	cpm	4.33E+8 **	4.36E+8 **	4.37E+8 **	4.37E+8 **	4.37E+8 **	1.42E+8 **
PRM-2B	cpm	3.92E+7 **	3.95E+7 **	3.96E+7 **	3.96E+7 **	3.96E+7 **	1.29E+7 **
PRM-2C	cpm	1.45E+7 **	1.46E+7 **	1.46E+7 **	1.47E+7 **	6.12E+7 **	2.16E+6 **
PRM-2D	cpm	4.97E+2 *	5.01E+2 *	5.01E+2 *	5.04E+2 *	2.10E+3 **	7.42E+1
PRM-3	cpm	1.04E+7 **	1.04E+7 **	1.04E+7 **	1.04E+7 **	1.04E+7 **	1.04E+7 **
PRM-4A	cpm	1.03E+7 **	1.03E+7 **	1.03E+7 **	1.03E+7 **	1.03E+7 **	1.03E+7 **
PRM-4B	cpm	2.85E+7 **	2.85E+7 **	2.85E+7 **	2.85E+7 **	2.85E+7 **	2.85E+7 **
PRM-5	cpm	1.79E+8 **	1.79E+8 **	1.79E+8 **	1.79E+8 **	1.79E+8 **	1.79E+8 **
PRM-6A	cpm	120.6	120.6	120.6	120.6	120.6	120.6
PRM-6B	cpm	41.0	41.0	41.0	41.0	41.0	41.0
PRM-6C	mR/hr	1.00E-1	1.00E-1	1.00E-1	1.00E-1	1.00E-1	1.00E-1
PRM-7	cpm	5.20E+7 **	5.20E+7 **	5.20E+7 **	5.20E+7 **	5.20E+7 **	5.20E+7 **
PRM-8	cpm	5.20E+7 **	5.20E+7 **	5.20E+7 **	5.20E+7 **	5.20E+7 **	5.20E+7 **
PRM-9	cpm	5.20E+7 **	5.20E+7 **	5.20E+7 **	5.20E+7 **	5.20E+7 **	5.20E+7 **
PRM-10	cpm	1300.0	1300.0	1300.0	1300.0	1300.0	1300.0
PRM-13	cpm	8748.0	8748.0	8748.0	8748.0	8748.0	8748.0
PRM-14	cpm	1.05E+7 **	1.05E+7 **	1.05E+7 **	1.05E+7 **	1.05E+7 **	1.05E+7 **
PRM-15	cpm	1.05E+7 **	1.05E+7 **	1.05E+7 **	1.05E+7 **	1.05E+7 **	1.05E+7 **
PRM-16A	mR/hr	1.12E+0	1.12E+0	1.12E+0	1.12E+0	1.12E+0	1.12E+0
PRM-16B	mR/hr	1.12E+0	1.12E+0	1.12E+0	1.12E+0	1.12E+0	1.12E+0
PRM-16C	mR/hr	1.12E+0	1.12E+0	1.12E+0	1.12E+0	1.12E+0	1.12E+0
PRM-16D	mR/hr	1.12E+0	1.12E+0	1.12E+0	1.12E+0	1.12E+0	1.12E+0
PRM-25A	cpm	0.1	0.1	0.1	0.1	0.1	0.1
PRM-25B	cpm	0.1	0.1	0.1	0.1	0.1	0.1
PRM-25C	cpm	0.1	0.1	0.1	0.1	0.1	0.1
AREA MONITORS							
ARM-1	mR/hr	1.88E+6 **	1.88E+6 **	1.88E+6 **	1.88E+6 **	1.88E+6 **	1.88E+6 **
ARM-2	mR/hr	3.74E+5 **	3.74E+5 **	3.74E+5 **	3.74E+5 **	3.74E+5 **	3.74E+5 **
ARM-3	mR/hr	3.74E+3 **	3.74E+3 **	3.74E+3 **	3.74E+3 **	3.74E+3 **	3.74E+3 **
ARM-4	mR/hr	4.08E+4 **	4.08E+4 **	4.08E+4 **	4.08E+4 **	4.08E+4 **	4.08E+4 **
ARM-5	mR/hr	4.36E+4 **	4.36E+4 **	4.36E+4 **	4.36E+4 **	4.36E+4 **	4.36E+4 **
ARM-6	mR/hr	2.93E+0	2.93E+0	2.93E+0	2.93E+0	2.93E+0	2.93E+0
ARM-7	mR/hr	1.23E+4 **	1.23E+4 **	1.23E+4 **	1.23E+4 **	1.23E+4 **	1.23E+4 **
ARM-8	mR/hr	7.05E+4 **	7.05E+4 **	7.05E+4 **	7.05E+4 **	7.05E+4 **	6.81E+4 **
ARM-9	mR/hr	3.16E+5 **	3.16E+5 **	3.16E+5 **	3.16E+5 **	3.16E+5 **	3.16E+5 **
ARM-10	mR/hr	7.34E+4 **	7.34E+4 **	7.34E+4 **	7.34E+4 **	7.34E+4 **	7.05E+4 **
ARM-11	mR/hr	3.26E+1 **	3.26E+1 **	3.26E+1 **	3.26E+1 **	3.26E+1 **	3.26E+1 **
ARM-12	mR/hr	7.12E+4 **	7.12E+4 **	7.12E+4 **	7.12E+4 **	7.12E+4 **	6.88E+4 **
ARM-13	mR/hr	9.17E+4 **	9.17E+4 **	9.17E+4 **	9.17E+4 **	9.17E+4 **	9.17E+4 **
ARM-14	mR/hr	3.34E+4 **	3.34E+4 **	3.34E+4 **	3.34E+4 **	3.34E+4 **	3.34E+4 **
ARM-15A	R/hr	1.00E+0	1.00E+0	1.00E+0	1.00E+0	1.00E+0	1.00E+0
ARM-15B	R/hr	1.00E+0	1.00E+0	1.00E+0	1.00E+0	1.00E+0	1.00E+0
ARM-16	mR/hr	3.26E+6 **	3.26E+6 **	3.26E+6 **	3.26E+6 **	3.26E+6 **	3.26E+6 **
ARM-17	mR/hr	1.53E+6 **	1.53E+6 **	1.53E+6 **	1.53E+6 **	1.53E+6 **	1.53E+6 **
ARM-18	mR/hr	2.00E+5 **	2.00E+5 **	2.00E+5 **	2.00E+5 **	2.00E+5 **	2.00E+5 **
ARM-19	mR/hr	3.45E+4 **	3.45E+4 **	3.45E+4 **	3.45E+4 **	3.45E+4 **	3.45E+4 **
ARM-20	mR/hr	1.10E+1	1.10E+1	1.10E+1	1.10E+1	1.10E+1	1.10E+1
ARM-21	mR/hr	5.35E+0	5.35E+0	5.35E+0	5.35E+0	5.35E+0	5.35E+0
ARM-22	mR/hr	1.99E-1	2.03E-1	7.74E-2	1.62E-1	1.99E-1	2.03E-1
ARM-23	mR/hr	1.78E+3 **	1.78E+3 **	1.78E+3 **	1.78E+3 **	1.60E+3 **	1.07E+3 **
ARM-24	mR/hr	1.99E-1	2.03E-1	7.74E-2	1.62E-1	1.99E-1	2.03E-1
ARM-25	mR/hr	1.00E+0	1.00E+0	1.00E+0	1.00E+0	1.00E+0	1.00E+0

TROJAN NUCLEAR PLANT RADIATION MONITOR SUMMARY

MONITOR #	UNITS	9:15 6:00	9:30 6:15	9:45 6:30	10:00 6:45
PRM-1A	cpm	1840.1	1840.1	1840.1	1840.1
PRM-1B	cpm	7919.1	7919.1	7919.1	7919.1
PRM-1C	cpm	5710.6	5710.6	5710.6	5710.6
PRM-1D	cpm	21.3	21.3	21.3	21.3
PRM-1E	mR/hr	1.00E-1	1.00E-1	1.00E-1	1.00E-1
PRM-2A	cpm	4.62E+7 **	1.51E+7 **	4.94E+6 **	4.94E+6 **
PRM-2B	cpm	4.19E+6 **	1.37E+6 **	4.48E+5 **	4.48E+5 **
PRM-2C	cpm	8.20E+5 **	2.64E+5 **	1.68E+5 **	1.68E+5 **
PRM-2D	cpm	2.81E+1	9.05E+0	5.76E+0	5.76E+0
PRM-3	cpm	1.04E+7 **	1.04E+7 **	1.04E+7 **	1.04E+7 **
PRM-4A	cpm	1.03E+7 **	1.03E+7 **	1.03E+7 **	1.03E+7 **
PRM-4B	cpm	2.85E+7 **	2.85E+7 **	2.85E+7 **	2.85E+7 **
PRM-5	cpm	1.79E+8 **	1.79E+8 **	1.79E+8 **	1.79E+8 **
PRM-6A	cpm	120.6	120.6	120.6	120.6
PRM-6B	cpm	41.0	41.0	41.0	41.0
PRM-6C	mR/hr	1.00E-1	1.00E-1	1.00E-1	1.00E-1
PRM-7	cpm	5.20E+7 **	5.20E+7 **	5.20E+7 **	5.20E+7 **
PRM-8	cpm	5.20E+7 **	5.20E+7 **	5.20E+7 **	5.20E+7 **
PRM-9	cpm	5.20E+7 **	5.20E+7 **	5.20E+7 **	5.20E+7 **
PRM-10	cpm	1300.0	1300.0	1300.0	1300.0
PRM-13	cpm	8748.0	8748.0	8748.0	8748.0
PRM-14	cpm	1.05E+7 **	1.05E+7 **	1.05E+7 **	1.05E+7 **
PRM-15	cpm	1.05E+7 **	1.05E+7 **	1.05E+7 **	1.05E+7 **
PRM-16A	mR/hr	1.12E+0	1.12E+0	1.12E+0	1.12E+0
PRM-16B	mR/hr	1.12E+0	1.12E+0	1.12E+0	1.12E+0
PRM-16C	mR/hr	1.12E+0	1.12E+0	1.12E+0	1.12E+0
PRM-16D	mR/hr	1.12E+0	1.12E+0	1.12E+0	1.12E+0
PRM-25A	cpm	0.1	0.1	0.1	0.1
PRM-25B	cpm	0.1	0.1	0.1	0.1
PRM-25C	cpm	0.1	0.1	0.1	0.1
AREA MONITORS					
ARM-1	mR/hr	1.88E+6 **	1.88E+6 **	1.88E+6 **	1.88E+6 **
ARM-2	mR/hr	3.74E+5 **	3.74E+5 **	3.74E+5 **	3.74E+5 **
ARM-3	mR/hr	3.74E+3 **	3.74E+3 **	3.74E+3 **	3.74E+3 **
ARM-4	mR/hr	4.08E+4 **	4.08E+4 **	4.08E+4 **	4.08E+4 **
ARM-5	mR/hr	4.36E+4 **	4.36E+4 **	4.36E+4 **	4.36E+4 **
ARM-6	mR/hr	2.93E+0	2.93E+0	2.93E+0	2.93E+0
ARM-7	mR/hr	1.23E+4 **	1.23E+4 **	1.23E+4 **	1.23E+4 **
ARM-8	mR/hr	6.51E+4 **	6.52E+4 **	6.52E+4 **	6.52E+4 **
ARM-9	mR/hr	3.16E+5 **	3.16E+5 **	3.16E+5 **	3.16E+5 **
ARM-10	mR/hr	6.59E+4 **	6.65E+4 **	6.65E+4 **	6.65E+4 **
ARM-11	mR/hr	3.26E+1 **	3.26E+1 **	3.26E+1 **	3.26E+1 **
ARM-12	mR/hr	6.56E+4 **	6.52E+4 **	6.52E+4 **	6.52E+4 **
ARM-13	mR/hr	9.17E+4 **	9.17E+4 **	9.17E+4 **	9.17E+4 **
ARM-14	mR/hr	3.34E+4 **	3.34E+4 **	3.34E+4 **	3.34E+4 **
ARM-15A	R/hr	1.00E+0	1.00E+0	1.00E+0	1.00E+0
ARM-15B	R/hr	1.00E+0	1.00E+0	1.00E+0	1.00E+0
ARM-16	mR/hr	3.26E+6 **	3.26E+6 **	3.26E+6 **	3.26E+6 **
ARM-17	mR/hr	1.53E+6 **	1.53E+6 **	1.53E+6 **	1.53E+6 **
ARM-18	mR/hr	2.00E+5 **	2.00E+5 **	2.00E+5 **	2.00E+5 **
ARM-19	mR/hr	3.45E+4 **	3.45E+4 **	3.45E+4 **	3.45E+4 **
ARM-20	mR/hr	1.10E+1	1.10E+1	1.10E+1	1.10E+1
ARM-21	mR/hr	5.35E+0	5.35E+0	5.35E+0	5.35E+0
ARM-22	mR/hr	7.74E-2	1.62E-1	7.74E-2	7.74E-2
ARM-23	mR/hr	5.46E+2 *	1.78E+1	1.78E+1	1.78E+1
ARM-24	mR/hr	7.74E-2	1.62E-1	7.74E-2	7.74E-2
ARM-25	mR/hr	1.00E+0	1.00E+0	1.00E+0	1.00E+0

8.2 Radiation Monitor Data Sheets

TROJAN NUCLEAR PLANT
EMERGENCY PREPAREDNESS DRILL

RADIATION MONITOR DATA SHEET

REAL TIME	3:15
ELAPSED TIME	0:00

Process Monitors

Monitor #	Units	Value
PRM-1A	cpm	1.84E+03
PRM-1B	cpm	7.92E+03
PRM-1C	cpm	5.71E+03
PRM-1D	cpm	2.13E+01
PRM-1E	mR/hr	3.59E-07
PRM-2A	cpm	1.31E+02
PRM-2B	cpm	5.84E+01
PRM-2C	cpm	3.98E+01
PRM-2D	cpm	2.93E+01
PRM-3	cpm	3.83E+01
PRM-4A	cpm	2.58E+01
PRM-4B	cpm	3.00E+04
PRM-5	cpm	3.00E+03
PRM-6A	cpm	2.29E+03
PRM-6B	cpm	4.10E+01
PRM-6C	mR/hr	1.98E-0
PRM-7	cpm	7.43E+02
PRM-8	cpm	3.99E+02
PRM-9	cpm	8.00E+02
PRM-10	cpm	1.31E+03
PRM-13	cpm	2.99E+04
PRM-14	cpm	4.00E+01
PRM-15	cpm	2.36E+02
PRM-16A	mR/hr	1.12E+00
PRM-16B	mR/hr	1.12E+00
PRM-16C	mR/hr	1.12E+00
PRM-16D	mR/hr	1.20E-01
PRM-25A	cpm	0.00E+00
PRM-25B	cpm	0.00E+00
PRM-25C	cpm	0.00E+00

Area Monitors

Monitor #	Units	Value
ARM-1	mR/hr	9.95E-02
ARM-2	mR/hr	7.25E-02
ARM-3	mR/hr	7.90E-02
ARM-4	mR/hr	9.19E-02
ARM-5	mR/hr	1.03E-01
ARM-6	mR/hr	4.18E+00
ARM-7	mR/hr	9.64E-02
ARM-8	mR/hr	9.30E-02
ARM-9	mR/hr	1.12E-01
ARM-10	mR/hr	1.06E-01
ARM-11	mR/hr	8.00E-02
ARM-12	mR/hr	1.71E-01
ARM-13	mR/hr	1.77E-01
ARM-14	mR/hr	1.65E-01
ARM-15A	R/hr	1.00E+00
ARM-15B	R/hr	1.00E+00
ARM-16	mR/hr	1.01E+01
ARM-17	mR/hr	9.18E+00
ARM-18	mR/hr	1.26E+01
ARM-19	mR/hr	1.04E+00
ARM-20	mR/hr	1.32E+02
ARM-21	mR/hr	3.51E+02
ARM-22	mR/hr	7.01E-02
ARM-23	mR/hr	7.11E-02
ARM-24	mR/hr	0.00E+00
ARM-25	mR/hr	6.31E-02

Effluent Parameters

Aux Bldg Vent	_____ (# Fans)
Containment Purge & H-Vent	_____ (FR-3180)(cfm)
SJAE	_____ (FR-3100)(cfm)

* Alert Alarm (a) Local Indicators in TSC

** High Alarm Bkg = Background

8.3 Pass Sample Results and Radiological Information

PASS RADIOLOGICAL INFORMATION

		Drill Time	
		Before 7:15 (mR/hr)	After 7:15 (mR/hr)
A.	RCS PASS		
	Pass ARM Readings (RE5624 A & B)	10	200
	Window closed, dose rate, 3 feet from sample skid, 150 ml RCS sample-diluted 1000:1	< 1	< 1
	Window closed dose rate, 6 inches from 150 ml RCS sample-diluted 1000:1	< 1	1
	Window open dose rate, 6 inches from 150 ml RCS sample-diluted 1000:1	1	8
	Window closed, dose rate, 2 feet from 0.6 cc off-gas sample	< 1	< 1
B.	Containment Pass		
	Window closed, dose rate, from noble gas sample		
	Contact	< 1	< 1
	1 foot	< 1	< 1
	Window closed, dose rate, from iodine sample		
	Contact	< 1	< 1
	1 foot	< 1	< 1
	Window closed, dose rate, from particulate sample		
	Contact	< 1	< 1
	1 foot	< 1	< 1

REACTOR COOLANT SAMPLE SUMMARY

ACTIVITY CONCENTRATION (uCi/g) AT INDICATED TIME

Isotope	Sample 1 3:15-7:15	Sample 2 7:15-10:30	Sample 3 After 10:30
Kr-85	1.5 E-01	2.6 E+01	8.9 E+00
Kr-87	6.0 E-02	7.9 E+00	2.7 E+00
Kr-88	2.0 E-01	2.9 E+01	1.0 E+01
Xe-131m	1.1 E-01	1.1 E+00	3.9 E-01
Xe-133m	2.2 E-01	3.7 E+00	1.3 E+00
Xe-133	1.8 E+01	2.3 E+02	7.8 E+01
Xe-135m	1.3 E-02	2.6 E+00	8.8 E-01
Xe-135	3.5 E-01	1.6 E+01	5.4 E+00
Xe-138	4.4 E-02	8.7 E+00	3.0 E+00
I-131	2.7 E-01	1.1 E+02	3.8 E+01
I-132	1.0 E-01	1.9 E+01	6.4 E+00
I-133	3.8 E-01	8.2 E+01	2.8 E+01
I-134	4.7 E-02	2.0 E+01	6.8 E+00
I-135	1.9 E-01	4.3 E+01	1.5 E+01
Te-132	2.7 E-02	4.6 E+00	1.6 E+00
Cs-134	2.5 E-02	4.3 E+00	1.5 E+00
Cs-137	1.8 E-02	3.1 E+00	1.1 E+00
Ba-140	2.2 E-04	3.7 E-02	1.3 E-02

AUXILIARY BUILDING SUMP SAMPLE SUMMARY

ACTIVITY CONCENTRATION (uCi/cc) AT INDICATED TIME

Isotope	Sample 1 3:15-7:15	Sample 2 7:15-10:30	Sample 3 After 10:30
I-131	2.7 E-01	1.1 E+02	3.8 E+01
I-132	1.0 E-01	1.9 E+01	6.4 E+00
I-133	3.8 E-01	8.2 E+01	2.8 E+01
I-134	4.7 E-02	2.0 E+01	6.8 E+00
I-135	1.9 E-01	4.3 E+01	1.5 E+01
Te-132	2.7 E-02	4.6 E+00	1.6 E+00
Cs-134	2.5 E-02	4.3 E+00	1.5 E+00
Cs-137	1.8 E-02	3.1 E+00	1.1 E+00
Ba-140	2.2 E-04	3.7 E-02	1.3 E-02

AUXILIARY BUILDING AIR SAMPLE SUMMARY

ACTIVITY CONCENTRATION (uCi/cc) AT INDICATED TIME

Isotope	Sample 1 5:15-7:15	Sample 2 7:15-10:30	Sample 3 After 10:30
Kr-85	3.2 E-04	3.3 E-02	3.0 E-05
Kr-87	1.2 E-04	9.5 E-03	8.6 E-06
Kr-88	4.1 E-04	3.6 E-02	3.3 E-05
Xe-131m	2.3 E-04	1.5 E-03	1.3 E-06
Xe-133m	4.7 E-04	4.8 E-03	4.3 E-06
Xe-133	3.8 E-02	2.9 E-01	2.7 E-04
Xe-135m	2.3 E-05	2.6 E-03	2.4 E-06
Xe-135	7.4 E-04	2.0 E-02	1.8 E-05
Xe-138	7.7 E-05	9.2 E-03	8.3 E-06
I-131	1.4 E-04	3.6 E-02	3.3 E-05
I-132	5.1 E-05	5.8 E-03	5.2 E-06
I-133	2.0 E-04	2.6 E-02	2.4 E-05
I-134	2.0 E-05	5.8 E-03	5.3 E-06
I-135	1.0 E-04	1.4 E-02	1.2 E-05
Te-132	9.8 E-06	1.4 E-03	1.2 E-06
Cs-134	1.6 E-06	2.3 E-04	2.1 E-07
Cs-137	8.0 E-07	1.2 E-04	1.0 E-07
Ba-140	1.8 E-06	2.7 E-04	2.5 E-07

8.4 In-Plant Radiological Data

RELEASE RATES AND TOTAL RELEASES

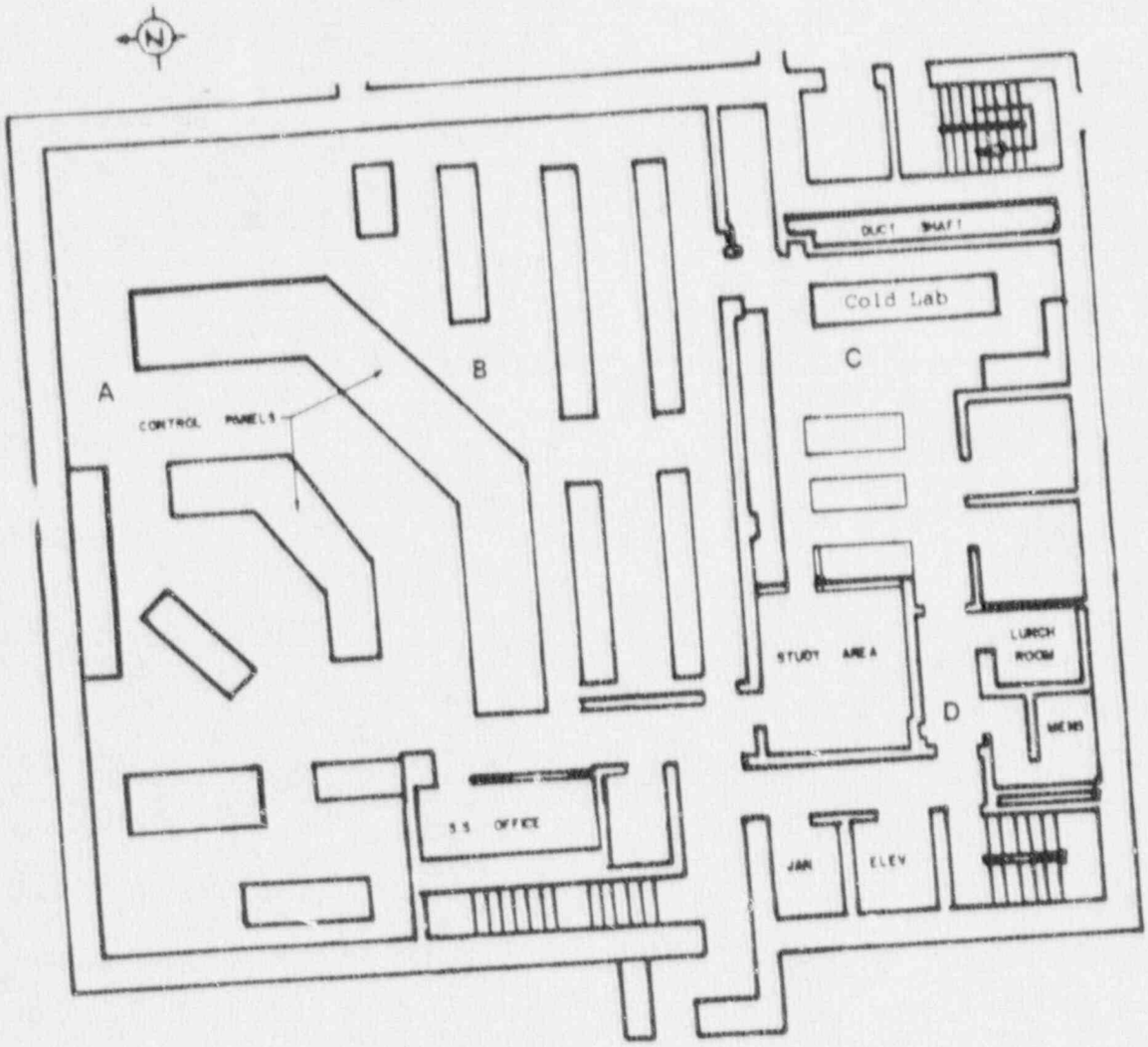
Isotope	RELEASE RATE (Ci/sec) 5:15	5:30	5:45	6:00	6:15	6:30	6:45	7:00
Kr-83	3.4 E-02	4.6 E-02	4.9 E-02	5.1 E-02	5.1 E-02	5.1 E-02	5.1 E-02	5.1 E-02
Kr-83m	1.4 E-01	1.8 E-01	2.0 E-01	2.1 E-01	2.1 E-01	2.1 E-01	2.1 E-01	2.1 E-01
Kr-85	5.2 E-03	6.9 E-03	7.5 E-03	7.7 E-03	7.8 E-03	7.8 E-03	7.8 E-03	7.8 E-03
Kr-87	2.1 E-03	2.7 E-03	2.9 E-03	2.9 E-03	2.9 E-03	2.9 E-03	2.9 E-03	. 9 E-03
Kr-88	6.9 E-03	9.1 E-03	9.8 E-03	1.0 E-02	1.0 E-02	1.0 E-02	1.0 E-02	1.0 E-02
Xe-131m	3.8 E-03	5.1 E-03	5.5 E-03	5.6 E-03	5.7 E-03	5.7 E-03	5.7 E-03	5.7 E-03
Xe-133	6.2 E-01	8.3 E-01	9.0 E-01	9.2 E-01	9.3 E-01	9.3 E-01	9.3 E-01	9.3 E-01
Xe-133m	7.6 E-03	1.0 E-02	1.1 E-02	1.1 E-02	1.1 E-02	1.1 E-02	1.1 E-02	1.1 E-02
Xe-135	1.2 E-02	1.6 E-02	1.7 E-02	1.8 E-02	1.8 E-02	1.8 E-02	1.8 E-02	1.8 E-02
Xe-135m	4.5 E-04	5.3 E-04	5.4 E-04	5.4 E-04	5.4 E-04	5.4 E-04	5.4 E-04	5.4 E-04
Xe-138	1.5 E-03	1.8 E-03	1.8 E-03	1.9 E-03	1.9 E-03	1.9 E-03	1.9 E-03	1.9 E-03
I-131	1.2 E-04	1.6 E-04	1.7 E-04	1.7 E-04	1.7 E-04	1.7 E-04	1.8 E-04	1.8 E-04
I-132	4.3 E-05	5.7 E-05	6.1 E-05	6.2 E-05	6.2 E-05	6.3 E-05	6.3 E-05	6.3 E-05
I-133	1.6 E-04	2.2 E-04	2.4 E-04	2.4 E-04	2.4 E-04	2.5 E-04	2.5 E-04	2.5 E-04
I-134	2.0 E-05	2.6 E-05	2.7 E-05	2.8 E-05	2.8 E-05	2.8 E-05	2.8 E-05	2.8 E-05
I-135	8.2 E-05	1.1 E-04	1.2 E-04	1.2 E-04	1.2 E-04	1.2 E-04	1.2 E-04	1.2 E-04

Isotope	RELEASE RATE (Ci/sec) 7:15	7:30	7:45	8:00	8:15	8:30	8:45	9:00
Kr-83	3.6 E+00	4.7 E+00	5.1 E+00	5.2 E+00	5.3 E+00	5.3 E+00	5.3 E+00	5.3 E+00
Kr-83m	1.4 E+01	1.9 E+01	2.1 E+01	2.1 E+01	2.1 E+01	2.1 E+01	2.1 E+01	2.1 E+01
Kr-85	5.4 E-01	7.2 E-01	7.7 E-01	7.9 E-01	8.0 E-01	8.0 E-01	8.0 E-01	8.0 E-01
Kr-87	1.6 E-01	2.1 E-01	2.2 E-01	2.3 E-01	2.3 E-01	2.3 E-01	2.3 E-01	2.3 E-01
Kr-88	6.0 E-01	7.9 E-01	8.5 E-01	8.7 E-01	8.7 E-01	8.7 E-01	8.7 E-01	8.7 E-01
Xe-131m	7.8 E-03	2.6 E-02	3.2 E-02	3.4 E-02	3.5 E-02	3.5 E-02	3.5 E-02	3.5 E-02
Xe-133	1.5 E+00	5.2 E+00	6.4 E+00	6.9 E+00	7.0 E+00	7.0 E+00	7.1 E+00	7.1 E+00
Xe-133m	2.3 E-02	8.4 E-02	1.0 E-01	1.1 E-01	1.1 E-01	1.1 E-01	1.1 E-01	1.1 E-01
Xe-135	8.8 E-02	3.6 E-01	4.4 E-01	4.7 E-01	4.8 E-01	4.8 E-01	4.8 E-01	4.8 E-01
Xe-135m	1.3 E-02	5.5 E-02	6.2 E-02	6.4 E-02	6.4 E-02	6.4 E-02	6.4 E-02	6.4 E-02
Xe-138	4.6 E-02	1.9 E-01	2.2 E-01	2.2 E-01	2.2 E-01	2.2 E-01	2.2 E-01	2.2 E-01
I-131	2.9 E-02	3.9 E-02	4.2 E-02	4.3 E-02	4.3 E-02	4.3 E-02	4.3 E-02	4.3 E-02
I-132	4.8 E-03	6.3 E-03	6.8 E-03	6.9 E-03	6.9 E-03	7.0 E-03	7.0 E-03	7.0 E-03
I-133	2.1 E-02	2.8 E-02	3.1 E-02	3.2 E-02	3.2 E-02	3.2 E-02	3.2 E-02	3.2 E-02
I-134	5.1 E-03	6.5 E-03	6.9 E-03	7.0 E-03	7.0 E-03	7.0 E-03	7.0 E-03	7.0 E-03
I-135	1.1 E-02	1.5 E-02	1.6 E-02	1.6 E-02	1.6 E-02	1.6 E-02	1.6 E-02	1.6 E-02

RELEASE RATES AND TOTAL RELEASES

Isotope	RELEASE RATE (Ci/sec) 9:15	9:30	9:45	10:00	10:15	10:30	Total Release(Ci)
Kr-83	1.8 E + 00	5.9 E-01	2.0 E-01	6.5 E-02	2.2 E-02	7.2 E-03	4.28E + 01
Kr-83m	7.1 E + 00	2.4 E + 00	7.9 E-01	2.6 E-01	8.8 E-02	2.9 E-02	1.73E + 02
Kr-85	2.7 E-01	8.9 E-02	3.0 E-02	9.9 E-03	3.3 E-03	1.1 E-03	6.49E + 00
Kr-87	6.7 E-02	1.9 E-02	5.6 E-03	1.6 E-03	4.7 E-04	1.4 E-04	1.87E + 00
Kr-88	2.7 E-01	8.6 E-02	2.7 E-02	8.4 E-03	2.6 E-03	8.2 E-04	7.08E + 00
Xe-131m	1.2 E-02	3.9 E-03	1.3 E-03	4.3 E-04	1.4 E-04	4.8 E-05	3.03E-01
Xe-133	2.3 E + 00	7.8 E-01	2.6 E-01	8.6 E-02	2.9 E-02	9.5 E-03	5.87E + 01
Xe-133m	3.8 E-02	1.3 E-02	4.2 E-03	1.4 E-03	4.6 E-04	1.5 E-04	9.23E-01
Xe-135	1.5 E-01	5.2 E-02	1.7 E-02	5.5 E-03	1.8 E-03	5.9 E-04	3.66E + 00
Xe-135m	1.1 E-02	1.9 E-03	3.2 E-04	5.4 E-05	9.3 E-06	1.6 E-06	4.67E-01
Xe-138	4.0 E-02	7.2 E-03	1.3 E-03	2.3 E-04	4.2 E-05	7.6 E-06	1.62E + 00
I-131	1.4 E-02	4.8 E-03	1.6 E-03	5.3 E-04	1.8 E-04	5.9 E-05	3.48E-01
I-132	2.1 E-03	6.6 E-04	2.0 E-04	5.3 E-05	2.0 E-05	6.0 E-06	5.62E-02
I-133	1.1 E-02	3.5 E-03	1.1 E-03	3.8 E-04	1.3 E-04	4.1 E-05	2.58E-01
I-134	1.9 E-03	5.2 E-04	1.4 E-04	3.9 E-05	1.1 E-05	2.9 E-06	5.65E-02
I-135	5.3 E-03	1.7 E-03	5.6 E-04	1.8 E-04	5.9 E-05	1.9 E-05	1.32E-01

CONTROL BUILDING
ELEVATION 93'



1. DOSE RATE INFORMATION

TIME	mR/hr UNLESS NOTED						GENERAL NOTES
HRS	A	B	C	D	E	F	
315	As Read	As Read	As Read	As Read	As Read	As Read	
515	0.1	0.1	0.1	0.1			
615	0.2	0.2	0.2	0.2			
700	30	32	38	38			
800	30	32	38	38			
900	30	32	38	38			
1000	30	32	38	38			

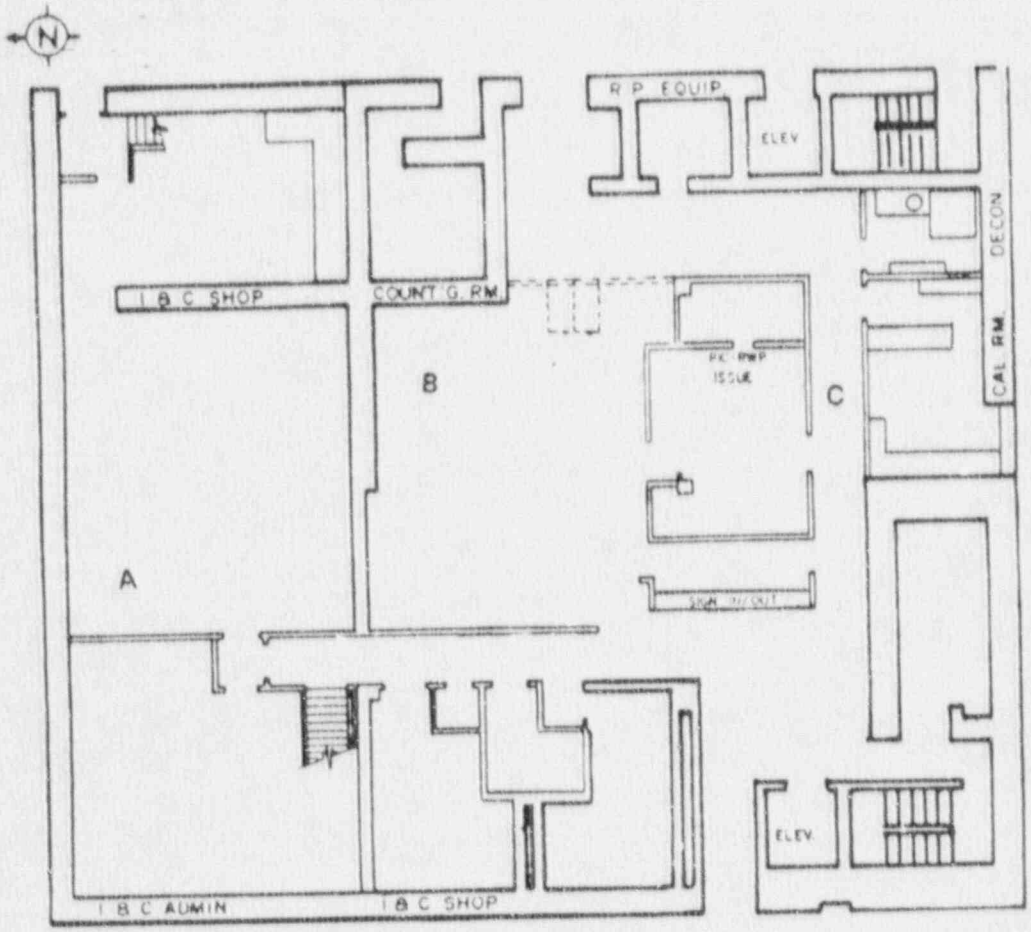
2. AIRBORNE CONCENTRATIONS AND CONTAMINATION LEVELS

TIME	GAS	IODINE	PARTIC.	CONTAMINATION	GENERAL NOTES
HRS	uCi/cc	uCi/cc	uCi/cc	LEVELS IN CPM	
315	As Read	As Read	As Read	As Read	
515	As Read	As Read	As Read	As Read	
615	As Read	As Read	As Read	As Read	
700	As Read	As Read	As Read	As Read	
800	As Read	As Read	As Read	As Read	
900	As Read	As Read	As Read	As Read	
1000	As Read	As Read	As Read	As Read	

REV. 10/26/90

3555

CONTROL BUILDING
ELEVATION 45'



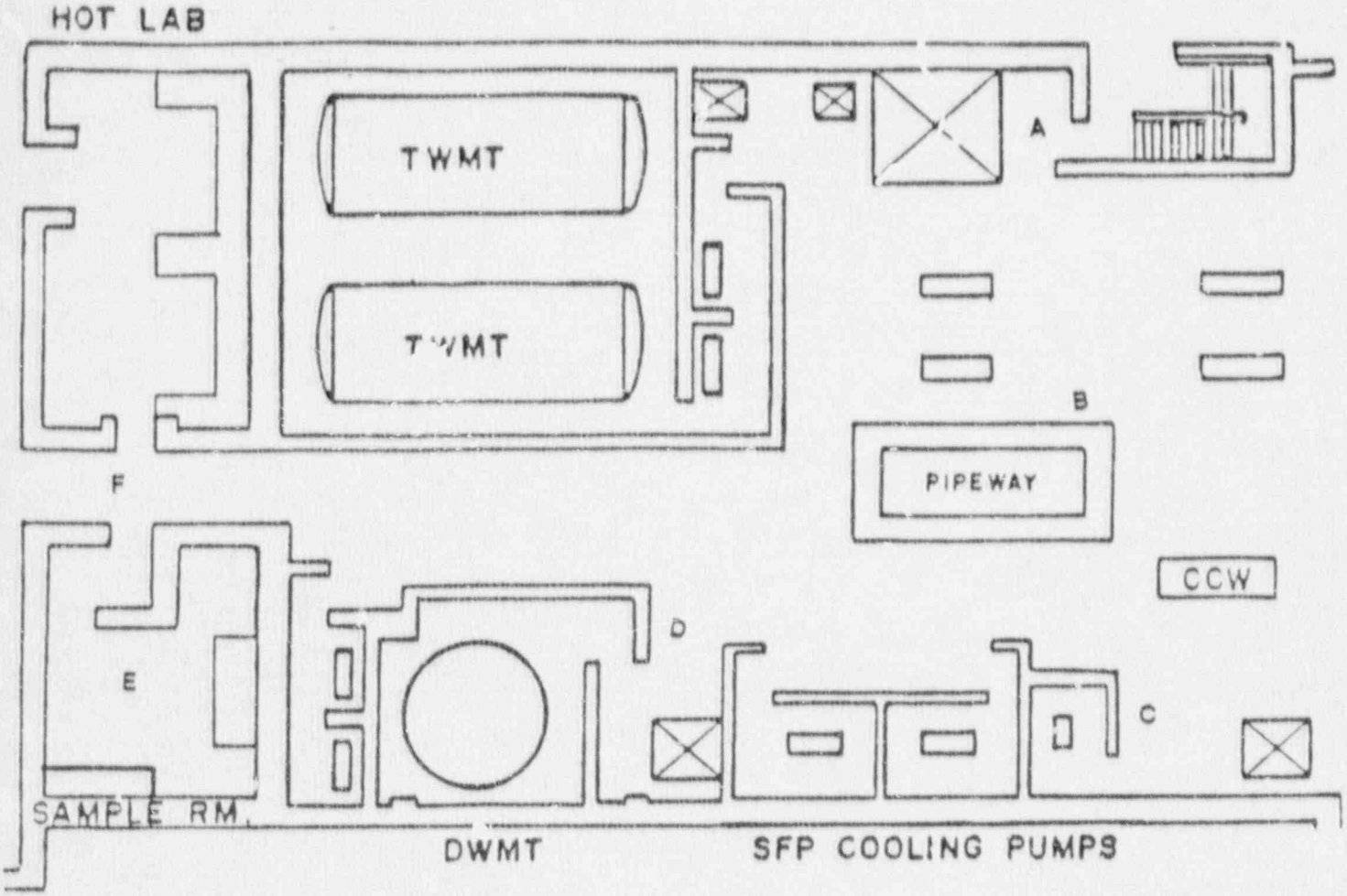
1. DOSE RATE INFORMATION

TIME	mR/hr UNLESS NOTED						GENERAL
HRS	A	B	C	D	E	F	NOTES
315	As Read	As Read	As Read				
515	0.2	0.2	0.2				
615	0.3	0.3	4.0				
700	50.0	50.0	50.0				
800	50.0	50.0	50.0				
900	50.0	50.0	50.0				
1000	50.0	50.0	50.0				

2. AIRBORNE CONCENTRATIONS AND CONTAMINATION LEVELS

TIME	G[illegible]DINE	PARTIC.	CONTAMINATION	GENERAL
HRS	uC[illegible]	uCi/cc	LEVELS IN CPM	NOTES
315	As[illegible]ad	As Read	As Read	
515	As[illegible]ead	As Read	As Read	
615	A[illegible]ead	As Read	As Read	
700	1.[illegible]E-08	4.2E-09	As Read	
800	1.10[illegible]-08	4.2E-09	280	
900	1.10E-04	4.2E-08	4.2E-09	320
1000	1.10E-04	4.2E-08	4.2E-09	300

AUXILIARY BUILDING - EAST
ELEVATION 45'



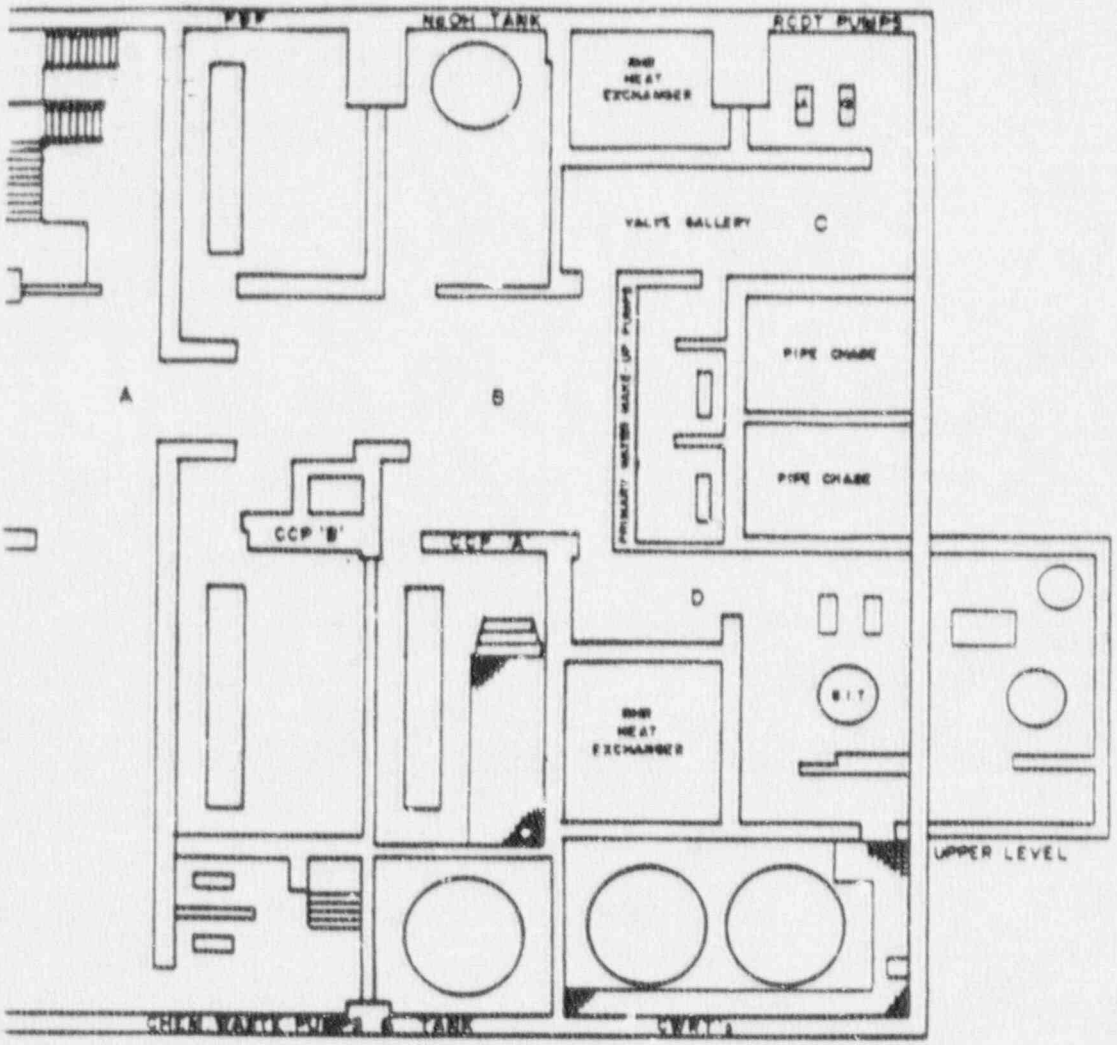
1. DOSE RATE INFORMATION

TIME	mR/hr UNLESS NOTED						GENERAL
HRS	A	B	C	D	E	F	NOTES
315	As Read	As Read	As Read	As Read	As Read	As Read	
515	150	155	190	175	1	1.5	
615	278	310	375	375	1	2.5	
700	5.20E+04	5.80E+04	6.95E+04	6.85E+04	3.70E+03	7.00E+02	Area "E" increases to this value
800	1.40E+05	1.54E+05	1.85E+05	1.80E+05	3.70E+03	7.00E+02	after 0700 if PASS is on recirc.
900	1.30E+05	1.53E+05	1.80E+05	1.85E+04	3.70E+03	7.00E+02	
1000	1.30E+05	1.53E+05	1.80E+05	1.85E+04	3.70E+03	7.00E+02	

2. AIRBORNE CONCENTRATIONS AND CONTAMINATION LEVELS

TIME	GAS	IODINE	PARTIC.	CONTAMINATION	GENERAL
HRS	uCi/cc	uCi/cc	uCi/cc	LEVELS IN CPM	NOTES
315	As Read	As Read	As Read	As Read	
515	2.2 E-2	2.8 E-6	2.8 E-5	12700	
615	3.3 E-2	4.1 E-6	4.1 E-5	18600	
700	1.0 E-1	4.7 E-2	4.7 E-3	Offscale	
800	3.1 E-1	6.8 E-2	6.8 E-3	Offscale	
900	1.1 E-1	2.3 E-2	2.3 E-3	Offscale	
1000	1.2 E-2	2.4 E-3	2.4 E-4	Offscale	

AUXILIARY BUILDING
ELEVATION 25'



1. DOSE RATE INFORMATION

TIME	mR/hr UNLESS NOTED						GENERAL
HRS	A	B	C	D	E	F	NOTES
315	AS Read	AS Read	AS Read	AS Read			
515	278	310	380	350			
615	520	598	715	718			
700	1.04E+05	1.16E+05	1.39E+05	1.37E+05			
800	2.75E+05	3.08E+05	3.70E+05	3.60E+05			
900	2.75E+05	3.08E+05	3.70E+05	3.60E+05			
1000	2.74E+05	3.06E+05	3.70E+05	3.70E+05			

2. AIRBORNE CONCENTRATIONS AND CONTAMINATION LEVELS

TIME	GAS	IODINE	PARTIC.	CONTAMINATION	GENERAL
HRS	uCi/cc	uCi/cc	uCi/cc	LEVELS IN CPM	NOTES
315	AS Read	AS Read	AS Read	AS Read	
515	2.8 E-03	3.5 E-06	3.5 E-05	15750	
615	2.8 E-03	3.5 E-06	3.5 E-05	15750	
700	1.3 E-01	5.9 E-02	5.9 E-03	Offscale	
800	3.9 E-01	8.5 E-02	8.5 E-03	Offscale	
900	1.4 E-01	2.8 E-02	2.8 E-03	Offscale	
1000	1.5 E-02	3.0 E-03	3.0 E-04	Offscale	

AUXILIARY BUILDING
ELEVATION 5'

1. DOSE RATE INFORMATION

TIME	mR/hr UNLESS NOTED						GENERAL
HRS	A	B	C	D	E	F	NOTES
315	As Read	As Read	As Read	As Read	As Read		
515	760	850	950	1000	100		
615	1120	1250	1400	1500	150		
700	2.98E+05	3.33E+06	3.73E+06	3.84E+06	1.04E+04		
800	1.01E+06	1.13E+06	1.27E+06	1.32E+06	2.75E+03		
900	9.80E+05	1.02E+06	1.14E+06	1.15E+06	1.80E+03		
1000	9.80E+05	1.02E+06	1.14E+06	1.15E+06	1.80E+03		

2. AIRBORNE CONCENTRATIONS AND CONTAMINATION LEVELS

TIME	GAS	IODINE	PARTIC.	CONTAMINATION	GENERAL
HRS	uCi/cc	uCi/cc	uCi/cc	LEVELS IN CPM	NOTES
315	As Read	As Read	As Read	Not Attainable	
515	5.5E-03	7.0E-06	7.0E-05	Not Attainable	
615	5.5E-03	7.0E-06	7.0E-05	Not Attainable	
700	7.8E-01	1.2E-01	1.2E-02	Not Attainable	
800	7.8E-01	1.7E-01	1.7E-02	Not Attainable	
900	2.7E-01	5.6E-02	5.6E-03	Not Attainable	
1000	2.9E-02	6.3E-02	6.3E-03	Not Attainable	

ALL OTHER AREAS OF FUEL-AUXILIARY BUILDING

1. DOSE RATE INFORMATION

TIME	mR/hr UNLESS NOTED						GENERAL
HRS	A	B	C	D	E	F	NOTES
315	As Read						
515	95						
615	118						
700	2.60E + 04						
800	2.60E + 04						
900	2.60E + 04						
1000	2.60E + 04						

2. AIRBORNE CONCENTRATIONS AND CONTAMINATION LEVELS

TIME	GAS	IODINE	PARTIC.	CONTAMINATION	GENERAL
HRS	uCi/cc	uCi/cc	uCi/cc	LEVELS IN CPM	NOTES
315	As Read	As Read	As Read	As Read	
515	1.4E-03	1.8E-06	1.8E-05	7900	
615	2.1E-03	2.6E-06	2.6E-05	11600	
700	2.1E-01	4.4E-02	4.4E-03	Offscale	
800	2.1E-01	1.6E-02	1.6E-03	Offscale	
900	7.5E-02	1.6E-02	1.6E-03	Offscale	
1000	7.40E-03	1.6E-03	1.6E-04	Offscale	

8.5 On-Site Radiological Data

ON-SITE MONITORING MAP INFORMATION

1. Dose Rates indicated in mR/hr.

2. Iodine cartridge count rate assumes a sample volume of 2 cubic feet and a detector efficiency of 0.022 cpm/dpm

3. Abbreviations:

   a. BKG = Background
   b. CPM = Counts per Minute
   c. LOC = Location
   d. IC = Iodine Cartridge
   e. C/L = Centerline
   f. EOP = Edge of Plume
   g. LMD = Less than Minimum Detectable

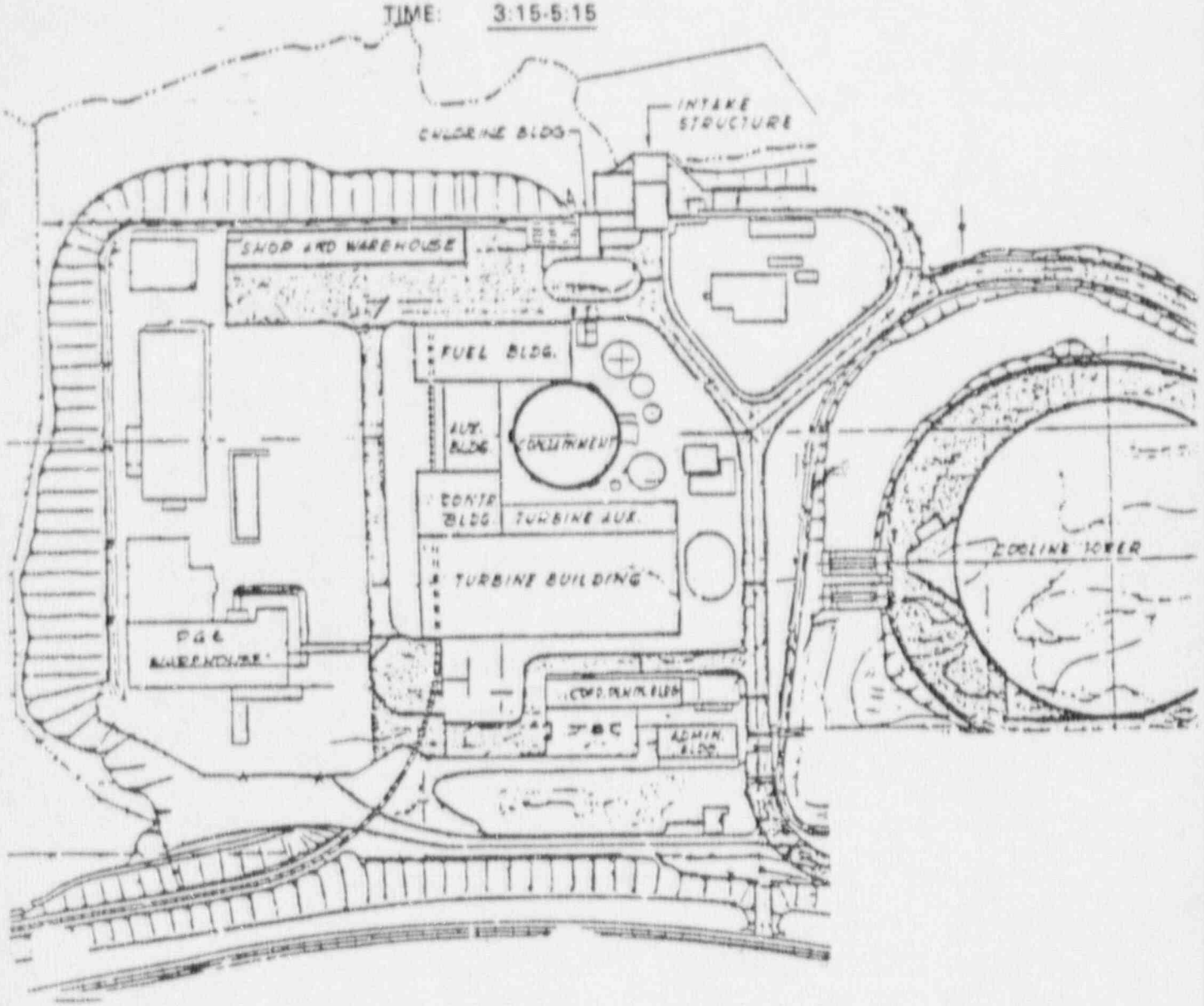
4. Edge of plume values are 10 percent of centerline values.

5. Smear measurements with a RM-14/E140N 100 CM^2

NOTE:
RADIOLOGICAL MEASUREMENTS NOT INCORPORATED
IN THIS SECTION SHOULD BE GIVEN AS READ

ON-SITE INSTRUMENT READINGS

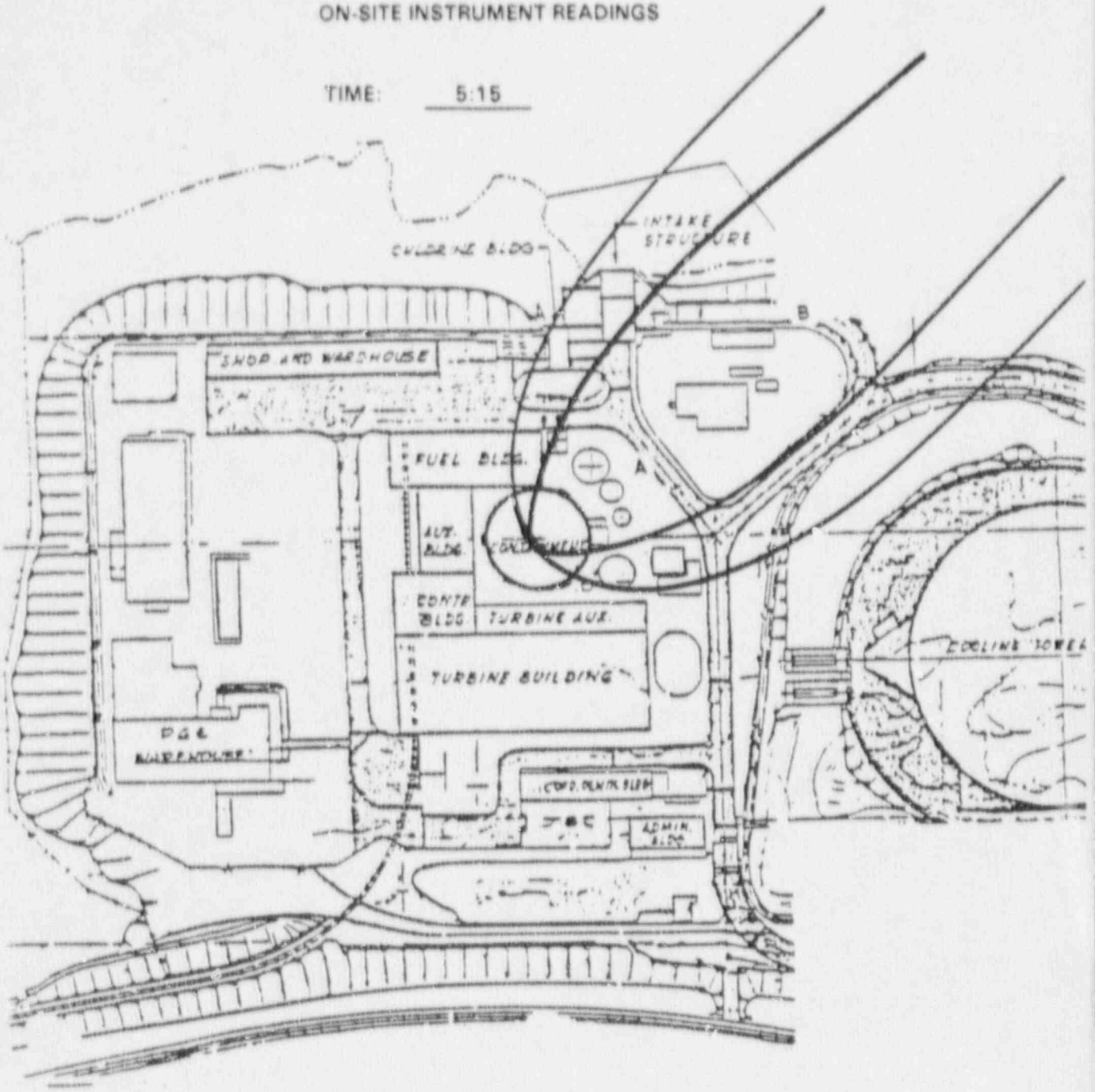
TIME: 3:15-5:15



Plume Location	Centerline Dose Rate		Edge of Plume Dose Rate		Air Samples Counts per Minute		Iodine Calc.	Smears
	W.O. (mR/hr)	W.C. (mR/hr)	W.O. (mR/hr)	W.C. (mR/hr)	Charcoal Cartridge	Filter Paper	(uCi/cc)	(cpm)
ALL	AR	AR	AR	AR	AR	AR	LMD	AR

ON-SITE INSTRUMENT READINGS

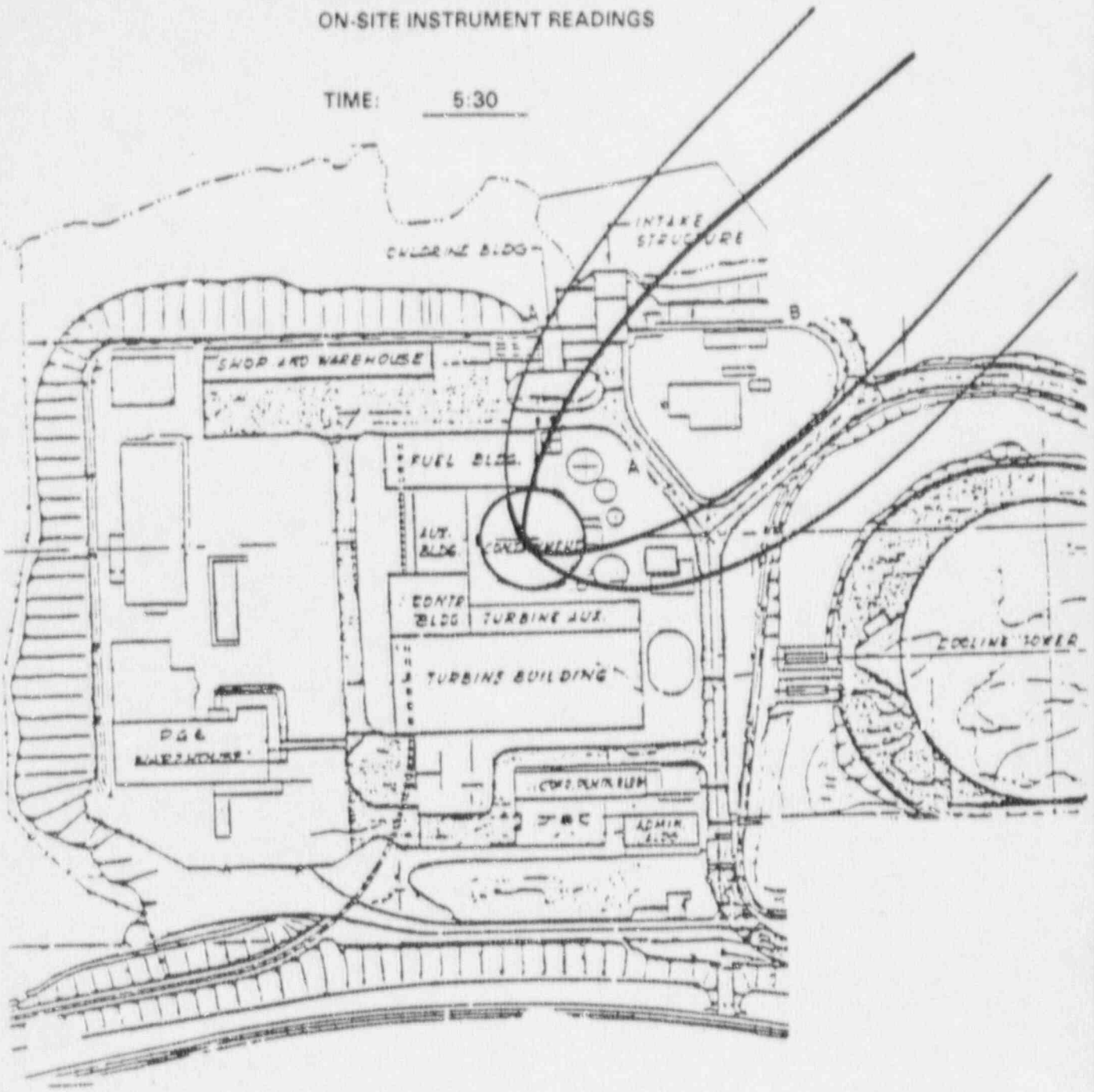
TIME: 5:15



Plume Location	Centerline Dose Rate		Edge of Plume Dose Rate		Air Samples Counts per Minute		Iodine Calc.	Smears
	W.O. (mR/hr)	W.C. (mR/hr)	W.O. (mR/hr)	W.C. (mR/hr)	Charcoal Cartridge	Filter Paper	(uCi/cc)	(cpm)
A	7.0	7.0	0.7	0.7	1625	AR	6.5 E-07	AR
B	3.1	1.4	0.3	0.1	325	AR	1.3 E-07	AR

ON-SITE INSTRUMENT READINGS

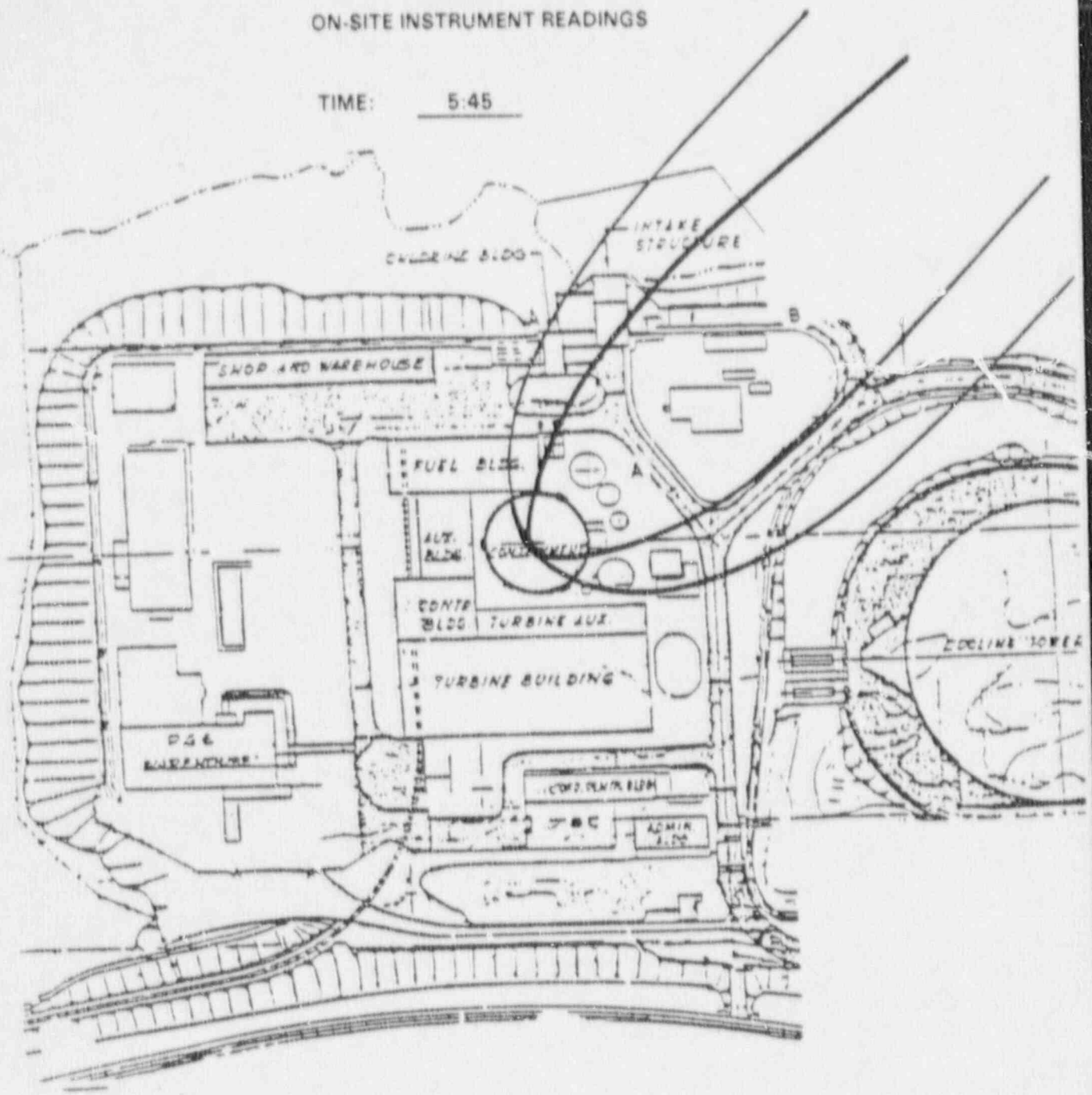
TIME: 5:30



Plume Location	Centerline Dose Rate		Edge of Plume Dose Rate		Air Samples Counts per Minute		Iodine Calc.	Smears
	W.O. (mR/hr)	W.C. (mR/hr)	W.O. (mR/hr)	W.C. (mR/hr)	Charcoal Cartridge	Filter Paper	(uCi/cc)	(cpm)
A	8.5	8.5	0.9	0.9	2000	AR	8.0 E-07	AR
B	3.8	1.7	0.4	0.2	400	AR	1.6 E-07	AR

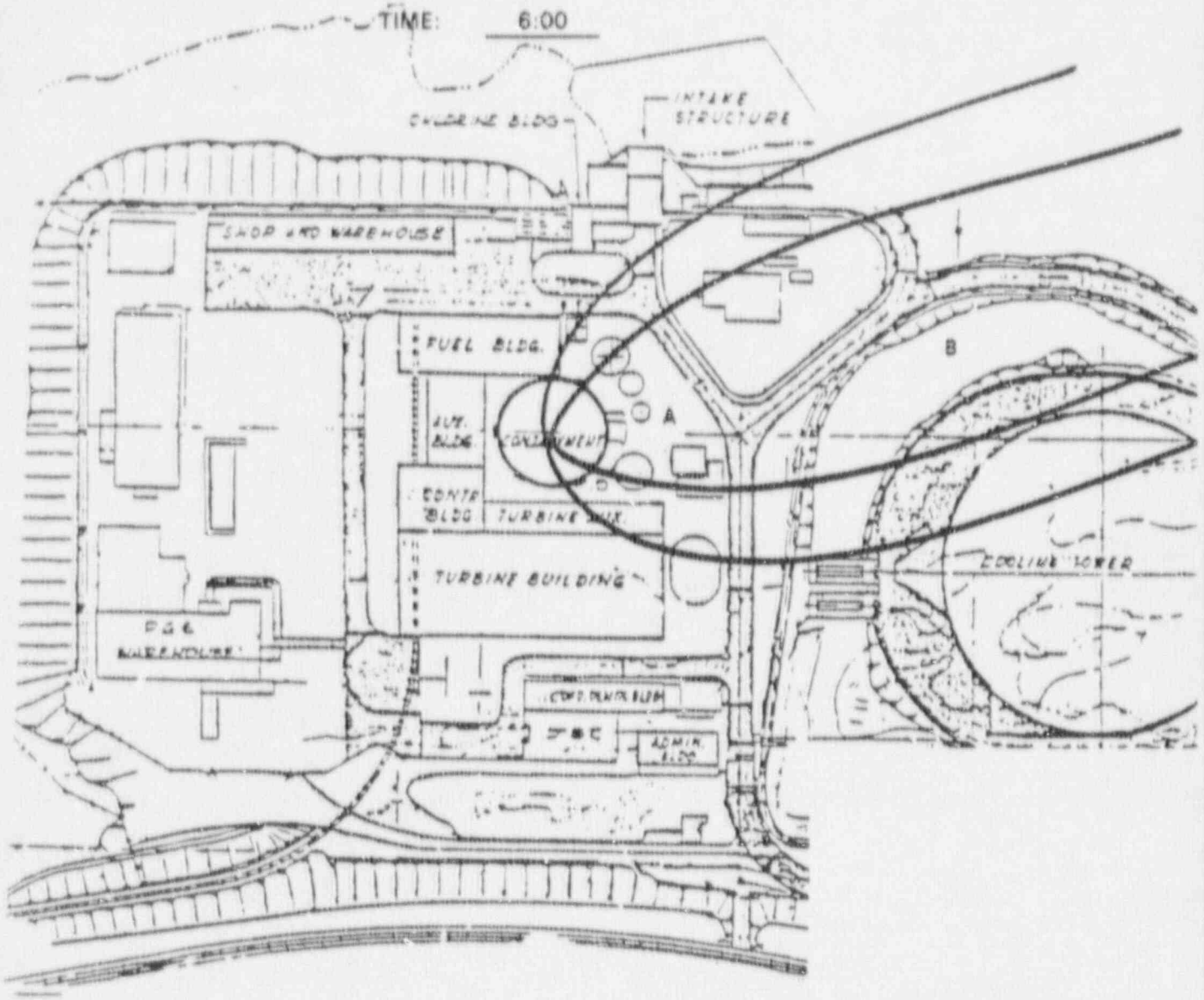
ON-SITE INSTRUMENT READINGS

TIME: 5:45



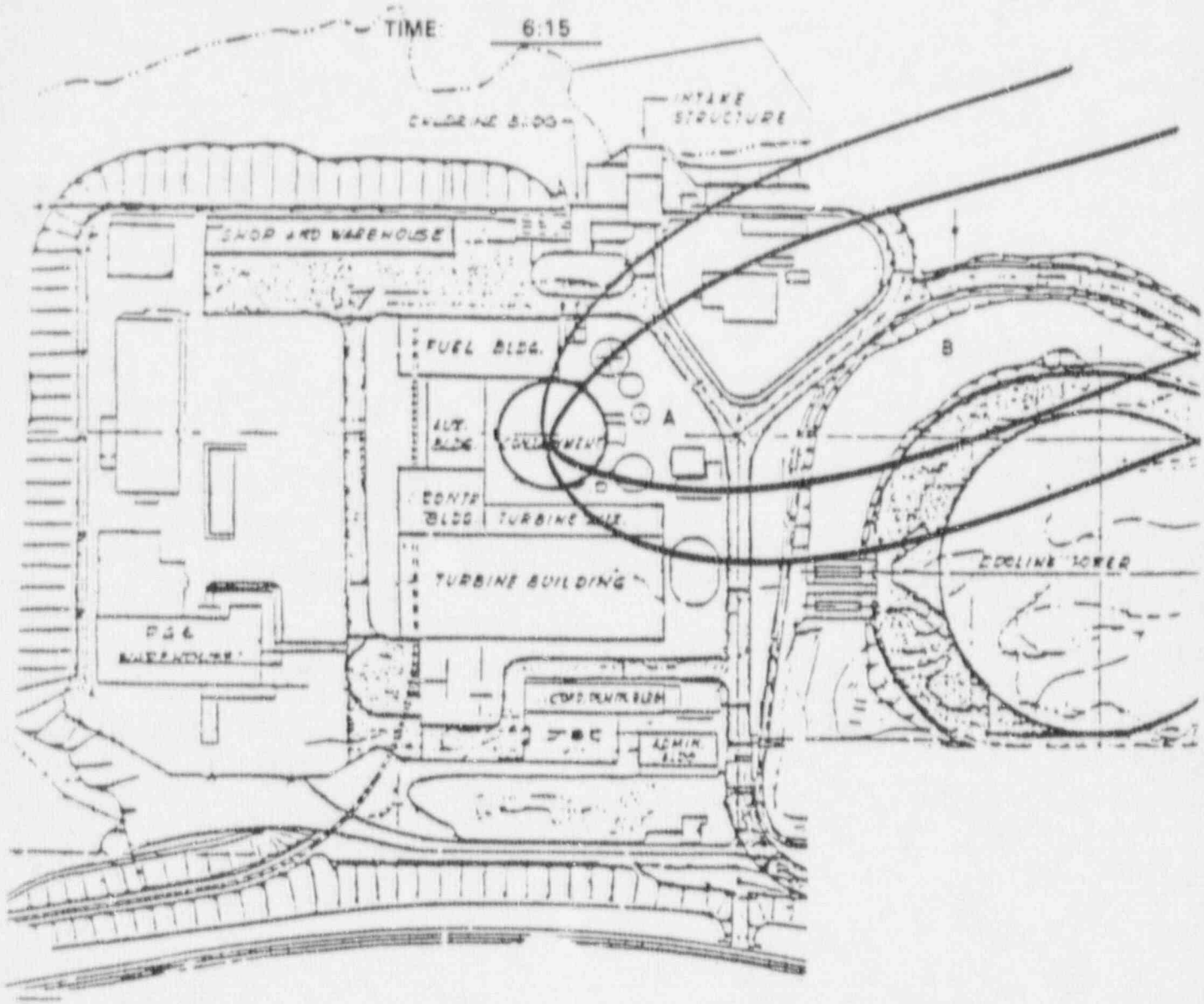
Plume Location	Centerline Dose Rate		Edge of Plume Dose Rate		Air Samples Counts per Minute		Iodine Calc.	Smears
	W.O. (mR/hr)	W.C. (mR/hr)	W.O. (mR/hr)	W.C. (mR/hr)	Charcoal Cartridge	Filter Paper	(uCi/cc)	(cpm)
A	9.0	9.0	0.9	0.9	2125	AR	8.5 E-07	AR
B	4.0	1.8	0.4	0.2	425	AR	1.7 E-07	AR

ON-SITE INSTRUMENT READINGS



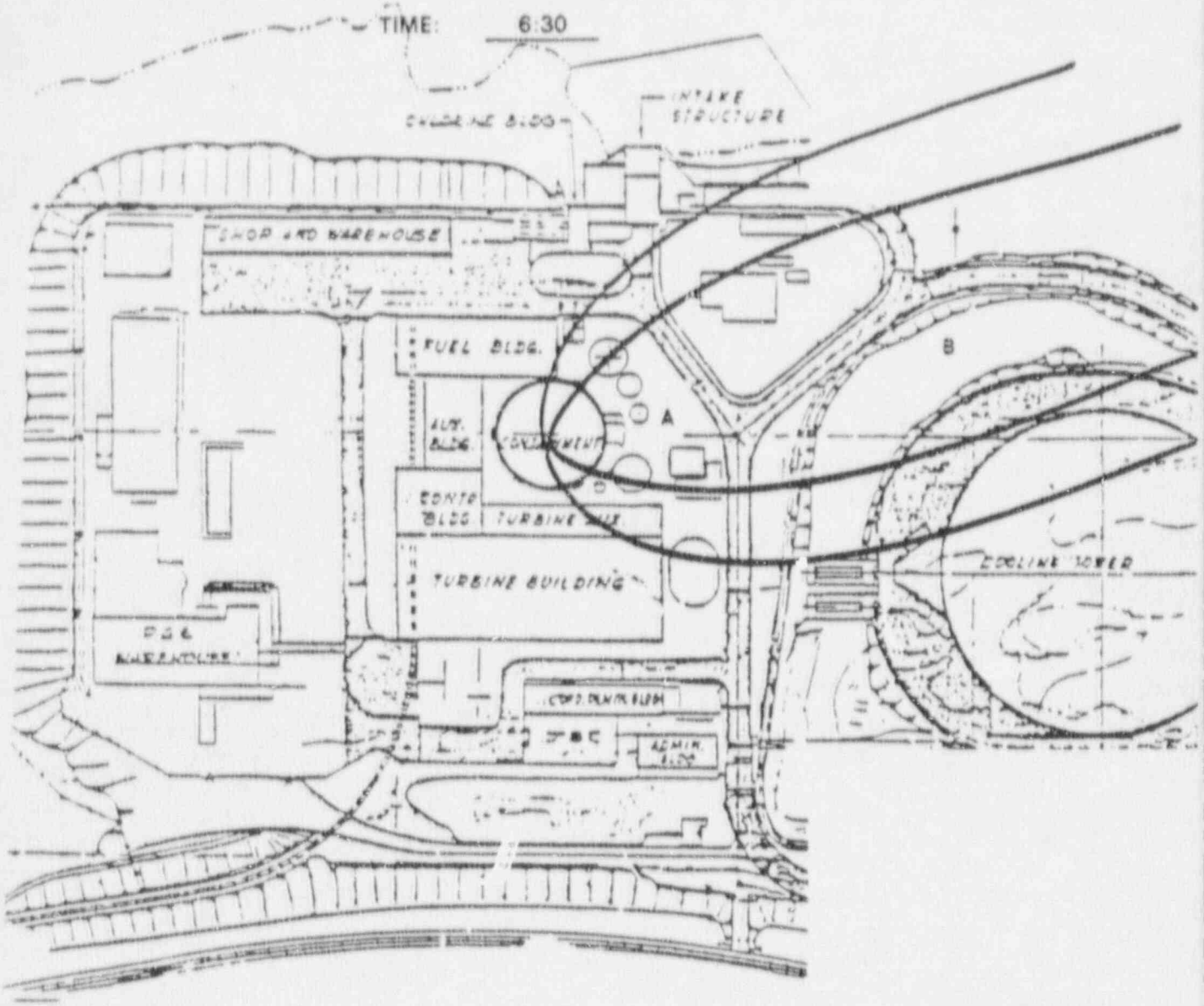
Plume Location	Centerline Dose Rate		Edge of Plume Dose Rate		Air Samples Counts per Minute		Iodine Calc.	Smears
	W.O. (mR/hr)	W.C. (mR/hr)	W.O. (mR/hr)	W.C. (mR/hr)	Charcoal Cartridge	Filter Paper	(uCi/cc)	(cpm)
A	9.5	9.5	1.0	1.0	2250	AR	9.0 E-07	AR
B	4.2	1.9	0.4	0.2	450	AR	1.8 E-07	AR

ON-SITE INSTRUMENT READINGS



Plume Location	Centerline Dose Rate		Edge of Plume Dose Rate		Air Samples Counts per Minute		Iodine Calc.	Smears
	W.O. (mR/hr)	W.C. (mR/hr)	W.O. (mR/hr)	W.C. (mR/hr)	Charcoal Cartridge	Filter Paper	(uCi/cc)	(cpm)
A	9.5	9.5	1.0	1.0	2250	AR	9.0 E-07	AR
B	4.2	1.8	0.4	0.2	450	AR	1.8 E-07	AR

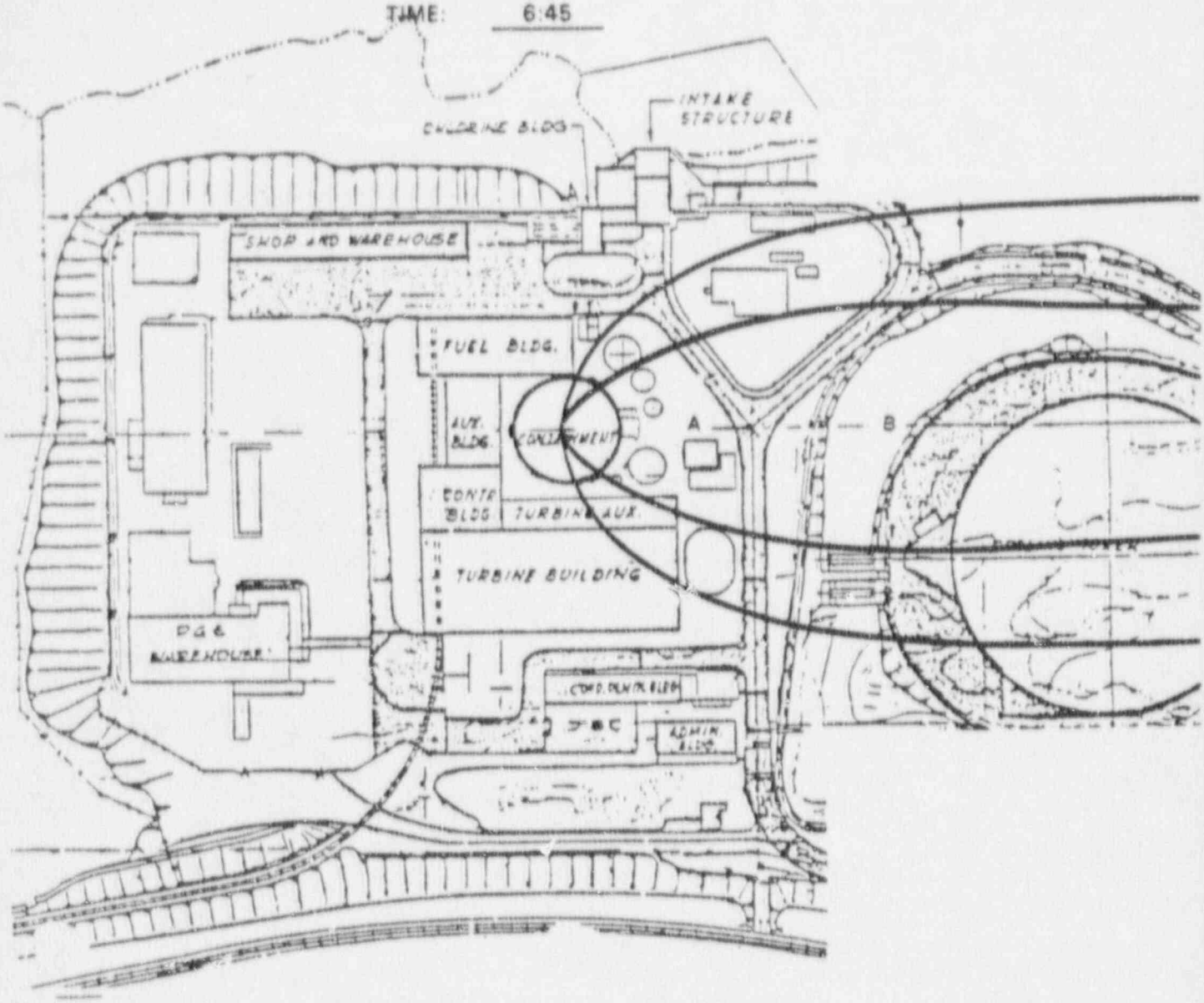
ON-SITE INSTRUMENT READINGS



Plume Location	Centerline Dose Rate W.O. (mR/hr)	Centerline Dose Rate W.C. (mR/hr)	Edge of Plume Dose Rate W.O. (mR/hr)	Edge of Plume Dose Rate W.C. (mR/hr)	Air Samples Counts per Minute Charcoal Cartridge	Air Samples Counts per Minute Filter Paper	Iodine Calc. (uCi/cc)	Smears (cpm)
A	7.5	7.5	0.8	0.8	1750	AR	7.0 E-07	AR
B	3.3	1.5	0.3	0.2	350	AR	1.4 E-07	AR

ON-SITE INSTRUMENT READINGS

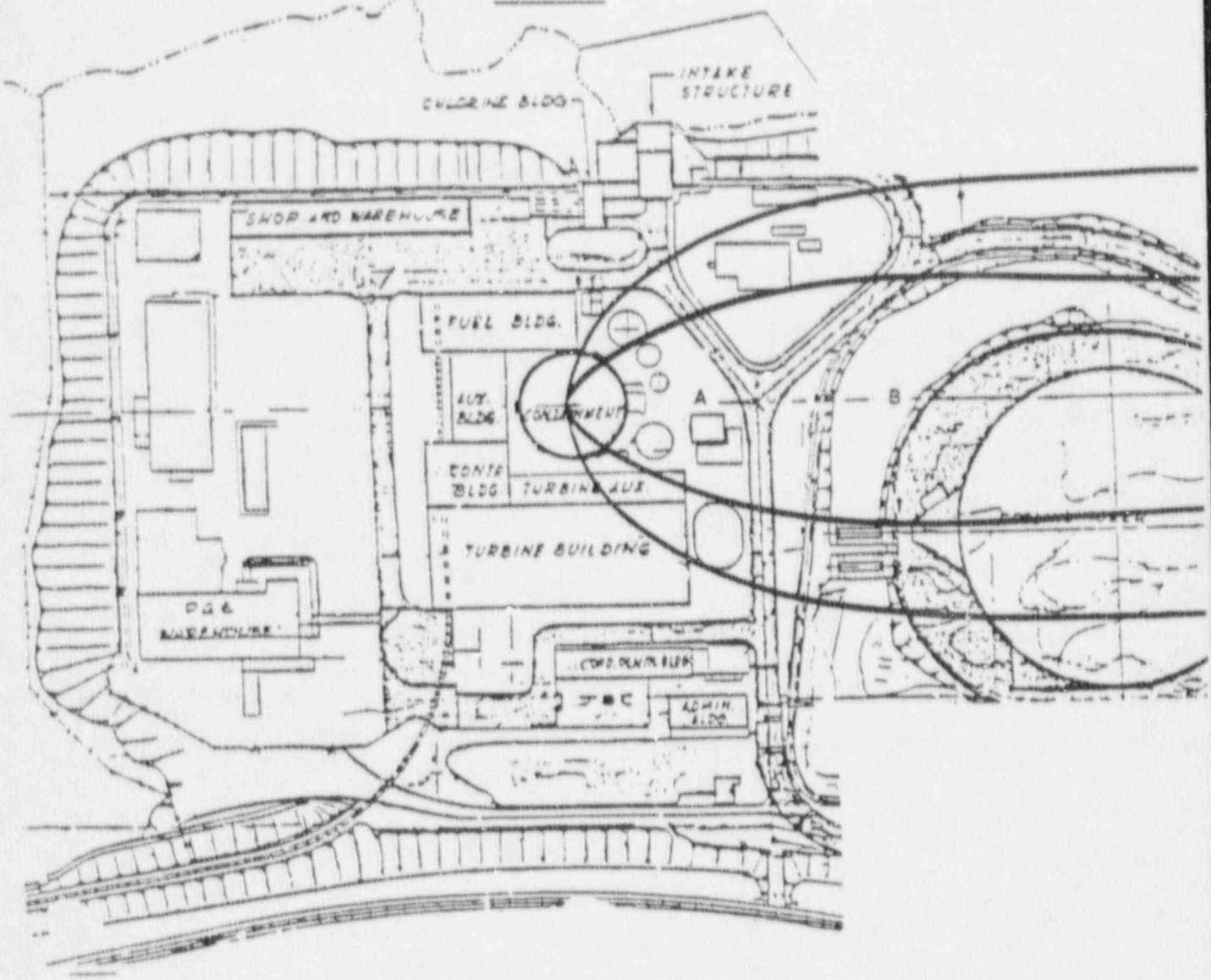
TIME: 6:45



Plume Location	Centerline Dose Rate W.O. (mR/hr)	Centerline Dose Rate W.C. (mR/hr)	Edge of Plume Dose Rate W.O. (mR/hr)	Edge of Plume Dose Rate W.C. (mR/hr)	Air Samples Counts per Minute Charcoal Cartridge	Air Samples Counts per Minute Filter Paper	Iodine Calc. (uCi/cc)	Smears (cpm)
A	5.5	5.5	0.6	0.6	AR 1375	AR	5.5 E-07	AR
B	2.4	1.1	0.2	0.1	275	AR	1.1 E-07	AR

ON-SITE INSTRUMENT READINGS

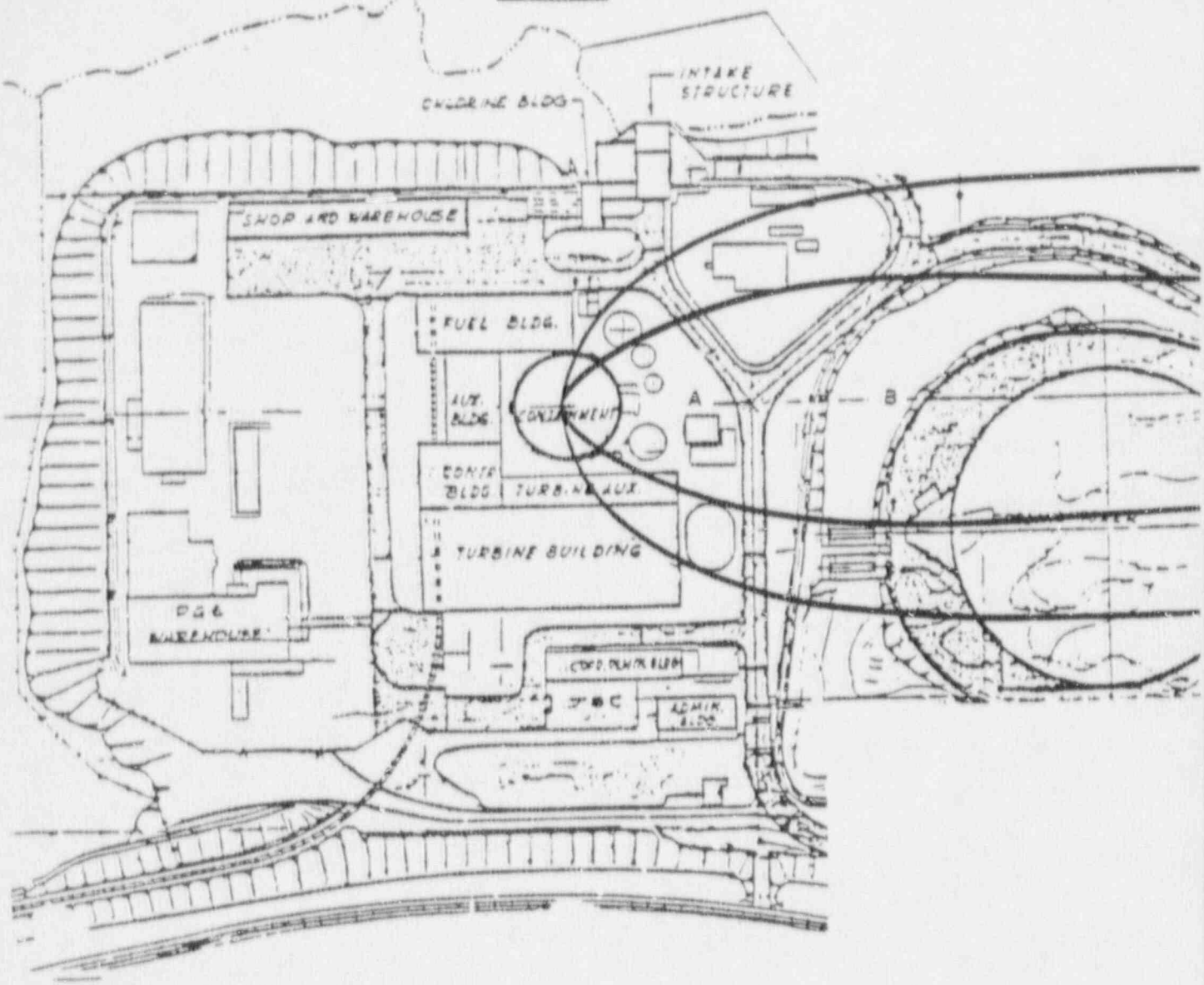
TIME: 7:00



Plume Location	Centerline Dose Rate		Edge of Plume Dose Rate		Air Samples Counts per Minute		Iodine Calc.	Smears
	W.O. (mR/hr)	W.C. (mR/hr)	W.O. (mR/hr)	W.C. (mR/hr)	Charcoal Cartridge	Filter Paper	(uCi/cc)	(cpm)
A	753	752	75	75	375000	AR	1.5 E-04	AR
B	334	150	33	15	72500	AR	2.9 E-05	AR

ON-SITE INSTRUMENT READINGS

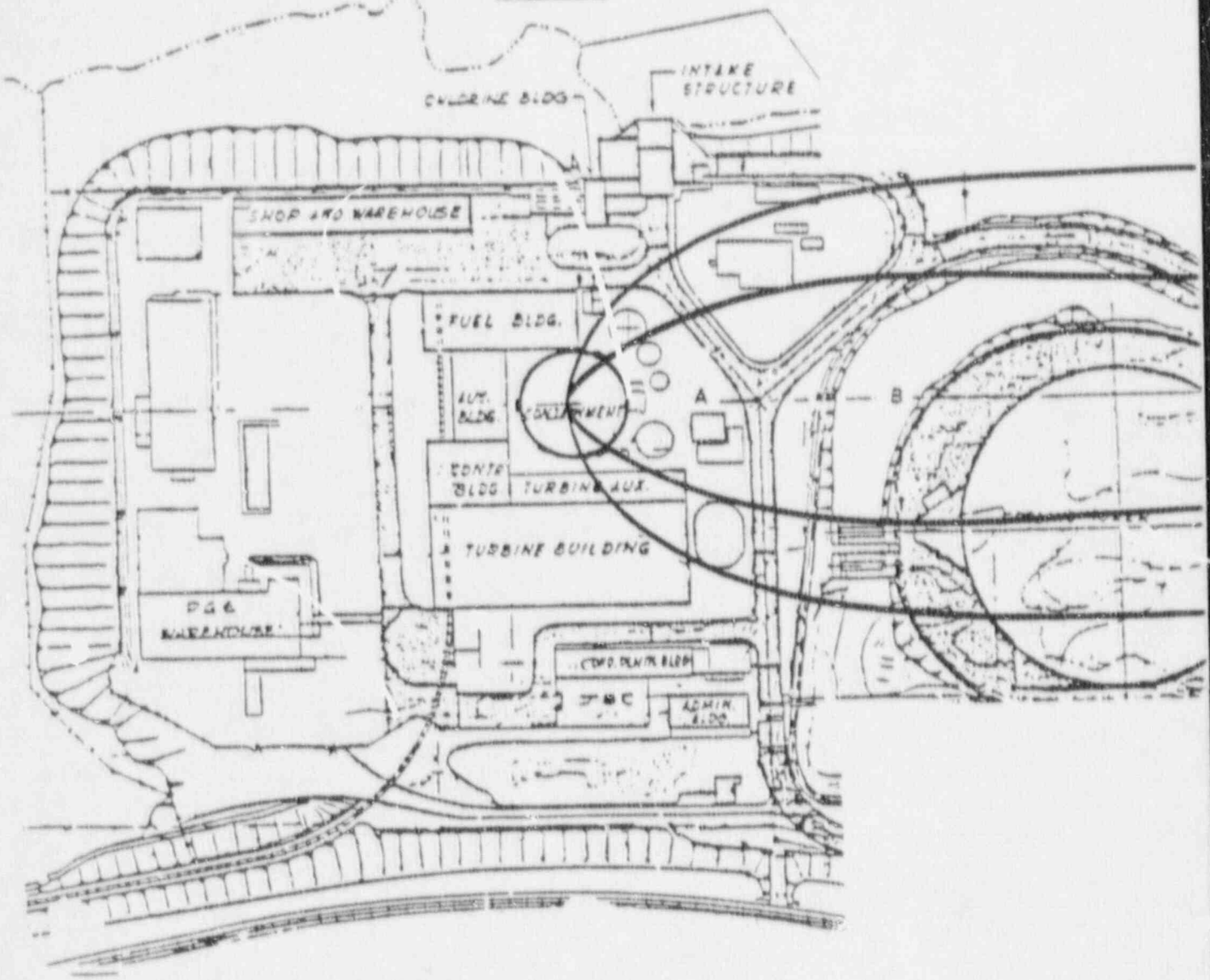
TIME: 7:15



Plume Location	Centerline Dose Rate		Edge of Plume Dose Rate		Air Samples Counts per Minute		Iodine Calc.	Smears
	W.O. (mR/hr)	W.C. (mR/hr)	W.O. (mR/hr)	W.C. (mR/hr)	Charcoal Cartridge	Filter Paper	(uCi/cc)	(cpm)
A	893	892	89	89	400000	AR	1.6 E-04	AR
B	396	178	40	18	77500	AR	3.1 E-05	AR

ON-SITE INSTRUMENT READINGS

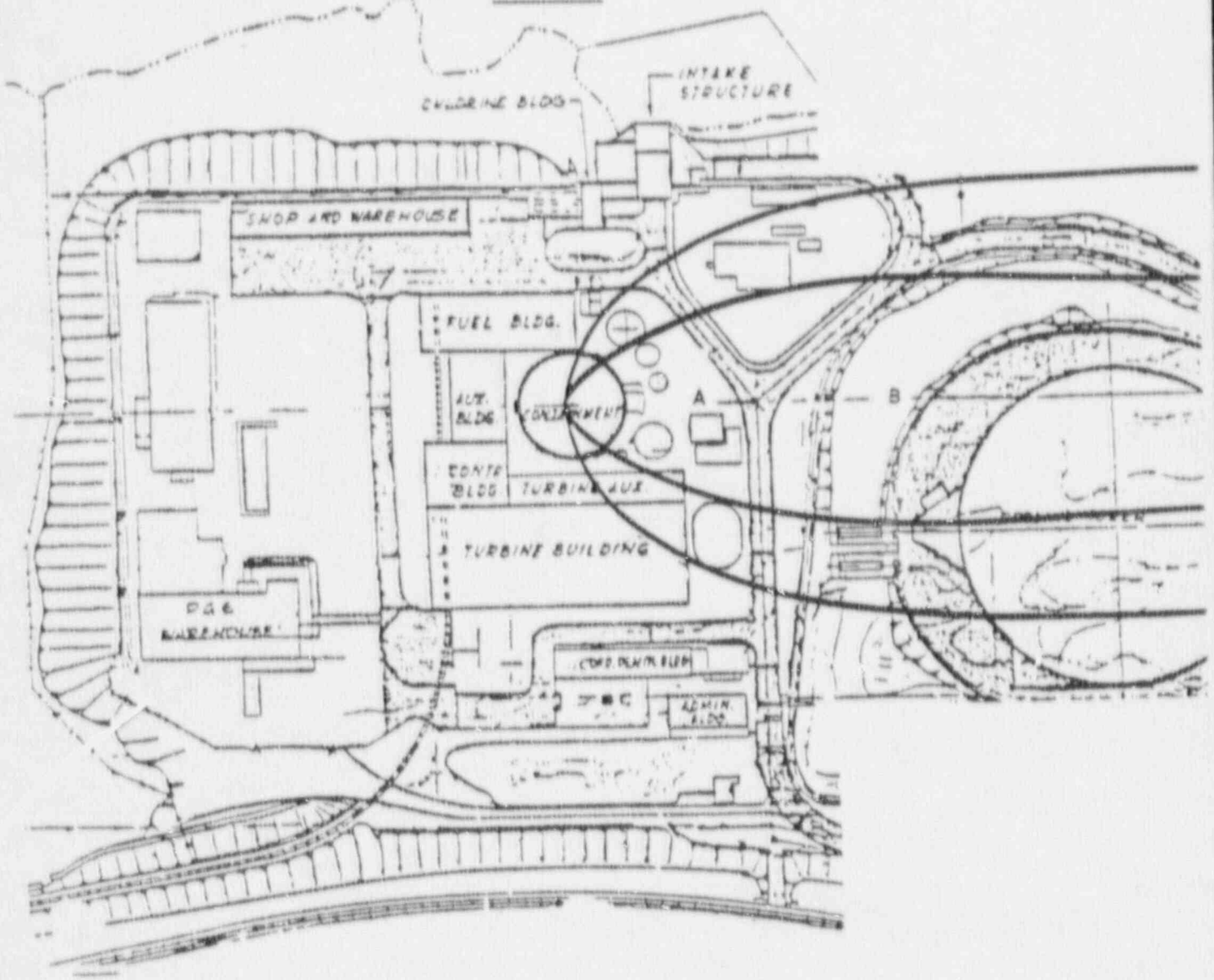
TIME: 7:30



Plume Location	Centerline Dose Rate		Edge of Plume Dose Rate		Air Samples Counts per Minute		Iodine Calc.	Smears
	W.O. (mR/hr)	W.C. (mR/hr)	W.O. (mR/hr)	W.C. (mR/hr)	Charcoal Cartridge	Filter Paper	(uCi/cc)	(cpm)
A	884	883	88	88	375000	AR	1.5 E-04	AR
B	392	177	39	18	75000	AR	3.0 E-05	AR

ON-SITE INSTRUMENT READINGS

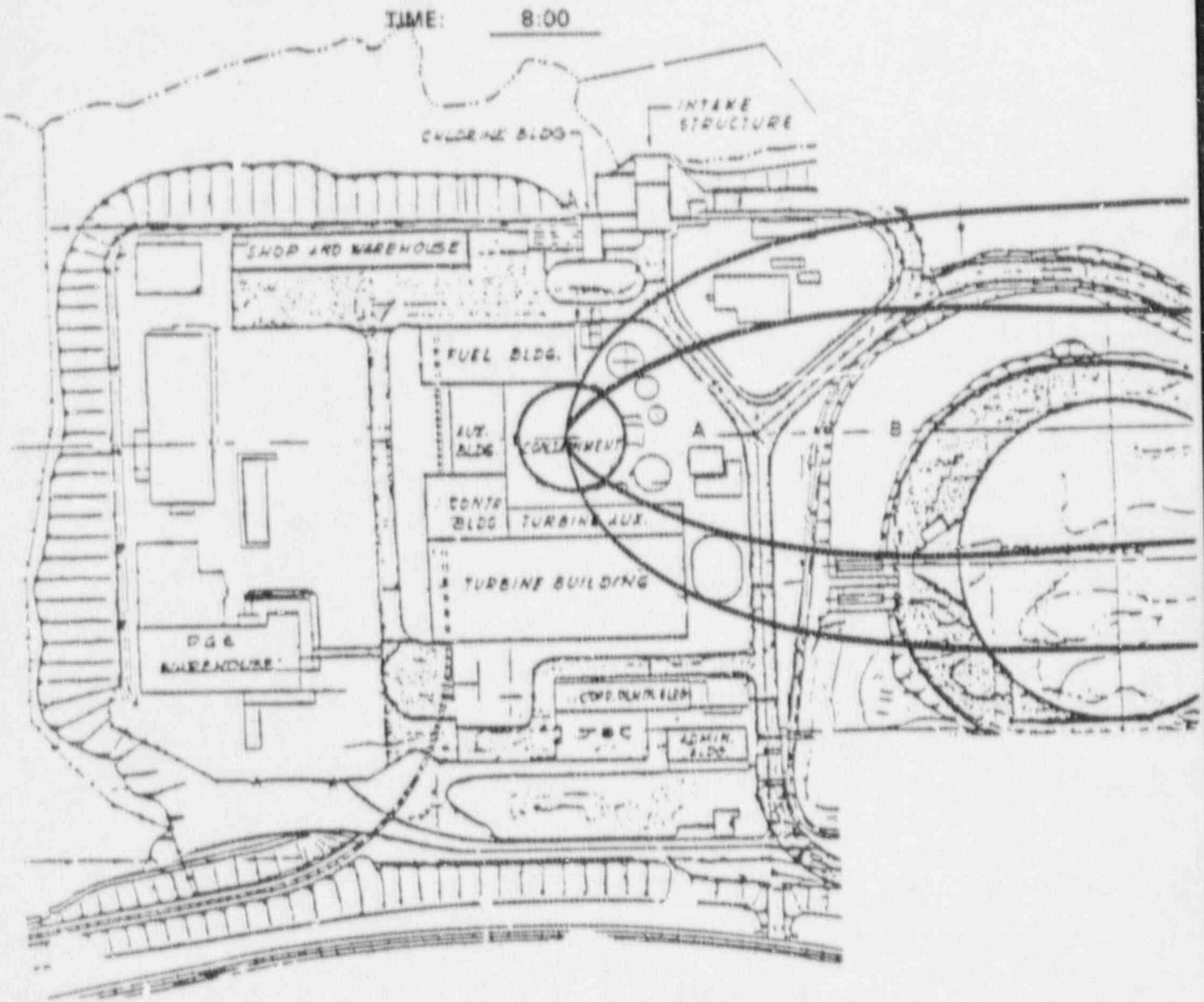
TIME: 7:45



Plume Location	Centerline Dose Rate		Edge of Plume Dose Rate		Air Samples Counts per Minute		Iodine Calc.	Smears
	W.O. (mR/hr)	W.C. (mR/hr)	W.O. (mR/hr)	W.C. (mR/hr)	Charcoal Cartridge	Filter Paper	(uCi/cc)	(cpm)
A	902	901	90	90	375000	AR	1.5 E-04	AR
B	400	180	40	18	75000	AR	3.0 E-05	AR

ON-SITE INSTRUMENT READINGS

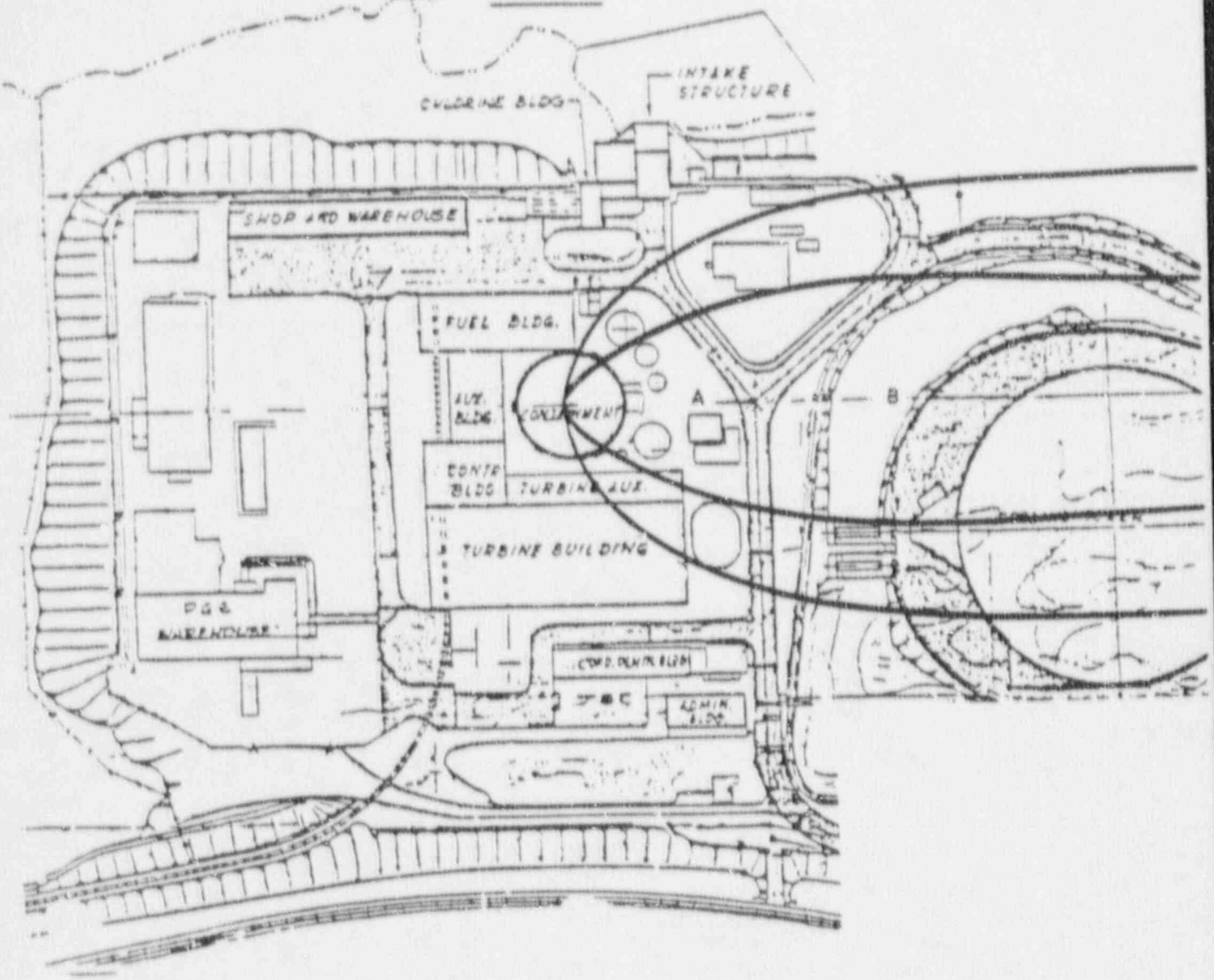
TIME: 8:00



Plume Location	Centerline Dose Rate		Edge of Plume Dose Rate		Air Samples Counts per Minute		Iodine Calc.	Smears
	W.O. (mR/hr)	W.C. (mR/hr)	W.O. (mR/hr)	W.C. (mR/hr)	Charcoal Cartridge	Filter Paper	(uCi/cc)	(cpm)
A	902	901	90	90	375000	AR	1.5 E-04	AR
B	400	180	40	18	75000	AR	3.0 E-05	AR

ON-SITE INSTRUMENT READINGS

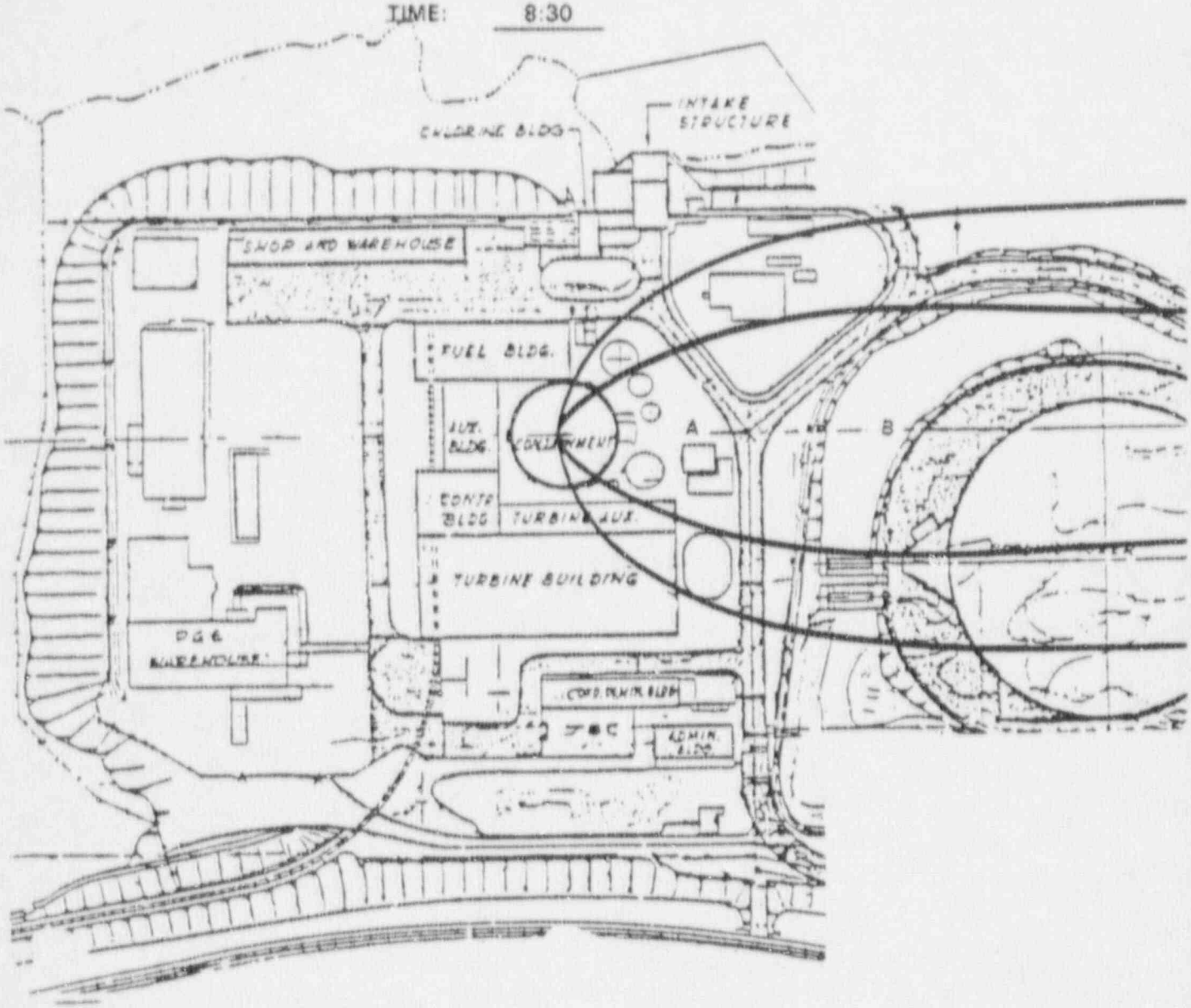
TIME: 8:15



Plume Location	Centerline Dose Rate		Edge of Plume Dose Rate		Air Samples Counts per Minute		Iodine Calc.	Smears
	W.O. (mR/hr)	W.C. (mR/hr)	W.O. (mR/hr)	W.C. (mR/hr)	Charcoal Cartridge	Filter Paper	(uCi/cc)	(cpm)
A	882	881	88	88	375000	AR	1.5 E-04	AR
B	391	176	39	18	72500	AR	2.9 E-05	AR

ON-SITE INSTRUMENT READINGS

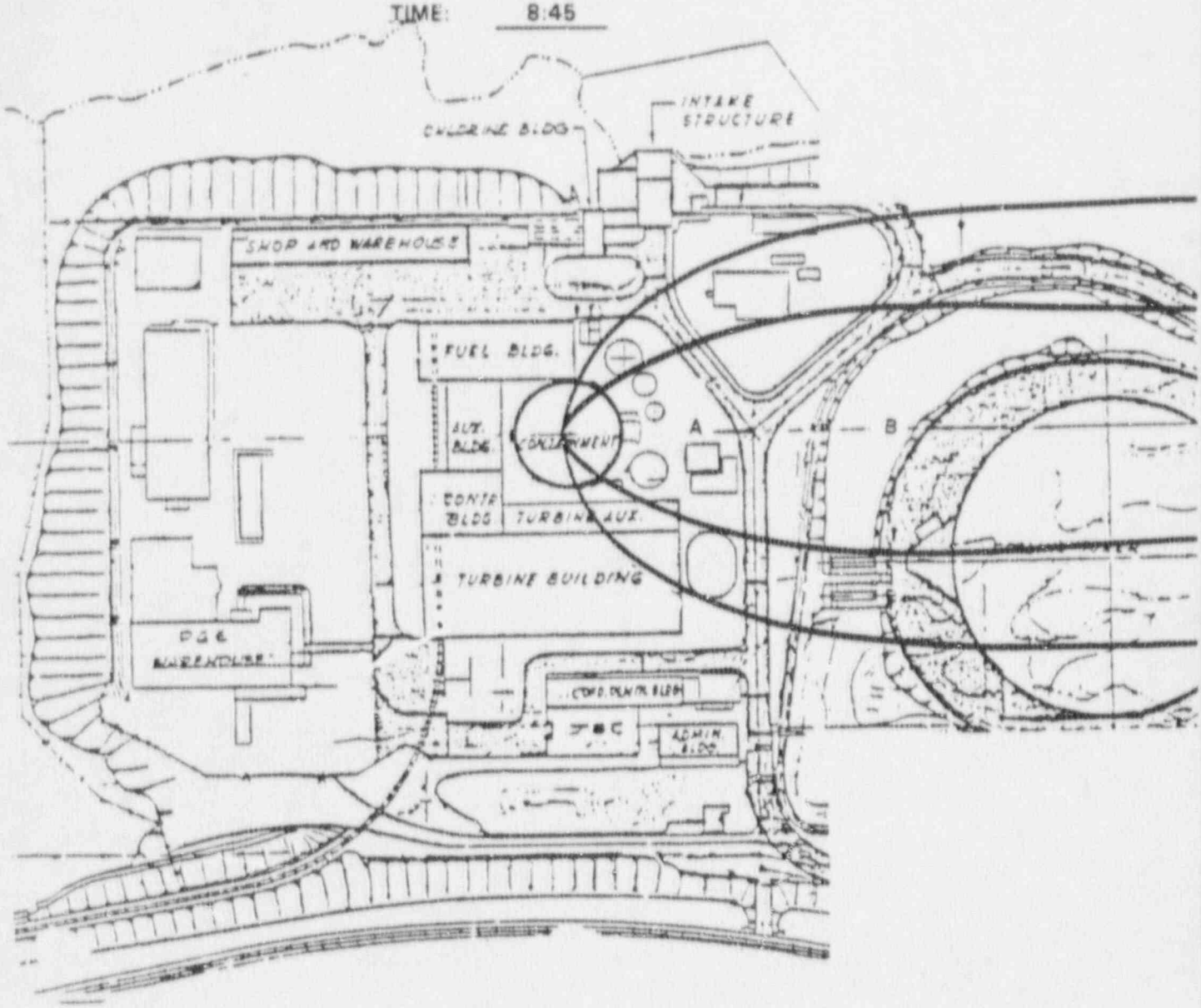
TIME: 8:30



Plume Location	Centerline Dose Rate W.O. (mR/hr)	Centerline Dose Rate W.C. (mR/hr)	Edge of Plume Dose Rate W.O. (mR/hr)	Edge of Plume Dose Rate W.C. (mR/hr)	Air Samples Counts per Minute Charcoal Cartridge	Air Samples Counts per Minute Filter Paper	Iodine Calc. (uCi/cc)	Smears (cpm)
A	907	906	91	91	375000	AR	1.5 E-04	AR
B	402	181	40	18	75000	AR	3.0 E-05	AR

ON-SITE INSTRUMENT READINGS

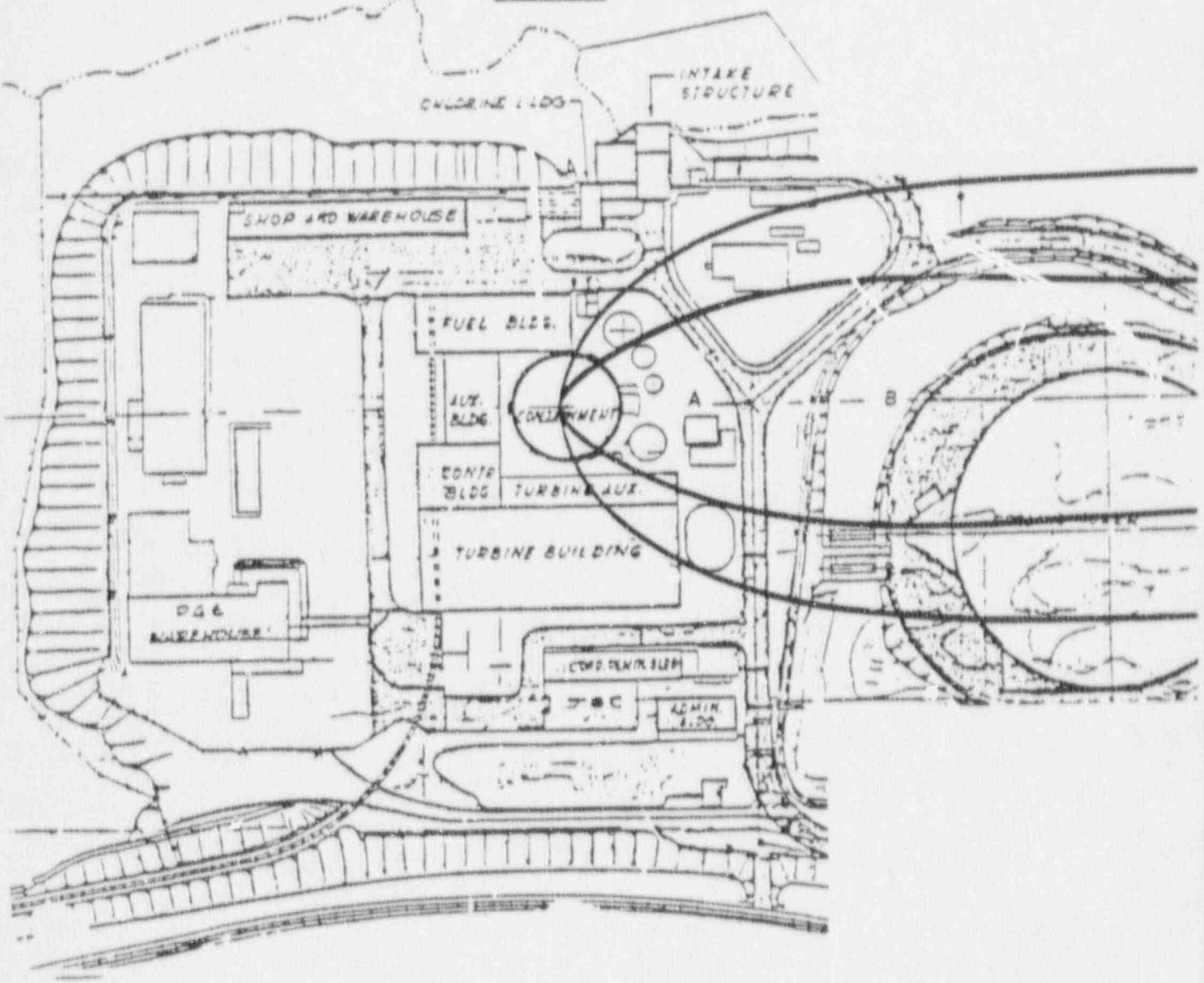
TIME: 8:45



Plume Location	Centerline Dose Rate		Edge of Plume Dose Rate		Air Samples Counts per Minute		Iodine Calc.	Smears
	W.O. (mR/hr)	W.C. (mR/hr)	W.O. (mR/hr)	W.C. (mR/hr)	Charcoal Cartridge	Filter Paper	(uCi/cc)	(cpm)
A	294	294	29	29.4	122500	AR	4.9 E-05	AR
B	130	59	13	5.9	24500	AR	9.8 E-06	AR

ON-SITE INSTRUMENT READINGS

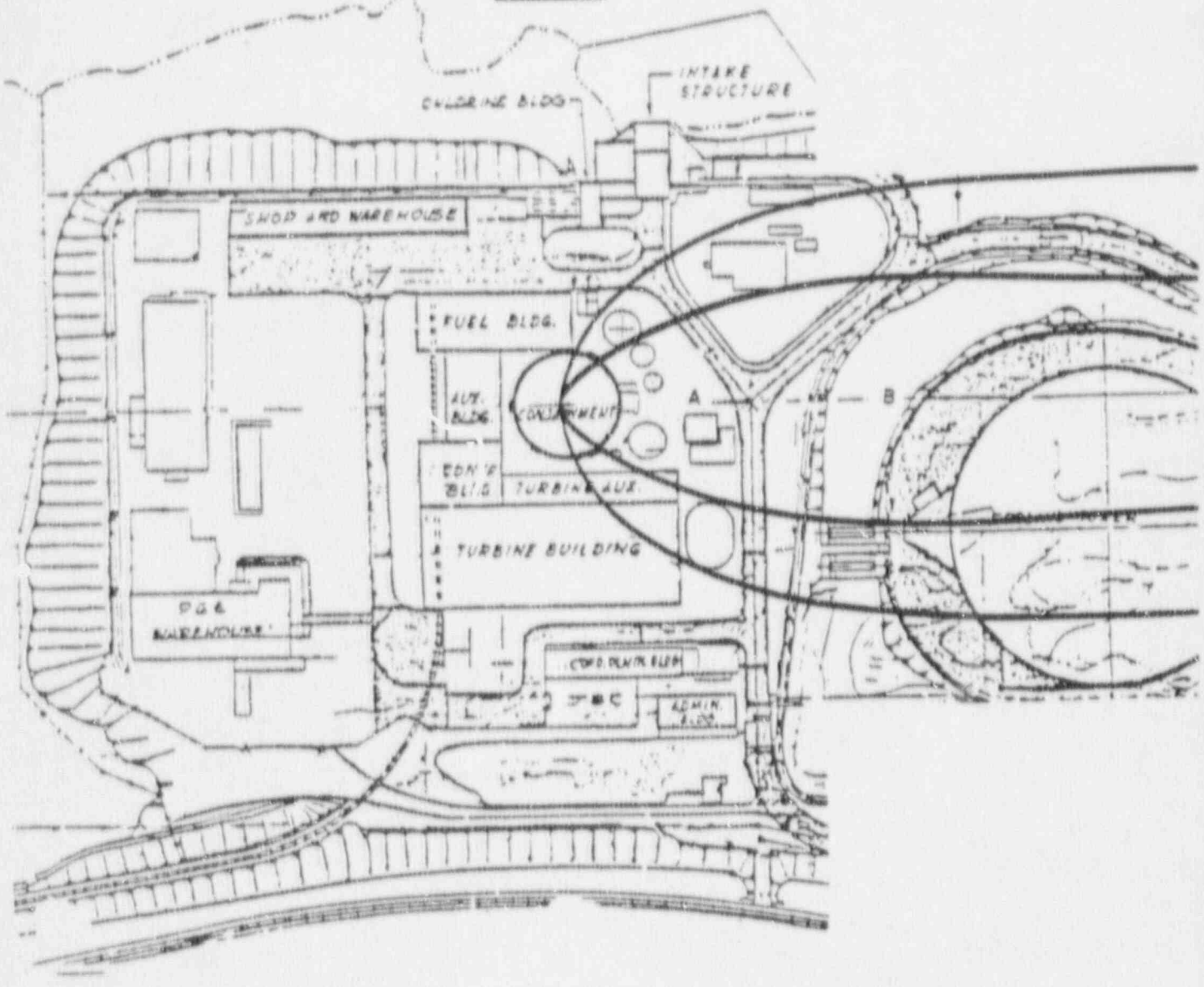
TIME: 9:00



Plume Location	Centerline Dose Rate		Edge of Plume Dose Rate		Air Samples Counts per Minute		Iodine Calc.	Smears
	W.O. (mR/hr)	W.C. (mR/hr)	W.O. (mR/hr)	W.C. (mR/hr)	Charcoal Cartridge	Filter Paper	(uCi/cc)	(cpm)
A	96	96	9.6	9.6	40000	AR	1.6 E-05	AR
B	43	19	4.3	1.9	8000	AR	3.2 E-06	AR

ON-SITE INSTRUMENT READINGS

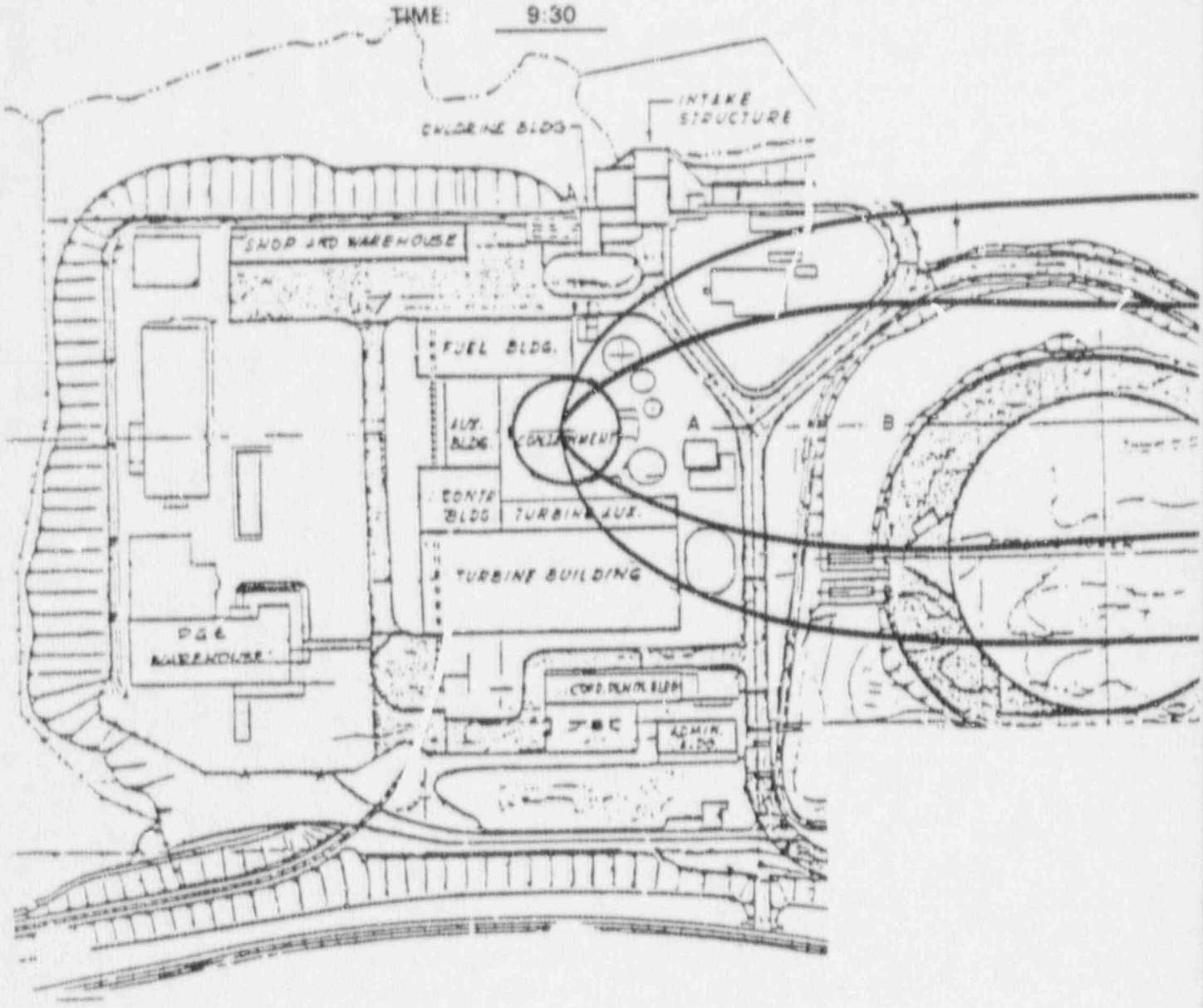
TIME: 9:15



Plume Location	Centerline Dose Rate W.O. (mR/hr)	Centerline Dose Rate W.C. (mR/hr)	Edge of Plume Dose Rate W.O. (mR/hr)	Edge of Plume Dose Rate W.C. (mR/hr)	Air Samples Counts per Minute Charcoal Cartridge	Air Samples Counts per Minute Filter Paper	Iodine Calc. (uCi/cc)	Smears (cpm)
A	31	31	3.1	3.1	12500	AR	5.0 E-06	AR
B	14	6.1	1.4	0.6	2500	AR	1.0 E-06	AR

ON-SITE INSTRUMENT READINGS

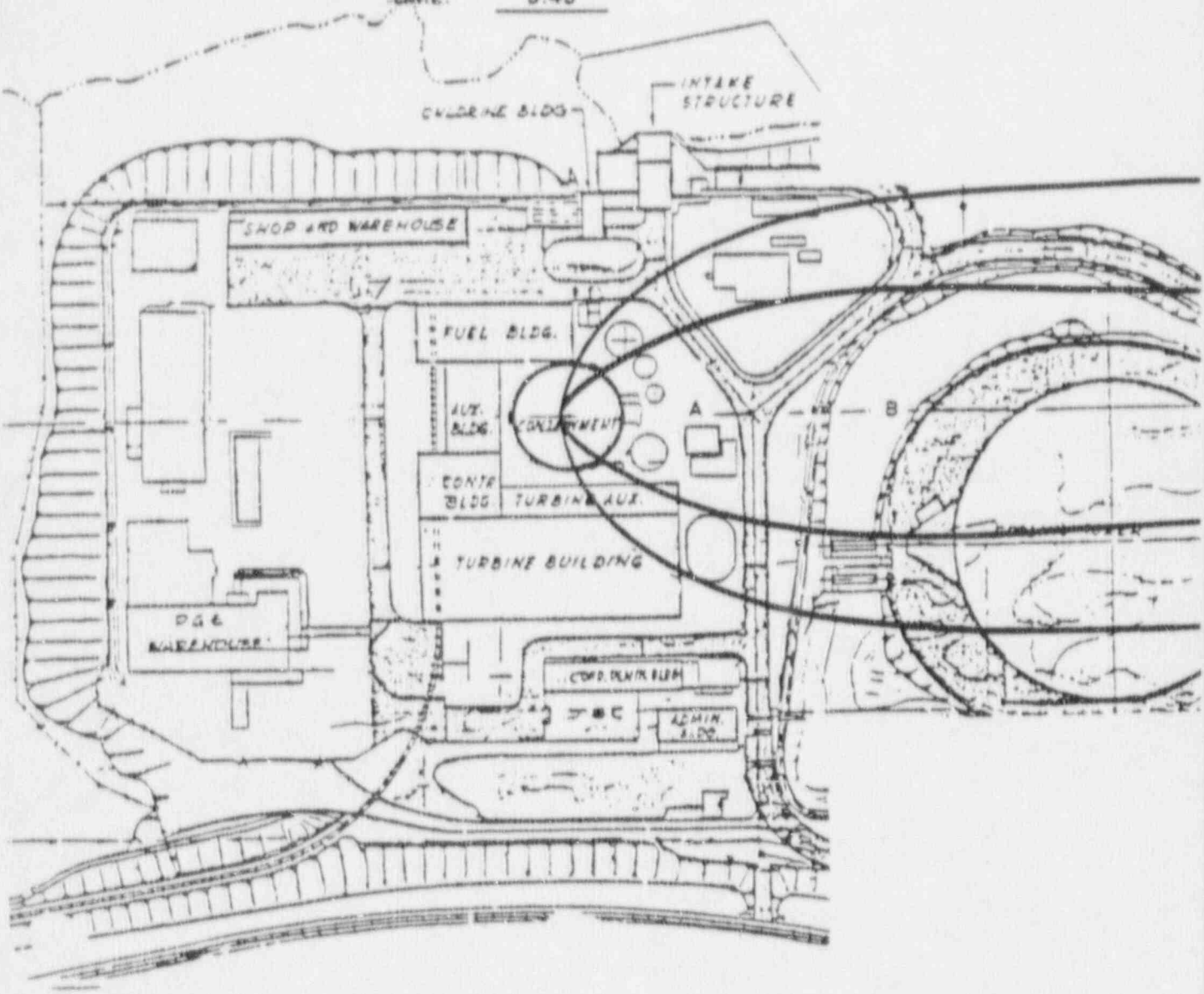
TIME: 9:30



Plume Location	Centerline Dose Rate W.O. (mR/hr)	Centerline Dose Rate W.C. (mR/hr)	Edge of Plume Dose Rate W.O. (mR/hr)	Edge of Plume Dose Rate W.C. (mR/hr)	Air Samples Counts per Minute Charcoal Cartridge	Air Samples Counts per Minute Filter Paper	Iodine Calc. (uCi/cc)	Smears (cpm)
A	10.0	10.0	1.0	1.0	4000	AR	1.6 E-06	AR
B	4.4	2.0	0.4	0.2	800	AR	3.2 E-07	AR

ON-SITE INSTRUMENT READINGS

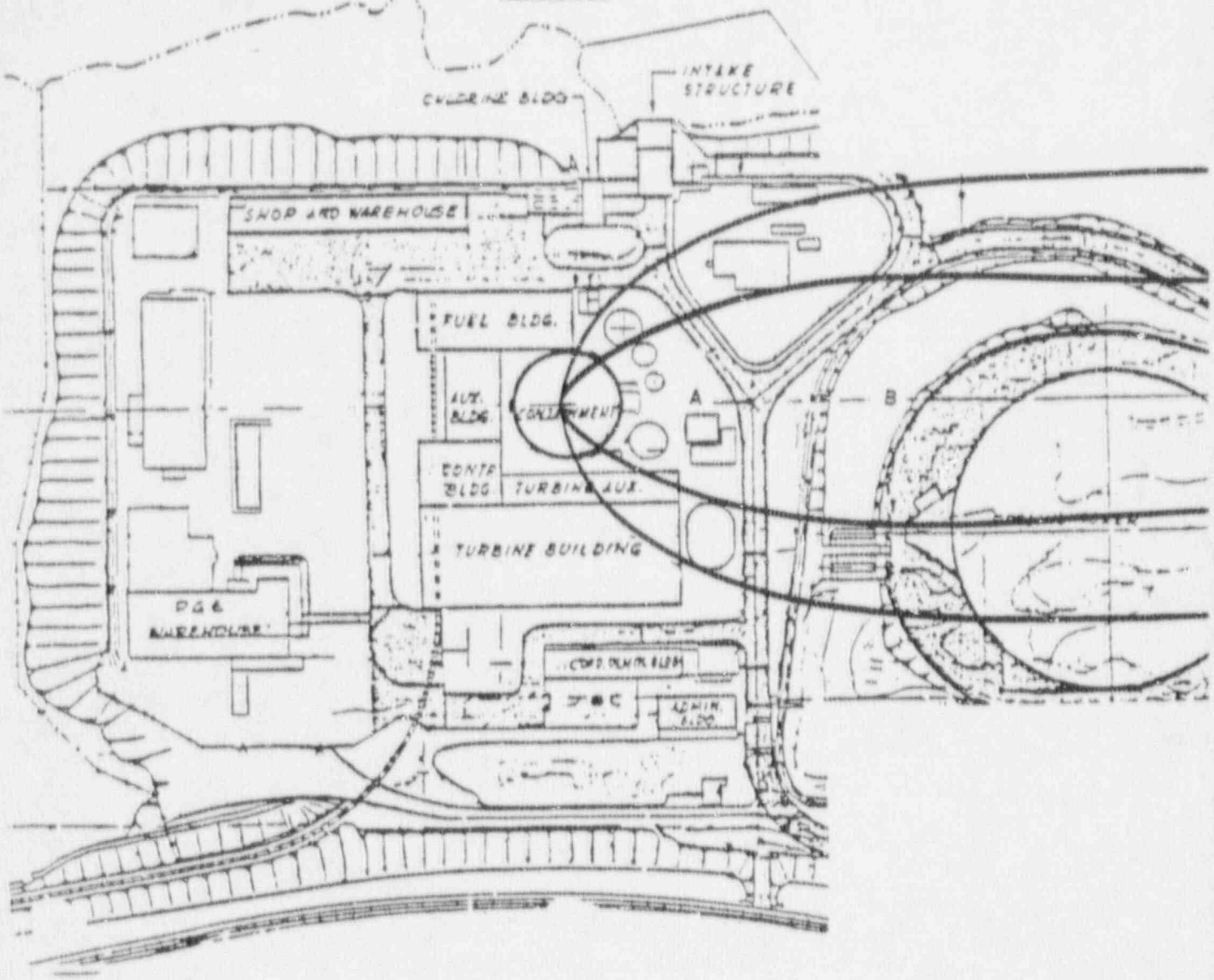
TIME: 9:45



Plume Location	Centerline Dose Rate W.O. (mR/hr)	Centerline Dose Rate W.C. (mR/hr)	Edge of Plume Dose Rate W.O. (mR/hr)	Edge of Plume Dose Rate W.C. (mR/hr)	Air Samples Counts per Minute Charcoal Cartridge	Air Samples Counts per Minute Filter Paper	Iodine Calc. (uCi/cc)	Smears (cpm)
A	AR	AR	AR	AR	9044	AR	3.6 E-06	AR
B	AR	AR	AR	AR	163	AR	6.5 E-08	AR

ON-SITE INSTRUMENT READINGS

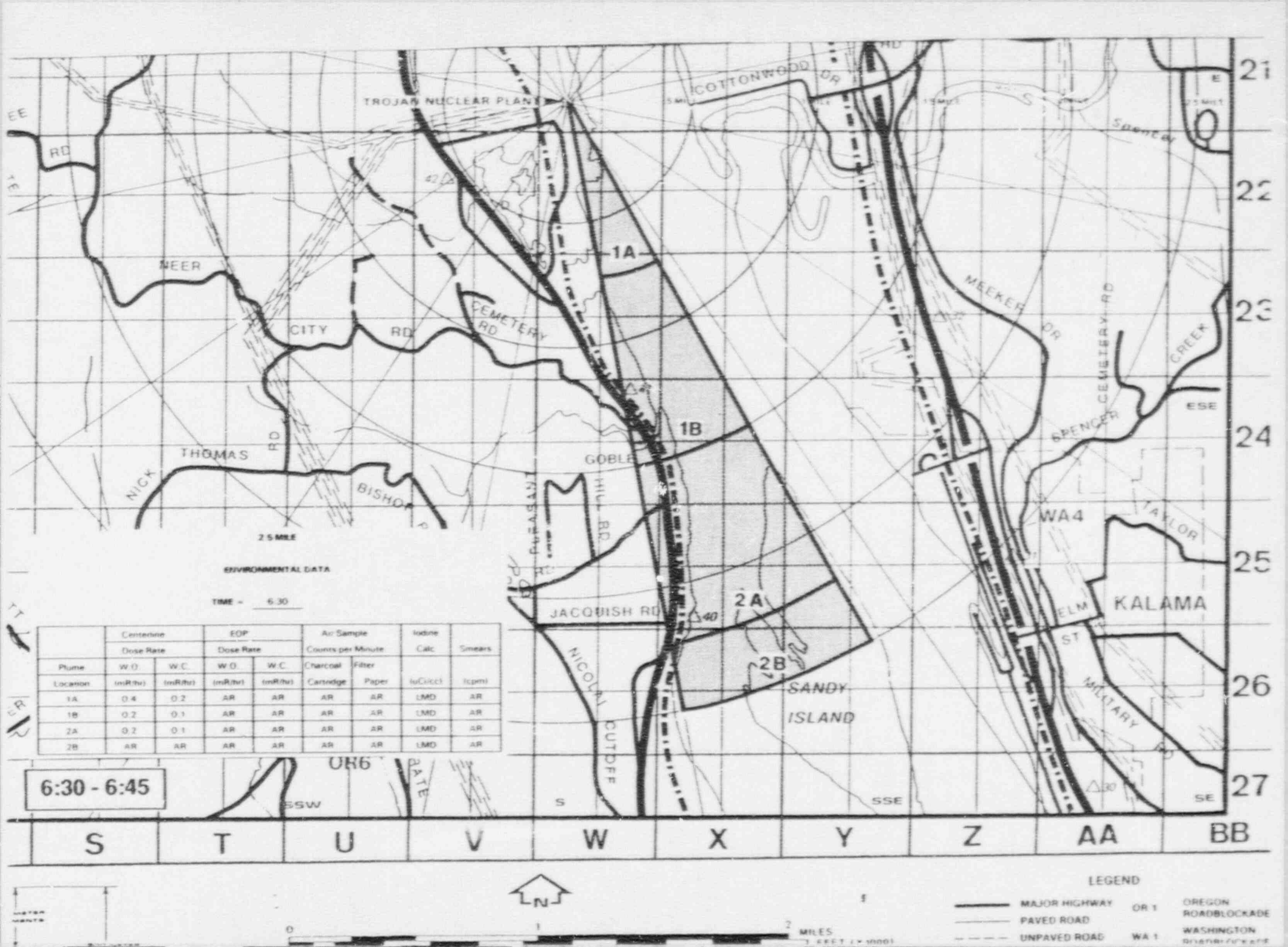
TIME: 10:00



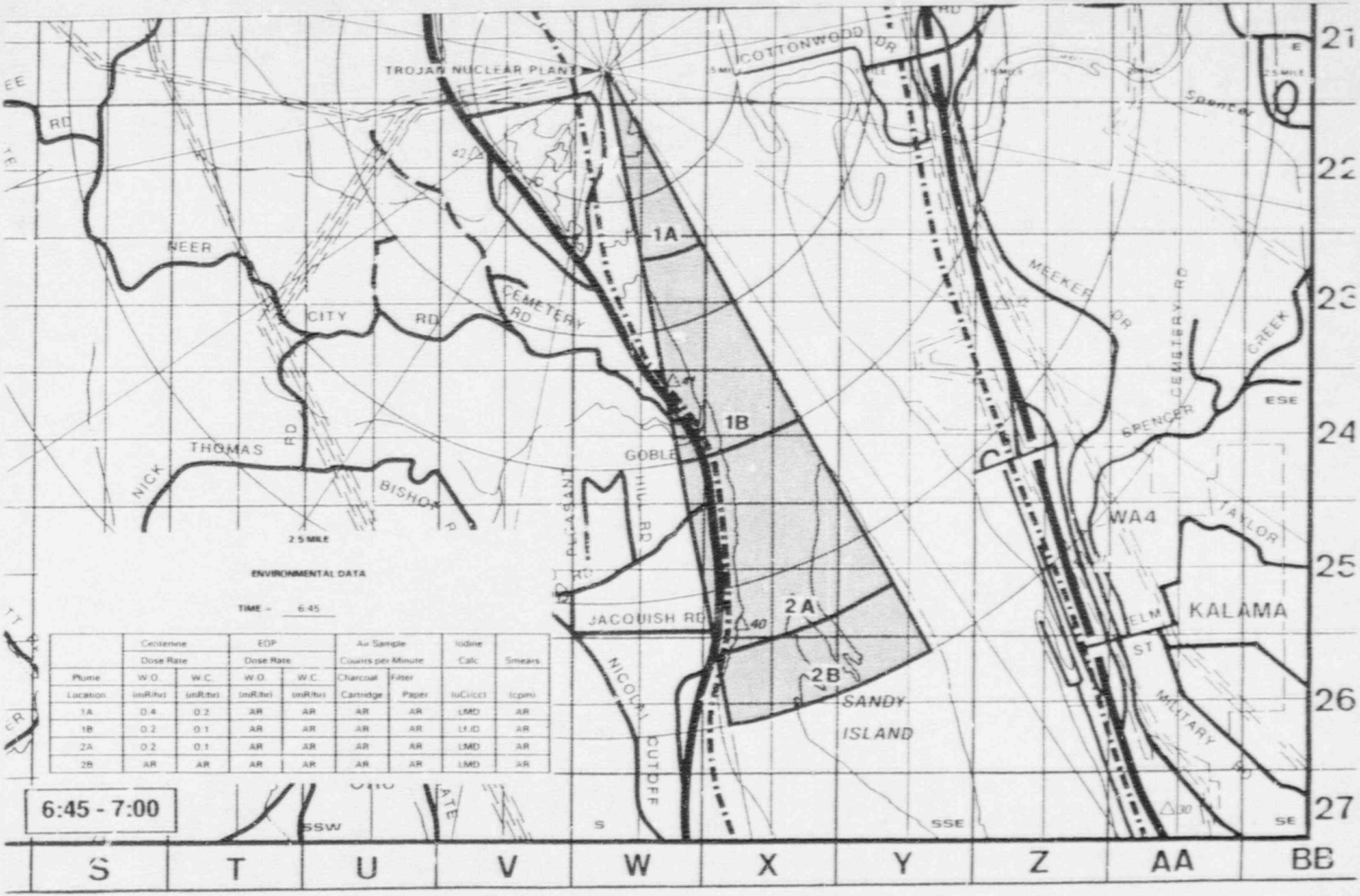
Plume Location	Centerline Dose Rate W.O. (mR/hr)	Centerline Dose Rate W.C. (mR/hr)	Edge of Plume Dose Rate W.O. (mR/hr)	Edge of Plume Dose Rate W.C. (mR/hr)	Air Samples Counts per Minute Charcoal Cartridge	Air Samples Counts per Minute Filter Paper	Iodine Calc. (uCi/cc)	Smears (cpm)
A	AR	AR	AR	AR	2964	AR	1.2 E-06	AR
B	AR	AR	AR	AR	AR	AR	2.1 E-08	AR

8.6 Off-Site Radiological Data

	Centerline Dose Rate		EOP Dose Rate		Air Sample Counts per Minute		Iodine Calc	Smears
Plume	W.O	W.C	W.O	W.C	Charcoal	Filter		
Location	(mR/hr)	(mR/hr)	(mR/hr)	(mR/hr)	Cartridge	Paper	(uCi/cc)	(cpm)
1A	0.7	0.3	AR	AR	AR	AR	LMD	AR
1B	0.2	0.1	AR	AR	AR	AR	LMD	AR
2A	0.2	0.1	AR	AR	AR	AR	LMD	AR
2B	AR	AR	AR	AR	AR	AR	LMD	AR



Plume Location	Centerline Dose Rate W.O. (mR/hr)	Centerline Dose Rate W.C. (mR/hr)	EOP Dose Rate W.O. (mR/hr)	EOP Dose Rate W.C. (mR/hr)	Air Sample Counts per Minute Charcoal Cartridge	Air Sample Counts per Minute Filter Paper	Iodine Calc (uCi/cc)	Smears (cpm)
1A	0.4	0.2	AR	AR	AR	AR	LMD	AR
1B	0.2	0.1	AR	AR	AR	AR	LMD	AR
2A	0.2	0.1	AR	AR	AR	AR	LMD	AR
2B	AR	AR	AR	AR	AR	AR	LMD	AR



ENVIRONMENTAL DATA

TIME – 6:45

	Centerline Dose Rate		EOP Dose Rate		Air Sample Counts per Minute		Iodine Calc	Smears
Plume	W.O.	W.C.	W.O.	W.C.	Charcoal	Filter		
Location	(mR/hr)	(mR/hr)	(mR/hr)	(mR/hr)	Cartridge	Paper	(uCi/cc)	(cpm)
1A	0.4	0.2	AR	AR	AR	AR	LMD	AR
1B	0.2	0.1	AR	AR	AR	AR	LMD	AR
2A	0.2	0.1	AR	AR	AR	AR	LMD	AR
2B	AR	AR	AR	AR	AR	AR	LMD	AR

6:45 - 7:00

LEGEND

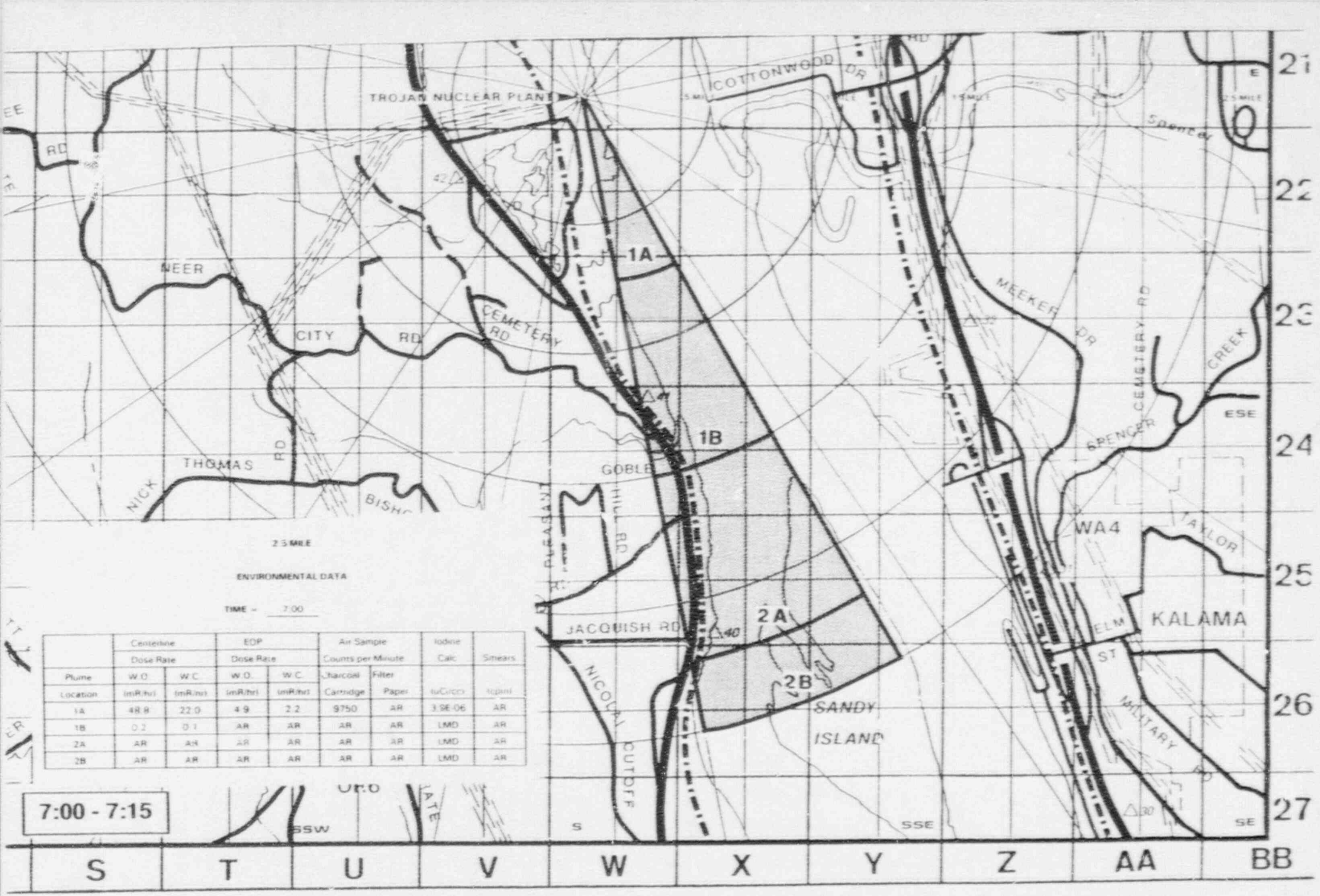
MAJOR HIGHWAY — OR 1 — OREGON ROADBLOCKADE

PAVED ROAD — WASHINGTON

UNPAVED ROAD — WA 1

N

0 1 2 MILES



2.5 MILE

ENVIRONMENTAL DATA

TIME – 7:00

	Centerline Dose Rate		EDP Dose Rate		Air Sample Counts per Minute		Iodine Calc	Smears
Plume	W.O.	W.C.	W.O.	W.C.	Charcoal	Filter		
Location	(mR/hr)	(mR/hr)	(mR/hr)	(mR/hr)	Cartridge	Paper	(uCi/cc)	(cpm)
1A	48.8	22.0	4.9	2.2	9750	AR	3.9E-06	AR
1B	0.2	0.1	AR	AR	AR	AR	LMD	AR
2A	AR	AR	AR	AR	AR	AR	LMD	AR
2B	AR	AR	AR	AR	AR	AR	LMD	AR

7:00 - 7:15

LEGEND

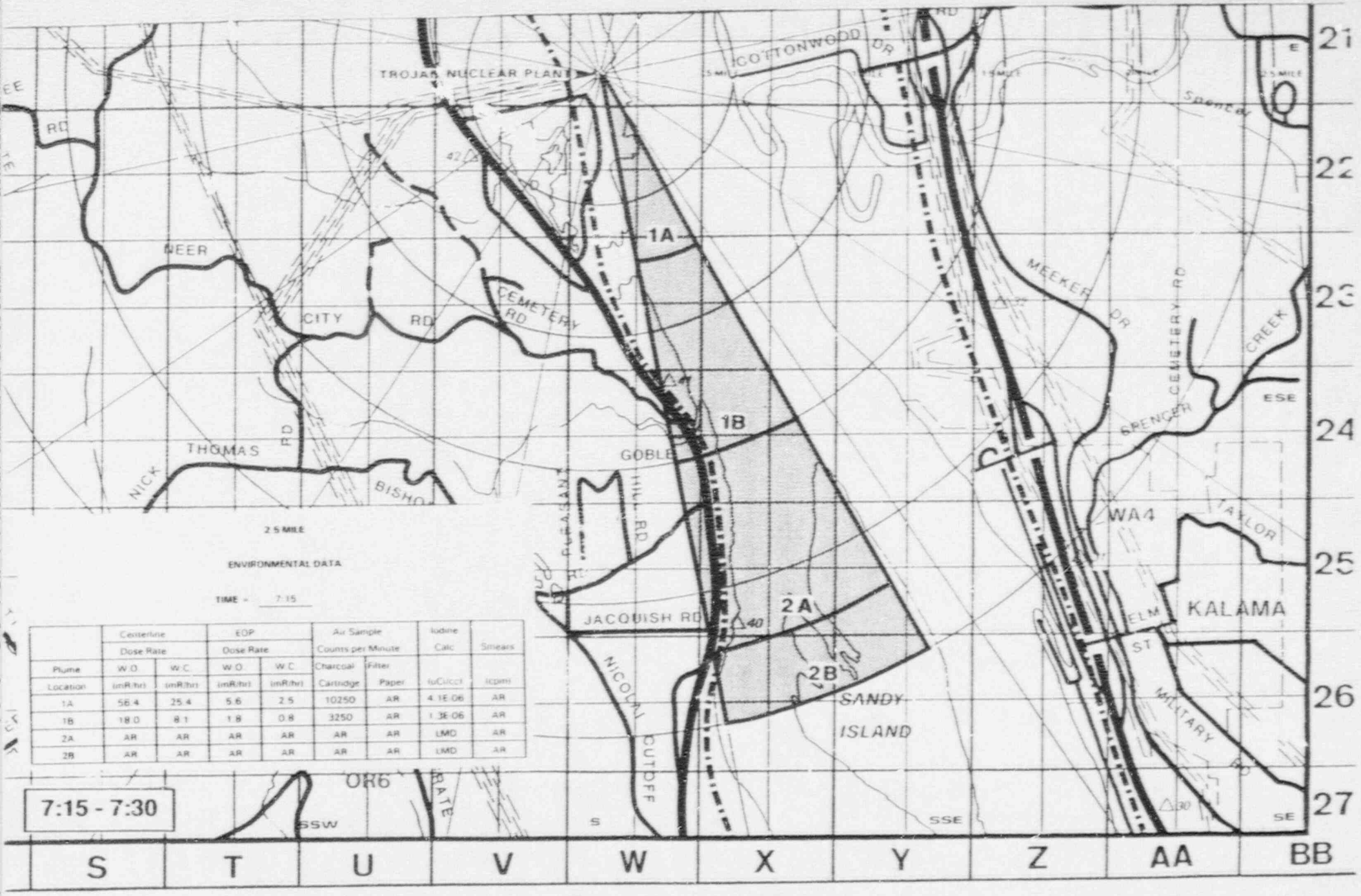
MAJOR HIGHWAY — OR 1 OREGON ROADBLOCKADE

PAVED ROAD

UNPAVED ROAD — WA 1 WASHINGTON ROADBLOCKADE

0 1 2 MILES

FEET (X 1000)



2.5 MILE

ENVIRONMENTAL DATA

TIME - 7:15

	Centerline Dose Rate		EOP Dose Rate		Air Sample Counts per Minute		Iodine Calc	Smears
Plume	W.O.	W.C.	W.O.	W.C.	Charcoal	Filter		
Location	(mR/hr)	(mR/hr)	(mR/hr)	(mR/hr)	Cartridge	Paper	(uCi/cc)	(cpm)
1A	56.4	25.4	5.6	2.5	10250	AR	4.1E-06	AR
1B	18.0	8.1	1.8	0.8	3250	AR	1.3E-06	AR
2A	AR	AR	AR	AR	AR	AR	LMD	AR
2B	AR	AR	AR	AR	AR	AR	LMD	AR

7:15 - 7:30

LEGEND

MAJOR HIGHWAY — OR 1 — OREGON ROADBLOCKADE

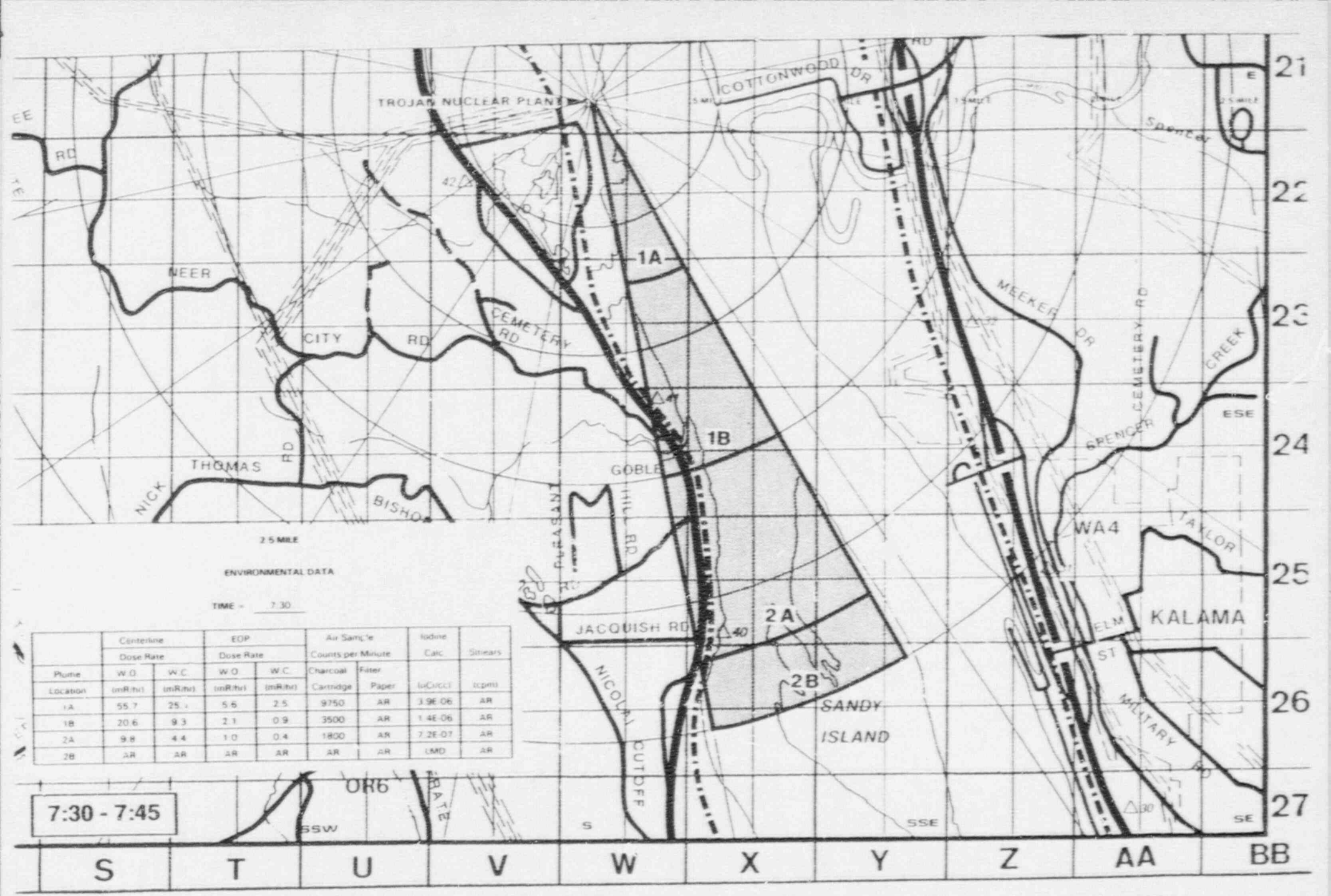
PAVED ROAD

UNPAVED ROAD — WA 1 — WASHINGTON ROADBLOCKADE

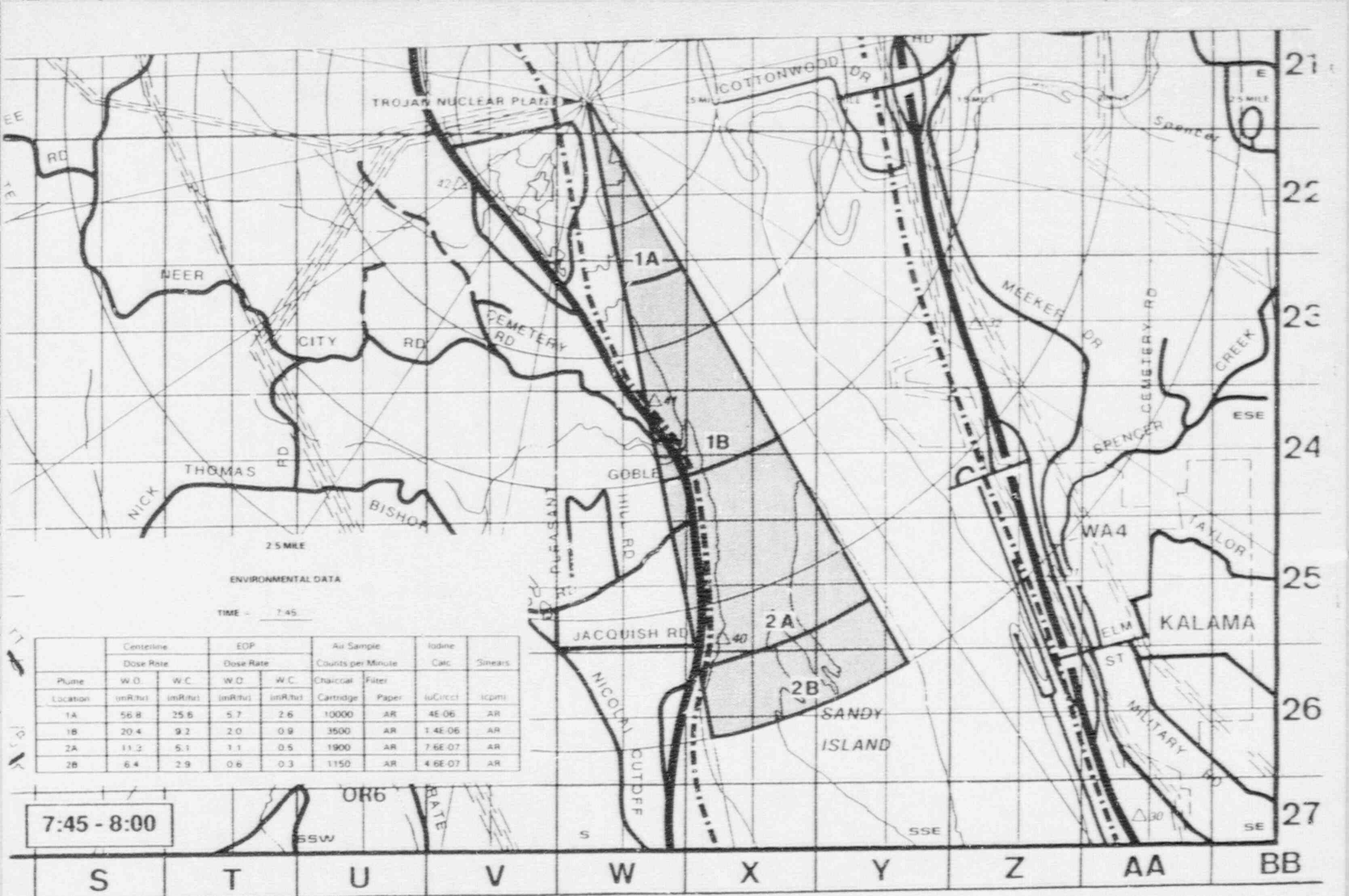
N

0 1 2 MILES

3 FEET (X 1000)



Plume Location	Centerline Dose Rate W.O. (mR/hr)	Centerline Dose Rate W.C. (mR/hr)	EOP Dose Rate W.O. (mR/hr)	EOP Dose Rate W.C. (mR/hr)	Air Sample Counts per Minute Charcoal Cartridge	Air Sample Counts per Minute Filter Paper	Iodine Calc (uCi/cc)	Stinears (cpm)
1A	55.7	25.1	5.6	2.5	9750	AR	3.9E-06	AR
1B	20.6	9.3	2.1	0.9	3500	AR	1.4E-06	AR
2A	9.8	4.4	1.0	0.4	1800	AR	7.2E-07	AR
2B	AR	AR	AR	AR	AR	AR	LMD	AR



ENVIRONMENTAL DATA

TIME - 7:45

Plume Location	Centerline Dose Rate W.O. (mR/hr)	Centerline Dose Rate W.C. (mR/hr)	EOP Dose Rate W.O. (mR/hr)	EOP Dose Rate W.C. (mR/hr)	Air Sample Counts per Minute Charcoal Cartridge	Air Sample Counts per Minute Filter Paper	Iodine Calc. (uCi/cc)	Sinears (cpm)
1A	56.8	25.6	5.7	2.6	10000	AR	4E-06	AR
1B	20.4	9.2	2.0	0.9	3500	AR	1.4E-06	AR
2A	11.3	5.1	1.1	0.5	1900	AR	7.6E-07	AR
2B	6.4	2.9	0.6	0.3	1150	AR	4.6E-07	AR

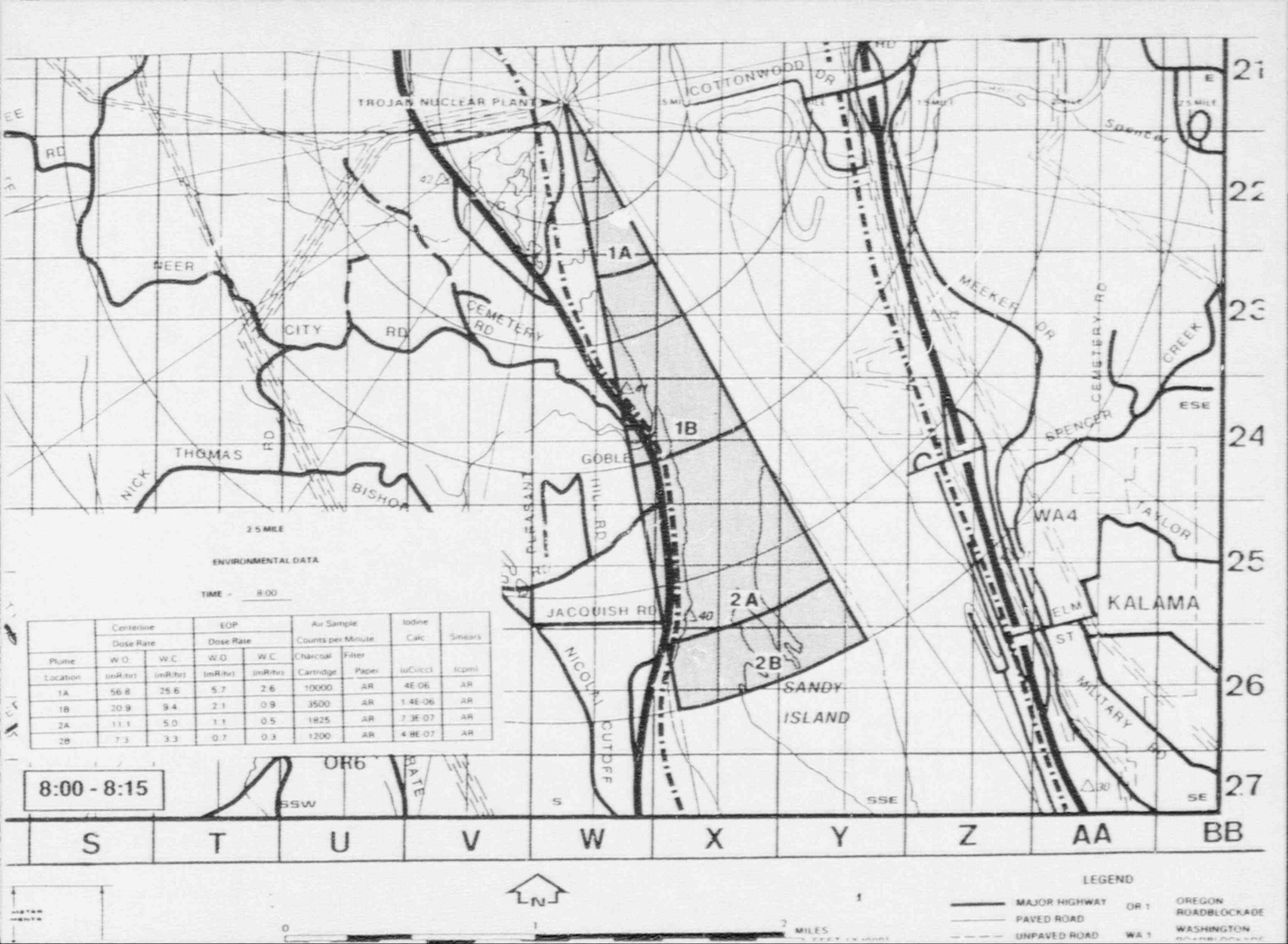
7:45 - 8:00

LEGEND

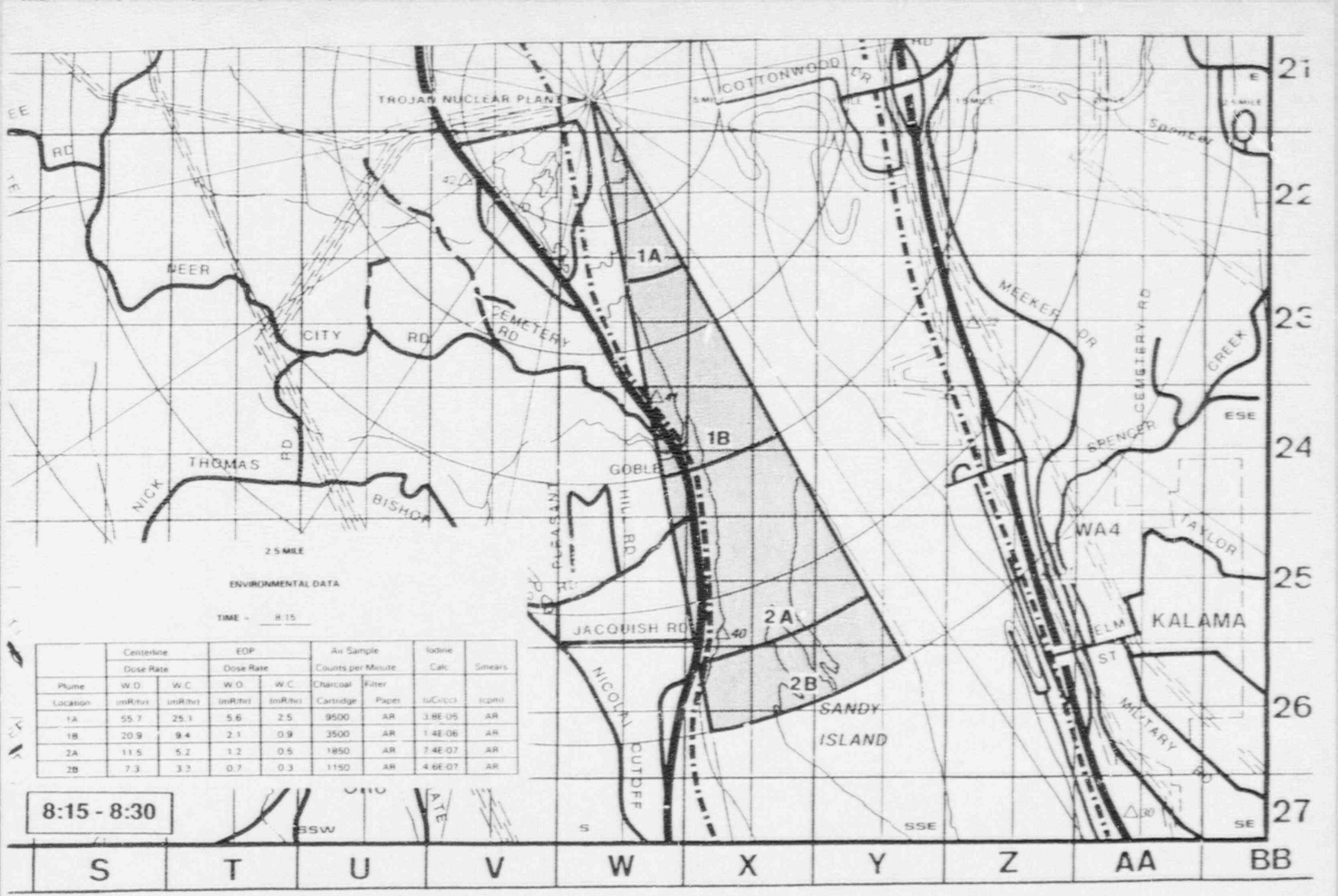
MAJOR HIGHWAY
PAVED ROAD
UNPAVED ROAD
OR 1 OREGON ROADBLOCKADE
WA 1 WASHINGTON ROADBLOCKADE

N

0 1 2 MILES
3 FEET (X 1000)



	Centerline Dose Rate		EOP Dose Rate		Air Sample Counts per Minute		Iodine Calc	Smears
Plume	W.O.	W.C.	W.O.	W.C.	Charcoal	Filter		
Location	(mR/hr)	(mR/hr)	(mR/hr)	(mR/hr)	Cartridge	Paper	(uCi/cc)	(cpm)
1A	56.8	25.6	5.7	2.6	10000	AR	4E-06	AR
1B	20.9	9.4	2.1	0.9	3500	AR	1.4E-06	AR
2A	11.1	5.0	1.1	0.5	1825	AR	7.3E-07	AR
2B	7.3	3.3	0.7	0.3	1200	AR	4.8E-07	AR



ENVIRONMENTAL DATA

TIME – 8:15

	Centerline Dose Rate		EOP Dose Rate		Air Sample Counts per Minute		Iodine Calc	Smears
Plume	W.O.	W.C.	W.O.	W.C.	Charcoal	Filter		
Location	(mR/hr)	(mR/hr)	(mR/hr)	(mR/hr)	Cartridge	Paper	(uCi/cc)	(cpm)
1A	55.7	25.1	5.6	2.5	9500	AR	3.8E-05	AR
1B	20.9	9.4	2.1	0.9	3500	AR	1.4E-06	AR
2A	11.5	5.2	1.2	0.5	1850	AR	7.4E-07	AR
2B	7.3	3.2	0.7	0.3	1150	AR	4.6E-07	AR

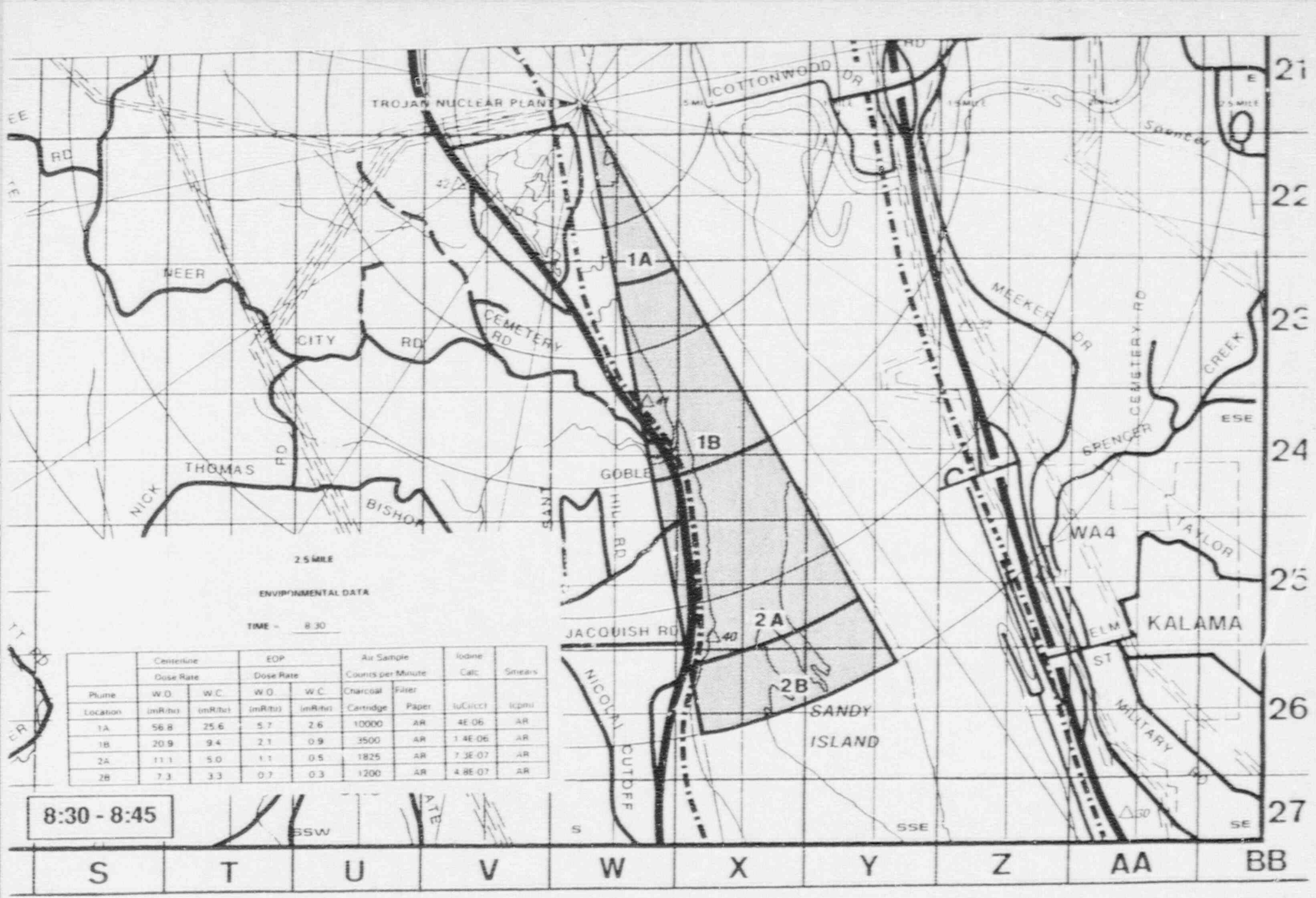
8:15 - 8:30

LEGEND

- MAJOR HIGHWAY
- PAVED ROAD
- UNPAVED ROAD
- OR - OREGON ROADBLOCKADE
- WA 1 WASHINGTON ROADBLOCKADE

0 1 2 MILES

FEET (X 1000)



2.5 MILE

ENVIRONMENTAL DATA

TIME - 8:30

	Centerline Dose Rate		EOP Dose Rate		Air Sample Counts per Minute		Iodine Calc	Smears
Plume Location	W.O. (mR/hr)	W.C. (mR/hr)	W.O. (mR/hr)	W.C. (mR/hr)	Charcoal Cartridge	Filter Paper	(uCi/cc)	(cpm)
1A	56.8	25.6	5.7	2.6	10000	AR	4E-06	AR
1B	20.9	9.4	2.1	0.9	3500	AR	1.4E-06	AR
2A	11.1	5.0	1.1	0.5	1825	AR	7.3E-07	AR
2B	7.3	3.3	0.7	0.3	1200	AR	4.8E-07	AR

8:30 - 8:45

METEOROLOGY

N

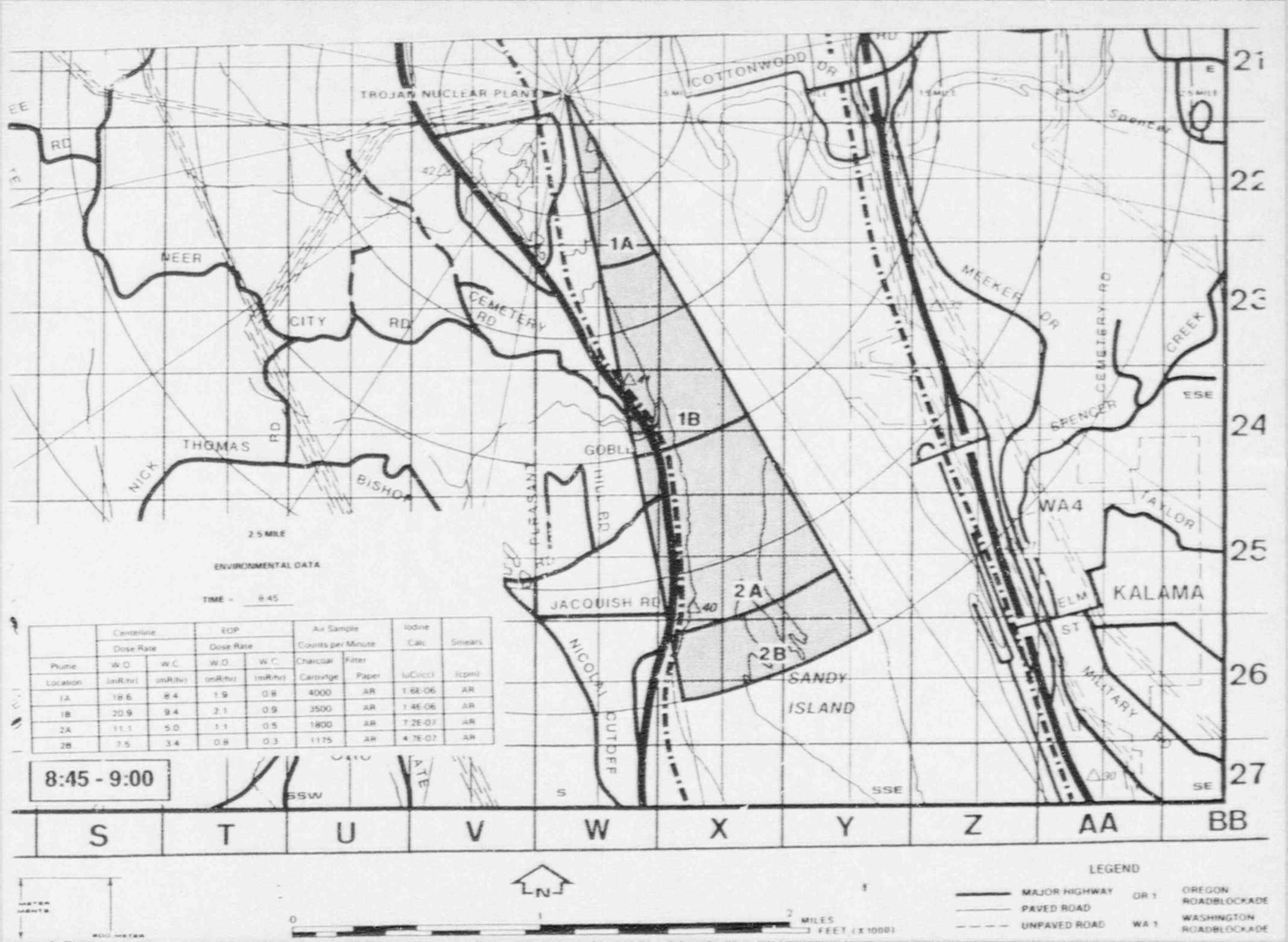
0 1 2 MILES

LEGEND

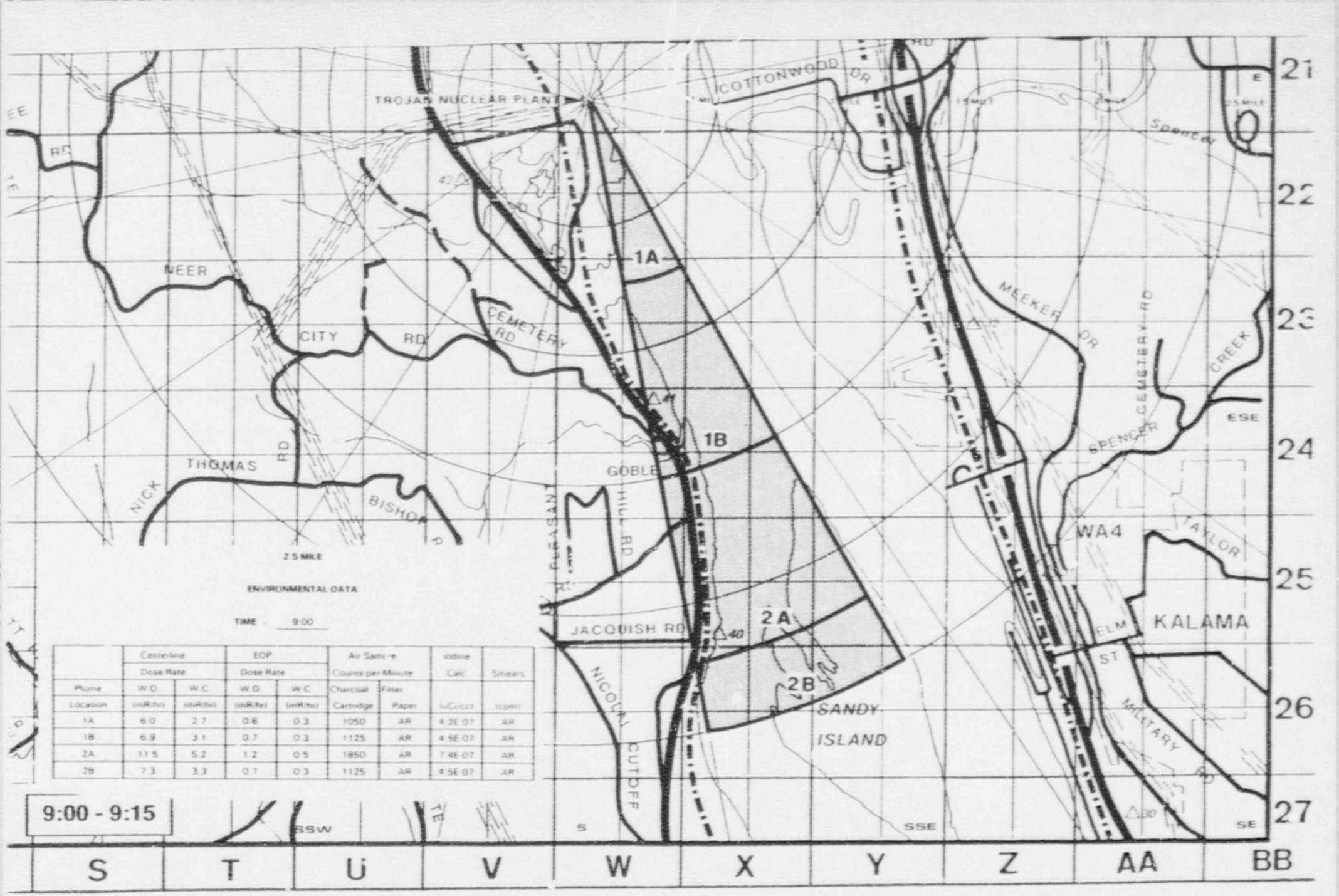
MAJOR HIGHWAY — OR 1 — OREGON ROADBLOCKADE

PAVED ROAD

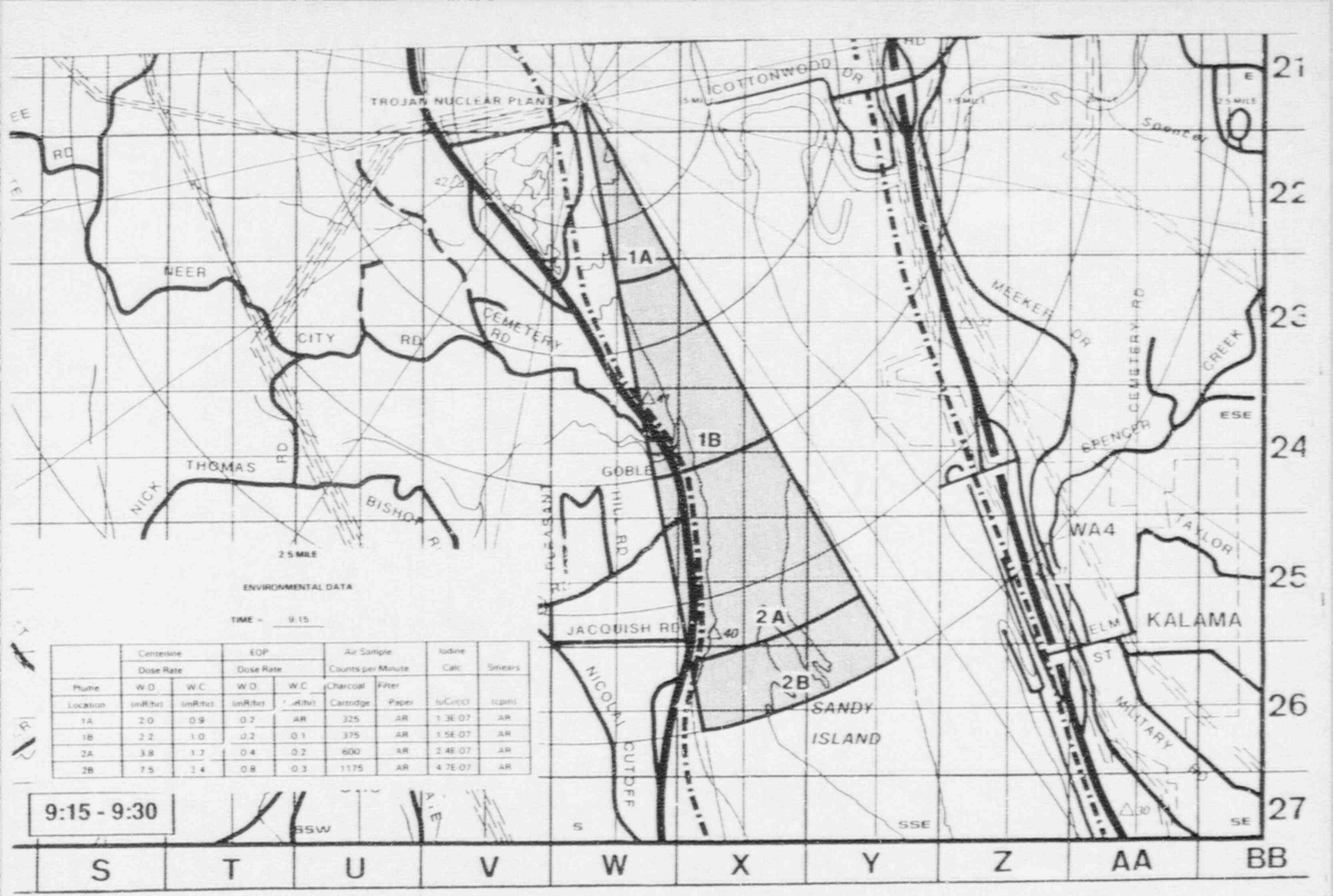
UNPAVED ROAD — WA 1 — WASHINGTON



Plume Location	Centerline Dose Rate W.O. (mR/hr)	Centerline Dose Rate W.C. (mR/hr)	EOP Dose Rate W.O. (mR/hr)	EOP Dose Rate W.C. (mR/hr)	Air Sample Counts per Minute Charcoal Cartridge	Air Sample Counts per Minute Filter Paper	Iodine Calc. (uCi/cc)	Smears (cpm)
1A	18.6	8.4	1.9	0.8	4000	AR	1.6E-06	AR
1B	20.9	9.4	2.1	0.9	3500	AR	1.4E-06	AR
2A	11.1	5.0	1.1	0.5	1800	AR	7.2E-07	AR
2B	7.5	3.4	0.8	0.3	1175	AR	4.7E-07	AR



	Centerline Dose Rate		EOP Dose Rate		Air Sample Counts per Minute		Iodine Calc	Smears
Plume	W.O.	W.C.	W.O.	W.C.	Charcoal Filter			
Location	(mR/hr)	(mR/hr)	(mR/hr)	(mR/hr)	Cartridge	Paper	(uCi/cc)	(cpm)
1A	6.0	2.7	0.6	0.3	1050	AR	4.2E-07	AR
1B	6.9	3.1	0.7	0.3	1125	AR	4.5E-07	AR
2A	11.5	5.2	1.2	0.5	1850	AR	7.4E-07	AR
2B	7.3	3.3	0.7	0.3	1125	AR	4.5E-07	AR



ENVIRONMENTAL DATA

TIME – 9:15

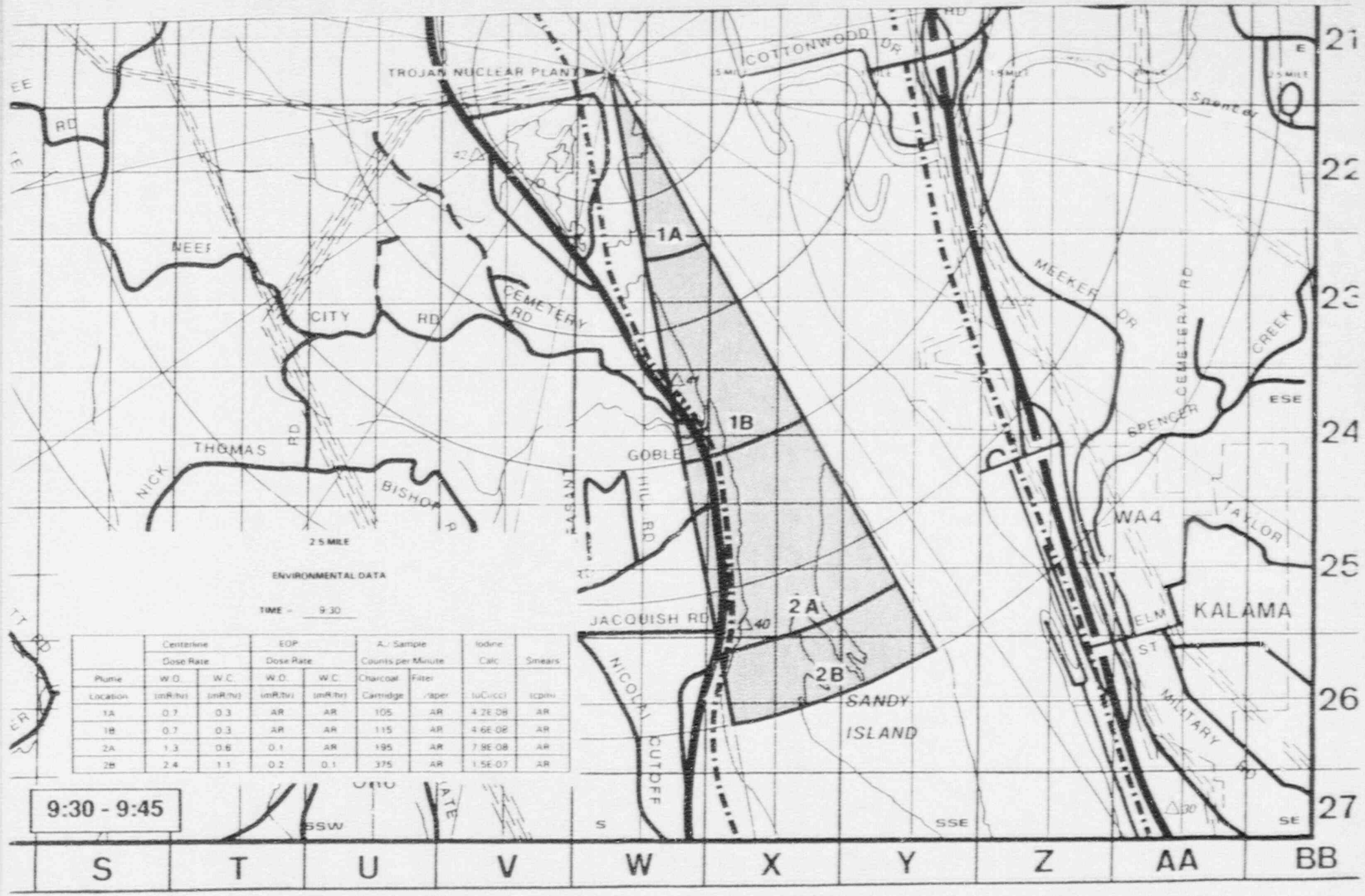
	Centerline Dose Rate		EOP Dose Rate		Air Sample Counts per Minute		Iodine Calc	Smears
Plume	W.O.	W.C.	W.O.	W.C.	Charcoal	Filter		
Location	(mR/hr)	(mR/hr)	(mR/hr)	(mR/hr)	Cartridge	Paper	(uCi/cc)	(cpm)
1A	2.0	0.9	0.2	AR	325	AR	1.3E-07	AR
1B	2.2	1.0	0.2	0.1	375	AR	1.5E-07	AR
2A	3.8	1.7	0.4	0.2	600	AR	2.4E-07	AR
2B	7.5	3.4	0.8	0.3	1175	AR	4.7E-07	AR

9:15 - 9:30

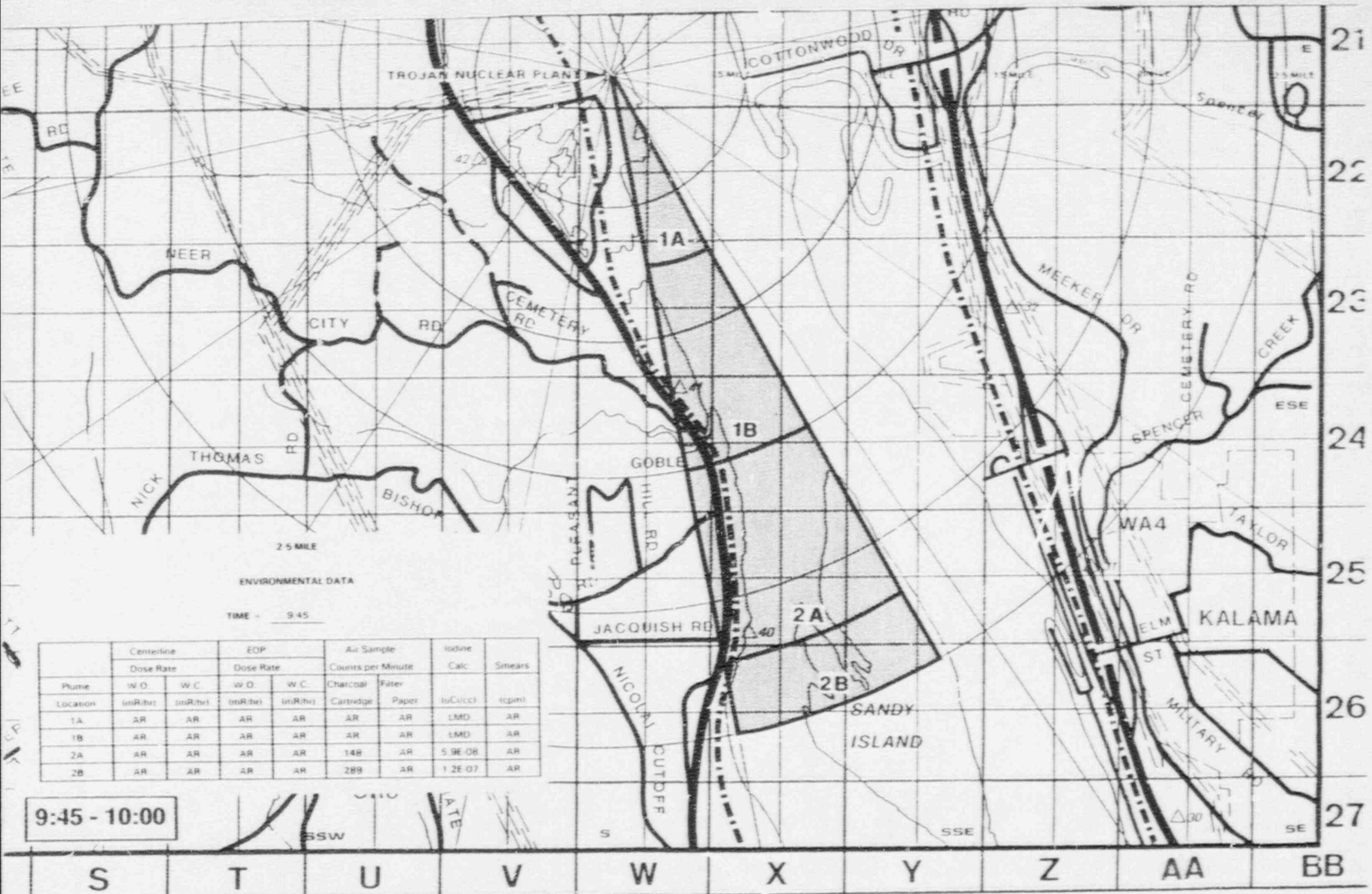
LEGEND

MAJOR HIGHWAY
PAVED ROAD
UNPAVED ROAD
OR 1 OREGON ROADBLOCKADE
WA 1 WASHINGTON ROADBLOCKADE

0 1 2 MILES



	Centerline Dose Rate		EOP Dose Rate		A./ Sample Counts per Minute		Iodine Calc	Smears
Plume	W.O.	W.C.	W.O.	W.C.	Charcoal	Filter		
Location	(mR/hr)	(mR/hr)	(mR/hr)	(mR/hr)	Cartridge	Paper	(uCi/cc)	(cpm)
1A	0.7	0.3	AR	AR	105	AR	4.2E-08	AR
1B	0.7	0.3	AR	AR	115	AR	4.6E-08	AR
2A	1.3	0.6	0.1	AR	195	AR	7.8E-08	AR
2B	2.4	1.1	0.2	0.1	375	AR	1.5E-07	AR



2.5 MILE

ENVIRONMENTAL DATA

TIME - 9:45

	Centerline Dose Rate		EOP Dose Rate		Air Sample Counts per Minute		Iodine Calc.	Smears
Plume	W.O.	W.C.	W.O.	W.C.	Charcoal	Filter		
Location	(mR/hr)	(mR/hr)	(mR/hr)	(mR/hr)	Cartridge	Paper	(uCi/cc)	(cpm)
1A	AR	AR	AR	AR	AR	AR	LMD	AR
1B	AR	AR	AR	AR	AR	AR	LMD	AR
2A	AR	AR	AR	AR	148	AR	5.9E-08	AR
2B	AR	AR	AR	AR	289	AR	1.2E-07	AR

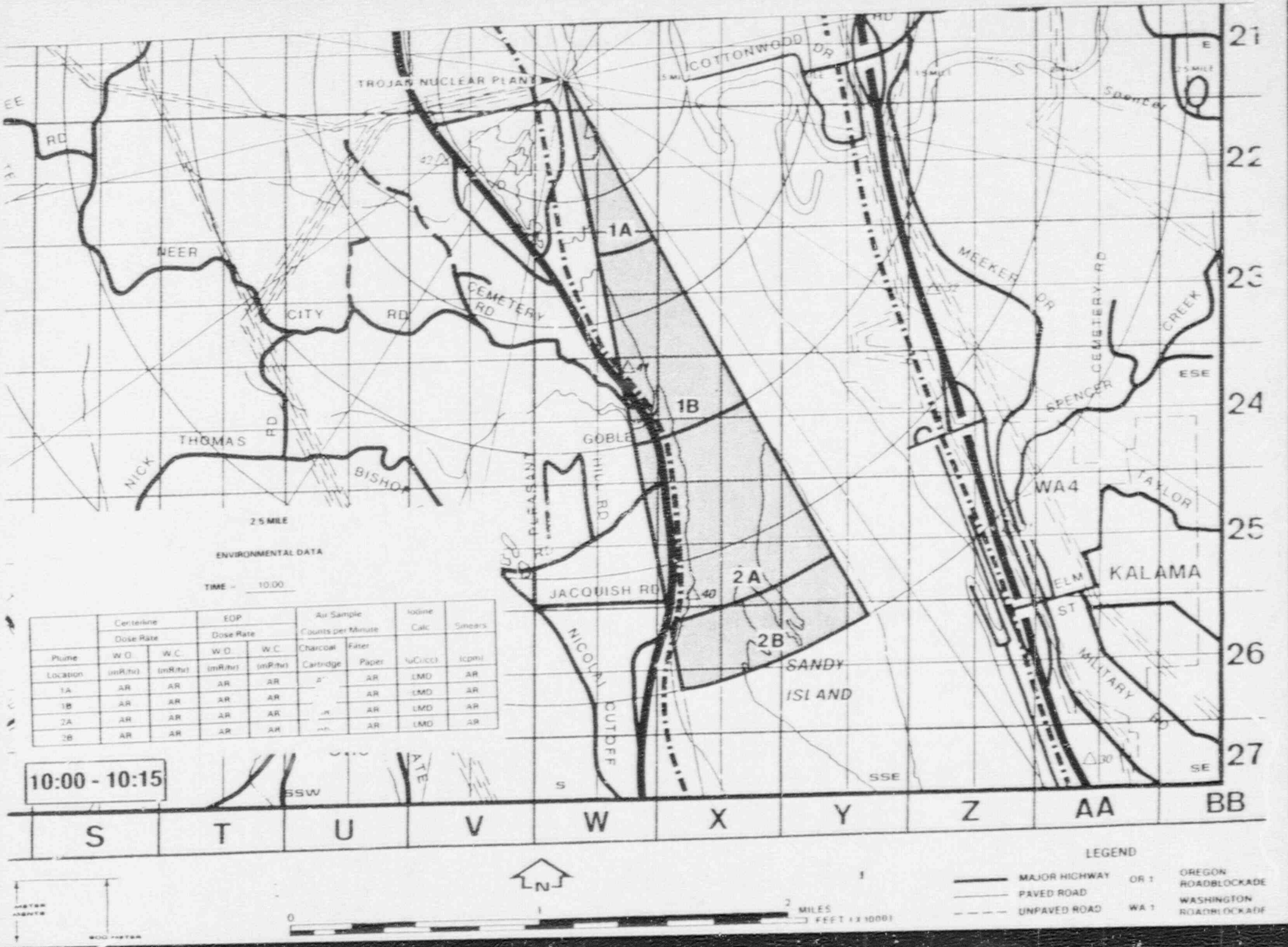
9:45 - 10:00

LEGEND

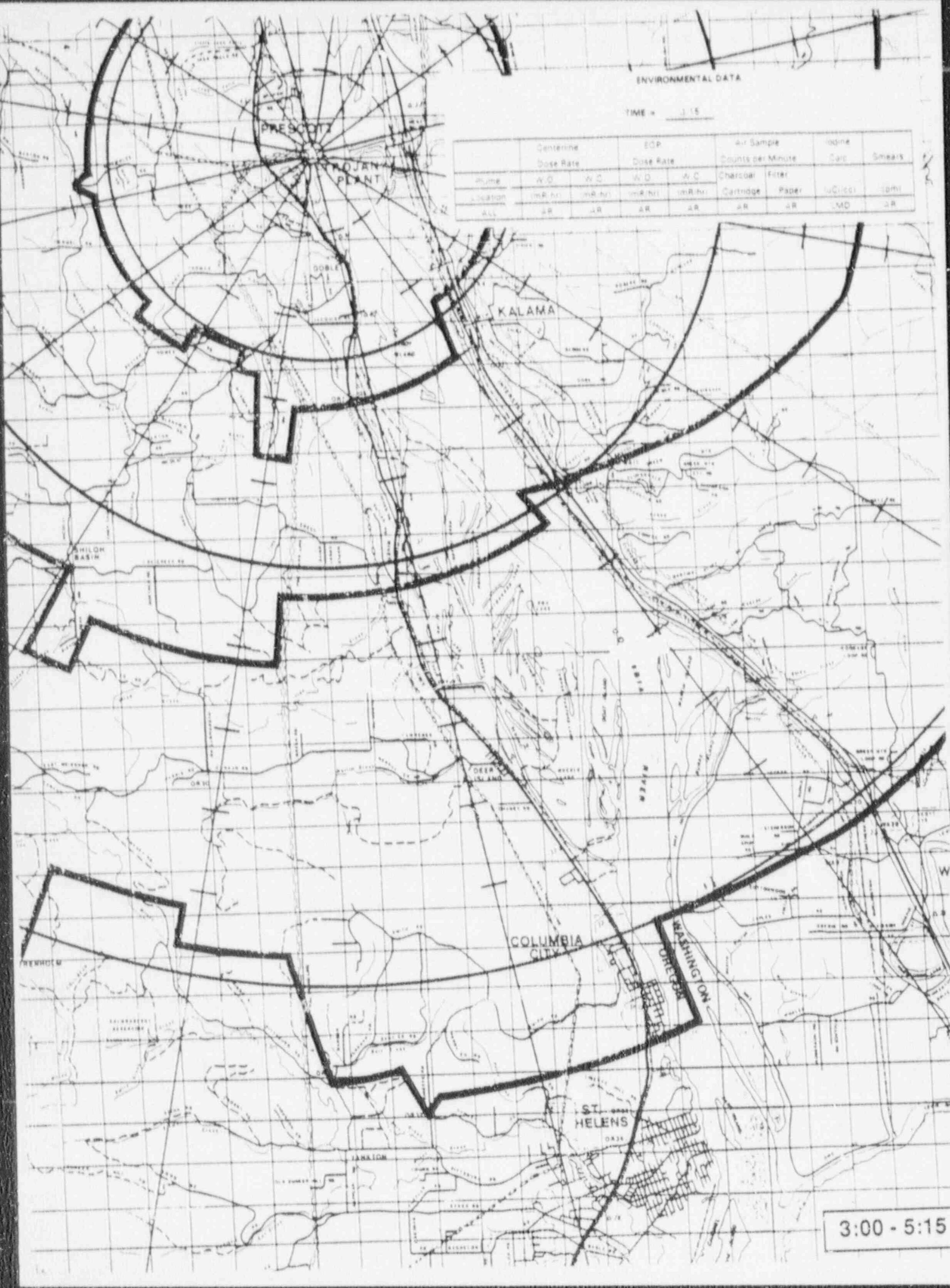
MAJOR HIGHWAY
PAVED ROAD
UNPAVED ROAD
OR 1 OREGON ROADBLOCKADE
WA 1 WASHINGTON ROADBLOCKADE

N

0 1 2 MILES



Plume Location	Centerline Dose Rate W.O. (mR/hr)	Centerline Dose Rate W.C. (mR/hr)	EOP Dose Rate W.O. (mR/hr)	EOP Dose Rate W.C. (mR/hr)	Air Sample Counts per Minute Charcoal Cartridge	Air Sample Counts per Minute Filter Paper	Iodine Calc (uCi/cc)	Smears (cpm)
1A	AR	AR	AR	AR		AR	LMD	AR
1B	AR	AR	AR	AR		AR	LMD	AR
2A	AR	AR	AR	AR		AR	LMD	AR
2B	AR	AR	AR	AR		AR	LMD	AR

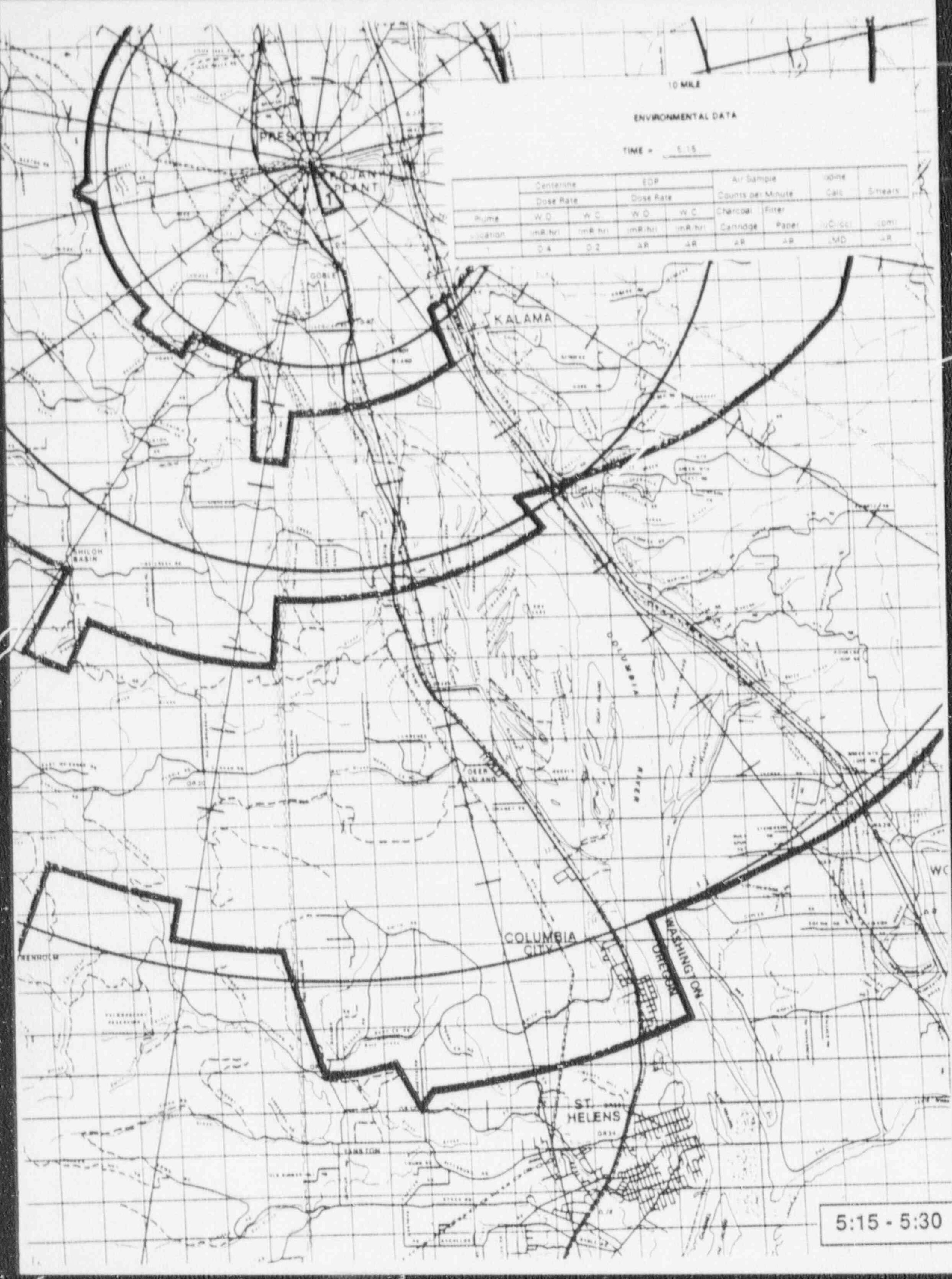


ENVIRONMENTAL DATA

TIME = 3:15

	Centerline Dose Rate		EOP Dose Rate		Air Sample Counts per Minute		Iodine Calc	Smears
Plume	W.O.	W.C.	W.O.	W.C.	Charcoal	Filter		
Location	(mR/hr)	(mR/hr)	(mR/hr)	(mR/hr)	Cartridge	Paper	(uCi/cc)	(dpm)
ALL	AR	AR	AR	AR	AR	AR	LMD	AR

3:00 - 5:15



ENVIRONMENTAL DATA

TIME = 5:15

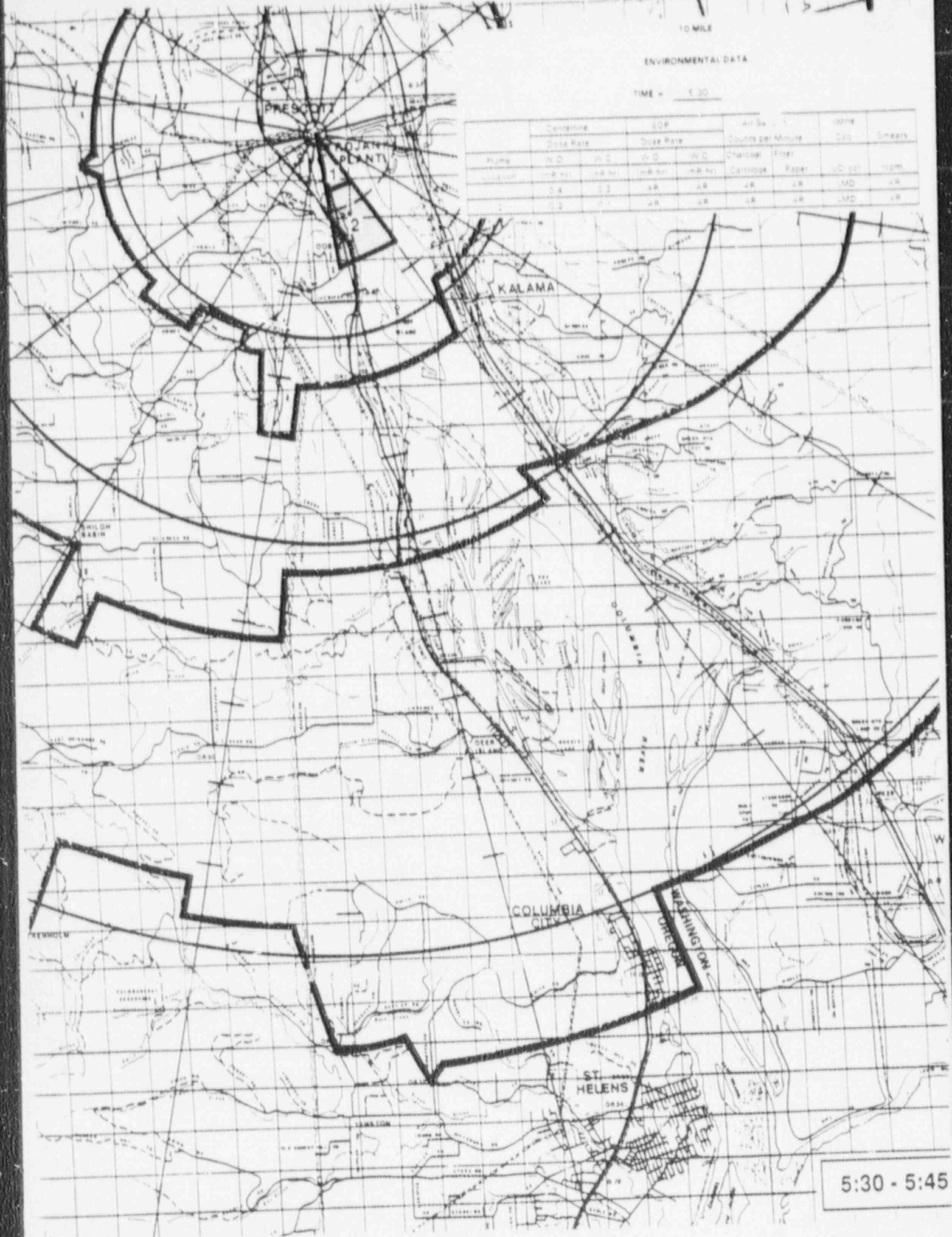
	Centerline Dose Rate		EDP Dose Rate		Air Sample Counts per Minute		Iodine Calc	Smears
Plume	W.O.	W.C.	W.O.	W.C.	Charcoal	Filter		
Location	(mR/hr)	(mR/hr)	(mR/hr)	(mR/hr)	Cartridge	Paper	(uCi/cc)	(cpm)
1	0.4	0.2	AR	AR	AR	AR	LMD	AR

10 MILE

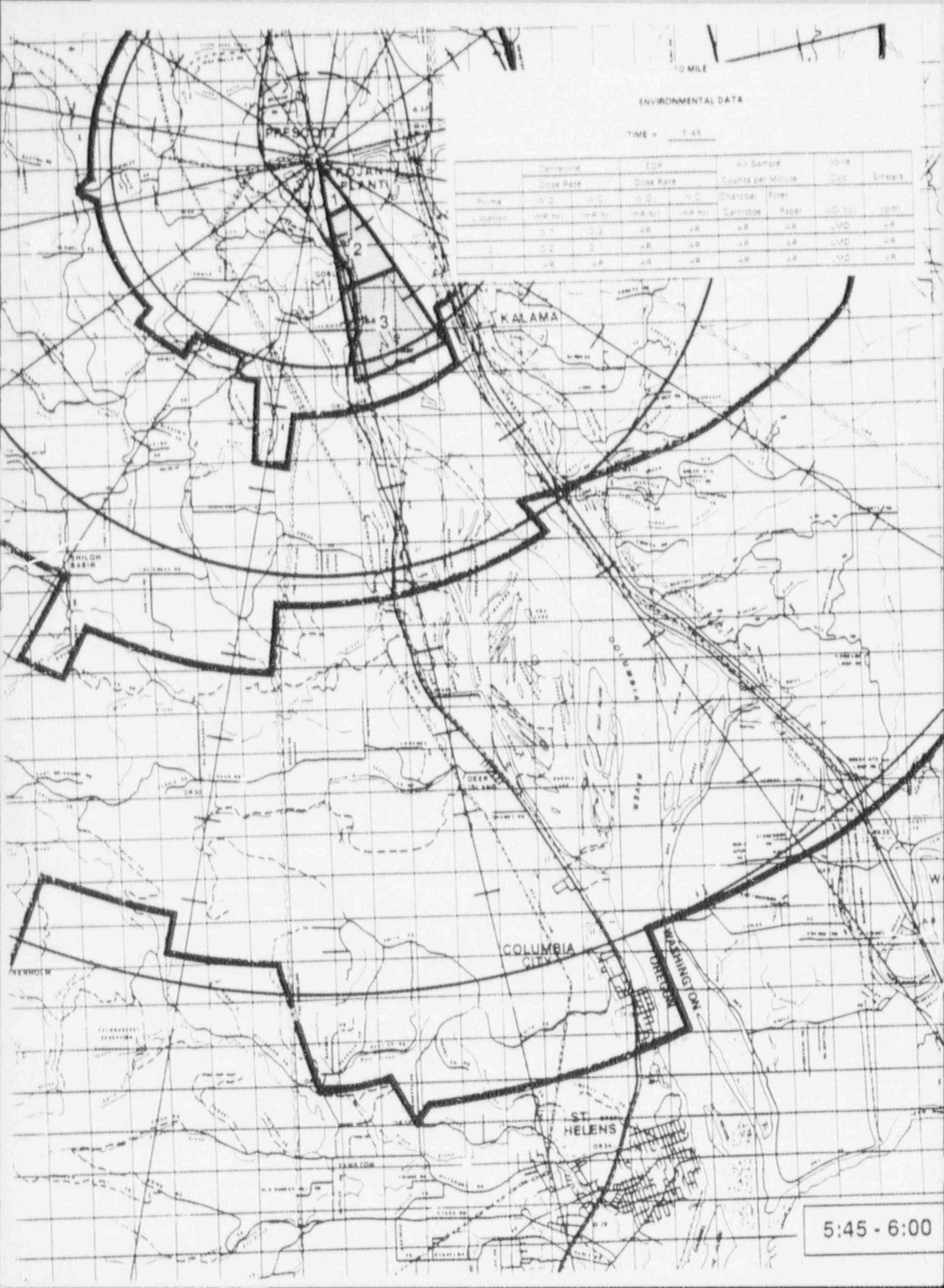
ENVIRONMENTAL DATA

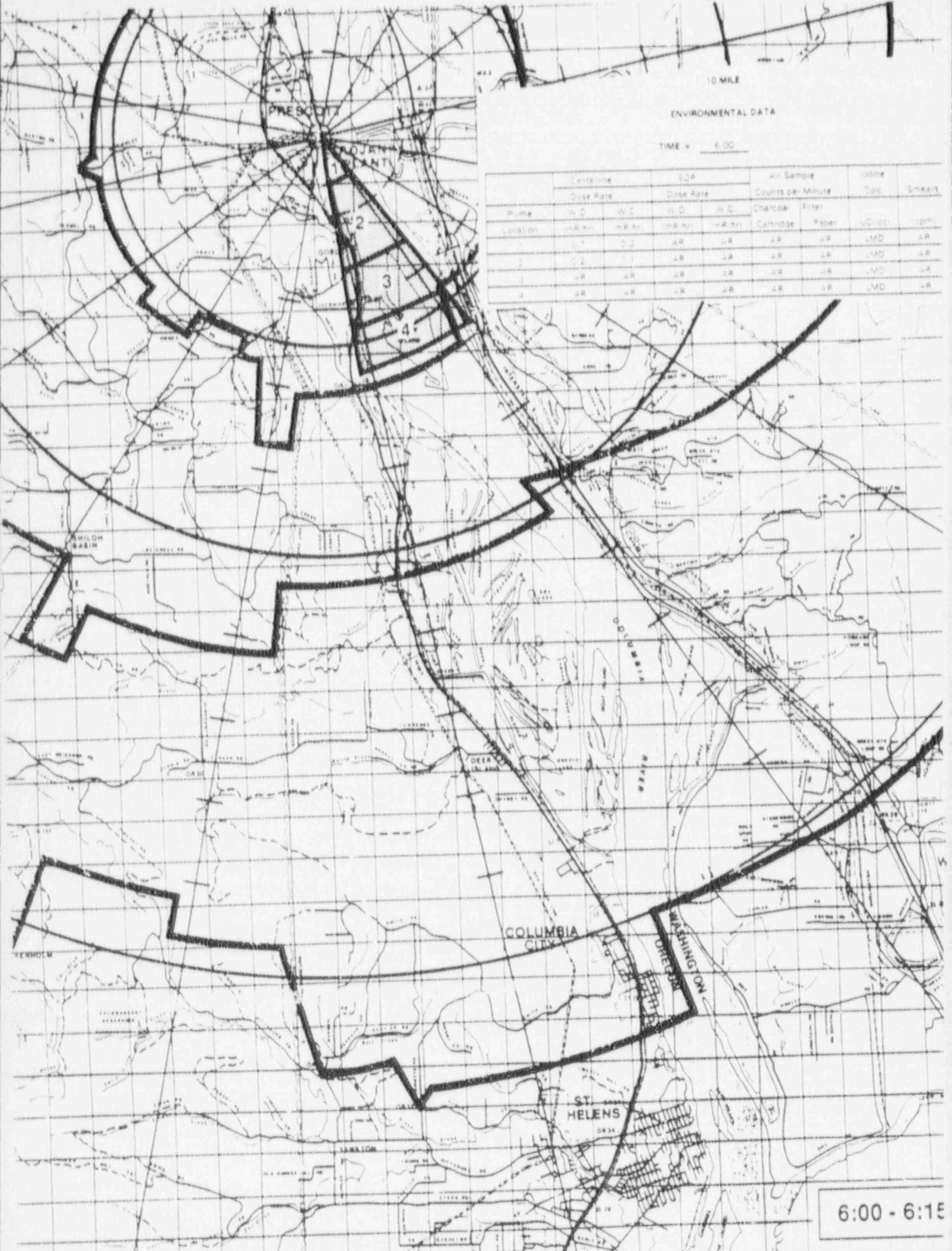
TIME = 5:30

	Centerline Dose Rate		EOP Dose Rate		Air Sa... Counts per Minute		Iodine Cpm	Smears
Plume	W.D.	W.S.	W.D.	W.S.	Charcoal Cartridge	Filter Paper	uC/cc	cpm
	mR/hr	mR/hr	mR/hr	mR/hr				
	0.4	0.2	ΔR	ΔR	ΔR	ΔR	MD	ΔR
	0.2	0.1	ΔR	ΔR	ΔR	ΔR	MD	ΔR



5:30 - 5:45

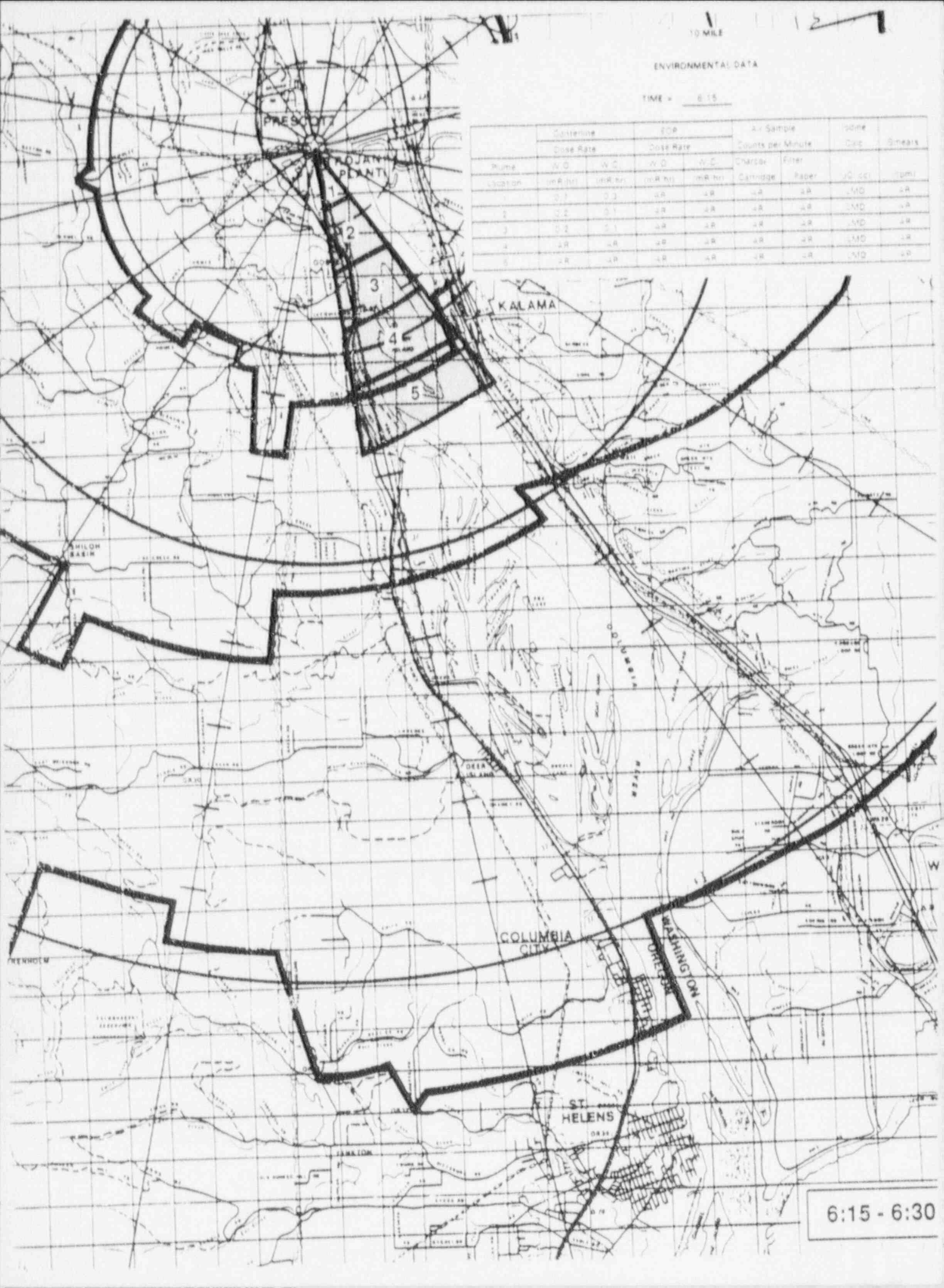

10 MILE
ENVIRONMENTAL DATA
TIME = 5:45
PRESCOTT
TROJAN PLANT
1
2
3
KALAMA
SHILOH BASIN
COLUMBIA CITY
WASHINGTON
OREGON
ST. HELENS
5:45 - 6:00

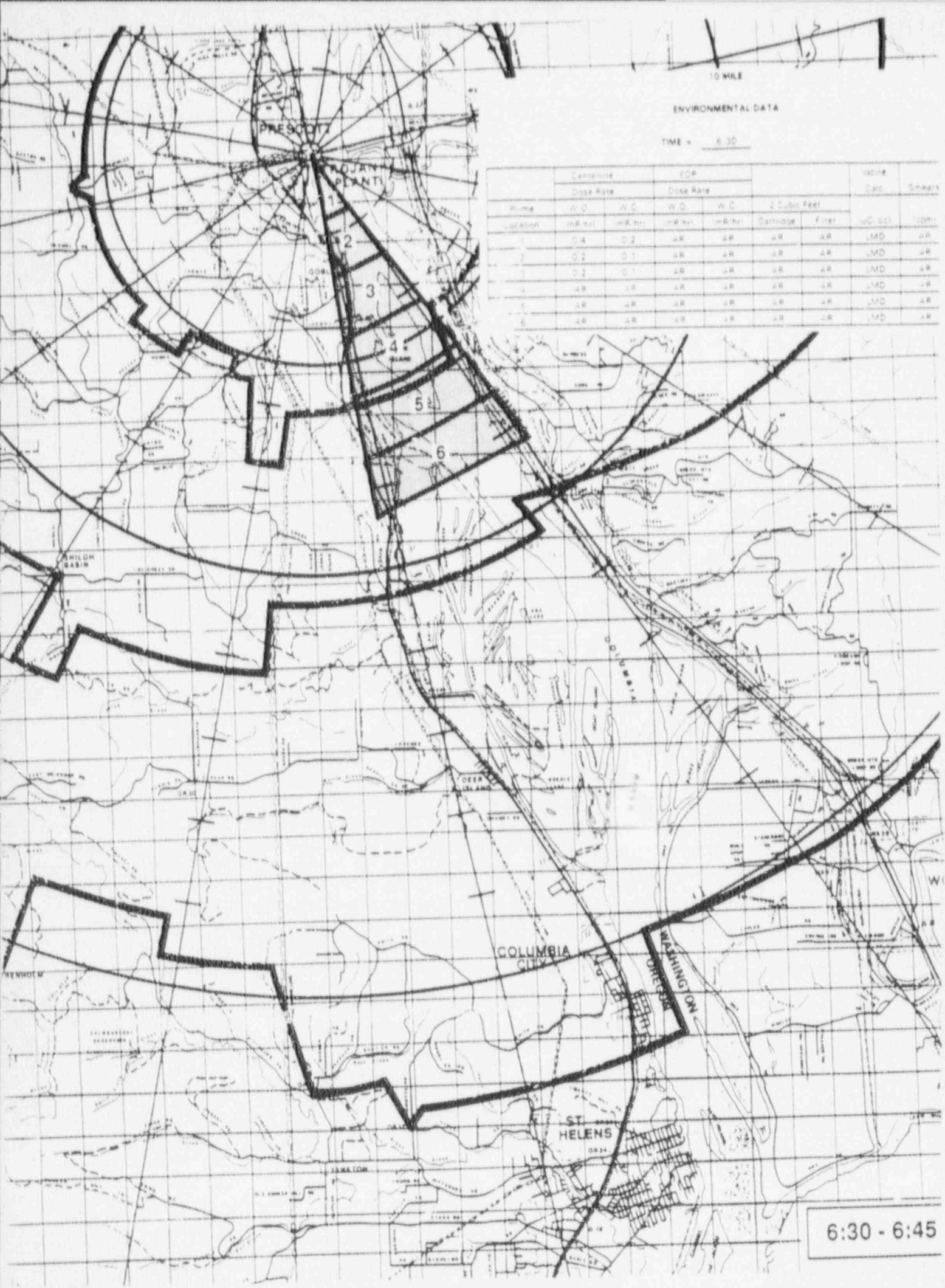


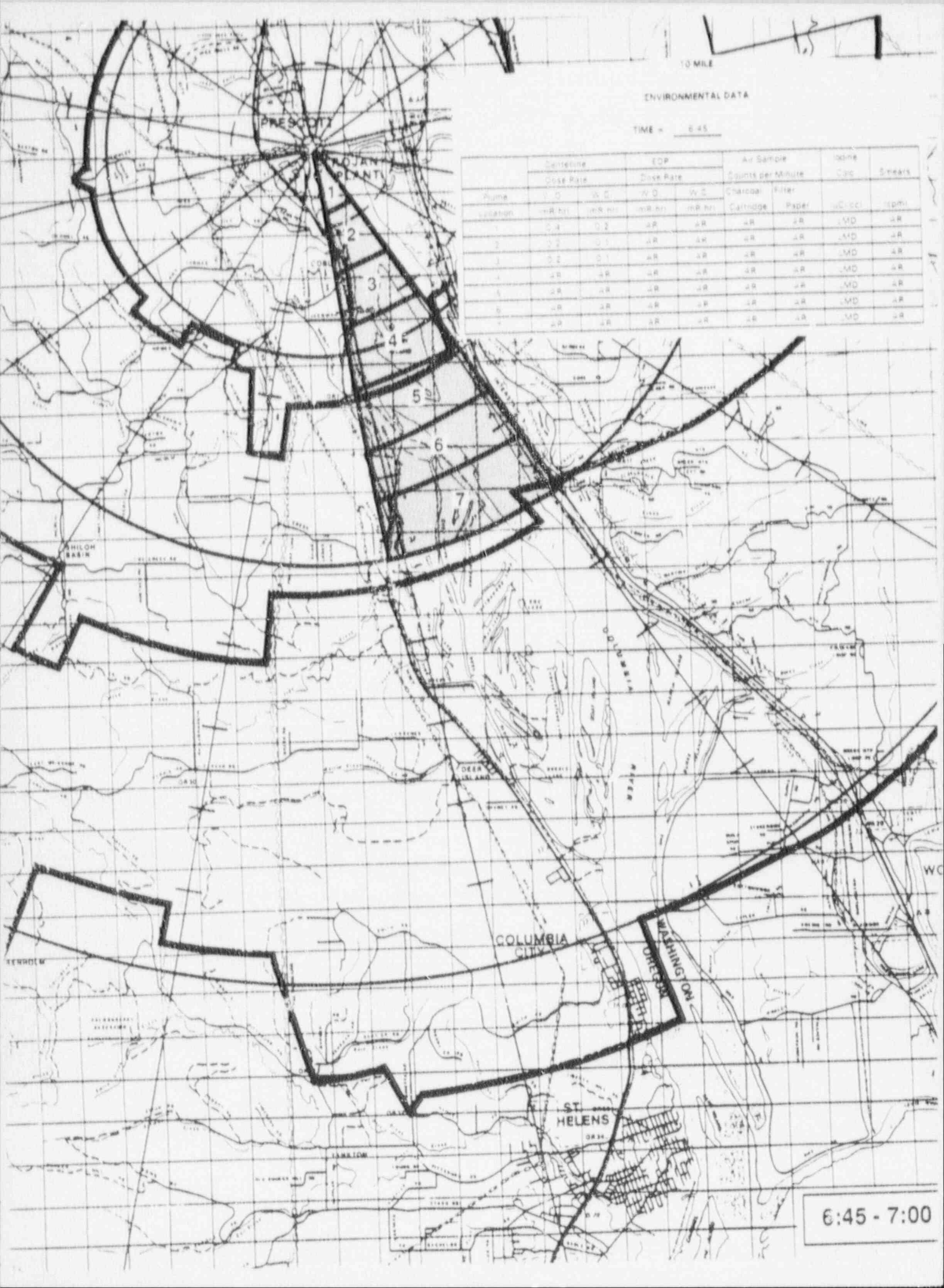
ENVIRONMENTAL DATA

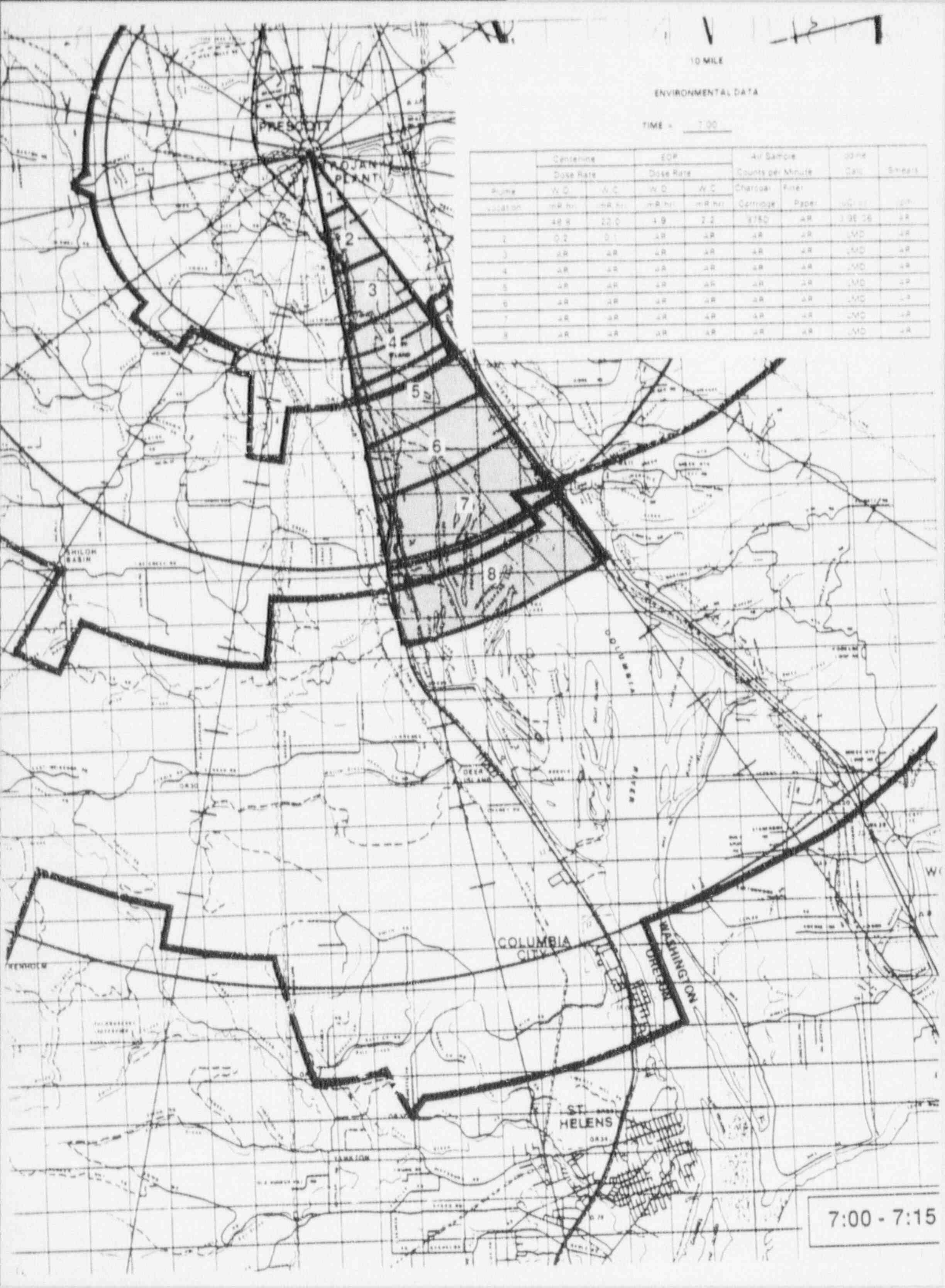
TIME = 6:00

	Centerline Dose Rate		EOP Dose Rate		Air Sample Counts per Minute		Iodine Calc	Smears
Plume Location	W.O. (mR/hr)	W.C. (mR/hr)	W.O. (mR/hr)	W.C. (mR/hr)	Charcoal Cartridge	Filter Paper	(uCi/cc)	(cpm)
1	0.7	0.3	AR	AR	AR	AR	LMD	AR
2	0.2	0.1	AR	AR	AR	AR	LMD	AR
3	AR	AR	AR	AR	AR	AR	LMD	AR
4	AR	AR	AR	AR	AR	AR	LMD	AR


10 MILE
ENVIRONMENTAL DATA
TIME = 6:15
Plume Location
Corrective Dose Rate W.O. (mR/hr)
Corrective Dose Rate W.C. (mR/hr)
EOF Dose Rate W.O. (mR/hr)
EOF Dose Rate W.C. (mR/hr)
Air Sample Counts per Minute Charcoal Cartridge
Air Sample Counts per Minute Filter Paper
Iodine Cpm
Smears dpm
PRESCOTT
TROJAN PLANT
1
2
3
4
5
KALAMA
COLUMBIA CITY
ST. HELENS
OREGON
WASHINGTON
6:15 - 6:30


10 MILE
ENVIRONMENTAL DATA
TIME = 6:30
Centerline Dose Rate
EOP Dose Rate
Plume Location
W.D. (mR/hr)
W.C. (mR/hr)
W.D. (mR/hr)
W.C. (mR/hr)
2 Cubic Feet Cartridge
2 Cubic Feet Filter
Iodine Data (uC/cc)
Smears (dpm)
1 0.4 0.2 AR AR AR AR LMD AR
2 0.2 0.1 AR AR AR AR LMD AR
3 0.2 0.1 AR AR AR AR LMD AR
4 AR AR AR AR AR AR LMD AR
5 AR AR AR AR AR AR LMD AR
6 AR AR AR AR AR AR LMD AR
PRESCOTT
ROJANT PLANT
1
2
3
4
5
6
SHILOH BASIN
COLUMBIA CITY
OREGON
WASHINGTON
ST. HELENS
6:30 - 6:45


10 MILE
ENVIRONMENTAL DATA
TIME = 6:45
PRESCOTT
TROJAN PLANT
1
2
3
4
5
6
7
COLUMBIA CITY
ST. HELENS
OREGON
WASHINGTON
6:45 - 7:00



10 MILE

ENVIRONMENTAL DATA

TIME = 7:00

	Centerline		EOP		Air Sample		Iodine	
	Dose Rate		Dose Rate		Counts per Minute		Calc	Smears
Plume	W.O.	W.C.	W.O.	W.C.	Charcoal	Filter		
Location	mR/hr	mR/hr	mR/hr	mR/hr	Cartridge	Paper	µCi/cc	dpm
1	48.8	22.0	4.9	2.2	3750	AR	3.9E-06	AR
2	0.2	0.1	AR	AR	AR	AR	LMD	AR
3	AR	AR	AR	AR	AR	AR	LMD	AR
4	AR	AR	AR	AR	AR	AR	LMD	AR
5	AR	AR	AR	AR	AR	AR	LMD	AR
6	AR	AR	AR	AR	AR	AR	LMD	AR
7	AR	AR	AR	AR	AR	AR	LMD	AR
8	AR	AR	AR	AR	AR	AR	LMD	AR

10 MILE

ENVIRONMENTAL DATA

TIME : 7:15

Plume Location	Centerline Dose Rate		EOP Dose Rate		Air Sample Counts per Minute		Iodine Calc	Smears
	W.O. (mR/hr)	W.C. (mR/hr)	W.O. (mR/hr)	W.C. (mR/hr)	Charcoal Cartridge	Filter Paper	(μCi/cc)	(cpm)
1	56.4	25.4	5.6	2.5	10250	AR	4.1E-06	AR
2	1.8.0	8.1	1.8	0.8	3250	AR	1.3E-06	AR
3	AR	AR	AR	AR	AR	AR	LMD	AR
4	AR	AR	AR	AR	AR	AR	LMD	AR
5	AR	AR	AR	AR	AR	AR	LMD	AR
6	AR	AR	AR	AR	AR	AR	LMD	AR
7	AR	AR	AR	AR	AR	AR	LMD	AR
8	AR	AR	AR	AR	AR	AR	LMD	AR
9	AR	AR	AR	AR	AR	AR	LMD	AR

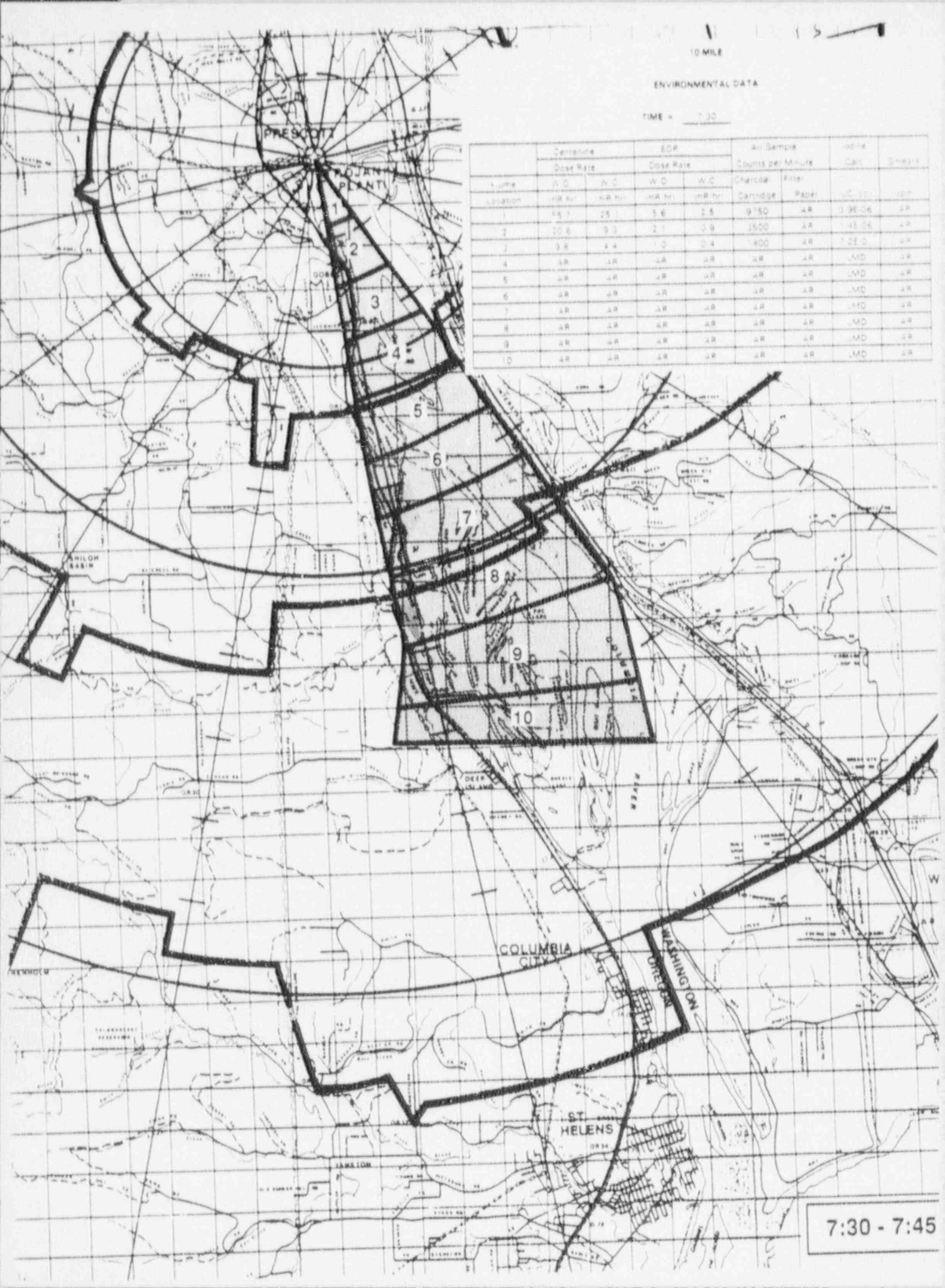
7:15 - 7:30

10 MILE

ENVIRONMENTAL DATA

TIME = 7:30

Location	Gamma Dose Rate W.O. (mR/hr)	Gamma Dose Rate W.C. (mR/hr)	EDP Dose Rate W.O. (mR/hr)	EDP Dose Rate W.C. (mR/hr)	Air Sample Counts per Minute Charcoal Cartridge	Air Sample Counts per Minute Filter Paper	Iodine Conc. (uC/cc)	Sheets
1	25.7	25.1	3.6	2.8	9150	AR	3.9E-06	AR
2	20.6	9.3	2.1	0.9	3500	AR	1.4E-06	AR
3	9.8	4.4	1.0	0.4	1400	AR	1.2E-0	AR
4	AR	AR	AR	AR	AR	AR	LMD	AR
5	AR	AR	AR	AR	AR	AR	LMD	AR
6	AR	AR	AR	AR	AR	AR	LMD	AR
7	AR	AR	AR	AR	AR	AR	LMD	AR
8	AR	AR	AR	AR	AR	AR	LMD	AR
9	AR	AR	AR	AR	AR	AR	LMD	AR
10	AR	AR	AR	AR	AR	AR	LMD	AR



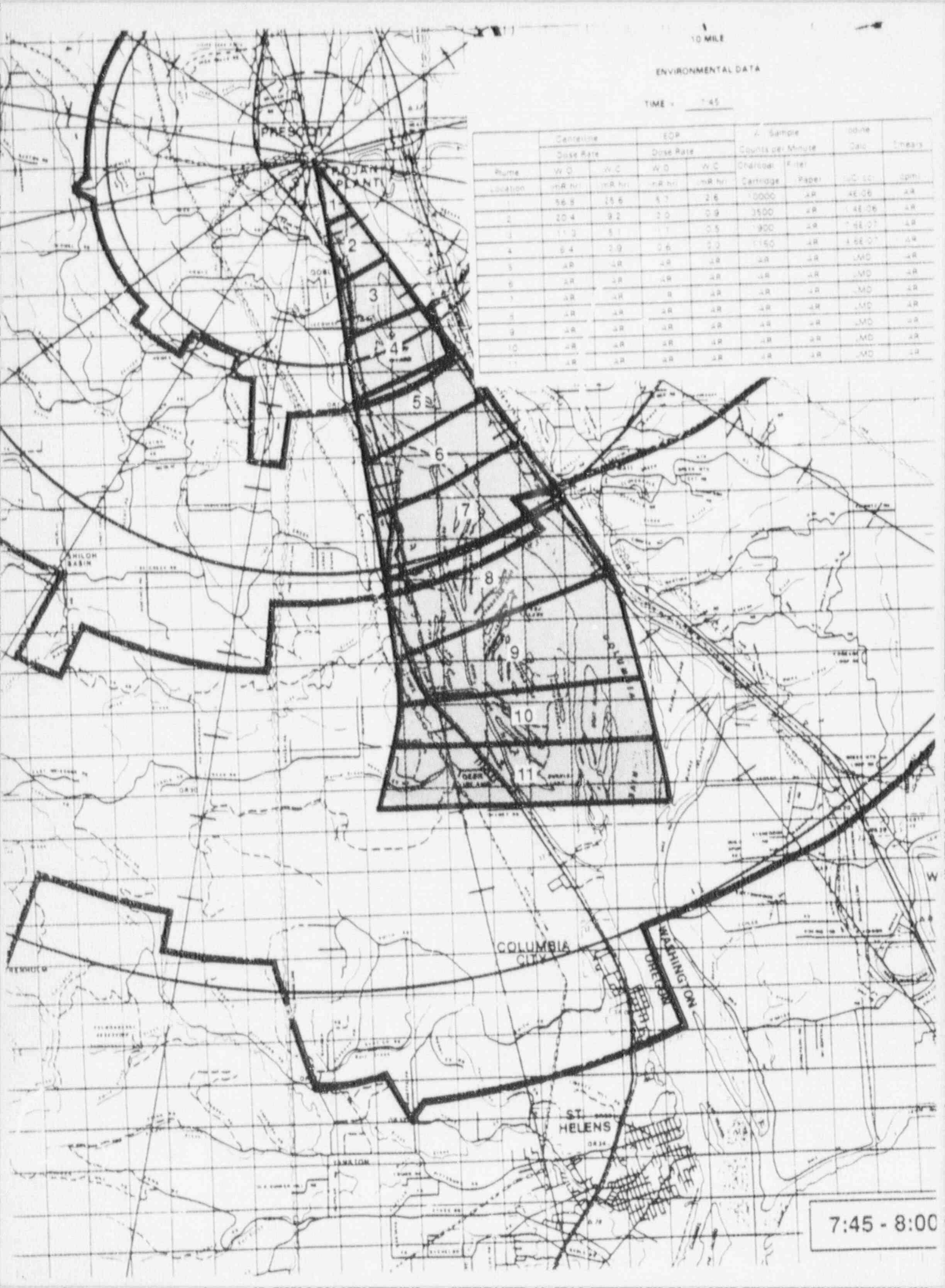
7:30 - 7:45

10 MILE

ENVIRONMENTAL DATA

TIME = 7:45

Plume Location	Centerline Dose Rate W.O mR/hr	Centerline Dose Rate W.C mR/hr	EOP Dose Rate W.O mR/hr	EOP Dose Rate W.C mR/hr	Air Sample Counts per Minute Charcoal Cartridge	Air Sample Counts per Minute Filter Paper	Iodine Data I-131	Iodine Data Spec.
	56.8	25.6	5.7	2.6	10000	AR	4E-06	AR
2	20.4	9.2	2.0	0.9	3500	AR	1.4E-06	AR
3	11.3	5.1	1.1	0.5	1900	AR	7.9E-07	AR
4	6.4	2.9	0.6	0.3	1150	AR	4.6E-07	AR
5	AR	AR	AR	AR	AR	AR	LMD	AR
6	AR	AR	AR	AR	AR	AR	LMD	AR
7	AR	AR	AR	AR	AR	AR	LMD	AR
8	AR	AR	AR	AR	AR	AR	LMD	AR
9	AR	AR	AR	AR	AR	AR	LMD	AR
10	AR	AR	AR	AR	AR	AR	LMD	AR
11	AR	AR	AR	AR	AR	AR	LMD	AR



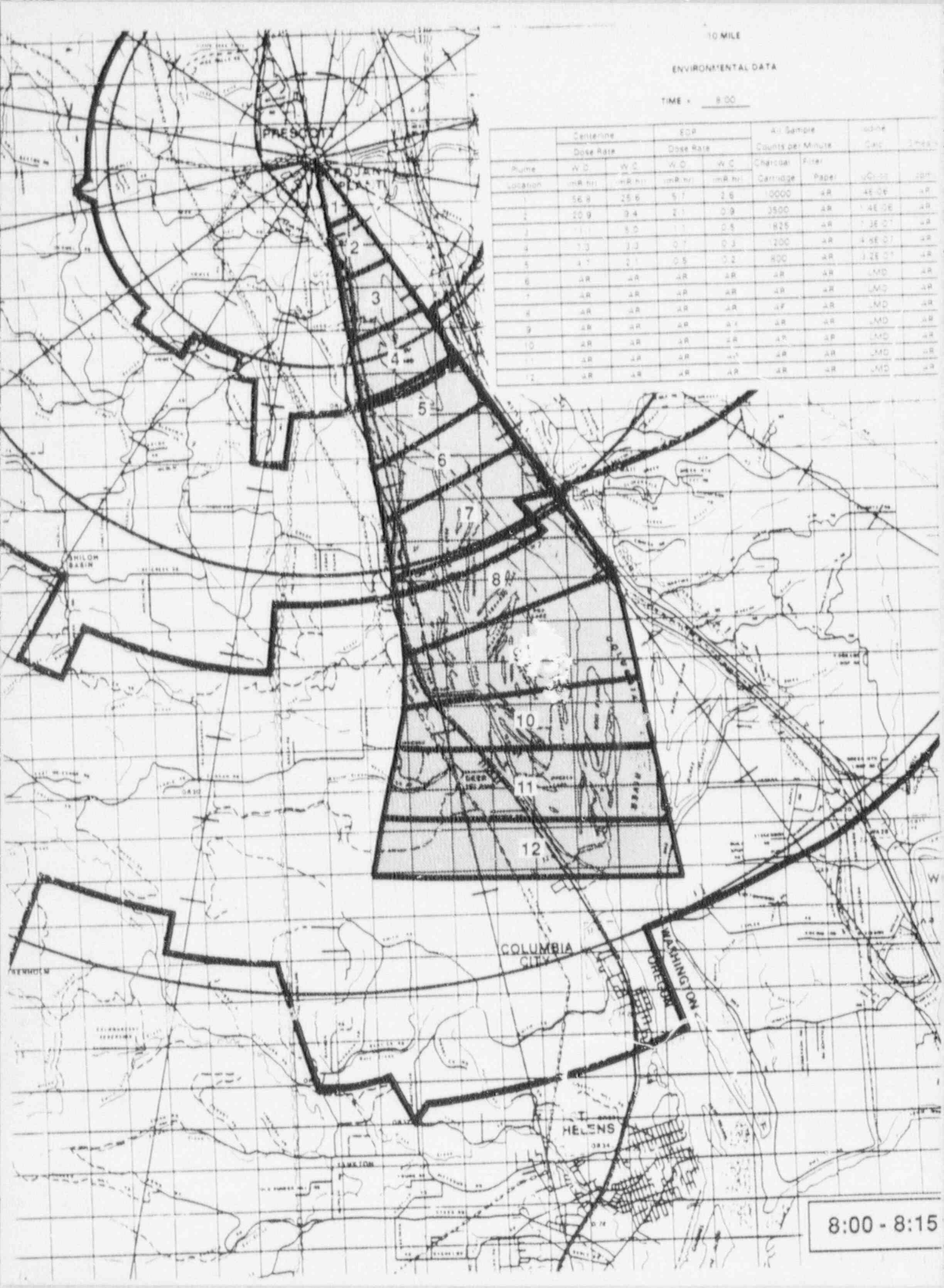
7:45 - 8:00

10 MILE

ENVIRONMENTAL DATA

TIME : 8:00

Plume Location	Centerline Dose Rate W.O (mR/hr)	Centerline Dose Rate W.C (mR/hr)	EOP Dose Rate W.O (mR/hr)	EOP Dose Rate W.C (mR/hr)	Air Sample Counts per Minute Charcoal Cartridge	Air Sample Counts per Minute Filter Paper	Iodine Gas (pCi/cc)	Iodine Gas (pCi/cc)
1	56.8	25.6	5.7	2.6	9000	AR	4E-06	AR
2	20.9	9.4	2.1	0.9	3500	AR	1.4E-06	AR
3	11.1	5.0	1.1	0.5	1825	AR	7.3E-07	AR
4	7.3	3.3	0.7	0.3	1200	AR	4.8E-07	AR
5	4.1	2.1	0.5	0.2	800	AR	3.2E-07	AR
6	AR	AR	AR	AR	AR	AR	AMD	AR
7	AR	AR	AR	AR	AR	AR	AMD	AR
8	AR	AR	AR	AR	AR	AR	AMD	AR
9	AR	AR	AR	AR	AR	AR	AMD	AR
10	AR	AR	AR	AR	AR	AR	AMD	AR
11	AR	AR	AR	AR	AR	AR	AMD	AR
12	AR	AR	AR	AR	AR	AR	AMD	AR



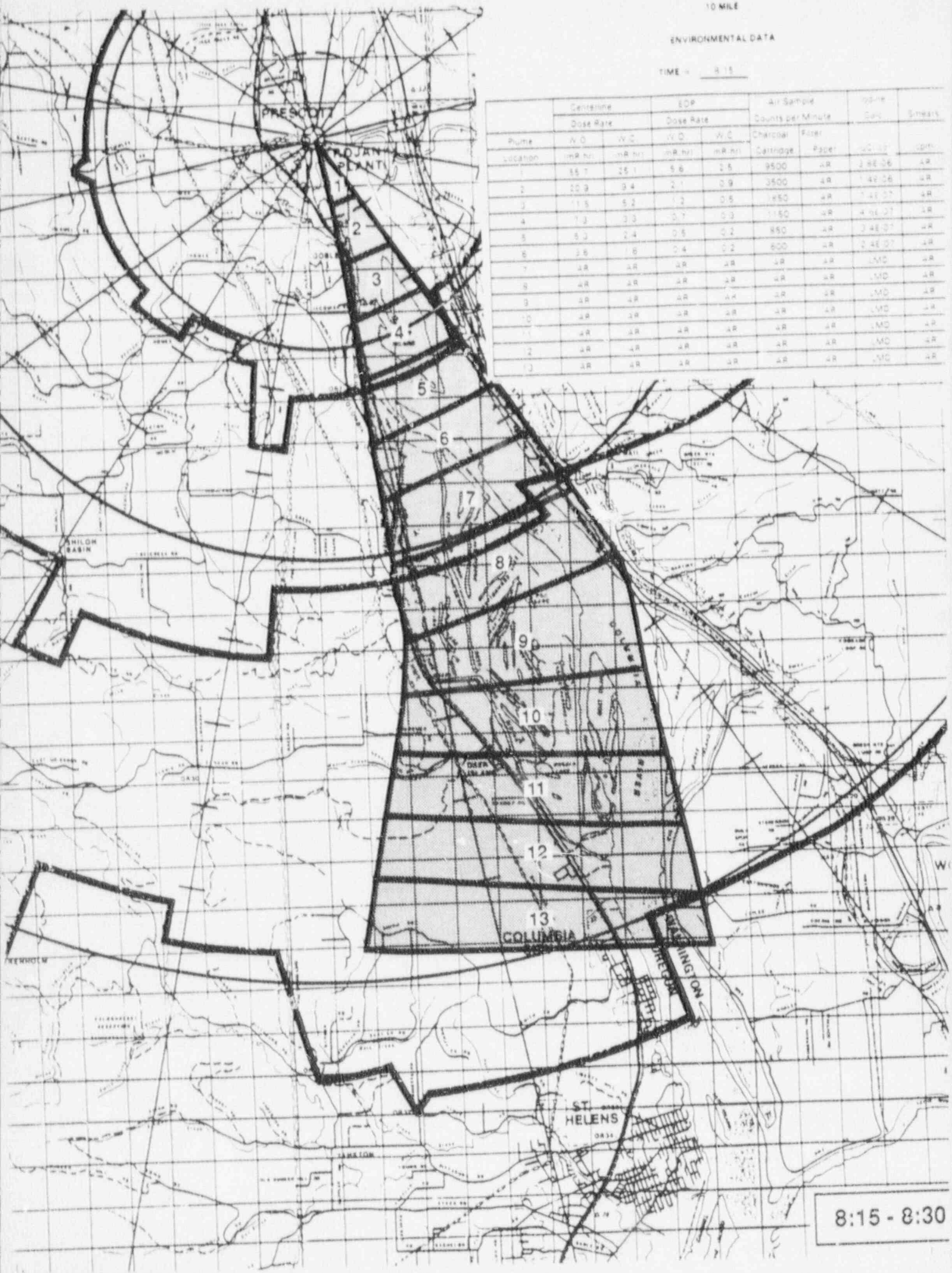
8:00 - 8:15

10 MILE

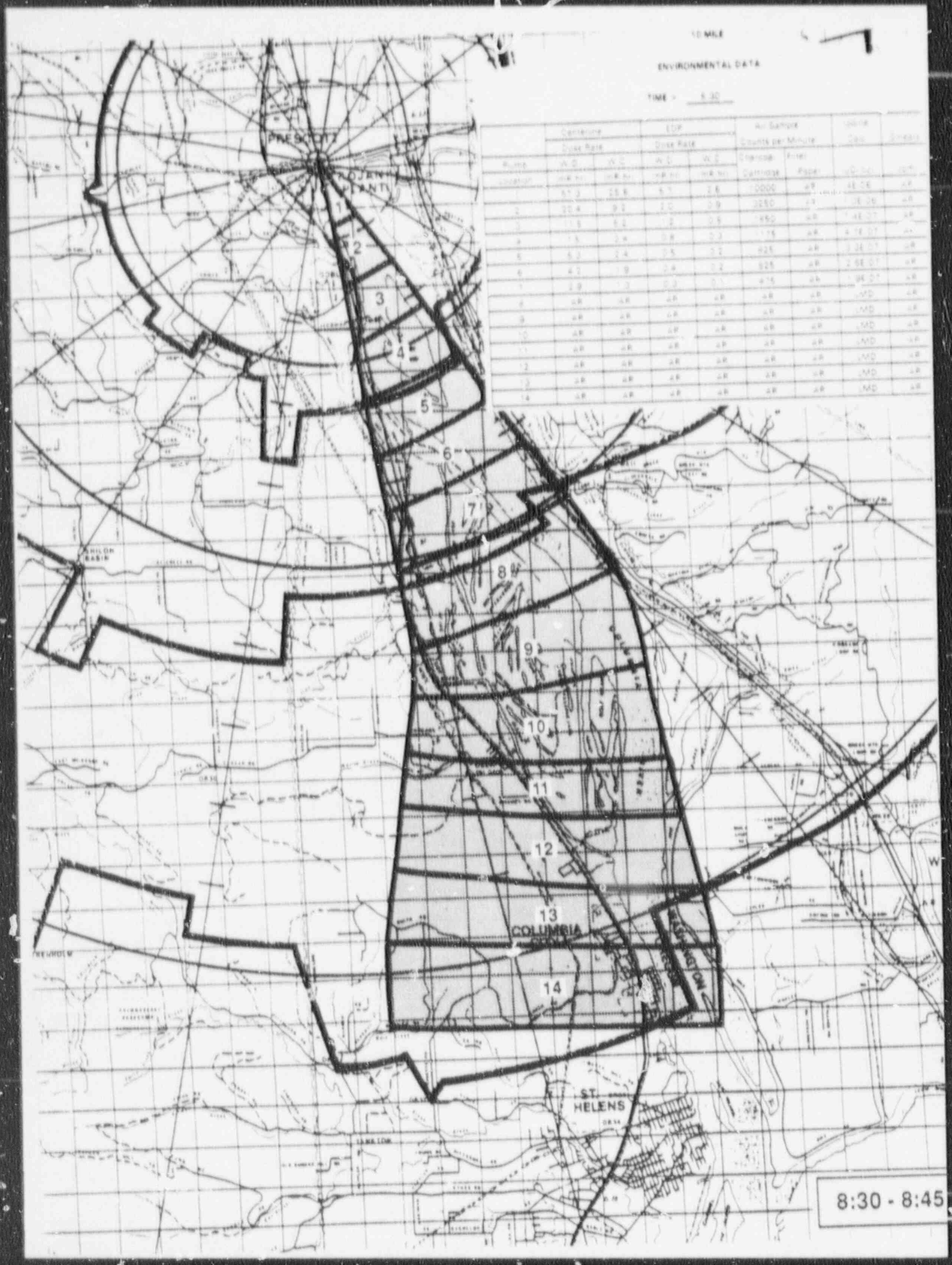
ENVIRONMENTAL DATA

TIME = 8:15

	Centerline Dose Rate		EOP Dose Rate		Air Sample Counts per Minute		Iodine Conc.	Stream
Plume Location	W.O. mR/hr	W.C. mR/hr	W.O. mR/hr	W.C. mR/hr	Charcoal Cartridge	Filter Paper	uCi/cc	cpm
1	55.7	25.1	5.6	2.5	9500	AR	2.4E-06	AR
2	20.9	9.4	2.1	0.9	3500	AR	1.4E-06	AR
3	11.5	5.2	1.2	0.5	1450	AR	5.4E-07	AR
4	7.3	3.3	0.7	0.3	1150	AR	4.0E-07	AR
5	5.3	2.4	0.5	0.2	850	AR	3.4E-07	AR
6	2.6	1.6	0.4	0.2	600	AR	3.4E-07	AR
7	AR	AR	AR	AR	AR	AR	LMD	AR
8	AR	AR	AR	AR	AR	AR	LMD	AR
9	AR	AR	AR	AR	AR	AR	LMD	AR
10	AR	AR	AR	AR	AR	AR	LMD	AR
11	AR	AR	AR	AR	AR	AR	LMD	AR
12	AR	AR	AR	AR	AR	AR	LMD	AR
13	AR	AR	AR	AR	AR	AR	LMD	AR



8:15 - 8:30


10 MILE
ENVIRONMENTAL DATA
TIME :
PRESCOTT
1
2
3
4
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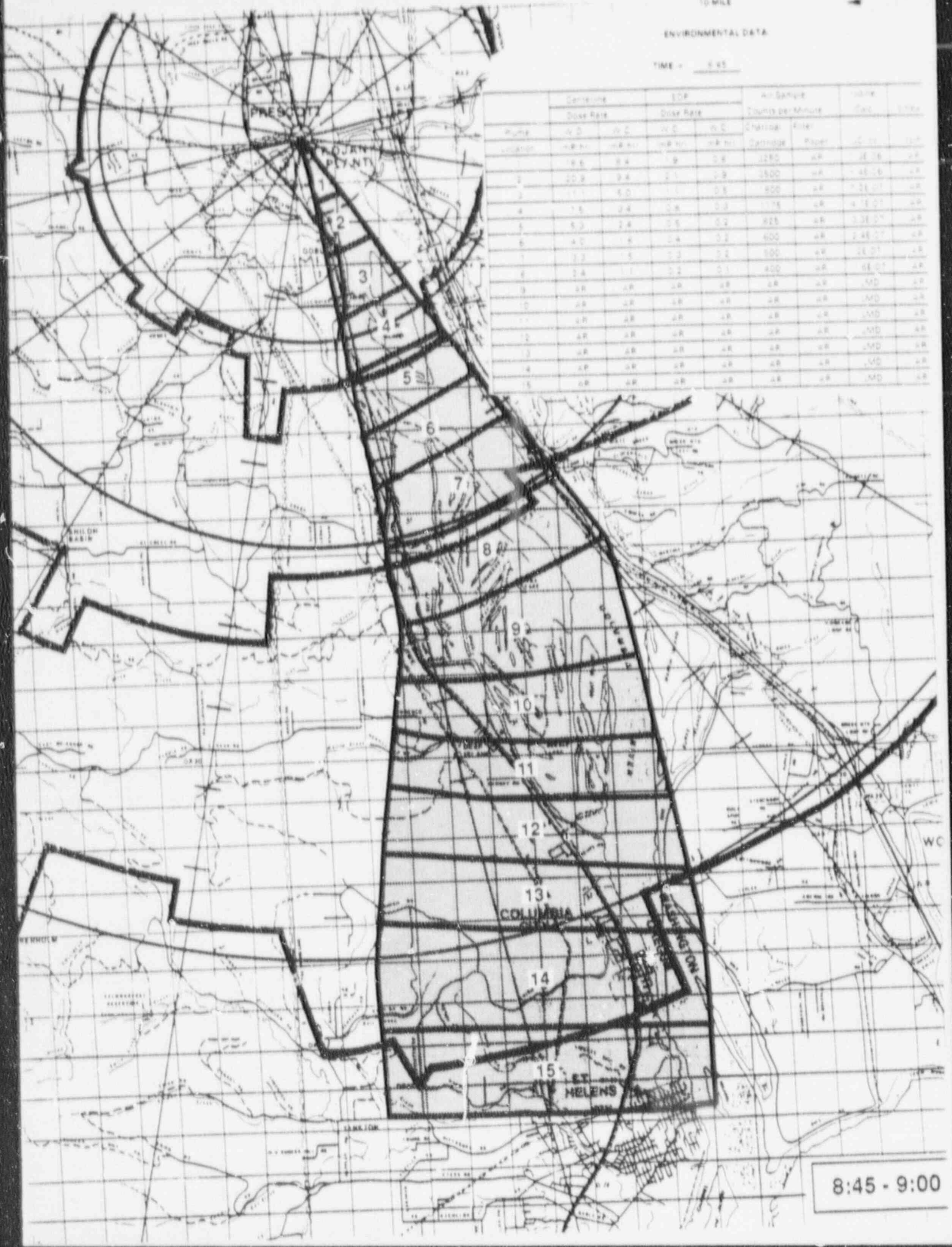
6
7
8
9
10
11
12
13
COLUMBIA
14
ST. HELENS
8:30 - 8:45

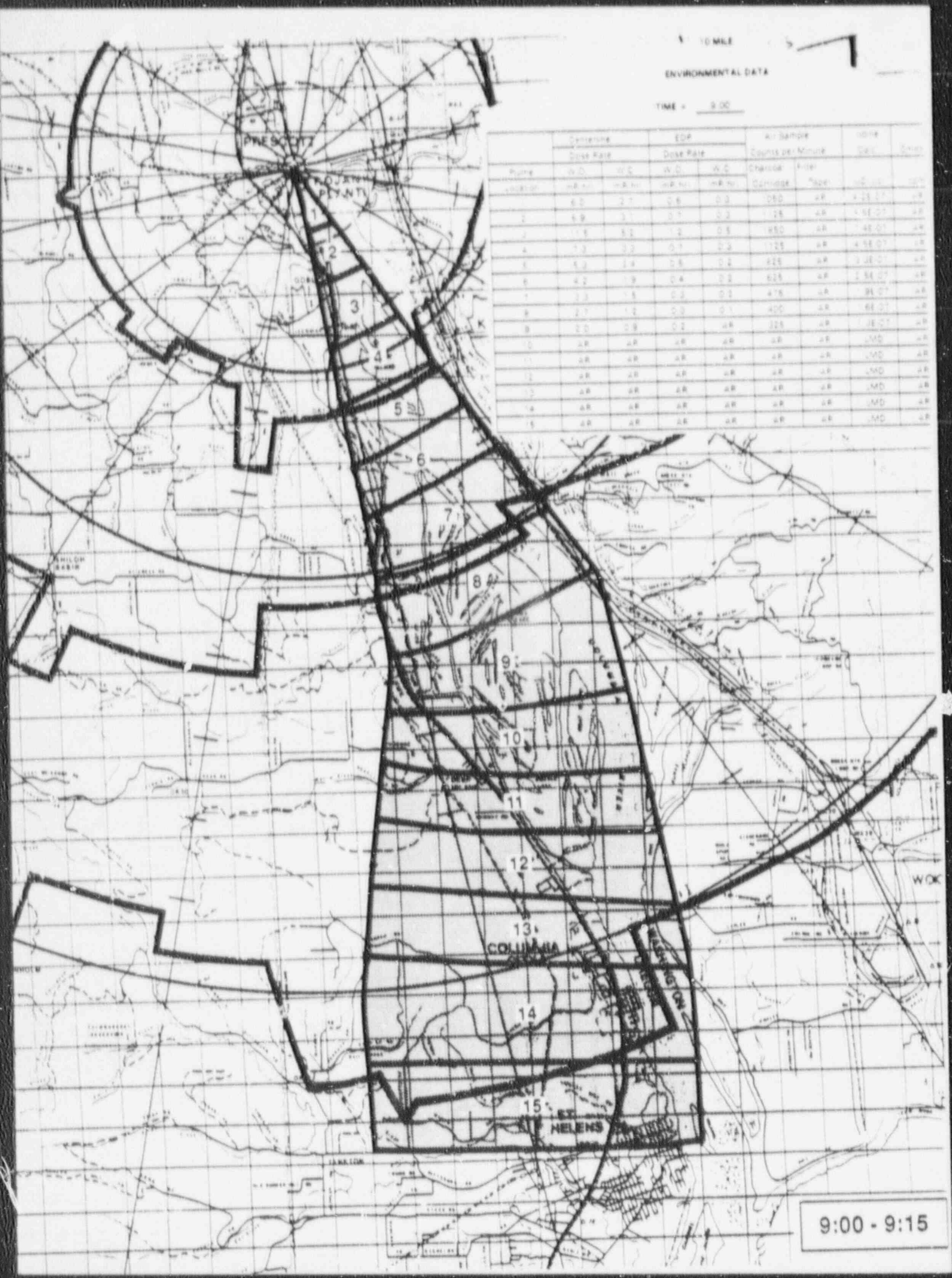
10 MILE

ENVIRONMENTAL DATA

TIME - 8:45



8:45 - 9:00


10 MILE
ENVIRONMENTAL DATA
TIME = 9:00
PRESCOTT
PROJECT
PLANT
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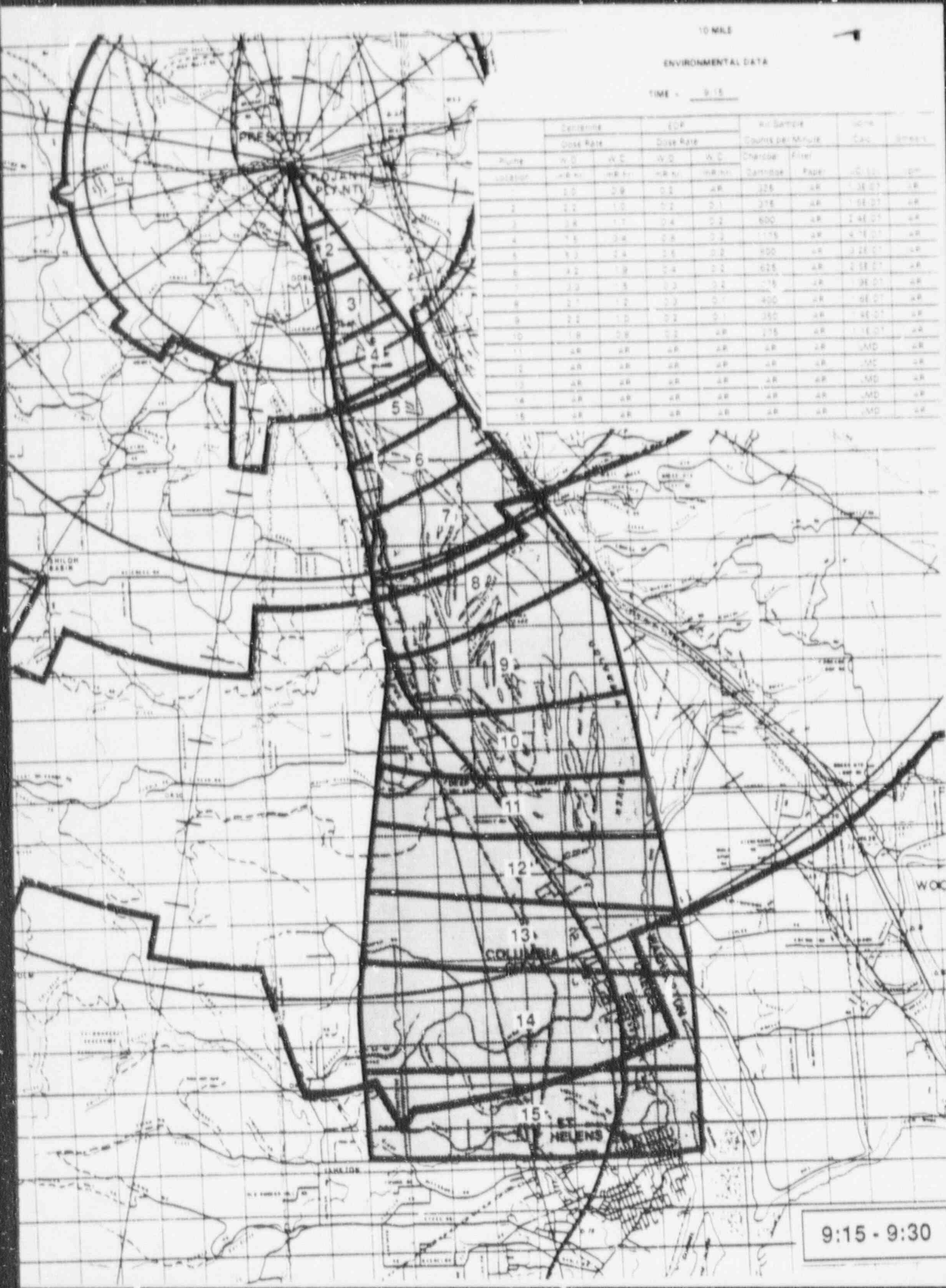
9
10
11
12
13
COLUMBIA
14
15
ST.
HELENS
WOOD
9:00 - 9:15



10 MILE

ENVIRONMENTAL DATA

TIME = 9:15

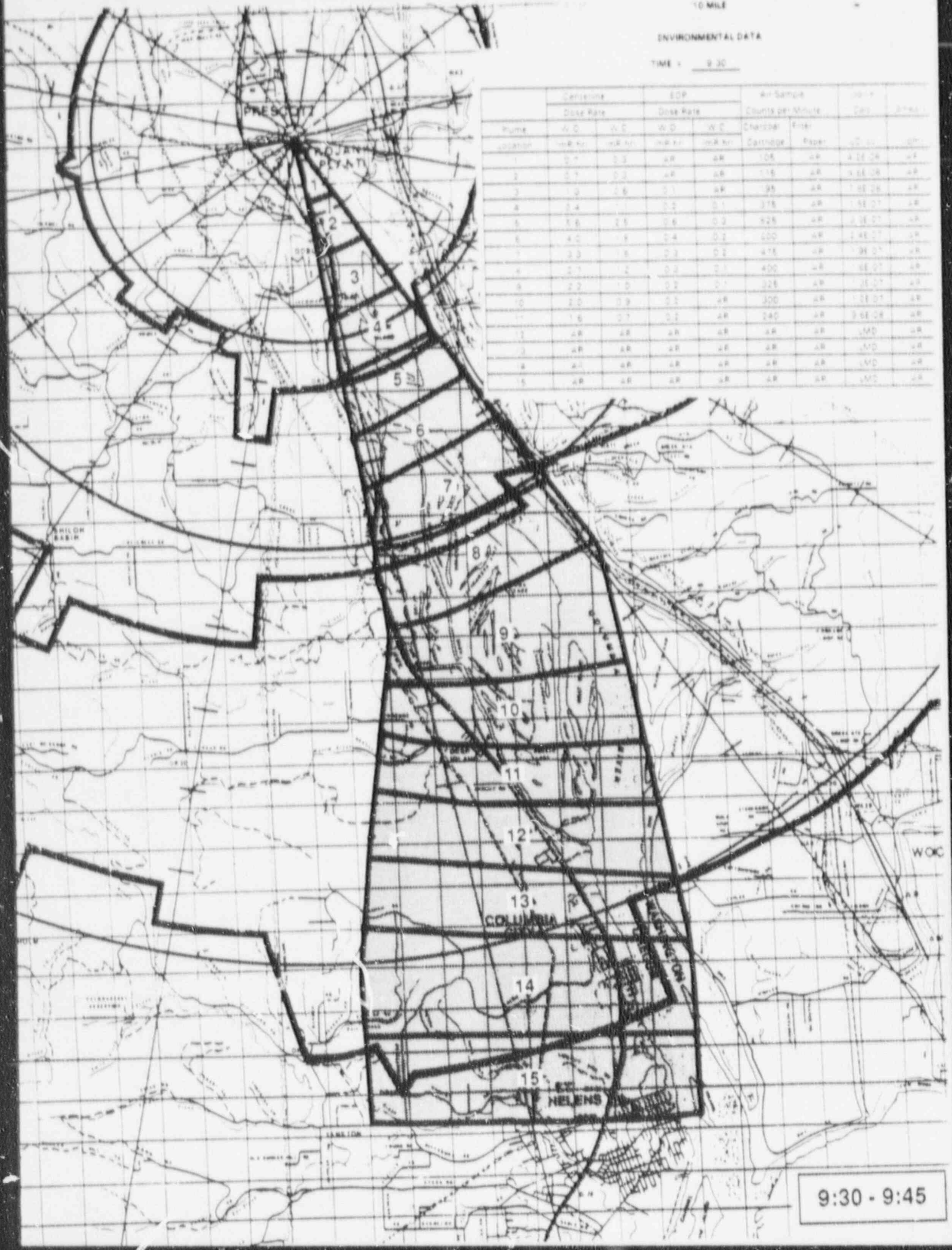
Plume Location	Centerline Dose Rate W.O. (mR/hr)	Centerline Dose Rate W.C. (mR/hr)	EOP Dose Rate W.O. (mR/hr)	EOP Dose Rate W.C. (mR/hr)	Air Sample Counts per Minute Charcoal Cartridge	Air Sample Counts per Minute Filter Paper	Iodine Calc (μCi/cc)	Smears (dpm)
1	2.0	0.9	0.2	AR	325	AR	1.3E-07	AR
2	2.2	1.0	0.2	0.1	375	AR	1.5E-07	AR
3	2.8	1.7	0.4	0.2	600	AR	2.4E-07	AR
4	7.5	3.4	0.8	0.2	1175	AR	4.7E-07	AR
5	5.3	2.4	2.6	0.2	800	AR	3.2E-07	AR
6	4.2	1.9	0.4	0.2	625	AR	2.5E-07	AR
7	3.3	1.5	0.3	0.2	475	AR	1.9E-07	AR
8	2.1	1.2	0.3	0.1	400	AR	1.6E-07	AR
9	2.2	1.0	0.2	0.1	350	AR	1.4E-07	AR
10	1.8	0.8	0.2	AR	275	AR	1.1E-07	AR
11	AR	AR	AR	AR	AR	AR	LMD	AR
12	AR	AR	AR	AR	AR	AR	LMD	AR
13	AR	AR	AR	AR	AR	AR	LMD	AR
14	AR	AR	AR	AR	AR	AR	LMD	AR
15	AR	AR	AR	AR	AR	AR	LMD	AR

10 MILE

ENVIRONMENTAL DATA

TIME : 9:30

Plume location	Centerline Dose Rate W.D mR/hr	Centerline Dose Rate W.C mR/hr	EOP Dose Rate W.D mR/hr	EOP Dose Rate W.C mR/hr	Air Sample Counts per Minute Charcoal Cartridge	Air Sample Counts per Minute Filter Paper	Dose W.D	Dose W.C
1	0.7	0.3	AR	AR	105	AR	4.2E-06	AR
2	0.7	0.2	AR	AR	115	AR	4.6E-06	AR
3	0.2	0.6	0.1	AR	95	AR	1.9E-06	AR
4	0.4		0.2	0.1	375	AR	1.5E-07	AR
5	1.6	2.5	0.6	0.2	525	AR	2.1E-07	AR
6	4.0	1.6	0.4	0.2	600	AR	2.4E-07	AR
7	3.3	1.6	0.3	0.2	475	AR	1.9E-07	AR
8	2.1	2	0.2	0.1	400	AR	1.6E-07	AR
9	2.2	1.6	0.2	0.1	325	AR	1.3E-07	AR
10	2.0	0.9	0.2	AR	300	AR	1.2E-07	AR
11	1.6	0.7	0.2	AR	240	AR	9.6E-08	AR
12	AR	AR	AR	AR	AR	AR	AMD	AR
13	AR	AR	AR	AR	AR	AR	AMD	AR
14	AR	AR	AR	AR	AR	AR	AMD	AR
15	AR	AR	AR	AR	AR	AR	AMD	AR



9:30 - 9:45

10 MILE

ENVIRONMENTAL DATA

TIME = 9:45

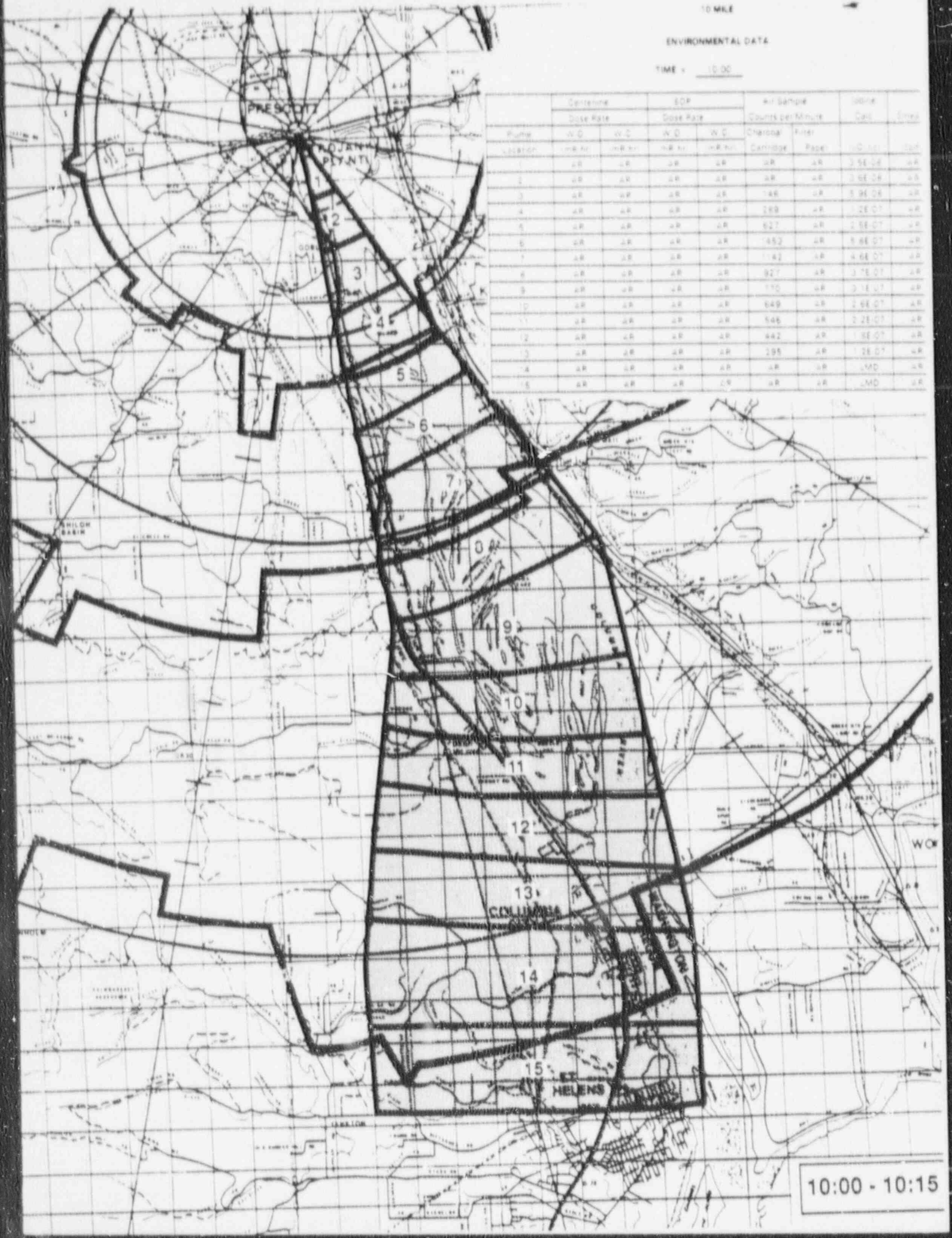
	Centerline		2DP		Air Sample		Iodine	
	Dose Rate		Dose Rate		Counts per Minute		Conc.	Smrs
Plume	W.O.	W.C.	W.O.	W.C.	Charcoal	Filter		
Location	(mR/hr)	(mR/hr)	(mR/hr)	(mR/hr)	Cartridge	Paper	(μCi/cc)	(dpm)
1	AR	AR	AR	AR	AR	AR	2.5E-08	AR
2	AR	AR	AR	AR	AR	AR	2.6E-08	AR
3	AR	AR	AR	AR	148	AR	7.9E-08	AR
4	AR	AR	AR	AR	289	AR	1.2E-07	AR
5	AR	AR	AR	AR	627	AR	2.5E-07	AR
6	AR	AR	AR	AR	1453	AR	5.4E-07	AR
7	AR	AR	AR	AR	1142	AR	4.4E-07	AR
8	AR	AR	AR	AR	927	AR	3.7E-07	AR
9	AR	AR	AR	AR	770	AR	3.1E-07	AR
10	AR	AR	AR	AR	649	AR	2.6E-07	AR
11	AR	AR	AR	AR	546	AR	2.2E-07	AR
12	AR	AR	AR	AR	442	AR	1.8E-07	AR
13	AR	AR	AR	AR	AR	AR	LMD	AR
14	AR	AR	AR	AR	AR	AR	LMD	AR
15	AR	AR	AR	AR	AR	AR	LMD	AR

10 MILE

ENVIRONMENTAL DATA

TIME = 10:00

Location	Centerline Dose Rate N.O. mR/hr	Centerline Dose Rate N.C. mR/hr	EOF Dose Rate N.O. mR/hr	EOF Dose Rate N.C. mR/hr	Air Sample Counts per Minute Charcoal Cartridge	Air Sample Counts per Minute Filter Paper	Iodine Conc. μCi/cc	Particulate Conc. μCi/cc
	AR	AR	AR	AR	AR	AR	3.5E-08	AR
2	AR	AR	AR	AR	AR	AR	3.5E-08	AR
3	AR	AR	AR	AR	AR	AR	3.3E-08	AR
4	AR	AR	AR	AR	269	AR	1.2E-07	AR
5	AR	AR	AR	AR	627	AR	2.5E-07	AR
6	AR	AR	AR	AR	1452	AR	5.6E-07	AR
7	AR	AR	AR	AR	1142	AR	4.6E-07	AR
8	AR	AR	AR	AR	927	AR	3.7E-07	AR
9	AR	AR	AR	AR	770	AR	3.1E-07	AR
10	AR	AR	AR	AR	649	AR	2.6E-07	AR
11	AR	AR	AR	AR	546	AR	2.2E-07	AR
12	AR	AR	AR	AR	442	AR	1.8E-07	AR
13	AR	AR	AR	AR	295	AR	1.2E-07	AR
14	AR	AR	AR	AR	AR	AR	MD	AR
15	AR	AR	AR	AR	AR	AR	MD	AR



10:00 - 10:15

9.0 METEOROLOGICAL DATA

WEATHER FORECAST

7 AM

: 12 Hour Forecast - Today will be clear and dry with high teperatures near 50°F. Winds will be light to moderate and from the north ranging from 2-5 mph.

: 12-24 Hour Forecast - Continued clear this evening with low temperatures near 40°F. Winds will be variable and from the north-north-east.

9.1 Meteorological Data Summary

METEOROLOGICAL DATA SUMMARY

PARAMETER:	3:15 0:00	3:30 0:15	3:45 0:30	4:00 0:45	4:15 1:00	4:30 1:15	4:45 1:30	5:00 1:45
Wind Speed (mph)								
30 ft A	2.6	2.6	2.6	2.5	2.5	2.6	2.7	2.8
30 ft B	2.6	2.6	2.6	2.5	2.4	2.6	2.7	2.8
200 ft A	2.9	2.9	2.9	2.7	2.8	2.9	3.1	3.1
200 ft B	2.9	2.9	2.9	2.8	2.8	3.0	3.2	3.1
500 ft A	3.1	3.1	3.1	3.0	3.0	3.2	3.4	3.3
500 ft B	3.2	3.2	3.2	3.1	3.1	3.3	3.4	3.4
Wind Direction (Sector) (From/To)								
30 ft A	NW/SE	NW/SE	NW/SE	WNW/ESE	WNW/ESE	WNW/ESE	NW/SE	NW/SE
30 ft B	NW/SE	NW/SE	NW/SE	WNW/ESE	WNW/ESE	WNW/ESE	NW/SE	NW/SE
200 ft A	NW/SE	NW/SE	NW/SE	WNW/ESE	WNW/ESE	WNW/ESE	NW/SE	NW/SE
200 ft B	NW/SE	NW/SE	NW/SE	WNW/ESE	WNW/ESE	WNW/ESE	NW/SE	NW/SE
500 ft A	NW/SE	NW/SE	NW/SE	WNW/ESE	WNW/ESE	WNW/ESE	NW/SE	NW/SE
500 ft B	NW/SE	NW/SE	NW/SE	WNW/ESE	WNW/ESE	WNW/ESE	NW/SE	NW/SE
Stability								
Delta T (200-33 ft) A	-0.30	-0.30	-0.30	-0.30	-0.30	-0.30	-0.30	-0.30
Delta T (200-33 ft) B	-0.31	-0.31	-0.31	-0.31	-0.31	-0.31	-0.31	-0.31
Sigma A/Sigma B	6	6	6	6	6	6	6	6
Precipitation (Yes/No)	N	N	N	N	N	N	N	N

METEOROLOGICAL DATA SUMMARY

PARAMETER:	5:15 2:00	5:30 2:15	5:45 2:30	6:00 2:45	6:15 3:00	6:30 3:15	6:45 3:30	7:00 3:45
Wind Speed (mph)								
30 ft A	2.9	3.0	3.0	2.9	2.9	2.8	3.0	3.3
30 ft B	2.8	3.0	3.1	2.9	2.9	2.8	2.9	3.2
200 ft A	3.3	3.5	3.6	3.2	3.3	3.3	3.2	3.7
200 ft B	3.2	3.6	3.6	3.3	3.2	3.2	3.7	3.6
500 ft A	3.4	3.8	3.7	3.6	3.7	3.8	3.6	4.1
500 ft B	3.5	3.9	3.8	3.7	3.6	3.7	3.6	4.1
Wind Direction (Sector) (From/To)								
30 ft A	NW/SE	NW/SE	NW/SE	NNW/SSE	NNW/SSE	NNW/SSE	N/S	N/S
30 ft B	NW/SE	NW/SE	NW/SE	NNW/SSE	NNW/SSE	NNW/SSE	N/S	N/S
200 ft A	NW/SE	NW/SE	NW/SE	NNW/SSE	NNW/SSE	NNW/SSE	N/S	N/S
200 ft B	NW/SE	NW/SE	NW/SE	NNW/SSE	NNW/SSE	NNW/SSE	N/S	N/S
500 ft A	NW/SE	NW/SE	NW/SE	NNW/SSE	NNW/SSE	NNW/SSE	N/S	N/S
500 ft B	NW/SE	NW/SE	NW/SE	NNW/SSE	NNW/SSE	NNW/SSE	N/S	N/S
Stability								
Delta T (200-33 ft) A	-0.32	-0.32	-0.32	-0.32	-0.32	-0.32	-0.35	-0.35
Delta T (200-33 ft) B	-0.34	-0.34	-0.34	-0.34	-0.34	-0.34	-0.36	-0.36
Sigma A/Sigma B	B	B	B	B	B	B	B	B
Precipitation (Yes/No)	N	N	N	N	N	N	N	N

METEOROLOGICAL DATA SUMMARY

PARAMETER:	7:15 4:00	7:30 4:15	7:45 4:30	8:00 4:45	8:15 5:00	8:30 5:15	8:45 5:30	9:00 5:45
Wind Speed (mph)								
30 ft A	3.2	3.2	3.3	3.5	3.5	3.5	3.6	3.5
30 ft B	3.1	3.1	3.2	3.4	3.5	3.4	3.5	3.3
200 ft A	3.6	3.5	3.7	4.1	4.2	4.0	4.1	4.0
200 ft B	3.6	3.6	3.6	4.1	4.1	4.1	4.1	3.9
500 ft A	4.0	4.1	4.2	4.5	4.6	4.6	4.7	4.7
500 ft B	4.1	4.2	4.2	4.4	4.5	4.5	4.5	4.?
Wind Direction (Sector) (From/To)								
30 ft A	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
30 ft B	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
200 ft A	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
200 ft B	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
500 ft A	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
500 ft B	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
Stability								
Delta T (200-33 ft) A	-0.35	-0.35	-0.35	-0.35	-0.35	-0.35	-0.35	-0.35
Delta T (200-33 ft) B	-0.36	-0.36	-0.36	-0.36	-0.36	-0.36	-0.36	-0.36
Sigma A/Sigma B	9	9	9	9	9	9	9	9
Precipitation (Yes/No)	N	N	N	N	N	N	N	N

METEOROLOGICAL DATA SUMMARY

PARAMETER:	9:15 6:00	9:30 6:15	9:45 6:30	10:00 6:45	10:15 7:00	10:30 7:15	10:45 7:30	11:00 7:45
Wind Speed (mph)								
30 ft A	3.5	3.5	3.6	3.7	3.7	3.7	3.9	3.9
30 ft B	3.4	3.5	3.5	3.5	3.5	3.5	3.8	3.8
200 ft A	4.0	4.2	4.1	4.1	4.1	4.1	4.2	4.2
200 ft B	4.1	4.1	4.1	4.2	4.2	4.2	4.1	4.1
500 ft A	4.6	4.6	4.7	4.9	4.9	4.9	4.7	4.7
500 ft B	4.6	4.5	4.5	4.8	4.8	4.8	4.6	4.6
Wind Direction (Sector) (From/To)								
30 ft A	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
30 ft B	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
200 ft A	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
200 ft B	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
500 ft A	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
500 ft B	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
Stability								
Delta T (200-33 ft) A	-0.61	-0.61	-0.61	-0.61	-0.78	-0.78	-0.78	-0.78
Delta T (200-33 ft) B	-0.63	-0.63	-0.63	-0.63	-0.79	-0.79	-0.79	-0.79
Sigma A/Sigma B	11	11	11	11	15	15	15	15
Precipitation (Yes/No)	N	N	N	N	N	N	N	N

METEOROLOGICAL DATA SUMMARY

PARAMETER:	11:15 8:00
Wind Speed (mph)	
30 ft A	3.9
30 ft B	3.8
200 ft A	4.2
200 ft B	4.1
500 ft A	4.7
500 ft B	4.6
Wind Direction (Sector) (From/To)	
30 ft A	N/S
30 ft B	N/S
200 ft A	N/S
200 ft B	N/S
500 ft A	N/S
500 ft B	N/S
Stability	
Delta T (200-33 ft) A	-0.78
Delta T (200-33 ft) B	-0.79
Sigma A/Sigma B	15
Precipitation (Yes/No)	N

9.2 Meteorological Data Sheets

TROJAN NUCLEAR PLANT
EMERGENCY PREPAREDNESS DRILL

METEOROLOGICAL DATA

REAL TIME	3:15
ELAPSED TIME	0:00

Wind Speed (mph)

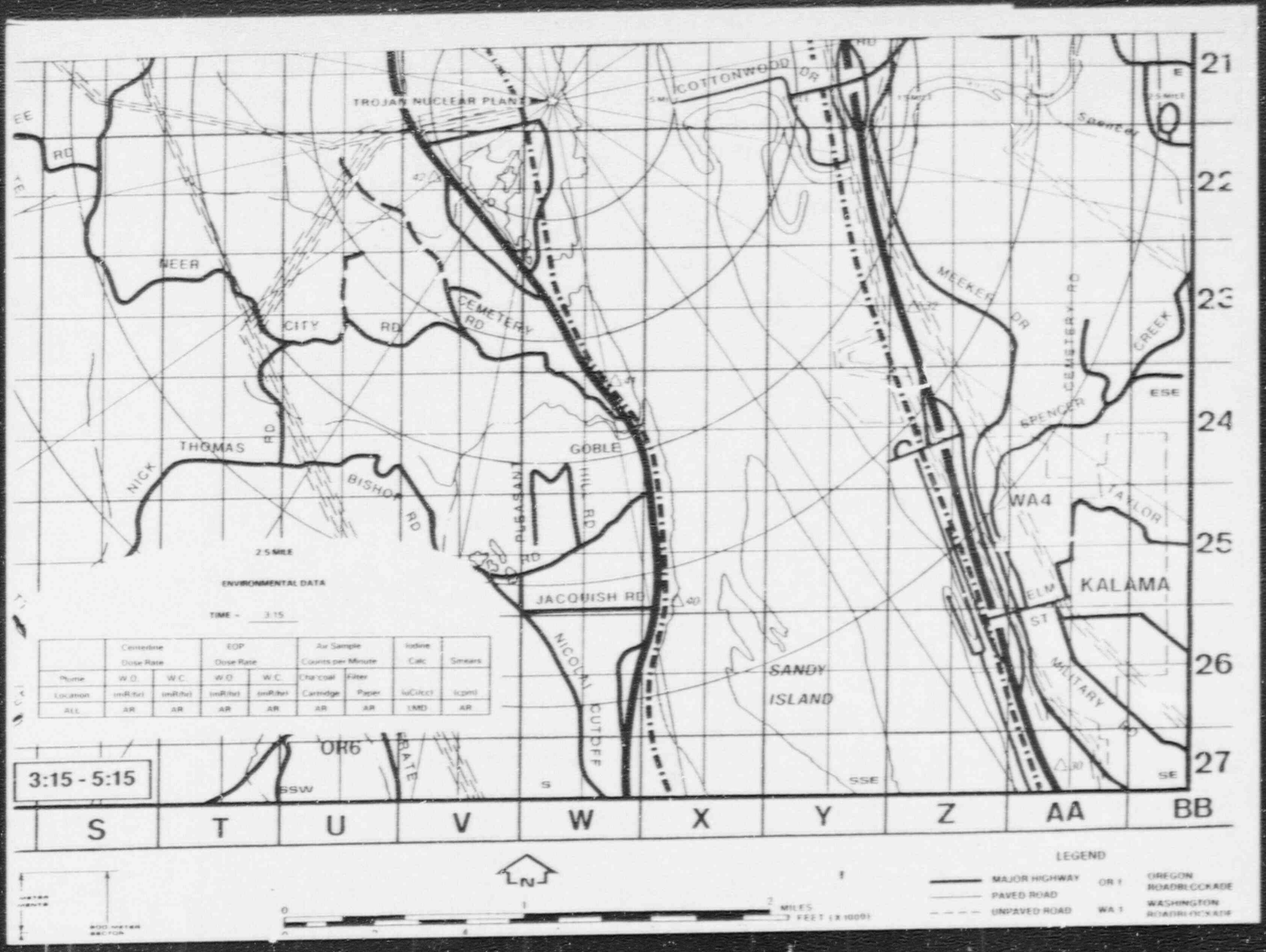
30 ft A	2.60
30 ft B	2.60
200 ft A	2.90
200 ft B	2.90
500 ft A	3.10
500 ft B	3.20

Wind Direction (Sector)
(From/To)

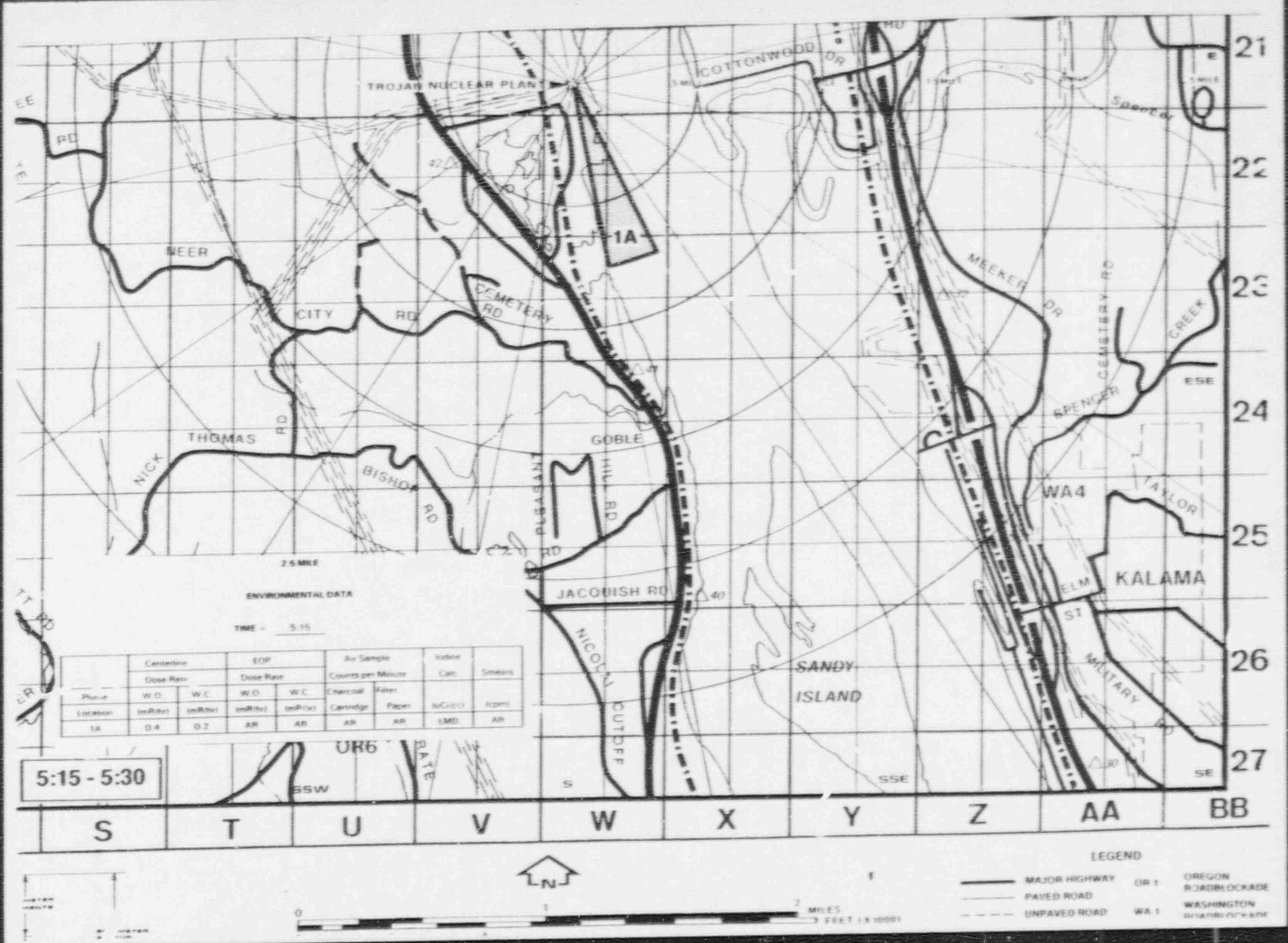
30 ft A	NW/SE
30 ft B	NW/SE
200 ft A	NW/SE
200 ft B	NW/SE
500 ft A	NW/SE
500 ft B	NW/SE

Stability

Delta T (200-33 ft) A	-0.30
Delta T (200-33 ft) B	-0.31
Sigma A/Sigma B	6.00
Precipitation (Yes/No)	N



	Centerline Dose Rate		EOP Dose Rate		Air Sample Counts per Minute		Iodine Calc	Smears
Plume	W.O.	W.C.	W.O.	W.C.	Charcoal	Filter		
Location	(mR/hr)	(mR/hr)	(mR/hr)	(mR/hr)	Cartridge	Paper	(uCi/cc)	(cpm)
ALL	AR	AR	AR	AR	AR	AR	LMD	AR

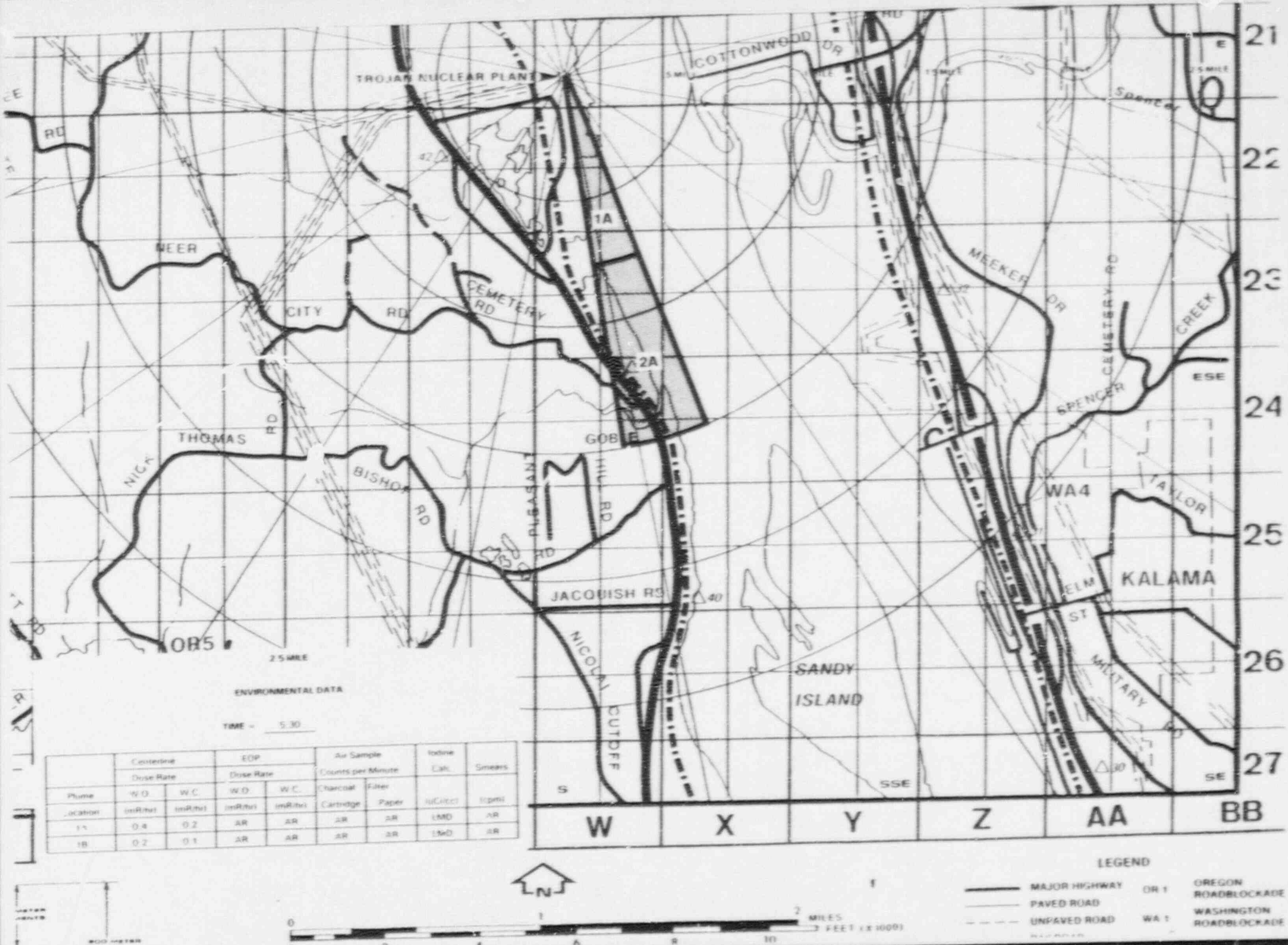


ENVIRONMENTAL DATA

TIME - 5:15

	Centerline Dose Rate		EOP Dose Rate		Air Sample Counts per Minute		Iodine Calc	Smears
Plume	W.O.	W.C.	W.O.	W.C.	Charcoal	Filter		
Location	(mR/hr)	(mR/hr)	(mR/hr)	(mR/hr)	Cartridge	Paper	(uCi/cc)	(cpm)
1A	0.4	0.2	AR	AR	AR	AR	LMD	AR

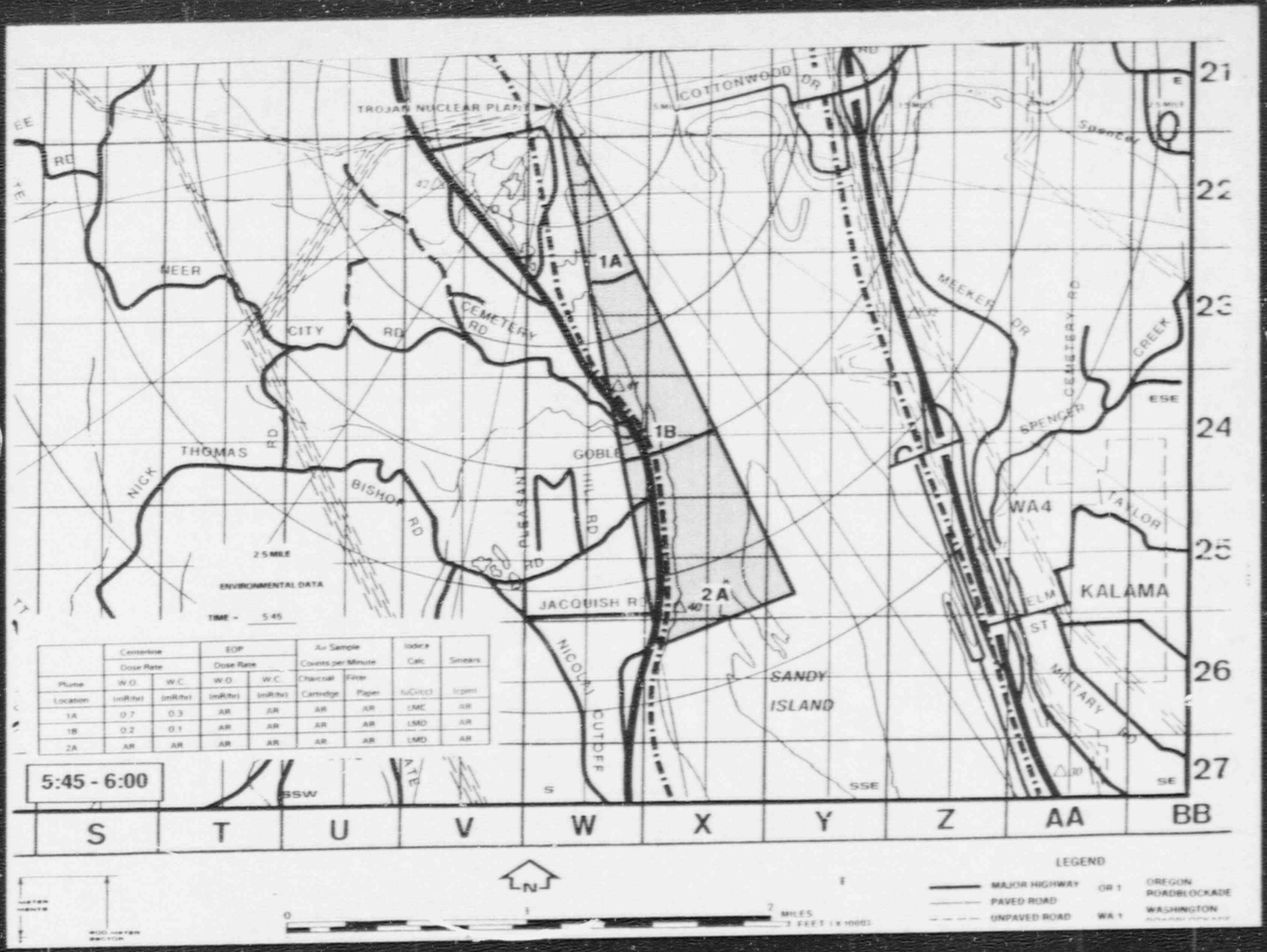
5:15 - 5:30



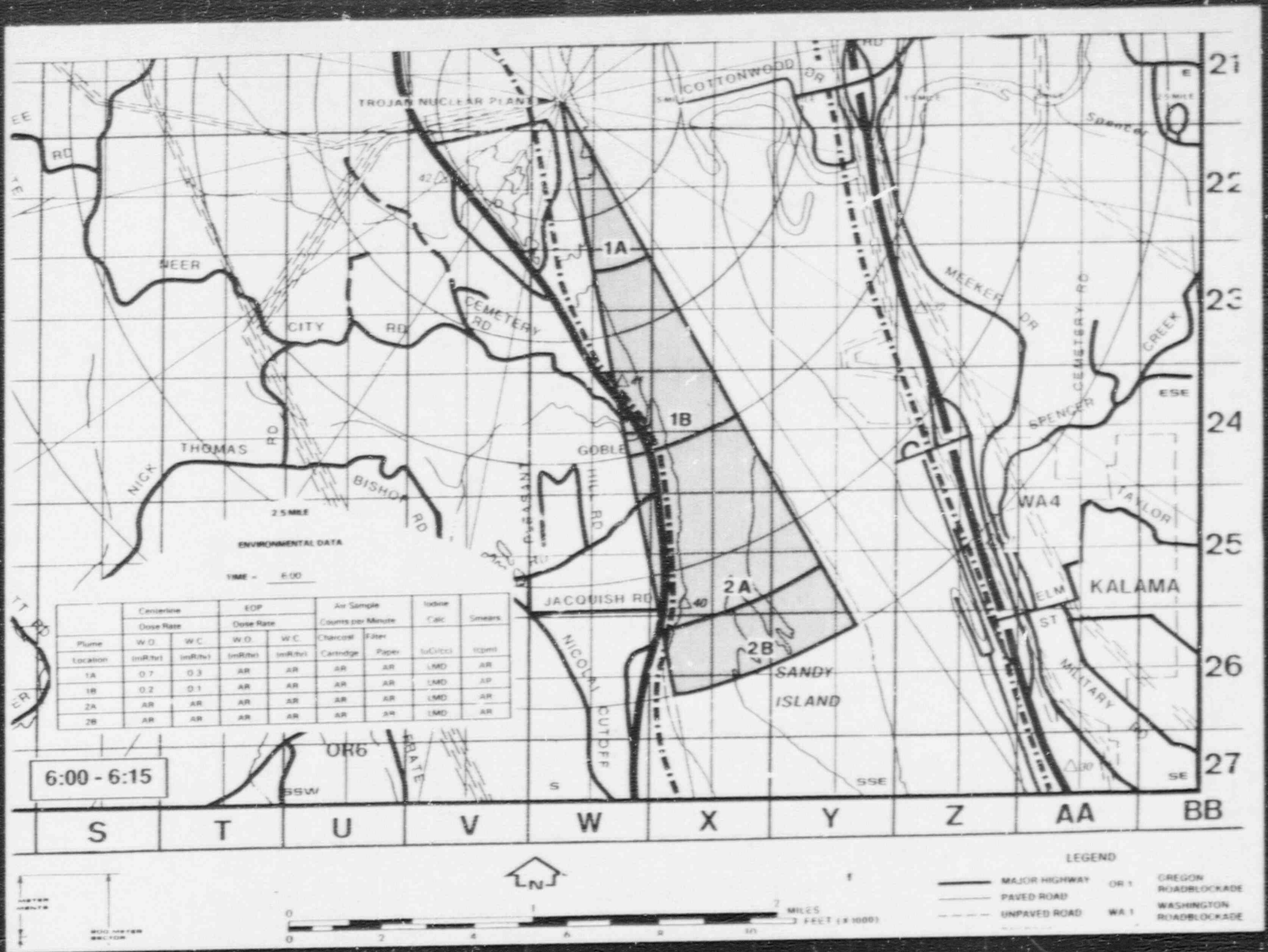
ENVIRONMENTAL DATA

TIME = 5:30

Plume Location	Centerline Dose Rate W.O. (mR/hr)	Centerline Dose Rate W.C. (mR/hr)	EOP Dose Rate W.O. (mR/hr)	EOP Dose Rate W.C. (mR/hr)	Air Sample Counts per Minute Charcoal Cartridge	Air Sample Counts per Minute Filter Paper	Iodine Calc. (μCi/cc)	Smears (cpm)
1A	0.4	0.2	AR	AR	AR	AR	LMD	AR
1B	0.2	0.1	AR	AR	AR	AR	LMD	AR



Plume Location	Centerline Dose Rate W.O. (mR/hr)	Centerline Dose Rate W.C. (mR/hr)	EOP Dose Rate W.O. (mR/hr)	EOP Dose Rate W.C. (mR/hr)	Air Sample Counts per Minute Charcoal Cartridge	Air Sample Counts per Minute Filter Paper	Iodine Calc (uCi/cc)	Smears (cpm)
1A	0.7	0.3	AR	AR	AR	AR	LMC	AR
1B	0.2	0.1	AR	AR	AR	AR	LMD	AR
2A	AR	AR	AR	AR	AR	AR	LMD	AR



Plume Location	Centerline Dose Rate W.O. (mR/hr)	Centerline Dose Rate W.C. (mR/hr)	EOP Dose Rate W.O. (mR/hr)	EOP Dose Rate W.C. (mR/hr)	Air Sample Counts per Minute Charcoal Cartridge	Air Sample Counts per Minute Filter Paper	Iodine Calc (uCi/cc)	Smears (cpm)
1A	0.7	0.3	AR	AR	AR	AR	LMD	AR
1B	0.2	0.1	AR	AR	AR	AR	LMD	AR
2A	AR	AR	AR	AR	AR	AR	LMD	AR
2B	AR	AR	AR	AR	AR	AR	LMD	AR