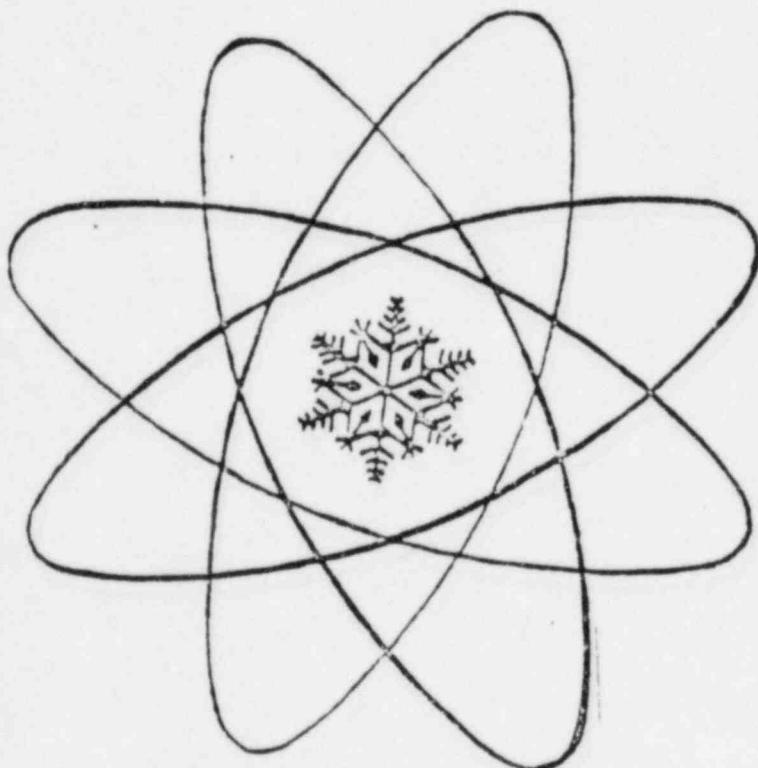


Power Authority of the State of New York

James A. Fitzpatrick Nuclear Power Plant

Emergency Response Plan Exercise Manual



**OPERATING LICENSE NO. DPR- 59
DOCKET NO. 50- 333**

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POWER AUTHORITY OF THE STATE OF NEW YORK

JAMES A. FITZPATRICK NUCLEAR POWER PLANT



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**JAMES A. FITZPATRICK NUCLEAR POWER PLANT
EXERCISE PURPOSE AND INTENT**

This exercise, with some exceptions, will endeavor to demonstrate by actual performance or simulation, a number of primary emergency preparedness functions. The James A. FitzPatrick Nuclear Power Plant will demonstrate the capabilities of plant procedures, equipment and personnel to satisfactorily and officially respond to an emergency and mitigate that emergency.

Fundamentally, this exercise is designed to activate the JAFNPP Emergency Plan through its various levels. As the initiating events are provided to the plant staff, the staff will determine the nature of the accident and implement the appropriate plant emergency response procedures. The appropriate Federal, State and local authorities will be notified in accordance with these procedures and integrated activities will be demonstrated.

The attached scenario is a hypothesized example of an emergency at the JAFNPP. This scenario will adequately demonstrate the capabilities I have noted above and provide the opportunity to also additionally train individuals in their particular responses.

CORBIN A. MCNEILL, JR.

CAM:NA:ls

1982 FEMA-NRC Observed Exercise
JAMES A. FITZPATRICK NUCLEAR POWER PLANT

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Section I

EMERGENCY PLAN EXERCISE/OBJECTIVES AND GENERAL GUIDELINES

1982 FEMA-NRC Observed Exercise
James A. FitzPatrick Nuclear Power Plant

Objectives and General Guidelines

A. PURPOSES

This document provides guidance for the conduct of the 1982 Federal Emergency Management Agency (FEMA) - Nuclear Regulatory Commission (NRC) observed radiological emergency exercise at the James A. FitzPatrick Nuclear Power Plant (JAFNPP). It shall be used by JAFNPP and by all participating Federal, State and local agencies.

The scope of this exercise, with some exceptions, will endeavor to demonstrate by actual performance a number of primary emergency preparedness functions. At no time will the exercise be permitted to interfere with the safe operation of JAFNPP and the plant management may, at their discretion, suspend the exercise for any period of time necessary to ensure this goal.

This exercise will include the appropriate notification to the Nine Mile Point Nuclear Station (NMPNS). Active participation by the NMPNS organizations is not expected.

B. EXERCISE OBJECTIVES

1. Radiological Emergency Preparedness Plans

- a. Evaluate the adequacy and capability of implementation of the New York State, Oswego County and the James A. FitzPatrick radiological emergency plans.
- b. Demonstrate the emergency response capabilities of State authorities, local support agencies, JAFNPP and appropriate Federal agencies.
- c. Demonstrate the capability of Oswego County, the State and JAFNPP to implement their respective radiological emergency preparedness plans in a manner satisfying FEMA/NRC acceptance criteria.

2. Notification Procedures

- a. Demonstrate the ability of JAFNPP staff to classify actual or potential emergencies in accordance with JAFNPP Emergency Plan Implementation Procedures as to
 - Notification of Unusual Event,
 - Alert Emergency,
 - Site Area Emergency,
 - General Emergency.

- b. Demonstrate the capability of JAFNPP to notify the State, local and Federal levels of government accordance with Federal guidance and established protocols.
- c. Demonstrate the capability to communicate technical information among JAFNPP, the State,, and Oswego County. JAFNPP will also demonstrate communicating technical information with the NRC via the NRC Hot Line.
- d. Demonstrate the capability of the State, Oswego County and JAFNPP to notify and activate emergency response personnel.
- e. Demonstrate the capability of Oswego County and the State to alert and notify the affected permanent and transient public within the Plume Exposure EPZ of an incident at JAFNPP and to follow up with information as required. This will include activation of the prompt notification system (sirens and tone alert radios) and the Emergency Broadcast System (EBS).
- f. Demonstrate as appropriate the notification and request for assistance to Federal agencies such as the radiological assistance from the Department of Energy.
- g. Demonstrate as appropriate the notification to counties and provinces within the ingestion Emergency Planning Zone (EPZ) and to agencies such as the railroad by the State and Oswego County.

3. Emergency Communications

- a. Demonstrate the JAFNPP communication capabilities among the Control Room, Technical Support Center (TSC), Emergency Operations Facility (EOF), Operations Support Center (OSC) and the Emergency News Center (ENC), and the ability to maintain communications with the Federal Government.
- b. Demonstrate emergency communications capability among Oswego County, the State and JAFNPP including the Radiological Emergency Communications System (RECS-hot line).
- c. Demonstrate the adequacy of JAFNPP, local and State emergency communications to:
 - (1) Transmit instructions to activate essential staff.
 - (2) Disseminate essential information to assisting agencies.
 - (3) Operate a 24 hour per day alert and notification system.
- d. Demonstrate the ability of JAFNPP and Oswego County to coordinate, control and deploy radiological monitoring teams via the respective field communications system.

4. Emergency Response Facilities

- a. Demonstrate the adequacy of the staffing and setting-up as appropriate of emergency response facilities as well as demonstrating the adequacy of space and habitability for management of radiological emergency at:

JAFNPP Control Room (CR)
JAFNPP Technical Support Center (TSC)
JAFNPP Operational Support Center (OSC)
JAFNPP Emergency Operations Facility (EOF)
State Emergency Operations Center (EOC)
ODP Central District EOC
Oswego County EOC
Special News Center

- b. Demonstrate the adequacy of internal communications in the State and County Emergency Operations Centers (EOC) including the use of status boards, charts, maps, diagrams or other displays.
- c. Evaluate the adequacy and competency of State, Oswego County and JAFNPP staff to operate the emergency response facilities.
- d. Evaluate the adequacy of access control and security for emergency response facilities.

5. Direction and Control

- a. Demonstrate the ability of key emergency personnel at all levels of government and JAFNPP to initiate and coordinate timely and effective decisions with respect to a radiological emergency and clearly demonstrate "who is in charge."
- b. Demonstrate that there is effective organizational control (direction and control) and integrated radiological emergency response including deployment of field monitors, receipt and analysis of field data and sharing of field data among the licensee, State and Oswego County for evaluation and verification.
- c. Demonstrate the capability of Federal, State and County emergency response agencies to identify and provide for resource requirements. Any required Federal response activities may be simulated.
- d. Demonstrate the capability in coordinating (internally/ externally) actions among organizations in order to obtain support and to make appropriate decisions.
- e. Demonstrate the capability of elected and appointed officials in implementing appropriate radiological emergency response actions.

6. Public Information

- a. Demonstrate the adequacy of the operation of and interaction among the State, Oswego County and JAFNPP public information systems.
- b. Demonstrate the activation and manning of the Emergency News Center by utility, State and Oswego County public information personnel and provide for periodic public information releases and rumor control.
- c. Demonstrate that the offsite authorities and the licensee can effectively provide information to the media in the event of an accident.

7. Accident Assessment and Evaluation

- a. Demonstrate the activation, operations and reporting procedures of JAFNPP and Oswego County field monitoring teams. JAFNPP teams will be dispatched within and beyond the site boundary. Field monitoring teams will be provided with simulated data at assigned times and specific locations consistent with the simulated release from the plant.
- b. Demonstrate the ability of JAFNPP, Oswego County and the State to receive and assess radiological data from both County and licensee field teams in accordance with their respective radiological emergency plans.
- c. Demonstrate the ability of JAFNPP, the State and Oswego County to calculate dose projections, compare and projections to the Protective Action Guide (PAGs) and determine appropriate protective actions.

8. Protective Response

- a. Demonstrate the capability of State and Oswego County emergency response organizations to make decisions and to implement appropriate protective action response options. The response options include sheltering and evacuation (simulated) of onsite and offsite areas, informing the public on the development of the accident, identification and provision for special populations, activation of reception and congregate care facilities and ingestion exposure pathway considerations.
- b. Demonstrate JAFNPP employee accountability following the requirements of their Emergency Plan Implementing Procedures.

9. Radiological Exposure Control

- a. Demonstrate the decision process for limiting exposure of emergency workers.

- b. Demonstrate the processing of State and local emergency workers through Personnel Monitoring Centers (PMC) including monitoring and decontamination.
- c. Evaluate the capability of offsite emergency response personnel to implement access control procedures.
- d. Demonstrate methods and resources for distribution of dosimetry to emergency workers.
- e. Demonstrate the capability of emergency personnel for keeping records of individuals radiation exposures.

10. Medical Support

- a. Demonstrate through the use of a scenario independent of the plant offsite releases the first aid treatment of a contaminated casualty in the field and transport to the subsequent treatment at a hospital.
- b. The initial treatment of an injured worker with contamination at JAFNPP, transport to and subsequent treatment at a hospital will be demonstrated at a medical drill tentatively scheduled for October 1982.

11. Reentry and Recovery

- a. Demonstrate the capability of emergency personnel to identify requirements, assess and implement procedures for reentry.
- b. Demonstrate the capability of emergency personnel to identify requirements, programs and policies governing damage assessment and recovery.

C. INTENT OF THE FITZPATRICK EXERCISE SCENARIO

The licensee (Power Authority of the State of New York), New York State and Oswego County plan a coordinated exercise of their respective emergency plans for both the site and offsite support agencies on August 11, 1982. In order to minimize the impact on scheduling and agendas, the exercise scenario will be completed in a time frame of approximately a routine working day.

The exercise is intended to demonstrate many, but not necessarily all, of the JAFNPP capabilities to respond to a wide range of emergency conditions. This scenario is designed to activate the JAFNPP Emergency Plan through its various action levels. Although this scenario accurately simulates operating events, it is not intended to assess all of the operators diagnostic capabilities, but rather provides sequences which ultimately demonstrate the operators ability to respond to events and which results of exercising both onsite and offsite emergency plans and procedures. Free play is encouraged and the referees will interfere only if operator/player action prematurely terminates the exercise or excessively deviates from the drill schedule.

In order to provide a conservative exercise in terms of off-site doses adverse meteorology was developed since actual meteorology would probably lead to projected radiological doses below established Protective Action Guides (PAGs).

D. CONCEPT OF OPERATIONS AND CONTROL OF THE EXERCISE

The licensee and the State of New York will supply official Controllers/Evaluators for locations where an emergency response is being demonstrated for the exercise. Prior to the exercise, the controllers and evaluators will be provided with the appropriate locations, maps, time periods, guidelines, and an observer evaluation checklist for their exercise assignments.

The exercise initiating events will be controlled by the lead referee at the JAFNPP. Simulated initiating events will consist of two types of information: (1) information and data provided to control room personnel by the Control Room referee, (2) onsite and offsite dose rate data (simulated gamma and iodine dose rate measurements) provided to the site, county, and Federal (if they participate) monitoring teams by controllers/referees.

The lead referee (onsite) and the State Exercise Director (offsite) will have the responsibility to control and coordinate the time sequence of initiating events to ensure an orderly flow of exercise events.

The State controllers or Federal evaluators may supply "problems" for offsite participants (such as a disabled vehicle or a farmer who must return to his farm after the evacuation). All other actions during the exercise will occur through a free play response as the licensee, State and County participants respond to the initiating events.

As the initiating events are provided to the JAFNPP staff, they will determine the nature of the emergency and implement appropriate plant emergency response procedures. These procedures include a determination of the emergency classification in accordance with the JAFNPP Emergency Plan. After the emergency classification has been determined, the appropriate Federal, State and local authorities will be notified in accordance with the JAFNPP emergency response procedures.

Upon notification of the simulated accident at the JAFNPP, the State and Oswego County will complete their initial notifications in accordance with their emergency plans and procedures. State and local personnel and facilities will be activated based on the initial accident classification provided by the site and confirmed by direct communication between appropriate agencies and the James A. FitzPatrick Nuclear Power Plant.

The simulated accident will continue to develop based on data and information provided to the control room personnel by the control room referee. As the situation develops, information will be forwarded to New York State and the county assessment teams. These agencies will analyze and act on the information as they would in a real emergency.

Where information would normally be confirmed via an independent source (such as the National Weather Service for weather data), the confirmation data will be obtained. If the confirmation data conflicts with simulation data provided by the site, the simulation data will be utilized for accident assessment purposes. If any inconsistencies are noted in the initiating events, these inconsistencies should be questioned by the accident assessment teams as they would be in a real emergency.

Certain inconsistencies (such as plume width, release duration, technical reason for the simulated release, etc.) may be intentional and required due to the nature of simulating an accident that has never occurred and the requirement to provide an exercise basis which tests the site, State, and local capabilities to the maximum extent feasible in a limited time frame. If an inconsistency is known or determined to be intentional, then the accident assessment group will note the inconsistency and ignore it. The lead referee shall have the authority to resolve or explain any inconsistencies or problems that may occur during the exercise.

With the exception of the aforementioned potential inconsistencies, the internal operation of the site, State, and local command centers shall be identical with their intended operation in a real emergency.

E. PUBLIC INFORMATION AND AWARENESS

Prior to the exercise, the public within the affected area will be informed of the impending conduct of a radiological emergency exercise through joint press releases. The Power Authority of the State of New York, New York State and Oswego County will develop coordinated press releases.

Agencies should make every effort to prevent the public from being misinformed about the nature of the exercise. Therefore, it is important to inform members of the public that an exercise is in progress and that their involvement is not required, whenever public contact occurs in the field.

A pre-exercise briefing will also be conducted for the news media.

F. MAINTAINING EMERGENCY READINESS

During the performance of an exercise the ability to recognize a real emergency, terminate the exercise, and respond to the new situation must be maintained. Therefore, the exercise scenario and actions of participants shall not include any actions which degrade the condition of systems, equipment or supplies, or affect the detection, assessment or response capability to radiological or other emergencies.

Actions taken by the participants shall also avoid actually reducing plant or public safety. The potential for creating real radiological or other emergencies shall be specifically avoided. If a local emergency occurs during an exercise requiring the local agency to terminate its participation in the exercise, the agency should notify the State and Oswego County Emergency Operations Centers of the situation. The State shall then determine whether the agency participation in the exercise is warranted and shall inform all other agencies involved in the exercise of the situation. All messages about real events shall be clearly identified as such. For example, precede a real message with "This is NOT, repeat, NOT an exercise message."

Section II

EMERGENCY PLAN EXERCISE/SCENARIO OVERVIEW

- 1) Time Sequence
- 2) Description

FITZPATRICK EMERGENCY PLAN EXERCISE SCENARIO OVERVIEW

0700 Start of Exercise - Notification of Unusual Event

0815 Escalation to ALERT Classification

0930 Escalation to SITE AREA EMERGENCY Classification

1100 Escalation to GENERAL EMERGENCY Classification

1400 De-escalation to SITE AREA EMERGENCY Classification - Releases to Environment Secured

1430 Time Advance for Exercising Recovery Operations

1700 Secure from Exercise

The FitzPatrick Nuclear Power Plant is operating at 100% power. The Reactor Core Isolation Cooling System (RCIC) has been removed from service overnight for repair of a body crack of a turbine steam supply isolation valve. Required High Pressure Coolant Injection System (HPCI) surveillance tests have been satisfactorily completed. Valve repair is expected to take several days. No other significant equipment problems are present at exercise commencement.

At approximately 0700 the Shift Supervisor is notified by telecopy message of a generic problem involving the lubricant used in the solenoid valves for the Safety Relief Valves. Apparently, when exposed to the temperature and humidity conditions of the drywell environment for a prolonged period of time, the lubricant decomposes into a cement-like substance that may prevent solenoid actuation. This condition initiates Notification of an Unusual Event and requires a plant shutdown to be initiated.

Shortly thereafter, a small leak is discovered in the Main Steam Tunnel (outside the Primary Containment). The leak rate increases substantially during the next hour until, a few minutes before 0800, automatic Main Steam Line Isolation Valve (MSIV) closure is initiated from high steam tunnel temperatures. The transient proceeds normally with a successful reactor scram, SRV actuations, and automatic HPCI start-up from low, low vessel level. However, leakage from the Main Steam Tunnel increases during the transient to about 50 gpm. Attempts to manually (electrically) open relief valves fail, verifying their inoperability. The Shift Supervisor upgrades the classification of plant conditions to the ALERT category either as the result of perceived steam line break with leaking isolation valves, reactor

coolant leakage of 50 gpm, or as result of a situation where increased awareness is required to operating staff personnel. The Technical Support Center (TSC) and Operational Support Center are activated. Investigation into the source of the leakage continues. Plant cool down and depressurization proceed using the HPCI system. Leakage is the result of a crack in the "B" Feedwater System piping in the Main Steam Tunnel between the primary containment and the outboard isolation valves of the HPCI and Feedwater System. The HPCI System tees into this section of piping.

At 0930 the piping crack propagates catastrophically resulting in a complete loss of HPCI and Feedwater System injection capability. The HPCI System isolates during the transient from high steam line flow signals. During the isolation the AC breaker supplying the inboard steam isolation valve trips its overloads with the valve in the closed position. Vessel level remains essentially constant following the feedwater line break and reactor pressure is increasing. The Control Rod Drive Hydraulic pumps remain as the single source of high pressure injection to the vessel. Turbine Building Radiation Ventilation Exhaust Monitor increases to the high level trip point. Building isolation occurs automatically except that one damper on the steam tunnel exhaust duct jams in the open position. Event classification is upgraded to the SITE AREA EMERGENCY based upon the inability to cool and depressurize the vessel to the cold shutdown condition. Each of the high pressure systems is disabled. SRV's will not function due to frozen solenoid air actuators. RCIC steam supply valve is disassembled. HPCI and Residual Heat Removal are isolated by a failed steam isolation valve. Feedwater and HPCI are isolated from the vessel by the feed line break.

Leakage from the reactor vessel through the break in "B" Feed Water line continues to the Turbine Building due to seat leakage from the inboard feed check valve. Vessel level is held constant by CRD injection. Attempts to reset the thermal overloads for the inboard HPCI steam isolation valve fail and repair maybe undertaken. Investigation by the repair crew will result in a determination that the valve's motor operator has shorted to ground. Vessel pressure increases until it reaches 1090 psig at which point SRV's lift to limit pressure. At approximately 1100, the leak rate through the "B" Feed Water inboard check valve increases due to the pressure transients caused by relief valve operation. Leakage far exceeds the capacity of CRD to makeup and vessel level begins to decrease rapidly. Reactor pressure decreases, but not fast enough to allow injection of low pressure systems to before core uncover. Leakage is to the Turbine Building and out the failed open Main Steam Tunnel exhaust duct. Temperature in the Turbine Building increases rapidly and the roof blow out patches open. Emergency classification is upgraded to GENERAL EMERGENCY since release of large amounts of radioactive materials is probable at this point.

Shortly after 1130, the core is uncovered and pressure, though decaying, is still greater than the shut-off head f the low pressure ECCS pumps. The core remains uncovered until about 1200 when pressure interlocks clear and ECCS injection begins. The vessel is quickly refilled and by 1230 shutdown cooling is established. Vessel level is maintained above the core and below the feedwater penetrations to the vessel thereby halting the release to the Turbine Building. Releases from the Turbine Building gradually decrease as the core is cooled and steam in the Turbine Building condenses and/or

disperses. By 1400 site radiation and release levels are such that de-escalation to the SITE AREA EMERGENCY classification is justified.

Following de-escalation at time lapse to the following morning occurs. The reactor remains in shutdown cooling with stable level and temperature. Coolant leakage has stopped. Recovery operations to seal the Turbine Building are demonstrated by the plant personnel. Off-site surveys for iodine deposition and protective action evaluation are demonstrated.

At some point during the exercise, in an independent scenario, a bus accident is simulated. A maximum of two contaminated injuries result requiring mobilization of rescue personnel, transportation to nearby health facilities, and subsequent decontamination and health care.

The exercise will terminate at approximately 1700 with the plant in stable conditions and concerned agencies pursuing recovery actions.

Section III

EMERGENCY PLAN EXERCISE/JAFNPP PLANT DATA

TIME	MESSAGE NUMBER	ISSUED TO	SUMMARY OF MESSAGE CONTENTS	ANTICIPATED RESULTS AND COMMENTS	EMERGENCY CLASSIFICATION
0650 day 1	1	Control Room	Summary of initial plant conditions: -- 100% power -- RCIC Inoperative -- HPCI tested sat. -- No other abnormal conditions	None	None

MESSAGE NO. 1

TIME: 0650 ON DAY 1

ISSUED TO THE CONTROL ROOM

The plant is operating at 100% power. Plant chemistry is normal. All major systems are operable and in their normal lineup for the full power condition except RCIC. Overnight a crack was discovered in the body of the RCIC steam inlet valve, 13-MOV-131. The system has been isolated and a PTR hung. Repairs are expected to take several days. Required HPCI surveillance tests have been completed satisfactorily. With the exception of RCIC, no other abnormal conditions or alarms exist.

TIME 0650
Day 1

PLANT STATUS SHEET

SHEET NO. 1C

Vessel Level 200 inches

Level Trend Stable

Vessel Pressure 1005 psig

Pressure Trend Stable

Vessel Bottom Drain Temp. 501 °F

Cleanup Inlet Temp. 515 °F

Main Steam Pressure 950 psig

Drywell Pressure 16.5 psia

Drywell Ave. Temp. 123 °F

Torus Ave. Water Temperature 72.5 °F

Torus Pressure 14.7 psia

Torus Level -1.07 inches

Drywell Floor Leak Rate 1.87 gpm

Drywell Equipment Leak rate 1.56 gpm

Busses Energized (/)

10300 ✓ 10400 ✓

10500 ✓ 10600 ✓

A DC ✓ B DC ✓

Main Steam Line Radiation Monitors 1.6 R/hr.

Comments: _____

RCIC INOP. 13-MOV-15 + 16

TAGGED CLOSED

REACTOR POWER = 100%

EDG Starts

A	Running	Loaded/Running	Unloaded	Standby	00S
C	Running	Loaded/Running	Unloaded	Standby	00S
B	Running	Loaded/Running	Unloaded	Standby	00S
D	Running	Loaded/Running	Unloaded	Standby	00S

115KV Reserve Power Available

#3 LHH Yes/No
#4 NMP Yes/No

Building Vent Rad Monitors

Rx. Building	150	CPM
Refuel Floor	180	CPM
Turbine Building	375	CPM
Radwaste	110	CPM
Control Room	100	CPM

Off-Gas Rad Monitor 250 mR/hr.

Stack Rad Monitor 3000 Cps

High Range Effluent Monitors

Stack	A 0.7	8	0.3	mR/hr.
Turbine Bldg.	A 0.6	8	0.3	mR/hr.
Radwaste Bldg.	A 0.3	3	0.5	mR/hr.

Containment High Range 5 Monitor A 70 B 20 R/hr.

Area Radiation Monitors

1	0.2	mR/hr.
2	0.3	mR/hr.
3	0.08	mR/hr.
4	5.0	mR/hr.
5	1.0	mR/hr.
6	1.0	mR/hr.
7	1.0	mR/hr.
8	5.0	mR/hr.
9	25	mR/hr.
10	30	mR/hr.
11	35	mR/hr.
12	1.0	mR/hr.
13	6.0	mR/hr.
14	5.0	mR/hr.
15	11	mR/hr.
16	3.0	mR/hr.
17	90	mR/hr.
18	10	mR/hr.
19	10	mR/hr.
20	10	mR/hr.
21	1.0	mR/hr.
22	2.0	mR/hr.
23	5.0	mR/hr.
24	17	mR/hr.
25	8.0	mR/hr.
26	9.0	mR/hr.
27	20	mR/hr.
28	9.0	mR/hr.
29	30	mR/hr.
30	200	mR/hr.

Meteorology

Windspeed _____

Direction _____

Brookhaven Class _____

FITZPATRICK SCENARIO - August 11, 1982

TIME	MESSAGE NUMBER	ISSUED TO	SUMMARY OF MESSAGE CONTENTS	ANTICIPATED RESULTS AND COMMENTS	EMERGENCY CLASSIFICATION
0700 day	2	Control Room	Telecopy received indicating possible inoperability of Safety Relief Valve solenoid activators.	<ol style="list-style-type: none">1. Review of Technical Specification limiting conditions for operation.2. Classification of situation using IAP-2 of the Emergency Plan.3. Preparation for a normal plant shutdown.4. Commencement of Emergency Plan notifications using IAP-1.	Notification of an Unusual Event.

MESSAGE NO. 2

TIME: 0700 ON DAY 1

ISSUED TO THE CONTROL ROOM

The following telecopy message has just been received and brought to the Control Room by the acceptant:

11 August 82

TO: JAMES A. FITZPATRICK NUCLEAR POWER PLANT
FROM: XYZ LABORATORIES
SUBJECT: POSSIBLE MALFUNCTION OF TARGET ROD SAFETY RELIEF VALVE SOLENOID
VALVES

Recent environmental testing conducted at our labs suggest that the new lubricant used in the solenoid activators for your Target Rod safety relief valves may undergo degradation which could prevent proper operation of the activators. After extended operation in a high temperature, high humidity test environment simulate to that of the containment a cement-like by-product is formed. This effectively freezes the solenoid valves in the closed position preventing electrical activation of the relief valves.

TIME 0700
Day 1

PLANT STATUS SHEET

SHEET NO. 2c

Vessel Level 200 inches

Level Trend Stable

Vessel Pressure 1005 psig

Pressure Trend Stable

Vessel Bottom Drain Temp. 502 °F

Cleanup Inlet Temp. 516 °F

Main Steam Pressure 950 psig

Drywell Pressure 16.5 psia

Drywell Ave. Temp. 123 °F

Torus Ave. Water Temperature 72.5 °F

Torus Pressure 14.7 psia

Torus Level -1.07 inches

Drywell Floor Leak Rate 1.87 gpm

Drywell Equipment Leak rate 1.56 gpm

Busses Energized (v)

10300 ✓ 10400 ✓

10500 ✓ 10600 ✓

A DC ✓ B DC ✓

Main Steam Line Radiation Monitors 1.6 R/hr.

Comments: _____

RCIC INOP. 13-MOV-15 + 16

TAGGED CLOSED

Rx POWER = 100%

ADS and SRV manual operation may be inoperative.

EDG Starts

A	Running	Loaded/Running	Unloaded	Standby	00S
C	Running	Loaded/Running	Unloaded	Standby	00S
B	Running	Loaded/Running	Unloaded	Standby	00S
D	Running	Loaded/Running	Unloaded	Standby	00S

115KV Reserve Power Available

#3 LHH	Yes/No
#4 NMP	Yes/No

Building Vent Rad Monitors

Rx. Building	150	CPM
Refuel Floor	180	CPM
Turbine Building	375	CPM
Radwaste	110	CPM
Control Room	100	CPM

Off-Gas Rad Monitor 250 mR/hr.

Stack Rad Monitor 3000 Cps

High Range Effluent Monitors

Stack	A 0.7	B 0.3	mR/hr.
Turbine Bldg.	A 0.6	B	mR/hr.
Radwaste Bldg.	A 0.3	B 0.5	mR/hr.

Containment High Range 6 Monitor A 70 B 20 R/hr.

Area Radiation Monitors

1	0.2	mR/hr.
2	0.3	mR/hr.
3	0.08	mR/hr.
4	5.0	mR/hr.
5	1.0	mR/hr.
6	1.0	mR/hr.
7	1.0	mR/hr.
8	5.0	mR/hr.
9	25	mR/hr.
10	30	mR/hr.
11	35	mR/hr.
12	1.0	mR/hr.
13	6.0	mR/hr.
14	5.0	mR/hr.
15	11	mR/hr.
16	3.0	mR/hr.
17	90	mR/hr.
18	10	mR/hr.
19	10	mR/hr.
20	10	mR/hr.
21	1.0	mR/hr.
22	2.0	mR/hr.
23	5.0	mR/hr.
24	17	mR/hr.
25	8.0	mR/hr.
26	9.0	mR/hr.
27	20	mR/hr.
28	9.0	mR/hr.
29	30	mR/hr.
30	200	mR/hr.

Meteorology

Wind speed _____

Direction _____

Brookhaven Class _____

FITZPATRICK SCENARIO - August 11, 1982

TIME	MESSAGE NUMBER	ISSUED TO	SUMMARY OF MESSAGE CONTENTS	ANTICIPATED RESULTS AND COMMENTS	EMERGENCY CLASSIFICATION
0705 day 1	3	Radwaste Control Room	Increased pumpouts of the south Turbine Building Floor Sump TK-130A.	<ol style="list-style-type: none">1. Quantify change in leakage from pump run data.2. Investigate the source locally.3. Notify the Control Room of this situation.	Unusual Event Continued

MESSAGE NO. 3

TIME: 0705 ON DAY 1

ISSUED TO THE RADWASTE OPERATOR

Daily run times for P-3A, the south Turbine Building floor sump have been overaging 0.2 hours the last couple weeks. This morning the daily pump run time is 0.7 hours.

FITZPATRICK SCENARIO - August 11, 1982

TIME	MESSAGE NUMBER	ISSUED TO	SUMMARY OF MESSAGE CONTENTS	ANTICIPATED RESULTS AND COMMENTS	EMERGENCY CLASSIFICATION
0715 day 1	4	Control Room	Data provided to the Control Room operator indicating increased temperature in the steam tunnel near primary containment.	<ol style="list-style-type: none"> 1. Discuss with the Control Room referee the implications of such data, possible causes, and operator actions. 2. Complete notifications required by Emergency Plan for Unusual Event Classification. 	Unusual Event Continued

MESSAGE NO. 4

TIME: 0715 ON DAY 1

ISSUED TO THE CONTROL ROOM

Auxiliary Operators have just completed Surveillance, Test-40D, Daily Surveillance and Instrument Checks. Main Steam Tunnel temperatures are as follows. All other parameters appear normal.

<u>DETECTOR</u>	<u>NORMAL READING</u>	<u>CURRENT READING</u>
TE-121A	107°F	114°F
TE-122A	102°F	101°F
TE-123A	103°F	102°F
TE-124A	115°F	114°F
TE-121B	107°F	114°F
TE-122B	101°F	102°F
TE-123B	103°F	103°F
TE-124B	117°F	118°F
TE-121C	108°F	115°F
TE-122C	102°F	102°F
TE-123C	101°F	101°F
TE-124C	118°F	119°F
TE-121D	109°F	115°F
TE-122D	102°F	103°F
TE-123D	101°F	102°F
TE-124D	116°F	117°F

TIME 0715

PLANT STATUS SHEET

SHEET NO. 4c

Day 1

Vessel Level 200 inches

Level Trend Stable

Vessel Pressure 1005 psig

Pressure Trend Stable

Vessel Bottom Drain Temp. 501 °F

Cleanup Inlet Temp. 515 °F

Main Steam Pressure 950 psig

Drywell Pressure 16.5 psia

Drywell Ave. Temp. 123 °F

Torus Ave. Water Temperature 72.6 °F

Torus Pressure 14.7 psia

Torus Level -1.07 inches

Drywell Floor Leak Rate 1.87 gpm

Drywell Equipment Leak rate 1.56 gpm

Busses Energized (✓)

10300 ✓ 10400 ✓

10500 ✗ 10600 ✗

A DC ✗ B DC ✗

Main Steam Line Radiation Monitors 1.6 R/hr.

Comments: _____

RCIC INOP. _____

Rx POWER = 100%

ADS and SRV manual operation may be inoperative _____

EDG Starts

A	Running	Loaded/Running	Unloaded	Standby	00S
C	Running	Loaded/Running	Unloaded	Standby	00S
B	Running	Loaded/Running	Unloaded	Standby	00S
D	Running	Loaded/Running	Unloaded	Standby	00S

115KV Reserve Power Available

#3 LHH Yes/No
#4 NMP Yes/No

Building Vent Rad Monitors

Rx. Building	150	CPM
Refuel Floor	180	CPM
Turbine Building	375	CPM
Radwaste	110	CPM
Control Room	100	CPM

Off-Gas Rad Monitor 250 mR/hr.

Stack Rad Monitor 3000 Cps

High Range Effluent Monitors

Stack -	A 0.7	B 0.3	mR/hr.
Turbine Bldg.	A 0.6	B	mR/hr.
Radwaste Bldg.	A 0.3	B 0.5	mR/hr.

Containment High Range 6 Monitor A 70 B 20 R/hr.

Area Radiation Monitors

1	0.2	mR/hr.
2	0.3	mR/hr.
3	0.08	mR/hr.
4	5.0	mR/hr.
5	1.0	mR/hr.
6	1.0	mR/hr.
7	1.0	mR/hr.
8	5.0	mR/hr.
9	25	mR/hr.
10	30	mR/hr.
11	35	mR/hr.
12	1.0	mR/hr.
13	6.0	mR/hr.
14	5.0	mR/hr.
15	11	mR/hr.
16	3.0	mR/hr.
17	90	mR/hr.
18	10	mR/hr.
19	10	mR/hr.
20	10	mR/hr.
21	1.0	mR/hr.
22	2.0	mR/hr.
23	5.0	mR/hr.
24	17	mR/hr.
25	8.0	mR/hr.
26	9.0	mR/hr.
27	20	mR/hr.
28	9.0	mR/hr.
29	30	mR/hr.
30	200	mR/hr.

Meteorology

Windspeed _____

Direction _____

Brookhaven Class _____

FITZPATRICK SCENARIO ~ August 11, 1982

TIME	MESSAGE NUMBER	ISSUED TO	SUMMARY OF MESSAGE CONTENTS	ANTICIPATED RESULTS AND COMMENTS	EMERGENCY CLASSIFICATION
715- 730 day 1	5	Radwaste Control Room	Provides results of investigation of input to Turbine Building Sump TK-130A. Leak rate is approximately 2 gpm from the steam tunnel.	Discussion of possible sources of leakage with referee. Notification of results of investigation to the Control Room.	Unusual Event Continued

MESSAGE NO. 5

TIME: ISSUED BETWEEN 0715 to 0730 WHEN THE RADWASTE OPERATOR ENTERS THE AREA SOUTH OF THE MAIN CONDENSER TO INVESTIGATE LEAKAGE SOURCE.

ISSUED TO THE RADWASTE OPERATOR

A small stream of clear water is trickling into the southern Turbine Building Floor sump from the Main Steam Tunnel is about 2-3 gpm. You cannot see the source of the leakage.

DO NOT ENTER the Steam Tunnel to investigate further.

FITZPATRICK SCENARIO - August 11, 1982

PAGE

6a

TIME	MESSAGE NUMBER	ISSUED TO	SUMMARY OF MESSAGE CONTENTS	ANTICIPATED RESULTS AND COMMENTS	EMERGENCY CLASSIFICATION
0730 day 1	6	Control Room	Update of Main Steam tunnel temperature status.	Continue discussion with referee on source of leakage and causes of action. Conduct simulated watch relief with training shift operators.	Unusual Event Continued

MESSAGE NO. 6

TIME: 0730 ON DAY 1

ISSUED TO THE CONTROL ROOM AND RADWASTE CONTROL ROOM

Steam Tunnel Temperature Detectors, TE-121A through D have increased 7°F since the previous message. Other detectors continue to indicate normal temperatures.

The training shift operators have arrived. Conduct watch relief with these operators. They will continue the exercise activities. The normal day shift will relieve afterward and continue normal shift activities.

TIME 0730

PLANT STATUS SHEET

SHEET NO. 6C

Day 1

Vessel Level 200 inches

Level Trend Stable

Vessel Pressure 1005 psig

Pressure Trend Stable

Vessel Bottom Drain Temp. 501 °F

Cleanup Inlet Temp. 515 °F

Main Steam Pressure 950 psig

Drywell Pressure 16.5 psia

Drywell Ave. Temp. 123 °F

Torus Ave. Water Temperature 72.6 °F

Torus Pressure 14.7 psia

Torus Level -1.06 inches

Drywell Floor Leak Rate 1.87 gpm

Drywell Equipment Leak rate 1.56 gpm

Busses Energized (✓)

10300 ✓ 10400 ✓

10500 ✓ 10600 ✓

A DC ✗ B DC ✗

Main Steam Line Radiation Monitors 1.6 R/hr.

Comments: _____

RCIC INOP. _____

Rx POWER = 100%

ADS and SRV manual operation may be inoperative. _____

EDG Starts

A	Running	Loaded/Running	Unloaded	Standby	00S
C	Running	Loaded/Running	Unloaded	Standby	00S
B	Running	Loaded/Running	Unloaded	Standby	00S
D	Running	Loaded/Running	Unloaded	Standby	00S

115KV Reserve Power Available

#3 LHH Yes/No

#4 NMP Yes/No

Building Vent Rad Monitors

Rx, Building	150	CPM
Refuel Floor	180	CPM
Turbine Building	375	CPM
Radwaste	110	CPM
Control Room	100	CPM

Off-Gas Rad Monitor 250 mR/hr.

Stack Rad Monitor 3000 Cps

High Range Effluent Monitors

Stack	A	0.7	B	0.3	mR/hr.
Turbine Bldg.	A	0.6	B		mR/hr.
Radwaste Bldg.	A	0.3	B	0.5	mR/hr.

Containment High Range 6 Monitor A 70 B 20 R/hr.

Area Radiation Monitors

1	0.2	mR/hr.
2	0.3	mR/hr.
3	0.08	mR/hr.
4	5.0	mR/hr.
5	1.0	mR/hr.
6	1.0	mR/hr.
7	1.0	mR/hr.
8	5.0	mR/hr.
9	25	mR/hr.
10	30	mR/hr.
11	35	mR/hr.
12	1.0	mR/hr.
13	6.0	mR/hr.
14	5.0	mR/hr.
15	11	mR/hr.
16	3.0	mR/hr.
17	90	mR/hr.
18	10	mR/hr.
19	10	mR/hr.
20	10	mR/hr.
21	1.0	mR/hr.
22	2.0	mR/hr.
23	5.0	mR/hr.
24	17	mR/hr.
25	8.0	mR/hr.
26	9.0	mR/hr.
27	20	mR/hr.
28	9.0	mR/hr.
29	30	mR/hr.
30	200	mR/hr.

Meteorology

Windspeed _____

Direction _____

Brookhaven Class _____

TIME	MESSAGE NUMBER	ISSUED TO	SUMMARY OF MESSAGE CONTENTS	ANTICIPATED RESULTS AND COMMENTS	EMERGENCY CLASSIFICATION
0745 day 1	7	Control Room	Update on increasing main steam tunnel temperatures.	None	Unusual Event Continued

MESSAGE NO. 7

TIME: 0745 ON DAY 1

ISSUED TO THE CONTROL ROOM

Steam Tunnel Temperature Detectors, TE-121A through D have increased 10°F since the last message. Other detectors have not increased significantly.

TIME 0745

PLANT STATUS SHEET

SHEET NO. 7c

Day 1

Vessel Level 200 inches

Level Trend Stable

Vessel Pressure 1005 psig

Pressure Trend Stable

Vessel Bottom Drain Temp. 501 °F

Cleanup Inlet Temp. 516 °F

Main Steam Pressure 950 psig

Drywell Pressure 16.5 psia

Drywell Ave. Temp. 123 °F

Torus Ave. Water Temperature 72.6 °F

Torus Pressure 14.7 psia

Torus Level -1.06 inches

Drywell Floor Leak Rate 1.87 gpm

Drywell Equipment Leak rate 1.56 gpm

Busses Energized (✓)

10300 ✓ 10400 ✓

10500 ✓ 10600 ✓

A DC ✓ B DC ✓

Main Steam Line Radiation Monitors 1.6 R/hr.

Comments: _____

RCIC INOP. _____

Rx POWER = 100%

ADS and SRV manual operation may be inoperative

EDG Starts

A	Running	Loaded/Running	Unloaded/Standby	00S
C	Running	Loaded/Running	Unloaded/Standby	00S
B	Running	Loaded/Running	Unloaded/Standby	00S
D	Running	Loaded/Running	Unloaded/Standby	00S

115KV Reserve Power Available

#3 LHH	<input checked="" type="checkbox"/> Yes	No
#4 NMP	<input checked="" type="checkbox"/> Yes	No

Building Vent Rad Monitors

Rx. Building	150	CPM
Refuel Floor	180	CPM
Turbine Building	375	CPM
Radwaste	110	CPM
Control Room	100	CPM

Off-Gas Rad Monitor 250 mR/hr.

Stack Rad Monitor 3000 Cps

High Range Effluent Monitors

Stack	A 0.7	B 0.3	mR/hr.
Turbine Bldg.	A 0.6	B	mR/hr.
Radwaste Bldg.	A 0.3	B 0.5	mR/hr.

Containment High Range δ Monitor A 70 B 20 R/hr.

Area Radiation Monitors

1	0.2	mR/hr.
2	0.3	mR/hr.
3	0.08	mR/hr.
4	5.0	mR/hr.
5	1.0	mR/hr.
6	1.0	mR/hr.
7	1.0	mR/hr.
8	5.0	mR/hr.
9	25	mR/hr.
10	30	mR/hr.
11	35	mR/hr.
12	1.0	mR/hr.
13	6.0	mR/hr.
14	5.0	mR/hr.
15	11	mR/hr.
16	3.0	mR/hr.
17	90	mR/hr.
18	10	mR/hr.
19	10	mR/hr.
20	10	mR/hr.
21	1.0	mR/hr.
22	2.0	mR/hr.
23	5.0	mR/hr.
24	17	mR/hr.
25	8.0	mR/hr.
26	9.0	mR/hr.
27	20	mR/hr.
28	9.0	mR/hr.
29	30	mR/hr.
30	200	mR/hr.

Meteorology

Windspeed _____

Direction _____

Brookhaven Class _____

FITZPATRICK SCENARIO - August 11, 1982

TIME	MESSAGE NUMBER	ISSUED TO	SUMMARY OF MESSAGE CONTENTS	ANTICIPATED RESULTS AND COMMENTS	EMERGENCY CLASSIFICATION
0800 day 1	8	Control Room and Radwaste Operator	Reactor scram occurs from MSIV closure generated by high steam tunnel temperatures. Relief valves open to limit pressure HPCI auto initiates on low-level signals and restores level to normal.	<p>Carry out actions of AOP-1 Reactor Scram and SP-3, Main Steam Break. Isolation of Control Room and Turbine Building Ventilation Systems Order a restricted area evacuation or Turbine Building evacuation from this time until exercises end.</p> <ol style="list-style-type: none"> 1. If SRV manual operation is attempted to blow down vessel, activation does not occur. 2. When Turbine Building ventilation isolation is attempted, isolation occurs except one Steam Tunnel Exhaust Damper remains open. 	<p>Unusual Event Continued</p> <p>Upgrade to Alert may occur any-time between 800 and 825 based upon free play information exchange between the Shift Supervisor and the Control Room Referee concerning conditions in the steam tunnel or based upon the SS discretion that TSC activation is necessary.</p>

MESSAGE NO. 8

TIME: 0800 ON DAY 1

ISSUED TO THE CONTROL ROOM

Main Steam Tunnel Temperatures TE-121A through D have increased to 200°F initiating Main Steam Isolation Valve automatic closure. All eight MSIV's indicate full closed. An automatic reactor scram has occurred as the result of MSIV closure.

During the transient, vessel pressure increased to about 1100 psig. Safety Relief Valves opened to relieve pressure and are now continuing to lift periodically.

Vessel level decreased to 123 inches. HPCI has automatically initiated and is restoring level. The recirculation pumps have tripped as the result of low level. Reactor Building Ventilation is isolated and the Standby Gas Treatment System has initiated. Primary containment isolation has occurred.

All control rods are fully inserted and reactor power is dropping rapidly through the intermediate range.

The Reactor Feed Pumps have tripped and condenser vacuum is gone.

The Main Turbine has tripped. Successful fast transfer of buses to the reserve 115 KV source has occurred.

TIME 0800

PLANT STATUS SHEET

SHEET NO. 8c

Day 1

Vessel Level Transient inchesLevel Trend --Vessel Pressure Transient psigPressure Trend --Vessel Bottom
Drain Temp. Transient °FCleanup Inlet Temp. sient °FMain Steam Pressure Q psigDrywell Pressure 16.5 psiaDrywell Ave. Temp. 123 °FTorus Ave. Water
Temperature 72.8 °FTorus Pressure 14.7 psiaTorus Level Transient inchesDrywell Floor Leak
Rate 1.87 gpmDrywell Equipment
Leak rate 1.56 gpmBusses Energized (✓)

10300 ✓ 10400 ✓

10500 ✗ 10600 ✗

A DC ✗ B DC ✗

Main Steam Line Radiation
Monitors 0.1 R/hr.

Comments: _____

RCIC INOP.Rx POWER 0%ADS and SRV manual operationmay be inoperative.
_____REACTOR SCRAMMEDMSIV's INDICATE CLOSEDContainment Isolated

EDG Starts

A	Running	Loaded/Running	Unloaded	Standby	005
C	Running	Loaded/Running	Unloaded	Standby	005
B	Running	Loaded/Running	Unloaded	Standby	005
D	Running	Loaded/Running	Unloaded	Standby	005

115KV Reserve Power Available

#3 LHH	Yes	No
#4 NMP	Yes	No

Building Vent Rad Monitors

Rx. Building	150	CPM
Refuel Floor	180	CPM
Turbine Building	400	CPM
Radwaste	110	CPM
Control Room	100	CPM

Off-Gas Rad Monitor 250+ mR/hr.Stack Rad Monitor 3000+ Cps

High Range Effluent Monitors

Stack - A	0.7	B	0.3	mR/hr.
Turbine Bldg. A	0.6	B	0.3	mR/hr.
Radwaste Bldg. A	0.3	B	0.5	mR/hr.

Containment High Range 6 Monitor A B 6+ R/hr.

Area Radiation Monitors

1	_____	mR/hr.
2	_____	mR/hr.
3	_____	mR/hr.
4	_____	mR/hr.
5	_____	mR/hr.
6	_____	mR/hr.
7	_____	mR/hr.
8	_____	mR/hr.
9	_____	mR/hr.
10	_____	mR/hr.
11	_____	mR/hr.
12	_____	mR/hr.
13	_____	mR/hr.
14	_____	mR/hr.
15	_____	mR/hr.
16	_____	mR/hr.
17	_____	mR/hr.
18	_____	mR/hr.
19	_____	mR/hr.
20	_____	mR/hr.
21	_____	mR/hr.
22	_____	mR/hr.
23	_____	mR/hr.
24	_____	mR/hr.
25	_____	mR/hr.
26	_____	mR/hr.
27	_____	mR/hr.
28	_____	mR/hr.
29	_____	mR/hr.
30	_____	mR/hr.

Meteorology

Windspeed Direction Brookhaven Class

FITZPATRICK SCENARIO - August 11, 1982

TIME	MESSAGE NUMBER	ISSUED TO	SUMMARY OF MESSAGE CONTENTS	ANTICIPATED RESULTS AND COMMENTS	EMERGENCY CLASSIFICATION
0815 day 1	9	Control Room Plant Status Sheet issued to TSC if activated.	Update of plant parameters following the MSIV isolation and Reactor Scram. Expected parameters for this transient exist.	<ol style="list-style-type: none">1. Continue post-scram procedures. Restore isolated systems per AOP-15, Recovery from isolations.2. Upgrade to the Alert Classification when reports from Radwaste indicate continued leakage from the steam tunnel.<ol style="list-style-type: none">a. Activate TSC & OSCb. TB evacuation may be initiated.	ALERT
<p>NOTE:</p> <ol style="list-style-type: none">1. The Control Room referee will initiate the Alert Classification if the Shift Supervisor has not done so by 0825.2. If personnel are dispatched to investigate the problem with the open steam tunnel exhaust damper, they will return in 10 minutes with Message No. 9, Supplement 1.					

MESSAGE NO. 9

TIME: 0815 ON DAY 1

ISSUED TO THE CONTROL ROOM

Plant parameters are given on the following plant status sheet.

Steam Tunnel Temperature Detectors TE-121A through D have decreased to about 180°F and are continuing on a downward trend. MSIV isolation signals have cleared.

TIME 0815

PLANT STATUS SHEET

SHEET NO. 9c

Day 1

Vessel Level 225 inchesLevel Trend StableVessel Pressure 970 psigPressure Trend decreasingVessel Bottom Drain Temp. 490 °FCleanup Inlet Temp. 525 °FMain Steam Pressure 0 psigDrywell Pressure 16.5 psiaDrywell Ave. Temp. 124 °FTorus Ave. Water Temperature 74.3 °FTorus Pressure 14.7 psiaTorus Level -1.03 inchesDrywell Floor Leak Rate 1.87 gpmDrywell Equipment Leak rate 1.56 gpmBusses Energized (✓)

10300 ✓ 10400 ✓

10500 ✓ 10600 ✓

A DC ✓ B DC ✓

Main Steam Line Radiation Monitors 0.1 R/hr.

Comments: _____

RCIC INOP. _____

Rx Power 0%

ADS and SRV manual operation may be inoperative. _____

EDG Starts

A	Running	Loaded/Running	Unloaded	Standby	00S
C	Running	Loaded/Running	Unloaded	Standby	00S
B	Running	Loaded/Running	Unloaded	Standby	00S
D	Running	Loaded/Running	Unloaded	Standby	00S

115KV Reserve Power Available

#3 LHH	Yes	No
#4 NMP	Yes	No

Building Vent Rad Monitors

Rx. Building	150	CPM
Refuel Floor	180	CPM
Turbine Building	400	CPM
Radwaste	110	CPM
Control Room	100	CPM

Off-Gas Rad Monitor _____ mR/hr.Stack Rad Monitor _____ CpsHigh Range Effluent Monitors

Stack - A	8	mR/hr.
Turbine Bldg. A	0.6	mR/hr.
Radwaste Bldg. A	0.3	0.5 mR/hr.

Containment High Range 6 Monitor A _____ B _____ R/hr.Area Radiation Monitors

1	_____	mR/hr.
2	_____	mR/hr.
3	_____	mR/hr.
4	_____	mR/hr.
5	_____	mR/hr.
6	_____	mR/hr.
7	_____	mR/hr.
8	_____	mR/hr.
9	_____	mR/hr.
10	_____	mR/hr.
11	_____	mR/hr.
12	_____	mR/hr.
13	_____	mR/hr.
14	_____	mR/hr.
15	_____	mR/hr.
16	_____	mR/hr.
17	_____	mR/hr.
18	_____	mR/hr.
19	_____	mR/hr.
20	_____	mR/hr.
21	_____	mR/hr.
22	_____	mR/hr.
23	_____	mR/hr.
24	_____	mR/hr.
25	_____	mR/hr.
26	_____	mR/hr.
27	_____	mR/hr.
28	_____	mR/hr.
29	_____	mR/hr.
30	_____	mR/hr.

Meteorology

Windspeed _____

Direction _____

Brookhaven Class _____

Message No. 9, Supplement I

issued to personnel investigating the open steam tunnel exhaust damper.

Gravity damper GD - is jammed in the OPEN position. Attempts to move the damper appear futile.

FITZPATRICK SCENARIO - August 11, 1982

TIME	MESSAGE NUMBER	ISSUED TO	SUMMARY OF MESSAGE CONTENTS	ANTICIPATED RESULTS AND COMMENTS	EMERGENCY CLASSIFICATION
0815 day 1	10	Radwaste Control Room	Data given to Radwaste Operator which will indicate continuing leakage from the Steam Tunnel into the southern Turbine Building Floor Sump. (50 gpm leak rate)	1. Calculate leakage rate. 2. Report results to Control Room.	ALERT

NOTE:

Referee to make report to the Control Room if not made by Radwaste Operator before 0820.

MESSAGE NO. 10

TIME: 0815 ON DAY 1

ISSUED TO THE RADWASTE CONTROL ROOM

Turbine Building Floor Drain Sump Pump P-3A just completed a pump-out
that took 20 minutes from the time the pump started until it stopped.

FITZPATRICK SCENARIO - August 11, 1982

TIME	MESSAGE NUMBER	ISSUED TO	SUMMARY OF MESSAGE CONTENTS	ANTICIPATED RESULTS AND COMMENTS	EMERGENCY CLASSIFICATION
0830 day 1	11	Control Room Plant Status Sheet issued to TSC.	Plant conditions stabilized following the scram. A 70°F/hr. cool-down rate is established. Steam tunnel parameters given to assist in source identification.	<ol style="list-style-type: none">1. TSC and OSC may be manned and operational.2. Continued investigation of leakage source should be underway.3. Post-scram coolant sampling may be initiated.	ALERT

MESSAGE NO. 11

TIME: 0830 ON DAY 1

ISSUED TO THE CONTROL ROOM

Plant conditions are as listed on Plant Status Sheet. There has been established a stable 70°F/hr. cooldown rate using HPCI.

Steam line temperature detectors continue to show decreasing tunnel temperatures. Detectors TE-121A through D are at 157°F.

TIME 0830

PLANT STATUS SHEET

SHEET NO. 11c

Day 1

Vessel Level 225 inches

Level Trend Stable

Vessel Pressure 830 psig

Pressure Trend decreasing

Vessel Bottom Drain Temp. 473 °F

Cleanup Inlet Temp. 508 °F

Main Steam Pressure 0 psig

Drywell Pressure 16.5 psia

Drywell Ave. Temp. 122 °F

Torus Ave. Water Temperature 76 °F

Torus Pressure 14.7 psia

Torus Level -0.95 inches

Drywell Floor Leak Rate 1.80 gpm

Drywell Equipment Leak rate 1.50 gpm

Busses Energized (✓)

10300 ✓ 10400 ✓

10500 ✓ 10600 ✓

A DC ✓ B DC ✓

Main Steam Line Radiation Monitors _____ R/hr.

Comments: _____

REIC INOP. _____

ADS and SRV manual operation may be inoperative.

EDG Starts

A	Running	Loaded/Running	Unloaded	Standby	005
C	Running	Loaded/Running	Unloaded	Standby	005
B	Running	Loaded/Running	Unloaded	Standby	005
D	Running	Loaded/Running	Unloaded	Standby	005

115KV Reserve Power Available

#3 LHH	Yes	No
#4 NMP	Yes	No

Building Vent Rad Monitors

Rx. Building	150	CPM
Refuel Floor	180	CPM
Turbine Building	410	CPM
Radwaste	110	CPM
Control Room	100	CPM

Off-Gas Rad Monitor _____ D'S mR/hr.

Stack Rad Monitor _____ Cps

High Range Effluent Monitors

Stack	A	B	mR/hr.
Turbine Bldg.	A 0.6	B	mR/hr.
Radwaste Bldg.	A 0.3	B 0.5	mR/hr.

Containment High Range 6 Monitor A _____ b _____ R/hr.

Area Radiation Monitors

1	mR/hr.
2	mR/hr.
3	mR/hr.
4	mR/hr.
5	mR/hr.
6	mR/hr.
7	mR/hr.
8	mR/hr.
9	mR/hr.
10	mR/hr.
11	mR/hr.
12	mR/hr.
13	mR/hr.
14	mR/hr.
15	mR/hr.
16	mR/hr.
17	mR/hr.
18	mR/hr.
19	mR/hr.
20	mR/hr.
21	mR/hr.
22	mR/hr.
23	mR/hr.
24	mR/hr.
25	mR/hr.
26	mR/hr.
27	mR/hr.
28	mR/hr.
29	mR/hr.
30	mR/hr.

Meteorology

Windspeed _____

Direction _____

Brookhaven Class _____

FITZPATRICK SCENARIO - August 11, 1982

TIME	MESSAGE NUMBER	ISSUED TO	SUMMARY OF MESSAGE CONTENTS	ANTICIPATED RESULTS AND COMMENTS	EMERGENCY CLASSIFICATION
0845 day 1	12	Control Room Plant Status Sheet issued to TSC.	Plant parameters updated. Cool-down continues of 70°F/hr.	1. TSC and OSC manned. 2. Continued investigation of source of leakage.	ALERT

MESSAGE NO. 12

TIME: 0845 ON DAY 1

ISSUED TO THE CONTROL ROOM

Plant cooldown continues at 70°F/hr. using HPCI Steam Tunnel Temperature
Detectors TE-121A through D are at 145°F and decreasing.

TIME 0845

PLANT STATUS SHEET

SHEET NO. 12c

Day 1

Vessel Level 225 inches

Level Trend Stable

Vessel Pressure 710 psig

Pressure Trend decreasing

Vessel Bottom Drain Temp. 456 °F

Cleanup Inlet Temp. 490 °F

Main Steam Pressure 0 psig

Drywell Pressure 16.5 psia

Drywell Ave. Temp. 122 °F

Torus Ave. Water Temperature 78 °F

Torus Pressure 14.7 psia

Torus Level -0.85 inches

Drywell Floor Leak Rate 1.80 gpm

Drywell Equipment Leak rate 1.50 gpm

Busses Energized (v)

10300 ✓ 10400 ✓

10500 ✓ 10600 ✓

A DC ✗ B DC ✗

Main Steam Line Radiation Monitors _____ R/hr.

Comments: _____

RCIC INOP. _____

ADS and SRV manual operation

may be inoperative.

EDG Starts

A	Running	Loaded/Running	Unloaded/Standby	00S
C	Running	Loaded/Running	Unloaded/Standby	00S
B	Running	Loaded/Running	Unloaded/Standby	00S
D	Running	Loaded/Running	Unloaded/Standby	00S

115KV Reserve Power Available

#3 LHH	Yes	No
#4 NMP	Yes	No

Building Vent Rad Monitors

Rx. Building	150	CPM
Refuel Floor	180	CPM
Turbine Building	400	CPM
Radwaste	110	CPM
Control Room	100	CPM

Off-Gas Rad Monitor D/S mR/hr.

Stack Rad Monitor _____ Cps

High Range Effluent Monitors

Stack	A	B	mR/hr.
Turbine Bldg.	A 0.6	B	mR/hr.
Radwaste Bldg.	A 0.3	B 0.5	mR/hr.

Containment High Range & Monitor A _____ B _____ R/hr.

Area Radiation Monitors

1	_____	mR/hr.
2	_____	mR/hr.
3	_____	mR/hr.
4	_____	mR/hr.
5	_____	mR/hr.
6	_____	mR/hr.
7	_____	mR/hr.
8	_____	mR/hr.
9	_____	mR/hr.
10	_____	mR/hr.
11	_____	mR/hr.
12	_____	mR/hr.
13	_____	mR/hr.
14	_____	mR/hr.
15	_____	mR/hr.
16	_____	mR/hr.
17	_____	mR/hr.
18	_____	mR/hr.
19	_____	mR/hr.
20	_____	mR/hr.
21	_____	mR/hr.
22	_____	mR/hr.
23	_____	mR/hr.
24	_____	mR/hr.
25	_____	mR/hr.
26	_____	mR/hr.
27	_____	mR/hr.
28	_____	mR/hr.
29	_____	mR/hr.
30	_____	mR/hr.

Meteorology

Windspeed _____

Direction _____

Brookhaven Class _____

FITZPATRICK SCENARIO - August 11, 1982

TIME	MESSAGE NUMBER	ISSUED TO	SUMMARY OF MESSAGE CONTENTS	ANTICIPATED RESULTS AND COMMENTS	EMERGENCY CLASSIFICATION
0845 day 1	13	Radwaste Control Room	Data given to Radwaste Operator which will indicate continuing leakage from the Steam Tunnel into the southern Turbine Building Floor Sump. (50 gpm leak rate)	1. Calculate leak rate. 2. Report results to Control Room.	ALERT

MESSAGE NO. 13

TIME: 0845 ON DAY 1

ISSUED TO RADWASTE CONTROL ROOM

The south Turbine Building Floor Sump Pump started at 0835 and is still pumping.

TIME	MESSAGE NUMBER	ISSUED TO	SUMMARY OF MESSAGE CONTENTS	ANTICIPATED RESULTS AND COMMENTS	EMERGENCY CLASSIFICATION
0900 day 1	14	Control Room	Plant parameters updated. Cool-down at 70°F/hr. continues.	Plant Status Sheet issued to TSC.	ALERT

MESSAGE NO. 14

TIME: 0900 ON DAY 1

ISSUED TO THE CONTROL ROOM

Plant cooldown continues at 70°F/hr. using HPCI Steam Tunnel Temperature
Detectors TE-121A through D are at 138°F and decreasing.

TIME 0900

PLANT STATUS SHEET

SHEET NO. 14c

Day 1

Vessel Level 225 inches

Level Trend Stable

Vessel Pressure 610 psig

Pressure Trend decreasing

Vessel Bottom Drain Temp. 440 °F

Cleanup Inlet Temp. 472 °F

Main Steam Pressure 0 psig

Drywell Pressure 16.5 psia

Drywell Ave. Temp. 121 °F

Torus Ave. Water Temperature 78 °F

Torus Pressure 14.7 psia

Torus Level -0.80 inches

Drywell Floor Leak Rate 1.80 gpm

Drywell Equipment Leak rate 1.50 gpm

Busses Energized (/)

10300 ✕ 10400 ✕

10500 ✕ 10600 ✕

A DC ✕ B DC ✕

Main Steam Line Radiation Monitors _____ R/hr.

Comments: _____

RCIC INOP. _____ADS and SRV manual operation
may be inoperative. _____

EDG Starts

A	Running	Loaded/Running	Unloaded/Standby	/00S
C	Running	Loaded/Running	Unloaded/Standby	/00S
B	Running	Loaded/Running	Unloaded/Standby	/00S
D	Running	Loaded/Running	Unloaded/Standby	/00S

115KV Reserve Power Available

#3 LHH	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
#4 NMP	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

Building Vent Rad Monitors

Rx. Building	150	CPM
Refuel Floor	180	CPM
Turbine Building	390	CPM
Radwaste	110	CPM
Control Room	100	CPM

Off-Gas Rad Monitor D/S mR/hr.

Stack Rad Monitor Cps

High Range Effluent Monitors

Stack -	A	B	mR/hr.
Turbine Bldg.	A 0.6	B	mR/hr.
Radwaste Bldg.	A 0.3	B 0.5	mR/hr.

Containment High Range & Monitor A _____ B _____ R/hr.

Area Radiation Monitors

1	_____	mR/hr.
2	_____	mR/hr.
3	_____	mR/hr.
4	_____	mR/hr.
5	_____	mR/hr.
6	_____	mR/hr.
7	_____	mR/hr.
8	_____	mR/hr.
9	_____	mR/hr.
10	_____	mR/hr.
11	_____	mR/hr.
12	_____	mR/hr.
13	_____	mR/hr.
14	_____	mR/hr.
15	_____	mR/hr.
16	_____	mR/hr.
17	_____	mR/hr.
18	_____	mR/hr.
19	_____	mR/hr.
20	_____	mR/hr.
21	_____	mR/hr.
22	_____	mR/hr.
23	_____	mR/hr.
24	_____	mR/hr.
25	_____	mR/hr.
26	_____	mR/hr.
27	_____	mR/hr.
28	_____	mR/hr.
29	_____	mR/hr.
30	_____	mR/hr.

Meteorology

Windspeed _____

Direction _____

Brookhaven Class _____

TIME	MESSAGE NUMBER	ISSUED TO	SUMMARY OF MESSAGE CONTENTS	ANTICIPATED RESULTS AND COMMENTS	EMERGENCY CLASSIFICATION
0900 day 1	15	Radwaste Control Room	Data given to Radwaste Operator which will indicate continuing leakage from Steam tunnel at 50 gpm.	1. Calculate leak rate. 2. Report results to Control Room.	ALERT

MESSAGE NO. 15

TIME: 0900 ON DAY 1

ISSUED TO THE RADWASTE CONTROL ROOM

The south Turbine Building Floor Drain Sump Pump, P-3A, stopped pumping at 0855.

FITZPATRICK SCENARIO - August 11, 1982

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TIME	MESSAGE NUMBER	ISSUED TO	SUMMARY OF MESSAGE CONTENTS	ANTICIPATED RESULTS AND COMMENTS	EMERGENCY CLASSIFICATION
0915 day 1	16	Control Room	Plant Parameters updated. Cool-down continues at 70°F/hr.	Plant Status Sheet issued to TSC.	ALERT

MESSAGE NO. 16

TIME: 0915 ON DAY 1

ISSUED TO THE CONTROL ROOM

Plant cooldown continues at 70°F/hr. using HPCI Steam Tunnel Detectors
TE-121A through D are at 131°F and decreasing.

TIME 0915

PLANT STATUS SHEET

SHEET NO. 16c

Day 1

Vessel Level 225 inches

Level Trend Stable

Vessel Pressure 510 psig

Pressure Trend decreasing

Vessel Bottom Drain Temp. 422 °F

Cleanup Inlet Temp. 455 °F

Main Steam Pressure 0 psig

Drywell Pressure 16.5 psia

Drywell Ave. Temp. 120 °F

Torus Ave. Water Temperature 77 °F

Torus Pressure 14.7 psia

Torus Level -0.80 inches

Drywell Floor Leak Rate 1.75 gpm

Drywell Equipment Leak rate 1.45 gpm

Busses Energized (✓)

10300 ✓ 10400 ✓

10500 ✓ 10600 ✓

A DC ✗ B DC ✗

Main Steam Line Radiation Monitors _____ R/hr.

Comments: _____

RCIC INOP. _____

SRV manual operation and ADS may be inoperative.

EDG Starts

A	Running	Loaded/Running	Unloaded	Standby	00S
C	Running	Loaded/Running	Unloaded	Standby	00S
B	Running	Loaded/Running	Unloaded	Standby	00S
D	Running	Loaded/Running	Unloaded	Standby	00S

115KV Reserve Power Available

#3 LHH	Yes	No
#4 NMP	Yes	No

Building Vent Rad Monitors

Rx. Building	150	CPM
Refuel Floor	180	CPM
Turbine Building	380	CPM
Radwaste	110	CPM
Control Room	100	CPM

Off-Gas Rad Monitor

D/S mR/hr.

Stack Rad Monitor

Cps

High Range Effluent Monitors

Stack -	A	8	mR/hr.
Turbine Bldg.	A 0.6	B	mR/hr.
Radwaste Bldg.	A 0.3	B 0.5	mR/hr.

Containment High Range & Monitor A 8 R/hr.

Area Radiation Monitors

1	_____ mR/hr.
2	_____ mR/hr.
3	_____ mR/hr.
4	_____ mR/hr.
5	_____ mR/hr.
6	_____ mR/hr.
7	_____ mR/hr.
8	_____ mR/hr.
9	_____ mR/hr.
10	_____ mR/hr.
11	_____ mR/hr.
12	_____ mR/hr.
13	_____ mR/hr.
14	_____ mR/hr.
15	_____ mR/hr.
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23	_____ mR/hr.
24	_____ mR/hr.
25	_____ mR/hr.
26	_____ mR/hr.
27	_____ mR/hr.
28	_____ mR/hr.
29	_____ mR/hr.
30	_____ mR/hr.

Meteorology

Windspeed _____

Direction _____

Brookhaven Class _____

FITZPATRICK SCENARIO - August 11, 1982

TIME	MESSAGE NUMBER	ISSUED TO	SUMMARY OF MESSAGE CONTENTS	ANTICIPATED RESULTS AND COMMENTS	EMERGENCY CLASSIFICATION
0915 day 1	17	Radwaste Control Room	Data given to Radwaste Operator which will indicate continuing leakage from Steam Tunnel at 50 gpm.	1. Calculate leak rate. 2. Report results to Control Room.	ALERT

MESSAGE NO. 17

TIME: 0915 ON DAY 1

ISSUED TO THE RADWASTE CONTROL ROOM

The south Turbine Building Floor Drain Sump Pump, P-3A, just started again.

FITZPATRICK SCENARIO - August 11, 1982

TIME	MESSAGE NUMBER	ISSUED TO	SUMMARY OF MESSAGE CONTENTS	ANTICIPATED RESULTS AND COMMENTS	EMERGENCY CLASSIFICATION
0930 day 1	18	Control Room Plant Status Sheet issued to TSC.	The B Feedwater Line fails catastrophically. HPCI system isolates during the transient. The HPCI in-board isolation valve breaker trips Thermal overloads after reaching the full closed position. If the condensate system remains in service, it begins pumping condenser hotwell water through the break to the Turbine Building.	<ol style="list-style-type: none"> 1. Shutdown condensate if operating to prevent flooding Turbine building. 2. Reclassify the emergency condition to SITE AREA EMERGENCY based upon the loss of all means of depressurizing vessel. 3. Restricted Area Evacuation may be initiated. 4. Activate EOF. 	SITE AREA EMERGENCY

NOTE:

1. If operators or maintenance personnel are dispatched to investigate the breaker problem with the in-board HPCI steam supply valve, they will report back in about 10 minutes with message No. 18, supplement 1.
2. If operators are dispatched to measure the water level in the condenser bay, they will report back in 5 minutes with message No. 18, supplement 2.

MESSAGE NO. 18

TIME: 0930 ON DAY 1

ISSUED TO THE CONTROL ROOM

Another transient is in progress. The HPCI turbine just tripped and isolated due to high steam line flow signals. The HPCI steam line isolation valves close. When the in-board isolation valves reaches the full closed position, the green indicator lamp near the control switch remains ON for a moment and then goes out also, the graph display indicator lamp shows the valve full closed.

Steam Tunnel Detectors TE-121A through D are at 125°F and increasing again. HPCI area temperature detectors indicate normal.

Message No. 18, Supplement

issue to Control Room if condensate pumps are operating at 0930 on day 1.

Hotwell level is decreasing rapidly. The condensate demineralizer trouble annunciator just alarmed.

TIME 0930

PLANT STATUS SHEET

SHEET NO. 18d

Day 1

Vessel Level 227 inchesLevel Trend increasingVessel Pressure 430 psigPressure Trend increasingVessel Bottom
Drain Temp. 405 °FCleanup Inlet Temp. 438 °FMain Steam Pressure 0 psigDrywell Pressure 16.5 psiaDrywell Ave. Temp. 120 °FTorus Ave. Water
Temperature 77 °FTorus Pressure 14.7 psiaTorus Level -0.75 inchesDrywell Floor Leak
Rate 1.80 gpmDrywell Equipment
Leak rate 1.50 gpmBusses Energized (✓)

10300 ✓ 10400 ✓

10500 ✓ 10600 ✓

A DC ✓ B DC ✓

Main Steam Line Radiation
Monitors _____ R/hr.

Comments: _____

RCIC INOP.HPCI isolated.ADS and SRV manual operation
may be inoperative.

EDG Starts

A	Running	Loaded/Running	Unloaded/Standby	/00S
C	Running	Loaded/Running	Unloaded/Standby	/00S
B	Running	Loaded/Running	Unloaded/Standby	/00S
D	Running	Loaded/Running	Unloaded/Standby	/00S

115KV Reserve Power Available

#3 LHH	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
#4 NMP	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

Building Vent Rad Monitors

Rx. Building	<u>150</u>	CPM
Refuel Floor	<u>180</u>	CPM
Turbine Building	<u>400</u>	CPM
Radwaste	<u>110</u>	CPM
Control Room	<u>100</u>	CPM

Off-Gas Rad Monitor D/S mR/hr.

Stack Rad Monitor _____ Cps

High Range Effluent Monitors

Stack -	<u>A</u>	<u>B</u>	mR/hr.
Turbine Bldg.	<u>A 0.6</u>	<u>B</u>	mR/hr.
Radwaste Bldg.	<u>A 0.3</u>	<u>B 0.5</u>	mR/hr.

Containment High Range & Monitor A _____ B _____ R/hr.

Area Radiation Monitors

1	_____	mR/hr.
2	_____	mR/hr.
3	_____	mR/hr.
4	_____	mR/hr.
5	_____	mR/hr.
6	_____	mR/hr.
7	_____	mR/hr.
8	_____	mR/hr.
9	_____	mR/hr.
10	_____	mR/hr.
11	_____	mR/hr.
12	_____	mR/hr.
13	_____	mR/hr.
14	_____	mR/hr.
15	_____	mR/hr.
16	_____	mR/hr.
17	_____	mR/hr.
18	_____	mR/hr.
19	_____	mR/hr.
20	_____	mR/hr.
21	_____	mR/hr.
22	_____	mR/hr.
23	_____	mR/hr.
24	_____	mR/hr.
25	_____	mR/hr.
26	_____	mR/hr.
27	_____	mR/hr.
28	_____	mR/hr.
29	_____	mR/hr.
30	_____	mR/hr.

Meteorology

Windspeed _____

Direction _____

Brookhaven Class _____

Message No. 18, Supplement I

issued to personnel dispatched to MCC -- to investigate problem with the breaker for the HPCI inbound steam supply valve.

The thermal overloads for 13-MOV-15, the HPCI inboard steam supply valve, were tripped. One phase cannot be reset.

Message No. 18, Supplement II

issued to personnel investigating Turbine Building condenser bay water level
in the case where condensate remained in operation at 0930.

Water level is about 4 inches deep through the condenser bay.

FITZPATRICK SCENARIO - August 11, 1982

TIME	MESSAGE NUMBER	ISSUED TO	SUMMARY OF MESSAGE CONTENTS	ANTICIPATED RESULTS AND COMMENTS	EMERGENCY CLASSIFICATION
0930 day 1	19	Radwaste Control Room <u>IF CONDENSATE IS IN OPERATION</u>	All four Turbine Building floor drain sumps just started pumping down. Room is available for 25,000 gallons of water in the Waste Surge Tank. The Floor Drain Collector and Waste Collector Tanks are full and being processed. All water has about 1.5 units conductivity.	- Place all Turbine Building floor drain pumps in pull to lock. - Notify Control Room of conditions.	SITE AREA EMERGENCY

MESSAGE NO. 19

TIME: 0930 ON DAY 1

ISSUED TO THE RADWASTE CONTROL ROOM

All four Turbine Building Floor Drain Sumps are pumping down now. The waste collector and floor drain collector tanks are within 1000 gallons each of being full. The waste surge tank has 30,000 gallons in it. Water in the floor drain collector and waste collector tanks has a conductivity of 1.50 units.

FITZPATRICK SCENARIO - August 11, 1982

TIME	MESSAGE NUMBER	ISSUED TO	SUMMARY OF MESSAGE CONTENTS	ANTICIPATED RESULTS AND COMMENTS	EMERGENCY CLASSIFICATION
0945 day 1	20	Control Room Plant Status Sheet issued to TSC.	Vessel level continues to increase. Vessel pressure is increasing. Turbine Building exhaust radiation levels are increasing. Steam tunnel temperatures have increased to the MSIV isolation set point again.	<ol style="list-style-type: none"> 1. Restricted Area Evacuation may be in progress. 2. Repair crews may be dispatched to replace overloads in the HPCI in-board steam isolation valve breaker. 3. Radiological Survey Teams may be dispatched. 	SITE AREA EMERGENCY

NOTE:

If repair crews are dispatched to repair the faulty overload in the in-board HPCI steam supply valve, they will report back in 45 minutes with message No. 20, supplement 1.

MESSAGE NO. 20

TIME: 0945 ON DAY 1

ISSUED TO THE CONTROL ROOM

Plant parameters are as shown on the Plant Status Sheet. Steam Tunnel Temperature Detectors TE-121A through D have increased to 195°F and MSIV isolation signals are again present.

TIME 0945

PLANT STATUS SHEET

SHEET NO. 20c

Day 1

Vessel Level 229 inchesLevel Trend increasingVessel Pressure 520 psigPressure Trend increasingVessel Bottom
Drain Temp. 424 °FCleanup Inlet Temp. 457 °FMain Steam Pressure 0 psigDrywell Pressure 16.5 psiaDrywell Ave. Temp. 121 °FTorus Ave. Water
Temperature 77 °FTorus Pressure 14.7 psiaTorus Level -0.75 inchesDrywell Floor Leak
Rate 1.80 gpmDrywell Equipment
Leak rate 1.50 gpmBusses Energized (✓)

10300 ✓ 10400 ✓

10500 ✓ 10600 ✓

A DC ✓ B DC ✓

Main Steam Line Radiation
Monitors _____ R/hr.

Comments: _____

RCIC INOP.23-MOV-15 inoperative.SRV's inoperative for remote
activation.

EDG Starts

A	Running	Loaded/Running	Unloaded/Standby	005
C	Running	Loaded/Running	Unloaded/Standby	005
B	Running	Loaded/Running	Unloaded/Standby	005
D	Running	Loaded/Running	Unloaded/Standby	005

115KV Reserve Power Available

#3 LHH	Yes	No
#4 NMP	Yes	No

Building Vent Rad Monitors

Rx. Building	150	CPM
Refuel Floor	180	CPM
Turbine Building	1400	CPM
Radwaste	110	CPM
Control Room	100	CPM

Off-Gas Rad Monitor

D/S mR/hr.

Stack Rad Monitor

 Cps

High Range Effluent Monitors

Stack - A	8	mR/hr.
Turbine Bldg. A	8	mR/hr.
Radwaste Bldg. A	0.3	0.5 mR/hr.

Containment High Range 5 Monitor A _____ B _____ R/hr.

Area Radiation Monitors

1	_____	mR/hr.
2	_____	mR/hr.
3	_____	mR/hr.
4	_____	mR/hr.
5	_____	mR/hr.
6	_____	mR/hr.
7	_____	mR/hr.
8	_____	mR/hr.
9	_____	mR/hr.
10	_____	mR/hr.
11	_____	mR/hr.
12	_____	mR/hr.
13	_____	mR/hr.
14	_____	mR/hr.
15	_____	mR/hr.
16	_____	mR/hr.
17	_____	mR/hr.
18	_____	mR/hr.
19	_____	mR/hr.
20	_____	mR/hr.
21	_____	mR/hr.
22	_____	mR/hr.
23	_____	mR/hr.
24	_____	mR/hr.
25	_____	mR/hr.
26	_____	mR/hr.
27	_____	mR/hr.
28	_____	mR/hr.
29	_____	mR/hr.
30	_____	mR/hr.

Meteorology

Windspeed

Direction

Brookhaven Class

Message No. 20, Supplement I

issued upon return of the repair crew sent to work on the HPCI inboard steam supply valve breaker.

Prior to attempting repair of the faulty overload the motor was checked for continuity and grounds. The results are as follows:

Continuity	-	A-B	Okay
		B-C	Open
		C-A	Open

Resistance to ground	-	A	$10^5 \Omega$
		B	$10^5 \Omega$
		C	0 Ω

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TIME	MESSAGE NUMBER	ISSUED TO	SUMMARY OF MESSAGE CONTENTS	ANTICIPATED RESULTS AND COMMENTS	EMERGENCY CLASSIFICATION
0945 day 1	21	Radwaste Control Room	Issued if the condensate system was <u>not</u> operating at 0930. Data given to Radwaste Operator which will indicate continuing leakage from Steam Tunnel at 50 gpm.	1. Calculate leak rate. 2. Report results to Control Room.	SITE AREA EMERGENCY

MESSAGE NO. 21

TIME: 0945 ON DAY 1

ISSUED TO THE RADWASTE CONTROL ROOM IF THE CONDENSATE SYSTEM WAS NOT IN
OPERATION AT 0930.

The southern Turbine Building Floor Drain Pump stopped pumping at 0935.

FITZPATRICK SCENARIO - August 11, 1982

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TIME	MESSAGE NUMBER	ISSUED TO	SUMMARY OF MESSAGE CONTENTS	ANTICIPATED RESULTS AND COMMENTS	EMERGENCY CLASSIFICATION
1000 day 1	22	Control Room	Update plant parameters. Plant status sheet issued to TSC.	Radiological Survey Teams may be dispatched.	SITE AREA EMERGENCY

MESSAGE NO. 22

TIME: 1000 ON DAY 1

ISSUED TO THE CONTROL ROOM

Plant parameters are given on the Plant Status Sheet. Vessel pressure continues increasing. Vessel level is increasing. Steam Tunnel Detectors TE-121A through D indicate about 215°F.

TIME 1000
Day 1

PLANT STATUS SHEET

SHEET NO. 22cVessel Level 232 inchesLevel Trend increasingVessel Pressure 625 psigPressure Trend increasingVessel Bottom Drain Temp. 443 °FCleanup Inlet Temp. 476 °FMain Steam Pressure 0 psigDrywell Pressure 16.5 psiaDrywell Ave. Temp. 122 °FTorus Ave. Water Temperature 77 °FTorus Pressure 14.7 psiaTorus Level -0.75 inchesDrywell Floor Leak Rate 1.80 gpmDrywell Equipment Leak rate 1.50 gpm

Busses Energized (✓)

10300 ✓ 10400 ✓

10500 ✓ 10600 ✓

A DC ✓ B DC ✓

Main Steam Line Radiation Monitors _____ R/hr.

Comments: _____

RCIC INCP. 13-MOV-15

inoperative.

SRV's inoperative for remote activation.

EDG Starts

A	Running	Loaded/Running	Unloaded	Standby	00S
C	Running	Loaded/Running	Unloaded	Standby	00S
B	Running	Loaded/Running	Unloaded	Standby	00S
D	Running	Loaded/Running	Unloaded	Standby	00S

115KV Reserve Power Available

#3 LHH	Yes	No
#4 NMP	Yes	No

Building Vent Rad Monitors

Rx. Building	150	CPM
Refuel Floor	180	CPM
Turbine Building		CPM
Radwaste	110	CPM
Control Room	100	CPM

Off-Gas Rad Monitor _____ mR/hr.

Stack Rad Monitor _____ Cps

High Range Effluent Monitors

Stack -	A	B	mR/hr.
Turbine Bldg.	A	B	mR/hr.
Radwaste Bldg.	A <u>0.3</u>	B <u>0.5</u>	mR/hr.

Containment High Range δ Monitor A _____ B _____ R/hr.

Area Radiation Monitors

1		mR/hr.
2		mR/hr.
3		mR/hr.
4		mR/hr.
5		mR/hr.
6		mR/hr.
7		mR/hr.
8		mR/hr.
9		mR/hr.
10		mR/hr.
11		mR/hr.
12		mR/hr.
13		mR/hr.
14		mR/hr.
15		mR/hr.
16		mR/hr.
17		mR/hr.
18		mR/hr.
19		mR/hr.
20		mR/hr.
21		mR/hr.
22		mR/hr.
23		mR/hr.
24		mR/hr.
25		mR/hr.
26		mR/hr.
27		mR/hr.
28		mR/hr.
29		mR/hr.
30		mR/hr.

Meteorology

Windspeed _____

Direction _____

Brookhaven Class _____

FITZPATRICK SCENARIO - August 11, 1982

TIME	MESSAGE NUMBER	ISSUED TO	SUMMARY OF MESSAGE CONTENTS	ANTICIPATED RESULTS AND COMMENTS	EMERGENCY CLASSIFICATION
1000 day 1	23	Radwaste Control Room	Issued if the condensate system was <u>not</u> operating at 0930. Data given to Radwaste Operator which will indicate continuing leakage from Steam Tunnel at 50 gpm.	1. Calculate leak rate. 2. Report results to Control Room.	SITE AREA EMERGENCY

MESSAGE NO. 23

TIME: 1000 ON DAY 1

ISSUED TO THE RADWASTE CONTROL ROOM IF THE CONDENSATE SYSTEM WAS NOT IN OPERATION AT 0930.

The southern Turbine Building Floor Sump Pump started pumping again at 0955.

TIME	MESSAGE NUMBER	ISSUED TO	SUMMARY OF MESSAGE CONTENTS	ANTICIPATED RESULTS AND COMMENTS	EMERGENCY CLASSIFICATION
1015 day 1	24	Control Room	Update plant parameters. Plant Status Sheet issued to TSC.		SITE AREA EMERGENCY

MESSAGE NO. 24

TIME: 1015 ON DAY 1

ISSUED TO THE CONTROL ROOM

Plant parameters are given on Plant Status Sheet. Vessel pressure continues increasing. Vessel level is increasing. Steam Tunnel Detectors TE-121A through D indicate about 225°F.

TIME 1015

PLANT STATUS SHEET

SHEET NO. 24c

Day 1

Vessel Level 235 inchesLevel Trend increasingVessel Pressure 735 psigPressure Trend increasingVessel Bottom Drain Temp. 462 °FCleanup Inlet Temp. 495 °FMain Steam Pressure 0 psigDrywell Pressure 16.5 psiaDrywell Ave. Temp. 122 °FTorus Ave. Water Temperature 77 °FTorus Pressure 14.7 psiaTorus Level -0.75 inchesDrywell Floor Leak Rate 1.80 gpmDrywell Equipment Leak rate 1.50 gpmBusses Energized (✓)

10300 ✓ 10400 ✓

10500 ✓ 10600 ✓

A DC ✓ B DC ✓

Main Steam Line Radiation Monitors _____ R/hr.

Comments: _____

RCIC INOP.23-MOV-15 inoperative.SRV's inoperative for remote activation.EDG Starts

A	Running	Loaded/Running	Unloaded	Standby	00S
C	Running	Loaded/Running	Unloaded	Standby	00S
B	Running	Loaded/Running	Unloaded	Standby	00S
D	Running	Loaded/Running	Unloaded	Standby	00S

115KV Reserve Power Available

#3 LHH	Yes	No
#4 NMP	Yes	No

Building Vent Rad Monitors

Rx. Building	150	CPM
Refuel Floor	180	CPM
Turbine Building	110	CPM
Radwaste	100	CPM
Control Room		

Off-Gas Rad Monitor

Stack Rad Monitor _____ Cps

High Range Effluent Monitors

Stack A	B	mR/hr.
Turbine Bldg. A	B	mR/hr.
Radwaste Bldg. A	0.3	0.5 mR/hr.

Containment High Range δ Monitor A _____ B _____ R/hr.Area Radiation Monitors

1	mR/hr.
2	mR/hr.
3	mR/hr.
4	mR/hr.
5	mR/hr.
6	mR/hr.
7	mR/hr.
8	mR/hr.
9	mR/hr.
10	mR/hr.
11	mR/hr.
12	mR/hr.
13	mR/hr.
14	mR/hr.
15	mR/hr.
16	mR/hr.
17	mR/hr.
18	mR/hr.
19	mR/hr.
20	mR/hr.
21	mR/hr.
22	mR/hr.
23	mR/hr.
24	mR/hr.
25	mR/hr.
26	mR/hr.
27	mR/hr.
28	mR/hr.
29	mR/hr.
30	mR/hr.

Meteorology

Windspeed _____

Direction _____

Brookhaven Class _____

FITZPATRICK SCENARIO - August 11, 1982

TIME	MESSAGE NUMBER	ISSUED TO	SUMMARY OF MESSAGE CONTENTS	ANTICIPATED RESULTS AND COMMENTS	EMERGENCY CLASSIFICATION
1015 day 1	25	Radwaste Control Room	Issued if the condensate system was <u>not</u> operating at 0930. Data given to Radwaste Operator which will indicate continuing leakage from Steam Tunnel at 50 gpm.	1. Calculate leak rate. 2. Report results to Control Room.	SITE AREA EMERGENCY

MESSAGE NO. 25

TIME: 1015 ON DAY 1

ISSUED TO THE RADWASTE CONTROL ROOM IF THE CONDENSATE SYSTEM WAS NOT IN OPERATION AT 0930.

The south Turbine Building Floor Sump Pump stopped at 1015.

TIME	MESSAGE NUMBER	ISSUED TO	SUMMARY OF MESSAGE CONTENTS	ANTICIPATED RESULTS AND COMMENTS	EMERGENCY CLASSIFICATION
1030 day 1	26	Control Room	Update Plant Parameters. Plant Status Sheet issued to TSC.		SITE AREA EMERGENCY

MESSAGE NO. 26

TIME: 1030 ON DAY 1

ISSUED TO THE CONTROL ROOM

Vessel level and pressure continues to increase. Steam Tunnel Detectors TE-121A through D indicate 227°F.

TIME 1030

PLANT STATUS SHEET

SHEET NO. 26c

Day 1

Vessel Level 237 inchesLevel Trend increasingVessel Pressure 860 psigPressure Trend increasingVessel Bottom Drain Temp. 480 °FCleanup Inlet Temp. 513 °FMain Steam Pressure 0 psigDrywell Pressure 16.5 psiaDrywell Ave. Temp. 123 °FTorus Ave. Water Temperature 77 °FTorus Pressure 14.7 psiaTorus Level -0.75 inchesDrywell Floor Leak Rate 1.80 gpmDrywell Equipment Leak rate 1.50 gpmBusses Energized (✓)

10300 ✗ 10400 ✗

10500 ✗ 10600 ✗

A DC ✗ B DC ✗

Main Steam Line Radiation Monitors _____ R/hr.

Comments: _____

RCIC INOP.23-MOV-15 inoperative.SRV's inoperative for remote operation.

EDG Starts

A	Running	Loaded/Running	Unloaded/Standby	005
C	Running	Loaded/Running	Unloaded/Standby	005
B	Running	Loaded/Running	Unloaded/Standby	005
D	Running	Loaded/Running	Unloaded/Standby	005

115KV Reserve Power Available

#3 LHH	Yes	No
#4 NMP	Yes	No

Building Vent Rad Monitors

Rx. Building	150	CPM
Refuel Floor	180	CPM
Turbine Building		CPM
Radwaste	110	CPM
Control Room	100	CPM

Off-Gas Rad Monitor

D/S mR/hr.

Stack Rad Monitor

 Cps

High Range Effluent Monitors

Stack - A	B	mR/hr.
Turbine Bldg. A	B	mR/hr.
Radwaste Bldg. A	B	0.5 mR/hr.

Containment High Range 6 Monitor A _____ B _____ R/hr.

Area Radiation Monitors

1	mR/hr.
2	mR/hr.
3	mR/hr.
4	mR/hr.
5	mR/hr.
6	mR/hr.
7	mR/hr.
8	mR/hr.
9	mR/hr.
10	mR/hr.
11	mR/hr.
12	mR/hr.
13	mR/hr.
14	mR/hr.
15	mR/hr.
16	mR/hr.
17	mR/hr.
18	mR/hr.
19	mR/hr.
20	mR/hr.
21	mR/hr.
22	mR/hr.
23	mR/hr.
24	mR/hr.
25	mR/hr.
26	mR/hr.
27	mR/hr.
28	mR/hr.
29	mR/hr.
30	mR/hr.

Meteorology

Windspeed _____

Direction _____

Brookhaven Clz.s _____

FITZPATRICK SCENARIO - August 11, 1982

TIME	MESSAGE NUMBER	ISSUED TO	SUMMARY OF MESSAGE CONTENTS	ANTICIPATED RESULTS AND COMMENTS	EMERGENCY CLASSIFICATION
1045 day 1	27	Control Room	Update plant parameters. Plant status Sheet issued to TSC.		SITE AREA EMERGENCY

MESSAGE NO. 27

TIME: 1045 ON DAY 1

ISSUED TO THE CONTROL ROOM

Vessel level and pressure continue to increase. Steam Tunnel Detectors TE-121A through D indicated 235°F.

TIME 1045

PLANT STATUS SHEET

SHEET NO. 27c

Day 1

Vessel Level 238 inchesLevel Trend increasingVessel Pressure 1000 psigPressure Trend increasingVessel Bottom
Drain Temp. 497 °FCleanup Inlet Temp. 530 °FMain Steam Pressure 0 psigDrywell Pressure 16.5 psiaDrywell Ave. Temp. 123 °FTorus Ave. Water
Temperature 77 °FTorus Pressure 14.7 psiaTorus Level -0.75 inchesDrywell Floor Leak
Rate 1.80 gpmDrywell Equipment
Leak rate 1.50 gpmBusses Energized (✓)

10300 ✓ 10400 ✓

10500 ✓ 10600 ✓

A DC ✕ B DC ✕

Main Steam Line Radiation
Monitors _____ R/hr.

Comments: _____

RCIC INOP.23-MOV-15 inoperative.SRV's inoperative for remote
operation.

_____EDG Starts

A	Running	Loaded/Running	Unloaded/Standby	00S
C	Running	Loaded/Running	Unloaded/Standby	00S
B	Running	Loaded/Running	Unloaded/Standby	00S
D	Running	Loaded/Running	Unloaded/Standby	00S

115KV Reserve Power Available

#3 LHH	Yes	No
#4 NMP	Yes	No

Building Vent Rad Monitors

Rx. Building	150	CPM
Refuel Floor	180	CPM
Turbine Building		CPM
Radwaste	110	CPM
Control Room	100	CPM

Off-Gas Rad Monitor D/B mR/hr.

Stack Rad Monitor _____ Cps

High Range Effluent Monitors

Stack - A	8	mR/hr.
Turbine Bldg. A	8	mR/hr.
Radwaste Bldg. A	0.3	0.5 mR/hr.

Containment High Range 6 Monitor A _____ B _____ R/hr.

Area Radiation Monitors

1	_____	mR/hr.
2	_____	mR/hr.
3	_____	mR/hr.
4	_____	mR/hr.
5	_____	mR/hr.
6	_____	mR/hr.
7	_____	mR/hr.
8	_____	mR/hr.
9	_____	mR/hr.
10	_____	mR/hr.
11	_____	mR/hr.
12	_____	mR/hr.
13	_____	mR/hr.
14	_____	mR/hr.
15	_____	mR/hr.
16	_____	mR/hr.
17	_____	mR/hr.
18	_____	mR/hr.
19	_____	mR/hr.
20	_____	mR/hr.
21	_____	mR/hr.
22	_____	mR/hr.
23	_____	mR/hr.
24	_____	mR/hr.
25	_____	mR/hr.
26	_____	mR/hr.
27	_____	mR/hr.
28	_____	mR/hr.
29	_____	mR/hr.
30	_____	mR/hr.

Meteorology

Windspeed _____

Direction _____

Brookhaven Class _____

FITZPATRICK SCENARIO - August 11, 1982

TIME	MESSAGE NUMBER	ISSUED TO	SUMMARY OF MESSAGE CONTENTS	ANTICIPATED RESULTS AND COMMENTS	EMERGENCY CLASSIFICATION
1045 day 1	28	Radwaste Control Room	Issued if the condensate system was <u>not</u> operating at 0930. Data given to Radwaste Operator which will indicate continuing leakage from Steam Tunnel at 50 gpm.	<ol style="list-style-type: none"> 1. Calculate leak rate. 2. Report results to Control Room. 	SITE AREA EMERGENCY

MESSAGE NO. 28

TIME: 1045 ON DAY 1

ISSUED TO THE RADWASTE CONTROL ROOM IF CONDENSATE WAS NOT IN OPERATION AT
0930.

The south Turbine Building Floor Sump Pump started at 1035.

FITZPATRICK SCENARIO - August 11, 1982

TIME	MESSAGE NUMBER	ISSUED TO	SUMMARY OF MESSAGE CONTENTS	ANTICIPATED RESULTS AND COMMENTS	EMERGENCY CLASSIFICATION
1100 day 1	29	Control Room Plant Status Sheet issued to TSC.	Vessel pressure increased to the SRV set points. Pressure surges caused by the SRV cycling have resulted in failure of the in-board feedwater check valve. Vessel level is dropping rapidly.	<ol style="list-style-type: none"> 1. Upgrade classification to the General Emergency level. 2. Evacuate repair teams from the restricted area. 	GENERAL EMERGENCY

MESSAGE NO. 29

TIME: 1100 ON DAY 1

ISSUED TO THE CONTROL ROOM

Vessel pressure increased to the SRV lift point. Relief valves cycled several times accompanied with normal level transients. However, following the last valve opening, vessel level began decreasing at a rate of 6 inches/minute. Steam Tunnel Temperature Detectors TE-121A through D indicate 255°F.

TIME 1100

PLANT STATUS SHEET

SHEET NO. 29c

Day 1

Vessel Level 240 inchesLevel Trend decreasingVessel Pressure 1100 psigPressure Trend decreasingVessel Bottom Drain Temp. 505 °FCleanup Inlet Temp. 540 °FMain Steam Pressure 0 psigDrywell Pressure 16.5 psiaDrywell Ave. Temp. 123 °FTorus Ave. Water Temperature 78 °FTorus Pressure 14.7 psiaTorus Level -0.74 inchesDrywell Floor Leak Rate 1.80 gpmDrywell Equipment Leak rate 1.50 gpmBusses Energized (✓)

10300 ✕ 10400 ✕

10500 ✕ 10600 ✕

A DC ✕ B DC ✕

Main Steam Line Radiation Monitors _____ R/hr.

Comments: _____

RCIC INOP.23-MOV-15 inoperative.SRV's inoperative for remote operation.

EDG Starts

A	Running	Loaded/Running	Unloaded	Standby	00S
C	Running	Loaded/Running	Unloaded	Standby	00S
B	Running	Loaded/Running	Unloaded	Standby	00S
D	Running	Loaded/Running	Unloaded	Standby	00S

115KV Reserve Power Available

#3 LHH	Yes	No
#4 NMP	Yes	No

Building Vent Rad Monitors

Rx. Building	<u>150</u>	CPM
Refuel Floor	<u>180</u>	CPM
Turbine Building		CPM
Radwaste	<u>110</u>	CPM
Control Room	<u>100</u>	CPM

Off-Gas Rad Monitor D/S mR/hr.

Stack Rad Monitor _____ Cps

High Range Effluent Monitors

Stack - A	<u>8</u>	mR/hr.
Turbine Bldg. A	<u>8</u>	mR/hr.
Radwaste Bldg. A	<u>0.3</u>	<u>0.5</u> mR/hr.

Containment High Range 5 Monitor A _____ B _____ R/hr.

Area Radiation Monitors

1		mR/hr.
2		mR/hr.
3		mR/hr.
4		mR/hr.
5		mR/hr.
6		mR/hr.
7		mR/hr.
8		mR/hr.
9		mR/hr.
10		mR/hr.
11		mR/hr.
12		mR/hr.
13		mR/hr.
14		mR/hr.
15		mR/hr.
16		mR/hr.
17		mR/hr.
18		mR/hr.
19		mR/hr.
20		mR/hr.
21		mR/hr.
22		mR/hr.
23		mR/hr.
24		mR/hr.
25		mR/hr.
26		mR/hr.
27		mR/hr.
28		mR/hr.
29		mR/hr.
30		mR/hr.

Meteorology

Windspeed _____

Direction _____

Brookhaven Class _____

FITZPATRICK SCENARIO - August 11, 1982

TIME	MESSAGE NUMBER	ISSUED TO	SUMMARY OF MESSAGE CONTENTS	ANTICIPATED RESULTS AND COMMENTS	EMERGENCY CLASSIFICATION
1100 day 1	30	Radwaste Control Room	Issued if the condensate system was <u>not</u> operating at 0930. All four Turbine Building floor drain pumps just started.	1. Secure Turbine Building floor drain pumps. 2. Notify Control Room.	GENERAL EMERGENCY

MESSAGE NO. 30

TIME: 1100 ON DAY 1

ISSUED TO THE RADWASTE CONTROL ROOM

The south Turbine Building Floor Drain Pump stopped at 1055. At 1100 all four Turbine Building Floor Sumps started in quick succession.

FITZPATRICK SCENARIO - August 11, 1982

TIME	MESSAGE NUMBER	ISSUED TO	SUMMARY OF MESSAGE CONTENTS	ANTICIPATED RESULTS AND COMMENTS	EMERGENCY CLASSIFICATION
1110 day 1	31	Control Room	Update of plant parameters. Plant Status Sheet issued to TSC.	1. Predict time of core uncover and major release to environment.	GENERAL EMERGENCY

MESSAGE NO. 31

TIME: 1110 ON DAY 1

ISSUED TO THE CONTROL ROOM

Plant parameters are as indicated on the Plant Status Sheet. Steam Tunnel Temperatures on TE-121A through D are 275°F and increasing.

TIME 1110.

PLANT STATUS SHEET

SHEET NO. 31c

Day 1

Vessel Level 180 inches

Level Trend decreasing

Vessel Pressure 870 psig

Pressure Trend decreasing

Vessel Bottom Drain Temp. 475 °F

Cleanup Inlet Temp. 510 °F

Main Steam Pressure 0 psig

Drywell Pressure 16.5 psia

Drywell Ave. Temp. 123 °F

Torus Ave. Water Temperature 80 °F

Torus Pressure 14.7 psia

Torus Level -0.74 inches

Drywell Floor Leak Rate 1.80 gpm

Drywell Equipment Leak rate 1.50 gpm

Busses Energized (✓)

10300 ✓ 10400 ✓

10500 ✓ 10600 ✓

A DC ✓ B DC ✓

Main Steam Line Radiation Monitors _____ R/hr.

Comments: _____

RCIC INOP. _____

23-MOV-15 inoperative. _____

SRV's inoperative for remote operation. _____

EDG Starts

A	Running	Loaded/Running	Unloaded/Standby	005
C	Running	Loaded/Running	Unloaded/Standby	005
B	Running	Loaded/Running	Unloaded/Standby	005
D	Running	Loaded/Running	Unloaded/Standby	005

115KV Reserve Power Available

#3 LHH	Yes	No
#4 NMP	Yes	No

Building Vent Rad Monitors

Rx. Building	150	CPM
Refuel Floor	180	CPM
Turbine Building		CPM
Radwaste	110	CPM
Control Room	100	CPM

Off-Gas Rad Monitor D/S mR/hr.

Stack Rad Monitor Cps

High Range Effluent Monitors

Stack	A	B	mR/hr.
Turbine Bldg.	A	B	mR/hr.
Radwaste Bldg.	A 0.3	B 0.5	mR/hr.

Containment High Range 5 Monitor A B R/hr.

Area Radiation Monitors

1		mR/hr.
2		mR/hr.
3		mR/hr.
4		mR/hr.
5		mR/hr.
6		mR/hr.
7		mR/hr.
8		mR/hr.
9		mR/hr.
10		mR/hr.
11		mR/hr.
12		mR/hr.
13		mR/hr.
14		mR/hr.
15		mR/hr.
16		mR/hr.
17		mR/hr.
18		mR/hr.
19		mR/hr.
20		mR/hr.
21		mR/hr.
22		mR/hr.
23		mR/hr.
24		mR/hr.
25		mR/hr.
26		mR/hr.
27		mR/hr.
28		mR/hr.
29		mR/hr.
30		mR/hr.

Meteorology

Windspeed _____

Direction _____

Brookhaven Class _____

FITZPATRICK SCENARIO - August 11, 1982

PAGE

32a

TIME	MESSAGE NUMBER	ISSUED TO	SUMMARY OF MESSAGE CONTENTS	ANTICIPATED RESULTS AND COMMENTS	EMERGENCY CLASSIFICATION
1120 day 1	32	Control Room	Updated plant parameters. Vessel level decreasing rapidly.	Plant Status Sheet issued to TSC.	GENERAL EMERGENCY

MESSAGE NO. 32

TIME: 1120 ON DAY 1

ISSUED TO THE CONTROL ROOM

Plant parameters are as indicated on the Plant Status Sheet. Steam
Tunnel Detectors TE-121A through D indicate 290°F.

TIME 1120

PLANT STATUS SHEET

SHEET NO. 32c

Day 1

Vessel Level 120 inches

EDG Starts

A	Running	Loaded/Running	Unloaded/Standby	/00S
C	Running	Loaded/Running	Unloaded/Standby	/00S
B	Running	Loaded/Running	Unloaded/Standby	/00S
D	Running	Loaded/Running	Unloaded/Standby	/00S

Level Trend decreasingVessel Pressure 680 psigPressure Trend decreasingVessel Bottom Drain Temp. 455 °F

115KV Reserve Power Available

Cleanup Inlet Temp. 480 °F

#3 LHH	Yes	No
#4 NMP	Yes	No

Main Steam Pressure 0 psig

Building Vent Rad Monitors

Drywell Pressure 16.5 psia

Rx. Building	<u>150</u>	CPM
Refuel Floor	<u>180</u>	CPM
Turbine Building		CPM
Radwaste	<u>110</u>	CPM
Control Room	<u>100</u>	CPM

Drywell Ave. Temp. 123 °FOff-Gas Rad Monitor D/S mR/hr.Torus Ave. Water Temperature 79 °FStack Rad Monitor CpsTorus Pressure 14.7 psia

High Range Effluent Monitors

Torus Level -0.74 inches

Stack - A	<u>B</u>	mR/hr.
Turbine Bldg. A	<u>B</u>	mR/hr.
Radwaste Bldg. A	<u>0.3</u>	<u>B</u> 0.5 mR/hr.

Drywell Floor Leak Rate 1.80 gpmContainment High Range 6 Monitor A B R/hr.Drywell Equipment Leak rate 1.50 gpm

Area Radiation Monitors

Busses Energized (✓)

1		mR/hr.
2		mR/hr.
3		mR/hr.
4		mR/hr.
5		mR/hr.
6		mR/hr.
7		mR/hr.
8		mR/hr.
9		mR/hr.
10		mR/hr.
11		mR/hr.
12		mR/hr.
13		mR/hr.
14		mR/hr.
15		mR/hr.
16		mR/hr.
17		mR/hr.
18		mR/hr.
19		mR/hr.
20		mR/hr.
21		mR/hr.
22		mR/hr.
23		mR/hr.
24		mR/hr.
25		mR/hr.
26		mR/hr.
27		mR/hr.
28		mR/hr.
29		mR/hr.
30		mR/hr.

10300 ✓ 10400 ✓

Meteorology

10500 ✓ 10600 ✓

Windspeed

A DC ✓ B DC ✓

Direction

Main Steam Line Radiation

Monitors R/hr.

Comments: _____

Brookhaven Class

RCIC INOP. _____

23-MOV-15 inoperative. _____

SRV's inoperative for remote operation. _____

FITZPATRICK SCENARIO - August 11, 1982

TIME	MESSAGE NUMBER	ISSUED TO	SUMMARY OF MESSAGE CONTENTS	ANTICIPATED RESULTS AND COMMENTS	EMERGENCY CLASSIFICATION
1130 day 1	33	Control Room	Updated plant parameters. Vessel level decreasing rapidly.	Plant Status Sheet issued to TSC.	GENERAL EMERGENCY

MESSAGE NO. 33

TIME: 1130 ON DAY 1

ISSUED TO THE CONTROL ROOM

Plant parameters are as indicated on the Plant Status Sheet. Steam Tunnel Temperatures on Detectors TE-121A through D are 280°F.

TIME 1130

PLANT STATUS SHEET

SHEET NO. 33c

Day 1

Vessel Level 60 inches

Level Trend decreasing

Vessel Pressure 580 psig

Pressure Trend decreasing

Vessel Bottom
Drain Temp. 430 °F

Cleanup Inlet Temp. 455 °F

Main Steam Pressure 0 psig

Drywell Pressure 16.5 psia

Drywell Ave. Temp. 123 °F

Torus Ave. Water
Temperature 79 °F

Torus Pressure 14.7 psia

Torus Level -0.74 inches

Drywell Floor Leak
Rate 1.80 gpmDrywell Equipment
Leak rate 1.50 gpmBusses Energized (/)

10300 ✓ 10400 ✓

10500 ✓ 10600 ✓

A DC ✓ B DC ✓

Main Steam Line Radiation
Monitors _____ R/hr.

Comments: _____

RCIC INOP.

23-MOV-15 inoperative.

SRV's inoperative for remote
operation.

EDG Starts

A	Running	Loaded/Running	Unloaded/Standby	00S
C	Running	Loaded/Running	Unloaded/Standby	00S
B	Running	Loaded/Running	Unloaded/Standby	00S
D	Running	Loaded/Running	Unloaded/Standby	00S

115KV Reserve Power Available

#3 LHH	Yes	No
#4 NMP	Yes	No

Building Vent Rad Monitors

Rx. Building	150	CPM
Refuel Floor	180	CPM
Turbine Building		CPM
Radwaste	110	CPM
Control Room	100	CPM

Off-Gas Rad Monitor D/S mR/hr.

Stack Rad Monitor _____ Cps

High Range Effluent Monitors

Stack - A	B	mR/hr.
Turbine Bldg. A	B	mR/hr.
Radwaste Bldg. A 0.3	B	0.5 mR/hr.

Containment High Range 5 Monitor A _____ B _____ R/hr.

Area Radiation Monitors

1	_____	mR/hr.
2	_____	mR/hr.
3	_____	mR/hr.
4	_____	mR/hr.
5	_____	mR/hr.
6	_____	mR/hr.
7	_____	mR/hr.
8	_____	mR/hr.
9	_____	mR/hr.
10	_____	mR/hr.
11	_____	mR/hr.
12	_____	mR/hr.
13	_____	mR/hr.
14	_____	mR/hr.
15	_____	mR/hr.
16	_____	mR/hr.
17	_____	mR/hr.
18	_____	mR/hr.
19	_____	mR/hr.
20	_____	mR/hr.
21	_____	mR/hr.
22	_____	mR/hr.
23	_____	mR/hr. *
24	_____	mR/hr.
25	_____	mR/hr.
26	_____	mR/hr.
27	_____	mR/hr.
28	_____	mR/hr.
29	_____	mR/hr.
30	_____	mR/hr.

Meteorology

Windspeed _____

Direction _____

Brookhaven Class _____

FITZPATRICK SCENARIO - August 11, 1982

TIME	MESSAGE NUMBER	ISSUED TO	SUMMARY OF MESSAGE CONTENTS	ANTICIPATED RESULTS AND COMMENTS	EMERGENCY CLASSIFICATION
1140 day 1	34	Control Room	Updated plant parameters. Vessel level decreasing rapidly.	Plant Status Sheet issued to TSC.	GENERAL EMERGENCY

MESSAGE NO. 34

TIME: 1140 ON DAY 1

ISSUED TO THE CONTROL ROOM

Plant parameters are as indicated on the Plant Status Sheet. Steam Tunnel Temperatures on Detectors TE-121A through D are 280°F.

LOCA signals are sealed in EBG's and low pressure ECCS pumps are running.

TIME 1140

PLANT STATUS SHEET

SHEET NO. 34c

Day 1

Vessel Level 0 inches

Level Trend decreasing

Vessel Pressure 500 psig

Pressure Trend decreasing

Vessel Bottom Drain Temp. 410 °F

Cleanup Inlet Temp. 435 °F

Main Steam Pressure 0 psig

Drywell Pressure 16.5 psia

Drywell Ave. Temp. 123 °F

Torus Ave. Water Temperature 79 °F

Torus Pressure 14.7 psia

Torus Level -0.74 inches

Drywell Floor Leak Rate 1.80 gpm

Drywell Equipment Leak rate 1.50 gpm

Busses Energized (✓)

10300 ✓ 10400 ✓

10500 ✓ 10600 ✓

A DC ✓ B DC ✓

Main Steam Line Radiation Monitors _____ R/hr.

Comments: _____

RCIC INOP.

23-MOV-15 inoperative.

SRV's inoperative for remote operation.

EDG Starts

A	Running	Loaded	/Running	Unloaded	/Standby	/00S
C	Running	Loaded	/Running	Unloaded	/Standby	/00S
B	Running	Loaded	/Running	Unloaded	/Standby	/00S
D	Running	Loaded	/Running	Unloaded	/Standby	/00S

115KV Reserve Power Available

#3 LHH	Yes	No
#4 NMP	Yes	No

Building Vent Rad Monitors

Rx. Building	150	CPM
Refuel Floor	180	CPM
Turbine Building	110	CPM
Radwaste	100	CPM
Control Room	100	CPM

Off-Gas Rad Monitor D/S mR/hr.

Stack Rad Monitor Cps

High Range Effluent Monitors

Stack	A	B	mR/hr.
Turbine Bldg.	A	B	mR/hr.
Radwaste Bldg.	A 0.3	B 0.5	mR/hr.

Containment High Range & Monitor A B R/hr.

Area Radiation Monitors

1	mR/hr.
2	mR/hr.
3	mR/hr.
4	mR/hr.
5	mR/hr.
6	mR/hr.
7	mR/hr.
8	mR/hr.
9	mR/hr.
10	mR/hr.
11	mR/hr.
12	mR/hr.
13	mR/hr.
14	mR/hr.
15	mR/hr.
16	mR/hr.
17	mR/hr.
18	mR/hr.
19	mR/hr.
20	mR/hr.
21	mR/hr.
22	mR/hr.
23	mR/hr.
24	mR/hr.
25	mR/hr.
26	mR/hr.
27	mR/hr.
28	mR/hr.
29	mR/hr.
30	mR/hr.

Meteorology

Windspeed _____

Direction _____

Brookhaven Class _____

TIME	MESSAGE NUMBER	ISSUED TO	SUMMARY OF MESSAGE CONTENTS	ANTICIPATED RESULTS AND COMMENTS	EMERGENCY CLASSIFICATION
1150 day 1	35	Control Room			

MESSAGE NO. 35

TIME: 1150 ON DAY 1

ISSUED TO THE CONTROL ROOM

TIME 1150

PLANT STATUS SHEET

SHEET NO. 35c

Day 1

Vessel Level -60 inches

Level Trend decreasing

Vessel Pressure 420 psig

Pressure Trend decreasing

Vessel Bottom Drain Temp. 390 °F

Cleanup Inlet Temp. 415 °F

Main Steam Pressure 0 psig

Drywell Pressure 16.5 psia

Drywell Ave. Temp. 122 °F

Torus Ave. Water Temperature 79 °F

Torus Pressure 14.7 psia

Torus Level -0.74 inches

Drywell Floor Leak Rate 1.70 gpm

Drywell Equipment Leak rate 1.40 gpm

Busses Energized (✓)

10300 ✓ 10400 ✓

10500 ✓ 10600 ✓

A DC ✓ B DC ✓

Main Steam Line Radiation Monitors _____ R/hr.

Comments: _____

RCIC INOP.

23-MOV-15 inoperative.

SRV's inoperative for remote operation.

EDG Starts

A	Running	Loaded	Running	Unloaded	Standby/00S
C	Running	Loaded	Running	Unloaded	Standby/00S
B	Running	Loaded	Running	Unloaded	Standby/00S
D	Running	Loaded	Running	Unloaded	Standby/00S

115KV Reserve Power Available

#3 LHH	Yes	No
#4 NMP	Yes	No

Building Vent Rad Monitors

Rx. Building	150	CPM
Refuel Floor	180	CPM
Turbine Building		CPM
Radwaste	110	CPM
Control Room	100	CPM

Off-Gas Rad Monitor D/S mR/hr.

Stack Rad Monitor _____ Cps

High Range Effluent Monitors

Stack	A	8	mR/hr.
Turbine Bldg.	A	8	mR/hr.
Radwaste Bldg.	A	0.3	0.5 mR/hr.

Containment High Range δ Monitor A _____ B _____ R/hr.

Area Radiation Monitors

1		mR/hr.
2		mR/hr.
3		mR/hr.
4		mR/hr.
5		mR/hr.
6		mR/hr.
7		mR/hr.
8		mR/hr.
9		mR/hr.
10		mR/hr.
11		mR/hr.
12		mR/hr.
13		mR/hr.
14		mR/hr.
15		mR/hr.
16		mR/hr.
17		mR/hr.
18		mR/hr.
19		mR/hr.
20		mR/hr.
21		mR/hr.
22		mR/hr.
23		mR/hr.
24		mR/hr.
25		mR/hr.
26		mR/hr.
27		mR/hr.
28		mR/hr.
29		mR/hr.
30		mR/hr.

Meteorology

Windspeed _____

Direction _____

Brookhaven Class _____

FITZPATRICK SCENARIO - August 11, 1982

TIME	MESSAGE NUMBER	ISSUED TO	SUMMARY OF MESSAGE CONTENTS	ANTICIPATED RESULTS AND COMMENTS	EMERGENCY CLASSIFICATION
1200 day 1	36	Control Room Plant Status Sheet issued to TSC.			GENERAL EMERGENCY

MESSAGE NO. 36

TIME: 1200 ON DAY 1

ISSUED TO THE CONTROL ROOM

Section IV

EMERGENCY PLAN EXERCISE/JAFNPP RADIOLOGICAL DATA

The following meteorological parameters were used to calculate the radiological parameters for this drill:

Wind Speed = 2 m/s until 1330
5 m/s from 1330 till end of drill
Pasquill Category = E for duration of drill
Wind Direction = out of 200° until 8:50 hrs
out of 315° until 8:50 hrs to end of drill

The following sets of maps show the isopleths of the release plume as they develop with time. Table I shows the radiological parameters for these isopleths:

Offsite Isopleths

Set #1 = 0930 - 1000
Set #2 = 1000 - 1030
Set #3 = 1030 - 1100
Set #4 = 1100 - 1130
Set #5 = 1130 - 1330
Set #6 = 1330 - 1345
Set #7 = 1345 - 1400
Set #8 = 1400 - 1415

Note 1: Since the release is terminated at 1330, the plume is considered to be essentially dispersed after 1415.

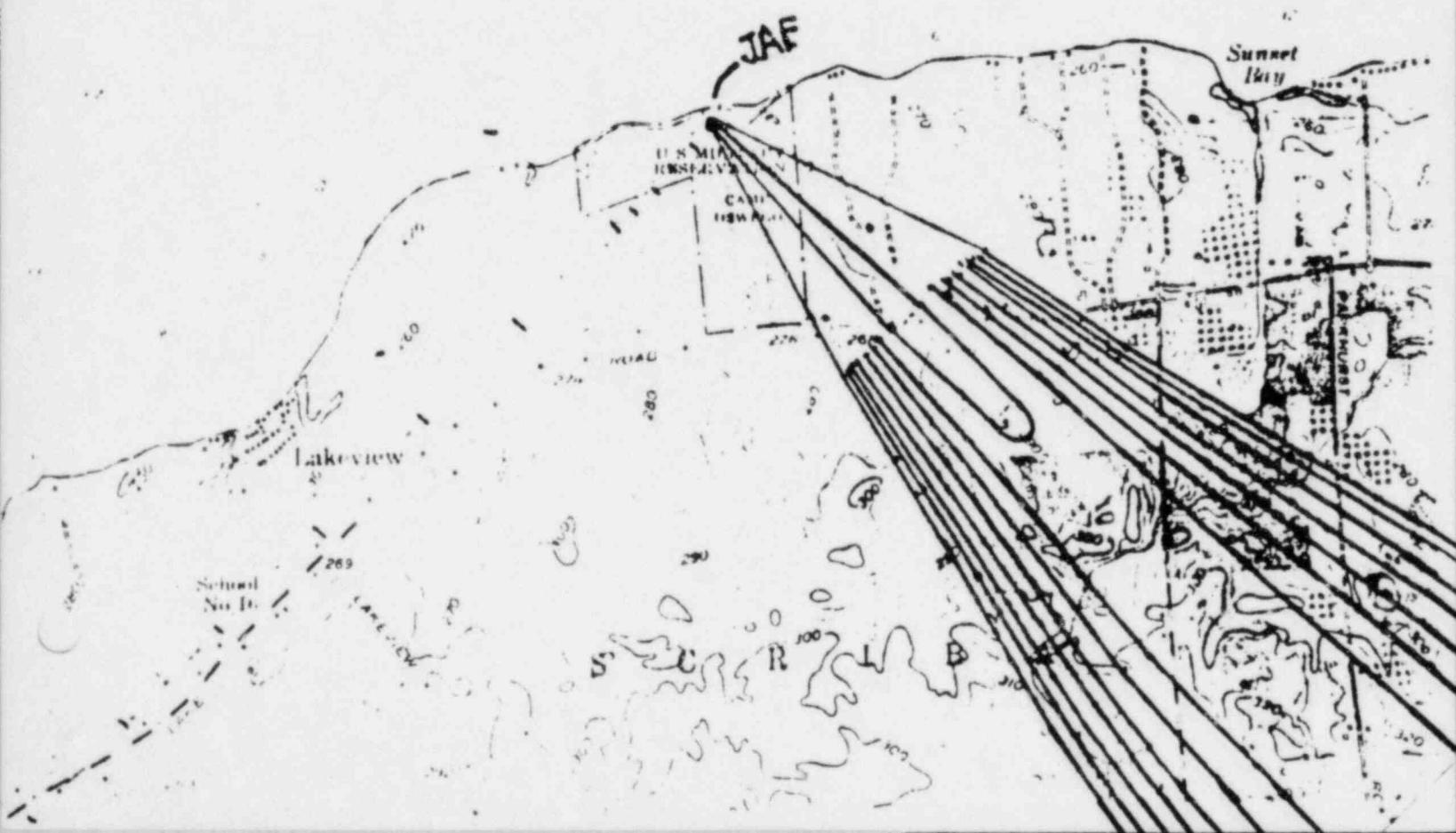
Note 2: The Noble Gas to Iodine Ratio is 1,000,000 to 1.

Table 1

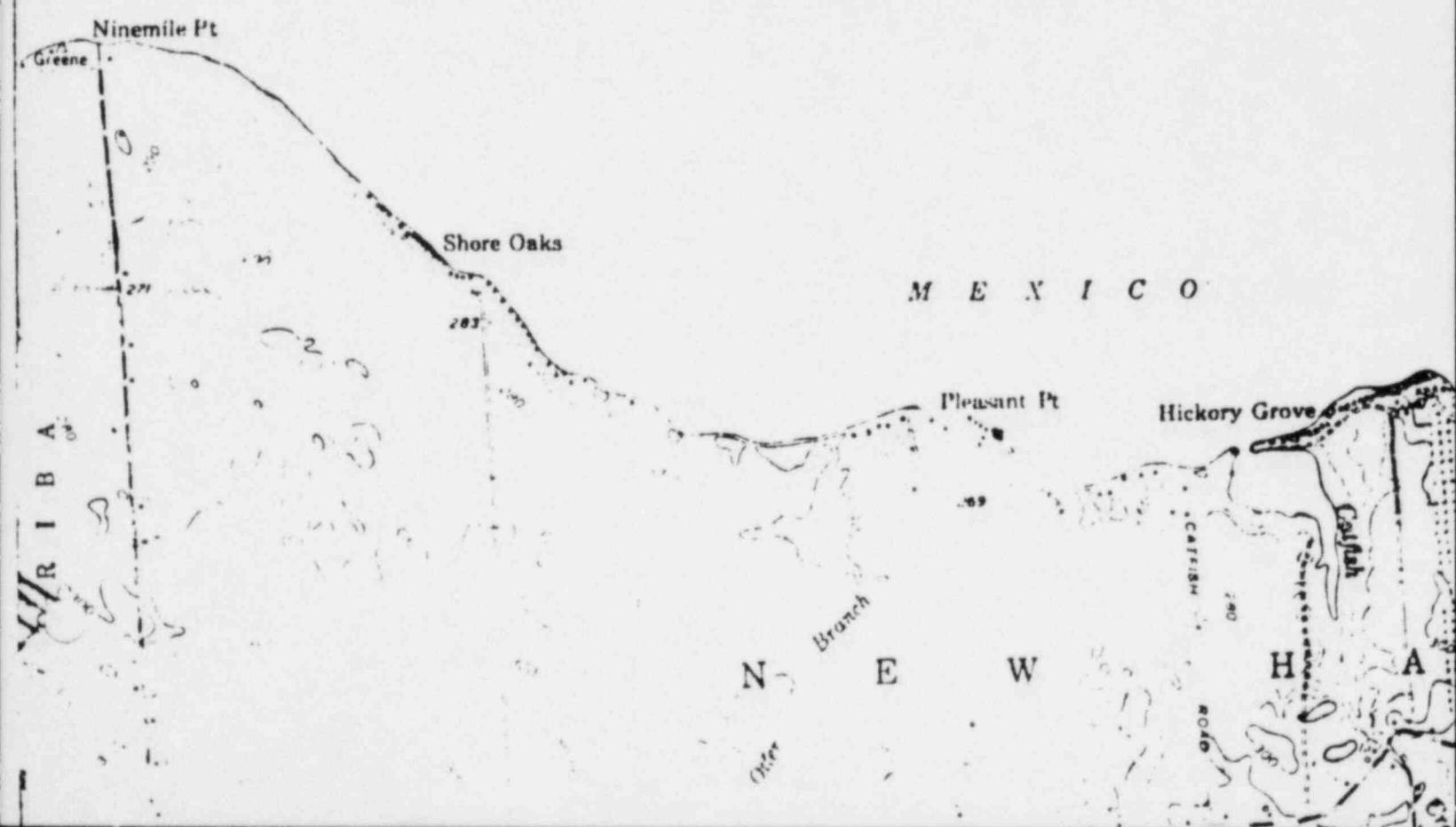
<u>Key</u>	$\frac{x_u}{Q}$	Noble Gas Dose Rate <u>mr/hr</u>
1 (inner isopleth)	1E-4	20,000
2	1E-5	2,000
3	1E-6	200
4	1E-7	20
5	1E-8	2
6	1E-9	0.2
7	1E-10	0.02
8 (outer isopleth)	1E-11	0.002

Set #1

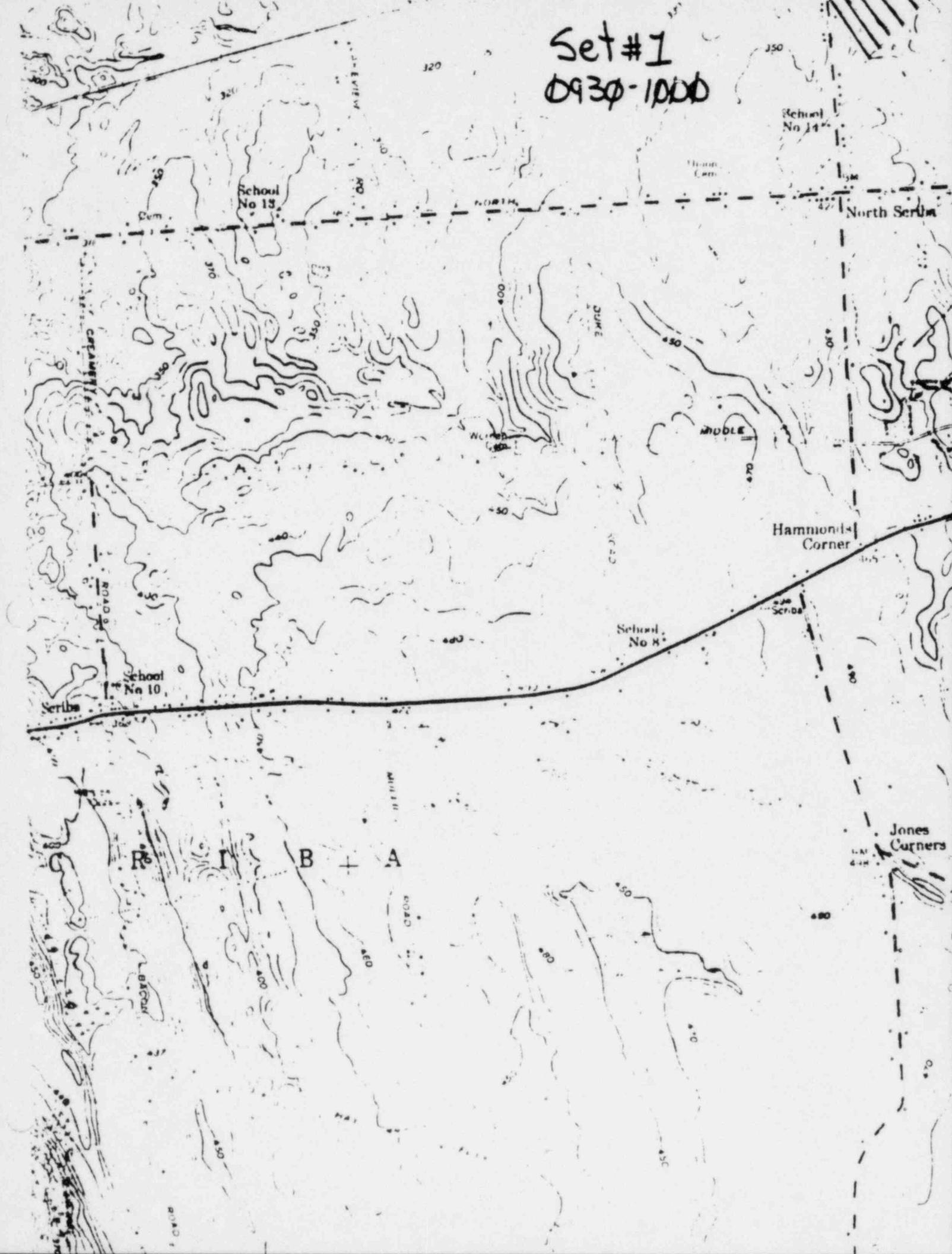
Φ93Φ - 106Φ



Set #1
Φ93Φ-1ΦΦΦ



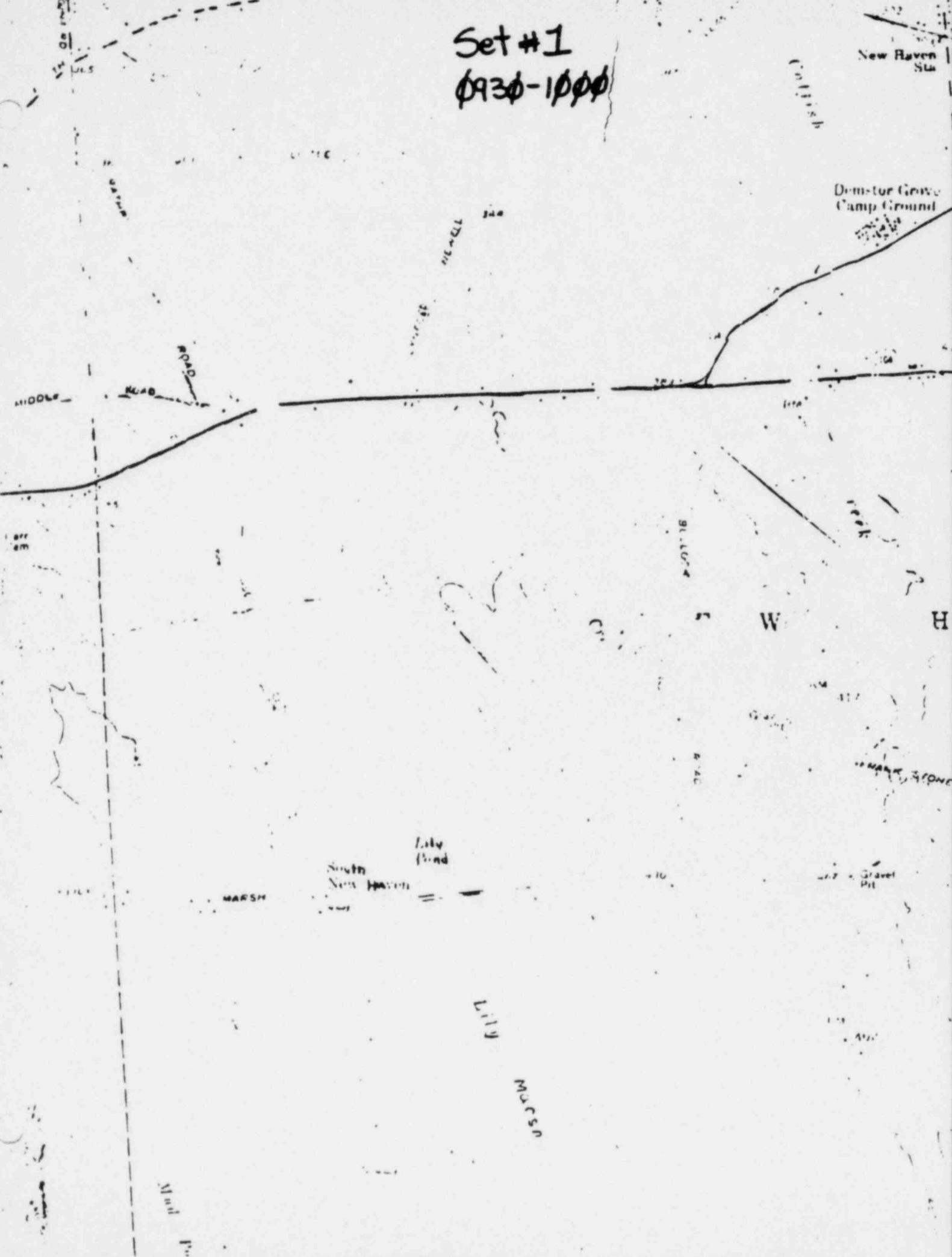
Set #1
0930-1000



Set #1
Φ93Φ-1ΦΦΦ

New Haven
Sta

Demstor Grove
Camp Ground



E W

H

A

V

E

N

Set #1
Φ93Φ-1ΦΦΦ

Butterfly
Cove

Creek

Cumming
Bridge

Austins
Corners

Johnson
Corners

NEONICS

Sat.

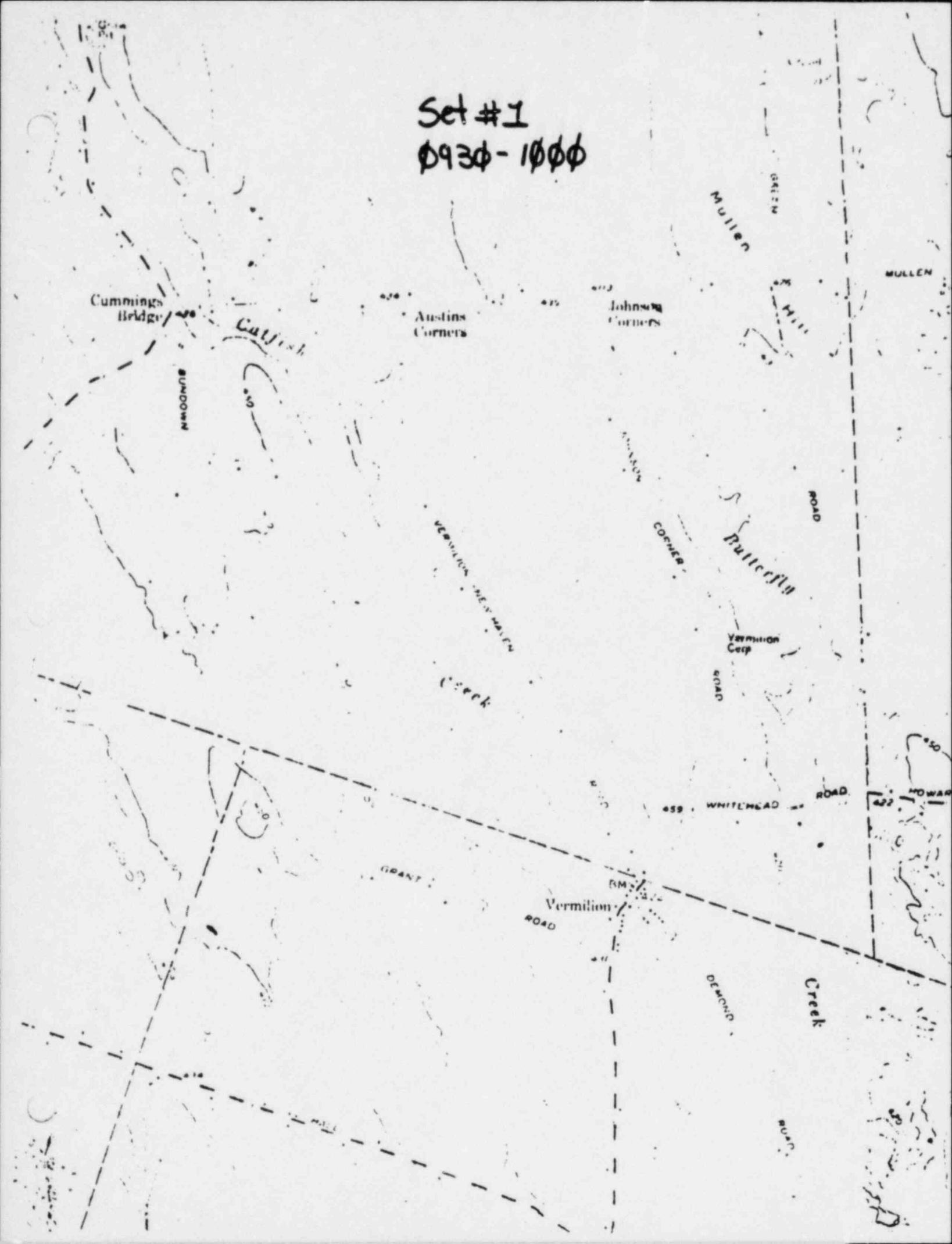
BM

BM

CONFIRMATION
RECEIVED
CREEK

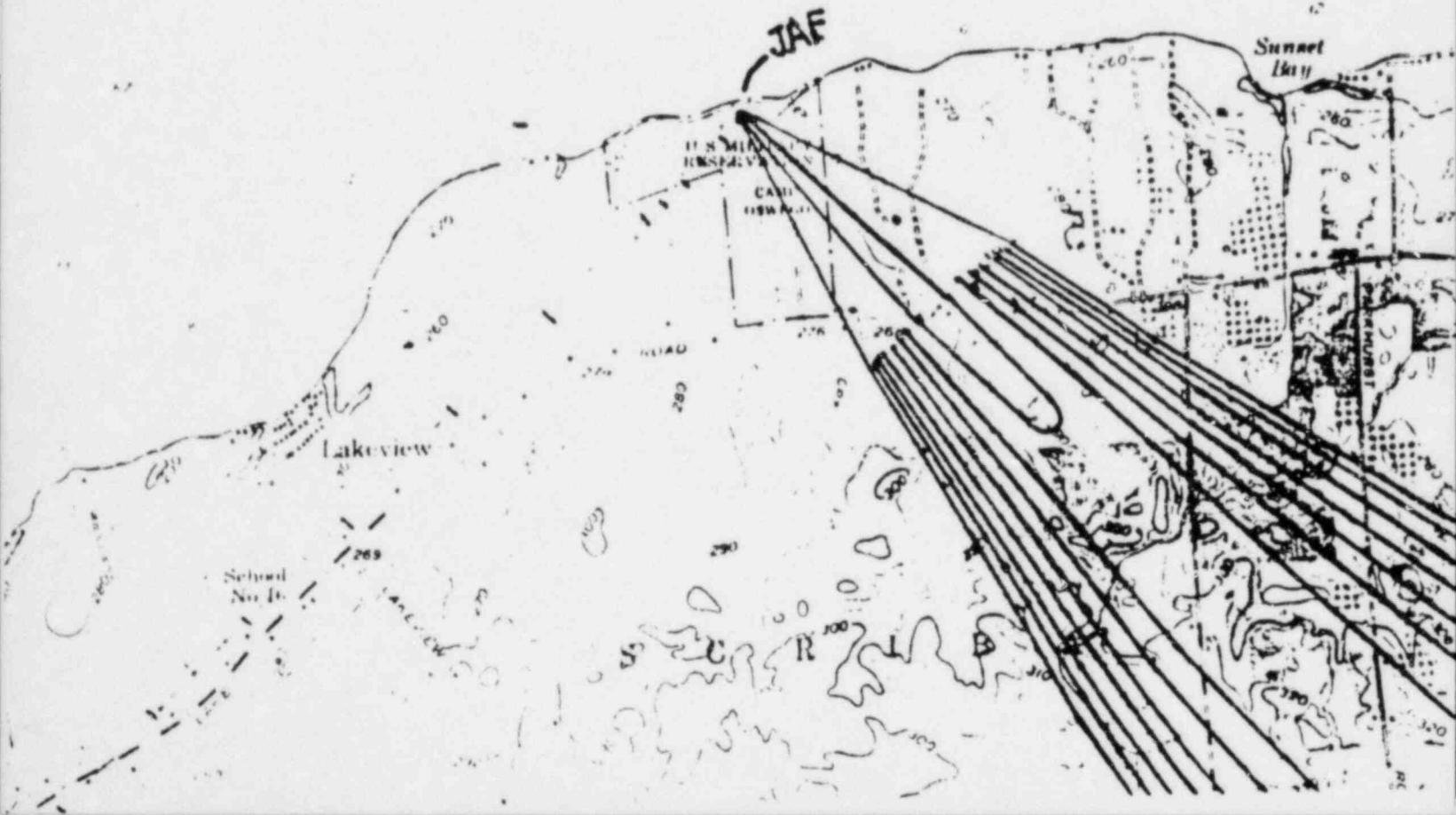
CO

Set #1
0930-1000

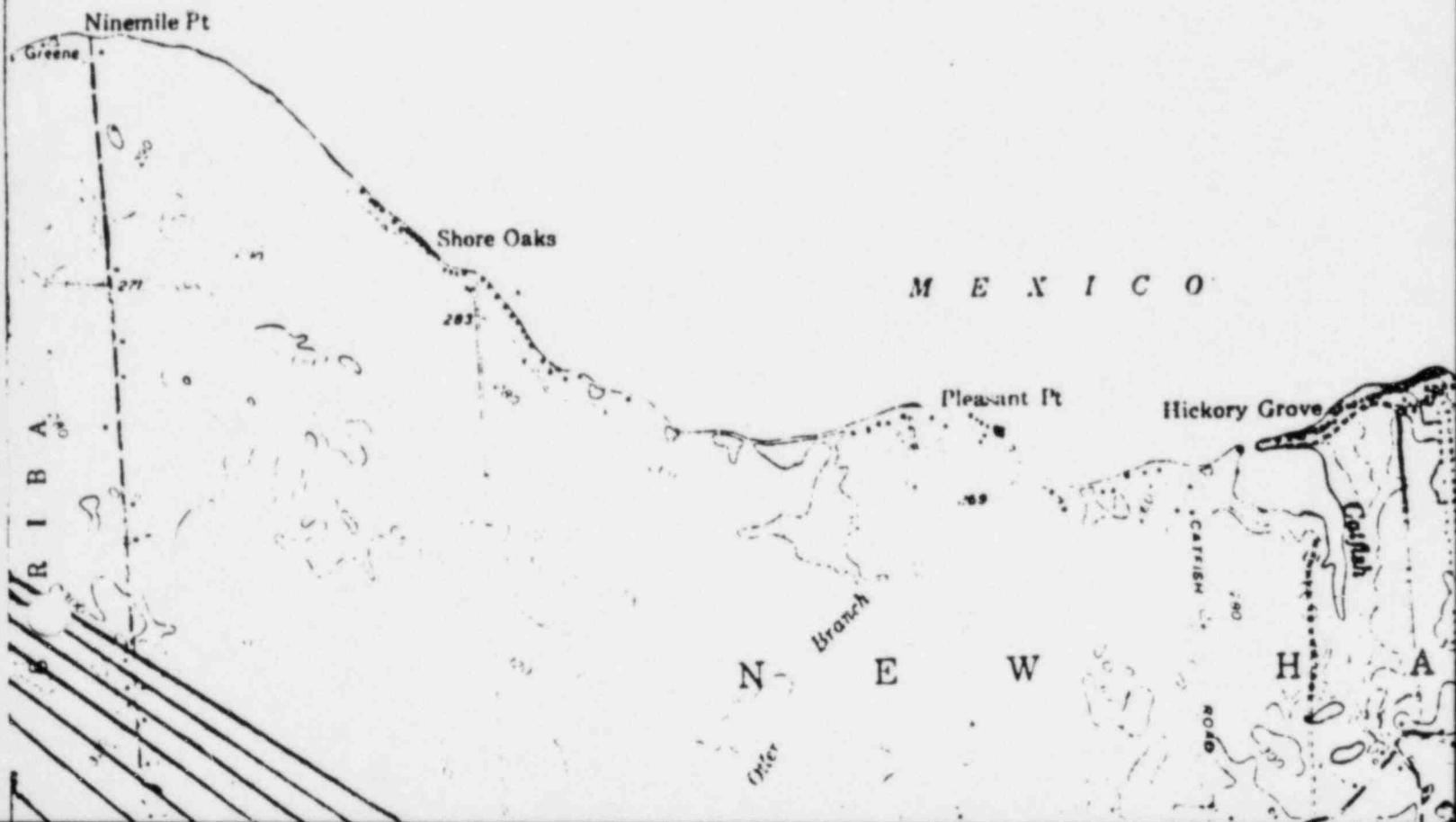


Set #2
1000-1030

FEET



Set #2
1000-1030



Set #2
1000-1030



Set #2
1000 - 1030

New Haven
Sta.

Denistor Grove Camp Ground

414

Civet

out : ok

N E W . H

H.M. 41

Gravel

100

*Lv
Dm*

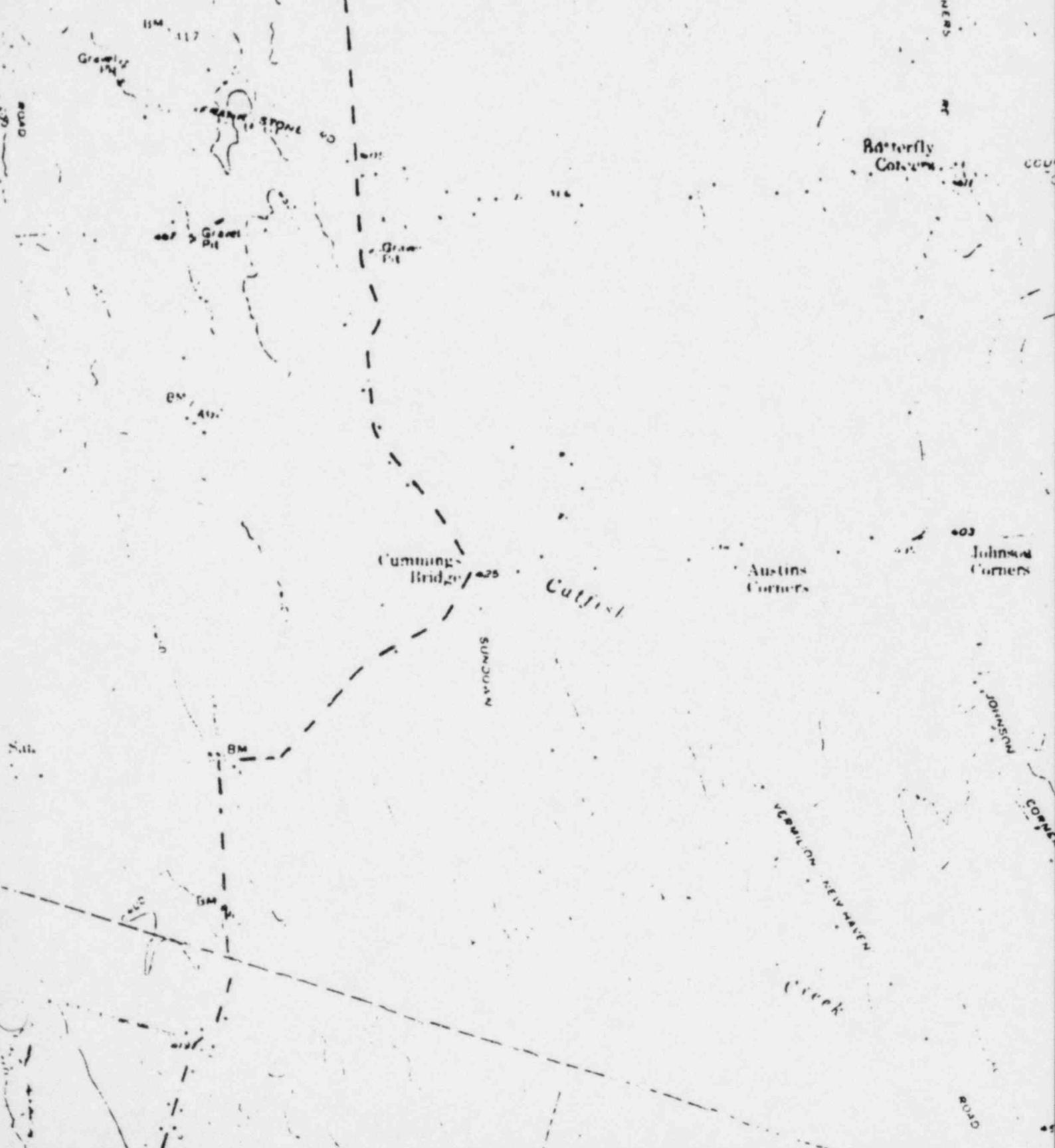
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1

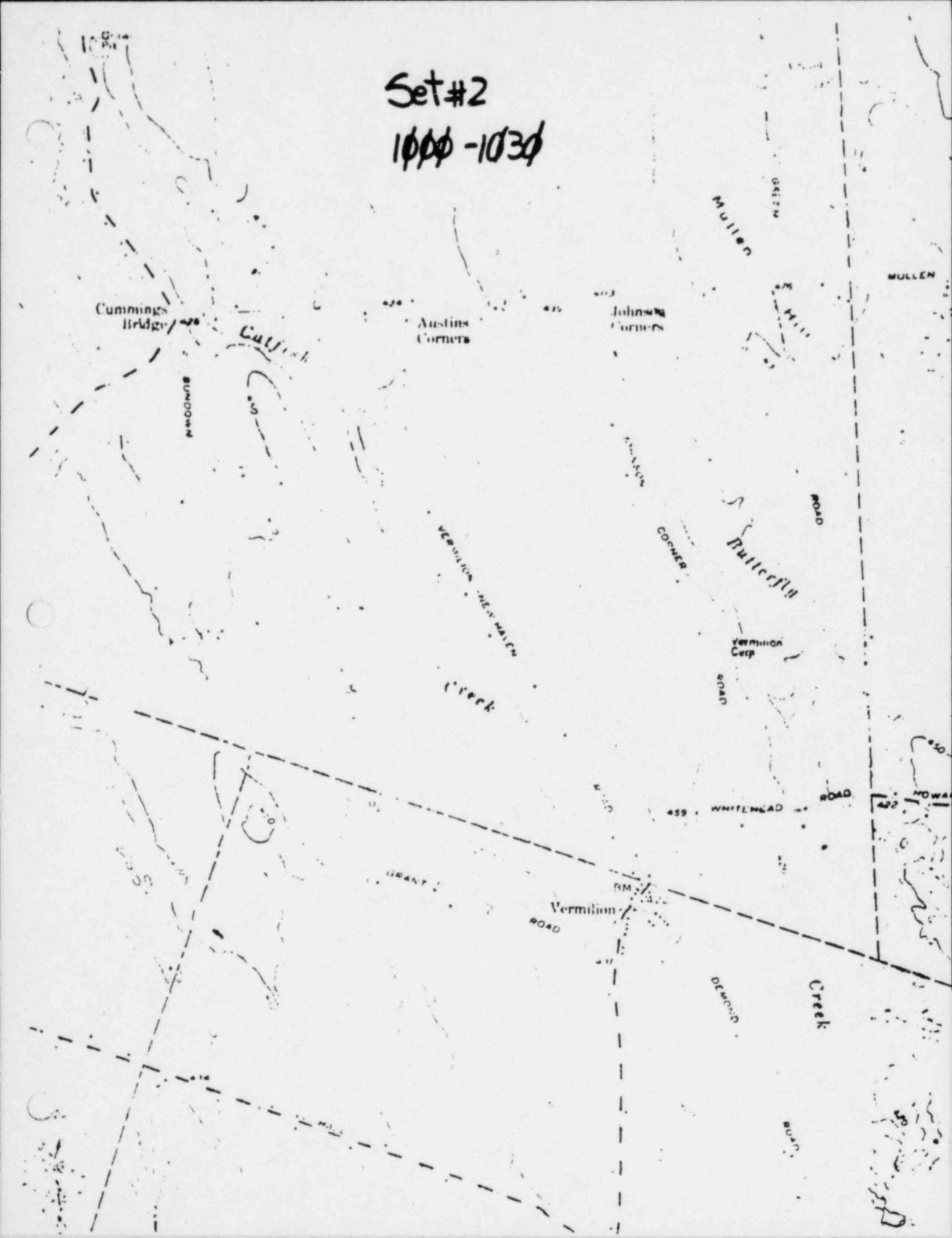
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Set#2
1000-1030

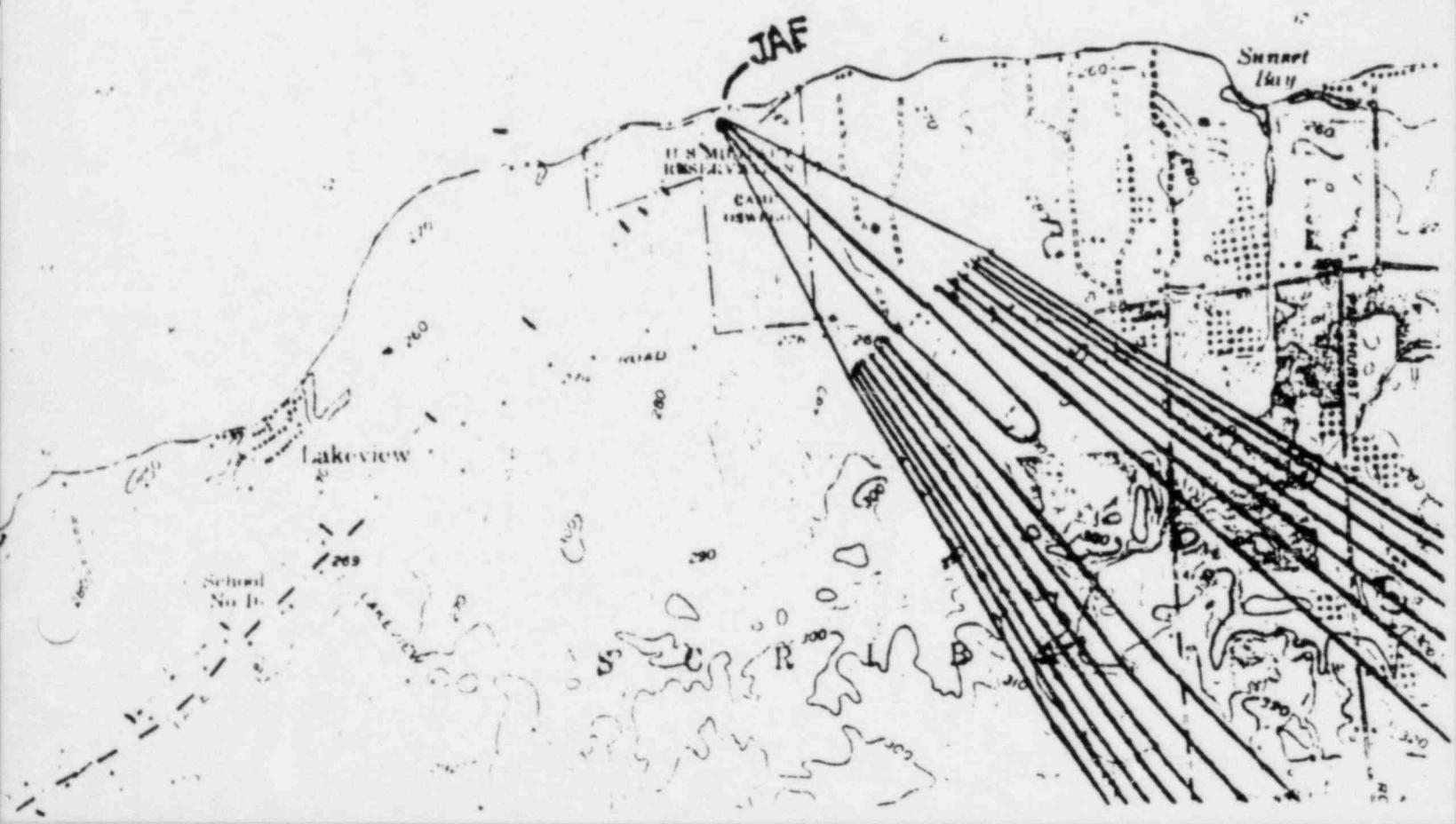
E W H V E N



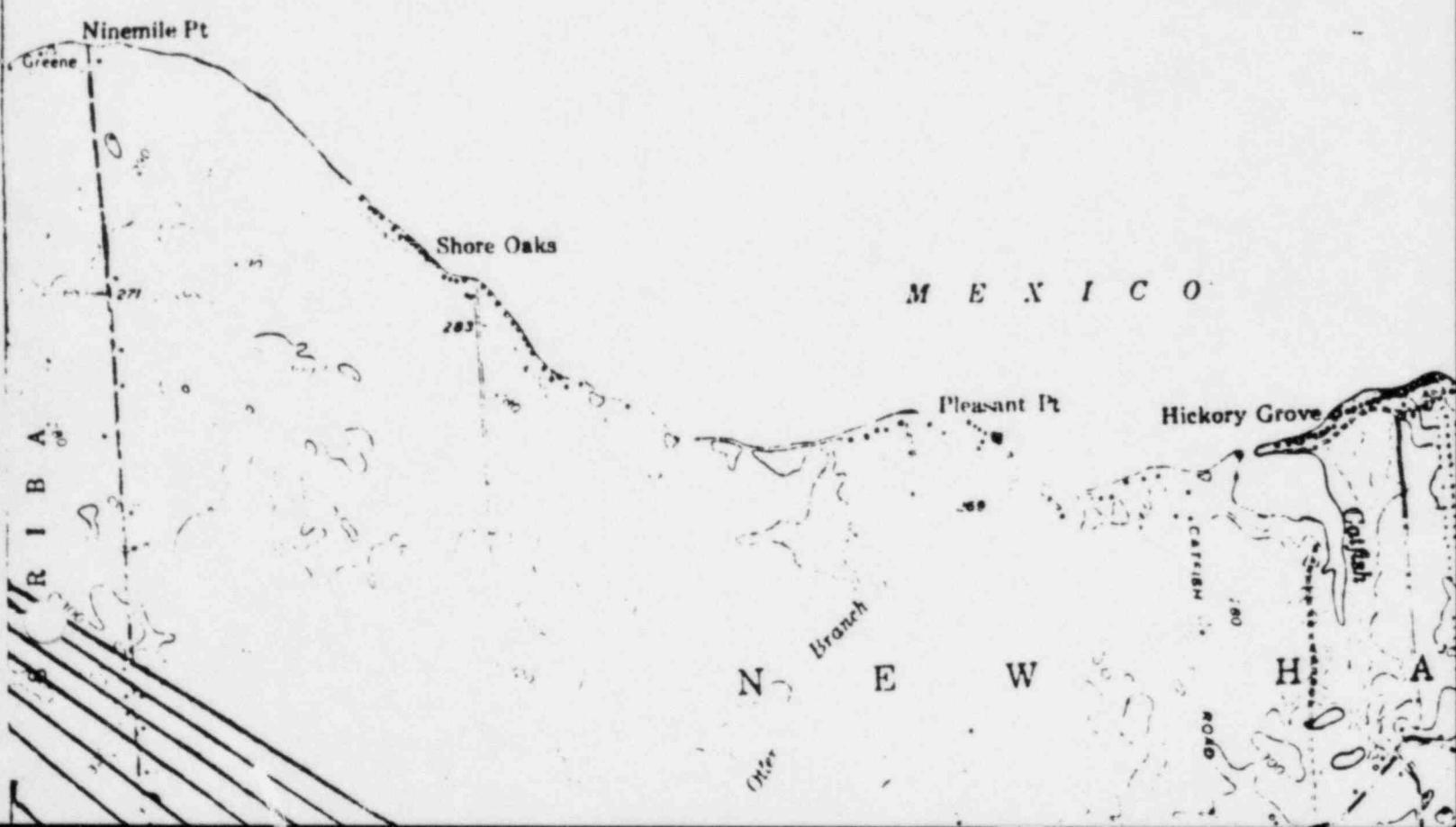
Set #2
1000 - 1030



Set #3
1030 - 1100



Set#3
1030-1100



Set #3
10 30-1100

School
No 14

Diamond
Creek

North Scribe

School
No 13

MIDDLE

Hammonds
Corner

School
No 8

Scribe

School
No 10

R

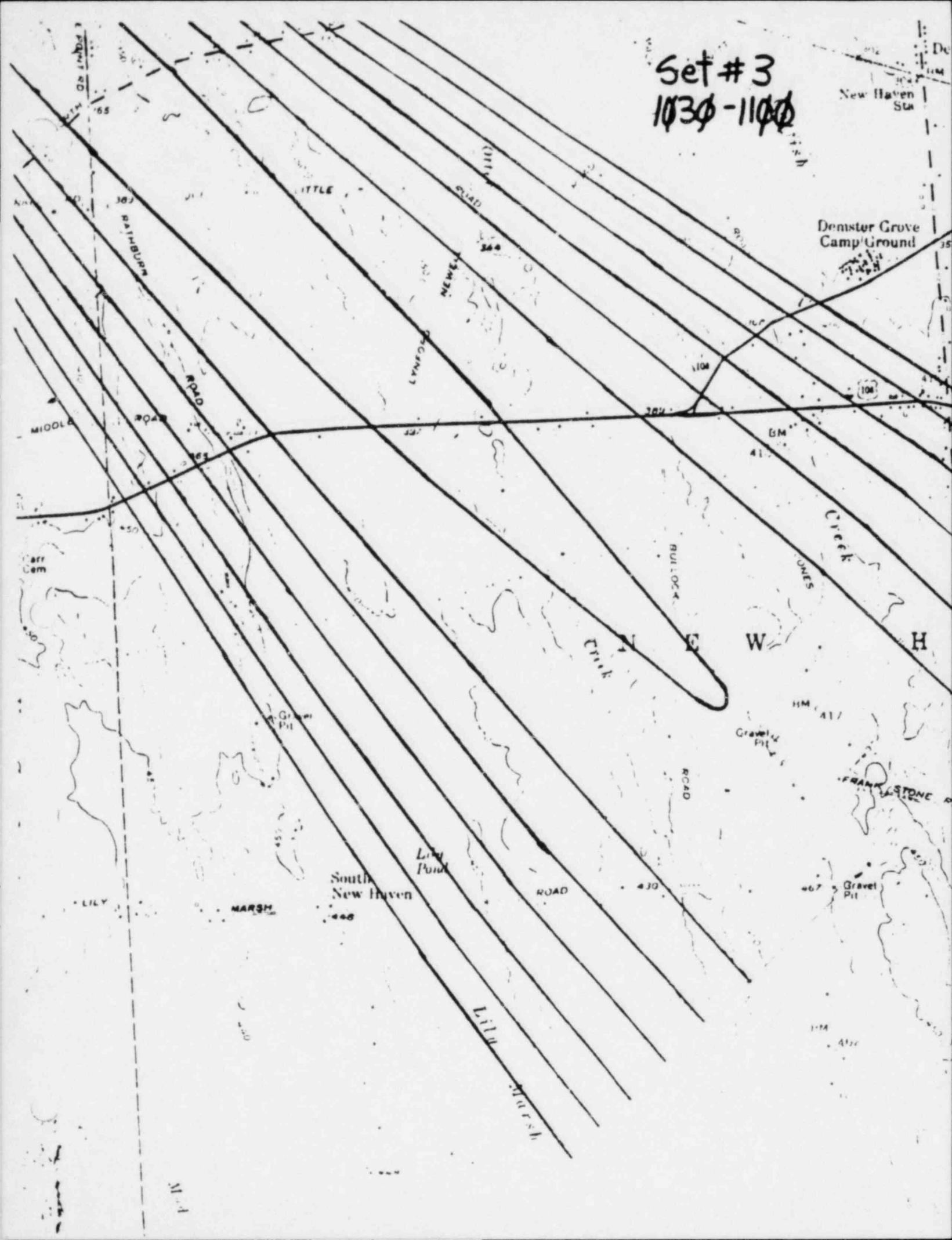
B + A

BACON

Jones
Corner

100

Set #3
103¢ - 11¢

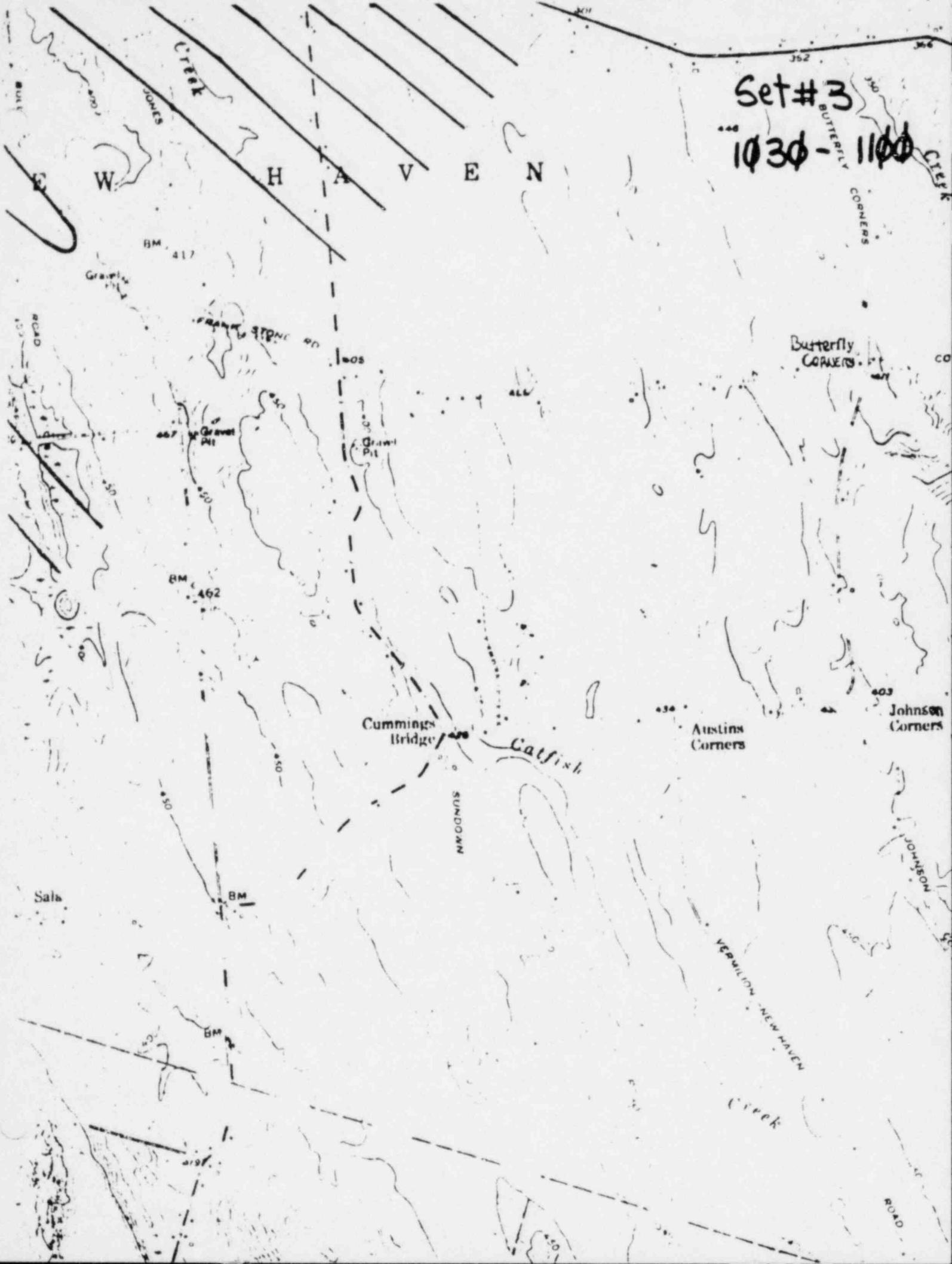


Set #3

1030 - 1100

BUTTERFLY

CORNERS



Set #3

1030-1100

Cummings
Bridge

ROAD DOWN

Austins
Corners

Johnson
Corners

Mullen

MULLEN

Vermonia
Mullen
Creek

CORNER

Vermilion
Corp

ROAD

Mullen

ROAD

459 - WHITHEAD

ROAD

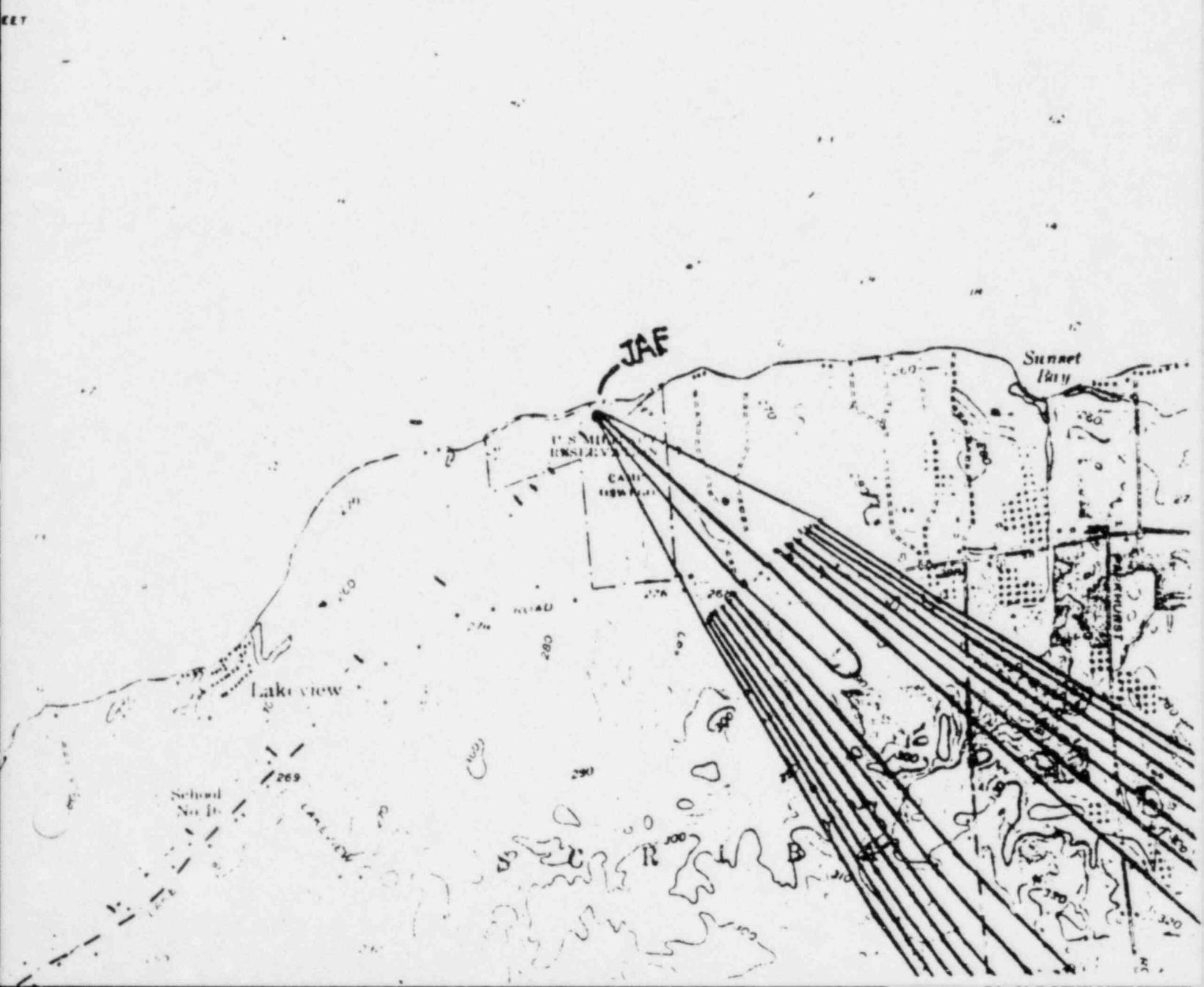
Vermonia
ROAD

Vermonia
Creek

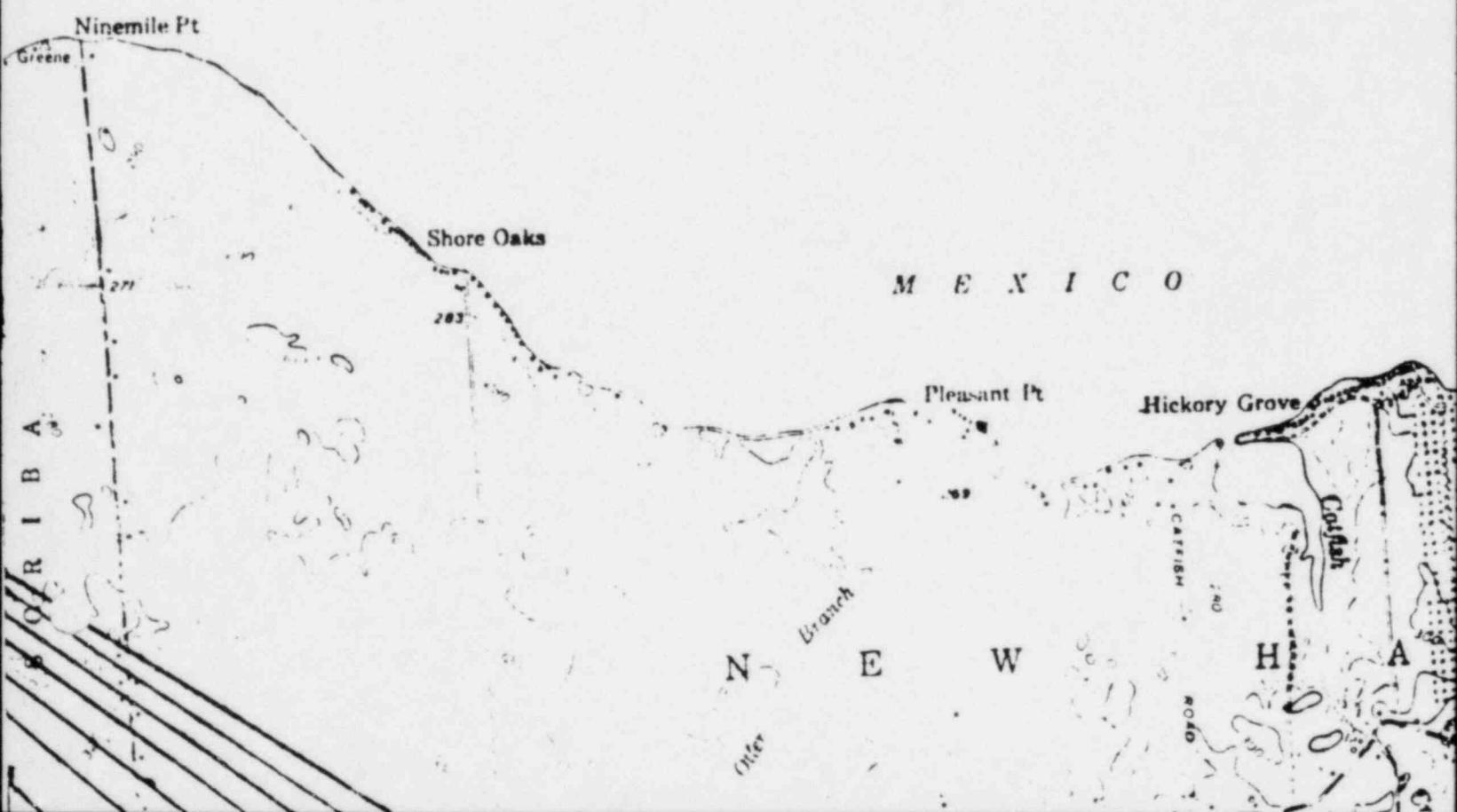
Creek

Vermonia

Set #4
11DΦ-113Φ



Set #4
1100-1130



Set #4
1100-1130

School
No 14

North Serum

School
No 15

NORTH

Time in
Sec

WILSON

DUKE

MIDDLE

Hammond's
Corner

School
No 8

Scriba

Scriba

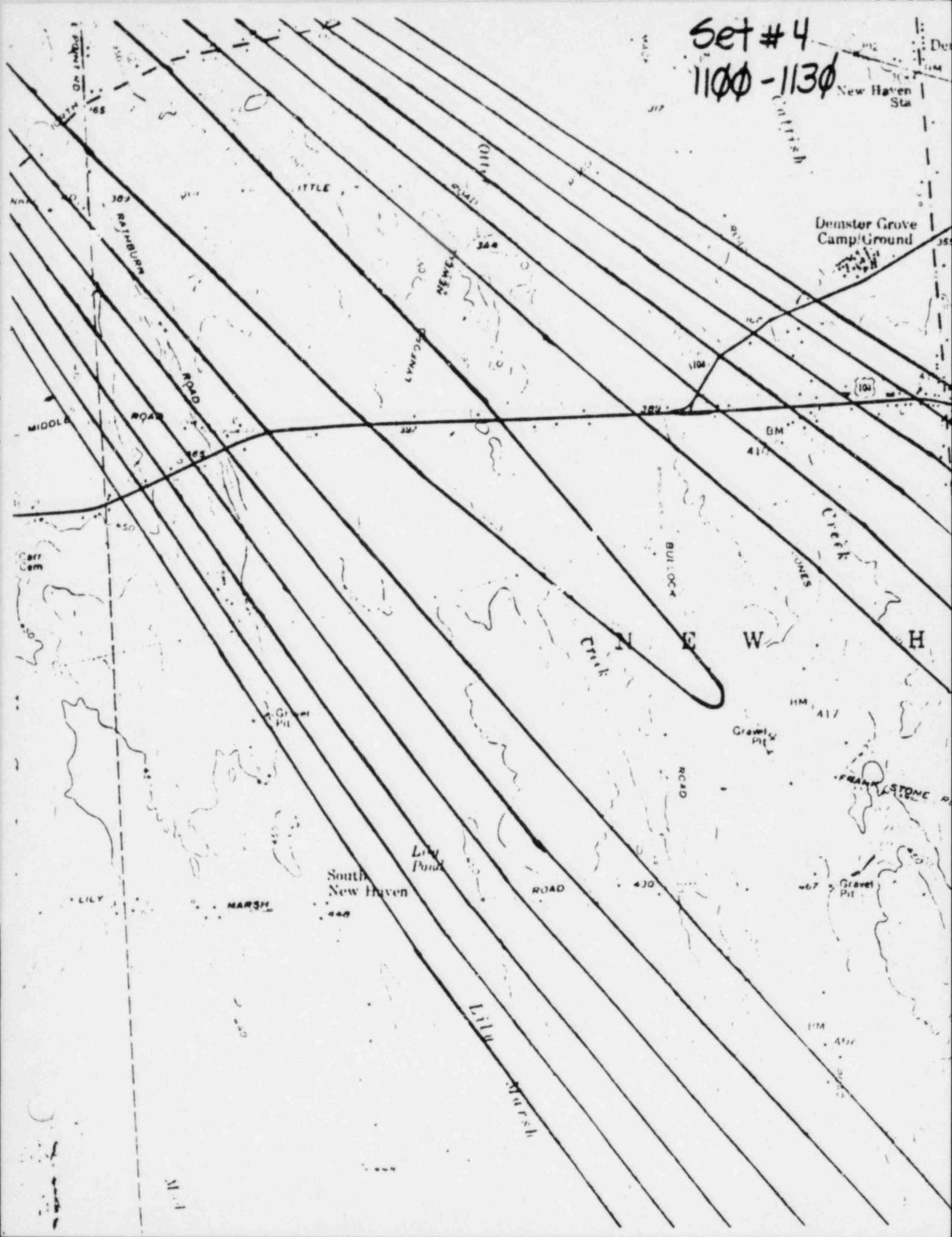
R + I
B + A

BACON

Jones
Corners

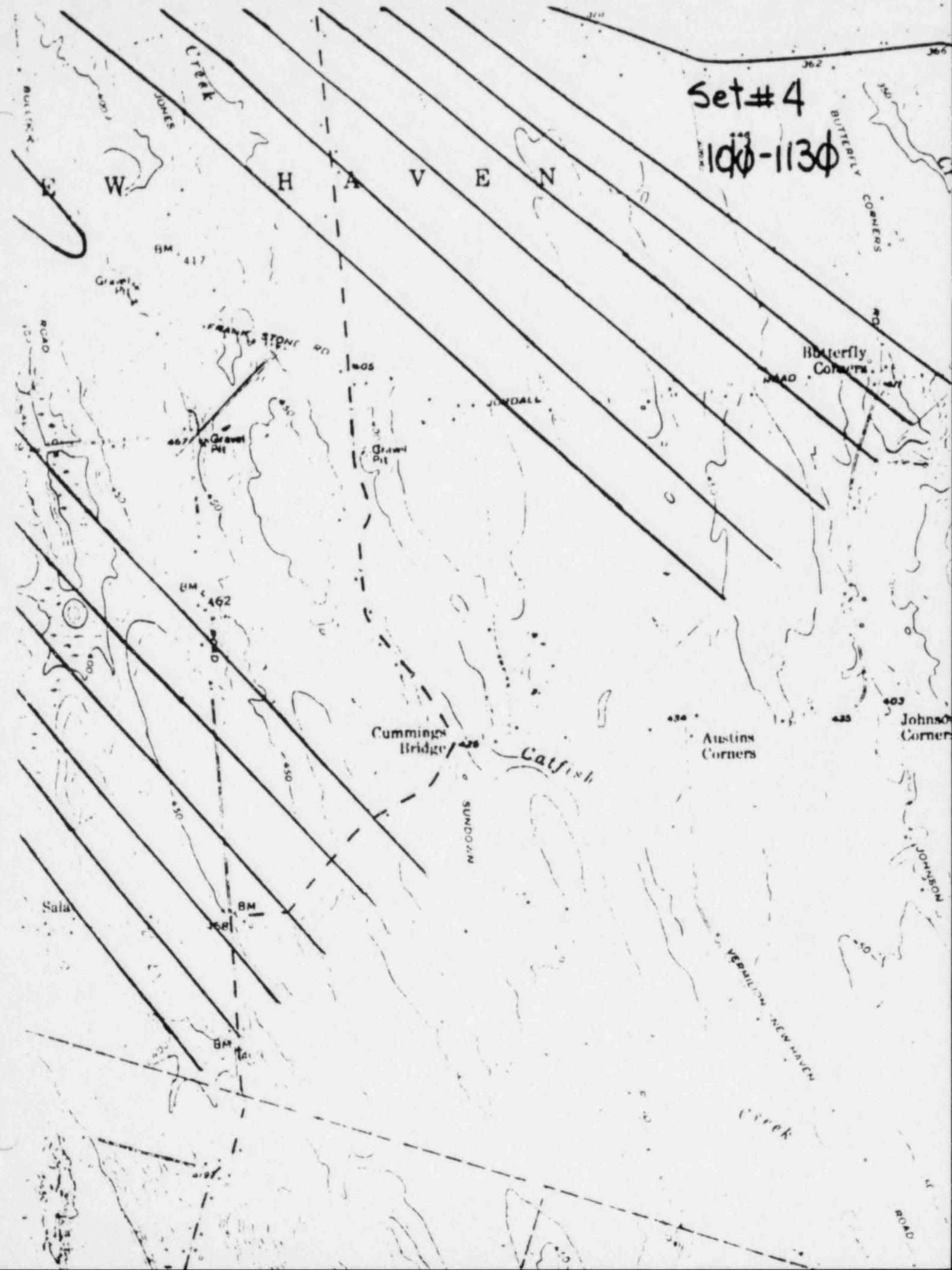
Set #4
110° - 113°

New Haven
Star



Set # 4

19-1130



Set #4
1100-1130

Cumming-
Bridge

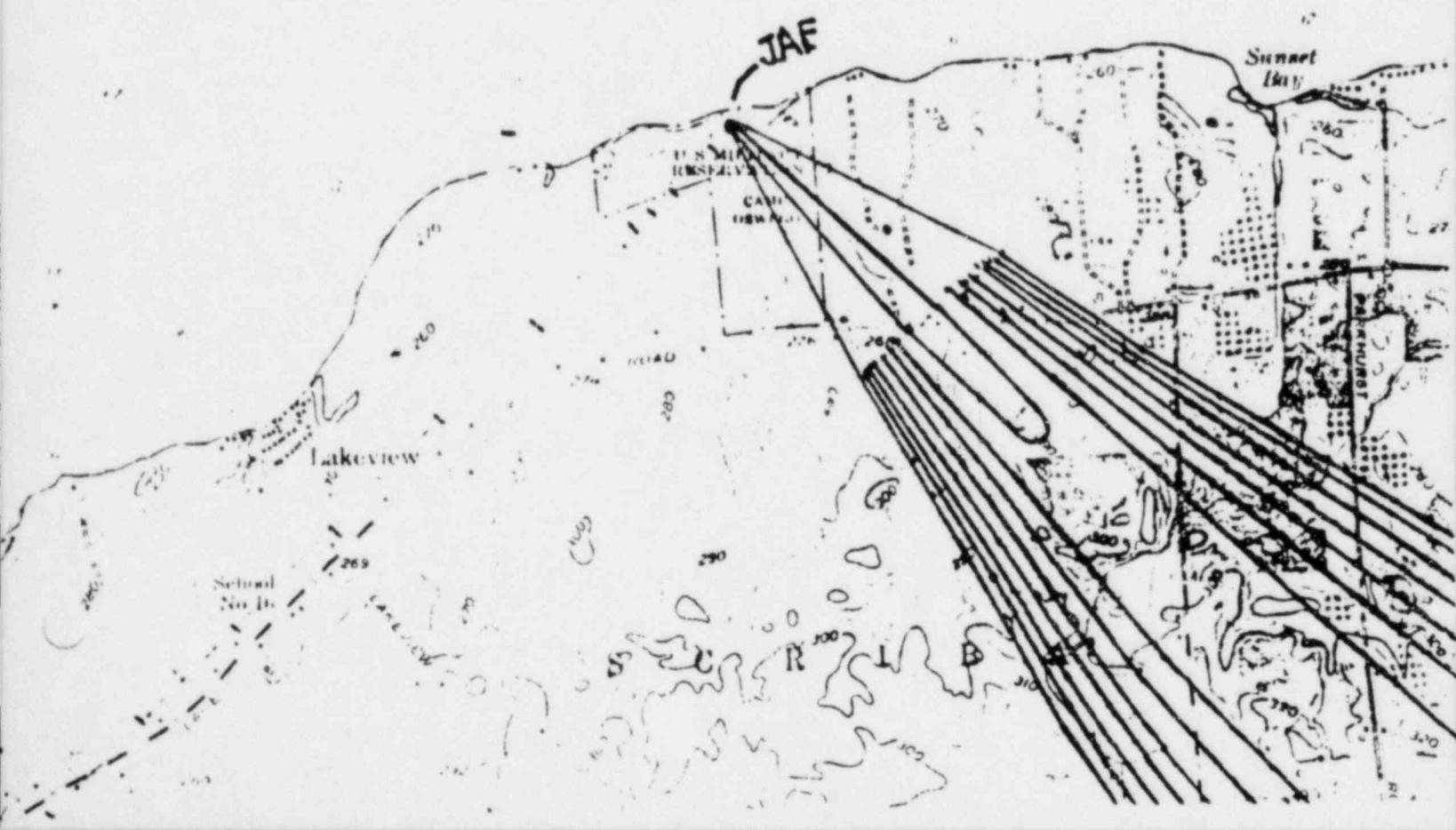
Austins
Corners

John W.
Curtis

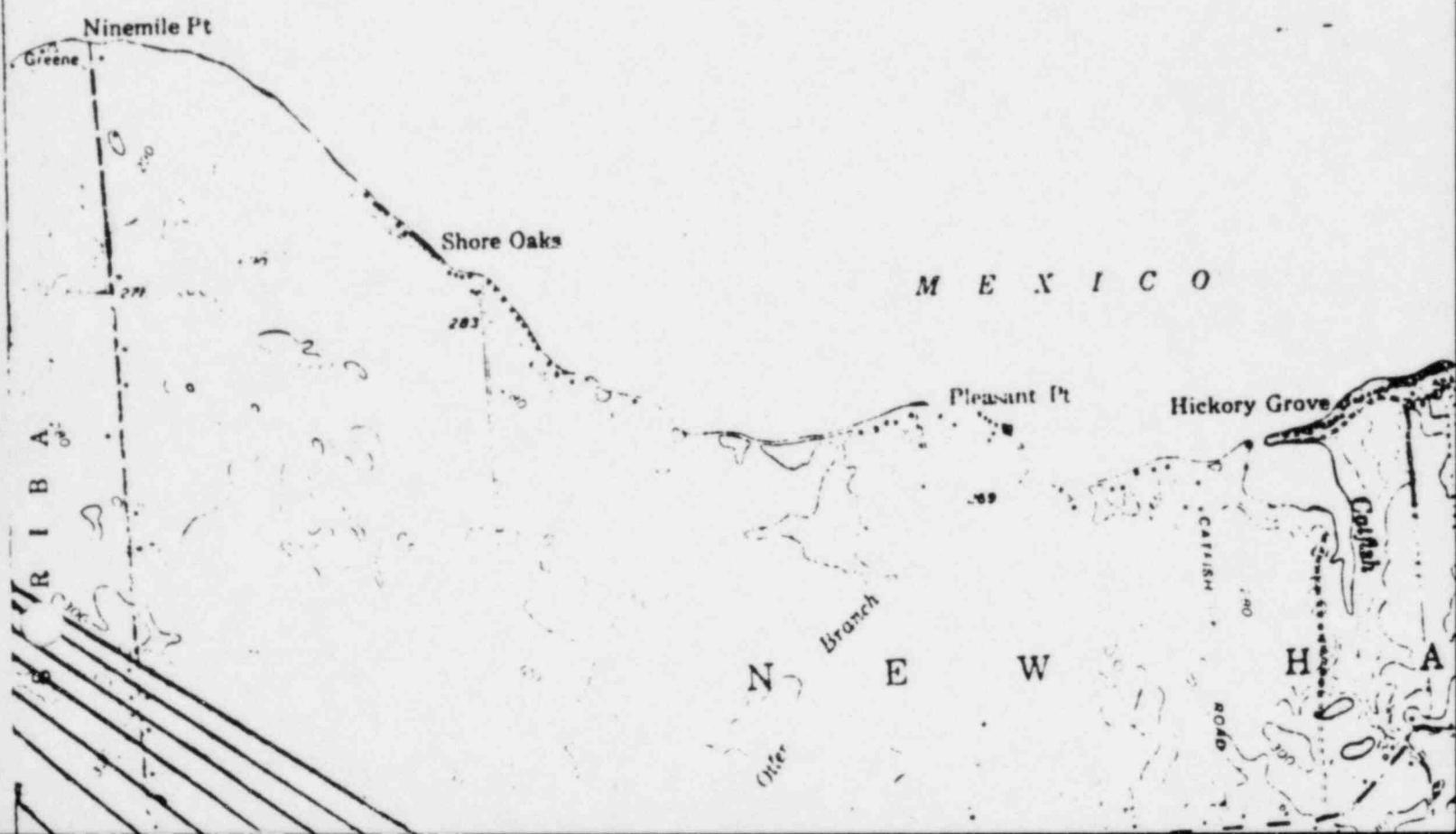
MULLER

Set #5
113d-133d

FEET



Set #5
113Φ-133Φ



Set #5
1130-1330

School
No 14

North Scitka

School
No 13

NORTH

UP

MIDDLE

Hammond's
Corner

School
No 8

Scitka

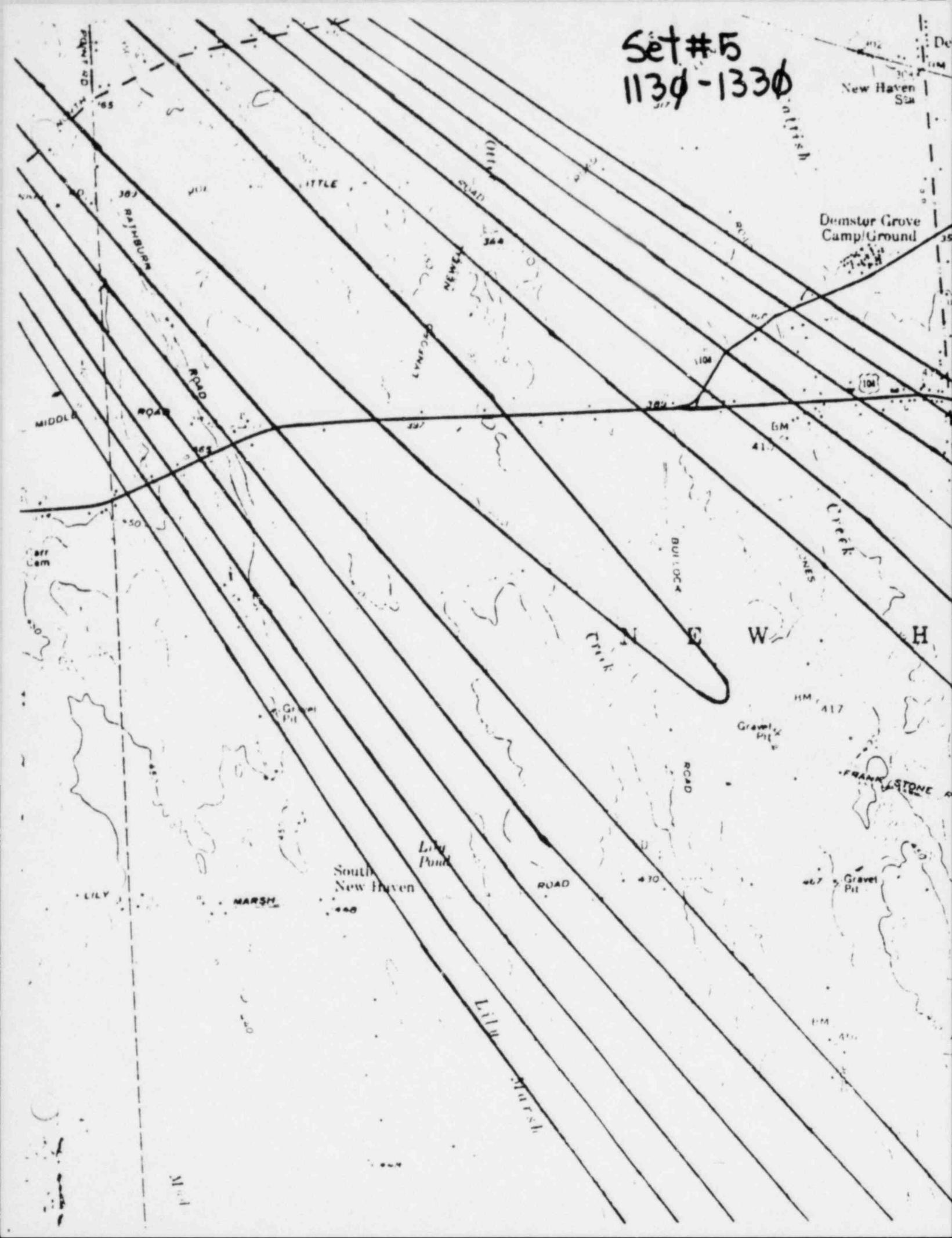
School
No 10

R I B + A

Jones
Corner

BACON

Set #5
1130-1330



Set #5
1130-1330

W

H A V E N

FIGURE

Grand

三

EM 462

1

三

BM

Cummings
Bridge

Calfornia

Austins
Corners

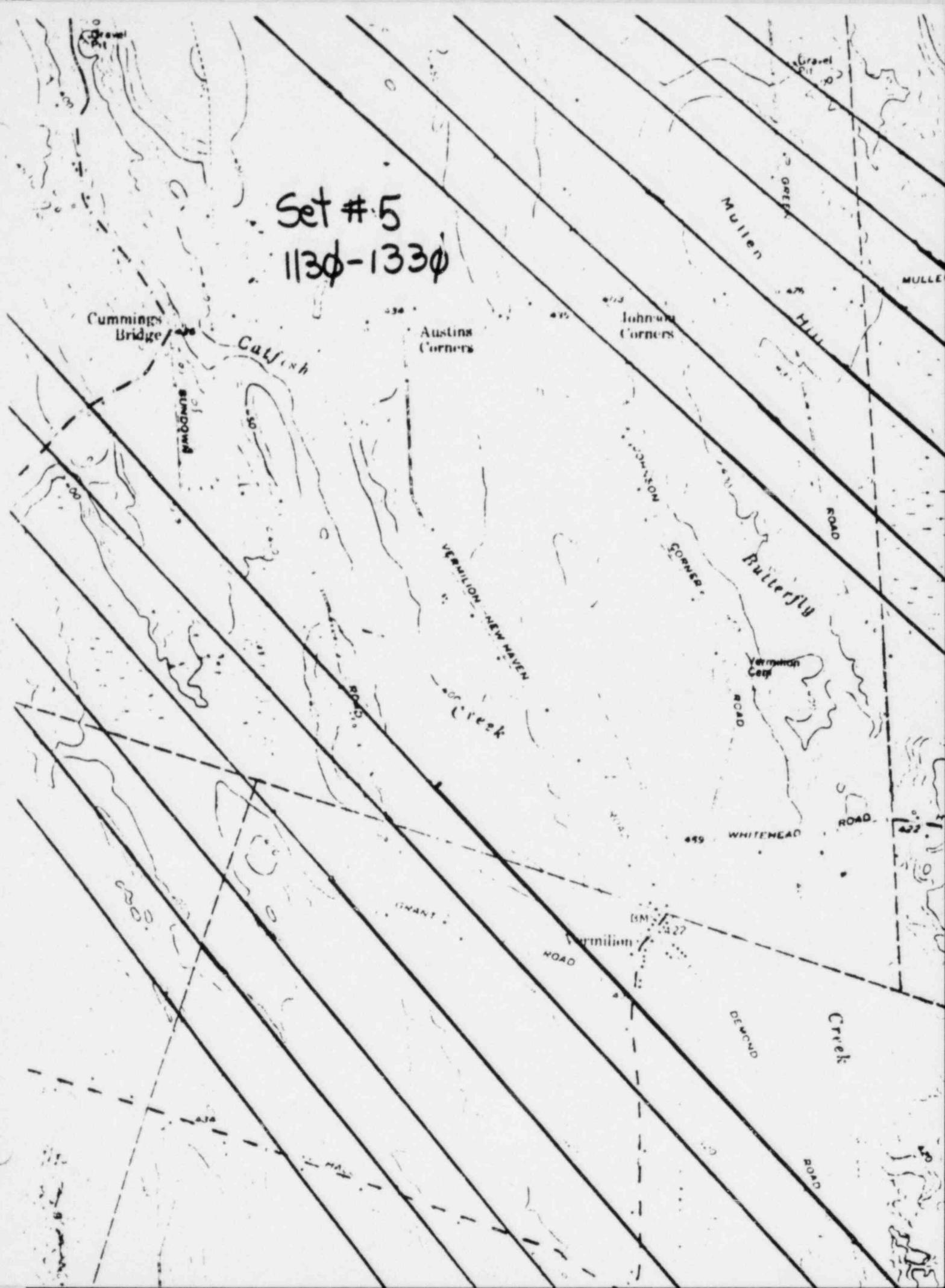
Sala

“THE MUSICAL
“COLLEGE”

17

2040

Set #5
1130-1330



Set # b
1330-1345

Cummings
Bridge

BUNDOWN

Galfish

Austins
Corners

434

435

403

Johnson
Corners

ROAD

Mullen

ROAD

Vermilion
Cem

424

WHITEHEAD

ROAD

HOWA

459

GRANT

ROAD

VERMILION

CHOWD

Creek

404

JOHNSON
CORNERS

VERMILION NEW HAVEN

Creek

400

400

400

400

400

400

400

400

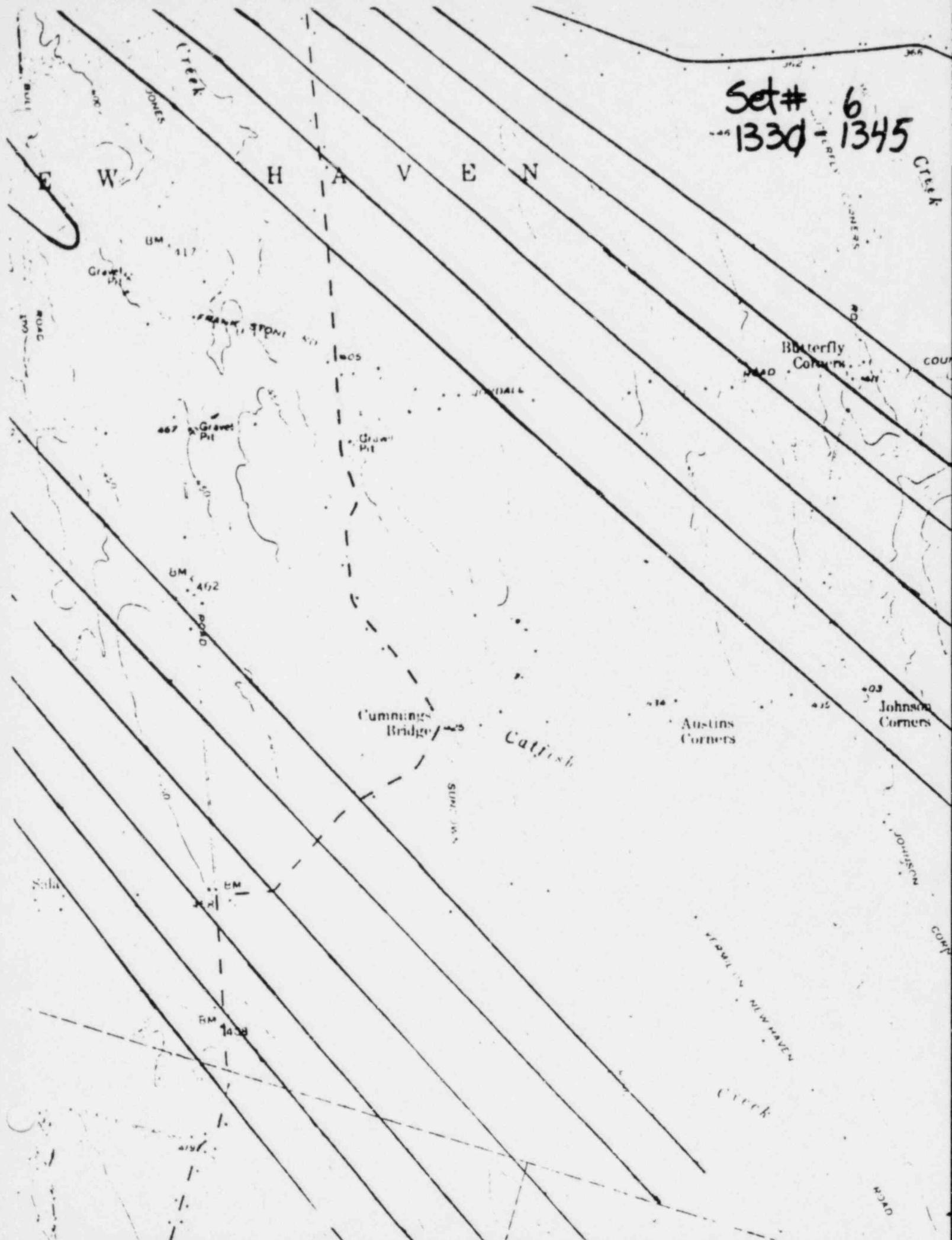
400

400

400

400

Set # 6
133d - 1345



Pleasant Point Crossing

Set # 6
1330-1345

New Haven
St.

Demster Grove
Camp/Gimundi

二二

Creek

W

200

5

• 148 •

M A R S H

~~South
New Haven~~

1st
time

11

10

133Φ-1345



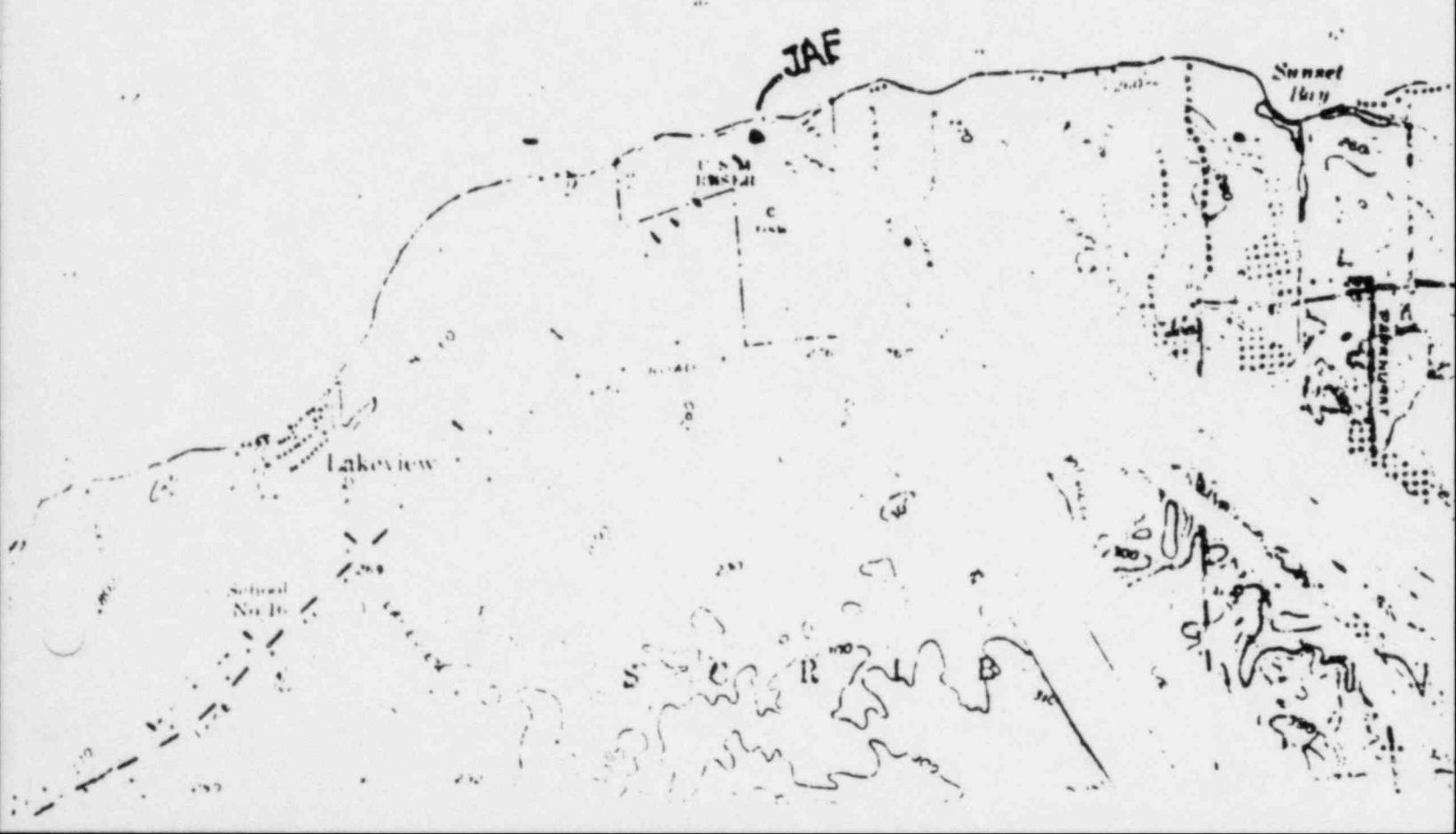
N

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Set # 6
1334-1345

FEET

C

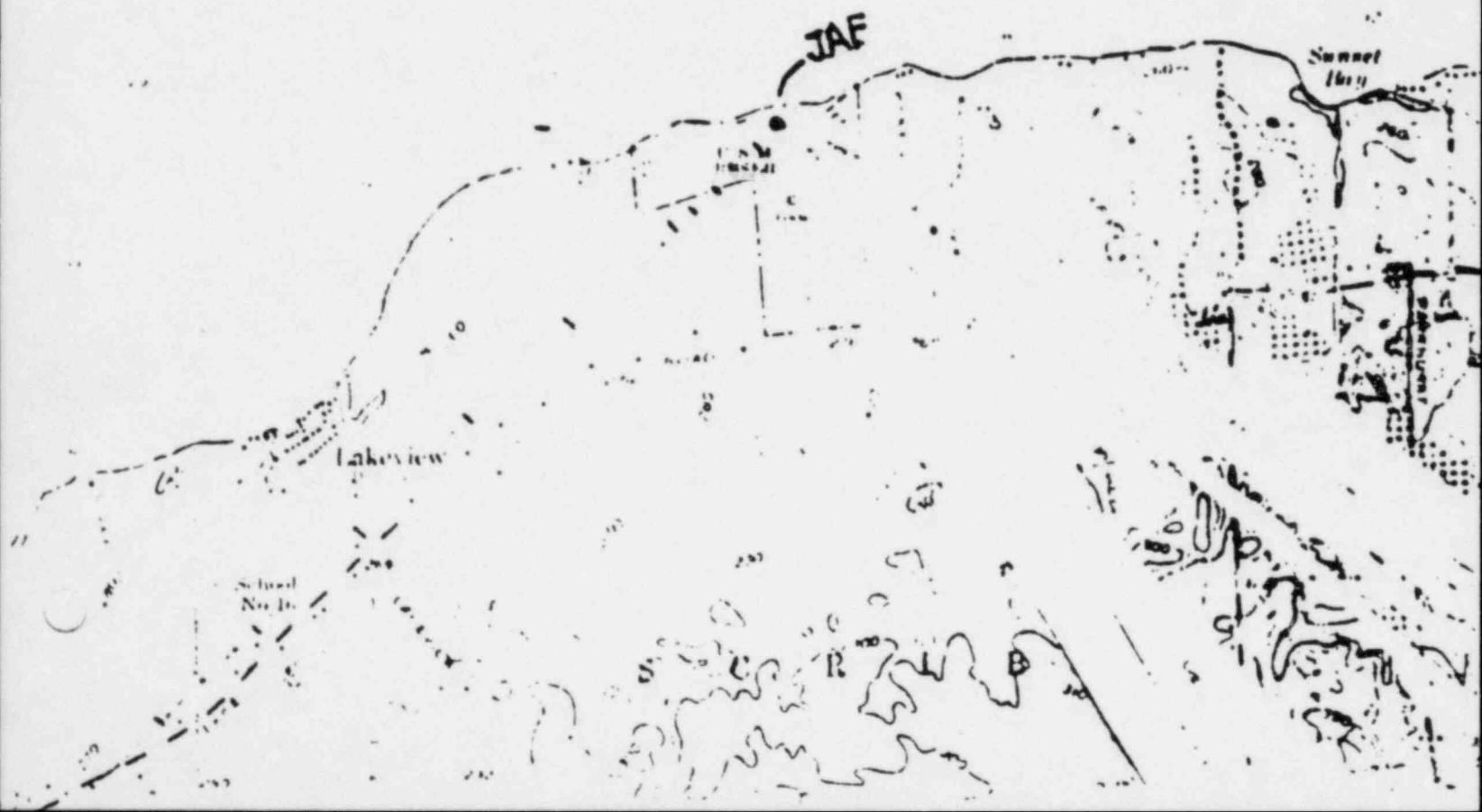


N

0

Set #7

1345-1400



Set #7
1345-1400

Ninomide Pt.

Shore Oaks

283

M E N I C O

לנ' יונאטיין

Hickory Grove

Cuppen

H

N

13

W

Set # 7
1345-1400

School
No 14**

North Series

School
No 13.

MIDDLE

Hammond's
Corner

Second
No 8.

Series

R I P A

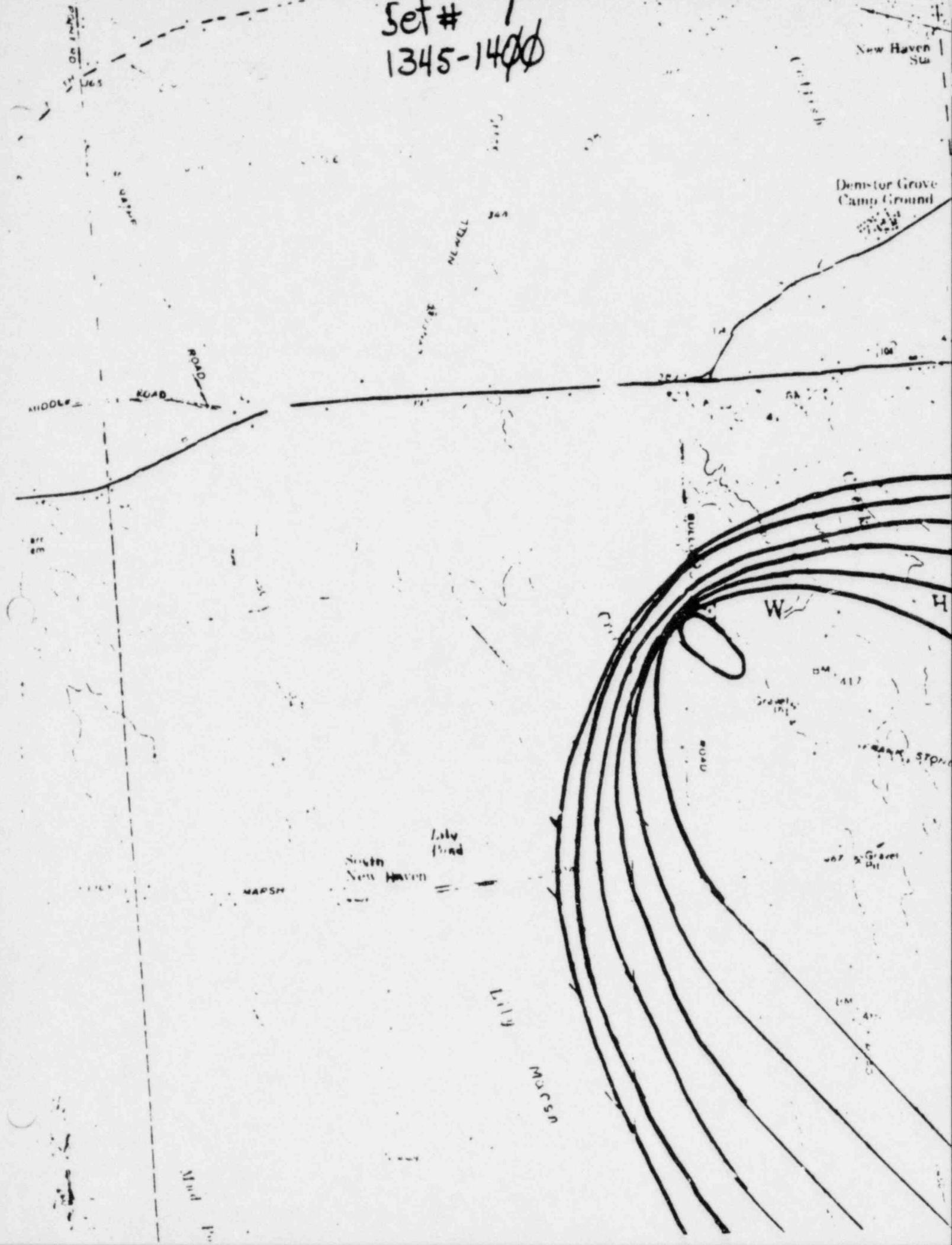
Schmid
No 10.

Berlita

Jones
Corner

Set # 7
1345-1400

New Haven
St.



Set# 7
1345-1400

Sala

Cumming
Bridge

Cutline

Austins
Corners

Johnson
Corners

Creek

Set# 7
1345-1400

Cummings
Bridge

Calfins

Austins
Corners

Johnson
Corners

Mullen

MULL

ROAD

Witterly

Vermilion
Creek

ROAD

WATSON MEAD

Vermilion

ROAD

Creek

Deacon

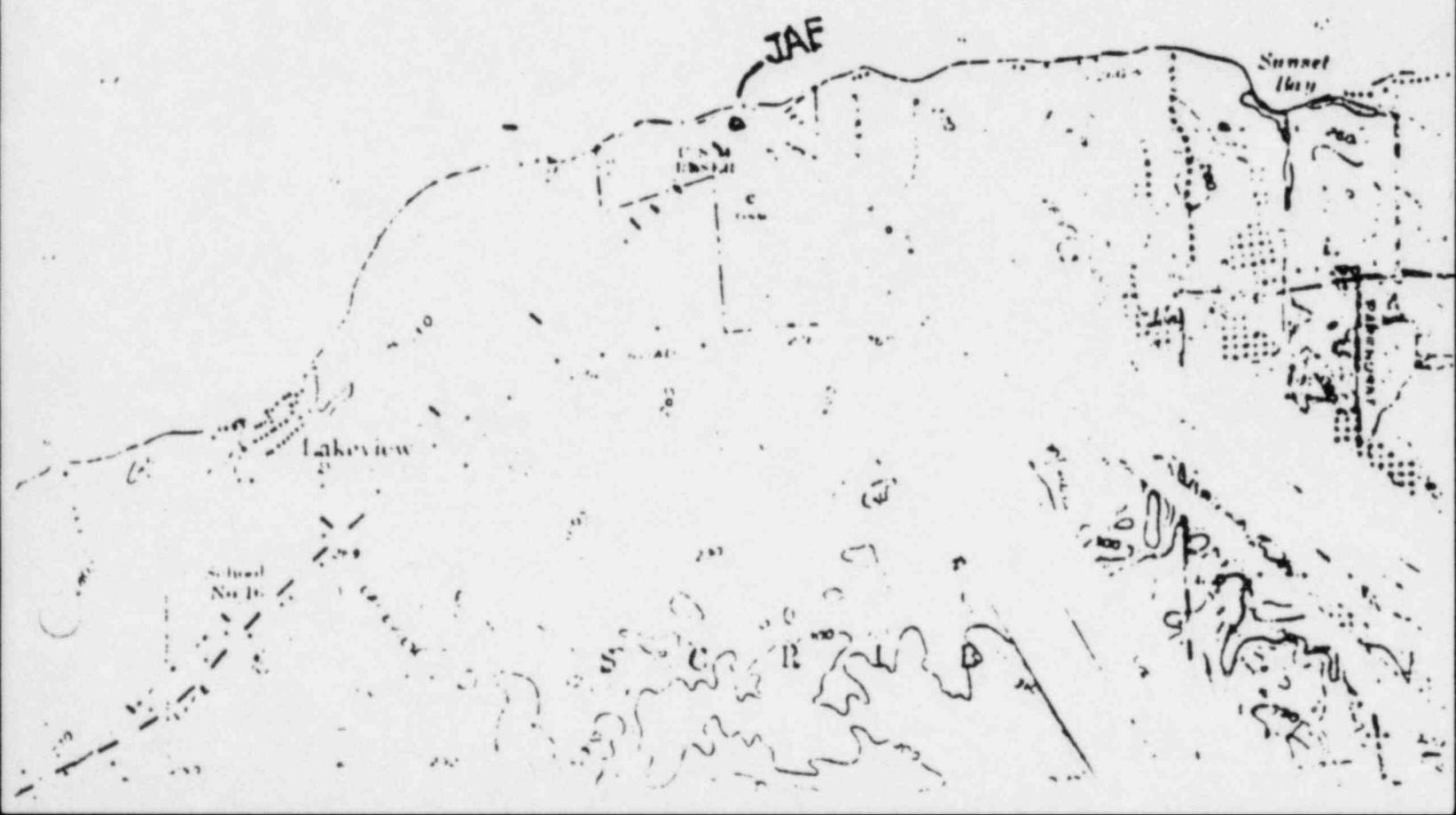
MAPS

VERMILION NEW HAVEN
CREEK

O

N

Set #8
1400-1415



Set #8

140φ - 1415

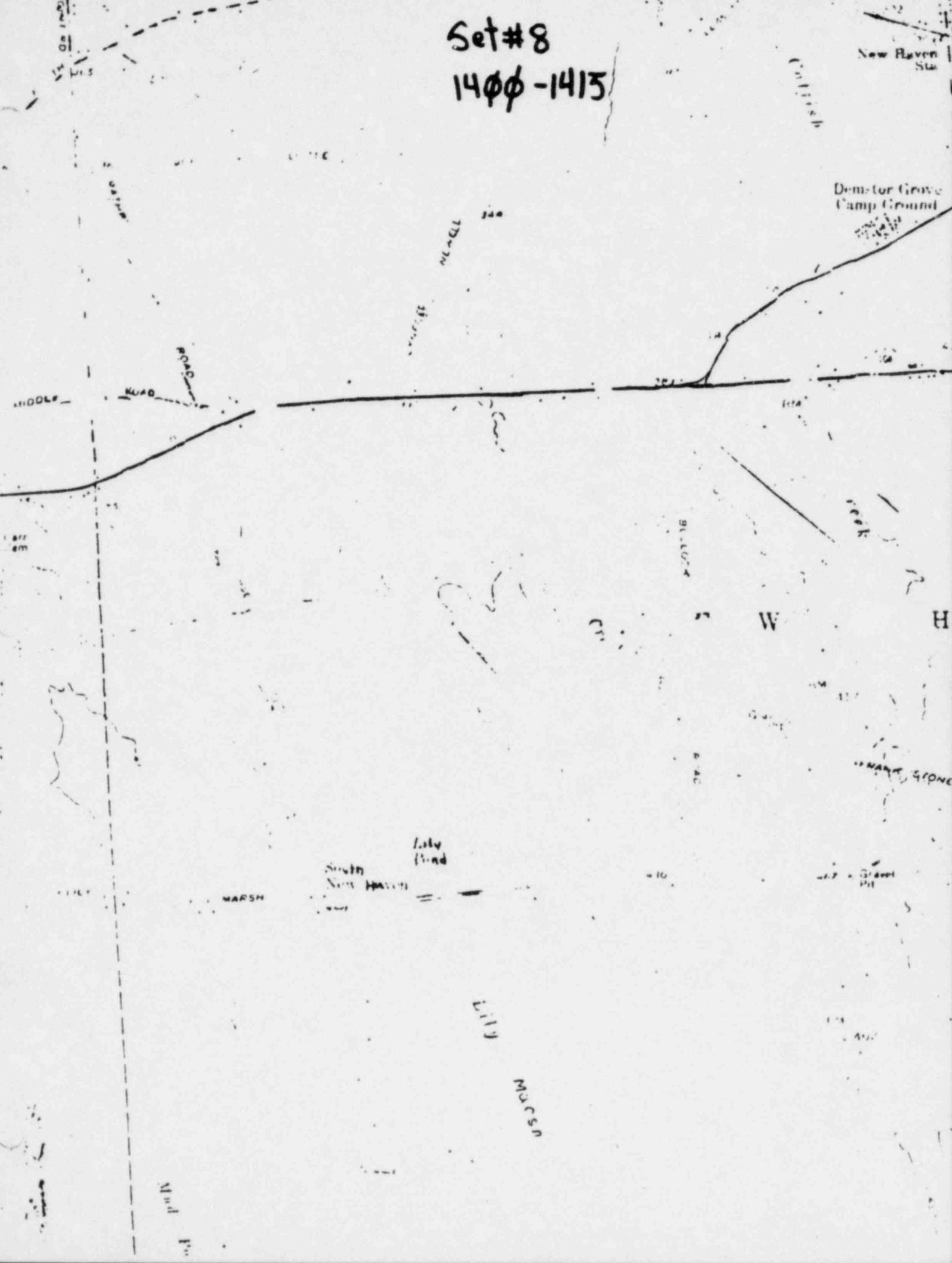




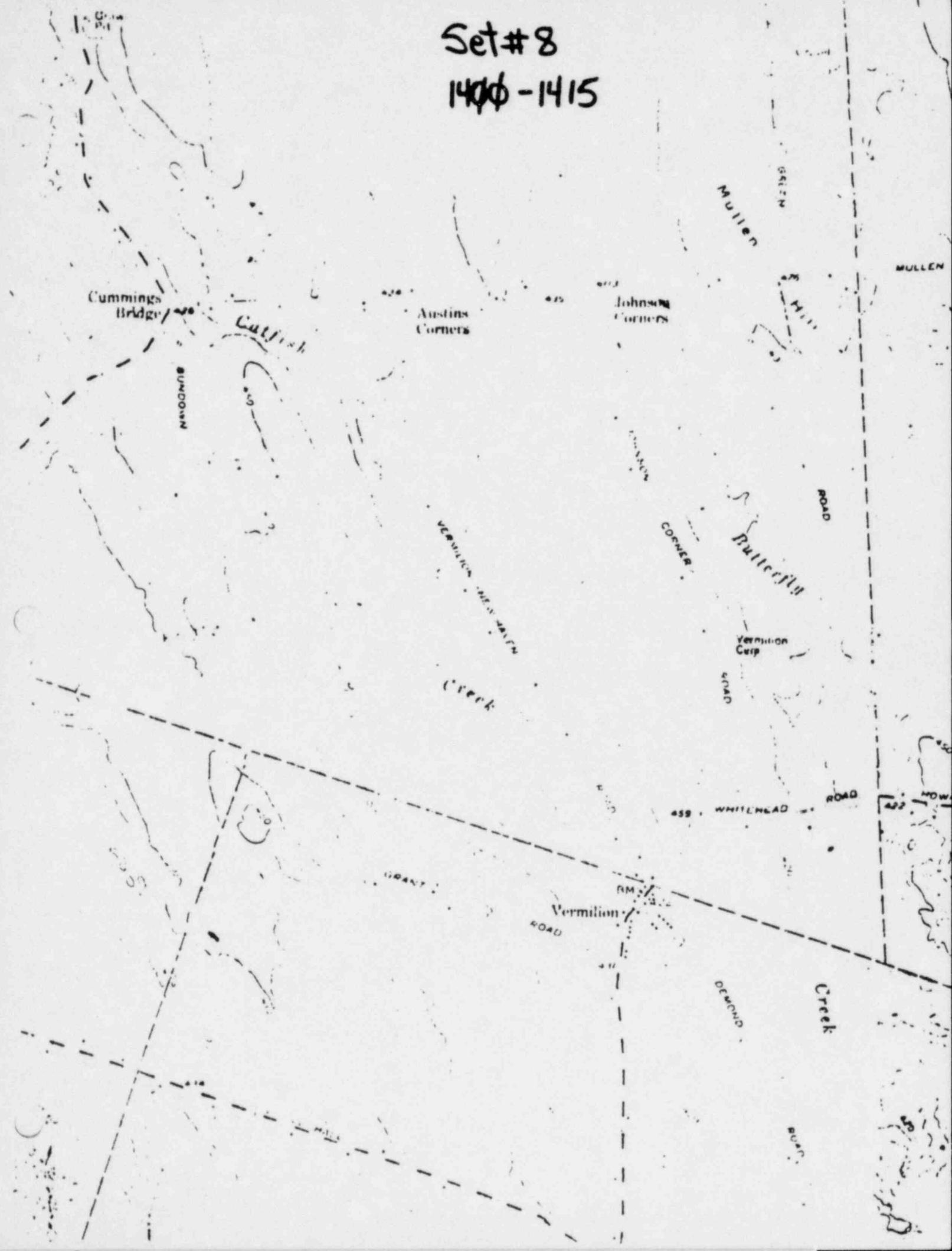
Set #8
14ΦΦ-1415

New Haven
Sta

Demitor Grove
Camp Ground



Set #8
1400 - 1415



Set #8
1400 - 1415

E W H A V E N

Grove
BM 112

Grove
BM

BM
At

Cumming
Bridge BM 125

Cutter

Austins
Corners

403
Johnson
Corners

junctions

Sat.

BM

Concord River
Cutter

900

Table II (Thyroid Dose)

	<u>Thyroid Dose for 1st Half of Release</u>	<u>Thyroid Dose for 2nd Half of Release</u>	<u>Total Dos</u>
Infant	16.6 mrem/hr	23.5 mrem/hr	40.1 mrem
Child	18.1 mrem/hr	25.8 mrem/hr	43.9 mrem
Teenager	16.4 mrem/hr	23.2 mrem/hr	39.6 mrem
Adult	13.3 mrem/hr	18.9 mrem/hr	32.2 mrem

Table III Ingested Dose

(for 1st half of release)

Deposition = $7.9833E - 3\mu Ci/m^2$
Concentration in pasture = $1.1405E - 2\mu Ci/Kg$
Concentration in milk = $4.0647E - 3\mu Ci/l$

Committed Dose

Child = $1.0834E - 5 \text{ mrem}$
Teenager = $5.3272E-6 \text{ mrem}$
Adult = $2.3874E-6 \text{ mrem}$

(for 2nd half release)

Deposition = $1.1342E-2\mu Ci/m^2$
Concentration in pasture = $1.6203E - 2\mu Ci/Kg$
Concentration in milk = $5.7749E - 3\mu Ci/l$

Committed Dose

Child = $1.5393E-5 \text{ mrem}$
Teenager = $7.5635E-6 \text{ mrem}$
Adult = $3.3896E-6 \text{ mrem}$

Table IV A
RELEASE RATE CALCULATIONS

DATE 8/11/82

TIME 1st 2 hrs of release

EFFECTIVE MONITOR

BACK CALCULATION

RELEASE POINT Turbine Building LOCATION

COUNT RATE (units) 1.9567E10 DISTANCE (mi)

CONVERSION CONSTANT 1E-1uCi/sec/cpm X/Q (l/m)

Q (uCi/sec) 1.9567E9 DOSE RATE (mr/hr)

Q (Ci/sec) (from step 4.2.4) 1.9567E3 Q(Ci/sec)
(from step 4.3.17)

DURATION OF RELEASE (hrs) 4 hrs

METEOROLOGICAL PARAMETERS:

TURBULENCE CLASS

I (PASQUILL A)	DIRECTION FROM (deg)	315
II (PASQUILL B.C)	WINDSPEED (mph)	2 mls 4.5 mph
III (PASQUILL D)	TYPE OF RELEASE	GROUND / ELEVATED
IV (PASQUILL E.F.G) E		

XE2

LOCATION/SECTOR	Xu/Q(l/m ²)	γ DOSE RATE (mrem/hr)	B DOSE RATE (mrem/hr)	THYROID DOSE RATE (rem/hr)	2HR THYROID DOSE (rem)	RELEASE DURATION (hrs)	PROJECTED DOSE (rem)
Center line	4.79E-4	4.3E5 mrem	2.5E3xE2		2.3E-1xE2	4	1.72E3 WB
1 mile			2.5E5		2.3E1		4.6 THY
Center line	1.79E-4	1.4E3xE2	7.8E2xE2		6.9E-2xE2		5.6E2 WD
2 miles		1.4E5	7.8E4		6.9		1.38 THY
5 miles	4.87E-5	4.2E2xE2 4.2E4	2.5E2xE2 2.5E4		2.2E-2xE2 2.2		1.68E2 WD 44 THY
0 miles	1.62E-5	1.3E2xE2 1.3E4	7.7E1xE2 7.7E3		6.9E-3xE2 6.9E-1		5.2E1 WB 1.38 THY

Table IV B DATE 8/11/82

RELEASE RATE CALCULATION: TIME 1st 2 hrs of release

EFFLUENT MONITORBACK CALCULATION

RELEASE POINT Turbine Building LOCATION
 COUNT RATE (units) 1.9567E10 DISTANCE (mi)
 CONVERSION CONSTANT 1E-luCi/sec/cpm X/Q (l/m)
 Q(luCi/sec) 1.9567E9 DOSE RATE (mr/hr)
 Q(Ci/sec) (from step 4.2.4) 1.9567E3 Q(Ci/sec)
 (from step 4.3.17)
 DURATION OF RELEASE (hrs) 4 hrs

METEOROLOGICAL PARAMETERS:

TURBULENCE CLASS
 I (PASQUILL A) DIRECTION FROM (deg) 315
 II (PASQUILL B,C) WINDSPEED (mph) 2 mls 4.5 mph
 III (PASQUILL D) TYPE OF RELEASE
 IV (PASQUILL E,F,G) E GROUND / ELEVATED

LOCATION/SECTOR	Xu/Q(l/m ²)	γ DOSE RATE (mrem/hr)	B DOSE RATE (mrem/hr)	THYROID DOSE RATE (rem/hr)	2HR THYROID DOSE (rem)	RELATIVE EXPOSURE (hrsr)	PREDICTED DOSE (rem)
N.M.Pt. Rd. and Minor Rd.	4.5E-4	4.2E3xE2 4.2E5	2.5E3xE2 2.5E5		2.2E-1xE2 2.2E1		1.68E3 WB
Parkhurst Road and Minor Rd.	4.E-10	3.4E-3xE2 3.4E-1	2E-3xE2 2E-1		1.8E-7xE2 1.8E-5		1.36E-3 NO 3.6E-6 THY
North Rd. and Dennis Rd.	4.5E-8	3.5E-1xE2 3.5E1	2E-1xE2 2E1		1.8E-5xE2 1.8E-3		1.4E-1 NO 3.6E-1 THY
Dennis Rd.	4.5E-10						1.36E-3 WB
Woolson Rd		3.4E-1	2E-1		1.8E-5		3.6E-5 THY

CALCULATED PROJECTED DOSE WORKSHEET

Table IV C

DATE 8/11/82

RELEASE RATE CALCULATION:

TIME 1st 2 hrs of release

EFFLUENT MONITORBACK CALCULATION

RELEASE POINT Turbine Building LOCATION _____

COUNT RATE (units) 1.9567E10 DISTANCE (mi) _____

CONVERSION CONSTANT 1E-luCi/sec/cpm X/Q (l/m) _____

Q(luCi/sec) 1.9567E9 DOSERATE (mr/hr) _____

Q(Ci/sec) (from step 4.2.41) 1.9567E3 Q(Ci/sec) (from step 4.3.17) _____

DURATION OF RELEASE (hrs) 4 hrs

METEOROLOGICAL PARAMETERS:

TURBULENCE CLASS

I (PASQUILL A)	DIRECTION FROM (deg)	315
II (PASQUILL B,C)	WINDSPEED (mph)	2 mls 4.5 mph
III (PASQUILL D)	TYPE OF RELEASE	GROUND / ELEVATED
IV (PASQUILL E,F,G) E		

LOCATION/SECTOR	Xu/Q(l/m ²)	γ DOSERATE (mrem/hr)	B DOSERATE (mrem/hr)	THYROID DOSE RATE (rem/hr)	2HR THYROID DOSE (rem)	RELEASE DURATION (hrs)	PROJECTED DOSE (rem)
isopleth	4.5E-4	4.2E5	2.5E5		2.2E1		1.68E3 WB
"	4.5E-5	4.1E2xE2	2.8E4		2.5E-2 xE-1		1.92E2 WB
"	4.5E-6	3.9E1xE2	2.3E3		2.1E-3 xE-1		15.6 WB
"	4.5E-7	3.7E2	2.2E2		1.9E-5		1.48 WB
							3.8E-5 THY

CALCULATOR PROJECTED DOSE WORKSHEET

Table IV D

RELEASE RATE CALCULATION:

DATE 8/11/82

TIME 1st 2 hrs of release

EFFLUENT MONITORBACK CALCULATION

RELEASE POINT Turbine Building LOCATION _____

COUNT RATE (units) 1.9567E10 DISTANCE (mi) _____

CONVERSION CONSTANT 1E-1uCi/sec/cpm X/Q (l/m) _____

Q(uCi/sec) 1.9567E9 DOSERATE (mr/hr) _____

Q(Ci/sec) (from step 4.2.4) 1.9567E3 Q(Ci/sec) (from step 4.3.17) _____

DURATION OF RELEASE (hrs) 4 hrs

METEOROLOGICAL PARAMETERS:

TURBULENCE CLASS

I (PASQUILL A)	DIRECTION FROM (deg.)	<u>315</u>
II (PASQUILL B,C)	WINDSPEED (mph)	<u>2 mls</u> <u>4.5 mph</u>
III (PASQUILL D)	TYPE OF RELEASE	<u>GROUND & ELEVATED</u>
IV (PASQUILL E,F,G) E		

LOCATION/SECTOR	Xu/Q(l/m ²)	DOSE RATE (mrem/hr)	B DOSE RATE (mrem/hr)	THYROID DOSE RATE (rem/hr)	2HR THYROID DOSE (rem)	RELEASE DURATION (hrs)	PROJECTED DOSE (rem)
isopleth	4.5E-8	3.5E1	3.2E1	2E1	1.83E-3 xE-1 1.83E-4	.14 WB	3.6E-4 THY
"	4.5E-9	3.5E-2	2.2		1.8E-7	1.4E-2 WB	3.6E-7 THY
"	4.5E-10	3.4E-1	2.E-1		1.8E-5 x1E-1 1.8E-6	1.36E-3 WB	3.6E-6 THY

CALCULATOR PROJECTED DOSE WORKSHEET

Table IV E

DATE 8/11/82

RELEASE RATE CALCULATION:

TIME Last half of release

EFFLUENT MONITOR

BACK CALCULATION

RELEASE POINT Turbine Building LOCATION _____

COUNT RATE (units) 1.9567E10 DISTANCE (mi) _____

CONVERSION CONSTANT 1E-luCi/sec/cpm X/Q (l/m) _____

Q(luCi/sec) 2.78E9 DOSERATE (mr/hr) _____

Q(Ci/sec) (from step 4.2.4) 2.78E3 Q(Ci/sec) (from step 4.3.17) _____

DURATION OF RELEASE (hrs) 4 hrs

METEOROLOGICAL PARAMETERS:

TURBULENCE CLASS

I (PASQUILL A)	DIRECTION FROM (deg)	315
II (PASQUILL B.C)	2 mls	4.5 mph
III (PASQUILL D)	WINDSPEED (mph)	
IV (PASQUILL E.F.G) E	TYPE OF RELEASE	GROUND / ELEVATED

LOCATION/SECTOR	Xu/Q(l/m ²)	γ DOSERATE (mrem/hr)	B DOSERATE (mrem/hr)	THYROID DOSE RATE (rem/hr)	2HR THYROID DOSE (rem)	RELEASE DURATION (hrs)	PROJECTED DOSE (rem)
C.L. 1 mi.	4.79E-4	4.8E5	3.3E5		2.9E-2		1.92E3 WB
C.L. 2 mi.	1.79E-4	2E5	1.2E5		1E-2		5.8E-2 THY 8E2 WB 2E-2 THY
C.L. 5 mi.	4.87E-5	5.9E4	3.5E4		3.1E-3		2.36E2 WB 6.2E-3 THY
C.L. 10 mi.	1.62E-5	2E4	1.2E4		1E-3		80 WB 2E-3 THY

CALCULATOR PROJECTED DOSE WORKSHEET

Table IV F
RELEASE RATE CALCULATION:DATE 8/11/82
TIME Last half of releaseEFFLUENT MONITORBACK CALCULATION

RELEASE POINT Turbine Building LOCATION _____

COUNT RATE (units) 1.9567E10 DISTANCE (mi) _____

CONVERSION CONSTANT 1E-1uCi/sec/mph X/Q (l/m) _____

Q(uCi/sec) 2.78E9 DOSERATE (mr/hr) _____

Q(Ci/sec) (from step 4.2.4) 2.78E3 Q(Ci/sec) (from step 4.3.17) _____

DURATION OF RELEASE (hrs) 4 hrs

METEOROLOGICAL PARAMETERS:

TURBULENCE CLASS		DIRECTION FROM (deg.)	315	
I (PASQUILL A)	_____		2 mls	4.5 mph
II (PASQUILL B.C)	_____			
III (PASQUILL D)	_____			
IV (PASQUILL E.F.G)	E	GROUND / ELEVATED		

LOCATION/SECTOR	X _u /Q(l/m ²)	DOSE RATE (mrem/hr)	B DOSE RATE (mrem/hr)	THYROID DOSE RATE (rem/hr)	2HR THYROID DOSE (rem)	RELEASE DURATION (hrs)	PROJECTED DOSE (rem)
N.M.Pt.Rd and Minor Rd.	4.5E-4	4.9E5	3.3E5		2.9E-2		1.96E3 WB 5.8E-2 THY
Parkhurst Rd and Minor Rd	4.5E-10	5E-1	3E-1		2.7E-8		.002 WB 5.4E-8 THY
North Rd and Dennis Rd	4.5E-8	5E-1	3E-1		2.7E-6		.20 WB 5.4E-6 THY
Dennis Rd and Woolson Rd	4.5E-10	5E-1	3E-1		27E-8		.002 WB 5.4E-8 THY

CALCULATOR PROJECTED DOSE WORKSHEET

Table IV G
RELEASE RATE CALCULATION:

DATE 8/11/82
TIME Last Half of release

EFFLUENT MONITOR

BACK CALCULATION

RELEASE POINT	Turbine Building	LOCATION	
COUNT RATE (units)	<u>1.9567E10</u>	DISTANCE (mi)	
CONVERSION CONSTANT	<u>1E-1 iCu/sec/mph</u>	X/Q (l/m)	
Q(uCi/sec)	<u>2.78E9</u>	DOSERATE (mr/hr)	
Q(Ci/sec) (from step 4.2.4)	<u>2.78E3</u>	Q(Ci/sec)	
DURATION OF RELEASE (hrs)	<u>4 hrs</u>	(from step 4.3.17)	

METEOROLOGICAL PARAMETERS:

TURBULENCE CLASS		DIRECTION FROM (deg.)		<u>315</u>
I	(PASQUILL A)	WINDSPEED (mph)		<u>2 mls</u> <u>4.5 mph</u>
II	(PASQUILL B,C)	TYPE OF RELEASE		
((PASQUILL D)			
IV	(PASQUILL E,F,G)	E	GROUND / ELEVATED	

LOCATION/SECTOR	Xu/Q(l/m ²)	DOSE RATE (mr/hrs)	B DOSE RATE (mr/hrs)	THYROID DOSE RATE (rem/hrs)	2HR THYROID DOSE (rem)	RELEASE DURATION (hrs)	PROJECTED DOSE (rem)
isopleth	4.5E-4	4.9E5	3.3E5		2.9E-2		1.96E3 WB
"	4.5E-5	6E4	3.5E4		3.1E-3		-2 THY
"	4.5E-6	5.6E3	3.2E3		2.9E-4		2.4E-2 WB
"	4.5E-7	5.5E2	3.1E2		2.9E-5		E-3 THY
							22.4 WB
							5.8E-4 THY
							2.2 WB
							5.8E-5 THY

CALCULATOR PROJECTED DOSE WORKSHEET

Table IV H

RELEASE RATE CALCULATION:

DATE 8/11/82
TIME Last half of releaseEFFLUENT MONITORBACK CALCULATION

RELEASE POINT Turbine Building LOCATION

COUNT RATE (units) 1.9567E10 DISTANCE (mi)

CONVERSION CONSTANT 1E-1uCi/sec/cpm X/Q (l/m)

Q(uCi/sec) 2.78E9 DOSERATE (mr/hr)

Q(Ci/sec) (from step 4.2.4) 2.78E3 Q(Ci/sec) (from step 4.3.17)

DURATION OF RELEASE (hrs) 4 hrs

METEOROLOGICAL PARAMETERS:

TURBULENCE CLASS

I (PASQUILL A)
 II (PASQUILL B,C)
 III (PASQUILL D)
 IV (PASQUILL E,F,G) E

DIRECTION FROM (deg.) 315
 WINDSPEED (mph) 2 mls 4.5 mph
 TYPE OF RELEASE GROUND / ELEVATED

LOCATION/SECTOR	Xu/Q(l/m ²)	DOSE RATE (mrem/hr)	B DOSE RATE (mrem/hr)	THYROID DOSE RATE (rem/hr)	2HR THYROID DOSE (rem)	RELEASE DURATION (hrs)	PROJECTED DOSE (rem)
isopleth	4.5E-8	5E1	3E1		2.7E-6		.20 WB
"	4.5E-9	5	3		2.7E-7		.02 WB
"	4.5E-10	5E-1	3E-1		2.7E-8		.002 WB
"							5.4E-7 THY
"							5.4E-7 THY
"							WB
"							THY

Table V (Offsite Monitoring Locations)

	0930	1000	1030	1100	1130	1200	1230	1300	1330	1400	1430	15
Environmental TLD's												
#45	.005	.005	.005	.005	.785	2.735	4.685	6.635	8.585	9.455	9.455	9.4
#57	.070	.070	.070	.070	.070	.070	.070	.070	.070	.071	.071	.0
Emergency TLD's												
E-13	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.0
E-18	.001	12.5E-3	2.75E-3	3E-3	3.25E-3	3.5E-3	3.75E-3	4E-3	4.25E-3	4.5E-3	4.5E-3	4.5