

PALO VERDE NUCLEAR GENERATING STATION
PROMPT NOTIFICATION SIREN SYSTEM TEST REPORT
FOR OCTOBER 24, 1984 TEST

SUMMARY

APS conducted a full scale test of the PVNGS Prompt Notification Siren System on October 24, 1984. The siren system, comprised of thirty-seven sirens, was activated from the Maricopa County Department of Civil Defense and Emergency Services (MCDCE&ES) at 12:00 p.m. and again at 12:15 p.m. HAM radio operators from the Phoenix area participated as volunteer evaluators/observers.

The preliminary findings indicate that the siren system satisfied all applicable federal standards. A random telephone survey of the 10-mile EPZ residents showed that over 90% of those called heard the sirens sound. The Federal Emergency Management Agency (FEMA) rated the test excellent on both the siren sound coverage of the residents and the receipt of siren and emergency actions information by the residents.

I INTRODUCTION

A. Purpose

The second full scale annual test of the PVNGS Prompt Notification Siren System was conducted on October 24, 1984. The objective of the test was twofold: 1) to demonstrate that the system provides adequate acoustical coverage of the resident population within the PVNGS 10-mile Emergency Planning Zone (EPZ) and 2) to assure that APS has provided adequate distribution of siren and emergency action information to the residents.

B. System Description

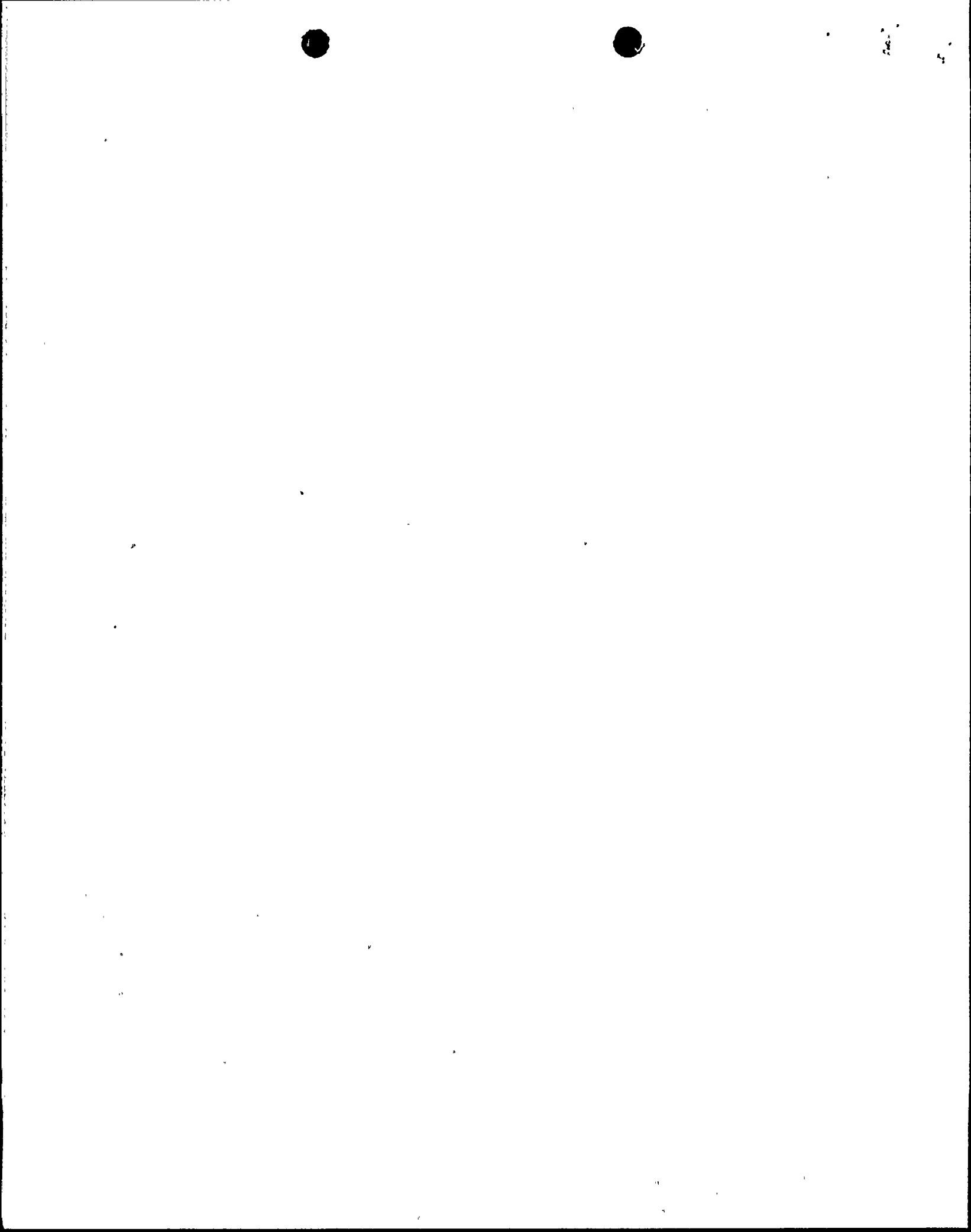
The thirty-seven sirens installed within the 10-mile EPZ by APS were manufactured by Federal Signal Corporation (FSC). The alert system designed consists of thirty-four electro-mechanical FSC Thunderbolt models and three electronic FSC Siratone models. Both the Thunderbolt and Siratone models are rotating sirens and produce a single tone. The electro-mechanical sirens utilize a single phase power supply, while the electronic siren model uses a solar powered battery unit for its power source. Sound level measurements were performed prior to the test by Acoustic Technology Incorporated test engineers and were included in APS' field testing report on the Siren Prompt Notification System for PVNGS, dated August 1983. The report was forwarded to FEMA, Region IX, on September 30, 1984. A FEMA-43 ("Standard Guide for the Evaluation of Alert and Notification Systems for Nuclear Power Plants") Report, dated May 31, 1984, was submitted to FEMA, Region IX, in June 1984.

II PRE-TEST PREPARATION

A. Checkout of Equipment

Prior to the October 24th test, a growl test was performed on each individual siren. To ensure that each siren could receive a signal, a silent test was conducted from the designated activation control panel.

8412060332 841204
PDR ADCK 05000528
F PDR



B. Personnel Training

On July 25, 1984, APS conducted a training class for state and county personnel having the responsibility for activating the sirens. Participants in the training session included representatives from the Maricopa County Department of Civil Defense and Emergency Services, the Maricopa County Sheriff's Office and the Department of Public Safety.

On October 17 and 24, 1984, APS conducted training for approximately 45 HAM radio operator volunteers on the manual activation of the sirens at the siren pole.

C. Public Information

The residents of the PVNGS 10-mile EPZ were notified, through written correspondence and the posting of notices in public places, of the date and approximate time that the sirens would be sounded and that FEMA would conduct a random telephone survey to determine if the sirens could be heard. APS also informed the local media of the siren test date and approximate time. A complete list of media distribution is provided on Attachment #1.

III PROCEDURES AND RESULTS

A. Staffing and Communications

The HAM radio operators assembled at the PVNGS Visitors' Center, where they were briefed on the purpose of the siren system and the use of the siren test evaluation forms. They were then divided into teams led by Palo Verde emergency response personnel and siren maintenance personnel. Group leaders were responsible for leading the evaluators to and from designated siren pole location and collecting siren test evaluation forms (see Attachment #2) and other materials at the end of the test.

After the briefing at the Visitors' Center, the radio operators were provided training on manual siren activation and then led to their assigned siren pole for the test.

A central communication station was established adjacent to the PVNGS Visitors' Center to coordinate the deployment of evaluators with the MCD&ES siren activation station. Communications between the activation station and the field was accomplished using the HAM radio communications net. Three maintenance personnel were placed in the field to respond to any sirens which malfunctioned during the test.

B. Testing

The siren system was activated twice. The purpose for the second activation was to allow any sirens which failed to sound on the first test to be repaired, thus assuring complete system activation on the second. Upon completion of the second test, FEMA conducted a random telephone survey of the 10-mile EPZ residents to determine if they heard the sirens and if they had received information concerning what actions to take if the sirens should sound in an actual emergency.

C. Results

1. System Activation

MCDCD&ES successfully activated the sirens from the County EOC.

The control panel interrogation printouts are provided as Attachments #3 (first test) and #4 (second test).

On the first test (12:00 pm) only one siren (INTRAC #410) malfunctioned, due to a broken fuse. The fuse was replaced by a maintenance worker prior to the second test.

On the second test (12:15 pm) all thirty-seven sirens operated properly.

FEMA requested that meteorological conditions at the PVNGS site be recorded at 90 minutes, 30 minutes, and 10 minutes before the first test. The conditions are provided on Attachment #5.

A completed FEMA, Region IX, Siren Testing Log is provided as Attachment #6.

2. Telephone Survey

The preliminary findings by FEMA indicate that the siren system satisfied all applicable federal standards. Over 90% of those residents called heard the sirens sound. FEMA rated this response "excellent".

An "excellent" rating was also given in regard to the residents' receipt of information on sirens and emergency actions to take, however a percentage of those responding positively to this part of the survey is not yet available.

3. FEMA Report

Before the end of 1984, FEMA will issue an official evaluation of the test.

D. Public Meetings

Following the siren tests, APS held two public meetings to permit local residents to discuss the tests and the siren system and to ask questions about the emergency plan for PVNGS.

ATTACHMENT #1

MEDIA DISTRIBUTION LIST

<u>Arizona Business Gazette</u>	KASA Radio
<u>Arizona Farmer-Ranchman</u>	KDJQ Radio
<u>Arizona Legislative Review</u>	KDKB Radio
<u>Arizona Republic</u>	KFLR Radio
<u>Buckeye Valley News</u>	KHEP Radio
<u>El Sol (spanish speaking newspaper)</u>	KJJJ Radio
<u>Glendale Star</u>	KKLT Radio
<u>Maryvale Star</u>	KLFF Radio
<u>Mesa Tribune</u>	KMCR Radio
<u>New Times Weekly</u>	KMEO Radio
<u>Peoria Times</u>	KMLE Radio
<u>Phoenix Business Journal</u>	KMZK Radio
<u>Phoenix Gazette</u>	KNIX Radio
<u>Scottsdale Daily Progress</u>	KOOL Radio
<u>Sun City News Sun</u>	KOPA Radio
<u>Tempe Daily News</u>	KOY Radio (spanish speaking)
<u>Westsider</u>	KPHX Radio
	KQYT Radio
	KRDS Radio
KAET Television	KSTM Radio
KPAZ Television	KTAR Radio
KPHO Television	KUKQ Radio
KPNX Television	KUPD Radio
KTSP Television	KVVA Radio (spanish speaking)
KTVK Television	KXAM Radio
	KXEG Radio
	KZZP Radio

Associated Press Wire Service

United Press International Wire Service

PALO VERDE NUCLEAR GENERATING STATION

Siren Test Report Form

Name (Please Print) _____

Address _____

Home Phone _____

Siren Number _____ (Use siren number on pole)

When you reach your siren location, walk over to the siren pole and find the number. This should be the same as your siren number listed above. For the test you should stand at the siren pole beside the control cabinet. Wait for the siren test to begin and complete the questionnaire. After the test, return the evaluation sheet to your group leader.

<u>Siren Test #</u>	<u>Time of Day Siren Started</u>	<u>Time of Day Siren Stopped</u>	(Check one)	
			<u>Wavering Tone</u>	<u>Steady Tone</u>
_____	_____	_____	_____	_____

(This test will last 3-5 minutes)

Did the siren operate continuously throughout the test?

___yes ___no

Did the horn rotate: ___yes ___no

Did the siren fail to turn off? ___yes ___no

A siren should start up gradually to full tone and coast down at the end of the test. Was there anything unusual about this siren's operation?

___yes ___no

comments: _____

Observer Signature _____ Date _____

Group Leader Signature _____ Date _____



0 11:58 ECM

0 12:00 CTR S 400 A7

12:00	CDS	410	A	1-0	2-0	3-0	4-0	5-0	6-0	7-0	8-X
12:00	CDS	010	A	1-X	2-X	3-0	4-0	5-X	6-0	7-0	8-0
12:00	CDS	200	A	1-X	2-X	3-0	4-0	5-X	6-0	7-0	8-0
12:00	CDS	220	A	1-X	2-X	3-0	4-0	5-X	6-0	7-0	8-0
12:00	CDS	230	A	1-X	2-X	3-0	4-0	5-X	6-0	7-0	8-0
12:00	CDS	240	A	1-X	2-X	3-0	4-0	5-X	6-0	7-0	8-0
12:00	CDS	260	A	1-X	2-X	3-0	4-0	5-X	6-0	7-0	8-0
12:00	CDS	300	A	1-X	2-X	3-0	4-0	5-X	6-0	7-0	8-0
12:00	CDS	310	A	1-X	2-X	3-0	4-0	5-X	6-0	7-0	8-0
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12:01	CDS	412	A	1-X	2-X	3-0	4-0	5-X	6-0	7-0	8-0
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12:01	CDS	450	A	1-X	2-X	3-0	4-0	5-X	6-0	7-0	8-0
12:01	CDS	451	A	1-X	2-X	3-0	4-0	5-X	6-0	7-0	8-0
12:01	CDS	452	A	1-X	2-X	3-0	4-0	5-X	6-0	7-0	8-0
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12:01	CDS	455	A	1-X	2-X	3-0	4-0	5-X	6-0	7-0	8-0
12:01	CDS	460	A	1-X	2-X	3-0	4-0	5-X	6-0	7-0	8-0
12:01	CDS	461	A	1-X	2-X	3-0	4-0	5-X	6-0	7-0	8-0
12:01	CDS	462	A	1-X	2-X	3-0	4-0	5-X	6-0	7-0	8-0
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12:02	CDS	471	A	1-X	2-X	3-0	4-0	5-X	6-0	7-0	8-0
12:02	CDS	472	A	1-X	2-X	3-0	4-0	5-X	6-0	7-0	8-0

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12:02	CDS	500	A	1-X	2-X	3-0	4-0	5-X	6-0	7-0	8-0
12:02	CDS	540	A	1-X	2-X	3-0	4-0	5-X	6-0	7-0	8-0
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12:03	CDS	411	A	1-X	2-X	3-0	4-0	5-0	6-0	7-0	8-0
12:03	CDS	411	A	1-0	2-0	3-0	4-0	5-0	6-0	7-0	8-0
12:04	CDS	010	A	1-0	2-0	3-0	4-0	5-0	6-0	7-X	8-0
12:04	CDS	220	A	1-0	2-0	3-0	4-0	5-0	6-0	7-X	8-0
12:04	CDS	200	A	1-0	2-0	3-0	4-0	5-0	6-0	7-X	8-0
12:04	CDS	230	A	1-0	2-0	3-0	4-0	5-0	6-0	7-X	8-0
12:04	CDS	260	A	1-0	2-0	3-0	4-0	5-0	6-0	7-X	8-0
12:04	CDS	300	A	1-0	2-0	3-0	4-0	5-0	6-0	7-X	8-0
12:04	CDS	330	A	1-0	2-0	3-0	4-0	5-0	6-0	7-X	8-0



11

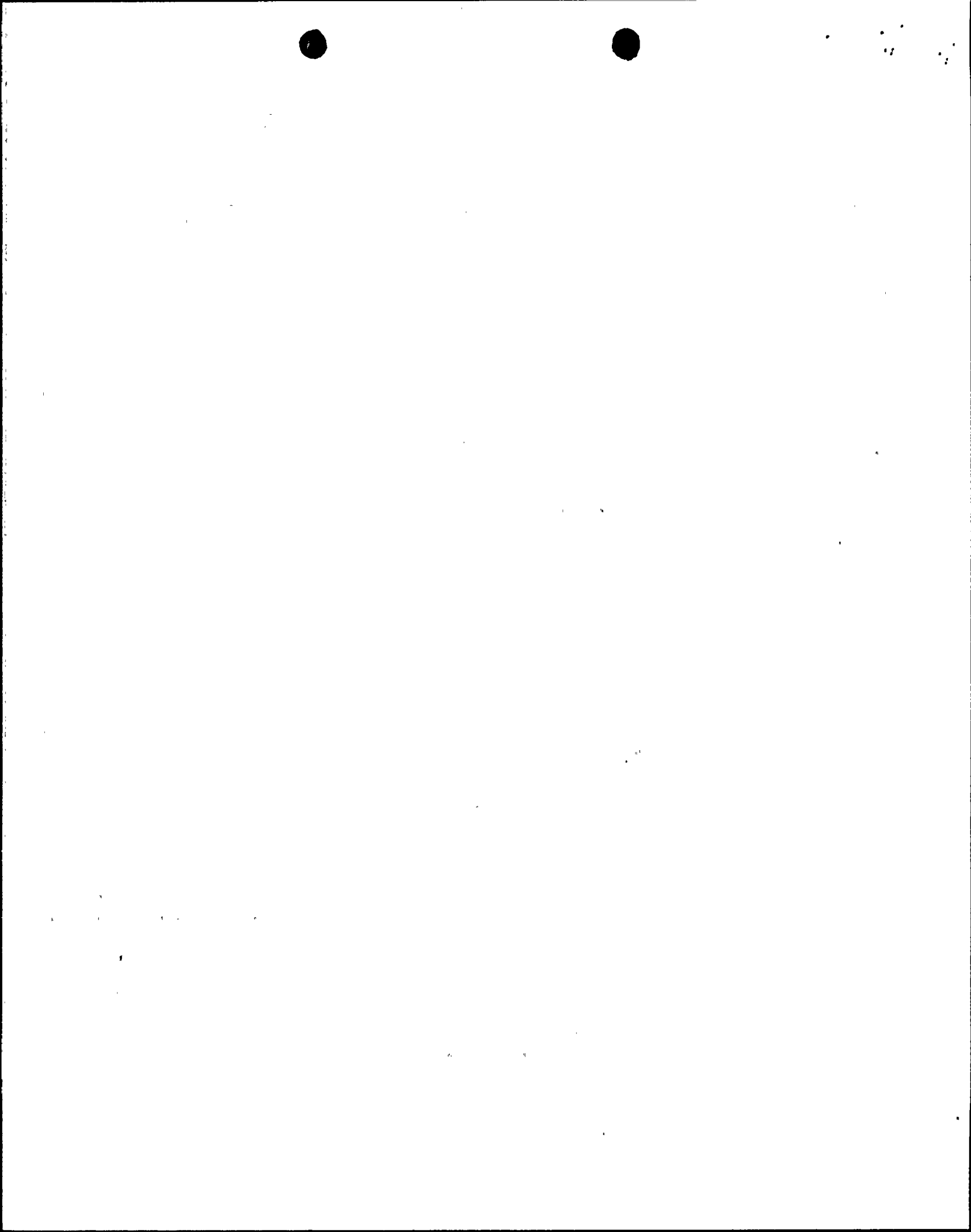
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12:05	COS	400	A	1-0	2-0	3-0	4-0	5-0	6-0	7-X	8-0
12:05	COS	401	A	1-0	2-0	3-0	4-0	5-0	6-0	7-X	8-0
12:05	COS	402	A	1-0	2-0	3-0	4-0	5-0	6-0	7-X	8-0
12:05	COS	310	A	1-0	2-0	3-0	4-0	5-0	6-0	7-X	8-0
12:05	COS	410	A	1-0	2-0	3-0	4-0	5-0	6-0	7-X	8-0
12:05	COS	412	A	1-0	2-0	3-0	4-0	5-0	6-0	7-X	8-0
12:05	COS	420	A	1-0	2-0	3-0	4-0	5-0	6-0	7-X	8-0
12:05	COS	421	A	1-0	2-0	3-0	4-0	5-0	6-0	7-X	8-0
12:05	COS	431	A	1-0	2-0	3-0	4-0	5-0	6-0	7-X	8-0
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12:09	COS	410	A	1-0	2-0	3-0	4-0	5-0	6-0	7-0	8-0
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12:11	COS	412	A	1-0	2-0	3-0	4-0	5-0	6-0	7-0	8-0
12:11	COS	470	A	1-0	2-0	3-0	4-0	5-0	6-0	7-0	8-0

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12:11	COS	440	A	1-0	2-0	3-0	4-0	5-0	6-0	7-0	8-0
12:11	COS	420	A	1-0	2-0	3-0	4-0	5-0	6-0	7-0	8-0
12:11	COS	450	A	1-0	2-0	3-0	4-0	5-0	6-0	7-0	8-0



12:12	CD1	4	A	1-0	2-0	3-0	4-0	5-0	6-0	7-0	8-0
12:12	CD1	442	A	1-0	2-0	3-0	4-0	5-0	6-0	7-0	8-0
12:12	CD1	431	A	1-0	2-0	3-0	4-0	5-0	6-0	7-0	8-0
12:12	CD1	441	A	1-0	2-0	3-0	4-0	5-0	6-0	7-0	8-0
12:12	CD1	453	A	1-0	2-0	3-0	4-0	5-0	6-0	7-0	8-0
12:12	CD1	454	A	1-0	2-0	3-0	4-0	5-0	6-0	7-0	8-0
12:12	CD1	452	A	1-0	2-0	3-0	4-0	5-0	6-0	7-0	8-0
12:12	CD1	461	A	1-0	2-0	3-0	4-0	5-0	6-0	7-0	8-0
12:12	CD1	540	A	1-0	2-0	3-0	4-0	5-0	6-0	7-0	8-0
12:12	CD1	462	A	1-0	2-0	3-0	4-0	5-0	6-0	7-0	8-0
12:12	CD1	471	A	1-0	2-0	3-0	4-0	5-0	6-0	7-0	8-0
12:13	CD1	570	A	1-0	2-0	3-0	4-0	5-0	6-0	7-0	8-0
12:13	CD1	472	A	1-0	2-0	3-0	4-0	5-0	6-0	7-0	8-0
12:13	CD1	410	A	1-0	2-0	3-0	4-0	5-0	6-0	7-X	8-0

D 12:14 ECM

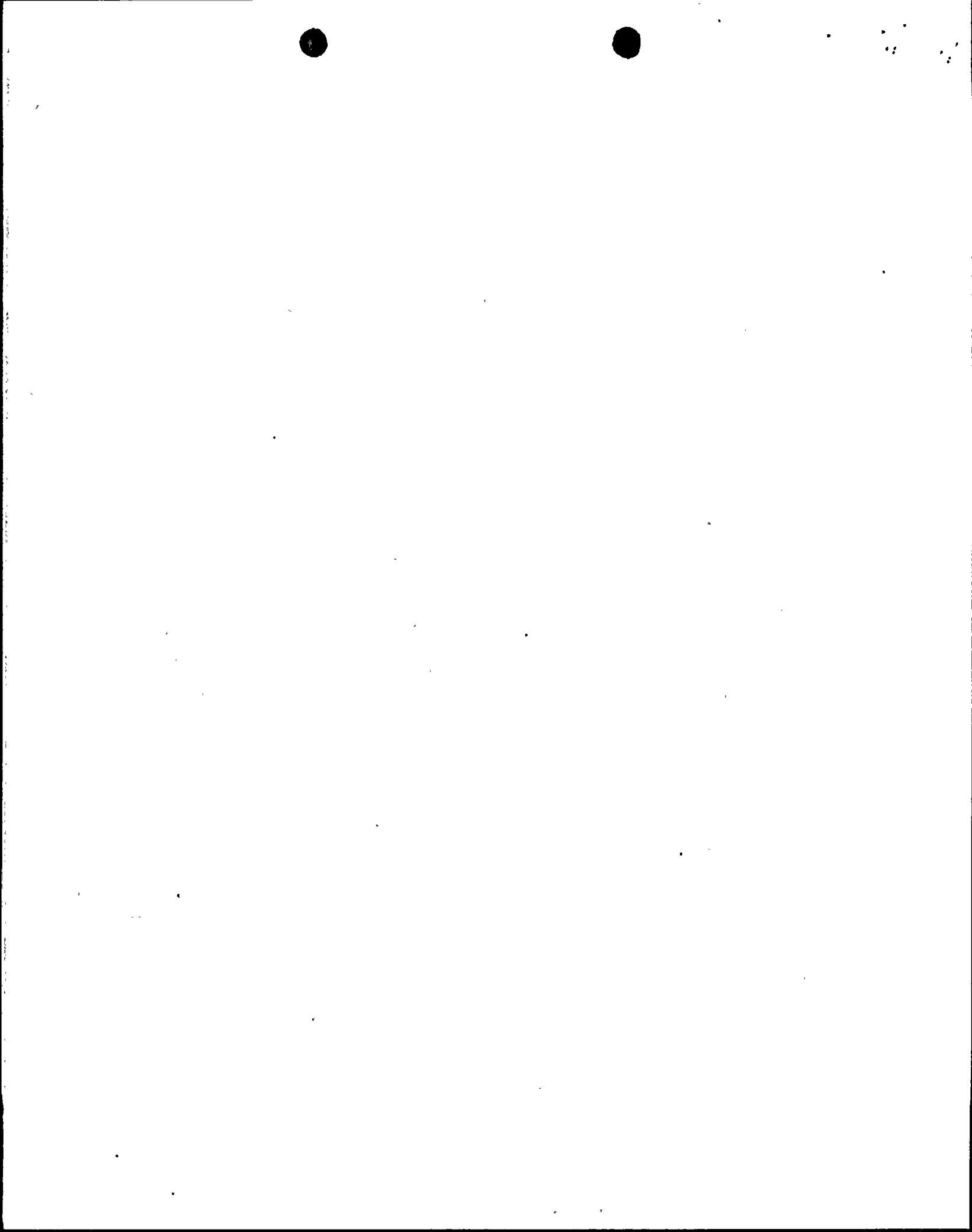
Attachment #4

Siren Test #2

D 12:15 CT

A7

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12:15	CD1	220	A	1-X	2-X	3-0	4-0	5-X	6-0	7-0	8-0
12:15	CD1	230	A	1-X	2-X	3-0	4-0	5-X	6-0	7-0	8-0
12:15	CD1	240	A	1-X	2-X	3-0	4-0	5-X	6-0	7-0	8-0
12:15	CD1	260	A	1-X	2-X	3-0	4-0	5-X	6-0	7-0	8-0
12:15	CD1	300	A	1-X	2-X	3-0	4-0	5-X	6-0	7-0	8-0
12:15	CD1	310	A	1-X	2-X	3-0	4-0	5-X	6-0	7-0	8-0
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12:16	CD1	411	A	1-X	2-X	3-0	4-0	5-X	6-0	7-0	8-0
12:16	CD1	412	A	1-X	2-X	3-0	4-0	5-X	6-0	7-0	8-0
12:16	CD1	420	A	1-X	2-X	3-0	4-0	5-X	6-0	7-0	8-0
12:16	CD1	421	A	1-X	2-X	3-0	4-0	5-X	6-0	7-0	8-0
12:16	CD1	431	A	1-X	2-0	3-0	4-0	5-0	6-0	7-0	8-0
12:16	CD1	440	A	1-X	2-X	3-0	4-0	5-X	6-0	7-0	8-0
12:16	CD1	441	A	1-X	2-X	3-0	4-0	5-X	6-0	7-0	8-0
12:16	CD1	442	A	1-X	2-X	3-0	4-0	5-X	6-0	7-0	8-0
12:16	CD1	450	A	1-X	2-X	3-0	4-0	5-X	6-0	7-0	8-0
12:16	CD1	451	A	1-X	2-X	3-0	4-0	5-X	6-0	7-0	8-0
12:16	CD1	452	A	1-X	2-X	3-0	4-0	5-X	6-0	7-0	8-0
12:16	CD1	453	A	1-X	2-X	3-0	4-0	5-X	6-0	7-0	8-0
12:16	CD1	454	A	1-X	2-X	3-0	4-0	5-X	6-0	7-0	8-0
12:16	CD1	455	A	1-X	2-X	3-0	4-0	5-X	6-0	7-0	8-0
12:16	CD1	460	A	1-X	2-X	3-0	4-0	5-X	6-0	7-0	8-0
12:16	CD1	461	A	1-X	2-X	3-0	4-0	5-X	6-0	7-0	8-0
12:16	CD1	462	A	1-X	2-X	3-0	4-0	5-X	6-0	7-0	8-0
12:16	CD1	470	A	1-X	2-X	3-0	4-0	5-X	6-0	7-0	8-0
12:16	CD1	471	A	1-X	2-X	3-0	4-0	5-X	6-0	7-0	8-0
12:16	CD1	472	A	1-X	2-X	3-0	4-0	5-X	6-0	7-0	8-0
12:16	CD1	500	A	1-X	2-X	3-0	4-0	5-X	6-0	7-0	8-0
12:17	CD1	540	A	1-X	2-X	3-0	4-0	5-X	6-0	7-0	8-0
12:17	CD1	570	A	1-X	2-X	3-0	4-0	5-X	6-0	7-0	8-0



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12:18 CDS	452 A	1-0	2-0	3-X	4-0	5-0	6-0	7-0	8-0
12:18 CDS	411 A	1-0	2-0	3-0	4-0	5-0	6-0	7-0	8-0
12:19 CDS	010 A	1-0	2-0	3-0	4-0	5-0	6-0	7-X	8-0
12:19 CDS	200 A	1-0	2-0	3-0	4-0	5-0	6-0	7-X	8-0
12:19 CDS	220 A	1-0	2-0	3-0	4-0	5-0	6-0	7-X	8-0
12:19 CDS	230 A	1-0	2-0	3-0	4-0	5-0	6-0	7-X	8-0
12:19 CDS	240 A	1-0	2-0	3-0	4-0	5-0	6-0	7-X	8-0
12:19 CDS	260 A	1-0	2-0	3-0	4-0	5-0	6-0	7-X	8-0
12:19 CDS	300 A	1-0	2-0	3-0	4-0	5-0	6-0	7-X	8-0
12:19 CDS	310 A	1-0	2-0	3-0	4-0	5-0	6-0	7-X	8-0
12:19 CDS	330 A	1-0	2-0	3-0	4-0	5-0	6-0	7-X	8-0
12:19 CDS	400 A	1-0	2-0	3-0	4-0	5-0	6-0	7-X	8-0
12:20 CDS	401 A	1-0	2-0	3-0	4-0	5-0	6-0	7-X	8-0
12:20 CDS	402 A	1-0	2-0	3-0	4-0	5-0	6-0	7-X	8-0
12:20 CDS	410 A	1-0	2-0	3-0	4-0	5-0	6-0	7-0	8-0
12:20 CDS	410 A	1-0	2-0	3-0	4-0	5-0	6-0	7-X	8-0
12:20 CDS	412 A	1-0	2-0	3-0	4-0	5-0	6-0	7-X	8-0
12:20 CDS	420 A	1-0	2-0	3-0	4-0	5-0	6-0	7-X	8-0
12:20 CDS	421 A	1-0	2-0	3-0	4-0	5-0	6-0	7-X	8-0
12:20 CDS	430 A	1-0	2-0	3-0	4-0	5-0	6-0	7-X	8-0
12:20 CDS	440 A	1-0	2-0	3-0	4-0	5-0	6-0	7-X	8-0
12:20 CDS	431 A	1-0	2-0	3-0	4-0	5-0	6-0	7-X	8-0
12:20 CDS	441 A	1-0	2-0	3-0	4-0	5-0	6-0	7-X	8-0
12:20 CDS	442 A	1-0	2-0	3-0	4-0	5-0	6-0	7-X	8-0
12:20 CDS	450 A	1-0	2-0	3-0	4-0	5-0	6-0	7-X	8-0
12:20 CDS	451 A	1-0	2-0	3-0	4-0	5-0	6-0	7-X	8-0
12:21 CDS	453 A	1-0	2-0	3-0	4-0	5-0	6-0	7-X	8-0
12:21 CDS	454 A	1-0	2-0	3-0	4-0	5-0	6-0	7-X	8-0
12:21 CDS	455 A	1-0	2-0	3-0	4-0	5-0	6-0	7-X	8-0
12:21 CDS	460 A	1-0	2-0	3-0	4-0	5-0	6-0	7-X	8-0
12:21 CDS	452 A	1-0	2-0	3-0	4-0	5-0	6-0	7-X	8-0
12:21 CDS	462 A	1-0	2-0	3-0	4-0	5-0	6-0	7-X	8-0
12:21 CDS	470 A	1-0	2-0	3-0	4-0	5-0	6-0	7-X	8-0
12:21 CDS	471 A	1-0	2-0	3-0	4-0	5-0	6-0	7-X	8-0
12:21 CDS	461 A	1-0	2-0	3-0	4-0	5-0	6-0	7-X	8-0
12:21 CDS	500 A	1-0	2-0	3-0	4-0	5-0	6-0	7-X	8-0
12:21 CDS	472 A	1-0	2-0	3-0	4-0	5-0	6-0	7-X	8-0
12:21 CDS	540 A	1-0	2-0	3-0	4-0	5-0	6-0	7-X	8-0
12:21 CDS	570 A	1-0	2-0	3-0	4-0	5-0	6-0	7-X	8-0

12:23 CDS	300 A	1-0	2-0	3-0	4-0	5-0	6-0	7-0	8-0
12:24 CDS	402 A	1-0	2-0	3-0	4-0	5-0	6-0	7-0	8-0
12:24 CDS	230 A	1-0	2-0	3-0	4-0	5-0	6-0	7-0	8-0
12:24 CDS	220 A	1-0	2-0	3-0	4-0	5-0	6-0	7-0	8-0
12:25 CDS	460 A	1-0	2-0	3-0	4-0	5-0	6-0	7-0	8-0
12:25 CDS	455 A	1-0	2-0	3-0	4-0	5-0	6-0	7-0	8-0
12:25 CDS	010 A	1-0	2-0	3-0	4-0	5-0	6-0	7-0	8-0
12:25 CDS	200 A	1-0	2-0	3-0	4-0	5-0	6-0	7-0	8-0
12:25 CDS	240 A	1-0	2-0	3-0	4-0	5-0	6-0	7-0	8-0
12:25 CDS	451 A	1-0	2-0	3-0	4-0	5-0	6-0	7-0	8-0
12:25 CDS	260 A	1-0	2-0	3-0	4-0	5-0	6-0	7-0	8-0

12:26	CDS	500	A	1-0	2-0	3-0	4-0	5-0	6-0	7-0	8-0
12:26	CDS	330	A	1-0	2-0	3-0	4-0	5-0	6-0	7-0	8-0
12:26	CDS	400	A	1-0	2-0	3-0	4-0	5-0	6-0	7-0	8-0
12:26	CDS	310	A	1-0	2-0	3-0	4-0	5-0	6-0	7-0	8-0
12:26	CDS	401	A	1-0	2-0	3-0	4-0	5-0	6-0	7-0	8-0
12:26	CDS	420	A	1-0	2-0	3-0	4-0	5-0	6-0	7-0	8-0
12:26	CDS	410	A	1-0	2-0	3-0	4-0	5-0	6-0	7-0	8-0
12:26	CDS	412	A	1-0	2-0	3-0	4-0	5-0	6-0	7-0	8-0
12:26	CDS	440	A	1-0	2-0	3-0	4-0	5-0	6-0	7-0	8-0

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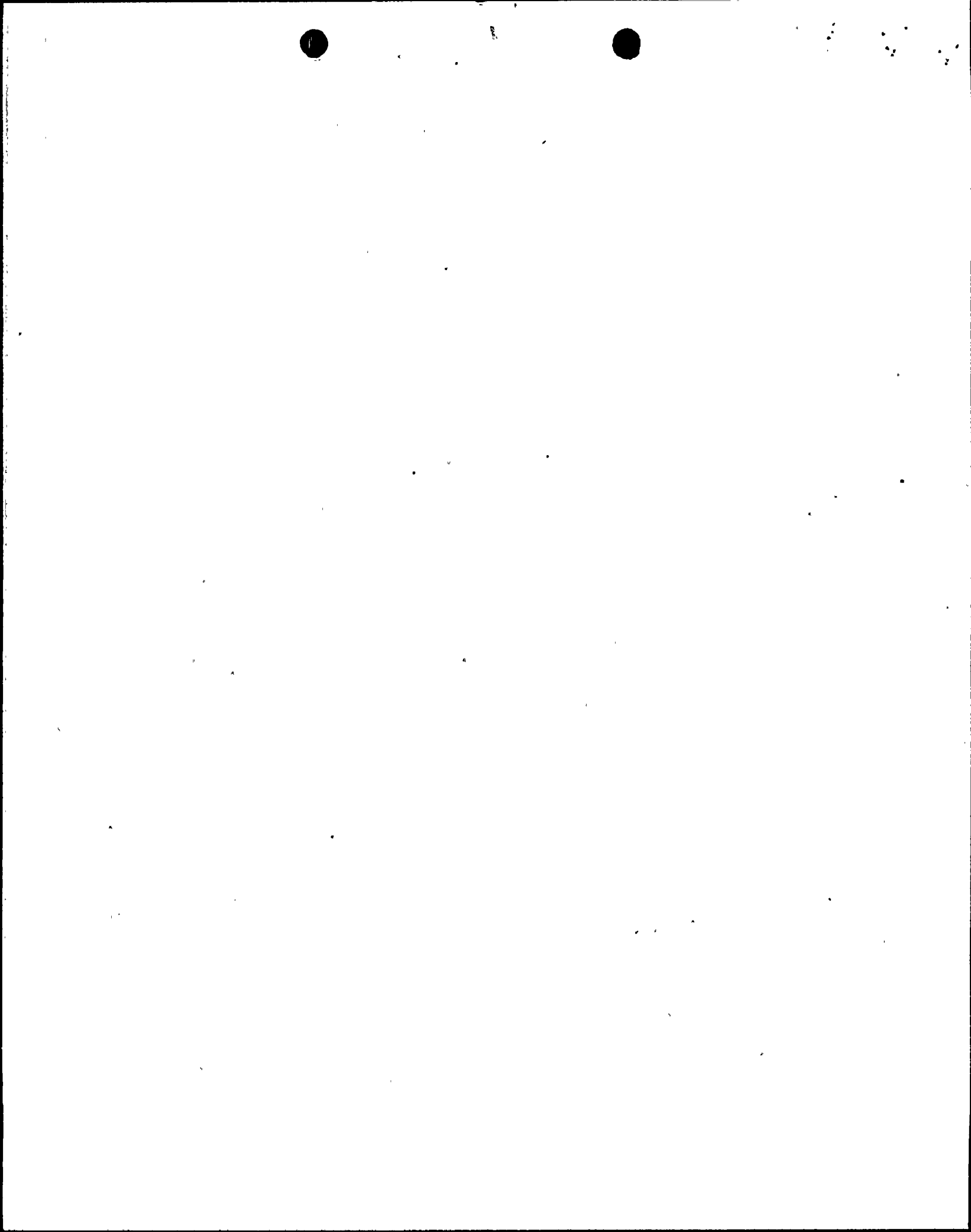
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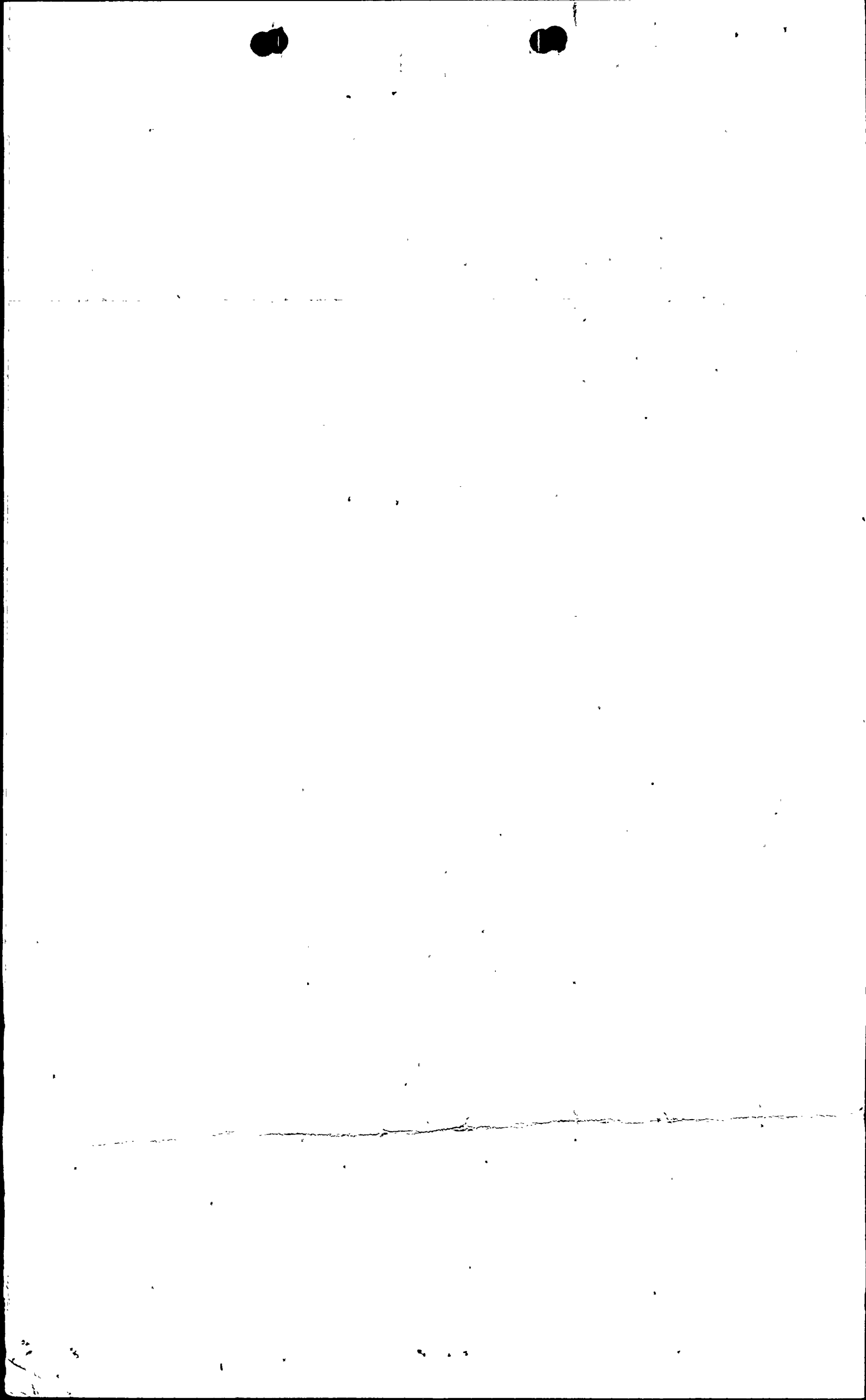
12:26	CDS	450	A	1-0	2-0	3-0	4-0	5-0	6-0	7-0	8-0
12:26	CDS	470	A	1-0	2-0	3-0	4-0	5-0	6-0	7-0	8-0
12:26	CDS	421	A	1-0	2-0	3-0	4-0	5-0	6-0	7-0	8-0
12:27	CDS	431	A	1-0	2-0	3-0	4-0	5-0	6-0	7-0	8-0
12:27	CDS	442	A	1-0	2-0	3-0	4-0	5-0	6-0	7-0	8-0
12:27	CDS	430	A	1-0	2-0	3-0	4-0	5-0	6-0	7-0	8-0
12:27	CDS	441	A	1-0	2-0	3-0	4-0	5-0	6-0	7-0	8-0
12:27	CDS	453	A	1-0	2-0	3-0	4-0	5-0	6-0	7-0	8-0
12:27	CDS	452	A	1-0	2-0	3-0	4-0	5-0	6-0	7-0	8-0
12:27	CDS	454	A	1-0	2-0	3-0	4-0	5-0	6-0	7-0	8-0
12:27	CDS	461	A	1-0	2-0	3-0	4-0	5-0	6-0	7-0	8-0
12:27	CDS	540	A	1-0	2-0	3-0	4-0	5-0	6-0	7-0	8-0
12:27	CDS	462	A	1-0	2-0	3-0	4-0	5-0	6-0	7-0	8-0
12:27	CDS	471	A	1-0	2-0	3-0	4-0	5-0	6-0	7-0	8-0
12:28	CDS	570	A	1-0	2-0	3-0	4-0	5-0	6-0	7-0	8-0
12:28	CDS	472	A	1-0	2-0	3-0	4-0	5-0	6-0	7-0	8-0

Attachment #5

METEOROLOGICAL DATA FOR OCTOBER 24, 1984 SIREN TEST
 (from PVNGS Met Tower)

	10:30 am	11:30 am	11:50 am
(200'/35') Wind speed	5/5 mph	6/9	11/6
(200'/35') Wind direction	(from) 90°/105°	145°/150°	130°/120°
Temperature	64° F	68°	69°
Dew Point	30°		





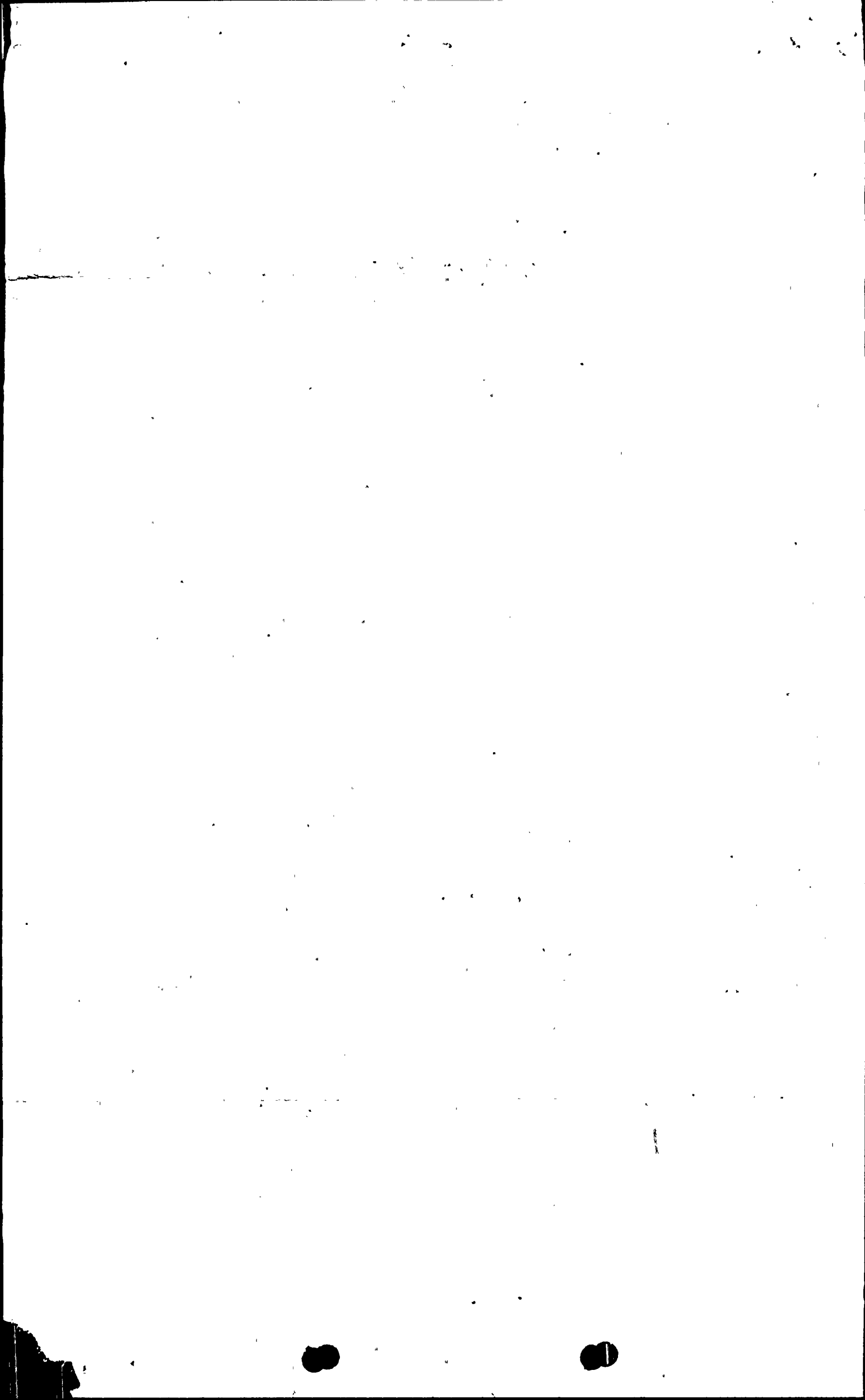
FEMA REGION IX SIREN TESTING, MAINTENANCE, AND OUTAGE LOG

NAME OF NUCLEAR POWER PLANT: PALO VERDE NUCLEAR GENERATING STATION
 LOCATION: APPROXIMATELY 50 MILES WEST OF PHOENIX, ARIZONA

DATE LOG SUBMITTED TO FEMA: _____

SIREN NUMBERS		TESTING			MAINTENANCE	OUTAGE	GENERAL INFORMATION					
Address (Intrac) Number	Location Number	Type of Test	Date/Time of Test	Test Satisfactory/Unsatisfactory	Date/Time Preventive Maintenance Performed	Date/Time Siren Malfunction	Type of Malfunction	Corrective Action Taken	Date/Time Siren Logged Out	Date/Time Siren Logged In	FEMA Notified? Yes/No Date/Time	Remarks
412	28	Complete Cycle	24 Oct. 84 1200	Satisfactory								
420	19	Complete Cycle	24 Oct. 84 1200	Satisfactory								
421	20	Complete Cycle	24 Oct. 84 1200	Satisfactory								
430	21	Complete Cycle	24 Oct. 84 1200	Satisfactory								
431	37	Complete Cycle	24 Oct. 84 1200	Satisfactory								
440	16	Complete Cycle	24 Oct. 84 1200	Satisfactory								
441	2	Complete Cycle	24 Oct. 84 1200	Satisfactory								
442	1	Complete Cycle	24 Oct. 84 1200	Satisfactory								
450	15	Complete Cycle	24 Oct. 84 1200	Satisfactory								
451	10	Complete Cycle	24 Oct. 84 1200	Satisfactory								
452	6	Complete Cycle	24 Oct. 84 1200	Satisfactory								
453	4	Complete Cycle	24 Oct. 84 1200	Satisfactory								
454	5	Complete Cycle	24 Oct. 84 1200	Satisfactory								
455	3	Complete Cycle	24 Oct. 84 1200	Satisfactory								

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FEMA REGION IX SIREN TESTING, MAINTENANCE, AND OUTAGE LOG

NAME OF NUCLEAR POWER PLANT: PALO VERDE NUCLEAR GENERATING STATION
 LOCATION: APPROXIMATELY 50 MILES WEST OF PHOENIX, ARIZONA

DATE LOG SUBMITTED TO FEMA: _____

SIREN NUMBERS		TESTING			MAINTENANCE	OUTAGE	GENERAL INFORMATION					
Address (Intrac) Number	Location Number	Type of Test	Date/Time of Test	Test Satisfactory/Unsatisfactory	Date/Time Preventive Maintenance Performed	Date/Time Siren Malfunction	Type of Malfunction	Corrective Action Taken	Date/Time Siren Logged Out	Date/Time Siren Logged In	FEMA Notified? Yes/No Date/Time	Remark
460	8	Complete Cycle	24 Oct. 84 1200	Satisfactory								
461	9	Complete Cycle	24 Oct. 84 1200	Satisfactory								
462	7	Complete Cycle	24 Oct. 84 1200	Satisfactory								
470	11	Complete Cycle	24 Oct. 84 1200	Satisfactory								
471	13	Complete Cycle	24 Oct. 84 1200	Satisfactory								
472	12	Complete Cycle	24 Oct. 84 1200	Satisfactory								
500	14	Complete Cycle	24 Oct. 84 1200	Satisfactory								
540	32	Complete Cycle	24 Oct. 84 1200	Satisfactory								
570	30	Complete Cycle	24 Oct. 84 1200	Satisfactory								

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