

CITIZEN'S RADIOLOGICAL
MONITORING NETWORK
21 SUMMER STREET
DUXBURY, MA 02332

Mrs. Bore:
I am preparing an
updated map for you.
D.L.2

October 8, 1989

Thomas Elsasser, Technical Advisor to Chairman Carr
US Nuclear Regulatory Commission
16 G 15, Washington, DC 200551

Report of prolonged excessive radiation readings on 10/26/89.

The evening of September 26, 1989 was our quarterly Quality Assurance Meeting. Members of our network gather to test our monitors in a batch for accuracy in reporting Beta and for total background radiation response. On the 24th. and 25th., members who could not be present at the formal meeting (school openhouses, etc.) dropped their instruments off so that their Radalerts could be tested with the group on the evening of the 26th.. On the 25th., I ran a preliminary comparative test on those instruments that had been collected todate.

Quality Assurance - 8:55am/1:41pm - 9/25/89.

#366 - 286 min. - 3222tc = 11.25cpm.
#397 - " " - 3210tc = 11.22cpm.
#373 - " " - 3090tc = 10.80cpm.
#354 - 293 min. - 3245tc = 11.07cpm.
#0 - 286 min. - 8153tc = 28.50cpm.

#366 is my own Radalert with a standard G/M tube, #0 is a prototype "pancake" G/M tube monitor.

The above figures are typical of normal radiation readings made in the following manner: The location, 10 miles from Pilgrim I, at 21 Summer Street, in the Town of Duxbury, MA, at the intersection of Summer and South Streets. This intersection is referred to as Tree of Knowledge Corner on local maps.

The conditions of the test: All Radalerts were positioned at an open window, leaning against a screen. Previous tests have shown that the window screen material deflects approximately 2.5cpm had the test been made out of doors. Since the following data was gathered at precisely the same place and in the identical manner as the test above this factor is ignored.

On the morning of 9/26/89, at 7:29am, that entry in my work sheet jumped abuptly from the previous entry. See copy of work sheet enclosed. Radalert #366 and pancake #0 recorded readings approximately 27% above background for a period of 9 hours. Since I had in my possession 8 Radalerts, I immediately employed them to certify the readings of #366 and #0.

9/26/89 - 9:17am.

#366 - 30 mins. - 410tc = 13.67cpm.
#353 - " " - 431tc = 14.37cpm.
#354 - " " - 434tc = 14.47cpm.
#397 - " " - 418tc = 13.93cpm.

H-025
11

#373 - " " - 401tc = 13.37cpm.
#415 - " " - 429tc = 14.30cpm.
#0 - " " - 1318tc = 43.93cpm.

9/26/89 - 10:27am.

#366 - 30 mins. - 412tc = 13.73cpm.
#353 - " " - 410tc = 13.67cpm.
#354 - " " - 353tc = 11.77cpm.
#373 - " " - 418tc = 13.93cpm.
#397 - " " - 432tc = 14.40cpm.
#415 - " " - 429tc = 14.30cpm.
#452 - " " - 431tc = 14.37cpm.
#0 - " " - 1226tc = 40.87cpm.

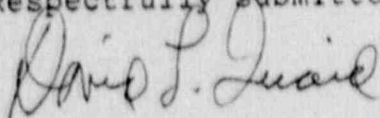
I reported these findings to Charles Marshall, the Resident NRC Inspector of Pilgrim I. He called back later on and reported that a check of the stack and vent monitors at the plant revealed no abnormal releases. The readings for 9/27/89 are more typical of what experience has shown us to be normal.

Enclosed for your interest is our computer graph of the elevated readings recorded the evening of 7/10/89 during a brief torrential rain shower. Several of our monitors recorded over double background readings for a period of 2 hours. Wind reported as southeast.

I am aware that the above elevated readings are modest, but we do record similar readings, at various times of day, for shorter periods almost daily. Modern medical opinion deems any increase in background as possibly injurious to health.

Please advise.

Respectfully submitted,



David L. Quaid, Citizen's Radiological Monitoring Network.

cc: Mass. Depts. Public Health, Public Safety, Civil Defense.
Carl O'Neill, Town of Duxbury CD.
Charles Marshall.
ROBERT BORES, CHIEF EFFLUENTS, REG I, NRC.

+ INDICATES PANCAKE

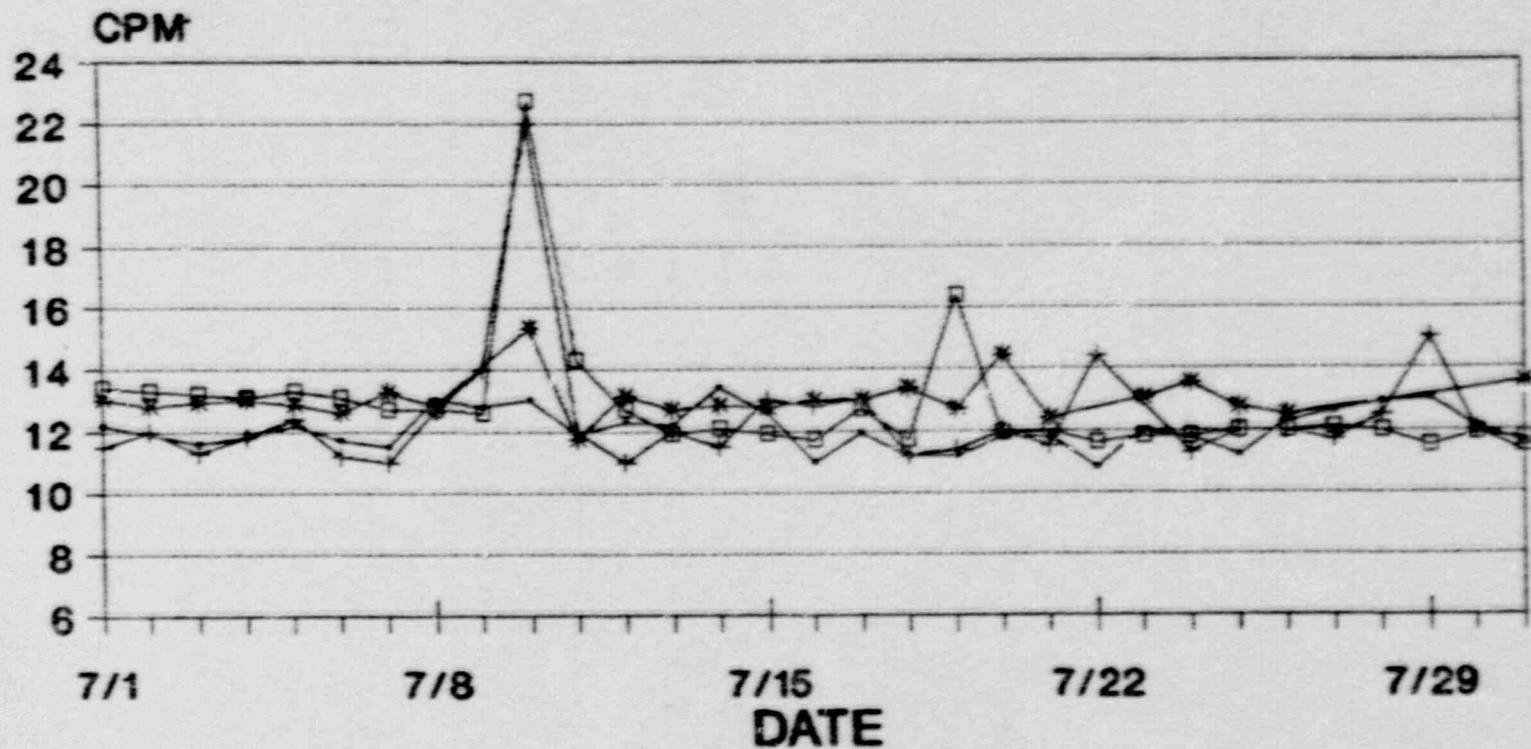
21 SUMMER STREET
DUXBURY, MA 02332

CITIZEN'S MONITORING NETWORK - PILGRIM STATION, PLYMOUTH, MA

Name: DAVID L. QUAD #366/40

te:	Time of Day	Minutes	Total Counts	Counts per Min.	Weather	Alert: From:	To:
24/88	8:34AM	60	776 / 2017	12.93 / 33.62+			
	9:40AM	60	723 / 2096	12.05 / 34.93+	Clear,		
10/2	10:41AM / 12:23PM	102	1276 / 3478	12.51 / 34.10+			
	12:27PM / 2:47PM	140	1643 / 3965	11.73 / 28.32+			
	2:48PM / 5:52PM	184	2098 / 5140	11.40 / 27.93+			
	6:53PM	64	732 / 1808	11.44 / 28.25+			
	6:59 / 9:48PM	169	1961 / 4960	11.60 / 29.35+			
	10:20PM / 11:32PM	92	1006 / 2633	10.93 / 28.62+			
	11:33PM / 3:58AM	265	3456 / 9280	11.91 / 35.02+			
25/88	3:59AM / 7:05AM	185	2193 / 6576	11.85 / 35.22+	7:53AM, CALM, 74% CL, 7mi UNK, 41° 30.40'		
	1:45 AM / 7:31 AM	162	- / 4519	- / 28.30+	9:36PM, 55° 8.40'S, SE 2mpm, 7mi UNK, 29.74° Cloudy.		
	9:47PM / 2:49AM	182	1975 / 5008	10.75 / 27.52+			
	12:50PM / 7:15AM	385	4181 / 10618	10.86 / 27.58+			
26/88	7:29AM	60	879 / 2481	14.65 / 40.67+	7:29AM, 17 Rain, 50%, 59° 93', 57' SE 2mpm,		
	8:33AM	30	430 / 1250	14.33 / 41.67+	3mi / 7mi, 29.98"		
	9:17AM	30	440 / 1318	13.67 / 43.93+	SE 7mi p.m. 3mi 2mi, 29.90"		
	10:28AM	30	412 / 1226	13.73 / 40.87+	CFEATN, MOG.		
	11:20AM / 3:48PM	288	3920 / 12194	13.61 / 42.340+	3:57PM, OVER, 61°, 81.85°, 14.67, 7mi, 29.71"		
	4:02 PM / 6:20PM	138	1661 / 4149	12.04 / 30.06+			
	6:54 PM						
27/88	11:55PM / 5:33AM	338	4086 / 11111	12.09 / 32.87+			
	5:39AM / 6:04AM	30	343 / 1012	11.43 / 33.73+			
	6:13AM / 7:23AM	70	822 / 2105	11.74 / 30.07+			
	7:29AM	64	722 / 1888	11.28 / 29.50+	7:26AM, 40° 57% CL, 52.30', 7mi UNK, 1010MP, 30.17		
	8:29AM	60	692 / 1777	11.53 / 29.62+			
	9:30AM / 1:21PM	231 231	2623 / 6646	11.35 / 28.77+			
	1:22PM	61	712 / 1765	11.67 / 28.93+			
	2:24PM / 5:56PM	212	2394 / 6250	11.06 / 29.48+			
	6:57PM / 9:57PM	231	2649 / 6801	11.47 / 29.44+	6:02pm, Clear, 54°, 14.610MP, 7mi UNK, 44.70, 33° 30.32°		

CITIZENS RADIOLOGICAL MONITORING NETWORK PILGRIM 1 - JULY 1989

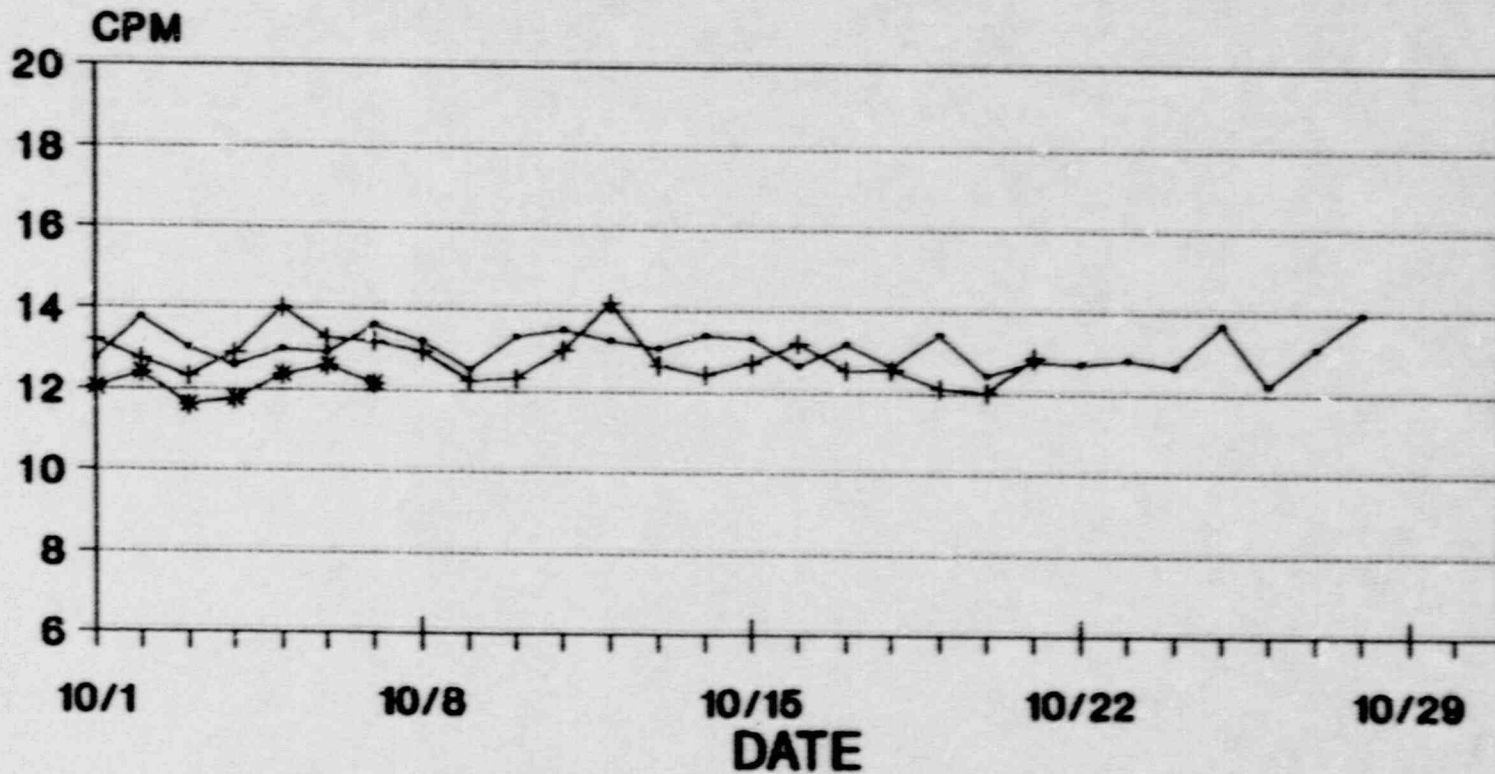


MONITORING STATIONS

—●— #9 —+— #10 —*— #11 —□— #12

8-16-89 SHT 2

CITIZENS RADIOLOGICAL MONITORING NETWORK PILGRIM 1 - OCTOBER 1989

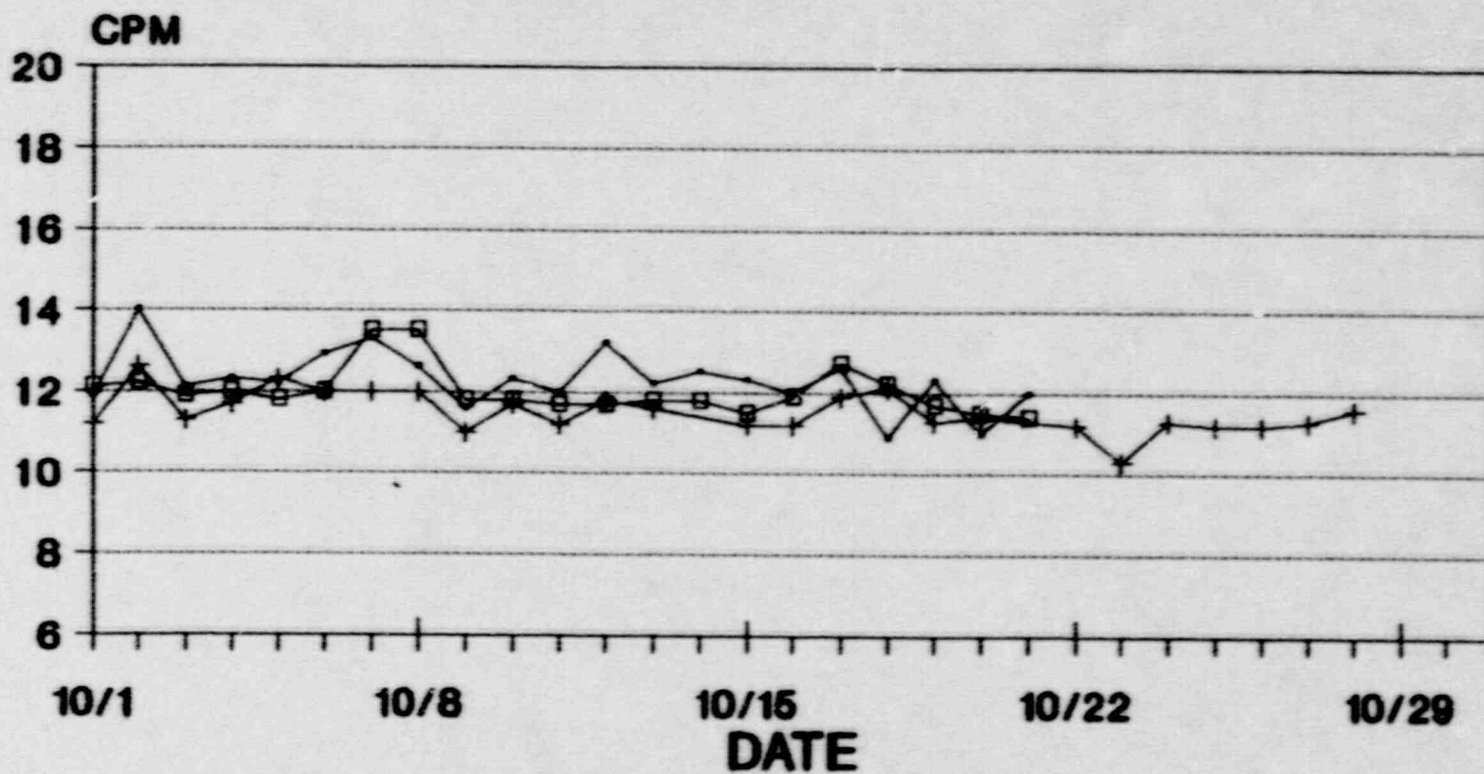


MONITORING STATIONS

—◆— #2 —+— #4 —*— #5

11-4-89 SHT 1

CITIZENS RADIOLOGICAL MONITORING NETWORK PILGRIM 1 - OCTOBER 1989

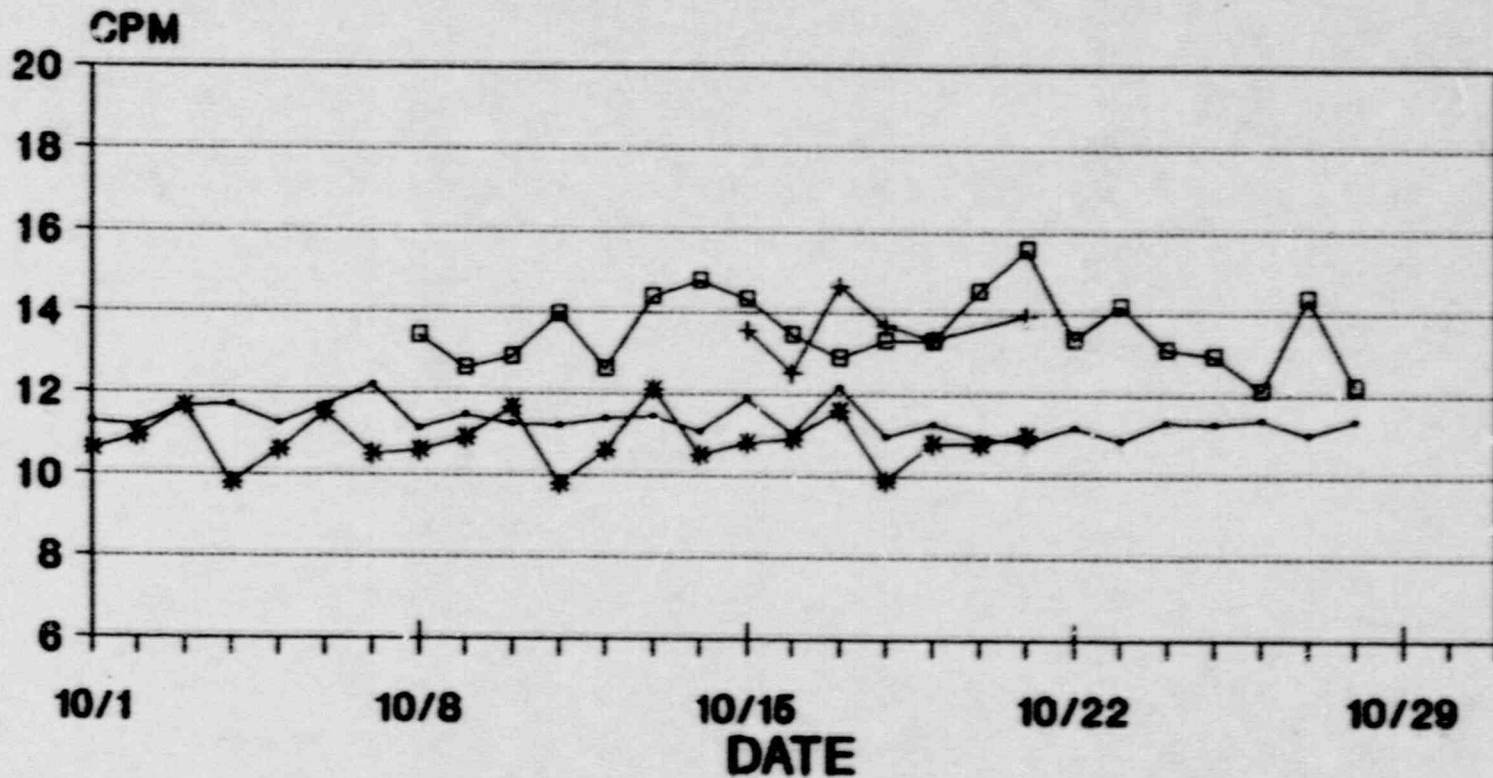


MONITORING STATIONS

—▲— #9 —+— #10 —□— #12

11-4-89 SHT 2

CITIZENS RADIOLOGICAL MONITORING NETWORK PILGRIM 1 - OCTOBER 1989

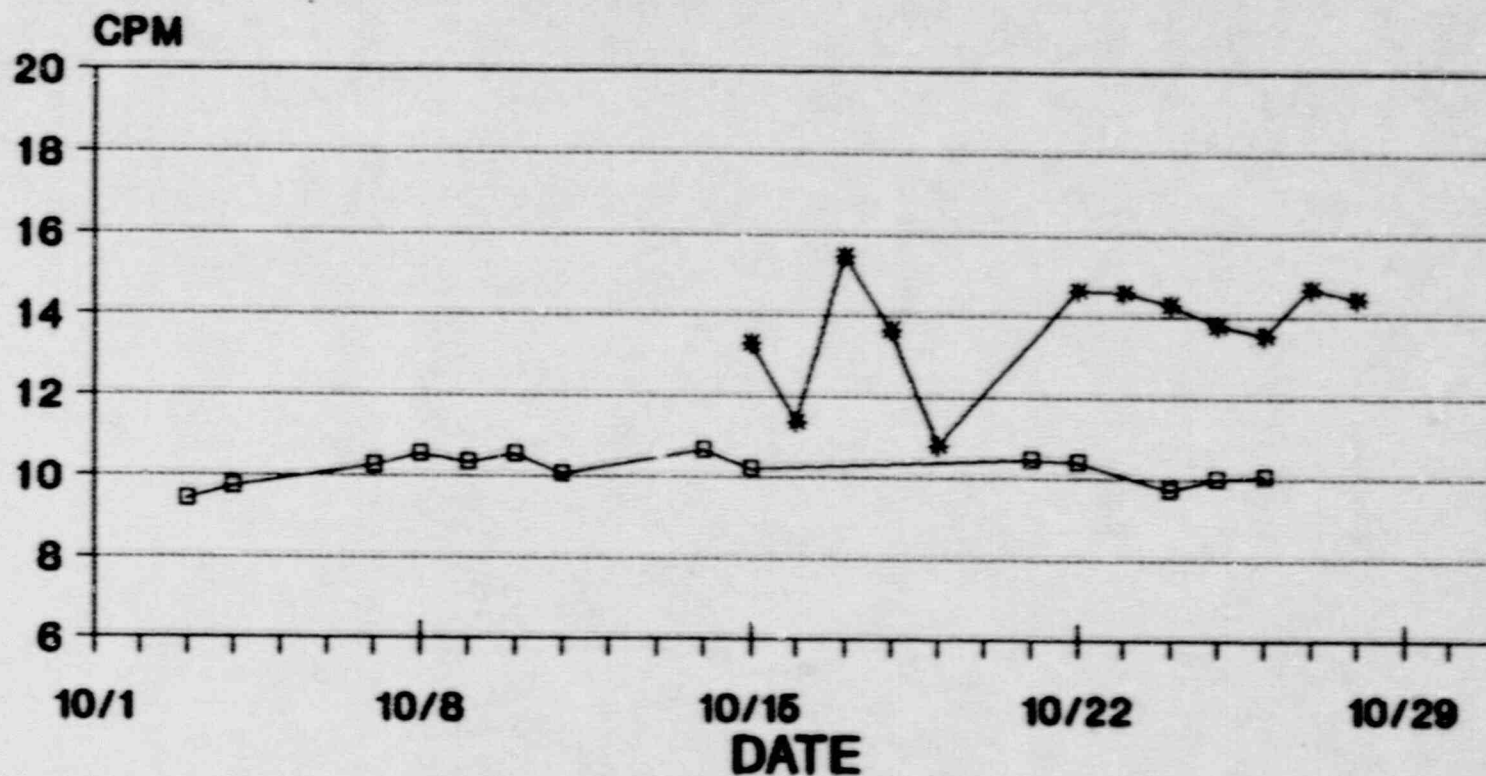


MONITORING STATIONS

—●— #13 —+— #14 —*— #15 —□— #16

11-4-89 SHT 3

CITIZENS RADIOLOGICAL MONITORING NETWORK PILGRIM 1 - OCTOBER 1989

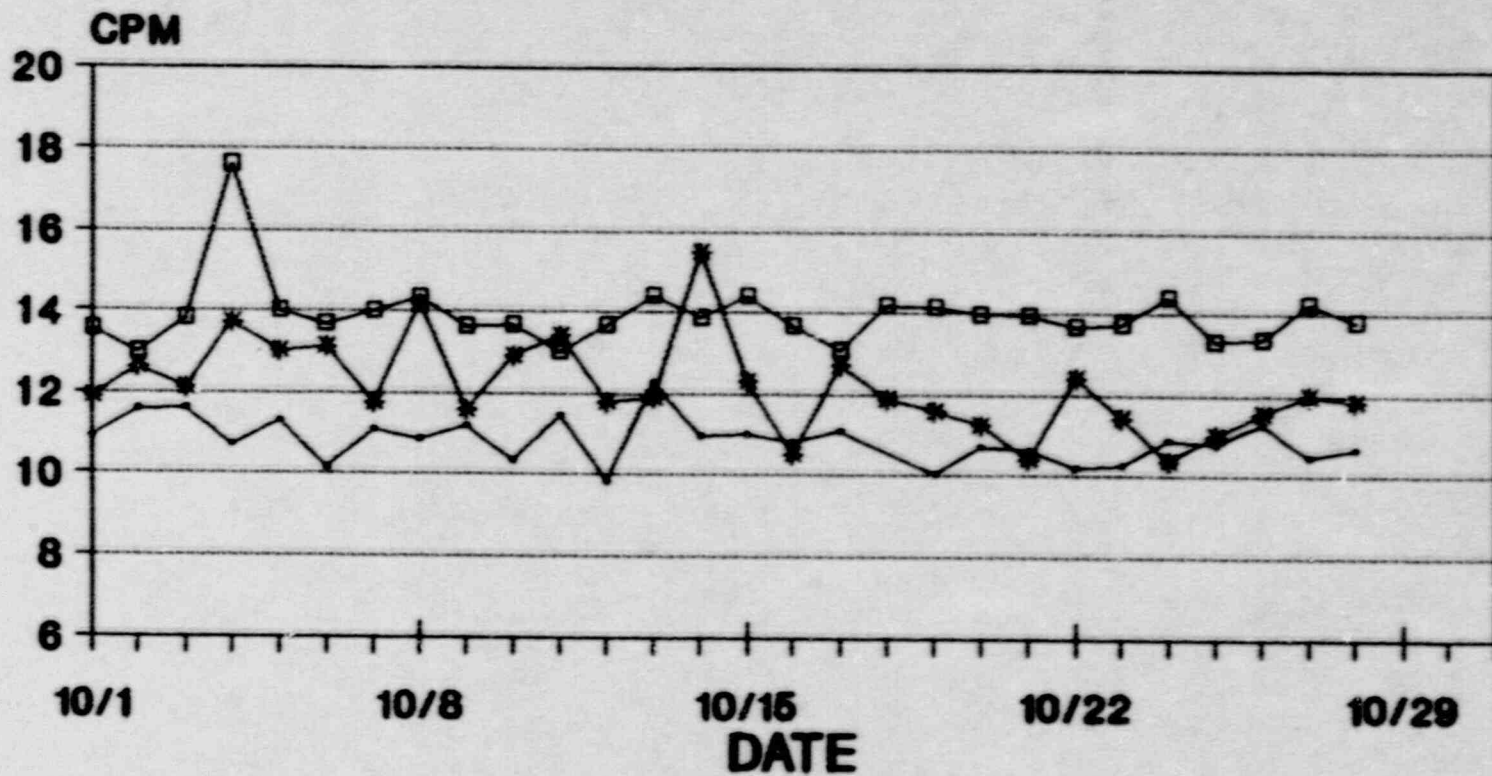


MONITORING STATIONS

* #19 □ #20

11-4-89 SHT 4

CITIZENS RADIOLOGICAL MONITORING NETWORK PILGRIM 1 - OCTOBER 1989

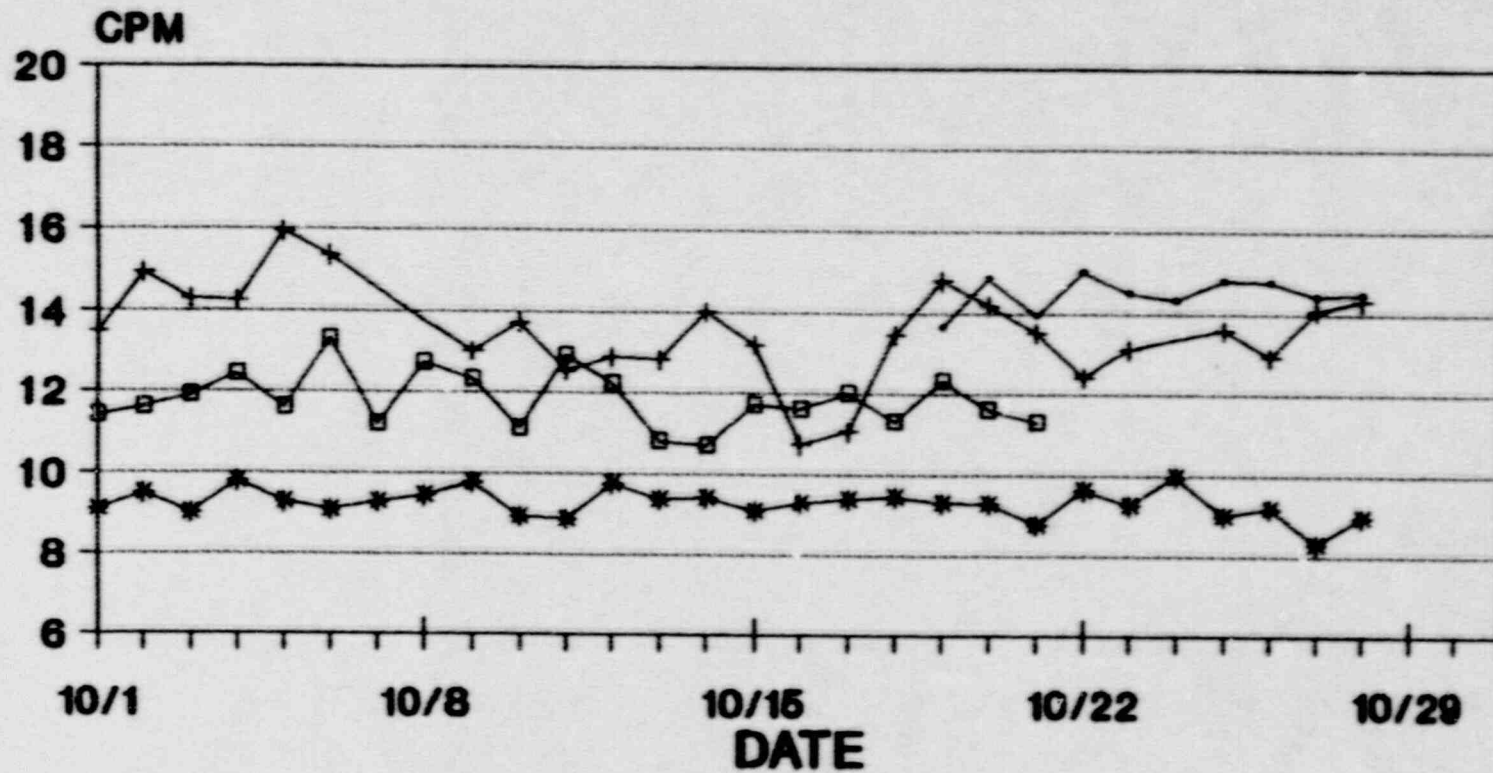


MONITORING STATIONS

— #21 * #23 □ #24

11-4-89 SHT 5

CITIZENS RADIOLOGICAL MONITORING NETWORK PILGRIM 1 - OCTOBER 1989

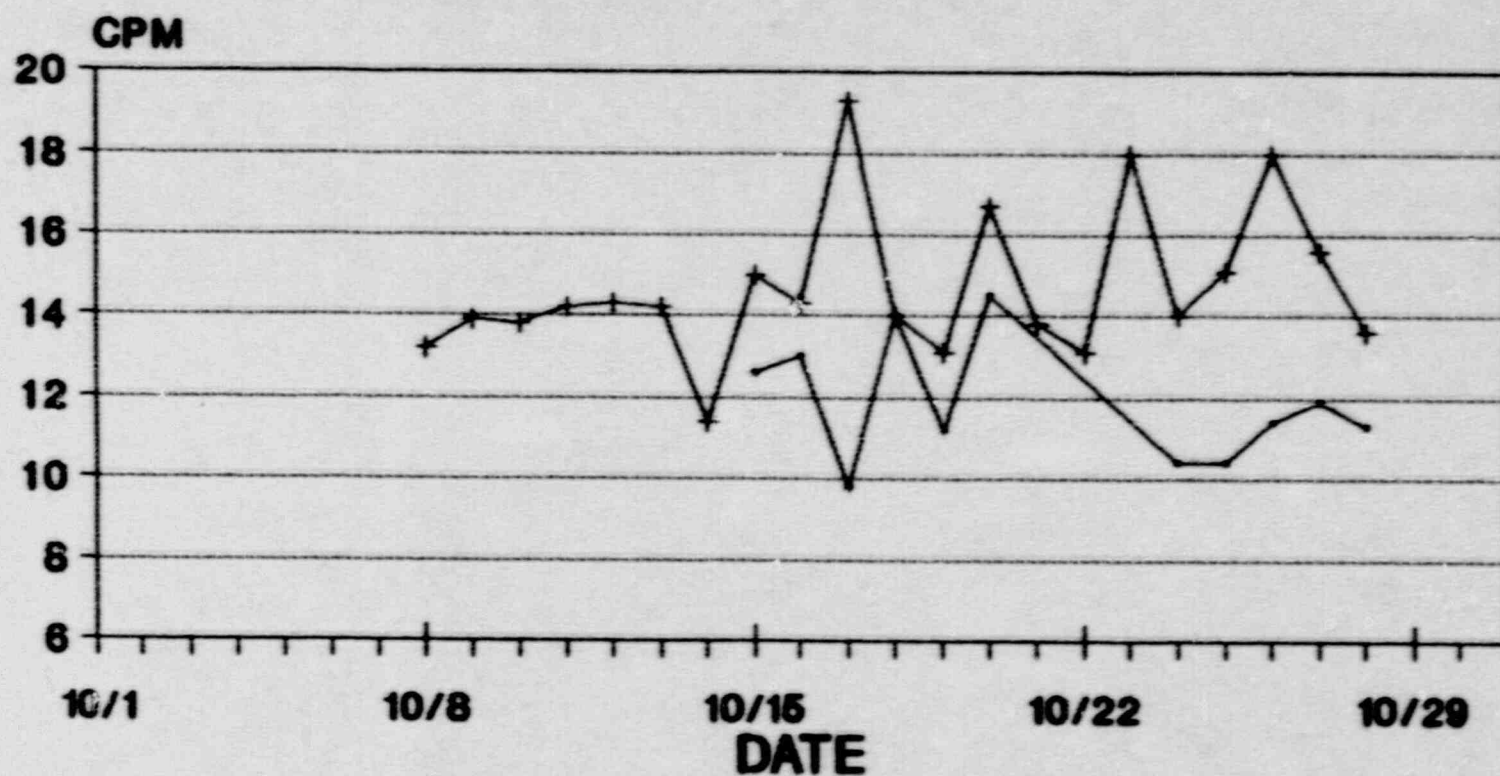


MONITORING STATIONS

—*— #25 —+— #26 —*— #27 —□— #28

11-4-89 SHT 6

CITIZENS RADIOLOGICAL MONITORING NETWORK PILGRIM 1 - OCTOBER 1989

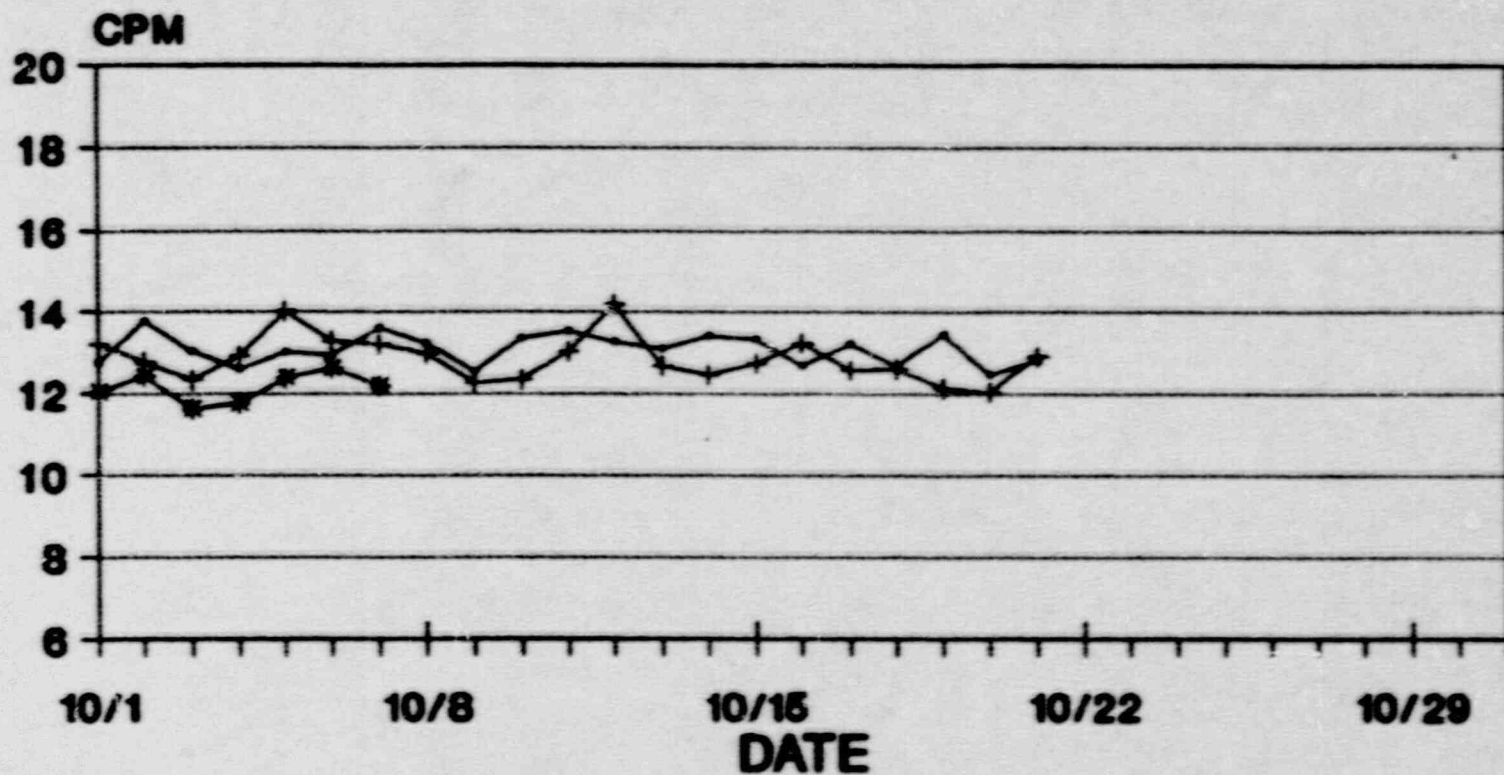


MONITORING STATIONS

—+— #29 —+— #31

11-4-89 SHT 7

CITIZENS RADIOLOGICAL MONITORING NETWORK PILGRIM 1 - OCTOBER 1989

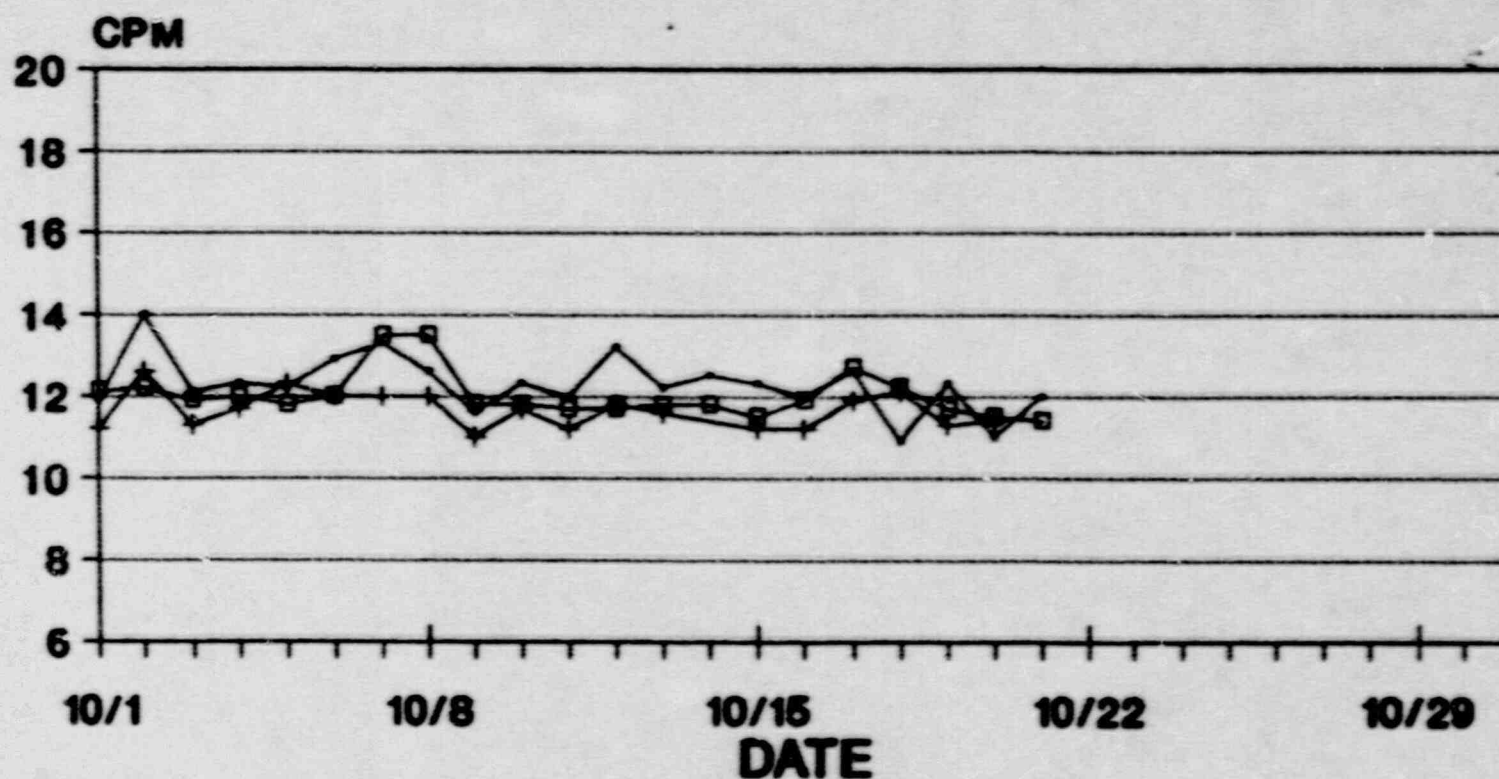


MONITORING STATIONS

— #2 + #4 * #5

10-28-89 SHT 1

CITIZENS RADIOLOGICAL MONITORING NETWORK PILGRIM 1 - OCTOBER 1989

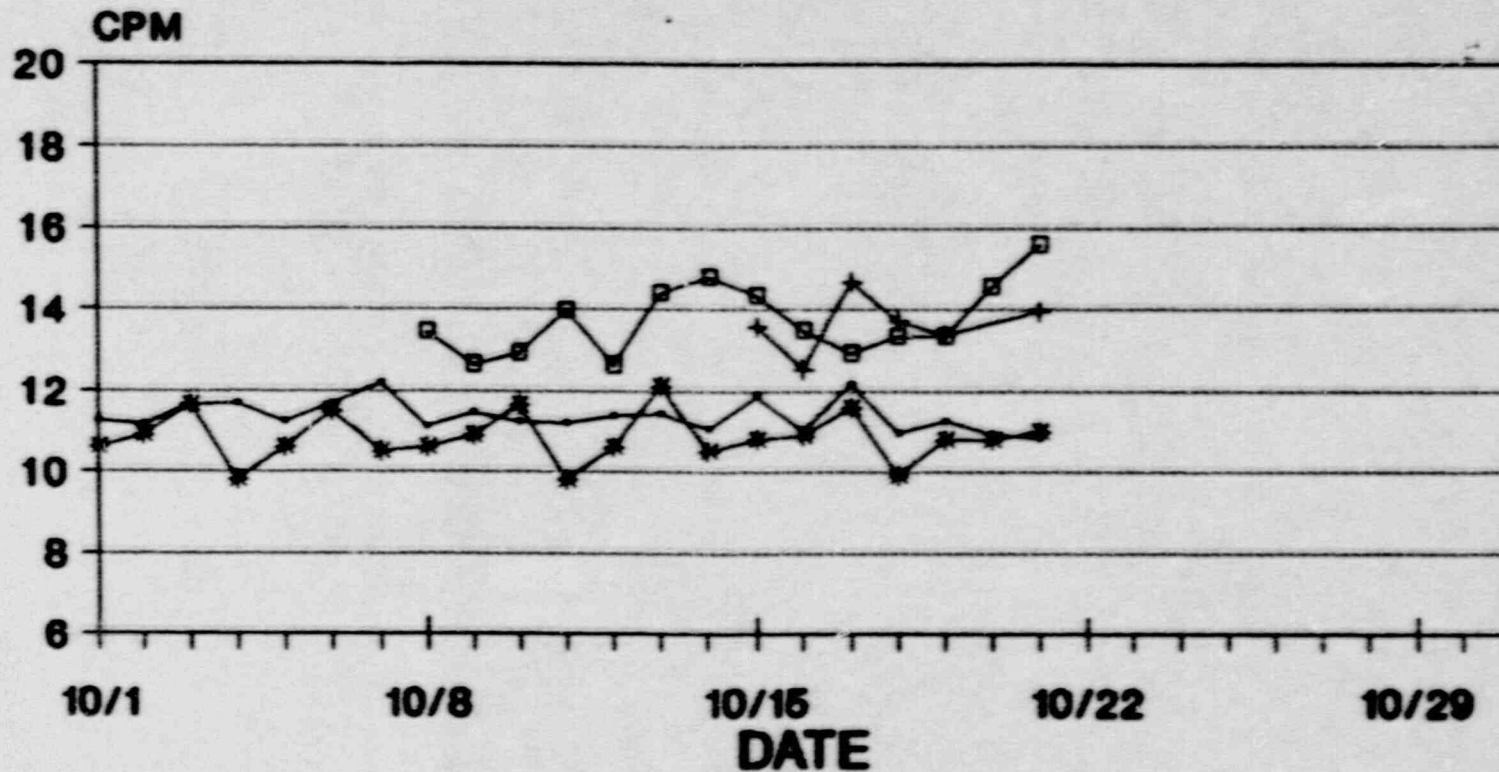


MONITORING STATIONS

—▲— #9 —+— #10 —□— #12

10-28-89 SHT 2

CITIZENS RADIOLOGICAL MONITORING NETWORK PILGRIM 1 - OCTOBER 1989

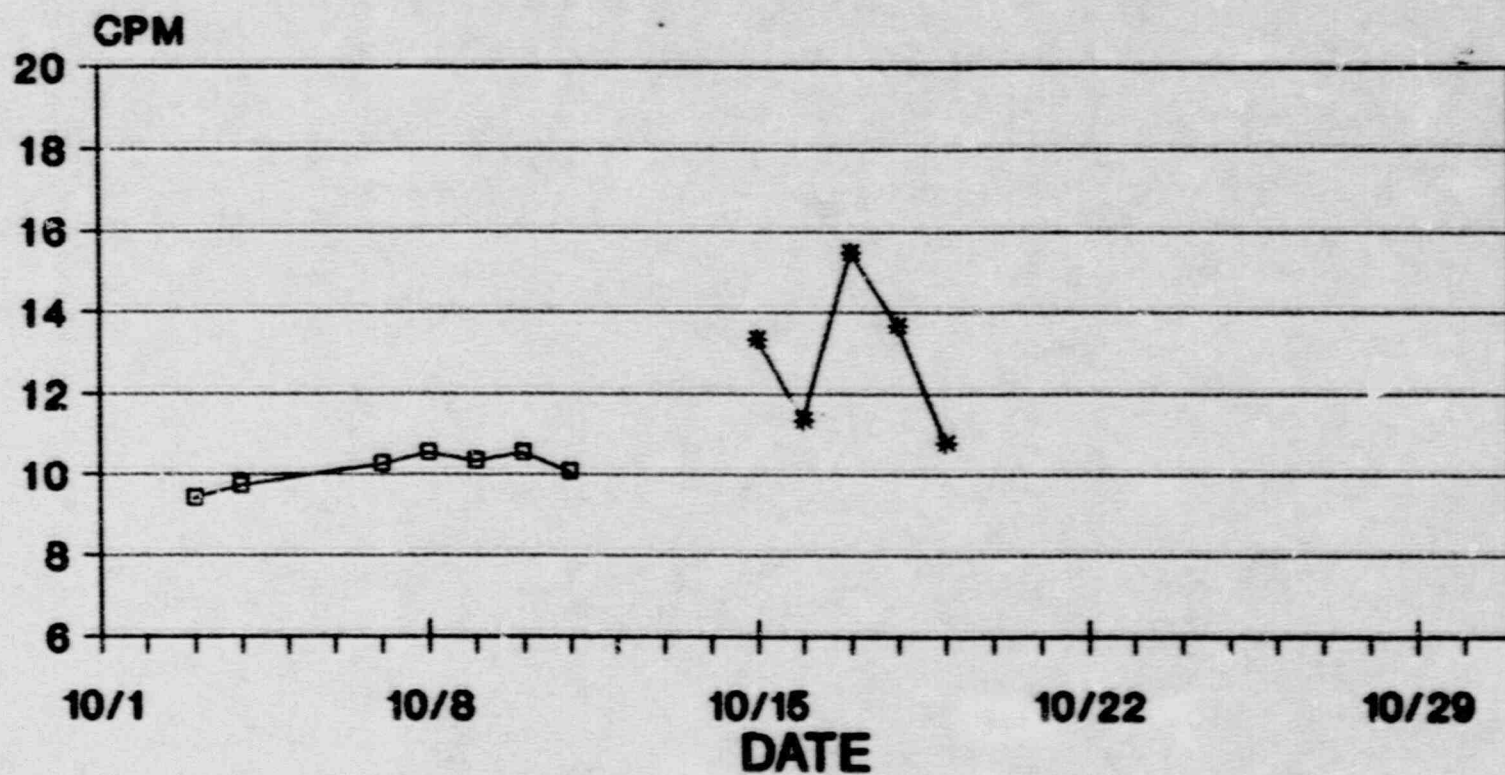


MONITORING STATIONS

—●— #13 —+— #14 —*— #15 —□— #16

10-28-89 SHT 3

CITIZENS RADIOLOGICAL MONITORING NETWORK PILGRIM 1 - OCTOBER 1989

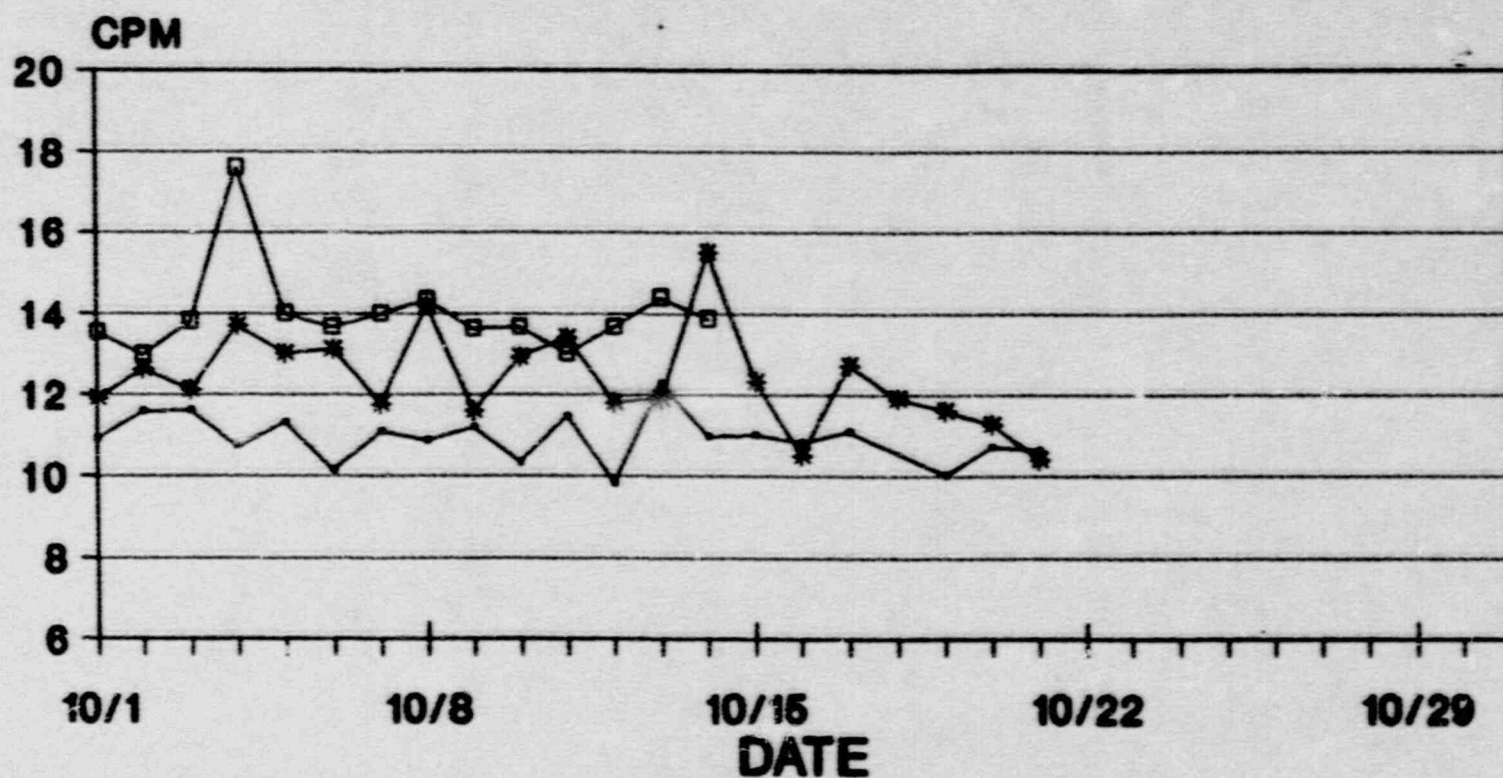


MONITORING STATIONS

* #19 □ #20

10-28-89 8HT 4

CITIZENS RADIOLOGICAL MONITORING NETWORK PILGRIM 1 - OCTOBER 1989

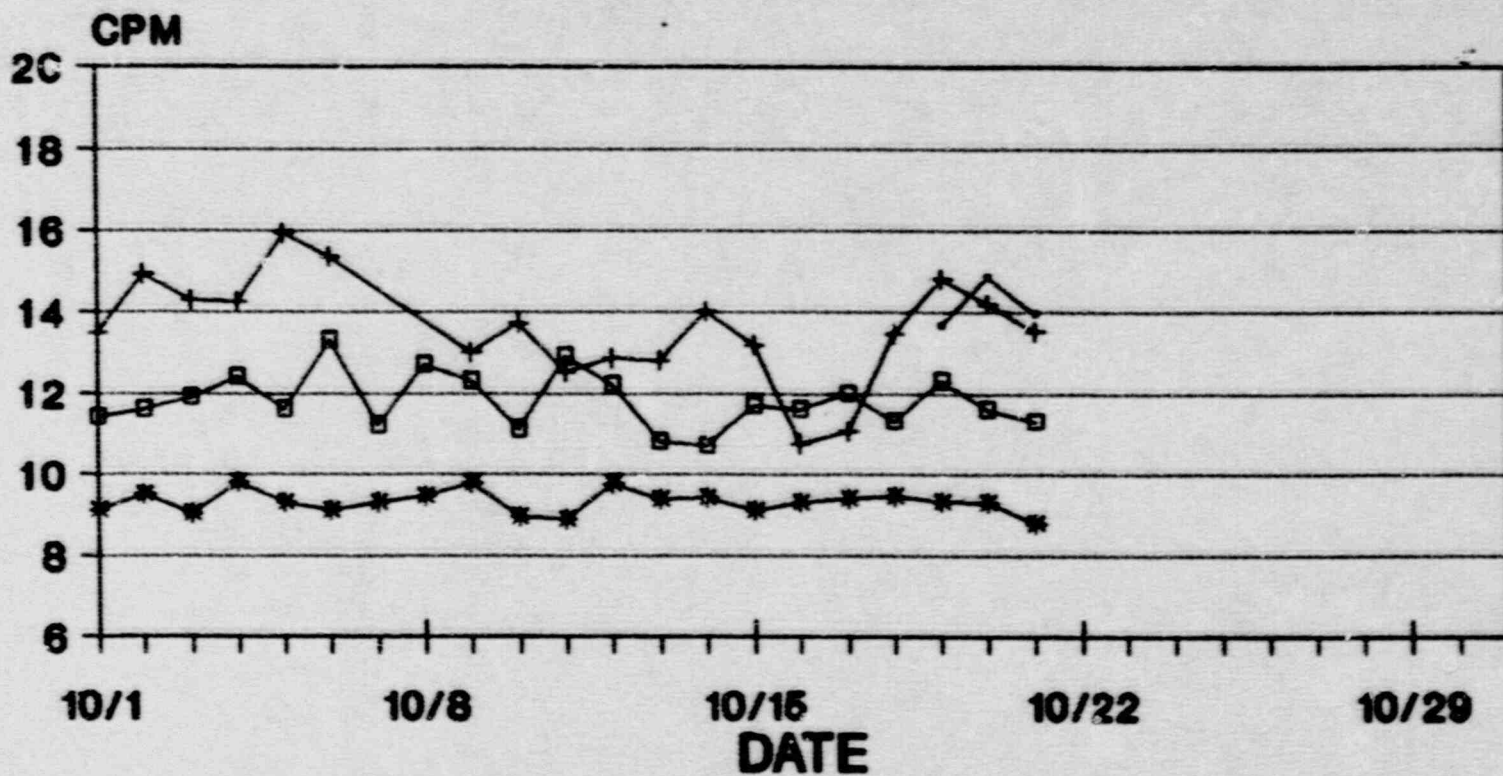


MONITORING STATIONS

—●— #21 —*— #23 —□— #24

10-28-89 SHT 5

CITIZENS RADIOLOGICAL MONITORING NETWORK PILGRIM 1 - OCTOBER 1989

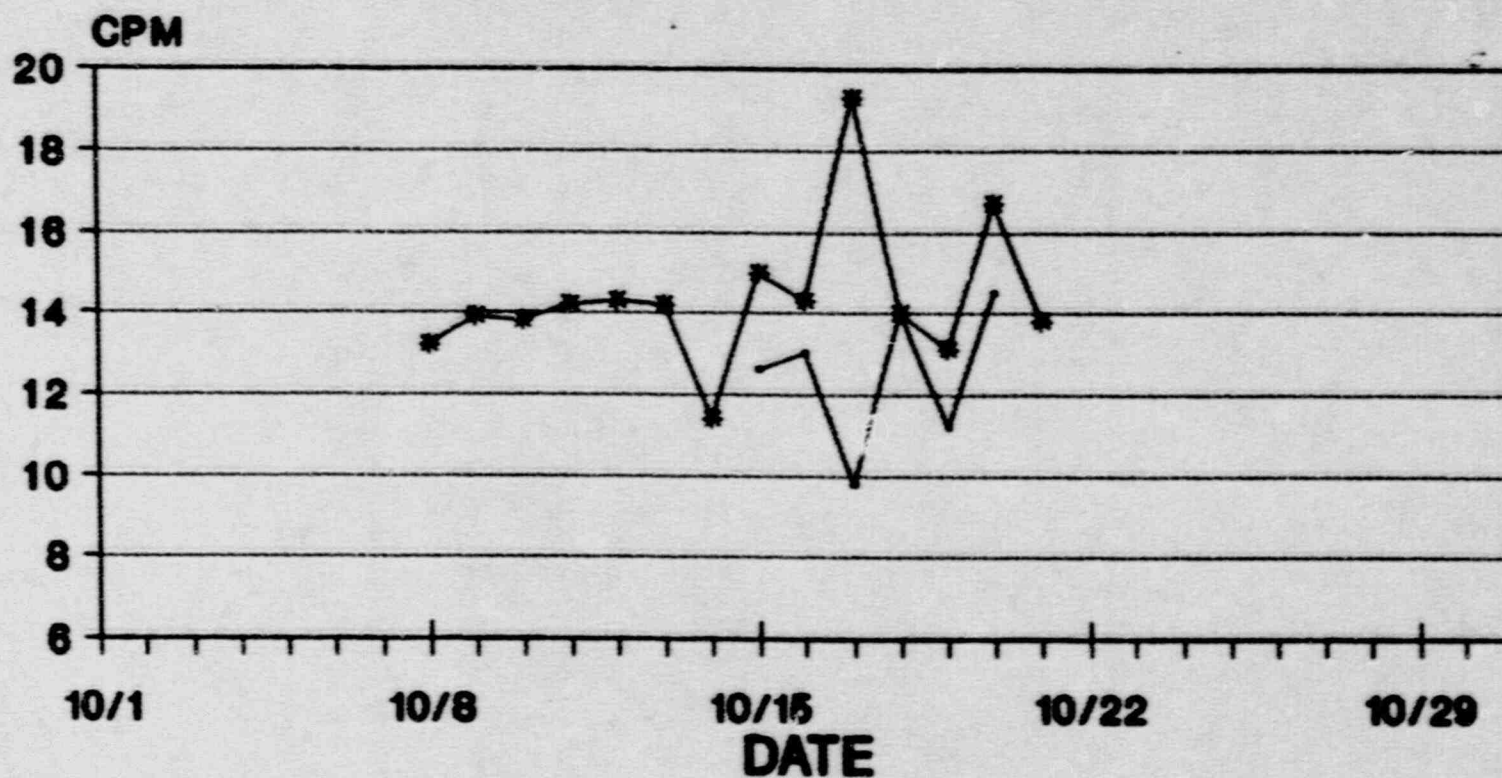


MONITORING STATIONS

—○— #25 —+— #26 —*— #27 —□— #28

10-28-89 SHT 6

CITIZENS RADIOLOGICAL MONITORING NETWORK PILGRIM 1 - OCTOBER 1989

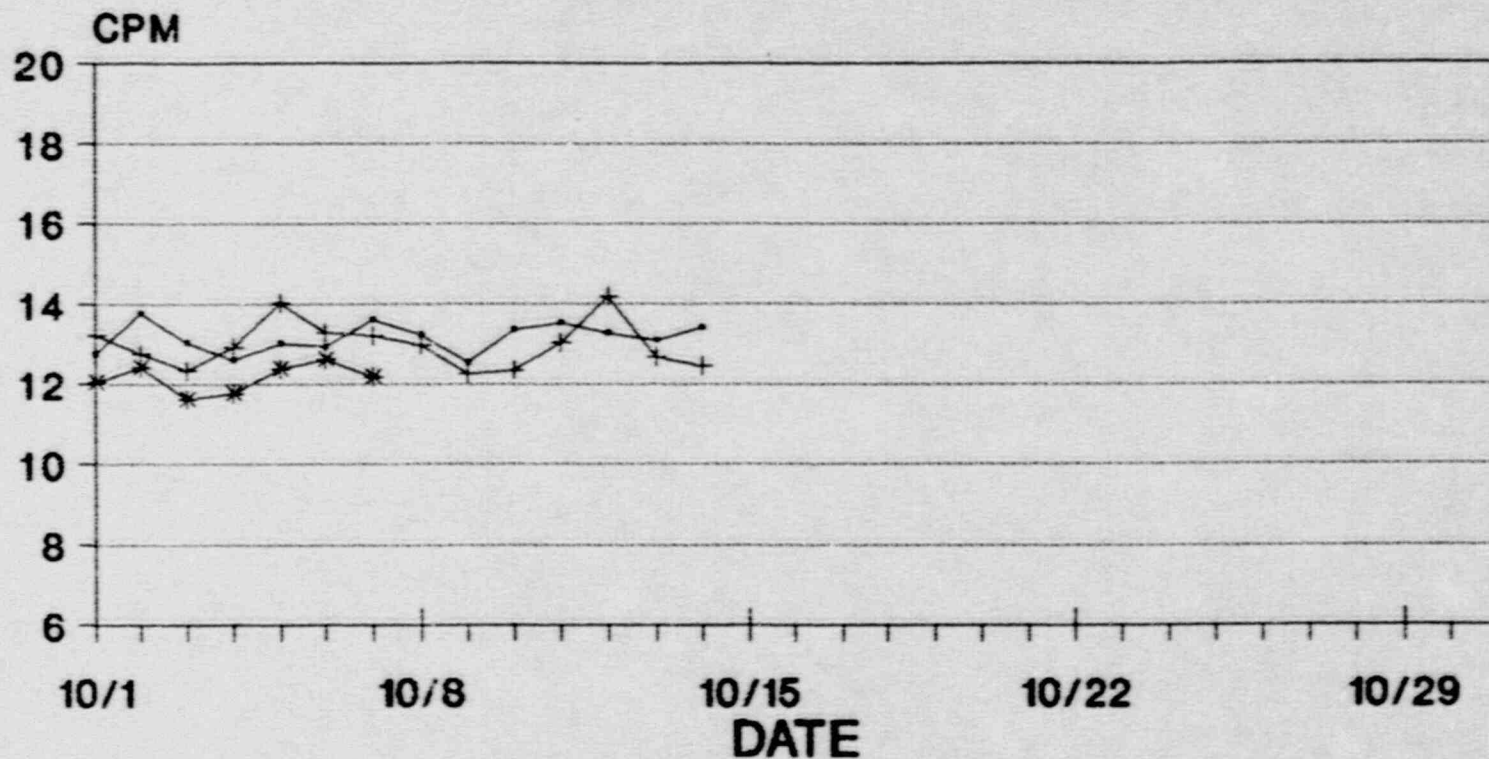


MONITORING STATIONS

—▲— #29 —*— #31

10-28-89 8HT 7

CITIZENS RADIOLOGICAL MONITORING NETWORK PILGRIM 1 - OCTOBER 1989

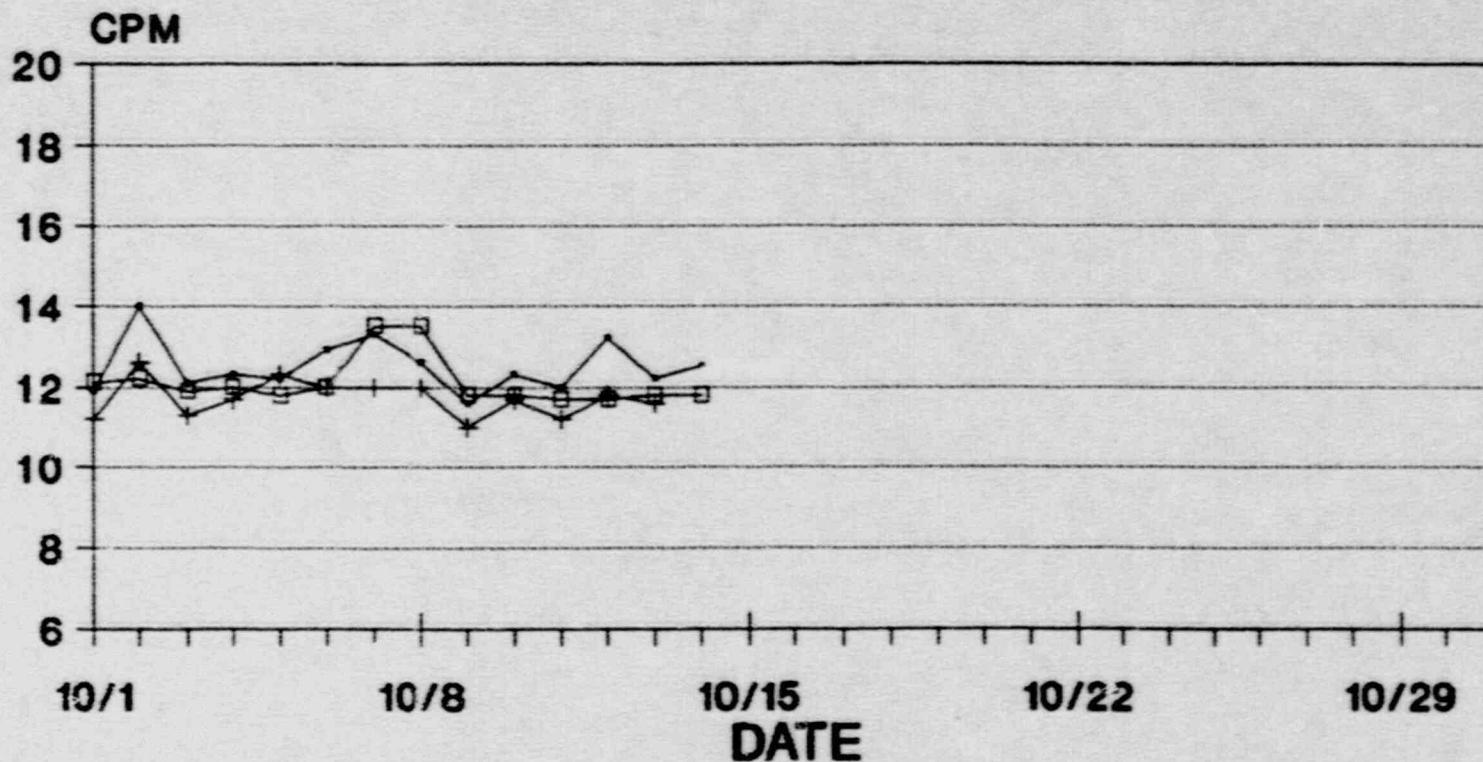


MONITORING STATIONS

—•— #2 —+— #4 —*— #5

10-22-89 SHT 1

CITIZENS RADIOLOGICAL MONITORING NETWORK PILGRIM 1 - OCTOBER 1989

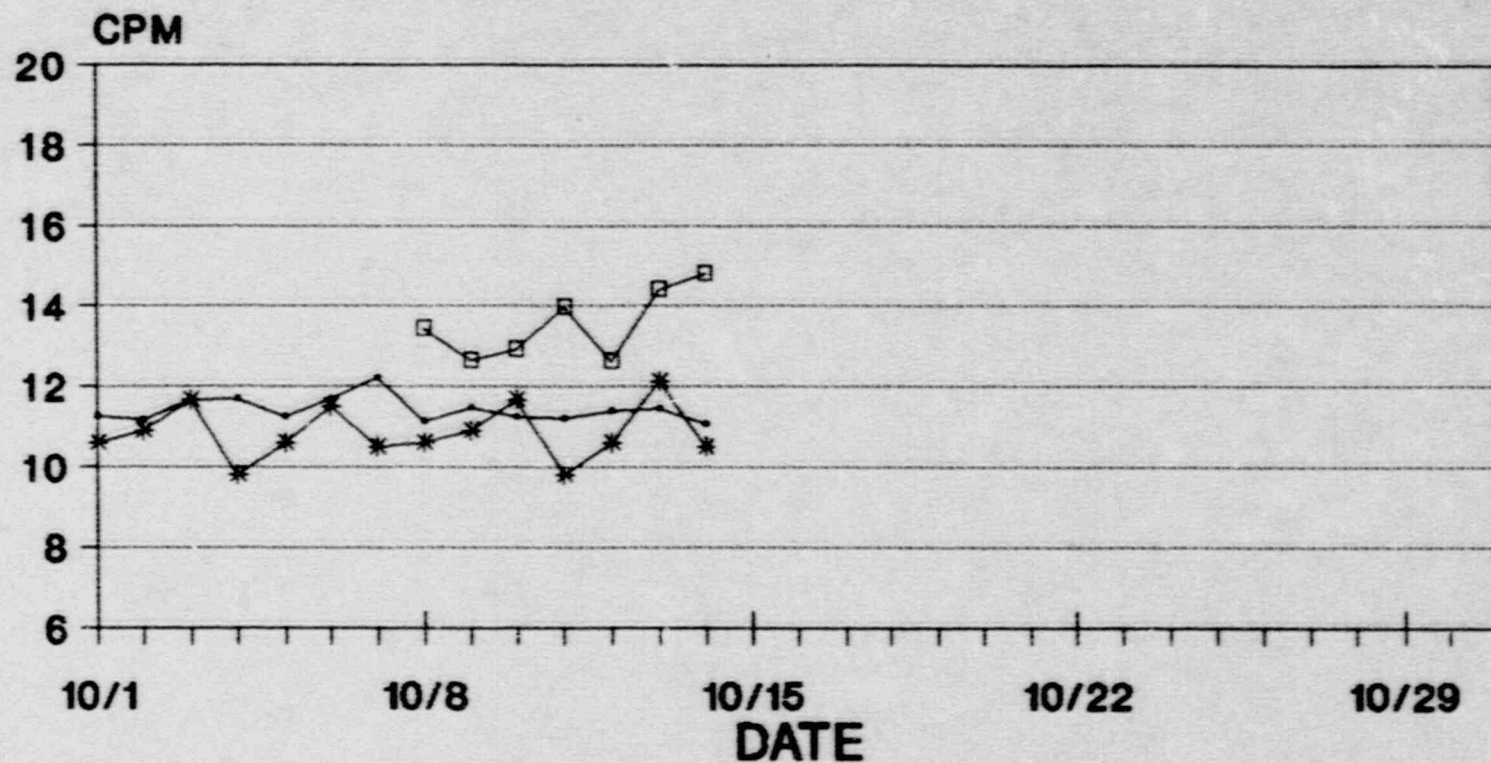


MONITORING STATIONS

—▲— #9 —+— #10 —□— #12

10-22-89 SHT 2

CITIZENS RADIOLOGICAL MONITORING NETWORK PILGRIM 1 - OCTOBER 1989

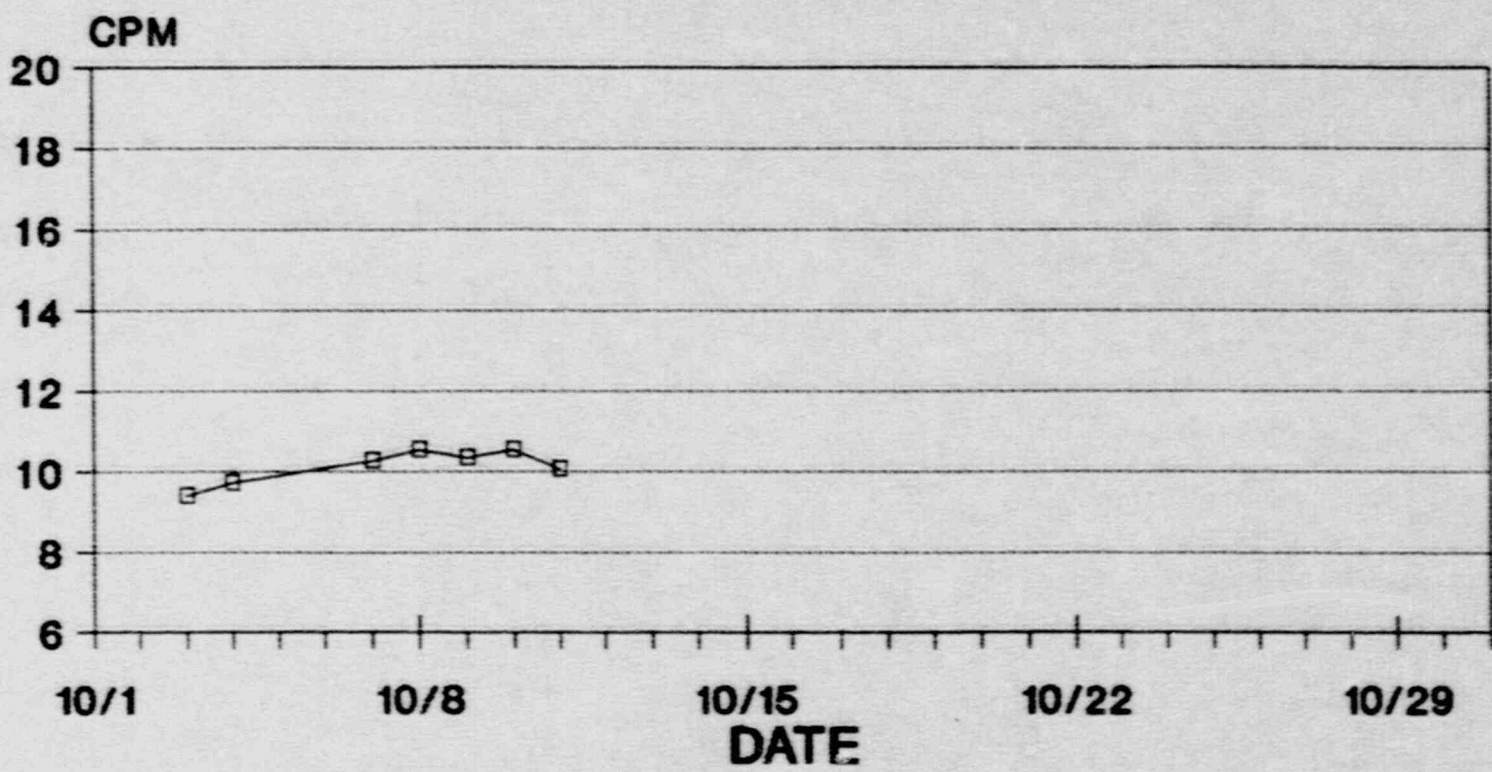


MONITORING STATIONS

—●— #13 —*— #15 —□— #16

10-22-89 SHT 3

CITIZENS RADIOLOGICAL MONITORING NETWORK PILGRIM 1 - OCTOBER 1989

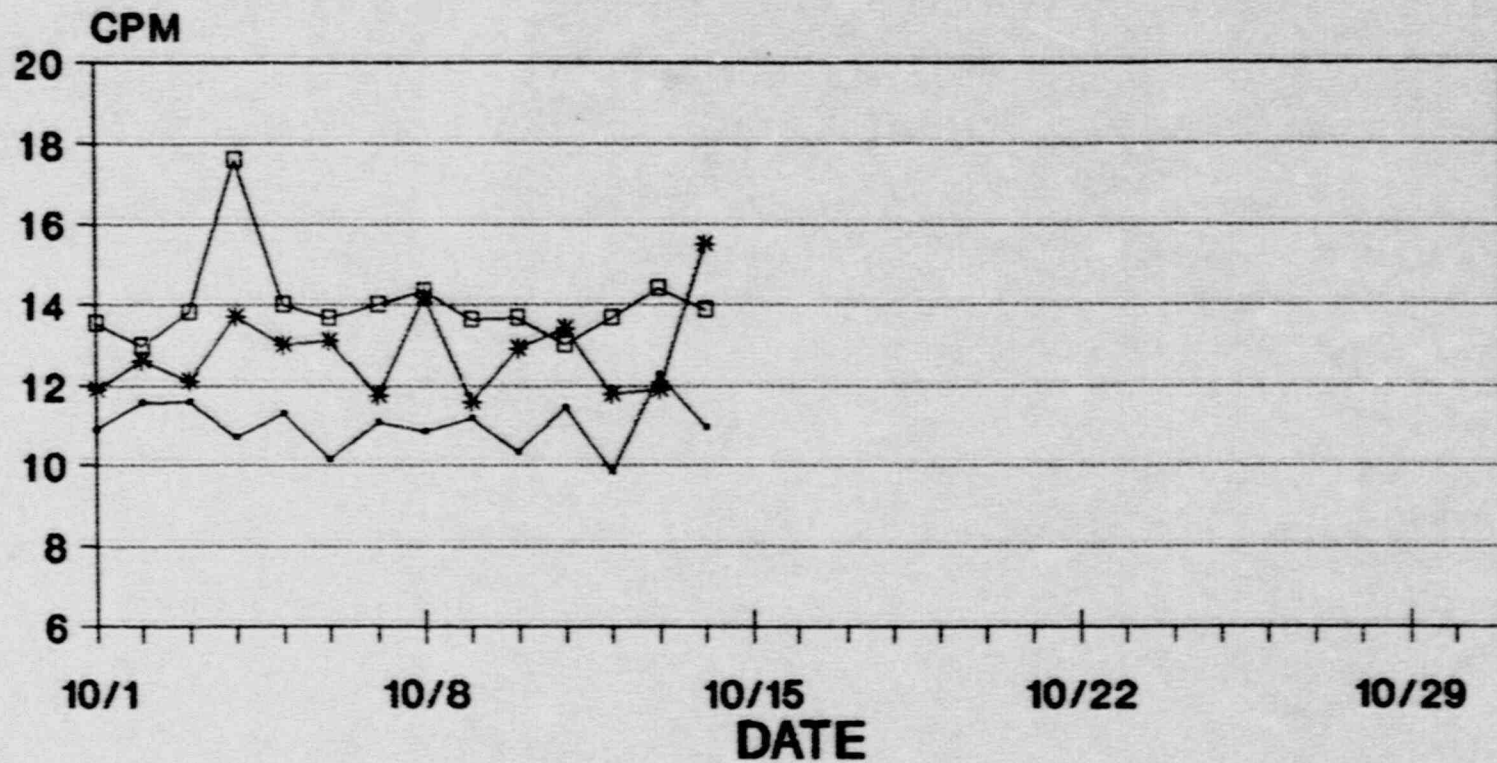


MONITORING STATIONS

—□— #20

10-22-89 SHT 4

CITIZENS RADIOLOGICAL MONITORING NETWORK PILGRIM 1 - OCTOBER 1989

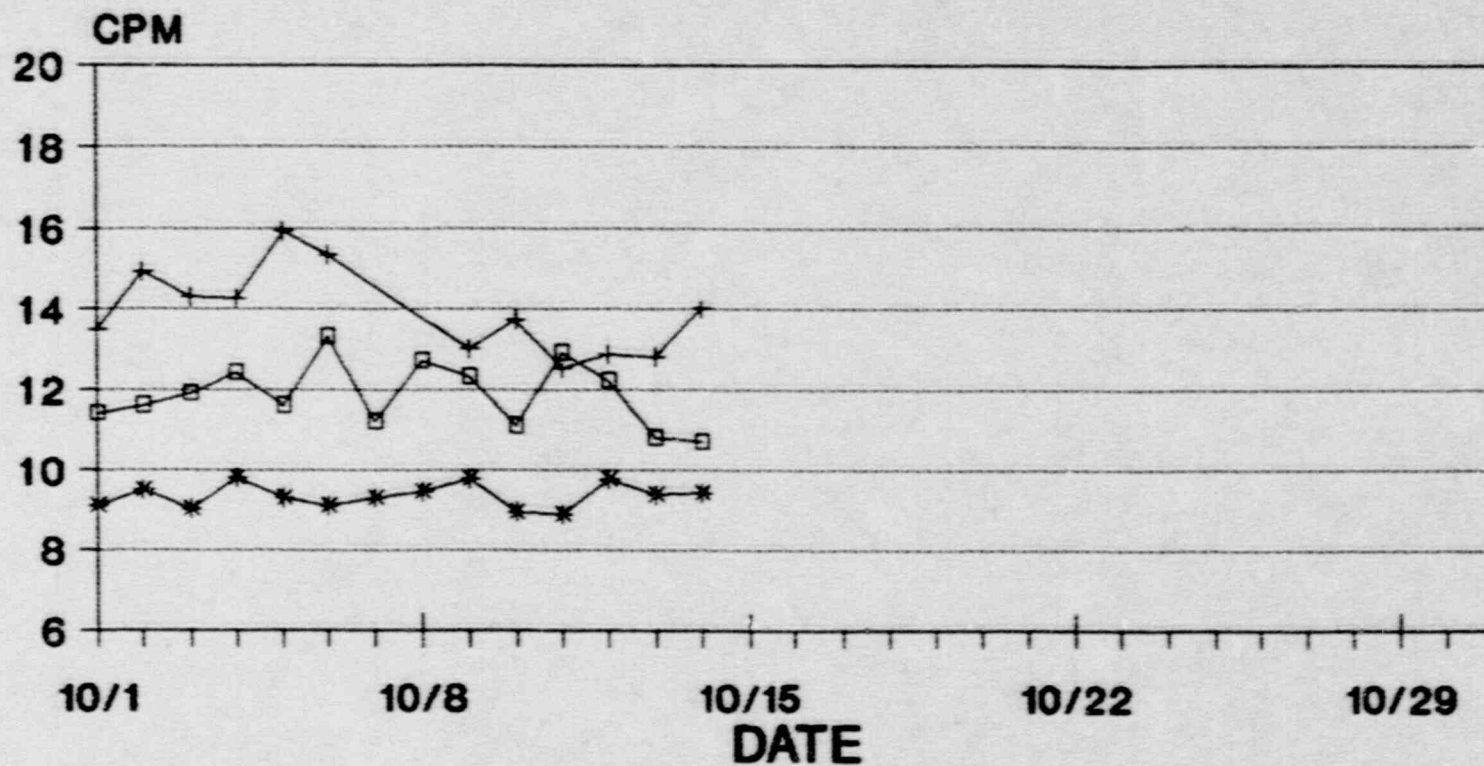


MONITORING STATIONS

—●— #21 —*— #23 —□— #24

10-22-89 SHT 5

CITIZENS RADIOLOGICAL MONITORING NETWORK PILGRIM 1 - OCTOBER 1989

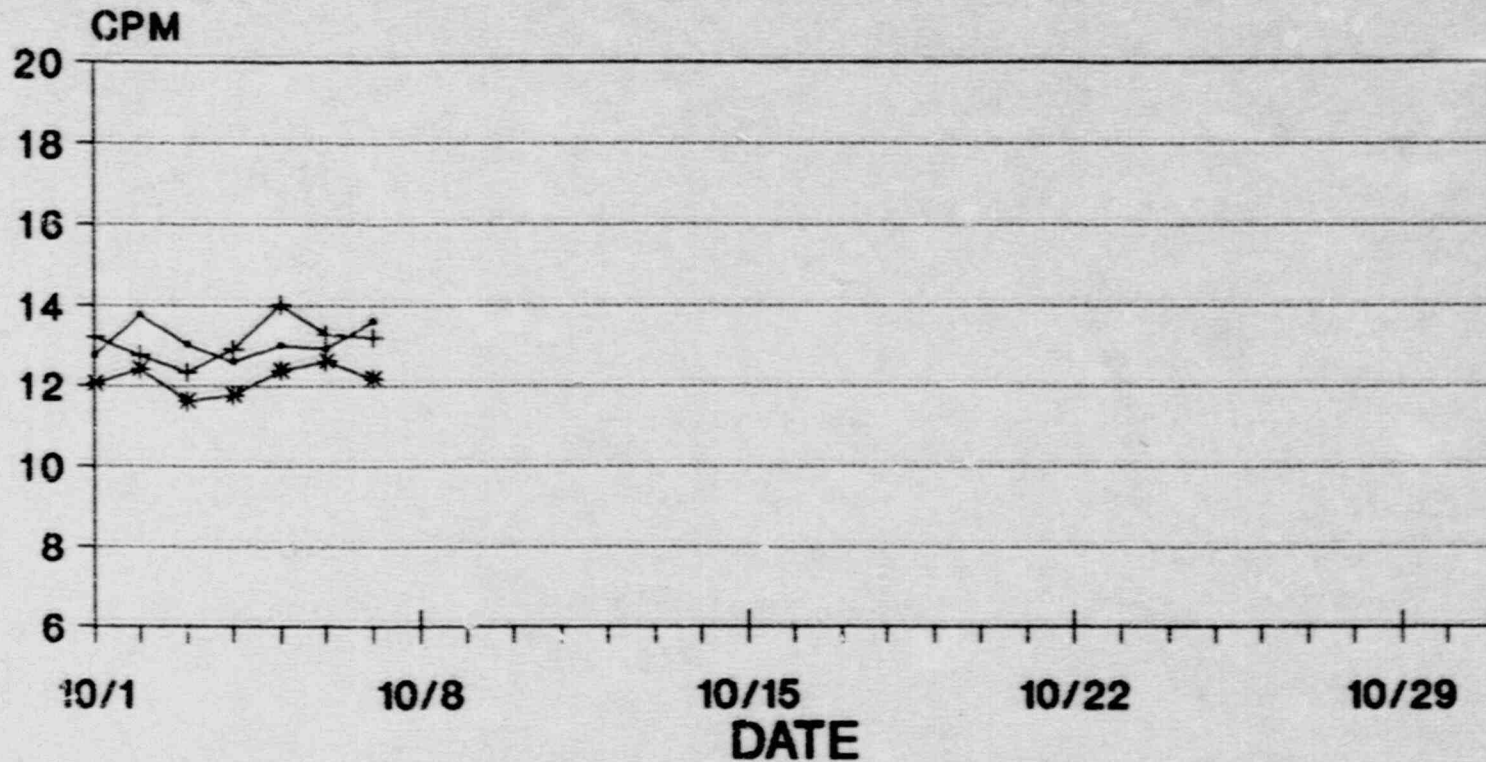


MONITORING STATIONS

—+— #26 —*— #27 —□— #28

10-22-89 SHT 6

CITIZENS RADIOLOGICAL MONITORING NETWORK PILGRIM 1 - OCTOBER 1989

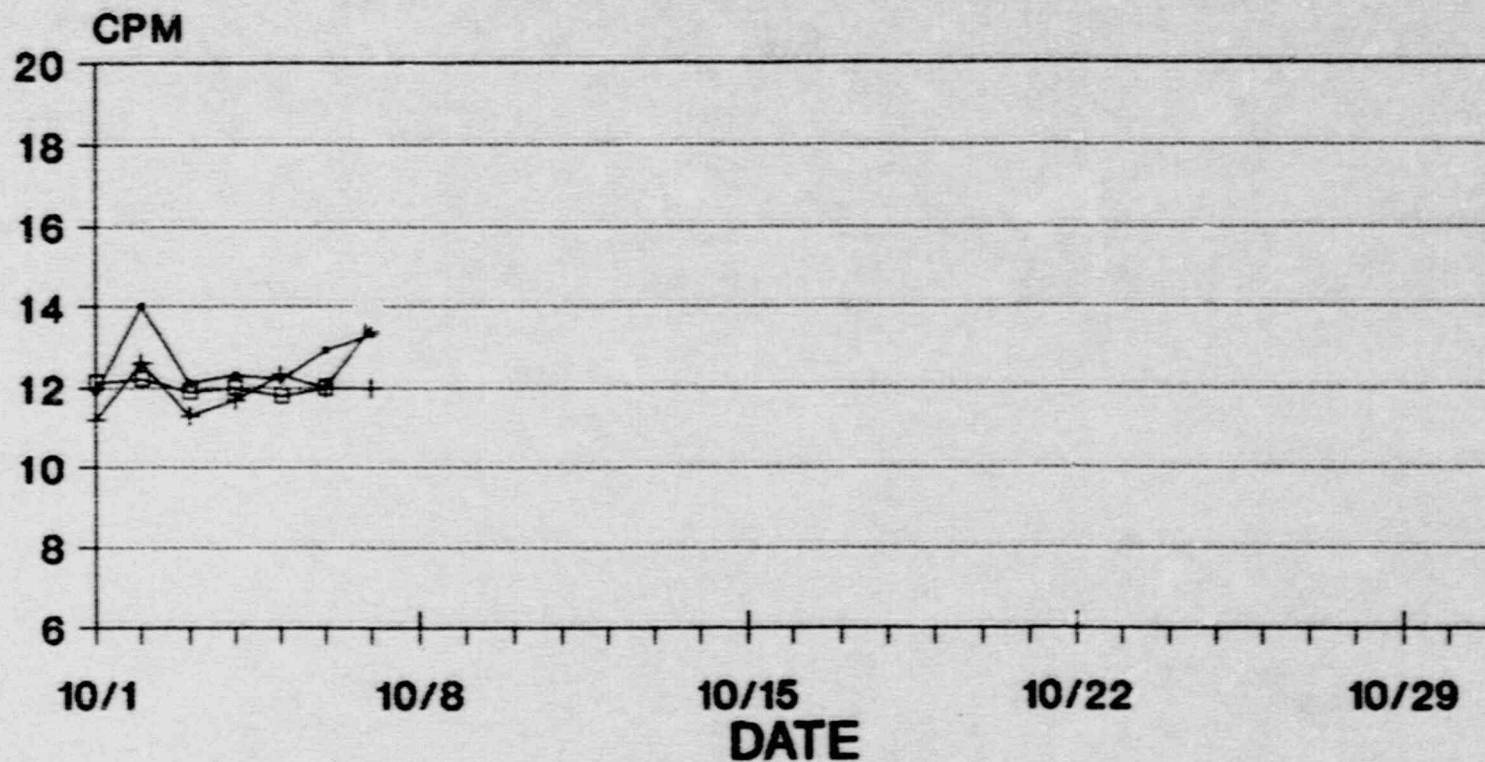


MONITORING STATIONS

—•— #2 —+— #4 —*— #5

10-14-89 SHT 1

CITIZENS RADIOLOGICAL MONITORING NETWORK PILGRIM 1 - OCTOBER 1989

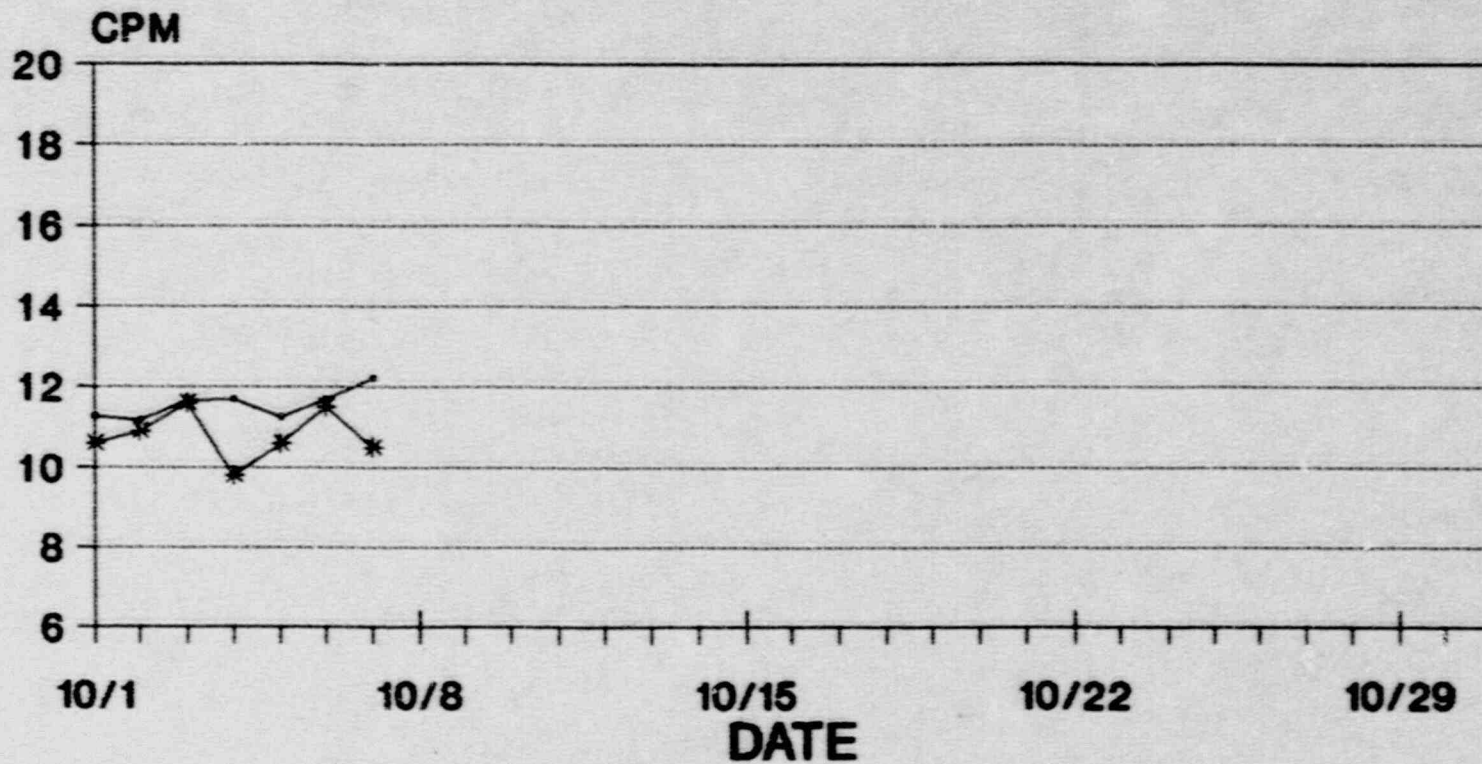


MONITORING STATIONS

—●— #9 —+— #10 —□— #12

10-14-89 SHT 2

CITIZENS RADIOLOGICAL MONITORING NETWORK PILGRIM 1 - OCTOBER 1989

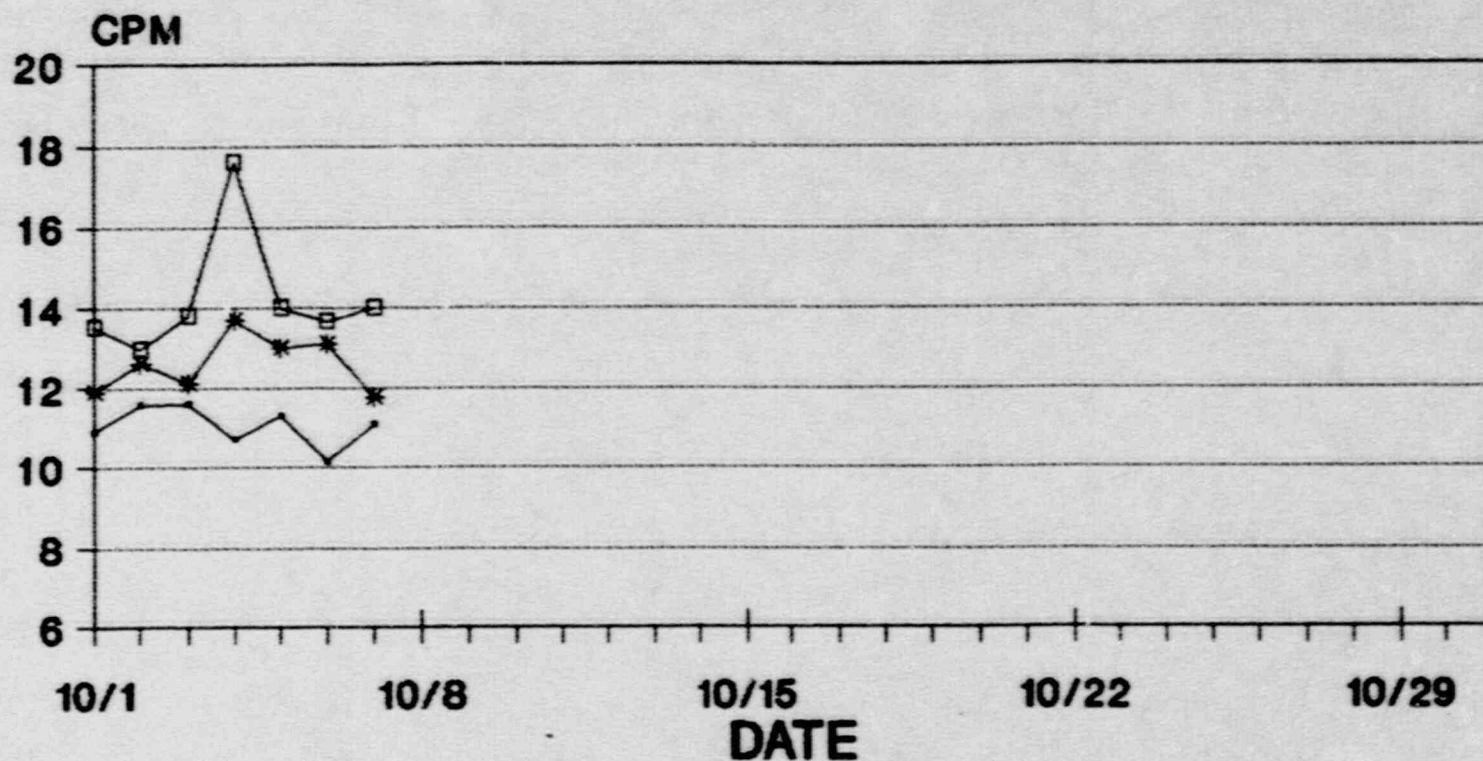


MONITORING STATIONS

—◆— #13 —*— #15

10-14-89 SHT 3

CITIZENS RADIOLOGICAL MONITORING NETWORK PILGRIM 1 - OCTOBER 1989

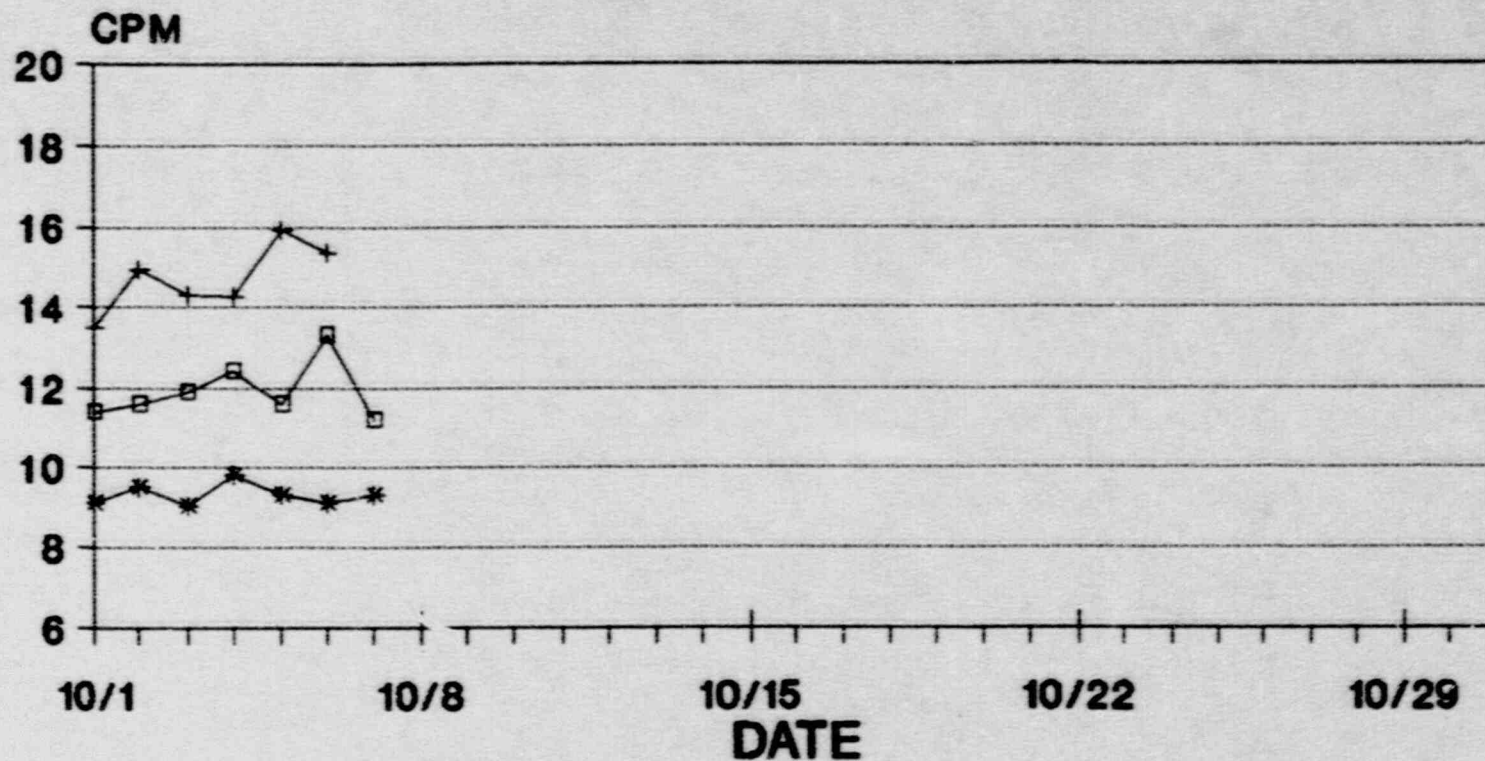


MONITORING STATIONS

—●— #21 *— #23 —□— #24

10-14-89 SHT 5

CITIZENS RADIOLOGICAL MONITORING NETWORK PILGRIM 1 - OCTOBER 1989

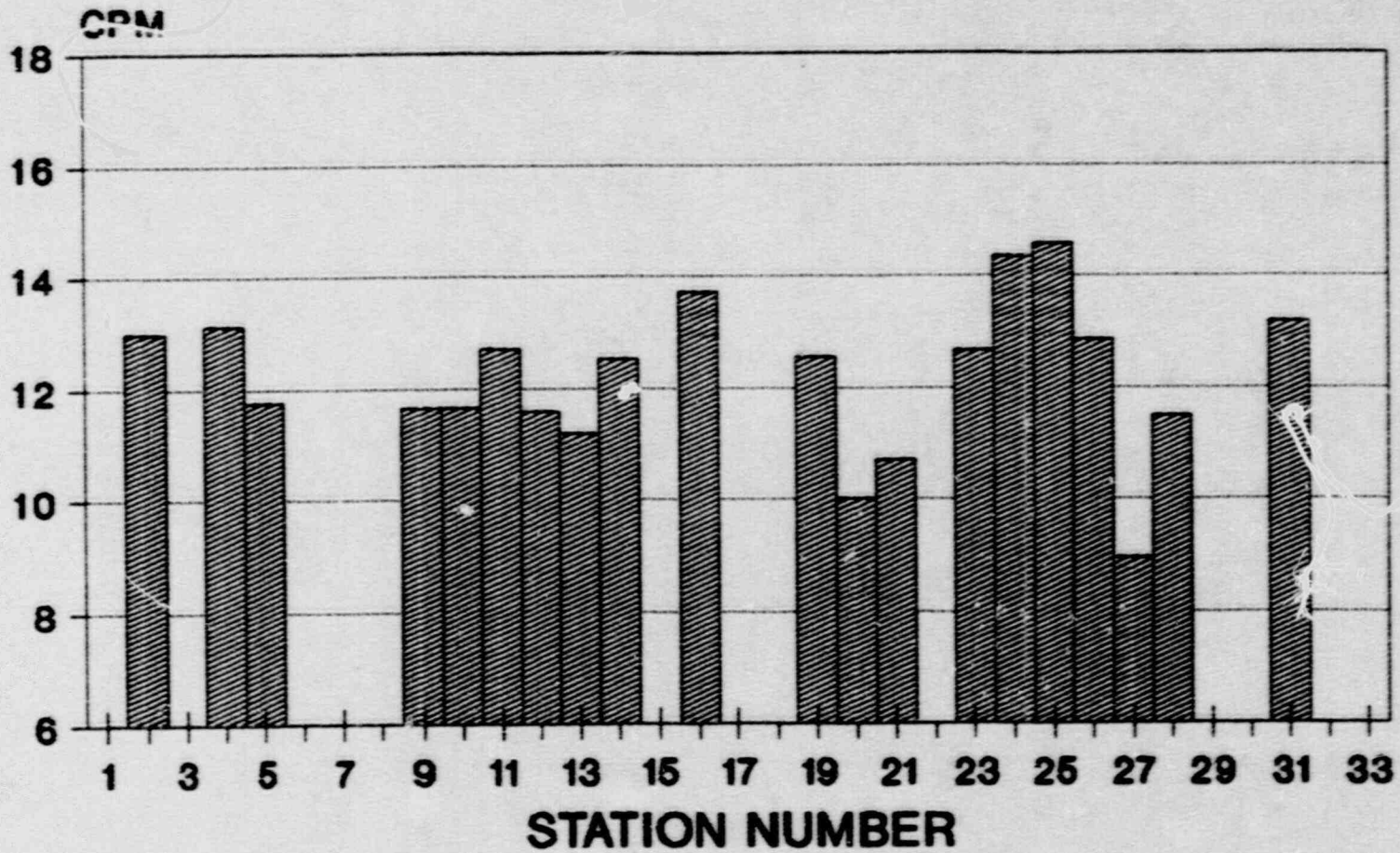


MONITORING STATIONS

—+— #26 —*— #27 —□— #28

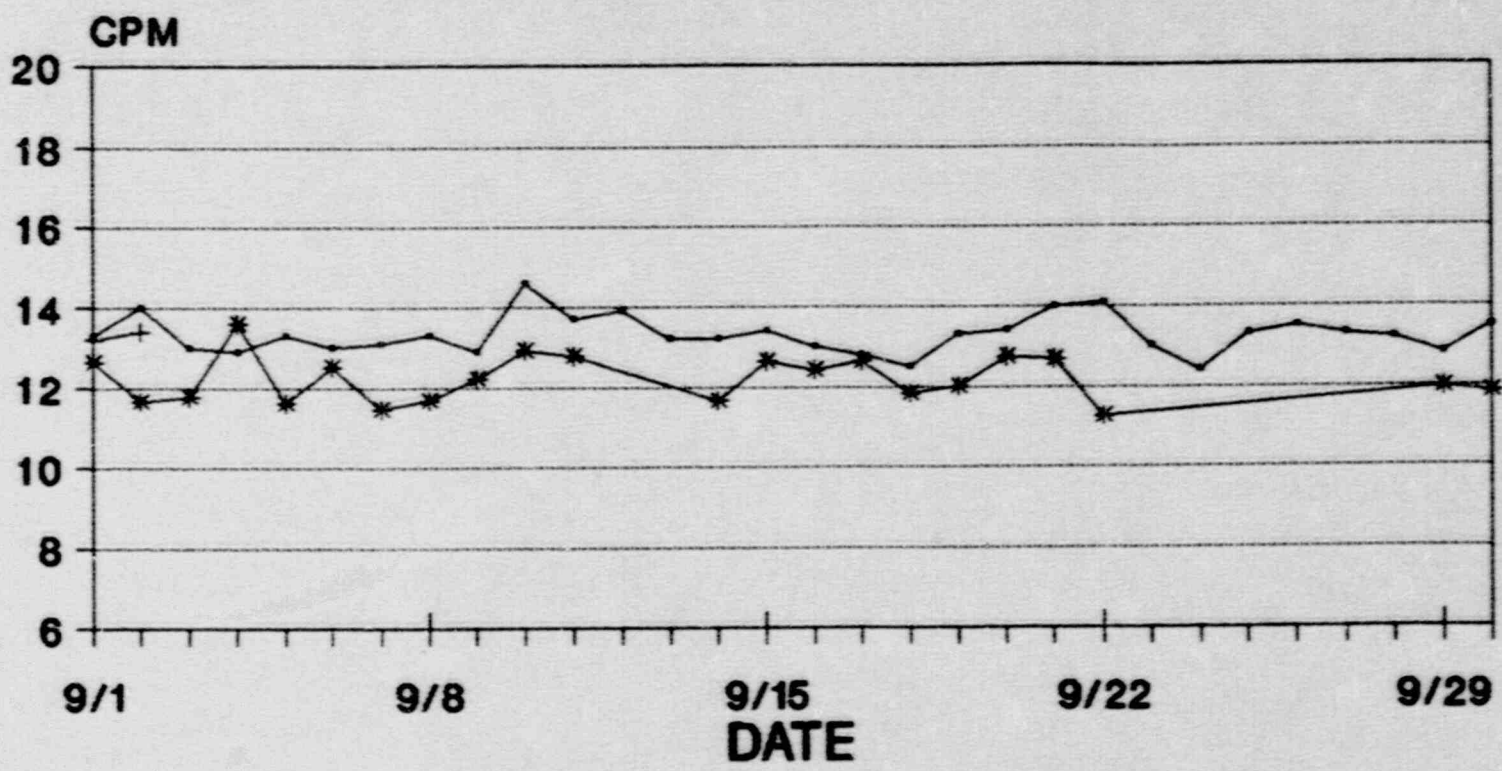
10-14-89 SHT 6

**CITIZENS RADIOLOGICAL MONITORING NETWORK
PILGRIM 1 - SEPTEMBER 1989
MONTHLY AVERAGE**



10-7-89

CITIZENS RADIOLOGICAL MONITORING NETWORK PILGRIM 1 - SEPTEMBER 1989

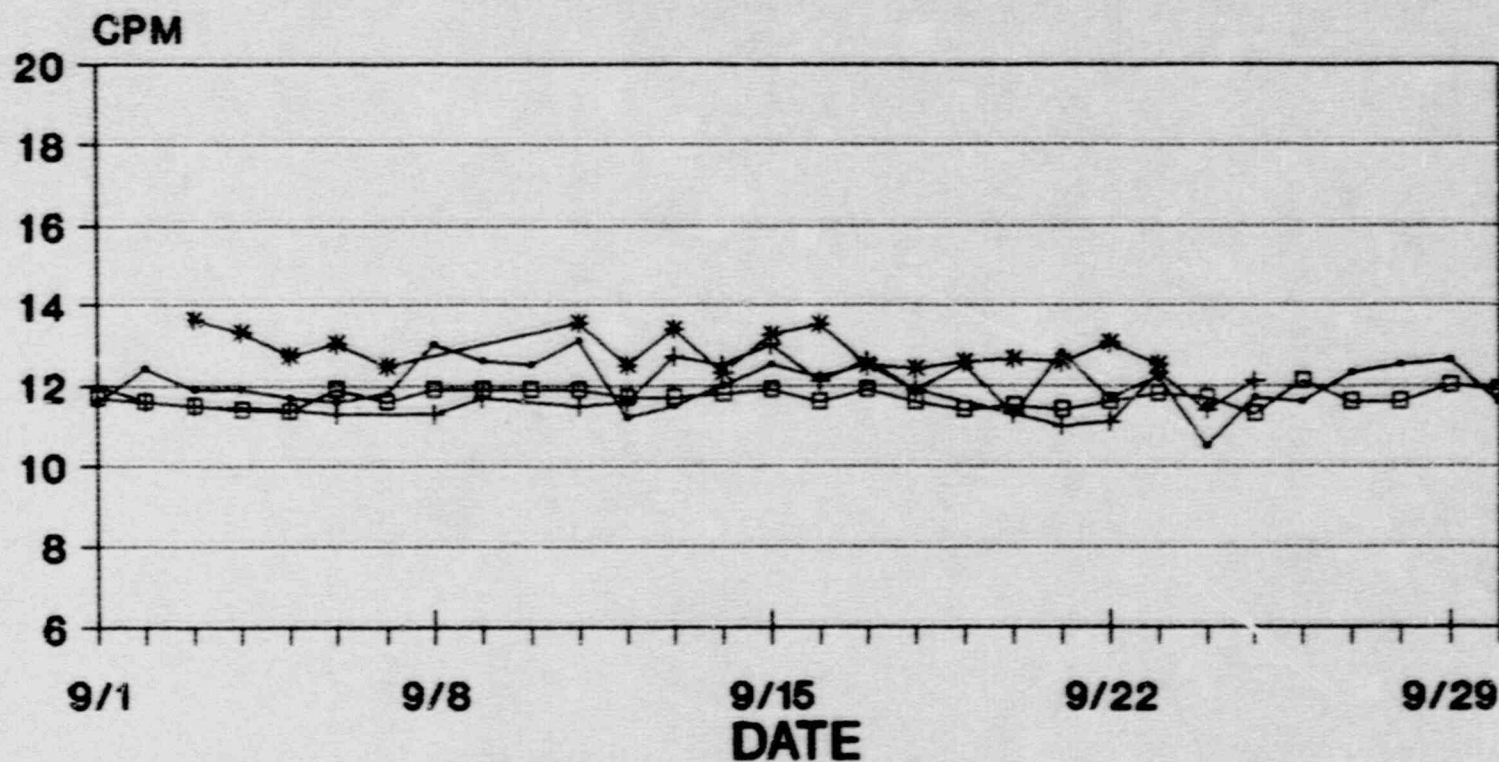


MONITORING STATIONS

—●— #2 —+— #4 —*— #5

10-7-89 S:HT 1

CITIZENS RADIOLOGICAL MONITORING NETWORK PILGRIM 1 - SEPTEMBER 1989

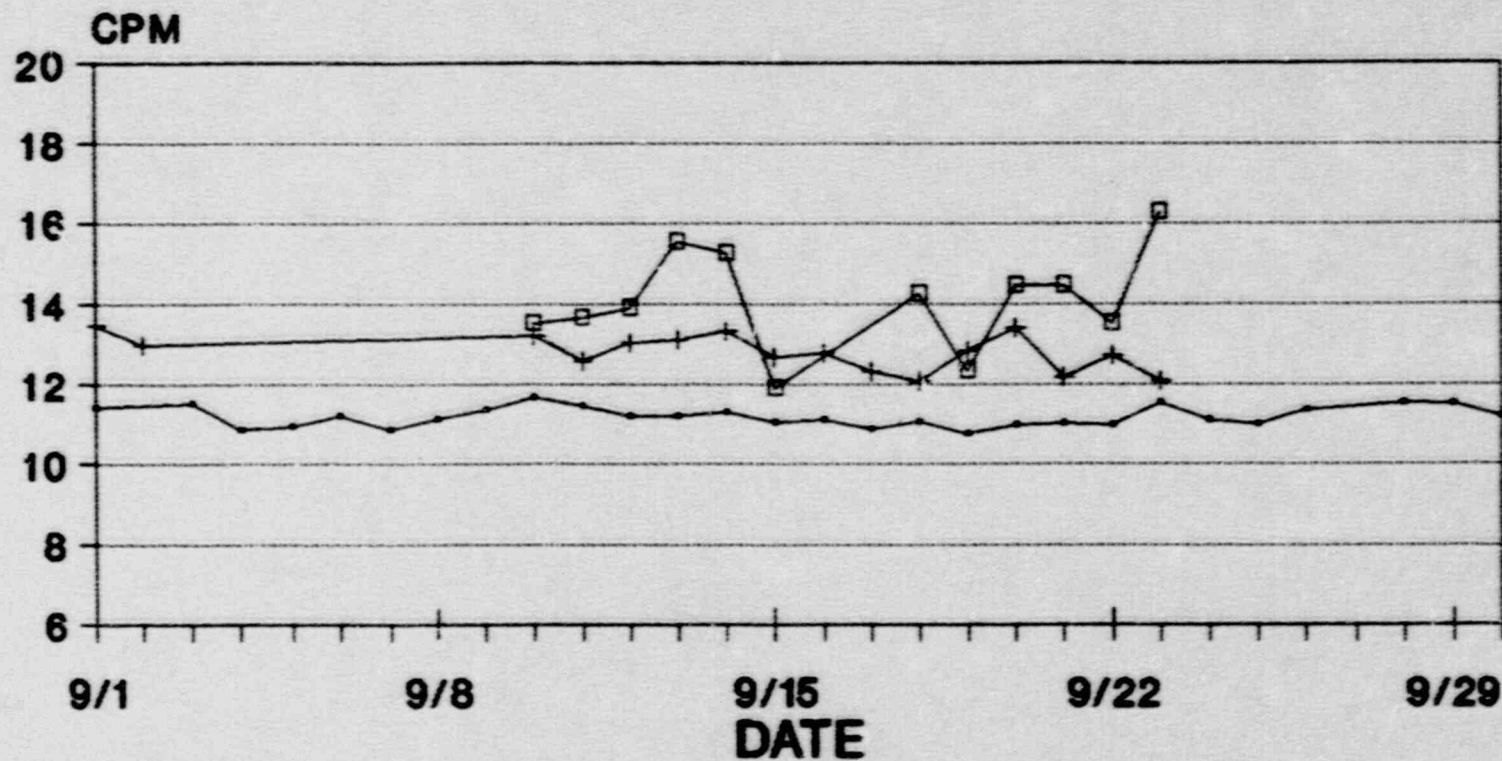


MONITORING STATIONS

—●— #9 —+— #10 —*— #11 —□— #12

10-7-89 SHT 2

CITIZENS RADIOLOGICAL MONITORING NETWORK PILGRIM 1 - SEPTEMBER 1989

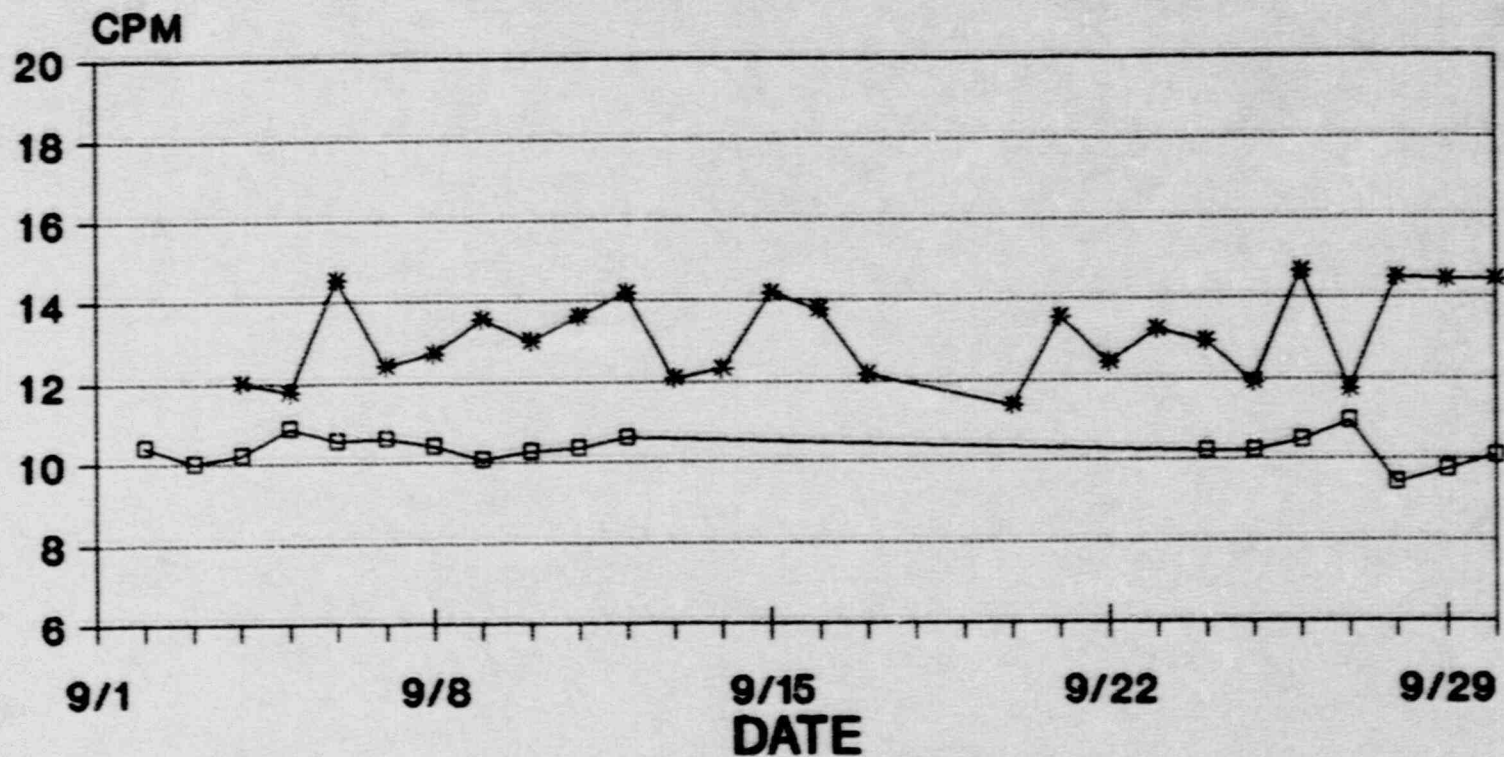


MONITORING STATIONS

—●— #13 —+— #14 —□— #16

10-7-89 SHT 3

CITIZENS RADIOLOGICAL MONITORING NETWORK PILGRIM 1 - SEPTEMBER 1989

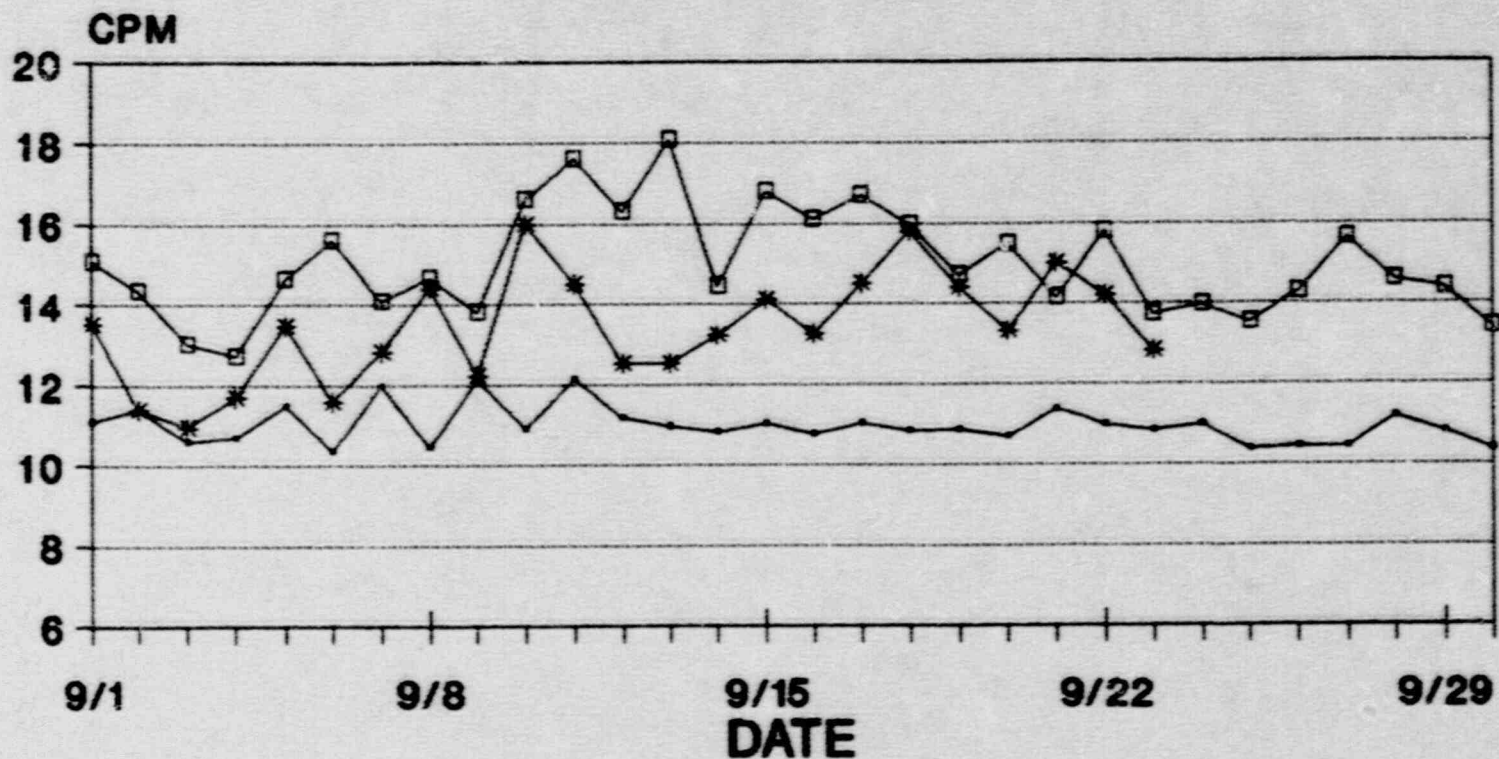


MONITORING STATIONS

* #19 □ #20

10-7-89 SHT 4

CITIZENS RADIOLOGICAL MONITORING NETWORK PILGRIM 1 - SEPTEMBER 1989

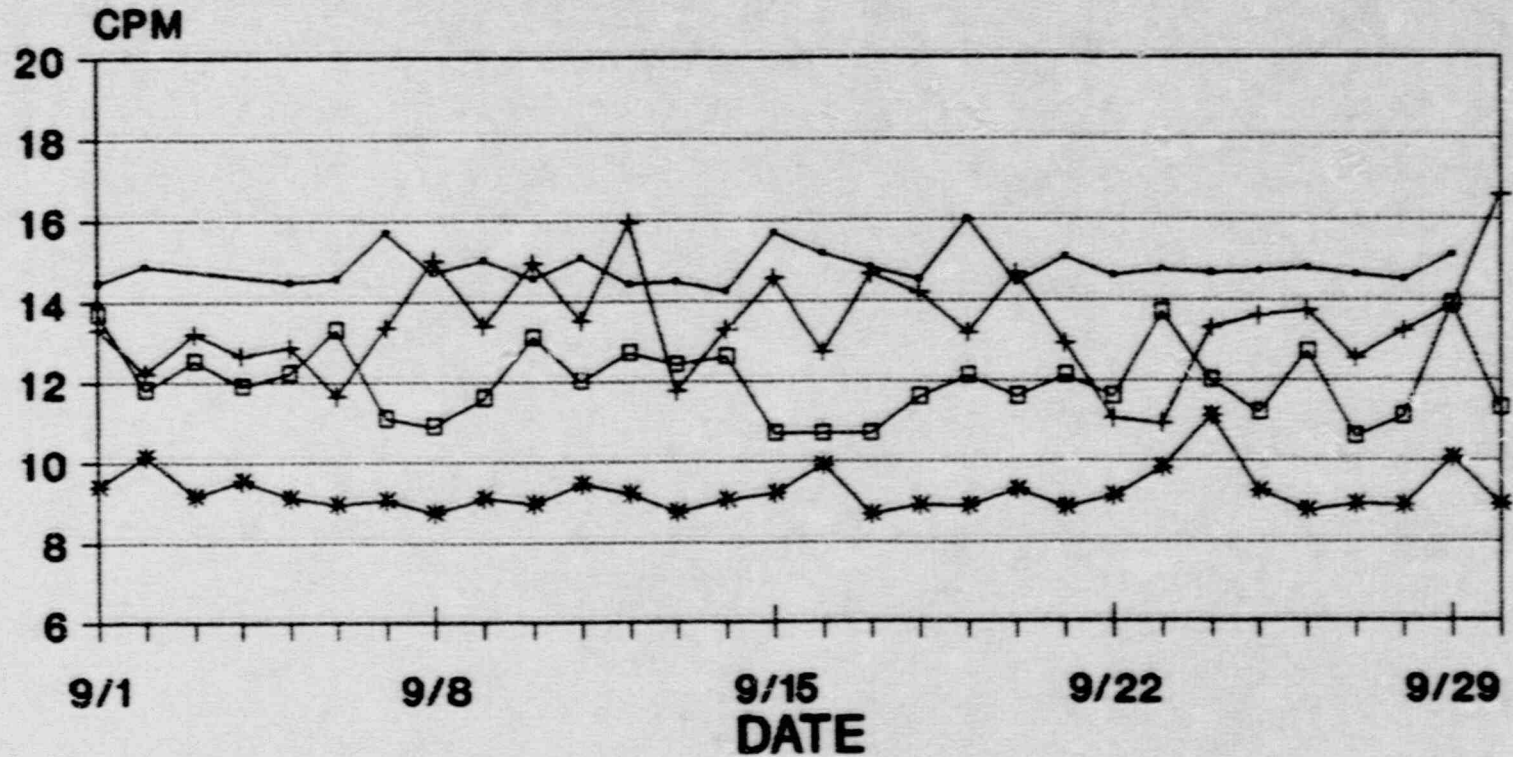


MONITORING STATIONS

—●— #21 —*— #23 —□— #24

10-7-89 SHT 5

CITIZENS RADIOLOGICAL MONITORING NETWORK PILGRIM 1 - SEPTEMBER 1989

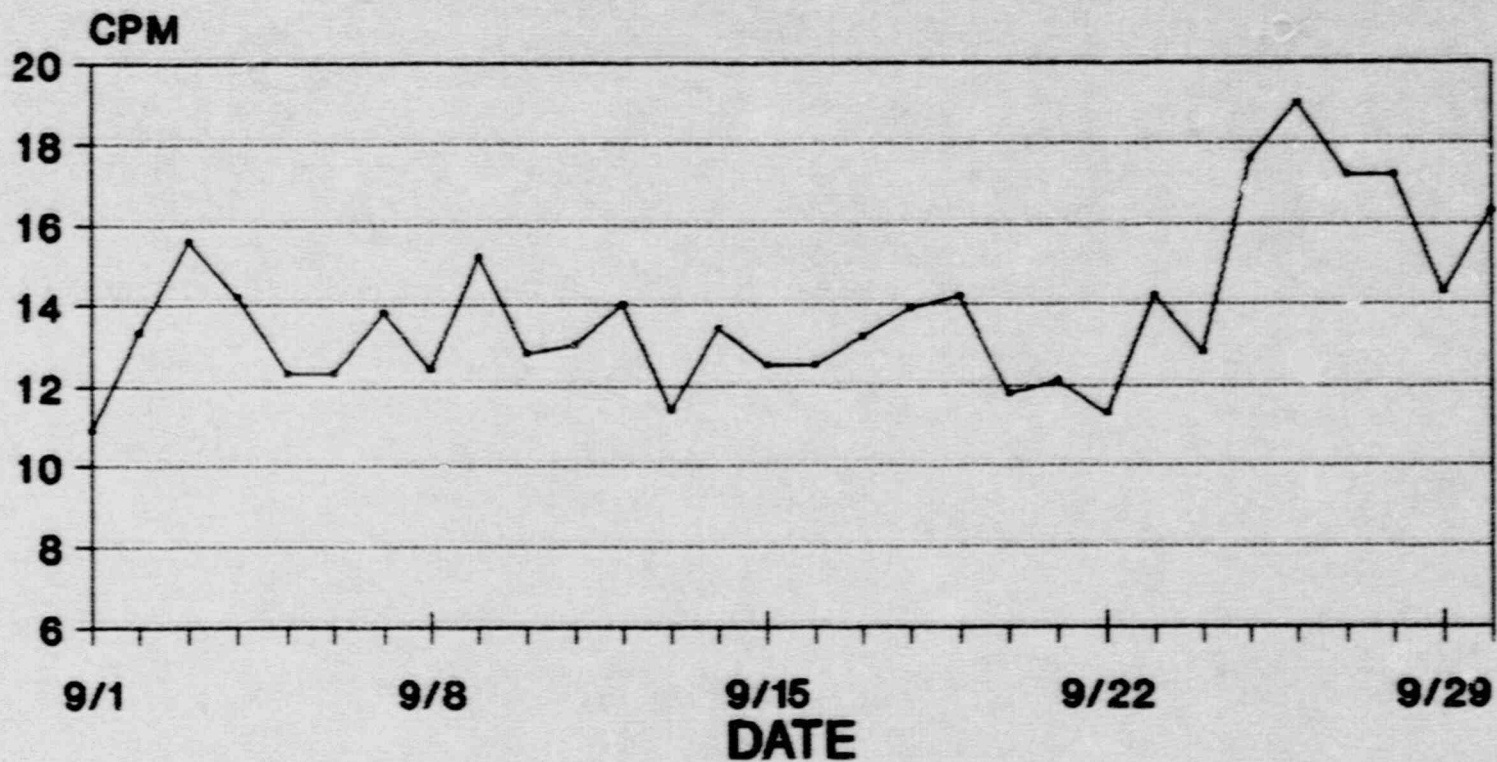


MONITORING STATIONS

—●— #25 —+— #26 —*— #27 —□— #28

10-7-89 SHT 6

CITIZENS RADIOLOGICAL MONITORING NETWORK PILGRIM 1 - SEPTEMBER 1989

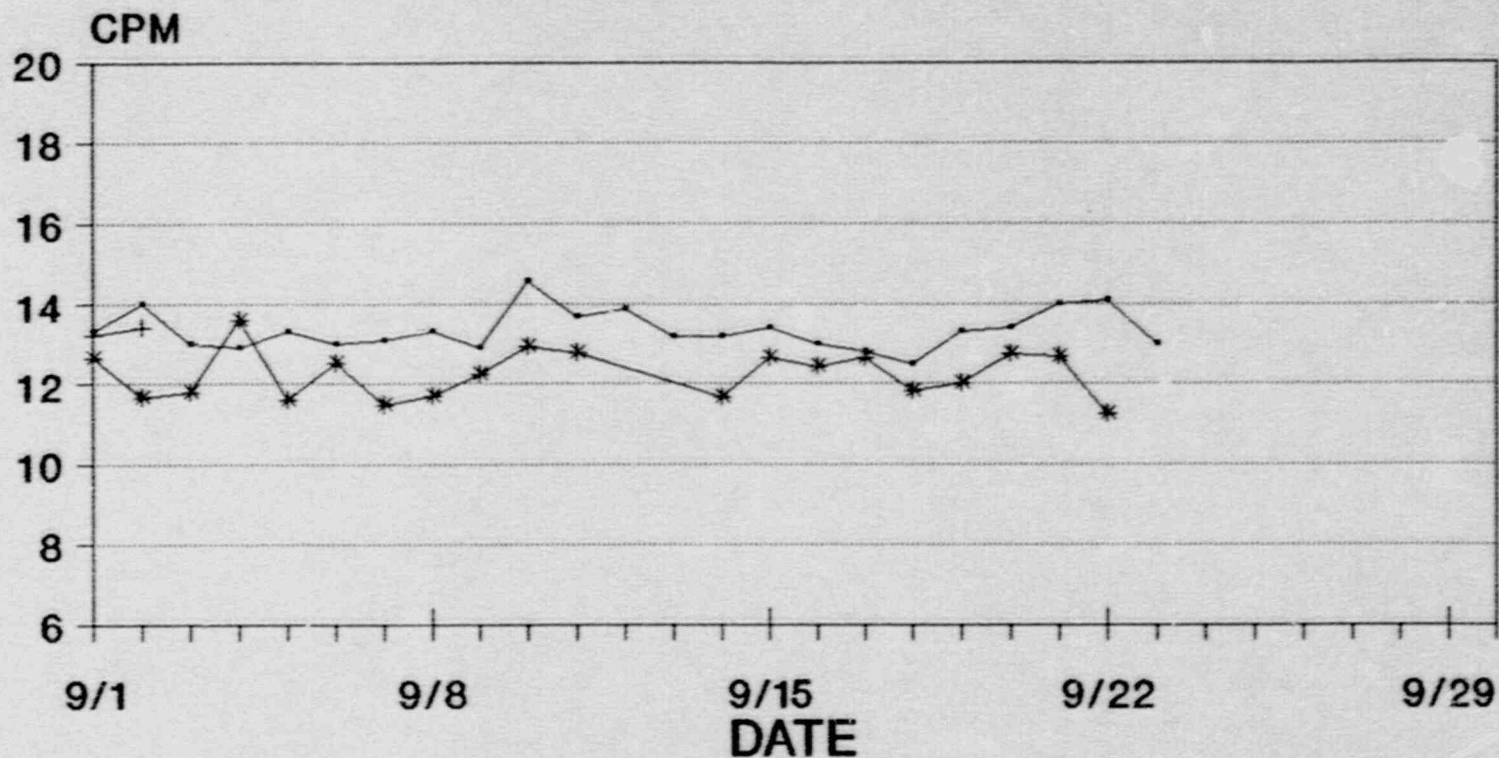


MONITORING STATIONS

— #31

10-7-89 SHT 7

CITIZENS RADIOLOGICAL MONITORING NETWORK PILGRIM 1 - SEPTEMBER 1989

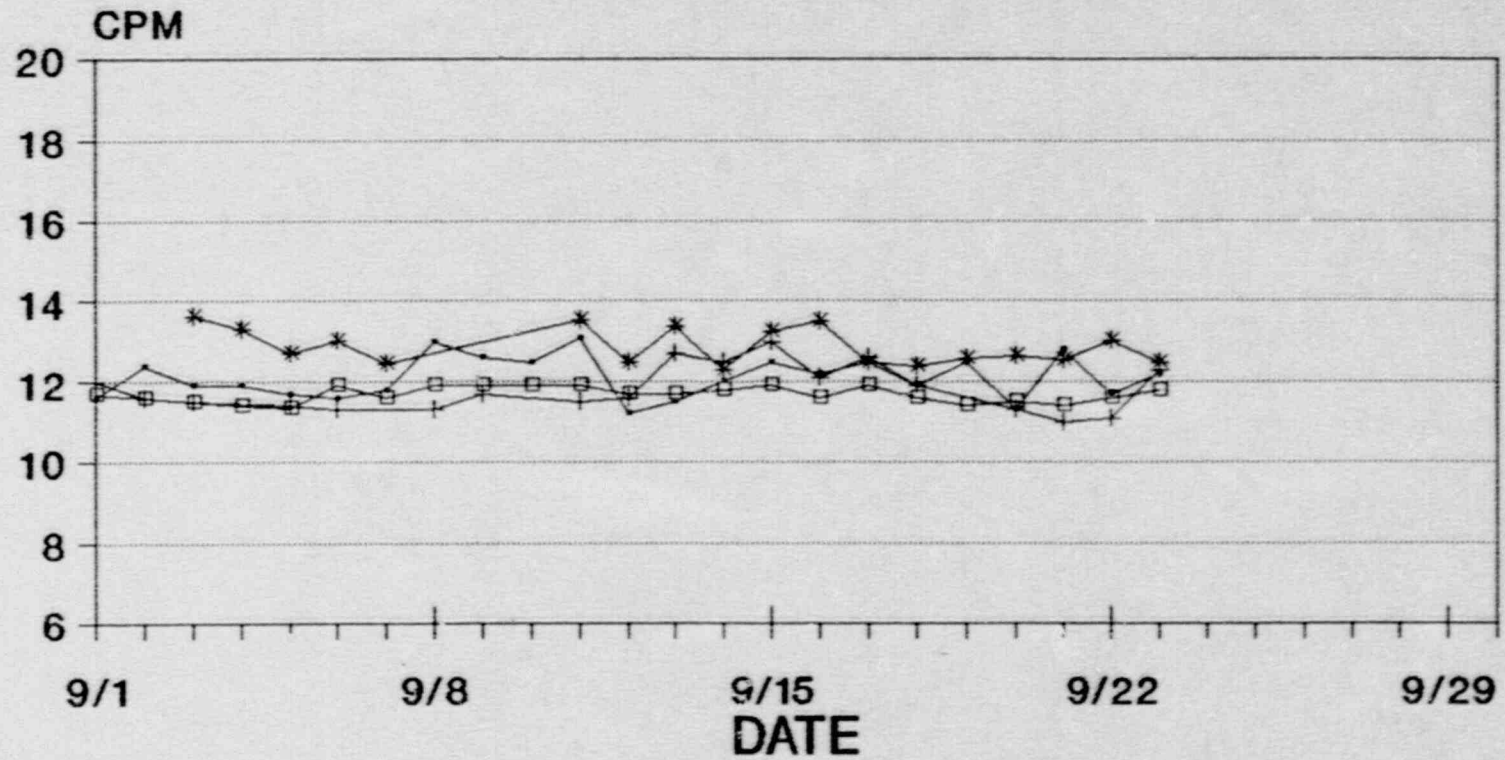


MONITORING STATIONS

—●— #2 —+— #4 —*— #5

10-2-89 SHT 1

CITIZENS RADIOLOGICAL MONITORING NETWORK PILGRIM 1 - SEPTEMBER 1989

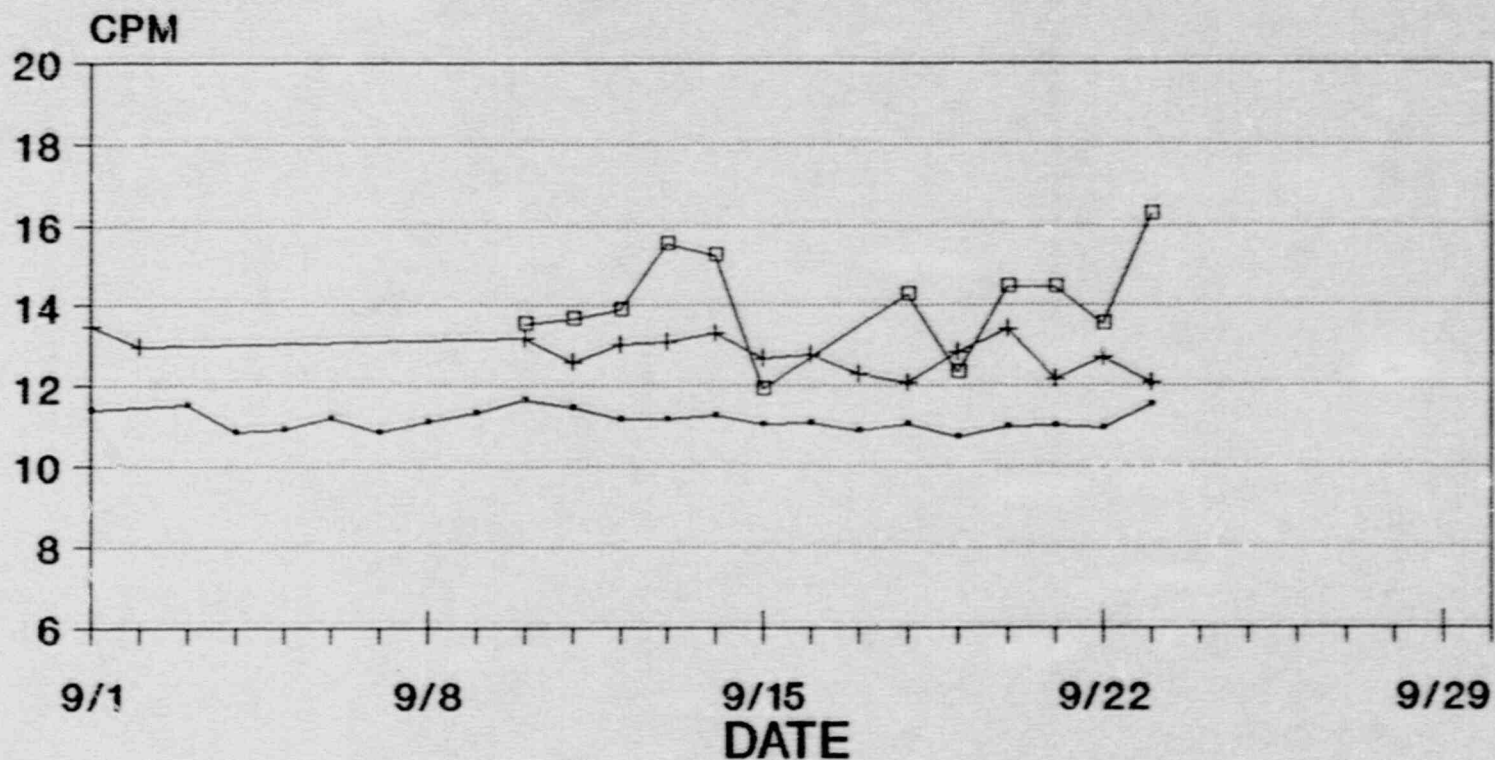


MONITORING STATIONS

—•— #9 —+— #10 —*— #11 —□— #12

10-2-89 SHT 2

CITIZENS RADIOLOGICAL MONITORING NETWORK PILGRIM 1 - SEPTEMBER 1989

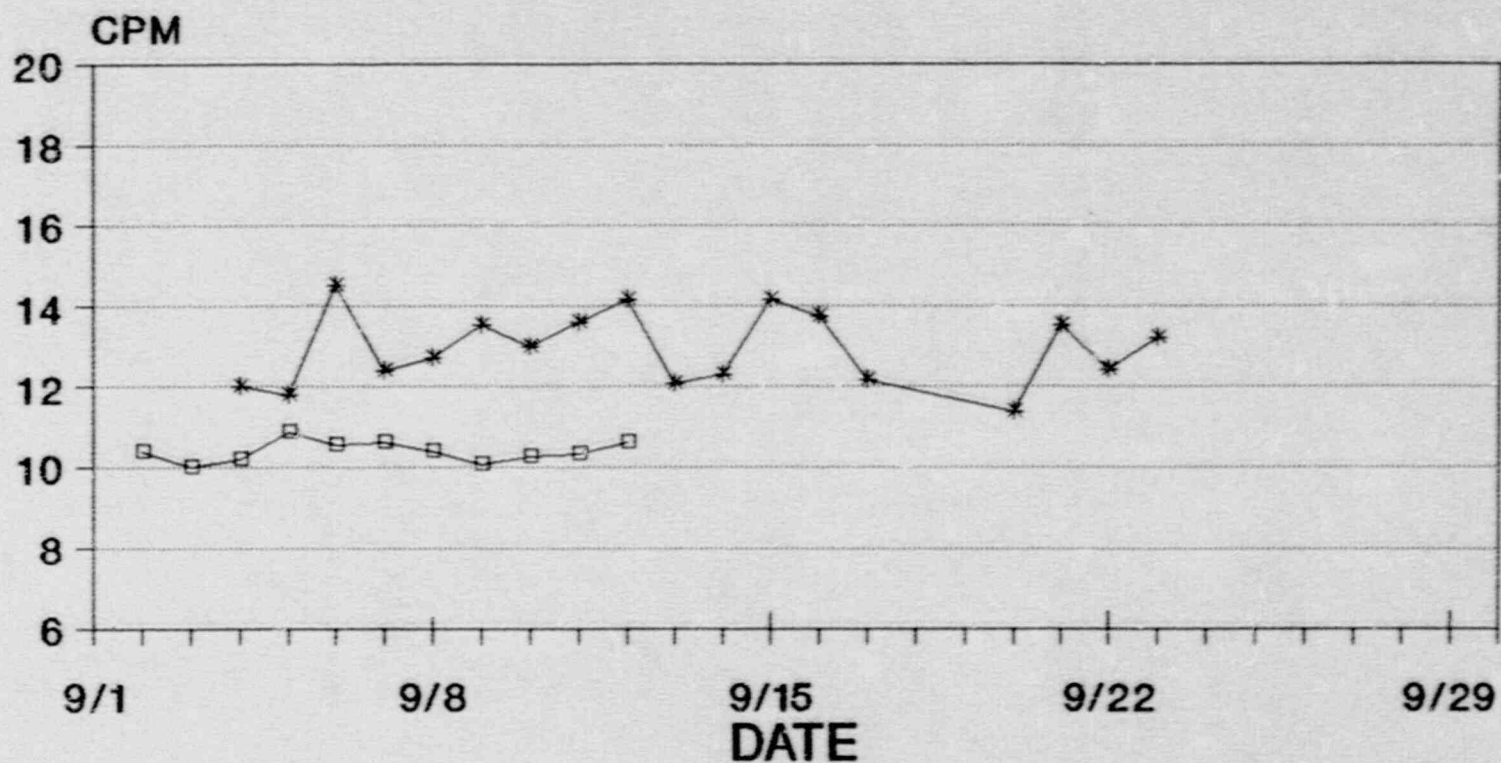


MONITORING STATIONS

—●— #13 —+— #14 —□— #16

10-2-89 SHT 3

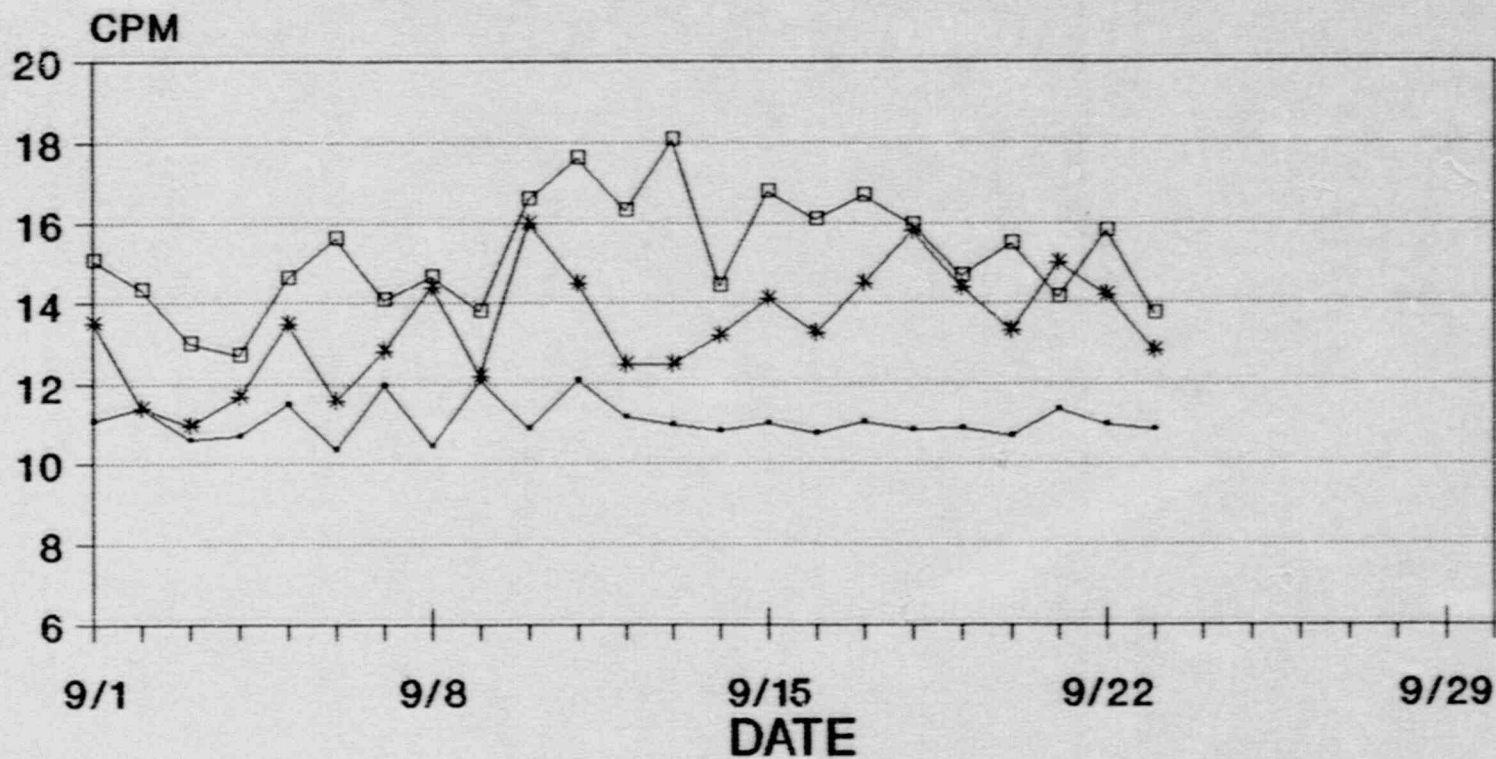
CITIZENS RADIOLOGICAL MONITORING NETWORK PILGRIM 1 - SEPTEMBER 1989



MONITORING STATIONS

* #19 □ #20

CITIZENS RADIOLOGICAL MONITORING NETWORK PILGRIM 1 - SEPTEMBER 1989

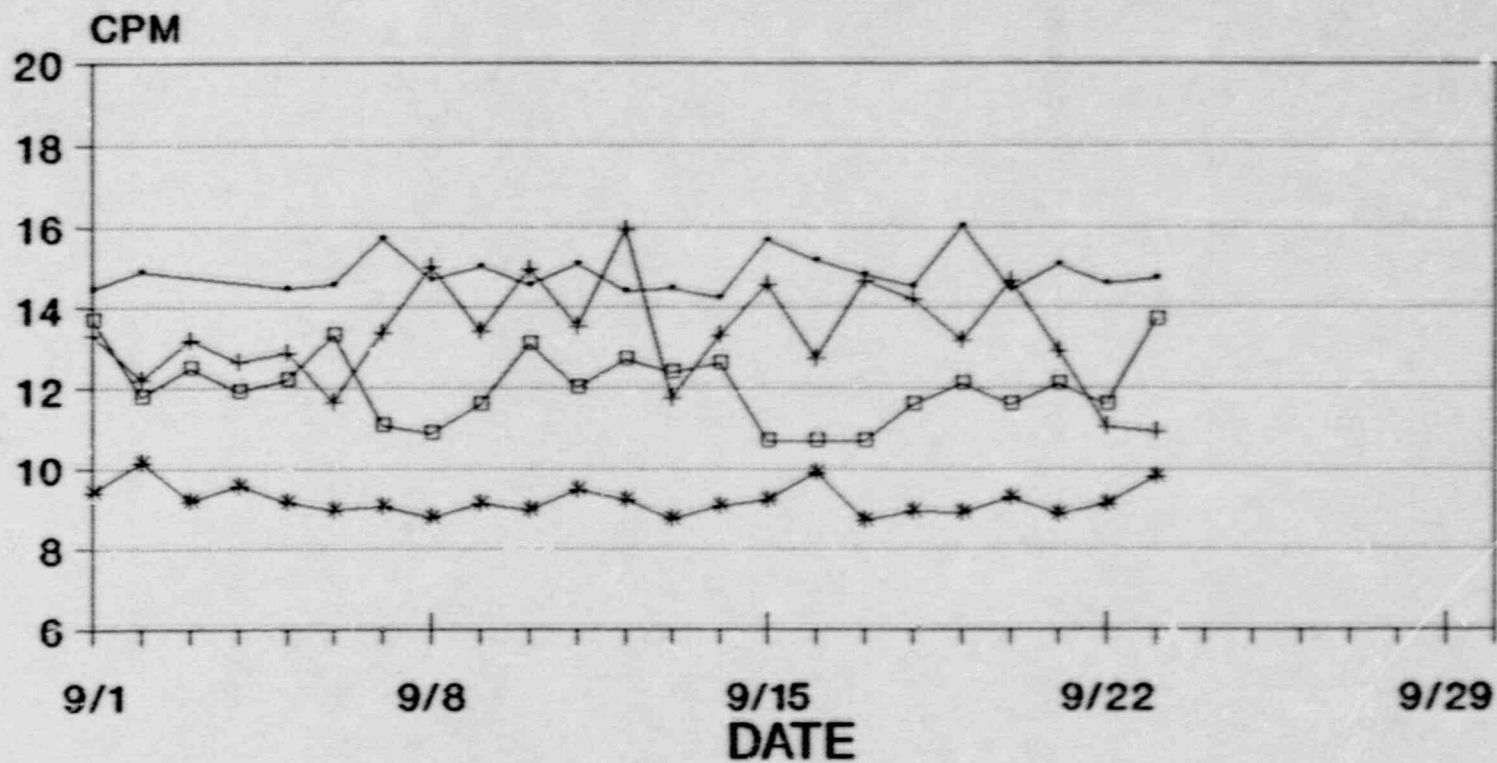


MONITORING STATIONS

—●— #21 —*— #23 —□— #24

10-2-89 SHT 5

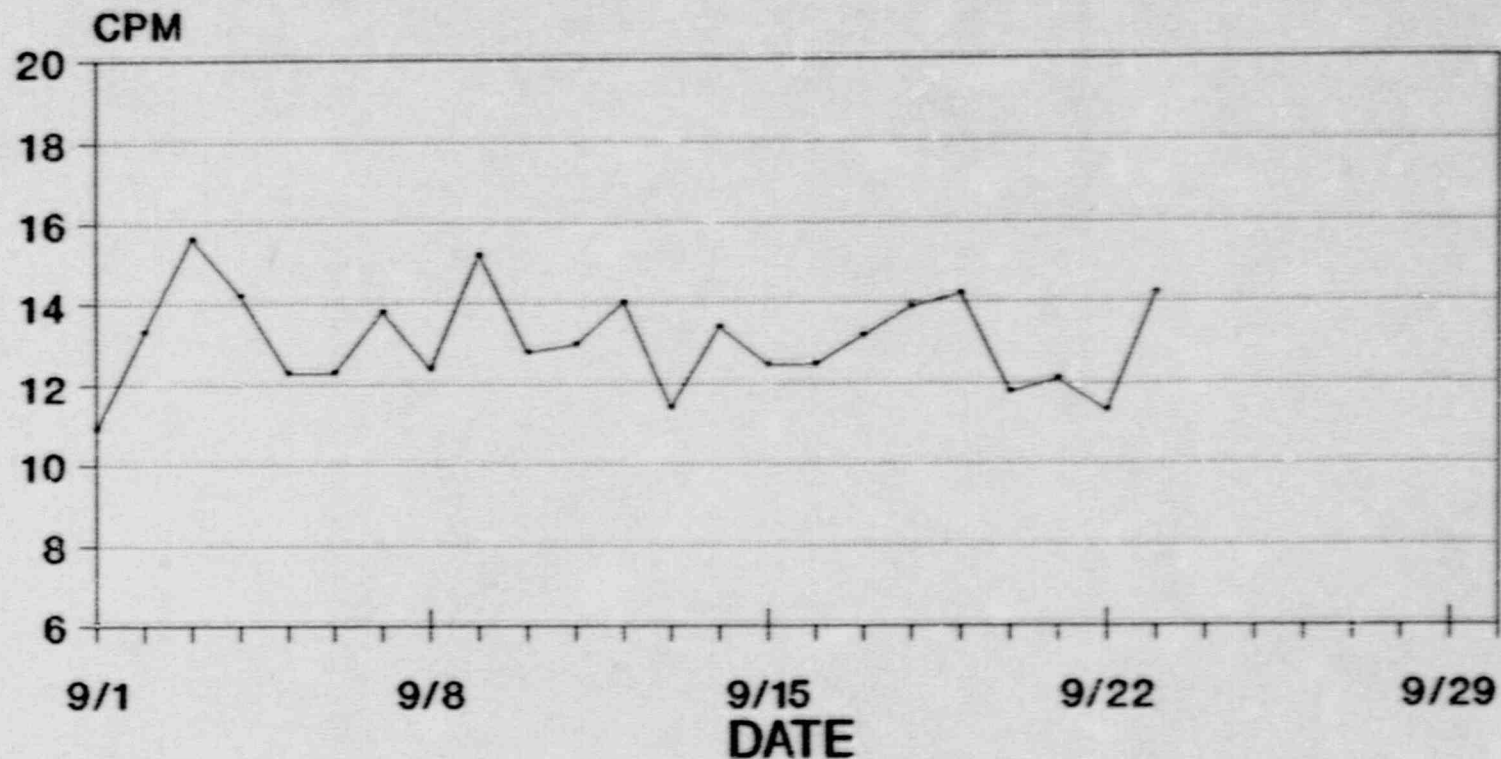
CITIZENS RADIOLOGICAL MONITORING NETWORK PILGRIM 1 - SEPTEMBER 1989



MONITORING STATIONS

—•— #25 —+— #26 —*— #27 —□— #28

CITIZENS RADIOLOGICAL MONITORING NETWORK PILGRIM 1 - SEPTEMBER 1989



MONITORING STATIONS

— #31

10-2-89 SHT 7

MAR 30 1989

Mr. David L. Quaid
21 Summer Street
Duxbury, Massachusetts 02332

Dear Mr. Quaid:

Thank you for the information you sent in your transmittal postmarked February 18, 1989. For your information, I have been designated as the appropriate NRC individual for receipt of information of this type. I will keep it on file in Region I and will also ensure it is entered into the Public Document Files.

As I indicated to you in our earlier telephone call, I have responsibility for the operation of the NRC TLD Direct Radiation Monitoring Network. If you have questions regarding that network relative to your own monitoring program, please feel free to call me (215) 337-5281.

Original Signed By:
Walter J. Pasciak

Walter J. Pasciak, Ph. D., Chief
Effluents Radiation Protection Section
Facilities Radiological Safety and
Safeguards Branch

OFFICIAL RECORD COPY

H005
1/1

~~1907275707~~

10