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 PERKINS, T. J. Niagara Mohawk Power Corp.
 RECIP. NAME RECIPIENT AFFILIATION
 HAYNES, R. C. Region 1, Office of Director

SUBJECT: ~~Forwards revised pages to "Annual Environ Operating Rept 1981," originally submitted 820430. Change made to tables to include associated error w/original measurements. Results remain same.~~

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June 2, 1982

Mr. Ronald C. Haynes
Regional Administrator
United States Nuclear Regulatory Commission
Region I
631 Park Avenue
King of Prussia, PA. 19406

RE: Nine Mile Nuclear Station Unit #1
Facility Operating License, DPR-63
Docket No. 50-220

Dear Mr. Haynes:

Enclosed please find revised pages to be inserted into the Annual Environmental Operating Report for Nine Mile Point #1 for the period January 1, 1981 through December 31, 1981. This report was originally submitted to you by letter dated April 30, 1982.

Changes were made to tables to include the associated error with original measurements. The results remain the same as noted in the previous report.

If any further clarification is needed, please feel free to contact H. Flanagan at Nine Mile Point on extension 1395.

Very truly yours,

Thomas J. Perkins

Thomas J. Perkins
General Superintendent
Nuclear Generation

mtm
Enc. (2 copies)

xc: Director, Office of NRR (17 copies)

TABLE OF CONTENTS

superseded

Page

List of Tables

List of Figures

I. Introduction

II. Description

- 1) Sample Methodology
- 2) Analysis Performed
- 3) Changes to the 1981 Sample Program
- 4) Exceptions to the 1981 Sample Program

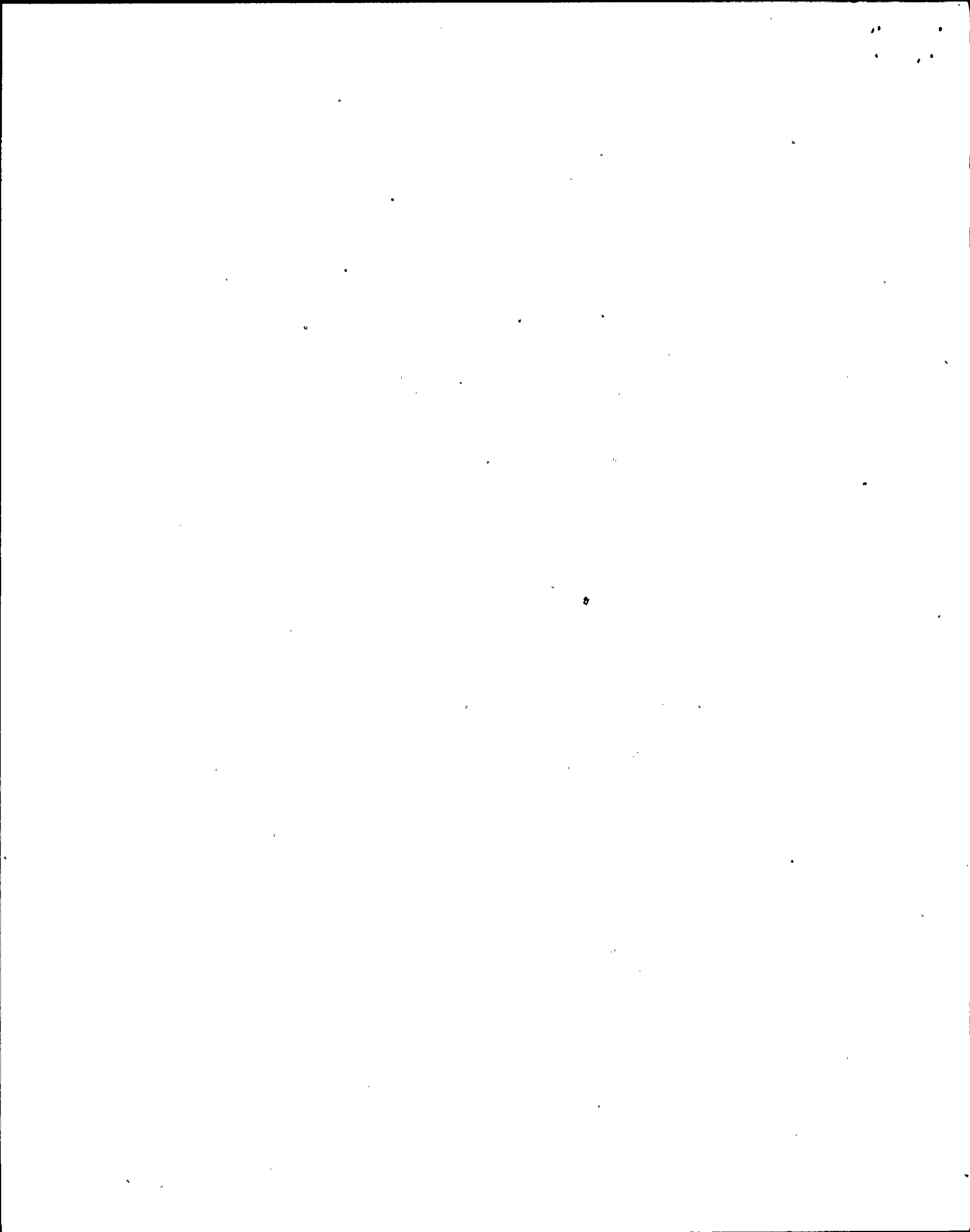
III. Evaluation of Environmental Data

A) Aquatic Program

- 1) Cladophora
- 2) Dam Shoreline Sediment
- 3) Fish
- 4) Lake Water

B) Terrestrial Program

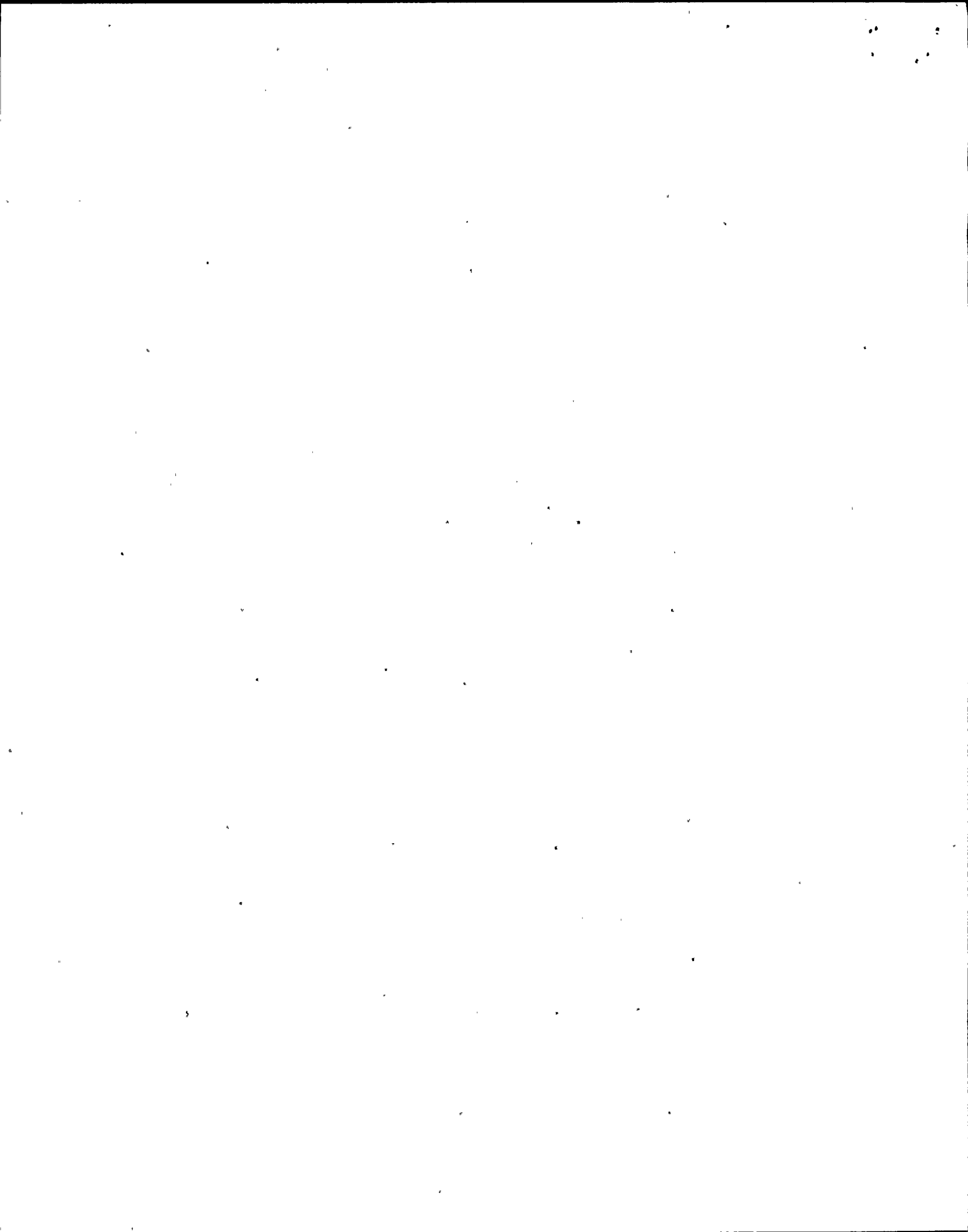
- 1) Air Particulates
- 2) Monthly Air Particulate Composites
- 3) Airborne Radioiodine (I-131)
- 4) TLD (Environmental Dosimetry)
- 5) Radiation Monitors
- 6) Milk
- 7) Milch Animal Census
- 8) Human Food Products
- 9) Special Studies



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TABLE OF CONTENTS
(continued)

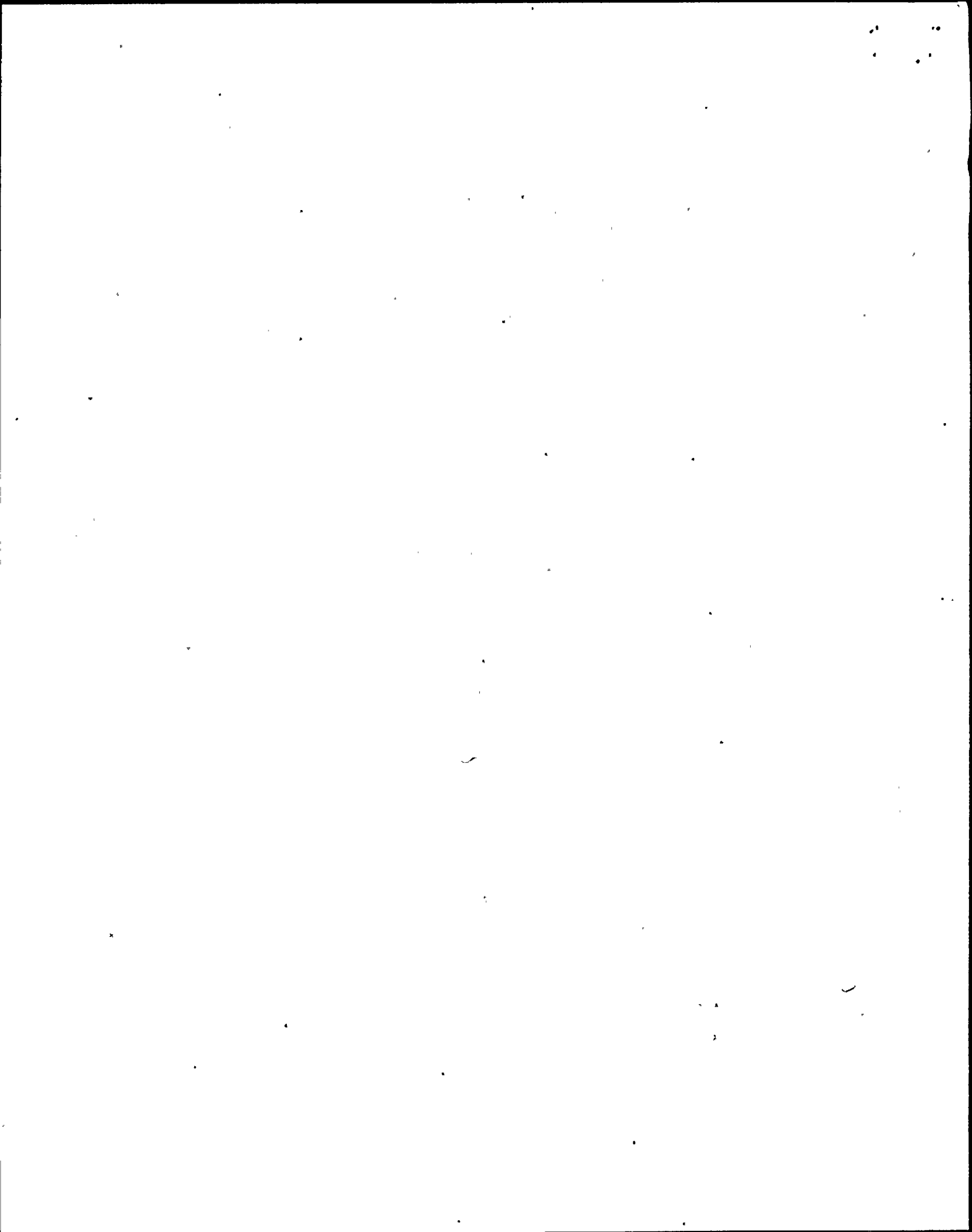
	<u>Page</u>
C) Conclusion	
D) References	
E) Sample Summaries	



Superseded

LIST OF TABLES

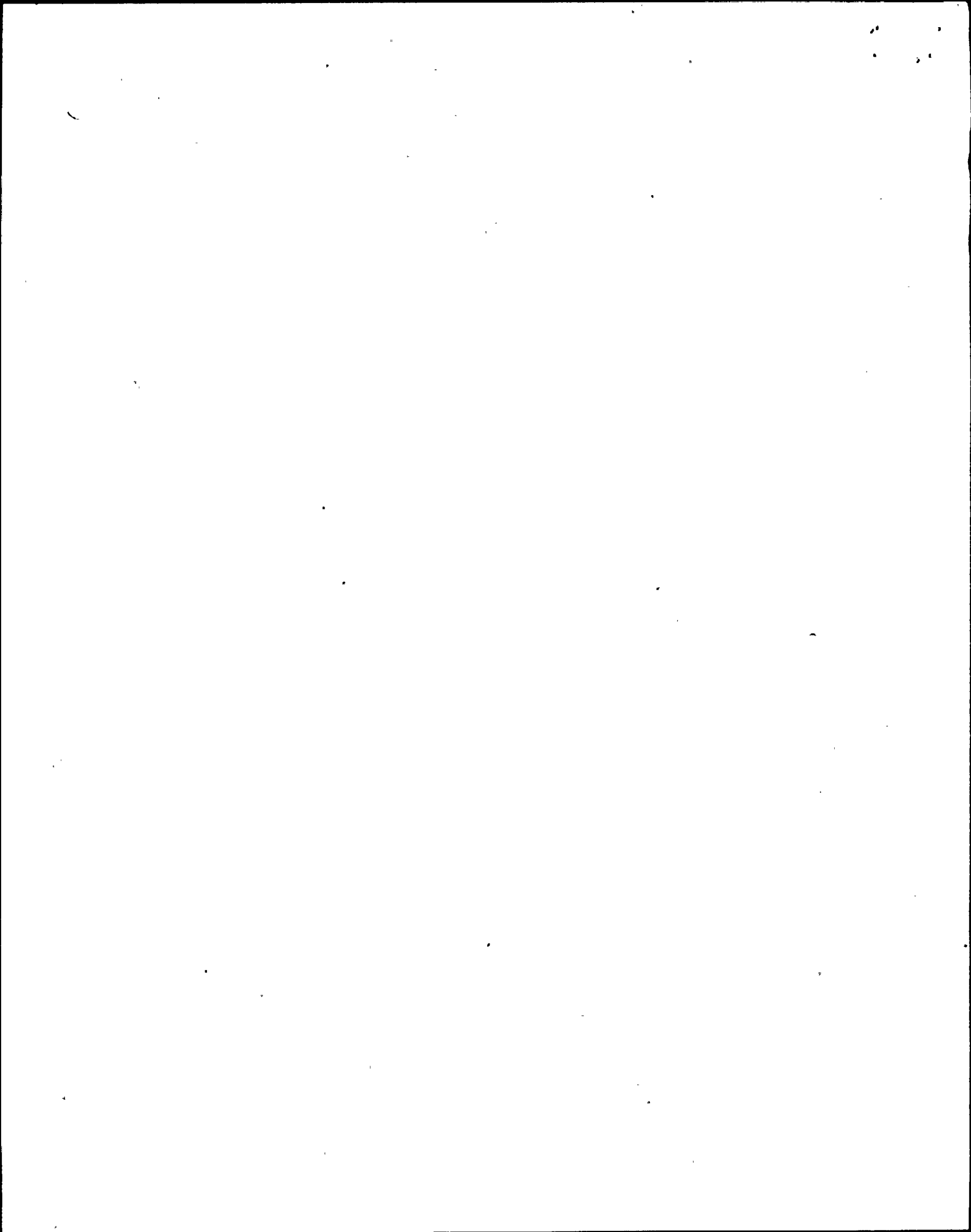
<u>Table No.</u>	<u>Content</u>	<u>Page</u>
Table 1	Sample Collection and Analysis, Site Radiological Environmental Monitoring Program - Aquatic Program	
Table 2	Sample Collection and Analysis, Site Radiological Environmental Monitoring Program - Terrestrial Program	
Table 3	Concentrations of Gamma Emitters in Cladophora Samples	
Table 4	Concentrations of Sr-90 and Gamma Emitters in Shoreline Sediment Samples	
Table 5A	Concentrations of Strontium 89 and 90 and Gamma Emitters in Fish Samples (pCi/g-wet)	
Table 5B	Concentrations of Strontium 89 and 90 and Gamma Emitters in Fish Samples (pCi/kg-dry)	
Table 6	Concentrations of Beta Emitters in Lake Water Samples	
Table 7	Concentrations of Tritium and Strontium 89 and 90 in Lake Water (Quarterly Composite Samples)	
Table 8	Concentrations of Gamma Emitters in Lake Water Samples	
Table 9	Environmental Airborne Particulate Samples - Off Site Stations, Gross Beta Activity	
Table 10	Environmental Airborne Particulate Samples - On Site Stations, Gross Beta Activity	
Table 11	Concentrations of Gamma Emitters in Monthly Composites of NMP Air Particulate Samples	
Table 12	Environmental Charcoal Cartridge Samples - Off Site Stations, I-131 Activity	
Table 13	Environmental Charcoal Cartridge Samples - On Site Stations, I-131 Activity	
Table 14	Direct Radiation Measurements - Quarterly Results	
Table 15	Continuous Radiation Monitors (GM)	

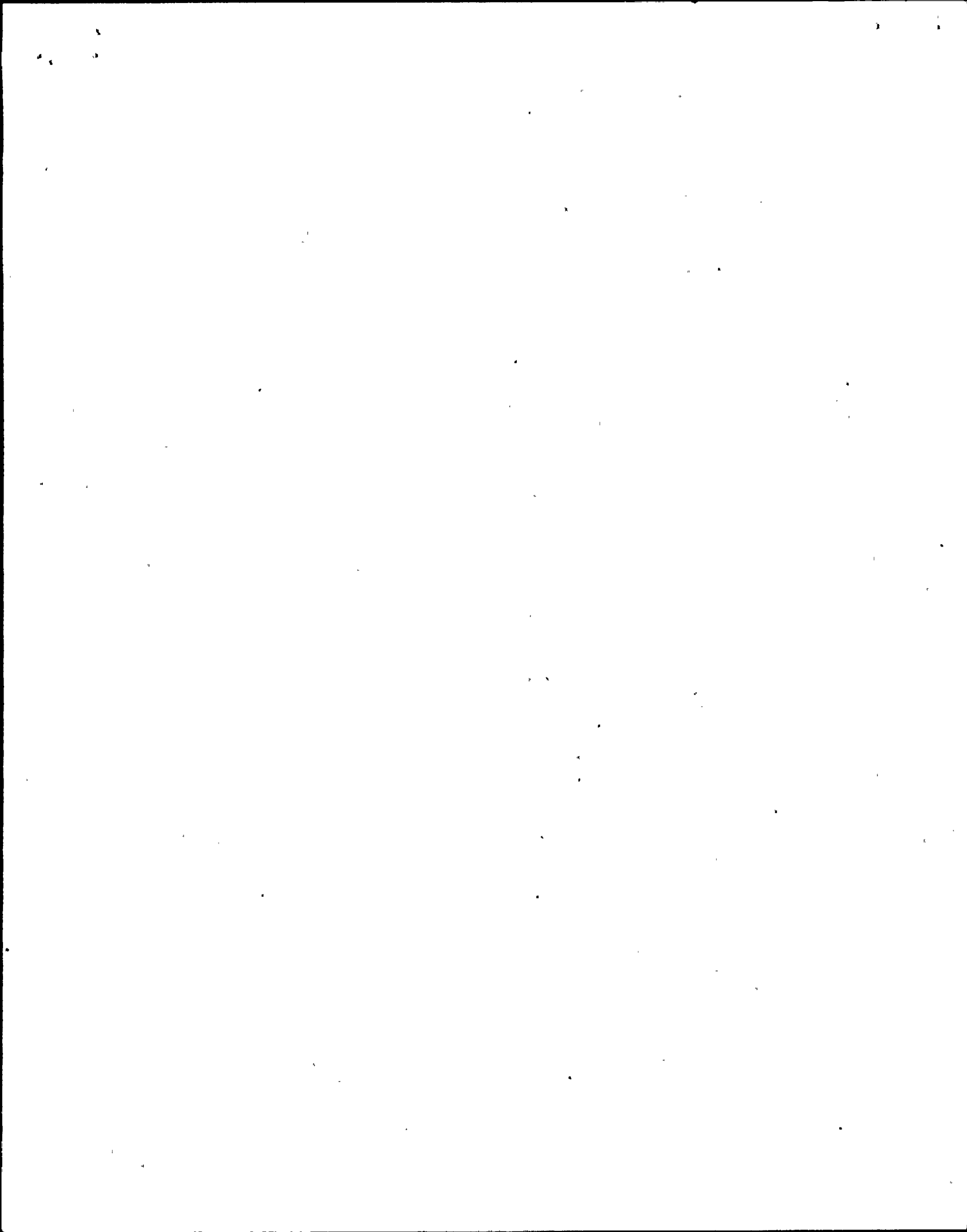


superseded

LIST OF TABLES
(continued)

<u>Table No.</u>	<u>Content</u>	<u>Page</u>
Table 16	Concentrations of Iodine-131 in Milk	
Table 17	Concentration of Gamma Emitters in Milk (Monthly Samples)	
Table 18	Concentrations of Strontium 90 in Milk (Monthly Samples)	
Table 19	Milch Animal Census	
Table 20	Concentrations of Gamma Emitters in Various Food Products	
Table 21	Concentration of Gamma Emitters in Fodder Crops and Pasture Grass	
Table 22	Concentration of Gamma Emitters in Surface Water Samples	
Table 23	Concentration of Gamma Emitters in Soil and Sediment Samples	
Table 24	Canal Water Data - Monthly Composite Samples	





Superseded

LIST OF FIGURES

<u>Figure No.</u>	<u>Content</u>	<u>Page</u>
Figure 1	Off Site Environmental Station and TLD Locations	
Figure 2	Off Site Monitoring-Station Locations	
Figure 3	On Site Environmental Station and TLD Locations	
Figure 4	Food Crops, Meat, Poultry, and Egg Collections - 1981	
Figure 5	Milch Animal Census and Milk Sample Location Locations	
Figure 6	Special Samples	
Figure 7	New York State Map with Regions	

TABLE 5B

Concentrations of Strontium-89 & 90 & Gamma Emitters in Fish Samples
Results in Units of pCi/kg (dry)

Sample Date	Sample Type	Sr-89	Sr-90	K-40	GAMMA EMITTERS					
					Mn-54	Co-58	Co-60	Cs-134	Cs-137	Others
FITZPATRICK										
May 1981	Lake Trout #1	<27.6	< 6.9	9840.0	<32.5	< 49.2	< 42.6	< 27.6	118.1	< LLD
	Lake Trout #2	12.8	< 6.2	9269.0	<35.9	< 50.8	< 53.8	< 29.9	158.5	< LLD
	White Sucker	<38.6	<14.0	16592.0	87.8	229.4	585.6	< 36.1	175.7	< LLD
October 1981	Lake Trout	<18.8	< 8.7	10571.0	<29.3	< 32.7	< 40.9	< 24.9	150.0	< LLD
	White Sucker #1	<49.4	<15.0	20360.0	<44.8	< 50.9	< 47.3	< 42.2	376.7	< LLD
	White Sucker #2	<40.8	11.9	19684.0	<53.2	< 63.8	< 53.2	< 48.9	292.6	< LLD
NINE MILE POINT.										
May 1981	Lake Trout #1	<18.9	< 5.4	9610.0	<27.3	< 40.3	< 34.1	< 21.7	189.1	< LLD
	Lake Trout #2	75.2	< 7.2	8729.0	<36.1	<105.4	<192.6	< 28.6	129.4	< LLD
	White Sucker	19.6	<10.8	16830.0	69.3	222.8	544.4	< 29.2	133.6	< LLD
October 1981	Lake Trout	<26.7	< 7.8	12400.0	<87.6	< 40.3	<116.8	< 29.4	210.8	< LLD
	White Sucker #1	<24.2	<11.0	17390.0	<34.8	< 43.2	< 44.6	< 32.4	470.0	< LLD
	White Sucker #2	<84.5	<29.5	17784.0	<49.4	< 59.3	< 59.3	< 47.9	355.7	< LLD

My procedure

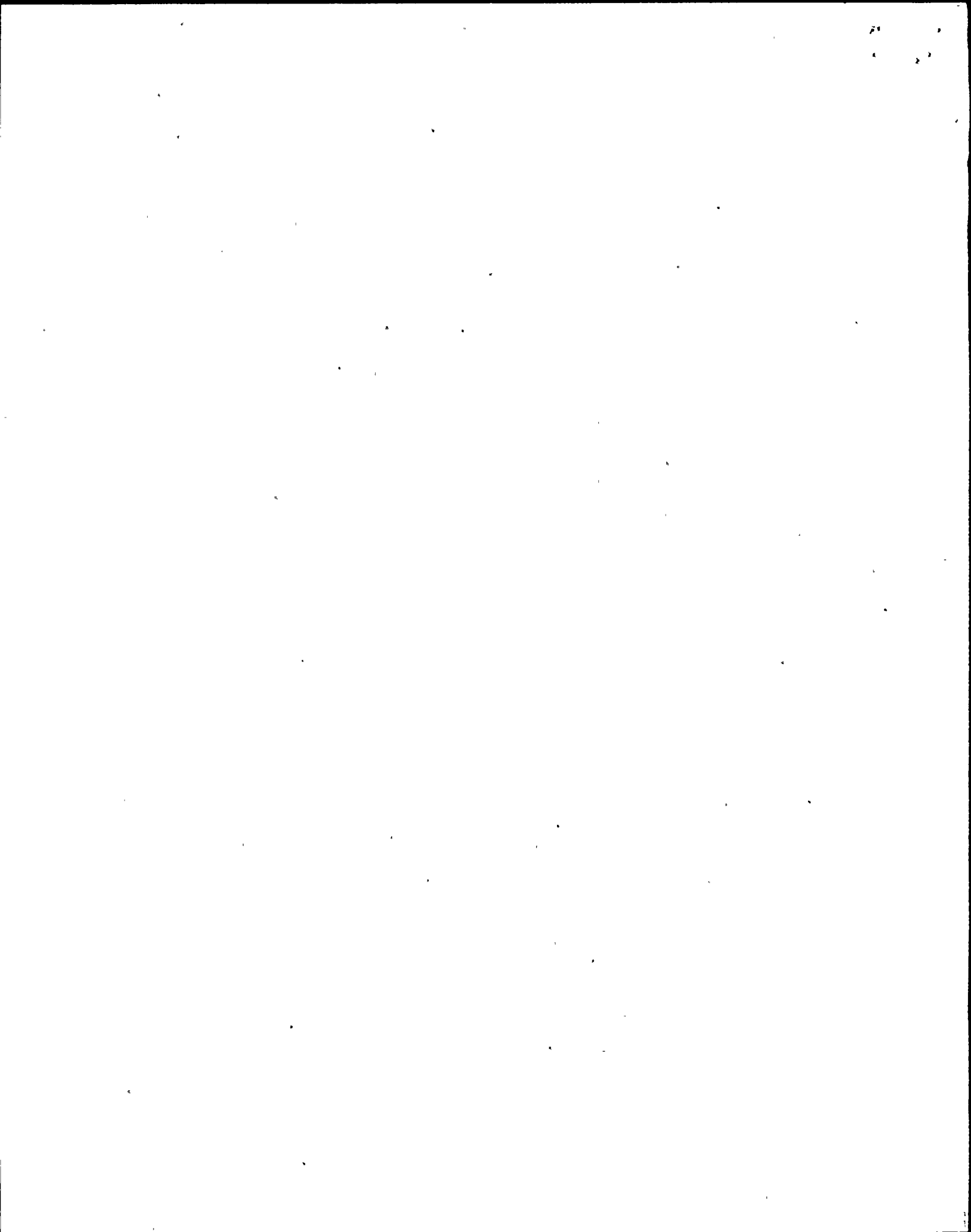


TABLE 5B (continued)

Concentrations of Strontium-89 & 90 & Gamma Emitters in Fish Samples
Results in Units of pCi/kg (dry)

Sample Date	Sample Type	Sr-89	Sr-90	K-40	GAMMA EMITTERS					
					Mn-54	Co-58	Co-60	Cs-134	Cs-137	Others
OSWEGO										
May 1981	White Sucker	< 48.1	< 16.6	16960.0	<37.6	<48.8	< 58.3	< 30.7	148.4	< LLD
October 1981	Lake Trout	< 69.7	< 27.6	10080.0	<46.2	<46.2	< 50.4	< 39.5	243.6	< LLD
	White Sucker #1	< 39.3	< 16.5	18909.0	<39.0	<37.8	< 63.0	< 33.2	160.4	< LLD
	White Sucker #2	< 34.3	< 14.4	18662.0	<48.2	<53.6	< 53.0	< 47.6	180.6	< LLD
RICE CREEK										
May 1981	Lake Trout #1	< 47.3	< 8.5	9990.0	<40.0	<56.6	< 40.0	< 36.6	206.5	< LLD
	Lake Trout #2	< 47.1	< 11.3	9610.0	<37.2	<49.6	< 52.7	< 30.4	161.2	< LLD

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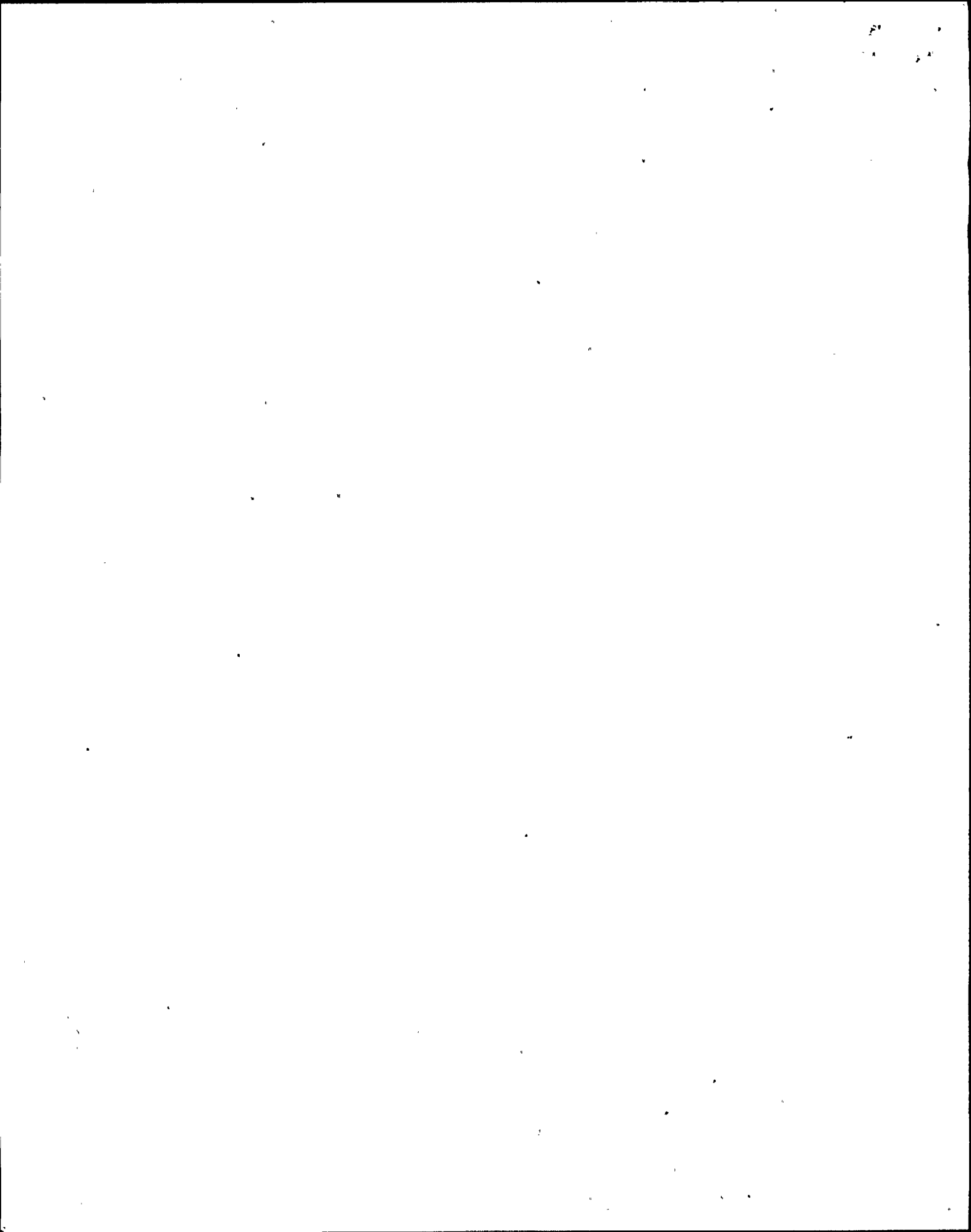


TABLE 11

CONCENTRATIONS OF GAMMA EMITTERS IN MONTHLY COMPOSITES OF NMP
AIR PARTICULATE SAMPLES

Results in Units of 10^{-3} pCi/m³

NUCLIDES	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE
OFF-SITE COMPOSITE: A-1						
Co-60	< 0.52	0.78	1.17	< 0.86	1.62	< 0.82
Mn-54	0.28	< 0.48	0.76	1.37	1.47	0.68
Cs-134	< 0.46	< 0.52	< 0.63	< 0.93	< 0.84	< 0.71
Cs-137	0.61	0.80	1.21	2.58	3.91	1.92
Nb-95	20.89	43.90	66.09	122.90	131.80	48.56
Zr-95	14.95	21.60	33.92	62.00	59.05	21.24
Ce-141	11.48	12.23	13.45	18.33	12.09	3.40
Ce-144	7.46	12.06	23.86	53.67	62.22	30.86
Ru-106	< 4.39	7.15	10.59	15.76	25.03	13.17
Ru-103	13.65	14.97	18.84	26.53	23.41	6.48
Be-7	86.73	74.24	82.35	112.20	143.20	84.54
K-40	5.26	< 5.28	< 5.51	12.73	7.57	< 8.92
La-140	18.62	LLD	LLD	LLD	LLD	LLD
ON-SITE COMPOSITE: B-2						
Co-60	0.51	0.60	0.52	0.71	1.73	0.38
Mn-54	< 0.38	0.28	0.71	1.24	1.42	1.29
Cs-134	< 0.36	< 0.33	< 0.44	< 0.61	< 0.64	< 0.48
Cs-137	0.45	0.68	0.89	2.38	3.42	1.81
Nb-95	20.87	36.14	53.73	100.40	103.50	41.19
Zr-95	12.76	16.60	27.67	47.22	45.62	17.95
Ce-141	8.08	9.56	9.22	12.52	9.82	3.14
Ce-144	4.60	8.94	17.05	38.91	52.95	24.67
Ru-106	2.34	3.99	4.54	11.25	19.40	9.41
Ru-103	10.44	12.93	14.40	20.48	17.65	5.44
Be-7	62.73	66.11	52.82	83.27	105.20	62.51
K-40	< 4.18	< 3.59	2.62	< 4.49	5.90	< 4.80
La-140	49.11	LLD	LLD	LLD	LLD	LLD
Ba-140	LLD	LLD	LLD	LLD	LLD	LLD

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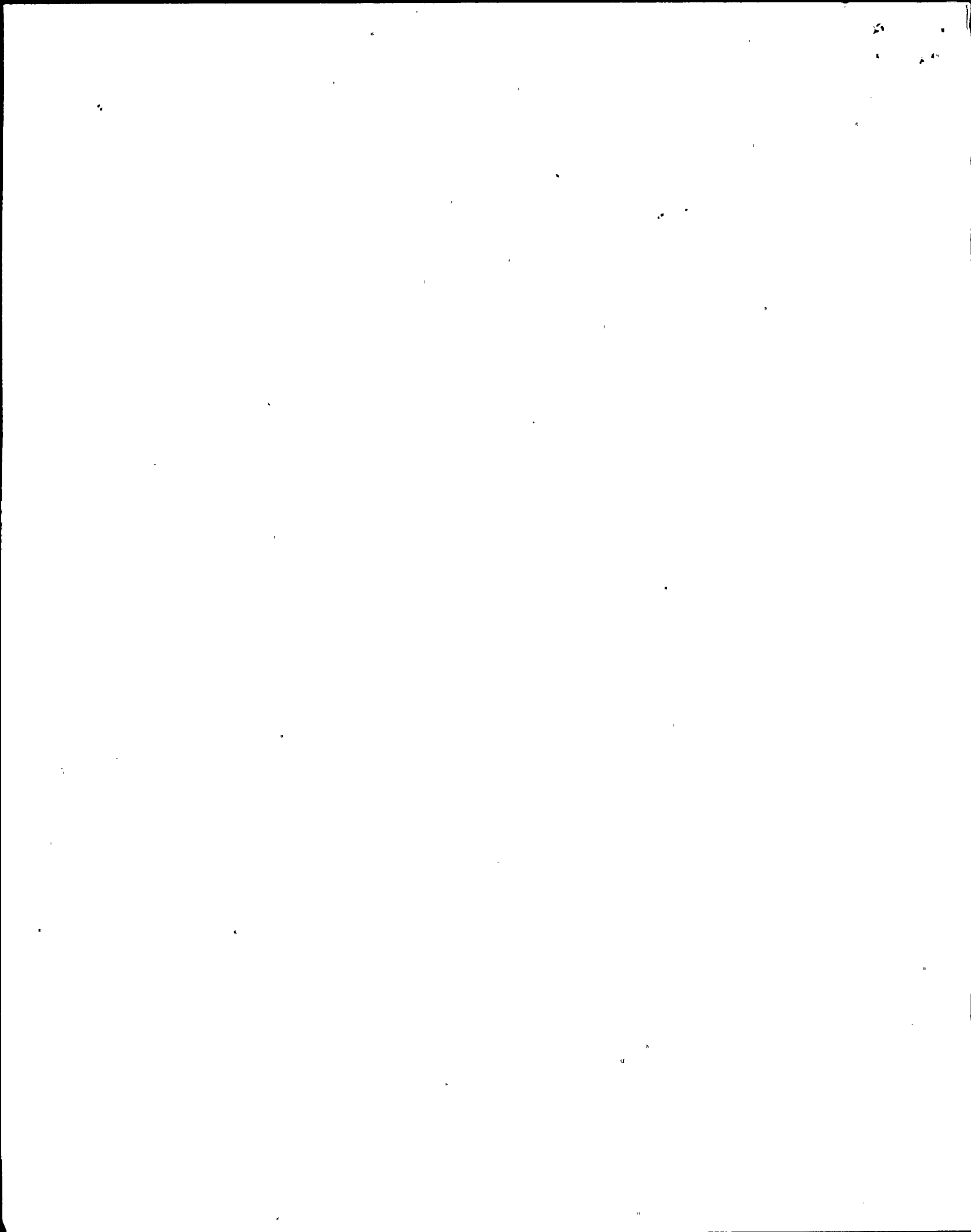


TABLE 11 (continued)

CONCENTRATIONS OF GAMMA EMITTERS IN MONTHLY COMPOSITES OF NMP
AIR PARTICULATE SAMPLES

Results in Units of 10^{-3} pCi/m³

NUCLIDES	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
		OFF-SITE COMPOSITE: A-1				
Co-60	0.90	0.53	< 0.72	0.27	< 0.46	< 0.37
Mn-54	1.23	0.46	< 0.52	< 0.28	0.18	< 0.40
Cs-134	< 0.48	< 0.43	< 0.48	< 0.25	< 0.24	< 0.32
Cs-137	2.66	1.10	0.81	< 0.39	< 0.34	0.38
Nb-95	36.30	11.80	3.56	1.23	0.82	0.47
Zr-95	14.10	4.12	2.33	< 0.96	< 0.65	< 0.92
Ce-141	< 1.42	< 0.50	< 0.64	< 0.53	< 0.35	< 0.43
Ce-144	29.50	12.40	3.71	2.26	1.87	0.93
Ru-106	11.60	5.98	< 4.54	< 2.74	< 2.85	< 3.01
Ru-103	4.51	1.39	< 0.67	< 0.48	< 0.33	< 0.36
Be-7	122.00	126.00	92.30	83.60	71.50	77.00
K-40	< 3.48	< 8.13	< 6.27	5.21	< 4.19	4.49
La-140	LLD	LLD	LLD	LLD	LLD	LLD
		ON-SITE COMPOSITE: B-2				
Co-60	0.28	0.47	< 0.49	0.51	0.60	0.43
Mn-54	0.90	0.57	< 0.33	< 0.24	< 0.24	< 0.30
Cs-134	< 0.34	< 0.34	< 0.28	< 0.20	< 0.20	< 0.22
Cs-137	1.93	0.84	0.41	0.30	0.34	0.18
Nb-95	37.70	10.90	2.78	0.86	0.68	0.50
Zr-95	15.20	3.76	1.43	< 0.54	< 0.70	< 0.66
Ce-141	1.55	0.44	< 0.42	< 0.35	< 0.31	< 0.34
Ce-144	30.30	10.10	3.75	1.33	0.78	0.56
Ru-106	14.20	3.59	< 3.07	< 2.00	< 2.32	< 2.35
Ru-103	4.12	0.47	< 0.42	< 0.29	< 0.26	< 0.30
Be-7	111.00	99.00	75.20	66.90	63.70	51.40
K-40	< 2.58	< 4.33	< 4.73	< 3.16	2.40	4.40
La-140	LLD	LLD	LLD	LLD	LLD	LLD
Ba-140	LLD	LLD	LLD	1.01	LLD	LLD

72

Approved

TABLE 11 (continued)

CONCENTRATIONS OF GAMMA EMITTERS IN MONTHLY COMPOSITES OF NMP
AIR PARTICULATE SAMPLES

Results in Units of 10^{-3} pCi/m³

NUCLIDES	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE
OFF-SITE COMPOSITE: A-2						
Co-60	< 0.63	< 0.56	0.88	0.77	< 1.45	0.54
Mn-54	< 0.40	0.42	0.79	1.35	1.58	1.39
Cs-134	< 0.48	< 0.56	< 0.66	< 0.91	< 2.62	< 0.70
Cs-137	< 0.54	0.69	1.23	2.91	4.16	2.65
Nb-95	22.52	54.70	68.69	129.90	134.20	53.25
Zr-95	16.11	28.29	36.73	63.87	60.94	23.45
Ce-141	11.98	13.98	13.93	18.81	13.12	3.45
Ce-144	7.15	12.37	21.71	55.51	69.95	34.70
Ru-106	< 4.81	< 6.09	10.69	17.97	24.14	15.49
Ru-103	13.55	15.94	20.13	28.46	20.22	7.09
Be-7	88.78	85.93	84.19	115.40	136.10	89.05
K-40	3.46	7.69	< 0.54	7.72	< 25.04	4.60
La-140	20.92	LLD	LLD	LLD	LLD	LLD

ON-SITE COMPOSITE: B-1						
Co-60	0.53	0.74	0.70	0.36	0.96	0.85
Mn-54	< 0.28	0.39	0.39	1.20	1.91	0.83
Cs-134	< 0.30	< 0.45	< 0.47	< 0.68	< 0.63	< 0.50
Cs-137	0.51	0.88	0.93	2.93	4.53	2.52
Nb-95	18.40	65.96	62.03	127.20	120.90	51.16
Zr-95	12.07	30.60	31.96	56.98	54.37	21.31
Ce-141	10.41	14.16	12.25	17.65	11.85	3.78
Ce-144	5.45	15.84	20.52	51.51	62.48	32.74
Ru-106	< 3.30	4.01	7.25	17.01	19.58	11.75
Ru-103	12.37	16.05	17.47	26.89	20.54	7.67
Be-7	82.46	82.63	67.27	103.20	118.50	76.72
K-40	< 4.34	< 4.13	< 0.41	< 3.36	4.24	< 5.20
La-140	44.14	LLD	LLD	LLD	LLD	LLD
Sb-124	< 0.77	< 1.05	< 0.66	< 0.75	< 0.96	< 1.19

73

Physicist

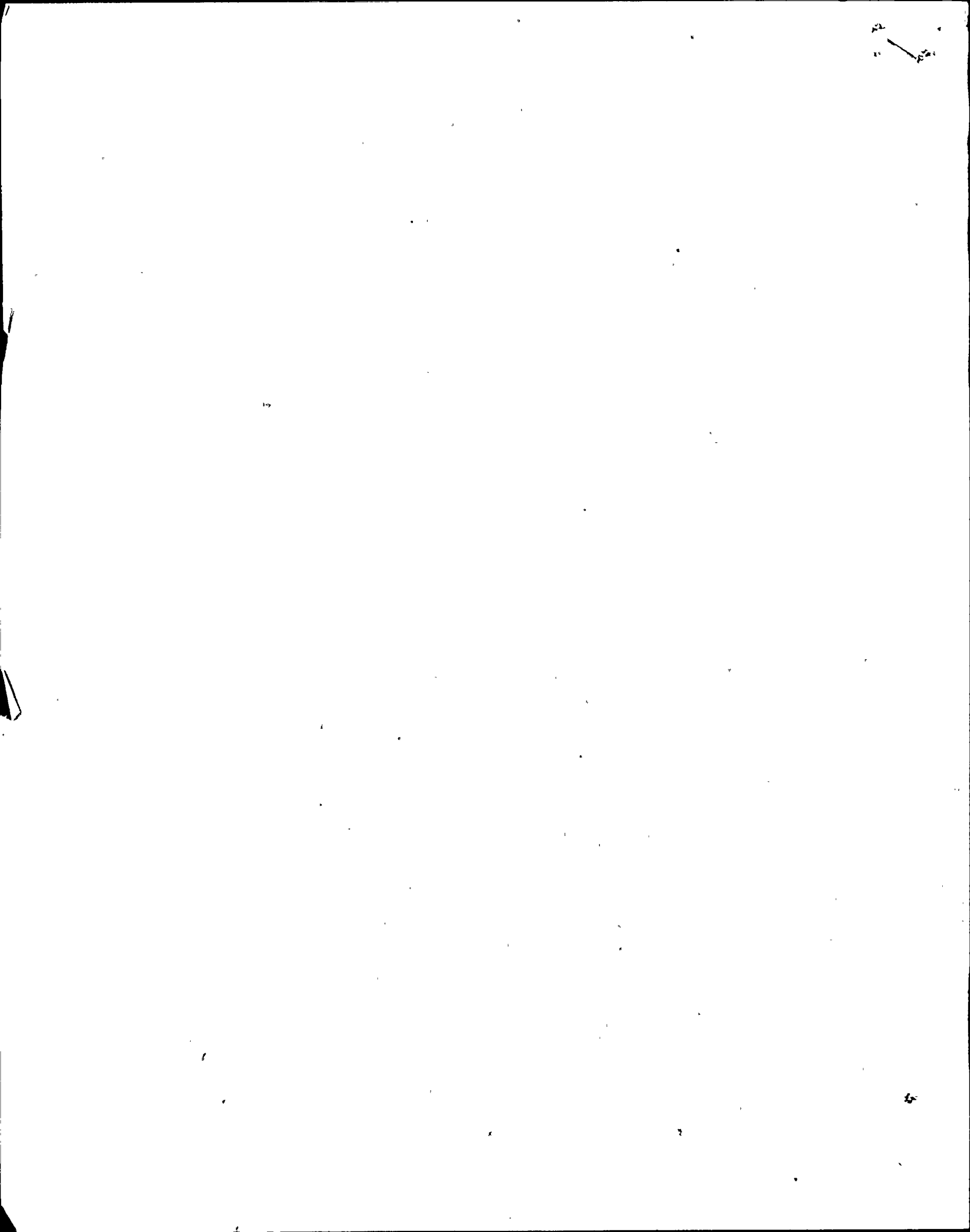


TABLE 11 (continued)

CONCENTRATIONS OF GAMMA EMITTERS IN MONTHLY COMPOSITES OF NMP
AIR PARTICULATE SAMPLES

Results in Units of 10^{-3} pCi/m³

NUCLIDES	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
		OFF-SITE COMPOSITE: A-2				
Co-60	< 0.38	< 0.63	< 0.63	< 0.29	< 0.48	0.74
Mn-54	0.99	0.69	< 0.51	< 0.28	< 0.30	< 0.36
Cs-134	< 0.44	< 0.39	< 0.48	< 0.26	< 0.30	< 0.31
Cs-137	2.88	1.28	0.80	0.30	0.32	< 0.40
Nb-95	38.60	11.80	2.82	1.12	0.78	0.66
Zr-95	14.50	4.03	1.63	< 0.87	< 0.79	< 0.90
Ce-141	< 1.53	< 0.70	< 0.65	< 0.45	< 0.39	< 0.47
Ce-144	29.80	10.70	3.13	2.02	1.44	1.01
Ru-106	12.00	5.51	< 0.50	< 2.88	< 2.91	3.02
Ru-103	4.74	0.83	< 0.64	< 0.40	< 0.37	< 0.46
Be-7	132.00	109.00	86.30	79.40	76.05	75.70
K-40	< 3.37	< 5.00	< 6.97	2.94	5.83	3.17
La-140	LLD	LLD	LLD	LLD	LLD	LLD
		ON-SITE COMPOSITE: B-1				
Co-60	0.34	0.49	< 0.48	0.25	0.50	0.35
Mn-54	0.92	0.33	< 0.34	< 0.17	< 0.17	< 0.25
Cs-134	< 0.36	< 0.31	< 0.30	< 0.16	< 0.22	< 0.24
Cs-137	2.44	1.37	0.68	0.24	0.33	< 0.26
Nb-95	39.50	11.20	3.22	1.25	0.64	0.38
Zr-95	15.50	3.61	2.62	0.76	< 0.57	< 0.69
Ce-141	< 1.49	< 0.55	< 0.48	< 0.32	< 0.30	< 0.34
Ce-144	30.40	10.90	3.73	1.36	1.03	1.14
Ru-106	13.60	5.47	< 3.35	< 1.79	1.32	< 2.24
Ru-103	< 4.72	< 0.65	0.33	< 0.27	< 0.25	< 0.28
Be-7	123.00	107.00	91.70	75.60	76.90	65.30
K-40	< 3.19	< 4.09	< 4.65	< 2.74	< 3.62	< 3.47
La-140	LLD	LLD	LLD	LLD	LLD	LLD
Sb-124	< 0.54	< 1.01	< 0.98	< 0.52	< 0.88	< 0.41

August 1968

74

