RADIOLOGICAL ENVIRONMENTAL SURVEY

January - December 1985

SUMMARY

The environment surrounding the Ginna Nuclear Plant is routinely monitored to determine the influence of plant operation on the levels of man-made radioactivity. Samples are collected on-site where concentrations would be expected to be highest if a release from the plant should occur and compared to samples which have been collected simultaneously at points where the concentration of the plant effluents is calculated to be less than 1% of those at the closer locations. The reference samples provide a running background which makes it possible to distinguish between significant radioactivity introduced to the environment from the operation of the plant and that introduced by nuclear detonations or other sources.

During the year of 1985, 1501 samples were obtained and analyzed. 434 of these samples were analyzed by a gamma scan. In addition, 17 EPA Interlaboratory Comparison Studies samples were analyzed and reported. The samples included air, water, fallout, fish, vegetation, milk and direct radiation. There was no significant difference between on-site and off-site samples and no positive results were found that were due to plant operations. The concentrations of radioactive material in the environment resulting from plant releases were calculated from the measured release rates and dilution factors. These calculated concentrations could not have been detected because of the magnitude and fluctuations of the background or because they were below the sensitivity of our analytic procedures. The calculated concentrations would give a dose commitment well below the design objectives specified in Appendix I, 10 CFR 50.

ANALYTICAL RESULTS

The values listed on the following tables include the uncertainties stated as 2 standard deviations (96% confidence level).

Key Definitions

Curie (Ci): The quantity of any radionuclide in which the number of disintegrations per second is 37 billion.

Picocurie (pCi): One millionth of a millionth of a curie or 0.037 disintegrations per second.

Cubic Meter (M^3): Approximately 35.3 cubic feet.

Liter (L): Approximately 1.06 quarts.

Lower Limit of Detection

The Nuclear Regulatory Commission has requested that reported values be compared to the Lower Limit of Detection (LLD) for each piece of equipment. Table XII is a listing of the LLD values for gamma isotopes using our Ge(Li) multichannel pulse height detector system. These values are before the correction for decay. An explanation of the calculation of the LLD is included following Table XII. Gross detection limits are as follows:

Beta:

Air 0.003 pCi/M^3 Gross beta for 400M^3 sample.

Water 1.2 pCi/L Gross beta for 1 liter sample.

Milk 0.24 pCi/L Iodine 131 for 4 liter sample.

Fallout 1.1 pCi/m^2/day for 0.092 M^2 collection area.

Gamma:

Air 0.03 pCi/m^3 Iodine 131 on charcoal cartridge for 400M^3 sample.

Radiation 10 millirem/month for one month exposure (film). 5 millirem/ quarter for one quarter exposure (TLD).

AIR PARTICULATES

Radioactive particles in air are collected by drawing approximately one cfm through a two inch diameter particulate filter. The volume of air sampled is measured by a dry gas meter and corrected for the pressure drop across the filter. The filters are changed weekly and allowed to decay for three days prior to counting to eliminate most of the natural radioactivity such as the short half-life daughter products of radon and thoron. The decay period is used to give a more sensitive measurement of long-lived man-made radioactivity.

There is a ring of 7 sampling stations on the plant site located from 150 to 300 meters from the reactor at the point of the maximum annual average ground level concentration. In addition, there is a ring of 5 sampling stations located approximately 7 to 10 miles from the site that serve as background stations.

Based on weekly comparisons, there was no statistical difference between the on-site and the background radioactive particulate concentrations. The average concentrations for the on-site and background samples were 0.022 and 0.021 pCi/M^3 for the period of January to December, 1985. Maximum weekly concentrations for each station were less than 0.057 pCi/m^3.

The average concentration of particulate at the site boundary due to plant releases of iodine and particulate would be 4.21 E-6 pCi/M^3 or 5.0 E-4% of the average release concentration of 0.842 pCi/m^3. The survey can not detect such concentrations against the magnitude of the background.

Table IA is a list of values for the on-site samplers during January through June, Table IIA is a list for the on-site locations during July through December. Table IB is a list of values for the off-site samplers during January through June, Table IIB is a list for the off-site locations during July through December.

The particulate filters from each sampling location were saved and a 13 week composite was made. A gamma isotopic analysis was done for each sampling location and corrected for decay. The results of this analysis are listed in Tables IIIA and B.

Iodine cartridges are placed at four locations. These cartridges are changed and counted each week. A list of values for these cartridges is given in Table IV.

A trend plot of the 1984 and 1985 Air Filter data is included. All counts were within normal variation seen during the past several years.

WATER

Composite samples are collected weekly from Lake Ontario, upstream (Russell Station) and downstream (Ontario Water Plant), and analyzed for gross beta activity. There was no significant difference between the upstream and downstream sample concentrations. The yearly averages were 3.38 and 3.06 pCi/liter for the upstream and downstream samples respectively. Results are listed in Table VA for January through June and Table VB for July through December. A trend plot of the upstream and downstream samples is included.

Weekly composite samples are taken from the plant circulating water intake and discharge canal. The yearly averages were 2.63 and 2.91 pCi/liter for the intake and discharge canal respectively. These are essentially the same as the upstream and downstream values of 3.38 and 3.06 pCi/liter as they fall within the error band and range of the measurement.

For all batch releases, the average concentration in the discharge canal from the identified activity was 0.67 pCi/liter. The normal 2 sigma variation in the activity calculation of composite samples is 0.99 pCi/liter or one and one-half the average concentration added by releases from the plant.

Samples of tap water, the nearest well, and the creek which crosses the site were collected and analyzed monthly. The results show no indication of plant influence. These results are listed in Tables VA and VB.

Gamma isotopic analysis was done on each monthly sample and biweekly or monthly composites of weekly samples. These are listed in Table VII and separated by source of sample.

After it was pointed out during an NRC audit in September that we did not meet the LLD required by Technical Specifications for iodine in water, an analysis for iodine by separation and beta counting was begun. The four months of data are included as Table VIB.

FALLOUT

Fallout is a term used to denote radioactive material settling from the atmosphere to the ground. At the sampling stations, the fallout settles as dust or is collected with rainfall by a funnel and bottle. There are two on-site sampling stations and three off-site. Fallout generally increases in the spring months due to transfer of fission products from the upper to the lower atmosphere in conjunction with increased rainfall. There was no significant difference between on-site and off-site samples for the period of January through December, 1985. Table VIII lists the values for fallout samples.

EXTERNAL PENETRATING RADIATION

External penetrating radiation is measured by film badges, which are sealed in plastic with the desiccant. The films are located at 12 air particulate sampling stations and one distant location and are changed monthly. One TLD and film location (#7) is affected by the contaminated equipment storage location and indicated > 20 mr/month exposure. The film badge program was discontinued at the end of the third quarter for the plant personnel monitoring and also for the environmental program.

A thermoluminescent dosimeter (TLD) with a sensitivity of 1 millirem is issued as part of the environmental monitoring. Thirty-nine TLD badges are currently placed in four rings around the plant. These rings range from less than 1000 feet to 15 miles and have been dispersed so as to give indications in each of the nine land based sectors around the plant potential population exposures should an excessive release occur from the plant. Badges are changed and read after approximately 3 months exposure.

For the year of 1985, omitting location 7, on-site exposure ranged between 13.5 and 22.0 mrem/quarter, with an average exposure of 17.4 mrem/quarter and off-site 10.3 to 19.4 mrem/quarter with an average exposure of 15.2 mrem/quarter. Table IX gives TLD readings for each quarter. A trend plot of the quarterly average dose rate by TLD location is included comparing 1984 and 1985.

MILK

Milk samples are collected monthly during November to May from one of the three and biweekly during June to October from each of the three dairy herds located three to five miles from the plant. A control farm sample is taken for each monthly sample and once during each biweekly period. The milk is analyzed for Iodine-131 and also gamma scanned for major fission products. The method involves chemical separation of iodine and gross beta counting. Interference from other radioactive isotopes has made the results suspect in that they are biased high. The counting procedure is not specific for Iodine-131 and other isotopes may add to the count rate. Attempts to determine the half-life of the activity in the sample is difficult because of the low counting rates involved.

During 1985, no samples indicated positive activity that exceeded the LLD for the analysis.

The annual dose to the thyroid of an infant which could result from the measured plant release rate, was calculated by the method described in the Offsite Dose Calculation Manual. The maximum resultant annual thyroid dose for 1985 would be 0.029 mrem. The annual average plant release rate would give a concentration of < 0.005 pCi/liter of Iodine-131 in milk, which is below the LLD for this analysis.

LAKE ONTARIO FISH

Fish caught near the discharge canal outfall were filleted, and counted for gamma emitting isotopes. A comparison to data for fish caught 15 miles and more away from the plant shows no indication of plant influence.

Isotopic Gamma Concentrations (pCi/wet kilogram) are listed in Table XI.

A sample of the sand was obtained from the lake bottom in the discharge plume area. Results of the gamma scan are included in Table XI.

OTHER SAMPLES

Additional samples representing vegetation and fruit were taken and analyzed for gamma emitting isotopes. The results for these samples are listed in Table XIB.

EPA INTERLABORATORY COMPARISON STUDY

An indication of the laboratory's ability to analyze samples and achieve results consistent with other laboratories is the aim of the EPA Interlaboratory Comparison. Selected unknowns are received and analyzed by our procedures and the results are sent to the EPA Environmental Monitoring Systems Laboratory. A report is returned from them indicating the concentrations with which the samples were spiked and how we compared to other laboratories analyzing the same samples. Table XIII is a tabulation of the samples analyzed during 1985.

DEVIATIONS TO THE SAMPLING PROGRAM

Deviations to the sampling program are permitted when samples are not obtainable due to hazardous conditions, seasonal availability or to malfunctioning of automatic sampling equipment. Samples that were not available due to malfunctioning of automatic sampling or not available for a specific reason are noted on data table pages.

The following deviation occurred in the fish program. The Tech Spec Table 3.16-1 gives the number of samples as - 4 control - and frequency as - twice during fishing season including at least four species. During 1985, only three different species of fish were collected during each half of the fishing season which were applicable to the program or of sufficient size to qualify as edible. An effort was made to have controls of the same species as those caught in the Ginna discharge plume.

RESULTS NOT MEETING THE MAXIMUM LLD

The maximum LLD values as defined by Tech Specs are:

Analysis	Water (pCi/l)	Airborne Particulate or Gas (pCi/m^3)	Fish (pCi/kg, wet)	Milk (pCi/l)	Food Particulate (pCi/kg, wet)
gross beta	4[a]	1×10^{-2}			
^{3}H	2000(1000[a])				
^{54}Mn	15		130		
^{59}Fe	30		260		
$^{58,60}Co$	15		130		
^{65}Zn	30		260		
^{95}Zr-Nb	15[b]				
^{131}I	1	7×10^{-2}		1	60
$^{134,137}Cs$	15(10[a]),18	1×10^{-2}	130	15	60
^{140}Ba-La	15[b]			15[b]	

a. LLD for drinking water

b. Total for parent and daughter

The following water samples exceeded the maximum LLD for iodine as specified in Tech Specs and are reported here as required.

Sample:	Reason
Sept. Well	Very small chemical yield of 10.5% gave an LLD value of 1.97 pCi/l.
Sept. Russell Comp.	Delay in receiving final composite sample caused a large decay correction of 2.63 giving an LLD of 1.71 pCi/l.
Sept. OWD Comp.	Delay in doing analysis caused a large decay correction of 2.06 giving an LLD of 1.24 pCi/l.
Sept. Circ. In Comp.	Delay in doing analysis caused a large decay correction of 3.16 giving an LLD of 1.62 pCi/l.

Sept. Circ. Out Comp.	Delay in doing analysis caused a large decay correction of 2.82 giving an LLD of 1.21 pCi/l.
Nov. Russell Comp.	Delay in receiving final composite sample caused a large decay correction of 2.20 giving an LLD of 1.22 pCi/l.

The technicians have been instructed in the need to do iodine analyses as soon as possible after the completion of the sampling period to alleviate the problems of high decay corrections in the calculation of the LLD.

Milk; Farm A Oct.	Iodine sample contaminated during separation with Cs-137 from EPA sample. Contamination identified by gamma scan of iodine precipitation. No Cs-137 identified in gamma scan of raw milk. Farm resampled for iodine analysis following day with an LLD achieved of 0.33 pCi/l.

During the installation of some inline equipment using the same sample line as the circ. out (discharge canal) automatic sampler on Dec. 3, 1985, the sample line was rerouted to a drain instead of back to the sampler. The situation existed for 13 days before it was recognized and corrected. A Ginna Station Event Report was initiated.

ENVIRONMENTAL SAMPLING LOCATIONS

Distance and Direction

No.	Distance (meters)	Direction
2	360	883?
4	260	140
6	280	230
8	19960	255
10	12980	187
12	24950	93
14	820	294
16	1020	254
18	690	194
20	640	167
22	910	130
24	670	91
26	2940	223
28	3500	147
30	20750	103
32	6040	244
34	6640	207
36	5530	176
38	7040	138
40	6540	97
OWD	1620	105
Russell Station	26860	263
Farm A	8200	117
Farm C	4950	170

No.	Distance (meters)	Direction
435?		
5	200	185
7	230	258
9	11160	245
11	11470	123
13	280	297
15	900	274
17	530	210
19	425	180
21	670	147
23	760	111
25	2860	248
27	2880	202
29	13770	105
31	7150	262
33	7850	222
35	7440	193
37	5630	160
39	6740	115
Well 'B'	640	150
Creek	200	135
Onsite Vegetable Garden	435	112
Farm B	5450	265
Farm D	19700	127

No.	Dist (m)	Direction
112?		

ROCHESTER GAS AND ELECTRIC CORPORATION
ENVIRONMENTAL RADIOLOGICAL MONITORING PROGRAM SUMMARY
R.E. GINNA NUCLEAR POWER PLANT DOCKET NO. 50-244
WAYNE, NEW YORK REPORTING PERIOD 1985

PATHWAY SAMPLED (UNIT OF MEASUREMENT)	TYPE AND TOTAL NUMBER OF ANALYSES	LLD	INDICATOR LOCATIONS MEAN (1) RANGE	LOCATION WITH HIGHEST ANNUAL MEAN NAME DISTANCE AND DIRECTION	MEAN (1) RANGE	CONTROL LOCATIONS MEAN (1) RANGE
AIR: PARTICULATE (pCi/Cu.M.)	GROSS BETA 615	0.003	0.022 (358/358) 0.005 - 0.057	ONSITE LOCATION #5 200 M 185	0.023 (52/52) 0.005 - 0.057	0.021 (257/257) 0.005 - 0.056
	GAMMA SCAN 48	(2)	< LLD (28/28)	----------	----------	< LLD (20/20)
IODINE	GAMMA SCAN 208	0.03	< LLD (104/104)	----------	----------	< LLD (104/104)
DIRECT RADIATION: (3) FIIM (mR/MONITH)	BETA/GAMMA 108	10	< 10 (45/45)	----------	----------	< 10 (54/54)
TLD (mR/QUARTER)	GAMMA 156	0.08	17.4 (68/68) 13.5 - 22.0	ONSITE LOCATION #5 200 M 185	----------	15.2 (84/84) 10.3 - 19.4
WATER: DRINKING (pCi/LITER)	GROSS BETA 75	1.2	3.98 (75/75) 1.20 - 9.53	WELL "B" 640 M 150	6.18 (12/12) 4.12 - 9.53	----------
	GAMMA SCAN 50	(2)	Ra-226 28 (12/50) 11 - 45	WELL "B" 640 M 150	28 (12/12) 11 - 45	----------
SURFACE (pCi/LITER)	GROSS BETA 164	1.2	3.46 (114/114) 0.73 - 8.49	DEER CREEK 200 M 135	5.14 (12/12) 3.65 - 7.42	3.38 (50/50) 1.39 - 10.86
	GAMMA SCAN 49	(2)	Ra-226 18 (9/37) 11 - 42	DEER CREEK 200 M 135	17 (9/12) 11 - 42	< LLD (12/12)
RAINFALL (pCi/sq.M/day)	GROSS BETA 59	1.2	6.70 (23/23) 1.24 - 23.80	STATION #5 200 M 185	8.05 (12/12) 1.24 - 23.80	5.79 (36/36) 1.78 - 14.00
MILK: (pCi/LITER)	IODINE 56	0.24	< LLD (38/38)	----------	----------	< LLD (18/18)
	GAMMA SCAN 56	(2)	< LLD (38/38)	----------	----------	< LLD (18/18)
FISH: (pCi/Kg)	GAMMA SCAN 14	(2)	Cs-137 24 (8/8) 15 - 32	DISCHARGE PLUME	----------	19 (6/6) 11 - 24
VEGETATION: (pCi/Kg)	GAMMA SCAN 7	(2)	Cs-137 40 (1/6) 40	ONSITE GARDEN 435 M 112	----------	< LLD (2/2)

(1) Mean and range based on detectable measurements only. Fraction of detectable measurements at specified locations in parentheses.
(2) Table of LLD values attached for gamma scan measurements.
(3) One direct radiation location has been deleted from this summary since it was affected by the contaminated equipment storage location 50 meters away. The average reading at this location is 65.8 mR/Quarter. The film program was deleted at the end of September.

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM

Exposure Pathway and/or Sample	Number of Samples and Sample Locations	Sampling and Collection Frequency	Type and Frequency of Analysis
1. AIRBORNE			
a. Radioiodine	2 indicator 2 control	Continuous operation of sampler with sample collection at least once per 10 days.	Radioiodine canister. Analyze within 7 days of collection of I-131.
b. Particulates	7 indicator 5 control	Same as above.	Particulate sampler. Analyze for gross beta radioactivity. ≥ 24 hours following filter change. Perform gamma isotopic analysis on each sample for which gross beta activity is > 10 times the mean of offsite samples. Perform gamma isotopic analysis on composite (by location) sample at least once per 92 days.
2. DIRECT RADIATION	18 indicator 10 control 11 placed greater than 5 miles from plant site	TLDs at least quarterly.	Gamma dose quarterly.

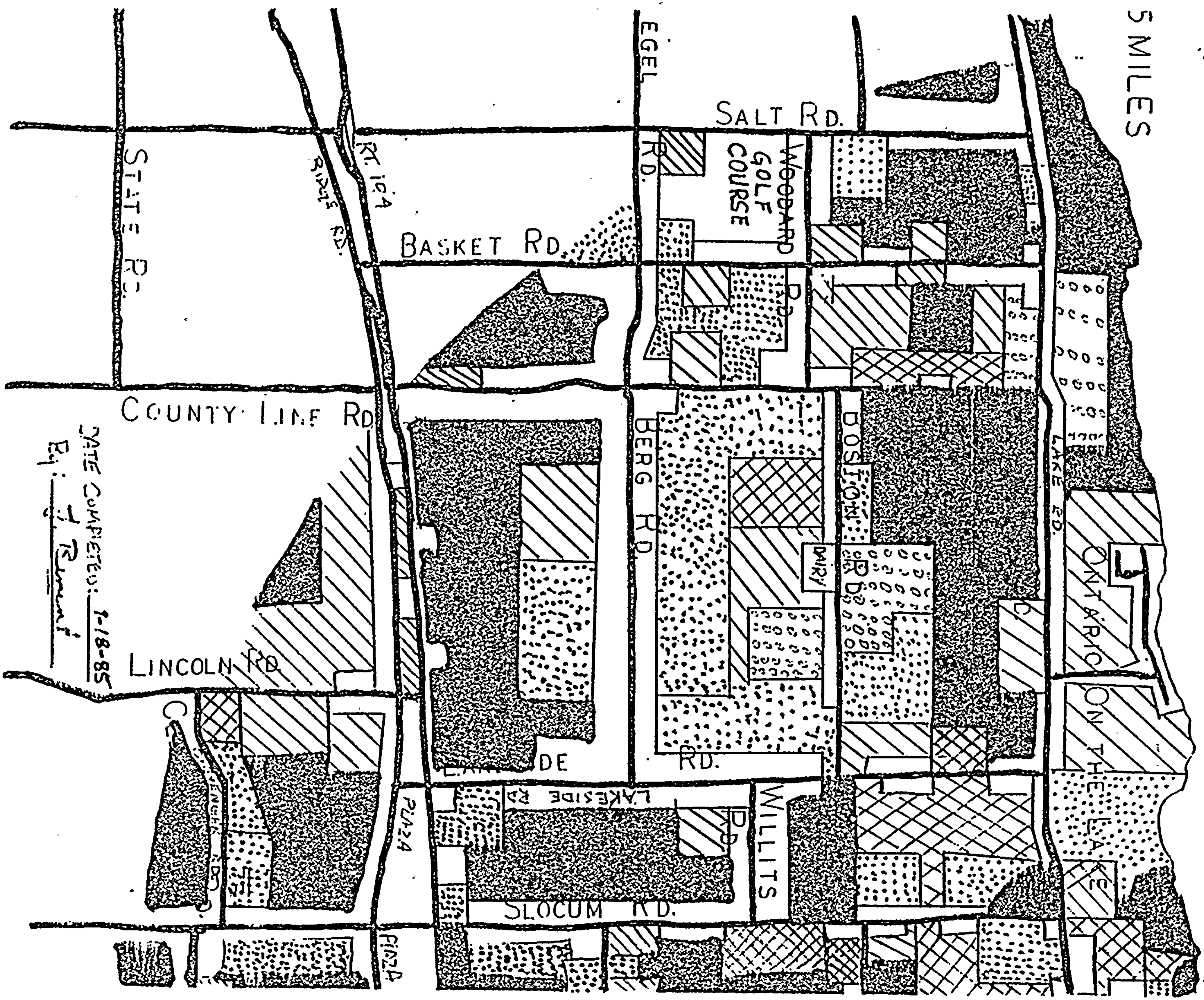
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM

Exposure Pathway and/or Sample	Number of Samples and Sample Locations	Sampling and Collection Frequency	Type and Frequency of Analysis
3. WATERBORNE			
a. Surface	1 control (Russell Station) 1 indicator (Condenser Water Discharge)	Composite* sample collected over a period of ≤ 31 days.	Gross beta and gamma isotopic analysis of each composite sample. Tritium analysis of one composite sample at least once per 92 days.
b. Drinking	1 indicator (Ontario Water District Intake)	Same as above.	Same as above.

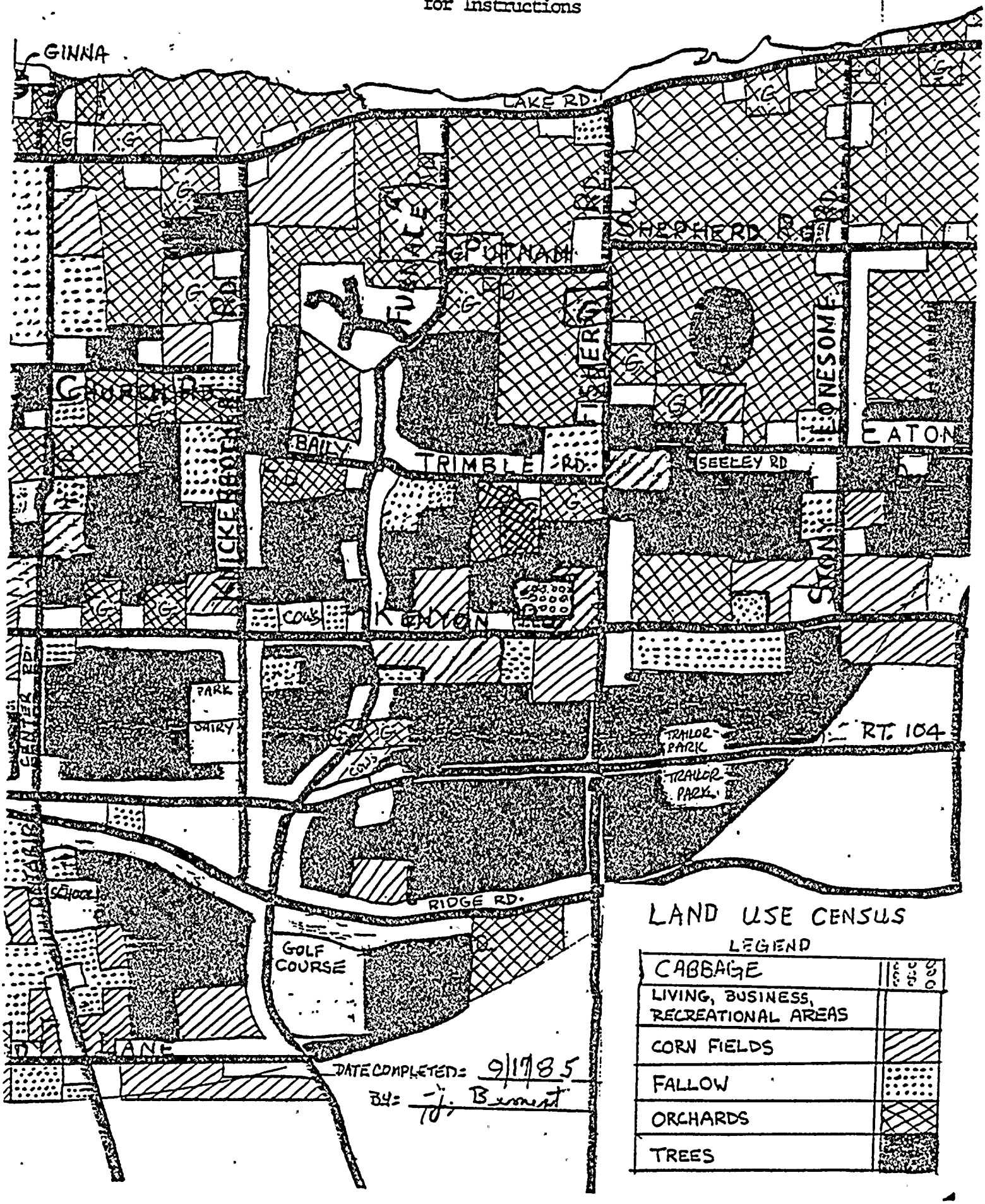
*Composite sample to be collected by collecting an aliquot at intervals not exceeding 2 hours.

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM

Exposure Pathway and/or Sample	Number of Samples and Sample Locations	Sampling and Collection Frequency	Type and Frequency of Analysis
4. INGESTION			
a. Milk	1 control 3 indicator June thru October each of 3 farms	At least once per 15 days.	Gamma isotopic and I-131 analysis of each sample.
	1 control 1 indicator November thru May one of the farms	At least once per 31 days.	Gamma isotopic and I-131 analysis of each sample.
b. Fish	4 control 4 indicator (Off shore at Ginna)	Twice during fishing season including at least four species.	Gamma isotopic analysis on edible portions of each sample.
c. Food Products	1 control 2 indicator (On site)	Annual at time of harvest. Sample from two of the following: 1. apples 2. cherries	Gamma isotopic analysis on edible portion of sample.
	1 control 2 indicator (On site garden or nearest offsite garden within 5 miles in the highest D/Q meteorological sector)	At time of harvest. One sample of: 1. broad leaf vegetation 2. other vegetable	Gamma isotopic analysis on edible portions of each sample.


5 MILES
SALT RD.
EGEL RD.
WOODARD GOLF COURSE
WOODARD RD.
RT. 104
RIDGE RD.
BASKET RD.
STATE RD.
COUNTY LINE RD
BERG RD.
BOSTON RD.
DAIRY
LAKE RD.
ONTARIO ON THE LAKE
LINCOLN RD
LAKESIDE RD
WILLITS RD
SLOCUM RD.
PLAZA
DATE COMPLETED: 1-18-85

LAND USE CENSUS
Refer to CE-9.1
for Instructions



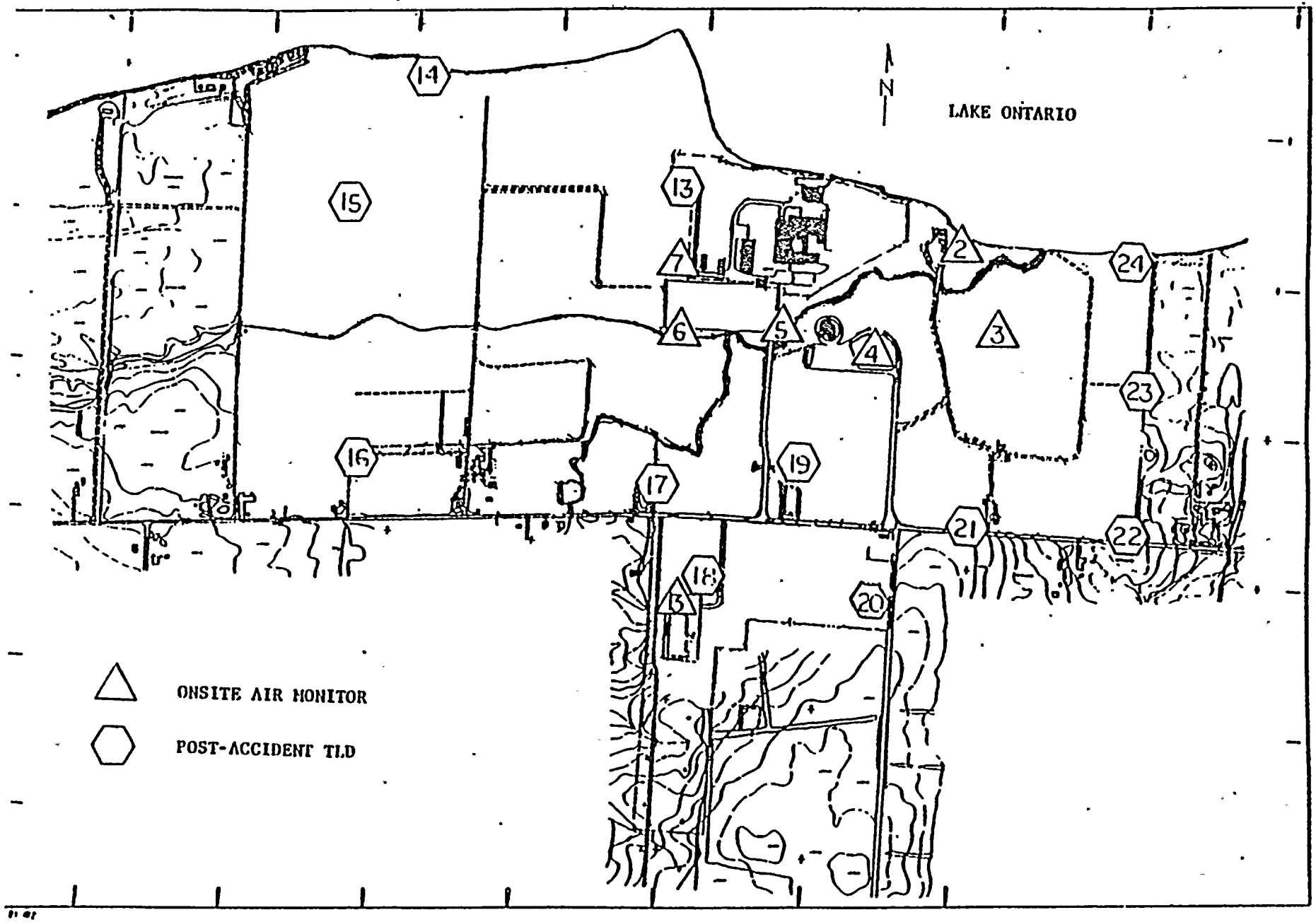
LAND USE CENSUS

LEGEND

CABBAGE	
LIVING, BUSINESS, RECREATIONAL AREAS	
CORN FIELDS	
FALLOW	
ORCHARDS	
TREES	

DATE COMPLETED: 9/17/85

BY: J. Bennett


N
LAKE ONTARIO
1
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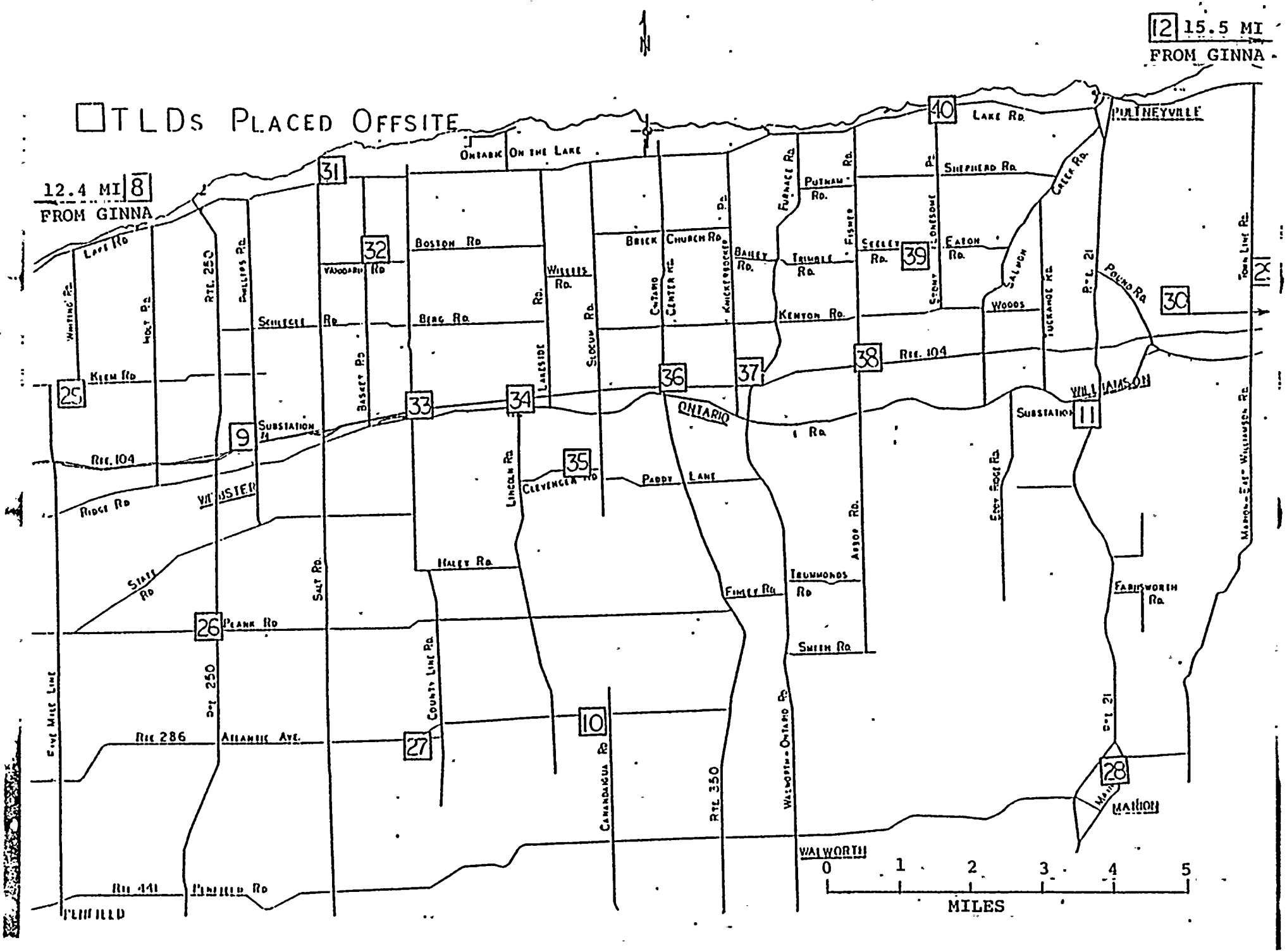
ONSITE AIR MONITOR
POST-ACCIDENT TLD


TLDs PLACED OFFSITE
12.4 MI 8
FROM GINNA
12 15.5 MI
FROM GINNA
N
ONTARIO ON THE LAKE
LAKE RD
PULTNEYVILLE
SHEPHERD RD
PUTNAM RD.
FURNACE RD.
BRICK CHURCH RD
BAILEY RD.
TRIMBLE RD.
FISHER RD.
SCEELEY RD.
EATON RD.
STONY LONESOME RD.
SALMON CREEK RD.
TUCKAHOE RD.
P.L. 21
POUND RD.
TOWN LINE RD.
BOSTON RD
WOODARD RD
WILLETTS RD.
SLOCUM RD.
CHURCH CENTER RD.
KNICKERBOCKER RD.
KENYON RD.
WOODS
RTE. 104
WILLIAMSON
SUBSTATION 11
ONTARIO
LAKE RD.
PADDY LANE
CLEVENGER RD
LINCOLN RD.
LAKESIDE
BASKET RD.
SCHEELES RD
BERG RD.
WHITING RD.
HOYT RD.
RTE. 250
PHILLIPS RD.
KEEM RD
SUBSTATION 9
RIDGE RD
WEBSTER
SIBLEY RD
SALT RD.
HALEY RD.
FINLEY RD.
TRUMMONDS RD
ARNOLD RD.
SMITH RD.
EAST FOOT RD.
FARNSWORTH RD.
PLANK RD
COUNTY LINE RD.
EAST MILE LINE
RTE 286
ATLANTIC AVE.
RTE 350
CANANDAIGUA RD.
WALWORTH-ONTARIO RD.
MACEDON-EAST WILLIAMSON RD.
RTE 441
PENFIELD RD
PENFIELD
MACEDON
MARION
WALWORTH
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MILES

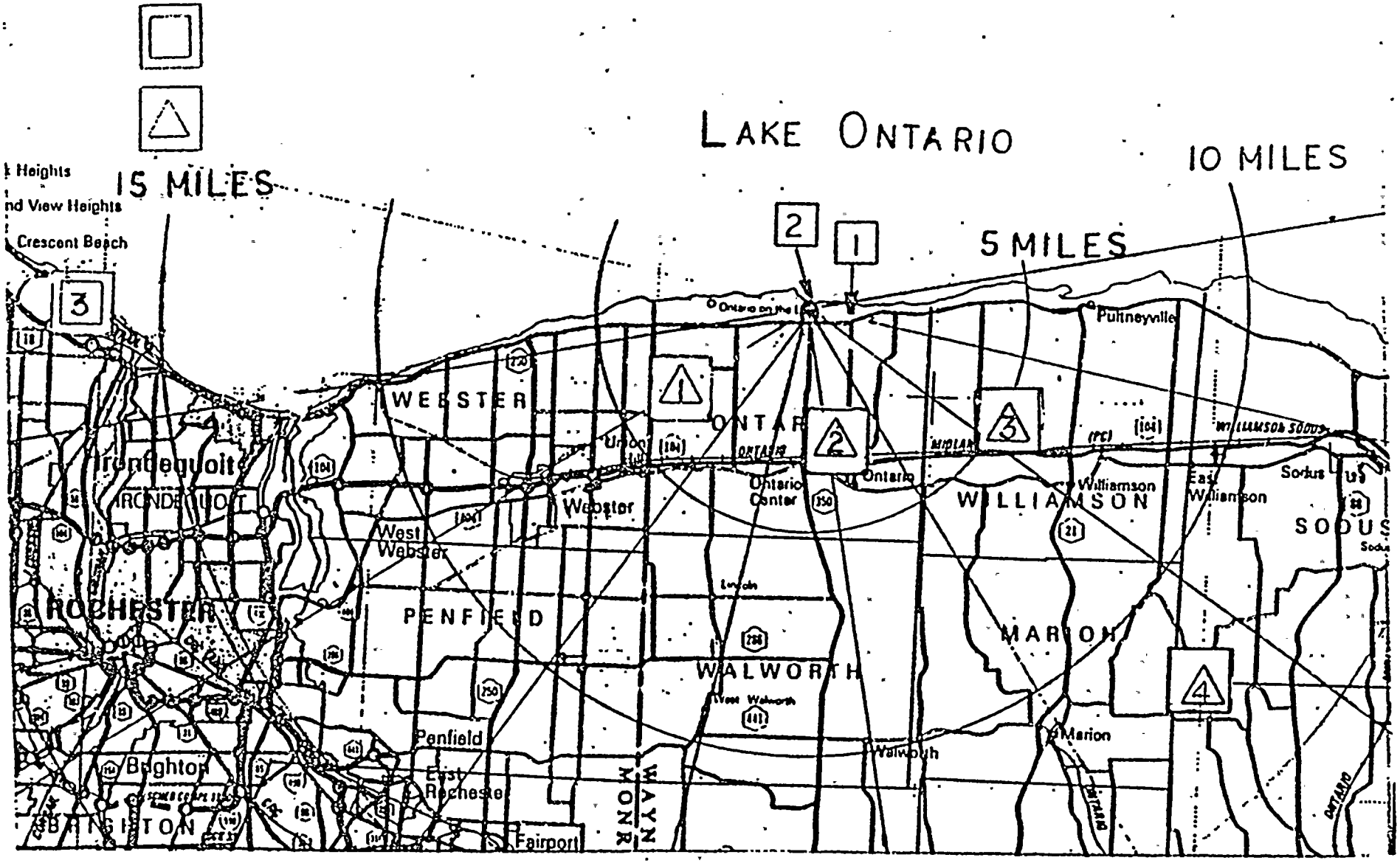

LAKE ONTARIO
15 MILES
10 MILES
5 MILES
Heights
nd View Heights
Crescent Beach
1
2
3
4
WEBSTER
Irondequoit
IRONDEQUOIT
ROCHESTER
Webster
West Webster
PENFIELD
Penfield
Brighton
East Rochester
BRIGHTON
Fairport
WAYNE
Ontario
Ontario Center
WILLIAMSON
Williamson
East Williamson
Sodus
SODUS
Pultneyville
WALWORTH
Walworth
West Walworth
MARION
Marion
Union
Lyons
Ontario on the Lake

TABLE I A

1985 ONSITE AIR MONITORS GROSS BETA ANALYSES
RESULTS IN pCi/CU. M.

WEEK OF	STATION 2	STATION 3	STATION 4	STATION 5	STATION 6	STATION 7	STATION 13	AVE.
DEC. 28 - JAN. 4	0.023±0.004	0.028±0.004	0.031±0.007	0.028±0.004	0.024±0.004	0.029±0.004	0.030±0.004	0.028
JAN. 4 - JAN. 11	0.031±0.005	0.030±0.005	0.038±0.008	0.026±0.005	0.031±0.004	0.024±0.005	0.029±0.005	0.030
JAN. 11 - JAN. 18	0.032±0.005	0.032±0.005	0.022±0.008	0.031±0.005	0.034±0.004	0.029±0.005	0.034±0.005	0.031
JAN. 18 - JAN. 25	0.037±0.005	0.036±0.005	0.033±0.009	0.039±0.005	0.039±0.004	0.036±0.005	0.031±0.005	0.036
JAN. 25 - FEB. 1	0.031±0.005	0.029±0.005	0.034±0.008	0.029±0.005	0.033±0.004	0.030±0.005	0.031±0.005	0.031
FEB. 1 - FEB. 8	0.050±0.005	0.048±0.006	0.046±0.008	0.057±0.005	0.051±0.004	0.051±0.005	0.046±0.005	0.050
FEB. 8 - FEB. 15	0.028±0.005	0.027±0.005	0.031±0.007	0.032±0.005	0.031±0.004	0.026±0.004	0.029±0.004	0.029
FEB. 15 - FEB. 22	0.045±0.005	0.043±0.006	0.045±0.008	0.050±0.005	0.045±0.004	0.046±0.005	0.046±0.005	0.046
FEB. 22 - MARCH 1	0.038±0.005	0.041±0.007	0.045±0.009	0.039±0.005	0.037±0.004	0.037±0.005	0.032±0.005	0.038
MARCH 1 - MARCH 8	0.036±0.005	0.045±0.008	0.036±0.008	0.041±0.005	0.036±0.004	0.035±0.005	0.031±0.005	0.037
MARCH 8 - MARCH 15	0.035±0.005	0.042±0.015	0.036±0.008	0.039±0.005	0.037±0.004	0.038±0.005	0.036±0.005	0.038
MARCH 15 - MARCH 22	0.026±0.003	(a)	0.019±0.005	0.025±0.003	0.029±0.003	0.029±0.003	0.023±0.003	0.025
MARCH 22 - MARCH 29	0.025±0.003	(a)	0.026±0.005	0.030±0.003	0.028±0.003	0.026±0.003	0.026±0.003	0.027
MARCH 29 - APRIL 5	0.032±0.003	(a)	0.027±0.004	0.033±0.003	0.032±0.003	0.024±0.003	0.027±0.003	0.029
APRIL 5 - APRIL 12	0.036±0.004	0.038±0.007	0.036±0.006	0.040±0.004	0.042±0.003	0.035±0.004	0.038±0.004	0.038
APRIL 12 - APRIL 19	0.025±0.002	0.023±0.002	0.024±0.003	0.026±0.002	0.024±0.002	0.022±0.002	0.019±0.002	0.023
APRIL 19 - APRIL 26	0.023±0.002	0.022±0.002	0.019±0.003	0.021±0.002	0.020±0.002	0.019±0.002	0.021±0.002	0.024
APRIL 26 - MAY 3	0.012±0.002	0.012±0.002	0.010±0.003	0.014±0.002	0.012±0.002	0.012±0.002	0.009±0.002	0.012
MAY 3 - MAY 10	0.020±0.002	0.021±0.002	0.018±0.003	0.022±0.002	0.021±0.002	0.017±0.002	0.022±0.002	0.020
MAY 10 - MAY 17	0.011±0.002	0.013±0.002	0.012±0.003	0.014±0.002	0.012±0.002	0.017±0.002	0.012±0.002	0.013
MAY 17 - MAY 24	0.015±0.002	0.015±0.002	0.014±0.003	0.014±0.002	0.014±0.002	0.012±0.002	0.011±0.002	0.014
MAY 24 - MAY 31	0.019±0.002	0.020±0.002	0.019±0.003	0.017±0.002	0.019±0.002	0.017±0.002	0.018±0.002	0.018
MAY 31 - JUNE 7	0.017±0.002	0.019±0.002	0.014±0.003	0.018±0.002	0.019±0.002	0.016±0.002	0.013±0.002	0.017
JUNE 7 - JUNE 14	0.012±0.002	0.014±0.002	0.014±0.003	0.012±0.002	0.014±0.002	0.012±0.002	0.012±0.002	0.013
JUNE 14 - JUNE 21	0.015±0.002	0.016±0.002	0.012±0.003	0.015±0.002	0.015±0.002	0.012±0.002	0.012±0.002	0.014
JUNE 21 - JUNE 28	0.013±0.002	0.013±0.002	0.013±0.003	0.014±0.002	0.015±0.002	0.013±0.002	(b)	0.013
MAXIMUM	0.050±0.005	0.048±0.006	0.046±0.008	0.057±0.005	0.051±0.004	0.051±0.005	0.046±0.005	
AVERAGE	0.026	0.027	0.026	0.028	0.027	0.026	0.026	
MINIMUM	0.011±0.002	0.012±0.002	0.010±0.003	0.012±0.002	0.012±0.002	0.012±0.002	0.009±0.002	

(a) UNIT OUT OF SERVICE
(b) FILTER TORN OR OFFCENTERED

TABLE I B

1985 OFFSITE AIR MONITORS GROSS BETA ANALYSES
RESULTS IN pCi/CU. M.

WEEK OF	STATION 8	STATION 9	STATION 10	STATION 11	STATION 12	AVE.
DEC. 28 - JAN. 4	0.033±0.005	0.026±0.004	0.030±0.006	0.032±0.007	0.030±0.005	0.030
JAN. 4 - JAN. 11	0.028±0.005	0.027±0.005	0.030±0.007	0.030±0.008	0.030±0.006	0.029
JAN. 11 - JAN. 18	0.040±0.006	0.031±0.005	0.035±0.007	0.026±0.008	0.037±0.006	0.034
JAN. 18 - JAN. 25	0.037±0.005	0.033±0.005	0.042±0.008	0.030±0.008	0.030±0.006	0.034
JAN. 25 - FEB. 1	0.035±0.005	0.027±0.005	0.032±0.007	0.023±0.008	0.029±0.005	0.029
FEB. 1 - FEB. 8	0.056±0.006	0.044±0.005	0.046±0.007	0.040±0.008	0.047±0.006	0.045
FEB. 8 - FEB. 15	0.033±0.005	0.029±0.004	0.030±0.006	0.027±0.007	0.032±0.005	0.030
FEB. 15 - FEB. 22	0.048±0.005	0.042±0.005	0.050±0.007	0.040±0.008	0.047±0.006	0.045
FEB. 22 - MARCH 1	0.035±0.006	0.033±0.005	0.034±0.007	0.029±0.008	0.035±0.006	0.033
MARCH 1 - MARCH 8	0.039±0.005	0.033±0.005	0.025±0.007	0.034±0.008	0.028±0.005	0.032
MARCH 8 - MARCH 15	0.041±0.005	0.031±0.005	0.036±0.007	0.027±0.008	0.035±0.006	0.034
MARCH 15 - MARCH 22	0.034±0.004	0.022±0.003	0.027±0.005	0.016±0.005	0.028±0.004	0.025
MARCH 22 - MARCH 29	0.033±0.003	0.026±0.003	0.027±0.004	0.019±0.005	0.030±0.004	0.027
MARCH 29 - APRIL 5	0.020±0.003	0.016±0.002	0.017±0.003	0.024±0.004	0.015±0.003	0.018
APRIL 5 - APRIL 12	0.051±0.004	0.032±0.004	0.042±0.005	0.035±0.006	0.040±0.004	0.040
APRIL 12 - APRIL 19	0.026±0.002	0.023±0.002	0.027±0.003	0.023±0.003	0.026±0.002	0.025
APRIL 19 - APRIL 26	0.027±0.002	0.022±0.002	0.023±0.003	0.019±0.003	0.022±0.002	0.023
APRIL 26 - MAY 3	0.012±0.002	0.010±0.002	0.012±0.003	0.009±0.003	0.012±0.002	0.011
MAY 3 - MAY 10	0.015±0.002	0.018±0.003	0.016±0.003	0.019±0.002	0.019±0.002	0.017
MAY 10 - MAY 17	0.014±0.002	0.014±0.002	0.013±0.003	0.013±0.002	0.012±0.002	0.013
MAY 17 - MAY 24	0.017±0.002	0.014±0.002	0.014±0.003	0.010±0.003	0.014±0.002	0.014
MAY 24 - MAY 31	0.020±0.002	0.017±0.002	0.016±0.002	0.017±0.003	0.019±0.002	0.018
MAY 31 - JUNE 7	0.016±0.002	0.014±0.002	0.015±0.003	0.013±0.003	0.016±0.002	0.015
JUNE 7 - JUNE 14	0.011±0.003	0.012±0.002	0.014±0.003	0.012±0.003	0.013±0.002	0.012
JUNE 14 - JUNE 21	0.016±0.002	0.015±0.002	0.015±0.003	0.011±0.003	0.013±0.002	0.014
JUNE 21 - JUNE 28	0.014±0.002	0.012±0.002	0.013±0.002	0.012±0.003	0.013±0.002	0.013
MAXIMUM	0.056±0.006	0.044±0.005	0.050±0.007	0.040±0.008	0.047±0.006	
AVERAGE	0.029	0.024	0.026	0.023	0.026	
MINIMUM	0.011±0.003	0.010±0.002	0.012±0.003	0.009±0.003	0.012±0.002	

(a) UNIT OUT OF SERVICE
(b) FILTER TORN OR OFFCENTERED

TABLE II A

1985 ONSITE AIR MONITORS GROSS BETA ANALYSES
RESULTS IN pCi/CU. M.

WEEK OF	STATION 2	STATION 3	STATION 4	STATION 5	STATION 6	STATION 7	STATION 13	AVE.
JUNE 28 - JULY 5	0.011±0.002	0.012±0.003	0.012±0.004	0.012±0.003	0.013±0.003	0.011±0.002	0.012±0.002	0.012
JULY 5 - JULY 12	0.017±0.001	0.017±0.002	0.016±0.003	0.017±0.002	0.020±0.002	0.015±0.002	0.015±0.002	0.016
JULY 12 - JULY 19	0.016±0.002	0.014±0.002	0.015±0.003	0.016±0.002	0.016±0.002	0.014±0.002	0.013±0.002	0.015
JULY 19 - JULY 26	0.017±0.002	0.016±0.002	0.016±0.003	0.017±0.003	0.017±0.002	0.014±0.002	0.014±0.002	0.013
JULY 26 - AUG. 2	0.015±0.002	0.015±0.002	0.010±0.003	0.009±0.004	0.016±0.002	0.013±0.002	0.013±0.002	0.013
AUG. 2 - AUG. 9	0.018±0.002	0.018±0.002	0.029±0.003	0.009±0.002	0.018±0.002	0.017±0.002	0.014±0.002	0.018
AUG. 9 - AUG. 16	0.018±0.002	0.031±0.003	0.018±0.003	0.024±0.002	0.024±0.002	0.019±0.002	0.020±0.002	0.022
AUG. 16 - AUG. 23	0.019±0.002	0.020±0.002	0.019±0.003	0.020±0.002	0.021±0.002	0.018±0.002	0.017±0.002	0.019
AUG. 23 - AUG. 30	0.025±0.002	0.024±0.002	0.023±0.003	0.024±0.002	0.023±0.002	0.021±0.002	0.019±0.002	0.023
AUG. 30 - SEPT. 6	0.017±0.002	0.018±0.002	0.016±0.003	0.019±0.002	0.021±0.002	0.015±0.002	0.016±0.002	0.017
SEPT. 6 - SEPT. 13	0.015±0.002	0.016±0.002	0.016±0.003	0.016±0.002	0.016±0.002	0.016±0.002	0.016±0.002	0.016
SEPT. 13 - SEPT. 20	0.024±0.002	0.024±0.002	0.024±0.003	0.025±0.002	0.026±0.002	0.023±0.002	0.025±0.002	0.024
SEPT. 20 - SEPT. 27	0.017±0.002	0.017±0.002	0.019±0.003	0.019±0.002	0.021±0.002	0.019±0.002	0.021±0.002	0.019
SEPT. 27 - OCT. 4	0.022±0.002	0.021±0.002	0.022±0.003	0.025±0.002	0.005±0.002	0.021±0.002	0.021±0.002	0.022
OCT. 4 - OCT. 11	0.019±0.002	0.020±0.002	0.020±0.003	0.021±0.002	0.022±0.002	0.021±0.002	0.019±0.002	0.020
OCT. 11 - OCT. 18	0.014±0.002	0.015±0.002	0.012±0.003	0.014±0.002	0.014±0.002	0.013±0.002	0.013±0.002	0.014
OCT. 18 - OCT. 25	(b)	0.018±0.002	0.015±0.003	0.017±0.002	0.021±0.002	0.017±0.002	0.017±0.002	0.018
OCT. 25 - NOV. 1	0.011±0.003	0.011±0.004	0.022±0.006	0.009±0.002	0.014±0.004	0.013±0.004	0.012±0.004	0.013
NOV. 1 - NOV. 8	0.006±0.001	0.007±0.002	0.008±0.003	0.005±0.001	0.008±0.002	0.005±0.002	0.007±0.002	0.007
NOV. 8 - NOV. 15	0.012±0.002	0.012±0.002	0.008±0.002	0.013±0.002	0.014±0.002	0.011±0.002	0.014±0.002	0.012
NOV. 15 - NOV. 22	0.022±0.002	0.022±0.002	0.023±0.003	0.025±0.002	0.026±0.002	0.022±0.002	0.027±0.003	0.024
NOV. 22 - NOV. 29	0.023±0.002	0.022±0.003	0.023±0.004	0.023±0.003	0.015±0.003	0.021±0.003	0.024±0.003	0.022
NOV. 29 - DEC. 6	0.016±0.001	0.019±0.002	0.016±0.002	0.018±0.002	0.019±0.002	0.017±0.002	0.020±0.002	0.018
DEC. 6 - DEC. 13	0.020±0.002	0.024±0.002	0.021±0.003	0.023±0.002	0.023±0.002	0.020±0.002	0.024±0.003	0.022
DEC. 13 - DEC. 20	0.022±0.002	0.021±0.002	0.024±0.003	0.025±0.002	0.026±0.003	0.022±0.002	0.027±0.003	0.024
DEC. 20 - DEC. 27	0.017±0.002	0.016±0.002	0.017±0.003	0.016±0.002	0.018±0.002	0.018±0.002	0.019±0.002	0.017
MAXIMUM	0.025±0.002	0.031±0.003	0.029±0.003	0.025±0.002	0.026±0.002	0.023±0.002	0.027±0.003	
AVERAGE	0.017	0.018	0.018	0.018	0.018	0.017	0.018	
MINIMUM	0.006±0.001	0.007±0.002	0.008±0.003	0.005±0.001	0.005±0.002	0.005±0.002	0.007±0.002	

(a) UNIT OUT OF SERVICE
(b) FILTER TORN OR OFFCENTERED

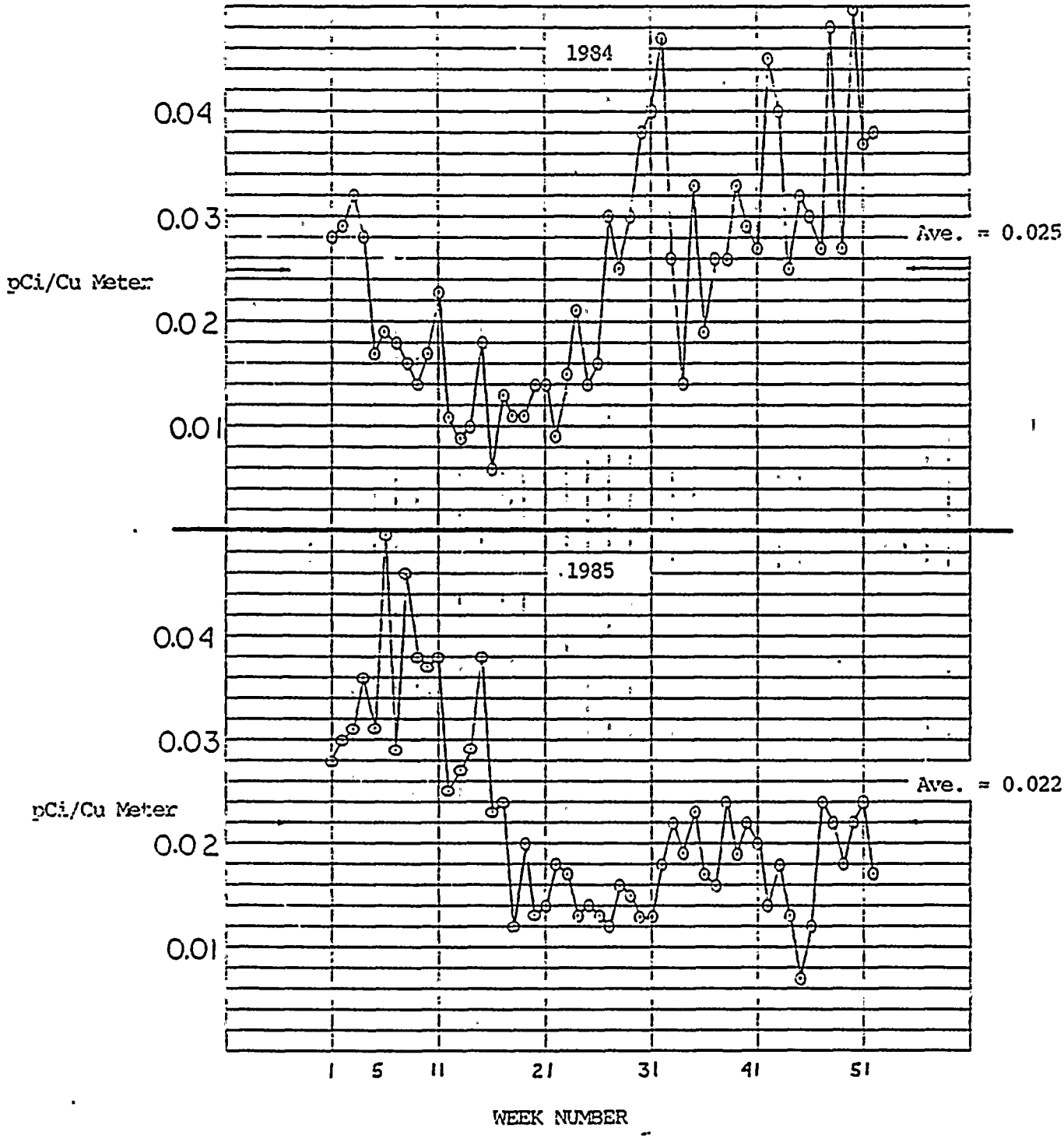
TABLE II B

1985 OFFSITE AIR MONITORS GROSS BETA ANALYSES
RESULTS IN pCi/CU. M.

WEEK OF	STATION 8	STATION 9	STATION 10	STATION 11	STATION 12	AVE.
JUNE 28 - JULY 5	(b)	0.012±0.002	0.010±0.003	0.005±0.004	0.009±0.003	0.009
JULY 5 - JULY 12	0.019±0.002	0.016±0.002	0.019±0.002	0.015±0.003	0.016±0.002	0.017
JULY 12 - JULY 19	0.015±0.002	0.016±0.002	0.014±0.003	0.011±0.003	0.014±0.002	0.014
JULY 19 - JULY 26	0.019±0.002	0.015±0.002	0.015±0.003	0.014±0.003	0.014±0.002	0.015
JULY 26 - AUG. 2	0.016±0.002	0.015±0.002	0.015±0.003	0.014±0.006	0.014±0.002	0.015
AUG. 2 - AUG. 9	0.018±0.002	0.015±0.002	0.018±0.003	0.013±0.008	0.014±0.002	0.016
AUG. 9 - AUG. 16	0.026±0.002	0.022±0.002	0.023±0.003	0.022±0.002	0.022±0.002	0.023
AUG. 16 - AUG. 23	0.022±0.002	0.017±0.002	0.020±0.003	0.017±0.002	0.016±0.002	0.018
AUG. 23 - AUG. 30	0.017±0.002	0.022±0.002	0.022±0.003	0.020±0.002	0.019±0.002	0.020
AUG. 30 - SEPT. 6	0.011±0.005	0.018±0.002	0.020±0.003	0.017±0.002	0.017±0.002	0.017
SEPT. 6 - SEPT. 13	0.013±0.002	0.015±0.002	0.015±0.002	0.015±0.002	0.015±0.002	0.015
SEPT. 13 - SEPT. 20	0.024±0.002	0.021±0.002	0.026±0.003	0.017±0.003	0.024±0.002	0.002
SEPT. 20 - SEPT. 27	0.021±0.002	0.017±0.002	0.022±0.003	0.022±0.002	0.022±0.002	0.022
SEPT. 27 - OCT. 4	0.025±0.002	0.018±0.002	0.023±0.003	0.023±0.002	0.024±0.002	0.023
OCT. 4 - OCT. 11	0.021±0.002	0.018±0.002	(b)	0.020±0.002	0.020±0.002	0.020
OCT. 11 - OCT. 18	0.014±0.002	0.011±0.002	0.014±0.002	0.014±0.002	0.012±0.002	0.014
OCT. 18 - OCT. 25	0.019±0.002	0.017±0.002	(b)	0.018±0.002	0.017±0.002	0.018
OCT. 25 - NOV. 1	0.013±0.003	0.011±0.003	0.013±0.005	0.006±0.003	0.013±0.004	0.011
NOV. 1 - NOV. 8	0.007±0.001	0.007±0.001	0.006±0.002	0.007±0.002	0.007±0.002	0.007
NOV. 8 - NOV. 15	0.013±0.002	0.011±0.002	0.012±0.002	0.010±0.002	0.011±0.002	0.011
NOV. 15 - NOV. 22	0.024±0.002	0.021±0.002	0.024±0.003	0.023±0.002	0.026±0.002	0.024
NOV. 22 - NOV. 29	0.022±0.002	0.020±0.002	0.024±0.004	0.022±0.003	0.022±0.003	0.022
NOV. 29 - DEC. 6	0.017±0.002	0.017±0.002	0.018±0.002	0.017±0.002	0.020±0.002	0.018
DEC. 6 - DEC. 13	0.024±0.002	0.020±0.002	0.021±0.003	0.021±0.002	0.023±0.002	0.022
DEC. 13 - DEC. 20	0.025±0.002	0.021±0.002	0.026±0.003	0.023±0.003	0.023±0.002	0.024
DEC. 20 - DEC. 27	0.016±0.002	0.015±0.003	0.017±0.003	0.017±0.002	0.019±0.002	0.017
MAXIMUM	0.026±0.002	0.022±0.002	0.026±0.003	0.023±0.002	0.026±0.002	
AVERAGE	0.018	0.016	0.018	0.016	0.017	
MINIMUM	0.007±0.001	0.007±0.001	0.006±0.002	0.005±0.004	0.007±0.002	

(a) UNIT OUT OF SERVICE
(b) FILTER TORN OR OFFCENTERED

ONSITE AIR MONITORS GROSS BETA
COMPARISON of 1984 and 1985



OFFSITE AIR MONITORS, GROSS BETA
COMPARISON OF 1984 and 1985

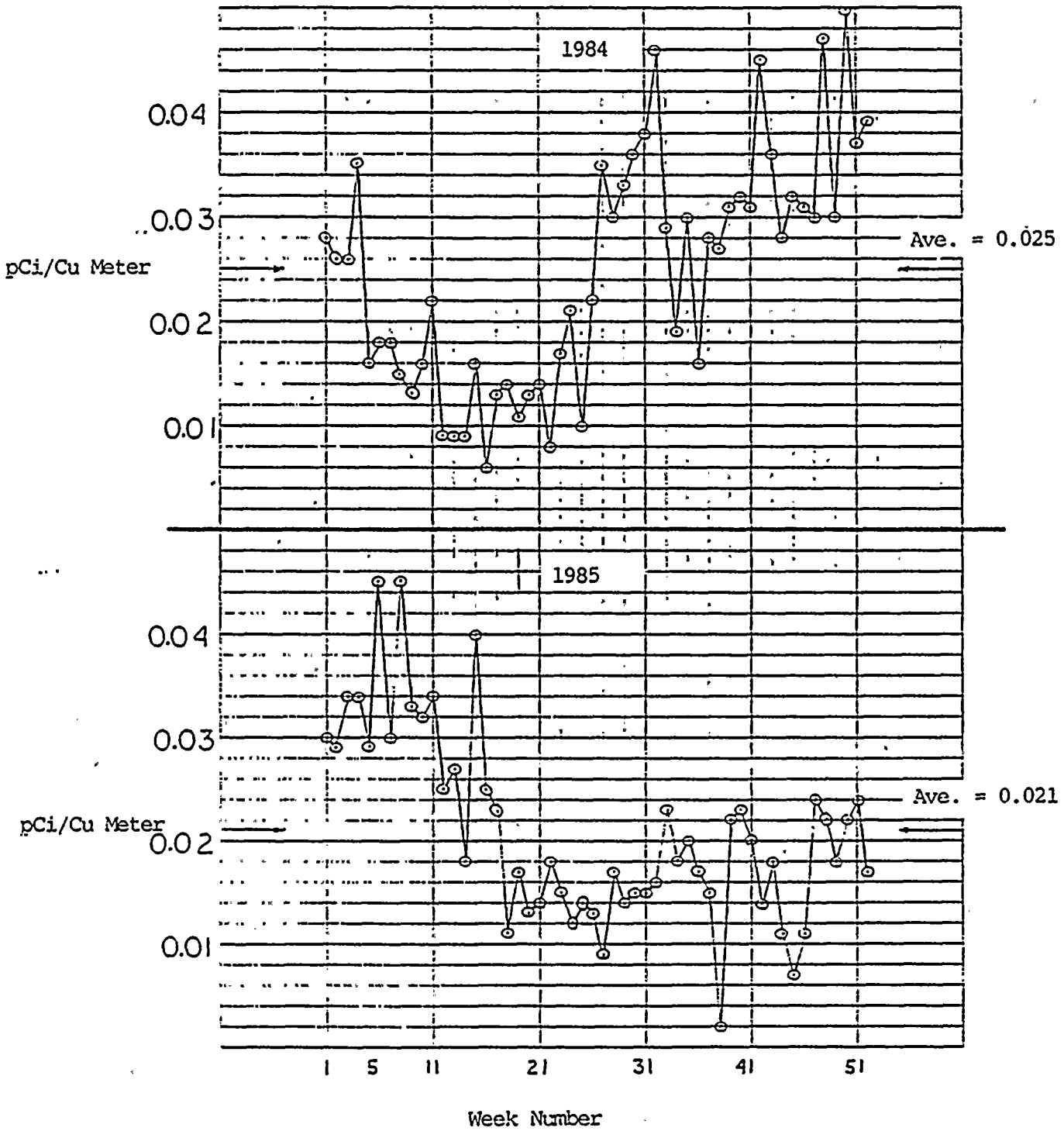


TABLE IIIA
13 WEEK COMPOSITE AIR FILTER GAMMA ISOTOPIC ANALYSIS
RESULTS IN pCi/m³

LOCATION	7 BE	40 K	51 CR	54 MN	59 FE	58 CO	60 CO	65 ZN	95 ZR	95 NB	103 RU	106 RU	134 CS	137 CS	140 BA	141 CE	144 CE
FIRST QUARTER																	
AIR FILTER STATION # 2	0.077±0.002	<0.006	<0.027	<0.001	<0.003	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.007	<0.001	<0.001	<0.013	<0.004	<0.006
AIR FILTER STATION # 3	0.057±0.003	<0.007	<0.039	<0.001	<0.004	<0.002	<0.001	<0.002	<0.003	<0.003	<0.003	<0.010	<0.001	<0.001	<0.020	<0.006	<0.008
AIR FILTER STATION # 4	0.052±0.003	<0.007	<0.034	<0.001	<0.003	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	<0.009	<0.001	<0.001	<0.017	<0.005	<0.007
AIR FILTER STATION # 5	0.086±0.002	<0.005	<0.028	<0.001	<0.003	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	<0.008	<0.001	<0.001	<0.011	<0.004	<0.006
AIR FILTER STATION # 6	0.094±0.002	<0.004	<0.023	<0.001	<0.002	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.006	<0.001	<0.001	<0.010	<0.003	<0.005
AIR FILTER STATION # 7	0.071±0.002	<0.005	<0.027	<0.001	<0.002	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	<0.007	<0.001	<0.001	<0.013	<0.004	<0.005
AIR FILTER STATION # 8	0.110±0.003	<0.007	<0.035	<0.001	<0.003	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	<0.008	<0.001	<0.001	<0.018	<0.005	<0.006
AIR FILTER STATION # 9	0.092±0.002	<0.005	<0.029	<0.001	<0.003	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	<0.007	<0.001	<0.001	<0.016	<0.004	<0.006
AIR FILTER STATION #10	0.094±0.004	<0.008	<0.047	<0.001	<0.005	<0.002	<0.001	<0.002	<0.003	<0.003	<0.003	<0.010	<0.001	<0.001	<0.026	<0.007	<0.008
AIR FILTER STATION #11	0.082±0.004	<0.007	<0.059	<0.001	<0.005	<0.002	<0.001	<0.003	<0.004	<0.004	<0.004	<0.012	<0.001	<0.001	<0.035	<0.009	<0.010
AIR FILTER STATION #12	0.153±0.006	<0.013	<0.075	<0.002	<0.007	<0.003	<0.001	<0.003	<0.005	<0.005	<0.005	<0.016	<0.002	<0.002	<0.046	<0.011	<0.012
AIR FILTER STATION #13	0.116±0.004	<0.009	<0.050	<0.001	<0.005	<0.002	<0.001	<0.002	<0.003	<0.003	<0.003	<0.011	<0.001	<0.001	<0.032	<0.007	<0.008
	0.090																

LOCATION	7 BE	40 K	51 CR	54 MN	59 FE	58 CO	60 CO	65 ZN	95 ZR	95 NB	103 RU	106 RU	134 CS	137 CS	140 BA	141 CE	144 CE
SECOND QUARTER																	
AIR FILTER STATION # 2	0.080±0.002	<0.004	<0.034	<0.001	<0.003	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	<0.007	<0.001	<0.001	<0.017	<0.004	<0.006
AIR FILTER STATION # 3	0.100±0.003	<0.006	<0.045	<0.001	<0.004	<0.002	<0.002	<0.002	<0.003	<0.003	<0.003	<0.011	<0.001	<0.001	<0.023	<0.006	<0.009
AIR FILTER STATION # 4	0.091±0.004	<0.009	<0.061	<0.001	<0.006	<0.002	<0.001	<0.003	<0.004	<0.004	<0.004	<0.014	<0.001	<0.001	<0.034	<0.008	<0.011
AIR FILTER STATION # 5	0.174±0.003	<0.005	<0.037	<0.001	<0.003	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	<0.008	<0.001	<0.001	<0.022	<0.005	<0.006
AIR FILTER STATION # 6	0.162±0.002	<0.005	<0.033	<0.001	<0.003	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	<0.007	<0.001	<0.001	<0.020	<0.004	<0.006
AIR FILTER STATION # 7	0.156±0.002	<0.006	<0.037	<0.001	<0.003	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	<0.007	<0.001	<0.001	<0.018	<0.005	<0.006
AIR FILTER STATION # 8	0.104±0.003	<0.004	<0.039	<0.001	<0.004	<0.001	<0.001	<0.002	<0.002	<0.002	<0.003	<0.008	<0.001	<0.001	<0.024	<0.005	<0.007
AIR FILTER STATION # 9	0.083±0.003	<0.005	<0.038	<0.001	<0.003	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	<0.007	<0.001	<0.001	<0.025	<0.005	<0.006
AIR FILTER STATION #10	0.105±0.004	<0.009	<0.057	<0.001	<0.005	<0.002	<0.001	<0.002	<0.004	<0.004	<0.004	<0.012	<0.001	<0.001	<0.038	<0.008	<0.010
AIR FILTER STATION #11	0.076±0.005	<0.008	<0.066	<0.001	<0.006	<0.002	<0.001	<0.003	<0.004	<0.004	<0.004	<0.014	<0.001	<0.001	<0.049	<0.009	<0.011
AIR FILTER STATION #12	0.095±0.003	<0.007	<0.048	<0.001	<0.004	<0.001	<0.001	<0.002	<0.003	<0.003	<0.003	<0.009	<0.001	<0.001	<0.034	<0.006	<0.007
AIR FILTER STATION #13	0.081±0.003	<0.005	<0.040	<0.001	<0.004	<0.001	<0.001	<0.002	<0.003	<0.003	<0.003	<0.008	<0.001	<0.001	<0.030	<0.006	<0.007
	0.109																

TABLE IIIA
13 WEEK COMPOSITE AIR FILTER GAMMA ISOTOPIC ANALYSIS
RESULTS IN pCi/m^3

LOCATION	7 BE	40 K	51 CR	54 MN	59 FE	58 CO	60 CO	65 ZN	95 ZR	95 NB	103 RU	106 RU	134 CS	137 CS	140 BA	141 CE	144 CE
THIRD QUARTER																	
AIR FILTER STATION # 2	0.089±0.002	<0.004	<0.024	<0.001	<0.002	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.006	<0.001	<0.001	<0.009	<0.003	<0.005
AIR FILTER STATION # 3	0.090±0.002	<0.006	<0.035	<0.001	<0.003	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	<0.009	<0.001	<0.001	<0.015	<0.005	<0.006
AIR FILTER STATION # 4	0.105±0.004	<0.009	<0.054	<0.001	<0.004	<0.002	<0.001	<0.003	<0.004	<0.003	<0.003	<0.013	<0.001	<0.001	<0.023	<0.007	<0.011
AIR FILTER STATION # 5	0.105±0.003	<0.004	<0.034	<0.001	<0.003	<0.001	<0.001	<0.002	<0.003	<0.002	<0.002	<0.008	<0.001	<0.001	<0.017	<0.005	<0.008
AIR FILTER STATION # 6	0.089±0.003	<0.007	<0.033	<0.001	<0.003	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	<0.007	<0.001	<0.001	<0.019	<0.005	<0.006
AIR FILTER STATION # 7	0.078±0.002	<0.006	<0.033	<0.001	<0.003	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	<0.008	<0.001	<0.001	<0.016	<0.005	<0.006
AIR FILTER STATION # 8	0.086±0.003	<0.006	<0.039	<0.001	<0.004	<0.001	<0.001	<0.002	<0.003	<0.003	<0.002	<0.009	<0.001	<0.001	<0.021	<0.005	<0.007
AIR FILTER STATION # 9	0.096±0.003	<0.006	<0.033	<0.001	<0.003	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	<0.008	<0.001	<0.001	<0.020	<0.005	<0.006
AIR FILTER STATION #10	0.106±0.004	<0.005	<0.051	<0.001	<0.004	<0.002	<0.001	<0.002	<0.003	<0.003	<0.003	<0.011	<0.001	<0.001	<0.026	<0.007	<0.009
AIR FILTER STATION #11	0.084±0.003	<0.006	<0.047	<0.001	<0.004	<0.001	<0.001	<0.002	<0.003	<0.003	<0.003	<0.010	<0.001	<0.001	<0.024	<0.006	<0.008
AIR FILTER STATION #12	0.091±0.003	<0.005	<0.040	<0.001	<0.004	<0.001	<0.001	<0.002	<0.003	<0.003	<0.003	<0.009	<0.001	<0.001	<0.021	<0.005	<0.006
AIR FILTER STATION #13	0.087±0.002	<0.004	<0.034	<0.001	<0.003	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	<0.007	<0.001	<0.001	<0.016	<0.005	<0.006
	0.092																

LOCATION	7 BE	40 K	51 CR	54 MN	59 FE	58 CO	60 CO	65 ZN	95 ZR	95 NB	103 RU	106 RU	134 CS	137 CS	140 BA	141 CE	144 CE
FOURTH QUARTER																	
AIR FILTER STATION # 2	0.096±0.003	<0.004	<0.035	<0.001	<0.003	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	<0.007	<0.001	<0.001	<0.023	<0.005	<0.005
AIR FILTER STATION # 3	0.105±0.004	<0.006	<0.052	<0.001	<0.005	<0.002	<0.001	<0.002	<0.003	<0.003	<0.003	<0.010	<0.001	<0.001	<0.035	<0.007	<0.008
AIR FILTER STATION # 4	0.112±0.006	<0.008	<0.077	<0.001	<0.006	<0.003	<0.001	<0.003	<0.005	<0.005	<0.005	<0.015	<0.001	<0.001	<0.052	<0.010	<0.011
AIR FILTER STATION # 5	0.097±0.003	<0.005	<0.046	<0.001	<0.004	<0.001	<0.001	<0.002	<0.003	<0.003	<0.003	<0.009	<0.001	<0.001	<0.031	<0.006	<0.007
AIR FILTER STATION # 6	0.101±0.004	<0.006	<0.053	<0.001	<0.005	<0.002	<0.001	<0.002	<0.003	<0.004	<0.003	<0.010	<0.001	<0.001	<0.041	<0.007	<0.007
AIR FILTER STATION # 7	0.100±0.004	<0.006	<0.057	<0.001	<0.005	<0.002	<0.002	<0.002	<0.004	<0.003	<0.004	<0.011	<0.001	<0.001	<0.041	<0.007	<0.007
AIR FILTER STATION # 8	0.127±0.005	<0.006	<0.063	<0.001	<0.005	<0.002	<0.001	<0.002	<0.004	<0.004	<0.004	<0.010	<0.001	<0.001	<0.045	<0.008	<0.009
AIR FILTER STATION # 9	0.101±0.003	<0.005	<0.044	<0.001	<0.001	<0.003	<0.001	<0.002	<0.002	<0.003	<0.003	<0.008	<0.001	<0.001	<0.028	<0.006	<0.006
AIR FILTER STATION #10	0.117±0.006	<0.010	<0.086	<0.002	<0.007	<0.002	<0.001	<0.003	<0.005	<0.005	<0.005	<0.015	<0.001	<0.002	<0.072	<0.011	<0.012
AIR FILTER STATION #11	0.107±0.003	<0.006	<0.050	<0.001	<0.004	<0.001	<0.001	<0.002	<0.003	<0.003	<0.003	<0.009	<0.001	<0.001	<0.038	<0.006	<0.007
AIR FILTER STATION #12	0.124±0.004	<0.006	<0.056	<0.001	<0.005	<0.002	<0.001	<0.002	<0.003	<0.003	<0.003	<0.010	<0.001	<0.001	<0.043	<0.007	<0.008
AIR FILTER STATION #13	0.117±0.004	<0.006	<0.058	<0.001	<0.004	<0.002	<0.001	<0.002	<0.003	<0.004	<0.004	<0.009	<0.001	<0.001	<0.050	<0.007	<0.008
	0.108																

TABLE IV

CHARCOAL CARTRIDGES GAMMA ANALYSES FOR IODINE
RESULTS IN pCi/CU. M.

WEEK OF	STA. # 4	STA. # 7	STA. # 9	STA. #11	WEEK OF	STA. # 4	STA. # 7	STA. # 9	STA. #11
DEC. 28 - JAN. 4	<0.05	<0.02	<0.03	<0.05	JUNE 27 - JULY 4	<0.06	<0.04	<0.03	<0.07
JAN. 4 - JAN. 11	<0.05	<0.02	<0.03	<0.05	JULY 4 - JULY 11	<0.03	<0.02	<0.02	<0.04
JAN. 11 - JAN. 18	<0.05	<0.02	<0.03	<0.05	JULY 11 - JULY 18	<0.04	<0.03	<0.03	<0.05
JAN. 18 - JAN. 25	<0.05	<0.02	<0.03	<0.05	JULY 18 - JULY 25	<0.04	<0.03	<0.03	<0.05
JAN. 25 - FEB. 1	<0.05	<0.03	<0.03	<0.05	JULY 25 - AUG. 1	<0.04	<0.03	<0.03	<0.03
FEB. 1 - FEB. 8	<0.05	<0.03	<0.02	<0.05	AUG. 1 - AUG. 8	<0.04	<0.03	<0.03	<0.03
FEB. 8 - FEB. 15	<0.05	<0.02	<0.03	<0.05	AUG. 8 - AUG. 15	<0.04	<0.03	<0.03	<0.03
FEB. 15 - FEB. 22	<0.05	<0.02	<0.03	<0.05	AUG. 15 - AUG. 22	<0.05	<0.03	<0.03	<0.03
FEB. 22 - MARCH 1	<0.05	<0.03	<0.03	<0.05	AUG. 22 - AUG. 29	<0.05	<0.03	<0.03	<0.03
MARCH 1 - MARCH 8	<0.05	<0.03	<0.03	<0.05	AUG. 29 - SEPT. 5	<0.04	<0.03	<0.03	<0.03
MARCH 8 - MARCH 15	<0.05	<0.03	<0.03	<0.05	SEPT. 5 - SEPT. 12	<0.05	<0.03	<0.02	<0.03
MARCH 15 - MARCH 22	<0.05	<0.03	<0.03	<0.05	SEPT. 12 - SEPT. 19	<0.05	<0.03	<0.02	<0.04
MARCH 22 - MARCH 29	<0.05	<0.03	<0.03	<0.05	SEPT. 19 - SEPT. 26	<0.05	<0.03	<0.02	<0.03
MARCH 29 - APRIL 5	<0.04	<0.02	<0.02	<0.04	SEPT. 26 - OCT. 3	<0.05	<0.03	<0.02	<0.03
APRIL 5 - APRIL 12	<0.05	<0.03	<0.03	<0.05	OCT. 3 - OCT. 10	<0.05	<0.03	<0.02	<0.03
APRIL 12 - APRIL 19	<0.05	<0.03	<0.03	<0.05	OCT. 10 - OCT. 17	<0.05	<0.03	<0.02	<0.03
APRIL 19 - APRIL 26	<0.05	<0.03	<0.03	<0.04	OCT. 17 - OCT. 24	<0.05	<0.03	<0.02	<0.03
APRIL 26 - MAY 3	<0.05	<0.03	<0.03	<0.05	OCT. 24 - OCT. 31	<0.05	<0.03	<0.02	<0.03
MAY 3 - MAY 10	<0.05	<0.03	<0.02	<0.04	OCT. 31 - NOV. 7	<0.05	<0.03	<0.02	<0.03
MAY 10 - MAY 17	<0.05	<0.03	<0.03	<0.04	NOV. 7 - NOV. 14	<0.04	<0.03	<0.02	<0.03
MAY 17 - MAY 24	<0.05	<0.03	<0.03	<0.05	NOV. 14 - NOV. 21	<0.04	<0.03	<0.02	<0.03
MAY 24 - MAY 31	<0.05	<0.03	<0.03	<0.05	NOV. 21 - NOV. 28	<0.06	<0.04	<0.03	<0.03
MAY 31 - JUNE 7	<0.05	<0.03	<0.03	<0.05	NOV. 28 - DEC. 5	<0.03	<0.02	<0.02	<0.02
JUNE 7 - JUNE 14	<0.04	<0.03	<0.03	<0.05	DEC. 5 - DEC. 12	<0.04	<0.03	<0.02	<0.03
JUNE 14 - JUNE 21	<0.04	<0.03	<0.03	<0.05	DEC. 12 - DEC. 19	<0.04	<0.03	<0.02	<0.03
JUNE 21 - JUNE 28	<0.04	<0.03	<0.03	<0.05	DEC. 19 - DEC. 26	<0.05	<0.03	<0.02	<0.03

ALL VALUES GIVEN AS < ARE LESS THAN THE LLD.

TABLE V A

1985 ENVIRONMENTAL WATER SAMPLES GROSS BETA ANALYSES
RESULTS IN pCi/L

WEEK OF	RUSSELL	O.U.D.	CIRC. IN	CIRC. OUT	DEER CREEK	TAP	WELL "B"
DEC. 30 - JAN. 5	6.96±2.40	4.01±2.28	2.60±2.06	2.16±2.08			
JAN. 6 - JAN. 12	5.00±2.49	2.76±2.48	1.79±2.37	4.18±2.56			
JAN. 13 - JAN. 19	3.01±2.36	5.75±2.54	4.48±2.22	5.08±2.47	5.24±2.80	3.60±2.38	
JAN. 20 - JAN. 26	4.70±2.36	5.10±2.53	5.57±2.48	3.91±2.38			
JAN. 27 - FEB. 2	3.13±2.47	4.48±2.53	3.48±2.39	3.34±2.40			9.53±3.46
FEB. 3 - FEB. 9	6.24±1.97	3.18±1.82	4.03±1.79	4.04±1.80			
FEB. 10 - FEB. 16	3.53±1.75	3.87±1.93	3.91±1.89	6.01±1.94	4.17±1.74		
FEB. 17 - FEB. 23	3.52±1.89	5.03±1.99	2.32±1.86	3.73±1.93		3.82±1.89	8.78±2.74
FEB. 24 - MARCH 2	7.39±1.94	5.54±1.83	3.36±1.65	3.58±1.82			
MARCH 3 - MARCH 9	6.47±2.14	3.81±2.05	3.89±1.97	4.14±1.97			
MARCH 10 - MARCH 16	(b)	4.89±1.20	3.45±1.11	6.51±1.27	5.73±1.29		
MARCH 17 - MARCH 23	4.80±1.20	4.92±1.10	3.45±1.07	5.48±1.21		3.63±1.14	5.48±1.53
MARCH 24 - MARCH 30	3.31±1.22	2.46±1.13	2.67±1.16	2.68±1.14			
MARCH 31 - APRIL 6	10.86±0.30	2.49±1.18	2.91±1.14	2.16±1.14			
APRIL 7 - APRIL 13	4.86±1.18	4.22±1.17	2.66±1.02	4.07±1.14			
APRIL 14 - APRIL 20	7.00±1.03	3.13±0.91	2.38±0.84	2.78±0.85	7.42±1.42	3.63±1.10	6.25±1.37
APRIL 21 - APRIL 27	2.02±0.94	< 1.20	< 1.20	< 1.20			
APRIL 28 - MAY 4	2.35±0.86	< 1.20	1.22±0.97	< 1.20			
MAY 5 - MAY 11	2.12±0.85	1.27±0.90	1.36±0.89	< 1.20			
MAY 12 - MAY 18	3.58±0.92	2.50±0.87	2.38±0.85	2.01±0.87	5.08±1.19	< 1.20	
MAY 19 - MAY 25	1.73±0.74	2.80±0.82	2.79±0.79	2.12±0.80			5.46±1.32
MAY 26 - JUNE 1	3.15±0.80	3.20±0.80	2.91±0.76	3.02±0.82			
JUNE 2 - JUNE 8	1.95±0.83	1.82±0.82	1.81±0.83	2.23±0.83			
JUNE 9 - JUNE 15	1.39±0.77	1.53±0.80	1.31±0.77	2.58±0.85		3.04±0.80	
JUNE 16 - JUNE 22	1.70±0.83	3.05±0.83	2.48±0.79	1.46±0.67	3.82±1.06		
JUNE 23 - JUNE 29	2.51±0.84	1.22±0.79	1.69±0.81	< 1.20			5.83±1.82
MAXIMUM	10.86±0.30	5.75±2.54	5.57±2.48	6.51±1.27	7.42±1.42	3.82±1.89	9.53±3.46
AVERAGE	4.13	3.46	2.84	3.51	5.24	3.54	6.89
MINIMUM	1.39±0.77	1.22±0.79	1.22±0.97	1.46±0.67	3.82±1.06	3.04±0.80	5.46±1.32

ALL VALUES GIVEN AS < ARE LESS THAN THE LLD.

(a) Sampling equipment out of service.
(b) No sample received.

TABLE V B

1985 ENVIRONMENTAL WATER SAMPLES GROSS BETA ANALYSES
RESULTS IN pCi/L

WEEK OF	RUSSELL	O.U.D.	CIRC. IN	CIRC. OUT	DEER CREEK	TAP	WELL 'B'
JUNE 30 - JULY 6	2.40±0.84	1.82±0.79	1.87±0.75	2.46±0.79			
JULY 7 - JULY 13	2.49±0.83	4.62±0.94	2.91±0.88	2.04±0.85			
JULY 14 - JULY 20	2.65±0.86	1.83±0.82	2.31±0.85	2.84±0.87	3.65±1.13	1.86±0.85	5.57±1.30
JULY 21 - JULY 27	1.88±0.86	1.88±0.87	1.62±0.82	1.74±0.87			
JULY 28 - AUG. 3	2.40±0.84	2.87±0.88	2.14±0.83	2.46±0.81			
AUG. 4 - AUG. 10	2.73±0.72	1.74±0.80	1.35±0.78	1.78±0.80			
AUG. 11 - AUG. 17	2.29±0.73	2.73±0.72	2.81±0.73	2.82±0.74	7.37±1.15		
AUG. 18 - AUG. 24	2.31±0.85	3.57±0.92	2.48±0.81	3.30±0.79		3.17±0.89	5.26±1.20
AUG. 25 - AUG. 31	2.19±0.85	1.80±0.83	2.75±0.88	2.21±0.86			
SEPT. 1 - SEPT. 7	2.03±0.85	2.30±0.93	2.16±0.84	2.56±0.91			
SEPT. 8 - SEPT. 14	2.15±0.90	2.56±0.91	1.68±0.83	2.03±0.85			
SEPT. 15 - SEPT. 21	2.36±0.82	2.65±0.87	1.73±0.85	1.94±0.87	3.78±0.95		
SEPT. 22 - SEPT. 28	3.68±0.82	2.14±0.81	1.48±0.78	1.52±0.80		1.83±0.82	4.39±1.29
SEPT. 29 - OCT. 5	1.63±0.88	3.36±0.89	3.47±0.95	(a)			
OCT. 6 - OCT. 12	(a)	2.66±0.87	2.65±0.87	2.02±0.85			
OCT. 13 - OCT. 19	2.56±0.84	1.93±0.85	1.98±0.81	1.61±0.80			
OCT. 20 - OCT. 26	2.21±0.85	3.53±0.82	2.53±0.77	(c)	6.74±1.23		
OCT. 27 - NOV. 2	3.45±0.92	2.55±0.81	2.57±0.84	2.04±0.79		3.16±0.79	7.10±1.32
NOV. 3 - NOV. 9	3.60±0.82	2.81±0.80	3.96±0.86	3.72±0.82			
NOV. 10 - NOV. 16	3.75±0.91	3.84±0.85	3.02±0.77	3.76±0.86			
NOV. 17 - NOV. 23	2.42±0.89	(c)	1.66±0.84	2.48±0.88	4.79±0.95	3.10±0.79	6.45±1.21
NOV. 24 - NOV. 30	2.88±0.83	2.48±0.88	2.42±0.84	1.82±0.90			
DEC. 1 - DEC. 7	3.29±0.91	2.89±0.86	2.82±0.86	2.19±0.80			
DEC. 8 - DEC. 14	2.62±0.87	3.31±0.91	3.20±0.90	3.42±0.95			
DEC. 15 - DEC. 21	1.97±0.82	2.33±0.88	2.58±0.96	1.52±0.89	3.83±1.16	2.32±0.86	
DEC. 22 - DEC. 28	4.13±1.01	2.40±0.90	2.66±0.93	1.43±0.85			4.12±1.28
MAXIMUM	4.13±1.01	4.62±0.94	3.96±0.86	3.76±0.86	7.37±1.15	3.17±0.89	7.10±1.32
AVERAGE	2.64	2.66	2.42	2.32	5.03	2.57	5.48
MINIMUM	1.63±0.88	1.74±0.80	1.35±0.78	1.43±0.85	3.65±1.13	1.83±0.82	4.12±1.28

ALL VALUES GIVEN AS < ARE LESS THAN THE LLD.

(a) Sampling equipment out of service
(c) Sample lost during processing.

COMPARISON OF GROSS BETA DATA FOR
WATER SAMPLES UPSTREAM (RUSSELL STATION)
AND DOWNSTREAM (ONTARIO WATER DISTRICT)

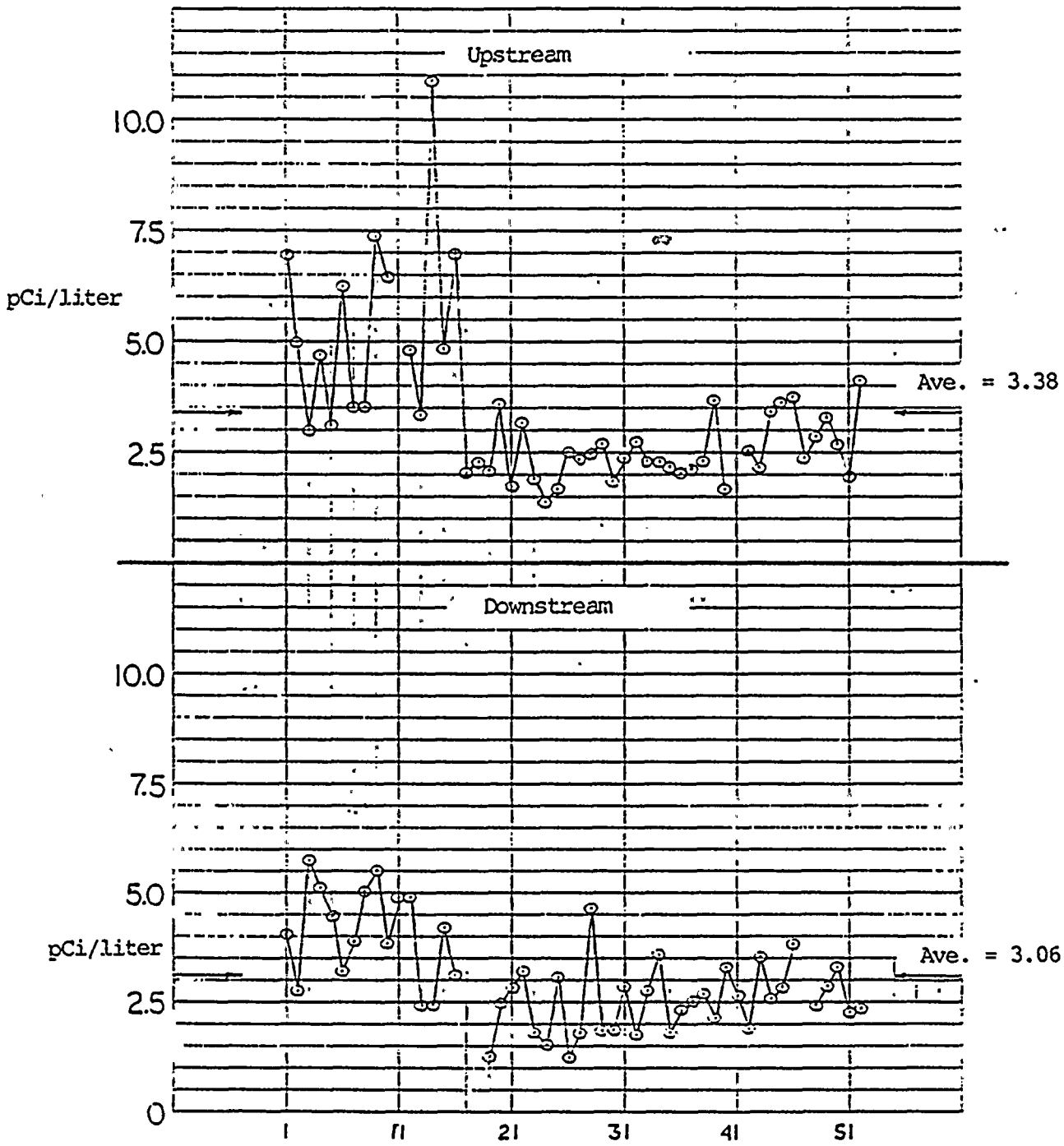


TABLE VI A

ENVIRONMENTAL WATER SAMPLES TRITIUM ANALYSIS
RESULTS IN PCI/L.

MONTH OF	RUSSELL	O.W.D.	CIRC. IN	CIRC. OUT	DEER CREEK	TAP	WELL 'B'
JANUARY	< 800	< 800	< 800	< 800	< 800	< 800	< 800
FEBRUARY	< 800	< 800	< 800	< 800	< 800	< 800	< 800
MARCH	< 900	< 900	< 900	< 900	< 900	< 900	< 900
APRIL	< 930	< 930	< 930	< 930	< 930	< 930	< 930
MAY	< 910	< 910	< 910	< 910	< 910	< 910	< 910
JUNE	< 980	< 980	< 980	< 980	< 980	< 980	< 980
JULY	< 970	< 970	< 970	< 970	< 970	< 970	< 970
AUGUST	< 920	< 920	< 920	< 920	< 920	< 920	< 920
SEPTEMBER	< 900	< 900	< 900	< 900	< 900	< 900	< 900
OCTOBER	< 900	< 900	< 900	< 900	< 900	< 900	< 900
NOVEMBER	< 900	< 900	< 900	< 900	< 900	< 900	< 900
DECEMBER	< 900	< 900	< 900	< 900	< 900	< 900	< 900

ALL VALUES GIVEN AS < ARE LESS THAN THE LLD.

TABLE VI

FALLOUT TRITIUM ANALYSIS
RESULTS IN pCi/L

MONTH OF	STATION 3	STATION 5	STATION 8	STATION 10	STATION 12
JANUARY	< 900	< 900	< 900	< 900	< 900
FEBRUARY	< 900	< 900	< 900	< 900	< 900
MARCH	< 900	< 900	< 900	< 900	< 900
APRIL	< 900	< 900	< 900	< 900	< 900
MAY	< 900	< 900	< 900	< 900	< 900
JUNE	< 900	< 900	< 900	< 900	< 900
JULY	< 900	< 900	< 900	< 900	< 900
AUGUST	< 900	< 900	< 900	< 900	< 900
SEPTEMBER	< 900	< 900	< 900	< 900	< 900
OCTOBER	< 900	< 900	< 900	< 900	< 900
NOVEMBER	< 900	< 900	< 900	< 900	< 900
DECEMBER	< 900	< 900	< 900	< 900	< 900

ALL VALUES GIVEN AS < ARE LESS THAN THE LLD.

TABLE VI B

WATER IODINE ANALYSIS

RESULTS IN pCi/L

MONTH OF	LOCATION	I-131
SEPTEMBER	DEER CREEK	< 0.50
SEPTEMBER	WELL	< 1.97
SEPTEMBER	TAP	< 0.72
SEPTEMBER	RUSSELL STATION	< 1.71
SEPTEMBER	ONTARIO WATER DISTRICT	< 1.24
SEPTEMBER	CIRC. IN	< 1.62
SEPTEMBER	CIRC. OUT	< 1.21
OCTOBER	DEER CREEK	< 0.60
OCTOBER	WELL	< 0.66
OCTOBER	TAP	< 0.89
OCTOBER	RUSSELL STATION	< 0.57
OCTOBER	ONTARIO WATER DISTRICT	< 0.45
OCTOBER	CIRC. IN	< 0.79
OCTOBER	CIRC. OUT	< 0.78
NOVEMBER	DEER CREEK	< 0.45
NOVEMBER	WELL	< 0.61
NOVEMBER	TAP	< 0.45
NOVEMBER	RUSSELL STATION	< 1.22
NOVEMBER	ONTARIO WATER DISTRICT	< 0.81
NOVEMBER	CIRC. IN	< 0.73
NOVEMBER	CIRC. OUT	< 0.63
DECEMBER	DEER CREEK	< 0.47
DECEMBER	WELL	< 0.38
DECEMBER	TAP	< 0.44
DECEMBER	RUSSELL STATION	< 0.43
DECEMBER	ONTARIO WATER DISTRICT	< 0.81
DECEMBER	CIRC. IN	< 0.56
DECEMBER	CIRC. OUT	< 0.52

ALL VALUES GIVEN AS < ARE LESS THAN THE L.L.D.

TABLE VII A

RUSSELL STATION WATER GAMMA ISOTOPIC ANALYSES
RESULTS IN pCi/LITER

BETWEEN DATES OF		7 BE	51 CR	54 MN	59 FE	58 CO	60 CO	65 ZN	95 ZR	95 NB
JAN.	1 - JAN. 31	< 63	< 80	< 4	< 8	< 5	< 1	< 8	< 9	< 5
FEB.	1 - FEB. 28	< 57	< 80	< 4	< 7	< 4	< 3	< 8	< 8	< 5
MARCH	1 - MARCH 31	< 68	<100	< 4	< 9	< 5	< 3	< 8	< 10	< 5
APRIL	1 - APRIL 30	< 64	< 80	< 4	< 7	< 4	< 4	< 9	< 9	< 5
MAY	1 - MAY 31	< 62	< 87	< 4	< 7	< 5	< 3	< 9	< 8	< 5
JUNE	1 - JUNE 30	< 66	< 87	< 5	< 8	< 5	< 3	< 9	< 10	< 5
JULY	1 - JULY 31	< 69	< 87	< 4	< 8	< 5	< 2	< 9	< 10	< 5
AUG.	1 - AUG. 31	< 79	<117	< 5	< 10	< 5	< 3	< 10	< 10	< 7
SEPT.	1 - SEPT. 30	< 67	< 90	< 4	< 8	< 5	< 2	< 9	< 9	< 5
OCT.	1 - OCT. 31	< 69	< 97	< 4	< 9	< 5	< 2	< 9	< 10	< 5
NOV.	1 - NOV. 30	< 66	< 90	< 4	< 7	< 5	< 3	< 9	< 10	< 5
DEC.	1 - DEC. 31	< 70	< 90	< 5	< 9	< 5	< 3	< 10	< 10	< 5

BETWEEN DATES OF		103 RU	106 RU	131 I	134 CS	137 CS	140 BA	141 CE	144 CE	226 RA
JAN.	1 - JAN. 31	< 6	< 53	< 10	< 5	< 4	< 4	< 20	< 88	< 11
FEB.	1 - FEB. 28	< 6	< 50	< 8	< 4	< 5	< 4	< 20	< 85	< 11
MARCH	1 - MARCH 31	< 7	< 58	< 17	< 5	< 5	< 6	< 25	< 96	< 11
APRIL	1 - APRIL 30	< 6	< 57	< 9	< 5	< 6	< 4	< 21	< 94	< 11
MAY	1 - MAY 31	< 7	< 58	< 9	< 5	< 6	< 4	< 22	< 95	< 11
JUNE	1 - JUNE 30	< 7	< 60	< 10	< 5	< 5	< 4	< 22	<100	< 12
JULY	1 - JULY 31	< 7	< 64	< 11	< 5	< 5	< 4	< 22	< 94	< 12
AUG.	1 - AUG. 31	< 9	< 64	< 28	< 5	< 5	< 8	< 30	< 96	< 12
SEPT.	1 - SEPT. 30	< 7	< 60	< 11	< 5	< 5	< 5	< 22	< 96	< 11
OCT.	1 - OCT. 31	< 7	< 57	< 14	< 5	< 5	< 5	< 25	< 96	< 11
NOV.	1 - NOV. 30	< 7	< 61	< 11	< 5	< 5	< 4	< 22	< 96	< 12
DEC.	1 - DEC. 31	< 7	< 64	< 10	< 6	< 5	< 4	< 24	<100	< 13

ALL VALUES GIVEN AS < ARE LESS THAN THE LLD.

TABLE VII K

ONTARIO WATER DISTRICT WATER GAMMA ISOTOPIC ANALYSES
RESULTS IN pCi/LITER

BETWEEN DATES OF	7 BE	51 CR	54 MN	59 FE	58 CO	60 CO	65 ZN	95 ZR	95 NB	103 RU	106 RU	131 I	134 CS	137 CS	140 BA	141 CE	144 CE	226 RA
DEC. 28 - JAN. 11	< 65	< 96	< 5	< 9	< 5	< 3	< 9	< 10	< 6	< 7	< 55	< 17	< 6	< 5	< 7	< 24	< 91	< 12
JAN. 11 - JAN. 25	< 63	< 89	< 5	< 9	< 5	< 2	< 9	< 9	< 5	< 8	< 57	< 17	< 5	< 5	< 7	< 23	< 90	< 12
JAN. 25 - FEB. 8	< 62	< 88	< 5	< 8	< 5	< 4	< 9	< 10	< 6	< 7	< 52	< 16	< 5	< 6	< 5	< 23	< 87	< 11
FEB. 8 - FEB. 22	< 66	< 92	< 5	< 9	< 5	< 5	< 8	< 9	< 6	< 8	< 55	< 17	< 5	< 6	< 6	< 24	< 91	< 12
FEB. 22 - MARCH 8	< 66	< 91	< 5	< 8	< 5	< 4	< 9	< 9	< 6	< 7	< 59	< 16	< 5	< 6	< 6	< 24	< 92	< 12
MARCH 8 - MARCH 22	< 65	< 94	< 5	< 9	< 5	< 4	< 9	< 10	< 6	< 8	< 56	< 14	< 5	< 6	< 7	< 24	< 92	< 12
MARCH 22 - APRIL 5	< 69	<110	< 5	< 10	< 6	< 3	< 9	< 11	< 6	< 8	< 60	< 22	< 6	< 5	< 8	< 27	< 98	< 12
APRIL 5 - APRIL 19	< 71	<100	< 5	< 9	< 5	< 4	< 9	< 10	< 6	< 8	< 57	< 19	< 6	< 7	< 6	< 26	< 97	< 12
APRIL 19 - MAY 3	< 70	< 97	< 5	< 9	< 6	< 4	< 9	< 10	< 6	< 8	< 60	< 17	< 6	< 7	< 6	< 25	< 97	< 12
MAY 3 - MAY 17	< 69	< 99	< 5	< 9	< 6	< 4	< 10	< 11	< 6	< 8	< 60	< 17	< 6	< 7	< 5	< 25	< 97	< 12
MAY 17 - MAY 31	< 70	<100	< 5	< 9	< 6	< 4	< 10	< 10	< 6	< 9	< 62	< 18	< 6	< 6	< 6	< 26	< 97	< 12
MAY 31 - JUNE 14	< 73	<100	< 5	< 10	< 6	< 3	< 10	< 11	< 6	< 9	< 59	< 20	< 6	< 6	< 6	< 27	< 97	< 13
JUNE 14 - JUNE 28	< 73	<110	< 6	< 10	< 6	< 4	< 10	< 11	< 7	< 9	< 58	< 23	< 6	< 6	< 8	< 28	< 99	< 13
JUNE 28 - JULY 12	< 68	< 94	< 5	< 10	< 5	< 4	< 10	< 10	< 6	< 8	< 62	< 15	< 6	< 6	< 6	< 25	< 97	< 12
JULY 12 - JULY 26	< 71	<105	< 5	< 9	< 6	< 3	< 10	< 11	< 6	< 8	< 59	< 20	< 6	< 6	< 7	< 27	< 98	< 12
JULY 26 - AUG. 9	< 72	<105	< 5	< 9	< 6	< 3	< 9	< 10	< 6	< 8	< 62	< 19	< 6	< 6	< 6	< 26	<100	< 12
AUG. 9 - AUG. 23	< 77	<110	< 5	< 9	< 5	< 4	< 9	< 11	< 6	< 9	< 61	< 22	< 6	< 6	< 7	< 28	<100	< 13
AUG. 23 - SEPT. 6	< 71	<100	< 5	< 9	< 6	< 3	< 10	< 11	< 6	< 8	< 60	< 18	< 6	< 6	< 7	< 26	< 98	< 13
SEPT. 6 - SEPT. 20	< 71	<100	< 5	< 9	< 6	< 3	< 10	< 11	< 6	< 8	< 58	< 19	< 6	< 6	< 6	< 26	< 98	< 13
SEPT. 20 - OCT. 4	< 69	< 92	< 5	< 9	< 5	< 3	< 10	< 11	< 6	< 8	< 60	< 18	< 6	< 6	< 6	< 24	< 99	< 13
OCT. 4 - OCT. 18	< 70	<105	< 5	< 9	< 5	< 3	< 9	< 11	< 6	< 8	< 58	< 19	< 6	< 6	< 7	< 26	< 96	< 12
OCT. 18 - NOV. 1	< 69	<105	< 5	< 9	< 6	< 3	< 10	< 10	< 7	< 9	< 61	< 20	< 6	< 6	< 7	< 27	< 99	< 12
NOV. 1 - NOV. 15	< 78	<115	< 6	< 11	< 6	< 5	< 9	< 12	< 7	< 9	< 64	< 25	< 6	< 6	< 8	< 28	<100	< 14
NOV. 15 - NOV. 29	< 76	<120	< 6	< 10	< 6	< 4	< 12	< 11	< 8	< 9	< 65	< 28	< 6	< 6	< 7	< 30	<100	< 14
NOV. 29 - DEC. 13	< 84	<125	< 6	< 11	< 6	< 5	< 11	< 12	< 8	< 10	< 65	< 30	< 6	< 7	< 8	< 30	<105	< 13
DEC. 13 - DEC. 27	< 71	<100	< 5	< 10	< 6	< 4	< 11	< 11	< 6	< 9	< 63	< 17	< 6	< 6	< 7	< 25	<100	< 14

ALL VALUES GIVEN AS < ARE LESS THAN THE LLD.

TABLE VII C

CIRC. OUT WATER GAMMA ISOTOPIC ANALYSES
RESULTS IN pCi/LITER

BETWEEN DATES OF	7 BE	51 CR	54 MN	59 FE	58 CO	60 CO	65 ZN	95 ZR	95 NB	103 RU	106 RU	131 I	134 CS	137 CS	140 BA	141 CE	144 CE	226 RA
DEC. 27 - JAN. 10	< 63	< 92	< 5	< 9	< 5	< 3	< 9	< 9	< 6	< 7	< 56	< 15	< 5	< 5	< 6	< 24	< 91	< 12
JAN. 10 - JAN. 24	< 67	< 92	< 5	< 9	< 5	< 2	< 9	< 10	< 6	< 8	< 55	< 16	< 6	< 5	< 6	< 24	< 91	< 12
JAN. 24 - FEB. 7	< 65	< 93	< 4	< 8	< 5	< 3	< 9	< 9	< 5	< 8	< 54	< 15	< 5	< 6	< 6	< 23	< 86	< 11
FEB. 7 - FEB. 21	< 62	< 88	< 4	< 9	< 5	< 3	< 8	< 9	< 6	< 7	< 55	< 15	< 5	< 6	< 6	< 23	< 87	< 11
FEB. 21 - MARCH 7	< 65	< 91	< 5	< 8	< 5	< 5	< 8	< 9	< 6	< 7	< 54	< 16	< 5	< 6	< 6	< 23	< 87	< 12
MARCH 7 - MARCH 21	< 63	< 91	< 5	< 9	< 5	< 5	< 9	< 9	< 5	< 7	< 51	< 16	< 5	< 6	< 6	< 23	< 88	< 12
MARCH 21 - APRIL 4	< 69	< 97	< 5	< 9	< 5	< 3	< 9	< 10	< 6	< 8	< 58	< 17	< 6	< 6	< 5	< 25	< 96	< 12
APRIL 4 - APRIL 18	< 72	<100	< 5	< 9	< 5	< 3	< 9	< 10	< 7	< 8	< 61	< 20	< 6	< 7	< 7	< 26	< 96	< 12
APRIL 18 - MAY 2	< 66	< 99	< 5	< 9	< 5	< 4	< 10	< 10	< 6	< 8	< 59	< 17	< 6	< 7	< 6	< 25	< 97	< 13
MAY 2 - MAY 16	< 69	<100	< 5	< 9	< 5	< 4	< 10	< 10	< 6	< 9	< 59	< 17	< 6	< 7	< 6	< 25	< 96	< 13
MAY 16 - MAY 30	< 69	< 99	< 5	< 9	< 5	< 4	< 10	< 10	< 6	< 8	< 60	< 17	< 6	< 7	< 6	< 25	< 98	< 12
MAY 30 - JUNE 13	< 71	<100	< 6	< 10	< 6	< 3	< 10	< 11	< 6	< 8	< 56	< 18	< 6	< 6	< 7	< 26	< 97	< 11
JUNE 13 - JUNE 27	< 71	<100	< 5	< 10	< 6	< 4	< 10	< 11	< 6	< 9	< 59	< 19	< 6	< 6	< 7	< 26	<100	< 12
JUNE 27 - JULY 11	< 75	<105	< 5	< 10	< 6	< 4	< 9	< 11	< 6	< 9	< 62	< 21	< 6	< 6	< 7	< 27	<100	< 12
JULY 11 - JULY 25	< 72	<100	< 5	< 9	< 6	< 3	< 9	< 11	< 7	< 8	< 62	< 19	< 6	< 6	< 7	< 26	< 98	< 12
JULY 25 - AUG. 8	< 71	<100	< 5	< 9	< 6	< 3	< 10	< 11	< 6	< 9	< 61	< 19	< 6	< 6	< 7	< 27	< 97	< 12
AUG. 8 - AUG. 22	< 71	<105	< 5	< 10	< 6	< 3	< 9	< 10	< 6	< 9	< 61	< 18	< 6	< 6	< 7	< 27	< 97	< 13
AUG. 22 - SEPT. 5	< 74	<110	< 5	< 11	< 6	< 4	< 10	< 11	< 6	< 8	< 60	< 25	< 6	< 6	< 8	< 29	<100	< 12
SEPT. 5 - SEPT. 19	< 71	<105	< 5	< 10	< 6	< 3	< 10	< 11	< 6	< 8	< 62	< 19	< 6	< 6	< 7	< 27	< 98	< 13
SEPT. 19 - OCT. 3	INSUFFICIENT SAMPLE FOR GAMMA ANALYSIS																	
OCT. 3 - OCT. 17	< 75	<110	< 6	< 10	< 6	< 4	< 9	< 11	< 6	< 9	< 62	< 20	< 6	< 6	< 7	< 28	<100	< 13
OCT. 17 - OCT. 31	< 69	< 97	< 5	< 9	< 5	< 3	< 10	< 11	< 6	< 8	< 62	< 15	< 6	< 6	< 6	< 25	< 98	< 12
OCT. 31 - NOV. 14	< 72	<105	< 6	< 9	< 6	< 4	< 10	< 11	< 7	< 9	< 63	< 20	< 6	< 6	< 7	< 27	< 98	< 13
NOV. 14 - NOV. 28	< 78	<120	< 6	< 11	< 6	< 4	< 11	< 12	< 7	< 9	< 64	< 26	< 6	< 6	< 8	< 30	<100	< 13
NOV. 28 - DEC. 12	< 81	<130	< 5	< 11	< 6	< 4	< 10	< 11	< 8	< 11	< 62	< 38	< 6	< 8	< 11	< 31	<100	< 13
DEC. 12 - DEC. 26	< 73	<100	< 6	< 10	< 6	< 4	< 10	< 10	< 6	< 9	< 64	< 16	< 6	< 6	< 6	< 25	< 96	< 13

ALL VALUES GIVEN AS < ARE LESS THAN THE LLD.

TABLE VII D

DEER CREEK WATER GAMMA ISOTOPIC ANALYSES
RESULTS IN pCi/LITER

BETWEEN DATES OF		7 BE	51 CR	54 MN	59 FE	58 CO	60 CO	65 ZN	95 ZR	95 NB
JAN.	1 - JAN. 31	< 63	< 82	< 6	< 7	< 5	< 2	< 9	< 9	< 6
FEB.	1 - FEB. 28	< 58	< 79	< 5	< 8	< 5	< 5	< 9	< 9	< 5
MARCH	1 - MARCH 31	< 58	< 78	< 5	< 7	< 5	< 2	< 9	< 9	< 5
APRIL	1 - APRIL 30	< 64	< 82	< 5	< 9	< 5	< 3	< 10	< 10	< 5
MAY	1 - MAY 31	< 65	< 80	< 5	< 8	< 5	< 4	< 9	< 9	< 5
JUNE	1 - JUNE 30	< 66	< 85	< 6	< 9	< 5	< 4	< 9	< 10	< 6
JULY	1 - JULY 31	< 69	< 91	< 6	< 9	< 6	< 4	< 11	< 10	< 6
AUG.	1 - AUG. 31	< 67	< 90	< 5	< 9	< 5	< 4	< 9	< 10	< 6
SEPT.	1 - SEPT. 30	< 65	< 85	< 5	< 8	< 5	< 4	< 9	< 10	< 6
OCT.	1 - OCT. 31	< 66	< 88	< 5	< 9	< 5	< 4	< 10	< 10	< 6
NOV.	1 - NOV. 30	< 65	< 86	< 5	< 8	< 5	< 3	< 10	< 10	< 5
DEC.	1 - DEC. 31	< 67	< 87	< 6	< 8	< 5	< 3	< 10	< 10	< 6

BETWEEN DATES OF		103 RU	106 RU	131 I	134 CS	137 CS	140 BA	141 CE	144 CE	226 RA
JAN.	1 - JAN. 31	< 7	< 58	< 9	< 5	< 6	< 4	< 22	< 94	12±3
FEB.	1 - FEB. 28	< 7	< 58	< 9	< 6	< 6	< 5	< 21	< 92	27±3
MARCH	1 - MARCH 31	< 7	< 52	< 9	< 6	< 5	< 4	< 21	< 88	13±3
APRIL	1 - APRIL 30	< 7	< 58	< 10	< 6	< 7	< 5	< 22	< 97	12±3
MAY	1 - MAY 31	< 7	< 60	< 9	< 6	< 6	< 5	< 22	< 97	11±2
JUNE	1 - JUNE 30	< 7	< 62	< 9	< 6	< 6	< 4	< 23	< 99	12±2
JULY	1 - JULY 31	< 8	< 64	< 10	< 6	< 6	< 5	< 24	<105	42±4
AUG.	1 - AUG. 31	< 8	< 61	< 12	< 6	< 6	< 5	< 24	< 98	< 12
SEPT.	1 - SEPT. 30	< 8	< 61	< 10	< 6	< 6	< 4	< 23	< 99	17±3
OCT.	1 - OCT. 31	< 8	< 61	< 12	< 6	< 5	< 5	< 23	< 96	< 12
NOV.	1 - NOV. 30	< 7	< 57	< 9	< 6	< 6	< 4	< 22	< 96	< 13
DEC.	1 - DEC. 31	< 8	< 57	< 10	< 5	< 6	< 5	< 23	< 97	12±2

ALL VALUES GIVEN AS < ARE LESS THAN THE LLD.

TABLE VII E

TAP WATER GAMMA ISOTOPIC ANALYSES
RESULTS IN pCi/LITER

BETWEEN DATES OF		7 BE	51 CR	54 MN	59 FE	58 CO	60 CO	65 ZN	95 ZR	95 NB
JAN.	1 - JAN. 31	< 59	< 76	< 5	< 7	< 5	< 3	< 8	< 9	< 5
FEB.	1 - FEB. 28	< 58	< 75	< 5	< 7	< 5	< 5	< 9	< 9	< 5
MARCH	1 - MARCH 31	< 59	< 77	< 5	< 8	< 5	< 2	< 8	< 8	< 5
APRIL	1 - APRIL 30	< 63	< 84	< 5	< 8	< 5	< 3	< 8	< 9	< 5
MAY	1 - MAY 31	< 61	< 84	< 5	< 8	< 5	< 4	< 9	< 10	< 5
JUNE	1 - JUNE 30	< 64	< 83	< 5	< 8	< 5	< 3	< 9	< 10	< 5
JULY	1 - JULY 31	< 84	<110	< 6	<11	< 7	< 4	< 10	< 11	< 5
AUG.	1 - AUG. 31	< 69	< 95	< 6	< 9	< 6	< 4	< 11	< 10	< 6
SEPT.	1 - SEPT. 30	< 66	< 81	< 5	< 8	< 5	< 3	< 10	< 9	< 5
OCT.	1 - OCT. 31	< 64	< 83	< 5	< 8	< 6	< 3	< 9	< 10	< 5
NOV.	1 - NOV. 30	< 64	< 86	< 5	< 9	< 5	< 4	< 10	< 10	< 5
DEC.	1 - DEC. 31	< 63	< 81	< 5	< 8	< 5	< 4	< 9	< 9	< 5

BETWEEN DATES OF		103 RU	106 RU	131 I	134 CS	137 CS	140 BA	141 CE	144 CE	226 RA
JAN.	1 - JAN. 31	< 7	< 53	< 9	< 5	< 5	< 4	< 20	< 89	< 11
FEB.	1 - FEB. 28	< 6	< 52	< 8	< 5	< 6	< 4	< 20	< 86	< 11
MARCH	1 - MARCH 31	< 6	< 56	< 9	< 6	< 5	< 4	< 20	< 89	< 12
APRIL	1 - APRIL 30	< 7	< 60	< 9	< 6	< 7	< 4	< 22	< 96	< 13
MAY	1 - MAY 31	< 7	< 58	< 9	< 6	< 6	< 4	< 21	< 94	< 12
JUNE	1 - JUNE 30	< 7	< 58	< 9	< 6	< 6	< 4	< 22	< 94	< 13
JULY	1 - JULY 31	< 7	< 59	< 10	< 6	< 6	< 4	< 23	< 96	< 13
AUG.	1 - AUG. 31	< 8	< 65	< 11	< 6	< 7	< 5	< 23	<105	< 13
SEPT.	1 - SEPT. 30	< 7	< 58	< 9	< 6	< 6	< 4	< 22	< 94	< 12
OCT.	1 - OCT. 31	< 7	< 60	< 9	< 6	< 6	< 4	< 22	< 94	< 12
NOV.	1 - NOV. 30	< 7	< 60	< 9	< 6	< 6	< 4	< 22	< 96	< 12
DEC.	1 - DEC. 31	< 7	< 58	< 9	< 6	< 6	< 4	< 22	< 94	< 12

ALL VALUES GIVEN AS < ARE LESS THAN THE LLD.

TABLE VII F

WELL 'B' WATER GAMMA ISOTOPIC ANALYSES
RESULTS IN pCi/LITER

BETWEEN DATES OF		7 BE	51 CR	54 MN	59 FE	58 CO	60 CO	65 ZN	95 ZR	95 NB
JAN.	1 - JAN. 31	< 61	< 80	< 5	< 7	< 5	< 2	< 10	< 8	< 5
FEB.	1 - FEB. 28	< 62	< 80	< 5	< 8	< 5	< 5	< 11	< 9	< 6
MARCH	1 - MARCH 31	< 60	< 80	< 5	< 8	< 5	< 3	< 10	< 9	< 5
APRIL	1 - APRIL 30	< 64	< 84	< 5	< 8	< 5	< 3	< 11	< 10	< 6
MAY	1 - MAY 31	< 65	< 85	< 5	< 8	< 5	< 4	< 9	< 9	< 6
JUNE	1 - JUNE 30	< 66	< 87	< 5	< 8	< 6	< 4	< 11	< 10	< 6
JULY	1 - JULY 31	< 70	< 94	< 5	< 9	< 6	< 3	< 9	< 10	< 6
AUG.	1 - AUG. 31	< 66	< 87	< 5	< 8	< 5	< 3	< 10	< 10	< 6
SEPT.	1 - SEPT. 30	< 65	< 85	< 5	< 8	< 6	< 4	< 10	< 10	< 6
OCT.	1 - OCT. 31	< 64	< 83	< 5	< 8	< 5	< 3	< 10	< 9	< 5
NOV.	1 - NOV. 30	< 71	< 90	< 6	< 8	< 6	< 5	< 11	< 11	< 6
DEC.	1 - DEC. 31	< 65	< 84	< 5	< 8	< 5	< 4	< 11	< 10	< 5

BETWEEN DATES OF		103 RU	106 RU	131 I	134 CS	137 CS	140 BA	141 CE	144 CE	226 RA
JAN.	1 - JAN. 31	< 7	< 53	< 8	< 5	< 5	< 4	< 21	< 89	32±3
FEB.	1 - FEB. 28	< 7	< 54	< 9	< 5	< 6	< 4	< 21	< 93	39±3
MARCH	1 - MARCH 31	< 7	< 58	< 9	< 5	< 5	< 5	< 22	< 93	42±3
APRIL	1 - APRIL 30	< 7	< 60	< 9	< 6	< 6	< 4	< 23	< 99	45±3
MAY	1 - MAY 31	< 7	< 61	< 9	< 6	< 7	< 5	< 23	< 99	30±3
JUNE	1 - JUNE 30	< 8	< 61	< 10	< 6	< 6	< 4	< 23	< 99	35±3
JULY	1 - JULY 31	< 8	< 61	< 12	< 6	< 6	< 5	< 25	<100	11±2
AUG.	1 - AUG. 31	< 7	< 62	< 10	< 6	< 6	< 4	< 23	<100	28±4
SEPT.	1 - SEPT. 30	< 8	< 60	< 10	< 6	< 6	< 4	< 23	< 98	20±2
OCT.	1 - OCT. 31	< 7	< 60	< 10	< 5	< 6	< 4	< 22	< 98	17±2
NOV.	1 - NOV. 30	< 8	< 64	< 11	< 6	< 6	< 5	< 24	<100	14±2
DEC.	1 - DEC. 31	< 7	< 60	< 9	< 6	< 6	< 5	< 22	< 98	20±2

ALL VALUES GIVEN AS < ARE LESS THAN THE LLD.

TABLE VIII

FALLOUT GROSS BETA ANALYSES
RESULTS IN pCi/M^2/DAY

MONTH OF	STATION 3	STATION 5	STATION 8	STATION 10	STATION 12
JANUARY	3.47±0.68	1.24±1.72	3.81±1.85	4.49±1.97	9.37±2.81
FEBRUARY	(a)	2.54±0.57	6.63±1.27	7.77±0.98	7.74±1.27
MARCH	2.23±0.79	3.41±1.01	3.72±1.10	1.98±0.95	2.08±1.06
APRIL	4.10±1.27	5.85±1.36	5.61±1.41	8.43±1.43	8.40±1.36
MAY	9.97±1.18	11.23±0.13	6.24±1.18	3.09±0.81	5.96±1.00
JUNE	1.40±1.17	23.80±3.02	2.38±1.63	6.70±2.31	3.84±2.31
JULY	< 1.20	1.80±0.23	1.78±1.23	5.03±1.74	2.28±1.73
AUGUST	2.78±0.68	9.57±1.09	2.77±0.78	3.33±0.85	4.54±1.05
SEPTEMBER	8.82±4.13	19.28±5.25	14.01±0.33	10.14±3.15	7.27±2.56
OCTOBER	5.40±1.46	2.91±1.30	3.14±1.24	3.19±1.22	5.66±2.11
NOVEMBER	6.08±2.23	7.43±2.28	5.99±2.18	6.59±2.23	11.91±2.48
DECEMBER	13.60±1.55	7.58±0.94	10.12±1.21	6.17±1.15	6.28±1.51
MAXIMUM	13.60±1.55	23.80±3.02	14.01±0.33	10.14±3.15	11.91±2.48
AVERAGE	5.78	8.05	5.52	5.58	6.28
MINIMUM	1.40±1.17	1.24±1.72	1.78±1.23	1.98±0.95	2.08±1.06

TABLE IX

EXTERNAL PENETRATING RADIATION

THERMOLUMINESCENT DOSIMETRY 1985

Units = Mr/91 day Qtr

	LOCATION	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr
#2 - #7 plus #13 are on-site near the line of highest annual average ground level concentration.	2	17.4 ± 4.4	18.1 ± 4.6	18.8 ± 4.7	20.9 ± 5.3
	3	17.2 ± 4.3	18.1 ± 4.6	18.5 ± 4.7	18.5 ± 4.7
	4	19.1 ± 4.8	15.6 ± 3.9	19.2 ± 4.8	21.2 ± 5.3
	5	21.8 ± 5.5	18.7 ± 4.7	21.2 ± 5.3	22.0 ± 5.6
	6	14.6 ± 3.7	14.8 ± 3.7	15.2 ± 3.8	16.7 ± 4.2
	7	58.5 ± 9.4	65.8 ±10.5	69.9 ±11.2	69.2 ±11.1
#8 - #12 are offsite at a distance of 8 to 15 miles.	8	13.5 ± 3.4	15.0 ± 3.8	14.1 ± 3.6	17.8 ± 4.5
	9	11.8 ± 3.0	12.5 ± 3.2	11.4 ± 2.9	14.5 ± 3.7
	10	13.4 ± 3.4	12.6 ± 3.2	13.2 ± 3.3	15.5 ± 3.9
	11	15.2 ± 3.8	12.9 ± 3.3	14.7 ± 3.7	16.4 ± 4.1
	12	14.6 ± 3.7	13.1 ± 3.3	14.2 ± 3.6	15.8 ± 4.0
	13	19.0 ± 4.8	17.0 ± 4.3	19.0 ± 4.8	20.7 ± 5.2
#14 - #16 are located along a line 3000' west of the plant.	14	16.0 ± 4.0	13.5 ± 3.4	16.4 ± 4.1	16.2 ± 4.1
	15	17.9 ± 4.5	16.2 ± 4.1	18.8 ± 4.7	19.2 ± 4.8
	16	16.1 ± 4.1	15.7 ± 4.0	17.8 ± 4.5	18.4 ± 4.6
#17 - #21 are located along Lake Road.	17	16.8 ± 4.2	15.5 ± 3.9	16.4 ± 4.1	18.2 ± 4.6
	18	18.2 ± 4.6	14.9 ± 3.8	18.2 ± 4.6	18.8 ± 4.7
	19	16.5 ± 4.2	15.1 ± 3.8	18.6 ± 4.7	17.7 ± 4.5
	20	16.2 ± 4.1	15.9 ± 4.0	18.1 ± 4.6	18.1 ± 4.6
	21	16.1 ± 4.1	15.6 ± 3.9	17.4 ± 4.4	17.3 ± 4.4
	22	17.3 ± 4.4	14.4 ± 3.6	16.8 ± 4.2	16.2 ± 4.1
#22 - #24 are located along the east site boundary line.	23	16.4 ± 4.1	13.9 ± 3.5	18.5 ± 4.7	16.2 ± 4.1
	24	17.0 ± 4.3	14.9 ± 3.8	16.7 ± 4.2	17.1 ± 4.3
#25 - #30 are offsite at a distance of 8 to 15 miles.	25	14.6 ± 3.7	11.7 ± 2.9	13.7 ± 3.5	14.9 ± 3.8
	26	13.8 ± 3.5	13.1 ± 3.3	12.5 ± 3.2	13.8 ± 3.5
	27	15.7 ± 4.0	15.3 ± 3.9	15.5 ± 3.9	18.0 ± 4.5
	28	16.1 ± 4.1	14.6 ± 3.7	17.5 ± 4.4	18.2 ± 4.6
	29	14.6 ± 3.7	12.0 ± 3.0	15.7 ± 4.0	15.5 ± 3.9
	30	13.3 ± 3.4	10.3 ± 2.6	15.5 ± 3.9	11.7 ± 3.0
#31 through #40 are located in an arc at a distance of 4-5 miles.	31	16.2 ± 4.1	15.5 ± 3.9	17.0 ± 4.3	18.4 ± 4.6
	32	14.4 ± 3.6	14.4 ± 3.6	15.9 ± 4.0	15.2 ± 3.8
	33	15.9 ± 4.0	15.1 ± 3.8	16.7 ± 4.2	18.7 ± 4.7
	34	15.9 ± 4.0	15.3 ± 3.9	15.4 ± 3.9	18.6 ± 4.7
	35	16.5 ± 4.2	15.3 ± 3.9	19.4 ± 4.9	18.7 ± 4.7
	36	14.8 ± 3.7	13.1 ± 3.3	15.2 ± 3.8	16.4 ± 4.1
	37	15.5 ± 3.9	14.4 ± 3.6	15.0 ± 3.8	16.6 ± 4.2
	38	16.2 ± 4.1	14.8 ± 3.7	16.8 ± 4.2	18.1 ± 4.6
	39	15.7 ± 4.0	18.2 ± 4.6	16.6 ± 4.2	19.4 ± 4.9
	40	15.5 ± 3.9	14.4 ± 3.6	14.6 ± 3.7	15.1 ± 3.8

COMPARISON OF TLD DATA
of 1984 and 1985
AVE. mRem/QUARTER vs. TLD LOCATION

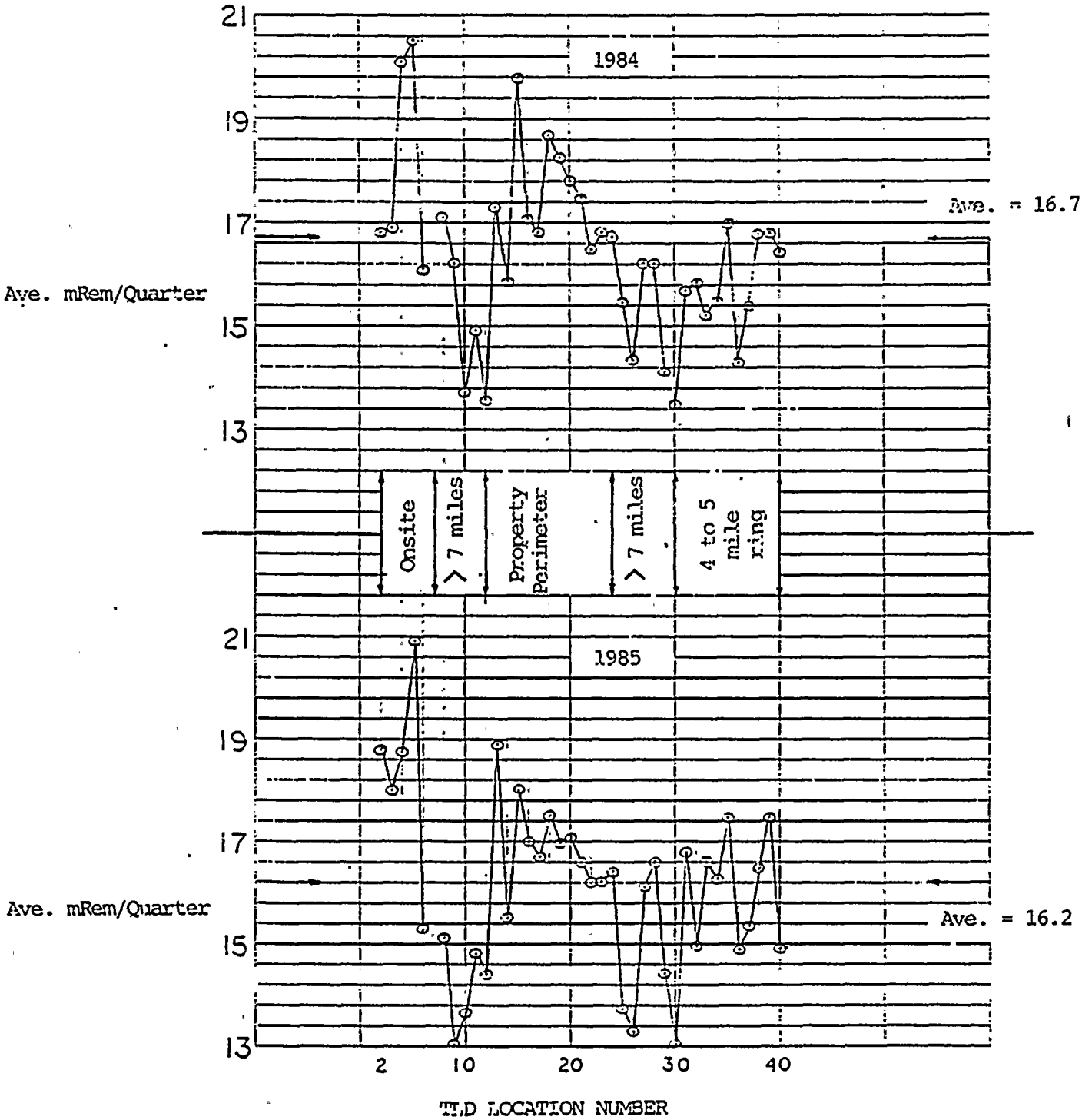


TABLE X

MILK
RESULTS IN pCi/LITER

FARM	DATE	I-131	CS-137	BA-140	K-40
B	JAN. 15	< 0.24	< 6	< 4	1320± 11
D	JAN. 17	(a)	< 6	< 4	1230± 11
A	FEB. 11	< 0.30	< 7	< 4	1390± 11
D	FEB. 14	< 0.30	< 7	< 4	1460± 12
C	MARCH 12	< 0.63	< 6	< 4	1160± 12
D	MARCH 14	< 0.57	< 6	< 4	1090± 11
B	APRIL 16	< 0.39	< 8	< 4	1560± 11
D	APRIL 18	< 0.41	< 7	< 4	1460± 12
A	MAY 21	< 0.32	< 7	< 4	1340± 12
D	MAY 23	< 0.28	< 7	< 5	1240± 12
C	JUNE 4	< 0.29	< 7	< 5	1310± 10
D	JUNE 6	< 0.30	< 7	< 4	1390± 13
B	JUNE 11	< 0.28	< 7	< 4	1320± 12
A	JUNE 13	< 0.30	< 7	< 3	1370± 13
C	JUNE 17	< 0.33	< 6	< 4	1260± 13
D	JUNE 20	< 0.31	< 7	< 4	1250± 12
B	JUNE 25	< 0.27	< 7	< 5	1290± 11
A	JUNE 27	< 0.22	< 7	< 5	1360± 12
C	JULY 1	< 0.23	< 7	< 4	1340± 12
D	JULY 3	< 0.22	< 7	< 4	1290± 11
B	JULY 9	< 0.25	< 7	< 4	1270± 12
A	JULY 11	< 0.22	< 7	< 4	1290± 11
C	JULY 16	< 0.51	< 7	< 4	1280± 11
D	JULY 18	< 0.41	< 7	< 4	1330± 11
B	JULY 23	< 0.29	< 7	< 4	1290± 12
A	JULY 25	< 0.30	< 7	< 4	1370± 12
C	JULY 30	< 0.28	< 6	< 4	1300± 10
D	AUG. 1	< 0.25	< 7	< 5	1440± 14
B	AUG. 6	< 0.27	< 6	< 4	1230± 11
A	AUG. 8	< 0.29	< 7	< 4	1320± 11
C	AUG. 13	< 0.43	< 6	< 4	1300± 12
D	AUG. 15	< 0.27	< 6	< 5	1300± 17
B	AUG. 20	< 0.23	< 7	< 4	1220± 11
A	AUG. 22	< 0.23	< 6	< 4	1350± 11
C	AUG. 27	< 0.35	< 7	< 4	1370± 11
D	AUG. 29	< 0.28	< 7	< 4	1270± 11
B	SEPT. 3	< 0.26	< 7	< 4	1270± 12
A	SEPT. 5	< 0.25	< 7	< 5	1340± 14
C	SEPT. 10	< 0.24	< 6	< 5	1250± 12
D	SEPT. 12	< 0.32	< 7	< 4	1280± 10
B	SEPT. 17	< 0.38	< 7	< 4	1310± 10
A	SEPT. 19	< 0.23	< 7	< 5	1270± 12
C	SEPT. 24	< 0.29	< 6	< 5	1290± 14
D	SEPT. 26	< 0.23	< 6	< 4	1300± 11
B	OCT. 1	< 0.27	< 7	< 4	1350± 11
A	OCT. 3	< 0.24	< 7	< 4	1250± 13
C	OCT. 8	< 0.22	< 6	< 5	1330± 11
D	OCT. 10	< 0.20	< 6	< 4	1220± 12
B	OCT. 15	< 0.25	< 7	< 5	1250± 11
A	OCT. 17	< 0.36	< 6	< 4	1210± 11
A	OCT. 18	(a)			
C	OCT. 22	< 0.30	< 6	< 4	1300± 10
D	OCT. 24	< 0.33	< 6	< 4	1320± 12
B	NOV. 12	< 0.28	< 6	< 4	1330± 12
D	NOV. 14	< 0.30	< 7	< 4	1309± 11
A	DEC. 10	< 0.30	< 7	< 5	1310± 11
D	DEC. 12	< 0.30	< 7	< 5	1270± 11

ALL VALUES GIVEN AS < ARE LESS THAN THE LLD.

(a) SAMPLE CONTAMINATED DURING CHEMICAL ANALYSIS.

TABLE XI
FISH SAMPLES
RESULTS IN pCi/kgm WET

DESCRIPTION		40 K	51 CR	54 MN	59 FE	58 CO	60 CO	65 ZN	95 ZR	95 NB	103 RU	106 RU	131 I	134 CS	137 CS	140 BA	141 CE	144 CE	226 RA
FIRST HALF 1985																			
COHO SALMON	6/21	3720±230	<560	< 14	< 44	< 19	< 12	< 30	< 38	< 30	< 35	<140	<990	< 15	23±3	< 92	<120	<220	< 28
BROWN TROUT	6/21	2460±125	<360	< 7	< 27	< 11	< 6	< 16	< 23	< 19	< 21	< 80	<980	< 8	16±2	< 80	< 76	<120	< 5
LAKE TROUT	6/21	3790±300	<360	< 16	< 36	< 18	< 15	< 33	< 34	< 23	< 27	<180	<120	< 13	29±4	< 29	< 85	<270	< 37
WHITE TROUT	6/21	2470±160	<210	< 9	< 20	< 10	< 8	< 20	< 20	< 13	< 16	< 99	< 75	< 10	21±2	< 17	< 49	<150	< 20
SECOND HALF 1985																			
BROWN TROUT	10/31	4050±240	<220	< 13	< 25	< 13	< 11	< 28	< 24	< 15	< 19	<140	< 39	< 14	21±3	< 13	< 55	<200	< 29
CHINOOK SALMON	11/11	3360±210	<160	< 10	< 20	< 10	< 8	< 20	< 18	< 11	< 14	<110	< 23	< 11	32±2	< 8	< 40	<170	< 23
WHITE PERCH	12/ 4	2260±200	<230	< 12	< 23	< 12	< 9	< 25	< 24	< 15	< 19	<120	< 56	< 13	15±3	< 16	< 55	<190	< 28
RAINBOW TROUT	12/ 4	3210±210	<450	< 12	< 28	< 15	< 9	< 29	< 27	< 17	< 20	<140	< 60	< 14	31±3	< 16	< 60	<210	< 29
BACKGROUND FISH FROM SOMERSET SITE																			
FIRST HALF 1985																			
BROWN TROUT	7/ 9	3730±220	<310	< 12	< 30	< 14	< 11	< 28	< 28	< 19	< 24	<140	<130	< 13	23±3	< 30	< 71	<200	< 28
LAKE TROUT	7/ 9	3150±270	<630	< 14	< 34	< 17	< 13	< 31	< 33	< 22	< 27	<170	<140	< 16	19±3	< 26	< 83	<240	< 32
WHITE PERCH	7/ 9	2330±210	<340	< 11	< 29	< 15	< 10	< 25	< 28	< 19	< 25	<130	<230	< 12	11±3	< 36	< 78	<190	< 26
SECOND HALF 1985																			
BROWN TROUT	11/12	2930±150	<140	< 8	< 17	< 9	< 9	< 18	< 16	< 9	< 12	< 88	< 26	< 9	16±2	< 8	< 35	<130	< 18
CHINOOK SALMON	12/19	2590±220	<360	< 16	< 36	< 20	< 13	< 27	< 39	< 28	< 21	<125	< 24	< 12	20±4	< 50	<105	<270	< 25
LAKE TROUT	12/19	3220±160	<340	< 10	< 30	< 14	< 9	< 23	< 26	< 19	< 23	<110	< 35	< 11	24±2	< 42	< 76	<170	< 22

ALL VALUES GIVEN AS < ARE LESS THAN THE LLD.

TABLE XI B

VEGETATION SAMPLES
RESULTS IN pCi/KGH WET

DESCRIPTION		40 K	51 CR	54 MN	59 FE	58 CO	60 CO	65 ZN	95 ZR	95 NB
CHERRIES	6/21	1500±100	< 86	< 6	< 11	< 5	< 5	< 12	< 11	< 5
LETTUCE	7/ 9	3150±680	<470	< 35	< 80	< 34	< 36	< 89	< 68	< 38
ZUCCINI	10/31	2110±230	<220	< 13	< 22	< 14	< 12	< 26	< 27	< 15
APPLES	11/11	680± 80	< 84	< 5	< 8	< 5	< 4	< 10	< 10	< 6
CORN	11/12	2240±160	<130	< 8	< 5	< 9	< 7	< 19	< 15	< 9
GRAPES	11/19	1180± 90	< 77	< 5	< 9	< 5	< 4	< 10	< 9	< 5
CONTROL VEGETATION SAMPLES										
SWISS CHARD	12/ 4	4340±250	<190	< 13	< 24	< 12	< 10	< 26	< 25	< 14
APPLES	12/19	930±130	<130	< 7	< 14	< 7	< 5	< 16	< 15	< 8

DESCRIPTION		103 RU	106 RU	131 I	134 CS	137 CS	140 BA	141 CE	144 CE	226 RA
CHERRIES	6/21	< 8	< 59	< 10	< 6	< 6	< 4	< 22	< 98	< 13
LETTUCE	7/ 9	< 39	<370	< 50	< 35	< 1	< 33	<100	<450	86±16
ZUCCINI	10/31	< 19	<150	< 24	< 16	< 16	< 9	< 54	<230	< 33
APPLES	11/11	< 7	< 54	< 9	< 6	< 6	< 4	< 22	< 95	< 13
CORN	11/12	< 11	< 96	< 14	< 10	< 10	< 6	< 33	<140	< 20
GRAPES	11/19	< 7	< 56	< 9	< 6	< 6	< 4	< 20	< 84	< 12
CONTROL VEGETATION SAMPLES										
SWISS CHARD	12/ 4	< 16	<140	< 22	< 14	< 14	< 9	< 48	<200	< 29
ALFALFA	12/19	< 11	< 86	< 17	< 9	< 9	< 7	< 34	<130	< 19

ALL VALUES GIVEN AS < ARE LESS THAN THE LLD.

TABLE XI C

LAKE SAMPLES
RESULTS IN pCi/KGM

DESCRIPTION	40 K	51 CR	54 MN	59 FE	58 CO	60 CO	65 ZN	95 ZR	95 NB
LAKE BOTTOM 11/19	1400±200	<190	< 13	< 34	< 14	21±3	< 36	< 27	< 19

DESCRIPTION	103 RU	106 RU	131 I	134 CS	137 CS	140 BA	141 CE	144 CE	226 RA
LAKE BOTTOM 11/19	< 17	<140	--	27±4	240±30	< 19	< 47	<150	340±9

ALL VALUES GIVEN AS < ARE LESS THAN THE LLD.

Table XII

LOWER LIMIT OF DETECTION (LLD)

	Air Filters(a) pCi/M3 (minimum sple. 3500 M3/Qt.)	Water pCi/liter (sample of 3.5 liters)		Milk pCi/liter (sample of 3.5 liters)	Fish pCi/kg (ave. sple. 2 kg)	Vegetation(a) pCi/kg (ave. sple. 2 kg)
Ave Decay(c)	55 days	0.5 d	8 days	0.5 d	6 days	0.5 days
Be-7	0.025	60	66			
K-40	0.012					
Cr-51	0.063	77	91		220	130
Mn-54	0.002	5	5		13	10
Fe-59	0.007	7	8		25	10
Co-58	0.002	5	5		10	10
Co-60	0.002	5	5	6	10	10
Zn-65	0.004	9	9		25	20
Zr-95	0.005	8	9		20	20
Nb-95	0.004	5	6		14	12
Ru-103	0.004	7	7		18	15
Ru-106	0.017	57	59		120	120
I-131	0.03 (b)	9	16	10 Gamma 0.24 Beta	35	20
Cs-134	0.002	5	6		12	12
Cs-137	0.002	6	6	7	11	12
BaLa-140	0.024	4	6	4	12	8
Ce-141	0.010	19	24		50	40
Ce-144	0.035	82	92		175	150
Ra-226		12	12		25	24
Beta	0.004	1.6				

(a) LLD value will vary due to different sample sizes. Data based on 1984 background sample spectra.
(b) Charcoal Cartridge
(c) Ave. decay normal period from midpoint of sampling period to counting time.

TABLE XIII

EPA INTERLABORATORY COMPARISON PROGRAM - 1985

Description	Date	Sample Analysis	Experimental Data			EPA Value +1
Alpha/Beta in Water (Results in pCi/l)	03/22/85	Alpha	5	7	5	6 ± 5
		Beta	11	11	11	15 ± 5
	07/19/85	Alpha	7	8	8	11 ± 5
		Beta	12	13	12	8 ± 5
	11/22/85	Alpha	7	7	7	10 ± 5
		Beta	16	15	15	13 ± 5
Gamma in Water (Results in pCi/l)	02/08/85	Cr-51*	74	76	77	48 ± 5
		Co-60	23	23	22	20 ± 5
		Zn-65	58	54	57	55 ± 5
		Ru-106	41	44	48	25 ± 5
		Cs-134	34	33	33	35 ± 5
		Cs-137*	37	38	38	25 ± 5
	06/07/85	Cr-51*	70	69	64	44 ± 5
		Co-60	17	15	15	14 ± 5
		Zn-65	52	51	48	47 ± 5
		Ru-106*	41	45	49	62 ± 5
		Cs-134	31	32	32	35 ± 5
		Cs-137	18	17	19	20 ± 5
	10/04/85	Cr-51	<72	<72	<72	21 ± 5
		Co-60	20	20	20	20 ± 5
		Zn-65	17	17	18	19 ± 5
		Ru-106*	58	68	67	20 ± 5
		Cs-134	15	15	17	20 ± 5
		Cs-137	19	21	23	20 ± 5
Iodine-131 in Water (Results in pCi/l)	04/05/85	I-131	8	7	7	7.5 ± 0.8
	08/09/85	I-131	35	29	31	33 ± 6
	12/06/85	I-131	36	40	37	45 ± 6

All values given as < are less than the LLD

* Average of results reported exceeding ± 2 sigma, see attached notes.

TABLE XIII (Cont'd)

EPA INTERLABORATORY COMPARISON PROGRAM - 1984

Description	Date	Sample Analysis	Experimental Data			EPA Value +1O
Air Filters (Results in pCi/filter)	03/29/85	Alpha	6	9	9	10 ± 5
		Beta	36	36	36	36 ± 5
		Cs-137	6	10	7	6 ± 5
	08/30/85	Alpha	9	13	13	13 ± 5
		Beta	44	47	48	44 ± 5
		Cs-137	8	7	7	8 ± 5
Milk (Results in pCi/l)	02/29/85	I-131*	12	11	10	9 ± 0.9
	06/28/85	I-131	15	15	15	11 ± 6
		Cs-137	10	8	8	11 ± 5
		K-40	1490	1520	1650	1525 ± 76
	10/25/85	I-131	34	34	33	42 ± 6
		Cs-137	52	51	51	56 ± 5
		K-40	1470	1540	1530	1540 ±77
Tritium in Water (Results in pCi/l)	02/02/85	H-3*	3960	4310	4270	3796 ± 366
	06/14/85	H-3*	1980	2360	2100	2416 ± 351
	10/11/85	H-3	2560	2410	2230	

All values given as < are less than the LLD

* Average of results reported exceeding ± 2 sigma, see attached notes.

TABLE XIII

NOTES:

Gamma in Water	2/8/85	Three isotopes were identified as greater than the EPA value +2 sigma. The Cr-51 and Ru-106 known values were less than the LLD for the equipment. The isotopic identification program located poorly defined peaks and determined values which were reported. The sample was counted in a container contaminated by earlier EPA gamma in water samples and the known background contamination of Cs-137 was not subtracted before reporting the value in the report. The bkgd of the container is 11 pCi which would have reduced the reported values to 26, 27 and 29 compared to the known EPA value of 25.
Gamma in Water	6/7/85	Cr-51 was identified as greater than the EPA value +2 sigma and Ru-106 was identified as less than the EPA value -2 sigma. For both isotopes, the isotopic identification program located poorly defined peaks and determined values which were reported. The known Cr-51 value was less than the LLD for the equipment.
Gamma in Water	10/4/85	Ru-106 was identified as greater than the EPA value +2 sigma. The known value was less than the LLD for the equipment. The isotopic identification program found a peak within $\pm$ 2 Kev of the energy of the Ru-106 and calculated a value which was reported.

Tritium in Water and	2/2/85 6/4/85	Tritium was identified as greater than the EPA known value +2 sigma. There is no apparent reason for the difference. The change of 1 cpm in the count rate would have resulted in a sample value with less than 1 sigma difference.
Low Level Iodine in Milk	2/29/85	The iodine 131 value reported was greater than the EPA value +2 sigma. The low level beta counter was not operable at the time of the sample and it was counted on a counter with a higher background. A variation in the background or gross count of 0.3 cpm would be equal to the 2 sigma difference. Normal background variation can easily be 0.3 cpm for the counting equipment.