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ENVIRONMENTAL MONITORING REPORT FOR THE NEVADA TEST SITE
January-December 1971

#28

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

by the
National Environmental Research Center

U.S. ENVIRONMENTAL PROTECTION AGENCY
Las Vegas, Nevada

Published September 1972

This work performed under a Memorandum of
Understanding No. AT(26-1)-539
for the
U. S. ATOMIC ENERGY COMMISSION

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INTRODUCTION

In accordance with a Memorandum of Understanding between the U. S. Atomic Energy Commission (AEC) and the Environmental Protection Agency (EPA) the National Environmental Research Center-Las Vegas (NERC-LV) conducts an off-site radiological safety program in support of nuclear testing sponsored by the AEC at the Nevada Test Site (NTS), by the Space Nuclear Systems Office at the Nuclear Rocket Development Station (which lies within the NTS), and by the AEC at other designated testing sites.

This report summarizes the surveillance data of the program conducted during Calendar Year 1971 around the NTS. The analytical results of radiological monitoring and environmental sampling performed in support of off-NTS tests, such as the Cannikin Event on Amchitka Island, Alaska, and Project Rulison, near Grand Junction, Colorado, are summarized separately[1,2].

For the NTS, the off-site area is defined as that area beyond the site boundary and adjacent restricted areas such as the Tonopah Test Range and the Nellis Air Force Range. For simplicity, these combined areas are referred to in this report as the Test Range Complex.

Note: At the time this work was accomplished, the Center was named the Western Environmental Research Laboratory. On July 17, 1972, it was designated as a National Environmental Research Center.

SUMMARY

Surveillance of the Nevada Test Site environs during 1971 showed that the concentrations of radioactivity and levels of radiation in the environment were within the Radiation Protection Standards of the Atomic Energy Commission. The surveillance data show that most of the environmental radioactivity in the NTS environs was due to naturally occurring radionuclides and world-wide fallout.

Following one test at the Nevada Test Site during this report period, radioactivity was detected beyond the Test Range Complex. The Diagonal Line Event, an underground nuclear detonation conducted at 1215 hours PST on November 24, 1971, began to seep gaseous radioactivity from the ground at H+4 hours, after the NERC-LV ground monitors and aircraft had been released from their missions. The ground monitors were again deployed offsite downwind of surface ground zero at H+19.5 hours, but no radioactivity was detected by them or by the surveillance networks. However, EG&G aircraft detected the Diagonal Line effluent over the Amargosa Desert southwest of the NTS on November 25, 1971. According to an EG&G summary report of the event[3], the radioactivity in the cloud was identified at ^{135}Xe, ^{88}Kr and ^{88}Rb. The highest gamma exposure rate measured between H+18.8 to H+21.7 hours by aircraft during a survey of the cloud periphery and one in-cloud pass was 0.1 mR/h. This reading was observed at an elevation of 500 feet over the NTS terrain, 2.0 nautical miles south of the event area.

Although the routine monitoring and sampling networks of NERC-LV did not detect radioactivity from nuclear tests conducted during 1971, radioiodine released from the Baneberry Event, an underground nuclear detonation on December 18, 1970, was detected in milk samples collected at the McCurdy Ranch, Springdale, Nevada, in January and February 1971 as part of the special surveillance program for this event. The radiation dose to the thyroid of the youngest individual drinking the McCurdy milk was estimated to be 85 mrem during 1971 (total potential dose including exposure during

December 1970 was 130 mrem). This was 17% of the Radiation Protection Standard of the AEC Manual, Chapter 0524 (500 mrem/a) for a representative sample of the exposed population. From the measurements of radioiodine in snow samples collected in December 1970 immediately following Baneberry, sheepherders working north of the NTS and using snow for cooking and drinking purposes were estimated to have received a total radiation dose to the thyroid of 500 mrem plus or minus a factor of three. Since the use of snow by sheepherders was not discovered until February 1971 and the contaminated snow was diluted with snowfall subsequent to Baneberry, the portion of the total dose which occurred in 1971, if any, could not be estimated.

Increases in gross beta concentrations in air and increases in ^{89}Sr, ^{90}Sr, and ^{137}Cs in milk during the late spring and early summer were attributed to the seasonal trend of world-wide fallout. Increases in the gross beta concentrations and measurements of fresh fission products in the air during November at many of the Air Surveillance Network Stations were attributed to the nuclear detonation on November 18, 1971, by the People's Republic of China.

MONITORING DATA COLLECTION, ANALYSIS, AND EVALUATION

The off-site radiological safety program for the NTS consists of continuously operated dosimetry and air sampling networks and scheduled collections of milk and water samples at locations surrounding the NTS. To supplement these networks, before each nuclear test mobile monitors were positioned in the off-site areas most likely to be affected by a possible release of radioactive material. These monitors, equipped with radiation survey instruments, gamma-rate recorders, thermoluminescent dosimeters, portable air samplers, and supplies for collecting environmental samples, were prepared to conduct a monitoring program directed from the NTS Control Point by two-way radio communications. In addition, for each event at the NTS, a U. S. Air Force aircraft with two NERC-LV monitors equipped with portable radiation survey instruments was airborne over surface ground zero to detect and track any radioactive effluent. Two NERC-LV cloud sampling and tracking aircraft were also available to obtain in-cloud samples, assess total cloud volume, and provide long-range tracking in the event of a radioactive release.

To assess the plutonium content of soil in areas surrounding the NTS, a special soil study was begun. The results of this study will be reported separately.

No radioactivity from nuclear testing conducted during this report period at the NTS was detected beyond the Test Range Complex by NERC-LV surveillance networks, monitors or aircraft. However, radioactivity released by the Diagonal Line Event of November 24, 1971, was detected by EG&G aircraft, and radioactivity released by the Baneberry Event of December 18, 1970, was observed in milk samples collected in January and February 1972. The analytical results of the surveillance networks and of the milk samples collected during this report period for the Baneberry Event are summarized in the following sections of this report.

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Air Sampling

The Air Surveillance Network, operated by the NERC-LV, consists of 104 active and 18 standby sampling stations located in 21 western states (Figure 1). Samples of airborne particulates are collected continuously at each active station on 4-inch-diameter, glass-fiber filters at a flow rate of about 350 m^3 of air per day. Samples are normally collected for 24 hours. However, at several stations operated by state health department and other government agency personnel, they may not be collected on weekends and holidays, resulting in 48- or 72-hour samples. Activated charcoal cartridges directly behind the filters are used regularly for the collection of gaseous radionuclides at 22 stations near the NTS. Charcoal cartridges can be added to all other stations by telephone request. The stations are operated by state health department personnel and by private individuals through contract agreements. All air samples are mailed to the NERC-LV unless special retrieval is arranged at selected locations in case of a known release of radioactivity from the NTS.

The particulate filters are counted 5 minutes for gross beta radioactivity as soon as they are received and again at 5 and 12 days after collection. Samples are counted on gas flow proportional counters calibrated over a range of beta energies from 0.1 to 1.8 MeV. A conservative efficiency value of 45% (corresponding to an average maximum beta energy of 0.5 MeV) is used for data conversion. The 5- and 12-day counts are used to extrapolate gross beta concentrations to mid-collection time for reporting. Extrapolation is accomplished by computer programs and is routinely based on a $T^{-1.2}$ decay. For known releases of radioactivity the decay rate is determined experimentally and is used in the extrapolations.

Those filters with total gross beta radioactivity of 500 cpm or greater are gamma scanned on a 4- by 4-inch sodium iodide (Tl-activated) crystal connected to a 400-channel gamma spectrometer. Individual radionuclides are quantitated from spectrometer data by use of a computer matrix technique. If fresh fission products related to a NTS event are detected, radiochemical analyses, such as strontium and plutonium, are made on selected filters. All charcoal cartridges are counted 10 minutes with a gamma spectrometer. Data from those cartridges having a net gross gamma count rate greater than 300 cpm are analyzed by a computer matrix technique to quantitate individual radionuclides.

Table 1 presents the maximum, minimum detected and average concentrations of gross beta radioactivity and individual radionuclides identified by gamma spectroscopy for each location within the network during 1971. The gross beta averages were determined for each station by averaging the station monthly averages. Each annual average for a radionuclide detected at a given station was derived by dividing the sum of its time-integrated concentrations (pCi-day/m^3) by 365 days. This was done assuming that radionuclides were not present on those filters which did not exceed the screening level of 500 cpm, or 1.4 pCi/m^3 for a 0.45 counting efficiency and normal sample volume of 350 m^3. This is consistent with the AEC Manual, Chapter 0524, which allows one to consider radionuclides to be absent in a mixture, "if (a) the ratio of the concentration of that radionuclide in the mixture. . .to the concentration guide for that radionuclide. . .does not exceed 1/10, and (b) the sum of such ratios for all the radionuclides considered as not present in the mixture does not exceed 1/4. . . ."(4)

As shown by Table 1, the fission products ^{95}Zr, ^{106}Ru, ^{131}I, ^{132}Te, ^{140}Ba, ^{141}Ce, and ^{144}Ce were detected in varying combinations at each sampling location. The presence of these radionuclides occurred throughout the network following the seasonal trend expected for world-wide fallout and a nuclear detonation by the People's Republic of China on November 18, 1971, thus they were not considered to be associated with nuclear tests at the

NTS. Figure 2 shows the variation in gross beta concentrations in air at Duckwater, Nevada, during the year 1971. Data from all other stations within the network indicated a similar pattern.

Dosimetry

The Dosimetry Network during 1971 consisted of 97 locations surrounding the Nevada Test Site which were monitored continuously with thermoluminescent dosimeters (TLD's). The locations, shown in Figure 3, are all within a 300-mile radius of the center of the NTS and include both inhabited and uninhabited locations. Each Dosimetry Network station was equipped with three EG&G Model TL-12 dosimeters which were exchanged monthly. Within the general area covered by the dosimetry stations, 60 off-site residents also wore one TLD each. These dosimeters were exchanged at the same time as the station dosimeters.

The TL-12 dosimeter has an internal or self-background exposure rate equivalent to 0.7 mR/day, which limits its minimum detection to about 5 mR for a 30-day measurement period. All TLD readings were corrected to ^{137}Cs gamma roentgen equivalent values according to individual TLD calibration factors. For purposes of this report, these units of exposure were considered to be equivalent to whole-body gamma doses in rems.

After appropriate corrections were made for the background exposure accumulated during shipment between the laboratory and the monitoring locations, the three TLD readings were averaged. The average exposure value for each month and station was statistically compared to values from the past twelve months to determine whether the new value was within the range of environmental background, or significantly greater than background. Those which were greater lead to calculations of net exposures, whereas those which were not were pooled with the background data bank, and the oldest value in the data bank was deleted. Values which were statistically lower than the background range were also deleted and considered invalid measurements. Each of the 60 personnel dosimeter readints was compared to the background value of the nearest station.

Table 2 lists the maximum, minimum, and average monthly dose rates measured at each station in the network during 1971. The average dose rate is the average of the twelve monthly rates. The annual background dose is the product of the average dose rate and 365 days. No doses related to nuclear testing were detected by the dosimetry network during 1971. Station background doses ranged from 102 to 303 mrem with a network average of 163 mrem/a. Among the 60 off-site residents who wore dosimeters continuously, no personnel doses greater than background were detected.

Several TLD's showed unexplained high readings during 1971. These values, listed in Table 3, are considered to be anomalous readings, not true gamma exposures. Surveys of the locations and interviews with the individuals involved identified no sources of radiation which would produce the exposures. Also, in the case of the Nuclear Engineering Company and Tonopah stations where three TLD's were issued each month, only one or two dosimeters read high each time. It is believed that the anomalies were due to phenomena associated with the TLD's rather than some external radiation source.

A network of 32 stationary Eberline RM-11 exposure rate recorders placed at selected air sampling locations was used to document gamma exposure rates at fixed locations (Figure 1). These recorders used a GM tube detector with a 0.01 to 100 mR/h range and were calibrated to ±20% with a ^{137}Cs source. The gamma exposure rates were recorded on a 30-hour strip chart, which is exchanged and mailed to the laboratory each day. No gamma exposure rates attributable to Nevada Test Site operations were detected by the network of gamma rate recorders.

Milk Sampling

Milk is only one of the sources of dietary intake of environmental radioactivity; however, it is a very convenient indicator of the general population's intake of biologically significant radionuclide contaminants. For this reason it is monitored on a routine basis. Few of the fission product radionuclides become incorporated into the milk of the cow due to

its selective metabolism. However, the ones that are incorporated are very important from a radiological health standpoint, and since they are preferentially transferred to the cow's milk, it is a very sensitive measure of their concentrations in the environment. The five fission product radionuclides which commonly occur in milk are ^{89}Sr and ^{90}Sr, ^{131}I, ^{137}Cs, and ^{140}Ba. A sixth radionuclide, ^{40}K, also occurs in milk at a reasonably constant concentration of about 1200×10^{-9} µCi/ml. Since this is a naturally occurring radionuclide, it was not included in the analytical results summarized in this section.

The milk surveillance networks operated by the NERC-LV are the routine Milk Surveillance Network (MSN) and the Standby Milk Surveillance Network (SMSN). The MSN during 1971 (Figure 4) consisted of 41 different locations at which NERC-LV personnel collected one-gallon milk samples from family cows, commercial pasteurized milk producers, Grade A raw milk intended for pasteurization, and Grade A raw milk for local consumption. In the event of a release of activity from the NTS, intensive sampling would have been conducted in the affected area within 300 miles of the NTS to assess radionuclide concentrations in milk, radiation doses that could result from the ingestion of the milk, and the need for protective action. Milk supplies and producers beyond 300 miles are sampled with the SMSN.

The SMSN (Figure 5) consisted of about 185 Grade A milk processing plants which could be requested by telephone to collect raw milk samples representing milk sheds supplying milk to the plants. Although not required during this report period, samples from the network could have been collected and mailed to the NERC-LV through the cooperation of Federal, state, and local government agencies in the event of a release of radioactivity at NTS or other test locations. Periodically, one sample may be collected from each station in a given area to maintain network readiness and to check the network's reliability. No analytical results are reported here for the SMSN, since only one sample was received from each of several selected locations.

During 1971, 356 milk samples were collected from the MSN. Five out of 41 sampling locations were discontinued in February when the Zone 5 Route along U. S. 40 and U. S. 93 north of McGill was terminated. One location in California was discontinued the same month when the cow was sold. Of the remaining 35 locations, five were alternates where milk was sometimes obtained in the event the primary sampling point did not have milk available. Although the routine locations were scheduled for monthly collection, milk could not usually be obtained at all locations in any one month. Cows not lactating, no one home, or no milk on the day the route monitors arrived at the ranch, were some of the reasons why some of the samples were not collected each month. During the year, milk sampling points also changed as cows were sold, or were otherwise unavailable for regular milkings.

All milk samples were analyzed for gamma emitters, ^{89}Sr and ^{90}Sr. Samples collected at five locations were routinely analyzed for ^{3}H. Table 4 lists the general analytical procedures and detection limits for these analyses as described by Johns[5] and Lem and Snelling[6]. For gamma spectroscopy analyses, the milk was placed in Marinelli beakers (3.5 liters) which position the samples around the crystal detector for high counting efficiency. All routine milk samples were counted for 40 minutes. Special samples collected following known releases of activity were counted 20 minutes. Actual counting time of the milk samples varied from 10 to 40 minutes depending on radionuclide concentrations. A computer was used to calculate the activity concentration of each of the detected nuclides at the time of count and extrapolated the results to time of milking.

The analytical results of samples collected during 1971 are summarized in Table 5. The maximum, minimum, and average concentrations of the ^{137}Cs, ^{89}Sr, ^{90}Sr, and ^{3}H analyses performed on samples collected during the year are shown for each sampling location at which these analyses were scheduled. In the computation of the average concentrations, sample concentrations of less than the minimum detectable concentration were assumed to be equal to the minimum detectable concentration. If any of the values used in

computing the averages were "less than" values, the average was expressed as a "less than" value. The same method was used for water samples. No radionuclides attributed to Nevada Test Site operations were detected in any of the samples except for ^{131}I in samples collected during January and February from the McCurdy Ranch at Springdale, Nevada. These samples were collected as part of the surveillance program for the Baneberry Event of December 18, 1970, which is described in detail in another report (7). During the year, there were a few samples which did not have enough volume to provide the usual minimum sensitivity for gamma spectrum analysis for ^{137}Cs (10×10^{-9} µCi/ml). In these cases, the minimum sensitivity was $<100 \times 10^{-9}$ µCi/ml. Thus, since these would bias the sample average for ^{137}Cs, they were omitted.

At the McCurdy Ranch, ^{131}I and ^{133}I were detected in the first milk samples collected two days after the Baneberry Event. The ^{131}I concentration peaked in the milk at 810×10^{-9} µCi/ml on December 26 and 27, 1970, and slowly decreased until the concentration was below the minimum detectable concentration of 10×10^{-9} µCi/ml on February 3, 1971. The maximum concentration during this report period was 730×10^{-9} µCi/ml on January 1. The highest concentration of ^{133}I, 1800×10^{-9} µCi/ml, was detected in the first milk sample collected on December 20, 1970. The concentrations rapidly decreased until they were below the minimum detectable concentration on December 25, 1970.

The annual average concentration of ^{131}I in milk samples collected at the McCurdy Ranch (Table 5) was calculated from the monthly averages for January and February and the results for the subsequent monthly samples. The method used for calculating the January average assumed that the days when milk was not collected had the same ^{131}I concentration as the last previous sample. The January average concentrations of ^{131}I and ^{137}Cs were calculated from 19 samples. Of the 19 samples, 11 were analyzed for ^{89}Sr and ^{90}Sr. In February, four samples were collected and averaged for ^{137}Cs and ^{131}I. Only one sample (collected on February 1) showed a positive ^{131}I concentration (10×10^{-9} µCi/ml).

The total radiation dose equivalent to the thyroid of the youngest person drinking the McCurdy milk (a three-year-old child at Beatty, Nevada) was estimated from the radioiodine concentrations to be 130 mrem[7]. The portion of the total dose occurring during this report period was estimated to be 85 mrem. These dose equivalents were below the Radiation Protection Standards of the AEC Manual, Chapter 0524[4], which is 1500 mrem to an individual thyroid (500 mrem to a suitable sample of the exposed population). Since all of the milk producers in the Springdale area were sampled following Baneberry and all of the individuals consuming the contaminated milk were evaluated, the standard for the individual is probably more appropriate.

At the other locations, no radioiodine was detected, and no significant increases were observed in the ^{137}Cs, $^{89-90}Sr$, and ^{3}H concentrations other than is normally observed due to variations in world-wide fallout. Figure 2 shows the gross beta concentration in air at the Halstead Ranch at Duckwater, Nevada, with the concentrations of ^{137}Cs, ^{90}Sr and ^{89}Sr in milk samples collected at the same location. The Halstead Ranch was chosen for this comparison because an air sampler is installed there and because the feeding practices were such that a good correlation between the activity in air and milk was seen. A number of other milk sampling locations also showed peak concentrations during the months of May and June also but the correlations of activity in milk with activity in air were not as evident. The cows at the Halstead Ranch were placed on green feed in May and stayed on green feed through October. During November they went back on hay and grain. The effect of both increased fallout and eating green feed was evident in the May sample results for ^{137}Cs and ^{89}Sr. During March and April when the gross beta concentration in air was increasing sharply, the ^{89}Sr and ^{137}Cs concentrations in the milk showed no increase, probably because the cows were on dry feed. The increase in the gross beta concentration in air during November was attributed to the nuclear detonation on November 18, 1971, by the People's Republic of China. The milk sample for November was collected before this event, and the increase in ^{137}Cs during this time was probably caused by analytical, feeding, and fallout variances.

Water Sampling

The Water Surveillance Network operated in off-site areas around the NTS during 1971, consisted of 99 locations (Figures 6 and 7) where NERC-LV personnel collected one-gallon water samples either monthly or quarterly. The samples were collected from community water supplies, wells, open and closed springs, streams, lakes and ponds. If a release of radioactivity from NTS had occurred, special sampling within the affected area would have been conducted to determine radionuclide concentrations and the possible need to take protective action.

During 1971, 1040 water samples were collected from these 99 locations. Eight of the sampling locations along U.S. 40 and U.S. 93 north of McGill, Nevada, were discontinued in February 1971 when activities at the Central Nevada Supplemental Test Site were terminated. One location in the Las Vegas Valley was discontinued when the well dried up. This location was replaced by another well in the same area.

All of the samples were scheduled to be collected monthly, except those from Walker Lake and Pruess Reservoir. These two locations were sampled quarterly. In some cases operational priorities, frozen sources, etc., prevented the sampling of each location every month.

All water samples were analyzed by gamma spectroscopy and counted for gross alpha and gross beta radioactivity. Network samples from approximately 25 locations west, south and southeast of NTS were also routinely analyzed for ^{3}H. Analyses for ^{89}Sr and ^{90}Sr, ^{238}Pu and ^{239}Pu, U and ^{3}H would have been done in the event activity related to the NTS had been detected by gamma spectroscopy, or special requirements of the sampling program had required additional analyses. Table 4 lists the general analytical procedures and detection limits as described by Johns[5], Lem and Snelling[6], and Talvitie[8,9].

The analytical results of all water samples collected during 1971 are summarized in Table 6. The maximum, minimum, and average concentrations of gross alpha, gross beta, and ^{3}H radioactivity are shown for each sampling

location, except for ^{3}H analyses which were performed on samples collected at 25 of the locations. No gamma-emitting fission products were detected in any of the samples by gamma spectroscopy analyses. No significant trends were observed in the gross alpha, gross beta, or ^{3}H results, although surface waters generally contained higher concentrations than ground waters. The higher concentrations were apparently due to world-wide fallout and naturally occurring radionuclides.

The average concentrations for the gross alpha, gross beta, and ^{3}H radioactivity were compared to the following Concentration Guides specified in AEC Manual, Chapter 0524[4] for exposure of individuals:

Type of Radioactivity	Concentration Guide μCi/ml
Gross alpha	$3x10^{-8}$
Gross beta	$3x10^{-8}$
^{3}H	$1x10^{-3}$

Those locations which had average concentrations greater than these Guides are Pahranagat Lake (gross beta $C_{avg}=3.5x10^{-8}\mu Ci/ml$), Comins Lake (gross beta $C_{avg}=4.5x10^{-8}\mu Ci/ml$), Walker Lake (gross beta $C_{avg}=2.8x10^{-7}\mu Ci/ml$), Seyler Reservoir (gross beta $C_{avg}=3.4x10^{-8}\mu Ci/ml$) and Fallini's Pond (gross beta $C_{avg}=3.3x10^{-8}\mu Ci/ml$). Although special analyses on samples from these locations were not made during the report period to identify the source of the gross radioactivity, such analyses for some of the locations during other years were made as shown in Table 7. This table shows that the source of the gross alpha and beta radioactivity was primarily due to various combinations of ^{40}K, natural uranium, and uranium daughters, including ^{226}Ra.

Since the water sampled at 70 of the 99 network sampling locations was used for drinking water (identified by the superscript 'd' next to the sample type numbers in Table 6), the gross radioactivity concentration averages for these locations were also compared to the PHS Drinking Water Standards[10]. These standards require that the gross alpha and gross beta radioactivity in drinking water be limited to $3x10^{-9}\mu Ci/ml$ and $1x10^{-8}\mu Ci/ml$, respectively, if ^{226}Ra and ^{90}Sr are not known to be

absent. If ^{90}Sr and alpha emitters are known to be absent, a gross beta radioactivity of $1x10^{-6}\mu Ci/ml$ is allowed. Analyses for ^{226}Ra and ^{90}Sr were not made on any of the drinking water samples during the report period; however, analyses were made on samples from some of the locations in previous years. In general, the results showed that the source of the majority of the gross alpha and gross beta radioactivity was naturally occurring uranium and ^{226}Ra. Strontium-90 and ^{226}Ra concentrations detected were below the PHS Standards except for ^{226}Ra concentrations in samples collected at the Service Station and Cafe at Warm Springs, Nevada. Samples have been analyzed for ^{226}Ra at this location during the time period November 1967 through August 1970. Twelve samples collected and analyzed during the 13-month period of August 1969 through August 1970 showed that the ^{226}Ra concentration ranged from 11 to $17x10^{-9}\mu Ci/ml$ with an average of $15x10^{-9}\mu Ci/ml$.

For the purpose of identifying the source of the gross radioactivity in all network samples and comparing sample concentrations with both the AEC Concentration Guides and the PHS Drinking Water Standards, samples during 1972 will be given special analyses at least once a year. For surface water samples, the special analyses will include $^{89-90}Sr$, $^{238-239}Pu$, U, and ^{226}Ra. For drinking water samples, the analyses will include $^{89-90}Sr$, U, and ^{226}Ra.

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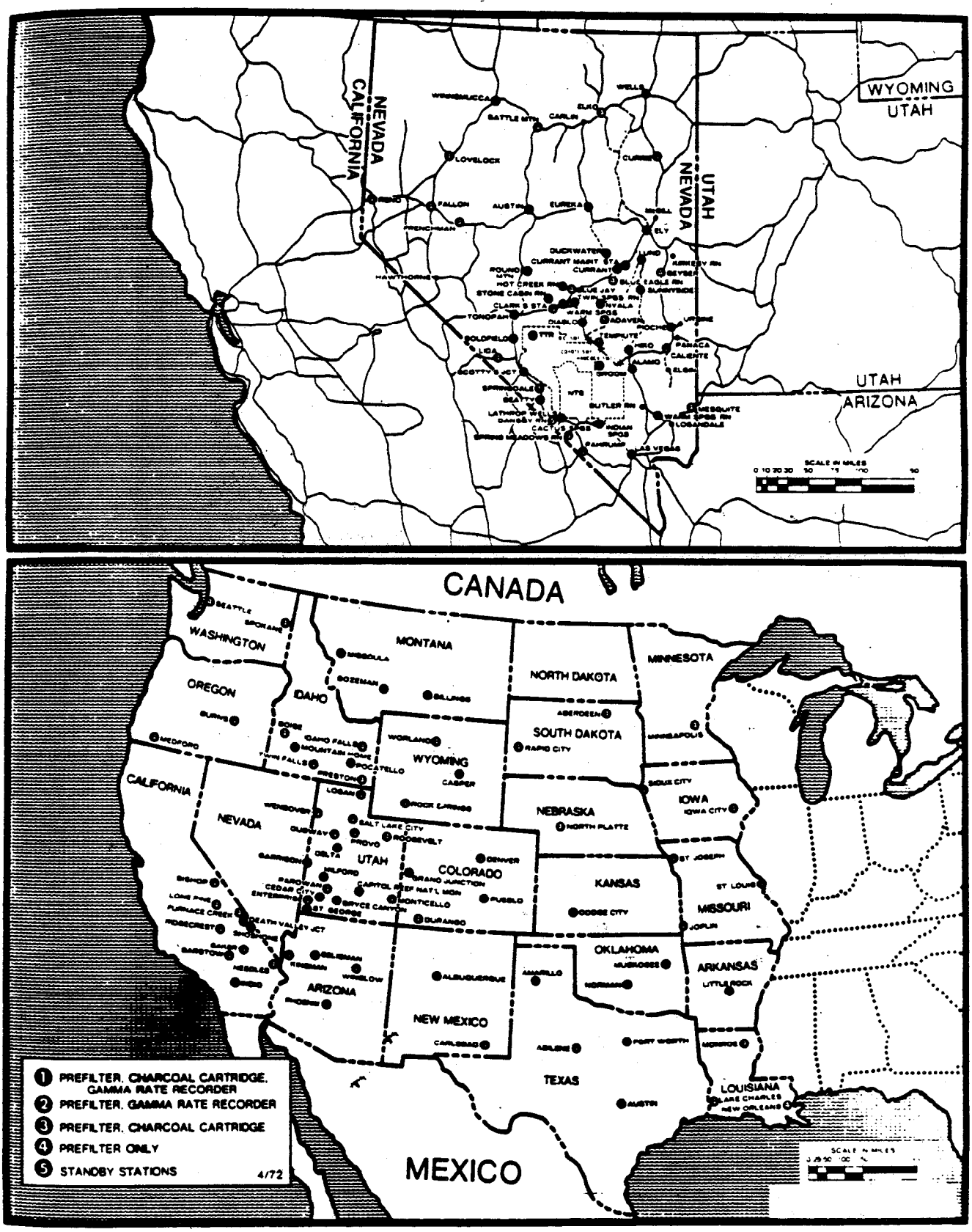

Figure 1. Air Surveillance Network.

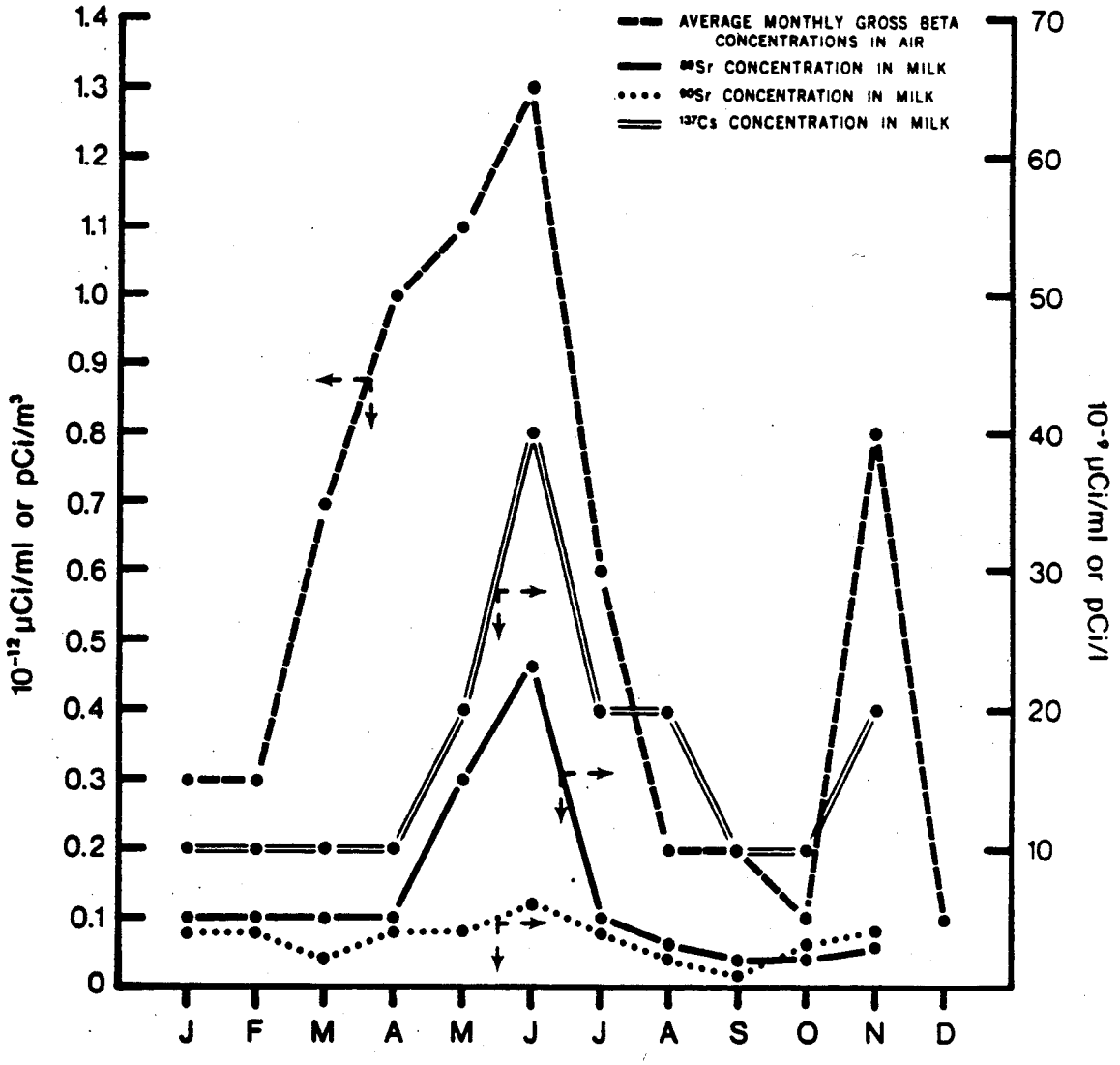

Figure 2. Radioactivity Trends in Air and Milk Samples Collected at Duckwater, Nevada During 1971.

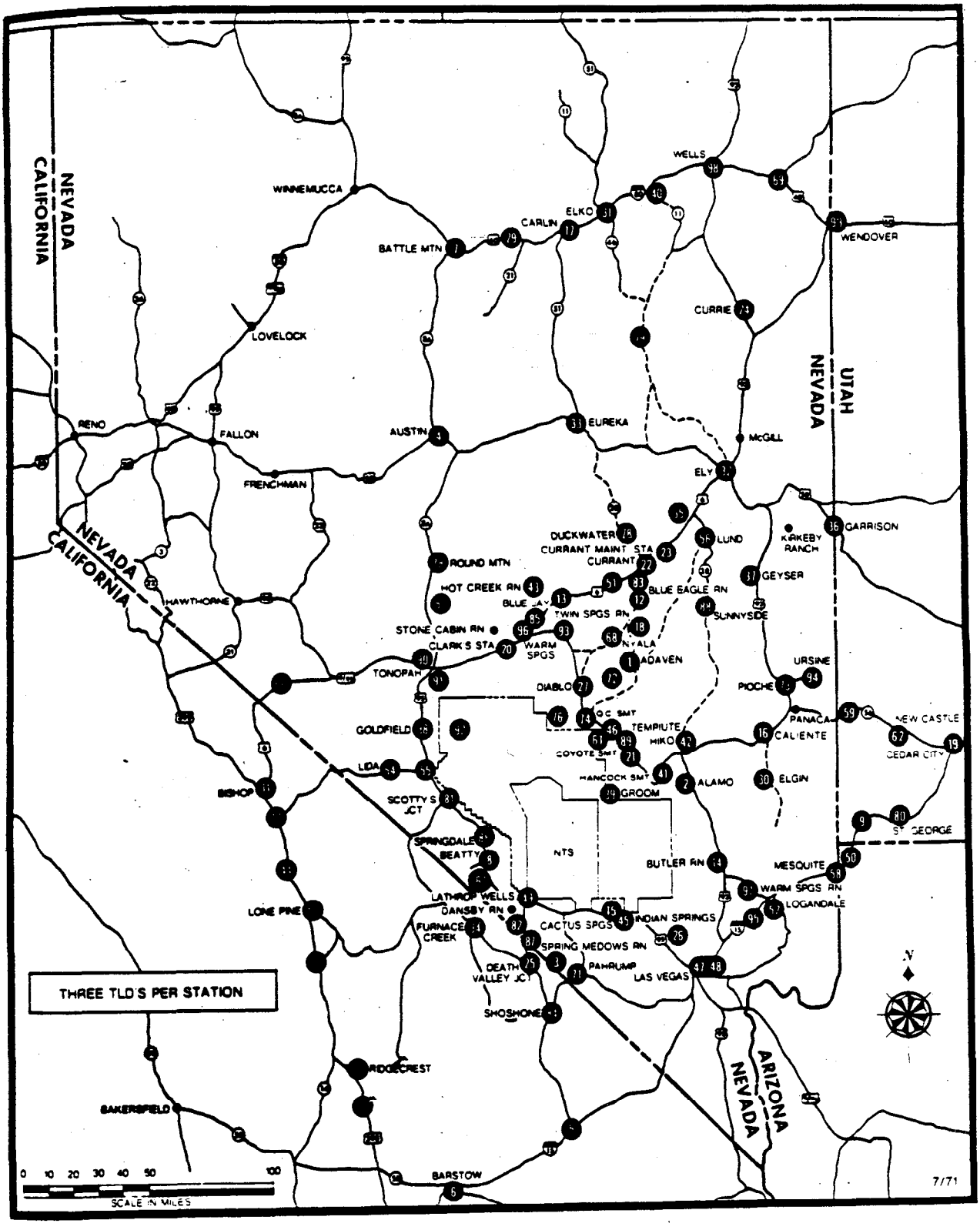

Figure 3. Dosimetry Network.

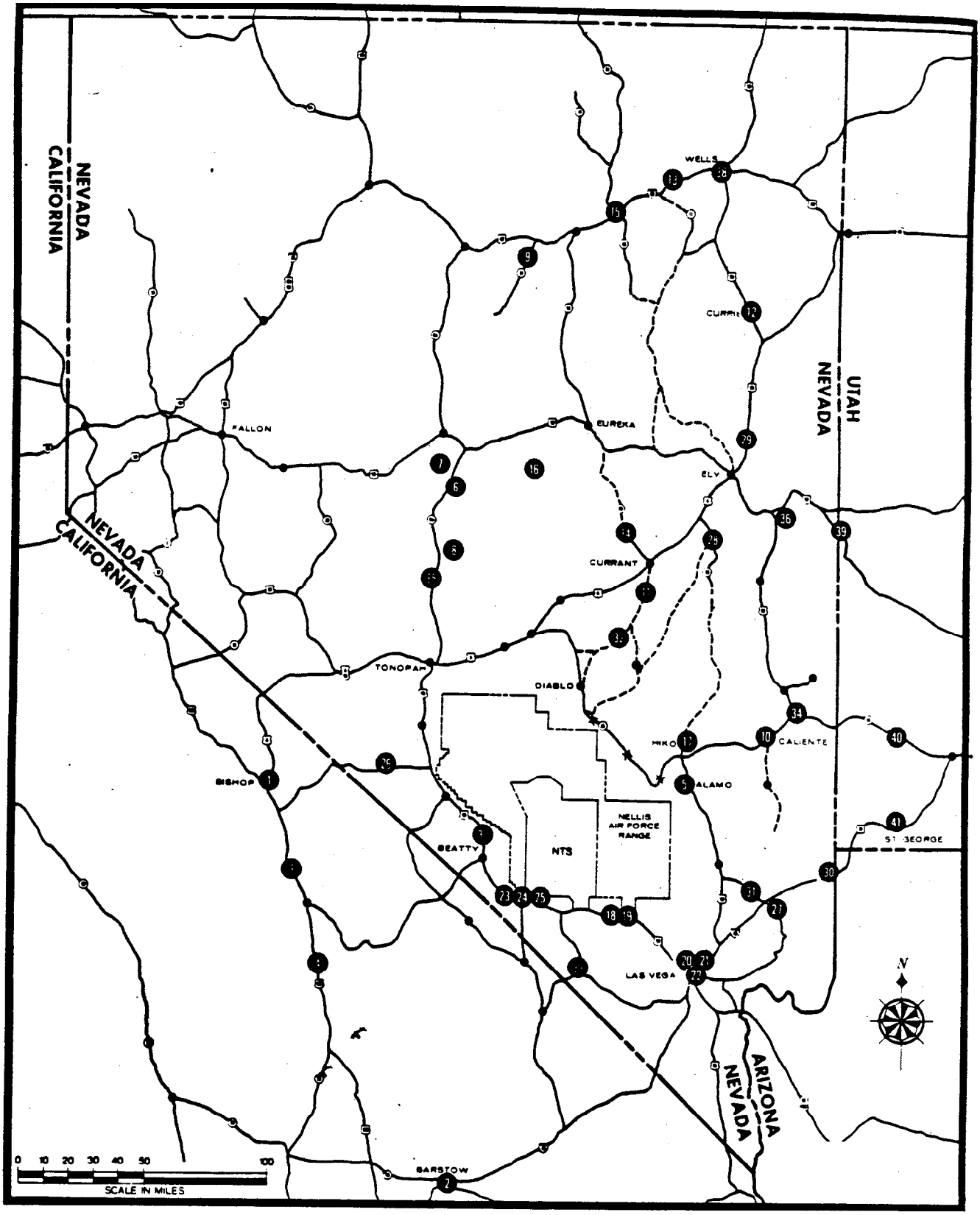

Figure 4. Milk Surveillance Network.

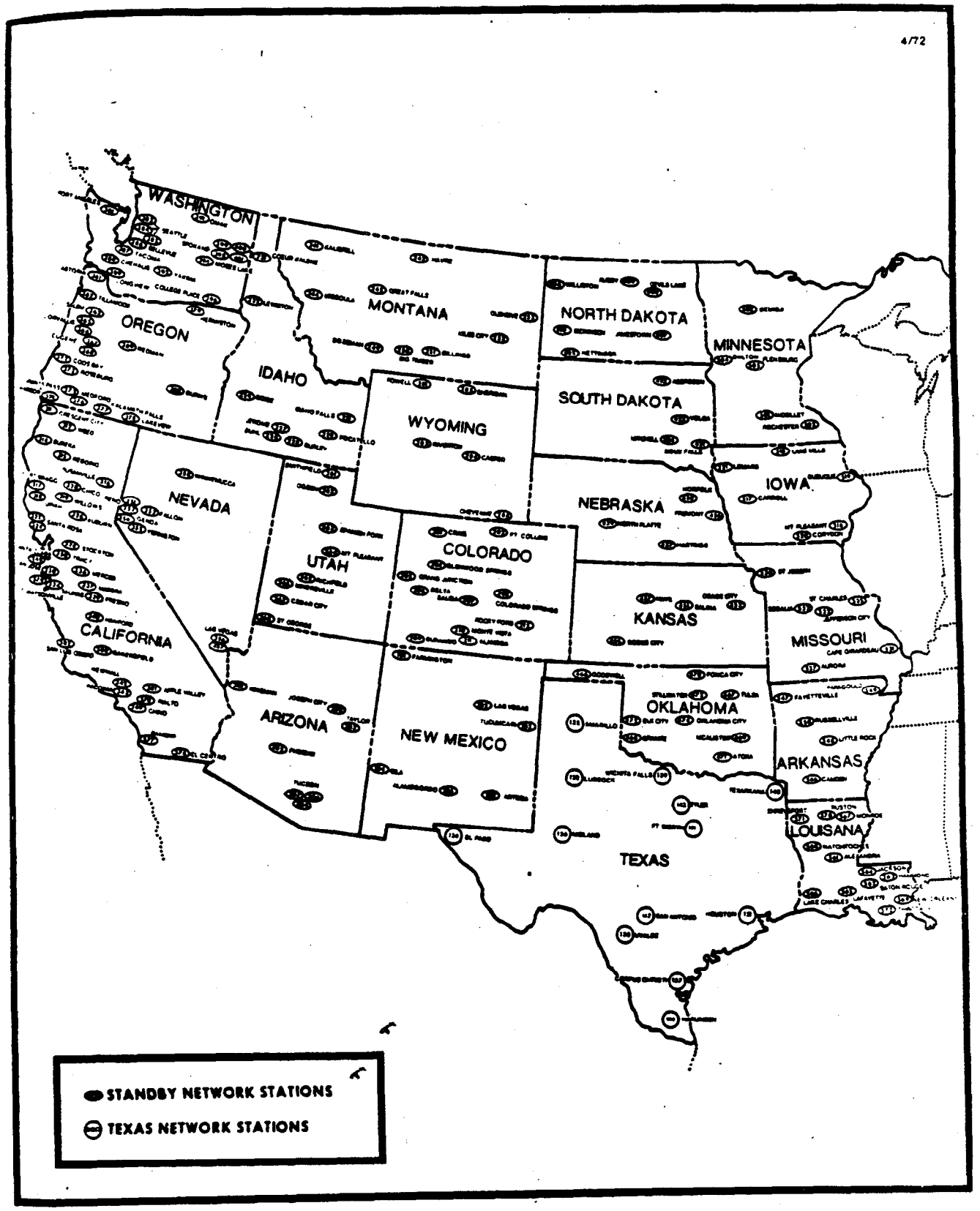

Figure 5. Standby Milk Surveillance Network.

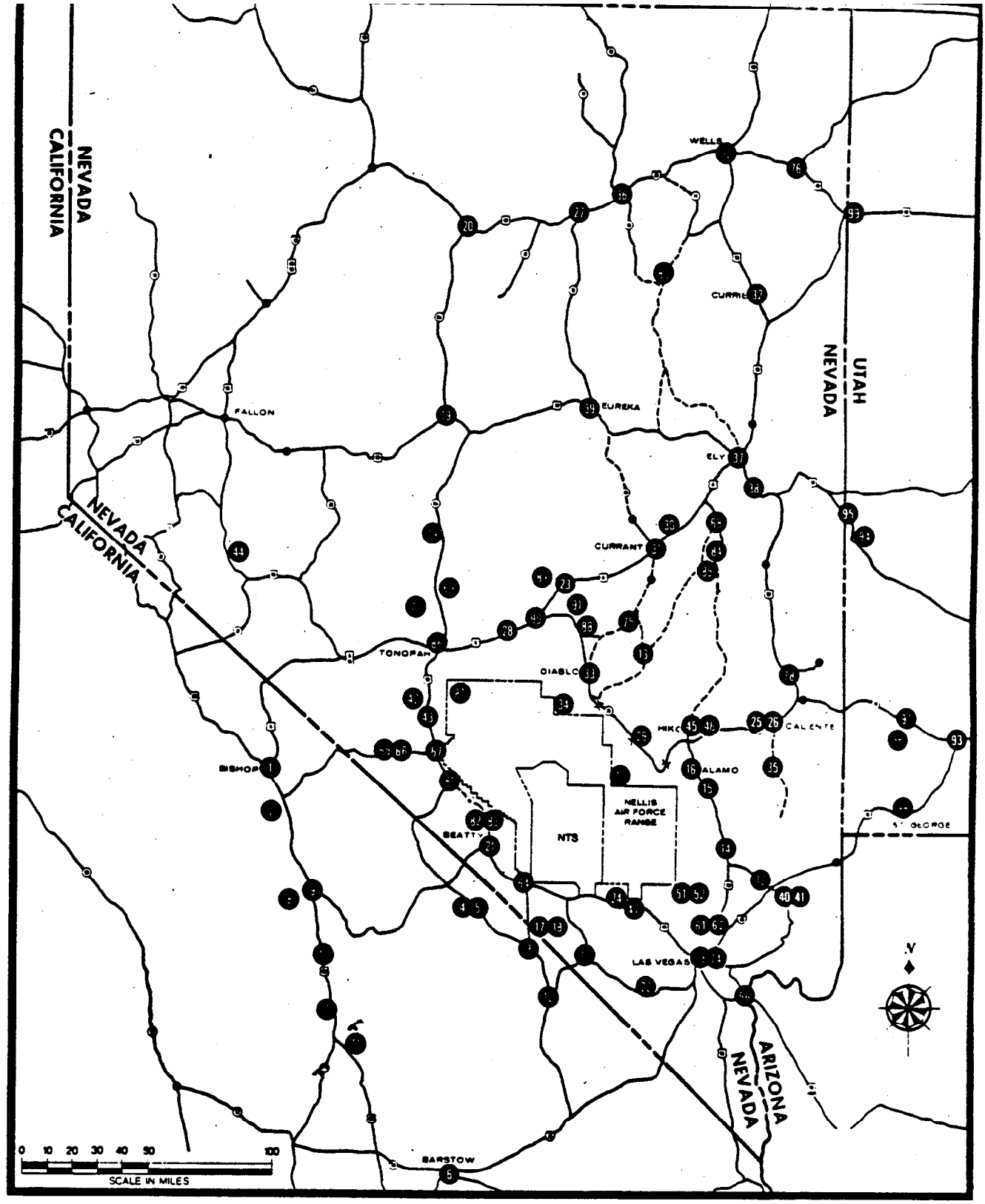

Figure 6. Water Surveillance Network.

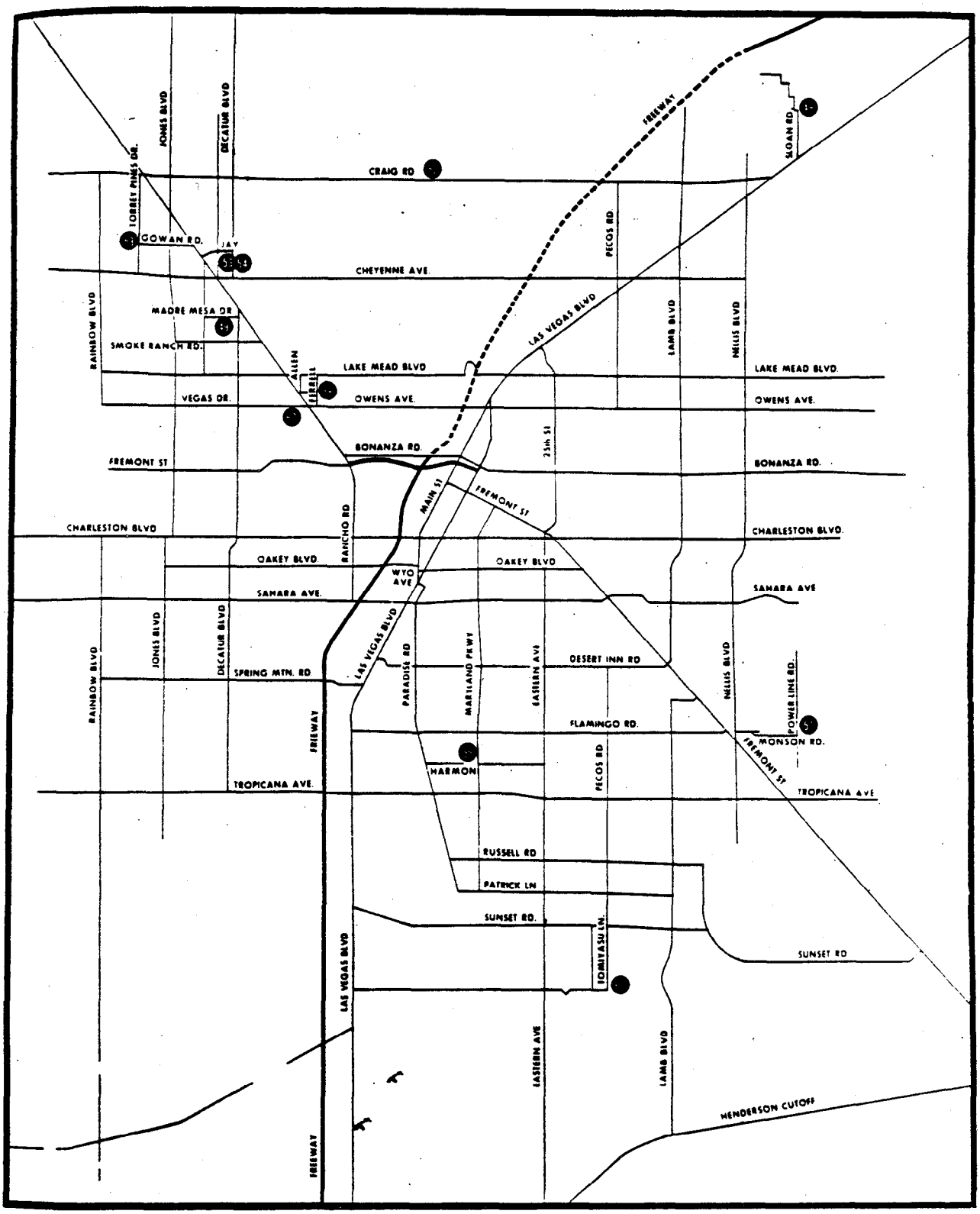

Figure 7. Water Surveillance Network--Las Vegas Valley.

Table 1 1971 Summary of Analytical Results for the Air Surveillance Network

Sampling Location	No. Days Sampled[a]	Type of Radioactivity	Radioactivity Concentration 10^{-12} uCi/ml or pCi/m^3 C_{max}	C_{min}	C_{avg}
Kingman, AZ	362	gross β	18	<0.1	0.6
	37	^{95}Zr	1.3	0.2	0.06
	16	^{106}Ru	2.6	0.9	0.07
	3	^{131}I	1.2	0.3	0.006
	3	^{132}Te	0.7	0.1	0.003
	3	^{140}Ba	1.2	0.3	0.007
	3	^{141}Ce	0.6	0.1	0.003
	13	^{144}Ce	1.6	0.7	0.04
Phoenix, AZ	359	gross β	3.0	<0.1	0.6
	49	^{95}Zr	1.2	0.5	0.11
	34	^{106}Ru	2.8	0.8	0.15
	3	^{131}I	0.2	0.1	0.001
	2	^{132}Te	0.2	0.1	0.001
	3	^{140}Ba	0.3	0.1	0.002
	2	^{141}Ce	0.1	0.1	0.001
	26	^{144}Ce	1.8	0.4	0.08
Seligman, AZ	362	gross β	14	<0.1	0.6
	47	^{95}Zr	1.3	0.4	0.1
	28	^{106}Ru	2.7	0.7	0.12
	3	^{131}I	0.9	0.3	0.004
	3	^{132}Te	0.8	0.1	0.003
	3	^{140}Ba	1.3	0.3	0.006
	3	^{141}Ce	0.4	0.2	0.003
	25	^{144}Ce	1.8	0.5	0.07

Table 1 1971 Summary of Analytical Results for the Air Surveillance Network

Sampling Location	No. Days Sampled[a]	Type of Radioactivity	Radioactivity Concentration 10^{-12} uCi/ml or pCi/m^3 C_{max}	C_{min}	C_{avg}
Winslow, AZ	364	gross β	7.8	<0.1	0.5
	19	^{95}Zr	1.1	0.4	0.04
	10	^{106}Ru	1.8	1.0	0.04
	3	^{131}I	0.5	0.2	0.002
	3	^{132}Te	0.3	0.1	0.001
	3	^{140}Ba	0.7	0.2	0.003
	2	^{141}Ce	0.2	0.1	0.001
	9	^{144}Ce	1.5	0.5	0.02
Little Rock, AR	164	gross β	2.0	<0.1	0.4
	6	^{95}Zr	0.8	0.4	0.01
	4	^{106}Ru	1.5	1.0	0.01
	0	^{131}I	ND	ND	ND
	0	^{132}Te	ND	ND	ND
	0	^{140}Ba	ND	ND	ND
	0	^{141}Ce	ND	ND	ND
	2	^{144}Ce	0.4	0.4	0.001
Baker, CA	355	gross β	15	<0.1	0.6
	41	^{95}Zr	0.8	0.1	0.06
	11	^{106}Ru	2.2	0.8	0.04
	3	^{131}I	1.0	0.2	0.005
	2	^{132}Te	0.7	0.4	0.003
	3	^{140}Ba	1.3	0.3	0.006
	3	^{141}Ce	0.6	0.1	0.002
	5	^{144}Ce	1.2	0.6	0.01

Table 1 1971 Summary of Analytical Results for the Air Surveillance Network

Sampling Location	No. Days Sampled [a]	Type of Radioactivity	Radioactivity Concentration 10^{-12} uCi/ml or pCi/m^3 C_{max}	C_{min}	C_{avg}
Barstow, CA	354	gross β	32	<0.1	0.6
	27	^{95}Zr	1.1	0.2	0.04
	9	^{106}Ru	1.5	1.1	0.03
	2	^{131}I	2.3	0.4	0.007
	2	^{132}Te	1.5	0.3	0.005
	2	^{140}Ba	2.9	0.8	0.01
	2	^{141}Ce	1.3	0.3	0.004
	6	^{144}Ce	1.3	0.9	0.02
Bishop, CA	361	gross β	31	<0.1	0.8
	34	^{95}Zr	1.1	0.3	0.07
	19	^{106}Ru	2.4	1.0	0.08
	3	^{131}I	1.8	0.4	0.009
	3	^{132}Te	1.1	0.3	0.006
	3	^{140}Ba	2.5	0.7	0.01
	3	^{141}Ce	1.0	0.3	0.005
	13	^{144}Ce	1.2	0.6	0.04
Death Valley Junction, CA	356	gross β	6.4	<0.1	0.6
	35	^{95}Zr	1.2	0.2	0.05
	14	^{106}Ru	2.4	0.6	0.05
	2	^{131}I	0.4	0.1	0.001
	1	^{132}Te	0.2	0.2	0.001
	2	^{140}Ba	0.5	0.1	0.002
	1	^{141}Ce	0.2	0.2	0.001
	13	^{144}Ce	1.3	0.5	0.03

Table 1 1971 Summary of Analytical Results for the Air Surveillance Network

Sampling Location	No. Days Sampled[a]	Type of Radioactivity	Radioactivity Concentration 10^{-12} uCi/ml or pCi/m^3 C_{max}	C_{min}	C_{avg}
Furnace Creek, CA	355	gross β	2.5	<0.1	0.6
	35	^{95}Zr	1.3	0.4	0.07
	20	^{106}Ru	2.5	0.9	0.09
	0	^{131}I	ND	ND	ND
	0	^{132}Te	ND	ND	ND
	0	^{140}Ba	ND	ND	ND
	0	^{141}Ce	ND	ND	ND
	12	^{144}Ce	1.4	0.5	0.03
Indio, CA	362	gross β	4.9	<0.1	0.4
	15	^{95}Zr	0.8	0.1	0.02
	6	^{106}Ru	1.7	1.0	0.02
	3	^{131}I	0.3	0.1	0.002
	3	^{132}Te	0.1	0.1	0.001
	3	^{140}Ba	0.4	0.2	0.002
	3	^{141}Ce	0.2	0.1	0.001
	3	^{144}Ce	1.3	0.9	0.01
Lone Pine, CA	339	gross β	16	<0.1	0.6
	32	^{95}Zr	1.0	0.2	0.07
	20	^{106}Ru	1.9	0.4	0.1
	2	^{131}I	0.8	0.8	0.004
	2	^{132}Te	0.5	0.5	0.003
	2	^{140}Ba	1.3	1.3	0.007
	2	^{141}Ce	0.6	0.6	0.003
	12	^{144}Ce	1.4	0.3	0.04

Table 1 1971 Summary of Analytical Results for the Air Surveillance Network

Sampling Location	No. Days Sampled[a]	Type of Radioactivity	Radioactivity Concentration 10^{-12} uCi/ml or pCi/m^3 C_{max}	C_{min}	C_{avg}
Needles, CA	346	gross β	11	<0.1	0.6
	55	^{95}Zr	1.3	0.2	0.11
	29	^{106}Ru	2.3	0.8	0.14
	3	^{131}I	0.7	0.2	0.003
	3	^{132}Te	0.5	0.1	0.002
	3	^{140}Ba	1.2	0.2	0.004
	3	^{141}Ce	0.5	0.1	0.002
	18	^{144}Ce	1.7	0.5	0.06
Ridgecrest, CA	363	gross β	7.1	<0.1	0.4
	5	^{95}Zr	0.5	0.2	0.006
	1	^{106}Ru	1.1	1.1	0.003
	2	^{131}I	0.8	0.4	0.003
	2	^{132}Te	0.6	0.3	0.002
	2	^{140}Ba	1.2	0.4	0.004
	2	^{141}Ce	0.4	0.1	0.002
	0	^{144}Ce	ND	ND	ND
Shoshone, CA	357	gross β	8.1	<0.1	0.5
	27	^{95}Zr	1.0	0.3	0.05
	12	^{106}Ru	2.5	1.0	0.05
	3	^{131}I	1.0	0.2	0.004
	2	^{132}Te	0.3	0.1	0.001
	3	^{140}Ba	0.7	0.1	0.003
	3	^{141}Ce	0.3	0.1	0.001
	9	^{144}Ce	1.6	0.5	0.03

Table 1 1971 Summary of Analytical Results for the Air Surveillance Network

Sampling Location	No. Days Sampled[a]	Type of Radioactivity	Radioactivity Concentration 10^{-12} uCi/ml or pCi/m^3 C_{max}	C_{min}	C_{avg}
Denver, CO	352	gross β	2.4	<0.1	0.5
	67	^{95}Zr	1.0	0.2	0.08
	56	^{106}Ru	2.1	0.4	0.12
	5	^{131}I	0.07	0.04	0.001
	5	^{132}Te	0.07	0.03	0.001
	5	^{140}Ba	0.09	0.08	0.001
	5	^{141}Ce	0.05	0.04	0.001
	57	^{144}Ce	1.3	0.3	0.08
Durango, CO	365	gross β	3.9	<0.1	0.6
	26	^{95}Zr	1.8	0.5	0.06
	21	^{106}Ru	3.3	1.1	0.09
	2	^{131}I	0.3	0.1	0.001
	2	^{132}Te	0.1	0.1	0.001
	2	^{140}Ba	0.4	0.2	0.002
	2	^{141}Ce	0.2	0.1	0.001
	16	^{144}Ce	2.1	0.5	0.05
Boise, ID	364	gross β	3.3	<0.1	0.5
	30	^{95}Zr	1.2	0.2	0.05
	17	^{106}Ru	2.4	0.8	0.07
	1	^{131}I	0.2	0.2	<0.001
	1	^{132}Te	0.1	0.1	<0.001
	1	^{140}Ba	0.3	0.3	<0.001
	0	^{141}Ce	ND	ND	ND
	12	^{144}Ce	1.6	0.7	0.03

Table 1 1971 Summary of Analytical Results for the Air Surveillance Network

Sampling Location	No. Days Sampled [a]	Type of Radioactivity	Radioactivity Concentration 10^{-12} uCi/ml or pCi/m^3 C_{max}	C_{min}	C_{avg}
Idaho Falls, ID	355	gross β	2.9	<0.1	0.5
	61	^{95}Zr	1.8	0.3	0.07
	52	^{106}Ru	1.8	0.5	0.12
	4	^{131}I	0.2	0.1	0.002
	2	^{132}Te	0.2	0.2	0.001
	4	^{140}Ba	0.3	0.1	0.002
	2	^{141}Ce	0.1	0.1	0.001
	42	^{144}Ce	1.1	0.3	0.08
Preston, ID	358	gross β	4.7	<0.1	0.5
	25	^{95}Zr	1.3	0.4	0.05
	16	^{106}Ru	2.4	1.1	0.07
	2	^{131}I	0.3	0.07	0.001
	1	^{132}Te	0.1	0.1	<0.001
	2	^{140}Ba	0.3	0.1	0.001
	2	^{141}Ce	0.1	0.07	<0.001
	12	^{144}Ce	1.4	0.8	0.03
Twin Falls, ID	362	gross β	3.7	<0.1	0.5
	36	^{95}Zr	1.9	0.1	0.06
	20	^{106}Ru	3.7	1.0	0.09
	1	^{131}I	0.1	0.1	<0.001
	1	^{132}Te	0.1	0.1	<0.001
	1	^{140}Ba	0.3	0.3	0.001
	1	^{141}Ce	0.1	0.1	<0.001
	11	^{144}Ce	2.2	0.7	0.03

Table 1 1971 Summary of Analytical Results for the Air Surveillance Network

Sampling Location	No. Days Sampled [a]	Type of Radioactivity	Radioactivity Concentration 10^{-12} uCi/ml or pCi/m^3 C_{max}	C_{min}	C_{avg}
Iowa City, IA	337	gross β	2.5	<0.1	0.4
	50	^{95}Zr	0.7	0.2	0.05
	33	^{106}Ru	1.2	0.4	0.06
	0	^{131}I	ND	ND	ND
	0	^{132}Te	ND	ND	ND
	0	^{140}Ba	ND	ND	ND
	0	^{141}Ce	ND	ND	ND
	32	^{144}Ce	0.8	0.3	0.04
Sioux City, IA	363	gross β	1.8	<0.1	0.4
	26	^{95}Zr	0.9	0.3	0.03
	16	^{106}Ru	1.2	0.6	0.04
	0	^{131}I	ND	ND	ND
	0	^{132}Te	ND	ND	ND
	0	^{140}Ba	ND	ND	ND
	0	^{141}Ce	ND	ND	ND
	11	^{144}Ce	0.8	0.4	0.02
Dodge City, KS	359	gross β	1.4	<0.1	0.3
	1	^{95}Zr	0.1	0.1	<0.001
	0	^{106}Ru	ND	ND	ND
	0	^{131}I	ND	ND	ND
	0	^{132}Te	ND	ND	ND
	0	^{140}Ba	ND	ND	ND
	0	^{141}Ce	ND	ND	ND
	0	^{144}Ce	ND	ND	ND

Table 1 1971 Summary of Analytical Results for the Air Surveillance Network

Sampling Location	No. Days Sampled [a]	Type of Radioactivity	Radioactivity Concentration 10^{-12} uCi/ml or pCi/m^3 C_{max}	C_{min}	C_{avg}
Lake Charles, LA	345	gross β	2.0	<0.1	0.3
	34	^{95}Zr	0.7	0.1	0.03
	33	^{106}Ru	0.7	0.2	0.05
	3	^{131}I	0.06	0.06	<0.001
	3	^{132}Te	0.05	0.05	<0.001
	3	^{140}Ba	0.1	0.1	0.001
	3	^{141}Ce	0.05	0.05	<0.001
	33	^{144}Ce	0.7	0.3	0.04
Monroe, LA	318	gross β	1.7	<0.1	0.3
	38	^{95}Zr	0.7	0.2	0.04
	38	^{106}Ru	1.2	0.3	0.07
	0	^{131}I	ND	ND	ND
	0	^{132}Te	ND	ND	ND
	0	^{140}Ba	ND	ND	ND
	0	^{141}Ce	ND	ND	ND
	30	^{144}Ce	1.1	0.3	0.04
New Orleans, LA	358	gross β	1.8	<0.1	0.4
	44	^{95}Zr	0.7	0.1	0.05
	34	^{106}Ru	1.0	0.5	0.07
	3	^{131}I	0.03	0.03	<0.001
	0	^{132}Te	ND	ND	ND
	3	^{140}Ba	0.08	0.08	0.001
	3	^{141}Ce	0.04	0.04	<0.001
	34	^{144}Ce	0.8	0.3	0.05

Table 1 1971 Summary of Analytical Results for the Air Surveillance Network

Sampling Location	No. Days Sampled[a]	Type of Radioactivity	Radioactivity Concentration 10^{-12} uCi/ml or pCi/m^3 C_{max}	C_{min}	C_{avg}
Minneapolis, MN	348	gross β	1.2	<0.1	0.4
	40	^{95}Zr	0.5	0.2	0.04
	31	^{106}Ru	1.0	0.4	0.05
	0	^{131}I	ND	ND	ND
	0	^{132}Te	ND	ND	ND
	0	^{140}Ba	ND	ND	ND
	0	^{141}Ce	ND	ND	ND
	30	^{144}Ce	0.6	0.3	0.04
Joplin,MO	362	gross β	2.5	<0.1	0.4
	10	^{95}Zr	0.9	0.3	0.02
	7	^{106}Ru	1.8	0.6	0.02
	0	^{131}I	ND	ND	ND
	0	^{132}Te	ND	ND	ND
	0	^{140}Ba	ND	ND	ND
	0	^{141}Ce	ND	ND	ND
	5	^{144}Ce	1.2	0.4	0.01
St. Joseph, MO	363	gross β	1.9	<0.1	0.4
	9	^{95}Zr	0.9	0.4	0.01
	7	^{106}Ru	1.5	1.1	0.02
	1	^{131}I	0.04	0.04	<0.001
	1	^{132}Te	0.07	0.07	<0.001
	1	^{140}Ba	0.2	0.2	0.001
	1	^{141}Ce	0.07	0.07	<0.001
	4	^{144}Ce	1.3	0.4	0.01

Table 1 1971 Summary of Analytical Results for the Air Surveillance Network

Sampling Location	No. Days Sampled [a]	Type of Radioactivity	Radioactivity Concentration 10^{-12} uCi/ml or pCi/m^3 C_{max}	C_{min}	C_{avg}
St. Louis, MO	362	gross β	1.5	<0.1	0.4
	4	^{95}Zr	0.6	0.4	0.004
	3	^{106}Ru	0.7	0.7	0.006
	0	^{131}I	ND	ND	ND
	0	^{132}Te	ND	ND	ND
	0	^{140}Ba	ND	ND	ND
	0	^{141}Ce	ND	ND	ND
	3	^{144}Ce	0.4	0.4	0.003
North Platte, NE	345	gross β	2.5	<0.1	0.5
	37	^{95}Zr	1.1	0.1	0.06
	28	^{106}Ru	1.7	0.6	0.07
	1	^{131}I	0.1	0.1	<0.001
	0	^{132}Te	ND	ND	ND
	0	^{140}Ba	ND	ND	ND
	0	^{141}Ce	0.6	0.6	0.002
	28	^{144}Ce	1.5	0.3	0.04
Alamo, NV	363	gross β	3.1	<0.1	0.6
	60	^{95}Zr	1.1	0.2	0.1
	19	^{106}Ru	3.0	0.8	0.07
	2	^{131}I	0.2	0.1	0.001
	2	^{132}Te	0.1	0.1	0.001
	2	^{140}Ba	0.4	0.2	0.002
	2	^{141}Ce	0.8	0.1	0.002
	8	^{144}Ce	1.2	0.6	0.02

Table 1 1971 Summary of Analytical Results for the Air Surveillance Network

Sampling Location	No. Days Sampled [a]	Type of Radioactivity	Radioactivity Concentration 10^{-12} uCi/ml or pCi/m^3 C_{max}	C_{min}	C_{avg}
Austin, NV	349	gross β	30	<0.1	0.7
	49	^{95}Zr	1.5	0.2	0.08
	26	^{106}Ru	2.1	0.7	0.09
	2	^{131}I	1.5	1.0	0.007
	2	^{132}Te	1.3	0.7	0.005
	2	^{140}Ba	1.7	1.3	0.008
	2	^{141}Ce	0.8	0.7	0.004
	17	^{144}Ce	1.8	0.5	0.05
Battle Mountain, NV	359	gross β	31	<0.1	0.6
	54	^{95}Zr	1.3	0.1	0.1
	30	^{106}Ru	3.4	0.5	0.11
	2	^{131}I	1.6	0.5	0.006
	2	^{132}Te	1.3	0.3	0.004
	2	^{140}Ba	1.9	0.6	0.007
	2	^{141}Ce	1.0	0.2	0.003
	16	^{144}Ce	2.0	0.5	0.04
Beatty, NV	365	gross β	23	<0.1	0.7
	33	^{95}Zr	1.2	0.5	0.06
	12	^{106}Ru	1.9	1.1	0.05
	3	^{131}I	1.3	0.2	0.003
	3	^{132}Te	0.8	0.1	0.005
	3	^{140}Ba	2.3	0.2	0.013
	3	^{141}Ce	1.0	0.1	0.005
	8	^{144}Ce	1.2	0.9	0.02

Table 1 1971 Summary of Analytical Results for the Air Surveillance Network

Sampling Location	No. Days Sampled[a]	Type of Radioactivity	Radioactivity Concentration 10^{-12} uCi/ml or pCi/m^3 C_{max}	C_{min}	C_{avg}
Blue Jay, NV	364	gross β	13	<0.1	0.6
	50	^{95}Zr	1.0	0.2	0.08
	16	^{106}Ru	1.9	0.8	0.05
	2	^{131}I	0.6	0.5	0.003
	2	^{132}Te	0.5	0.3	0.002
	2	^{140}Ba	1.1	1.0	0.006
	2	^{141}Ce	0.5	0.4	0.002
	11	^{144}Ce	1.2	0.7	0.03
Caliente, NV	364	gross β	6.9	<0.1	0.6
	68	^{95}Zr	1.2	0.2	0.1
	32	^{106}Ru	2.4	0.7	0.12
	2	^{131}I	0.4	0.3	0.002
	2	^{132}Te	0.3	0.2	0.001
	2	^{140}Ba	0.7	0.4	0.003
	2	^{141}Ce	0.3	0.2	0.001
	22	^{144}Ce	1.7	0.6	0.06
Stone Cabin Ranch, NV	361	gross β	15	<0.1	0.6
	32	^{95}Zr	1.0	0.2	0.06
	14	^{106}Ru	1.8	0.9	0.05
	2	^{131}I	0.8	0.8	0.004
	2	^{132}Te	0.7	0.6	0.004
	2	^{140}Ba	1.3	1.1	0.007
	2	^{141}Ce	0.5	0.5	0.003
	9	^{144}Ce	1.2	0.8	0.02

Table 1 1971 Summary of Analytical Results for the Air Surveillance Network

Sampling Location	No. Days Sampled[a]	Type of Radioactivity	Radioactivity Concentration 10^{-12} uCi/ml or pCi/m^3 C_{max}	C_{min}	C_{avg}
Currant, NV	335	gross β	6.7	<0.1	0.5
	23	^{95}Zr	0.6	0.2	0.03
	12	^{106}Ru	2.0	0.7	0.04
	2	^{131}I	0.7	0.2	0.002
	3	^{132}Te	0.5	0.1	0.002
	2	^{140}Ba	1.1	0.2	0.004
	3	^{141}Ce	0.5	0.1	0.002
	9	^{144}Ce	1.1	0.4	0.02
Blue Eagle Ranch, (Currant) NV	355	gross β	11	<0.1	0.6
	26	^{95}Zr	1.1	0.4	0.05
	14	^{106}Ru	2.0	1.0	0.06
	0	^{131}I	ND	ND	ND
	0	^{132}Te	ND	ND	ND
	0	^{140}Ba	ND	ND	ND
	0	^{141}Ce	ND	ND	ND
	11	^{144}Ce	1.5	0.7	0.03
Currie, NV	361	gross β	14	<0.1	0.6
	39	^{95}Zr	1.5	0.2	0.07
	18	^{106}Ru	2.8	0.7	0.07
	3	^{131}I	0.8	0.1	0.005
	3	^{132}Te	0.6	0.1	0.003
	3	^{140}Ba	0.9	0.1	0.005
	3	^{141}Ce	0.5	0.1	0.003
	11	^{144}Ce	1.7	0.5	0.03

Table 1 1971 Summary of Analytical Results for the Air Surveillance Network

Sampling Location	No. Days Sampled [a]	Type of Radioactivity	Radioactivity Concentration 10^{-12} uCi/ml or pCi/m^3 C_{max}	C_{min}	C_{avg}
Diablo, NV	365	gross β	14	<0.1	0.6
	34	^{95}Zr	1.1	0.2	0.06
	20	^{106}Ru	1.6	0.7	0.07
	2	^{131}I	0.8	0.4	0.003
	2	^{132}Te	0.5	0.3	0.002
	2	^{140}Ba	1.4	0.7	0.006
	2	^{141}Ce	0.6	0.2	0.002
	11	^{144}Ce	1.5	0.5	0.03
Duckwater, NV	327	gross β	15	<0.1	0.6
	40	^{95}Zr	1.1	0.2	0.06
	29	^{106}Ru	2.9	0.6	0.08
	1	^{131}I	1.0	1.0	0.003
	1	^{132}Te	0.8	0.8	0.002
	1	^{140}Ba	1.4	1.4	0.004
	1	^{141}Ce	0.5	0.5	0.001
	19	^{144}Ce	2.3	0.5	0.04
Elko, NV	363	gross β	20	<0.1	0.5
	22	^{95}Zr	1.1	0.3	0.05
	11	^{106}Ru	3.2	0.7	0.04
	2	^{131}I	0.9	0.3	0.003
	2	^{132}Te	0.8	0.4	0.003
	2	^{140}Ba	1.5	0.3	0.005
	1	^{141}Ce	0.6	0.6	0.002
	7	^{144}Ce	1.3	0.4	0.02

Table 1 1971 Summary of Analytical Results for the Air Surveillance Network

Sampling Location	No. Days Sampled [a]	Type of Radioactivity	Radioactivity Concentration 10^{-12} uCi/ml or pCi/m^3 C_{max}	C_{min}	C_{avg}
Ely, NV	360	gross β	18	<0.1	0.6
	38	^{95}Zr	1.3	0.3	0.06
	28	^{106}Ru	2.6	0.6	0.1
	2	^{131}I	1.1	0.2	0.004
	2	^{132}Te	0.7	0.2	0.002
	2	^{140}Ba	1.2	0.5	0.005
	2	^{141}Ce	0.6	0.2	0.002
	21	^{144}Ce	1.5	0.3	0.04
Eureka, NV	362	gross β	22	<0.1	0.7
	37	^{95}Zr	1.2	0.4	0.08
	25	^{106}Ru	2.0	0.9	0.09
	3	^{131}I	0.9	0.2	0.005
	3	^{132}Te	0.8	0.1	0.004
	3	^{140}Ba	1.4	0.2	0.008
	3	^{141}Ce	0.7	0.1	0.003
	15	^{144}Ce	1.4	0.8	0.04
Fallon, NV	364	gross β	51	<0.1	0.7
	51	^{95}Zr	1.0	0.2	0.07
	20	^{106}Ru	1.7	0.9	0.07
	3	^{131}I	2.0	0.2	0.008
	3	^{132}Te	1.6	0.2	0.007
	3	^{140}Ba	2.6	0.4	0.01
	3	^{141}Ce	0.9	0.2	0.005
	13	^{144}Ce	1.4	0.5	0.03

Table 1 1971 Summary of Analytical Results for the Air Surveillance Network

Sampling Location	No. Days Sampled [a]	Type of Radioactivity	Radioactivity Concentration 10^{-12} uCi/ml or pCi/m^3 C_{max}	C_{min}	C_{avg}
Frenchman Station, NV	358	gross β	37	<0.1	0.7
	43	^{95}Zr	0.9	0.2	0.06
	6	^{106}Ru	1.4	0.9	0.02
	3	^{131}I	1.9	0.2	0.009
	3	^{132}Te	0.8	0.1	0.003
	3	^{140}Ba	1.9	0.4	0.01
	3	^{141}Ce	0.9	0.2	0.005
	4	^{144}Ce	1.1	0.4	0.01
Geyser Maintenance Station, NV	315	gross β	14	<0.1	0.6
	39	^{95}Zr	1.1	0.3	0.07
	21	^{106}Ru	2.3	1.0	0.08
	3	^{131}I	0.7	0.2	0.003
	3	^{132}Te	0.4	0.1	0.002
	3	^{140}Ba	0.7	0.3	0.004
	3	^{141}Ce	0.3	0.1	0.002
	10	^{144}Ce	1.1	0.8	0.03
Goldfield, NV	363	gross β	34	<0.1	0.7
	46	^{95}Zr	1.3	0.2	0.07
	19	^{106}Ru	2.2	0.9	0.07
	2	^{131}I	1.6	1.0	0.007
	2	^{132}Te	1.2	0.8	0.005
	2	^{140}Ba	2.4	1.8	0.01
	2	^{141}Ce	1.1	0.8	0.005
	6	^{144}Ce	1.3	0.9	0.02

Table 1 1971 Summary of Analytical Results for the Air Surveillance Network

Sampling Location	No. Days Sampled[a]	Type of Radioactivity	Radioactivity Concentration 10^{-12} uCi/ml or pCi/m^3 C_{max}	C_{min}	C_{avg}
Groom Lake, NV	302	gross β	13	<0.1	0.6
	87	^{95}Zr	0.9	0.2	0.1
	69	^{106}Ru	1.6	0.4	0.15
	2	^{131}I	0.8	0.8	0.004
	2	^{132}Te	0.5	0.5	0.003
	2	^{140}Ba	1.2	1.2	0.007
	2	^{141}Ce	0.5	0.5	0.003
	64	^{144}Ce	1.1	0.3	0.09
Hiko, NV	365	gross β	2.5	<0.1	0.6
	61	^{95}Zr	1.0	0.2	0.1
	25	^{106}Ru	2.4	0.8	0.1
	1	^{131}I	0.1	0.1	<0.001
	0	^{132}Te	ND	ND	ND
	1	^{140}Ba	0.2	0.2	0.001
	1	^{141}Ce	0.1	0.1	<0.001
	17	^{144}Ce	1.3	0.7	0.05
Indian Springs, NV	365	gross β	4.5	<0.1	0.6
	34	^{95}Zr	1.1	0.3	0.06
	16	^{106}Ru	2.9	0.6	0.07
	2	^{131}I	0.3	0.2	0.001
	2	^{132}Te	0.2	0.1	0.001
	2	^{140}Ba	0.4	0.4	0.002
	2	^{141}Ce	0.2	0.1	0.001
	12	^{144}Ce	1.5	0.5	0.03

Table 1 1971 Summary of Analytical Results for the Air Surveillance Network

Sampling Location	No. Days Sampled [a]	Type of Radioactivity	Radioactivity Concentration 10^{-12} uCi/ml or pCi/m^3 C_{max}	C_{min}	C_{avg}
Las Vegas, NV	362	gross β	2.3	<0.1	0.6
	117	^{95}Zr	1.0	0.05	0.15
	64	^{106}Ru	2.0	0.5	0.18
	3	^{131}I	0.1	0.1	0.001
	3	^{132}Te	0.1	0.1	0.001
	3	^{140}Ba	0.2	0.2	0.002
	0	^{141}Ce	ND	ND	ND
	57	^{144}Ce	1.2	0.3	0.1
Lathrop Wells, NV	362	gross β	9.9	<0.1	0.6
	59	^{95}Zr	1.7	0.2	0.11
	34	^{106}Ru	4.0	0.9	0.15
	3	^{131}I	0.7	0.2	0.003
	2	^{132}Te	0.4	0.1	0.001
	3	^{140}Ba	1.0	0.2	0.004
	2	^{141}Ce	0.5	0.1	0.002
	24	^{144}Ce	1.8	0.5	0.06
Lida, NV	333	gross β	32	<0.1	0.7
	24	^{95}Zr	1.1	0.5	0.04
	12	^{106}Ru	1.6	1.1	0.04
	3	^{131}I	1.1	0.4	0.007
	3	^{132}Te	1.0	0.2	0.005
	3	^{140}Ba	1.4	0.4	0.008
	3	^{141}Ce	0.7	0.2	0.004
	11	^{144}Ce	1.1	0.5	0.03

Table 1 1971 Summary of Analytical Results for the Air Surveillance Network

Sampling Location	No. Days Sampled [a]	Type of Radioactivity	Radioactivity Concentration 10^{-12} uCi/ml or pCi/m^3 C_{max}	C_{min}	C_{avg}
Lovelock, NV	365	gross β	14	<0.1	0.5
	48	^{95}Zr	1.0	0.1	0.08
	22	^{106}Ru	1.8	0.8	0.08
	3	^{131}I	1.0	0.2	0.004
	3	^{132}Te	0.8	0.1	0.003
	3	^{140}Ba	1.5	0.3	0.006
	3	^{141}Ce	0.5	0.2	0.002
	14	^{144}Ce	1.5	0.7	0.04
Lund, NV	348	gross β	18	<0.1	0.6
	45	^{95}Zr	1.3	0.2	0.08
	24	^{106}Ru	2.9	0.7	0.08
	2	^{131}I	0.8	0.6	0.004
	2	^{132}Te	0.6	0.5	0.003
	2	^{140}Ba	1.1	1.1	0.006
	2	^{141}Ce	0.7	0.6	0.004
	19	^{144}Ce	1.6	0.7	0.05
Mesquite, NV	365	gross β	2.7	<0.1	0.6
	64	^{95}Zr	1.4	0.2	0.11
	30	^{106}Ru	2.3	0.9	0.13
	2	^{131}I	0.1	0.1	0.001
	2	^{132}Te	0.1	0.1	0.001
	2	^{140}Ba	0.2	0.1	0.001
	2	^{141}Ce	0.1	0.1	0.001
	15	^{144}Ce	1.5	0.8	0.04

Table 1 1971 Summary of Analytical Results for the Air Surveillance Network

Sampling Location	No. Days Sampled	Type of Radioactivity	Radioactivity Concentration 10^{-12} uCi/ml or pCi/m^3 C_{max}	C_{min}	C_{avg}
Nyala, NV	365	gross β	12	<0.1	0.6
	34	^{95}Zr	1.1	0.5	0.07
	23	^{106}Ru	2.4	0.8	0.09
	2	^{131}I	0.6	0.3	0.002
	2	^{132}Te	0.4	0.3	0.002
	2	^{140}Ba	1.0	0.6	0.004
	2	^{141}Ce	0.4	0.2	0.002
	16	^{144}Ce	1.6	0.8	0.05
Pahrump, NV	332	gross β	3.1	<0.1	0.6
	55	^{95}Zr	1.1	0.1	0.09
	27	^{106}Ru	1.8	0.6	0.09
	3	^{131}I	0.3	0.3	0.002
	3	^{132}Te	0.1	0.1	0.001
	3	^{140}Ba	0.3	0.3	0.002
	3	^{141}Ce	0.1	0.1	0.001
	21	^{144}Ce	1.9	0.5	0.06
Pioche, NV	361	gross β	10	<0.1	0.5
	23	^{95}Zr	0.9	0.4	0.04
	11	^{106}Ru	1.7	0.6	0.04
	2	^{131}I	0.6	0.3	0.002
	2	^{132}Te	0.5	0.3	0.002
	2	^{140}Ba	0.7	0.5	0.003
	2	^{141}Ce	0.4	0.3	0.002
	5	^{144}Ce	1.2	0.6	0.01

Table 1 1971 Summary of Analytical Results for the Air Surveillance Network

Sampling Location	No. Days Sampled	Type of Radioactivity	Radioactivity Concentration 10^{-12} uCi/ml or pCi/m^3 C_{max}	C_{min}	C_{avg}
Reno, NV	338	gross β	46	<0.1	0.7
	25	^{95}Zr	1.0	0.4	0.05
	15	^{106}Ru	2.0	0.5	0.06
	2	^{131}I	2.4	0.7	0.008
	2	^{132}Te	1.9	0.5	0.007
	2	^{140}Ba	3.3	0.9	0.01
	2	^{141}Ce	1.4	0.4	0.005
	9	^{144}Ce	1.2	0.8	0.02
Round Mountain, NV	361	gross β	27	<0.1	0.7
	49	^{95}Zr	1.1	0.3	0.08
	25	^{106}Ru	2.1	0.7	0.08
	3	^{131}I	1.5	0.4	0.006
	3	^{132}Te	1.2	0.2	0.005
	3	^{140}Ba	1.6	0.5	0.008
	3	^{141}Ce	0.7	0.3	0.004
	20	^{144}Ce	1.5	0.5	0.05
Scotty's Junction, NV	363	gross β	18	<0.1	0.7
	40	^{95}Zr	1.4	0.4	0.08
	25	^{106}Ru	2.2	1.1	0.11
	4	^{131}I	1.4	0.2	0.01
	2	^{132}Te	0.8	0.2	0.003
	2	^{140}Ba	2.0	0.2	0.006
	2	^{141}Ce	0.8	0.1	0.002
	17	^{144}Ce	2.0	0.5	0.05

Table 1 1971 Summary of Analytical Results for the Air Surveillance Network

Sampling Location	No. Days Sampled	Type of Radioactivity	Radioactivity Concentration 10^{-12} uCi/ml or pCi/m^3 C_{max}	C_{min}	C_{avg}
Sunnyside, NV	320	gross β	15	<0.1	0.7
	31	^{95}Zr	1.0	0.3	0.05
	22	^{106}Ru	1.9	0.5	0.08
	3	^{131}I	0.8	0.3	0.004
	3	^{132}Te	0.3	0.2	0.002
	3	^{140}Ba	1.0	0.4	0.005
	3	^{141}Ce	0.5	0.2	0.003
	18	^{144}Ce	1.1	0.5	0.04
Tonopah, NV	364	gross β	34	<0.1	0.8
	40	^{95}Zr	1.1	0.4	0.08
	22	^{106}Ru	2.4	0.9	0.09
	3	^{131}I	1.4	0.6	0.008
	3	^{132}Te	0.8	0.2	0.005
	3	^{140}Ba	2.1	0.7	0.01
	3	^{141}Ce	1.1	0.3	0.005
	13	^{144}Ce	1.3	0.6	0.04
Tonopah Test Range, NV	339	gross β	15	<0.1	0.7
	52	^{95}Zr	1.1	0.2	0.08
	27	^{106}Ru	1.8	0.5	0.08
	5	^{131}I	1.1	0.3	0.008
	5	^{132}Te	0.8	0.2	0.006
	5	^{140}Ba	1.6	0.4	0.01
	5	^{141}Ce	0.6	0.2	0.005
	21	^{144}Ce	1.4	0.6	0.04

Table 1 1971 Summary of Analytical Results for the Air Surveillance Network

Sampling Location	No. Days Sampled	Type of Radioactivity	Radioactivity Concentration 10^{-12} uCi/ml or pCi/m^3 C_{max}	C_{min}	C_{avg}
Fallini's Ranch	361	gross β	11	<0.1	0.6
(Twin Springs), NV	51	^{95}Zr	1.0	0.2	0.09
	21	^{106}Ru	2.5	0.8	0.08
	2	^{131}I	0.4	0.4	0.002
	2	^{132}Te	0.4	0.3	0.002
	2	^{140}Ba	1.2	0.6	0.005
	2	^{141}Ce	0.3	0.3	0.002
	16	^{144}Ce	1.4	0.8	0.04
Warm Springs, NV	126	gross β	1.9	0.2	0.7
	13	^{95}Zr	1.0	0.3	0.06[b]
	8	^{106}Ru	2.3	0.5	0.09[b]
	0	^{131}I	ND	ND	ND
	0	^{132}Te	ND	ND	ND
	0	^{140}Ba	ND	ND	ND
	0	^{141}Ce	ND	ND	ND
	6	^{144}Ce	1.6	0.8	0.06[b]
Warm Springs	364	gross β	2.5	<0.1	0.5
Ranch, NV	45	^{95}Zr	1.1	0.3	0.08
	26	^{106}Ru	2.3	0.6	0.09
	0	^{131}I	ND	ND	ND
	0	^{132}Te	ND	ND	ND
	0	^{140}Ba	ND	ND	ND
	0	^{141}Ce	ND	ND	ND
	18	^{144}Ce	1.3	0.7	0.05

Table 1 1971 Summary of Analytical Results for the Air Surveillance Network

Sampling Location	No. Days Sampled [a]	Type of Radioactivity	Radioactivity Concentration 10^{-12} uCi/ml or pCi/m^3 C_{max}	C_{min}	C_{avg}
Wells, NV	365	gross β	21	<0.1	0.6
	30	^{95}Zr	1.3	0.4	0.06
	17	^{105}Ru	2.8	0.9	0.08
	2	^{131}I	1.2	0.3	0.004
	2	^{132}Te	1.0	0.2	0.003
	2	^{140}Ba	1.8	0.3	0.006
	2	^{141}Ce	0.7	0.2	0.002
	12	^{144}Ce	1.5	0.5	0.03
Winnemucca, NV	350	gross β	28	<0.1	0.6
	26	^{95}Zr	1.0	0.3	0.04
	16	^{106}Ru	1.9	0.8	0.06
	4	^{131}I	2.1	0.2	0.005
	4	^{132}Te	2.0	0.2	0.004
	4	^{140}Ba	2.1	0.4	0.006
	4	^{141}Ce	0.8	0.1	0.003
	8	^{144}Ce	1.3	0.6	0.02
Albuquerque, NM	348	gross β	2.5	<0.1	0.5
	43	^{95}Zr	1.4	0.2	0.07
	31	^{106}Ru	2.1	0.5	0.10
	5	^{131}I	0.1	0.1	0.001
	5	^{132}Te	0.1	0.1	0.001
	5	^{140}Ba	0.2	0.2	0.003
	5	^{141}Ce	0.7	0.7	0.01
	27	^{144}Ce	1.6	0.4	0.06

Table 1 1971 Summary of Analytical Results for the Air Surveillance Network

Sampling Location	No. Days Sampled [a]	Type of Radioactivity	Radioactivity Concentration 10^{-12} uCi/ml or pCi/m^3 C_{max}	C_{min}	C_{avg}
Carlsbad, NM	360	gross β	3.2	<0.1	0.5
	24	^{95}Zr	1.3	0.2	0.04
	15	^{106}Ru	2.5	1.1	0.06
	3	^{131}I	0.2	0.1	0.001
	2	^{132}Te	0.1	0.1	0.001
	3	^{140}Ba	0.3	0.2	0.002
	0	^{141}Ce	ND	ND	ND
	15	^{144}Ce	1.2	0.5	0.04
Muskogee, OK	360	gross β	5.3	<0.1	0.4
	3	^{95}Zr	2.1	0.7	0.01
	3	^{106}Ru	3.9	0.9	0.02
	0	^{131}I	ND	ND	ND
	0	^{132}Te	ND	ND	ND
	0	^{140}Ba	ND	ND	ND
	0	^{141}Ce	ND	ND	ND
	2	^{144}Ce	2.9	1.1	0.01
Medford, OR	342	gross β	2.3	<0.1	0.4
	6	^{95}Zr	0.9	0.4	0.01
	3	^{106}Ru	1.7	0.8	0.01
	0	^{131}I	ND	ND	ND
	0	^{132}Te	ND	ND	ND
	0	^{140}Ba	ND	ND	ND
	0	^{141}Ce	ND	ND	ND
	1	^{144}Ce	0.9	0.9	0.002

Table 1 1971 Summary of Analytical Results for the Air Surveillance Network

Sampling Location	No. Days Sampled [a]	Type of Radioactivity	Radioactivity Concentration 10^{-12} uCi/ml or pCi/m^3 C_{max}	C_{min}	C_{avg}
Burns, OR	364	gross β	2.1	<0.1	0.5
	20	^{95}Zr	0.9	0.4	0.04
	14	^{106}Ru	2.0	0.9	0.06
	0	^{131}I	ND	ND	ND
	0	^{132}Te	ND	ND	ND
	0	^{140}Ba	ND	ND	ND
	0	^{141}Ce	ND	ND	ND
	13	^{144}Ce	1.2	0.7	0.03
Aberdeen, SD	360	gross β	2.8	<0.1	0.4
	6	^{95}Zr	0.7	0.5	0.01
	3	^{106}Ru	1.5	0.8	0.008
	0	^{131}I	ND	ND	ND
	0	^{132}Te	ND	ND	ND
	0	^{140}Ba	ND	ND	ND
	0	^{141}Ce	ND	ND	ND
	2	^{144}Ce	0.7	0.7	0.002
Rapid City, SD	365	gross β	1.9	<0.1	0.5
	14	^{95}Zr	1.2	0.5	0.02
	8	^{106}Ru	2.0	1.1	0.03
	0	^{131}I	ND	ND	ND
	0	^{132}Te	ND	ND	ND
	0	^{140}Ba	ND	ND	ND
	0	^{141}Ce	ND	ND	ND
	2	^{144}Ce	1.2	1.2	0.007

Table 1 1971 Summary of Analytical Results for the Air Surveillance Network

Sampling Location	No. Days Sampled [a]	Type of Radioactivity	Radioactivity Concentration 10^{-12} uCi/ml or pCi/m^3 C_{max}	C_{min}	C_{avg}
Abilene, TX	360	gross β	9.2	<0.1	0.5
	10	^{95}Zr	1.1	0.3	0.02
	8	^{106}Ru	2.1	0.6	0.03
	2	^{131}I	0.5	0.2	0.002
	2	^{132}Te	0.4	0.2	0.002
	2	^{140}Ba	0.9	0.3	0.003
	2	^{141}Ce	0.5	0.1	0.002
	4	^{144}Ce	1.1	0.5	0.01
Amarillo, TX	365	gross β	2.9	<0.1	0.5
	17	^{95}Zr	1.1	0.2	0.03
	9	^{106}Ru	1.5	0.9	0.03
	2	^{131}I	0.2	0.2	0.001
	2	^{132}Te	0.1	0.1	0.001
	2	^{140}Ba	0.3	0.3	0.002
	2	^{141}Ce	0.1	0.1	0.001
	7	^{144}Ce	1.3	0.9	0.02
Austin, TX	154	gross β	6.7	<0.1	0.3
	4	^{95}Zr	0.1	0.1	0.002 [c]
	0	^{106}Ru	ND	ND	ND
	0	^{131}I	ND	ND	ND
	0	^{132}Te	ND	ND	ND
	0	^{140}Ba	ND	ND	ND
	0	^{141}Ce	ND	ND	ND
	0	^{144}Ce	ND	ND	ND

Table 1 1971 Summary of Analytical Results for the Air Surveillance Network

Sampling Location	No. Days Sampled [a]	Type of Radioactivity	Radioactivity Concentration 10^{-12} uCi/ml or pCi/m^3 C_{max}	C_{min}	C_{avg}
Fort Worth, TX	341	gross β	8.0	<0.1	0.5
	22	^{95}Zr	1.0	0.2	0.04
	17	^{106}Ru	1.7	0.7	0.07
	2	^{131}I	0.4	0.1	0.001
	2	^{132}Te	0.2	0.1	0.001
	2	^{140}Ba	0.5	0.3	0.002
	2	^{141}Ce	0.2	0.1	0.001
	14	^{144}Ce	1.2	0.6	0.02
Bryce Canyon, UT	338	gross β	4.2	<0.1	0.5
	40	^{95}Zr	1.2	0.2	0.06
	33	^{106}Ru	2.1	0.6	0.09
	4	^{131}I	0.2	0.1	0.002
	4	^{132}Te	0.1	0.1	0.001
	4	^{140}Ba	0.4	0.1	0.003
	4	^{141}Ce	0.1	0.1	0.001
	18	^{144}Ce	1.6	0.4	0.04
Cedar City, UT	361	gross β	8.0	<0.1	0.6
	44	^{95}Zr	1.3	0.4	0.08
	33	^{106}Ru	2.3	0.6	0.12
	3	^{131}I	0.4	0.1	0.002
	3	^{132}Te	0.2	0.1	0.001
	3	^{140}Ba	0.7	0.1	0.002
	1	^{141}Ce	0.2	0.2	0.001
	27	^{144}Ce	1.8	0.3	0.06

Table 1 1971 Summary of Analytical Results for the Air Surveillance Network

Sampling Location	No. Days Sampled[a]	Type of Radioactivity	Radioactivity Concentration 10^{-12} uCi/ml or pCi/m^3 C_{max}	C_{min}	C_{avg}
Delta, UT	326	gross β	8.7	<0.1	0.5
	23	^{95}Zr	2.6	0.4	0.05
	19	^{106}Ru	2.5	0.6	0.07
	2	^{131}I	0.5	0.3	0.002
	2	^{132}Te	0.3	0.2	0.001
	2	^{140}Ba	0.6	0.4	0.003
	2	^{141}Ce	0.3	0.3	0.002
	17	^{144}Ce	2.2	0.6	0.05
Dugway, UT	363	gross β	6.1	<0.1	0.6
	34	^{95}Zr	1.2	0.4	0.07
	27	^{106}Ru	2.9	0.8	0.11
	2	^{131}I	0.3	0.3	0.002
	2	^{132}Te	0.3	0.2	0.001
	2	^{140}Ba	0.4	0.4	0.002
	2	^{141}Ce	0.2	0.2	0.001
	17	^{144}Ce	1.6	0.6	0.05
Enterprise, UT	364	gross β	9.0	<0.1	0.6
	34	^{95}Zr	1.2	0.5	0.07
	24	^{106}Ru	2.8	0.9	0.09
	2	^{131}I	0.7	0.2	0.002
	2	^{132}Te	0.4	0.2	0.002
	2	^{140}Ba	0.8	0.3	0.003
	2	^{141}Ce	0.4	0.2	0.002
	17	^{144}Ce	1.4	0.8	0.04

Table 1 1971 Summary of Analytical Results for the Air Surveillance Network

Sampling Location	No. Days Sampled [a]	Type of Radioactivity	Radioactivity Concentration 10^{-12} uCi/ml or pCi/m^3 C_{max}	C_{min}	C_{avg}
Garrison, UT	364	gross β	8.8	<0.1	0.6
	32	^{95}Zr	1.1	0.2	0.06
	22	^{106}Ru	2.2	0.9	0.09
	2	^{131}I	0.6	0.5	0.003
	2	^{132}Te	0.4	0.4	0.002
	2	^{140}Ba	0.6	0.5	0.003
	2	^{141}Ce	0.4	0.3	0.002
	15	^{144}Ce	1.8	0.6	0.04
Logan, UT	362	gross β	2.7	<0.1	0.5
	32	^{95}Zr	1.2	0.1	0.06
	19	^{106}Ru	2.7	0.7	0.07
	1	^{131}I	0.1	0.1	<0.001
	0	^{132}Te	ND	ND	ND
	1	^{140}Ba	0.2	0.2	0.001
	1	^{141}Ce	.07	.07	<0.001
	17	^{144}Ce	1.2	0.6	0.04
Milford, UT	358	gross β	8.9	<0.1	0.5
	17	^{95}Zr	1.3	0.5	0.03
	9	^{106}Ru	1.8	0.9	0.03
	2	^{131}I	0.6	0.4	0.003
	2	^{132}Te	0.5	0.2	0.002
	2	^{140}Ba	0.9	0.7	0.004
	2	^{141}Ce	0.3	0.3	0.002
	8	^{144}Ce	1.5	0.5	0.02

Table 1 1971 Summary of Analytical Results for the Air Surveillance Network

Sampling Location	No. Days Sampled [a]	Type of Radioactivity	Radioactivity Concentration 10^{-12} uCi/ml or pCi/m^3 C_{max}	C_{min}	C_{avg}
Monticello, UT	278	gross β	2.6	<0.1	0.4
	7	^{95}Zr	1.4	0.5	0.01
	5	^{106}Ru	1.9	1.0	0.02
	0	^{131}I	ND	ND	ND
	0	^{132}Te	ND	ND	ND
	0	^{140}Ba	ND	ND	ND
	0	^{141}Ce	ND	ND	ND
	4	^{144}Ce	1.4	0.6	0.01
Parowan, UT	334	gross β	4.3	<0.1	0.5
	22	^{95}Zr	2.2	0.3	0.06
	13	^{106}Ru	3.3	0.8	0.07
	0	^{131}I	ND	ND	ND
	0	^{132}Te	ND	ND	ND
	0	^{140}Ba	ND	ND	ND
	0	^{141}Ce	ND	ND	ND
	11	^{144}Ce	2.3	0.9	0.04
Provo, UT	348	gross β	6.7	<0.1	0.6
	29	^{95}Zr	1.8	0.4	0.06
	16	^{106}Ru	2.4	0.9	0.06
	2	^{131}I	0.2	0.2	0.001
	2	^{132}Te	0.2	0.2	0.001
	2	^{140}Ba	0.5	0.4	0.002
	2	^{141}Ce	0.2	0.1	0.001
	12	^{144}Ce	1.6	0.7	0.04

Table 1 1971 Summary of Analytical Results for the Air Surveillance Network

Sampling Location	No. Days Sampled [a]	Type of Radioactivity	Radioactivity Concentration 10^{-12} uCi/ml or pCi/m^3 C_{max}	C_{min}	C_{avg}
Roosevelt, UT	364	gross β	7.6	<0.1	0.5
	35	^{95}Zr	1.8	0.3	0.07
	24	^{106}Ru	2.8	0.9	0.11
	2	^{131}I	0.4	0.2	0.002
	2	^{132}Te	0.3	0.1	0.001
	2	^{140}Ba	0.7	0.5	0.003
	2	^{141}Ce	0.3	0.2	0.001
	19	^{144}Ce	1.7	0.7	0.06
St. George, UT	365	gross β	3.2	<0.1	0.5
	28	^{95}Zr	1.0	0.3	0.05
	15	^{106}Ru	2.3	1.0	0.06
	1	^{131}I	0.2	0.2	0.001
	1	^{132}Te	0.1	0.1	<0.001
	1	^{140}Ba	0.2	0.2	0.001
	1	^{141}Ce	0.1	0.1	<0.001
	11	^{144}Ce	1.1	0.6	0.03
Salt Lake City, UT	363	gross β	5.3	<0.1	0.6
	43	^{95}Zr	1.6	0.4	0.09
	34	^{106}Ru	4.2	0.8	0.15
	2	^{131}I	0.4	0.2	0.002
	2	^{132}Te	0.3	0.1	0.001
	2	^{140}Ba	0.4	0.4	0.002
	2	^{141}Ce	0.2	0.1	0.001
	27	^{144}Ce	1.8	0.5	0.08

Table 1 1971 Summary of Analytical Results for the Air Surveillance Network

Sampling Location	No. Days Sampled [a]	Type of Radioactivity	Radioactivity Concentration 10^{-12} uCi/ml or pCi/m^3 C_{max}	C_{min}	C_{avg}
Wendover, UT	365	gross β	3.5	<0.1	0.5
	31	^{95}Zr	1.1	0.5	0.06
	21	^{106}Ru	2.9	0.9	0.08
	2	^{131}I	0.2	0.1	0.001
	1	^{132}Te	0.1	0.1	<0.001
	1	^{140}Ba	0.2	0.2	0.001
	1	^{141}Ce	0.2	0.2	0.001
	12	^{144}Ce	2.0	0.7	0.04
Seattle, WA	360	gross β	1.6	<0.1	0.2
	19	^{95}Zr	0.5	0.1	0.01
	11	^{106}Ru	1.2	0.4	0.02
	0	^{131}I	ND	ND	ND
	0	^{132}Te	ND	ND	ND
	0	^{140}Ba	ND	ND	ND
	0	^{141}Ce	ND	ND	ND
	10	^{144}Ce	0.3	0.3	0.008
Spokane, WA	328	gross β	1.9	<0.1	0.4
	48	^{95}Zr	1.2	0.2	0.06
	42	^{106}Ru	2.1	0.3	0.08
	0	^{131}I	ND	ND	ND
	0	^{132}Te	ND	ND	ND
	0	^{140}Ba	ND	ND	ND
	0	^{141}Ce	ND	ND	ND
	42	^{144}Ce	1.6	0.2	0.04

Table 1 1971 Summary of Analytical Results for the Air Surveillance Network

Sampling Location	No. Days Sampled [a]	Type of Radioactivity	Radioactivity Concentration 10^{-12} uCi/ml or pCi/m^3 C_{max}	C_{min}	C_{avg}
Rock Springs, WY	362	gross β	4.4	<0.1	0.5
	22	^{95}Zr	1.4	0.4	0.05
	15	^{106}Ru	2.2	1.1	0.07
	2	^{131}I	0.2	0.2	0.001
	2	^{132}Te	0.2	0.2	0.001
	1	^{140}Ba	0.3	0.3	0.002
	1	^{141}Ce	0.2	0.2	0.001
	10	^{144}Ce	1.7	1.0	0.04
Worland, WY	363	gross β	2.3	<0.1	0.5
	34	^{95}Zr	1.1	0.2	0.05
	16	^{106}Ru	1.8	0.7	0.05
	1	^{131}I	0.2	0.2	0.001
	1	^{132}Te	0.1	0.1	<0.001
	1	^{140}Ba	0.3	0.3	0.001
	0	^{141}Ce	ND	ND	ND
	11	^{144}Ce	1.2	0.8	0.03

[a] For gross beta, this number represents the number of days of the year that the sampler was operated. For radionuclides, this number represents the number of sampling days of the year during which the radionuclide was detected.

[b] Since station operated only during the first 4½ months of the year the average was computed over 126 days instead of 365 days.

[c] Since station didn't operate during months of March, April, May and most of June, the average was computed over 154 days instead of 365 days.

Table 2 1971 Summary of Background Radiation Doses for the Dosimetry Network

Station Location	Map No.	Measurement Period	Background Dose Equivalent Rate (mrem/d) Max.	Min.	Avg.	Annual Background Dose (mrem/a)
Adaven, NV	1	12/29/70 - 1/10/72	0.7	0.3	0.55	200
Alamo, NV	2	12/29/70 - 1/10/72	0.5	0.2	0.38	140
Ash Meadows, NV	3	12/30/70 - 1/5/72	0.5	0.3	0.38	140
Austin, NV	4	12/29/70 - 1/12/72	0.8	0.5	0.64	230
Baker, CA	5	12/28/70 - 1/5/72	0.5	0.3	0.37	140
Barstow, CA	6	12/28/70 - 1/5/72	0.5	0.3	0.45	160
Battle Mountain, NV	7	12/30/70 - 2/2/71	-	-	0.54[a]	200
Beatty, NV	8	12/29/70 - 1/6/72	0.6	0.4	0.53	190
Beaver Dam Summit, UT	9	12/29/70 - 1/10/72	0.5	0.2	0.33	120
Big Pine, CA	10	12/29/70 - 1/6/72	0.5	0.3	0.41	150
Bishop, CA	11	12/29/70 - 1/6/72	0.5	0.3	0.42	150
Blue Eagle Ranch, NV	12	12/30/70 - 1/13/72	0.4	0.2	0.30	110
Blue Jay, NV	13	12/29/70 - 1/11/72	0.7	0.4	0.50	180
Butler Ranch, NV	14	12/29/70 - 1/10/72	0.4	0.2	0.28	100
Cactus Springs, NV	15	12/29/70 - 1/6/72	0.4	0.2	0.34	120
Caliente, NV	16	12/29/70 - 1/11/72	0.6	0.3	0.46	170
Carlin, NV	17	12/31/70 - 2/2/71	-	-	0.54[a]	200
Casey's Ranch, NV	18	12/30/70 - 1/11/72	0.4	0.2	0.34	120
Cedar City, UT	19	12/30/70 - 1/11/72	0.6	0.2	0.39	140
Clark Station, NV	20	12/29/70 - 1/11/72	0.6	0.3	0.51	190
Coyote Summit, NV	21	12/29/70 - 1/10/72	0.7	0.4	0.52	190
Currant, NV	22	12/30/70 - 1/13/72	0.5	0.3	0.41	150
Currant Maint. Sta., NV	23	12/30/70 - 1/13/72	0.5	0.3	0.41	150
Currie, NV	24	1/2/71 - 2/5/71	-	-	0.56[a]	200
Death Valley Junct., NV	25	12/30/71 - 1/5/72	0.5	0.3	0.42	150
Desert Game Range, NV	26	12/29/70 - 1/6/72	0.4	0.2	0.33	120
Diablo Maint. Sta., NV	27	12/29/70 - 1/10/72	0.7	0.4	0.54	200
Duckwater, NV	28	12/30/70 - 1/13/72	0.5	0.3	0.39	140
Dunphy, NV	29	12/31/70 - 2/2/71	-	-	0.55[a]	200
Elgin, NV	30	12/30/71 - 1/12/72	0.6	0.4	0.48	180
Elko, NV	31	12/31/70 - 2/2/71	-	-	0.49[a]	180
Ely, NV	32	12/29/70 - 1/11/72	1.0	0.2	0.75	270[b]
Eureka Maint. Sta., NV	33	12/29/70 - 1/12/72	0.6	0.3	0.41	150

Table 2 1971 Summary of Background Radiation Doses for the Dosimetry Network (Continued)

Station Location	Map No.	Measurement Period	Background Dose Equivalent Rate (mrem/d) Max.	Min.	Avg.	Annual Background Dose (mrem/a)
Furnace Creek, CA	34	12/30/70 - 1/6/72	0.4	0.3	0.34	120
Gardner Ranch, NV	35	12/30/70 - 1/13/72	0.6	0.4	0.52	190
Garrison, UT	36	12/29/70 - 1/12/72	0.5	0.3	0.37	140
Geyser Maint. Sta., NV	37	12/29/70 - 1/10/72	0.5	0.3	0.41	150
Goldfield, NV	38	12/30/70 - 1/11/72	0.7	0.4	0.54	200
Groom Lake, NV	39	12/30/70 - 1/10/72	0.4	0.2	0.33	120
Halleck, NV	40	12/31/70 - 2/3/71	-	-	0.53[a]	190
Hancock Summit, NV	41	12/29/70 - 1/10/72	0.7	0.4	0.56	200
Hiko, NV	42	12/29/70 - 1/10/72	0.6	0.2	0.39	140
Hot Creek Ranch, NV	43	12/29/70 - 1/11/72	0.6	0.3	0.44	160
Independence, CA	44	12/29/70 - 1/6/72	0.5	0.3	0.42	150
Indian Springs, NV	45	12/29/70 - 1/6/72	0.8	0.3	0.60	220
Koynes, NV	46	12/29/70 - 1/10/72	0.6	0.3	0.41	150
Las Vegas (Placak), NV	47	12/31/70 - 1/12/72	0.4	0.2	0.30	110
Las Vegas (USDI), NV	48	12/31/70 - 1/7/72	0.4	0.2	0.29	110
Lathrop Wells, NV	49	12/29/70 - 1/5/72	0.6	0.4	0.49	180
Littlefield, AZ	50	12/29/70 - 1/10/72	0.5	0.2	0.41	150
Lockes Ranch, NV	51	12/30/70 - 1/13/72	0.5	0.3	0.41	150
Logandale, NV	52	12/29/70 - 1/10/72	0.5	0.1	0.36	130
Lone Pine, CA	53	12/29/70 - 1/6-72	0.5	0.4	0.48	180
Lida, NV	54	12/30/70 - 1/10/72	0.6	0.4	0.48	170
Lida Junction, NV	55	12/30/70 - 1/10/72	0.6	0.4	0.52	190
Lund, NV	56	12/29/70 - 1/11/72	0.5	0.3	0.36	130
Manhattan, NV	57	12/29/70 - 1/12/72	0.8	0.4	0.64	230
Mesquite, NV	58	12/29/70 - 1/10/72	0.5	0.2	0.37	140
Modena, UT	59	12/30/70 - 1/11/72	0.7	0.4	0.54	200
Montgomery Pass, NV	60	12/30/70 - 1/6/72	0.7	0.3	0.52	190
Nevada Farms, NV	61	12/29/70 - 1/10/72	0.7	0.4	0.51	190
New Castle, UT	62	12/30/70 - 1/11/72	0.6	0.4	0.46	170
Nuclear Eng. Co., NV	67	12/30/70 - 1/6/72	0.7	0.4	0.58	210
Nyala, NV	68	12/30/70 - 1/11/72	0.6	0.2	0.39	140
Oasis, NV	69	12/31/70 - 2/1/71	-	-	0.53[a]	190

Table 2 1971 Summary of Background Radiation Doses for the Dosimetry Network (Continued)

Station Location	Map No.	Measurement Period	Background Dose Equivalent Rate (mrem/d) Max.	Min.	Avg.	Annual Background Dose (mrem/a)
...acha, CA	70	12/29/70 - 1/6/72	0.5	0.3	0.38	140
...rump, NV	71	12/31/70 - 1/4/72	0.5	0.2	0.36	130
...e Creek Ranch, NV	72	12/29/70 - 1/10/72	0.6	0.4	0.52	190
...che, NV	73	12/30/70 - 1/11/72	0.5	0.2	0.37	140
...en City Summit, NV	74	12/29/70 - 1/10/72	0.8	0.4	0.57	210
...dsburg, CA	75	12/29/70 - 1/6/72	0.4	0.2	0.37	140
...ed Ranch, NV	76	12/29/70 - 1/10/72	0.7	0.3	0.48	180
...dgecrest, CA	77	12/29/70 - 1/6/72	0.5	0.3	0.40	150
...und Mountain, NV	78	12/29/70 - 1/12/72	0.8	0.5	0.68	250
...by Valley, NV	79	1/1/71 - 2/4/71	-	-	0.41[a]	150
...t. George, UT	80	12/29/70 - 1/11/72	0.4	0.2	0.33	120
...cotty's Junction, NV	81	12/30/70 - 1/10/72	0.6	0.3	0.52	190
...elbach Ranch, NV	82	12/29/70 - 1/5/72	0.7	0.4	0.53	190
...hell Oil Site, NV	83	12/30/70 - 1/13/72	0.4	0.2	0.32	120
...hoshone, CA	84	12/31/70 - 1/4/72	0.5	0.3	0.42	150
...ite C, NV	85	12/29/70 - 1/11/72	0.7	0.4	0.51	190
...pringdale, NV	86	12/30/70 - 1/5/72	0.6	0.4	0.52	190
...pring Meadows, NV	87	12/30/70 - 1/5/72	0.4	0.3	0.35	130
...unnyside, NV	88	12/29/70 - 1/11/72	0.5	0.3	0.38	140
...empiute, NV	89	12/29/70 - 1/10/72	0.7	0.3	0.46	170
...onopah, NV	90	12/29/70 - 1/11/72	0.8	0.4	0.66	240
...onopah Airport, NV	91	12/29/70 - 1/11/72	1.0	0.4	0.56	200
...onopah Test Range, NV	92	3/2/71 - 1/11/72	0.6	0.4	0.49	180
Twin Springs Ranch, NV	93	12/29/70 - 1/10/72	0.7	0.4	0.49	180
...rsine, NV	94	12/30/70 - 1/11/72	0.6	0.3	0.50	180
Valley of Fire, NV	95	12/29/70 - 1/10/72	0.5	0.3	0.39	140
Warm Springs, NV	96	12/29/70 - 1/11/72	1.4	0.5	0.83	300[c]
Warm Springs Ranch, NV	97	12/29/70 - 1/10/72	0.4	0.2	0.30	110
Wells, NV	98	1/1/71 - 2/2/71	-	-	0.57[a]	210
Wendover, UT	99	12/31/70 - 2/1/71	-	-	0.36[a]	130

[a] = Average is only for one monthly measurement period; station was terminated in February.

[b] = Elevated value is due to ^{137}Cs check source near TLD station. The 1970 value was 150mrem/

[c] = Elevated value due to nearby stream containing ^{226}Ra and daughters.

Table 3 Anomalous TLD Readings in 1971

Personnel TLD's

Personnel Location	Map No.	Measurement Period Issue Date	Collection Date	TLD Readings (mrem)
Blue Jay, NV	13	02/03/71 -	03/03/71	52
		06/09/71 -	07/15/71	190
		08/10/71 -	09/09/71	150
		10/05/71 -	11/16/71	250
Beatty, NV	8	03/11/71 -	04/14/71	30,000

Station TLD's

Station Location	Map No.	Measurement Period Issue Date	Collection Date	TLD Readings (mrem)		
Nuclear Eng. Co., NV	67	12/30/70 -	02/03/71	20	23	490[a]
		02/03/71 -	03/09/71	20	12	2300[a]
		04/15/71 -	05/11/71	11	73[a]	90[a]
		05/11/71 -	06/09/71	17	17	44[a]
		10/05/71 -	11/18/71	23	1200[a]	1200[a]
		12/02/71 -	01/06/72	7200[a]	140[a]	16
Tonopah, NV	90	09/08/71 -	10/04/71	34	17	19

[a] = Anomalous values

Table 4. Analytical Procedures for Milk and Water

Type of Analysis	Analytical Equipment	Counting Period (min)	Analytical Procedures	Sample Size (liter)	Detection Limit (10^{-9} uCi/ml or pCi/l)[c]
Gamma Spectroscopy	Gamma spectrometer with 4-inch-thick by 4-inch diameter NaI (Tl-activated) crystal with input to 200 channels (0-2 MeV) of 400-channel, pulse-height analyzer.	10-40	Radionuclide concentrations quantitated from gamma spectrometer data by computer using the matrix technique.	3.5	Generally 10 for most common fallout radionuclides in a simple spectrum.
^{89}Sr-^{90}Sr	Low-background-thin-window, gas-flow proportional counter with a 2.25" diameter window (80 μg/cm).	50	Chemical separation by ion exchange. Separated sample counted successively; activity calculated by simultaneous equations.	1.0	$^{89}Sr \approx 5^{a}$ $^{90}Sr \approx 2^{a}$
^{3}H	Automatic liquid scintillation counter with output printer.	100	Sample prepared by distillation.	0.005	$\approx 400^{ab}$
$^{238-239}Pu$, $^{234,235,238}U$	Alpha spectrometer with 45 mm^2, 300 um depletion depth silicon surface barrier detectors operated in vacuum chambers.	1000-1400	Sample is digested with acid, separated by ion exchange, electroplated on stainless steel planchet and counted by alpha spectrometry.	1	2×10^{-11}

Table 4 Analytical Procedures for Milk and Water (cont'd)

Type of Analysis	Analytical Equipment	Counting Period (min)	Analytical Procedures	Sample Size (liter)	Detection Limit (10^{-9} μCi/ml or pCi/l)[c]
gross U	Turner fluorometer		Sample is fused into a pellet with Na-K flux and the fluorescence is determined under ultraviolet light.	2.5×10^{-4}	≈ 0.001μg/ml
gross alpha gross beta	Low-level end window, gas flow proportional counter with a 2½" diameter window (80μg/cm²)	50	Sample evaporated; residue counted.	0.2	$\alpha \approx 2^{a}$ $\beta \approx 2^{a}$

[a] The detection limit for a given sample is defined as the 2-sigma counting error when the measured concentration is < the 2 sigma counting error.

[b] The detection limit for samples analyzed during July and thereafter was ≈320pCi/l.

[c] Except gross U which is given as μg/ml.

Table 5 1971 Summary of Analytical Results for the Milk Surveillance Network

Sampling Location	Map No.	Sample Type[a]	No. of Samples	Type of Radioactivity	Radioactivity Conc. 10^{-9}µCi/ml or pCi/l C_{max}	C_{min}	C_{avg}
Bishop, CA Sierra Farms	1	11	12	^{137}Cs	20	<10	<10
				^{89}Sr	9	<2	<5
				^{90}Sr	4	<1	<2
				^{3}H	NA	NA	NA
Hinkley, CA Bill Nelson Dairy	2	12	12	^{137}Cs	<10	<10	<10
				^{89}Sr	4	<1	<4
				^{90}Sr	3	<1	<2
				^{3}H	NA	NA	NA
Independence, CA Smith Ranch	3	13	7	^{137}Cs	10	<10	<10
				^{89}Sr	5	<2	<4
				^{90}Sr	3	<2	<2
				^{3}H	NA	NA	NA
Olancha, CA[b] Hunter Ranch	4	13	2	^{137}Cs	<10	<10	<10
				^{89}Sr	<5	<2	<4
				^{90}Sr	3	<1	<2
				^{3}H	NA	NA	NA
Alamo, NV Wright Dairy	5	12	12	^{137}Cs	20	<10	<10
				^{89}Sr	10	<2	<5
				^{90}Sr	5	<2	<3
				^{3}H	NA	NA	NA
Austin, NV Triple T Ranch	6	13	11	^{137}Cs	40	10	<20
				^{89}Sr	7	<2	<4
				^{90}Sr	7	<1	<3
				^{3}H	1300	410	760

Table 5 1971 Summary of Analytical Results for the Milk Surveillance Network

Sampling Location	Map No.	Sample Type[a]	No. of Samples	Type of Radio-activity	Radioactivity Conc. 10^{-9}µCi/ml or pCi/l C_{max}	C_{min}	C_{avg}
Austin, NV							
Young's Ranch	7	13	1	^{137}Cs	10	-	-
				^{89}Sr	NA	-	-
				^{90}Sr	NA	-	-
				^{3}H	NA	-	-
Belmont, NV							
Pine Creek Ranch	8	13	10	^{137}Cs	70	30	50
				^{89}Sr	9	<4	<5
				^{90}Sr	10	<1	<7
				^{3}H	NA	NA	NA
Beowawe, NV[b]							
Friesen Ranch	9	13	1	^{137}Cs	20	-	-
				^{89}Sr	<5	-	-
				^{90}Sr	6	-	-
				^{3}H	NA	-	-
Caliente, NV							
Young Ranch	10	13	8	^{137}Cs	10	<10	<10
				^{89}Sr	<5	<2	<4
				^{90}Sr	3	<1	<2
				^{3}H	NA	NA	NA
Currant, NV							
Blue Eagle Ranch	11	13	8	^{137}Cs	40	<10	<20
				^{89}Sr	<5	<3	<5
				^{90}Sr	7	2	<4
				^{3}H	NA	NA	NA
Currie, NV[b]							
Bill Lear Ranch	12	13	2	^{137}Cs	20	10	20
				^{89}Sr	<5	<5	<5
				^{90}Sr	8	7	<8
				^{3}H	NA	NA	NA

Table 5 1971 Summary of Analytical Results for the Milk Surveillance Network

Sampling Location	Map No.	Sample Type[a]	No. of Samples	Type of Radio-activity	Radioactivity Conc. 10^{-9}µCi/ml or pCi/l C_{max}	C_{min}	C_{avg}
Deeth, NV[b]							
Lotspeich Ranch	13	13	2	^{137}Cs	20	20	20
				^{89}Sr	<5	<5	<5
				^{90}Sr	6	4	5
				^{3}H	NA	NA	NA
Duckwater, NV							
Halstead Ranch	14	13	11	^{137}Cs	40	<10	<20
				^{89}Sr	23	<2	<7
				^{90}Sr	6	<1	<3
				^{3}H	NA	NA	NA
Elko, NV[b]							
Anchor S Ranch	15	13	1	^{137}Cs	<10	-	-
				^{89}Sr	<5	-	-
				^{90}Sr	3	-	-
				^{3}H	NA	-	-
Eureka, NV							
Martin Ranch	16	13	11	^{137}Cs	40	20	30
				^{89}Sr	26	<3	<8
				^{90}Sr	16	4	9
				^{3}H	NA	NA	NA
Hiko, NV							
Schofield Dairy	17	12	12	^{137}Cs	10	<10	<10
				^{89}Sr	12	<2	<4
				^{90}Sr	4	<2	<3
				^{3}H	1000	290	<420
Indian Springs, NV							
Cambern Ranch	18	13	2	^{137}Cs	<10	<10	<10
				^{89}Sr	4	<2	<3
				^{90}Sr	3	<1	<2
				^{3}H	NA	NA	NA

Table 5 1971 Summary of Analytical Results for the Milk Surveillance Network

Sampling Location	Map No.	Sample Type[a]	No. of Samples	Type of Radio-activity	Radioactivity Conc. 10^{-9} µCi/ml or pCi/l C_{max}	C_{min}	C_{avg}
Indian Springs, NV							
Indian Springs Ranch	19	13	7	^{137}Cs	<10	<10	<10
				^{89}Sr	<5	<2	<4
				^{90}Sr	3	<1	<2
				^{3}H	NA	NA	NA
Las Vegas, NV							
Anderson Dairy	20	11	12	^{137}Cs	<10	<10	<10
				^{89}Sr	5	<2	<4
				^{90}Sr	3	<2	<2
				^{3}H	NA	NA	NA
Las Vegas, NV							
Arden Dairy	21	11	12	^{137}Cs	<10	<10	<10
				^{89}Sr	<5	<2	<5
				^{90}Sr	3	<1	<2
				^{3}H	NA	NA	NA
Las Vegas, NV							
LDS Dairy Farms	22	12	12	^{137}Cs	<10	<10	<10
				^{89}Sr	3	<1	<3
				^{90}Sr	7	<1	<2
				^{3}H	420	<290	<360
Lathrop Wells, NV							
Eastman Ranch	23	13	7	^{137}Cs	<10	<10	<10
				^{89}Sr	<5	<2	<5
				^{90}Sr	<3	<2	<2
				^{3}H	NA	NA	NA
Lathrop Wells, NV							
Ellis Ranch	24	13	1	^{137}Cs	<10	-	-
				^{89}Sr	3	-	-
				^{90}Sr	2	-	-
				^{3}H	NA	-	-

Table 5 1971 Summary of Analytical Results for the Milk Surveillance Network

Sampling Location	Map No.	Sample Type[a]	No. of Samples	Type of Radio-activity	Radioactivity Conc. 10^{-9}µCi/ml or pCi/l C_{max}	C_{min}	C_{avg}
Lathrop Wells, NV							
Mills Ranch	25	13	2	^{137}Cs	<10	<10	<10
				^{89}Sr	<3	<1	<2
				^{90}Sr	9	4	<7
				^{3}H	NA	NA	NA
Lida, NV							
Lida Livestock	26	13	8	^{137}Cs	20	<10	<10
				^{89}Sr	<5	2	<4
				^{90}Sr	7	2	4
				^{3}H	NA	NA	NA
Logandale, NV							
Vegas Valley Dairy	27	12	10	^{137}Cs	<10	<10	<10
				^{89}Sr	<5	<2	<4
				^{90}Sr	5	<1	<3
				^{3}H	NA	NA	NA
Lund, NV							
McKenzie Dairy	28	12	12	^{137}Cs	20	<10	<10
				^{89}Sr	<5	<2	<4
				^{90}Sr	6	3	<4
				^{3}H	1100	<290	<440
McGill, NV							
Larsen Ranch	29	13	4	^{137}Cs	10	<10	<10
				^{89}Sr	5	2	<4
				^{90}Sr	4	1	<2
				^{3}H	NA	NA	NA
Mesquite, NV							
Hughes Bros. Dairy	30	12	11	^{137}Cs	20	<10	<10
				^{89}Sr	<5	<2	<4
				^{90}Sr	3	<1	<2
				^{3}H	520	<320	<370

Table 5 1971 Summary of Analytical Results for the Milk Surveillance Network

Sampling Location	Map No.	Sample Type[a]	No. of Samples	Type of Radio-activity	Radioactivity Conc. 10^{-9} µCi/ml or pCi/l C_{max}	C_{min}	C_{avg}
Moapa, NV							
Searles Dairy	31	12	12	^{137}Cs	10	<10	<10
				^{89}Sr	<5	<2	<4
				^{90}Sr	4	<2	<3
				^{3}H	NA	NA	NA
Nyala, NV							
Sharp's Ranch	32	13	12	^{137}Cs	20	<10	<10
				^{89}Sr	6	1	<4
				^{90}Sr	5	<2	<3
				^{3}H	720	<310	<400
Pahrump, NV							
Owens Ranch	33	13	12	^{137}Cs	10	<10	<10
				^{89}Sr	<5	<1	<3
				^{90}Sr	2	<1	<1
				^{3}H	NA	NA	NA
Panaca, NV							
Lee Ranch	34	13	12	^{137}Cs	40	<10	<20
				^{89}Sr	27	<2	<7
				^{90}Sr	12	<1	<4
				^{3}H	NA	NA	NA
Round Mtn, NV							
Karl Berg Ranch	35	13	8	^{137}Cs	20	<2	<10
				^{89}Sr	<5	4	<4
				^{90}Sr	6	<2	<3
				^{3}H	NA	NA	NA
Shoshone, NV							
Kirkaby Ranch	36	13	9	^{137}Cs	20	<10	<10
				^{89}Sr	<5	<2	<4
				^{90}Sr	4	2	<3
				^{3}H	NA	NA	NA

Table 5. 1971 Summary of Analytical Results for the Milk Surveillance Network

Sampling Location	Map No.	Sample Type[a]	No. of Samples	Type of Radioactivity	Radioactivity Conc. 10^{-9}µCi/ml or pCi/l C_{max}	C_{min}	C_{avg}
Springdale, NV McCurdy Ranch	37	13	12	^{137}Cs	20	<10	<10
				^{89}Sr	<5	<1	<4
				^{90}Sr	4	<1	<2
				^{3}H	NA	NA	NA
				^{131}I	730	<10	<30
Wells, NV[b] Willow Creek Ranch	38	13	2	^{137}Cs	10	<10	<10
				^{89}Sr	<5	<5	<5
				^{90}Sr	5	4	5
				^{3}H	NA	NA	NA
Garrison, UT Gonders Ranch	39	13	8	^{137}Cs	20	<10	<10
				^{89}Sr	<5	<2	<4
				^{90}Sr	3	<2	<2
				^{3}H	NA	NA	NA
Newcastle, UT Newcastle Dairy	40	12	11	^{137}Cs	20	<10	<10
				^{89}Sr	5	<2	<4
				^{90}Sr	4	<1	<2
				^{3}H	NA	NA	NA
St. George, UT R. Cox Dairy	41	12	11	^{137}Cs	20	<10	<10
				^{89}Sr	<5	<2	<4
				^{90}Sr	5	<1	<2
				^{3}H	NA	NA	NA

[a] 11 = Pasteurized Milk
12 = Raw Milk from Grade A Producer(s)
13 = Raw Milk from family cow(s)

[b] = Discontinued

NA = Not Analyzed

Table 6 1971 Summary of Analytical Results for the Water Surveillance Network

Sampling Location	Map No.	Sample Type[a]	No. of Samples	Type of Radio-activity	Radioactivity Conc. 10^{-9}μCi/ml or pCi/l C_{max}	C_{min}	C_{avg}	% of Guide
Bishop, CA								
Fish & Game Office	1	24[d]	12	gross α	4	<2	<2	<7
				gross β	7	<2	<4	<13
				^3H	NA	NA	NA	-
Bishop, CA								
Owens River 3 mi E.	2	22	12	gross α	7	2	<4	<13
				gross β	15	15	7	23
				^3H	NA	NA	NA	-
Death Valley Jct, CA								
Lila's Cafe	3	24[d]	12	gross α	10	2	<7	<23
				gross β	14	8	11	37
				^3H	<400	<300	<360	<1
Furnace Creek, CA								
Pond	4	21	12	gross α	7	3	<5	<17
				gross β	17	8	10	33
				^3H	NA	NA	NA	-
Furnace Creek, CA								
Visitors Center	5	24[d]	12	gross α	7	<2	<4	<13
				gross β	13	8	10	33
				^3H	NA	NA	NA	-
Hinkley, CA								
Bill Nelson Dairy	6	23[d]	12	gross α	14	<3	<9	<30
				gross β	17	<2	<8	<27
				^3H	NA	NA	NA	-
Little Lake, CA								
Little Lake Ranch	7	21	9	gross α	25	3	11	37
				gross β	27	6	17	57
				^3H	NA	NA	NA	-
Lone Pine, CA								
Diaz Lake	8	21	12	gross α	24	<2	<15	<50
				gross β	24	9	18	60
				^3H	NA	NA	NA	-

Table 6 1971 Summary of Analytical Results for the Water Surveillance Network

Sampling Location	Map No.	Sample Type[a]	No. of Samples	Type of Radio-activity	Radioactivity Conc. 10^{-9}µCi/ml or pCi/l C_{max}	C_{min}	C_{avg}	% of Guide
Lone Pine, CA Forest Ranger Station	9	24[d]	12	gross α	5	<2	<2	<7
				gross β	9	<2	<4	<13
				^3H	NA	NA	NA	-
Olancha, CA Haiwee Reservoir	10	21	12	gross α	9	3	6	20
				gross β	10	4	7	23
				^3H	NA	NA	NA	-
Ridgecrest, CA City Hall	11	24[d]	12	gross α	8	<2	<3	<10
				gross β	6	<2	<4	<13
				^3H	NA	NA	NA	-
Shoshone, CA Chevron Service Sta.	12	24[d]	12	gross α	10	<2	<6	<20
				gross β	22	15	19	63
				^3H	NA	NA	NA	-
Adaven, NV Simpson Ranch	13	22[d]	12	gross α	9	3	6	20
				gross β	9	2	<4	<13
				^3H	NA	NA	NA	-
Alamo, NV Butler Ranch	14	27[d]	12	gross α	8	2	<5	<17
				gross β	10	<2	<5	<17
				^3H	NA	NA	NA	-
Alamo, NV Pahranagat Lake	15	21	12	gross α	41	17	27	90
				gross β	90	23	35	117
				^3H	NA	NA	NA	-
Alamo, NV Wright Dairy	16	24[d]	12	gross α	9	<2	<5	<17
				gross β	21	10	13	43
				^3H	NA	NA	NA	-

Table 6 1971 Summary of Analytical Results for the Water Surveillance Network

Sampling Location	Map No.	Sample Type[a]	No. of Samples	Type of Radio-activity	Radioactivity Conc. 10^{-9} µCi/ml or pCi/l C_{max}	C_{min}	C_{avg}	% of Guide
Ash Meadows, NV								
Ash Meadows Lodge	17	23[d]	12	gross α	11	5	<7	<23
				gross β	24	13	18	60
				^3H	<400	<310	<360	<1
Ash Meadows, NV								
Ash Meadows Pond	18	21	10	gross α	18	3	10	33
				gross β	30	11	16	53
				^3H	NA	NA	NA	-
Austin, NV								
Chevron Service Sta.	19	24[d]	11	gross α	48	<3	<28	<93
				gross β	26	<3	<17	<57
				^3H	NA	NA	NA	-
Battle Mt, NV[b]								
Glen's Chevron Sta.	20	24[d]	2	gross α	4	<2	<2	<7
				gross β	6	5	5	17
				^3H	NA	NA	NA	-
Beatty, NV								
Richfield Ser. Sta.	21	24[d]	12	gross α	20	3	<11	<33
				gross β	17	8	12	40
				^3H	<400	<330	<370	<1
Blue Diamond, NV								
Post Office	22	24[d]	11	gross α	6	<2	<4	<13
				gross β	12	<2	<4	<13
				^3H	<400	<290	<330	<1
Blue Jay, NV								
Highway Maint. Sta.	23	23[d]	12	gross α	4	<2	<3	<10
				gross β	10	3	5	17
				^3H	NA	NA	NA	-
Cactus Springs, NV								
Mobile Ser. Sta.	24	24[d]	12	gross α	6	<2	<3	<10
				gross β	4	<2	<3	<10
				^3H	<400	<290	<360	<1

Table 6 1971 Summary of Analytical Results for the Water Surveillance Network

Sampling Location	Map No.	Sample Type[a]	No. of Samples	Type of Radio-activity	Radioactivity Conc. 10^{-9}µCi/ml or pCi/l C_{max}	C_{min}	C_{avg}	% of Guide
Caliente, NV Agriculture Ext. Sta.	25	24[d]	12	gross α	12	2	<7	<23
				gross β	10	<3	<5	<17
				^3H	NA	NA	NA	-
Caliente, NV Meadow Valley Wash	26	22	12	gross α	18	4	<8	<27
				gross β	40	6	18	60
				^3H	NA	NA	NA	-
Carlin, NV[b] Carlin Conoco Sta.	27	24[d]	2	gross α	5	4	5	17
				gross β	7	6	7	23
				^3H	NA	NA	NA	-
Clark Sta., NV Five Mile Ranch	28	27[d]	12	gross α	<4	<2	<3	<10
				gross β	10	<3	<7	<23
				^3H	NA	NA	NA	-
Coyote Summit, NV Sand Springs Well	29	23	12	gross α	47	<3	<14	<47
				gross β	24	5	11	37
				^3H	NA	NA	NA	-
Currant, NV Currant Pond	30	21	12	gross α	22	6	12	40
				gross β	13	<3	<6	<20
				^3H	NA	NA	NA	-
Currant, NV Currant Ranch Cafe	31	24[d]	12	gross α	14	6	8	27
				gross β	12	<3	<6	<20
				^3H	NA	NA	NA	-
Currie, NV[b] Kitt Lear Ranch	32	23[d]	2	gross α	11	7	9	30
				gross β	13	8	11	37
				^3H	NA	NA	NA	-

Table 6 1971 Summary of Analytical Results for the Water Surveillance Network

Sampling Location	Map No.	Sample Type[a]	No. of Samples	Type of Radio-activity	Radioactivity Conc. 10^{-9} µCi/ml or pCi/l C_{max}	C_{min}	C_{avg}	% of Guide
Diablo, NV								
Highway Maint. Sta.	33	23[d]	11	gross α	6	<2	<3	<10
				gross β	10	<3	<6	<20
				^3H	NA	NA	NA	-
Diablo, NV								
Reed Ranch	34	21	12	gross α	37	8	23	77
				gross β	85	8	30	100
				^3H	NA	NA	NA	-
Elgin, NV								
Water Tower	35	24[d]	12	gross α	13	2	9	30
				gross β	15	6	10	33
				^3H	NA	NA	NA	-
Elko, NV[b]								
Phillips 66 Truck Stop	36	24[d]	2	gross α	13	11	12	40
				gross β	20	20	20	67
				^3H	NA	NA	NA	-
Ely, NV								
Chevron Ser. Sta.	37	24[d]	12	gross α	7	2	4	13
				gross β	6	<2	<4	<13
				^3H	NA	NA	NA	-
Ely, NV								
Comins Lake	38	21	7	gross α	21	<6	<11	<37
				gross β	64	19	45	150
				^3H	NA	NA	NA	-
Eureka, NV								
Chevron Ser. Sta.	39	24[d]	11	gross α	8	<3	<4	<13
				gross β	13	<2	<6	<20
				^3H	NA	NA	NA	-
Glendale, NV								
Chevron Ser. Sta.	40	24[d]	12	gross α	11	4	<5	<17
				gross β	13	7	10	33
				^3H	NA	NA	NA	-

Table 6 1971 Summary of Analytical Results for the Water Surveillance Network

Sampling Location	Map No.	Sample Type[a]	No. of Samples	Type of Radio-activity	Radioactivity Conc. 10^{-9}µCi/ml or pCi/l C_{max}	C_{min}	C_{avg}	% of Guide
Glendale, NV Muddy River	41	22	12	gross α	14	<2	<8	<27
				gross β	33	11	18	60
				^3H	NA	NA	NA	-
Goldfield, NV Alkali Springs	42	21	11	gross α	12	<2	<6	<20
				gross β	41	7	24	80
				^3H	NA	NA	NA	-
Goldfield, NV Chevron Ser. Sta.	43	24[d]	12	gross α	5	<2	<4	<13
				gross β	6	2	<4	<13
				^3H	NA	NA	NA	-
Hawthorne, NV[c] Walker Lake	44	21	4	gross α	24	<2	<9	<30
				gross β	340	110	280	933
				^3H	NA	NA	NA	-
Hiko, NV Crystal Springs	45	27[d]	12	gross α	11	5	8	27
				gross β	16	5	8	27
				^3H	NA	NA	NA	-
Hiko, NV Schofield Dairy	46	24[d]	12	gross α	40	20	26	87
				gross β	37	26	29	97
				^3H	NA	NA	NA	-
Indian Springs Chevron Ser. Sta.	47	24[d]	12	gross α	7	<3	<5	<17
				gross β	7	<2	<4	<13
				^3H	<400	<290	<360	<1
Las Vegas, NV Cal-Nev Jet Fuels	48	23[d]	12	gross α	5	2	<4	<13
				gross β	8	<3	<4	<13
				^3H	<400	<310	<370	<1

Table 6 1971 Summary of Analytical Results for the Water Surveillance Network

Sampling Location	Map No.	Sample Type[a]	No. of Samples	Type of Radio-activity	Radioactivity Conc. 10^{-9}µCi/ml or pCi/l C_{max}	C_{min}	C_{avg}	% of Guide
Las Vegas, NV								
Cunningham Ranch	49	23[d]	12	gross α	11	<2	<4	<13
				gross β	7	<2	<3	<10
				^3H	<400	<280	<360	<1
Las Vegas, NV								
Craig Ranch Golf Crse.	50	23[d]	12	gross α	8	<2	<5	<17
				gross β	7	<2	<4	<13
				^3H	<400	<290	<360	<1
Las Vegas, NV								
Desert Game Range	51	23[d]	12	gross α	13	<2	<6	<20
				gross β	8	3	5	<17
				^3H	<400	<290	<370	<1
Las Vegas, NV								
Desert Game Rge. Pond	52	21	11	gross α	7	2	<4	<13
				gross β	5	<2	<3	<10
				^3H	<400	<310	<380	<1
Las Vegas, NV								
Francis Residence	53	23[d]	4	gross α	<6	<4	<5	<17
				gross β	6	<3	<4	13
				^3H	<340	<330	<340	<1
Las Vegas, NV[b]								
Frommer Residence	54	23[d]	7	gross α	10	2	4	13
				gross β	4	<2	<3	<10
				^3H	<400	<310	<390	<1
Las Vegas, NV								
Lab II WERL	55	24[d]	12	gross α	9	<4	<5	<17
				gross β	11	<2	<6	<20
				^3H	1400	<400	<840	<1
Las Vegas, NV								
Lake Mead Vegas Wash	56	21	12	gross α	7	<2	<5	<17
				gross β	11	7	9	30
				^3H	1500	720	1100	<1

Table 6 1971 Summary of Analytical Results for the Water Surveillance Network

Sampling Location	Map No.	Sample Type[a]	No. of Samples	Type of Radio-activity	Radioactivity Conc. 10^{-9}µCi/ml or pCi/l C_{max}	C_{min}	C_{avg}	% of Guide
Las Vegas, NV								
LDS Dairy Farms	57	24[d]	12	gross α	13	<2	<7	<23
				gross β	18	13	15	50
				^3H	<400	<310	<360	<1
Las Vegas, NV								
Lloyd Ranch	58	23[d]	12	gross α	10	2	<6	<20
				gross β	11	2	6	20
				^3H	<400	<310	<370	<1
Las Vegas, NV								
LV Water Dist. Well 28	59	24[d]	12	gross α	6	<2	<3	<10
				gross β	8	<2	<4	<13
				^3H	<400	<290	<360	<1
Las Vegas, NV								
Municipal Golf Crse.	60	23	12	gross α	5	<2	<4	<13
				gross β	6	<2	<3	<10
				^3H	<400	<290	<360	<1
Las Vegas, NV								
Tule Springs	61	23[d]	12	gross α	7	<3	<4	<13
				gross β	7	<2	<4	<13
				^3H	<400	290	<360	<1
Las Vegas, NV								
Tule Springs Pond	62	21	12	gross α	9	<2	<6	<20
				gross β	5	2	<4	<13
				^3H	NA	NA	NA	-
Las Vegas, NV								
Vegas Estates	63	23[d]	12	gross α	9	4	<6	<20
				gross β	17	10	13	43
				^3H	<400	<300	<360	<1
Lathrop Wells, NV								
Texaco Ser. Sta.	64	24[d]	12	gross α	<4	<2	<3	<10
				gross β	6	<2	<3	<10
				^3H	<400	<320	<360	<1

Table 6 1971 Summary of Analytical Results for the Water Surveillance Network

Sampling Location	Map No.	Sample Type[a]	No. of Samples	Type of Radio-activity	Radioactivity Conc. 10^{-9}µCi/ml or pCi/l C_{max}	C_{min}	C_{avg}	% of Guide
Lida, NV								
Lida Livestock	65	24[d]	12	gross α	8	2	<4	<13
				gross β	6	<2	<4	<13
				^3H	NA	NA	NA	-
Lida, NV								
Pond at Storage Tank	66	21	9	gross α	7	<2	<4	<13
				gross β	11	<3	<6	<20
				^3H	NA	NA	NA	-
Lida Jct, NV								
Cafe Garage	67	23[d]	12	gross α	11	<2	<5	<17
				gross β	17	3	13	43
				^3H	NA	NA	NA	-
Lund, NV								
Gardner Grocery	68	23[d]	12	gross α	9	3	5	<17
				gross β	6	<2	<4	<13
				^3H	NA	NA	NA	-
Manhattan, NV								
Manhattan Trading Post	69	24[d]	12	gross α	24	4	<15	<50
				gross β	13	<2	<7	<23
				^3H	NA	NA	NA	-
Manhattan, NV								
Seyler Reservoir	70	21	7	gross α	26	4	17	57
				gross β	73	10	34	113
				^3H	NA	NA	NA	-
Mercury, NV								
Area 51	71	24[d]	12	gross α	6	<2	<3	<10
				gross β	6	<2	<4	<13
				^3H	NA	NA	NA	-
Moapa, NV								
Pederson Valley View Rch.	72	24[d]	12	gross α	8	4	<6	<20
				gross β	15	7	11	37
				^3H	NA	NA	NA	-

Table 6 1971 Summary of Analytical Results for the Water Surveillance Network

Sampling Location	Map No.	Sample Type[a]	No. of Samples	Type of Radio-activity	Radioactivity Conc. 10^{-9}µCi/ml or pCi/l C_{max}	C_{min}	C_{avg}	% of Guide
Mt. Charleston, NV								
Kyle Canyon	73	24[d]	12	gross α	3	<2	<2	<7
				gross β	4	<2	<2	<7
				^3H	<400	<330	<370	<1
Mt. Charleston, NV								
Kyle Canyon Pond	74	21	8	gross α	3	<2	<2	<7
				gross β	64	8	20	67
				^3H	NA	NA	NA	-
Nyala, NV								
Sharp's Ranch	75	23[d]	12	gross α	6	<2	<3	<10
				gross β	14	<2	<4	<13
				^3H	NA	NA	NA	-
Oasis, NV[b]								
Chevron Ser. Sta.	76	23[d]	2	gross α	5	3	4	13
				gross β	6	2	4	13
				^3H	NA	NA	NA	-
Pahrump, NV								
Texaco Ser. Sta.	77	24[d]	12	gross α	5	<2	<3	<10
				gross β	6	<2	<3	<10
				^3H	NA	NA	NA	-
Pioche, NV								
County Courthouse	78	24[d]	12	gross α	5	<2	<3	<10
				gross β	14	<2	<5	<17
				^3H	NA	NA	NA	-
Round Mt., NV								
Mobil Ser. Sta.	79	24[d]	12	gross α	9	<2	<4	<13
				gross β	7	<2	<4	<13
				^3H	NA	NA	NA	-
Ruby Valley, NV[b]								
Fish Hatchery	80	21	1	gross α	4	-	-	-
				gross β	8	-	-	-
				^3H	NA	NA	NA	-

Table 6 1971 Summary of Analytical Results for the Water Surveillance Network

Sampling Location	Map No.	Sample Type[a]	No. of Samples	Type of Radio-activity	Radioactivity Conc. 10^{-9} µCi/ml or pCi/l C_{max}	C_{min}	C_{avg}	% of Guide
Scotty's Jct., NV Chevron Ser. Sta.	81	23[d]	12	gross α	7	<3	<5	<17
				gross β	14	<3	<11	<37
				^3H	<400	<300	<370	<1
Springdale, NV Peacock Ranch	82	27[d]	12	gross α	7	<2	<4	<13
				gross β	16	7	9	30
				^3H	<400	<290	<370	<1
Springdale, NV Pond	83	21	12	gross α	10	4	<7	<23
				gross β	25	10	14	47
				^3H	NA	NA	NA	-
Sunnyside, NV Adam McGill Reservoir	84	21	12	gross α	15	5	8	27
				gross β	14	5	9	30
				^3H	NA	NA	NA	-
Sunnyside, NV Wildlife Mgt. Hdqts.	85	27[d]	12	gross α	6	<2	<3	<10
				gross β	6	<2	<3	<10
				^3H	NA	NA	NA	-
Tonopah, NV David's L & L Motel	86	24[d]	12	gross α	8	<3	<5	<17
				gross β	13	<2	<8	<27
				^3H	NA	NA	NA	-
Tonopah Test Range, NV CP-1	87	24[d]	12	gross α	10	<2	<6	<20
				gross β	24	7	11	37
				^3H	NA	NA	NA	-
Warm Springs, NV Fallini's Pond	88	21	12	gross α	32	10	<21	<70
				gross β	70	5	33	110
				^3H	NA	NA	NA	-

Table 6 1971 Summary of Analytical Results for the Water Surveillance Network

Sampling Location	Map No.	Sample Type[a]	No. of Samples	Type of Radio-activity	Radioactivity Conc. 10^{-9} µCi/ml or pCi/l C_{max}	C_{min}	C_{avg}	% of Guide
Warm Springs, NV Hot Creek Ranch	89	27[d]	10	gross α	8	3	<5	<17
				gross β	18	3	11	37
				^3H	NA	NA	NA	-
Warm Springs, NV Ser. Sta. & Cafe	90	27[d]	10	gross α	39	<5	<21	<10
				gross β	45	22	28	93
				^3H	NA	NA	NA	-
Warm Springs, NV Twin Springs Ranch	91	23[d]	12	gross α	14	<3	<8	<27
				gross β	13	7	10	33
				^3H	NA	NA	NA	-
Wells, NV[b] 4-Way Truck Stop	92	24[d]	2	gross α	5	4	<5	<17
				gross β	8	5	<7	<23
				^3H	NA	NA	NA	-
Cedar City, UT M. D. Baldwin Res.	93	24[d]	12	gross α	5	<2	<3	<10
				gross β	7	<2	<3	<10
				^3H	NA	NA	NA	-
Garrison, UT[c] Pruess Reservoir	94	21	3	gross α	29	13	21	70
				gross β	21	14	17	57
				^3H	NA	NA	NA	-
Garrison, UT Rowley Grocery	95	23[d]	12	gross α	6	2	<4	<13
				gross β	5	<2	<4	<13
				^3H	NA	NA	NA	-
Newcastle, UT Municipal Reservoir	96	21	9	gross α	17	3	10	33
				gross β	18	3	11	37
				^3H	NA	NA	NA	-

Table 6 1971 Summary of Analytical Results for the Water Surveillance Network

Sampling Location	Map No.	Sample Type[a]	No. of Samples	Type of Radio-activity	Radioactivity Conc. 10^{-9} µCi/ml or pCi/l C_{max}	C_{min}	C_{avg}	% of Guide
Newcastle, UT								
Newcastle Dairy	97	24[d]	11	gross α	9	<2	<5	<17
				gross β	13	<2	<7	<23
				^3H	NA	NA	NA	-
St. George, UT								
R. Cox Dairy	98	24[d]	11	gross α	7	<2	<4	<13
				gross β	7	<2	<3	<10
				^3H	NA	NA	NA	-
Wendover, UT								
State Line Cafe	99	24[d]	2	gross α	<2	<2	<2	<7
				gross β	<3	<2	<3	<10
				^3H	NA	NA	NA	-

[a] 21 = Pond, Lake, Reservoir.
22 = Stream, River.
23 = Well.
24 = Community Supply, i.e., a water supply continuously serving 20 or more people or 10 or more residences.
27 = Spring.

[b] = Discontinued.

[c] = Sampled Quarterly.

[d] = Drinking water.

NA = Not Analyzed.

Table 7 Results of Special Water Analyses

Sampling Locations	Collection Data	Radioactivity Concentrations, 10^{-9} μCi/ml ^{40}K	^{226}Ra	U	^{89}Sr	^{90}Sr
Alamo, Nv						
Pahrangat Lake	3/8/67	ND	0.2	NA	1	0.3
	4/27/67	ND	0.2	NA	2	1.3
	5/22/67	ND	0.4	NA	<5	0.3
	6/6/67	ND	NA	NA	<5	0.2
	11/1/67	ND	0.1	23[a]	NA	NA
	11/28/67	ND	0.3	25[a]	NA	NA
	1/23/68	ND	0.3	12[a]	NA	NA
	2/4/68	ND	0.2	19[a]	NA	NA
	3/28/68	ND	0.3	20[a]	NA	NA
	5/28/68	ND	0.2	17[a]	NA	NA
	6/24/68	ND	0.2	13[a]	NA	NA
	7/24/68	ND	0.1	33[a]	NA	NA
	9/9/68	ND	0.1	34[a]	NA	NA
	10/1/68	ND	0.1	32[a]	NA	NA
Ely, Nv						
Comins Lake	10/13/67	ND	NA	NA	<5	<0.1
Hawthorne, Nv						
Walker Lake	6/18/69	ND	NA	NA	<5	<2
	12/10/70	ND	NA	NA	<5	<2
	2/15/72	130	0.4	36 (^{234}U)[b]	<2	<2
				1.1 (^{235}U)[b]		
				33 (^{238}U)[b]		
Manhattan, Nv						
Seyler Reservoir	12/8/70	ND	NA	NA	<5	<2
Warm Springs, Nv						
Fallini's Pond	2/15/68	ND	1.1	21[a]	NA	NA
	3/5/68	ND	1.7	20[a]	NA	NA
	4/3/68	ND	1.3	19[a]	NA	NA
	5/22/68	ND	1.7	39[a]	NA	NA
	9/4/68	ND	5.1	20[a]	NA	NA
	10/15/68	ND	3.0	23[a]	NA	NA
	11/8/68	ND	1.7	15[a]	NA	NA
	1/14/69	ND	1.4	12[a]	NA	NA

Table 7 Results of Special Water Analyses

ND = Not detected.

NA = No analysis.

[a] = Concentration in μg/l determined by fluorometry procedures were converted to μCi/ml by multiplying by factor of 0.7×10^{-9}, specific activity of natural uranium.

[b] = Concentration in μCi/ml determined by alpha spectroscopy procedure.

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