

**OFF-SITE SURVEILLANCE ACTIVITIES OF THE  
SOUTHWESTERN RADIOLOGICAL HEALTH LABORATORY  
from January through June 1964**

by the  
**Southwestern Radiological Health Laboratory  
U. S. Public Health Service  
Department of Health, Education, and Welfare  
Las Vegas, Nevada**

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**This surveillance performed under a Memorandum of  
Understanding (No. SF 54 373)  
for the  
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## ABSTRACT

The Southwestern Radiological Health Laboratory of the U. S. Public Health Service performed off-site radiological surveillance for thirteen announced events and four reactor experiments during the period from January through June 1964. This surveillance is conducted in the public areas surrounding the Nevada Test Site under a Memorandum of Understanding with the U. S. Atomic Energy Commission.

During the six month period, one nuclear event and three reactor experiments released radioactivity which was detected off-site. The majority of surveillance effort was directed toward the Pike Event, an underground nuclear detonation conducted on March 13 which vented and released radioactivity into off-site populated areas. Approximately 1450 various environmental samples were collected and analyzed following this event.

Analysis of all sampling and surveillance performed during the six month period indicates that the safety criteria established by the Atomic Energy Commission for the off-site population were not exceeded by any one or combination of detonations or reactor experiments during the period January through June 1964.

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## I. INTRODUCTION

During the period January through June 1964, thirteen announced underground nuclear tests were conducted by the U. S. Atomic Energy Commission at their Nevada Test Site as a part of Operation Niblick. In addition, four reactor experiments were conducted in May 1964 on the Nuclear Rocket Development Station. The U. S. Public Health Service carried out a program of radiological surveillance of the public areas off site for the Operational Safety Division of the AEC's Nevada Operations Office under a Memorandum of Understanding between the U. S. Atomic Energy Commission (AEC) and the U. S. Public Health Service (PHS).

The Off-Site Radiological Safety Program of the Southwestern Radiological Health Laboratory (SWRHL) conducted its program of radiological monitoring and environmental sampling in the off-site areas surrounding the restricted area enclosed within the Nevada Test Site and the Nellis Air Force Range. This overall complex of the Nevada Test Site (NTS) and the Nellis Air Force Range (NAFR) includes the Nuclear Rocket Development Station (NRDS) and the Tonopha Test Range (TTR) and for simplicity will be called the test range complex throughout this report. Although routine sampling and monitoring was done within a 300-mile radius around the test range complex, surveillance was extended as necessary to provide adequate coverage.

This report describes the methods and equipment used and summarizes the data collected during the six month period.

## II. OPERATIONAL PROCEDURES

### A. GROUND MONITORING

Mobile monitoring teams were deployed in the off-site area before each event to locations most likely to be affected by a release of radioactive material. If a release did occur, the teams conducted a ground monitoring program directed from Control Point headquarters via two-way radio communications. Ground monitoring continued until activity levels became too low to necessitate further monitoring.

Each monitor was equipped with an Eberline E-500B, a Precision Model 111 Standard "Scintillator", a Beckman MX-5, and a Tracerlab AN/PDR T1B. The Eberline E-500B has a range of 0 to 200 milliroentgens per hour (mR/hr) gamma and beta-gamma detection in four scales with an external halogen filled GM tube and a 0 to 2000 mR/hr range from an internal Anton 302 tube. The Precision Model 111 Standard "Scintillator" was used primarily for low level detection since it provides a range of 0 to 5 mR/hr in six scales. The Beckman MX-5 instrument has a range of 0 to 20 mR/hr in three scales. It is equipped with an external Geiger tube with a sliding beta shield. The Tracerlab AN/PDR T1B has a range of 0.05 to 50,000 mR/hr in five scales. This instrument employs an air ionization chamber detector. These instruments are accurate to +20%, and readings can be taken to two significant figures.

### B. DOSE RATE RECORDERS

To supplement the ground monitoring program, Eberline RM-11 dose rate recorders were utilized to document cloud passages at fixed locations, thereby allowing mobile monitoring teams to continue following the release as it moved through the off-site area. These recorders

utilize a Geiger tube detector and operate on 110 V AC. They have a 0.01 to 100 mR/hr range and are accurate to  $\pm 20\%$ . Gamma dose rate is recorded on a 30-hour strip chart.

### C. AERIAL CLOUD TRACKING

A PHS aerial monitoring team was available for each experiment. In the event of a radioactive release, this team, equipped with instruments identical to those used by ground monitors, tracked the effluent. Normally an Air Force U3-A aircraft and a PHS Aero-Commander were used in this tracking mission.

Aerial cloud tracking is essentially used to detect relative radiation intensities and to indicate cloud position, speed and direction. The information thus obtained is utilized to position ground monitors to insure comprehensive ground coverage and subsequently better surveillance.

### D. AERIAL SAMPLING

The aerial sampling program was performed by the Engineering Development Program of the Southwestern Radiological Health Laboratory. The program used two C-45 aircraft for cloud sampling activities. Cloud samples were collected by cryogenic, electrostatic precipitator, and mass air sampling techniques. The methods developed have resulted in measurements of cloud inventories which have been reasonably consistent with determinations made by other organizations.

### E. AIR SAMPLING

The air samplers used were a high volume turbine type impeller powered by an electric motor. The sampler was equipped with a special sampling head designed to accommodate a Gelman type E, 8"x 10" glass fiber filter and an MSA activated charcoal cartridge. Normal

air flow with a glass fiber filter in place is approximately 45 to 60 cubic feet per minute (cfm) and approximately 25 to 35 cfm with both filter and cartridge in place. Approximately thirty permanent air sampling stations were in operation on a twenty-four hour basis. Portable generators were carried by ground monitoring teams, so that in the event of a radioactive release from a test, remote or specific "in-cloud" air samples could be obtained.

#### F. MILK AND WATER SAMPLING

The previously established milk sampling program from both commercial dairies and private producers continued throughout the six month period. Thirty-one sources were routinely sampled during this period, most on a monthly basis. A total of 146 samples were collected from these locations. In the event of cloud passage over a specific area, intensified sampling within the area was conducted to document changes in activity.

Water samples were collected on a routine basis, unless circumstances dictated specific source sampling. Both potable and nonpotable water supplies were sampled. During this period approximately 285 water samples were collected from 48 sources. Most of these sources are sampled on a monthly basis.

#### G. VEGETATION SAMPLING

Normally, vegetation samples were collected only in the event of a release of radioactive material. The analytical results of these samples were used to delineate the fallout pattern.

#### H. FILM BADGES

Approximately two hundred residents in the off-site area wore film badge dosimeters throughout this period. These film badges were



changed each month and were processed by the Radiation Safety Department of Reynolds Electrical and Engineering Company, Inc. Approximately seventy-five station badges were also utilized to provide more complete coverage. The badge used is made up of DuPont type 555 film. Dose, as determined from this film, is accurate to  $\pm 50\%$  in the 20 to 100 mR range and  $\pm 10\%$  in the 100 to 2000 mR range.

#### I. PUBLIC RELATIONS

Frequent contacts with the off-site population, schools and civic groups provided the opportunity to explain the role of the Public Health Service with respect to the programs of the Atomic Energy Commission. Lectures and films dealing with elementary atomic physics, radiation effects, atomic testing, and the safeguards exercised to protect the public were presented. As a result of favorable public relations, a number of off-site residents took part in the environmental sampling program; all routine sampling stations except Las Vegas were operated by local citizens, and many people volunteered to wear film badge dosimeters.

#### J. MEDICAL AND VETERINARIAN SERVICES

The Public Health Service has been requested by the Atomic Energy Commission to include at least one Medical Officer on its staff. This Medical Officer is responsible for maintaining liaison with local physicians, answering inquiries on the medical effects of radiation, investigating all cases of alleged radiation injury, and conducting meetings for various groups who wish to know about biological effects of radiation.

An Army Veterinarian assigned to the NVOO, AEC, was available to the Public Health Service Off-Site Radiological Safety Program. Veterinarian services were also provided by a PHS Veterinarian. Liaison was maintained with livestock producers in the area and the program

of wildlife and cattle investigation was continued. Semi-annual slaughter of cattle from the NTS herd and the Knoll Creek and Delamar Valley herds was accomplished in cooperation with the University of Nevada. Specimens from these animals were analyzed for radionuclide content.

#### K. BIOENVIRONMENTAL RESEARCH

Another program of the Southwestern Radiological Health Laboratory is Bioenvironmental Research. The mission of this program is, in part, to investigate the inter-relationships among the levels of radionuclide contamination of air, soil, water, vegetation and milk.

Following the Pike Event, radioiodine studies were conducted at two Las Vegas dairy farms.

### III. ANALYTICAL PROCEDURES

#### A. AIR FILTERS

All 8"x 10" glass fiber filters were counted for gross beta activity in a thin window, large area proportional probe connected to a high speed scaler. This system has an efficiency of approximately 30% for 1.5 Mev betas and background for the system is approximately 600 cpm. All samples were counted as soon as possible after collection, and activity levels were computed at time of count for the purpose of screening samples and delineating the cloud pattern. These samples were then stored for five days to allow natural activity to decay. They were recounted at this time and again seven days later. Activity levels were then recomputed from these two later counts.

Samples with high levels of gross beta activity were recounted frequently to obtain a decay curve. The curve obtained was then analyzed for best fit to the general equation  $y=ax^b$ . Based on an analysis of decay curves, it was found that a  $T^{-1.0}$  relationship existed with a mean error of 4%. This relationship was then used to correct all samples with high activity to end of collection.

#### B. CHARCOAL CARTRIDGES

All cartridges were gamma scanned by placement directly on a 4"x 4" sodium iodide crystal coupled to a 400 channel analyzer set to view energies from 0 to 2 Mev. Assuming no break in the prefilter, the activity on the cartridge should represent essentially only gaseous fission products. Detection efficiency for this geometry is about 18% at 0.51 Mev. The minimum detectable activity is taken to be about 200 pCi total with this system.

The reported values ( $\text{pCi}/\text{m}^3$ ) assume average concentration over each entire sampling period.

## C. ENVIRONMENTAL SAMPLES

### 1. Milk

Milk samples were collected on a routine basis throughout the six month period. In the event of a release, additional milk samples were collected from locations within the suspected trajectory.

These samples represented dairies, dairy farms and farms producing milk for home consumption only.

All milk samples were counted in 3.5 liter, inverted well aluminum beakers which were placed on top of a 4"x 4" crystal coupled to a 400 channel pulse height analyzer. The detection efficiency for  $^{131}\text{I}$  is 5.3% utilizing the 0.364 Mev photopeak. A matrix technique is employed to compensate for the interference due to the presence of other isotopes. The input to this matrix is variable allowing for the simultaneous determination of any eight nuclides for which efficiencies and interference factors have been obtained. Actual computation is performed by an IBM 1620 computer.

The lower detection limit for milk samples was about 20  $\text{pCi}/\text{l}$  (equal to the 2 sigma error) at time of count and all results below that value are reported as not detectable. The error associated with positive values is about  $\pm 20$   $\text{pCi}/\text{l}$  or 10% whichever is greater. All reported values are corrected to collection time.

Chemical analysis for  $^{89}\text{Sr}$  and  $^{90}\text{Sr}$  was also performed on selected samples, as determined by the presence of  $^{131}\text{I}$  or where background information was needed for a location not previously sampled. The minimum detectable quantity of  $^{90}\text{Sr}$  is 1  $\text{pCi}/\text{l}$ .

Strontium-89 is determined on the calculated difference between

<sup>90</sup>Sr and total radio strontium; due to analytical errors, values are reported to the nearest 5 pCi/l, with values of less than five reported as not detectable.

## 2. Vegetation

As soon as information was available to determine the trajectory of a release, vegetation samples were collected to identify the fallout pattern. Depending upon sample size, these samples were packed either into aluminum beakers or 400 ml plastic containers and were gamma scanned by the system described above.

## IV. RESULTS

### A. UNDERGROUND TESTS

One of the thirteen announced events resulted in a release of radioactive effluent that was detected in the off-site populated areas. This was the Pike Event of March 13 which will be discussed below. A second event, Oconto, detonated January 23, 1964, released a small amount of gaseous fresh fission products during sample recovery on drill-back operations. The release consisted primarily of inert gases and was detected by aerial sampling in the vicinity of Tempiute on Highway 25. The maximum concentrations of xenon within the gas cloud at this point were estimated to be 840 picocuries of xenon-133 per standard cubic meter and 33,000 picocuries of xenon-135 per standard cubic meter. This event produced no measurable radiation dose to off-site personnel and was not detectable at ground level off site.

The Pike Event resulted in a release of radioactive effluent that was detected by various sampling techniques as far south as Yuma, Arizona. Maximum ground monitoring readings were relatively low (less than 10 mR/hr net gamma). Those areas in the cloud path experienced small but detectable residual contamination on vegetation and in some milk supplies. No environmental sampler contained activity levels in excess of the radiation protection guides for general population exposure. Maximum total whole body exposures to gross gamma radiation as a result of this event were less than 55 mR infinite dose.

The ten highest air sample results from the Pike Event are shown in Table 1.

OK  
this number is correct  
should have been identified  
as at Coctus Springs

Table I. Ten highest air sample results following the Pike Event, 3/13/64.

I. LOCATION DATA STATION NAME	II. COLLECTION DATA							COLLECTOR	III. RADIOASSAY DATA				
	AIR VOLUME (m <sup>3</sup> )	SAMPLING PERIOD							GROSS BETA COUNT		GAMMA PULSE HEIGHT ANALYSIS		
		BEGIN			END				DATE-TIME COUNTED	ACTIVITY (pCi/m <sup>3</sup> )	DATE-TIME COUNTED	ACTIVITY (pCi/m <sup>3</sup> )	
		Mo.	Day	Time	Mo.	Day	Time					<sup>133</sup> I	<sup>135</sup> I
On Hwy. 95, 5 mi. W of Cactus Springs	49	3	13	0910	3	13	1010	FC	13-1515	76,000*	13-2040	470	380
Cactus Springs	91	3	13	0840	3	13	1120	FC	13-1512	50,000*	13-1625	700	510
Indian Springs	77	3	13	0852	3	13	1102	FC	13-1521	35,000	13-1620	190	160
	99	3	13	1106	3	13	1530	FC	13-1635	15,000	13-1645	123	92
2760 Highland Drive Las Vegas, Nev.	155	3	13	1140	3	13	1445	FC	13-1457	14,000	13-1620	60	100
Nye County Line and Hwy. 95, 12 mi. W of Cactus Springs	162	3	13	0852	3	13	1228	FC	13-1516	10,000	13-1605	75	160
Cactus Springs	79	3	13	1128	3	13	1503	FC	13-1706	9,000	13-1910	98	96
On Hwy. 95, 5 mi. W of Cactus Springs	85	3	13	1210	3	13	1522	FC	13-1704	1,400	13-1830	10	6
104 W. Charleston, Las Vegas, Nev.	210	3	13	1450	3	13	1845	FC	13-2221	680	13-2100	10	ND
Nye County Line and Hwy. 95, 12 mi. W of Cactus Springs	53	3	13	1245	3	13	1503	FC	13-1705	460	13-1830	5	10

\* Sampler failed after approximately one hour's operation. Results calculated on this basis.

\*\* The glass fiber filter showed the following concentrations (pCi/m<sup>3</sup>) <sup>131</sup>I, 1000; <sup>133</sup>I, 35,000.

ND - Not detected

F - Filter

C - Cartridge

Radioiodine appeared in some samples of milk from individual farms; however, none was found in commercially available milk at any location sampled. Two hundred seventy-five samples of milk were collected and analyzed from Arizona, New Mexico, Texas, California and Nevada (excluding those samples taken for a special study in Las Vegas, Nevada). Iodine-131 was found in milk from Yuma, Arizona and at Bard, Blythe and Winterhaven, California with a peak concentration of 80 pCi/l detected in samples from Yuma and Winterhaven. The results of milk samples collected following this event are listed in Table 1 of the Appendix.

An experiment was conducted by the Bioenvironmental Research Program at two Las Vegas dairy farms where six cows were supplied with fresh green feed (green chop). A maximum concentration of 420 pCi/l of  $^{131}\text{I}$  was found in the milk from these six cows. The highest iodine concentration from a cow on dry feed was 70 pCi/l. Dry feed is the normal diet for milk cows at this time of year in Las Vegas. One hundred seventy-five milk samples were analyzed in conjunction with this experiment. The results of these samples are shown in Table 2 of the Appendix.

No contamination of water supplies used for human consumption was detected following the Pike Event.

None of the film badges collected in the off-site area following the Pike Event indicated a result above the threshold exposure (20 mR).

## B. REACTOR EXPERIMENTS

### 1. Tory II-C

On May 12 and May 20, 1964, the Tory II-C nuclear reactor was tested at the Nevada Test Site at a location approximately 7.7 miles southwest of CP-1. The May 12 test, conducted at 1315 hours PDT,



was an intermediate power test (sixty percent of design power). The May 20 test was a full power test conducted at 1350 hours PDT. The reactor was tested in a position such that the exhaust and escaping fission products were directed toward the north.

a. The Tory II-C Intermediate Power Run

Only one indication of activity off the test range complex was found on May 12. This was a ground monitor's report of 0.02 mR/hr net gamma at 1617 hours PDT, at the junction of Valley Road and State Highway 25. Readings above background at this location were detected in the time interval 1600 to 1645 hours PDT. A vegetation sample collected from Gunderson's Ranch at 1700 hours PDT on May 12 indicated no residual activity. Gunderson's Ranch is located seven miles west northwest of the Highway 25-Valley Road intersection.

b. The Tory II-C Full Power Run

The full power run yielded detectable radioactivity off the test range complex. The maximum dose rate detected off-site by ground monitoring was 0.05 mR/hr net gamma.

Three of the air samples taken off the test range complex contained fresh fission products. Iodine-133 was the only isotope detected. Analyses of the prefilters and charcoal cartridges are presented in Table 2.

A milk sampling program was initiated following the Kiwi B4D full power test (May 13, 1964). Twenty-five of the samples in this program were taken following the May 20 Tory test. Although the presence of  $^{131}\text{I}$  was detected in several samples taken following May 20, the contribution,

if any, from the Tory test was indistinguishable from the Kiwi test. Comparison of air sampling results and effluent trajectories of the Kiwi and the Tory tests tends to substantiate the conclusion that milk contamination was a result of the Kiwi test.

## 2. Kiwi B4D

On May 8, and May 13, 1964 the Kiwi B4D reactor was tested at Test Cell C, located at the Nuclear Rocket Development Station, Jackass Flats, Nevada. The May 8 experiment was an intermediate power run (design power x 0.001) and was a scaled down profile of the full power test conducted on May 13. During the full power test, the reactor was brought to design power at 1045 hours and remained at that level for sixty-four seconds. The reactor was tested in an upright position so that the hydrogen coolant exhausted upward along with escaping fission products.

The intermediate power run yielded no detectable activity off site. The full power run yielded activity in the off-site area. The only populated locations at which dose rates above background were detected were Diablo, where the peak net dose rate was 0.43 mR/hr and Lund, where the peak was 0.028 mR/hr.

Three of the air samples taken off site contained fresh fission products. Analyses of the prefilters and charcoal cartridges are presented in Table 3.

Milk samples collected from May 14 to 22 at several ranches indicated the presence of radioiodine. (See Appendix, Table 5)

## C. SIX - MONTH SUMMARY

The ten highest air filter results collected during the six month period were taken during the Pike Event and are listed with the results from that event.

Table 2. Results of air samples collected following the Tory II-C full power test, May 20, 1964, in pCi/m<sup>3</sup> at end of collection.

Location	Date-Time On Hours (PDT)	Date-Time Off Hours (PDT)	8"x 10" Prefilter Gross Beta	Gamma Pulse Height Analysis - Charcoal Cartridge	
				<sup>133</sup> I	
Goss Ranch	5/20-1530	5/20-1713	1000	6.9	
Adaven	5/20-1745	5/21-1000	2.3	<1	
Sunnyside	5/20-1621	5/21-1020	8.8	<1	

Table 3. Results of air samples collected following the Kiwi B4D full power test, May 13, 1964, in pCi/m<sup>3</sup> at end of collection.

Location	Date-Time On Hours (PDT)	Date-Time Off Hours (PDT)	8"x 10" Prefilter Gross Beta	Gamma Pulse Height Analysis - Charcoal Cartridge		
				<sup>131</sup> I	<sup>133</sup> I	<sup>135</sup> I
Currant	5/13-0700	5/14-0700	20	<1	3.5	ND
Diablo	5/13-0715	5/13-1637	1500	ND	12	ND
Queen City Summit (unpopulated)	5/13-1120	5/13-1522	400	<1	5.8	ND

Samples of water collected during this period from sources used for human consumption showed no fresh fission products. Approximately 285 samples from potable and nonpotable sources were collected during this time.

The only milk samples showing fresh fission products were collected subsequent to the Pike Event and the Kiwi B4D reactor run. All milk samples collected and analyzed from January through June 1964 are listed in the Appendix. Milk samples collected and analyzed on a routine basis are listed in Table 4 of the Appendix.

Approximately 1500 film badges were collected and processed from film badge stations and badged personnel in the off-site area. No exposures above the 20 mR detection limit were found that could be attributed to any one or combination of the events of this period.

## V. CONCLUSIONS

Results obtained through environmental radiation surveillance during this period indicate that no individual in the off-site area received an exposure, resulting from Nevada Test Site operations, which exceeded the guides established by the AEC and/or recommended by the FRC and the NCRP.

## APPENDIX

Milk samples collected and analyzed from January through June 1964.

Table 1.	Results of milk samples collected following the Pike Event (activity extrapolated to time of collection).	18
Table 2.	Results of raw milk samples collected following the Pike Event (activity extrapolated to time of collection).	38
Table 3.	Results of milk samples collected following Shoal.	50
Table 4.	Results of routine milk sampling.	51
Table 5.	Results of milk samples collected following Kiwi B4D.	55

Note 1. Table 3 showing milk samples collected following Project Shoal (detonated October 26, 1963 near Fallon, Nevada) contains only those samples collected during 1964. The majority of milk samples collected following Project Shoal were processed during 1963 and can be found in "Final Report of Off-Site Surveillance for Project Shoal" VUF-1009.

Note 2. In tables where the letters "A" and "B" appear, A= <10, B= <5.

Table 1. Results of milk samples collected following the Pike Event (activity extrapolated to time of collection).

LOCATION	ID	DATE COLL	DATE COUNT	I 131	PC/L I 133	CS 137
AJO ARIZ	F	03 17	03 19	ND	ND	30
AJO ARIZ	F	03 18	03 18	ND	ND	25
AJO ARIZ	F	03 18	03 21	ND	ND	25
AJO ARIZ	F	03 19	03 21	ND	ND	25
BUCKEYE ARIZ	F	03 16	03 17	ND	ND	20
BUCKEYE ARIZ	F	03 17	03 19	ND	ND	25
BUCKEYE ARIZ	F	03 18	03 21	ND	ND	30
BAGDAD ARIZ	F	03 17	03 19	ND	ND	30
BAGDAD ARIZ	F	03 18	03 21	ND	ND	25
BAGDAD ARIZ	F	03 19	03 21	ND	ND	25
BAGDAD ARIZ	F	03 20	03 21	ND	ND	15
BAGDAD ARIZ	F	03 21	03 21	ND	ND	15
CHINO VLLY ARIZ	F	03 14	03 16	ND	ND	95
CHINO VLLY ARIZ	F	03 15	03 18	ND	ND	40
CHINO VLLY ARIZ	F	03 15	03 18	ND	ND	40
CHINO VLLY ARIZ	F	03 16	03 18	ND	ND	40
CHINO VLLY ARIZ	F	03 16	03 18	ND	ND	40
CHINO VLLY ARIZ	F	03 17	03 17	ND	ND	50
CHINO VLLY ARIZ	F	03 17	03 18	ND	ND	50
CHINO VLLY ARIZ	F	03 18	03 19	ND	ND	50
CHINO VLLY ARIZ	F	03 19	03 19	ND	ND	40
CHINO VLLY ARIZ	F	03 19	03 23	ND	ND	40
CHINO VLLY ARIZ	F	03 20	03 23	ND	ND	40
COTTONWOOD ARIZ	F	03 17	03 18	ND	ND	20
COTTONWOOD ARIZ	F	03 18	03 19	ND	ND	20
COTTONWOOD ARIZ	F	03 19	03 21	ND	ND	15
EHRENBERG ARIZ	F	03 15	03 16	ND	ND	55
EHRENBERG ARIZ	F	03 16	03 16	ND	ND	15
EHRENBERG ARIZ	F	03 17	03 18	ND	ND	35
EHRENBERG ARIZ	F	03 18	03 19	ND	ND	10

Table 1. Results of milk samples collected following the Pike Event (activity extrapolated to time of collection). (continued)

LOCATION	ID	DATE COLL	DATE COUNT	61 80	81 80	PC/L	CS
EHRENBERG ARIZ	HF	03 19	03 20	ND	ND	133	137
EHRENBERG ARIZ	HF	03 20	03 22	ND	ND		30
KINGMAN ARIZ	HD	03 14	03 15	ND	ND		20
KINGMAN ARIZ	HD	03 15	03 15	ND	ND		30
KINGMAN ARIZ	HD	03 16	03 17	ND	ND		35
KINGMAN ARIZ	HD	03 17	03 18	ND	ND		25
KINGMAN ARIZ	HD	03 18	03 19	ND	ND		30
KINGMAN ARIZ	HD	03 19	03 20	ND	ND		25
KINGMAN ARIZ	HD	03 20	03 25	ND	ND		20
KINGMAN ARIZ	HD	03 21	03 23	ND	ND		20
PARKER ARIZ	HF	03 16	03 16	ND	ND		35
PARKER ARIZ	HF	03 17	03 18	ND	ND		65
PARKER ARIZ	HF	03 18	03 19	ND	ND		55
PARKER ARIZ	HF	03 19	03 20	ND	ND		50
PARKER ARIZ	HF	03 20	03 21	ND	ND		40
PARKER ARIZ	HF	03 21	03 25	ND	ND		50
PARKER ARIZ	HF	03 22	03 23	ND	ND		45
PHOENIX ARIZ	D01	03 14	03 14	ND	ND		55
PHOENIX ARIZ	D01	03 15	03 17	ND	ND		25
PHOENIX ARIZ	D01	03 16	03 17	ND	ND		20
PHOENIX ARIZ	D01	03 17	03 17	ND	ND		20
PHOENIX ARIZ	D01	03 18	03 18	ND	ND		20
PHOENIX ARIZ	D01	03 19	03 21	ND	ND		40
PHOENIX ARIZ	D01	03 20	03 21	ND	ND		25
PHOENIX ARIZ	D01	03 26	03 31	ND	ND		20
PHOENIX ARIZ	F02	03 17	03 17	ND	ND		30
PHOENIX ARIZ	F02	03 18	03 19	ND	ND		25
PHOENIX ARIZ	F02	03 19	03 20	ND	ND		70



Table 1. Results of milk samples collected following the Pike Event (activity extrapolated to time of collection). (continued)

LOCATION	ID	DATE COLL	DATE COUNT	PC/L		CS 137
				I 131	I 133	
PHOENIX ARIZ	F03	03 14	03 14	ND	ND	25
PHOENIX ARIZ	F03	03 16	03 17	ND	ND	20
PHOENIX ARIZ	F03	03 17	03 19	ND	ND	20
PHOENIX ARIZ	F03	03 18	03 21	ND	ND	15
TEMPE ARIZ	D02	03 14	03 14	ND	ND	30
TEMPE ARIZ	D02	03 15	03 17	ND	ND	20
TEMPE ARIZ	D02	03 16	03 17	ND	ND	20
TEMPE ARIZ	D02	03 17	03 17	ND	ND	30
TEMPE ARIZ	D02	03 18	03 19	ND	ND	50
TEMPE ARIZ	D02	03 19	03 21	ND	ND	40
TEMPE ARIZ	D02	03 20	03 21	ND	ND	30
TEMPE ARIZ	D02	03 26	03 30	ND	ND	25
TEMPE ARIZ	D03	03 14	03 14	ND	ND	40
TEMPE ARIZ	D03	03 15	03 17	ND	ND	20
TEMPE ARIZ	D03	03 16	03 17	ND	ND	20
TEMPE ARIZ	D03	03 17	03 17	ND	ND	20
TEMPE ARIZ	D03	03 18	03 19	ND	ND	40
TEMPE ARIZ	D03	03 19	03 21	ND	ND	35
TEMPE ARIZ	F01	03 14	03 14	ND	ND	20
TEMPE ARIZ	F01	03 16	03 17	ND	ND	25
TEMPE ARIZ	F01	03 17	03 17	ND	ND	30
TEMPE ARIZ	F01	03 18	03 19	ND	ND	90
TEMPE ARIZ	F01	03 19	03 21	ND	ND	70
TUCSON ARIZ	D	03 17	03 17	ND	ND	20
TUCSON ARIZ	D	03 18	03 19	ND	ND	20
TUCSON ARIZ	D	03 18	03 19	ND	ND	80
TUCSON ARIZ	D	03 18	03 19	ND	ND	35
TUCSON ARIZ	D	03 19	03 21	ND	ND	40
TUCSON ARIZ	D	03 19	03 21	ND	ND	40
TUCSON ARIZ	D	03 20	03 21	ND	ND	ND
TUCSON ARIZ	D	03 26	03 31	ND	ND	ND

Table 1. Results of milk samples collected following the Pike Event (activity extrapolated to time of collection). (continued)

LOCATION	ID	DATE COLL	DATE COUNT	I 131	PC/L I 133	CS 137
WENDEN ARIZ	F	03 18	03 19	ND	ND	30
WICKENBURG ARIZ	F	03 19	03 20	ND	ND	30
WIKIEUP ARIZ	F	03 17	03 19	ND	ND	20
WIKIEUP ARIZ	F	03 20	03 21	ND	ND	15
WIKIEUP ARIZ	F	03 21	03 21	ND	ND	15
YUMA ARIZ	F01	03 16	03 17	ND	ND	15
YUMA ARIZ	F01	03 18	03 18	ND	ND	20
YUMA ARIZ	F01	03 19	03 19	ND	ND	30
YUMA ARIZ	F01	03 21	03 25	ND	ND	ND
YUMA ARIZ	F01	03 22	03 24	ND	ND	15
YUMA ARIZ	F01	03 23	03 24	ND	ND	20
YUMA ARIZ	F01	03 24	03 25	ND	ND	ND
YUMA ARIZ	F01	03 25	03 26	ND	ND	ND
YUMA ARIZ	F01	03 26	03 30	30	ND	10
YUMA ARIZ	F01	03 27	03 30	ND	ND	5
YUMA ARIZ	F01	03 30	04 02	ND	ND	15
YUMA ARIZ	F01	04 02	04 03	ND	ND	10
YUMA ARIZ	F02	03 17	03 17	30	ND	10
YUMA ARIZ	F02	03 18	03 18	50	ND	15
YUMA ARIZ	F02	03 19	03 19	ND	ND	20
YUMA ARIZ	F02	03 21	03 25	80	ND	20
YUMA ARIZ	F02	03 22	03 24	60	ND	15
YUMA ARIZ	F02	03 23	03 25	ND	ND	ND
YUMA ARIZ	F02	03 24	03 25	40	ND	ND
YUMA ARIZ	F02	03 25	03 26	40	ND	ND
YUMA ARIZ	F02	03 27	03 30	ND	ND	10
YUMA ARIZ	F02	03 28	04 01	30	ND	ND
YUMA ARIZ	F02	04 01	04 03	ND	ND	5

Table 1. Results of milk samples collected following the Pike Event (activity extrapolated to time of collection). (continued)

LOCATION	ID	DATE COLL	DATE COUNT	I 131	PC/L I 133	CS 137
BARD CAL	F	03 19	03 20	ND	ND	40
BARD CAL	F	03 19	03 20	ND	ND	20
BARD CAL	F	03 20	03 25	ND	ND	10
BARD CAL	F	03 21	03 25	ND	ND	25
BARD CAL	F	03 22	03 24	ND	ND	15
BARD CAL	F	03 23	03 24	ND	ND	10
BARD CAL	F	03 24	03 25	ND	ND	15
BARD CAL	F	03 25	03 26	ND	ND	5
BARD CAL	F	03 26	03 30	50	ND	20
BARD CALIF	F	03 28	04 01	ND	ND	20
BLYTHE CAL	F01	03 16	03 16	ND	ND	ND
BLYTHE CAL	F01	03 17	03 18	ND	ND	25
BLYTHE CAL	F01	03 18	03 19	ND	ND	35
BLYTHE CAL	F01	03 19	03 20	ND	ND	20
BLYTHE CAL	F01	03 20	03 21	ND	ND	20
BLYTHE CAL	F01	03 21	03 25	30	ND	ND
BLYTHE CAL	F01	03 22	03 24	20	ND	ND
BLYTHE CAL	F01	03 24	03 25	ND	ND	ND
BLYTHE CAL	F02	03 26	03 30	ND	ND	15
BRAWLY CAL	D	03 18	03 19	ND	ND	15
INDIO CAL	F	03 19	03 20	ND	ND	20
WINTERHAVEN CAL	F	03 21	03 25	ND	ND	15
WINTERHAVEN CAL	F	03 22	03 24	ND	ND	20
WINTERHAVEN CAL	F	03 23	03 24	20	ND	25
WINTERHAVEN CAL	F	03 24	03 25	ND	ND	20
WINTERHAVEN CAL	F	03 25	03 26	40	ND	20
WINTERHAVEN CAL	F	03 26	03 30	50	ND	20
WINTERHAVEN CAL	F	03 27	03 30	20	ND	25
WINTERHAVEN CAL	F	03 28	04 01	80	ND	35

Table 1. Results of milk samples collected following the Pike Event (activity extrapolated to time of collection). (continued)

LOCATION	ID	DATE COLL	DATE COUNT	I 131	PC/L I 133	CS 137
LAS VEGAS NEV	D03	03 16	03 16	ND	ND	105
LAS VEGAS NEV	D03	03 17	03 17	ND	ND	130
LAS VEGAS NEV	D03	03 17	03 17	ND	ND	90
LAS VEGAS NEV	D03	03 18	03 19	ND	ND	135
LAS VEGAS NEV	D03	03 18	03 19	ND	ND	75
LAS VEGAS NEV	D03	03 19	03 19	ND	ND	130
LAS VEGAS NEV	D03	03 20	03 21	ND	ND	100
LAS VEGAS NEV	D03	03 21	03 21	ND	ND	150
LAS VEGAS NEV	D03	03 22	03 23	ND	ND	110
LAS VEGAS NEV	D03	03 23	03 24	ND	ND	115
LAS VEGAS NEV	D03	03 24	03 25	ND	ND	125
LAS VEGAS NEV	D03	03 25	03 26	ND	ND	125
LAS VEGAS NEV	D03	03 26	03 30	ND	ND	105
LAS VEGAS NEV	D04	03 16	03 16	ND	ND	80
LAS VEGAS NEV	D04	03 17	03 17	ND	ND	50
LAS VEGAS NEV	D04	03 17	03 17	ND	ND	30
LAS VEGAS NEV	D04	03 18	03 19	ND	ND	95
LAS VEGAS NEV	D04	03 19	03 19	ND	ND	80
LAS VEGAS NEV	D04	03 20	03 21	ND	ND	70
LAS VEGAS NEV	D04	03 21	03 21	ND	ND	85
LAS VEGAS NEV	D04	03 22	03 23	ND	ND	100
LAS VEGAS NEV	D04	03 23	03 24	ND	ND	85
LAS VEGAS NEV	D04	03 24	03 25	ND	ND	85
LAS VEGAS NEV	D04	03 25	03 26	ND	ND	75
LAS VEGAS NEV	D04	03 26	03 30	ND	ND	80
LAS VEGAS NEV	D04	03 27	03 31	ND	ND	65
LAS VEGAS NEV	D05	03 17	03 17	ND	ND	65
LAS VEGAS NEV	D06	03 17	03 17	ND	ND	65

Table 1. Results of milk samples collected following the Pike Event (activity extrapolated to time of collection). (continued)

LOCATION	ID	DATE COLL	DATE COUNT	I 131	PC/L		CS 137
					I 133		
LAS VEGAS NEV	D07	03 16	03 16	ND	ND		90
LAS VEGAS NEV	D07	03 18	03 19	ND	ND		105
LAS VEGAS NEV	D07	03 16	03 16	ND	ND		95
LAS VEGAS NEV	D07	03 17	03 17	ND	ND		90
LAS VEGAS NEV	D07	03 19	03 19	ND	ND		90
LAS VEGAS NEV	D07	03 20	03 21	ND	ND		80
LAS VEGAS NEV	D07	03 21	03 21	ND	ND		80
LAS VEGAS NEV	D07	03 23	03 24	ND	ND		80
LAS VEGAS NEV	D07	03 25	03 26	ND	ND		75
LAS VEGAS NEV	D07	03 26	03 30	ND	ND		75
LAS VEGAS NEV	D07	03 27	03 31	ND	ND		75
LAS VEGAS NEV	D08	03 17	03 17	ND	ND		130

Table 1. Results of milk samples collected following the Pike Event (activity extrapolated to time of collection). (continued)

LOCATION	ID	DATE COLL	DATE COUNT	I 131	PC/L		CS 137
					I 133		
LATHROP WLS NEV	F	03 18	03 19	ND	ND		55
MOAPA NEV	F	03 14	03 15	ND	ND		120
MOAPA NEV	F	03 15	03 15	ND	ND		125
MOAPA NEV	F	03 15	03 16	ND	ND		125
MOAPA NEV	F	03 16	03 16	ND	ND		110
MOAPA NEV	F	03 16	03 17	ND	ND		65
MOAPA NEV	F	03 17	03 17	ND	ND		65
MOAPA NEV	F	03 18	03 18	ND	ND		135
MOAPA NEV	F	03 18	03 18	ND	ND		135
MOAPA NEV	F	03 19	03 19	ND	ND		130
MOAPA NEV	F	03 20	03 21	ND	ND		125
OVERTON NEV	F	03 15	03 15	ND	ND		85
OVERTON NEV	F	03 15	03 16	ND	ND		95
OVERTON NEV	F	03 16	03 16	ND	ND		85
OVERTON NEV	F	03 16	03 17	ND	ND		60
OVERTON NEV	F	03 17	03 17	ND	ND		60
OVERTON NEV	F	03 17	03 18	ND	ND		105
OVERTON NEV	F	03 18	03 18	ND	ND		105
OVERTON NEV	F	03 19	03 19	ND	ND		95
PAHRUMP NEV	F	03 14	03 15	ND	ND		30
PAHRUMP NEV	F	03 14	03 15	ND	ND		40
PAHRUMP NEV	F	03 15	03 15	ND	ND		35
PAHRUMP NEV	F	03 15	03 17	ND	ND		30
PAHRUMP NEV	F	03 16	03 18	ND	ND		35
PAHRUMP NEV	F	03 16	03 17	ND	ND		30
PAHRUMP NEV	F	03 17	03 18	ND	ND		35

Table 1. Results of milk samples collected following the Pike Event (activity extrapolated to time of collection). (continued)

LOCATION	ID	DATE COLL	DATE COUNT	I 131	PC/L I 133	CS 137
ALAMOGORDO N M	D	03 16	03 18	ND	ND	80
ALAMOGORDO N M	D	03 18	03 18	ND	ND	40
ALAMOGORDO N M	D	03 19	03 20	ND	ND	40
ALAMOGORDO N M	D	03 20	03 21	ND	ND	70
ARTESIA N M	D	03 16	03 17	ND	ND	40
ARTESIA N M	D	03 18	03 19	ND	ND	65
ARTESIA N M	D	03 19	03 20	ND	ND	50
ARTESIA N M	D	03 20	03 21	ND	ND	40
CARLSBAD N M	D	03 13	03 16	ND	ND	45
CARLSBAD N M	D	03 16	03 17	ND	ND	45
CARLSBAD N M	D	03 17	03 18	ND	ND	40
CARLSBAD N M	D	03 17	03 18	ND	ND	45
CARLSBAD N M	D	03 18	03 19	ND	ND	50
CARLSBAD N M	D	03 19	03 19	ND	ND	60
CARLSBAD N M	D	03 19	03 20	ND	ND	60
CARLSBAD N M	D	03 20	03 21	ND	ND	45
CARLSBAD N M	D	03 24	03 30	ND	ND	30
EUNICE N M	D	03 17	03 18	ND	ND	105
EUNICE N M	D	03 19	03 21	ND	ND	40
GILA N M	D	03 16	03 17	ND	ND	20
GILA N M	D	03 18	03 19	ND	ND	55
GILA N M	D	03 19	03 22	ND	ND	55
LAS CRUCES N M	D	03 17	03 18	ND	ND	45
LAS CRUCES N M	D	03 18	03 20	ND	ND	40
LAS CRUCES N M	D	03 20	03 21	ND	ND	40
LAS VEGAS N M	D	03 18	03 19	ND	ND	125
LOVING N M	D	03 13	04 08	ND	ND	145
ROSWELL N M	D	03 16	03 18	ND	ND	70

Table 1. Results of milk samples collected following the Pike Event (activity extrapolated to time of collection). (continued)

LOCATION	ID	DATE COLL	DATE COUNT	I 131	PC/L	CS 137
					I 133	
ROSWELL N M	D	03 17	03 18	ND	ND	70
ROSWELL N M	D	03 18	03 20	ND	ND	65
ROSWELL N M	D	03 19	03 20	ND	ND	60
ROSWELL N M	D	03 20	03 24	ND	ND	75
TUCUMCARI N M	D	03 15	03 19	ND	ND	65
WHITES CITY N M D		03 13	03 16	ND	ND	95
WHITES CITY N M D		03 16	03 17	ND	ND	65
WHITES CITY N M D		03 17	03 18	ND	ND	70
WHITES CITY N M D		03 18	03 19	ND	ND	65
WHITES CITY N M D		03 19	03 21	ND	ND	80
WHITES CITY N M D		03 20	03 21	ND	ND	75



Table 1. Results of milk samples collected following the Pike Event (activity extrapolated to time of collection). (continued)

LOCATION	ID	DATE COLL	DATE COUNT	I 131	PC/L	CS 137
					I 133	
AUSTIN TEX	D01	03 14	03 17	ND	ND	50
AUSTIN TEX	D01	03 18	03 21	ND	ND	70
AUSTIN TEX	D01	03 19	03 24	ND	ND	50
AUSTIN TEX	F02	03 17	03 18	ND	ND	50
AUSTIN TEX	F02	03 20	03 21	ND	ND	55
DALLAS TEX	D01	03 17	03 18	ND	ND	75
DALLAS TEX	D01	03 18	03 19	ND	ND	130
DALLAS TEX	D01	03 19	03 24	ND	ND	90
DALLAS TEX	D01	03 20	03 24	ND	ND	80
DALLAS TEX	D01	03 26	03 27	ND	ND	110
DALLAS TEX	D01	03 27	03 31	ND	ND	60
DALLAS TEX	D01	03 30	03 31	ND	ND	80
DALLAS TEX	D01	03 31	04 02	ND	ND	60
DALLAS TEX	D01	04 03	04 07	ND	ND	65
DALLAS TEX	F02	03 16	03 18	ND	ND	90
EL PASO TEX	D	03 18	03 19	ND	ND	30
EL PASO TEX	D	03 19	03 20	ND	ND	40
EL PASO TEX	D	03 20	03 22	ND	ND	45
EL PASO TEX	D	03 21	03 23	ND	ND	35
EL PASO TEX	D	03 22	03 24	ND	ND	25
LUBBOCK TEX		03 16	03 18	ND	ND	40
LUBBOCK TEX	D01	03 20	03 24	ND	ND	70
LUBBOCK TEX	D01	03 22	03 30	ND	ND	85
LUBBOCK TEX	D02	03 21	03 24	ND	ND	30

Table 1. Results of milk samples collected following the Pike Event (activity extrapolated to time of collection). (continued)

LOCATION	ID	DATE COLL	DATE COUNT	GR/L CA	PC/L SR 89	PC/L SR 90
AJO ARIZ	F	03 17	03 19	1.57	ND	5
AJO ARIZ	F	03 19	03 21	1.66	ND	1
BUCKEYE ARIZ	F	03 16	03 17	1.52	ND	4
BUCKEYE ARIZ	F	03 18	03 21	2.15	5	6
BAGDAD ARIZ	F	03 19	03 21	1.10	ND	3
BAGDAD ARIZ	F	03 21	03 21	1.09	ND	3
CHINO VLLY ARIZ	F	03 14	03 16	1.22	ND	7
CHINO VLLY ARIZ	F	03 17	03 17	1.22	ND	8
CHINO VLLY ARIZ	F	03 19	03 23	1.34	5	7
CHINO VLLY ARIZ	F	03 20	03 23	1.34	5	7
COTTONWOOD ARIZ	F	03 17	03 18	1.15	ND	1
COTTONWOOD ARIZ	F	03 19	03 21	.88	ND	ND
EHRENBERG ARIZ	F	03 15	03 16	1.46	ND	3
EHRENBERG ARIZ	F	03 16	03 16	1.46	ND	3
EHRENBERG ARIZ	F	03 18	03 19	1.20	ND	2
KINGMAN ARIZ	D	03 14	03 15	1.28	ND	2
KINGMAN ARIZ	D	03 16	03 17	1.14	ND	4
KINGMAN ARIZ	D	03 17	03 18	1.22	5	4
KINGMAN ARIZ	D	03 18	03 19	1.23	ND	3
KINGMAN ARIZ	D	03 19	03 20	1.23	5	2
KINGMAN ARIZ	D	03 20	03 25	1.25	ND	3
KINGMAN ARIZ	D	03 21	03 23	1.22	ND	4
PARKER ARIZ	F	03 16	03 16	1.20	ND	6
PARKER ARIZ	F	03 18	03 19	1.17	ND	4
PARKER ARIZ	F	03 19	03 20	1.17	ND	5
PARKER ARIZ	F	03 21	03 25	1.34	ND	5
PARKER ARIZ	F	03 22	03 23	1.34	5	5

Table 1. Results of milk samples collected following the Pike Event (activity extrapolated to time of collection). (continued)

LOCATION	ID	DATE COLL	DATE COUNT	GR/L CA	PC/L SR 89	PC/L SR 90
PHOENIX ARIZ	D01	03 20	03 21	1.16	5	2
PHOENIX ARIZ	D01	03 26	03 31	1.14	ND	5
PHOENIX ARIZ	F02	03 18	03 19	1.14	ND	12
PHOENIX ARIZ	F02	03 19	03 20	1.25	10	10
PHOENIX ARIZ	F03	03 18	03 21	1.13	ND	1
TEMPE ARIZ	D02	03 19	03 21	1.15	ND	2
TEMPE ARIZ	D02	03 26	03 30	1.14	ND	3
TEMPE ARIZ	D03	03 18	03 19	1.14	ND	5
TEMPE ARIZ	F01	03 14	03 14	1.38	ND	4
TEMPE ARIZ	F01	03 19	03 21	1.18	ND	3
TUCSON ARIZ	D	03 17	03 17	1.19	ND	2
TUCSON ARIZ	D	03 18	03 19	1.28	ND	3
TUCSON ARIZ	D	03 26	03 31	1.09	ND	5
WENDEN ARIZ	F	03 18	03 19	.	ND	4
WICKENBURG ARIZ	F	03 19	03 20	1.42	ND	4
YUMA ARIZ	F01	03 16	03 17	1.12	ND	6
YUMA ARIZ	F01	03 18	03 18	1.17	5	4
YUMA ARIZ	F01	03 19	03 19	1.42	ND	9
YUMA ARIZ	F01	03 21	03 25	1.18	ND	2
YUMA ARIZ	F01	03 22	03 24	1.15	ND	4
YUMA ARIZ	F01	03 23	03 24	1.16	ND	4
YUMA ARIZ	F01	03 24	03 25	1.18	ND	2
YUMA ARIZ	F01	03 25	03 26	1.18	ND	2
YUMA ARIZ	F01	03 27	03 30	1.38	ND	3
YUMA ARIZ	F01	03 30	04 02	1.38	ND	3
YUMA ARIZ	F01	04 02	04 03	1.14	ND	5
YUMA ARIZ	F02	03 17	03 17	1.16	ND	4
YUMA ARIZ	F02	03 18	03 18	1.14	5	3
YUMA ARIZ	F02	03 19	03 19	1.20	ND	3
YUMA ARIZ	F02	03 21	03 25	1.16	ND	4

Table 1. Results of milk samples collected following the Pike Event (activity extrapolated to time of collection). (continued)

LOCATION	ID	DATE COLL	DATE COUNT	GR/L CA	PC/L SR 89	PC/L SR 90
YUMA ARIZ	F02	03 22	03 24	1.15	ND	4
YUMA ARIZ	F02	03 23	03 25	1.16	ND	4
YUMA ARIZ	F02	03 24	03 25	1.16	ND	4
YUMA ARIZ	F02	03 25	03 26	1.16	ND	4
YUMA ARIZ	F02	03 27	03 30	1.20	ND	4
YUMA ARIZ	F02	03 28	04 01	1.20	ND	4
YUMA ARIZ	F02	04 01	04 03	1.20	ND	4

Table 1. Results of milk samples collected following the Pike Event (activity extrapolated to time of collection). (continued)

LOCATION	ID	DATE COLL	DATE COUNT	GR/L CA	PC/L SR 89	PC/L SR 90
BARD CAL	F	03 19	03 20	1.15	5	1
BARD CAL	F	03 19	03 20	1.16	ND	3
BARD CAL	F	03 20	03 25	1.14	ND	2
BARD CAL	F	03 21	03 25	1.14	ND	2
BARD CAL	F	03 22	03 24	1.16	ND	3
BARD CAL	F	03 23	03 24	1.15	ND	2
BARD CAL	F	03 24	03 25	1.14	ND	2
BARD CAL	F	03 25	03 26	1.14	ND	2
BARD CALIF	F	03 28	04 01	1.20	ND	4
BLYTHE CAL	F01	03 16	03 16	1.36	ND	3
BLYTHE CAL	F01	03 19	03 20	1.33	ND	3
BLYTHE CAL	F01	03 21	03 25	1.42	ND	3
BLYTHE CAL	F01	03 22	03 24	1.58	ND	2
BLYTHE CAL	F01	03 24	03 25	1.42	ND	3
BRAWLY CAL	D	03 18	03 19	1.22	5	3
INDIO CAL	F	03 19	03 20	.	ND	ND
WINTERHAVEN CAL	F	03 21	03 25	1.14	ND	2
WINTERHAVEN CAL	F	03 22	03 24	1.12	ND	2
WINTERHAVEN CAL	F	03 23	03 24	1.16	ND	3
WINTERHAVEN CAL	F	03 24	03 25	1.14	ND	2
WINTERHAVEN CAL	F	03 25	03 26	1.14	ND	2
WINTERHAVEN CAL	F	03 27	03 30	1.20	ND	4
WINTERHAVEN CAL	F	03 28	04 01	1.20	ND	4

Table 1. Results of milk samples collected following the Pike Event (activity extrapolated to time of collection). (continued)

LOCATION	ID	DATE COLL	DATE COUNT	GR/L CA	PC/L SR 89	PC/L SR 90
LAS VEGAS NEV	D03	03 16	03 16	1.04	ND	14
LAS VEGAS NEV	D03	03 17	03 17	1.18	5	18
LAS VEGAS NEV	D03	03 18	03 19	1.20	ND	12
LAS VEGAS NEV	D03	03 19	03 19	1.25	5	15
LAS VEGAS NEV	D03	03 21	03 21	1.10	5	14
LAS VEGAS NEV	D03	03 22	03 23	1.18	ND	15
LAS VEGAS NEV	D03	03 23	03 24	.83	5	13
LAS VEGAS NEV	D03	03 25	03 26	1.22	5	14
LAS VEGAS NEV	D03	03 26	03 30	1.11	ND	19
LAS VEGAS NEV	D04	03 16	03 16	1.12	ND	12
LAS VEGAS NEV	D04	03 17	03 17	1.17	5	11
LAS VEGAS NEV	D04	03 18	03 19	1.33	5	15
LAS VEGAS NEV	D04	03 19	03 19	1.14	ND	14
LAS VEGAS NEV	D04	03 20	03 21	1.23	5	11
LAS VEGAS NEV	D04	03 21	03 21	1.23	ND	10
LAS VEGAS NEV	D04	03 22	03 23	1.12	ND	15
LAS VEGAS NEV	D04	03 23	03 24	.86	5	10
LAS VEGAS NEV	D04	03 25	03 26	1.26	5	9
LAS VEGAS NEV	D04	03 26	03 30	1.14	ND	14
LAS VEGAS NEV	D04	03 27	03 31	1.12	ND	11
LAS VEGAS NEV	D07	03 16	03 16	1.12	ND	13
LAS VEGAS NEV	D07	03 18	03 19	1.10	5	13
LAS VEGAS NEV	D07	03 19	03 19	1.12	5	11
LAS VEGAS NEV	D07	03 20	03 21	1.20	5	8
LAS VEGAS NEV	D07	03 21	03 21	.	ND	13
LAS VEGAS NEV	D07	03 23	03 24	1.00	ND	11
LAS VEGAS NEV	D07	03 25	03 26	.90	5	9
LAS VEGAS NEV	D07	03 26	03 30	1.12	ND	13
LAS VEGAS NEV	D07	03 27	03 31	1.14	ND	12
LAS VEGAS NEV	D08	03 17	03 17	1.18	5	18

Table 1. Results of milk samples collected following the Pike Event (activity extrapolated to time of collection). (continued)

LOCATION	ID	DATE COLL	DATE COUNT	GR/L CA	PC/L SR 89	PC/L SR 90
MOAPA NEV	F	03 15	03 16	1.15	ND	16
MOAPA NEV	F	03 16	03 16	1.15	ND	16
OVERTON NEV	F	03 15	03 15	1.25	ND	11
OVERTON NEV	F	03 16	03 16	1.20	ND	11
PAHRUMP NEV	F	03 14	03 15	1.31	ND	3
PAHRUMP NEV	F	03 15	03 17	1.20	ND	3
PAHRUMP NEV	F	03 16	03 17	1.15	ND	4

Table 1. Results of milk samples collected following the Pike Event (activity extrapolated to time of collection). (continued)

LOCATION	ID	DATE COLL	DATE COUNT	GR/L CA	PC/L SR 89	PC/L SR 90
ALAMOGORDO	N M D	03 16	03 18	.	5	8
ALAMOGORDO	N M D	03 19	03 20	1.46	5	7
ALAMOGORDO	N M D	03 20	03 21	1.23	5	6
ARTESIA	N M D	03 16	03 17	1.09	5	4
ARTESIA	N M D	03 18	03 19	1.12	ND	4
ARTESIA	N M D	03 19	03 20	1.11	ND	4
ARTESIA	N M D	03 20	03 21	1.20	ND	16
CARLSBAD	N M D	03 13	03 16	1.18	ND	5
CARLSBAD	N M D	03 16	03 17	1.12	ND	4
CARLSBAD	N M D	03 17	03 18	1.28	5	4
CARLSBAD	N M D	03 17	03 18	1.27	ND	4
CARLSBAD	N M D	03 18	03 19	1.22	ND	6
CARLSBAD	N M D	03 19	03 20	1.17	ND	4
CARLSBAD	N M D	03 20	03 21	1.20	ND	5
EUNICE	N M D	03 17	03 18	1.44	5	35
EUNICE	N M D	03 19	03 21	1.36	5	36
GILA	N M D	03 16	03 17	1.18	ND	7
LAS CRUCES	N M D	03 17	03 18	1.28	ND	6
LAS CRUCES	N M D	03 18	03 20	1.22	ND	7
LAS CRUCES	N M D	03 20	03 21	1.23	5	4
LAS VEGAS	N M D	03 18	03 19	1.36	5	15
LOVING	N M D	03 13	04 08	1.33	ND	10
ROSWELL	N M D	03 16	03 18	1.15	5	2
ROSWELL	N M D	03 17	03 18	1.31	5	6
ROSWELL	N M D	03 18	03 20	1.10	ND	6
ROSWELL	N M D	03 19	03 20	1.21	5	7
ROSWELL	N M D	03 20	03 24	1.02	ND	5
TUCUMCARI	N M D	03 15	03 19	.	10	12



Table 1. Results of milk samples collected following the Pike Event (activity extrapolated to time of collection). (continued)

LOCATION		ID	DATE COLL	DATE COUNT	GR/L CA	PC/L SR 89	PC/L SR 90
WHITES	CITY N M D		03 13	03 16	1.15	ND	10
WHITES	CITY N M D		03 16	03 17	1.14	ND	7
WHITES	CITY N M D		03 17	03 18	1.20	5	5
WHITES	CITY N M D		03 18	03 19	1.07	5	4
WHITES	CITY N M D		03 19	03 21	1.18	ND	5
WHITES	CITY N M D		03 20	03 21	1.13	ND	5

Table 1. Results of milk samples collected following the Pike Event (activity extrapolated to time of collection). (continued)

LOCATION	ID	DATE COLL	DATE COUNT	GR/L CA	PC/L SR 89	PC/L SR 90
AUSTIN TEX	D01	03 14	03 17	1.14	5	11
AUSTIN TEX	D01	03 18	03 21	1.18	5	11
AUSTIN TEX	F02	03 17	03 18	1.25	ND	10
AUSTIN TEX	F02	03 20	03 21	1.23	5	10
DALLAS TEX	D01	03 17	03 18	1.25	ND	13
DALLAS TEX	D01	03 18	03 19	1.28	ND	18
DALLAS TEX	D01	03 19	03 24	1.18	5	17
DALLAS TEX	D01	03 20	03 24	1.23	ND	18
DALLAS TEX	D01	03 27	03 31	1.22	ND	15
DALLAS TEX	D01	03 30	03 31	1.22	ND	15
DALLAS TEX	D01	03 31	04 02	1.22	ND	15
DALLAS TEX	D01	04 03	04 07	1.18	ND	14
EL PASO TEX	D	03 18	03 19	1.36	5	15
EL PASO TEX	D	03 19	03 20	1.06	ND	4
EL PASO TEX	D	03 21	03 23	1.06	ND	5
EL PASO TEX	D	03 22	03 24	1.10	ND	5
LUBBOCK TEX	D02	03 21	03 24	1.14	ND	13
LUBBOCK TEX	D01	03 22	03 30	1.15	ND	11

## IDENTIFICATIONS

### PHOENIX, ARIZONA

D01 = BORDEN CO.  
F02 = CORNELISON FARM  
F03 = OWEN FARM

### TEMPE ARIZONA

D02 = UNITED DAIRY ASSOC.  
D03 = SWEET MILK CO.  
F01 = HAMSTRA FARM

### YUMA, ARIZONA

F01 = COMBS  
F02 = SNODGRASS

### BLYTHE, CALIFORNIA

F01 = FAULKNER  
F02 = SHERMAN  
LAS VEGAS, NEV. DAIRIES  
D03 = ANDERSON DAIRY

D04 = ARDEN DAIRY

D05 = BLISS DAIRY

D06 = HEINIES DAIRY

D07 = HILAND DAIRY

D08 = MEADOWGOLD DAIRY

### AUSTIN, TEXAS

D01 = HILLCREST DAIRY

F02 = MID TEXAS REC.

### DALLAS, TEXAS

D01 = METZEGAR DAIRY

F02 = STATION 2

### LUBBOCK, TEXAS

D01 = BELL MILK CO.

D02 = BORDEN MILK CO.

Table 2. Results of raw milk samples collected following the Pike Event (activity extrapolated to time of collection).

LOCATION	ID	DATE COLL.	DATE COUNT	I 131	PC/L		CS 137
					I 133		
LAS VEGAS NEV	F01 D FD	03 15PM	03 15	30	200		70
LAS VEGAS NEV	F01 D FD	03 16AM	03 16	70	100		70
LAS VEGAS NEV	F01 D FD	03 16PM	03 16	70	65		120
LAS VEGAS NEV	F01 D FD	03 17AM	03 17	50	30		85
LAS VEGAS NEV	F01 D FD	03 17PM	03 17	ND	ND		45
LAS VEGAS NEV	F01 D FD	03 18AM	03 18	150	40		80
LAS VEGAS NEV	F01 G CH	03 18PM	03 18	220	150		80
LAS VEGAS NEV	F01 D FD	03 18PM	03 18	80	30		70
LAS VEGAS NEV	F01 G CH	03 19AM	03 19	150	40		70
LAS VEGAS NEV	F01 D FD	03 19AM	03 19	70	ND		70
LAS VEGAS NEV	F01 D FD	03 19PM	03 19	60	ND		85
LAS VEGAS NEV	F01 G CH	03 19PM	03 19	250	50		85
LAS VEGAS NEV	F01 G CH	03 20AM	03 20	300	ND		75
LAS VEGAS NEV	F01 D FD	03 20AM	03 20	40	ND		65
LAS VEGAS NEV	F01 G CH	03 20PM	03 21	150	ND		60
LAS VEGAS NEV	F01 D FD	03 20PM	03 21	50	ND		40
LAS VEGAS NEV	F01 G CH	03 21AM	03 21	420	40		70
LAS VEGAS NEV	F01 D FD	03 21AM	03 21	50	ND		70
LAS VEGAS NEV	F01 D FD	03 21PM	03 22	50	ND		90
LAS VEGAS NEV	F01 G CH	03 21PM	03 22	330	ND		60
LAS VEGAS NEV	F01 D FD	03 22AM	03 22	ND	ND		65
LAS VEGAS NEV	F01 G CH	03 22AM	03 22	290	ND		90
LAS VEGAS NEV	F01 D FD	03 22PM	03 23	ND	ND		70
LAS VEGAS NEV	F01 G CH	03 22PM	03 23	240	ND		55
LAS VEGAS NEV	F01 D FD	03 23AM	03 23	40	ND		35
LAS VEGAS NEV	F01 G CH	03 23AM	03 23	300	ND		110
LAS VEGAS NEV	F01 G CH	03 23PM	03 24	260	ND		55
LAS VEGAS NEV	F01 D FD	03 23PM	03 24	ND	ND		70
LAS VEGAS NEV	F01 D FD	03 24AM	03 24	ND	ND		75
LAS VEGAS NEV	F01 G CH	03 24AM	03 24	260	ND		70

Table 2. Results of raw milk samples collected following the Pike Event (activity extrapolated to time of collection). (continued)

LOCATION	ID	DATE COLL.	DATE COUNT	I 131	PC/L I 133	CS 137
LAS VEGAS NEV	F01 D FD	03 24PM	03 25	30	ND	70
LAS VEGAS NEV	F01 G CH	03 24PM	03 25	180	ND	55
LAS VEGAS NEV	F01 D FD	03 25AM	03 25	ND	ND	85
LAS VEGAS NEV	F01 G CH	03 25AM	03 25	170	ND	60
LAS VEGAS NEV	F01 G CH	03 25PM	03 26	150	ND	40
LAS VEGAS NEV	F01 D FD	03 25PM	03 26	ND	ND	75
LAS VEGAS NEV	F01 G CH	03 26AM	03 26	120	ND	50
LAS VEGAS NEV	F01 D FD	03 26AM	03 26	30	ND	75
LAS VEGAS NEV	F01 G CH	03 26PM	03 27	110	ND	25
LAS VEGAS NEV	F01 D FD	03 26PM	03 27	ND	ND	70
LAS VEGAS NEV	F01 G CH	03 27AM	03 27	110	ND	50
LAS VEGAS NEV	F01 D FD	03 27AM	03 27	40	ND	70
LAS VEGAS NEV	F01 G CH	03 27PM	03 29	80	ND	30
LAS VEGAS NEV	F01 D FD	03 27PM	03 30	50	ND	80
LAS VEGAS NEV	F01 G CH	03 28AM	03 30	60	ND	30
LAS VEGAS NEV	F01 D FD	03 28AM	03 30	40	ND	90
LAS VEGAS NEV	F01 G CH	03 28PM	03 29	80	ND	30
LAS VEGAS NEV	F01 D FD	03 28PM	03 30	ND	ND	60
LAS VEGAS NEV	F01 G CH	03 29AM	03 29	120	ND	40
LAS VEGAS NEV	F01 D FD	03 29AM	03 30	30	ND	55
LAS VEGAS NEV	F01 D FD	03 29PM	03 30	ND	ND	60
LAS VEGAS NEV	F01 G CH	03 29PM	03 30	110	ND	35
LAS VEGAS NEV	F01 G CH	03 30AM	03 30	110	ND	35
LAS VEGAS NEV	F01 D FD	03 30AM	03 30	30	ND	45
LAS VEGAS NEV	F01 G CH	03 30PM	03 31	80	ND	30
LAS VEGAS NEV	F01 D FD	03 30PM	03 31	40	ND	55
LAS VEGAS NEV	F01 G CH	03 31AM	03 31	70	ND	40
LAS VEGAS NEV	F01 D FD	03 31AM	03 31	ND	ND	50
LAS VEGAS NEV	F01 G CH	03 31PM	04 01	30	ND	45
LAS VEGAS NEV	F01 D FD	03 31PM	04 01	30	ND	55

Table 2. Results of raw milk samples collected following the Pike Event (activity extrapolated to time of collection). (continued)

LOCATION	ID	DATE COLL.	DATE COUNT	I 131	PC/L	CS 137
					I 133	
LAS VEGAS NEV	F01 G CH	04 01AM	04 01	ND	ND	75
LAS VEGAS NEV	F01 D FD	04 01AM	04 01	ND	ND	80
LAS VEGAS NEV	F01 G CH	04 01PM	04 02	ND	ND	60
LAS VEGAS NEV	F01 D FD	04 01PM	04 02	ND	ND	60
LAS VEGAS NEV	F01 G CH	04 02AM	04 02	ND	ND	45
LAS VEGAS NEV	F01 D FD	04 02AM	04 02	ND	ND	70
LAS VEGAS NEV	F01 D FD	04 02PM	04 03	ND	ND	40
LAS VEGAS NEV	F01 G CH	04 02PM	04 03	30	ND	80
LAS VEGAS NEV	F01 D FD	04 03AM	04 03	30	ND	80
LAS VEGAS NEV	F01 G CH	04 03AM	04 03	ND	ND	60
LAS VEGAS NEV	F01 G CH	04 03PM	04 06	ND	ND	25
LAS VEGAS NEV	F01 G CH	04 04AM	04 06	ND	ND	40
LAS VEGAS NEV	F01 D FD	04 04AM	04 06	ND	ND	70
LAS VEGAS NEV	F01 D FD	04 04PM	04 06	ND	ND	65
LAS VEGAS NEV	F01 G CH	04 04PM	04 06	ND	ND	55
LAS VEGAS NEV	F01 G CH	04 05AM	04 06	ND	ND	45
LAS VEGAS NEV	F01 D FD	04 05AM	04 06	ND	ND	55
LAS VEGAS NEV	F01 D FD	04 05PM	04 06	ND	ND	85
LAS VEGAS NEV	F01 D FD	04 05PM	04 07	ND	ND	60
LAS VEGAS NEV	F01 G CH	04 05PM	04 07	ND	ND	45
LAS VEGAS NEV	F01 G CH	04 06AM	04 07	ND	ND	30
LAS VEGAS NEV	F01 D FD	04 06AM	04 07	ND	ND	55
LAS VEGAS NEV	F01 G CH	04 06PM	04 08	ND	ND	50
LAS VEGAS NEV	F01 D FD	04 06PM	04 08	ND	ND	50
LAS VEGAS NEV	F01 G CH	04 07AM	04 08	ND	ND	50
LAS VEGAS NEV	F01 D FD	04 07AM	04 08	ND	ND	65
LAS VEGAS NEV	F01 D FD	04 07PM	04 09	ND	ND	70
LAS VEGAS NEV	F01 G CH	04 07PM	04 09	ND	ND	45
LAS VEGAS NEV	F01 G CH	04 08AM	04 09	ND	ND	55
LAS VEGAS NEV	F01 D FD	04 08AM	04 09	ND	ND	65

Table 2. Results of raw milk samples collected following the Pike Event (activity extrapolated to time of collection). (continued)

LOCATION	ID	DATE COLL.	DATE COUNT	I 131	PC/L	CS 137
					I 133	
LAS VEGAS NEV	F01 G CH	04 08PM	04 09	ND	ND	55
LAS VEGAS NEV	F01 D FD	04 08PM	04 09	ND	ND	65
LAS VEGAS NEV	F01 G CH	04 09AM	04 09	ND	ND	60
LAS VEGAS NEV	F01 D FD	04 09AM	04 09	ND	ND	50
LAS VEGAS NEV	F01 G CH	04 09PM	04 13	ND	ND	70
LAS VEGAS NEV	F01 D FD	04 09PM	04 13	ND	ND	55
LAS VEGAS NEV	F01 G CH	04 10AM	04 13	ND	ND	55
LAS VEGAS NEV	F01 D FD	04 10AM	04 13	ND	ND	50
LAS VEGAS NEV	F01 G CH	04 13AM	04 14	ND	ND	55
LAS VEGAS NEV	F01 G CH	04 15	04 16	ND	ND	65
LAS VEGAS NEV	F01 G CH	04 17AM	04 20	ND	ND	75

Table 2. Results of raw milk samples collected following the Pike Event (activity extrapolated to time of collection. (continued)

LOCATION	ID	DATE COLL.	DATE COUNT	GR/L CA	PC/L SR 89	PC/L SR 90
LAS VEGAS NEV	F01 D FD	03 15PM	03 15	1.12	10	9
LAS VEGAS NEV	F01 D FD	03 16AM	03 16	1.16	5	8
LAS VEGAS NEV	F01 D FD	03 17AM	03 17	1.18	ND	10
LAS VEGAS NEV	F01 D FD	03 17PM	03 17	1.14	ND	8
LAS VEGAS NEV	F01 D FD	03 18AM	03 18	1.33	5	7
LAS VEGAS NEV	F01 G CH	03 18PM	03 18	1.31	ND	5
LAS VEGAS NEV	F01 D FD	03 18PM	03 18	1.36	ND	7
LAS VEGAS NEV	F01 G CH	03 19AM	03 19	1.46	ND	4
LAS VEGAS NEV	F01 D FD	03 19AM	03 19	1.22	ND	6
LAS VEGAS NEV	F01 D FD	03 19PM	03 19	1.41	ND	4
LAS VEGAS NEV	F01 G CH	03 19PM	03 19	1.22	5	3
LAS VEGAS NEV	F01 G CH	03 20AM	03 20	1.09	5	4
LAS VEGAS NEV	F01 D FD	03 20AM	03 20	.96	ND	5
LAS VEGAS NEV	F01 G CH	03 20PM	03 21	1.11	5	2
LAS VEGAS NEV	F01 D FD	03 20PM	03 21	1.13	ND	6
LAS VEGAS NEV	F01 G CH	03 21AM	03 21	.98	5	1
LAS VEGAS NEV	F01 D FD	03 21AM	03 21	1.00	ND	4
LAS VEGAS NEV	F01 D FD	03 21PM	03 22	1.01	5	2
LAS VEGAS NEV	F01 G CH	03 21PM	03 22	1.46	ND	6
LAS VEGAS NEV	F01 D FD	03 22AM	03 22	1.35	ND	3
LAS VEGAS NEV	F01 G CH	03 22AM	03 22	1.46	ND	6
LAS VEGAS NEV	F01 D FD	03 22PM	03 23	1.10	5	4
LAS VEGAS NEV	F01 G CH	03 22PM	03 23	1.20	ND	4
LAS VEGAS NEV	F01 D FD	03 23AM	03 23	1.01	ND	5
LAS VEGAS NEV	F01 G CH	03 23AM	03 23	1.18	ND	3
LAS VEGAS NEV	F01 G CH	03 23PM	03 24	1.04	ND	4
LAS VEGAS NEV	F01 D FD	03 23PM	03 24	.96	ND	6
LAS VEGAS NEV	F01 D FD	03 24AM	03 24	.98	ND	4



Table 2. Results of raw milk samples collected following the Pike Event (activity extrapolated to time of collection). (continued)

LOCATION	ID	DATE COLL.	DATE COUNT	GR/L CA	PC/L SR 89	PC/L SR 90
LAS VEGAS NEV	F01 G CH	03 24AM	03 24	1.34	ND	3
LAS VEGAS NEV	F01 D FD	03 24PM	03 25	1.18	ND	4
LAS VEGAS NEV	F01 G CH	03 24PM	03 25	.78	ND	4
LAS VEGAS NEV	F01 D FD	03 25AM	03 25	1.01	5	6
LAS VEGAS NEV	F01 G CH	03 25AM	03 25	1.09	ND	62
LAS VEGAS NEV	F01 G CH	03 25PM	03 26	1.27	ND	3
LAS VEGAS NEV	F01 D FD	03 25PM	03 26	1.12	ND	4
LAS VEGAS NEV	F01 G CH	03 26AM	03 26	1.34	ND	2
LAS VEGAS NEV	F01 D FD	03 26AM	03 26	1.25	5	6
LAS VEGAS NEV	F01 G CH	03 26PM	03 27	1.10	ND	4
LAS VEGAS NEV	F01 D FD	03 26PM	03 27	.	ND	5
LAS VEGAS NEV	F01 G CH	03 27AM	03 27	.	ND	2
LAS VEGAS NEV	F01 D FD	03 27AM	03 27	.92	10	10
LAS VEGAS NEV	F01 G CH	03 27PM	03 29	1.28	5	2
LAS VEGAS NEV	F01 D FD	03 27PM	03 30	1.47	ND	6
LAS VEGAS NEV	F01 G CH	03 28AM	03 30	1.34	ND	2
LAS VEGAS NEV	F01 G CH	03 28PM	03 29	1.28	ND	2
LAS VEGAS NEV	F01 D FD	03 28AM	03 30	1.44	5	4
LAS VEGAS NEV	F01 G CH	03 29AM	03 29	1.36	ND	3
LAS VEGAS NEV	F01 D FD	03 29AM	03 30	1.49	5	5
LAS VEGAS NEV	F01 G CH	03 30PM	03 31	1.30	5	3
LAS VEGAS NEV	F01 D FD	03 30PM	03 31	1.07	ND	4
LAS VEGAS NEV	F01 G CH	03 31AM	03 31	1.30	5	3
LAS VEGAS NEV	F01 D FD	03 31AM	03 31	1.07	ND	4
LAS VEGAS NEV	F01 G CH	04 01PM	04 02	1.22	ND	3

Table 2. Results of raw milk samples collected following the Pike Event (activity extrapolated to time of collection). (continued)

LOCATION	ID	DATE COLL.	DATE COUNT	GR/L CA	PC/L SR 89	PC/L SR 90
LAS VEGAS NEV	F01 D	FD 04	01PM 04 02	1.05	ND	3
LAS VEGAS NEV	F01 G	CH 04	02AM 04 02	1.22	ND	3
LAS VEGAS NEV	F01 D	FD 04	02AM 04 02	1.05	ND	3
LAS VEGAS NEV	F01 G	CH 04	03PM 04 06	1.06	ND	3
LAS VEGAS NEV	F01 D	FD 04	04PM 04 06	1.14	ND	7
LAS VEGAS NEV	F01 G	CH 04	04PM 04 06	1.11	ND	5
LAS VEGAS NEV	F01 G	CH 04	04AM 04 06	1.11	ND	5
LAS VEGAS NEV	F01 D	FD 04	05PM 04 06	1.14	ND	7
LAS VEGAS NEV	F01 G	CH 04	05AM 04 06	1.06	ND	3
LAS VEGAS NEV	F01 D	FD 04	05AM 04 06		SMPLE	LOST
LAS VEGAS NEV	F01 G	CH 04	07AM 04 08	.92	ND	6
LAS VEGAS NEV	F01 G	CH 04	08PM 04 09	1.31	5	3
LAS VEGAS NEV	F01 D	FD 04	08PM 04 09	1.22	ND	4
LAS VEGAS NEV	F01 G	CH 04	09PM 04 13	1.26	5	5
LAS VEGAS NEV	F01 D	FD 04	09PM 04 13	1.22	ND	3
LAS VEGAS NEV	F01 G	CH 04	10AM 04 13	1.10	ND	5
LAS VEGAS NEV	F01 D	FD 04	10AM 04 13	1.25	ND	5
LAS VEGAS NEV	F01 G	CH 04	13AM 04 14	1.18	ND	5
LAS VEGAS NEV	F01 G	CH 04	15 04 16	1.20	ND	6
LAS VEGAS NEV	F01 G	CH 04	17AM 04 20	1.12	5	4

Table 2. Results of raw milk samples collected following the Pike Event (activity extrapolated to time of collection). (continued)

LOCATION	ID	DATE COLL.	DATE COUNT	I 131	PC/L I 133	CS 137
LAS VEGAS NEV	F02 D	FD 03 15AM	03 15	ND	ND	45
LAS VEGAS NEV	F02 D	FD 03 15AM	03 15	ND	ND	50
LAS VEGAS NEV	F02 D	FD 03 15PM	03 15	ND	ND	45
LAS VEGAS NEV	F02 D	FD 03 16AM	03 16	ND	ND	55
LAS VEGAS NEV	F02 D	FD 03 16PM	03 17	ND	ND	35
LAS VEGAS NEV	F02 D	FD 03 17AM	03 17	ND	ND	45
LAS VEGAS NEV	F02 G	CH 03 17PM	03 18	ND	ND	50
LAS VEGAS NEV	F02 D	FD 03 17PM	03 18	40	ND	50
LAS VEGAS NEV	F02 D	FD 03 18AM	03 18	ND	ND	55
LAS VEGAS NEV	F02 G	CH 03 18AM	03 18	40	ND	50
LAS VEGAS NEV	F02 G	CH 03 18PM	03 18	50	ND	50
LAS VEGAS NEV	F02 G	CH 03 18PM	03 18	50	10	50
LAS VEGAS NEV	F02 D	FD 03 18PM	03 18	ND	ND	60
LAS VEGAS NEV	F02 G	CH 03 19AM	03 19	ND	ND	60
LAS VEGAS NEV	F02 D	FD 03 19AM	03 19	ND	ND	50
LAS VEGAS NEV	F02 D	FD 03 19PM	03 20	40	ND	55
LAS VEGAS NEV	F02 G	CH 03 19PM	03 20	40	ND	50
LAS VEGAS NEV	F02 G	CH 03 20AM	03 20	60	ND	45
LAS VEGAS NEV	F02 D	FD 03 20AM	03 20	40	ND	45
LAS VEGAS NEV	F02 G	CH 03 20PM	03 21	70	ND	60
LAS VEGAS NEV	F02 D	FD 03 20PM	03 21	ND	ND	20
LAS VEGAS NEV	F02 G	CH 03 21AM	03 21	60	ND	55
LAS VEGAS NEV	F02 D	FD 03 21AM	03 21	30	ND	50
LAS VEGAS NEV	F02 D	FD 03 21PM	03 22	30	ND	50
LAS VEGAS NEV	F02 G	CH 03 21PM	03 22	60	ND	35
LAS VEGAS NEV	F02 D	FD 03 22AM	03 22	ND	ND	50
LAS VEGAS NEV	F02 G	CH 03 22AM	03 22	ND	ND	35
LAS VEGAS NEV	F02 D	FD 03 22PM	03 23	ND	ND	45

Table 2. Results of raw milk samples collected following the Pike Event (activity extrapolated to time of collection). (continued)

LOCATION	ID	DATE COLL.	DATE COUNT	I 131	PC/L	CS 137
					I 133	
LAS VEGAS NEV	F02 G CH 03	22PM	03 23	30	ND	45
LAS VEGAS NEV	F02 D FD 03	23AM	03 23	ND	ND	35
LAS VEGAS NEV	F02 G CH 03	23AM	03 23	50	ND	45
LAS VEGAS NEV	F02 G CH 03	23PM	03 24	ND	ND	50
LAS VEGAS NEV	F02 D FD 03	23PM	03 24	ND	ND	55
LAS VEGAS NEV	F02 D FD 03	24AM	03 24	ND	ND	45
LAS VEGAS NEV	F02 G CH 03	24AM	03 24	ND	ND	40
LAS VEGAS NEV	F02 G CH 03	24PM	03 25	30	ND	45
LAS VEGAS NEV	F02 D FD 03	24PM	03 25	ND	ND	35
LAS VEGAS NEV	F02 G CH 03	25AM	03 25	30	ND	45
LAS VEGAS NEV	F02 D FD 03	25AM	03 25	ND	ND	35
LAS VEGAS NEV	F02 G CH 03	25PM	03 26	40	ND	50
LAS VEGAS NEV	F02 D FD 03	25PM	03 26	ND	ND	40
LAS VEGAS NEV	F02 G CH 03	26AM	03 26	ND	ND	45
LAS VEGAS NEV	F02 D FD 03	26AM	03 26	ND	ND	40
LAS VEGAS NEV	F02 D FD 03	26PM	03 27	ND	ND	40
LAS VEGAS NEV	F02 G CH 03	26PM	03 27	ND	ND	45
LAS VEGAS NEV	F02 D FD 03	27AM	03 27	ND	ND	35
LAS VEGAS NEV	F02 G CH 03	27AM	03 27	40	ND	50
LAS VEGAS NEV	F02 D FD 03	27PM	03 30	ND	ND	35
LAS VEGAS NEV	F02 G CH 03	27PM	03 29	50	ND	40
LAS VEGAS NEV	F02 G CH 03	28AM	03 29	ND	ND	45
LAS VEGAS NEV	F02 D FD 03	28PM	03 30	ND	ND	45
LAS VEGAS NEV	F02 G CH 03	28PM	03 29	ND	ND	45
LAS VEGAS NEV	F02 G CH 03	29AM	03 29	ND	ND	40
LAS VEGAS NEV	F02 G CH 03	29PM	03 31	ND	ND	35
LAS VEGAS NEV	F02 D FD 03	29PM	03 30	ND	ND	35
LAS VEGAS NEV	F02 G CH 03	30AM	03 31	ND	ND	40

Table 2. Results of raw milk samples collected following the Pike Event (activity extrapolated to time of collection). (continued)

LOCATION	ID	DATE COLL.	DATE COUNT	I 131	PC/L		CS 137
					I 133		
LAS VEGAS	NEV F02 G CH	03 30PM	03 31	30		ND	40
LAS VEGAS	NEV F02 D FD	03 30PM	03 31	ND		ND	35
LAS VEGAS	NEV F02 G CH	03 31AM	03 31	ND		ND	35
LAS VEGAS	NEV F02 D FD	03 31AM	03 31	ND		ND	35
LAS VEGAS	NEV F02 D FD	03 31PM	04 01	ND		ND	45
LAS VEGAS	NEV F02 D FD	04 01AM	04 01	ND		ND	50
LAS VEGAS	NEV F02 D FD	04 02AM	04 03	ND		ND	55
LAS VEGAS	NEV F02 G CH	04 03AM	04 03	ND		ND	35
LAS VEGAS	NEV F02 G CH	04 04AM	04 06	ND		ND	40
LAS VEGAS	NEV F02 G CH	04 05AM	04 06	ND		ND	30
LAS VEGAS	NEV F02 G CH	04 06AM	04 07	ND		ND	35
LAS VEGAS	NEV F02 G CH	04 07AM	04 08	ND		ND	50
LAS VEGAS	NEV F02 G CH	04 08AM	04 09	ND		ND	45
LAS VEGAS	NEV F02 G CH	04 09AM	04 10	ND		ND	40
LAS VEGAS	NEV F02 G CH	04 10AM	04 15	ND		ND	25
LAS VEGAS	NEV F02 G CH	04 13AM	04 14	ND		ND	45
LAS VEGAS	NEV F02 G CH	04 15AM	04 16	ND		ND	35
LAS VEGAS	NEV F02 G CH	04 17AM	04 20	ND		ND	75

Table 2. Results of raw milk samples collected following the Pike Event (activity extrapolated to time of collection). (continued)

LOCATION	ID	DATE COLL.	DATE COUNT	GR/L CA	PC/L SR 89	PC/L SR 90
LAS VEGAS NEV	F02 D	FD 03 15AM	03 15	1.60	ND	7
LAS VEGAS NEV	F02 D	FD 03 16AM	03 16	1.36	ND	18
LAS VEGAS NEV	F02 D	FD 03 16PM	03 17	1.36	ND	11
LAS VEGAS NEV	F02 D	FD 03 17AM	03 17	1.40	ND	11
LAS VEGAS NEV	F02 G	CH 03 17PM	03 18	1.62	ND	6
LAS VEGAS NEV	F02 D	FD 03 17PM	03 18	1.38	5	9
LAS VEGAS NEV	F02 D	FD 03 18AM	03 18	1.58	ND	11
LAS VEGAS NEV	F02 G	CH 03 18AM	03 18	1.62	ND	6
LAS VEGAS NEV	F02 G	CH 03 18PM	03 18	1.47	ND	3
LAS VEGAS NEV	F02 D	FD 03 18PM	03 18	1.60	5	6
LAS VEGAS NEV	F02 G	CH 03 19AM	03 19	1.30	ND	5
LAS VEGAS NEV	F02 G	CH 03 19PM	03 20	1.41	ND	3
LAS VEGAS NEV	F02 D	FD 03 19AM	03 20	1.50	ND	6
LAS VEGAS NEV	F02 D	FD 03 19PM	03 19	1.57	ND	6
LAS VEGAS NEV	F02 G	CH 03 20AM	03 20	1.39	5	3
LAS VEGAS NEV	F02 D	FD 03 20AM	03 20	1.25	ND	3
LAS VEGAS NEV	F02 G	CH 03 20PM	03 21	1.54	ND	5
LAS VEGAS NEV	F02 D	FD 03 20PM	03 21	1.47	ND	4
LAS VEGAS NEV	F02 G	CH 03 21AM	03 21	1.56	ND	6
LAS VEGAS NEV	F02 D	FD 03 21PM	03 22	1.60	ND	6
LAS VEGAS NEV	F02 G	CH 03 21PM	03 22	1.46	ND	6
LAS VEGAS NEV	F02 D	FD 03 22AM	03 22	1.61	ND	7
LAS VEGAS NEV	F02 G	CH 03 22AM	03 22	1.53	ND	6
LAS VEGAS NEV	F02 D	FD 03 22PM	03 23	1.71	5	5
LAS VEGAS NEV	F02 G	CH 03 22PM	03 23	1.54	ND	6
LAS VEGAS NEV	F02 D	FD 03 23AM	03 23	1.56	ND	6
LAS VEGAS NEV	F02 G	CH 03 23AM	03 23	1.38	ND	5
LAS VEGAS NEV	F02 G	CH 03 23PM	03 24	1.65	ND	7
LAS VEGAS NEV	F02 D	FD 03 23PM	03 24	1.59	5	6

Table 2. Results of raw milk samples collected following the Pike Event (activity extrapolated to time of collection). (continued)

LOCATION	ID	DATE COLL.	DATE COUNT	GR/L CA	PC/L SR 89	PC/L SR 90
LAS VEGAS NEV	F02	03 24AM	03 24	1.48	ND	8
LAS VEGAS NEV	F02	03 24AM	03 24	1.50	ND	5
LAS VEGAS NEV	F02	03 24PM	03 25	1.49	5	4
LAS VEGAS NEV	F02	03 24PM	03 25	1.46	ND	6
LAS VEGAS NEV	F02	03 25AM	03 25	1.47	ND	7
LAS VEGAS NEV	F02	03 25PM	03 26	1.49	5	3
LAS VEGAS NEV	F02	03 25PM	03 26	1.50	ND	15
LAS VEGAS NEV	F02	03 26AM	03 26	1.59	ND	5
LAS VEGAS NEV	F02	03 26AM	03 26	1.53	ND	5
LAS VEGAS NEV	F02	03 26PM	03 27	1.58	ND	5
LAS VEGAS NEV	F02	03 26PM	03 27	1.59	ND	11
LAS VEGAS NEV	F02	03 27AM	03 27	1.46	ND	6
LAS VEGAS NEV	F02	03 27AM	03 27	1.49	5	4
LAS VEGAS NEV	F02	03 28PM	03 29	1.54	5	5
LAS VEGAS NEV	F02	03 30AM	03 31	1.42	5	12
LAS VEGAS NEV	F02	03 30PM	03 31	1.42	5	12
LAS VEGAS NEV	F02	03 30PM	03 31	1.28	ND	7
LAS VEGAS NEV	F02	03 31AM	03 31	1.52	ND	7
LAS VEGAS NEV	F02	03 31AM	03 31	1.28	ND	7
LAS VEGAS NEV	F02	04 02AM	04 03	.	ND	7
LAS VEGAS NEV	F02	04 04AM	04 06	1.28	5	20
LAS VEGAS NEV	F02	04 05AM	04 06	1.28	5	20
LAS VEGAS NEV	F02	04 10AM	04 15	.	ND	10
LAS VEGAS NEV	F02	04 13AM	04 14	1.71	5	5
LAS VEGAS NEV	F02	04 15AM	04 16	1.35	5	5
LAS VEGAS NEV	F02	04 17AM	04 20	1.59	ND	8

Table 3. Results of milk samples collected following Shoal.

COLLECTION DATA		RADIOCHEMICAL DATA						
LOCATION	DATE COLLECTED	ACTIVITY (pCi/l)					CONCENTRATION (gm/l)	
		<sup>89</sup> Sr	<sup>90</sup> Sr	<sup>131</sup> I	<sup>140</sup> Ba-La	<sup>137</sup> Cs	Ca	K
Crazy K Ranch Dixie Valley, Nevada	01/31/64	5	38	<10	<10	165	1.34	1.1
Oats Farm	01/29/64	5	5	<10	<10	35	1.22	1.6
Fallon, Nevada	04/01/64	5	37	<10	<10	420	1.23	1.6
A. Jackson	02/01/64	5	27	<10	<10	100	1.47	1.7
Hawthorne, Nevada	04/02/64	15	30	<10	<10	130	1.57	1.5
Peavine Ranch, Nevada	01/04/64	<5	5	<10	<10	75	1.05	1.7
	02/03/64	10	31	<10	<10	345	1.26	1.3
	03/05/64	<5	6	<10	<10	95	1.25	1.5
	04/29/64	5	5	<10	<10	45	1.38	1.5
	06/03/64	10	5	<10	<10	80	1.52	1.3
Alvin Hughes	02/01/64	<5	10	<10	<10	85	1.01	1.4
Schurz, Nevada	03/31/64	30	64	<10	<10	375	1.42	
	05/05/64	<5	84	<10	<10	410		1.5
Lyle DeBraga	01/30/64	5	6	<10	<10	45	1.27	1.6
Stillwater, Nevada	04/02/64	5	9	<10	<10	55	1.42	1.3



Table 4. Results of routine milk sampling.

Location	Date	pCi/l					gm/l	
		<sup>89</sup> Sr	<sup>90</sup> Sr	<sup>131</sup> I	<sup>140</sup> Ba-La	<sup>137</sup> Cs	Ca	K
Anderson Dairy, Las Vegas, Nev.	1/16/64	5	15	A	A	110	1.24	1.7
	2/24/64	5	19	A	A	130	1.14	1.6
	3/11/64	B	15	A	A	115	1.16	1.4
	4/17/64	10	12	A	A	110	1.20	1.6
	6/23/64	5	8	A	A	65	1.15	1.5
Arden Dairy, Las Vegas, Nev.	1/16/64	5	13	A	A	70	1.22	1.6
	2/24/64	5	19	A	A	70	1.17	1.6
	3/11/64	5	14	A	A	100	1.14	1.6
	4/17/64	B	11	A	A	95	1.20	1.8
	6/23/64	B	6	A	A	65	1.17	1.5
Bliss Dairy, Las Vegas, Nev.	1/16/64	5	13	A	A	95	1.24	1.7
	3/11/64	B	17	A	A	130	1.18	1.6
	4/02/64	10	14	A	A	105		1.2
	4/17/64	5	13	A	A	110	1.29	1.6
	6/23/64	5	15	A	A	85	1.34	1.2
Hiland Dairy, Las Vegas, Nev.	2/24/64	5	20	A	A	115	1.23	1.6
	3/11/64	5	16	A	A	130	1.22	1.6
	4/02/64	15	14	A	A	105	1.00	1.6
	4/17/64	5	11	A	A	110	1.16	1.7
	6/23/64	10	8	A	A	40	1.25	1.1
Hinies Dairy, Las Vegas, Nev.	1/16/64	B	12	A	A	90	1.17	1.6
	2/24/64	5	11	A	A	95	1.13	1.6
	3/11/64			A	A	80		1.5
	4/02/64	B	10	A	A	80	0.97	1.4
	4/17/64	B	14	A	A	90	1.16	1.5
6/23/64	5	5	A	A	30	1.08	1.2	
Meadow Gold Dairy, Las Vegas, Nev.	1/16/64	5	18	A	A	105	1.14	1.6
	2/24/64	B	12	A	A	115	1.23	1.5
	3/11/64	B	17	A	A	115	1.20	1.7
	4/17/64	15	23	A	A	150	1.25	1.3
	6/23/64	5	22	SMPL LOST			1.15	
O. Simpson, Adaven, Nev.	4/16/64	20	29	A	A	370	1.46	1.4
M. Stewart, Alamo, Nev.	1/27/64	B	8	A	A	50	1.13	1.5
	3/03/64	5	17	A	A	120	1.20	1.4
	3/30/64	B	21	A	A	130	1.23	1.3
	4/29/64	10	19	A	A	180	1.22	1.7

Table 4. Results of routine milk sampling. (continued)

Location	Date	pCi/l					gm/l	
		<sup>89</sup> Sr	<sup>90</sup> Sr	<sup>131</sup> I	<sup>140</sup> Ba-La	<sup>137</sup> Cs	Ca	K
R. Young, Caliente, Nev.	1/28/64	5	10	A	A	65	1.11	1.5
	3/05/64	B	10	A	A	75	1.46	1.7
	3/30/64	B	27	A	A	85	1.62	0.9
	4/29/64			SOUR				
Blue Eagle Ranch, Currant, Nev.	1/24/64	10	55	A	A	375	1.17	1.4
	2/19/64	5	55	A	A	310	1.33	1.7
	4/02/64	15	56	A	A	455	1.20	
Halstead Ranch, Duckwater, Nev.	1/23/64	B	6	A	A	100	1.44	1.6
	1/23/64	5	44	A	A	340	1.29	1.3
	2/19/64	5	102	A	A	365	1.26	1.1
Fish Creek Ranch, Eureka, Nev.	2/04/64	B	26	A	A	150	1.29	1.1
	3/05/64	5	32	A	A	305	1.22	1.4
	4/01/64	B	30	A	A	210	0.76	
Hanson Ranch, Hiko, Nev.	1/27/64	B	7	A	A	60	1.16	1.5
	3/03/64	5	7	A	A	45	1.20	1.3
	3/30/64	B	10	A	A	60	1.37	1.5
	4/29/64	5	11	A	A	90	1.16	1.5
Selbach Ranch, Lathrop Wells	1/10/64	B	4	A	A	35	1.19	1.5
	2/14/64	B	15	A	A	25	1.20	1.4
L. Stevens, Lida, Nev.	1/18/64	B	10	A	A	50	1.07	0.9
	2/06/64	B	9				1.66	
	3/04/64	5	17	A	A	60	1.63	1.0
	4/01/64	25	21	A	A	130	1.52	
	4/30/64			A	A	110		1.5
	6/02/64	B	21	A	A	100	1.15	1.4
McKenzie Ranch, Lund, Nev.	1/08/64	5	23	A	A	185	1.15	1.5
	1/16/64	5	24	A	A	170	1.25	1.6
	1/24/64	5	23	A	A	170	1.12	1.6
	1/29/64	B	24	A	A	175	1.12	1.7
	2/05/64	5	25	A	A	160	1.18	1.7
	2/14/64	8	72	A	A	165	1.14	1.6
	2/20/64	B	23	A	A	150	1.23	1.6
	2/27/64	10	23	A	A	170	1.14	1.6
	3/05/64	5	17	A	A	155	1.22	1.5
	3/12/64	5	17	A	A	165	1.16	1.7
	3/19/64	10	15	A	A	115	1.14	1.3
	3/26/64	5	24	A	A	135	1.22	1.6

Table 4. Results of routine milk sampling. (continued)

Location	Date	pCi/l					gm/l	
		<sup>89</sup> Sr	<sup>90</sup> Sr	<sup>131</sup> I	<sup>140</sup> Ba-La	<sup>137</sup> Cs	Ca	K
McKenzie Ranch, Lund, Nev.	4/03/64	B	26	A	A	25	1.02	
	4/09/64	B	24	A	A	180	1.16	1.4
	4/15/64	15	13	A	A	110	1.18	0.9
	4/23/64	5	25	A	A	170	1.15	1.4
	4/30/64	B	23	A	A	165	1.20	1.5
	5/08/64	5	17	A	A	125	1.17	1.5
	5/14/64	10	28	A	A	260	1.19	1.5
	5/21/64	B	37	A	A	235	1.15	1.3
	5/29/64	5	39	A	A	325	1.15	1.6
	6/04/64	5	30	A	A	270	1.19	1.4
	6/10/64	10	37	A	A	235	1.17	1.5
	6/18/64	5	40	A	A	375	1.20	1.6
Peavine Ranch, Manhattan, Nev.	1/04/64	B	5	A	A	75	1.05	1.7
	2/03/64	10	31	A	A	345	1.26	1.3
	3/05/64	B	6	A	A	95	1.25	1.5
	4/29/64			A	A	45		1.5
	6/03/64	10	5	A	A	80	1.52	1.3
K. Searles, Moapa, Nev.	1/29/64	B	12	A	A	80	1.15	1.6
	3/06/64	B	36	A	A	125	1.16	1.3
	3/30/64	B	14	A	A	115	1.17	1.4
	4/29/64	5	9	A	A	90	1.23	1.6
Sharp Ranch, Nyala, Nev.	4/01/64	B	45	A	A	425	1.24	1.5
Bowman Ranch, Pahrump, Nev.	1/07/64	B	2	A	A	30	1.29	1.5
	2/14/64	SOUR		A	A	50		1.4
	3/31/64	B	3	A	A	40	1.28	
	5/02/64	B	8	A	A	50	1.26	1.6
	5/29/64	B	8	A	A	45	1.32	1.6
H. Horlacher, Pioche, Nev.	1/29/64	B	9	A	A	50	1.86	1.7
	3/04/64	B	4	A	A	50	1.39	1.4
	3/30/64	B	5	A	A	30	1.35	1.2
	4/29/64			SOUR				
P. Peacock, Springdale, Nev.	1/07/64	B	7	A	A	100	1.25	1.5
	2/11/64	B	4	A	A	95	1.24	1.4
	3/04/64	B	11	A	A	115	1.35	1.3
	4/02/64	5	5	A	A	75	1.38	
	5/03/64	5	10	A	A	125	1.32	1.5
	5/27/64	B	6	A	A	60	1.34	1.4

Table 4. Results of routine milk sampling. (continued)

Location	Date	pCi/l					gm/l	
		<sup>89</sup> Sr	<sup>90</sup> Sr	<sup>131</sup> I	<sup>140</sup> Ba-La	<sup>137</sup> Cs	Ca	K
Artesia, New Mexico	4/21/64	5	4	A	A	45	1.13	1.6
Carlsbad, N.M.	4/22/64	B	6	A	A	50	1.18	1.5
White City, N.M.	4/22/64	B	3	A	A	45	1.09	1.5
Gonders Ranch, Garrison, Utah	1/23/64	5	9	A	A	50	1.34	1.4
	2/20/64	B	9	A	A	30	1.20	1.5
	3/31/64	5	18	A	A	100	1.12	1.5
Newcastle, Utah	1/06/64	B	12	A	A	60	1.17	1.5
	2/08/64	B	9				1.19	
	2/19/64	B	13	A	A	55	1.19	1.5
	2/26/64	B	14	A	A	70	1.18	1.5
R. Cox, St. George, Utah	1/03/64	B	19	A	A	135	1.05	1.4
	1/10/64	B	20	A	A	165	1.17	1.7
	1/17/64	5	21	A	A	170	1.23	1.7
	1/24/64	5	23	A	A	145	1.18	1.5
	1/30/64	10	22	A	A	135	1.17	1.6
	2/07/64	5	20				1.24	
	2/14/64	B	22	A	A	150	1.32	1.4
	2/21/64	B	22	A	A	140	1.21	1.5
	2/28/64	5	21	A	A	150	1.16	1.6
	3/06/64	B	19	A	A	135	1.28	1.4
	3/13/64	B	22	A	A	155	1.13	1.5
	3/20/64	5	24	A	A	150	1.22	1.4
	3/27/64	B	13	A	A	130	1.18	1.5
	4/03/64	B	20	A	A	135	1.16	
	4/10/64	B	6	A	A	100	1.23	1.6
	4/17/64	5	18	A	A	115	1.28	1.5
	4/24/64	10	12	A	A	95	1.22	1.6
	5/01/64	5	13	A	A	80	1.22	1.5
	5/08/64	5	14	A	A	80	1.12	1.4
	5/15/64	B	13	A	A	75	1.23	1.6
5/22/64	B	13	A	A	60	1.21	1.3	
5/29/64	5	18	A	A	85	1.39	1.6	
6/05/64	B	13	A	A	95	1.23	1.4	
6/12/64	10	13	A	A	90	1.17	1.4	
6/19/64	5	12	A	A	70	1.17	1.5	

Table 5. Results of milk samples collected following Kiwi B4D.

Location	Date Coll.	Date Count	gm/l			pCi/l		
	1964	1964	Ca	<sup>89</sup> Sr	<sup>90</sup> Sr	<sup>131</sup> I	<sup>133</sup> I	<sup>137</sup> Cs
Alamo, Nevada	5/14	5/14				ND	ND	1.2E2
	5/16	5/17				ND	ND	1.3E2
	5/20	5/21				3.0E1	ND	1.1E2
	5/23	5/25				ND	ND	1.4E2
Henroid Ranch, Cherry Creek, Nev.	3/15	3/17				4.0E1	ND	1.6E2
	5/17	5/19				4.0E1	ND	1.7E2
	5/19	5/21				ND	ND	1.6E2
	5/20	5/22				ND	ND	1.8E2
	5/21	5/25				ND	ND	1.1E2
Tex Gates Ranch, Cherry Creek, Nev.	5/17	5/17				4.0E1	ND	2.2E2
	5/18	5/18				ND	ND	1.8E2
	5/19	5/21				ND	ND	1.7E2
	5/21	5/22				ND	ND	1.4E2
	5/22	5/25				ND	ND	1.8E2
Blue Eagle Ranch, Currant, Nev.	5/14	5/17				1.0E2	ND	6.4E2
	5/14	5/17				1.1E2	5.0E1	4.9E2
	5/14	5/17	1.28	5	30			
	5/16	5/17				1.2E2	7.0E1	3.8E2
	5/16	5/17	1.18	5	26			
	5/17	5/18				1.2E2	ND	3.7E2
	5/18	5/21				ND	ND	2.6E2
	5/20	5/22				4.0E1	ND	2.6E2
	5/21	5/25				4.0E1	ND	3.4E2
	6/02	6/15				ND	ND	1.6E2
6/02	6/15	.93	ND	13				
Manzonie Ranch, Currant, Nev.	5/14	5/15				ND	ND	5.0E2
	5/17	5/17				ND	ND	3.6E2
	5/18	5/19				ND	ND	5.0E2
	5/19	5/21				ND	ND	4.4E2
	5/21	5/22				ND	ND	5.0E2
	5/22	5/25				ND	ND	3.6E2
Bradshaw Ranch, Currant, Nev.	5/17	5/17				ND	ND	1.1E2
	5/18	5/19				ND	ND	8.0E1
	5/19	5/21				ND	ND	1.2E2
	5/21	5/22				ND	ND	1.0E2
	5/22	5/25				ND	ND	9.5E1

Table 5. Results of milk samples collected following Kiwi B4D. (cont)

Location	Date	Date	gm/l			pCi/l		
	Coll. 1964	Count 1964	Ca	<sup>89</sup> Sr	<sup>90</sup> Sr	<sup>131</sup> I	<sup>133</sup> I	<sup>137</sup> Cs
Kitt Lear Ranch, Currie, Nev.	5/16	5/17				ND	ND	2.4E2
	5/18	5/19				ND	ND	2.0E2
	5/19	5/21				ND	ND	2.8E2
	5/22	5/25				ND	ND	3.0E2
Halstead Ranch, Duckwater, Nev.	5/17	5/17				9.0E1	6.0E1	1.4E2
	5/18	5/19				1.1E2	ND	1.6E2
	5/19	5/22				1.0E2	ND	1.4E2
	5/21	5/22				ND	ND	1.1E2
	5/22	5/25				3.0E1	ND	1.4E2
	6/04	6/15				ND	ND	8.5E1
	6/04	6/15	1.18	5	17			
Eldridge Ranch, Ely	5/19	5/21				ND	ND	4.4E2
Georgetown Ranch, Ely, Nev.	5/19	5/21				3.0E1	ND	1.7E2
	5/22	5/25				ND	ND	2.8E2
Yelland Ranch, Ely	5/19	5/22				ND	ND	3.0E2
Hiko, Nevada	5/14	5/14				ND	ND	1.3E2
	5/16	5/17				ND	ND	1.2E2
	5/20	5/21				ND	ND	1.2E2
	5/23	5/25				ND	ND	1.1E2
McKenzie Ranch, Lund, Nev.	5/17	5/19				ND	ND	3.0E2
	5/17	5/19				ND	ND	2.5E2
	5/18	5/21				ND	ND	3.2E2
	5/21	5/22				ND	ND	2.4E2
	5/22	5/25				ND	ND	2.9E2
Pescio Ranch, McGill	5/18	5/22				ND	ND	1.5E2
Cole Creek Ranch, Newark Valley, Nev.	5/19	5/22				ND	ND	2.0E2
M. Sharpe's Ranch, Nyala, Nev.	5/16	5/17				5.0E1	ND	1.8E2
	5/17	5/17				6.0E1	ND	2.2E2
	5/18	5/19				ND	ND	1.6E2
	5/18	5/21				5.0E1	ND	2.2E2
	5/21	5/22				ND	ND	2.1E2
	5/21	5/25				3.0E1	ND	1.8E2
	6/02	6/15	1.28	ND	18			
6/02	6/15				ND	ND	1.4E2	

Table 5. Results of milk samples collected following Kiwi B4D. (cont)

Location	Date	Date	gm/l			pCi/l		
	Coll.	Count	Ca	<sup>89</sup> Sr	<sup>90</sup> Sr	<sup>131</sup> I	<sup>133</sup> I	<sup>137</sup> Cs
	1964	1964						
Casey's Ranch, Nyala, Nev.	5/17	5/17				1.4E2	7.0E1	3.5E2
	5/17	5/17	1.67	20	19			
	5/18	5/18				1.0E2	ND	3.3E2
	5/20	5/22				7.0E1	ND	3.0E2
	5/22	5/25				ND	ND	1.9E2
	5/27	5/28				ND	ND	1.6E2
	5/27	5/28	1.79	5	25			
	6/04	6/15				ND	ND	1.2E2
	6/04	6/15	1.71	5	18			
American Fork, Utah	5/18	5/19				ND	ND	2.4E2
Gonders Ranch, Garrison, Utah	5/19	5/21				ND	ND	1.3E2
Ogden, Utah	5/18	5/19				ND	ND	1.2E2
Payson, Utah	5/18	5/19				ND	ND	1.8E2
Salt Lake City, Utah	5/18	5/19				ND	ND	1.4E2

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