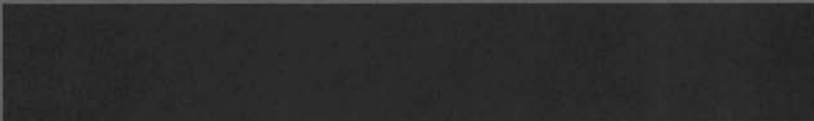


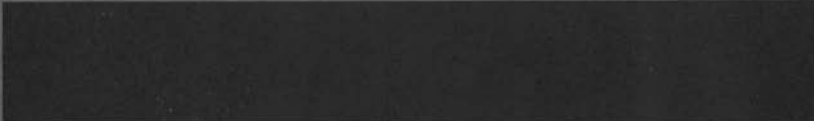
6
BNWL-1272
UC-53

2-
2-70



**DETAILED TIME-HISTORIES
OF CONCENTRATIONS RESULTING FROM PUFF
AND SHORT-PERIOD RELEASES
OF AN INERT RADIOACTIVE GAS:
A VOLUME OF ATMOSPHERIC DIFFUSION DATA**

February 1970



AEC RESEARCH & DEVELOPMENT REPORT

ROUTE TO	PERSON	DATE	ROUTE DATE

BNWL-1272

LEGAL NOTICE

This report was prepared as an account of Government sponsored work. Neither the United States, nor the Commission, nor any person acting on behalf of the Commission:

A. Makes any warranty or representation, expressed or implied, with respect to the accuracy, completeness, or usefulness of the information contained in this report, or that the use of any information, apparatus, method, or process disclosed in this report may not infringe privately owned rights; or

B. Assumes any liabilities with respect to the use of, or for damages resulting from the use of any information, apparatus, method, or process disclosed in this report.

As used in the above, "person acting on behalf of the Commission" includes any employee or contractor of the Commission, or employee of such contractor, to the extent that such employee or contractor of the Commission, or employee of such contractor prepares, disseminates, or provides access to, any information pursuant to his employment or contract with the Commission, or his employment with such contractor.

PACIFIC NORTHWEST LABORATORY

RICHLAND, WASHINGTON

operated by

BATTELLE MEMORIAL INSTITUTE

for the

UNITED STATES ATOMIC ENERGY COMMISSION UNDER CONTRACT AT(45-1)-1830

3 3679 00061 6542

BNWL-1272
UC-53,
Meteorology

DETAILED TIME-HISTORIES OF CONCENTRATIONS RESULTING FROM PUFF
AND SHORT-PERIOD RELEASES OF AN INERT RADIOACTIVE GAS: A
VOLUME OF ATMOSPHERIC DIFFUSION DATA

P. W. Nickola and J. V. Ramsdell, Jr.

Atmospheric Resources
Environmental and Life Sciences

and

J. D. Ludwick

Radiological Sciences
Environmental and Life Sciences

February 1970

BNWL-1272
INSTRUMENTATION

BATTELLE MEMORIAL INSTITUTE
PACIFIC NORTHWEST LABORATORIES
RICHLAND, WASHINGTON 99352

Printed in the United States of America
Available from
Clearinghouse for Federal Scientific and Technical Information
National Bureau of Standards, U.S. Department of Commerce
Springfield, Virginia 22151
Price: Printed Copy \$3.00; Microfiche \$0.65

DETAILED TIME-HISTORIES OF CONCENTRATIONS RESULTING FROM PUFF
AND SHORT-PERIOD RELEASES OF AN INERT RADIOACTIVE GAS: A
VOLUME OF ATMOSPHERIC DIFFUSION DATA

- Page 12 Under "Total Emitted (Ci)" for Test No. P1,
"10.9" should be "10.0".
- Page 13 Line 4 "...data on page A-9..." should be
"...data on page A-7..."
- Page 20 Fourth paragraph "...on the 42-M Tower..."
should be "...on the 25-M Tower..."
- Pages B-37 to B-40 inclusive - Under the column heading
"SECONDS AFTER RELEASE", all values should
have 348.0 seconds subtracted from the listed
values. For example, the first value on
page B-37 should be 507.0, and the last value
on page B-40 should be 804.6. (The correct
times are identical to those listed on pages
B-29 through B-32 inclusive).
- Page B-149 In the second line of headings, "200 METERS"
should be "800 METERS".

DETAILED TIME-HISTORIES OF CONCENTRATIONS RESULTING FROM PUFF
AND SHORT-PERIOD RELEASES OF AN INERT RADIOACTIVE GAS: A
VOLUME OF ATMOSPHERIC DIFFUSION DATA

P. W. Nickola, J. V. Ramsdell, Jr., and J. D. Ludwick

ABSTRACT

This paper is primarily a volume of atmospheric diffusion data of exceptional detail. The concentration measurements in this report were obtained from the release of the radioactive gas krypton-85 as an atmospheric tracer. Measurements were made simultaneously on a real-time basis at 64 field locations. The sampling array, arranged on sampling arcs at distances of 200 and 800 m from the tracer release point, consisted of 40 Geiger-Muller tubes at elevations of 1.5 m above the surface, with 24 more tubes located on six towers. Tower sampling extended to heights of 21 m.

Eight of these inert gaseous tracer releases were in the form of instantaneous bursts or puffs, while the remaining five releases took the form of plume releases of 10 to 20 min duration.

Vertical wind and temperature profiles for the periods of tracer transport are given. A description of the field system and field techniques is also included.

CONTENTS

FIGURES	vii
INTRODUCTION	1
THE FIELD SYSTEM	2
The Field Grid and Detectors	2
Data Collection, Storage, and Recording	8
Tracer Dispersal Techniques	9
TRACER SOURCE DATA	11
METEOROLOGICAL DATA FOR PERIOD DURING TRACER RELEASE AND TRANSPORT	11
TRACER CONCENTRATION DATA	15
COMMENTS ON INDIVIDUAL TESTS	18
Test P1	19
Test P2	20
Test C1	21
Test P3	21
Test C2	22
Test P4	23
Tests P5, C3, and P6.	23
Test P7	24
Test C4	24
Test C5	25
Test P8	25
ACKNOWLEDGEMENT	26
REFERENCES	26
APPENDIX A: METEOROLOGY	
Test P1	A-1
Test P2	A-2
Test P3	A-3
Test P4	A-4
Test P5	A-4
Test P6	A-5
Test P7	A-5
Test P8	A-6

Test C1	▪	▪	▪	▪	▪	▪	▪	▪	▪	▪	A-7
Test C2	▪	▪	▪	▪	▪	▪	▪	▪	▪	▪	A-9
Test C3	▪	▪	▪	▪	▪	▪	▪	▪	▪	▪	A-10
Test C4	▪	▪	▪	▪	▪	▪	▪	▪	▪	▪	A-11
Test C5	▪	▪	▪	▪	▪	▪	▪	▪	▪	▪	A-12
APPENDIX B:	CONCENTRATIONS	▪	▪	▪	▪	▪	▪	▪	▪	▪	
Test P1	▪	▪	▪	▪	▪	▪	▪	▪	▪	▪	B-1
Test P2	▪	▪	▪	▪	▪	▪	▪	▪	▪	▪	B-9
Test P3	▪	▪	▪	▪	▪	▪	▪	▪	▪	▪	B-45
Test P4	▪	▪	▪	▪	▪	▪	▪	▪	▪	▪	B-55
Test P5	▪	▪	▪	▪	▪	▪	▪	▪	▪	▪	B-63
Test P6	▪	▪	▪	▪	▪	▪	▪	▪	▪	▪	B-75
Test P7	▪	▪	▪	▪	▪	▪	▪	▪	▪	▪	B-83
Test P8	▪	▪	▪	▪	▪	▪	▪	▪	▪	▪	B-91
Test C1	▪	▪	▪	▪	▪	▪	▪	▪	▪	▪	B-115
Test C2	▪	▪	▪	▪	▪	▪	▪	▪	▪	▪	B-127
Test C3	▪	▪	▪	▪	▪	▪	▪	▪	▪	▪	B-135
Test C4	▪	▪	▪	▪	▪	▪	▪	▪	▪	▪	B-143
Test C5	▪	▪	▪	▪	▪	▪	▪	▪	▪	▪	B-147

FIGURES

1	Schematic Representation of Field Grid .	3
2	"Ground-Level" Field Detector on 800-m Arc .	4
3	Tower-Mounted Field Detectors on 800-m Arc .	5
4	Influence of Distance on Krypton-85 Detection in the Free Atmosphere .	7
5	Guillotine Employed in Puff Generation .	. 10
6	Distribution of Relative Concentration with Respect to Time and to Direction from Source During Test C5. (All Data at 1.5-m Elevation)	. 16

DETAILED TIME-HISTORIES OF CONCENTRATIONS RESULTING FROM PUFF
AND SHORT-PERIOD RELEASES OF AN INERT RADIOACTIVE GAS: A
VOLUME OF ATMOSPHERE DIFFUSION DATA

P. W. Nickola, J. V. Ramsdell, Jr., and J. D. Ludwick

INTRODUCTION

This volume presents atmospheric concentration measurements of a radioactive noble gas tracer, krypton-85. Concentrations of this gas, resulting from near ground-level tracer releases made at the Atomic Energy Commission's Hanford reservation, were measured by 64 field detectors located on arcs at distances of 200 and 800 m from the tracer release point. Each detector monitored the krypton tracer concentration on a real-time basis.

The data listed in this report were obtained from 13 releases of the tracer. Accompanying meteorological measurements are also given. Both instantaneous point releases and short-period releases of 10 to 20 min were employed. Although these tracer releases were made primarily to check the feasibility and response of a prototype field system, the data generated were of such high quality and exceptional detail that their publication in a form suitable for use by researchers or others interested in employing field-generated diffusion data was considered appropriate. To date, the krypton concentration measurements have been the source data for several studies completed at Hanford. (1,2,3)

Among the advantages of an inert gas tracer system is its minimum interaction with structures or vegetation and absence of reaction with other atmospheric constituents. Furthermore, the subject tracer system has the advantage of permitting

•

generation of either an instantaneous point source or a longer release, and of providing simultaneous real-time measurements of concentration at many locations.

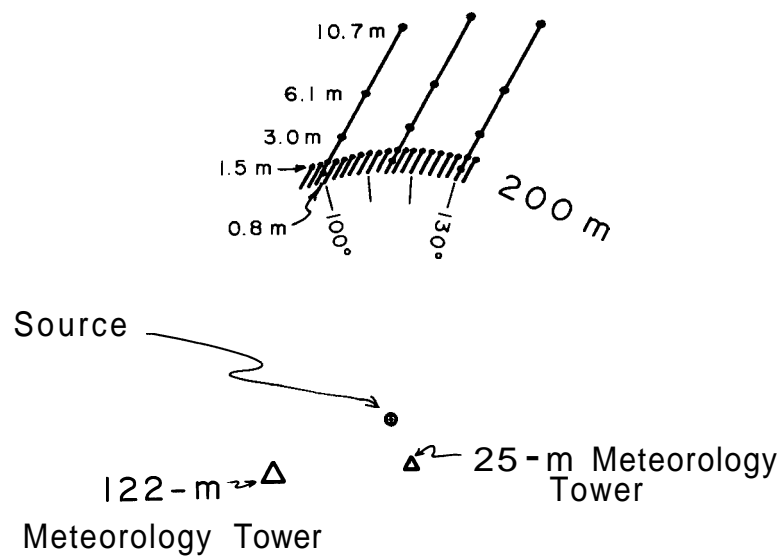
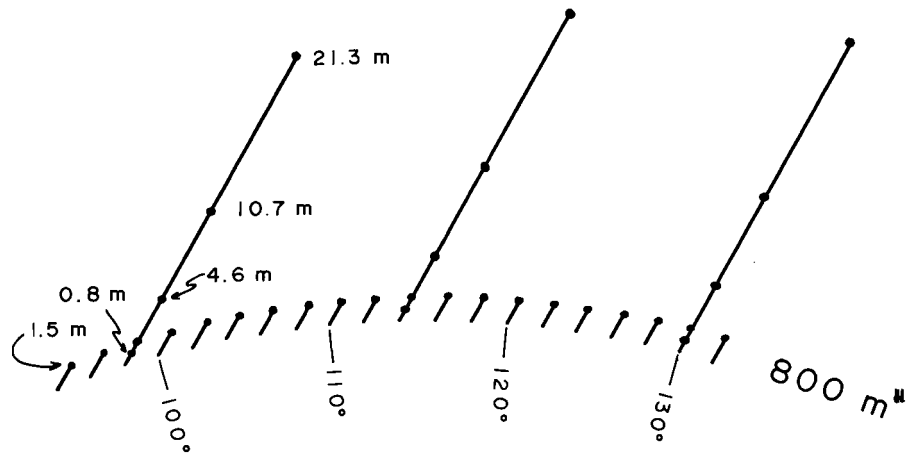
THE FIELD SYSTEM

Although the system itself has been described in the open literature,^(3,4) a brief review here of its physical layout and functioning is considered appropriate.

THE FIELD GRID AND DETECTORS

The krypton-85 tracer system was installed on a portion of the Hanford field diffusion grid.⁽⁵⁾ Terrain in this area is quite flat. The extremes in elevation on the krypton field course differ by only 20 ft. Vegetation is primarily sagebrush and steppe grasses. Photographs included in this report provide views of the field course.

The 64-field detectors were positioned along two arcs concentric about the tracer release point. The radii of these arcs were 200 and 800 m. The detectors were positioned to take advantage of the frequent west-northwest winds at Hanford. Figure 1 is a schematic presentation of the distribution of these field detectors. Twenty of the field detectors, 1.5 m above the ground, were placed on each of the two sampling arcs. The remaining samplers were mounted on six towers, three towers on each arc. Figure 2 shows removal of a protective cover from one of the "ground-level" (1.5-m elevation) detectors on the 800-m arc. Figure 3 shows the bottom three sensors mounted on a tower. The middle detector in this figure is at an elevation of 1.5 m. It and other tower sensors mounted at the 1.5-m elevation can be considered as a part of both the horizontal and vertical sampling arrays. Signals generated by such sensors will be included in both the "ground-level" and "tower" data presented later in this report.



Neg 0695345

FIGURE 1. Schematic Representation of Field Grid



FIGURE 2 "Ground-Level" Field Detector on 800-m Arc

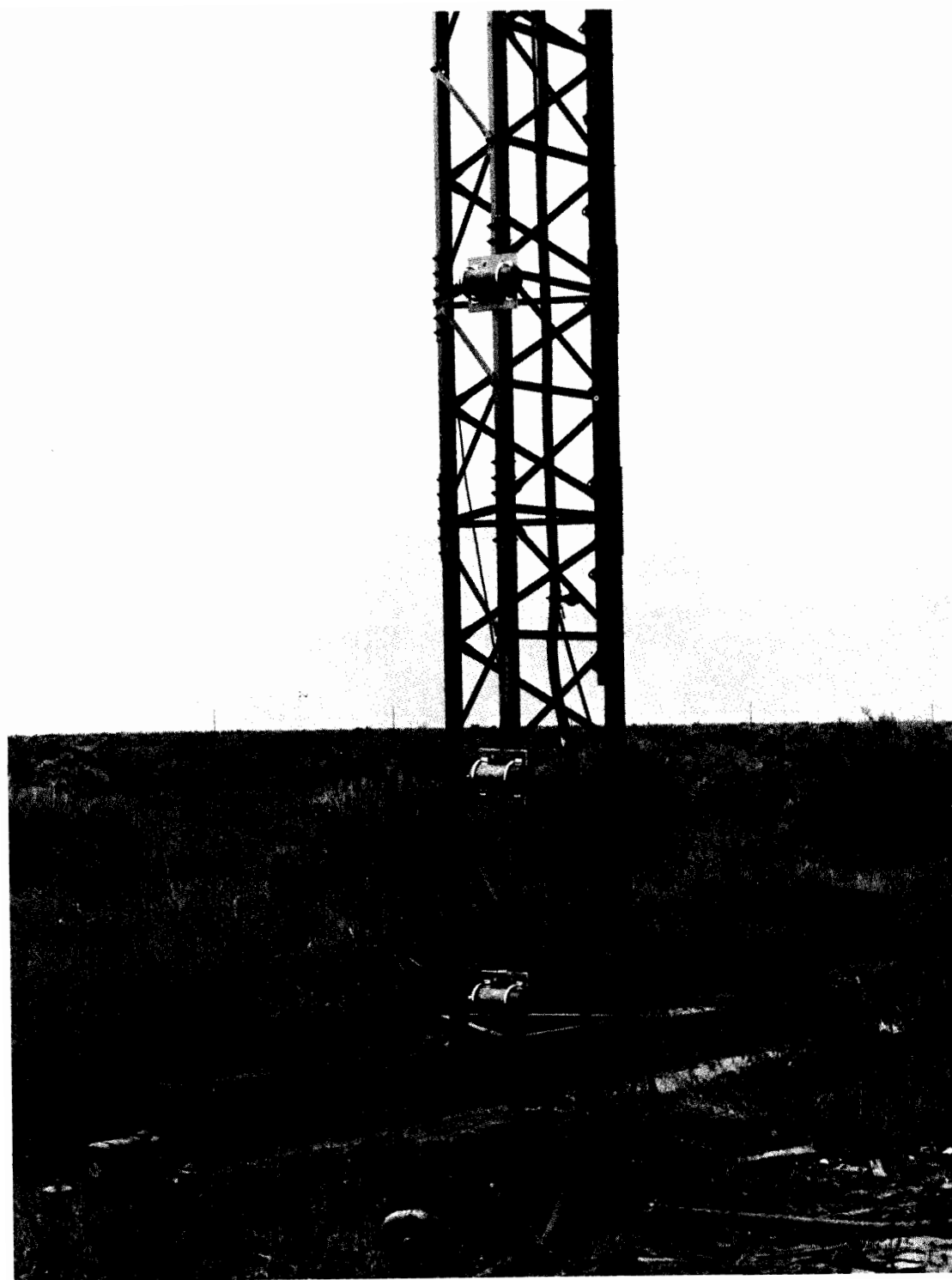


FIGURE 3. Tower-Mounted Field Detectors on 800-m Arc

The sensors employed to detect the 0.68 MeV (max) beta particles associated with the krypton-85 was a halogen-quenched Geiger-Muller tube. Chlorine-36 sources, similar in beta activity to krypton-85, were used for crosscalibration of the field detectors. These sources were positioned identically with respect to each detector in order to determine relative counting efficiencies of each detector. Detectors with efficiencies of more than 5% above or below the mean efficiency, were discarded.

The efficiency was related to the quantitative measurement of the krypton tracer by placing several of the Geiger counters, in turn, inside a large meteorological balloon and then inserting a known amount of krypton-85. Next, compressed air was added to expand the volume so that the radius of the balloon was greater than the range of the krypton beta particle. The calibration determined from those Geiger tubes checked was 9.7 counts per sec per μCi per m^3 . Although somewhat different calibration constants are doubtless appropriate for each detector, no attempt was made (beyond the culling mentioned in the preceding paragraph) to individually calibrate all tubes prior to the prototype field tests whose data are reported in this document. Nonetheless, the individual detector data are generally consistent and directly intercomparable.

The effect of distance of the krypton tracer from the detector was ascertained in the balloon calibration procedure. The specific activity of the gas was determined by expanding the balloon to the point where the radius of the sphere was beyond the range of the krypton beta particle. Measurements of the detector counting rate versus size of the balloon were made as the gas was slowly exhausted from the sphere. The results of this procedure are graphed in Figure 4. It can be

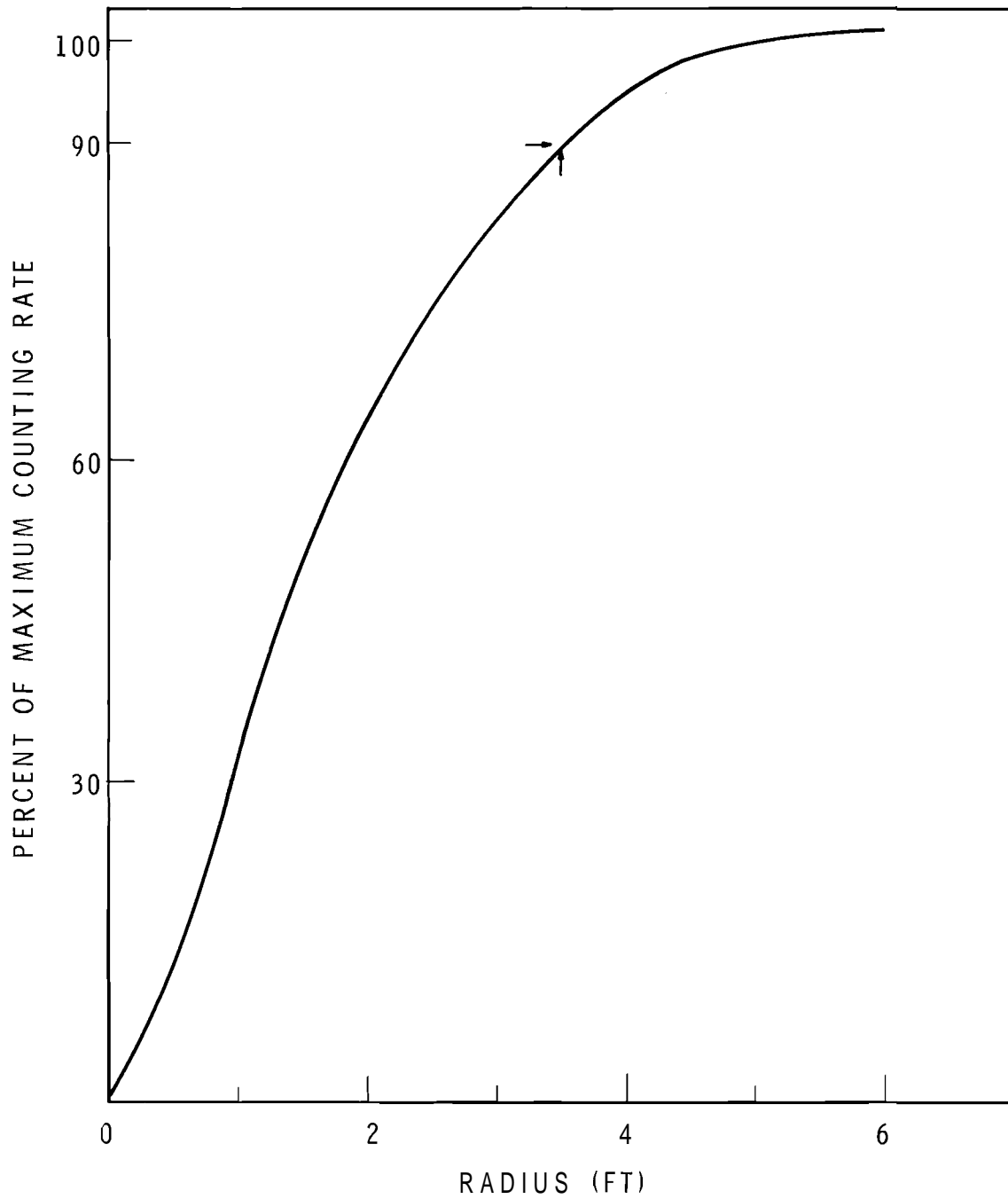


FIGURE 4. Influence of Distance on Krypton-85 Detection in the Free Atmosphere

seen that 90% of the counts registered by the detector were generated within a radius of less than 3.5 ft from the detector, and more than 99% originated within a radius of 5 ft.

DATA COLLECTION, STORAGE, AND RECORDING

Counts from the field detectors were relayed by coaxial cables to a 4096 address memory. The memory was programmed to accept data simultaneously from the 64 detectors for 64 successive time increments. In this paper, the period required to fill the memory will be referred to as a "storage period". A time interval selector permitted automatic advance of the stepping process at a slow or fast rate through the 64 time increments. The time increment selector permitted counting intervals of 1.2, 2.4, 4.8, or 38.4 sec. The time lost between sampling period was negligible, on the order of a few milliseconds. The specific time interval selected was determined to a great extent by the expected time required for the plume or puff to clear the sampling grid. At the end of each storage period, the data were read onto magnetic tape and the memory was cleared. The time interval required for dump and reactivation was less than 40 sec.

After completion of a field test, the data contained on the magnetic tapes were transferred back into the 4096 memory. The memory was then read out to a unit providing a photographic reproduction of the counts accumulated in each channel. Data from the photographs were punched onto cards for electronic data processing to the format presented in Appendix B of this report. Modification of the system so as to permit direct computer handling of the magnetic tape output is underway.

The central electronics were housed in a temperature-controlled trailer about 100 m from the source point. A series of coaxial cables carried high voltage from this

central location to each field detector and returned the beta-initiated pulses from the detector to the central station. Bundles of these cables are visible in both Figures 2 and 5. The bundle in Figure 5 incorporates all of the 64 cables leading to the trailer, (off to the left of the photograph). The bundles were suspended on metal stakes primarily to avoid difficulties with desert rodents. After removal of protective caps from detectors, all subsequent data collection functions could be handled from the trailer by a single individual.

TRACER DISPERSAL TECHNIQUES

The concentration data listed in this report were obtained from two types of releases. These were near instantaneous bursts (called "puffs" in this paper) and short period releases of from 10 to 20 min (referred to here as "plumes").

Puffs were generated by the crushing of a quartz ampule containing the krypton-85 tracer. The ampules were smashed in the guillotine-like device shown in Figure 5. This photo displays the lead brick "crusher" suspended over the krypton ampule at the bottom of the guillotine. Each ampule contained 10 Ci of krypton-85. The gas in the ampule was sealed at near atmospheric pressure to minimize the initial volume of the "instantaneous point source". All of the vials were crushed while resting on the ground.

In the case of the plumes, the source was a pressurized gas cylinder from which krypton was released at a rate of about 1 Ci/min for periods of 10 to 20 min. The effective source height for these short-period releases was approximately 1 m.

A word of caution may be in order here, particularly to researchers who may employ these data in simulation of point sources. During these prototype tests, the area directly

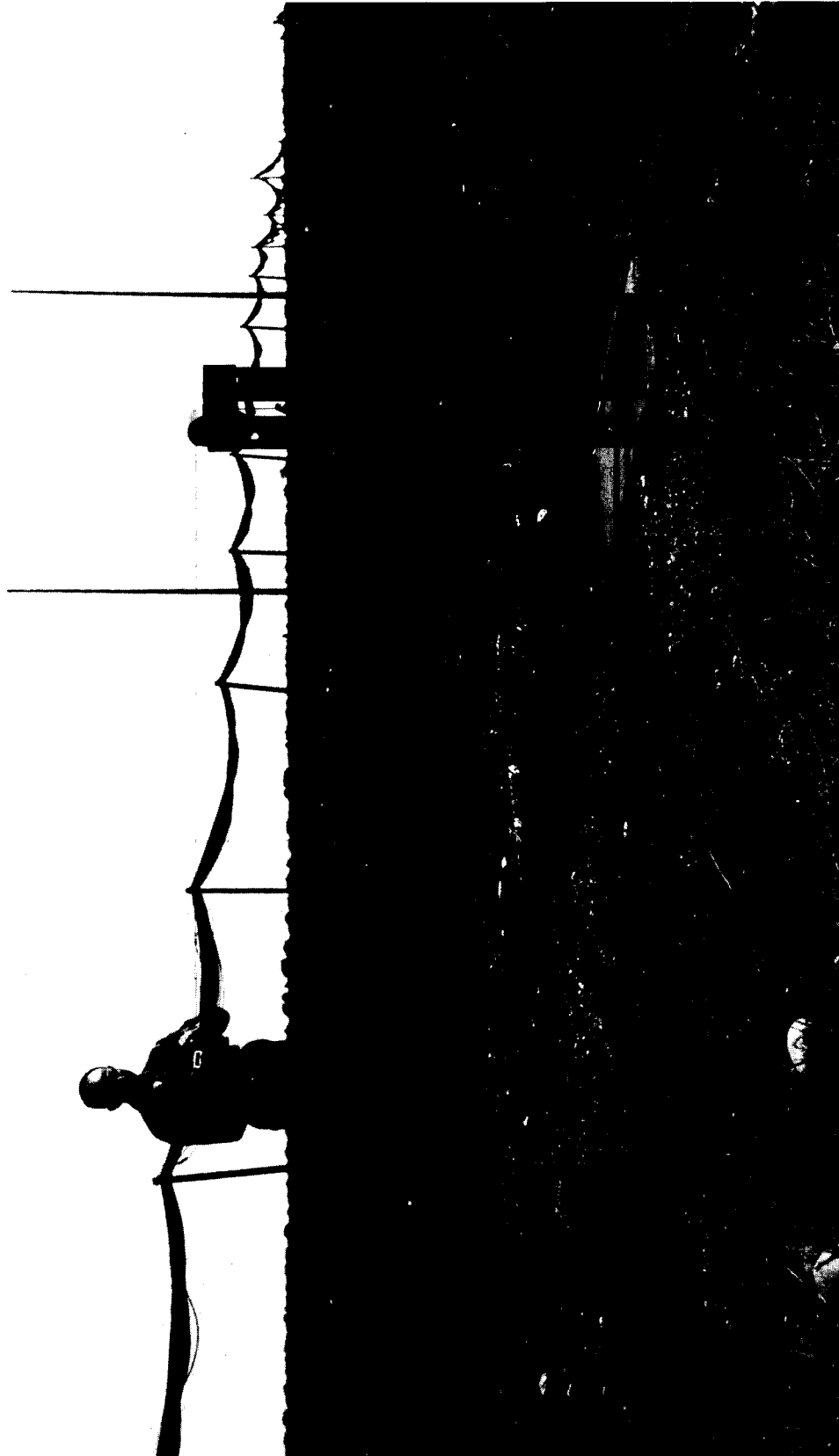


FIGURE 5. Guillotine Employed in Puff Generation

upwind of the source was less than perfect in terms of the clear fetch desired in an ideal diffusion study. A flatbed trailer about 6 m in length was parked about 4 m upwind of the source location. Several boxlike pieces of apparatus were spaced on the trailer. Overall, a lattice-like cross section of 8 to 10 m² presented to the wind approaching the source undoubtedly caused some wake effects in the vicinity of the source.

TRACER SOURCE DATA

A total of 13 krypton-85 releases were made. Eight of the releases were puffs, and five were plumes. Table 1 lists the releases in chronological order. Tests whose numbers are preceded by a "P" are puff releases. Those preceded by a "C" are plumes. Releases occurring within a period of an hour or less are grouped together in the table. The table presents data pertinent to the number of curies of gas emitted and the emission times. The last two columns give general meteorological information and are intended only to aid the reader in roughly grasping the meteorological regimes embraced during this test series. The last column, in particular, is a very subjective categorization. Much more detailed meteorological information is supplied elsewhere in this report.

METEOROLOGICAL DATA FOR PERIOD DURING TRACER RELEASE AND TRANSPORT

Appendix A gives meteorological data pertinent to each tracer release. The data were gathered by sensors mounted on two towers located upwind of the field grid. The location of these meteorology towers is indicated on Figure 1. The towers are 25 and 122 m in height. Instrumentation⁽⁶⁾ on the shorter tower was of a faster response type and recorded in more

TABLE 1. Krypton-85 Tracer Releases

Test No.	Date (1967)	Start (PST)	End (PST)	Duration (min & sec)	Total Emitted (Ci)	Release Rate (Ci/sec)	Wind Speed at 1.5m (mps)	Qualitative Thermal Stability
P1	Aug 18	0312	-	-	10.9	-	2.5	Stable
P2	Sep 14	2300:00	-	-	10.0	-	1.3	Very Stable
C1	Sep 15	0000:00	0015:28	15:28	10.9	0.0117	0.3	Very Stable
P3	Oct 17	0738:00	-	-	10.0	-	4.2	Neutral
C2	Oct 17	0801:50	0816:55	15:05	10.9	0.0120	3.9	Unstable
P4	Oct 17	0838:15	-	-	10.0	-	4.9	Unstable
P5	Oct 23	1052:40	-	-	10.0	-	8.0	Unstable
C3	Oct 23	1101:25	1115:40	14:15	23.8	0.0278	7.1	Unstable
P6	Oct 23	1130:00	-	-	10.0	-	7.3	Unstable
P7	Oct 24	1052:30	-	-	10.0	-	4.6	Unstable
C4	Oct 24	1104:30	1114:28	9:58	22.8	0.0388	3.9	Unstable
C5	Nov 8	0512:22	0532:13	19:51	20.4	0.0171	2.6	Stable
P8	Nov 8	0602:00	-	-	10.0	-	1.5	Stable

detail than that mounted on the 122-m tower. Therefore, information when available from the shorter tower, was used in compiling the data reported in Appendix A.

Let us examine Test C1 data on Page A-9 of Appendix A as an example of data generated completely at the 25-m tower. The time of 0000 listed in the first column signifies that the data at the right are applicable to the interval 0000:00 PST to 0001:00 PST. These minute-by-minute data follow until such a time as either 1) the instruments are turned off, or 2) tracer is no longer detectable on the field grid. The space skipped after each 5 min of data on the aforementioned page is merely for convenience in reading the table. On Page A-8, at the conclusion of the minute-by-minute data, the data are summarized by 5-min periods (e.g. minutes 0000 to 0004, inclusive), and finally, over a period embracing all or nearly all of the data collection period.

With the exception of Test P1 on Page A-1, all wind speed, speed standard deviation, and direction standard deviation data were obtained from measurements on the 25-m tower, and are reported in the manner just described. Since the 25-m instrumentation was inoperative during Test P1, wind speeds reported for this test were read from strip charts generated by Aerovane sensors mounted on the 122-m tower. Since the chart speed was only 3 in./hr, the tabled one-minute increments of speed obtained from the chart are relatively imprecise. Any attempt to generate standard deviations from the 3 min of data during puff transport would be essentially meaningless, particularly if these data were expected to be compatible with the standard deviations generated from the 25-m tower data. The method of generating standard deviations from the 25-m tower instrumentation will be described shortly.

During this test series, the 25-m tower temperature system operated satisfactorily only during Tests C1, P2, P4, and P6. This temperature system, when in operation, reported an air temperature for each sensor twice a minute. Thus temperatures are available for completion of the meteorological appendix on a minute-by-minute basis for these four tests. For the remaining nine releases, temperatures from the 122-m tower were employed in the preparation of Appendix A. Since the frequency of temperature reporting for each sensor on this taller tower was about once per 4 min, no data are presented in the minute-by-minute portion of the tables. Note that the heights of temperature (or wind) sensors are not the same for both towers.

Since the type of wind sensors used and the method of recording data have a bearing on the values of the standard deviations of wind speed and direction, a brief description of the wind measuring-recording system on the 22-m tower is in order. The wind speed sensors were Beckman and Whitley Model M 1564 three-cup anemometers. The circuitry was arranged to permit accumulation of an integrated wind speed by each anemometer for 3.5 sec, after which 1.5 sec were consumed in signal processing and recording. Thus, in each minute, 12 such recorded bits of wind speed were accumulated for each anemometer. These 12 bits of data were employed in generating a mean wind speed and speed standard deviation listed for each minute for each test in Appendix A.

The wind direction transducers employed were Beckman and Whitley Model 1565 vanes. The output signals from the wind vane transducers were smoothed by a filter having a 5 sec time constant. The filter output was sampled for 60 msec once each 5 sec, digitized, and recorded. The resultant 12

recorded directions for each minute were the input for the standard deviation listed in the meteorology appendix. Inasmuch as the wind vanes were relatively poorly oriented during this test series, no mean directions are given.

TRACER CONCENTRATION DATA

Time-histories of concentration are presented in Appendix B. The data are presented in the form of reproduction of computer printer listings. Isoplething of concentration values directly on these computer outputs reveals the coherent detail of concentration generated by the field system. Figure 6 is a composite of several pages of computer output with isopleths and supplemental headings and time scales added.

The first series of pages in Appendix B pertain to the eight puff releases ("P" tests). Concentration data for the short-period continuous releases ("C" tests) follow. The format of the concentration data presented for the puffs differs slightly from that presented for the plumes. The most important difference is that the relative concentrations listed in the body of the reports have units of counts/10 sec for the puffs, but units of counts/sec for the plumes.

A total of 1.9 counts/sec has been subtracted from the count rates listed in Appendix B. This subtracted value consists of a common mean background of about 1.2 counts/sec plus approximately three standard deviations of that mean.

Conversion of the relative concentrations (presented in the form of count rates) to meaningful atmospheric concentrations can be accomplished by means of the relationship.

$$\chi = 0.103 R$$

where χ is krypton-85 concentration in $\mu\text{Ci}/\text{m}^3$ and R is detector count rate in counts/sec.

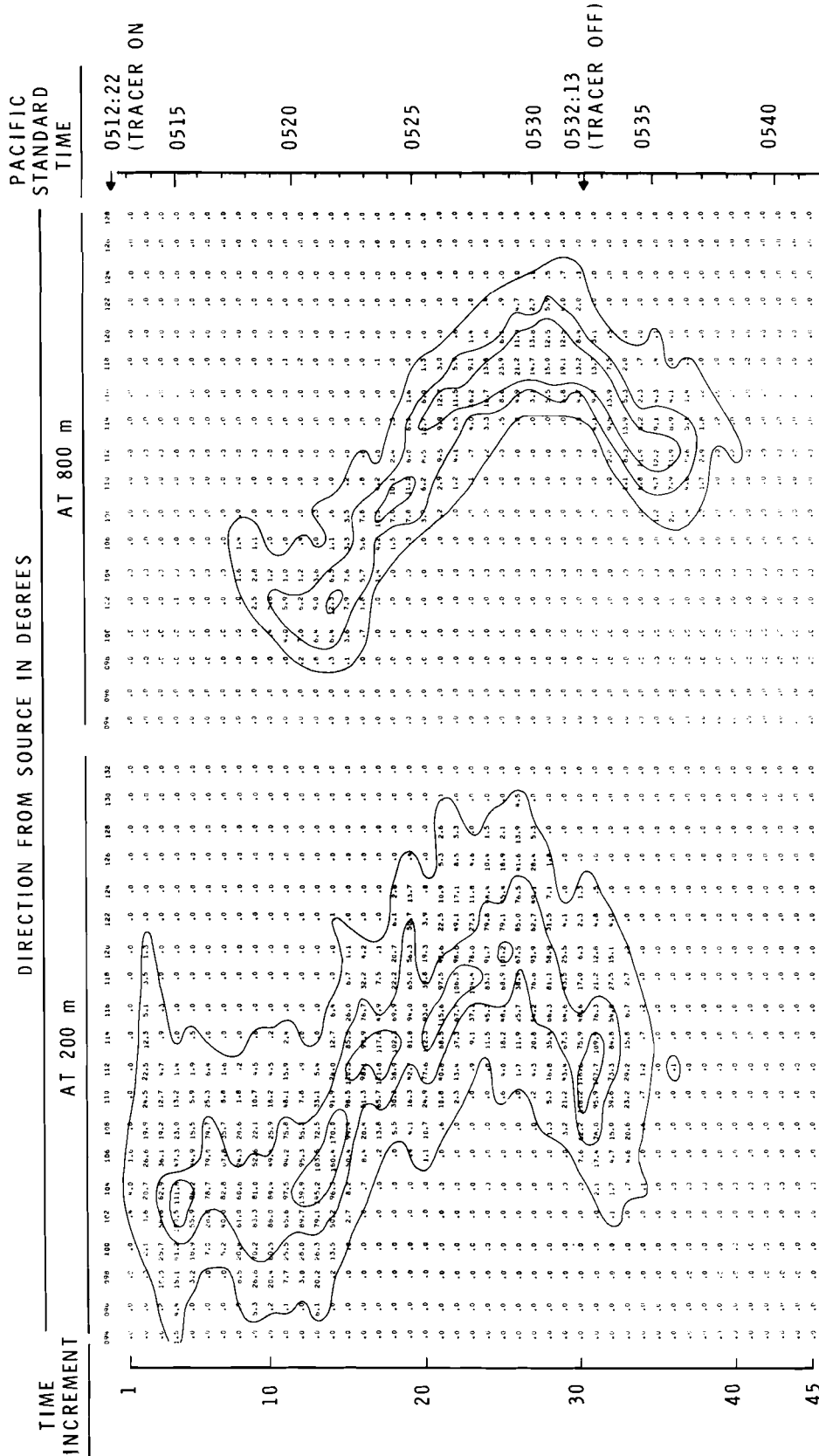


FIGURE 6. Distribution of Relative Concentration with Respect to Time and to Direction from Source During Test C5 (A 1 Data at 1.5-m Elevation)

The headings listed at the beginning of each test are reasonably self-explanatory. For the puffs, these headings are repeated at the beginning of each page of data. For the plumes, these headings are given only when the column headings differ from the previous page. For the P tests, sums of count rates are given at the right and at the bottom of each set of data. These sums are omitted with the C test data.

For a row of data across a page on a P test, accumulation began at the time listed in the column at the extreme left of the page under the title SECONDS AFTER RELEASE. The accumulation of counts continued for a period of time equal to the DATA ACCUMULATION INCREMENT listed at the top of each page. The end of this increment coincides with the start of the increment whose time is listed at the left of the following row of data.

For the plume releases, no times are listed for each row of data. A time corresponding to the beginning of accumulation of the first row of data is given, however, in the heading preceding data for each C test. This time is specified as START OF DATA STORAGE. Since the number listed under DATA ACCUMULATION INCREMENT gives the length of time data were accumulated in each row, a time corresponding to each row of data can be computed. The start and end times for the plume emission are also listed at the start of each test.

In Appendix B, missing data are indicated by a "-1". For the continuous runs, this -1 appears only one time for each set of missing data and directly follows the heading which identifies the missing detector's azimuth (or elevation, in the case of tower samples). A series of -1's are recorded for the missing puff data.

COMMENTS ON INDIVIDUAL TESTS

In the course of conducting a series of field experiments, there are bound to be peculiarities or problems associated with specific tests. This series of tests was no exception. It is, then, appropriate to comment on the tests individually. They will be reviewed in chronological sequence. This sequence is that listed in Table 1.

Before beginning with the comments on individual tests, a general comment should be injected regarding data appearing either implausible or dead wrong. For example, there is strong evidence in the data from several tests that signal leads from detectors on the tower at 200 m, 130° were interchanged. However, because of necessary disconnections and reconnections of detector-to-memory leads during this prototype series, and because of relatively long delay between recording of data and subsequent plotting in a form suitable for detailed analysis, it was generally impossible to check on suspected misconnections. Therefore, data in Appendix B are presented as applying to the field detector of record at the time of record regardless of the plausibility of the picture presented.

Prior to some field tests, counts from the 64 field detectors were permitted to accumulate for a relatively long period of time prior to turning the time increment selector from the accumulate position to one of the automatic stepping positions. These counts were recorded in the 64 memory addresses allotted to the first time increment. In several instances, tracer arrived at the 200-m arc detectors while the data storage system was still in this accumulate mode. Even though the total time of count accumulation may be known in such situations, the computation of a count rate would be

misleading. For example, there were instances when background counts were being accumulated prior to tracer release, and count accumulation continued through the period when tracer-initiated counts began. A mean count rate for this period would have minimal significance. Therefore, only total counts above background are presented for the cases when tracer arrived while the system was in the accumulate mode. These net counts are listed in the individual test comments which follow. In these comments, the nomenclature "data storage period" does not include the time during which the system was in the accumulate mode, but only the period during which the stepping process was automatic.

A problem common to all tests was that the vertical Sampling did not extend to a great enough elevation to define the top of the diffusing puff or plume.

On 11 of the 13 field tests, above background count rates are presented for only one data storage period. On Tests P2 and P8, above background count rates are available for three data storage periods. However, for these latter two tests, discontinuities in the concentration data occur for the periods during which memory dump was taking place.

TEST P1

The upwind fetch was unobstructed during this test. The flatbed trailer (mentioned under TRACER DISPERSAL TECHNIQUES) was not yet in place.

The source ampule of krypton-85 was smashed by shooting it with a bullet, inasmuch as the guillotine dispersal technique had not been developed.

The time of source release and initiation of data collection was not as precisely known as on subsequent tests. The best estimate of time between source release and initiation of the first increment of data collection was 56 sec. It is

possible that some tracer arrived at the 200 m-arc before data collection started. It is obvious that above background counts continued beyond the 64th time increment, the last time increment available in memory. However, by the time the memory was read to magnetic tape and the system was placed in the record mode for the second time, all detectors were giving background signals. The period required on this first test to effect the dump and reactivate procedure was 91 sec.

There is no ready explanation for the rather coherent set of above background counts at ground level between 120° and 130° azimuth starting at about 80 seconds after release.

The puff drifted off the north end of the 200-m arc during the last half of the data storage period. The puff then apparently drifted to the north of all 800-m detectors, inasmuch as they recorded only background data. Therefore, no 800-m data are given in Appendix B.

The wind and temperature sensors on the 42-m tower were not in operation during this test.

TEST P2

The trailer obstruction upwind of the source was in place, and continued in place throughout all subsequent tests in this series.

Smashing of the krypton-85 ampule again was by a rifle shot. The first shot punctured the ampule but did not shatter it completely. A second shot, 15 to 20 sec after the first, completed the breaking of the vial. It is felt that, although the first shot released the bulk of the tracer, some krypton likely remained shielded from the wind in the cuplike unbroken portion of the ampule until the second shot.

The tracer very likely reached the detector at 200 m, 130°, 10.7-m elevation prior to the first data storage period. However, since the system was not in the accumulate mode prior to this period, no positive statement can be made.

This puff, although reasonably well-contained within the horizontal confines of the grid at 200 m, extended beyond the south edge of the grid for the first 2 min of its passage at 800 m.

Only 32 time increments of data are available from the first of the three data storage periods during this test.

At 800 m, all counts were background during the first data storage period. Count rates were still well above background at the end of the third data storage period. However, no fourth storage period was initiated.

Although the detector at an elevation of 10.7 m on the 800-m, 130° tower was counting erratically during this test, its count rates are included in the Appendix B data.

TEST C1

Tracer release began precisely at midnight, one hour after the release of the puff of Test P2.

Operation of the instrumentation in the accumulate mode failed to reveal the arrival of any tracer on the grid prior to the data storage period presented in Appendix B. Although the plume meandered off the north edge of the field grid before the end of the first data storage period, count rates were very near background as the plume made its departure.

TEST P3

This release was the first of a series of three releases made within the period of one hour.

Prior to the listed data for the storage period, programmer control was in accumulate rather than automatic. In this case, there is evidence that tracer arrived prior to the arrival of data listed in Appendix B. Although the total amount of tracer passing during the pre-storage period was small, the accumulated net counts above background (not count rate) for the 200-m arc are as follows:

<u>Azimuth</u>	<u>Elevation</u>	<u>Net Count</u>
108°	1.5 m	9
110	1.5	120
112	1.5	81
114	1.5	156
116	1.5	92
118	1.5	24
120	1.5	12
122	1.5	18
124	1.5	248
114	0.8	185
114	3.0	271
114	6.1	683
114	10.7	1238

Tracer concentration at all detectors fell to background level prior to the completion of the data storage period. The tracer was completely contained horizontally within the sampling grid.

TEST C2

Minor amounts of tracer passed the 200-m arc while the system was in the accumulate mode. These net counts for the 200-m arc, accumulated prior to the Appendix B data, are as follows:

<u>Azimuth</u>	<u>Elevation</u>	<u>Net Count</u>
116°	1.5 m	24
118	1.5	26
120	1.5	82
122	1.5	108
124	1.5	399
126	1.5	527
128	1.5	800

<u>Azimuth</u>	<u>Elevation</u>	<u>Net Count</u>
130°	1.5 m	1118
132	1.5	770
130	0.8	907
130	3.0	1042
130	6.1	820
130	10.7	1165

The south edge of the plume meandered off the field grid on several occasions. Tracer concentration at all detectors fell to background level prior to the completion of the data storage period.

TEST P4

It is possible that a very minor amount of krypton reached the 200-m detectors prior to the first Appendix B data, but since no data were collected prior to the first listed Appendix B data, no proof or disproof can be given.

From the standpoint of horizontal containment, the test was the least successful of the series. Approximately half the tracer passed to the south of the sample grid.

Tracer concentration at all detectors was down to background level prior to the completion of the data storage period.

TESTS P5, C3, and P6

These three field releases were made within a period of 38 min. Because of high wind speeds, it was considered practical to start the automatic data storage increments well before tracer arrival and to continue them beyond the time when tracer cleared the field grid. This fact may not be obvious in the case of the 200-m data for Test C3. However, two 38.4-sec time increments of background count rates preceded the data first tabled in Appendix B.

Plume meander during Test C3 was great enough to cause above background counts on all 1.5-m detectors at 200 m. Significant amounts of tracer no doubt passed to the south of the sampling grid on both arcs during this test.

Tracer was completely embraced in the horizontal during Tests P5 and P6.

TEST P7

Some tracer arrived prior to switching the monitoring system from accumulate to automatic. Net counts due to this tracer at 200 m follow.

<u>Azimuth</u>	<u>Elevation</u>	<u>Net Count</u>
106°	1.5 m	34
108	1.5	0
110	1.5	673
112	1.5	679
114	1.5	674
116	1.5	1,260
118	1.5	248
120	1.5	61
122	1.5	30
114	0.8	1,643
114	3.0	3,883
114	6.1	12,620
114	10.7	8,524
130	0.8	5
130	3.0	25
130	6.1	171
130	10.7	0

Tracer was completely embraced within the horizontal extent of the grid during this test, and tracer concentration at all detectors was down to background level prior to the completion of the data storage period.

TEST C4

It is unlikely that tracer reached the 200-m detectors prior to acquisition of the first Appendix B data, since transport speeds in excess of 8 mps would have been required. No

wind speeds that high were recorded at any tower level. However, since no data were collected prior to the first listed Appendix B data, no absolute proof can be given.

Krypton was not completely contained at the southern edge of the grid.

Tracer concentration at all detectors was down to background level prior to the completion of the data storage period.

TEST C5

The data storage period started well before the arrival of krypton at the 200-m arc and continued past the time tracer cleared the 800-m arc. Four 38.4-sec time increments of background count rates preceded the data first tabled in Appendix B.

From the standpoint of plume containment in the horizontal, Test C5 was the most successful. As is illustrated in Figure 6, the plume reached the edge of the sampling grid on only one brief occasion.

TEST P8

The first data storage period started well in advance of the first tracer arrival at 200-m detectors. However, by the end of the first storage period, tracer had not cleared the 200-m arc and had only started to appear at 800 m. Obviously the puff had "stretched" to a length of greater than 600 m at this time. A second storage period was initiated. During this second period, tracer concentrations fell to background levels at 200 m, but continued above background at 800 m. A third data storage period was required before the 800-m detector counts fell to background.

During the test, tracer extended slightly beyond the southern extremity of the grid at both 200 and 800 m.

ACKNOWLEDGEMENT

It is appropriate here to acknowledge the continuing numerous contributions of Donald W. Glover as the krypton tracer system proceeded from the procurement stage through fabrication, field installation, and field testing.

REFERENCES

- P. W. Nickoza and J. D. Ludwick. "The Measurement of Particulate Plume Depletion in the Atmosphere by Comparison with an Inert Gaseous Tracer," Pacific Northwest Laboratory Annual Report for 1967 to the USAEC Division of Biology and Medicine. Volume II: Physical Sciences, Part 3. Atmospheric Sciences, BNWL-715 3, pp. 65-73. Battelle-Northwest, Richland, Washington, October 1968.*
2. *J. V. Ramsdell, Jr. and W. T. Hinds. "Concentration Fluctuations and Peak-to-Mean Concentration Ratios in Plumes from a Ground-Level, Continuous Point Source," manuscript submitted to Atmospheric Environment.*
 3. *P. W. Nickoza, J. D. Ludwick and J. V. Ramsdell, Jr. "An Inert Gas Tracer System for Monitoring the Real-Time History of a Diffusing Plume or Puff," manuscript submitted to J. of Appl. Meteorol., November 1969.*
 4. *J. D. Ludwick, J. J. Lashock, R. E. Connally and P. W. Nickoza. "Automatic Real Time Air Monitoring of ^{85}Kr Utilizing the 4696 Memory of a Multiparameter Analyzer," Rev. Sci. Instr., vol. 39, pp. 853-859. 1968.*
- J. J. Fuquay. Progress in Atmospheric Physics: A Summary of Hanford Laboratories Work on this Program Under General Electric, 1959-1964, HW-83602. Hanford Laboratories. Richland, Washington, September 1964.*
- C. A. Ratcliffe and E. M. Sheen. "An Automatic Data Collection System for Meteorological Tower Instrumentation," J. of Appl. Meteorol., vol. 3, pp. 807-809. 1964.*

APPENDIX A

METEOROLOGY

TEST P1

Generation 0312 PST 10 Curies
August 18, 1967

Time, <u>PST</u>	Mean Wind Speed i n MPS			Mean Temp i n Degrees FAHR -		
	<u>2.1m</u>	<u>15m</u>	<u>30m</u>	<u>0.9m</u>	<u>15m</u>	<u>30m</u>
0312	2.8	4.4	5.9			
0313	2.5	3.8	4.8			
0314	2.4	3.8	4.8			
to 0312 0314	2.6	4.0	5.2	82.9	84.8	85.2

TEST P2

Generation 2300:00 PST 10 Curies
September 14, 1967

Time, PST	Mean Wind Speed in MPS			Speed Standard Deviation, MPS			Dir Standard Deviation, DEG			Mean Tempo in Degrees FAHR		
	1.5m	6.1m	24.4m	1.5m	6.1m	24.4m	1.5m	6.1m	24.4m	1.5m	6.1m	24.4m
2300	1.1	2.4	4.9	0.06	0.09	0.15	2.4	1.0	0.8	65.6	68.6	71.9
2301	1.2	2.4	4.9	0.06	0.10	0.16	2.5	0.7	0.9	66.0	68.5	71.8
2302	1.1	2.5	5.0	0.10	0.08	0.21	2.5	1.2	0.9	65.5	69.0	71.8
2303	1.2	2.7	5.0	0.09	0.10	0.12	3.1	1.1	0.9	65.3	68.7	71.7
2304	1.3	2.7	5.1	0.14	0.08	0.17	2.7	0.8	0.7	65.9	69.0	71.7
2305	1.3	2.6	4.9	0.14	0.12	0.17	3.8	1.2	1.2	65.3	69.2	71.9
2306	1.2	2.6	4.8	0.06	0.07	0.19	2.0	1.4	1.0	65.8	69.1	71.6
2307	1.2	2.6	4.8	0.12	0.12	0.08	2.1	0.9	0.8	65.7	68.9	71.3
2308	1.3	2.6	4.8	0.08	0.11	0.19	2.3	0.7	1.0	65.4	68.7	71.0
2309	1.3	2.5	5.0	0.07	0.10	0.23	1.7	2.1	1.2	65.7	68.1	71.0
2310	1.3	2.6	4.9	0.12	0.14	0.22	1.8	1.3	1.4	65.8	68.0	71.1
2311	1.4	2.6	5.2	0.09	0.16	0.20	2.2	1.0	1.0	65.1	68.0	71.3
2312	1.3	2.7	5.0	0.11	0.20	0.38	2.7	1.5	1.1	64.7	67.9	71.5
2313	1.4	2.8	5.0	0.08	0.12	0.25	2.4	2.3	1.3	65.0	69.1	71.5
2314	1.4	2.7	5.1	0.07	0.18	0.15	2.5	2.8	1.1	64.4	68.1	71.1
2315	1.3	2.5	5.3	0.09	0.21	0.14	2.8	2.4	0.5	64.3	67.8	70.9
2316	1.4	2.5	5.4	0.12	0.23	0.18	3.4	1.2	0.5	63.9	66.6	71.3
2317	1.3	2.7	5.4	0.19	0.16	0.09	3.6	2.1	0.8	64.3	67.2	71.1
2318	1.1	2.5	5.5	0.11	0.18	0.16	4.5	2.3	0.9	64.1	66.6	70.8
2319	1.2	2.5	5.5	0.18	0.16	0.12	3.5	1.3	1.2	64.4	66.2	70.8
2320	1.0	2.2	5.9	0.18	0.16	0.12	4.3	2.3	0.6	64.4	66.1	71.9
2259 to 2302	1.1	2.4	4.9	0.09	0.11	0.17	3.8	1.3	1.0	65.8	68.8	71.8
2303 to 2307	1.3	2.6	4.9	0.12	0.11	0.18	4.8	1.6	1.5	65.6	69.0	71.7
2308 to 2312	1.3	2.6	5.0	0.10	0.15	0.29	3.0	1.6	1.3	65.3	68.2	71.2
2313 to 2317	1.4	2.6	5.3	0.12	0.20	0.23	3.4	3.3	1.1	64.4	67.8	71.2
2300 to 2320	1.3	2.6	5.1	0.15	0.18	0.34	4.4	2.9	2.4	65.1	68.1	71.4

TEST P3

Generation 0738:00 PST 10 Curies
October 17, 1967

Time, PST	Mean Wind Speed in MPS			Speed Standard Deviation, MPS			Dir Standard Deviation, DEG			Temperature in Degrees FAHR		
	<u>1.5m</u>	<u>6.1m</u>	<u>24.4m</u>	<u>1.5m</u>	<u>6.1m</u>	<u>24.4m</u>	<u>1.5m</u>	<u>6.1m</u>	<u>24.4m</u>	<u>0.9m</u>	<u>15m</u>	<u>30m</u>
0738	4.1	5.5	6.8	0.88	0.96	0.43	4.0	3.4	2.1			
0739	4.1	5.5	6.1	0.66	0.64	0.63	3.7	2.1	3.9			
0740	3.8	5.0	6.2	0.95	0.41	0.48	5.3	5.2	3.9			
0741	4.1	5.3	6.5	0.52	0.42	0.37	4.5	2.7	2.5			
0742	4.8	6.2	6.4	0.48	0.42	0.49	7.5	5.0	2.5			
0743	3.8	5.0	5.7	0.55	0.58	0.89	4.5	1.8	3.2			
0738 to 0742	4.2	5.5	6.4	0.79	0.72	0.54	5.2	4.2	3.1	53.5	52.7	51.8
0738 to 0743	4.1	5.4	6.3	0.76	0.72	0.67	5.1	4.0	3.1	53.5	52.7	51.8

TEST P4

Generation 0838:15 PST 10 Curies
October 17, 1967

Time, PST	Mean Wind Speed in MPS			Speed Standard Deviation, MPS			Dir Standard Deviation, DEG			Mean Temp in Degrees FAHR		
	<u>1.5m</u>	<u>6.1m</u>	<u>24.4m</u>	<u>1.5m</u>	<u>6.1m</u>	<u>24.4m</u>	<u>1.5m</u>	<u>6.1m</u>	<u>24.4m</u>	<u>1</u>	<u>6.1m</u>	<u>24.4m</u>
0838*	5.4	7.0	8.7	0.71	0.86	0.59	6.1	4.1	2.5	55.6	53.5	53.6
0839	4.5	6.3	7.9	0.84	1.12	0.57	5.6	6.2	2.8	56.1	55.3	54.3
0840	5.0	6.6	7.9	0.70	0.45	0.84	4.1	2.7	3.4	56.5	54.9	54.0
0841	4.3	5.4	6.8	0.90	0.53	0.27	4.5	4.9	3.2	57.1	55.3	55.0
0842	3.7	4.8	6.7	0.77	0.59	0.66	7.5	6.8	5.7	58.5	56.6	54.7
0838:15 to 0842	4.6	6.0	7.6	0.95	1.08	0.97	7.4	7.3	4.6	56.8	55.4	54.3

*Data for 0838:15 to 0839:00 only.

TEST P5

Generation 1052:40 PST 10 Curies
October 23, 1967

Time, PST	Mean Wind Speed in MPS			Speed Standard Deviation, MPS			Dir Standard Deviation, DEG			Temperature in Degrees FAHR		
	<u>1.5m</u>	<u>6.1m</u>	<u>24.4m</u>	<u>1.5m</u>	<u>6.1m</u>	<u>24.4m</u>	<u>1.5m</u>	<u>6.1m</u>	<u>24.4m</u>	<u>0.9m</u>	<u>15m</u>	<u>30m</u>
1052*	8.1	11.6	13.5	0.62	0.65	0.82	3.5	5.4	1.9			
1053	7.4	9.9	12.8	1.70	1.67	1.03	7.4	4.8	1.8			
1054	8.4	10.7	12.4	1.06	1.02	1.21	4.9	4.6	3.3			
1055	7.4	9.9	11.9	1.42	1.54	1.35	3.4	4.0	2.9			
1056	6.9	8.7	12.1	2.02	2.33	2.15	5.6	7.1	5.4			
1057	8.6	11.7	13.5	1.43	1.44	1.36	4.5	3.4	4.7			
1052:40 to 1056	7.6	9.9	12.4	1.58	1.80	1.48	6.4	6.1	4.9	60.0	57.5	56.6

*Data for 1052:40 to 1053:00 only.

TEST P6

Generation 1130:00 PST 10 Curies
October 23, 1967

Time, PST	Mean Wind Speed in MPS			Speed Standard Deviation, MPS			Dir Standard Deviation, DEG			Mean Temp in Degrees FAHR		
	<u>1.5m</u>	<u>6.1m</u>	<u>24.4m</u>	<u>1.5m</u>	<u>6.1m</u>	<u>24.4m</u>	<u>1.5m</u>	<u>6.1m</u>	<u>24.4m</u>	<u>1.5m</u>	<u>6.1m</u>	<u>24.4m</u>
1130	7.1	8.6	10.9	1.38	1.78	1.64	5.4	7.4	6.6	59.1	58.6	56.3
1131	7.7	9.6	11.8	1.47	1.33	1.03	3.3	2.5	1.9	59.2	57.7	55.8
1132	7.0	9.5	12.2	0.79	1.07	1.06	3.7	4.4	3.9	59.6	57.2	55.7
1133	7.3	9.8	12.2	1.21	0.76	0.91	7.6	8.4	5.4	58.6	56.9	55.4
1130 to 1133	7.3	9.4	11.8	1.23	1.33	1.28	5.9	6.6	4.8	59.1	57.6	55.8
1130 to 1134	7.2	9.3	11.7	1.19	1.25	1.20	5.4	6.2	4.6	59.2	57.7	55.9

TEST P7

Generation 1052:30 PST 10 Curies
October 24, 1967

Time, PST	Mean Wind Speed in MPS			Speed Standard Deviation, MPS			Dir Standard Deviation, DEG			Temperature in Degrees FAHR		
	<u>1.5m</u>	<u>6.1m</u>	<u>24.4m</u>	<u>1.5m</u>	<u>6.1m</u>	<u>24.4m</u>	<u>1.5m</u>	<u>6.1m</u>	<u>24.4m</u>	<u>0.9m</u>	<u>15m</u>	<u>30m</u>
1052*	4.7	5.1	6.2	0.57	0.55	0.43	4.3	1.8	3.5			
1053	5.4	6.3	6.9	0.59	0.76	0.33	5.5	3.1	2.3			
1054	4.3	5.1	6.1	0.83	0.74	0.29	4.1	3.3	4.2			
1055	4.3	5.4	6.3	1.05	1.18	0.61	6.6	7.9	6.8			
1056	4.0	4.9	6.0	0.42	0.53	0.59	8.6	7.7	10.7			
1057	3.9	5.1	6.3	0.96	0.83	0.82	9.8	7.9	7.1			
1052:30 to 1056	4.5	5.4	6.3	0.87	0.94	0.57	9.1	8.8	8.9	54.4	51.9	50.8

*Data for 1052:30 to 1053:00 PST only.

TEST P8

Generation 0602:00 PST 10 Curies
November 8, 1967

Time, PST	Mean Wind Speed in MPS			Speed Standard Deviation, MPS			Dir Standard Deviation, DEG			Temperature in Degrees FAHR		
	1.5m	6.1m	24.4m	1.5m	6.1m	24.4m	1.5m	6.1m	24.4m	0.9m	15m	30m
0602	1.4	2.4	4.7	0.16	0.33	0.26	4.5	3.7	1.9			
0603	1.2	2.1	4.5	0.20	0.32	0.27	4.5	5.4	3.8			
0604	1.6	2.3	4.3	0.18	0.38	0.26	4.0	3.4	2.4			
0605	1.5	2.3	4.5	0.16	0.15	0.36	4.5	3.8	2.2			
0606	1.5	2.4	4.4	0.23	0.25	0.35	4.6	2.6	2.5			
0607	1.7	2.2	4.6	0.27	0.22	0.25	6.4	4.5	2.4			
0608	1.8	2.5	4.5	0.25	0.31	0.32	3.3	2.8	2.2			
0609	1.6	2.6	4.7	0.30	0.25	0.39	4.4	3.2	3.2			
0610	1.6	2.4	4.7	0.26	0.24	0.25	4.0	4.0	1.6			
0611	2.0	2.8	4.9	0.23	0.27	0.20	3.4	2.1	1.4			
0612	2.0	2.9	4.5	0.34	0.26	0.23	3.5	3.9	1.8			
0613	2.0	2.8	5.0	0.39	0.36	0.30	3.9	3.1	2.1			
0614	2.2	3.1	5.1	0.30	0.35	0.36	2.3	2.7	1.3			
0615	2.0	3.1	5.3	0.35	0.41	0.33	6.1	3.7	1.3			
0616	2.4	3.0	5.0	0.43	0.29	0.16	5.5	2.9	1.8			
0617	1.8	2.8	5.1	0.22	0.22	0.36	6.2	4.5	1.8			
0602 to 0606	1.5	2.3	4.5	0.22	0.32	0.32	8.1	7.6	4.4	40.5	41.6	42.0
0607 to 0611	1.7	2.5	4.7	0.29	0.33	0.31	8.9	7.0	2.8	40.2	41.5	41.9
0612 to 0616	2.1	3.0	5.0	0.38	0.34	0.37	6.2	6.0	2.9	40.1	41.5	41.8
0602 to 0611	1.6	2.4	4.6	0.29	0.34	0.33	8.7	7.3	3.7	40.3	41.5	42.0

TEST C1

Generation 0000:00 to 0015:28 PST 10.9 Curies
September 15, 1967

Time, PST	Mean Wind Speed in MPS			Speed Standard Deviation, MPS			Dir Standard Deviation, DEG			Mean Temp in Degrees FAHR		
	1.5m	6.1m	24.4m	1.5m	6.1m	24.4m	1.5m	6.1m	24.4m	1.5m	6.1m	24.4m
0000	1.2	2.2	4.8	0.10	0.19	0.18	1.3	1.4	0.9	64.3	66.7	69.8
0001	1.2	2.1	4.8	0.15	0.17	0.16	3.4	1.3	1.3	63.7	66.5	69.6
0002	1.0	2.2	4.8	0.12	0.14	0.23	3.5	1.7	0.9	63.9	66.0	69.6
0003	1.1	2.2	4.8	0.12	0.15	0.20	4.3	1.2	1.2	64.0	66.2	70.1
0004	0.9	2.0	4.9	0.07	0.16	0.37	3.1	2.1	1.2	63.5	65.9	69.6
0005	1.1	2.3	5.1	0.10	0.23	0.26	4.1	2.4	0.9	62.9	66.8	69.4
0006	1.1	2.3	5.0	0.12	0.13	0.27	2.9	2.0	0.8	63.0	66.3	69.7
0007	1.2	2.4	5.0	0.19	0.16	0.17	3.3	2.8	1.2	63.7	66.7	69.1
0008	1.4	2.7	5.0	0.17	0.22	0.18	3.0	1.6	1.3	64.6	67.2	69.5
0009	1.5	2.6	5.1	0.18	0.18	0.20	3.3	1.6	0.7	64.2	67.0	69.7
0010	1.3	2.4	5.3	0.16	0.23	0.24	3.4	2.6	1.0	63.7	66.7	69.5
0011	1.4	2.6	5.3	0.13	0.26	0.20	2.3	1.8	1.1	64.6	66.8	69.3
0012	1.4	2.4	5.1	0.25	0.28	0.31	2.4	2.5	1.1	64.4	67.3	69.8
0013	1.3	2.5	5.0	0.12	0.22	0.21	3.6	1.6	1.5	65.1	66.6	69.6
0014	1.2	2.1	4.7	0.17	0.28	0.24	2.4	2.6	1.5	65.2	66.7	68.7
0015	1.0	1.9	4.9	0.10	0.14	0.22	5.0	4.0	1.0	64.6	66.1	69.3
0016	1.1	2.1	4.8	0.17	0.23	0.17	4.9	2.5	0.9	63.6	65.9	68.6
0017	1.0	2.0	5.1	0.14	0.21	0.33	6.4	2.8	0.9	64.3	65.8	69.5
0018	1.2	2.3	5.1	0.22	0.22	0.20	5.3	2.6	1.9	64.1	65.8	69.8
0019	1.4	2.4	5.1	0.14	0.28	0.21	1.9	3.3	1.0	64.2	66.2	69.3
0020	1.2	2.3	5.1	0.12	0.19	0.28	5.2	3.4	1.1	64.6	65.5	69.2
0021	1.3	2.1	4.9	0.14	0.07	0.35	2.2	4.0	1.3	64.1	65.5	68.8
0022	1.1	2.1	5.6	0.19	0.25	0.18	4.3	3.8	0.8	63.3	66.0	69.9
0023	1.4	2.7	5.4	0.29	0.21	0.20	3.1	1.6	1.0	64.2	65.9	69.7
0024	1.4	2.6	5.4	0.14	0.16	0.19	5.7	3.0	1.1	63.9	66.4	69.8
0025	1.5	2.6	5.2	0.09	0.16	0.13	2.2	1.3	0.9	64.5	65.7	69.4
0026	1.4	2.5	5.1	0.18	0.28	0.16	4.1	2.3	0.8	64.5	65.6	69.3
0027	1.5	2.6	5.1	0.13	0.18	0.08	3.5	1.6	0.5	64.0	66.0	69.2
0028	1.6	2.5	5.1	0.19	0.20	0.15	2.6	1.1	0.7	63.8	65.8	69.5
0029	1.5	2.5	5.3	0.08	0.17	0.20	3.4	2.4	1.3	63.3	65.7	69.7
0030	1.5	2.7	5.2	0.12	0.09	0.13	4.1	2.6	1.1	63.8	65.7	69.4
0031	1.4	2.6	5.2	0.11	0.13	0.19	2.6	1.3	0.9	63.1	65.8	69.6
0032	1.4	2.8	5.2	0.24	0.13	0.14	2.6	1.8	0.8	63.5	66.4	69.7
0033	1.4	2.6	5.1	0.16	0.12	0.13	2.0	2.5	1.2	63.6	65.9	69.8
0034	1.3	2.7	5.0	0.16	0.17	0.18	2.8	2.6	2.0	63.0	65.8	69.4

TEST C1
(Continued)

Time, PST	Mean Wind Speed in MPS			Speed Standard Deviation, MPS			Dir Standard Deviation, DEG			Mean Temp in Degrees FAHR		
	<u>1.5m</u>	<u>6.1m</u>	<u>24.4m</u>	<u>1.5m</u>	<u>6.1m</u>	<u>24.4m</u>	<u>1.5m</u>	<u>6.1m</u>	<u>24.4m</u>	<u>1.5m</u>	<u>6.1m</u>	<u>24.4m</u>
0035	1.3	2.7	5.0	0.21	0.08	0.15	2.3	1.5	2.0	62.7	65.8	69.5
0036	1.4	2.8	4.8	0.11	0.12	0.26	2.1	1.4	0.8	63.5	66.7	69.5
0037	1.4	2.7	4.8	0.28	0.18	0.13	3.0	3.2	1.3	63.0	66.1	69.0
0038	1.2	2.5	4.7	0.20	0.16	0.14	5.9	1.6	1.3	62.5	66.1	69.5
0039	1.3	2.5	4.6	0.15	0.11	0.26	2.5	0.7	1.0	63.4	66.2	69.4
0000 to 0004	1.1	2.1	4.8	0.15	0.18	0.24	6.3	2.6	1.3	63.9	66.3	69.7
0005 to 0009	1.3	2.5	5.0	0.21	0.24	0.22	4.2	2.8	1.2	63.7	66.8	69.5
0010 to 0014	1.3	2.4	5.1	0.18	0.31	0.33	4.3	3.6	1.3	64.6	66.9	69.4
0015 to 0019	1.1	2.1	5.0	0.20	0.29	0.26	5.1	3.4	1.3	64.2	66.0	69.3
0020 to 0024	1.3	2.4	5.3	0.21	0.30	0.34	5.7	4.2	1.3	64.0	65.9	69.5
0025 to 0029	1.5	2.5	5.2	0.15	0.20	0.17	6.0	2.8	1.2	64.0	65.8	69.4
0030 to 0034	1.4	2.7	5.1	0.16	0.13	0.18	3.6	2.5	1.3	63.4	65.9	69.6
0035 to 0039	1.3	2.7	4.8	0.22	0.17	0.23	5.5	3.1	1.8	63.1	66.2	69.4
0000 to 0039	1.3	2.4	5.0	0.23	0.31	0.30	11.8	8.4	3.7	63.9	66.2	69.5

TEST C2

Generation 0801:50 to 0816:55 PST 10.9 Curies
October 17, 1967

Time, PST	Mean Wind Speed in <u>MPS</u>			Speed Standard Deviation, <u>MPS</u>			Dir Standard Deviation, <u>DEG</u>			Temperature in Degrees <u>FAHR</u>		
	<u>1.5m</u>	<u>6.1m</u>	<u>24.4m</u>	<u>1.5m</u>	<u>6.1m</u>	<u>24.4m</u>	<u>1.5m</u>	<u>6.1m</u>	<u>24.4m</u>	<u>0.9m</u>	<u>15m</u>	<u>30m</u>
0801*	3.6	4.6	6.1	0.68	0.46	0.15	2.8	1.8	1.4			
0802	3.4	4.2	5.1	0.89	0.88	0.87	8.4	7.2	7.9			
0803	3.5	4.7	5.7	0.78	0.45	0.10	6.0	5.3	3.8			
0804	4.2	5.3	6.2	0.83	0.78	0.67	5.6	3.5	2.4			
0805	4.2	5.1	6.0	0.72	0.63	0.53	2.7	3.2	4.2			
0806	4.1	5.1	5.8	0.55	0.49	0.48	3.0	5.4	2.9			
0807	3.3	4.2	5.0	0.63	0.74	0.58	7.0	7.4	3.5			
0808	4.2	5.1	6.6	1.04	0.69	0.98	6.7	6.1	4.4			
0809	4.1	5.4	6.7	0.87	0.77	0.67	5.3	6.1	4.8			
0810	3.3	4.7	5.5	0.51	0.58	0.41	6.2	7.1	6.0			
0811	3.2	4.1	6.1	0.81	1.02	0.56	6.9	6.3	5.2			
0812	4.4	5.3	6.0	0.75	0.58	0.56	2.4	4.5	3.5			
0813	3.6	4.3	5.6	0.49	0.62	0.56	4.7	7.2	6.1			
0814	5.1	6.4	6.6	0.59	0.72	0.81	5.5	3.2	2.5			
0815	4.2	6.2	7.1	0.84	0.76	0.54	5.0	7.2	4.9			
0816	4.3	5.3	6.8	1.01	1.05	0.80	4.8	3.7	4.8			
0801:50 to 0805	3.8	4.8	5.8	0.86	0.79	0.89	6.4	5.1	4.1	53.4	52.6	52.0
0806 to 0810	3.8	4.9	5.9	0.84	0.77	0.91	5.8	6.3	4.6	53.9	52.7	52.1
0811 to 0815	4.1	5.3	6.3	0.96	1.20	0.78	5.4	6.7	4.8	54.5	53.1	52.4
0801:50 to 0816	3.9	5.0	6.1	0.90	0.97	0.90	6.1	6.1	4.7	54.1	52.8	52.2

*Data for 0801:50 to 0802:00 only.

TEST C3

Generation 1101:25 to 1115:40 PST 23.8 Curies
October 23, 1967

Time, PST	Mean Wind Speed in MPS			Speed Standard Deviation, MPS			Dir Standard Deviation, DEG			Temperature in Degrees FAHR		
	1.5m	6.1m	24.4m	1.5m	6.1m	24.4m	1.5m	6.1m	24.4m	0.9m	15m	30m
1101	7.7	10.4	13.4	1.67	2.05	1.41	3.7	4.4	2.8			
1102	7.4	9.5	13.0	1.29	1.36	1.33	3.9	1.5	3.7			
1103	6.8	8.9	11.9	0.99	1.11	1.13	5.5	5.4	4.0			
1104	8.2	10.1	12.8	1.54	1.51	1.43	4.2	5.0	3.5			
1105	8.6	11.4	13.9	1.50	1.90	0.90	4.1	3.4	2.5			
1106	6.3	8.9	11.1	1.25	1.03	1.16	6.3	4.8	3.4			
1107	7.0	9.0	11.9	1.80	1.78	1.06	5.2	6.3	6.4			
1108	6.6	8.1	9.9	1.96	1.90	1.58	13.1	12.1	6.5			
1109	7.2	9.2	11.3	1.60	1.30	1.84	5.2	3.7	3.0			
1110	6.8	8.7	10.8	1.07	0.81	1.22	2.9	3.9	3.8			
1111	6.6	8.5	10.3	0.92	1.02	0.75	4.5	3.6	7.1			
1112	7.0	9.6	11.3	1.22	1.28	1.46	7.9	4.4	3.6			
1113	7.0	9.4	12.8	1.33	1.57	0.93	7.2	4.7	2.5			
1114	6.7	9.9	12.7	0.87	1.07	0.69	2.8	2.1	1.7			
1115	7.4	9.7	12.0	0.73	1.05	1.00	11.7	9.5	5.9			
1116	6.6	8.9	10.6	1.16	1.26	1.40	3.7	3.0	3.2			
1117	6.3	8.4	10.5	0.74	1.55	1.35	5.5	6.5	5.5			
1118	7.8	9.8	11.8	1.15	1.33	0.76	3.5	5.2	2.6			
1119	6.2	8.1	11.4	1.42	1.86	0.64	5.5	3.4	3.0			
1102 to 1106	7.5	9.8	12.6	1.54	1.67	1.53	5.6	6.1	3.8	60.1	57.9	56.7
1107 to 1111	6.8	8.7	10.8	1.49	1.43	1.49	7.5	8.3	9.4	60.5	58.2	57.3
1112 to 1116	6.9	9.5	11.9	1.08	1.26	1.38	9.8	8.8	8.1	60.7	58.2	57.1
1117 to 1121	6.9	9.0	11.6	1.40	1.67	1.32	6.5	6.6	5.7	61.2	58.3	57.2
1101 to 1115	7.1	9.4	11.9	1.44	1.59	1.64	9.8	10.1	8.9	60.4	57.9	57.1

TEST C4

Generation 1104:30 to 1114:28 PST 22.8 Curies
October 24, 1967

Time, PST	Mean Wind Speed in MPS			Speed Standard Deviation, MPS			Dir Standard Deviation, DEG			Temperature in Degrees FAHR		
	<u>1.5m</u>	<u>6.1m</u>	<u>24.4m</u>	<u>1.5m</u>	<u>6.1m</u>	<u>24.4m</u>	<u>1.5m</u>	<u>6.1m</u>	<u>24.4m</u>	<u>0.9m</u>	<u>15m</u>	<u>30m</u>
1104	4.3	5.6	6.7	1.45	1.51	1.28	6.0	7.0	3.3			
1105	4.2	5.3	6.3	1.13	0.81	0.74	4.4	4.8	4.9			
1106	4.8	5.6	6.8	0.94	1.21	1.25	7.0	7.3	2.7			
1107	3.9	5.3	6.1	0.60	0.65	0.36	9.5	7.6	5.0			
1108	4.3	5.3	5.6	0.82	0.38	0.61	5.8	6.4	9.0			
1109	3.8	4.5	4.6	0.85	0.68	0.56	4.7	3.8	3.7			
1110	2.9	3.4	4.6	1.01	0.91	1.06	12.2	14.5	9.4			
1111	3.3	4.4	4.8	0.63	0.82	0.70	7.1	4.1	11.2			
1112	3.6	4.5	5.3	1.13	1.09	0.96	8.4	6.2	8.9			
1113	3.5	4.5	5.1	0.77	0.89	0.46	10.4	14.8	8.2			
1114	4.2	5.0	6.0	0.65	0.79	0.67	2.3	4.3	1.8			
1115	3.6	4.7	5.3	0.72	0.72	0.62	8.3	5.0	2.3			
1102 to 1106	4.5	5.7	6.7	1.07	1.04	0.96	5.9	6.0	4.9	56.1	52.6	51.5
1107 to 1111	3.6	4.6	5.1	0.92	0.99	0.91	13.3	14.2	12.1	56.7	52.9	51.7
1112 to 1116	3.6	4.6	5.3	0.90	0.84	0.79	12.7	13.8	12.3	55.3	52.5	51.4
1104 to 1115	3.9	4.9	5.6	1.02	1.07	1.09	13.0	14.4	12.5	56.3	52.7	51.6

TEST C5

Generation 0512:22 to 0532:13 PST 20.4 Curies
November 8, 1967

Time, PST	Mean Wind Speed in MPS			Speed Standard Deviation, MPS			Dir Standard Deviation, DEG			Temperature in Degrees FAHR		
	1.5m	6.1m	24.4111	1.5m	6.1m	24.4m	1.5m	6.1m	24.4111	0.9m	15m	30m
0512*	2.2	3.2	4.9	0.36	0.27	0.55	6.7	2.9	4.1			
0513	2.0	2.9	4.8	0.35	0.42	1.02	5.7	3.6	2.4			
0514	2.6	3.6	5.3	0.51	0.35	0.40	4.9	5.4	4.1			
0515	2.7	3.5	4.8	0.63	0.59	0.29	3.2	3.6	4.5			
0516	2.3	3.3	4.7	0.28	0.56	0.38	3.8	3.9	3.1			
0517	1.9	2.8	5.1	0.47	0.43	0.55	5.4	7.1	2.6			
0518	2.4	3.3	4.9	0.30	0.33	0.43	4.2	2.0	2.7			
0519	2.3	3.3	5.2	0.55	0.46	0.77	6.3	1.3	4.5			
0520	2.5	3.7	5.0	0.59	0.63	0.36	3.5	2.2	3.0			
0521	2.4	3.2	5.1	0.58	0.46	0.37	2.5	4.6	2.5			
0522	2.5	3.3	5.0	0.51	0.47	0.48	5.1	3.1	4.8			
0523	3.0	3.8	5.0	0.53	0.33	0.45	4.4	2.7	3.4			
0524	2.9	3.7	5.4	0.54	0.67	0.47	4.9	3.2	2.8			
0525	2.8	3.7	6.0	0.57	0.51	0.54	5.5	4.3	2.9			
0256	3.1	4.2	6.0	0.40	0.47	0.65	5.9	3.9	4.2			
0527	2.5	3.8	5.8	0.58	0.62	0.49	4.1	5.3	2.7			
0528	3.2	4.0	6.2	0.71	0.65	0.60	3.5	4.2	3.4			
0529	2.3	3.6	5.5	0.30	0.33	0.42	3.4	3.9	2.1			
0530	3.1	4.4	6.4	0.60	0.65	0.46	5.7	5.7	3.3			
0531	2.8	3.8	5.9	0.49	0.39	0.36	3.7	3.7	3.0			
0532	3.0	4.1	5.9	0.48	0.60	0.59	5.0	4.1	2.1			
0533	2.7	3.6	5.2	0.39	0.45	0.67	2.2	3.8	2.2			
0534	3.0	3.8	5.9	0.39	0.45	0.48	5.4	4.2	3.4			
0535	2.6	3.7	5.1	0.36	0.40	0.56	6.3	3.2	3.9			
0536	2.2	3.0	5.3	0.41	0.40	0.61	4.0	3.8	5.8			
0537	2.1	3.0	5.0	0.15	0.57	0.69	6.3	5.8	3.8			
0512:20 to 0516	2.4	3.3	4.9	0.51	0.51	0.61	5.4	4.4	4.0	42.6	43.2	43.3
0517 to 0521	2.3	3.2	5.1	0.53	0.54	0.51	5.5	5.2	3.9	42.3	43.3	43.3

*Data for 0512:20 to 0513:00 only.

TEST C5
(Continued)

Time, PST	Mean Wind Speed in MPS			Saeed Standard Deviation, MPS			Dir Standard Deviation, DEG			Temperature in Degrees FAHR		
	1.5m	6.1m	24.4m	1.5m	6.1m	24.4m	1.5m	6.1m	24.4m	0.9m	15m	30m
0522 to 0526	2.9	3.7	5.5	0.53	0.56	0.68	5.0	3.7	3.7	42.2	43.1	43.1
0527 to 0531	2.8	3.9	6.0	0.64	0.61	0.55	5.0	5.6	3.9	42.1	43.1	43.2
0532 to 0536	2.7	3.6	5.5	0.49	0.56	0.66	6.3	5.8	4.3	42.1	42.9	43.1
0512:20 to 0537	2.6	3.6	5.4	0.58	0.62	0.71	7.4	7.4	5.1	42.2	43.1	43.2

APPENDIX B

CONCENTRATIONS

TEST P2 DISTANCE FRO-SOURCE 200 METERS PUFF RELEASE TIME 2300:00 PST DATA ACCUMULATION INCREMENT 4.8 SECONDS GROUND LEVEL - M) -

RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS

SECONDS AFTER RELEASE	D I R E C T I O N F R O M S O U R C E D E G R E E S																				CROSSWIND SUMS
	094	096	098	100	102	104	106	108	110	112	114	116	118	120	122	124	126	128	130	132	
1114.2	0	0	0	0	0	0	0	3	10	6	0	12	0	0	6	3	8	0	0	0	48
1119.0	3	0	0	0	0	0	0	0	0	1	6	6	0	0	0	0	0	0	0	0	16
1123.6	0	0	0	0	0	0	0	0	0	8	0	8	1	0	0	0	0	0	0	1	18
1128.6	0	0	0	0	1	0	0	0	8	0	14	10	1	0	1	0	0	0	0	0	35
1133.4	0	0	0	0	0	0	0	0	3	12	3	1	0	0	0	3	0	0	0	0	22
1138.2	1	0	0	0	0	0	0	0	0	1	3	14	1	0	0	0	0	0	6	0	26
1143.0	0	0	0	0	0	0	0	6	8	0	0	3	8	0	0	0	0	0	0	0	25
1147.8	0	0	0	0	0	0	1	0	10	0	6	12	10	6	0	0	0	0	0	0	45
1152.6	0	0	0	0	0	0	0	0	12	0	8	20	0	0	0	0	0	0	0	0	40
1157.4	0	0	1	12	0	0	0	0	0	0	0	3	1	0	0	0	0	0	0	0	17
AZIMUTH SUMS	13	5	4	30	41	109	474	1802	4897	5090	4046	3209	1397	717	231	94	25	10	6	27	22227

81-18

TEST P2 DISTANCE FROM SOURCE 200 METERS PUFF RELEASE TIME 2300:00 PST DATA ACCUMULATION INCREMENT 4.8 SECONDS GROUND LEVEL (1.5 M)

RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS

SECONDS AFTER RELEASE	DIRECTION																				CROSSWIND SUMS		
	D 094	I 096	R 098	E 100	C 102	T 105	I 108	N 106	F 108	R 110	O 112	M 114	S 116	O 118	U 120	R 122	C 124	E 126	D 128	E 130		G 132	R 132
1027.8	0	0	3	0	0	0	0	0	6	8	16	24	10	18	0	1	0	0	0	0	0	0	86
1032.6	0	0	0	0	6	6	0	0	6	14	1	14	18	12	8	0	0	0	0	0	0	0	85
1037.4	0	0	0	0	0	0	0	1	0	8	1	12	16	14	0	0	0	0	0	0	0	0	52
1042.2	0	0	0	0	0	0	0	0	0	8	0	37	8	10	28	0	0	0	0	0	0	0	91
1047.0	0	0	0	0	0	0	0	8	0	10	12	14	0	14	10	1	0	0	0	0	0	0	69
1051.8	0	1	0	0	0	0	0	0	0	3	6	20	8	3	12	1	0	0	0	0	1	0	55
1056.6	0	0	0	0	0	0	0	0	0	16	0	0	18	10	6	0	0	0	0	0	8	0	58
1061.4	0	0	0	0	0	0	0	6	0	0	16	20	0	6	8	0	0	0	0	0	0	0	56
1066.2	0	0	0	0	9	0	0	0	0	0	10	8	28	8	12	0	0	0	0	0	0	0	66
1071.0	0	0	0	0	0	0	0	0	0	3	1	24	24	31	0	6	0	0	0	0	0	0	89
1075.8	0	0	0	14	0	0	0	0	0	0	6	3	8	3	12	0	1	0	0	0	0	0	48
1080.6	0	0	0	0	0	0	0	0	0	3	12	8	0	12	0	1	0	0	0	0	0	0	36
1085.4	0	0	0	0	0	0	0	0	0	3	6	6	16	14	0	0	0	0	0	0	0	0	45
1090.2	0	0	0	0	0	0	0	0	0	3	14	18	0	20	6	0	1	3	0	0	0	0	65
1095.0	0	0	0	0	1	0	0	0	0	0	3	1	1	6	1	0	0	0	0	0	0	0	13
1099.8	0	0	0	0	0	0	0	0	0	8	0	6	10	0	0	0	0	1	0	0	0	0	25
1104.6	0	0	0	3	0	0	0	0	3	12	3	24	8	6	0	0	0	0	0	0	0	0	59
1109.4	0	0	0	0	0	0	0	0	3	0	6	22	8	0	0	0	0	0	0	0	1	0	40

B-17

TEST P2 DISTANCE FROM SOURCE 200 METERS PUFF RELEASE TIME 2300:00 PST DATA ACCUMULATION INCREMENT 4.8 SECONDS GROUND LEVEL (1.5 M)

RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS

SECONDS AFTER RELEASE	D	I	R	E	C	T	I	O	M	S	O	U	R	C	E	D	E	G	R	E	S	CROSSWIND SUMS
	094	096	098	100	102	104	105	108	110	112	114	116	118	120	122	124	126	128	130	132		
941.4	0	0	0	0	1	0	0	31	120	31	110	72	43	12	3	0	0	0	0	0	0	431
946.2	0	0	0	0	0	0	1	16	45	97	78	60	16	14	8	6	0	0	0	0	0	341
951.0	8	0	0	0	0	1	0	0	24	103	64	81	22	24	0	0	6	0	0	0	0	333
955.8	0	3	0	0	0	0	0	12	31	87	47	45	41	10	0	0	0	0	0	0	0	276
960.6	0	0	0	0	0	0	0	0	26	95	28	56	22	18	6	12	0	1	0	0	0	264
965.4	0	0	0	0	0	0	0	6	24	60	39	51	8	6	0	0	0	0	0	0	0	202
970.2	0	0	0	0	0	0	0	0	14	76	51	47	22	14	12	0	0	0	0	0	0	236
975.0	0	0	0	0	0	0	0	0	10	51	47	47	33	12	0	0	0	0	0	0	0	200
979.8	0	0	0	0	0	0	1	0	16	37	39	62	22	12	1	0	3	0	0	0	0	193
984.6	0	0	0	0	0	0	0	10	18	3	53	41	45	22	0	0	0	0	0	0	0	192
989.4	0	0	0	0	0	0	0	3	6	1	43	53	22	1	1	0	0	0	0	0	0	130
994.2	0	0	0	0	0	0	0	0	16	12	18	39	24	22	0	0	0	0	0	0	0	131
999.0	0	0	0	0	0	0	0	0	6	8	18	56	28	22	6	6	0	0	0	0	0	150
1003.8	0	0	0	0	0	0	0	0	0	20	12	49	8	8	8	3	0	0	0	0	0	108
1008.6	1	0	0	0	0	0	0	0	0	16	18	22	28	10	8	12	0	3	0	0	0	118
1013.4	0	0	0	0	0	0	0	0	0	0	31	20	14	16	8	0	0	0	0	0	0	89
1018.2	0	0	0	0	0	0	0	0	0	3	31	8	26	12	8	0	0	0	0	0	0	88
1023.0	0	0	0	0	0	0	0	0	0	3	28	10	20	18	6	8	0	0	0	0	6	99

B-16

TEST	DISTANCE FROM SOURCE		PUFF RELEASE TIME		DATA ACCUMULATION INCREMENT		GROUND LEVEL (1.5 M)																			
P2	200 METERS		2300:00 PST		4.8 SECONDS																					
-----RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS																										
SECONDS	D	T	R	F	C	T	Y	O	N	F	R	O	M	S	O	U	R	C	E	D	E	G	R	E	S	CROSSWIND SUMS
AFTER RELEASE	094	096	098	100	102	104	106	108	110	112	114	116	118	120	122	124	126	128	130	132						
855.0	0	0	0	0	0	3	64	160	376	395	268	128	20	20	3	0	0	0	0	0	0	0	0	0	1437	
859.8	0	0	0	0	0	12	70	147	406	322	293	197	43	26	0	1	0	0	0	0	1	0	0	1518		
864.6	0	0	0	0	6	16	58	147	408	372	270	170	47	0	3	0	0	0	0	0	0	0	0	1497		
869.4	0	0	0	0	0	16	26	164	366	351	128	197	49	14	3	0	6	0	0	0	0	0	0	1320		
874.2	0	0	0	0	0	14	37	106	456	343	214	151	56	10	0	0	0	0	0	0	0	0	0	1387		
879.0	0	0	0	0	3	8	16	99	378	366	158	91	49	18	0	0	0	0	0	0	0	0	0	1186		
883.8	0	0	0	0	0	6	10	128	349	226	206	133	41	18	1	0	0	0	0	0	6	0	0	1124		
888.6	0	0	0	0	1	6	22	97	262	272	214	112	70	16	6	0	0	0	0	0	0	0	0	1078		
893.4	0	0	0	0	0	8	14	156	233	341	181	93	24	24	0	1	0	0	0	0	0	0	0	1075		
898.2	0	0	0	0	0	1	26	114	162	191	210	108	45	8	0	6	0	0	0	0	0	0	0	871		
903.0	0	1	0	0	10	0	41	47	145	216	172	112	47	12	3	3	0	0	0	0	0	0	0	809		
907.8	0	0	0	0	0	0	22	45	168	143	126	97	45	10	12	1	0	0	0	0	0	0	0	669		
912.6	0	0	0	0	0	0	18	70	124	170	156	110	35	6	10	6	1	0	0	0	3	0	0	709		
917.4	0	0	0	0	6	12	22	51	181	126	120	120	45	26	3	0	0	0	0	0	0	0	0	712		
922.2	0	0	0	0	6	0	6	53	166	158	110	64	26	16	3	1	0	0	0	0	0	0	0	609		
927.0	0	0	0	1	0	0	0	22	87	106	120	41	41	12	0	0	0	0	0	0	0	0	0	430		
931.8	0	0	0	0	0	0	10	41	124	76	108	45	41	8	8	0	0	0	0	0	0	0	0	462		
936.6	0	0	0	0	0	0	1	53	81	78	89	68	31	22	0	0	0	1	0	0	0	0	0	424		

R-15

TEST	DISTANCE FROM SOURCE	PUFF RELEASE TIME	DATA ACCUMULATION INCREMENT	GROUND LEVEL (1.5 M)																		
P2	200 METERS	2300:00 PST	4.8 SECONDS	RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS																		
SECONDS AFTER RELEASE	D	094	096	098	100	102	104	106	108	110	112	114	116	118	120	122	124	126	128	130	132	CROSSWIND SUMS
766.2	0	0	0	0	28	224	322	726	1187	1016	399	233	145	53	1	0	0	0	0	0	0	4334
771.0	1	0	0	0	18	168	262	593	1160	958	349	222	176	97	14	3	3	0	0	0	0	4024
775.8	0	0	0	0	12	162	251	658	816	1224	518	237	108	58	8	0	0	0	0	0	0	4052
780.6	0	0	0	0	28	70	212	458	1045	603	528	249	93	64	6	0	0	0	0	0	0	3356
785.4	0	0	0	10	43	64	245	618	1120	610	374	245	81	70	18	0	0	0	0	0	0	3498
790.2	0	1	0	3	18	83	253	766	868	637	420	245	83	51	24	1	0	0	0	0	0	3453
795.0	0	0	0	0	16	51	318	472	822	668	478	310	153	70	18	0	0	0	0	0	0	3376
799.8	0	3	0	0	12	76	420	512	739	612	535	233	164	53	20	0	0	0	0	0	0	3387
804.6	0	0	0	0	10	26	172	653	616	412	585	285	149	37	8	0	0	0	0	0	0	2958
AZIMUTH SUMS	9	12	7	18	229	1965	5029	14325	29415	78698	126940	144432	112652	61381	34020	13822	3719	671	125	23	627495	

B-14

TEST P2	DISTANCE FROM SOURCE 200 METERS		PUFF RELEASE TIME 2300:00 PST		DATA ACCUMULATION INCREMENT 4.8 SECONDS																GROUND LEVEL (1.5 M)						
RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS																				CROSSWIND SUMS							
SECONDS AFTER RELEASE	D	I	R	F	C	T	I	O	N	F	R	O	M	S	C	U	R	C	E		D	E	G	R	E	E	S
	094	096	098	100	102	104	106	108	110	112	114	116	118	120	122	124	126	128	130	132							
679.8	0	0	0	0	0	1	0	183	406	1249	978	1445	676	326	122	28	0	0	0	0							5414
684.6	1	0	0	0	0	0	0	372	253	1195	1739	926	445	268	106	26	8	0	0	0							5339
689.4	0	0	0	0	0	0	0	524	347	1299	1462	914	610	256	101	41	3	0	0	0							5557
694.2	0	0	0	0	0	0	0	183	643	1306	1408	1072	622	272	112	20	0	0	0	0							5638
699.0	0	0	0	0	0	0	31	485	639	1220	1753	1062	595	216	83	45	6	0	0	0							6135
703.8	0	0	0	0	0	0	33	258	383	1591	1643	1149	481	243	81	18	0	0	0	0							5880
708.6	0	0	0	0	0	6	74	160	391	1770	1564	1228	499	214	81	14	0	0	0	0							6001
713.4	0	0	0	0	1	0	45	262	620	1420	1556	937	435	187	78	14	0	0	0	1							5556
718.2	0	0	0	0	0	12	66	226	793	1541	1287	778	376	156	39	12	0	0	0	3							5289
723.0	0	0	0	0	0	12	108	397	1233	1483	976	772	247	108	33	6	1	2	0	0							5387
727.8	0	0	0	0	0	31	247	453	1099	968	781	545	320	91	47	8	0	0	0	0							4590
732.6	0	0	0	0	0	41	345	326	1522	849	981	531	147	103	20	10	0	0	0	0							4875
737.4	0	0	0	0	1	168	291	533	1287	1037	810	547	253	106	20	10	0	0	6	0							5069
742.2	0	0	0	0	0	170	324	560	883	1137	610	543	206	91	28	0	1	0	0	3							4556
747.0	1	0	0	0	1	78	222	787	1001	503	614	428	131	99	37	6	0	0	0	0							3908
751.8	6	0	0	0	6	78	281	926	1016	608	660	349	162	78	8	0	0	0	0	0							4178
756.6	0	0	0	0	12	153	233	758	1131	943	693	326	139	47	20	0	3	0	3	0							4461
761.4	0	0	0	0	22	281	262	922	1166	787	508	249	172	56	18	8	0	0	0	0							4451

TEST P2	DISTANCE FROM SOURCE 200 METERS				PUFF RELEASE TIME 2300300 PST				DATA ACCUMULATION INCREMENT 4.8 SECONDS				GROUND LEVEL (1.5 M)										
RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS																							
SECONDS AFTER RELEASE	D	I	R	E	C	T	1	5	M	E	R	S	U	R	C	E	D	E	G	R	E	S	CROSSWIND SUMS
	094	096	098	100	102	104	106	108	110	112	114	116	118	120	122	124	126	128	130	132			
593.4	0	0	0	0	0	0	0	16	151	1856	3287	2637	2766	1328	776	370	89	12	12	0			13300
598.2	0	0	0	0	0	0	0	33	247	1897	4351	2603	2260	1228	635	241	81	24	0	0			13600
603.0	0	0	1	0	0	0	0	22	343	1941	3551	3072	2058	1181	560	289	45	22	0	0			13085
607.8	0	0	0	0	0	0	0	6	528	2068	3028	2783	1364	949	537	195	60	22	0	0			11540
612.6	0	0	0	0	0	0	0	1	366	1633	1897	1989	1412	956	483	162	43	24	0	0			8966
617.4	0	0	0	0	0	0	0	0	168	1953	2570	1968	1387	785	399	160	39	0	0	0			9429
622.2	0	1	0	0	0	0	0	0	226	1581	3253	1912	1101	720	335	143	47	18	0	0			9337
627.0	0	0	0	0	0	0	0	6	220	1791	2074	1712	1372	697	297	145	41	3	0	0			8358
631.8	0	0	0	0	0	1	0	1	285	1914	2985	1545	1299	568	270	133	39	12	0	0			9052
636.6	0	6	0	1	0	1	0	1	206	1570	3203	1599	1099	485	308	124	22	6	0	0			8631
641.4	0	0	3	0	0	0	0	28	183	1843	2024	2020	1120	324	285	70	3	6	0	0			7909
646.2	0	0	0	3	0	0	0	0	176	1683	2114	1858	1128	556	189	66	26	0	0	0			7799
651.0	0	0	0	0	0	0	0	12	176	697	1210	1224	933	547	212	58	10	3	0	0			5082
655.8	0	0	0	1	0	6	0	0	185	997	1403	1374	1110	443	176	76	10	0	0	0			5781
660.6	0	0	0	0	0	0	0	49	264	1353	1670	1783	899	483	181	70	8	0	0	0			6760
665.4	0	0	0	0	1	0	0	78	78	810	1933	1072	918	431	174	89	20	0	0	0			5604
670.2	0	0	0	0	0	0	0	76	310	1318	1208	1364	918	328	112	51	16	0	0	0			5701
675.0	0	0	0	0	0	1	0	143	353	703	1351	1585	743	299	158	43	0	6	0	0			5385

B-12

TEST P2	DISTANCE FROM SOURCE 200 METERS				PUFF RELEASE TIME 2300:00 PST				DATA ACCUMULATION INCREMENT 4.8 SECONDS								GROUND LEVEL (1.5 M)							
SECONDS AFTER RELEASE	RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS																CROSSWIND SUMS							
	D	I	R	E	C	T	I	O	N	M	E	R	S	O	U	R		C	E	D	E	G	R	E
	094	096	098	100	102	104	106	108	110	112	114	116	118	120	122	124	126	128	130	132				
507.0	0	0	0	0	0	0	0	1	22	1397	3999	9533	7274	5420	2276	651	74	1	10	3			30661	
511.8	0	0	0	0	0	0	0	0	18	708	4999	7183	6251	3576	2160	664	156	8	1	0			25724	
516.6	0	0	0	0	0	0	0	0	18	410	4193	8403	7014	3212	1628	647	231	20	0	0			25776	
521.4	0	0	0	0	0	0	0	0	12	760	3393	6633	6516	3016	1853	683	235	16	0	0			23117	
526.2	0	0	0	0	0	0	3	0	58	1006	4072	8672	5493	2097	2087	708	176	1	10	0			24383	
531.0	0	0	0	0	0	0	0	3	214	1756	3828	7353	4849	2516	1389	656	218	8	0	0			22790	
535.8	0	1	3	0	0	0	0	0	62	924	3266	3816	4922	3195	1806	706	241	51	14	0			19007	
540.6	0	0	0	0	0	0	0	1	22	1020	3366	5812	4851	2408	1510	797	158	33	3	0			19981	
545.4	0	0	0	0	0	0	0	0	41	893	3308	3891	4418	2383	1658	693	172	39	10	0			17506	
550.2	0	0	0	0	0	1	0	0	41	1399	2460	5824	4091	2164	1345	697	189	47	8	0			18266	
555.0	0	0	0	0	0	0	1	0	110	1087	2812	6883	3189	1828	1120	658	195	41	20	0			17944	
559.8	0	0	0	0	0	0	0	16	137	1456	2812	3197	3270	2235	1251	697	214	35	3	0			15323	
564.6	0	0	0	0	0	0	0	8	81	1210	2345	3535	3481	2622	1433	616	174	43	3	0			15551	
569.4	0	0	0	0	0	0	0	12	95	1551	3210	2356	3935	2224	1318	497	131	35	0	12			15376	
574.2	0	0	0	0	0	0	0	0	78	2699	2670	2491	3678	1881	991	499	166	43	18	0			15214	
579.0	0	0	0	0	0	0	0	1	264	2128	2606	2912	2537	1895	1089	458	139	18	1	0			14048	
583.8	0	0	0	0	0	0	0	0	224	1451	2972	3068	2681	1553	956	343	124	41	3	1			13417	
588.6	0	0	0	0	0	0	0	35	270	1589	3308	2710	2647	1378	912	397	91	33	0	0			13370	

B-11

TEST P2 DISTANCE FROM SOURCE 200 METERS PUFF RELEASE TIME 2300:00 PST DATA ACCUMULATION INCREMENT 4.8 SECONDS GROUND LEVEL (1.5 M)

RELATIVE CONCENTRATION IN. COUNTS PER TEN SECONDS

SECONDS AFTER RELEASE	DIRECTION										ELEVATION						CROSSWIND SUMS		
	094	096	098	100	102	104	106	108	110	112	114	116	118	120	122	124		126	128
276.4	8	8	0	0	0	0	0	0	3	0	0	0	0	43	26161896226860	2856	6	49	51411
281.2	0	0	0	0	0	0	0	0	0	0	0	0	0	37	43742691029799	2018	31	37	63206
286.0	0	0	0	0	0	0	0	0	0	0	0	0	0	31	52913113530260	1666	0	39	68422
290.8	0	0	0	0	0	0	0	3	0	0	0	0	0	51	96222682029706	1737	6	22	67967
295.6	1	3	0	0	0	0	0	0	0	0	0	0	0	108120102836029256	1274	16	31	71059	
300.4	0	1	1	0	0	0	0	0	0	0	0	0	10	316129454078722468	570	3	14	77115	
305.2	0	1	0	6	0	0	0	0	0	0	0	0	0	851150994877618033	639	1	0	77406	
310.0	0	1	0	0	0	0	0	0	0	0	0	0	0	1533172724260112320	401	0	0	74128	
314.8	0	20	0	26	0	0	0	0	0	0	0	0	35	25162801639149	9881	283	0	1	79927
319.6	0	6	0	8	0	0	0	0	0	0	0	0	24	70243075337333	9406	253	0	0	84807
324.4	0	3	0	18	0	1	0	0	0	0	0	0	89	99393275636870	6624	124	3	0	86427
329.2	0	1	0	0	0	0	0	0	0	0	0	0	185100083357434795	7978	110	0	0	86651	
334.0	0	0	0	6	1	0	10	0	0	0	0	0	320144433650632506	5758	135	3	0	89688	
338.8	0	1	1	10	0	0	0	0	0	0	0	0	810150393753530676	4164	68	0	0	88304	
AZIMUTH SUMS	9	51	14	80	1	1	11	7	3	2	16	1480	285183	416115	92854	4362	867	1421461	

B-10

TEST
P2

DISTANCE FROM SOURCE
200 METERS

PUFF RELEASE TIME
2300:00 PST

DATA ACCUMULATION INCREMENT
4.8 SECONDS

GROUND LEVEL (1.5 M)

RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS

SECONDS AFTER RELEASE	D I R E C T I O N F R O M S O U R C E D E G R E E S																			CROSSWIND SUMS	
	094	096	098	130	102	104	106	108	110	112	114	116	118	120	122	124	126	128	130		132
190.0	0	6	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
194.8	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	12	6	0	0	20
199.6	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	1	41	0	0	48
204.4	0	0	3	0	0	0	0	0	0	0	0	0	0	0	1	0	0	274	122	1	401
209.2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	56	1533	691	0	2281
214.0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	8	6	589	8699	291	0	9594
218.8	0	0	0	0	0	0	0	0	0	0	0	8	0	6	0	6	1078	5412	518	0	7028
223.6	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	103	2687	6187	712	6	9698
228.4	0	0	0	0	0	0	0	0	3	3	0	0	0	0	0	1576	6435	6831	539	28	15415
233.2	0	0	0	0	0	0	0	1	1	0	0	0	3	0	0	1437	7760	7416	408	53	17079
238.0	0	0	0	0	0	0	0	0	3	0	0	6	1	0	18	695	9485	6251	510	28	16997
242.8	0	0	3	0	0	0	0	0	0	0	0	1	0	0	78	4799	14091	4920	206	72	24170
247.6	0	0	0	0	0	0	0	0	8	0	1	0	0	0	85	7912	11670	9601	93	81	29451
252.4	0	0	0	0	0	0	0	1	0	0	0	0	0	0	222	7935	18164	7797	47	122	34288
257.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	512	9083	20403	4589	37	64	34688
262.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2168	16203	22224	4508	45	87	45235
266.8	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1939	19816	27885	3064	33	49	52787
271.6	0	0	0	0	0	0	0	0	0	0	0	0	0	6	1783	19185	31062	3591	41	83	55751

B-9

TEST	DISTANCE FROM SOURCE					PUFF RELEASE TIME	DATA ACCUMULATION INCREMENT									
P1	200 METERS					0312:0, PST	.2 SECONDS									
RELATIVE CONCENTRATION IN COUNTS PER TEST SECONDS																
SECONDS	D I R E C T I O N					F	S O U R C E A N G L E					E L E V A T I O N				
AFTER	0	9	8	0	6	S	1	4	0	6	0	1	3	0	0	6
RELEASE	0.8M	1.5M	3.0M	6.1M	10.7M	0.8	1.5	3.0	6.1	10.7M	0.8M	1.5M	3.0M	6.1M	10.7M	10.7M
120.8	4664	3214	2564	306	114	0	0	0	0	0	0	0	0	0	14	0
122.0	4522	4081	2881	97	22	0	0	0	0	0	0	14	0	6	0	0
123.2	5189	4306	3822	97	6	0	6	0	6	6	14	6	0	22	0	0
124.4	3389	1322	1039	181	0	0	0	0	0	0	0	14	0	14	0	0
125.6	3531	2131	622	164	14	0	0	0	6	14	0	0	0	6	0	0
126.8	3189	1397	722	133	64	6	0	0	0	0	0	0	0	0	0	14
128.0	3489	2356	1339	247	14	0	0	0	0	0	6	0	0	0	0	0
129.2	3597	2131	1306	489	89	14	6	0	0	0	0	0	0	0	0	0
130.4	3256	1472	856	147	14	0	6	0	0	0	14	0	0	6	22	0
SUMS	267578	252796	226323	156450	47832	344	108	95	2095	908	335	2295	107	1314	2330	0

TEST P1	DISTANCE FROM SOURCE 200 METERS		PUFF RELEASE TIME 0312:00 PST		DATA ACCUMULATION INCREMENT 1.2 SECONDS		TOWER									
RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS																
SECONDS AFTER RELEASE	0.8M	1.5M	3.0M	6.1	10.7M	0.8M	1.5	3.0	6.1	10.7M	0.8M	1.5M	3.0M	6.1M	10.7	
77.6	6	0	81	322	322	0	0	0	0	0	6	0	0	0		
78.8	0	0	14	456	1014	0	6	0	14	6	6	0	0	0	0	17
80.0	0	39	89	1647	222	31	0	0	6	0	0	0	0	0	0	122
81.2	22	139	1514	1139	1039	0	0	0	0	0	14	0	0	6	214	
82.4	72	556	2606	4697	3189	0	0	22	31	6	14	6	0	0	122	
83.6	272	822	3022	8247	5556	0	0	0	14	14	6	6	0	14	264	
84.8	1181	2039	3806	10272	4656	0	0	0	6	14	47	14	0	0	214	
86.0	1389	2447	5756	12931	5339	6	6	0	39	0	31	72	0	0	172	
87.2	1181	2347	9014	18564	3414	6	0	0	0	31	64	147	0	0	264	
88.4	2956	6906	15347	18431	1872	39	0	0	31	6	47	281	0	22	189	
89.6	6914	8914	13597	18106	1522	6	0	0	31	22	0	281	0	6	122	
90.8	8314	8731	15931	16856	3314	31	0	6	72	6	0	172	0	31	131	
92.0	7597	8131	18789	9439	5231	22	0	0	81	56	0	206	0	31	64	
93.2	8439	14431	16564	12897	7269	22	0	0	47	0	0	256	0	22	72	
94.4	10539	13322	17156	11981	864	14	0	0	56	6	0	214	0	0	72	
95.6	11397	14889	16206	3531	239	6	0	0	56	6	0	64	0	0	14	
96.8	12056	14464	13614	1297	597	6	0	0	81	14	6	56	0	14	14	
98.0	10964	13589	10739	1164	547	22	14	0	64	22	6	56	0	56	14	

TEST #1	DISTANCE FROM SOURCE 200 METERS					PUFF RELEASE TIME 0312:00 PST	DATA ACCUMULATION INCREMENT 1.2 SECONDS					TOWER				
RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS																
SECONDS AFTER RELEASE	D I R E C T I O N F R O M S O U R C E A N D					E L E V A T I O N										
	0.8M	1.5M	3.0M	6.1M	10.7M	0.8	1.5	3.0	6.1	10.7M	0.8M	1.5M	3.0M	6.1M	10.7M	
56.0	0	14	0	0	22	0	0	0	39	6	0	0	0	0	0	
57.2	0	6	0	0	6	0	0	31	0	247	0	0	0	0	6	
58.4	0	0	0	0	0	6	0	6	0	72	0	0	0	0	0	
59.6	6	0	0	0	6	22	0	6	747	6	0	0	39	0	0	
60.8	0	0	6	0	0	6	6	0	231	0	0	0	0	0	0	
62.0	0	0	0	6	6	0	0	0	0	56	0	0	0	0	0	
63.2	0	0	0	22	0	31	0	6	14	81	0	0	0	0	0	
64.4	0	0	0	14	0	0	0	0	6	0	0	0	0	0	6	
65.6	0	0	0	22	0	0	6	0	6	6	6	0	0	0	0	
66.8	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	
68.0	0	0	0	0	0	0	0	0	22	6	0	14	0	0	0	
69.2	6	0	14	0	22	0	0	0	0	0	0	14	0	0	0	
70.4	0	0	0	6	6	0	0	0	6	0	0	22	0	0	6	
71.6	0	0	0	0	6	0	6	0	6	0	0	0	6	0	0	
72.8	0	6	0	0	0	14	0	0	0	0	0	0	0	0	0	
74.0	0	0	0	0	0	0	0	0	0	0	0	6	6	0	0	
75.2	22	0	0	6	31	0	0	0	14	14	0	31	0	0	0	
76.4	0	0	6	389	106	14	0	0	14	0	0	0	0	0	0	

TEST P1 DISTANCE FROM SOURCE 200 METERS PUFF RELEASE TIME 0312:00 PST DATA ACCUMULATION INCREMENT 1.2 SECONDS GROUND LEVEL (1.5 M)

RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS

SECONDS FROM RELEASE	D	1	R	E	C	T	I	O	N	F	R	O	M	S	O	U	R	C	E	D	E	G	R	E	E	S	CROSS IN SU 5
	094	096	098	100	102	104	106	108	110	112	114	116	118	120	122	124	126	128	130	132							
120.8	5472	5764	3214	5447	231	2481	247	39	0	0	0	0	14	31	0	0	6	31	0	0							22577
122.0	4681	6397	4581	4822	1039	1589	264	0	0	0	0	0	6	14	0	6	56	14	14	0							22983
123.2	5539	7322	4306	4897	1347	1122	189	64	0	0	6	0	0	39	0	6	64	0	6	0							24907
124.4	5731	5122	1322	4106	1364	731	181	22	0	0	0	0	0	39	0	0	0	0	14	0							18632
125.6	6597	4906	2131	4306	1081	606	206	6	0	0	0	0	14	56	0	0	22	0	0	0							19631
126.8	6422	3247	1397	3339	1214	447	172	14	0	0	0	0	0	0	0	0	0	0	0	0							15952
128.0	5764	3189	2356	2556	1447	364	106	6	0	0	0	0	0	6	0	0	22	0	0	0							15816
129.2	5806	3014	2131	3014	1939	481	172	22	0	0	6	0	0	6	0	14	22	0	0	0							16627
130.4	5222	3114	1472	3647	1864	456	131	72	6	0	6	6	0	14	0	0	22	14	0	0							16046
TOTAL SUMS	236361	252796	266041	185392	77761	108	76	149	8224	2295																	2000407

B-4

TEST P1	DISTANCE FROM SOURCE 200 METERS				PUFF RELEASE TIME 0312:00 PST				DATA ACCUMULATION INCREMENT 1.2 SECONDS				GROUND LEVEL (1.5 M)																				
RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS																																	
SECONDS AFTER RELEASE	D	I	R	E	I	C	T	I	O	S	N	M	E	R	T	E	N	S	E	L	E	V	A	T	D	I	O	N	R	E	E	S	CROSSWIND SUMS
99.2	87729	~3912	1971	1681	1583	943	972	2314	231	6	81	0	0	0	381	0	72	314	147	47	0												55518
100.4	9297	9372	1135	6110	89	5647	4714	1881	231	0	56	0	0	0	356	0	89	372	114	114	0											54688	
101.6	9397	9122	1068	9481	6172	4797	656	272	0	14	0	6	0	272	0	56	289	64	31	0												51318	
102.8	7947	9789	9072	8722	5897	4622	1006	139	0	56	0	0	0	239	0	64	264	72	31	0												47920	
104.0	7747	8839	1089	7964	5197	3947	514	47	0	14	14	0	0	331	14	72	256	47	64	0												45964	
105.2	9339	7564	1205	6742	6714	4006	856	81	6	31	0	0	0	414	0	47	239	47	22	0												48894	
106.4	9856	9706	9781	7381	7022	3306	1047	122	0	6	0	0	0	339	0	81	139	97	0	0												48883	
107.6	9822	9614	8339	7806	6606	2989	731	164	0	22	0	0	0	272	0	31	114	64	0	0												46574	
108.8	8522	1065	6780	7722	6864	2322	464	256	0	6	6	0	0	247	22	39	131	6	22	0												45091	
110.0	9006	1028	945	7947	5747	3406	356	172	0	6	0	0	0	122	0	14	122	39	0	0												41823	
111.2	8106	7647	4389	8506	5597	2681	139	139	0	0	6	0	6	89	0	14	97	31	0	0												37447	
112.4	9122	8406	4131	5072	6106	2589	272	56	0	6	0	0	0	56	6	6	72	6	0	6												35912	
113.6	10114	5556	1239	5456	5614	2539	447	22	0	0	0	0	0	72	0	39	22	6	6	0												31132	
114.8	9406	7397	1139	4122	4381	1114	381	39	0	0	0	6	0	39	0	6	31	14	0	0												28075	
116.0	9947	8006	1447	3889	3081	1297	556	64	0	0	14	0	6	22	0	0	47	6	0	0												28382	
117.2	9772	8297	2256	4697	3422	1264	222	56	0	6	0	0	0	106	6	0	47	31	6	0												30188	
118.4	9906	5414	3389	5131	1839	2222	206	56	0	0	0	0	0	72	0	14	0	0	0	14												28263	
119.6	7731	5322	3814	4956	981	2256	181	56	0	0	0	0	0	39	0	0	56	0	0	0												25392	

B-5

TEST P1 DISTANCE FROM SOURCE 200 METERS PUFF RELEASE TIME 0312:00 PST DATA ACCUMULATION INCREMENT 1.2 SECONDS GROUND LEVEL (1.5 M)

RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS

SECONDS AFTER RELEASE	D I R E C T I O N F R O M S O U R C E D E G R E E S																				CROSSWIND SUMS				
	094	096	098	100	102	104	106	108	110	112	114	116	118	120	122	124	126	128	130	132					
77.0	0	0	0	72	2722	1131	1103	9622	656	106	0	6	0	0	0	0	0	0	0	0	30954				
78.8	0	6	0	172	5714	1333	9780	6147	481	72	6	0	0	0	0	47	0	14	0	0	33804				
80.0	0	0	39	522	8122	1601	4989	7559	356	64	0	0	0	0	0	6	0	89	0	0	40706				
81.2	0	22	139	1522	1235	6131	0683	8954	893	72	0	0	0	6	14	47	6	139	0	0	41646				
82.4	0	0	556	2914	1363	1128	0681	8148	4731	39	0	0	0	39	0	39	72	56	6	0	43500				
83.6	0	47	822	3706	1230	6138	3186	8939	247	31	0	0	0	139	0	31	122	164	6	0	44113				
84.8	6	6	203	963	7213	5311	2531	7606	314	72	89	0	0	0	139	0	56	231	239	14	0	46078			
86.0	0	114	244	734	6414	5061	0581	7906	287	14	6	0	0	147	6	89	181	247	72	0	42799				
87.2	64	231	234	748	0613	1648	5067	4813	264	22	22	0	0	0	139	0	72	206	214	147	0	40685			
88.4	72	1181	690	610	9141	1697	7706	629	193	31	22	0	0	0	97	0	106	422	289	281	0	47952			
89.6	39	1489	891	411	4819	447	7622	528	171	81	39	0	0	0	89	0	114	547	272	281	0	47410			
90.8	221	1514	873	111	1396	422	7681	461	931	47	64	0	0	0	147	14	206	372	172	172	0	44440			
92.0	167	1947	813	111	4224	939	511	437	931	6	39	0	0	0	181	0	97	414	72	206	0	39543			
93.2	113	339	714	431	108	4758	396	789	466	412	0	81	0	0	0	422	0	122	689	239	256	0	50029		
94.4	117	327	213	322	211	77	403	154	72	42	97	81	0	0	0	147	0	64	606	197	214	0	45411		
95.6	28	224	414	714	889	130	975	414	45	56	43	22	68	1	0	164	0	89	514	247	64	0	51070		
96.8	35	475	489	144	641	244	766	065	689	45	72	36	0	39	6	0	97	564	214	56	0	54449			
98.0	85	471	028	913	589	114	065	314	49	64	35	89	0	56	14	0	0	472	31	81	414	214	56	0	59250

TEST
P1

DISTANCE FROM SOURCE
200 METERS

PUFF RELEASE TIME
0312:00 PST

DATA ACCUMULATION INCREMENT
1.2 SECONDS

GROUND LEVEL (1.5 M)

RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS

SECONDS AFTER RELEASE	DIRECTION																				CROSS IN- SUMS
	094	096	098	130	102	104	106	108	110	112	114	116	118	120	122	124	126	128	130	132	
56.4	6	0	14	0	0	0	164	164	1381	0	0	0	0	6	0	0	14	0	0	22	1771
57.2	0	0	6	0	6	6	39	381	439	0	0	0	0	6	6	0	0	0	0	0	889
58.4	14	14	0	0	0	0	81	597	122	0	0	0	6	0	0	0	6	22	0	0	862
59.6	0	0	0	6	14	14	547	2572	322	14	0	0	0	0	0	0	0	14	0	0	3503
60.8	6	6	0	6	6	0	1031	1097	364	39	6	0	0	6	0	0	0	0	0	0	2567
62.0	0	14	0	14	56	164	3622	756	156	47	0	31	6	6	0	6	0	0	0	6	4884
63.2	0	0	0	14	106	722	1181	506	172	64	0	0	0	0	0	0	0	0	0	0	2765
64.4	0	6	0	14	47	372	439	706	3781	56	0	0	6	0	0	14	0	0	0	0	5441
65.6	0	0	0	14	14	272	447	2239	22147	97	6	0	0	6	0	0	0	0	0	6	25248
66.8	0	0	0	0	0	289	564	1675	621972	0	0	0	6	6	6	0	0	0	0	0	39599
68.0	0	6	0	6	56	181	1939	2068	912881	22	0	0	0	6	0	0	6	0	14	0	35806
69.2	0	6	0	0	131	647	4022	8214	5214	0	0	6	0	0	6	0	0	14	14	0	18274
70.4	6	0	0	22	272	1606	3264	13689	2406	31	0	6	0	0	0	6	6	0	22	6	21342
71.6	0	0	0	47	689	5189	4231	12714	1881	122	6	6	0	0	6	31	0	0	0	0	24922
72.8	0	0	6	39	1739	7356	7472	10647	564	56	0	0	0	0	0	14	6	6	0	0	27305
74.0	0	14	0	97	472	5631	7747	9597	464	39	0	0	6	0	6	0	0	0	6	0	24079
75.2	0	0	0	64	1064	7831	7031	8297	356	64	0	0	0	6	0	0	0	6	31	6	24756
76.4	0	0	0	64	1356	10797	9672	5681	322	14	0	0	0	0	0	14	0	0	0	0	27920

B-1

TEST P2 DISTANCE FROM SOURCE 800 METERS PUFF RELEASE TIME 2300:00 PST DATA ACCUMULATION INCREMENT 4.8 SECONDS GROUND LEVEL (1.5 M)

RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS

SECONDS AFTER RELEASE	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	CROSSWIND SUMS
507.0	0	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	741	785								1526
511.8	0	-1	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	-1	0	947	764								1717
516.6	0	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	3	1281	816								2100
521.4	0	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	1647	816								2463
526.2	0	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	-1	1	2499	799									3302
531.0	0	-1	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	2583	618								3207
535.8	0	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	-1	0	2918	764								3692
540.6	0	-1	0	0	0	6	0	0	0	1	0	0	0	0	0	0	0	0	0	-1	0	3358	662								4027
545.4	0	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	-1	12	3622	449								4086
550.2	0	-1	0	0	0	0	0	0	0	0	0	0	0	0	12	1	0	0	0	-1	8	3493	424								3938
555.0	0	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	28	3426	391								3845
559.8	0	-1	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	-1	22	3776	295								4096
564.6	0	-1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	-1	16	4374	368								4760
569.4	0	-1	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	-1	47	4501	272								4823
574.2	0	-1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	85	4337	260								4685
579.0	1	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	108	4139	314								4562
583.8	0	-1	0	0	0	0	0	0	0	0	0	0	3	0	8	1	0	0	0	-1	118	3720	214								4064
588.6	0	-1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	-1	166	3726	160								4053

B-19

TEST P2 DISTANCE FROM SOURCE 800 METERS PUFF RELEASE TIME 2300:00 PST DATA ACCUMULATION INCREMENT 4.6 SECONDS GROUND LEVEL (1.5 M)

RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS

SECONDS AFTER RELEASE	D I R E C T I O N										F R O N T S I D E						D E G R E E S				CROSSWIND SUMS
	094	096	098	100	102	104	106	108	110	112	114	116	118	120	122	124	126	128	130	132	
593.4	0	-1	0	0	0	0	0	3	1	0	0	0	0	0	0	-1	235	2883	162	3284	
598.2	0	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	741	2718	135	3594	
603.0	0	-1	0	0	0	0	0	0	0	0	0	0	0	1	0	-1	1272	2422	103	3798	
607.8	0	-1	0	0	0	0	0	0	0	3	0	0	0	0	0	-1	1153	1889	49	3094	
612.6	0	-1	3	0	0	0	0	0	0	0	0	0	0	0	0	-1	1545	1785	66	3399	
617.4	0	-1	0	0	8	0	0	0	0	0	0	3	0	0	0	-1	3153	1951	70	5188	
622.2	0	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	3299	1501	60	4860	
627.0	0	-1	0	0	0	0	0	12	0	0	0	0	0	0	0	-1	3843	1143	37	5035	
631.8	0	-1	0	0	6	0	0	0	0	0	0	0	1	0	0	-1	3289	887	43	4226	
636.6	0	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	3270	808	31	4109	
641.4	0	-1	0	1	18	0	0	0	0	0	0	0	0	1	0	-1	3749	724	20	4513	
646.2	0	-1	0	1	0	0	0	0	0	0	0	0	0	0	0	-1	3745	597	18	4367	
651.0	0	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	3224	470	3	3697	
655.8	0	-1	0	0	0	0	0	6	0	0	0	0	0	0	0	-1	3153	481	14	3654	
660.6	0	-1	0	0	0	0	0	1	0	0	0	1	10	0	1	-1	2816	437	3	3269	
665.4	0	-1	0	0	0	1	0	0	0	0	0	0	3	0	0	-1	2589	378	12	2999	
670.2	0	-1	0	0	3	0	0	0	0	10	0	0	0	0	1	-1	2499	395	12	2936	
675.0	1	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	2141	224	3	2391	

B-20

TEST	DISTANCE FROM SOURCE		PUFF RELEASE TIME		DATA ACCUMULATION INCREMENT		GROUND LEVEL (1.5 M)																
P2	800 METERS		2300:00 PST		4.0 SECONDS																		
RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS																							
SECONDS	D	I	R	E	C	T	1	5	M	T	R	S	U	R	C	E	D	E	G	R	E	S	CROSSWIND
AFTER	094	096	098	100	102	104	106	108	110	112	114	116	118	120	122	124	126	128	130	132			SUMS
RELEASE																							
679.8	0	-1	0	0	0	0	0	0	3	1	0	0	0	0	0	45	-1	2001	203	0			2253
684.6	0	-1	0	0	0	0	0	0	0	0	0	3	0	0	0	106	-1	1768	149	0			2126
689.4	0	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	566	-1	1610	185	0			2361
694.2	0	-1	0	0	0	0	0	0	0	0	0	0	10	0	0	483	-1	1464	166	6			2129
699.0		-	0	0	0	0	0	0	0	0	0	0	0	6	0	460	-1	1316	156	6			1944
703.8	0	-1	0	0	0	0	0	1	0	0	0	0	3	0	0	526	-1	1268	37	0			1835
708.6	0	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	1106	-1	1320	49	6			2481
713.4	0	-1	0	0	0	0	0	0	0	0	0	0	8	0	6	1353	-1	1008	78	1			2454
718.2	0	-1	0	0	1	0	0	0	0	0	0	0	0	0	0	1489	-1	1003	91	0			2534
723.0	0	-1	0	0	0	0	0	0	0	0	0	0	0	0	22	1643	-1	764	83	0			2512
727.8		-	0	0	0	0	0	0	0	0	0	0	0	0	31	1912	-1	781	47	0			2774
732.6	0	-1	0	0	0	0	0	0	0	0	0	0	0	0	51	1920	-1	774	58	0			2803
737.4	8	-1	0	0	0	0	0	0	0	0	0	0	20	0	178	1883	-1	706	56	0			2831
742.2		-	0	0	0	0	0	0	0	0	0	0	0	0	153	1914	-1	691	58	0			2816
747.0	0	-1	0	0	0	0	0	3	0	0	0	0	0	0	312	2178	-1	695	41	0			3229
751.8	0	-1	0	0	0	0	0	0	0	0	0	0	0	0	222	2139	-1	689	39	0			3189
756.6	0	-1	0	0	0	0	0	0	0	0	0	0	0	0	264	2218	-1	660	47	0			3189
761.4	0	-1	0	0	0	0	0	0	0	0	0	0	0	0	282	2287	-1	675	43	6			3214

TEST P2 DISTANCE FROM SOURCE 800 METERS PUFF RELEASE TIME 2300:00 PST DATA ACCUMULATION INCREMENT 4.8 SECONDS GROUND LEVEL (1.5 M)

RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS

SECONDS AFTER RELEASE	D	R	E	C	T	J	O	F	R	C	E	R	S	E	L	E	V	A	T	O	E	G	R	E	E	CROSSWIND SUMS
766.2	0	-1	0	0	0	0	0	0	0	8	0	0	0	0	1	337	2193	-1	524	51	0				3104	
771.0	1	-1	0	0	6	0	0	0	0	0	0	0	0	1	0	506	2324	-1	428	31	0				3297	
775.8	0	-1	0	0	0	0	0	0	0	0	0	0	6	3	3	591	2356	-1	378	18	10				3365	
780.6	0	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	570	2166	-1	422	31	0				3189	
785.4	3	-1	0	0	1	0	0	0	0	0	0	0	0	0	0	624	2376	-1	393	14	0				3411	
790.2	0	-1	0	0	0	0	6	0	0	0	0	0	8	3	3	585	2231	-1	403	24	0				3260	
795.0	0	-1	0	0	0	0	0	0	0	0	0	0	12	1	1	562	2212	-1	324	22	0				3134	
799.8	0	-1	0	0	0	0	0	0	0	0	1	0	0	0	16	574	2106	-1	364	16	0				3077	
804.6	0	-1	0	0	0	0	0	0	0	0	0	0	0	0	1	543	2112	-1	335	22	0				3013	
AZIMUTH SUMS	17	0	12	3	43	7	6	26	13	16	0	28	77	56	6436	44461	0	78596	68933	10047					208777	

TEST	DISTANCE FROM SOURCE		PUFF RELEASE TIME		DATA ACCUMULATION INCREMENT		GROUND LEVEL (1.5 M)																			
P2	800 METERS		2300:00 PST		4.8 SECONDS																					
RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS																										
SECONDS AFTER RELEASE	D	I	R	E	C	T	I	O	N	F	R	O	M	S	O	U	R	C	E	D	E	G	R	E	S	CROSSWIND SUMS
	094	096	098	100	102	104	106	108	110	112	114	116	118	120	122	124	126	128	130	132						
855.0	0	-1	0	0	0	0	0	1	0	0	0	0	10	89	1014	1933	-1	266	47	0						3360
859.8	0	-1	0	1	0	0	0	0	0	0	0	1	12	64	1093	1785	-1	283	37	1						3277
864.6	0	-1	0	0	1	0	0	0	0	0	0	0	0	101	1041	1766	-1	226	31	0						3166
869.4	0	-1	0	0	0	0	0	0	0	0	0	0	0	135	1143	1618	-1	195	33	0						3124
874.2	0	-1	0	0	0	0	0	0	0	0	0	0	0	91	1045	1731	-1	278	24	0						3169
879.0	0	-1	0	0	0	0	0	0	0	0	0	1	0	141	1066	1443	-1	222	14	3						2890
883.8	0	-1	0	0	0	0	0	0	0	0	0	0	12	91	1037	1366	-1	195	20	0						2723
888.6	0	-1	0	0	6	0	0	3	0	0	0	0	10	83	1087	1608	-1	210	18	0						3025
893.4	0	-1	0	0	0	1	0	1	0	0	0	0	1	101	1039	1533	-1	160	22	1						7859
898.2	0	-1	0	0	0	0	0	0	0	0	0	0	10	89	1024	1524	-1	201	6	0						2854
903.0	0	-1	0	0	0	0	0	0	10	0	1	0	1	95	1064	1262	-1	145	16	0						2594
907.8	0	-1	0	0	0	0	0	0	0	0	0	0	0	139	868	1201	-1	128	12	0						2348
912.6	0	-1	0	0	0	0	0	0	0	0	0	0	0	93	1012	1158	-1	106	3	0						2372
917.4	0	-1	0	0	0	0	0	0	0	0	0	0	1	81	978	1435	-1	151	14	0						2660
922.2	0	-1	0	0	0	0	0	0	0	1	0	0	0	93	1085	1262	-1	158	0	0						2599
927.0	0	-1	0	0	0	0	0	3	0	0	3	0	0	99	1101	1437	-1	89	0	0						2732
931.8	0	-1	0	0	0	0	0	0	0	0	0	0	0	91	1151	1274	-1	116	12	0						2644
936.6	3	-1	0	3	1	0	0	0	0	0	3	3	0	101	1033	1024	-1	108	0	0						2279

TEST P2	DISTANCE FROM SOURCE 800 METERS		PUFF RELEASE TIME 2300:01:00		DATE		ACCUMULATION INCREMENT 0.0 SECONDS		GROUND LEVEL (1.5 M)														
RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS														DIRECTION		CROSSWIND							
SECONDS AFTER RELEASE	D	I	R	E	C	T	I	O	F	R	O	S	U	R	C	E	D	E	G	R	E	S	CROSSWIND SUMS
	094	096	098	100	102	104	106	108	110	112	114	116	118	120	122	124	126	128	130	132			
941.4	0	-1	0	0	0	0	0	0	0	0	0	0	6	72	1051	1187	-1	135	3	0			2454
946.2	0	-1	0	0	0	0	0	0	0	0	0	0	3	106	1091	987	-1	89	12	0			2288
951.0	0	-1	0	1	0	1	0	0	0	0	0	0	0	103	1093	958	-1	64	3	0			2223
955.8	0	-1	0	0	0	0	0	0	0	0	0	0	1	133	1022	947	-1	95	0	0			2214
960.6	0	-1	0	0	0	0	0	0	0	0	0	0	1	151	1047	1103	-1	99	0	0			2401
965.4	0	-1	0	0	0	0	0	0	6	0	0	0	0	164	1039	1176	-1	58	0	0			2443
970.2	8	-1	0	0	0	0	0	0	0	0	0	0	0	201	935	960	-1	97	0	1			2202
975.0	0	-1	0	0	0	0	0	0	0	0	0	0	12	208	951	935	-1	70	0	3			2176
979.8	0	-1	0	0	0	0	0	0	0	0	0	0	0	172	864	720	-1	81	6	0			1843
984.6	0	-1	0	8	0	0	0	0	0	0	0	0	8	199	797	810	-1	72	0	0			1894
989.4	0	-1	0	0	0	0	0	0	0	0	0	0	0	165	697	953	-1	49	0	0			2084
994.2	0	-1	0	0	0	0	0	0	0	0	0	0	0	328	647	891	-1	47	0	1			2114
999.0	0	-1	0	1	0	0	0	0	0	0	0	0	12	360	674	691	-1	53	0	0			1796
1003.8	0	-1	3	0	0	0	0	0	0	0	0	0	6	274	741	753	-1	49	3	0			1831
1008.6	0	-1	0	0	0	0	0	0	1	0	0	0	10	312	831	737	-1	35	0	0			1926
1013.4	0	-1	0	0	0	0	0	0	0	0	0	0	0	214	751	774	-1	26	0	6			1771
1018.2	3	-1	0	0	0	0	0	0	0	0	0	0	6	237	651	778	-1	20	10	12			1727
1023.0	1	-1	0	0	0	0	0	0	1	0	0	0	22	218	678	793	-1	49	0	0			1762

TEST
P2

DISTANCE FROM SOURCE
800 METERS

PUFF RELEASE TIME
2300:00 PST

DATA ACCUMULATION INCREMENT
4.8 SECONDS

GROUND LEVEL (1.5 M)

RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS

SECONDS AFTER RELEASE	D I R E C T I O N F E R O M S O U R C E																D E G R E E S	CROSSWIND SUMS			
	094	096	098	100	102	104	106	108	110	112	114	116	118	120	122	124			126	128	130
1027.8	0	-1	0	0	0	0	0	1	0	0	0	0	3	197	622	693	-1	47	0	0	1563
1032.6	0	-1	0	0	0	8	0	0	0	0	0	0	20	235	610	639	-1	53	6	0	1571
1037.4	0	-1	0	0	10	0	0	0	1	0	0	0	8	195	516	660	-1	24	1	0	1415
1042.2	0	-1	0	0	0	0	0	6	0	0	0	0	20	145	647	528	-1	35	0	0	1381
1047.0	0	-1	0	0	0	3	0	0	0	0	0	0	16	164	568	608	-1	41	0	3	1403
1051.8	0	-1	0	0	0	0	0	1	0	3	0	0	28	187	443	699	-1	64	0	0	1425
1056.6	0	-1	0	0	0	0	0	3	0	0	0	0	12	162	533	626	-1	43	0	0	1379
1061.4	0	-1	0	0	0	0	0	0	0	0	0	0	16	187	626	643	-1	18	0	0	1490
1066.2	0	-1	0	0	0	9	0	3	0	0	0	0	14	116	570	551	-1	99	0	0	1303
1071.0	0	-1	0	0	0	0	0	0	0	0	0	0	0	160	603	493	-1	28	0	0	1284
1075.8	0	-1	0	0	0	0	0	0	0	0	0	0	10	172	564	397	-1	51	1	0	1195
1080.6	0	-1	0	0	0	0	0	0	0	0	0	0	0	222	587	456	-1	43	0	0	1308
1085.4	0	-1	0	0	0	0	0	0	0	0	0	0	6	172	578	410	-1	14	0	0	1180
1090.2	0	-1	0	0	0	0	0	0	0	0	0	0	1	220	528	395	-1	18	0	0	1162
1095.0	0	-1	0	0	0	0	0	0	0	0	3	0	3	214	528	424	-1	14	0	0	1186
1099.8	0	-1	0	0	0	0	0	0	0	0	0	0	28	233	524	370	-1	10	0	1	1166
1104.6	0	-1	0	0	0	0	0	0	0	0	0	0	18	208	583	318	-1	33	0	0	1160
1109.4	0	-1	0	0	6	0	0	0	0	0	0	0	24	206	591	310	-1	12	0	0	1149

B-25

TEST	DISTANCE FROM SOURCE				PUFF RELEASE TIME				DATA ACCUMULATION INCREMENT				GROUND LEVEL (1.5 M)																		
P2	800 METERS				2300:00 PST				4.8 SECONDS																						
RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS																															
SECONDS	D	I	R	E	C	T	1	0	N	M	E	T	E	R	S	0	U	R	C	E	V	A	T	D	E	G	R	E	E	S	CROSSWIND
AFTER	094	096	098	100	102	104	106	108	110	112	114	116	118	120	122	124	126	128	130	132							SUMS				
RELEASE																															
1114.2	0	-1	0	0	1	0	0	0	0	0	0	0	0	26	228	460	420	-1	14	0	0							1149			
1119.0	0	-1	0	0	0	0	0	0	0	0	0	0	0	24	210	464	366	-1	0	0	0							1064			
1123.8	0	-1	0	0	0	0	0	1	0	0	0	0	0	56	197	562	291	-1	6	0	0							1113			
1128.6	0	-1	0	3	0	1	0	0	0	0	0	0	0	35	208	451	318	-1	6	0	0							1022			
1133.4	0	-1	0	0	0	1	0	0	0	0	0	0	0	51	270	493	268	-1	12	0	0							1095			
1138.2	0	-1	0	0	0	0	0	0	0	0	0	0	0	20	262	524	208	-1	10	0	0							1024			
1143.0	0	-1	0	1	0	0	0	3	1	0	0	0	0	70	220	487	256	-1	0	0	0							1038			
1147.8	0	-1	0	0	3	0	0	0	0	0	0	0	0	106	245	374	328	-1	8	0	0							1064			
1152.6	10	-1	0	0	0	0	0	0	0	0	1	3	58	224	487	295	-1	0	0	0							1078				
1157.4	1	-1	0	0	10	0	0	0	0	6	0	0	56	264	418	260	-1	6	0	0							1021				
AZIMUTH	26		3		32		0		23		19		877		49782		0		354												
SUMS		0		18		21		23		10		16		11137		54745		5097		29											122212

B-26

TEST P2	DISTANCE FROM SOURCE 200 METERS					PUFF RELEASE TIME 2300:00 PST					DATA ACCUMULATION INCREMENT 4.8 SECONDS					TOWER									
RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS																									
SECONDS AFTER RELEASE	D I R E C T I O N					F R O M					S O U R C E					A N D					E L E V A T I O N				
	0.8M	1.5M	3.0M	6.1M	10.7M	0.8M	1.5M	3.0M	6.1M	10.7M	0.8M	1.5M	3.0M	6.1M	10.7M	0.8M	1.5M	3.0M	6.1M	10.7M					
190.0	3	6	0	0	1	0	0	0	0	0	0	0	0	0	0	0	10	14	2681						
194.8	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	149	47	6641						
199.6	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	431	64	5612						
204.4	0	3	0	0	0	0	0	0	0	0	0	0	0	0	1	122	874	0	8508						
209.2	3	0	0	0	0	0	0	0	0	0	1	193	691	1712	8	5535									
214.0	0	0	1	0	8	0	0	0	0	0	0	93	291	3087	68	4735									
218.8	0	0	0	0	0	0	0	0	0	0	0	116	518	5078	3	3551									
223.6	0	0	6	1	0	0	0	0	0	0	0	268	712	2466	31	2958									
228.4	0	0	0	0	0	0	0	0	1	0	0	231	539	2037	31	837									
233.2	0	0	0	0	0	0	0	0	0	0	0	228	408	1764	47	1591									
238.0	0	0	0	0	0	0	0	1	0	0	0	164	510	547	28	1533									
242.8	0	3	0	0	0	0	0	0	0	0	0	89	206	166	37	712									
247.6	0	0	0	0	0	0	1	0	0	0	0	81	93	174	3	258									
252.4	0	0	0	0	0	0	0	0	0	0	0	58	47	43	6	85									
257.2	0	0	0	1	0	0	0	1	0	3	0	47	37	101	6	247									
262.0	0	0	0	0	0	0	0	0	0	1	0	14	45	16	78	220									
266.8	0	0	0	0	3	0	1	0	0	0	0	33	33	28	64	70									
271.6	0	0	0	0	0	0	0	0	1	0	0	24	41	26	83	0									

B-27

TEST	DISTANCE FROM SOURCE					PUFF RELEASE TIME					DATA ACCUMULATION INCREMENT					TOWER				
P2	200 METERS					2300:00 PST					4.8 SECONDS									
RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS																				
SECONDS AFTER RELEASE	D I R E C T I O N					F R O M S O U R C E					A N D					E V A L U A T I O N				
	0.8M	1.5M	3.0M	6.1M	10.7M	0.8M	1.5M	3.0M	6.1M	10.7M	0.8M	1.5M	3.0M	6.1M	10.7M	0.8M	1.5M	3.0M	6.1M	10.7M
276.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31	6	3	83	1
281.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	45	31	3	189	14
286.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24	0	6	287	12
290.8	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	12	6	0	464	1
295.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	16	6	526	3
300.4	0	1	0	0	6	1	0	0	0	0	0	0	0	0	0	6	3	10	678	10
305.2	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	1	14	739	0
310.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	66	816	0
314.8	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	72	1164	0
319.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	197	1308	0
324.4	0	0	0	0	0	0	0	1	1	8	0	0	0	0	0	0	3	287	1322	0
329.2	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	1	0	303	1281	0
334.0	0	0	0	0	6	0	0	3	0	0	0	0	0	0	0	3	3	393	1251	0
338.8	0	1	0	0	1	0	0	0	0	10	0	0	0	0	0	10	0	414	1156	0
SUMS	6	14	11	3	26	10	2	7	3	45	1789	4362	20483	11882	45815					

B-28

TEST	DISTANCE FROM SOURCE					PUFF RELEASE TIME	DATA ACCUMULATION INCREMENT					TOWER				
P2	200 METERS					2300:00 PST	4.8 SECONDS									
RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS																
SECONDS	D I R E C T I O N					F R O M					E L E V A T I O N					
AFTER	0.8M	1.5M	3.0M	6.1M	10.7M	0.8M	1.5M	3.0M	6.1M	10.7M	0.8M	1.5M	3.0M	6.1M	10.7M	
RELEASE	0.8M	1.5M	3.0M	6.1M	10.7M	0.8M	1.5M	3.0M	6.1M	10.7M	0.8M	1.5M	3.0M	6.1M	10.7M	
507.0	0	0	0	0	0	6497	3999	122	0	22	89	10	10	28	0	
511.8	1	0	0	0	0	8764	4999	189	0	35	78	1	10	26	0	
516.6	0	0	0	0	0	8195	4193	170	0	35	95	0	22	12	0	
521.4	0	0	0	0	0	7868	3393	341	1	37	74	0	31	0	0	
526.2	0	0	0	0	0	7370	4072	272	0	12	66	10	6	18	0	
531.0	0	0	0	0	0	7622	3828	260	0	16	64	0	14	31	0	
535.8	0	3	0	0	0	7091	3266	97	0	33	58	14	18	26	0	
540.6	1	0	0	0	0	7256	3366	341	0	20	49	3	22	14	0	
545.4	0	0	0	0	0	7958	3308	264	0	20	51	10	12	18	0	
550.2	1	0	0	0	0	6766	2460	91	0	12	62	8	35	8	0	
555.0	0	0	0	0	0	7833	2812	399	0	16	41	20	18	18	0	
559.8	0	0	0	0	0	7645	2812	764	0	12	28	3	22	22	0	
564.6	0	0	0	0	0	6651	2345	362	0	8	20	3	3	20	0	
569.4	0	0	0	0	0	6743	3210	393	0	28	43	0	3	12	0	
574.2	0	0	0	0	0	7699	2670	133	0	43	35	18	3	14	0	
579.0	0	0	0	0	0	6674	2606	258	1	18	14	1	14	8	0	
583.8	0	0	0	0	0	5612	2972	658	6	14	28	3	0	12	0	
588.6	0	0	0	0	0	6603	3308	870	0	12	24	0	8	1	0	

B-29

TEST P2 DISTANCE FROM SOURCE 200 METERS PUFF RELEASE TIME 2300:00 PST DATA ACCUMULATION INCREMENT 4.8 SECONDS

SECONDS AFTER RELEASE	D I R E C T I O N : D E G R E E S					F R O M S O U R C E A N D D E G R E E S					E L E V A T I O N D E G R E E S				
	0.8M	1.5M	3.0M	6.1M	10.7M	0.8M	1.5	3.0	6.14	10.7M	0.8M	1.5M	3.0M	6.1M	10.7M
593.4	0	0	0	0	8	6101	3287	560	0	28	16	12	8	0	0
598.2	0	0	0	0	0	5451	4351	1189	6	33	28	0	0	0	0
603.0	0	1	0	0	0	5470	3551	816	0	28	26	0	14	3	1
607.8	0	0	0	0	6	5426	3028	289	0	28	14	0	0	0	0
612.6	0	0	6	0	0	4937	1897	462	0	10	26	0	1	0	0
617.4	0	0	0	0	0	4301	2570	570	10	8	10	0	0	0	0
B-30 622.2	0	0	0	0	0	5168	3253	370	0	1	0	0	0	10	0
627.0	0	0	0	0	1	4289	2074	539	0	1	0	0	3	0	0
631.8	6	0	0	0	3	4412	2935	522	16	8	0	0	0	0	0
636.6	0	0	0	0	0	4512	3203	393	0	8	1	0	0	3	10
641.4	0	3	0	0	12	4493	2024	169	0	10	12	0	0	0	0
646.2	0	0	0	0	0	3389	2114	187	0	16	0	0	1	0	0
651.0	0	0	0	0	0	3756	1210	174	0	0	14	0	0	0	0
655.8	0	0	3	0	0	3141	1403	81	6	0	0	0	0	0	0
660.6	3	0	0	0	0	3445	1670	285	8	3	8	0	0	0	1
665.4	1	0	0	0	1	4083	1933	412	8	12	0	0	0	3	0
670.2	0	0	0	0	0	2728	1206	122	76	1	1	0	0	0	0
675.0	0	0	0	0	0	2049	1351	345	49	1	0	0	0	0	0

TEST P2	DISTANCE FROM SOURCE 200 METERS					PUFF RELEASE TIME 2300:00 PST	DATA ACCUMULATION INCREMENT 4.8 SECONDS					TOWER				
RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS																
SECONDS AFTER RELEASE	D I R E C T I O N D E G R E E S					F R O M D E G R E E S					E L E V A T I O N D E G R E E S					
	0.8M	1.5M	3.0M	6.1M	10.7M	0.8M	1.5M	3.0M	6.1M	10.7M	0.8M	1.5M	3.0M	6.1M	10.7M	
679.8	0	0	0	0	0	2172	978	378	47	1	0	0	0	0	0	
684.6	0	0	0	0	0	2401	1739	489	47	1	0	0	1	0	0	
689.4	0	0	1	0	1	3328	1462	572	39	0	0	0	0	0	0	
694.2	0	0	0	0	0	2706	1408	637	12	0	0	0	0	0	0	
699.0	0	0	0	0	0	2849	1753	764	8	16	6	0	0	0	1	
703.8	0	0	0	0	0	2164	1643	760	10	10	0	0	0	0	0	
708.6	0	0	0	0	0	2435	1564	687	14	3	0	0	0	0	0	
713.4	0	0	0	0	0	2428	1556	462	0	0	0	0	0	3	0	
718.2	0	0	0	0	0	2043	1287	453	18	0	0	0	3	0	0	
723.0	0	0	0	0	3	2318	976	306	31	1	0	0	1	0	0	
727.8	0	0	0	0	0	1556	781	243	16	0	0	0	0	0	0	
732.6	0	0	0	0	0	1814	981	339	31	0	0	0	0	0	0	
737.4	0	0	0	0	0	1633	810	272	20	0	0	6	0	0	0	
742.2	0	0	0	0	0	1228	610	185	6	0	0	0	0	0	0	
747.0	0	0	0	0	0	972	614	212	3	0	0	0	0	0	0	
751.8	0	0	0	0	0	1189	660	208	8	0	0	0	0	0	0	
756.6	0	0	0	0	0	1047	693	276	22	3	0	3	0	0	1	
761.4	1	0	0	0	1	885	508	231	20	0					0	

B-31

TEST P2 DISTANCE FROM SOURCE 200 METERS PUFF RELEASE TIME 2300:07 PST DATE ACCUMULATION INCREMENT 4.8 SECONDS

RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS

SECONDS AFTER RELEASE	D I R E C T I O N					F R O M					E L E V A T I O N				
	0.8M	1.5M	3.0M	6.1M	10.7M	0.8M	1.5M	3.0M	6.1M	10.7M	0.8M	1.5M	3.0M	6.1M	10.7M
766.2	0	0	0	1	0	814	399	210	6	8	0	0	0	8	0
771.0	0	0	0	0	0	758	349	193	16	0	0	0	0	0	0
775.8	0	0	0	0	0	751	518	170	1	0	0	0	0	0	0
780.6	0	0	0	0	0	901	528	187	12	0	0	0	0	0	0
785.4	0	0	0	0	0	724	374	160	14	0	0	0	0	0	0
790.2	0	0	0	8	0	760	420	168	14	0	0	0	0	0	0
795.0	0	0	0	0	0	683	476	162	12	0	0	0	0	0	0
799.8	0	0	0	0	0	781	535	197	1	0	0	0	0	0	0
804.6	0	0	0	0	0	724	585	191	20	0	0	0	0	0	0
SUMS	14	7	10	9	36	250062	126940	22641	635	632	1081	125	283	318	

TEST P2 DISTANCE FROM SOURCE 200 METERS PUFF RELEASE TIME 2300:00 PST DATA ACCUMULATION INCREMENT 4.8 SECONDS TOWER

RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS

SECONDS AFTER RELEASE	D I R E C T I O N F R O M S O U R C E A N D					E L E V A T I O N									
	0.8M	1.5M	3.0M	6.1M	10.7M	0.8M	1.5M	3.0M	6.1M	10.7M	0.8M	1.5M	3.0M	6.1M	10.7M
855.0	0	0	0	0	0	410	268	145	1	8	0	0	0	0	0
859.8	0	0	0	0	0	372	293	143	0	0	0	0	0	0	0
864.6	0	0	0	0	0	381	270	116	6	0	6	0	0	0	0
869.4	0	0	0	0	0	220	128	101	22	0	0	0	0	1	0
874.2	0	0	0	0	0	239	214	158	1	0	0	0	0	0	0
879.0	0	0	0	9	0	268	158	143	0	0	0	0	0	0	0
883.8	0	0	0	8	0	253	206	120	18	0	0	0	0	0	0
888.6	0	0	0	0	3	306	214	83	0	0	0	0	0	0	0
893.4	0	8	0	0	0	262	181	70	6	0	0	0	0	0	0
898.2	0	0	0	0	0	283	210	78	6	0	0	0	0	0	1
903.0	0	0	0	0	0	291	ITZ	33	1	0	0	0	0	0	0
907.8	0	0	0	0	0	258	126	43	0	0	0	0	0	0	0
912.6	0	0	0	0	0	206	156	45	0	0	0	0	0	0	0
917.4	0	0	0	0	0	141	120	51	3	0	0	0	0	0	0
922.2	0	0	0	0	0	174	110	20	0	0	0	0	0	0	0
927.0	0	0	0	0	0	151	120	22	0	0	0	0	14	0	0
931.8	0	0	6	0	0	120	108	26	0	0	0	0	0	0	0
936.6	0	0	0	0	0	LET	89	26	0	0	0	0	0	8	0

B-23

TEST P2 DISTANCE FROM SOURCE 204 METERS PUFF RELEASE TIME 2300:00 PST DATA ACCUMULATION INCREMENT 4.8 SECONDS TOWER

RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS

SECONDS AFTER RELEASE	D I R E C T I O N F R O M S O U R C E					A N D E L E V A T I O N									
	0.8M	1.5M	3.0M	6.1M	10.7M	0.8M	1.5M	3.0M	6.1M	10.7M	0.8M	1.5M	3.0M	6.1M	10.7M
941.4	0	0	0	0	0	147	110	22	0	0	8	0	0	0	0
946.2	0	0	0	0	0	126	78	10	0	0	0	0	0	0	0
951.0	0	0	0	0	0	103	64	16	0	0	0	0	0	0	0
955.8	0	0	0	0	0	97	47	0	0	0	0	0	0	0	0
960.6	0	0	0	0	0	66	28	12	0	0	0	0	0	0	0
965.4	0	0	0	0	0	83	39	20	0	0	0	0	0	0	0
970.2	0	0	0	0	0	53	51	3	0	0	0	0	0	0	0
975.0	0	0	0	0	0	70	47	24	0	0	0	0	0	0	0
979.8	0	0	0	0	0	85	39	0	0	0	0	0	0	0	0
984.6	0	0	0	0	0	72	53	12	0	0	0	0	0	0	0
989.4	0	0	0	0	0	76	43	0	0	0	0	0	0	0	6
994.2	0	0	0	0	0	53	18	3	0	0	0	0	0	1	0
999.0	0	0	1	0	0	26	18	1	0	0	0	0	0	3	0
1003.8	0	0	0	0	0	45	12	0	0	0	0	0	0	0	0
1008.6	0	0	0	0	0	37	18	1	0	0	0	0	0	0	0
1013.4	0	0	0	0	0	24	31	0	0	0	0	0	0	0	0
1018.2	0	0	0	0	0	47	31	0	0	0	0	0	0	0	0
1023.0	0	0	0	0	0	24	28	0	0	0	8	0	0	0	0

B-34

TEST P2 DISTANCE FROM SOURCE 200 METERS PUFF RELEASE TIME 2300:00 PST DATA ACCUMULATION INCREMENT 4.8 SECONDS TOWER

RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS

SECONDS AFTER RELEASE	D I R E C T I O N F R O M S O U R C E A N D					E L E V A T I O N									
	0.8M	1.5M	3.0M	6.1M	10.7M	0.8M	1.5M	3.0M	6.1M	10.7M					
1027.6	0	3	0	0	1	26	16	20	0	0	0	0	0	0	0
1032.6	0	0	0	0	0	26	1	1	0	0	0	0	0	0	0
1037.4	0	0	0	0	0	18	1	8	0	0	0	0	0	0	0
1042.2	3	0	0	0	0	22	0	0	0	0	0	0	0	0	0
1047.0	0	0	0	0	0	16	12	0	0	0	0	0	0	0	0
1051.8	0	0	0	0	0	18	6	0	0	0	1	0	0	0	0
1056.6	0	0	0	6	0	20	0	6	0	3	0	0	0	0	0
1061.4	0	0	0	0	0	20	16	1	0	0	0	0	0	0	0
1066.2	0	0	0	0	0	20	10	0	0	0	0	0	0	0	0
1071.0	0	0	3	0	0	24	1	0	0	0	0	0	0	0	0
1075.8	0	0	0	0	0	22	1	0	0	0	0	0	0	0	0
1080.6	0	0	0	0	0	22	12	0	0	0	0	0	0	0	0
1085.4	0	0	0	0	0	6	6	1	0	0	0	0	0	0	0
1090.2	0	0	0	0	0	16	14	1	0	0	0	0	0	0	0
1095.0	0	0	0	0	0	20	3	0	0	0	0	0	0	0	0
1099.8	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
1104.6	0	0	0	0	0	14	3	3	0	0	0	0	0	0	0
1109.4	0	0	0	0	0	26	6	3	0	1	0	0	0	0	0

B-35

TEST- DISTANCE FROM SOURCE BUFF RELEASE TIME DATA ACCUMULATION INCREMENT
P2 200 METERS 2300:00 PST 4.8 SECONDS

RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS

SECONDS AFTER RELEASE	D I R E C T I O N F R O M					S O U R C E A N D					E L E V A T I O N				
	0.8	1.5M	3.0M	6.1M	10.7M	0.8M	1.5M	3.0M	6.1	10.7M	0.8M	1.5M	3.0M	6.1M	10.7M
1114.2	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0
1119.0	0	0	0	0	0	22	6	6	10	0	0	0	0	0	0
1123.8	0	0	1	0	0	16	0	16	0	0	0	0	0	0	0
1128.6	0	0	0	0	0	22	14	10	0	0	0	0	0	0	0
1133.4	0	0	0	0	0	10	3	0	0	0	0	0	0	0	0
1138.2	0	0	0	0	0	12	3	0	0	0	0	6	0	0	0
1143.0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0
1147.8	0	0	0	0	0	14	6	3	0	0	0	0	0	0	0
1152.6	0	0	0	0	0	3	8	0	0	0	0	0	0	0	0
1157.4	0	1	0	0	0	0	0	0	0	0	0	0	3	0	0
SUMS	3	4	12	14	4	6167	4046	1626	74	18	23	6	17	19	

TEST	DISTANCE FROM SOURCE					PUFF RELEASE TIME					DATA ACCUMULATION INCREMENT					TOWER										
P2	800 METERS					2300:00 PST					4.8 SECONDS															
RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS																										
SECONDS	D I R E C T I O N					F R O M					S O U R C E					A N D					E L E V A T I O N					
AFTER	0	9	8	D E G R E E		5	1	4	D E G R E E		5	1	4	D E G R E E		5	1	3	D E G R E E		5	1	3	D E G R E E		5
RELEASE	0.8M	1.5M	4.6M	10.7M	21.3M	0.8M	1.5M	4.6M	10.7M	21.3M	0.8M	1.5M	4.6M	10.7M	21.3M	0.8M	1.5M	4.6M	10.7M	21.3M	0.8M	1.5M	4.6M	10.7M	21.3M	
855.0	-1	0	0	0	0	8	0	0	0	0	0	0	0	0	0	320	741	2241	99	0						
859.8	-1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	528	947	2370	93	0						
864.6	-1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	801	1281	3224	153	0						
869.4	-1	0	0	0	0	0	0	0	0	3	0	0	0	0	0	908	1647	3043	156	0						
874.2	-1	0	0	1	0	0	0	0	0	28	3	0	0	0	0	1881	2499	3393	270	0						
879.0	-1	6	0	0	0	0	0	0	0	22	0	0	0	0	0	1551	2583	3601	249	0						
883.8	-1	0	0	0	0	0	0	0	0	3	0	0	0	0	0	1908	2918	3068	185	0						
888.6	-1	0	0	8	0	0	0	0	0	31	0	0	0	0	0	3081	3358	4741	316	0						
893.4	-1	0	0	0	0	0	0	0	0	24	0	0	0	0	0	3543	3622	3968	558	0						
898.2	-1	0	1	0	0	0	0	0	0	18	1	0	0	0	0	3847	3493	4464	439	0						
903.0	-1	0	0	0	0	0	0	0	0	18	0	0	0	0	0	4101	3426	5920	614	0						
907.8	-1	0	0	0	0	0	0	0	0	20	0	0	0	0	0	3720	3776	6745	660	0						
912.6	-1	0	0	24	0	16	0	0	0	31	6	0	0	0	0	4889	4374	6689	383	0						
917.4	-1	0	0	0	0	0	0	0	0	35	0	0	0	0	0	4795	4501	6197	274	0						
922.2	-1	3	0	0	0	0	0	0	0	18	0	0	0	0	0	4849	4337	5274	260	0						
927.0	-1	0	0	0	0	0	0	0	0	18	0	0	0	0	0	4764	4139	4303	339	0						
931.8	-1	0	0	0	0	0	0	0	0	35	0	0	0	0	0	5314	3720	3366	187	0						
936.6	-1	0	0	0	0	0	0	0	0	53	0	0	0	0	0	4628	3726	2466	310	0						

TEST P2 DISTANCE FROM SOURCE 800 METERS PUFF RELEASE TIME 2300:00 PST DATA ACCUMULATION INCREMENT 4.8 SECONDS

RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS

SECONDS AFTER RELEASE	D I R E C T I O N					F R O M					E L E V A T I O N					
	0.8M	1.5M	4.6M	10.7M	21.3M	0.8M	1.5M	4.6M	10.7M	21.3M	0.8M	1.5M	4.6M	10.7M	21.3M	
941.4	-1	0	0	0	0	0	0	0	0	12	0	4037	2883	2147	233	0
946.2	-1	0	0	0	0	1	0	0	0	26	0	3820	2718	1535	151	0
951.0	-1	0	0	0	0	3	0	0	0	26	0	3831	2422	1020	95	0
955.8	-1	0	0	0	0	0	0	0	0	12	0	3128	1889	785	93	1
960.6	-1	3	1	0	0	0	0	0	0	8	0	2410	1785	922	85	0
965.4	-1	0	0	3	0	0	0	0	6	3	0	2868	1951	831	72	0
970.2	-1	0	0	0	0	0	0	0	0	20	6	2537	1501	522	74	3
975.0	-1	0	0	0	0	0	0	0	0	8	0	1789	1143	376	72	0
979.8	-1	0	0	0	0	0	0	0	0	18	0	1916	887	320	68	0
984.6	-1	0	0	0	0	0	0	0	3	18	0	1485	808	399	45	0
989.4	-1	0	0	0	0	3	0	0	0	6	0	1462	724	243	64	0
994.2	-1	0	0	0	0	0	0	0	0	16	0	1060	597	91	62	0
999.0	-1	0	0	0	0	0	0	0	0	0	0	931	470	135	85	0
1003.8	-1	0	0	0	0	0	0	0	0	3	8	866	481	172	56	0
1008.6	-1	0	0	0	0	0	0	0	0	3	0	722	437	106	60	0
1013.4	-1	0	0	0	0	0	0	0	0	6	0	535	378	70	68	0
1018.2	-1	0	6	0	0	1	0	0	0	8	0	541	395	122	66	0
1023.0	-1	0	0	0	0	0	0	0	0	1	0	503	224	70	43	3

.....

TEST	DISTANCE FROM SOURCE	PUFF RELEASE TIME	DATA ACCUMULATION INCREMENT					TOWER												
P2	800 METERS	2300:00 PST	4.8 SECONDS																	
RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS																				
SECONDS	D I R E C T I O N					F R O M					S O U R C E					A N D				
AFTER	0	9	8	D E G R E E S		1	1	4	D E G R E E S		1	3	0	D E G R E E S		1	3	0	D E G R E E S	
RELEASE	0.8M	1.5M	4.6M	10.7M	21.3M	0.8M	1.5M	4.6M	10.7M	21.3M	0.8M	1.5M	4.6M	10.7M	21.3M	0.8M	1.5M	4.6M	10.7M	21.3M
1027.8	-1	0	0	0	0	0	0	1	3	0	408	203	64	41	0					
1032.6	-1	0	0	0	0	0	0	0	0	0	366	149	14	51	0					
1037.4	-1	0	0	0	0	0	0	0	0	0	310	185	47	56	1					
1042.2	-1	0	0	0	0	0	0	0	0	0	276	166	53	49	0					
1047.0	-1	0	1	0	1	0	0	0	0	0	387	156	20	47						
1051.8	-1	0	0	0	3	0	0	0	0	0	168	37	26	47						
1056.6	-1	0	0	0	0	0	0	0	1	0	131	49	14	37						
1061.4	-1	0	0	0	0	0	0	1	0	0	101	78	28	47						
1066.2	-1	0	0	0	6	18	0	0	1	0	164	91	14	31						
1071.0	-1	0	0	0	0	0	0	0	0	0	112	83	10	49						
1075.8	-1	0	0	0	10	0	0	0	0	0	139	47	33	47	0					
1080.6	-1	0	0	0	0	0	0	0	0	0	126	58	8	43	0					
1085.4	-1	0	0	0	3	0	0	0	0	0	110	56	24	35	0					
1090.2	-1	0	0	0	1	0	0	0	0	0	93	58	24	53	8					
1095.0	-1	0	0	0	0	0	0	0	0	0	76	41	41	45	0					
1099.8	-1	0	1	0	0	0	0	0	0	0	101	39	28	62	0					
1104.6	-1	0	0	0	0	0	0	0	0	3	91	47	14	45	3					
1109.4	-1	0	0	0	1	0	0	0	0	0	53	43	8	43	0					

B-52

TEST	DISTANCE FROM SOURCE	PUFF RELEASE TIME	DATA ACCUMULATION INCREMENT					TOWER							
P2	800 METERS	2300:00 PST	4.8 SECONDS												
RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS															
SECONDS	D I R E C T I O N					S O U R C E					E L E V A T I O N				
AFTER	---0 9 8	D E G R E E S---	---	1 1 4	S O U R C E	---	---	1 3 0	D E G R E E S---	---	---	---	---	---	---
RELEASE	0.8M	1.5M	4.6M	10.7M	21.3M	0.8M	1	4.6	10.7M	21.3M	0.8M	1.5M	4.6M	10.7M	21.3M
1114.2	-1	0	0	0	0	0	0	0	0	0	95	51	22	49	0
1119.0	-1	0	0	0	0	0	0	0	0	0	56	31	14	56	0
1123.8	-1	0	0	0	0	0	0	0	0	0	47	18	31	49	0
1128.6	-1	0	0	0	0	0	0	0	0	0	60	31	14	51	0
1133.4	-1	0	0	0	6	0	0	0	0	0	72	14	0	53	0
1138.2	-1	0	0	0	0	0	0	0	0	0	28	24	8	56	0
1143.0	-1	0	0	0	0	0	0	0	0	1	26	22	10	60	0
1147.8	-1	0	0	1	3	0	0	1	0	0	33	16	14	62	0
1152.6	-1	0	0	0	0	0	0	0	0	0	37	22	10	62	0
SUMS	0	12	10	37	34	50	0	12	558	28	93535	78596	85532	8363	19

R-40

TEST P2 DISTANCE FROM SOURCE 800 METERS PUFF RELEASE TIME 2300:00 PST DATA ACCUMULATION INCREMENT 4.8 SECONDS TOWER

RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS

SECONDS AFTER RELEASE	D I R E C T I O N F R O M S O U R C E A N D					E L E V A T I O N									
	0.8M	1.5M	4.6M	10.7M	21.3M	0.8M	1.5M	4.6M	10.7M	21.3M	0.8M	1.5M	4.6M	10.7M	21.3M
855.0	-1	0	0	1	0	0	0	3	0	0	64	47	10	66	0
859.8	-1	0	0	0	1	3	0	1	0	0	68	37	8	51	0
864.6	-1	0	0	0	0	3	0	0	0	0	58	31	20	76	0
869.4	-1	0	0	0	0	0	0	0	0	0	33	33	8	101	
874.2	-1	0	0	0	0	0	0	0	0	0	14	24	0	99	
879.0	-1	0	0	0	0	1	0	0	0	0	12	14	10	118	
883.8	-1	0	0	6	0	0	0	1	0	0	24	20	20	138	
888.6	-1	0	0	0	0	0	0	0	1	0	26	18	12	76	0
893.4	-1	0	3	0	0	0	0	0	0	0	24	22	0	18	0
898.2	-1	0	0	0	0	0	0	0	0	0	35	6	20	26	0
903.0	-1	0	0	0	0	0	1	0	0	0	10	16	31	31	0
907.8	-1	0	0	0	0	0	0	0	1	0	12	12	1	22	0
912.6	-1	0	0	1	0	0	0	6	0	0	43	3	8	31	0
917.4	-1	0	1	0	0	0	0	0	0	1	26	14	6	31	0
922.2	-1	0	0	0	0	0	0	0	0	0	18	0	0	24	6
927.0	-1	0	0	0	0	0	3	0	0	0	18	0	0	22	0
931.8	-1	0	0	0	0	0	0	0	0	0	16	12	6	31	0
936.6	-1	0	0	0	0	0	3	0	0	0	0	0	0	22	0

B-41

TEST P2 DISTANCE FROM SOURCE 800 METERS PUFF RELEASE TIME 2300:00 PST DATA ACCUMULATION INCREMENT 4.8 SECONDS TOWER

RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS

SECONDS AFTER RELEASE	D I R E C T I O N F R O M S O U R C E A N D					E L E V A T I O N									
	0.8M	1.5M	4.6M	10.7M	21.3M	0.8M	1.5M	4.6M	10.7M	21.3M					
941.4	-1	0	0	0	0	0	0	0	0	0	8	3	6	16	0
946.2	-1	0	0	0	0	0	0	0	0	0	14	12	0	22	0
951.0	-1	0	0	0	0	1	0	0	0	0	10	3	0	16	0
955.8	-1	0	1	0	0	0	8	0	0	0	8	0	0	20	0
960.6	-1	0	0	0	0	0	0	0	0	0	8	0	0	16	0
965.4	-1	0	0	0	0	3	0	0	0	0	3	0	0	14	0
970.2	-1	0	0	0	0	0	0	0	0	0	0	0	0	22	0
975.0	-1	0	0	1	0	0	0	0	0	0	8	0	0	20	0
979.8	-1	0	0	0	0	0	0	0	0	0	3	6	0	18	0
984.6	-1	0	0	0	0	0	0	0	0	0	6	0	0	26	0
989.4	-1	0	0	0	0	0	0	0	0	0	8	0	0	26	0
994.2	-1	0	0	0	0	0	0	0	0	0	12	0	0	22	0
999.0	-1	0	0	0	0	0	0	0	0	0	0	0	0	31	0
1003.8	-1	3	0	0	0	0	0	0	0	0	14	3	0	16	0
1008.6	-1	0	6	0	0	0	0	0	0	0	8	0	0	22	0
1013.4	-1	0	0	0	0	0	0	0	0	0	20	0	0	24	0
1018.2	-1	0	0	0	0	1	0	0	0	0	0	10	0	20	0
1023.0	-1	0	0	0	0	0	0	0	0	0	0	0	0	16	0

B-42

TEST	DISTANCE FROM SOURCE					PUFF RELEASE TIME	DATA ACCUMULATION INCREMENT					TOWER													
P2	800 METERS					2300:00 PST	4.8 SECONDS																		
RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS																									
SECONDS AFTER RELEASE	D I R E C T I O N					F R O M					S O U R C E					A N D					E L E V A T I O N				
	0.8M	1.5M	4.6M	10.7M	21.3M	0.8M	1.5M	4.6M	10.7M	21.3M	0.8M	1.5M	4.6M	10.7M	21.3M	0.8M	1.5M	4.6M	10.7M	21.3M					
1027.8	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	24	0					
1032.6	-1	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	6	0	26	0					
1037.4	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	20	0					
1042.2	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	16	0					
1047.0	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	12	0					
1051.8	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	26	0					
1056.6	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	18	0					
1061.4	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	24	0					
1066.2	-1	0	0	0	0	12	0	0	0	0	0	0	0	0	3	0	1	0	26	0					
1071.0	-1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	24	0					
1075.8	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	6	1	0	0	28	0					
1080.6	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	26	0					
1085.4	-1	0	0	0	8	0	0	0	0	0	0	0	0	0	14	0	0	0	16	0					
1090.2	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0					
1095.0	-1	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	18	0					
1099.8	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0					
1104.6	-1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	20	0					
1109.4	-1	0	1	1	0	0	0	0	0	0	3	0	0	0	0	0	0	1	24	0					

B-43

TEST P2 DISTANCE FROM SOURCE 800 METERS IUFF #Fir. Sir TIME 2300:00 PST DATA ACCUMULATION INCREMENT 48 SECONDS

RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS

SECONDS AFTER RELEASE	DIRECTION FROM SOURCE AND					ELEVATION								
	0.8M	1.5M	4.6M	10.7M	21.3M	0.8M	1.5M	4.6M	10.7M	21.3M				
1114.2	-1	0	0	0	0	0	0	0	0	0	18	0		
1119.0	-1	0	0	0	0	8	0	0	0	0	20	0		
1123.8	-1	0	0	0	0	0	0	0	0	0	16	0		
1128.6	-1	0	0	0	0	0	0	0	0	1	12	0		
1133.4	-1	0	0	0	0	0	0	0	0	0	24	0		
1138.2	-1	0	0	0	0	3	0	0	0	0	22	0		
1143.0	-1	0	0	0	0	0	0	0	0	1	31	0		
1147.8	-1	0	0	0	0	0	0	0	0	1	22	0		
1152.6	-1	0	0	0	0	0	1	0	0	0	14	0		
1157.4	-1	0	0	0	0	0	0	0	0	1	14	0		
SUMS	0	3	12	11	9	45	19	11	2	19	698	354	179	1938

B-44

TEST	DISTANCE FROM SOURCE		PUFF RELEASE TIME		DATA ACCUMULATION INCREMENT		GROUND LEVEL (1.5 M)																			
P3	200 METERS		0738:00 PST		4.8 SECONDS																					
RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS																										
SECONDS AFTER RELEASE	D	I	R	E	C	T	I	O	N	F	R	O	M	S	O	U	R	C	E	D	E	G	R	E	S	CROSSWIND SUMS
	.094	.096	.098	100	102	104	106	108	110	112	114	116	118	120	122	124	126	128	130	132						
58.0	0	0	0	0	0	0	20	178	891	781	320	2414	249	5737	2578	470	0	0	0	0					13638	
62.8	0	0	0	0	0	24	166	189	1320	1643	1710	3541	7953	8008	5062	1431	3	101	14	0					31165	
67.6	0	0	0	0	0	0	24	568	872	1549	2770	3326	5808	10251	10358	3633	366	83	0	0					39608	
72.4	0	0	0	0	0	0	10	195	553	2010	2739	4599	10903	16401	8145	2001	658	197	0	0					42411	
77.2	0	0	0	1	0	1	0	37	781	1712	4945	6414	10174	7335	8506	1766	339	49	0	0					42060	
82.0	0	8	0	0	1	0	0	3	341	3608	5078	6345	7268	4976	4308	1420	214	28	12	0					33610	
86.8	1	0	0	0	0	0	0	60	512	3816	5268	5547	3853	2191	3001	761	228	66	3	3					25330	
91.6	0	0	0	0	0	0	0	95	468	2216	4572	5662	2389	1491	1785	262	108	33	22	0					19103	
96.4	0	0	0	1	0	0	0	112	562	2253	2006	3376	2570	1549	1397	266	93	10	0	1					14196	
101.2	0	0	0	0	0	0	6	93	670	1347	2443	1858	1243	406	828	135	31	16	6	0					9082	
106.0	0	0	0	0	0	0	0	1	316	660	635	2160	1043	428	356	74	10	0	0	0					5683	
110.8	0	0	0	0	1	0	0	0	53	551	241	641	991	422	133	6	6	0	1	1					3047	
115.6	0	0	0	0	0	0	0	0	93	278	118	456	476	120	81	10	0	0	6	0					1638	
120.4	0	0	0	0	0	0	0	0	58	195	168	493	226	49	24	1	0	0	0	0					1214	
125.2	1	0	0	3	0	0	1	0	43	131	176	212	143	91	10	0	0	0	0	0					811	
130.0	0	0	0	0	0	0	0	1	10	26	49	85	143	74	8	0	0	0	0	0					396	
134.8	0	0	0	0	0	0	1	0	16	26	26	18	35	22	6	0	0	0	0	0					150	
139.6	1	0	0	0	0	0	0	0	3	0	3	22	35	8	12	0	0	0	0	0					84	

B-45

TEST	DISTANCE FROM SOURCE		PUFF RELEASE TIME		DATA ACCUMULATION INCREMENT		GROUND LEVEL (1.5 M)																			
P3	200 METERS		0738:00 PST		4.8 SECONDS																					
-----RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS																										
SECONDS	D	R	E	C	T	I	O	N	F	R	O	M	R	S	U	B	A	D	E	G	N	R	E	E	S	CROSSWIND
AFTER	094	096	098	100	102	104	106	108	110	112	114	116	118	120	122	124	126	128	130	132					SUMS	
RELEASE																										
144.4	0	0	1	0	0	0	0	0	0	16	0	14	8	10	0	0	0	0	0	1					50	
149.2	0	0	0	0	0	0	0	0	0	0	1	6	0	0	0	0	0	0	3	0					10	
154.0	0	0	0	0	0	0	0	0	0	10	14	26	3	3	0	3	8	0	0	0					67	
158.8	0	0	0	0	1	0	0	0	0	1	6	6	0	10	0	0	0	0	0	0					24	
163.6	0	0	0	0	0	0	0	0	0	0	3	1	10	0	0	0	0	0	0	0					14	
168.4	0	0	0	0	3	0	0	0	0	6	0	0	0	0	0	3	0	0	0	0					12	
173.2	0	0	0	0	0	0	0	0	0	0	3	0	8	1	0	0	0	0	0	0					13	
178.0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0					6	
182.8	0	0	0	0	0	0	0	0	0	1	0	16	0	0	0	0	0	0	0	0					17	
187.6	0	0	0	0	0	0	0	0	0	1	0	3	0	0	0	0	0	0	0	0					4	
192.4	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	1	0	0	0					3	
197.2	0	0	0	0	0	0	0	0	0	6	0	0	0	10	0	0	0	0	0	0					16	
202.0	0	0	0	0	0	0	1	0	0	0	0	0	3	0	0	0	0	0	0	0					4	
206.8	0	0	0	0	0	0	0	8	0	0	0	6	0	0	0	0	0	0	1	0					15	
211.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0					1	
216.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					0	
221.2	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					6	
226.0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0					8	

AZIMUTH	3	7	6	229	7569	33291	55534	46601	2064	66																
SUMS	8	5	33	1540	2204	47250	53593	12201	583	0	203496															

B-46

TEST	DISTANCE FROM SOURCE	PUFF RELEASE TIME	DATA ACCUMULATION INCREMENT	GROUND LEVEL (1.5 M)																						
P3	800 METERS	0738:00 PST	4.8 SECONDS	RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS																						
SECONDS	D	R	E	C	T	1	5	N	M	E	T	E	R	S	U	R	C	V	E	D	E	G	R	E	S	CROSSWIND SUMS
AFTER RELEASE	094	096	098	100	102	104	106	108	110	112	114	116	118	120	122	124	126	128	130	132						
130.0	0	-1	3	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	6
134.8	0	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	3
139.6	0	-1	0	0	0	0	0	0	0	0	0	0	10	0	8	0	0	0	0	0	0	0	0	0	0	18
144.4	0	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	6
149.2	0	-1	1	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
154.0	0	-1	0	0	14	0	1	0	0	1	0	0	1	31	0	0	0	0	0	0	0	0	0	0	0	48
158.8	0	-1	0	0	0	0	0	0	0	1	0	0	37	8	26	0	0	0	0	0	0	0	0	0	0	72
163.6	0	-1	0	0	0	0	0	0	0	0	20	14	20	120	93	28	0	0	0	0	0	0	0	0	0	295
168.4	0	-1	0	0	0	0	0	0	0	0	0	0	20	187	345	160	51	0	0	0	0	0	6	0	0	769
173.2	0	-1	0	0	0	0	0	0	1	0	6	12	428	474	208	1	0	0	0	0	0	0	0	0	0	1130
178.0	1	-1	0	0	3	0	0	0	10	0	18	1	581	576	345	0	0	0	0	0	0	0	0	0	0	1535
182.8	0	-1	0	0	0	0	0	0	0	0	12	12	889	606	299	14	0	0	0	0	0	0	0	0	0	1832
187.6	0	-1	0	0	0	0	0	1	0	0	6	70	693	693	324	26	0	0	0	0	0	0	0	0	0	1813
192.4	0	-1	0	0	0	0	0	0	0	0	14	110	585	601	335	22	1	3	0	0	0	0	0	0	0	1671
197.2	0	-1	0	0	0	0	0	0	0	14	37	139	581	662	331	0	0	0	0	0	0	0	0	0	0	1764
202.0	0	-1	0	0	0	0	0	0	0	6	70	178	408	631	353	6	0	0	0	0	0	0	0	0	0	1652
206.8	0	-1	0	0	0	0	0	0	0	0	95	274	568	547	433	0	0	0	0	0	0	0	6	0	0	1923
211.6	1	-1	0	0	0	0	0	0	0	16	47	360	595	535	320	22	0	0	0	0	0	0	0	0	0	1896

B-47

TEST	DISTANCE FROM SOURCE		PUFF RELEASE TIME		DATA ACCUMULATION INCREMENT		GROUND LEVEL (1.5 M)														
P3	800 METERS		0738:00 PST		4.6 SECONDS																
RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS																					
SECONDS AFTER RELEASE	D	I	R	F	C	T	1	5	10	15	20	25	30	35	40	45	50	55	60	65	CROSSWIND SUMS
	094	096	098	100	102	104	106	108	110	112	114	116	118	120	122	124	126	128	130	132	
216.4	0	-1	0	0	0	0	0	0	0	16	81	416	501	476	170	10	0	0	0	0	1672
221.2	6	-1	0	10	0	0	0	0	8	0	70	368	345	439	85	0	0	0	0	0	1331
226.0	0	-1	1	0	0	0	1	1	0	3	60	374	470	422	51	0	0	0	0	0	1383
230.8	0	-1	0	0	0	0	0	0	0	6	33	220	412	416	93	1	0	0	0	0	1181
235.6	1	-1	0	0	0	0	0	0	0	0	45	214	333	391	133	0	0	0	0	6	1123
240.4	0	-1	0	0	0	0	0	0	0	0	41	99	326	326	176	0	0	0	0	0	970
245.2	0	-1	0	1	0	0	0	0	0	0	3	93	387	245	20	8	0	0	0	0	757
250.0	1	-1	0	0	0	0	0	0	0	0	0	53	299	141	37	0	0	0	0	0	531
254.8	0	-1	0	0	0	0	0	0	0	0	3	35	416	131	33	0	0	0	0	0	618
259.6	0	-1	0	0	0	0	0	0	0	1	0	28	356	83	16	0	0	0	0	0	484
264.4	0	-1	0	0	1	0	0	0	3	0	0	1	266	116	0	0	0	0	0	0	387
269.2	0	-1	0	0	0	6	0	0	0	0	0	0	251	108	0	0	0	3	0	0	368
274.0	3	-1	0	0	0	0	0	0	0	0	0	0	208	74	6	0	1	0	0	0	292
278.8	0	-1	0	0	0	0	0	0	0	0	0	10	178	51	14	0	0	0	1	0	254
283.6	0	-1	0	0	0	1	0	3	1	0	0	3	181	64	8	0	0	0	0	0	261
288.4	0	-1	0	0	0	0	0	10	0	0	0	20	147	37	12	0	0	0	0	0	226
293.2	0	-1	0	0	0	0	0	0	0	0	0	10	68	10	18	0	0	0	0	0	106
298.0	0	-1	0	0	0	0	0	0	0	0	0	14	18	10	8	0	0	0	0	0	50

TEST	DISTANCE FROM SOURCE		PUFF RELEASE TIME		DATA ACCUMULATION INCREMENT		GROUND LEVEL (1.5 M)																													
P3	800 METERS		0738:00 PST		4.8 SECONDS																															
RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS																																				
SECONDS AFTER RELEASE	D	I	R	E	E	T	1	2	5	0	10	M	E	110	112	R	L	116	E	118	L	E	120	V	122	A	124	T	126	I	0	128	N	I	132	CROSSWIND SUMS
302.8	0	-1	0	6	1	0	0	0	0	0	0	0	0	0	0	0	0	35	12	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	55
307.6	0	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	1	1	20	6	0	0	0	0	0	0	0	0	0	0	0	0	0	38
312.4	0	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	3	6	8	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27
317.2	0	-1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
322.0	0	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
326.8	1	-1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
331.6	0	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
336.4	0	-1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
341.2	0	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	
346.0	0	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	6
350.8	0	-1	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22
355.6	0	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	
AZIMUTH	14	11	20	7	2	23	664	3175	10813	4158	8	2	18	28627																						
SUBS	0	17	7	21	70	9400	195	9	18																											

B-49

TEST P3 DISTANCE FROM SOURCE 200 METERS PUFF RELEASE TIME 0738:00 PST DATA ACCUMULATION INCREMENT 48 SECONDS TOWER

RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS

SECONDS AFTER RELEASE	D I R E C T I O N F R O M S O U R C E A N D					E L E V A T I O N									
	0.8M	1.5M	3.0M	6.1M	10.7M	0.8M	1.5M	3.0M	6.1M	10.7M	0.8M	1.5M	3.0M	6.1M	10.7M
58.0	0	0	0	0	0	168	320	410	1664	2247	0	0	18	97	176
62.8	0	0	0	0	0	993	1710	1914	2631	514	43	14	41	89	0
67.6	0	0	0	0	0	2908	2770	2320	506	153	47	0	28	231	135
72.4	0	0	0	0	0	2651	2739	4170	2920	495	58	0	97	224	0
77.2	0	0	0	0	0	5433	4945	4753	2158	212	85	0	62	203	1
82.0	0	0	0	0	0	5403	5078	4120	2474	618	56	12	58	124	0
86.8	0	0	0	0	0	5868	5268	5097	3195	1037	66	3	33	89	0
91.6	0	0	0	0	0	5170	4572	3547	1089	72	33	22	26	31	1
96.4	0	0	0	0	0	2120	2006	1447	1393	1003	10	0	14	10	0
101.2	0	0	0	0	0	2512	2443	2162	1391	101	16	6	0	0	0
106.0	0	0	0	0	0	1110	635	293	139	0	8	0	0	0	0
110.8	0	0	0	0	4	370	241	120	85	10	0	1	0	0	0
115.6	0	0	0	0	0	110	118	78	95	50	0	6	1	0	0
120.4	1	0	0	0	0	162	168	135	68	0	0	0	0	0	0
125.2	0	3	0	0	0	201	176	172	78	3	0	0	0	0	0
130.0	0	0	0	0	0	72	49	51	1	2	0	0	0	0	0
134.8	0	0	0	0	0	14	26	0	0	0	0	0	0	0	0
139.6	1	0	0	0	0	22	3	0	0	0	0	0	0	0	0

B
SD

TEST P3 DISTANCE FROM SOURCE 200 METERS PUFF RELEASE TIME 0738:00 PST DATA ACCUMULATION INCREMENT 4.8 SECONDS TOWER

RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS

SECONDS AFTER RELEASE	D I R E C T I O N					F R O M S O U R C E					A N D F L E V A T I O N				
	0.8M	1.5M	3.0M	6.1M	10.7M	0.8M	1.5M	3.0M	6.1M	10.7M	0.8M	1.5M	3.0M	6.1M	10.7M
144.4	0	1	0	0	0	14	0	3	1	0	0	0	0	0	0
149.2	0	0	0	0	0	1	1	0	0	0	0	3	0	0	0
154.0	0	0	1	0	0	1	14	26	0	0	0	0	0	0	0
158.8	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0
163.6	0	0	6	0	0	8	3	1	0	0	0	0	0	0	0
168.4	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
173.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
178.0	0	0	0	0	0	0	0	6	0	0	0	0	0	3	0
182.8	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0
187.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
192.4	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0
197.2	0	0	0	0	0	16	0	0	0	0	0	0	0	1	0
202.0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0
206.8	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
211.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
216.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
221.2	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0
226.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUMS	2	7	13	0	0	E3E3E	33291	30828	19888	6533	423	68	378	1102	313

B-51

TEST P3 DISTANCE FROM SOURCE 800 METERS PUFF RELEASE TIME 0738:00 PST DATA ACCUMULATION INCREMENT 4.8 SECONDS

RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS

SECONDS AFTER RELEASE	D I R E C T I O N F R O M S O U R C E A N D					E L E V A T I O N								
	0.8M	1.5M	4.6M	10.7M	21.3M	0.8M	1.5M	4.6M	10.7M	21.3M				
130.1,	-1	3	0	0	0	0	0	0	0	0	0	0	0	0
134.8	-1	0	0	0	0	4	0	0	0	0	0	0	0	1
139.6	-1	0	0	0	0	1	0	8	0	0	0	0	0	0
144.4	-1	0	0	0	0	0	0	0	0	0	0	0	0	0
149.2	-1	1	1	0	1	0	0	0	0	0	0	0	0	0
154.0	-1	0	0	0	0	0	0	0	0	0	0	0	0	0
158.8	-1	0	0	0	0	1	0	24	14	1	0	0	0	0
163.6	-1	0	0	0	0	8	20	33	22	35	14	0	0	1
168.4	-1	0	0	0	0	6	0	0	1	53	0	0	0	0
173.2	-1	0	0	0	1	6	6	22	33	49	0	0	0	0
178.0	-1	0	0	0	0	28	18	31	24	10	0	0	0	0
182.8	-1	0	0	0	0	10	12	35	45	60	3	0	0	0
187.6	-1	0	0	0	0	14	6	39	18	70	3	0	0	0
192.4	-1	0	0	0	0	12	14	31	35	80	0	0	0	0
197.2	-1	0	0	1	0	28	37	70	101	235	0	0	1	0
202.0	-1	0	0	0	0	58	70	141	231	295	0	0	0	1
206.8	-1	0	0	0	0	91	95	93	91	20	0	0	0	0
211.6	-1	0	0	0	0	70	47	47	20	3	0	0	0	0

B-52

TEST	DISTANCE FROM SOURCE		PUFF RELEASE TIME		DATA ACCUMULATION INCREMENT		GROUND LEVEL (1.5 M)																						
P4	200 METERS		0838:15 PST		4.8 SECONDS		RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS																						
SECONDS AFTER RELEASE	D	I	R	E	C	T	I	O	N	F	R	O	M	S	O	U	R	C	E	D	E	G	R	E	S	CROSSWIND SUMS			
	094	096	098	100	102	104	106	108	110	112	114	116	118	120	122	124	126	128	130	132									
26.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	1	47	31					82				
30.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	70	314	803	314	133	237	7131					9002			
35.6	3	0	0	0	0	0	0	0	0	0	0	0	45	189	1495	2206	2428	2672	2578	9603						21219			
40.4	0	6	0	0	10	0	0	0	0	0	0	0	0	39	343	1726	3208	4374	5851	11093						26650			
45.2	0	6	0	0	0	0	0	0	0	0	0	0	45	60	503	2110	1797	2595	4997	7845						19958			
50.0	0	0	0	0	0	0	0	0	0	0	0	0	22	156	197	570	1874	2214	2103	5289						12425			
BSS 54.8	0	0	0	0	0	0	0	0	0	1	0	1	6	39	43	393	1362	1526	2814	4874						11059			
59.6	0	0	0	0	0	0	0	3	0	0	0	0	0	0	24	476	843	797	1581	3626						7350			
64.4	0	0	0	0	0	0	0	0	0	0	0	0	0	1	49	401	439	2891	1197	1341						3717			
69.2	0	0	0	0	0	0	0	0	0	0	0	0	0	12	81	203	118	295	628	635						1972			
74.0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	22	99	110	206	268	287						993			
78.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	6	6	4	9	1	6	2	1	7	4	2	1	2	671
83.6	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	6	4	1	2	6	0	7	8	5	6		272		
88.4	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	10	1	4	5	26	24						109		
93.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	20	16	14						58			
98.0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	8	14						26			
102.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0	10	8						30			
107.6	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	1	0	3						10			

TEST P4	DISTANCE FROM SOURCE 200 METERS		BUFF RELEASE TIME 0838:15 PST		DATA ACCUMULATION INCREMENT 4.8 SECONDS																GROUND LEVEL (1.5 M)						
RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS																											
SECONDS AFTER RELEASE	D	I	R	F	C	T	I	O	N	M	E	T	E	R	S	C	U	R	C	E	D	E	G	R	E	S	CROSSWIND SUMS
	094	096	098	100	102	104	106	108	110	112	114	116	118	120	122	124	126	128	130	132							
112.4	0	0	1	0	0	0	0	0	10	0	0	0	0	0	1	0	6	6	0	6						33	
117.2	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	1	3						10	
122.0	1	1	0	0	3	0	0	0	0	0	0	0	0	0	0	0	6	20	1							32	
126.8	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	10	0						11	
131.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						0	
136.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0						3	
141.2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	6						10	
146.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0						1	
150.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	1						7	
155.6	0	0	0	0	6	0	0	0	0	0	0	0	0	0	6	1	0	0	0	1						14	
160.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0						3	
165.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						0	
170.0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						8	
174.8	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						1	
179.6	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	6	1	0	0						9	
184.4	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	12	0	1	0						15	
189.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						0	
194.0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0						1	
AZIMUTH		8	14	19	0	10	1	133	3087	12602	22650																
SUMS		13	0	0	5	3	5	566	9137	18404	52104	115761															

TEST P4 DISTANCE FROM SOURCE 800 METERS PUFF RELEASE TIME 0838:15 PST DATA ACCUMULATION INCREMENT 4.b SECONDS GROUND LEVEL (1.5 M)

RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS

SECONDS AFTER RELEASE	D	I	R	E	C	T	I	O	N	M	E	R	O	S	O	U	R	C	E	D	E	G	R	E	E	S	CROSSWIND SUMS
	094	096	098	100	102	104	106	108	110	112	114	116	118	120	122	124	126	128	130	132							
84.0	0	-1	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14
88.8	0	-1	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
93.6	0	-1	0	3	0	0	1	0	0	3	0	0	6	0	6	0	0	0	0	0	0	0	0	10		29	
98.4	1	-1	0	0	0	0	3	0	0	0	0	0	0	0	1	0	6	0	0	37						48	
103.2	0	-1	3	1	8	0	0	0	0	0	0	0	0	0	0	1	20	0	24	45						102	
108.0	0	-1	0	0	0	0	0	0	0	0	0	1	0	0	16	43	45	133	95							333	
112.8	1	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	16	51	64	172	166						470	
117.6	0	-1	0	0	0	0	0	0	0	0	0	0	1	0	0	28	89	53	176	418						765	
122.4	0	-1	0	0	0	0	0	0	0	0	0	0	6	0	0	14	91	91	208	345						755	
127.2	0	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	24	66	97	197	256						640	
132.0	0	-1	0	0	0	0	0	0	0	0	0	0	0	1	0	16	81	64	201	247						610	
136.8	0	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	26	62	76	170	283						617	
141.6	0	-1	0	3	0	0	0	0	0	0	0	1	3	0	12	22	45	110	162	226						584	
146.4	0	-1	0	0	6	0	0	0	0	0	0	0	0	0	0	22	28	95	139	266						556	
151.2	8	-1	0	0	0	0	0	0	3	0	0	0	0	0	0	22	35	124	112	283						587	
156.0	0	-1	0	0	10	0	0	0	0	0	0	0	0	0	0	8	39	56	101	243						457	
160.8	0	-1	0	0	0	0	0	0	0	0	0	0	0	3	0	14	8	60	64	360						509	
165.6	0	-1	0	0	0	0	3	0	0	0	0	0	0	0	1	0	26	28	74	283						415	

B-57

TEST P4 DISTANCE FROM SOURCE 800 METERS PUFF RELEASE TIME 0838:15 PST DATA ACCUMULATION INCREMENT 4.8 SECONDS GROUND LEVEL (1.5 M)

RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS

SECONDS AFTER RELEASE	3	I R E C T I O N F R O M S O U R C E D E G R E E S																		CROSSWIND SUMS		
		094	096	098	100	102	104	106	108	110	112	114	116	118	120	122	124	126	128		130	132
170.4		0	-1	0	0	0	8	0	0	0	0	0	3	0	0	0	14	26	10	18	264	343
175.2		0	-1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	14	16	26	193	250
180.0		0	-1	0	0	0	0	0	0	0	0	0	0	1	0	0	14	0	26	41	224	306
184.8		0	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	12	14	28	24	133	211
189.6		0	-1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	6	20	18	60	105
194.4		0	-1	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	20	18	18	58
199.2		0	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	8	0	22	34
204.0	P-58	0	-1	0	0	0	0	0	0	0	0	0	0	1	0	0	8	0	22	0	3	34
208.8		0	-1	0	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	3	3	12
213.6		0	-1	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	12	14
218.4		0	-1	0	1	0	0	0	0	0	0	0	0	0	1	0	10	0	6	0	10	28
223.2		0	-1	0	0	14	0	0	0	0	0	0	0	0	0	0	0	1	6	1	0	22
228.0		0	-1	0	0	1	0	0	0	0	0	1	0	6	0	0	0	0	0	0	1	9
232.8		0	-1	0	0	0	0	0	0	0	0	0	0	0	6	0	6	1	0	0	3	16
237.6		0	-1	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	6	0	0	14
242.4		0	-1	0	0	0	0	0	1	6	0	0	3	0	0	0	3	0	0	0	0	13
247.2		0	-1	0	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0	0	6
252.0		0	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AZIMUTH		10		13		54		7		9		1		31		26		755		2082		
SUMS		0		9		16		2		4		8		12		297		1131		4509		8976

TEST P4 DISTANCE FROM SOURCE 200 METERS PUFF RELEASE TIME 0838:15 PST DATA ACCUMULATION INCREMENT 4.8 SECONDS TOWER

RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS

SECONDS AFTER RELEASE	D I R E C T I O N F R O M S O U R C E A N D					E L E V A T I O N									
	0.8M	1.5M	3.0M	6.1M	10.7M	0.8M	1.5M	3.0M	6.1M	10.7M					
26.0	0	0	0	1	0	0	0	0	0	0	16	47	85	33	78
30.8	0	0	0	0	0	6	0	1	0	3	166	237	108	2528	270
35.6	0	0	12	10	0	0	0	0	0	0	1774	2578	4610	2233	6572
40.4	28	0	12	49	0	0	0	0	0	14	5558	5851	6803	333	3720
45.2	3	0	3	26	0	0	0	0	0	0	5081	4997	3914	281	1249
50.0	0	0	0	0	0	0	0	0	0	0	2751	2103	1906	203	926
54.8	1	0	22	10	0	0	0	0	0	0	2406	2814	2972	137	1439
59.6	0	0	0	0	0	0	0	0	0	0	1728	1581	972	39	224
64.4	0	0	0	0	0	0	0	0	0	0	1395	1197	774	41	210
69.2	0	0	0	0	0	0	0	0	3	1	710	628	508	87	278
74.0	0	0	0	0	0	0	0	0	0	0	351	268	139	3	45
78.8	0	0	3	0	0	0	0	0	0	0	235	174	101	0	6
83.6	0	0	0	0	0	0	0	0	1	0	120	78	53	0	18
88.4	0	0	0	0	0	0	0	0	0	0	33	26	10	0	20
93.2	0	0	0	0	0	0	0	0	0	0	22	16	1	0	8
98.0	0	3	0	0	8	0	0	0	0	0	18	8	10	0	0
102.8	0	0	3	0	0	0	0	0	0	0	3	10	1	0	12
107.6	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0

B-59

TEST P4 DISTANCE FROM SOURCE 200 METERS PUFF RELEASE TIME 0838:15 PST DATA ACCUMULATION INCREMENT 4.8 SECONDS

RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS

SECONDS AFTER RELEASE	D I R E C T I O N F R O M S O U R C E A N D					E L E V A T I O N									
	0.8M	1.5M	3.0M	6.1M	10.7M	0.8M	1.5M	3.0M	6.1M	10.7M					
112.4	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0
117.2	0	0	0	0	0	0	0	0	6	3	0	1	0	0	0
122.0	3	0	0	0	0	0	0	0	0	0	0	20	0	0	0
126.8	0	0	0	0	0	0	1	0	0	0	3	10	1	3	0
131.6	0	0	0	0	0	0	0	0	0	0	0	0	1	0	3
136.4	0	0	0	0	0	0	0	0	0	0	0	3	0	0	10
141.2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
146.0	0	0	0	0	1	0	0	0	0	0	0	1	1	0	0
150.8	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0
155.6	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0
160.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165.2	0	0	3	6	0	0	0	0	0	0	0	0	1	0	0
170.0	0	8	10	0	0	0	0	0	0	0	0	0	0	0	0
174.8	0	1	8	0	0	0	0	1	0	0	0	0	0	0	0
179.6	0	1	0	0	0	3	0	0	0	0	0	0	0	0	0
184.4	0	0	0	0	0	0	0	0	0	0	0	1	0	0	6
189.2	1	0	0	8	3	0	0	0	0	0	0	0	0	0	0
194.0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	6
SUMS	36	14	80	111	14	10	1	2	10	36	22370	22650	22971	5931	15100

B 60

TEST	DISTANCE FROM SOURCE	FUFF RELEASE TIME	DATA ACCUMULATION INCREMENT	TOWER											
P4	800 METERS	0838:15 PST	4.8 SECONDS												
RELATIVE CO CENTRATION IN COUNTS PER TEN SECONDS															
SECONDS	D I R E C T I O N F R O M S O U R C E A N D					E L E V A T I O N									
AFTER	0 9	8	5	1 4	5	0 8	1 5	4 b	10.7M	21.3M	0 8	1 5	4 6	10.7M	21.3M
RELEASE	0.8M	1.5M	4.6M	10.7M	21.3M	0.8M	1.5M	4.6M	10.7M	21.3M	0.8M	1.5M	4.6M	10.7M	21.3M
84.0	-1	0	0	0	0	0	0	0	0	1	0	0	0	0	0
88.8	-1	10	0	0	0	0	0	0	0	1	0	0	0	6	0
93.6	-1	0	0	0	0	0	0	0	1	0	0	0	0	0	0
98.4	-1	0	0	0	0	0	0	0	0	0	10	0	0	0	0
103.2	-1	3	0	0	0	3	0	0	12	0	3	24	47	37	62
108.0	-1	0	0	0	0	0	0	0	0	1	147	133	222	193	6
112.8	-1	0	0	0	0	0	0	1	0	0	241	172	222	276	137
117.6	-1	0	0	0	0	0	0	0	0	0	176	176	178	218	62
122.4	-1	0	0	0	3	0	0	0	0	0	253	208	243	120	0
127.2	-1	0	0	0	0	0	0	0	0	0	218	197	187	91	6
132.0	-1	0	0	0	0	0	0	0	0	0	195	201	206	64	0
136.8	-1	0	0	0	0	0	0	0	3	0	199	170	141	120	10
141.6	-1	0	0	0	0	0	0	0	6	0	170	162	189	66	6
146.4	-1	0	0	0	0	0	0	0	0	0	170	139	156	58	0
151.2	-1	0	0	0	0	0	0	0	6	0	147	112	112	64	1
156.0	-1	0	0	0	0	0	0	0	0	0	106	101	118	22	24
160.8	-1	0	0	0	0	0	0	0	0	0	85	64	60	35	6
165.6	-1	0	0	1	0	0	0	0	0	0	81	74	70	47	8

TEST P4 DISTANCE FROM SOURCE 800 METERS PUFF RELEASE TIME 0838:15 PST DATA ACCUMULATION INCREMENT 4.8 SECONDS

RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS

SECONDS AFTER RELEASE	D I R E C T I O N D E G R E E S					F R O M D I S T A N C E					E L E V A T I O N D E G R E E S				
	0.8M	1.5M	4.6M	10.7M	21.3M	0.8M	1.5M	4.6M	10.7M	21.3M	0.8M	1.5M	4.6M	10.7M	21.3M
170.4	-1	0	3	0	3	0	0	0	0	0	64	18	18	12	26
175.2	-1	0	0	0	0	0	0	0	0	0	31	26	22	3	0
180.0	-1	0	0	0	0	0	0	0	0	0	28	41	26	3	0
184.8	-1	0	0	0	0	0	0	0	0	1	33	24	1	0	0
189.6	-1	0	0	0	0	1	0	0	0	0	24	18	24	0	1
194.4	-1	0	0	0	0	0	0	0	0	3	12	18	10	0	0
199.2	-1	0	0	0	0	0	0	0	0	0	6	0	0	3	0
204.0	-1	0	0	6	0	0	0	0	0	0	0	0	18	0	0
208.8	-1	0	0	0	0	0	0	0	0	0	12	3	0	0	0
213.6	-1	0	0	0	0	3	0	0	0	0	1	0	0	1	0
218.4	-1	0	0	0	0	0	0	0	0	0	6	0	1	1	0
223.2	-1	0	0	0	0	0	0	0	0	0	3	1	1	0	0
228.0	-1	0	0	0	0	1	1	0	0	0	1	0	0	6	0
232.8	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
237.6	-1	0	0	0	3	0	0	0	0	0	0	0	0	0	0
242.4	-1	0	0	0	0	0	0	0	0	0	0	0	1	0	0
247.2	-1	0	0	0	0	0	0	0	0	0	1	0	0	0	0
252.0	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUMS	0	13	3	7	9	8	1	9	28	7	2423	2082	2273	1446	355

19-B

TEST P5	DISTANCE FROM SOURCE 200 METERS				PUFF RELEASE TIME 1052:40 PST				DATA ACCUMULATION INCREMENT 2.4 SECONDS				GROUND LEVEL (1.5 M)								
RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS																					
SECONDS AFTER RELEASE	D 094	I 096	R 098	E 100	C 102	T 104	I 106	O 108	N 110	F 112	R 114	O 116	M 118	E 120	T 122	E 124	R 126	S 128	O 130	U 132	CROSSWIND SU'S
16.0	0	0	0	0	1	0	0	0	1	1	6	0	0	0	0	0	0	0	1	0	10
18.4	6	0	0	0	0	0	0	1	10	0	0	0	0	0	6	1	0	0	0	0	24
20.8	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	10
23.2	0	0	1	0	1	0	1	6	0	10	360	1072	322	14	35	18	31	0	0	1	1872
25.6	0	0	0	14	0	6	1	0	472	5910	3918	464	660	243	97	39	6	6	0	0	11836
28.0	1	0	6	0	1	0	26	1264	2831	13060	8314	2672	926	635	393	0	0	0	0	0	30129
30.4	6	0	0	43	81	118	543	2310	5410	16381	117385	10164	1218	556	389	64	0	0	0	0	54668
32.8	0	0	0	35	0	143	456	6193	11647	16301	119751	6276	893	435	243	22	0	0	0	0	62395
35.2	0	0	0	12	0	89	547	6047	15735	20476	12868	4731	551	326	206	31	0	0	0	0	61629
37.6	0	0	0	0	0	68	264	3610	18597	17160	12368	2001	401	93	110	14	0	10	0	0	54696
40.0	0	0	1	14	0	93	1210	5335	16185	15285	11381	1414	197	31	147	1	0	0	0	0	51294
42.4	0	0	0	22	0	43	197	1118	9056	9722	8476	2393	110	72	39	0	0	0	0	0	31248
44.8	0	0	0	0	0	31	176	943	7539	11110	5710	4926	606	122	60	14	10	0	0	0	31247
47.2	0	0	0	1	60	151	522	2860	7676	3656	3226	3776	1576	393	214	0	0	0	10	0	24121
49.6	0	0	6	0	47	35	685	4043	5172	2414	3569	1785	606	343	147	10	0	0	0	6	18888
52.0	0	0	0	14	18	26	139	1547	3418	2131	2126	2426	622	164	72	1	0	0	0	0	12704
54.4	0	1	0	0	14	22	43	201	1289	1360	1872	1672	435	147	18	1	0	0	0	0	7075
56.8	1	0	1	1	10	18	0	64	810	1310	1189	1781	639	110	26	26	0	0	0	0	5986

P-63

TEST P5	DISTANCE FROM SOURCE 200 METERS				PUFF RELEASE TIME: 1052:40 PST		DATA ACQUISITION INCREMENT 0.4 SECONDS				GROUND LEVEL (1.5 M)													
RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS																								
SECONDS AFTER RELEASE	D	I	R	E	T	I	O	N	F	R	O	S	C	O	R	C	E	D	E	G	R	E	S	CROSS IN SUMS
	094	096	098	100	102	104	106	108	110	112	114	116	118	120	122	124	126	128	130	132				
59.2	0	0	0	0	0	10	0	97	256	422	514	1522	410	172	51	0	0	0	0	0	0	0	0	3454
61.6	0	6	0	0	0	10	0	0	51	256	456	589	739	214	81	14	0	0	0	0	0	0	0	2416
64.0	0	1	0	0	0	0	0	6	64	76	193	147	322	214	97	0	0	10	0	0	0	0	0	1131
66.4	6	0	0	0	1	0	0	0	14	26	118	276	122	60	81	6	0	0	0	0	6	0	0	716
68.8	0	1	0	1	0	0	0	0	6	14	76	201	39	47	18	14	0	0	0	0	0	0	0	417
71.2	0	1	0	0	0	0	1	0	6	0	89	93	31	6	6	10	0	0	0	0	0	0	0	243
73.6	0	0	0	0	0	0	0	0	14	0	43	64	10	0	0	0	0	0	0	0	0	0	0	131
76.0	0	0	0	0	1	0	1	0	1	0	35	51	6	0	0	0	0	0	0	0	0	0	0	95
78.4	0	0	0	0	0	0	0	0	0	6	18	18	0	0	0	0	0	0	0	0	6	0	6	54
80.8	0	1	0	0	6	0	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0	0	0	19
83.2	0	0	0	0	0	0	0	0	0	10	1	6	0	0	0	6	0	0	0	1	0	0	0	24
85.6	1	0	0	0	10	0	0	0	0	6	0	10	10	10	0	1	0	0	0	0	0	0	0	48
88.0	0	0	0	1	1	6	0	0	0	0	18	1	0	0	0	0	1	0	0	0	0	0	0	23
90.4	0	0	0	0	0	0	0	0	1	0	22	1	0	0	0	0	0	0	0	0	0	0	0	24
92.8	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	6	0	1	0	0	0	0	0	17
95.2	0	0	0	0	0	0	0	0	6	0	0	0	0	0	14	0	0	0	0	0	0	0	0	20
97.6	0	0	0	0	0	0	0	0	0	0	0	10	1	0	0	0	0	0	0	1	1	0	0	13
100.0	0	0	0	0	0	0	1	0	0	0	10	10	0	10	0	0	0	0	0	0	0	0	0	31

B-64

TEST
P5

DISTANCE FROM SOURCE
200 METERS

PUFF RELEASE TIME
1052:40 PST

DATA- ACCUMULATION INCREMENT
2.4 SECONDS

GROUND LEVEL- (1.5 M)

RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS

SECONDS /FT- RELEASE	3	I	R	E	T	I	O	N	E	R	O	M	S	O	U	R	C	E	D	E	G	R	E	E	S	CROSSING SUMS
	094	096	098	100	102	104	106	108	110	112	114	116	118	120	122	124	126	128	130	132						
145.6	0	1	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	6	0	1					11	
148.0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0						3
150.4	0	0	0	1	0	6	0	1	0	0	0	0	0	0	0	6	0	0	0	0						14
152.8	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0						2
155.2	0	1	0	0	0	22	0	1	0	0	1	0	0	0	0	0	0	0	0	0						25
157.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	1	0						7
B-66	AZIMUT. SUMS	33	22	13	189	264	897	4819	106288	137112	114183	50581	11461	4418	2563	301	67	46	15	22						468953

TEST P5 DISTANCE FROM SOURCE 800 METERS PUFF RELEASE TIME 1052:40 PST DATA ACCUMULATION INCREMENT 2.4 SECONDS GROUND LEVEL (1.5 M)

RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS

SECONDS AFTER RELEASE	I R E C T I O N F R O M S O U R C E , D I G R E E S																				CROSSWIND SUMS
	094	096	098	100	102	104	106	108	110	112	114	116	118	120	122	124	126	128	130	132	
71.0	-1	0	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	4
73.4	-1	0	0	0	6	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	16
75.8	-1	0	0	0	0	0	0	10	0	0	6	0	1	0	0	0	0	0	0	0	17
78.2	-1	0	0	0	1	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	7
80.6	-1	0	14	0	1	0	0	0	6	10	1	0	0	0	0	0	0	0	0	6	38
83.0	-1	0	1	0	1	1	0	0	101	43	14	0	0	0	0	0	0	0	0	0	161
85.4	-1	6	0	0	0	14	1	0	156	89	6	0	10	0	0	1	0	0	0	0	283
87.8	-1	0	0	0	0	0	0	0	93	164	26	197	210	0	0	0	0	14	0	0	704
90.2	-1	0	1	0	0	1	0	0	56	97	76	118	135	14	0	0	0	0	10	1	509
92.6	-1	0	0	0	1	1	0	10	18	126	97	122	168	35	0	0	0	0	0	0	578
95.0	-1	0	0	0	0	0	0	1	93	197	81	122	160	60	1	6	0	0	0	1	722
97.4	-1	0	0	0	0	0	1	0	806	235	318	151	276	122	31	0	0	0	0	0	1940
99.8	-1	0	0	0	0	0	0	0	147	364	264	310	406	114	60	0	0	0	0	1	1666
102.2	-1	0	0	0	0	0	0	0	347	485	235	297	435	156	143	0	0	0	0	0	2098
104.6	-1	0	0	0	0	0	0	0	639	626	431	222	451	160	139	0	0	0	0	0	2668
107.0	-1	0	0	6	0	1	0	10	264	293	314	347	476	185	189	0	0	0	0	0	2085
109.4	-1	0	0	0	0	0	0	0	289	210	289	447	639	168	176	0	0	0	0	0	2218
111.8	-1	0	0	0	6	0	6	0	318	114	156	414	760	260	89	0	6	0	0	0	2129

B-67

TEST DISTANCE FROM SOURCE
P5 800 METERS

OFF RELEASE TIME DATA ACCUMULATION INCREMENT
1052:4 PST 2.4 SECONDS

GROUND LEVEL (1.5 M)

RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS

SECONDS AFTER RELEASE	D	D I R E C T I O N																			CROSS N. SUMS
		094	095	098	100	102	304	106	108	110	112	114	116	118	120	122	124	126	128	130	
114.2	-1	0	0	0	0	0	0	0	289	126	193	347	747	210	47	1	1	0	0	14	1975
116.6	-1	0	6	14	0	0	0	0	281	147	139	297	581	218	43	0	14	0	0	0	1741
119.0	-1	1	0	0	1	1	0	0	181	89	135	281	693	151	35	0	0	0	0	0	1568
121.4	-1	0	0	0	0	0	0	0	256	43	135	268	464	218	14	0	0	0	0	0	1398
123.8	-1	0	6	0	0	0	0	0	56	39	114	201	297	143	60	1	0	1	0	0	919
126.2	-1	0	0	0	0	0	0	0	51	31	118	193	297	181	89	6	0	0	0	0	966
128.6	-1	0	0	1	0	0	0	6	31	14	56	76	339	151	131	18	1	0	0	0	824
131.0	-1	6	0	0	6	0	0	1	0	18	6	64	322	210	118	22	0	1	0	0	774
133.4	-1	0	0	1	0	14	0	1	14	6	10	64	181	139	101	1	0	0	0	0	532
135.8	-1	0	0	1	0	0	0	0	0	14	60	35	176	118	81	0	10	1	0	0	496
138.2	-1	1	0	0	0	0	0	10	0	0	10	1	122	135	122	6	0	0	1	0	408
140.6	-1	0	0	0	0	1	0	0	0	1	22	10	43	81	22	14	0	0	0	0	194
143.0	-1	0	1	0	0	0	0	0	1	0	6	47	101	60	18	0	0	0	0	0	234
145.4	-1	0	0	0	0	0	0	0	6	0	0	35	72	18	0	0	0	0	0	0	131
147.8	-1	1	0	1	0	0	1	0	0	0	0	31	51	22	6	6	0	0	0	0	119
150.2	-1	0	0	0	0	0	0	0	0	0	0	6	18	31	26	0	0	0	0	0	81
152.6	-1	0	0	0	18	0	0	0	0	0	0	10	43	31	0	0	0	0	6	0	108
155.0	-1	1	0	0	10	0	0	0	1	0	0	26	0	0	1	0	10	0	0	0	49
AZIMUTH		0	29	52	9	4501	3324	8697	1716	42	17										
SUMS		16	25	34	49	3587	4751	3386	82	17	24	30358									

B-68

TEST	DISTANCE FROM SOURCE					PUFF RELE SE TIME	DATA ACCUMULATION INCREMENT					TOWER								
P5	200 METERS					1052:40 PST	2.4 SECONDS													
RELATIVE CONCENTRATION IN COUNTS PER TE SECONDS																				
SECONDS	D I R E C T I O N					F R O N T					S O U R C E					A N D				
AFTER	0.8M	1.5M	3.0M	6.1M	10.7M	0.8M	1.5M	3.0M	6.1M	10.7M	0.8M	1.5M	3.0M	6.1M	10.7M	0.8M	1.5M	3.0M	6.1M	10.7M
RELEASE	0.8M	1.5M	3.0M	6.1M	10.7M	0.8M	1.5M	3.0M	6.1M	10.7M	0.8M	1.5M	3.0M	6.1M	10.7M	0.8M	1.5M	3.0M	6.1M	10.7M
16.0	0	0	0	0	0	0	6	0	0	0	0	1	6	0	0	0	0	0	0	0
18.4	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0
20.8	0	0	0	6	0	6	10	0	0	14	0	0	0	0	0	0	0	0	0	0
23.2	0	1	1	0	0	135	360	781	1639	1906	0	0	0	1	0	0	0	0	0	0
25.6	0	0	0	0	0	3035	3918	4247	4606	643	0	0	10	22	1	0	0	0	0	0
28.0	1	6	0	1	14	6081	8314	13835	9910	3906	47	0	143	181	0	0	0	0	0	0
30.4	0	0	10	1	10	15322	17385	21368	14856	9664	376	0	539	593	0	0	0	0	0	0
32.8	0	0	0	0	56	20814	19751	20239	18610	951	181	0	181	185	0	0	0	0	0	0
35.2	0	0	0	6	10	15693	12868	9331	5289	2356	106	0	72	47	0	0	0	0	0	0
37.6	0	0	0	0	1	12322	12368	8968	2847	22	22	0	1	6	0	0	0	0	0	0
40.0	0	1	0	0	0	11789	11381	8231	2568	293	14	0	0	39	0	0	0	0	0	0
42.4	0	0	0	0	6	10776	8476	7385	3326	2935	60	0	51	60	0	0	0	0	0	0
44.8	6	0	0	0	0	7576	5710	3339	1643	1576	18	0	14	10	0	0	0	0	0	0
47.2	0	0	0	0	0	4714	3226	1676	739	314	31	10	10	6	0	0	0	0	0	0
49.6	0	6	0	0	6	3585	3589	2222	810	106	6	0	6	0	0	0	0	0	0	0
52.0	10	0	0	0	0	2393	2126	1568	518	14	0	0	0	0	0	0	0	0	0	0
54.4	0	0	0	0	0	1947	1872	1322	489	139	0	0	0	0	0	0	0	0	0	0
56.8	0	1	0	0	0	1285	1189	593	493	110	0	0	0	0	0	0	0	0	0	6

169

TEST P5 DISTANCE FROM SOURCE 200 METERS PUFF RELEASE TIME 1052:40 PST DATA ACCUMULATION INCREMENT 2.4 SECONDS

SECONDS AFTER RELEASE	RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS														
	D I R E C T I O N F R O M S O U R C E A N D					E L E V A T I O N									
	0.8M	1.5M	3.0M	6.1M	10.7M	0.8M	1.5M	3.0M	6.1M	10.7M	0.8M	1.5M	3.0M	6.1M	10.7M
59.2	0	0	0	0	0	685	514	160	35	14	0	0	0	0	
61.6	0	0	0	0	0	501	456	306	56	0	0	0	0	10	
64.0	0	0	1	0	0	314	193	197	31	0	0	0	0	0	
66.4	0	0	0	0	0	168	118	106	10	0	0	0	1	0	0
68.8	0	0	0	0	0	106	76	39	0	1	1	0	0	1	0
71.2	0	0	0	1	0	51	89	43	1	0	0	0	0	0	0
73.6	10	0	0	0	0	85	43	43	10	6	0	0	0	0	1
76.0	0	0	0	0	0	60	35	6	0	0	0	0	0	0	0
78.4	0	0	0	0	0	31	8	18	6	6	0	0	0	0	0
80.8	0	0	0	1	0	6	6	0	0	0	0	0	0	0	0
83.2	0	0	6	0	0	0	1	14	0	1	1	1	0	0	0
85.6	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0
88.0	0	0	0	0	0	10	18	6	0	0	0	0	6	1	0
90.4	0	0	0	0	18	10	22	0	0	0	0	0	0	0	0
92.8	1	0	0	0	0	0	10	0	0	0	0	0	0	0	0
95.2	0	0	1	0	0	10	0	1	0	0	0	0	0	0	0
97.6	6	0	0	0	6	0	0	0	0	0	0	1	0	0	6
100.0	0	0	0	0	0	1	10	0	0	0	0	0	0	0	0

B-70

TEST P5 DISTANCE FROM SOURCE 200 METERS PUFF RELEASE TIME 1052:40 PST DATA ACCUMULATION INCREMENT 2.4 SECONDS

RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS

SECONDS AFTER RELEASE	D I R E C T I O N F R O M S O U R C E A N D					E L E V A T I O N								
	0 9 8	D E G R E E S	1 4	D E G R E E S	1 3	0	D E G R E E S	6 1	D E G R E E S	1 0 7				
	0.8M	1.5M	3.0M	6.1M	10.7M	0.8	1.5	3.0	6.1	10.7				
145.6	0	1	0	0	0	0	0	0	0	0	0	1	0	0
148.0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
150.4	6	0	0	0	0	0	0	0	0	0	0	0	0	6
152.8	1	0	0	0	0	0	0	0	0	0	0	0	0	0
155.2	0	0	0	0	0	0	1	0	0	0	0	0	0	0
157.6	6	0	0	0	0	0	0	1	0	1	0	1	0	1
8-79 SUMS	57	18	30	22	127	119545	114183	100071	68499	24993	866	15	1051	1164

TEST

DISTANCE FROM SOURCE
800 METERS

PUFF RELEASE TIME
1052:40 PST

DATA ACCUMULATION INCREMENT
2.4 SECONDS

TOWER

RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS

SECONDS

DI RECT I O N

DE GR E E S

RE LE A S E

A F T E R

0.8M

1.5M

4.6M

10.7M

21.3M

0.8M

1.5M

4.6M

10.7M

21.3M

0.8M

1.5M

4.6M

10.7M

21.3M

0.8M

1.5M

4.6M

10.7M

21.3M

0.8M

1.5M

4.6M

10.7M

21.3M

TEST	DISTANCE FROM SOURCE	PUFF RELEASE TIME	DATA ACCUMULATION INCREMENT	TOWER	SECONDS	DI RECT I O N	DE GR E E S	RE LE A S E	A F T E R	0.8M	1.5M	4.6M	10.7M	21.3M	0.8M	1.5M	4.6M	10.7M	21.3M	
71.0	0	0	0	0	1	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0
70.4	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
70.8	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0
70.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
78.2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
80.6	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0
83.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
83.0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
87.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
90.2	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
92.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95.0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
97.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
99.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
102.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
104.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
107.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
109.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
111.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

B-75

TEST STATION FROM SOURCE PUFF RELEASE TIME DATA ACCUMULATION INCREMENT TOWER
 P5 800 METERS 1052:40 PST 24 SECONDS

RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS

SECONDS AFTER RELEASE	D I R E C T I O N F R O M S O U R C E A N D E L E V A T I O N					D I R E C T I O N F R O M S O U R C E A N D E L E V A T I O N					D I R E C T I O N F R O M S O U R C E A N D E L E V A T I O N				
	9 0.8M	8 1.5M	0 4.6M	6 10.7M	5 21.3M	4 0.8M	3 1.5M	2 4.6M	1 10.7M	0 21.3M	3 0.8M	2 1.5M	1 4.6M	0 10.7M	5 21.3M
114.2	0	0	0	0	0	231	193	189	151	14	0	0	0	0	1
116.6	0	6	0	0	0	147	139	93	31	10	0	0	0	6	10
119.0	0	0	0	0	0	164	135	93	51	76	1	0	0	0	0
121.4	0	0	0	6	6	81	135	131	31	0	0	0	0	0	0
123.8	1	6	0	0	0	143	114	47	1	18	1	0	0	0	0
126.2	0	0	0	0	0	89	118	56	0	14	1	0	1	0	0
128.6	0	0	0	0	0	51	56	22	0	0	1	0	14	0	0
131.0	0	0	0	0	0	51	6	10	0	0	6	0	0	0	0
133.4	6	0	0	0	0	14	10	10	0	0	0	0	0	0	0
135.8	0	0	0	0	1	26	60	0	10	0	0	0	0	0	0
138.2	0	0	0	0	0	64	10	0	6	0	0	1	0	0	0
140.6	0	0	0	0	0	22	22	10	0	0	1	0	1	1	0
143.0	0	1	0	0	0	26	6	0	0	6	0	0	0	0	0
145.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
147.8	1	0	0	0	0	0	0	0	0	0	14	0	0	0	0
150.2	0	0	0	0	0	1	6	1	0	0	0	0	0	0	0
152.6	0	0	0	0	0	0	0	1	0	0	0	6	0	6	0
155.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
SUMS	11	29	1	24	17	4181	3324	3560	3228	4509	86	17	18	42	23

B-74

TEST P6 DISTANCE FROM SOURCE 200 METERS PUFF RELEASE TIME 1130:00 PST DATA ACCUMULATION INCREMENT 4.8 SECONDS GROUND LEVEL- (1.5 M)

RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS

SECONDS AFTER RELEASE	D I R E C T I O N F R O M S O U R C E D E G R E E S																			CROSSWIND SUMS		
	094	096	098	100	102	104	106	108	110	112	114	116	118	120	122	124	126	128	130		132	
6.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
10.8	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	
15.6	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	
20.4	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	
25.2	0	0	0	0	0	0	0	0	1	0	0	0	8	26	1674	1618	3710	393	8	0	0	
30.0	0	1	0	0	0	0	6	0	0	6	1	3	60	1676	1853	7124	3114	37	3216	243	0	
34.8	0	0	0	6	0	0	0	0	0	0	0	3	199	623	3225	1421	606	1534	1	5033	622	6
39.6	0	0	0	0	0	0	0	0	0	0	108	295	2122	9899	1481	1021	989	1396	2	4520	424	28
44.4	0	0	0	6	0	0	0	0	0	1	270	1658	5283	7078	1248	710	1012	2	3795	378	16	
49.2	0	0	0	0	6	0	6	0	1	18	585	2441	5472	4922	4628	4466	528	1	1076	91	0	
54.0	0	0	0	0	0	0	1	0	24	106	358	1687	5312	3351	2533	1456	45	1	93	39	0	
58.8	0	0	0	0	0	0	0	6	58	168	987	1174	1503	1435	839	216	176	12	0	0	0	
63.6	0	0	0	0	0	0	0	68	226	426	376	262	260	395	408	278	135	8	0	0	0	
68.4	0	0	1	0	0	0	0	24	110	170	99	153	141	220	49	85	62	3	0	0	0	
73.2	0	0	0	0	0	0	0	0	62	47	33	60	95	37	41	8	1	0	0	0	0	
78.0	1	0	0	0	0	0	0	0	31	0	1	28	24	18	6	0	0	0	0	0	6	
82.8	3	0	0	0	0	0	1	0	6	10	0	0	1	1	0	0	0	0	0	1	0	
87.6	0	0	6	0	0	0	3	0	10	0	8	0	1	14	0	1	0	0	0	0	0	

B-75

TEST P6 DISTANCE FROM SOURCE 800 METERS PUFF RELEASE TIME 1130:00 PST DATA ACCUMULATION INCREMENT 4.8 SECONDS GROUND LEVEL (1.5 M)

RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS

SECONDS AFTER RELEASE	D	T	R	F	C	T	I	O	N	E	R	O	i	S	O	U	R	C	E	D	E	G	R	E	E	S	CROSSWIND SUMS
	094	096	098	100	102	104	106	108	110	112	114	116	118	120	122	124	126	128	130	132							
73.0	-1	0	0	0	0	0	0	0	0	-1	0	0	12	0	0	0	3	1	0	0							16
77.8	-1	0	0	0	3	1	0	0	0	-1	0	0	1	0	0	1	0	10	0	0							16
82.6	-1	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	0	0	0	0	0							0
87.4	-1	0	0	0	6	0	0	0	0	-1	0	0	0	1	0	0	18	0	0	0							25
92.2	-1	0	0	0	0	0	0	0	0	-1	0	0	6	0	10	108	16	6	0	0							146
97.0	-1	3	0	0	0	0	0	0	0	-1	0	0	6	0	1	272	81	8	0	0							371
101.8	-1	0	0	0	0	0	0	1	0	-1	0	8	6	6	89	478	199	3	0	0							790
106.6	-1	0	0	0	3	0	0	0	0	-1	6	116	39	389	512	583	141	12	0	1							1804
111.4	-1	0	0	0	0	0	0	0	0	-1	72	139	316	656	626	506	149	0	0	0							2464
116.2	-1	0	0	0	0	0	0	0	0	-1	97	203	339	581	572	420	201	0	0	0							2413
121.0	-1	0	0	0	0	0	0	0	0	-1	49	258	387	574	462	258	95	0	0	0							2083
125.8	-1	0	0	0	0	0	0	0	0	-1	45	328	247	583	306	191	51	0	0	0							1751
130.6	-1	0	0	0	0	0	0	0	0	-1	24	289	220	378	143	145	22	3	0	0							1224
135.4	-1	1	0	0	0	0	0	0	6	-1	0	228	308	170	126	72	0	0	0	0							911
140.2	-1	0	0	3	0	0	0	0	0	-1	14	153	208	116	28	45	0	0	1	0							568
145.0	-1	0	0	0	0	0	0	0	0	-1	1	66	64	51	20	3	0	0	0	0							205
149.8	-1	0	0	0	0	0	0	0	0	0	0	39	74	20	14	0	0	0	0	0							147
154.6	-1	0	0	6	0	0	8	0	0	-1	8	10	39	12	22	0	0	0	0	0							105

H-77

TEST	DISTANCE FROM SOURCE	PUFF RELEASE TIME	DATA ACCUMULATION INCREMENT	GROUND LEVEL (1.5 M)																		
P6	800 METERS	1130:00 PST	4.8 SECONDS	RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS																		
SECONDS AFTER RELEASE	D	094	096	098	100	102	104	106	108	110	112	114	116	118	120	122	124	126	128	130	132	CROSSWIND SUMS
159.4	-1	0	0	1	3	0	0	0	0	-1	0	14	0	0	1	0	0	0	0	0	0	19
164.2	-1	0	0	0	0	0	0	0	0	-1	0	0	0	0	16	3	1	0	0	0	0	20
169.0	-1	0	0	0	0	0	0	0	0	-1	0	10	14	14	0	0	0	0	0	0	0	38
173.8	-1	0	0	0	0	0	0	0	0	-1	1	10	6	3	1	0	0	0	0	0	0	21
178.6	-1	0	0	0	0	0	0	0	0	-1	0	10	0	0	0	0	1	0	0	0	0	11
183.4	-1	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	0	0	0	0	0	0	0
878 AZIMUTH SUMS	0	4	0	10	15	1	8	1	6	0	319	1881	2292	3554	2949	3085	978	43	1	1	15148	

TEST	P6	DISTANCE-NOW SOURCE	PUFF RELEASE TIME ~	DATA ACCUMULATION INCREMENT	TOWER
SECONDS	---	0 9 8	1.5M	3.0M	0.8M
DIRECT ION	---	0 0 0	6.1M	10.7M	0.8M
RELEASE	---	0 0 0	10.7M	10.7M	10.7M
6.0	0	0	0	0	0
10.8	0	0	0	0	0
15.6	0	0	0	0	0
20.4	0	0	0	0	0
25.2	0	0	0	0	0
30.0	0	0	1	0	0
34.8	0	0	0	0	0
39.6	0	0	0	0	0
44.4	0	0	0	0	0
49.2	0	0	0	0	0
54.0	0	0	0	0	0
58.8	0	0	0	0	0
63.6	1	0	0	0	0
68.4	0	0	0	0	0
73.2	0	0	0	0	0
78.0	3	0	0	0	0
82.8	0	0	0	0	0
87.6	0	0	0	0	0

RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS

B-N

4.8 SECONDS
 PUFF RELEASE TIME ~ DATA ACCUMULATION INCREMENT
 1130:00 PST

TOWER

TEST P6 DISTANCE FROM SOURCE 200 METERS PUFF RELEASE TIME 1130:00 PST DATA ACCUMULATION INCREMENT 4.8 SECONDS

RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS

SECONDS AFTER RELEASE	D I R E C T I O N F R O M S O U R C E A N D					E L E V A T I O N									
	0.8M	1.5M	3.0M	6.1M	10.7M	0.8M	1.5M	3.0M	6.1M	10.7M	0.8M	1.5M	3.0M	6.1M	10.7M
92.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
97.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
102.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
106.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
111.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
116.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUMS	4	7	1	0	1	3068	2829	2315	1862	1284	1554	1806	2556	6283	2181

08-8

TEST P6 DISTANCE FROM SOURCE 800 METERS PUFF RELEASE TIME 1130:00 PST DATA ACCUMULATION INCREMENT 4.8 SECONDS TOWER

RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS

SECONDS AFTER RELEASE	D I R E C T I O N					F R O M					S O U R C E					A N D					E L E V A T I O N				
	0.8M	1.5M	4.6M	10.7M	21.3M	0.8M	1.5M	4.6M	10.7M	21.3M	0.8M	1.5M	4.6M	10.7M	21.3M	0.8M	1.5M	4.6M	10.7M	21.3M	0.8M	1.5M	4.6M	10.7M	21.3M
73.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
77.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
82.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
87.4	0	0	0	0	0	0	0	3	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
92.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
97.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	6	12	0	0	0	0	0
101.8	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
106.6	0	0	0	0	0	0	0	8	41	99	76	0	0	0	14	0	0	0	0	0	0	0	0	0	0
111.4	0	0	0	0	0	SE	72	78	128	76	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
116.2	1	0	0	0	0	SE	83	97	85	118	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0
121.0	0	0	0	0	0	SE	61	91	16	37	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0
125.8	0	0	0	0	0	SE	39	45	43	6	19	0	0	1	0	0	0	0	0	0	0	0	0	0	0
130.6	0	0	0	0	0	SE	24	28	24	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135.4	0	0	0	0	0	0	0	6	16	3	SE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
140.2	0	0	0	0	0	0	14	3	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
145.0	0	0	0	0	0	0	1	1	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
149.8	0	0	0	0	0	0	8	0	8	1	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0
154.6	0	0	0	0	0	0	26	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

881

TEST
P7

DISTANCE FROM SOURCE
200 METERS

PUFF RELEASE TIME
1052:30 PST

DATA ACCUMULATION INCREMENT
4.8 SECONDS

— GROUND-LEVEL (1.5 AT

RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS

SECONDS AFTER RELEASE	D I R E C T I O N F R O M S O U R C E , D E G R E E S																			CRWSWIND SUMS	
	094	096	098	100	102	104	106	108	110	112	114	116	118	120	122	124	126	128	130		132
52.0	0	12	0	26	0	6	12	235	4266	11524	20439	7593	1447	637	239	0	0	0	0	0	46436
56.8	0	8	0	45	0	20	0	216	3314	13078	20635	12318	2410	1460	578	31	0	6	0	0	54119
61.6	0	0	0	20	0	18	10	389	1453	8293	20735	9768	5697	2683	1010	89	10	0	0	0	50175
66.4	0	0	0	0	0	28	1195	2156	4847	8801	15618	6674	4943	1966	501	18	0	0	0	0	46747
71.2	0	0	0	3	0	203	1237	2518	5187	10831	110435	3124	3564	2060	308	26	0	0	0	0	39496
76.0	0	0	0	8	0	116	560	2449	6137	6816	6943	3151	2143	468	81	14	0	0	0	0	28886
80.8	0	0	0	0	0	3	110	649	3135	2966	4364	1874	1026	493	141	74	3	0	0	0	14838
85.6	0	0	0	0	0	0	24	58	1135	3349	1824	1978	876	181	33	14	0	0	0	0	9472
90.4	0	0	0	0	0	0	22	76	560	972	874	816	412	364	62	0	0	0	0	0	4158
95.2	0	0	6	0	0	0	0	106	441	270	181	253	183	228	31	8	0	0	0	0	1707
100.0	0	0	0	0	0	0	0	24	164	153	126	106	153	116	10	3	0	0	0	0	855
104.8	0	0	0	0	0	0	0	0	70	56	58	78	62	0	0	3	12	0	1	0	340
109.6	0	0	1	0	1	0	0	0	35	6	24	31	28	0	0	0	0	0	0	0	126
114.4	0	0	0	0	0	0	0	0	16	16	20	22	14	0	0	22	3	0	0	3	116
119.2	3	0	1	0	0	0	0	0	3	6	0	18	12	6	0	0	0	0	0	0	49
124.0	0	0	0	0	0	0	3	0	0	0	10	10	0	6	0	8	3	0	1	0	41
128.8	0	0	0	0	0	0	0	0	8	6	1	14	1	0	0	0	0	0	0	0	30
133.6	0	0	0	0	0	0	0	0	6	0	0	10	0	1	0	0	0	0	0	0	17

B-83

TEST P7 DISTANCE FROM SOURCE 200 PETERS PUFF RELEASE TIME 1052:30 PST DATA ACCUMULATION INCREMENT 48 SECONDS GROUND LEVEL (1.5 M)

RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS

SECONCS AFTER RELEASE	DIRECTION																				CRGSSWIND SUPS
	094	096	098	100	102	104	106	108	110	112	114	116	118	120	122	124	126	128	130	132	
138.4	0	0	0	0	0	0	0	0	0	1	14	16	0	0	0	0	0	0	0	0	31
143.2	0	0	0	0	0	0	0	0	0	0	0	14	3	0	0	0	0	0	0	0	17
148.0	1	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	3	0	0	7
152.8	0	1	0	0	0	0	0	0	10	0	6	1	6	0	0	0	0	0	1	0	25
157.6	0	0	0	0	0	0	0	0	3	24	3	0	1	0	0	0	0	0	0	0	31
162.4	1	0	0	0	0	0	0	0	0	0	0	1	1	0	3	0	0	0	0	0	6
167.2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	3	4
172.0	3	0	0	0	3	0	3	0	0	0	0	0	0	3	0	0	0	0	0	0	12
176.8	0	0	0	0	6	0	0	0	6	0	0	1	0	0	0	0	0	0	0	0	13
181.6	0	0	0	0	0	0	0	0	0	8	12	0	1	0	0	0	0	0	0	0	21
186.4	0	0	1	0	0	0	0	0	0	0	18	1	0	0	0	0	0	0	0	0	20
191.2	0	0	1	0	0	6	0	0	0	0	0	3	3	1	0	0	0	0	0	0	14
196.0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	2
200.8	0	0	0	0	0	0	0	0	0	0	6	0	0	0	6	0	0	0	0	0	12
205.6	0	0	0	0	0	0	0	0	3	1	3	1	0	0	0	0	0	0	0	0	8
210.4	0	0	0	0	1	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	4
215.2	0	0	0	0	3	0	3	0	1	0	0	0	0	0	0	1	0	0	0	0	8
AZIMUTH SUWS	8	21	10	102	14	400	3179	8879	30800	67180	102349	47877	22987	10673	3003	311	31	9	3	7	297843

B-84

TEST P7	DISTANCE FROM SOURCE 800 METERS			PUFF RELEASE TIME 1052:30 PST			DATA ACCUMULATION INCREMENT 4.8 SECONDS			GROUND LEVEL (1.5 M)																		
RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS														CROSSWIND w p \ -														
SECONDS AFTER RELEASE	P	I	R	E	C	L	I	5	N	M	E	T	E	R	S	O	U	R	C	E	D	E	G	R	E	E	S	
	094	096	098	100	102	104	106	108	110	112	114	116	118	120	122	124	126	128	130	132								
148.0	-1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2
152.8	-1	0	0	0	6	0	0	0	0	6	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	18	
157.6	-1	0	0	0	0	0	1	0	0	0	0	1	0	0	3	0	0	0	0	0	0	0	0	0	0	0	5	
162.4	-1	0	0	0	0	1	0	0	0	0	0	0	0	0	12	0	0	0	0	1	1						15	
167.2	-1	0	0	0	0	1	0	0	0	16	0	0	0	0	12	0	6	3	0	0							31	
172.0	-1	1	0	0	3	1	0	0	0	3	22	0	39	147	47	37	0	0	0	0							300	
176.8	-1	0	0	0	0	0	0	0	0	10	43	0	0	233	203	10	1	0	0	0							500	
181.6	-1	0	0	0	0	0	0	0	0	6	28	76	93	12	243	195	85	0	0	0							738	
186.4	-1	1	0	0	0	0	0	0	0	39	76	106	39	235	191	103	0	0	0	0							790	
191.2	-1	0	0	0	14	0	0	0	0	33	97	85	70	189	166	91	0	0	0	0							745	
196.0	-1	0	0	0	3	0	0	1	0	20	124	89	83	149	110	122	0	0	0	0							701	
200.8	-1	0	0	0	0	1	0	3	3	62	158	151	68	189	70	139	28	8	0	0							880	
205.6	-1	0	0	0	0	0	0	0	0	12	89	164	66	139	53	68	0	0	0	0							591	
210.4	-1	0	0	0	0	1	0	0	0	16	114	116	64	112	62	62	6	0	0	0							553	
215.2	-1	0	0	0	0	1	0	0	0	0	51	74	31	66	62	14	0	0	0	0							309	
220.0	-1	0	0	0	0	0	1	0	6	10	10	108	47	53	18	3	0	0	0	0							256	
224.8	-1	0	0	0	0	0	0	0	18	10	10	74	83	37	16	0	0	0	0	0							248	
229.6	-1	0	0	0	1	0	0	0	1	6	3	68	24	33	8	10	0	0	0	0							154	

TEST	DISTANCE FROM SOURCE	PUFF	RELEASE TIME	DATA ACCUMULATION INCREMENT	GROUND LEVEL (1.5 M)																	
P7	800 METERS		1052:30 PST	4.8 SECONDS	RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS																	
SECONDS AFTER RELEASE	D	094	096	098	100	102	104	106	108	110	112	114	116	118	120	122	124	126	128	130	132	CROSSWIND SUMS
234.4	-1	3	1	0	0	1	0	0	0	0	10	35	28	22	14	0	0	0	0	0	0	114
239.2	-1	0	0	0	0	16	0	8	1	0	0	18	12	35	14	0	0	0	0	0	0	104
244.0	-1	0	0	0	0	0	0	0	0	0	0	37	26	14	0	0	0	0	0	0	0	77
248.8	-1	0	0	0	0	0	6	0	0	0	0	37	0	18	0	0	0	0	0	0	0	61
253.6	-1	0	0	0	0	0	0	0	0	0	1	22	0	14	0	6	0	0	0	0	0	43
258.4	-1	0	0	6	1	0	0	0	0	0	3	6	0	6	0	0	0	6	0	0	0	28
263.2	-1	0	1	0	0	0	0	0	0	0	3	1	0	0	0	0	0	3	0	3	0	11
268.0	-1	0	0	1	1	0	0	1	0	0	0	0	6	0	0	8	0	0	0	0	0	17
272.8	-1	0	0	0	0	0	0	0	0	0	14	1	10	1	0	0	0	0	0	0	0	26
277.6	-1	0	0	0	0	0	0	0	0	1	0	0	8	0	0	0	0	0	0	0	0	9
282.4	-1	0	8	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	10
287.2	-1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
AZIMUTH SUMS	0	5	10	7	29	23	9	13	45	272	905	1286	717	1936	1262	759	41	20	1	4	7344	

98.8

TEST P7 DISTANCE FROM SOURCE 200 PETERS PUFF RELEASE TIME 1052:30 PST DATA ACCUMULATION INCREMENT 4.8 SECONDS TOWER

RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS

SECONDS AFTER RELEASE	D I R E C T I O N					F R O M S O U R C E					A N 3	E L E V A T I O N				
	0.8M	1.5M	3.0M	6.1M	10.7M	0.8M	1.5M	3.0M	6.1M	10.7M		0.8M	1.5M	3.0M	6.1M	10.7M
52.0	0	0	0	0	12	19393	20439	20078	18566	11422	414	0	453	564	0	
56.8	0	0	0	0	22	23039	20635	21476	22720	12070	641	0	687	910	0	
61.6	0	0	0	0	26	23341	20735	20774	7589	697	324	0	253	36R	0	
66.4	0	0	0	0	20	17597	15610	15383	5926	1347	216	0	172	26J	0	
71.2	0	0	0	0	10	12878	10435	7370	2356	489	85	0	31	91	0	
76.0	0	0	0	0	8	8762	6943	4185	1728	231	26	0	16	14	0	
80.8	0	0	0	0	0	4545	4364	3620	662	110	0	0	0	8	0	
85.6	0	0	3	0	0	2376	1824	647	131	31	1	0	3	3	0	
90.4	0	0	0	0	0	1153	874	531	235	33	0	0	0	0	1	
95.2	0	6	0	0	0	212	18	49	0	14	0	0	0	0	0	
100.0	3	0	0	0	0	122	126	47	6	0	6	0	0	0	12	
104.8	0	0	0	0	0	87	58	43	22	0	0	1	0	0	0	
109.6	0	1	0	0	0	26	24	22	0	0	0	0	0	0	0	
114.4	0	0	0	0	0	49	20	8	1	0	0	0	1	0	0	
119.2	0	1	0	1	3	0	0	0	0	3	0	0	0	10	3	
124.0	0	0	0	0	0	8	10	0	0	0	0	1	0	0	0	
128.8	0	0	0	0	8	0	1	1	0	3	0	0	0	0	0	
133.6	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	

B-87

TEST P7 DISTANCE FROM SOURCE 200 METERS PUFF RELEASE TIME 1052:30 PST DATA ACCUMULATION INCREMENT 4.8 SECONCS

RELATIVE CONCENTRATION IN COUNTS PER TEN SECONCS

SECONDS AFTER RELEASE	D I R E C T I O N F R O M S C U R C E A N D						E L E V A T I O N								
	0.8M	1.5M	3.0M	6.1M	10.7M	14.1M	0.8M	1.5M	3.0M	6.1M	10.7M	13.0M	16.1M	19.2M	22.3M
138.4	0	0	0	0	0	14	1	0	12	0	0	0	0	0	
143.2	0	0	1	0	0	10	0	1	1	0	0	0	0	0	
148.0	0	0	1	0	0	1	0	1	0	0	0	0	0	3	
152.8	0	0	0	0	1	0	6	0	0	0	0	1	0	0	
157.6	0	0	0	0	0	6	3	6	0	10	0	0	0	0	
162.4	0	0	0	0	8	0	0	0	0	0	0	0	1	6	
167.2	0	0	0	0	0	8	0	1	0	1	0	0	0	3	
172.0	0	0	0	0	0	10	0	0	1	0	0	0	0	0	
176.8	0	0	0	0	0	0	0	0	6	16	0	0	0	0	
181.6	0	0	0	0	0	0	12	0	1	3	0	0	0	0	
186.4	0	1	0	0	0	0	18	0	1	3	0	0	0	0	
191.2	0	1	0	6	0	0	0	1	0	1	0	0	0	0	
196.0	0	0	0	0	0	3	0	0	0	8	0	0	0	0	
200.8	0	0	0	3	0	1	6	0	0	0	0	0	0	0	
205.6	0	0	0	0	0	0	3	0	0	3	0	0	0	8	
210.4	0	0	0	6	0	0	0	0	0	0	0	0	0	0	
215.2	0	0	0	0	3	0	0	0	0	0	0	0	0	0	
SUMS	3	10	6	16	121	113628	102349	94245	59952	26515	1713	3	1614	2248	23

TEST P7 DISTANCE FROM SOURCE 800 METERS PUFF RELEASE TIME 1052:30 PST DATA ACCUMULATION INCREMENT 4.8 SECONDS TOWER

RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS

SECONDS AFTER RELEASE	D I R E C T I O N F R O M S O U R C E A N D					E L E V A T I O N									
	0.8M	1.5M	4.6M	10.7M	21.3M	0.8M	1.5M	4.6M	10.7M	21.3M					
148.0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0
152.8	0	0	0	0	1	0	0	1	3	0	0	0	0	0	1
157.6	0	0	0	0	6	0	0	0	0	0	8	0	0	0	3
162.4	0	0	0	0	0	0	0	0	6	49	0	1	0	0	0
167.2	0	0	0	0	0	6	0	0	128	339	0	0	0	0	0
172.0	0	0	0	0	1	8	22	81	87	45	0	0	1	0	1
176.8	0	0	0	0	0	62	43	74	116	10	0	0	0	3	0
181.6	0	0	0	0	0	81	76	39	3	0	0	0	0	0	0
186.4	0	0	0	3	0	99	76	49	28	37	0	0	0	0	0
191.2	0	0	0	0	0	122	97	120	26	0	10	0	0	0	0
196.0	0	0	0	0	0	120	124	122	87	62	0	0	0	0	0
200.8	0	0	0	0	0	149	158	139	89	12	0	0	0	1	0
205.6	0	0	0	0	0	147	89	60	0	28	0	0	0	0	0
210.4	0	0	0	0	0	143	114	49	10	0	10	0	0	0	
215.2	0	0	0	0	0	58	51	12	16	18	1	0	0	0	0
220.0	0	0	0	0	0	6	10	6	0	0	0	0	0	0	0
224.8	3	0	0	0	3	10	10	10	3	0	0	0	0	0	0
229.6	0	0	0	0	0	6	3	0	10	14	0	0	0	0	0

B-89

TEST P7 CISTANCE FROV SOURCE 800 METERS PUFF RELEASE TIME 1052:30 PST DATA ACCUMULATION INCREMENT 4.8 SECONDS TOWER

RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS

SECONDS AFTER RELEASE	D I R E C T I O N					O F N O R M S O U R C E A N D					E L E V A T I O N				
	0.8M	1.5M	4.6M	10.7M	21.3M	0.8M	1.5M	4.6M	10.7M	21.3M	0.8M	1.5M	4.6M	10.7M	21.3M
234.4	0	1	0	1	0	8	10	6	0	8	0	0	0	0	0
239.2	0	0	0	0	0	18	0	8	0	0	0	0	0	1	0
244.0	6	0	0	0	0	0	0	0	0	12	0	0	0	0	6
248.8	0	0	0	0	0	12	0	0	0	3	0	0	0	0	0
253.6	0	0	0	0	0	22	1	0	0	0	10	0	0	0	0
258.4	0	0	0	1	0	0	3	1	0	0	0	0	0	0	0
263.2	0	1	1	0	0	20	3	3	10	0	0	0	0	0	0
268.0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0
272.8	0	0	0	0	0	14	14	0	0	1	0	0	0	0	0
277.6	1	0	0	0	0	6	0	0	0	0	12	0	0	0	0
282.4	0	8	0	0	0	6	1	6	0	0	0	0	0	0	0
287.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUMS	10	10	1	5	11	1123	905	786	622	638	54	1	1	11	11

B-90

TEST P8 DISTANCE FROM SOURCE 200 METERS PUFF RELEASE TIME 0602:00 PST DATA ACCUMULATION INCREMENT 4.8 SECONDS GROUND LEVEL (1.5 M)

RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS

SECONDS AFTER RELEASE	D I R E C T I O N F R O M S O U R C E D E G R E E S																		CROSSWIND SUMS		
	094	096	098	100	102	104	106	108	110	112	114	116	118	120	122	124	126	128		130	132
145.4	0	1	0	0	1	0	0	33	81	1351	7047	14251	13451	6214	1835	503	28	8	0	0	44804
150.2	0	0	0	28	0	0	0	18	70	726	6249	15826	14462	13964	7281	1064	72	16	0	0	59776
155.0	0	0	3	6	0	1	0	20	49	1208	10285	14695	18360	12516	9018	472	91	12	0	0	66736
159.8	0	1	0	18	0	0	0	8	53	1062	8622	15728	18060	12951	7237	795	343	22	0	0	64900
164.6	0	0	0	0	0	0	0	0	39	749	4614	16335	17710	13101	7841	2316	1197	83	0	0	63985
169.4	0	3	0	0	0	0	0	8	26	643	4397	15076	18891	17495	8316	2941	560	93	0	0	68449
174.2	1	0	0	6	0	0	1	0	45	537	3866	13976	15308	14687	10824	5210	841	145	0	0	65449
179.0	0	0	0	0	0	0	0	14	26	435	3758	9858	11751	16537	11535	6047	1143	126	28	0	61258
183.8	0	0	0	0	3	0	0	6	6	212	3624	7853	11616	14433	13124	3953	897	160	22	0	55909
188.6	0	0	0	0	0	0	0	1	14	251	2206	5451	10856	13031	113439	5758	876	147	58	3	52091
193.4	0	0	1	0	0	0	0	0	10	368	416	2199	10449	13053	12193	6095	618	324	51	6	45783
198.2	0	0	0	3	0	0	1	0	0	418	403	3760	7118	12008	12431	5581	720	251	26	0	42720
203.0	6	0	1	0	0	0	0	0	8	74	443	1949	7056	10760	11208	6431	1293	226	41	0	39496
207.8	0	1	0	0	0	0	0	0	0	3	303	1460	6078	10539	8916	7728	2078	399	26	0	37531
212.6	8	0	0	3	0	0	0	0	0	39	253	1483	6566	7845	4783	6589	1756	610	31	0	29966
217.4	1	8	0	0	0	0	0	0	0	24	212	2074	4197	3241	5766	5164	3045	1045	47	14	24838
222.2	0	0	0	0	0	0	0	0	0	0	49	1601	2612	5026	4522	5551	1781	1185	58	0	22385
227.0	0	0	3	0	1	0	0	0	0	0	95	1487	1464	2362	2114	4472	2108	939	131	8	15184

B-92

TEST P8	DISTANCE FROM SOURCE 200 METERS			PUFF RELEASE TIME 0602:00 PST			DATA ACCUMULATION INCREMENT 4.8 SECONDS			GROUND LEVEL (1.5 M)											
RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS															CROSSWIND SUMS						
SECONDS AFTER RELEASE	D 094	I 096	R 098	E 100	C 102	T 104	I 106	O 108	N 110	M 112	S 114	O 116	U 118	R 120	C 122	E 124	D 126	E 128	G 130	R 132	E S
359.0	0	0	0	0	0	0	0	0	0	1	6	18	33	24	72	37	28	6	12	8	245
363.8	0	0	0	0	0	0	1	0	0	0	0	8	28	18	31	43	22	14	12	6	183
368.6	0	0	0	0	10	0	0	0	0	0	1	6	20	31	20	14	16	1	0	0	119
373.4	0	0	0	0	0	0	0	0	0	0	6	8	6	22	37	12	35	16	12	14	168
378.2	0	0	1	0	0	0	0	0	0	0	0	37	10	18	22	18	6	3	8	0	123
383.0	0	0	0	0	0	1	0	0	0	0	0	0	31	16	24	26	12	0	1	0	111
387.8	3	0	0	0	0	0	0	3	0	0	0	1	10	10	20	33	1	8	12	0	101
392.6	0	0	0	0	0	1	0	0	0	0	0	16	0	10	31	14	0	6	28	3	109
397.4	0	0	0	0	0	0	0	0	0	0	0	8	0	20	16	8	8	3	0	0	63
402.2	0	0	0	0	0	0	0	0	0	0	10	1	0	16	18	10	0	6	0	0	61
407.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	1	1	20	1	12	47
411.8	0	0	0	0	0	0	0	0	0	0	0	6	14	12	10	8	18	0	0	0	68
416.6	0	3	0	0	0	0	0	0	0	8	1	0	6	16	22	0	3	6	1	0	66
421.4	3	0	0	1	0	1	0	0	0	0	0	0	0	18	1	22	20	3	0	0	69
426.2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	6	0	3	0	0	10
431.0	0	0	0	0	0	16	0	0	6	0	0	3	1	1	3	8	24	1	0	0	63
435.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	6	0	10	0	0	22
440.6	0	0	1	0	0	0	0	0	0	0	0	0	3	3	18	3	0	10	0	0	38

TEST	DISTANCE FROM SOURCE		PUFF RELEASE TIME		DATA ACCUMULATION INCREMENT		GROUND LEVEL (1.5 M)															
PB	200 METERS		0602:00 PST		4.8 SECONDS																	
RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS																						
SECONDS	B	R	E	C	1	2	5	M	E	T	E	R	S	U	B	V	A	T	I	O	N	CROSSWIND
AFTER	094	096	098	100	102	104	106	108	110	112	114	116	118	120	122	124	126	128	130	SUMS		
445.4	0	0	0	0	0	0	0	0	0	0	0	8	0	6	3	8	0	3	0	0	28	
450.2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	14	0	0	0	0	15	
455.0	0	0	0	0	0	6	0	0	0	10	6	8	0	1	1	0	12	0	8	6	58	
459.8	0	0	0	6	0	0	0	0	0	0	0	18	0	8	3	16	0	0	0	0	51	
464.6	0	0	0	6	0	1	0	0	0	0	0	1	0	6	8	0	12	0	0	0	34	
469.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	0	0	0	20	
474.2	0	6	0	6	0	0	0	0	0	0	0	1	6	0	0	24	1	0	0	0	44	
479.0	0	0	0	0	0	0	0	0	0	1	0	0	10	16	0	0	0	0	0	0	27	
483.8	0	0	0	0	0	0	0	0	0	0	0	0	14	12	14	3	0	0	0	0	43	
488.6	0	0	0	0	0	0	0	3	0	0	0	6	12	0	3	0	0	0	0	0	24	
493.4	0	0	0	0	0	0	0	0	0	0	0	6	0	6	0	6	0	0	0	0	18	
498.2	3	0	0	0	0	0	0	0	0	6	1	0	0	0	1	0	0	0	0	0	11	
AZIMUTH	9	2	10	1	6	32	205	396	239	95	49	2039										
SUMS	9	9	19	26	6	26	160	290	340	119	49	2039										

TEST
P8

DISTANCE FROM SOURCE
800 METERS

PUFF RELEASE TIME
0602:00 PST

DATA ACCUMULATION INCREMENT
4.8 SECONDS

GROUND LEVEL (1.5 M)

RELATIVE CONCENTRATION IN COUITS PER TEN SECONDS

SECONDS AFTER RELEASE	D	I	R	E	C	T	I	O	N	F	R	O	S	U	R	C	E	D	E	G	R	E	S	CROSSWIND SUMS
	094	096	098	100	102	104	106	108	110	112	114	116	118	120	122	124	126	126	130	132				
260.0	3	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	11
264.8	6	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	3	0	1	0	0	-1	11	
269.6	6	0	3	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	15
274.4	0	0	1	0	6	0	0	0	0	0	0	1	22	6	1	24	0	0	0	0	0	-1	63	
279.2	0	0	0	0	0	0	0	0	8	0	0	0	8	0	1	10	1	0	1	0	0	-1	29	
284.0	0	0	0	3	0	0	0	0	0	0	0	0	16	0	3	22	10	6	0	0	0	-1	60	
288.8	0	0	0	0	0	0	0	0	0	0	0	0	3	0	8	35	1	0	0	0	0	-1	47	
293.6	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	26	91	18	0	0	0	-1	136	
298.4	6	6	0	1	0	0	0	0	0	0	0	0	0	3	37	110	26	3	0	0	0	-1	192	
303.2	8	0	0	0	1	0	0	0	0	0	0	3	12	1	39	143	14	0	0	0	0	-1	221	
308.0	0	0	0	0	16	0	1	0	0	0	0	0	0	10	37	178	0	0	0	0	0	-1	242	
312.8	0	0	3	0	0	0	0	0	0	0	0	1	0	8	118	126	43	6	0	0	0	-1	305	
AZIMUTH SUMS	29	6	7	10	31	0	1	0	8	1	1	5	61	30	244	674	189	35	2	0	0	0	0	1332

TEST
P8

DISTANCE FROM SOURCE
800 METERS

PUFF RELEASE TIME
2602:00 PST

DATA ACCUMULATION INCREMENT
4.8 SECONDS

GROUND LEVEL (1.5 M)

RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS

SECONDS AFTER RELEASE	D	I	R	E	C	T	I	O	N	F	R	O	M	S	O	U	R	C	E	D	E	G	R	E	E	S	CROSSWIND SUMS
	094	096	098	100	102	104	106	108	110	112	114	116	118	120	122	124	126	128	130	132							
359.0	0	0	3	0	0	0	0	0	0	0	0	0	0	20	8	176	653	512	166	0	-1						1538
363.8	0	0	0	0	1	0	0	0	0	0	0	0	1	1	214	666	537	316	6	-1							1742
368.6	10	0	0	0	10	0	0	0	0	0	0	0	0	0	10	187	745	622	253	10	-1						1847
373.4	6	0	0	3	0	3	1	0	0	0	0	0	0	3	0	187	1058	772	243	1	-1						2277
378.2	1	0	0	0	1	3	0	0	0	0	0	0	0	0	0	203	716	806	249	6	-1						1985
383.0	3	3	0	0	0	0	0	1	0	0	0	0	0	0	3	272	826	960	235	28	-1						2331
387.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	262	947	901	249	14	-1						2373
392.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	258	933	1003	428	18	-1						2646
397.4	0	10	1	0	0	0	0	0	0	0	0	0	0	0	3	203	966	974	310	51	-1						2518
402.2	1	0	0	0	0	0	0	12	0	0	0	0	0	1	0	241	960	1068	433	20	-1						2736
407.0	0	0	0	0	14	0	0	0	0	0	0	0	0	10	0	206	1018	1124	472	56	-1						2900
411.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	218	1041	1126	537	95	-1						3023
416.6	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	287	881	1174	551	122	-1						3018
421.4	3	0	6	0	0	0	0	0	0	0	0	0	0	0	0	272	918	1164	670	235	-1						3268
426.2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	8	174	845	1076	649	191	-1						2944
431.0	1	0	0	0	0	0	6	0	0	0	0	0	0	10	16	218	912	1110	656	203	-1						3132
435.8	8	0	0	0	0	0	0	12	6	0	6	0	0	0	24	183	872	1139	789	193	-1						3232
440.6	0	0	0	6	0	1	3	0	0	0	0	0	0	0	0	185	960	1039	758	193	-1						3145

R-97

TEST P8	DISTANCE FROM SOURCE 800 METERS																PUFF RELEASE TIME 0602:00 PST				DATA ACCUMULATION INCREMENT 4.8 SECONDS				GROUND LEVEL (1.5 M)			
RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS																												
SECONDS AFTER RELEASE	D	I	R	E	C	T	I	O	N	F	R	O	M	S	O	U	R	C	E	D	E	G	R	E	E	S		
	094	096	098	100	102	104	106	108	110	112	114	116	118	120	122	124	126	128	130	132	CROSSWIND SUMS							
445.4	0	0	0	0	0	1	0	0	0	0	0	0	0	6	1	193	966	1033	770	237	-1				3207			
450.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	189	766	1064	670	174	-1				2863			
455.0	0	8	0	0	0	0	0	0	6	0	0	0	0	0	16	178	726	1012	672	214	-1				2832			
459.8	3	0	3	1	0	0	0	0	0	0	0	0	0	0	6	174	876	937	828	164	-1				2992			
464.6	0	0	0	0	3	0	0	0	0	0	0	0	0	0	12	199	943	841	810	178	-1				2986			
469.4	0	0	0	0	0	0	0	0	0	0	0	0	0	14	22	195	845	958	803	149	-1				2986			
474.2	0	0	0	0	0	0	8	0	0	0	0	0	0	0	24	185	1041	924	720	120	-1				3022			
479.0	1	0	0	0	6	3	0	1	0	0	1	1	0	3	287	1010	943	683	126	-1					3065			
483.6	8	0	0	1	0	0	1	0	0	3	0	0	1	16	249	870	1001	666	95	-1					2911			
488.6	8	0	0	0	0	0	0	0	0	0	0	0	1	20	322	710	1041	701	122	-1					2925			
493.4	3	0	0	3	0	8	0	0	1	0	0	0	0	20	241	762	995	556	89	-1					2678			
498.2	0	0	0	0	0	6	6	0	0	0	0	0	12	31	287	778	970	620	60	-1					2770			
503.0	0	0	0	0	0	0	0	0	0	0	0	0	0	43	191	739	1006	533	47	-1					2559			
507.8	0	0	0	0	0	0	0	0	0	1	0	0	14	43	241	891	968	431	20	-1					2609			
512.6	0	0	0	0	3	0	0	0	0	0	0	0	10	24	314	949	1053	470	26	-1					2849			
517.4	0	0	0	0	0	0	0	0	1	10	3	0	22	37	276	883	991	418	22	-1					2663			
522.2	18	0	0	0	0	0	6	0	8	0	0	0	10	47	310	960	1106	412	8	-1					2885			
527.0	0	0	0	0	0	0	0	0	0	0	0	0	0	47	368	968	908	268	24	-1					2583			

B-98

TEST P8 DISTANCE FROM SOURCE PUFF RELEASE TIME DATA ACCUMULATION INCREMENT GROUND LEVEL (1.5 M)
 00 METERS 0602:00 PST .4.8 SECONDS

 RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS

SECONDS AFTER RELEASE	D I R E C T I O N F R O M S O U R C E , D E G R E E S																			CROSSWIND SUMS	
	094	096	098	100	102	104	106	108	110	112	114	116	118	120	122	124	126	128	130		132
531.8	6	0	0	0	0	0	3	0	0	0	0	0	1	43	353	895	872	285	18	-1	2476
536.6	3	0	0	0	0	0	0	0	0	0	0	0	0	51	335	874	951	314	0	-1	2528
541.4	0	0	0	0	0	0	0	0	0	0	0	0	1	39	468	918	728	278	0	-1	2432
546.2	0	0	0	1	1	0	0	0	0	0	0	0	0	53	470	1024	639	253	0	-1	2441
551.0	3	0	0	0	0	0	0	3	0	0	0	0	0	97	439	947	695	122	0	-1	2306
555.8	0	0	0	0	0	0	0	0	0	0	0	0	3	74	572	893	641	93	0	-1	2276
560.6	0	0	0	0	6	1	0	0	0	0	0	0	1	133	635	856	418	110	1	-1	2161
565.4	0	12	0	0	0	0	0	6	0	0	0	0	10	118	693	739	389	62	3	-1	2032
570.2	0	0	0	0	0	0	0	0	0	12	0	0	14	160	745	603	397	24	0	-1	1955
575.0	0	0	0	0	0	0	0	0	0	0	0	0	0	178	824	587	353	22	0	-1	1964
579.8	0	0	0	0	0	0	0	0	0	0	0	0	35	262	776	560	293	45	0	-1	1971
584.6	12	0	8	0	0	3	0	0	0	0	0	0	20	70	610	660	160	43	0	-1	1586
589.4	0	0	0	0	12	0	0	0	0	0	0	0	18	241	756	583	197	14	0	-1	1821
594.2	3	0	0	0	0	0	0	0	0	0	0	0	49	306	685	481	158	20	1	-1	1703
599.0	0	0	0	0	0	0	0	3	0	0	0	0	45	356	601	412	143	1	0	-1	1561
603.8	0	0	0	0	0	0	0	0	0	1	0	3	45	364	597	378	114	6	0	-1	1508
608.6	0	0	0	0	8	0	0	0	0	0	0	0	164	360	691	326	118	14	0	-1	1681
613.4	0	0	0	0	0	0	0	0	0	0	0	0	162	433	733	247	93	0	0	-1	1668

B-99

TEST DISTANCE FROM SOURCE PUFF RELEASE TIME DATA ACCUMULATION INCREMENT GROUND LEVEL (1.5 M)
 P6 800 METERS 0602:00 PST 4.6 SECONDS

RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS

SECONDS AFTER RELEASE	D	I	R	E	C	I	I	O	N	F	R	O	M	S	O	U	R	C	E	D	E	G	R	E	E	S	CROSSWIND SUMS
	094	096	098	100	102	104	106	108	110	112	114	116	118	120	122	124	126	128	130	132							
618.2	0	3	0	0	0	0	0	0	0	0	0	0	97	295	693	314	70	8	0	-1						1480	
623.0	8	0	1	0	0	0	0	0	6	8	0	0	126	341	526	258	28	14	0	-1						1316	
627.8	0	0	0	0	0	0	0	0	0	3	0	20	208	347	543	235	51	1	0	-1						1408	
632.6	0	0	0	0	0	0	6	0	0	0	12	0	149	343	558	193	31	6	0	-1						1298	
637.4	0	0	0	1	8	0	0	0	0	0	0	3	110	308	458	191	24	0	1	-1						1104	
642.2	0	0	0	0	0	0	0	0	0	0	0	6	139	189	370	151	12	0	0	-1						867	
647.0	0	0	0	0	8	0	0	0	0	3	0	33	110	237	364	101	10	0	0	-1						866	
651.8	0	0	0	3	22	0	0	0	0	0	0	33	166	220	335	143	8	0	0	-1						930	
656.6	0	0	0	0	0	0	0	0	0	0	0	12	187	228	262	139	3	0	0	-1						831	
661.4	0	0	0	0	0	6	0	0	0	0	0	58	181	226	247	128	14	0	1	-1						861	
AZIMUTH SUMS	110	36	22	19	103	35	40	38	28	41	22	169	2179	6569	23684	45436	42468	20730	3342	0						145071	

B-100

TEST PB	DISTANCE FROM SOURCE 800 METERS	PUFF RELEASE TIME 0602:00 PST	DATA ACCUMULATION INCREMENT 4.8 SECONDS	GROUND LEVEL (1.5 M)																							
RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS																											
SECONDS AFTER RELEASE	D	I	R	E	E	T	I	O		F	R	O		S	O	U	R	C	E	D	E	G	R	E	S	CROSSWIND SUMS	
	094	096	098	100	102	104	106	108	110	112	114	116	118	120	122	124	126	128	130	132	134	136	138	140	142	144	146
704.0	0	1	0	0	3	0	0	0	0	0	0	37	114	106	20	3	0	0	0	0	0	0	0	0	0	-1	284
708.8	0	1	0	0	0	0	0	0	0	1	14	0	68	103	114	28	0	0	0	0	0	0	0	0	0	-1	329
713.6	0	0	0	0	0	0	0	0	0	0	0	6	47	95	122	24	0	0	0	0	0	0	0	0	0	-1	294
718.4	0	0	0	0	0	0	0	0	0	8	1	6	35	101	93	22	0	0	0	0	0	0	0	0	0	-1	266
723.2	0	0	0	0	0	0	0	0	0	0	6	8	41	85	85	20	6	0	0	0	0	0	0	0	0	-1	251
728.0	14	0	0	0	6	0	0	0	0	0	0	10	43	68	68	1	0	6	0	0	0	0	0	0	0	-1	216
732.8	0	0	0	0	6	0	0	0	0	3	0	0	31	56	66	12	8	6	0	0	0	0	0	0	0	-1	188
737.6	0	3	1	0	3	0	0	0	0	3	3	3	41	47	76	0	0	0	0	0	0	0	0	0	0	-1	177
742.4	0	0	0	0	0	0	0	0	3	0	0	0	37	88	45	8	0	0	0	0	0	0	0	0	0	-1	126
747.2	0	0	0	0	3	0	0	0	1	0	0	24	6	88	16	0	0	0	0	0	0	0	0	0	0	-1	83
752.0	0	0	0	0	0	0	0	0	0	6	1	3	28	16	39	1	0	0	0	0	0	0	0	0	0	-1	104
756.8	6	0	0	1	3	0	0	0	0	0	0	14	26	88	12	3	0	0	0	0	0	0	0	0	0	-1	118
761.6	0	0	0	0	0	8	0	0	0	0	8	0	43	70	20	0	0	0	0	0	0	0	0	0	0	-1	144
766.4	6	0	0	0	6	0	0	0	0	0	1	6	24	26	20	10	0	0	0	0	0	0	0	0	0	-1	90
771.2	0	0	0	0	0	0	0	0	0	0	0	10	18	24	20	0	0	0	0	0	0	0	0	0	0	-1	72
776.0	0	0	0	0	0	0	0	0	0	0	6	12	3	41	1	1	0	0	0	0	0	0	0	0	0	-1	64
780.8	0	0	0	0	0	0	0	0	1	6	0	8	10	8	6	0	0	0	0	0	8	0	0	0	0	-1	47
785.6	18	0	0	0	0	0	0	0	0	0	1	1	24	6	18	0	0	3	0	0	0	0	0	0	0	-1	71

B-101

TEST P8	DISTANCE FROM SOURCE 000 METERS		PUFF RELEASE TIME 0602:00 PST		DATA ACCUMULATION INCREMENT 4.8 SECONDS		GROUND LEVEL (1.5 M)																			
RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS															SCROSSWIND											
SECONDS AFTER RELEASE	D	I	R	F	C	T	I	O	N	F	R	O	M	S	O	U	R	C	E	D	E	G	R	E	E	SUMS
790.4	094	096	098	100	102	104	106	108	110	112	114	116	118	120	122	124	126	128	130	132	~	1	0	0	~	34
795.2	3	0	0	0	0	0	0	0	3	0	0	18	0	1	0	0	0	0	0	0	0	0	0	-1	25	
800.0	0	0	0	0	3	1	0	0	0	3	6	10	24	10	0	0	0	0	0	0	0	0	0	-1	54	
80418	8	0	0	0	1	0	0	0	3	0	0	0	12	1	3	0	0	0	0	0	0	0	0	-1	28	
809.6	0	0	0	0	0	0	0	0	6	6	14	6	1	8	0	0	0	0	0	0	0	0	0	-1	41	
814.4	0	0	0	0	1	0	0	3	0	0	16	0	45	0	0	0	0	0	0	0	0	0	0	-1	65	
819.2	0	0	0	0	0	0	0	0	3	0	10	0	6	0	0	0	1	0	0	0	0	0	0	-1	20	
824.0	10	0	0	0	0	0	0	0	0	0	18	0	0	0	0	0	0	0	0	0	0	0	0	-1	28	
828.8	0	0	0	0	3	0	0	0	1	8	3	0	6	0	0	0	1	0	0	0	0	0	0	-1	22	
833.6	0	0	0	0	0	0	0	0	0	8	3	3	6	6	6	0	0	0	0	0	0	0	0	-1	32	
838.4	0	0	0	0	6	0	0	1	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	-1	13	
843.2	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	-1	2	
AZIMUTH	68	1	50	0	37	165	1103	149	16	0																
SUMS	5	1	9	10	64	609	953	18	16	8	0														3288	

B-102

TEST	DISTANCE FROM SOURCE	PUFF RELEASE TIME	DATA ACCUMULATION INCREMENT	TOWER													
PB	200 METERS	0602:00 PST	4.8 SECONDS														
RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS																	
SECONDS	D I R E C T I O N						F R O M						E L E V A T I O N				
AFTER	0	9	8	D	E	G	1	1	4	S	0	U	R	C	E	A	N
RELEASE	0	1	5	3.0M	6.1M	10.7M	0.8M	1.5M	3.0M	6.1M	10.7M	0.8M	1.5M	3.0M	6.1M	10.7M	
59.0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0
63.8	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
68.6	0	0	0	0	0	3	0	0	0	0	0	0	3	0	0	0	0
73.4	0	0	0	1	0	0	0	0	0	0	0	10	8	0	1	0	0
78.2	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0
83.0	0	0	0	0	6	0	0	0	0	6	20	0	0	0	3	3	0
87.8	0	0	0	3	0	0	0	0	1	62	1031	0	0	0	0	0	0
92.6	0	0	0	0	0	1174	1522	2341	3997	2206	0	0	0	1	8	0	0
97.4	1	0	0	0	0	1208	2908	6199	4678	1291	0	0	0	3	3	1	0
102.2	0	0	0	1	0	1791	2293	6074	3993	7695	16	0	49	68	0	0	0
107.0	0	0	0	0	6	2833	3647	8322	12053	11385	95	0	181	356	10	0	0
111.8	0	0	0	0	10	2301	4139	8974	22489	11474	162	0	253	795	0	0	0
116.6	0	0	0	0	0	4272	5645	7076	14735	12187	203	0	172	572	0	0	0
121.4	0	0	0	0	10	4283	4041	5264	7787	7803	241	0	85	314	0	0	0
126.2	1	0	0	0	0	3808	3964	7289	8076	10674	191	0	218	389	1	0	0
131.0	0	0	0	0	0	5837	5645	10951	17068	8462	218	0	268	697	0	0	0
135.8	0	0	0	0	6	6041	7266	10883	12818	4991	220	0	174	595	0	0	0
140.6	0	0	0	0	18	6178	6937	9764	20147	4314	201	0	203	789	0	0	0

B-103

TEST P8	DISTANCE FROM SOURCE 200 METERS	PUFF RELEASE TIME 0602:00 PST	DATA ACCUMULATION INCREMENT 4.8 SECONDS										TOWER				
RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS																	
SECONDS AFTER RELEASE	D I R E C T I O N D E G R E E S					F R O N T D I S T A N C E M E T E R S					E L E V A T I O N M E T E R S						
	0.8M	1.5M	3.0M	6.1M	10.7M	0.8M	1.5M	3.0M	6.1M	10.7M	0.8M	1.5M	3.0M	6.1M	10.7M		
145.4	0	0	0	0	10	6645	7047	12562	15053	2418	208	0	249	733	0		
150.2	0	0	0	0	3	5983	6249	13126	14197	374	206	0	308	1037	0		
155.0	0	3	0	0	0	7041	10285	10470	4906	674	195	0	264	528	3		
159.8	0	0	0	0	1	7866	8622	5076	4174	728	199	0	108	489	0		
164.6	0	0	0	0	3	5345	4614	5556	5674	566	195	0	199	556	0		
169.4	0	0	0	0	6	4391	4397	4016	874	53	210	0	170	222	0		
174.2	0	0	0	0	0	3637	3666	1974	497	60	210	0	118	187	0		
179.0	0	0	0	0	0	3851	3758	2222	660	153	153	28	145	203	6		
183.8	0	0	3	0	0	3064	3624	3351	622	18	124	22	158	241	1		
188.6	0	0	0	0	0	2995	2206	770	260	26	122	58	118	149	0		
193.4	0	1	1	0	3	1047	416	139	14	18	133	51	89	103	0		
198.2	0	0	0	0	1	831	403	112	101	1	81	26	106	114	3		
203.0	0	1	0	0	1	508	443	310	101	6	112	41	66	81	14		
207.8	0	0	0	0	0	424	303	53	1	1	83	20	89	339	8		
212.6	0	0	0	0	0	474	253	103	14	0	89	31	56	99	1		
217.4	8	0	0	1	0	222	212	58	10	0	60	47	101	95	8		
222.2	3	0	0	0	0	128	49	18	6	0	72	58	99	68	0		
227.0	0	3	0	0	0	101	95	20	0	6	89	131	110	83	16		

TEST P8 DISTANCE FROM SOURCE 200 METERS PUFF RELEASE TIME 0602:00 PST DATA ACCUMULATION INCREMENT 4.8 SECONDS TOWER

RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS

AFTER RELEASE	D I R E C T I O N F R O M S O U R C E A N D					E L E V A T I O N									
	0.8M	1.5M	3.0M	5.1M	10.7M	0.8M	1.5M	3.0M	6.1M	10.7M	0.8M	1.5M	3.0M	6.1M	10.7M
231.8	0	12	0	6	0	137	95	16	0	0	153	135	158	116	37
236.6	0	0	0	0	16	53	45	0	0	0	101	106	156	124	41
241.4	0	0	0	0	3	41	31	8	0	0	122	128	264	206	24
246.2	0	0	0	0	1	51	22	0	0	6	178	281	274	78	14
251.0	0	0	0	0	6	58	18	0	0	0	222	191	103	118	20
255.8	0	0	0	0	0	47	12	10	0	0	201	158	151	51	0
260.6	0	0	0	0	0	41	24	10	1	1	191	189	135	35	18
265.4	6	0	1	0	0	20	8	26	1	0	226	214	181	45	0
270.2	0	0	0	0	0	6	6	8	0	0	216	203	120	62	0
275.0	0	0	0	0	0	18	0	0	0	0	276	281	289	160	18
279.2	0	0	0	0	26	10	0	0	0	3	268	216	287	149	18
284.6	0	0	0	0	0	0	0	0	0	0	276	224	197	95	0
289.4	0	0	0	8	0	20	14	12	14	0	270	187	189	64	10
294.2	0	0	0	0	0	12	10	0	0	1	264	189	141	26	1
299.0	0	0	0	0	1	24	10	6	0	0	208	149	87	22	10
303.8	0	0	0	0	0	8	6	0	0	0	103	95	33	20	0
308.6	0	0	1	0	0	10	0	1	0	0	81	70	20	20	6
313.4	0	0	0	0	6	1	10	0	0	0	56	39	18	0	0
SUMS	19	20	6	20	149	94836	105161	143171	175089	88647	7510	3585	6964	11308	292

B-105

TEST PB DISTANCE FROM SOURCE 200 METERS PUFF RELEASE TIME 0602:00 PST DATA ACCUMULATION INCREMENT 4.8 SECONDS TOWER

RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS

SECONDS AFTER RELEASE	D I R E C T I O N F R O M S O U R C E					A N D E L E V A T I O N									
	0.8M	1.5M	3.0M	6.1M	10.7M	0.8M	1.5M	3.0M	6.1M	10.7M					
359.0	0	0	0	0	0	0	6	0	0	0	12	12	0	0	1
363.8	0	0	0	0	0	0	0	0	0	0	18	12	10	0	0
368.6	0	0	0	0	0	0	1	0	0	0	6	0	10	0	3
373.4	0	0	1	0	6	0	6	0	0	1	10	12	0	0	0
378.2	0	1	0	0	0	0	0	0	0	0	0	8	8	0	0
383.0	0	0	0	0	0	0	0	0	1	0	0	1	0	6	0
387.8	0	0	0	0	3	6	0	0	0	0	3	12	1	3	0
392.6	0	0	0	0	0	0	0	0	0	8	3	28	10	6	0
397.4	0	0	0	0	0	0	0	0	0	0	8	0	6	0	1
402.2	0	0	0	0	0	0	10	0	0	0	0	0	0	6	0
407.0	0	0	0	0	1	0	0	0	0	0	14	1	3	0	0
411.8	0	0	0	3	0	3	0	0	0	0	0	0	0	0	0
416.6	0	0	0	0	0	0	1	0	0	10	1	1	1	0	0
421.4	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0
426.2	0	0	0	0	3	3	0	0	0	0	1	0	0	1	0
431.0	0	0	0	1	0	10	0	0	0	0	0	0	0	0	0
435.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
440.6	0	1	0	0	0	1	0	0	0	0	1	0	1	0	3

B-106

TEST	DISTANCE FROM SOURCE					PUFF RELEASE TIME	DATA ACCUMULATION INCREMENT					TOWER													
P8	200 METERS					0602:00 PST	4.8 SECONDS																		
RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS																									
SECONDS	D I R E C T I O N					F R O M					S O U R C E					A N D					E L E V A T I O N				
AFTER	---0	9	8	D E G R E E S---		---	1	1	4	D E G R E E S---		---	1	3	0	D E G R E E S---		---	1	3	0	D E G R E E S---		---	
RELEASE	0.8M	1.5M	3.0M	6.1M	10.7M	0.8M	1.5M	3.0M	6.1M	10.7M	0.8M	1.5M	3.0M	6.1M	10.7M	0.8M	1.5M	3.0M	6.1M	10.7M	0.8M	1.5M	3.0M	6.1M	10.7M
445.4	0	0	0	0	0	0	0	8	0	1	0	0	0	1	1	0									
450.2	0	0	0	0	6	0	1	0	0	1	1	0	0	0	0										
455.0	0	0	1	0	0	0	6	0	0	3	0	8	0	0	0										
459.8	0	0	0	0	6	0	0	0	0	0	0	0	0	0	3										
464.6	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0										
469.4	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0										
474.2	0	0	1	0	0	0	0	0	0	0	0	0	3	6	0										
479.0	0	0	0	3	0	0	0	6	1	0	0	0	18	0	0										
483.8	8	0	0	0	0	0	0	0	3	0	0	0	1	0	0										
488.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0										
493.4	0	0	0	0	1	0	0	0	1	10	0	0	0	0	0										
498.2	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0										
SUMS	8	2	3	7	26	29	32	14	17	42	78	95	73	29	11										

B-107

TEST PB DISTANCE FROM SOURCE 300 METERS PUFF RELEASE TIME 0602:00 PST DATA ACCUMULATION INCREMENT 4.8 SECONDS

RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS

SECONDS AFTER RELEASE	D I R E C T I O N F R O M S O U R C E A N D					E L E V A T I O N									
	0.8	1.5M	4.6M	10.7M	21.3M	0.8M	1.5M	4.6M	10.7M	21.3M	0.8M	1.5M	4.6M	10.7M	21.3M
260.0	8	0	0	0	1	0	0	0	0	0	0	0	0	0	0
264.8	0	0	0	0	0	10	0	0	0	0	18	1	0	0	0
269.6	0	3	0	1	0	16	0	0	0	0	10	0	0	1	0
274.4	0	1	0	0	0	0	0	0	0	0	0	0	0	8	0
279.2	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0
284.0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0
288.8	1	0	0	0	0	6	0	0	0	0	0	0	0	0	0
293.6	0	0	0	0	0	0	1	0	0	0	3	0	0	0	0
298.4	0	0	0	0	0	0	0	0	0	0	3	0	0	0	10
303.2	0	0	0	0	0	0	0	0	0	0	6	0	1	1	6
308.0	0	0	0	0	0	0	0	0	1	14	0	0	0	0	0
312.8	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0
SUMS	9	7	0	1	1	32	1	0	1	23	40	2	1	10	16

B-108

TEST PB	DISTANCE FROM SOURCE 800 METERS					PUFF RELEASE TIME 060230 PST	DATA ACCUMULATION INCREMENT 4.0 SECONDS					TOWER				
RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS																
SECONDS AFTER RELEASE	D I R E C T I O N D E G R E E S					F R O M S O U R C E D E G R E E S					A N D E L E V A T I O N D E G R E E S					
	0.8M	1.5M	4.6M	10.7M	21.3M	0.8M	1.5M	4.6M	10.7M	21.3M	0.8M	1.5M	4.6M	10.7M	21.3M	
359.0	6	3	0	0	0	1	0	0	0	0	0	0	0	14	8	
363.8	0	0	0	0	0	0	0	1	0	0	0	6	14	58	56	
368.6	0	0	0	0	0	0	0	0	0	0	0	10	10	103	58	
373.4	0	0	0	0	0	0	0	0	0	0	3	1	12	176	176	
378.2	3	0	0	0	0	3	0	0	0	0	22	6	26	195	22	
383.0	0	0	0	0	0	0	0	0	0	0	28	28	28	195	0	
387.8	0	0	0	0	0	0	0	0	0	0	31	14	20	166	12	
392.6	0	0	0	0	0	1	0	0	0	0	35	18	24	116	24	
397.4	0	1	0	0	3	0	0	0	0	0	18	51	53	193	33	
402.2	0	0	3	0	0	0	0	0	1	0	41	20	35	137	24	
407.0	0	0	0	0	0	0	0	0	0	0	41	56	68	78	164	
411.8	0	0	0	0	0	0	0	0	0	0	62	95	118	185	14	
416.6	0	0	0	0	0	0	0	0	0	0	106	122	176	368	31	
421.4	0	6	0	0	0	0	0	0	0	0	199	235	212	139	18	
426.2	0	0	0	3	0	0	0	0	0	0	189	191	166	70	26	
431.0	0	0	0	0	0	0	0	0	3	0	218	203	262	139	35	
435.8	18	0	0	0	0	0	6	0	0	3	264	193	218	168	31	
440.6	0	0	0	0	0	0	0	0	0	0	241	193	149	212	14	

R-10P

TEST PB	DISTANCE FROM SOURCE 800 METERS					OFF (ELI)SE TIME 0602:00 PST	ANTI-ACCUMULATION INCREMENT SECONDS					RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS								
SECONDS AFTER RELEASE	D I R E C T I O N D E G R E E S					F R O M D I R E C T I O N D E G R E E S					S O U R C E D I R E C T I O N D E G R E E S					E L E V A T I O N D E G R E E S				
	0.8M	1.5	4.6M	10.7	21.3M	0.8M	1.5M	4.6	10.7M	21.3	0.8M	1.5M	4.6M	10.7M	21.3M					
445.4	0	0	0	0	0	0	0	0	0	1	270	237	214	178	3					
450.2	0	0	0	0	0	0	0	0	0	0	231	174	172	116	20					
455.0	0	0	0	0	0	0	0	0	0	0	289	214	228	276	8					
459.8	1	3	0	0	0	8	0	0	0	0	212	164	181	49	0					
464.6	0	0	0	0	0	0	0	0	1	0	218	178	170	168	0					
469.4	0	0	0	0	0	0	0	0	0	0	253	149	160	91	8					
474.2	0	0	0	0	0	0	0	0	0	8	203	120	108	51	14					
479.0	0	0	0	0	1	0	1	0	0	0	176	126	49	78	0					
483.8	0	0	0	1	0	0	0	0	0	0	135	95	87	16	0					
486.6	0	0	0	6	0	0	0	0	0	0	118	122	110	1	0					
493.4	0	0	0	0	0	0	0	0	0	0	145	89	85	1	0					
498.2	0	0	0	0	0	0	0	0	0	0	120	60	28	6	0					
503.0	0	0	0	0	0	0	0	0	0	6	114	47	18	3	0					
507.8	0	0	0	1	0	0	0	0	0	0	49	20	12	0	0					
512.6	0	0	0	0	0	0	0	0	0	0	6	26	18	10	0					
517.4	0	0	0	8	0	0	5	0	0	0	43	22	8	0	0					
522.2	0	0	0	0	0	3	0	0	0	1	20	8	8	1	0					
527.0	0	0	0	0	6	1	0	1	0	16	14	24	0	0	0					

B-110

TEST	DISTANCE FROM SOURCE		PUFF RELEASE TIME		DATA ACCUMULATION INCREMENT		TOWER												
PR	800 METERS		0602:00 PST		4.8 SECONDS														
RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS																			
SECONDS	D I R E C T I O N					F R O M S O U R C E					A N D								
AFTER	0	9	8	D	E	E	1	1	4	D	E	E	1	3	0	D	E	E	1
RELEASE	0.8M	1.5M	4.6M	10.7M	21.3M	0.8M	1.5M	4.6M	10.7M	21.3M	0.8M	1.5M	4.6M	10.7M	21.3M	0.8M	1.5M	4.6M	10.7M
531.8	0	0	0	0	0	0	0	0	0	0	39	18	0	3	0				
536.6	0	0	0	8	0	0	0	0	0	0	20	0	0	0	0				
541.4	0	0	0	0	0	0	0	0	0	0	6	0	6	3	0				
546.2	0	0	3	0	0	0	0	1	0	0	10	0	0	0	0				
551.0	0	0	3	0	0	0	0	10	0	0	0	0	0	0	0				
555.8	0	0	0	0	1	1	0	0	1	0	6	0	0	0	1				
560.6	0	0	0	0	0	0	0	0	0	0	6	1	0	0	8				
565.4	0	0	0	0	0	0	0	0	0	3	0	3	3	0	0				
570.2	0	0	0	0	0	6	0	0	0	0	6	0	0	0	0				
575.0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0				
579.8	0	0	0	0	0	3	0	0	0	0	10	0	0	0	10				
584.6	0	8	0	0	0	1	0	0	1	0	0	0	0	0	0				
589.4	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0				
594.2	0	0	0	0	0	0	0	0	0	6	0	1	0	0	0				
599.0	0	0	0	1	0	0	0	0	0	0	1	0	3	0	0				
603.8	0	0	0	0	3	0	0	0	0	0	1	0	0	0	0				
608.6	0	0	0	0	10	0	0	6	0	0	8	0	3	3	0				
613.4	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0				

R-111

TEST DISTANCE FROM SOURCE DIFFERENCE TIME DATE ACCUMULATION INTERVAL
 -- PB 800 METERS 06 2:00 4.0 SECONDS

RELATIVE CONCENTRATION IN COUNTS PER YEAR SECONDS

SECONDS	D I R E C T I O N					F R O M S O U R C E A N D					E L E V A T I O N				
AFTER	0.8M	1.5M	4.6M	10.7M	21.3M	0.8M	1.5M	4.6M	10.7M	21.3M	0.8M	1.5M	4.6M	10.7M	21.3M
618.2	0	0	0	0	0	12	0	0	0	0	0	0	1	0	
623.0	0	1	0	1	0	3	0	0	0	0	0	0	3	0	
627.8	0	0	0	0	18	0	0	0	0	0	1	0	0	0	
632.6	0	0	0	0	0	0	12	0	0	0	0	0	0	0	
637.4	0	0	0	0	0	0	0	0	0	0	0	1	0	0	
642.2	0	0	0	0	0	6	0	0	0	0	0	0	0	0	
647.0	10	0	3	0	0	6	0	0	0	0	0	0	6	0	
651.8	0	0	1	0	0	0	0	3	0	0	0	0	0	1	
656.6	0	0	0	6	0	14	0	1	0	0	0	0	0	0	
661.4	0	0	0	0	0	0	0	0	0	0	3	1	0	0	
SUMS	38	22	13	35	42	70	24	43	10	63	4251	3342	3272	3767	627

8-112

TEST DISTANCE FROM SOURCE OFF REL SE TIME DATA ACCUMULATION INCREMENT TOWER
 P8 800 METERS 06 2: 0 PST 4.8 SECONDS

RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS

SECONDS AFTER RELEASE	D I R E C T I O N D E G R E E S					F R O M S O U R C E D E G R E E S					E L E V A T I O N D E G R E E S				
	0.8M	1.5M	4M	10.7M	21.3M	0.8M	1.5M	4.6M	10.7M	21.3M	0.8M	1.5M	4.6M	10.7M	21.3M
704.0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	1
708.8	0	0	0	0	0	6	0	22	0	0	3	0	0	0	0
713.6	0	0	0	0	0	16	6	1	1	0	0	0	0	0	0
716.4	0	0	0	0	0	10	6	3	0	0	0	0	0	0	0
723.2	0	0	0	0	1	18	8	0	3	1	3	0	0	6	0
726.0	0	0	0	1	0	0	10	1	0	0	0	0	0	0	0
732.8	0	0	0	0	0	10	0	3	0	0	8	0	0	0	0
737.6	0	1	0	0	0	0	3	12	0	0	0	0	0	0	3
742.4	3	0	0	0	0	18	0	0	0	0	0	0	0	0	0
747.2	0	0	0	6	0	1	24	14	1	0	12	0	0	0	0
752.0	0	0	0	0	0	10	3	8	6	0	0	0	0	0	0
756.8	3	0	0	0	0	0	14	3	0	0	0	0	0	0	0
761.6	0	0	0	0	0	37	0	1	0	0	0	0	0	0	0
766.4	0	0	0	3	0	6	6	0	1	0	0	0	0	6	0
771.2	0	0	10	0	0	22	10	1	0	1	0	0	0	0	0
776.0	0	0	0	0	8	14	12	1	0	0	0	0	0	0	0
780.8	3	0	0	0	0	12	8	10	0	0	0	0	0	1	0
785.6	0	0	0	0	0	10	1	1	0	1	0	0	0	0	0

B-113

TEST PB DISTANCE FROM SOURCE 300 METERS PUFF RELEASE TIME .0602:00 PST DATA ACCUMULATION INCREMENT 4.8 SECONDS TOWER

RELATIVE CONCENTRATION IN COUNTS PER TEN SECONDS

SECONDS AFTER RELEASE	D I R E C T I O N F R O M S O U R C E A N D					E L E V A T I O N									
	0.8M	1.5M	4.6M	10.7M	21.3M	0.8M	1.5M	4.6M	10.7M	21.3M					
790.4	0	0	0	0	0	0	3	0	0	0	10	0	0	0	0
795.2	0	0	0	0	0	16	0	0	0	0	0	0	1	0	0
800.0	0	0	0	0	0	6	6	0	3	0	8	0	0	0	0
804.8	0	0	0	0	0	14	0	3	0	10	0	0	0	0	0
809.6	0	0	0	0	6	24	14	12	0	0	0	0	0	0	0
814.4	0	0	0	0	0	10	16	1	1	0	0	0	0	0	0
819.2	0	0	0	1	1	10	10	1	0	3	0	0	0	0	0
824.0	0	0	1	0	0	14	18	0	0	6	1	0	0	0	0
828.8	0	0	0	16	0	0	3	0	0	0	0	0	0	0	0
833.6	0	0	0	0	0	0	3	0	1	0	1	0	0	0	0
838.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
843.2	0	0	0	0	6	6	1	0	1	3	8	0	0	0	0
SUMS	9	1	11	27	28	290	185	98	18	28	54	0	1	13	4

END OF 85 KH PUFF REPORT

TEST CL DISTANCE FROM SOURCE PLUME RELEASE PERIOD DATA ACCUMULATION INCREMENT START OF DATA STORAGE GROUND LEVEL (1.5 M)
 200 METERS 0000:00 TO 0015:28 PST 38.4 SECONDS 0002:05 PST

RELATIVE CONCENTRATION IN COUNTS PER SECOND

		D I R E C T I O N										F R O M S O U R C E ,						D E G R E E S	
		A T 1 . 5					M E T E R					E L E V A T I O N							
094	096	098	100	102	104	106	108	110	112	114	116	118	120	122	124	126	128	130	132
.0	.0	.0	.3	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
.4	6.8	29.6	14.5	9.0	5.4	3.9	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9.2	56.9	84.0	52.2	44.4	13.3	7.3	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
55.4	111.4	150.9	109.3	71.3	34.3	15.1	5.3	1.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61.7	133.8	154.8	180.9	108.8	75.2	57.7	34.3	4.8	.9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
143.4	165.3	182.2	175.7	126.2	70.7	52.8	24.4	32.2	9.9	2.9	.3	.0	.0	.0	.0	.0	.0	.0	.0
198.6	191.0	222.8	142.3	130.9	92.9	82.4	95.5	53.3	13.9	3.5	.4	.0	.0	.0	.0	.0	.0	.0	.0
175.7	181.4	168.6	156.4	185.1	239.0	204.6	140.5	69.2	23.2	1.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
150.9	127.5	147.0	196.0	305.4	297.6	223.9	144.2	65.5	18.2	1.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
116.8	131.1	237.1	354.8	536.6	305.4	206.7	121.5	38.7	11.4	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0
142.6	206.4	334.0	406.9	393.9	300.2	152.0	72.6	12.4	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
185.8	206.7	362.7	542.3	417.3	276.7	163.2	48.6	2.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
115.8	161.9	399.1	511.1	490.3	390.2	100.4	29.8	5.5	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
90.3	212.7	360.1	479.8	461.6	297.6	155.1	71.5	46.5	21.5	2.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
62.4	141.3	248.3	399.1	396.5	268.9	203.3	220.5	204.1	68.4	5.9	.5	1.3	.0	.4	.0	.0	.0	.0	.0
49.4	94.4	161.4	268.9	266.3	256.9	249.9	331.4	276.7	79.6	17.0	2.1	.8	.2	1.7	.0	.0	.0	.0	.0
24.6	47.6	93.9	150.9	181.7	200.4	334.0	404.3	263.7	125.4	14.6	5.2	.1	.5	2.4	.0	.0	.0	.0	.0
9.1	56.4	55.6	105.9	110.8	186.1	328.8	518.9	396.5	118.9	43.4	7.6	.8	.1	2.9	.0	.0	.0	.0	.0
3.8	16.3	28.5	57.7	65.8	121.0	292.3	586.6	419.9	124.6	18.6	2.4	.3	.2	3.0	.0	.0	.0	.0	.0
1.5	10.1	20.6	30.1	39.7	85.1	195.5	511.1	539.7	160.1	39.2	13.4	6.0	.1	1.5	.0	.0	.0	.0	.0

B-115

.0
.0
.0
.0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0

TEST DISTANCE FROM SOURCE PLUME RELEASE PERIOD D.T. ACCUMULATION INCREMENT COUNT OF DATA STORAGE GROUND LEVEL (1.5 M)
 CL 800 METERS 0000:00 TO 0015:28 PST 38.4 SECONDS 0002:05 PST

RELATIVE CONCENTRATION IN COUNT PER SECOND

		D I R E C T I O N F R O M S O U R C E , D E G R E E S																	
		A T 1 5 N E T E R E L E V T I O N																	
094	096	098	100	102	104	106	108	110	112	114	116	118	120	122	124	126	128	130	132
	-1															-1			
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	.1	.9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	1.1	1.6	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.6	1.9	3.1	3.0	1.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.5	2.3	3.4	5.1	4.9	2.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
.0	.0	.0	.4	2.9	4.6	6.9	6.7	5.2	2.8	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
.0	.0	.3	2.1	6.5	6.6	12.4	10.7	6.8	2.7	.0	.0	.0	.0	.0	9.7	.0	.0	.0	.0
.0	.0	2.8	4.4	9.6	12.2	14.6	11.7	8.5	3.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
.0	.0	6.2	9.2	15.1	14.3	18.2	14.5	9.6	1.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
.7	.0	9.2	12.1	17.9	18.1	25.4	18.0	5.9	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1.8	.0	12.6	13.6	22.1	23.8	32.2	16.9	3.9	.3	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0
3.1	.0	14.3	17.1	31.1	29.1	28.0	11.7	4.3	.9	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0

B-118

.7	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

TEST
C1

DISTANCE FROM SOURCE
800 METERS

PLUME RELEASE PERIOD
0000:00 TO 0015:28 PST

DATA ACCUMULATION INCREMENT
38.4 SECONDS

START OF DATA STORAGE
0002:05 PST

RELATIVE CONCENTRATION IN COUNIS PER SECOND

AZIMUTH	098					114					130				
HEIGHT METERS	.8	1.5	4.6	10.6	21.0	.8	1.5	4.6	10.6	21.0	.8	1.5	4.6	10.6	21.0
-1															-1
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.6	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.5	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.8	2.8	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	1.2	3.9	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	.4	.0	2.1	6.8	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	.1	.1	1.9	7.7	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	.2	2.1	6.1	.0	.0	.0	.0	.0	.0
.0	.3	.1	.0	.0	.0	.4	.0	3.1	6.7	.0	.0	.0	.0	.0	.0
.0	2.8	2.6	.0	.0	.0	.0	.0	.0	.8	.0	.0	.0	.0	.0	.0
.0	6.2	3.8	.0	.0	.0	.0	.0	.0	.9	.0	.0	.0	.0	.0	.0
.0	9.2	6.5	.0	.0	.0	.0	.0	.0	3.7	.0	.0	.0	.0	.0	.0
.0	12.8	10.3	.0	.0	.0	.0	.0	1.4	3.6	.0	.0	.0	.0	.0	.0

TEST C2 DISTANCE FROM SOURCE 200 METERS PLUME RELEASE PERIOD 0801:50 TO 0816:55 PST DATA ACCUMULATION INCREMENT 38.4 SECONDS START OF DATA STORAGE 0803:23 PST GROUND LEVEL (1.5 M)

RELATIVE CONCENTRATION IN COUNTS PER SECOND

		D I R E C T I O N F R O M S O U R C E , D E G R E E S																	
		A T 1 5 M E T E R S E L E V A T I O N																	
094	096	098	100	102	104	106	108	110	112	114	116	118	120	122	124	126	128	130	132
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.3	10.2	25.5	42.6	34.2	23.1
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	3.1	8.6	13.4	23.6	25.4	23.5	21.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.2	2.4	10.3	27.7	25.6	26.7	30.9	25.4	17.4
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.3	11.9	15.9	18.6	20.6	36.1	23.6	10.8
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	6.0	31.3	33.4	25.6	28.6	29.4	22.3	21.5	14.7	17.4
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	8.1	23.7	9.3	21.6	24.6	16.4	10.0	7.0	1.2
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	9.1	17.2	23.3	22.2	25.0	26.7	42.5
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.7	5.9	16.0	26.0	30.7	44.1	32.6
.0	.0	.0	.0	.0	.0	.0	.0	.0	.5	2.9	2.5	7.7	26.1	29.8	29.7	32.9	38.3	49.4	55.4
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.2	3.6	13.1	41.6	44.0	33.5	28.1	18.1	9.9
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.9	5.8	16.4	23.6	26.5	19.3
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	3.7	17.7	44.4	52.2
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.5	1.1	1.2	9.4	42.0	34.0	17.3
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4	3.9	3.9	13.1	19.6	21.2	31.3	59.2	20.1	4.7
.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	2.4	10.6	21.0	33.6	28.4	20.0	13.6	9.8	11.6	5.5
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.2	16.5	35.6	38.4	37.6	33.7	19.1	23.6	19.6
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.6	4.2	13.3	23.7	31.2	28.3	28.2	35.2	25.6
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	1.5	6.9	10.7	16.5	24.1	34.8	43.0	34.5
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.7	10.7	17.1	27.2	26.5	27.5	39.2	40.8	21.0	5.1
.0	.0	.0	.0	.0	.0	.0	.0	.0	.5	3.5	9.6	21.8	40.0	48.3	39.7	26.3	23.2	18.0	15.5

TEST C2 DISTANCE FROM SOURCE 800 METERS PLUME RELEASE PERIOD 0801:50 TO 0816:55 PST DATA ACCUMULATION INCREMENT 38.4 SECONDS START OF DATA STORAGE 0803:23 PST GROUND LEVEL (1.5 M)

RELATIVE CONCENTRATION IN COUNTS PER SECOND

		D I R E C T I O N F R O M S O U R C E , D E G R E E S																	
		A T 1 5 M E T E R E L E V A T I O N																	
094	096	098	100	102	104	106	108	110	112	114	6	118	120	122	124	126	128	130	132
	-1																		
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.2	1.6	1.8
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.1	1.1	3.4	.9
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	3.5	3.8	2.3	.3
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4	.0	.1	.8	1.9	2.9	.7	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	3.4	3.0	1.2	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	2.8	2.6	2.5	.0	.3
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	2.3	3.1	2.0	1.1	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4	2.0	2.9	2.3	1.4
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	1.4	3.0	1.5	.4
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.3	3.0	5.1	3.3	.1
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	2.7	4.9	4.5	.5
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.9	1.6	2.8	.4
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.0	.8	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.7	.7	1.2	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	4.5	2.2	1.3	.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.8	3.6	3.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	3.8	3.8	.7	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.5	.7	2.5	2.6	.3	.0

B-129

TEST C2 DISTANCE FROM SOURCE 200 METERS PLUME RELEASE PERIOD 0801:50 TO 0816:55 PST DATA ACCUMULATION INCREMENT 38.4 SECONDS START OF DATA STORAGE 0803:23 PST TOWER

RELATIVE CONCENTRATION IN COUNTS PER SECOND

AZIMUTH	098					114					130				
	.8	1.5	3.0	6.1	10.6	.8	1.5	3.0	6.1	10.6	.8	1.5	3.0	6.1	10.6
.0	.0	.0	.8	.0	.0	.0	.0	.0	.0	.0	34.6	34.2	28.7	19.4	17.3
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	23.3	23.5	20.7	10.2	16.1
.0	.0	.0	.6	.0	.0	.0	.0	.0	.0	.0	27.4	25.4	27.6	18.4	21.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	20.6	23.6	22.8	29.6	30.8
.0	.0	.0	.0	.0	.0	5.5	6.0	7.3	10.6	11.0	17.9	14.7	13.6	4.8	9.3
.0	.0	.0	.0	.0	.0	.5	.3	.0	.0	.0	5.7	7.0	7.6	4.9	5.7
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	26.5	26.7	24.0	6.9	14.4
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	46.8	44.1	45.1	31.9	39.8
.0	.0	.0	.0	.0	.0	2.5	2.9	2.3	2.5	1.6	49.5	49.4	45.1	14.8	28.4
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	16.7	18.1	19.5	12.0	16.8
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	25.4	26.5	25.4	15.0	21.6
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	44.2	44.4	42.4	33.7	39.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	35.5	34.0	31.6	12.3	21.9
.0	.0	.0	.0	.0	.0	.0	.4	2.2	3.1	9.0	20.1	20.1	23.0	18.4	24.2
.0	.0	.0	.0	.0	.0	2.9	2.4	3.1	4.6	3.8	12.8	11.6	9.6	2.8	4.9
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	22.7	23.6	21.4	14.5	15.7
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	32.6	35.2	34.9	22.9	30.4
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	44.9	43.0	42.0	26.2	30.5
.0	.0	.0	.0	.0	.0	2.2	1.7	.6	.5	2.9	19.1	21.0	20.7	11.2	14.9

TEST C2	DISTANCE FROM SOURCE 200 METERS					PLUME RELEASE PERIOD 0801:50 TO 0816:55 PST					DATA ACCUMULATION INCREMENT 38.4 SECONDS					START OF DATA STORAGE 0803:23 PST					TOWER
RELATIVE CONCENTRATION IN COUNTS PER SECOND																					
AZIMUTH	098					114					130										
HEIGHT METERS	.8	1.5	3.0	6.1	10.6	.8	1.5	3.0	6.1	10.6	.8	1.5	3.0	6.1	10.6						
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	34.6	34.2	28.7	19.4	17.3						
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	23.3	23.5	20.7	10.2	16.1						
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	27.4	25.4	27.6	18.4	21.0						
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	20.6	23.6	22.8	29.6	30.8						
.0	.0	.0	.0	.0	.0	5.5	6.0	7.3	10.6	11.0	17.9	14.7	13.6	4.8	9.3						
.0	.0	.0	.0	.0	.0	.3	.3	.0	.0	.0	5.7	7.0	7.6	4.9	5.7						
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	26.5	26.7	24.0	6.9	14.4						
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	46.8	44.1	45.1	31.9	39.8						
.0	.0	.0	.0	.0	.0	2.5	2.9	2.3	2.5	1.6	49.5	49.4	45.1	14.8	28.4						
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	16.7	18.1	19.5	12.0	16.8						
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	25.4	26.5	25.4	15.0	21.6						
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	44.2	44.4	42.4	33.7	39.0						
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	35.5	34.0	31.6	12.3	21.9						
.0	.0	.0	.0	.0	.0	.0	.4	2.2	3.1	4.0	20.1	20.1	23.0	18.4	24.2						
.0	.0	.0	.0	.0	.0	2.9	2.4	3.1	4.6	3.8	12.8	11.6	9.6	2.8	4.9						
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	22.7	23.6	21.4	14.5	15.7						
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	32.6	35.2	34.9	22.9	30.4						
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	44.9	43.0	42.0	26.2	30.5						
.0	.0	.0	.0	.0	.0	2.2	1.7	.6	1.5	2.9	19.1	21.0	20.7	11.2	14.9						

TEST C2 DISTANCE FROM SOURCE 800 METERS PLUME RELEASE PERIOD 0801:50 TO 0816:55 PST DATA ACCUMULATION INCREMENT 38.4 SECONDS START OF DATA STORAGE 0803:23 PST TOWER

RELATIVE CONCENTRATION IN COUNTS PER SECOND

AZIMUTH	098					114					130				
	.8	1.5	4.6	10.6	21.0	.8	1.5	4.6	10.6	21.0	.8	1.5	4.6	10.6	21.0
HEIGHT METERS															
-1															
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.4	1.6	1.5	3.2	2.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	3.7	3.4	3.0	4.0	2.9
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	3.5	2.3	2.1	1.0	.4
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.3	.7	.6	1.2	1.4
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.1	1.2	.8	.9	.5
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.2	1.1	.5	1.1	.6
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	3.6	2.3	2.6	2.9	1.6
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.3	1.5	1.3	1.8	2.3
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	3.4	3.3	3.3	3.0	2.7
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	5.4	4.5	4.1	3.1	2.1
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.1	2.8	2.3	1.5	.6
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

TEST 03	DISTANCE FROM SOURCE 200 METERS		PLUME RELEASE PERIOD 1101:25 TO 1115:40 PST					DATA ACCUMULATION INTERVAL 38.4 S CORDS					START OF DATA STORAGE 1101:21 PST				GROUND L VEL (1.5 M)		
RELATIVE CONCENTRATION IN COUNTS PER SECOND																			
		D I R E C T I O N					F R O M					S O U R C E				D E G R E E S			
		A T 1 . 5					N E T W O R K					E L E V A T I O N				T I C K S			
094	096	098	100	102	104	106	108	110	112	114	116	118	120	122	124	126	128	130	132
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.5	.5	2.4	3.4	2.7	1.3	1.1	.9
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	2.2	5.4	16.0	26.6	29.4	29.7	37.2
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.5	11.8	21.9	39.6	67.7
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	2.6	10.8	21.9	35.4	43.5
.0	.0	.0	.0	.0	.0	.0	.0	.0	3.4	12.8	18.9	35.4	52.9	60.9	51.3	38.3	20.1	9.3	1.9
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.9	4.5	8.7	29.7	46.6	44.8	43.2	44.3	17.0	5.8
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.5	1.1	4.2	14.4	28.4	33.3	40.1	54.7	45.0	31.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.2	8.6	25.0	58.6	50.2	32.0	15.9	11.0	1.1	.0
.0	.0	.0	.0	.0	.0	.0	.0	.1	7.9	23.9	39.8	60.1	67.2	47.4	30.2	20.7	5.8	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4	13.6	61.7	85.7	53.9	14.1	1.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	6.3	40.1	61.4	64.6	35.1	20.1	14.8	6.7
.0	.0	.0	.0	.0	.0	.0	1.8	3.6	10.4	22.5	26.6	27.9	28.4	30.7	24.1	18.5	13.5	14.7	20.2
.0	.0	.0	4.9	30.5	44.3	39.8	41.7	38.3	25.0	18.5	9.4	6.2	3.2	.2	.0	.0	.0	.0	.0
.0	.0	.2	5.9	17.6	23.8	27.9	18.0	18.2	23.7	30.7	14.6	1.1	.0	.0	.0	.0	.0	.0	.0
.0	2.0	6.2	14.1	20.9	34.4	53.6	51.6	29.2	19.2	8.7	1.8	.0	.0	.0	.0	.0	.0	.0	.0
.6	5.8	20.3	24.7	33.1	38.8	60.4	89.3	86.7	71.3	37.0	4.9	.0	.0	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	1.1	6.9	29.7	44.8	59.6	71.6	71.6	52.3	21.5	17.6	3.3	.2	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.9	3.0	17.8	24.7	24.5	13.5	12.6	15.1	17.6	16.7	8.7
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	2.5	4.2	25.8	39.1	52.9	53.6	42.7
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	3.0	22.8	38.0	46.6

TEST C3 DISTANCE FROM SOURCE 800 METERS PLUME RELEASE PERIOD 1101:25 TO 1115:40 PST DATA ACCUMULATION INCREMENT 38.4 SECONDS START OF DATA STORAGE 1101:21 PST GROUND LEVEL (1.5 M)

RELATIVE CONCENTRATION IN COUNTS PER SECOND

		D I R E C T I O N F R O M S O U R C E , D E G R E E S																	
		A 1 1 . 5 K E P L R E L E V A T I O N																	
094	096	098	100	102	104	106	108	110	112	114	6	118	120	122	124	126	128	130	132
									-1										
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.6	2.0	2.5
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.5	2.4	3.6	2.5
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.9	4.2	4.8
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.2	.9	2.8	2.5	1.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.6	.9	5.0	3.3	1.1	.7	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.6	2.5	3.6	5.0	2.4	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.6	2.5	3.6	5.0	2.4	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.7	4.9	4.7	5.0	3.0	2.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.5	3.8	4.5	5.2	.8	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.2	4.3	2.0	.5	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	1.5	.8	1.3	1.5	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	1.7	1.9	2.2	1.3	.0
.0	.0	.0	.0	.0	.0	.2	.6	.3	.0	1.2	.6	.4	.5	.3	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.1	1.1	2.6	3.2	.0	.8	.0	.0	.0	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	1.0	4.4	6.1	1.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	5.0	5.5	5.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	3.0	2.3	1.3	.0	.5	.8	.0	.0	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	3.6	2.4	1.3	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.7	1.3	3.2	2.5	.0	.0

B-137

TEST C3 DISTANCE FROM SOURCE 200 METERS PLUME RELEASE PERIOD 1101:25 TO 1115:40 PST DATA ACCUMULATION INCREMENT 38.4 SECONDS START OF DATA STORAGE 1101:21 PST TOWER

RELATIVE CONCENTRATION IN COUNTS PER SECOND

AZIMUTH	098					114					130				
	.8	1.5	3.0	6.1	10.6	.8	1.5	3.0	6.1	10.6	.8	1.5	3.0	6.1	10.6
.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.5	1.1	2.2	3.4	4.6
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	29.9	29.7	29.9	20.0	27.4
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	37.7	39.6	39.5	32.0	42.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	36.1	35.4	32.9	17.7	28.4
.0	.0	.0	.0	.0	.0	10.8	12.8	10.6	9.2	3.6	8.7	9.3	8.5	2.5	4.8
.0	.0	.0	.0	.0	.0	1.8	.9	.5	.6	.8	18.5	17.0	18.4	12.5	15.8
.0	.0	.0	.0	.0	.0	.7	.5	1.0	.5	.0	41.5	45.0	45.4	18.0	33.9
.0	.0	.0	.0	.0	.0	1.5	2.2	2.4	2.4	2.9	1.2	1.1	1.7	.0	.4
.0	.0	.0	.0	.0	.0	24.4	23.9	24.5	22.8	16.0	.2	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	2.6	.6
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	13.4	14.8	16.3	12.7	16.0
.0	.0	.0	.0	.0	.0	25.3	22.5	18.7	18.1	11.0	16.5	14.7	11.9	1.6	7.3
.0	.0	.0	.0	1.1	17.6	18.5	18.9	17.6	12.3	.0	.0	.0	.0	.0	.0
.0	.2	.4	1.8	1.0	27.4	30.6	30.3	24.3	22.1	.0	.0	.0	.0	.0	.0
5.9	6.2	9.9	8.9	7.3	9.4	8.7	9.1	10.8	6.8	.0	.0	.0	.0	.0	.0
20.8	20.3	16.0	8.9	2.6	34.7	36.9	38.0	30.1	18.6	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	77.3	71.6	65.6	40.9	21.6	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	3.7	3.0	2.4	4.9	1.8	13.9	16.7	18.9	18.7	18.3	
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	49.9	53.6	54.3	32.2	45.8	

B-139

TEST C3 DISTANCE FROM SOURCE 800 METERS PLUM RELEASE PERIOD 1101:25 TO 1115:40 PST DATA ACCUMULATION INTERVAL 30.4 SECONDS DATA COLLECTION PERIOD 1101:21 PST TOWER

RELATIVE CONCENTRATION IN COUNTERS PER SECOND

AZIMUTH	098					114					130				
	.8	1.5	4.6	10.6	21.0	.8	1.5	4.6	10.6	21.0	.8	1.5	4.6	10.6	21.0
HEIGHT METERS															
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.9	2.0	2.3	1.7	.2
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	3.9	3.6	4.1	3.5	III
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	5.4	4.2	4.3	4.8	2.2
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	4.1	2.5	2.4	1.1	0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	4.2	2.4	2.6	4.1	4.1
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.2	2.0	1.8	1.7	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
.0	.0	7.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.7	.2
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.7	.0	.0	.3	.0
.0	.0	.0	.0	.0	.0	1.1	1.2	2.0	III	.1	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	1.3	.8	.5	.1	.4	.2	.0	.0	.0	0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	1.1	.5	1.1	1.9	1.9	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	.4	.2	.0	.0	.0	.0	.0	.0	.0	.0

B-141

TEST
04

DISTANCE FROM SOURCE
200 METERS

PLU REL AS. PERIOD
1104:30 TO 1114:28 PST

DATA ACCUMULATION INTERVAL
38.4 SECONDS

NO. OF DATA STORAGE
1104:54 PST

GROUND LEVEL (1.5 M)

RELATIVE CONCENTRATION IN COUNTS PER SECOND

		D I R E C T I O N F R O M S O U R C E ,																D E G R E E S	
		A T 1 . 5 M E T E R E L E V A T I O N																	
094	096	098	100	102	104	106	108	110	112	114	116	118	120	122	124	126	128	130	132
.0	.0	.0	.0	.0	.0	.0	.0	.0	2.8	6.3	7.2	8.6	18.1	22.1	26.4	32.2	29.9	38.1	39.7
.0	.0	.0	.0	.0	.0	4.7	26.8	34.0	46.1	87.0	149.8	167.5	149.0	114.3	100.6	73.2	65.9	70.9	60.2
.0	.0	.0	.0	.0	.0	3.1	21.9	63.7	162.9	146.5	104.2	60.2	61.7	63.8	33.1	9.1	1.6	.5	.4
.0	.0	.0	.0	.0	.0	.0	.1	4.3	14.5	44.1	59.0	115.3	118.8	102.7	87.3	63.9	33.5	31.8	19.3
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	5.1	32.3	37.9	73.8	98.2	62.8	26.5	24.1	9.8	4.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.6	7.3	11.5	15.0	31.2	58.9	84.2	80.5	72.6	55.1	31.0
.0	.0	.0	.0	.0	.0	.0	.2	6.4	42.8	52.3	57.3	77.8	85.8	98.2	108.8	82.4	95.7	33.4	8.2
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.6	1.3	4.4	6.2	9.6	7.8	15.1	15.3	25.0	12.4
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.9	3.4	10.3	20.9	26.2	26.4	26.9	25.3
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	3.0	7.7	11.0	15.0	11.1
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	3.3	4.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.9	16.7	24.7	44.5	42.1
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.9	6.5	21.6	26.7
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.5	2.8	6.4	5.5	4.0	7.8	4.1	1.0	1.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.5	7.0	6.5	10.8	17.2	24.5	18.8	7.7	6.7	5.4
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

B-143

TEST
C4

DISTANCE FROM SOURCE
800 METERS

PLUME RELEASE PERIOD
1104:30 TO 1114:28 PST

DATA ACCUMULATION INCREMENT
38.4 SECONDS

START OF DATA STORAGE
1104:54 PST

RELATIVE CONCENTRATION IN COUNTS PER SECOND

AZIMUTH	098					114					130				
	.8	1.5	4.6	10.6	21.0	.8	1.5	4.6	10.6	21.0	.8	1.5	4.6	10.6	21.0
HEIGHT METERS	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4	.0	.0
	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0
	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4	.0	.0
	.0	.0	.0	.0	.0	.0	.0	.3	.7	.5	.2	.0	.9	.0	.0
	.0	.0	.0	.0	.0	.0	3.6	2.6	2.9	2.3	.7	.1	1.3	.0	.0
	.0	.0	.0	.0	.0	.0	.4	.0	.4	1.6	.0	.0	.7	.1	.0
	.0	.0	.0	.0	.0	.0	1.6	1.8	1.1	1.2	.4	.2	1.9	1.5	.9
	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.5	1.1	2.7	1.0	1.4
	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.7	.0	.0
	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.3	1.0	2.0	1.2	1.1
	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.6	.0	.0
	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.6	.0	.0
	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4	.0	.0
	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.5	.0	.0
	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4	.0	.0
	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.5	.0	.0
	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.9	.0	.0
	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0
	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4	.0	.0

B-146

TEST C5	DISTANCE FROM SOURCE 200 METERS		PLUME RELEASE PERIOD 0512:22 TO 0532:13 PST					DATA ACCUMULATION INCREMENT 38.4 SECONDS					START OF DATA STORAGE 0513:04 PST			GROUND LEVEL (1.5 M)													
RELATIVE CONCENTRATION IN COUNTS PER SECOND																													
D I R E C T I O N										F R O M S O U R C E										D E G R E E S									
A T 1 . 5					F M E T E R					E L E V					A T I O N					E E S									
094	096	098	100	102	104	106	108	110	112	114	116	118	120	122	124	126	128	130	132										
.0	.0	.0	.0	.4	4.0	1.6	.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0										
.0	.0	.0	2.1	8.6	20.7	26.6	19.9	24.5	22.5	12.3	5.1	3.5	1.3	.0	.0	.0	.0	.0	.0										
.0	.2	10.0	25.7	54.6	62.9	36.1	19.2	12.7	4.7	.9	.3	.0	.0	.0	.0	.0	.0	.0	.0										
1.5	4.4	15.1	41.2	109.5	111.8	47.3	23.0	13.2	1.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0										
.0	.0	3.2	18.9	55.9	96.2	44.9	15.5	5.9	1.9	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0										
B-147	.0	.0	7.0	28.0	78.7	79.0	79.7	25.3	6.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0										
.0	.0	.0	5.2	40.0	82.8	67.8	35.7	8.8	1.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0										
.0	.9	8.5	20.4	61.0	60.6	24.3	20.6	1.8	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0										
.0	5.3	26.8	70.2	88.3	81.0	52.6	22.1	10.7	4.5	.8	.0	.0	.0	.0	.0	.0	.0	.0	.0										
.0	.2	20.4	60.5	86.0	89.4	49.4	25.9	18.2	4.5	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0										
.0	.1	7.7	25.5	65.6	97.5	94.2	75.8	48.1	15.9	2.4	.0	.0	.0	.0	.0	.0	.0	.0	.0										
.0	.0	3.0	28.0	89.7	139.9	95.3	55.3	7.8	.9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0										
.0	6.1	20.2	26.3	79.1	145.2	103.5	72.5	33.1	5.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0										
.0	.0	.2	13.5	50.2	96.3	160.4	170.0	91.9	24.0	12.7	6.4	.0	.0	.1	.0	.0	.0	.0	.0										
.0	.0	.0	.0	2.7	8.2	50.4	99.4	98.5	110.3	85.5	26.0	6.7	1.1	.0	.0	.0	.0	.0	.0										
.0	.0	.0	.0	.0	.7	8.4	20.4	51.3	98.1	99.9	76.7	32.2	4.2	.0	.0	.0	.0	.0	.0										
.0	.0	.0	.0	.0	.0	.2	13.8	65.7	121.8	117.8	47.9	7.5	.1	.0	.0	.0	.0	.0	.0										
.0	.0	.0	.0	.0	.0	.0	5.5	30.3	58.9	102.3	69.9	22.2	20.7	6.1	2.6	.0	.0	.0	.0										
.0	.0	.0	.0	.0	.0	.4	4.1	16.3	42.7	81.8	94.0	65.0	56.3	50.7	13.7	.4	.0	.0	.0										
.0	.0	.0	.0	.0	.0	1.1	10.7	24.9	77.6	112.3	93.0	39.8	19.3	3.9	.8	.0	.0	.0	.0										

.0	.0	.0	.0	.0	.0	.0	.6	10.8	40.6	68.5	115.6	97.5	42.6	22.5	10.9	5.3	2.6	.1	.0
.0	.0	.0	.0	.0	.0	.0	.0	2.3	13.4	37.3	67.7	106.3	98.0	49.1	17.1	8.5	3.3	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.9	9.1	37.1	104.4	78.0	27.3	11.8	4.6	.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	11.5	45.3	83.1	91.7	79.8	48.4	10.4	1.5	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.6	4.0	18.2	48.1	68.9	101.2	79.1	45.4	18.9	2.1	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	1.7	11.9	25.7	38.9	67.5	85.0	76.5	41.6	13.9	4.5	.0
.0	.0	.0	.0	.0	.0	.0	.0	.2	4.3	20.8	54.2	76.6	93.9	62.7	49.1	28.4	5.3	.0	.0
.0	.0	.0	.0	.0	.0	.0	1.3	5.3	16.8	35.4	66.3	81.1	58.9	31.5	7.1	1.8	.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	3.2	21.2	43.4	67.5	64.6	43.5	25.5	4.1	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	7.6	62.2	116.2	116.6	75.9	48.6	17.0	6.3	2.3	1.3	.0	.0	.0	.0
.0	.0	.0	.0	.0	2.1	17.4	78.8	95.9	107.7	109.9	76.3	21.2	12.8	4.8	.5	.0	.0	.0	.0
.0	.0	.0	.0	.1	1.7	4.7	15.0	39.6	73.3	84.8	54.8	27.5	15.1	4.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.7	4.6	20.6	23.2	29.2	15.8	6.7	2.7	.2	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.1	.0	.6	.7	1.2	.7	.2	.0	.0	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

B-148

TEST C5 DISTANCE FROM SOURCE FLUID RELEASE PERIOD DATA ACQUISITION TIME PERIOD DATA ACQUISITION POINT TIME OF DAY TO END

ZOO METERS

0512:22 TO 0532:13 PST

38.4 SECONDS

0513:04 PST

RELATIVE CONCENTRATION IN COUNTS PER SECOND

AZIMUTH	098					114					130				
	.8	1.5	3.0	6.1	10.6	.8	1.5	3.0	6.1	10.6	.8	1.5	3.0	6.1	10.6
HEIGHT METERS	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0
	.0	.0	.0	.0	.0	11.5	12.3	12.5	9.9	9.2	.0	.0	.0	.0	.0
	7.7	10.0	17.5	13.6	4.6	1.2	.9	.9	.6	2.6	.0	.0	.0	.0	.0
	18.5	15.1	14.4	10.8	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	3.7	3.2	4.6	5.2	2.2	.5	.5	1.9	3.4	5.4	.0	.0	.0	.0	.0
	.2	.0	.1	.0	.0	.2	.0	.0	.8	3.5	.0	.0	.0	.0	.0
	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.5	.0	.0	.0	.0	.0
	8.3	8.5	10.5	15.1	11.4	.0	.0	.0	.7	1.1	.0	.0	.0	.0	.0
	27.8	26.8	26.7	7.2	.0	1.0	.8	1.3	1.5	1.2	.0	.0	.0	.0	.0
	23.2	20.4	18.9	4.8	.8	.4	.2	2.0	1.5	2.1	.0	.0	.0	.0	.0
	8.2	7.7	4.8	1.2	.0	1.7	2.4	1.9	.9	2.8	.0	.0	.0	.0	.0
	2.5	3.0	9.2	3.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
	18.6	20.2	21.4	00	.9	.0	.0	2.3	1.7	3.3	.0	.0	.0	.0	.0
	.6	.2	1.4	2.1	.3	12.3	12.7	15.6	19.5	11.2	.0	.0	.0	.0	.0
	.0	.0	.0	.0	.0	79.1	85.5	92.7	64.5	33.6	.0	.0	.0	.0	.0
	.0	.0	.0	.0	.0	94.5	99.9	106.5	92.8	61.9	.0	.0	.0	.0	.0
	.0	.0	.0	.0	.0	122.3	117.8	108.4	86.8	50.9	.0	.0	.0	.0	.0
	.0	.0	.0	.0	.0	104.1	102.3	99.7	94.6	67.5	.0	.0	.0	.0	.0
	.0	.0	.0	.0	.0	81.0	81.8	81.2	72.7	56.5	.0	.0	.0	.0	.0

B-151

TEST 05 DISTANCE FROM SOURCE 800 METERS PLUM RISE PERIOD 0512:22 TO 0532:13 PST DATA ACCUMULATION INTERVAL 38.4 SECONDS START OF DATA STORAGE 0513:04 PST TOWER

RELATIVE CONCENTRATION IN COUNTS PER SECOND

AZIMUTH	098					114					130				
	.8	1.5	4.6	10.6	21.0	.8	1.5	4.6	10.6	21.0	.8	1.5	4.6	10.6	21.0
.0	.0	.0	.4	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0
.0	.0	.0	.5	.0	.0	.0	.0	.0	.0	.9	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.7	.0	.0	.0	.0	.0
.0	.0	.0	.6	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0
.0	.0	.0	.5	.0	.0	.0	.0	.0	.0	.9	.0	.0	.0	.0	.0
.0	.0	.0	.4	.0	.0	.0	.0	.0	.0	.9	.0	.0	.0	.0	.0
.0	.0	.0	.6	.0	.0	.0	.0	.0	.0	1.1	.0	.0	.0	.0	.0
.0	.0	.0	.4	.0	.0	.0	.0	.0	.0	1.0	.0	.0	.0	.0	.0
.0	.0	.0	.3	.0	.0	.0	.0	.0	.0	.9	.0	.0	.0	.0	.0
.0	.0	.0	.4	.0	.0	.0	.0	.0	.0	.6	.0	.0	.0	.0	.0
.0	.0	1.0	.0	.0	.0	.0	.0	.0	.0	.7	.0	.0	.0	.0	.0
.4	.2	1.3	.3	.0	.0	.0	.0	.0	.0	.7	.0	.0	.0	.0	.0
.7	.8	1.6	.9	.0	.0	.0	.0	.0	.0	1.0	.0	.0	.0	.0	.0
.8	.3	1.6	.0	.0	.0	.0	.0	.0	.0	1.1	.0	.0	.0	.0	.0
.0	.1	1.1	.0	.0	.0	.0	.0	.0	.0	.7	.0	.0	.0	.0	.0
.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	2.8	.5	.0	.0	.0	.0
.0	.0	.8	.0	.0	.0	.0	.0	.0	1.6	9.9	.0	.0	.0	.0	.0
.0	.0	.5	.0	.0	.0	.9	.3	1.6	5.6	10.3	.0	.0	.0	.0	.0
.0	.0	.7	.0	.0	.0	6.6	6.1	7.8	8.3	7.1	.0	.0	.0	.0	.0

B-154

.0	.0	.4	.0	.0	12.1	10.7	12.6	11.9	3.6	.0	.0	.0	.0	.0
.0	.0	.4	.0	.0	15.4	9.9	10.2	5.4	1.7	.1	.0	.0	.0	.0
.0	.0	.5	.0	.0	9.7	6.5	6.5	3.3	2.0	.0	.0	.0	.0	.0
.0	.0	.2	.0	.0	5.6	4.0	3.4	1.2	1.2	.0	.0	.0	.0	.0
.0	.0	.1	.0	.0	4.6	3.3	2.2	.5	.6	.0	.0	.0	.0	.0
.0	.0	.4	.0	.0	.2	.5	.0	.0	.8	.0	.0	.0	.0	.0
.0	.0	.5	.0	.0	.0	.0	.0	.0	.5	.0	.0	.0	.0	.0
.0	.0	.5	.0	.0	.0	.0	.0	.0	1.1	.0	.0	.0	.0	.0
.0	.0	.7	.0	.0	.1	.0	.0	.0	.8	.0	.0	.0	.0	.0
.0	.0	.4	.0	.0	.1	.0	.0	.0	.3	.0	.0	.0	.0	.0
.0	.0	.4	.0	.0	.0	.0	.0	.0	.9	.0	.0	.0	.0	.0
.0	.0	.6	.0	.0	5.4	4.1	6.4	7.2	6.3	.0	.0	.0	.0	.0
.0	.0	.3	.0	.0	12.6	9.5	11.9	10.1	7.2	.0	.0	.0	.0	.0
.0	.0	.6	.0	.0	15.1	13.9	11.5	6.7	7.6	.0	.0	.0	.0	.0
.0	.0	.7	.0	.0	9.2	8.2	7.2	5.9	4.3	.0	.0	.0	.0	.0
.0	.0	.1	.0	.0	11.0	9.1	9.8	7.9	5.0	.0	.0	.0	.0	.0
.0	.0	.1	.0	.0	10.6	8.9	8.4	5.1	2.1	.0	.0	.0	.0	.0
.0	.0	.2	.0	.0	7.6	5.1	5.1	2.4	2.1	.0	.0	.0	.0	.0
.0	.0	.8	.0	.0	3.4	1.8	.9	.2	.7	.0	.0	.0	.0	.0
.0	.0	.7	.0	.0	1.3	.2	.3	.0	1.0	.0	.0	.0	.0	.0
.0	.0	.5	.0	.0	.0	.0	.0	.0	1.0	.0	.0	.0	.0	.0
.0	.0	.8	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0
.0	.0	.3	.0	.0	.0	.0	.0	.0	.7	.0	.0	.0	.0	.0
.0	.0	.7	.0	.0	.0	.0	.0	.0	.9	.0	.0	.0	.0	.0

DISTRIBUTIONNo. of
CopiesOFFSITE

1 AEC Chicago Patent Group
 G. H. Lee

176 AEC Division of Technical Information Extension

ONSITE - HANFORD

1 AEC Chicago Patent Group
 R. K. Sharp (Richland)

2 AEC RDT Site Representative
 P. G. Holsted

1 AEC Richland Operations Office
 C. L. Robinson

3 Battelle Memorial Institute

208 Battelle-Northwest
 E. L. Alpen
 C. E. Elderkin
 J. J. Fuquay
 J. D. Ludwick (10)
 P. W. Nickola (175)
 J. M. Nielsen
 J. V. Ramsdell, Jr. (10)
 C. L. Simpson
 N. A. Wogman
 Technical Information (5)
 Technical Publications (2)