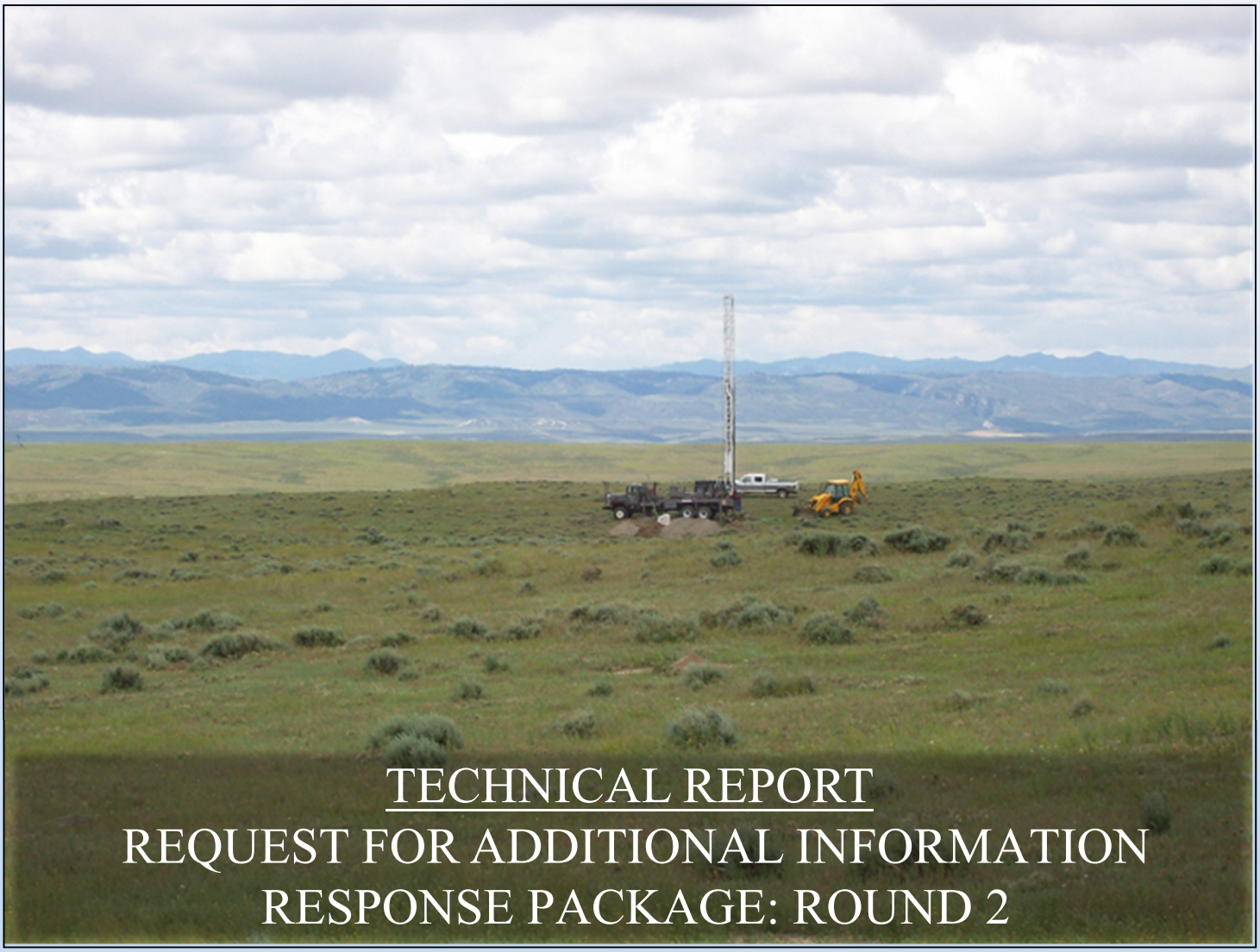
USNRC APPLICATION

SUA-1341 License Amendment
Ludeman Project
Converse County, WY



TECHNICAL REPORT
REQUEST FOR ADDITIONAL INFORMATION
RESPONSE PACKAGE: ROUND 2

June 2015

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TABLE OF CONTENTS

Water Resources 1
RAI-47 1
RAI-47 Response 1
RAI-48 3
RAI-48 Response 3
RAI-49 4
RAI-49 Response 4
RAI-57 6
RAI-57 Response 6
Operations 7
RAI-80 7
RAI-80 Response 7
RAI-83 12
RAI-83 Response 12
RAI-85 13
RAI-85 Response 13
RAI-88 18
RAI-88 Response 18
RAI-89 19
RAI-89 Response 19
RAI-90 22
RAI-90(a) Response 23
RAI-90(b) Response 27
Change of Design RAIs 29
Response 29

List of Tables

Table 5-1: Radiation Detectors 16
Table 5-2: MDAs for Air Sample and Contamination Control Detectors 17
Table 5-4: Elements of the Operational Environmental Monitoring Program 28

List of Figures

Figure 1: Air Sampler and Representative Wind Roses.....26

List of Appendices

Appendix A: Hydraulic Effects of Negley Subdivision Pumping on the Proposed Project
Appendix B: Change of Design Impact Matrix
Appendix C: Conceptual Pond Design Plan
Appendix D: Updated MILDOS Results
Appendix E: Baseline Gamma Survey Update

RAI Response Explanation

Uranium One is pleased to provide this Technical Report response package to the NRC staff's Request for Additional Information (RAI) in a letter dated December 18, 2014. Included in this package is each RAI followed by Uranium One's response. Any response which quotes specific existing application language will highlight that language in quotations. Specific text revisions or new additional language within the application will be highlighted in the color red. All responses which detail revisions or additional language to the application will clearly list the appropriate application location where those changes will be made.

Water Resources

RAI-1

Description of Deficiency

The responses provided for RAIs 47 and 48 are incomplete and require additional information to resolve the concerns. Acceptance criteria 1 of SRP Section 2.9.3 states that monitoring programs be established in compliance with Regulatory Guide 4.14 in order to establish a baseline. To meet the guidance of Regulatory Guide 4.14 two sets of samples will need to be collected. Presently the applicant has stated that:

"Uranium One collected single samples because there was insufficient rainfall snow melt to warrant a second sampling event thus surface water was ephemeral and did not indicate variability in water levels. The streams remained dry between sampling periods in the same year and therefore, would not result in transport of radionuclides in surface water that would have been absorbed or precipitated into sediments."

Formulation of RAI

The staff points out that the samples taken are baseline samples and are used to acknowledge the site conditions prior to the development of the facility. Not performing baseline sampling in accordance with RG 4.14 does not give assurance of the pre-operation conditions of the site. NRC staff request the following information:

- *Provide a second set of sampling as described by Regulatory Guide 4.14.*
- *Or provide enough detail to support the position that a second set of samples are not required. The NRC requires sufficient details for this site specific case to make a final decision on the acceptability of an alternative methodology.*
- *NRC Staff request the markups of the changes to be made to the Technical Report (TR) be provided as part of the response to this RAI.*

RAI-47 Response

Uranium One commits to collecting a second set of sedimentation samples at surface water locations SW-1, SW-26, SW-27 and SW-28. The samples will be collected and submitted for analysis as per Regulation Guide 4.14, Section 1.1.4 and Table 1. Once the lab analysis is complete, Uranium will submit this information to the NRC.

Accordingly, Uranium One has modified the first paragraph in TR Sec. 2.9.4 as shown below. The remaining applicable discussions within the TR will be modified to accommodate the analysis of the second set of sediment samples.

"2.9.4 Sediment Sampling

In order to establish a pre-operational baseline background for radiological characteristics, Uranium One will collect sediment samples utilizing the guidance in Regulatory Guide 4.14. At each sediment sampling location (SW-1, SW-26, SW-27 and SW-28), samples will be collected to a depth of five cm. Each sample will include the location ID number, date and name of the collector, and will be submitted to an accredited laboratory for analysis as required by RG 4.14."

RAI-2

Description of Deficiency

The responses provided for RAIs 47 and 48 are incomplete and require additional information to resolve the concerns. Acceptance criteria 1 of SRP Section 2.9.3 states that monitoring programs be established in compliance with Regulatory Guide 4.14 in order to establish a baseline. To meet the guidance of Regulatory Guide 4.14 two sets of samples will need to be collected. Presently the applicant has stated that:

"Uranium One collected single samples because there was insufficient rainfall snow melt to warrant a second sampling event thus surface water was ephemeral and did not indicate variability in water levels. The streams remained dry between sampling periods in the same year and therefore, would not result in transport of radionuclides in surface water that would have been absorbed or precipitated into sediments."

Formulation of RAI

The staff points out that the samples taken are baseline samples and are used to acknowledge the site conditions prior to the development of the facility. Not performing baseline sampling in accordance with RG 4.14 does not give assurance of the pre-operation conditions of the site. NRC staff request the following information:

- *Provide a second set of sampling as described by Regulatory Guide 4.14.*
- *Or provide enough detail to support the position that a second set of samples are not required. The NRC requires sufficient details for this site specific case to make a final decision on the acceptability of an alternative methodology.*
- *NRC Staff request the markups of the changes to be made to the Technical Report (TR) be provided as part of the response to this RAI.*

RAI-48 Response

See RAI-47 for response to this RAI.

RAI-3

Description of Deficiency

The response provided for RAI 47 is incomplete and requires additional information to resolve the concerns. Acceptance criteria 1 of Standard Review Plan (SRP) Section 2.9.3 states that monitoring programs be established in compliance with Regulatory Guide (RG) 4.14 in order to establish a baseline. A baseline monitoring program must also be established to meet the requirements of 10 CFR 40 Appendix A, criterion 7.

Formulation of RAI

In a response to the NRC the applicant has stated that they have modeled the ingestion pathway doses using MILDOS and have determined that the doses are not significant. Therefore, the applicant does not intend to conduct vegetation, food, or fish sampling because the calculated doses are deemed below five percent of the applicable radiation standard. The NRC believes that this argument is in reference to Regulatory Guide 4.14, Tables 1 and 2, footnote "O." This footnote is for operational radiological monitoring not pre-operational monitoring. Pre-operational monitoring will still needed to be performed as described in Table 1 in order to meet SRP Section 2.9.3 Acceptance Criteria 1. The NRC staff requests the following information:

- *Collect fish and food samples as described in Regulatory Guide 4.14 and provide a discussion on the samples taken and the observed results in TR Section 2.9.3.*
- *NRC Staff requests the markups of the changes to be made to the TR be provided as part of the response to this RAI.*

<u>RAI-49 Response</u>

As noted in RG 4.14 (Sec. 1.1.3 and Table 1), at least three samples should be collected at time of harvest or slaughter or removal of animals from grazing for each type of crop (including vegetable gardens) or livestock raised within three kilometers of the mill site. Uranium One has revised TR Section 2.9.11 to read:

"2.9.11 Pre-Operational Baseline Sampling for Vegetation, Animal and Fish

Uranium One commits to collecting tissue samples (livestock, etc. as specified in Regulatory Guide 4.14) once during the slaughter of livestock, prior to commencement of construction activities onsite. There were no observed crops within or adjacent to the proposed project so harvesting of crops will not be required. Additionally, no quantitative surveys for aquatic species will be required or conducted. The lack of deep-water habitat

and extensive water sources precludes the presence of fish, and greatly limits the abundance and diversity of other aquatic species."

RAI-4

Description of Deficiency

The response to this RAI has not been provided.

Formulation of RAI

Please address by providing an analysis of the groundwater flow regime and time of travel of spills in the overlying aquifers at the Leuenberger satellite wellfields and the design of the requested guard well strategy for monitoring of the overlying 100, 110 and 120 sand aquifers to protect the Negley subdivision ground water wells.

RAI-57 Response

See Appendix A for this response.

Operations

RAI-5

Description of Deficiency

The response to RAI 80 response is incomplete. SRP Section 5.4 describes the minimum qualifications of radiation safety personnel. The licensee provided text from RG 8.31 to address the initial question. While the update addresses a majority of the question, NRC staff requires specific information to ensure the licensee is enforcing the necessary qualifications for a Radiation Safety Officer (RSO) designee or Health Physics Technician (HPT) designee.

Formulation of RAI

The NRC staff requests the following information:

- *Provide information about minimum education, training, and health physics experience needed for an RSO on HPT designee. Please see Lost Creek LC 9.7. Please see ML13038A325 page 11 of Lost Creek Safety Evaluation Report (SER) for a reference example of acceptable response.*

RAI-80 Response

Regulatory Guide 8.31 specifies that daily walk-through (visual) inspection be conducted by the Radiation Safety Officer ("RSO") or designated Radiation Safety Technician ("RST"). In the Uranium One license SUA-1341 renewal application, it is stated that the RSO or qualified designee conducts the daily documented walk-through inspections of the plant. As an amendment to SUA-1341, the Ludeman Project would follow the same procedures.

NRC has required in SUA-1341, License Condition 9.12 that Uranium One shall describe in an SOP the training provided and procedures used by the RSO designate to conduct daily inspections in the temporary absence of the RSO or RST. From discussion held with NRC during a public meeting on May 27, 2014 NRC clarified that they did not intend to have Standard Operating Procedures ("SOP's") submitted to NRC for written review and approval but rather the program used to qualify designee's other the RSO or RST to conduct the daily inspection in their absence and on weekends. The following language will be added to the application Technical Report Section 5.7.6.

“ 5.7.6.1 Designated Operators

The Uranium One RSO will qualify Designated Operators to conduct daily walkthrough inspections of the plant/satellite. The Designated Operators will only conduct the inspections on weekends and holidays when neither the RSO nor RST are present. For holidays, the Designated Operator will not conduct the inspections for more than five consecutive days.

Any problems noted by the Designate Operator during the daily inspection will be recorded on the inspection form, signed, dated, and retained on file. The RSO will review the inspection forms and take the appropriate action to correct the noted problems or ensure the identified problem has been corrected.

Before a Designated Operator may conduct such inspections, he must be qualified by reason of training and experience to observe proper implementation of good radiation safety practices. In addition to the annual radiation worker training required by Section 5.5 of the approved SUA-1341 License Renewal Application ("LRA"), the operator seeking to be qualified to conduct daily inspections must complete training specific to daily inspections. The additional training will emphasize housekeeping and working conditions as they relate to employee safety and contamination control. Proficiency will be demonstrated through the use of testing and observed task training.

At a minimum, the operator seeking designation must have the following combination of education, training and experience:

Education: A high school diploma or equivalent or relevant experience working in a uranium recovery facility. RSO will review and approve on a case by case basis.

Training: New employee radiation safety training as specified in Section 5.5 of the LRA, and additional training specific to conducting daily inspection at Uranium One ISR facilities. In addition the Designated Operator will need to demonstrate proficiency to the RSO for conducting daily inspections. Specific training and proficiency requirements to perform the daily inspection are included below.

Experience: A minimum of three month’s work experience in operations or maintenance at a uranium recovery facility, knowledgeable of health physics, industrial safety and industrial hygiene practices used to maintain radiological levels ALARA.

5.7.6.2 Daily Inspection Observations

Uranium One conducts daily walk-through inspections of all work and storage areas of the facility to ensure proper implementation of good radiation safety practices, including housekeeping and cleanup to minimize contamination. Normally, these inspections are conducted by the RSO or RST, however during weekends and or holidays a qualified operator will be designated to conduct the daily inspection.

The Designated Operator will observe through visual inspection, radiation safety practices, housekeeping and cleanup practices being implemented throughout the plant/satellite facility. Such duties include, but are not limited to, inspecting for compliance with radiation postings, contamination control practices, proper plant/satellite ingress and egress practices are being followed, inspection ventilation or emission control systems are operational, employee radiation control practices appropriate for activity, proper storage practices being followed for byproduct material and yellowcake storage.

A Qualified Designated Operator has no authority for development and administration of the radiation protection program, other than conducting daily inspection in the temporary absence of the RSO or RST. The Designate Operator cannot authorize a radiation work permit for no routine activities that have the potential for personnel exposure to licensed materials for which no effective operating procedure exists. The Designated Operator does not have the authority to release materials for unrestricted use. In the event of an emergency, the on-call RSO or RST will be responsible for decisions regarding radiological issues.

The additional radiation safety training for operators performing the daily inspection during the temporary absence of the RSO or RST involves three hours of training including walk-through inspection proficiency training with the RSO or RST and a test.

The additional training for the Designated Operator includes but is not limited to the following topics:

- Proper use and storage of PPE by employees;
- Plant ingress and egress controls in place;
- Ventilation/Scrubber systems operational;
- Spill and leak contamination and cleaned practices appropriate;
- General housekeeping;

- Sumps and drains operational;
- Yellowcake spillage;
- Radiological postings observed;
- Storage areas practices acceptable; and
- Completion of the daily inspection form.

As part of the training and prior to approval as a Designated Operator the trainee will successfully complete the test and demonstrate understanding and proficiency of the walkthrough inspection requirements. Proficiency is shown with an 80% or higher test score. Prior to performing unaccompanied daily inspections the Designated Operator will perform a minimum of three (3) daily inspections under the supervision of the RSO or RST. The supervised inspection will cover the topics listed above and will be documented with signatures of the RSO or RST and the operator seeking designation to perform daily inspections. Any operator that fails to qualify will be re-trained and re-evaluated until proficiency is demonstrated satisfactorily to the RSO. After the designated operator has been trained, the RSO or RST will re-evaluate retention of training material through task observation within 6 months of first approval.

The designation process will be documented and maintained at the site files. Documentation of successful completion as a Designated Operator will include education, training signoff form, test and copy of the three (3) supervised inspection forms.

To remain qualified as a Designated Operator approved to conduct daily inspection, the operator must complete on an annual basis, an abbreviated training program on daily inspections and be accompanied by the RSO or RST on at least two (2) inspections per year.

5.7.6.3 Justification

The qualifications presented for a Designated Operator will ensure that a level of skill consistency and responsibility appropriate to address the safety considerations presented in Section 5.5 of the LRA and Regulatory Guide 8.31 for conducting daily inspections are addressed.

The additional training and supervised inspections will allow the RSO to ensure that proficiency is demonstrated prior to designation. The continuing requirement for annual

refresher training along with the two supervised inspection also ensures continued proficiency. The task of conducting dialing inspections of the plant/satellite in the temporary absence of the RSO or RST by a qualified Operator does not compromise the ability of the facility to maintain good radiological practices that are effective in maintain site conditions ALARA."

RAI-6

Description of Deficiency

The response to RAI 83 is inadequate as described in SRP Section 5.7.2.3 acceptance criteria 4 as it relates to the use of Lower Limit of Detection (LLD). In order for NRC staff to accept the discussion and use of Minimum Detection Limit

Formulation of RAI

NRC Staff request the markups of the changes to be made to the TR be provided as part of the response to this RAI. RAI 83. In order for NRC staff to accept the discussion and use of Minimum Detection Limit (MDL), the staff requests an adequate discussion be provided in TR Section 5.7.2. NRC staff requests the following information:

- *Provide a description for MDL. This discussion requires information about the basis, the equations used, and overall methodology of using MDL.*
- *NRC Staff request the markups of the changes to be made to the TR be provided as part of the response to this RAI.*

RAI-83 Response

See RAI-85 for this response

RAI-7

Description of Deficiency

The response to RAI 85 is inadequate. 10 CFR 20.1501 describes the requirements to survey and monitor contamination levels and radiation levels. The initial RAI 85 requested the applicant to provide Beta surveys. In the response to RAI 85 the applicant states they are only required to perform beta surveys to release items for unrestricted use. However, 10 CFR 20.1501 requires a licensee know the extent and magnitude of all radiation levels. NRC staff did not find the required info to satisfy 10 CFR 20.1501 included in the TR or the response to RAI 85. In addition, the applicant states that they will use a static scan; NRC staff requests a description of a static scan in the application.

Formulation of RAI

The NRC staff requests the following information:

- *Provide a description of the beta survey program including how it will be conducted and how beta will be measured, or if located in a different section provide a reference and pointer to the section in TR Section 5.7.2.*
- *Provide a description of a static scan.*

RAI-85 Response

Surveys for beta contamination will be performed consistent with the recommendations of NRC Regulatory Guide 8.30. Beta surveys would typically be conducted of specific operations that would involve the handling of large quantities of aged yellowcake. On a routine basis, an annual beta survey would be conducted in areas that would typically be subject to residual uranium concentrate contamination; specifically, the precipitation, drying, and packaging areas of a uranium yellowcake processing plant. However, equipment to be released from the restricted areas at the Ludeman site for unrestricted use that is subject to potential beta contamination (from the aforementioned process areas) will be surveyed for beta contamination. This is a direct condition of SUA-1341, License condition 11.9.

Uranium One has commented to conducting beta surveys at the Ludeman Project at the same frequency and following the same procedures as followed at the Willow Creek operations. Contamination frisking/scanning stations will be equipped with instrumentation to survey for both potential alpha and beta contamination. The employees will be required to record a single value in dpm/100cm^2 with a limit of 1,000

dpm/100cm^2. Frisking/scanning stations will be equip with a survey instrument capable of detecting both alpha and beta contamination. A Ludelum model 177-84 with a 43-93 probe is an example of the type of instrument that could be utilized to achieve this program objective.

As discussed in Regulatory Guide 8.30, beta exposure potential evaluations may be substituted for beta instrument-based surveys. Such evaluations are based on data provided in the Regulatory Guide. The evaluations utilize curves presenting the beta dose rate increase over time associated with ingrowth of 234Pa and 234Th, and the decrease of beta dose with distance. Uranium One will use this methodology, combined with beta radiation surveys, to estimate and control beta dose during operations to establish a baseline. If baseline beta dose evaluations do not represent a measureable dose or at such low levels that limits are not approached, beta monitoring will be limited to annual evaluations.

Accordingly, Uranium One will include the following discussion and tables in TR Sec.5.7.2 as shown below:

“ 5.7.2.3 Equipment Monitoring Program

Equipment to be released from the restricted areas at the Ludeman Project for unrestricted use that is subject to potential beta contamination (from the aforementioned process areas) will be surveyed for beta contamination. Contamination frisking/scanning stations will be equipped with instrumentation to survey for both potential alpha and beta contamination. A Ludelum model 177-84 with a 43-93 probe or equivalent is an example of the type of instrument that could be utilized to achieve this program objective.

As discussed in Regulatory Guide 8.30, beta exposure potential evaluations may be substituted for beta instrument-based surveys. Such evaluations are based on data provided in the Regulatory Guide. The evaluations utilize curves presenting the beta dose rate increase over time associated with ingrowth of 234Pa and 234Th, and the decrease of beta dose with distance. Uranium One will use this methodology, combined with beta radiation surveys, to estimate and control beta dose during operations to establish a baseline. If baseline beta dose evaluations do not represent a measureable dose or at such low levels that limits are not approached, beta monitoring will be limited to annual evaluations. Table 5-1 lists the radiation detection instruments Uranium One may use for operational monitoring. Table 5-2 provides estimates of Minimum Detectable Activity for each instrument.”

Table 5-2 also incorporates an MDA estimate for the Ludlum 43-93 detector, based on a recent Uranerz Energy Corporation response to a similar NRC Request for Additional Information. The document, ML#14066A397, represents the most recent calculations and discussion concerning the capability of the Ludlum 43-93 detector in meeting the detection limits required for free release of equipment and personnel from a licensed facility. The Uranerz document is the most current approach to analysis of the sensitivity of the 43-93 instrument in an environment potentially influenced by significant levels of interfering gamma radiation.

Table 5-1: Radiation Detectors

Detector	Radiation Detected	Type	Characteristics
Ludlum Model 19	Gamma	Handheld combined unit	Energy dependent; 175 cpm/µR/hr,
Ludlum 44-10	Gamma	High sensitivity	Energy dep.; 900 cpm/uR/hr Cs-137; separate datalogger
Ludlum 43-78	Alpha	Holds 4" air filters	37% efficiency for Th-230; separate datalogger
Ludlum 3030	Alpha/Beta	Benchtop alpha/beta counter	Integrated unit; simultaneous alpha/beta counting; 32% effic. for Th-230; 26% effic. for Sr-90/Y-90.
Ludlum 43-93	Alpha/Beta	Contamination survey	20% Effic. For Pu-239 and Sr-/Y-90; separate datalogger

Table 5-2: MDAs for Air Sample and Contamination Control Detectors

Detector	Use	Equation	Bg CPM	Bg Count Time (Min.)	Flow Volume (l)	Efficiency	MDA (see notes)	Note
	Radon	$\frac{3+3.29\sqrt{R_b t_g}\left(1+\frac{t_g}{t_b}\right)}{(Eff.)(t_g)(Vol.)(.21)(K)}$	0.4	60	15	0.37	0.03	1 & 2
Ludlum 43-108	Alpha particle detection	$\frac{3+3.29\sqrt{\left[R_b t_g\left(1+\frac{t_g}{t_b}\right)\right]}}{(Eff.)(t_g)(Vol.)(C)}$	1	60	2800	0.37	2.97E-12	1 & 2
Ludlum 3030	Alpha particle detection	$\frac{3+3.29\sqrt{\left[R_b t_g\left(1+\frac{t_g}{t_b}\right)\right]}}{(Eff.)(t_g)(Vol.)(C)}$	0.5	60	190	0.32	2.98E-12	1 & 2
Ludlum 43-93	Contamination monitor	$\frac{3+3.29\sqrt{\left[R_b t_g\left(1+\frac{t_g}{t_b}\right)\right]}}{(Eff.)(t_g)}$	500	5	na	0.2	Can meet MDA of 900 dpm/100 cm^2 if Bkg is below 1271 cpm. See Note 3.	31

Notes:

1) MDA equation per NUREG-1507 reference: K = Kusnetz factor = 60; converts to WL. C = 2.22E9: converts to uCi/ml;
2) Required radon sample analysis MDA = 0.03. Required air particulate sample analysis MDA=3E-12 uCi/ml
3) Ludlum 43-93 beta particle surface contamination MDA calculated for an interfering gamma radiation field of 25 uR/hr using the provided equation and the Ludlum website noted 43-93 gamma sensitivity of 15-20 cpm per uR/hr

RAI-8

Description of Deficiency

The response to RAI 88 is inadequate. SRP Section 5.7.6.3 acceptance criteria 4 requests monitoring equipment by type, specification of the range, sensitivity, calibration methods and frequency, availability, and planned use is adequately described .The response does not provide the requested descriptions of beta survey equipment as first requested in RAI 88. The response to RAI 88 describes that a discussion of beta monitoring equipment is in TR Section 5.7.2.1. Upon inspection of TR Section 5.7.2.1, NRC staff finds only a description of gamma surveys but does not see information on gamma or beta survey equipment and finds no information on performing beta surveys..

Formulation of RAI

The NRC staff requests the following information:

- *Provide a description of the beta survey program including how it will be conducted and how beta will be measured in TR Section 5.7.6.*
- *Provide information on the gamma survey equipment used or provide reference to the specific section where this information will be found in TR Section 5.7.6.*
- *NRC staff request the markups of the changes to be made to the TR be provided as part of the response to this RAI.*

RAI-88 Response

See RAI-85 for this response.

RAI-9

Description of Deficiency

The response to RAI 89 is inadequate based on SRP Section 5.7.6.3 acceptance criteria 1 and 2 as it relates to an acceptable contamination control program. In the response to RAI 89 the applicant states that this information will be incorporated as part of the licensee amendment from SUA-1341 which includes license condition 9.8. From this response NRC has no information to determine acceptability of a contamination control program until such details are made available.

Formulation of RAI

The NRC staff request the following information:

- *Provide a discussion of the process through which the applicant will prevent the spread of potential contamination from employees who alarm monitors at the exits.*
- *NRC Staff request the markups of the changes to be made to the TR be provided as part of the response to this RAI.*

RAI-89 Response

The process that the applicant will utilize to prevent spread of potential contamination from employees who alarm monitors at exits is discussed in site SOP's and is consistent with the guidance provided in Section 2.6 of Regulatory Guide 8.30. The satellite facility will have laundry facilities to launder contaminated clothing and wash basin are provided within the satellite for decontamination should this become necessary. All alpha contamination on skin and clothing is considered to be removable so the limit of 1,000 dpm/100cm^2 is applicable. Any worker above the removable limit must shower or wash if the removable limit is exceeded.

Uranium One has submitted to the NRC for review and written verification a Contamination Control Plan (August 8, 2014) for review. When incorporated into SUA-1341 the plan will also be incorporated into work practices at the Ludeman facility as the Ludeman application is an amendment to Materials License SUA-1341.

Uranium One will add the following information to Section 5.7.6 for Ludeman from the Approved License Renewal Application for SUA-1341 to address spread of potential contamination from employees who alarm monitors at exits.

" ***5.7.6 Contamination Control Plan***

Uranium One's contamination control program at Ludeman consists of the following elements:

Surveys for Surface Contamination

Uranium One performs surveys for surface contamination in operating and clean areas of the Ludeman facility is in accordance with the guidelines contained in USNRC Regulatory Guide 8.30, "Health Physics Surveys in Uranium Mills". Surveys for removable alpha contamination in clean areas such as lunch rooms, change rooms and offices are conducted weekly.

Surveys for Contamination of Skin and Personal Clothing

Condition 10.11 of License SUA-1341 requires that all employees who do not shower prior to leaving the restricted area monitor themselves with an alpha survey instrument. All personnel leaving the restricted area are required to perform and document alpha contamination monitoring. In addition, personnel who could come in contact with potentially contaminated solutions outside a restricted area such as in the wellfields are required to monitor themselves prior to leaving that worksite. All personnel receive training in the performance of surveys for skin and personal contamination. Personnel are also allowed to conduct contamination monitoring of small, hand-carried items as long as all surfaces could be reached with the instrument probe and the item did not originate in satellite areas. All other items are surveyed as described in the next section.

As recommended in USNRC Regulatory Guide 8.30, "Health Physics Surveys in Uranium Mills", Uranium One conducts quarterly unannounced spot checks of personnel to verify the effectiveness of the surveys for personnel contamination. A minimum of 25 percent of the employees assigned to the mine site are surveyed, concentrating on plant operators and maintenance personnel. The purpose of the surveys is to ensure that employees were adequately surveying and decontaminating themselves prior to exiting the restricted areas.

Surveys of Equipment Prior to Release to an Unrestricted Area

Surveys of all items from the restricted areas with the exception of small. hand-carried items described above are performed by the RSO, radiation safety technician, or properly trained employees. The release limits are set by "Guidelines for Decontamination of Facilities and Equipment Prior to Release for Unrestricted Use or Termination of

Licenses for Byproduct or Source Materials", NRC, September 1984. Surveys are performed with the following equipment:

1. Portable alpha count rate meter, Ludlum Model 3 or equivalent.
2. Portable GM survey meter with a beta/gamma probe with an end window thickness of not more than 7 mg/cm^2, Eberline Model E-120 with HP-190 probe or equivalent.
3. Swipes for removable contamination surveys as required.

Proposed Contamination Control Program

Uranium One proposes to implement the same Contamination Control program which is currently in use at Irigaray and Christensen ranch facilities. The program has proven to be effective at controlling contamination of personnel and clean areas. The program will be implemented in accordance with Standard Operating Procedures that describe instrument calibration and check requirements, surveys for removable contamination, surveys for alpha and beta/gamma contamination of items prior to release from restricted areas, and personnel monitoring. Surveys for beta contamination will be performed consistent with the recommendations of NRC Regulatory Guide 8.30, May, 2002; beta surveys will be conducted of specific operations that would involve the handling of large quantities of aged yellowcake. On a routine basis, an annual beta survey will be conducted in areas that would typically be subject to residual uranium concentrate contamination, specifically, the precipitation, drying, and packaging areas of the Irigaray plant. Equipment to be released from the restricted area for unrestricted use that is subject to potential beta contamination (from the aforementioned process areas) will be surveyed for beta contamination."

RAI-10

Description of Deficiency

NRC staff seeks information to meet the acceptance criteria in SRP Section 5.7.7.3, acceptance criteria 1 and 2. In review of Section 5.7.7 staff observes the discussion provided and has reviewed Figure 2.9-39 showing various monitoring locations. RG 4.14 Section 1.1.1 asks for the following information when choosing sampling locations:

"The sampling locations should be determined according to the projected site and milling operations. Preoperational sampling locations should be the same as operational locations. The following factors should be considered in determining the sampling locations:

(1) Average metrological conditions (wind speed, wind, direction, atmospheric stability),
(2) Prevailing wind direction,
(3) Site boundaries nearest to mill, ore piles, and tailings piles
(4) Direction of nearest occupiable structure
(5) Location of estimated maximum concentrations of radioactive material."

In review of the response to RAI 90 and review of the information included in the TR, NRC staff understands the reference to Section 1.1.1 of RG 4.14. However NRC staff did not find any information pertaining to the details required in RG 4.14 quoted as noted above. Also, the staff notes potential changes to the meteorological data due to the response from RAI 3, which specifies the construction of a new meteorological tower to obtain new site specific data.

Formulation of RAI

Part A: Airborne Effluent and Environmental Monitoring Program

The NRC staff requests the following information:

- *Provide a discussion related to the quoted criteria above for choosing sampling directions. In the response to RAI-90 the staff observes the cited reference to the first part of Regulatory Guide 4.14 Section 1.1.1. The staff requests more details pertaining to the locations chosen by describing the considerations quoted above for each sampling location. Provide NRC staff with a mark-up of the changes to Section 5.7.7 with the information described.*

- *Considering the response to RAI 3, the staff asks the applicant to reanalyze the sampling locations chosen since representative data will be obtained from the construction of the new meteorological tower.*
- *Given the "Change of Design" request, NRC staff request the applicant to reanalyze doses based on new meteorological data, potential changes to the site location, and potential changes to the location of the nearest receptor locations.*
- *Provide a copy of the calculations used to determine sampling locations. MILDOS calculations, spreadsheets or whatever was used to determine sampling locations.*
- *NRC Staff request the markups of the changes to be made to the TR be provided as part of the response to this RAI.*

Part B: Site Specific Effluent Monitoring Program

- *Please describe the requirements and implementation of the site specific effluent monitoring program including sampling locations and sampling frequency for the Ludeman satellite facilities, well houses and any other;*
- *Radionuclide sources which will be conducted under the general Willow Creek 10 CFR 40.65 effluent monitoring program*

RAI-90(a) Response

Uranium One conducted baseline air monitoring for the Proposed Project using five continuous air samplers collecting total suspended particulates. The collected particulate matter was analyzed at the end of each calendar quarter for radionuclides, as specified in Regulatory Guide 4.14. Figure 1 shows the sampler locations with respect to the Ludeman Project boundary, accompanied by the regional and site specific wind roses. The monitoring locations were determined using criteria per Regulatory Guide 4.14. Monitoring location LUD 3 did not include an air particulate sampler, only data on radon and gamma baseline concentrations were collected at this monitoring location. The original regional evaluation weather data (Glenrock Coal) used to select the baseline sampler locations was based on the criteria outlined in RG 4.14, Section 1.1.1:

1) Average meteorological conditions (wind speed, wind direction, atmospheric stability);
2) The prevailing wind direction;
3) The proposed site boundary nearest the mill. Ore piles and tailings (satellite and wellfields);

4) Direction of nearest occupied structure; and Location of estimated maximum concentrations of radioactive materials

Criteria 1: The average wind speed reported at the Glenrock Coal Company (GCC) was 14.8 mph. The average wind speed recorded at the Ludeman meteorological station for the period of record was 11.0 mph.

Criteria 2: Both the GCC and Ludeman meteorological sites recorded the predominant wind direction as west-southwest. Based on the comparison of the wind speed and wind direction of the Ludeman meteorological site with the regional data included in the original Technical Report, Section 2.5, the site the location of the samplers would have been placed in the same location as the current locations and remain valid and appropriate.

Criteria 3: Four of the five sample locations (LUD-1, LUD-4, LUD-5 and LUD-6) are all near or at the project boundary.

Criteria 4: The nearest structure which could potentially expect occupants with the highest predicted airborne concentration of radionuclides due to milling operations is LUD-2 which is located at a dwelling approximately one mile downwind (prevailing wind direction) from the proposed satellite plant.

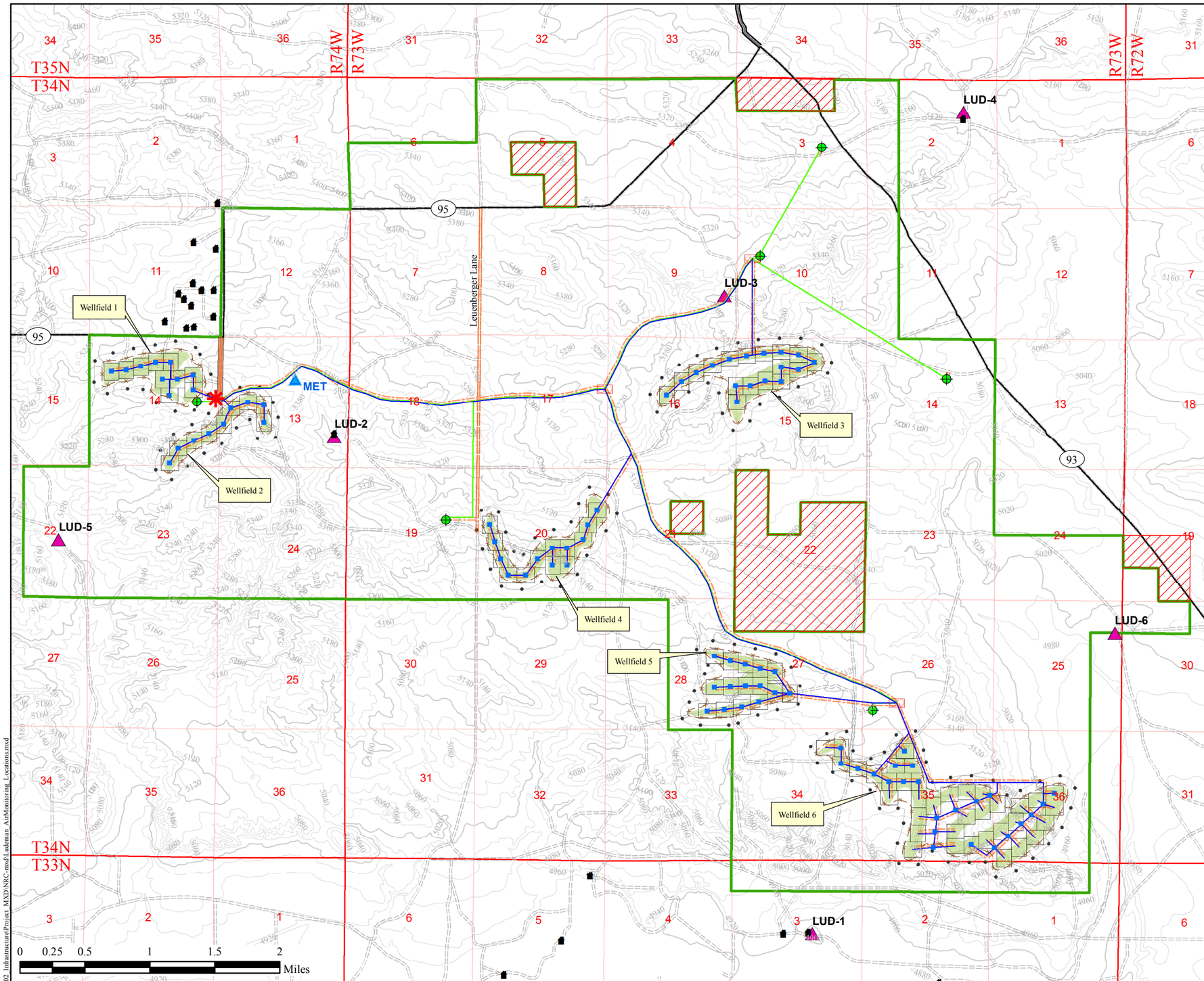
The Negley subdivision is approximately 0.5 miles north of the satellite plant site; however, wind rose from both the regional data set as well as the onsite meteorological station (Figure 1) shows that southerly winds towards the Negley subdivision are extremely uncommon. Therefore, the radionuclide concentrations are expected to be higher at the LUD-2 location. Given the close proximity of the Negley subdivision, Uranium One will establish a sixth air monitoring station for baseline air particulate monitoring at or near the project boundary and north of the satellite plant site.

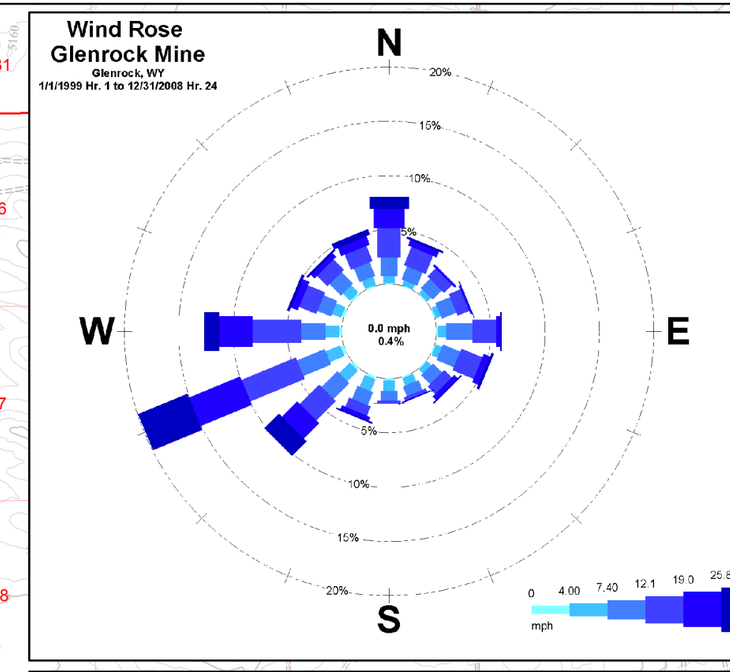
At least one structure where predicted doses exceed 5 percent of the standards was LUD-4 which is located approximately six miles downwind from the satellite plant site and near a residence outside the project boundary. A remote location that represents background conditions at the mill site (satellite) LUD-5 is located southwest of the satellite plant site. Since prevailing winds are westerly and west-southwesterly with a secondary mode from the east-southeast, impacts from the proposed satellite plant at LUD-5 are expected to be minor.

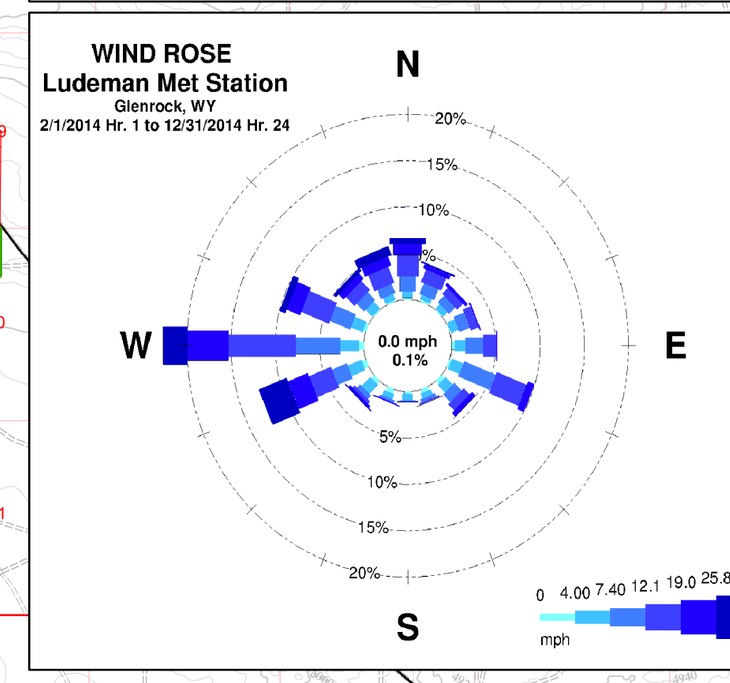
The change of design represented the shift from three satellites to one satellite located at the original Leuenberger satellite location. The change of design will also include the use of a buried trunk line, three booster stations and a series of ponds used for water management. The ponds will cover approximately 60 acres and will be located adjacent to the Leuenberger satellite plant. The wellfield will not change nor will the infrastructure within the wellfields (header houses and wells heads) as a result of the change of design.

The change in design will not result in a change in the monitoring station locations. The network of monitoring stations are appropriately located to monitor potential effluents for the project.

As a result of the change in design and the availability of onsite meteorological data, Uranium One has completed a new MILDOS AREA model to evaluate potential effluent concentrations for the proposed facilities. The revised MILDOS AREA model report and results are provided in Appendix D.







This map (or data product) is for assessment and planning purposes only. It is not intended to be used for description, conveyance, authoritative definition of legal boundary, or property title. This is not a survey product.

PREPARED FOR

uranium one™
investing in our energy

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Legend

- Ludeman Project Boundary
- Excluded Area
- MET Station
- Air Monitoring Station
- Header House
- Trunkline
- Deep Disposal Well
- Deep Disposal Well Pipeline
- Well Pattern
- Wellfield
- Monitor Well Ring
- Booster Station
- Primary Access
- Secondary Access Road
- Fenced Area
- Residence

N W E S

DRAWN BY: EGS
CHECKED BY: CT
APPROVED BY: RMD

Air Monitoring Locations

REV #	DESCRIPTION	BY	DATE	FIGURE
0	For Submittal	EGS	06/03/15	X

Path: O:\WY Projects\8201-2013-102 Infrastructure\Project MXD\NRC-mxd\Ludeman AirMonitoring Locations.mxd

RAI-90(b) Response

Uranium One recognizes that the methodologies and supporting regulations for determining the quantity of the principal radionuclides from all point and diffuse sources will be accounted for are currently under evaluation and development. Therefore, rather than rely on current methods and regulations Uranium One commits to discuss and identify with NRC how Uranium One will determine the quantity of the principal radionuclides from all point and diffuse sources will be accounted for, and verified by, surveys and/or monitoring based on the updated methodologies and regulations. Uranium One will provide to the NRC staff, for review and written verification, written procedures for its airborne effluent and environmental monitoring program no later than 30 days before the preoperational inspection to show compliance with 10 CFR 40.65.

Uranium One is currently in discussions with NRC with a methodology to account for determination of the quantity of the principle radionculides from all point and diffuse sources for SUA-1341 and methodologies consist with those currently being discussed with NRC for the Christensen Ranch facility will be implemented at Ludeman once approved.Uranium One has provided the locations, frequency and type of analysis for the major elements of the operational environmental monitoring program in Table 5-4 below:

Table 5-4: Elements of the Operational Environmental Monitoring Program

Program Element/Section Reference	Location	Radionuclides Analyzed	Sampling Frequency
Existing Groundwater Supply Wells	Private wells within 2-km of project area similar to pre-operational baseline monitoring	Dissolved and suspended uranium, ^{226}Ra, ^{230}Th, ^{210}Pb, ^{210}Po	Quarterly
Surface Water	Surface waters passing through project area and reservoirs subject to runoff similar to pre-operational baseline monitoring	Dissolved and suspended uranium, ^{226}Ra, ^{230}Th, ^{210}Pb, ^{210}Po	Quarterly (as available)
Particulates in Air [1]	Locations with the highest predicted concentrations, nearest residences and control location similar to pre-operational baseline monitoring	Total uranium, ^{230}Th, ^{226}Ra, ^{210}Pb	Continuous-Composites of filters analyzed quarterly
Radon in Air	Particulate in air locations and other areas of interest similar to pre-operational baseline monitoring	^{222}Rn	Continuous via Track-Etch units or equivalent — analyzed quarterly
Soil	Particulate in air locations and other locations with the highest predicted concentrations similar to pre-operational baseline monitoring	Total uranium, ^{226}Ra, ^{210}Pb	Annually
Sediment	Surface waters passing through project area and reservoirs subject to runoff similar to pre-operational baseline monitoring	Total uranium, ^{226}Ra, ^{210}Pb, ^{230}Th	Annually (as available)
Direct Radiation	Particulate in air locations and other areas of interest similar to pre-operational baseline monitoring	Continuous via TLD or OSL or equivalent dosimetry	Quarterly

Change of Design RAIs

Please provide the location and design of all evaporation ponds to be installed as part of the "Change of Design" request.

Response

Uranium One is proposing to construct and use evaporation ponds in lieu of Deep Disposal Wells (DDWs) for the Proposed Ludeman Project. The design of the evaporation ponds are based on NRC Regulatory Guide 3.11, "Design, Construction, and Inspection of Embankment Retention Systems at Uranium Recovery Facilities", 10 CFR Part 40, Appendix A, Criterion 5(A), and the pertinent laws and regulations indicated therein. It should be noted that these regulations apply to 11e.(2) impoundments. See Appendix C for the Conceptual Pond Design Plan.

APPENDIX A:

Hydraulic Effects of Negley Subdivision Pumping on Proposed Project

HYDRAULIC EFFECTS OF NEGLEY SUBDIVSION PUMPAGE ON THE LUDEMAN URANIUM ISR PROJECT WYOMING

URANIUM ONE USA, INC.
CONVERSE COUNTY, WY
May 2015

Petrotek Engineering Corporation
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TABLE OF CONTENTS

1 Executive Summary 1
2 Introduction 3
3 Model Objectives 3
4 Site Conceptual Model 4
  4.1 Negley Subdivision Wells 4
  4.2 Site Geology 5
  4.3 Site Hydrology 6
5 Modeling Approach 8
6 Model Codes 9
7 Model Domain and Boundary Conditions 9
8 Model Parameters 10
9 Model Simulations 11
10 Sensitivity Analysis 16
11 Monitor Well Design and Spacing 16
12 Summary and Conclusions 17
13 References 20

FIGURES

1- Ludeman License Amendment Area and Negley Subdivision
2- Geologic Cross-Section Locations
3- Structure Map, Bottom of 110 Sand
4- Structure Map, Top of 110 Sand
5- Model Domain, Grid and Boundary Conditions
6- Potentiometric Surface,110 Sand, Steady-State (Non-Pumping) Simulation
7- 100-Year Groundwater Flowpaths, 110 Sand, Steady-State (Non-Pumping) Simulation
8- Simulation of Negley Wells Pumping 5 GPM (Each), Potentiometric Surface and 10-Year Groundwater Flowpaths, 110 Sand
9- Simulation of Negley Wells Pumping 5 GPM (Each) and Hypothetical Injection Well Release (20 GPM), Potentiometric Surface and 5-Year Groundwater Flowpaths, 110 Sand
10- Simulation of Negley Wells Pumping At Variable Rates and Hypothetical Injection Well Release (20 GPM), Potentiometric Surface and 5-Year Groundwater Flowpaths, 110 Sand
11- Comparison of Simulations of Negley Wells Pumping 5 GPM and Negley Wells Pumping at Variable Rates and Hypothetical Injection Well Release (20 GPM), 5-Year Groundwater Flowpaths
12- Simulation of Hypothetical Injection Well Release (20 GPM), No Pumping From Negley Wells, Potentiometric Surface and 5-Year Groundwater Flowpaths, 110 Sand

13- Simulation of Negley Wells Pumping At Variable Rates and Hypothetical Injection Well Release (10 GPM), Potentiometric Surface and 5-Year Groundwater Flowpaths, 110 Sand
14- Simulation of Negley Wells Pumping 1 GPM (Each) and Hypothetical Injection Well Release (10 GPM), Potentiometric Surface and 5-Year Groundwater Flowpaths, 110 Sand
15- Simulation of Hypothetical Injection Well Release (10 GPM), No Pumping From Negley Wells, Potentiometric Surface and 5-Year Groundwater Flowpaths, 110 Sand
16- Sensitivity Analysis-Effects of Injection Rate on Hypothetical Release Travel Distance. 5-Year Groundwater Flowpaths
17- Sensitivity Analysis-Effects of Hydraulic Conductivity on Hypothetical Release Travel Distance. 5-Year Groundwater Flowpaths
18- Sensitivity Analysis-Effects of Specific Storage on Hypothetical Release Travel Distance. 5-Year Groundwater Flowpaths
19- Sensitivity Analysis-Effects of Specific Yield on Hypothetical Release Travel Distance. 5-Year Groundwater Flowpaths
20- Sensitivity Analysis-Effects of Recharge Rate on Hypothetical Release Travel Distance. 5-Year Groundwater Flowpaths
21- Sensitivity Analysis-Effects of Porosity on Hypothetical Release Travel Distance. 5-Year Groundwater Flowpaths
22- Comparison of Potential Monitoring Networks, Shallow Overlying Aquifers
23- Proposed Monitoring Network, 100 and 110 Sands

TABLES

1. Negley Subdivision Well Information
2. Geologic Contacts, Negley Subdivision and Vicinity
3. Aquifer Test Data
4. Summary of Shallow Aquifer Assessment Model Simulations
5. Sensitivity Analysis Simulations
6. Results of Sensitivity Analysis Simulations

ATTACHMENTS

A. Geologic Cross Sections-Negley Subdivision and Ludeman License Amendment Area
B. Model Input and Output Files (Portable External Hard Drive)

HYDRAULIC EFFECTS OF NEGLEY SUBDIVISION PUMPAGE
LUDEMAN URANIUM ISR PROJECT, WYOMING

1 Executive Summary

A numerical groundwater flow model was developed to evaluate the hydraulic effects of pumpage from private water supply wells in the Negley Subdivision on potential releases from the proposed Ludeman uranium insitu recovery (ISR) project in Converse County, Wyoming. The Negley wells produce water from shallow aquifers that overly the Ludeman ore-bearing zones. A hypothetical pathway was simulated in which failed casing in an injection well results in a release to the shallow water supply aquifers. The model was used to estimate the distance that the hypothetical release could migrate within a five-year period under various pumping scenarios. Mechanical integrity tests will be conducted on all operating ISR wells at five-year intervals. Therefore, the longest period that a release could go undetected under a failed casing scenario is five years. Results of the modeling were used to design a groundwater monitoring system that will adequately protect the shallow water supply aquifers of the Negley Subdivision from potential releases from the Ludeman uranium ISR operations.

The target uranium ore-bearing zones at Ludeman are within units designated as the 80 and 90 Sands. The Negley Subdivision is located adjacent to and north of the proposed MU1 wellfield. Water supply wells within the Negley Subdivision are completed in the overlying 100, 110 and 120 Sands. The shortest pathway for an ISR release to reach the Negley private wells would be via a failed casing of an injection well near the northern margin of the ISR wellfield into either the 100, 110 or 120 Sand (a minimum distance of approximately 970 feet). The fastest travel time would be under a scenario where the hydraulic gradient between the Negley wells and the failed injection well is maximized (steepest). Model simulations were designed to maximize that hydraulic gradient.

Simulations were run to evaluate the hydraulic impacts of pumping from the Negley Subdivision wells and a hypothetical release from a failed ISR injection well into the shallow water supply sands. The simulations utilized pumping and injection rates that may be unrealistically high, but serve as conservative, “worst-case” scenarios for maximizing the hydraulic gradient between the Negley wells and the wellfield area.

The maximum distance that a simulated release migrates from the MU1 wellfield after five years, without any pumping from the Negley Subdivision, was 455 ft (91 ft/yr). The release was simulated at an injection rate of 20 gpm. Simulation of a 20 gpm release coupled with pumping from the Negley wells totaling 110 gpm (5 gpm per well) increased the migration distance to 535 ft after five years (107 ft/yr). Thus,

the maximum simulated impact from the Negley wells increased the migration rate by approximately 16 ft/yr.

The U.S. Geological Survey reports that the average per capita use of water for domestic purposes in Converse County is 74 gallons per day (gpd) (Maupin, et al. 2010). A typical family of four persons in Converse County would require just under 300 gpd or a continuous pumping rate of less than 0.21 gpm. This value is considerably lower than the 5 gpm simulated for the Negley wells in the "worst case" scenarios.

Simulations were also run using injection and pumping rates considered more reasonable for site conditions and typical domestic usage rates. A simulation of an injection release of 10 gpm without Negley pumping resulted in a five year migration distance of 350 ft. The addition of the Negley wells pumping at 1 gpm per well increased the migration distance to 357 ft. Under those simulated conditions, the increased migration attributable to pumping from the Negley wells was only 7 ft after five years (1.4 ft/yr).

The model simulations demonstrate that the hydraulic impacts of pumpage from the Negley Subdivision (even at rates substantially higher than would be expected) are not great enough to overcome the initial radial flow from the source of injection. There is substantial lateral spreading of the release at the point of injection. The simulations show that the maximum width of the injectate plume is always greater than the maximum downgradient travel distance within the first five years of the release. Therefore, the most effective means of detecting potential releases in the shallower sands overlying the production zone is placement of shallow monitor wells within the projected footprint of the wellfield or at the very northern edge. The lateral spreading of an injected fluid would be detected in the interior wellfield shallow monitor wells much sooner than in monitor wells placed hundreds of feet downgradient.

Based on the modeling results, a monitoring network is proposed that will allow early detection of potential releases from a failed injection well into the shallow aquifers that supply water to the Negley Subdivision. The monitoring network includes one well every 4 acres within the projected footprint of the MU1 wellfield in the 100 Sand. A row of wells spaced between 450 and 500 feet apart will be positioned along the north margin of the wellfield to monitor the 110 Sand. The 120 Sand is not anticipated to be water-bearing in the immediate vicinity of the MU1 wellfield. If it is determined that saturated conditions are present in the 120 Sand, monitor wells will be installed along the north perimeter of MU1 within that unit at the same spacing as for the 110 Sand. The proposed groundwater monitoring system will adequately protect the shallow water supply aquifers of the Negley Subdivision from potential releases from the Ludeman uranium ISR operations.

2 Introduction

Petrotek Engineering Corporation (Petrotek) developed a numerical groundwater flow model to assist in the design of a monitoring system to detect potential releases to shallow water supply sands, if they were to occur, from uranium insitu recovery (ISR) mining at the Ludeman Project in Converse County, Wyoming. Uranium One USA, Inc. (Uranium One) intends to develop and extract uranium from the Fort Union Formation within the Ludeman License Amendment Area (LLAA). The target ore-bodies are located within hydrostratigraphic units designated by Uranium One as the 80 and 90 Sands. The Negley Subdivision is located adjacent to the northwest portion of the LLAA and includes twenty two private water wells. Those private water wells are completed in overlying hydrostratigraphic units designated as the 100, 110 and 120 Sands.

Potential leakage from failed casing in an ISR operating well could release production fluids into the shallower, overlying sands that provide water supply to residents of the Negley Subdivision. The Negley Subdivision is located directly north of, and hydraulically downgradient from proposed Mine Unit 1 (MU1) of the Ludeman Project. Pumping from the Negley wells has the potential to increase the hydraulic gradient between the Negley subdivision and the Ludeman wellfields. The numerical modeling is used to assess the hydraulic impacts that pumpage from the Negley wells may have on the migration of a potential release from ISR operations.

3 Model Objectives

The primary objective of this modeling effort is to determine if a potential release from an ISR operating well into the shallow overlying sands could go undetected long enough to impact a private water well in the Negley Subdivision. Uranium One has indicated that mechanical integrity testing (MIT) of all production and injection wells will be conducted at least every five years during the period the well is in service (or after repair work). Therefore, the focus of the modeling effort is to estimate the maximum distance that a hypothetical release into the shallow overlying sands could travel within a five-year time frame. The model simulations were developed to assess the following:

- potential changes in hydraulic gradient caused by the combination of drawdown in the Negley Subdivision from active pumping of the private water wells and a potential release from an ISR operating well;
- the rate and distance that a potential release from an operating ISR well could travel during the 5 year period between MITs; and
- the location and spacing between shallow monitor wells that would be adequate to detect such a release, if it were to occur.

4 Site Conceptual Model

A site conceptual model is presented that provides the basis for the numerical modeling. The conceptual model is based on geologic information derived from exploration borings, hydrologic data from water level measurements and results of pumping tests conducted within the LLAA, and well records from Negley Subdivision wells from the Wyoming State Engineers Office (SEO). Much of this information has been provided in previous submittals including; the Ludeman NRC License Amendment Application-Technical Report (Technical Report) (Uranium One USA, Inc. 2009), the Ludeman Request for Additional Information Response Package (Uranium One Americas, Inc. 2013), and the technical memorandum "Assessment of the Hydraulic Relationship of the Negley Subdivision to the Ludeman ISR Uranium Project in Converse County, Wyoming" (Petrotek 2011). Relevant information is summarized below.

4.1 Negley Subdivision Wells

Most of the wells of the Negley Subdivision are located in Section 11, T34N, R74W, directly north and west of the LLAA (Figure 1). The Uranium One identification for the Negley wells is provided in Figure 2 and Table 1. Extensive evaluation of geologic logs, structure maps and cross-sections indicates that none of the twenty two Negley wells located in Section 11 or further north are completed in the ore-bearing 80 or 90 Sands. Well N-8 (believed to be completed in the 80 or 70 Sand) is located more than 8,000 feet west of the nearest Negley wells and over one mile west of the nearest Ludeman wellfield. Well N-8 (not shown on Figure 2) is not considered part of the Negley subdivision for purposes of this assessment. Protection of that well will be ensured by the monitor well ring associated with any production of the 80 Sand within the LLAA.

Total depth of the Negley wells ranges from 120 to 210 feet. The screened intervals in the Negley wells range from 40 to 200 feet below ground surface (bgs), although the intervals are unknown for four of the wells. The well yield on the State Engineer records was 0 gallons per minute (gpm) or not listed for five of the Negley wells. The permitted yield for the remaining wells ranged from 2 to 25 gpm. The sum of the yields of all the Negley wells, for which records are available, is 246 gpm (excluding well N-8).

Geologic structure maps and cross-sections indicate that two wells of the Negley wells are most likely completed in the 100 Sand, fifteen are completed in the 110 Sand and five are completed in the 120 Sand (Figure 2). In those cases where the completion interval is unavailable, the determination of completion zone is based on the reported total depth of the well. Table 1 summarizes the information for the Negley wells.

The minimum horizontal distance from a proposed Ludeman wellfield to a private water well in the Negley Subdivision is approximately 970 feet, although the ore-

bearing sands are also vertically separated from the water supply sands by a 40- to 80-foot thick shale.

4.2 Site Geology

The geology of the LLAA has been extensively described in the NRC License SUA1341 Amendment Application, Ludeman Project, Technical Report (Uranium One, 2009). Additional characterization was included in subsequent responses to Requests for Additional Information (RAIs) regarding the Negley Subdivision (Uranium One, Americas, Inc. 2013). Key features of the geology, as they relate to the Negley Subdivision and MU1, the nearest Ludeman wellfield area directly to the south, are summarized below.

A series of cross-sections were developed by Uranium One to establish the geologic relationship between the overlying (100, 110 and 120) sands in the vicinity of the Negley subdivision (Section 11) and the production (80 and 90) sands in the area of the proposed MU1 wellfield in Section 14. The cross-sections are included as Attachment A to this technical memorandum. The location of the cross-sections are shown on Figure 2. The north-south cross sections (C-C', D-D' and F-F') clearly demonstrate a northward component of dip in the entire stratigraphic section from the 80 Sand up through the 120 Sand. A structure map of the base of the 110 Sand illustrates the geologic dip to the north-northeast (Figure 3) at between 120 to 150 feet per mile. A structure map of the top of the 110 Sand is shown in Figure 4. Data used to construct the structure maps are provided in Table 2. The geologic contacts were provided by Uranium One geological staff.

The cross-sections indicate that the 120 Sand is present in outcrop across portions of the Negley subdivision. It is generally between 40 and 80 feet thick across much of the Negley Subdivision, but is eroded away completely in the southwest part of Section 11 and most of Section 14. The minimum distance between any Negley well completed in 120 Sand and the proposed MU1 wellfield in Section 14 is approximately 4,000 feet. The 120 Sand is most likely unsaturated in the vicinity of the MU1 wellfield.

The 110 Sand is continuous across all of Section 11 and 14 but also crops out to the west. The 110 Sand is eroded away southwest of the proposed MU1 wellfield. The 110 Sand is generally 45 to 80 feet thick across the Negley subdivision, thinning across the proposed MU1 wellfield. Most of the Negley wells are completed in this sand. Three of those wells (N-2, N-12 and N-16) are within 1,400 feet of the nearest proposed MU1 wellfield. Well N-2 is the closest as it is approximately 970 feet from the northern edge of the MU1.

The 100 Sand is generally thinner and less continuous than the 110 Sand in the vicinity of the Negley Subdivision and northwest portion of the LLAA. This unit also is eroded away to the southwest and is absent over much of the MU1 as shown in the isopach map of the 100 Sand included as Figure 2.6-30 in the NRC License

SUA 1341 Amendment Application, Ludeman Project, Technical Report (Uranium One, USA 2009). Only two Negley wells are believed to be completed in this unit, although one of them (N-19) is less than 1,000 feet from the proposed wellfield.

The 90 Sand is the shallowest proposed production zone. The 90 Sand is separated from the 100 Sand by the 100/90 Shale. The 100/90 Shale ranges from 3 to 145 feet thick across the License Amendment Area. The 90 Sand pinches out in various locations within the LLAA, but is continuous across the Negley Subdivision. Its thickness ranges from 0 to 181 feet. The top of the 90 sand ranges from 5,000 to 4,820 ft amsl across the Negley Subdivision, dipping to the north as illustrated in the cross-sections (Attachment A). Based on well records and field surveys, the deepest penetration of any of the Negley wells, other than N-8, is approximately 5063 ft amsl, which is over 60 feet above the shallowest occurrence of the 90 Sand.

4.3 Site Hydrology

The Ludeman Project is located in the southwestern portion of the Powder River Basin, approximately two miles north of the east-flowing North Platte River. Regional groundwater flow within the Wasatch and Ft Union hydrostratigraphic units is generally northeast across the project area, following the geologic dip.

Recharge most likely occurs from infiltration of precipitation or streamflow over areas of outcrop. As previously described under the geology section of this report, the 100, 110 and 120 Sands are present in outcrop within or near the LLAA. Precipitation is estimated in the Technical Report (Uranium One, 2009) to be approximately 12.5 inches/year.

The hydrostratigraphic units of interest, with respect to this assessment, are the 90, 100, 110 and 120 Sands, each of which are within the Paleocene Ft Union Formation and are present beneath the Negley Subdivision and the northwest portion of the LLAA. Most of the hydrologic data (water levels and pumping tests) are concentrated in the target ore-bearing units, the 80 and 90 Sands, as a result of historic uranium exploitation efforts by Teton and the current permitting efforts of Uranium One. Aquifer characterization data for the 100, 110 and 120 Sands are generally limited.

Potentiometric data for the 80 and 90 Sands presented in the Technical Report (Uranium One 2009) indicate a general decrease in potentiometric head to the northeast across the northwest portion of the LLAA. The hydraulic gradient for the 80 and 90 Sands across the northwest portion of the LLAA is reported to be 0.0055 and 0.0063 ft/ft, respectively. As previously indicated, there are no wells completed in the 80 or 90 Sand within the Negley Subdivision.

Monitor wells completed in the 100 and 110 Sands that are located within the northwest portion of the LLAA also show a decrease in potentiometric head to the north and east. It is noted that the surface elevations included in the Technical

Report (Uranium One 2009) for two wells completed in the 110 Sand appear to be incorrect. Well LMO-1 was reported to have a top of casing (TOC) elevation of 5,194 feet above mean sea level (ft amsl). However the logs and topographic elevation maps indicate the ground surface is 5,217 ft amsl. The depth to water for LM0-1 was measured in the winter of 2008 as 21.6 ft below TOC with a reported elevation of 5172.4 ft amsl. The corrected water level elevation is approximately 5,196 ft amsl. For well M-7, the reported TOC elevation was 5,290 and the depth to water measured in the winter of 2008 was 181 ft with a reported water level elevation of approximately 5109 ft amsl. The logs and topographic elevation maps indicate the ground surface at M-7 is approximately 5,385 ft amsl and the corrected water level is approximately 5,177 ft amsl.

At LMO-1, the 110 Sand is present at ground surface. The depth to water (21.6 ft) indicates that unconfined conditions are present at this location. At M-7 the depth to water coincides with the approximate top of the 110 Sand indicating partially confined to confined conditions. The water level data and the geologic dip of this unit indicate that the 110 Sand transitions from unconfined conditions along the updip limits of the aquifer to confined conditions further into the basin.

Similar conditions are observed for the 100 Sand with unconfined conditions present at monitor well M-13 and confined conditions further north at well M-6. No monitor wells are completed in the 120 Sand. As previously discussed, the 120 Sand is eroded away farther north than the 110 and 100 Sands. Private water wells that are believed to be completed within the 120 Sand are located in the northern portion of the Negley Subdivision. It is very likely that the 120 Sand is unsaturated further south in the vicinity of the proposed MU1 wellfield.

Aquifer properties of transmissivity, hydraulic conductivity and storativity have been estimated from numerous pumping tests within the LLAA including those conducted by Teton in 1979-80 and those conducted by Uranium One in 2008. Eight multi-well and three single well tests have been conducted. The tests were generally conducted on the target ore sands (70, 80 and 90 Sands). The results of the tests and the analyses are summarized in Table 3. Transmissivity ranged from 122 to 721 gallons/day/foot (gpd/ft) or 16.3 to 96.4 feet squared/day (ft^2/d) with an average of 456 gpd/ft (61 ft^2/d). Hydraulic conductivity ranged from 0.44 to 2.3 feet/day (ft/d) with an average of 1.34 ft/d. One single well test conducted by Teton was reportedly on the 110 Sand with results of 620 gpd/ft (82.9 ft^2/d). The thickness of the tested interval was not reported so the hydraulic conductivity cannot be determined for that test. Storativity estimated from the multi-well tests ranged from 5.1E-05 to 2.6E-04 (unitless) with an average of 1.2E-04.

Although no test data specific to the 100 and 120 Sands are available, and the data for the 110 Sand are limited to one single well test, it is reasonable to assume that the aquifer properties of these shallower hydrostratigraphic units are similar to those of the tested ore-body sands. Description of the 100, 110 and 120 Sands provided in the Technical Report (Uranium 2009) are similar to the description of

the 80 and 90 Sands with the exception that the mineralization is generally absent in the shallower units.

The porosity of the shallower sands is expected be in the range of 20 to 30 percent, which is typical for fluvial sands.

5 Modeling Approach

The primary objective of this modeling effort is to determine if a potential release from an ISR operating well into an overlying aquifer could go undetected long enough to impact a private water well in the Negley Subdivision. Key considerations and assumptions in addressing this issue are listed below.

- Closest production to the Negley Subdivision within the LLAA will be from the 90 and/or 80 Sands.
- There will be a sufficient monitoring well ring in place to identify potential lateral excursions (within the 80 or 90 Sand) during mining and restoration.
- The Negley wells are completed in (and produce water from) the shallower 100, 110 and 120 Sands.
- There is some uncertainty as to which of the shallow sands each of the Negley private wells are completed in, some of them may be completed across multiple sands.
- There is limited aquifer characterization data for the shallower sands but it is reasonable to assume that aquifer properties will be similar to those of the 80 and 90 Sands.
- The Negley subdivision is hydraulically downgradient from the proposed wellfields in the northwest portion of the LLAA (although vertically separated by a shaley unit).
- Pumping from the private wells will increase the hydraulic gradient between the Negley Subdivision and the nearest wellfield.
- MITs will be conducted on all operating wells at least once every 5 years (which would be the maximum period of time that a release could go undetected).

The shortest pathway for a release to reach the Negley private wells would be via a failed casing of an injection well near the northern margin of the wellfield into either the 100, 110 or 120 Sand. The fastest travel time would be under a scenario where the hydraulic gradient between the Negley Subdivision and the failed injection well is maximized (steepest).

Because hydrologic data for each of the shallow sands are limited, the approach used in the model was to simulate all of the Negley wells within a single sand unit.

The 110 Sand was used to simulate the scenario of a release from an injection well because most of the Negley wells are completed in that unit and three of those wells are located immediately north of the LLAA boundary. The 120 sand is probably not saturated directly above the wellfield and the closest Negley wells completed in that unit are approximately 4,000 feet away. The 100 Sand appears thinner and less continuous than the 110 Sand and would probably not sustain as high a pumping rate as the 110 Sand. Placing all of the Negley wells into a single model layer maximizes the drawdown associated with pumping of those wells for water supply. This results in the maximum hydraulic gradient between the hypothetical failed injection well and the Negley wells.

6 Model Codes

The model codes used to simulate groundwater conditions at the Negley Subdivision are MODFLOW2000 (Harbaugh et al. 2000) and MODPATH, Version 3 (Pollock, 1994). MODFLOW2000 is a public domain computer program developed by the U.S. Geological Survey (USGS) that numerically solves the groundwater flow equation for a porous medium using a finite difference method. MODFLOW-2000 is an enhanced version of the widely used MODFLOW code that has been updated several times (McDonald and Harbaugh 1988, and Harbaugh and McDonald 1996). Like its predecessors, MODFLOW-2000 simulates groundwater flow using a block-centered, finite-difference approach that is capable of a wide array of boundary conditions. The code can simulate aquifer conditions as unconfined, confined, or a combination of the two. MODFLOW-2000 also supports variable thickness layers (i.e. variable aquifer bottoms and tops). Documentation of all aspects of the MODFLOW-2000 code is provided in the user manuals (Harbaugh and others 2000).

MODPATH is a particle-tracking code that can readily incorporate information collected from the MODFLOW groundwater flow model. MODPATH is used to provide computations of groundwater seepage velocities and groundwater flow directions. MODPATH is also a public domain code developed by the USGS.

The pre/post-processor Groundwater Vistas (Environmental Simulations, Version 6, 2011) was used to assist with input of model parameters and output of model results. Groundwater Vistas serves as a direct interface with MODFLOW2000 and MODPATH.

7 Model Domain and Boundary Conditions

The model domain encompasses an area of approximately 45.4 square miles with west-east dimensions of 42,200 ft (8.0 miles) and north-south dimensions of 30,000 ft (5.7 miles). The Negley Subdivision is located slightly south of the center of the model domain. The extent of the model domain is illustrated in Figure 5. The model is constructed as a single layer system, representing the 110 Sand. Use of a single layer will result in the fastest travel time for a release to reach the Negley wells.

The model grid was designed to provide adequate spatial resolution within the Negley Subdivision and the northwestern portion of the LLAA in order to simulate response of the aquifer(s) to pumping from the Negley private water wells and a hypothetical release of production fluids at the margins of the Section 14 wellfield. The model domain was extended approximately 18,400 ft (3.5 miles) east and west of Section 11 and 9,000 ft (1.7 miles) south and 15,500 north, (2.9 miles) of Section 11 to minimize impacts of exterior boundary conditions on the model solution.

Cell dimensions across the area of interest (in the vicinity of the LLAA boundary between the Negley Subdivision and the wellfield in Section 14) are 12.5 feet by 12.5 feet. Cell dimensions are gradually increased to a maximum size of 200 feet by 200 feet out at the margins of the modeled area. The model consists of 444 rows and 566 columns containing 251,304 cells.

As described, the 110 Sand is eroded away in the southwestern portion of the LLAA. The trace of the erosional contact is delineated in the model as a no flow boundary. Figure 3 shows the portion of the model excluded from the simulation as a no flow boundary because of the absence of the 110 Sand.

The General Head boundary (GHB) condition was used to represent lateral groundwater flow into and out of the model domain along the perimeter. The heads for the GHBs were adjusted along with recharge to provide a reasonable approximation of the potentiometric surface of the 110 Sand with a north-northeast hydraulic gradient.

The well package of MODFLOW2000 was used to simulate pumping from the Negley wells and injection from well along the perimeter of the production wellfield. Numerous simulations were conducted at varying pumping rates to determine the maximum rates that could be sustained for the Negley wells without “drying up” the aquifer. The rates are described in the simulations section of this report.

8 Model Parameters

Key parameters in the simulation of a hypothetical release to the 110 Sand include hydraulic conductivity, storativity and porosity, top and bottom elevation of the unit, and recharge. A description of each of these parameters follows.

The top and bottom elevation of the 110 Sand were imported from a gridded contour map that was based on electric log correlations from the exploratory borings. The geologic contacts were provided by Uranium One geologic staff. The data were contoured using Surfer (Golden Software, Version 11.0). Figures 3 and 4 show those structure maps. The data used in the mapping are concentrated in the Negley Subdivision and the northwest portion of the LLAA. The structure maps were extrapolated out to the edges of the model using an average thickness of approximately 75 feet in areas where there was no subsurface control.

As previously described, the average hydraulic conductivity for the LLAA aquifer tests was 1.34 ft/d. This value was used in the initial simulations and is considered reasonable for the 110 Sand. Additional sensitivity analyses were also conducted by varying the hydraulic conductivity as described under the sensitivity analysis section of this report.

MODFLOW2000 uses specific storage instead of storativity in transient simulations. Specific storage is equal to the storativity divided by the saturated thickness of the aquifer. The average storativity reported from site pumping tests was 1.15E-04. The average saturated thickness from those tests was 49.5 feet. Therefore, the average specific storage from those tests was 2.33E-06. This was the value used in the simulations.

The porosity used in the base simulations was 0.25 (25%). Specific yield, which is essentially the drainable porosity in the aquifer matrix, was simulated as 0.2 (20%). These parameters were adjusted during the sensitivity analysis of the modeling results.

Recharge was used to adjust the potentiometric heads so that they provided a reasonable match to the water level elevations seen in 110 Sand monitor wells LMO-1 and M-7. As previously described, the hydraulic conductivity was initially held constant at the average value determined from site pumping tests. Recharge and the GHBs were adjusted until a reasonable match was achieved to the potentiometric surface both in terms of elevation and flow direction. The value used in the simulations was 8.0E-05 ft/d. which is approximately 3% of precipitation.

9 Model Simulations

Several model simulations were run to evaluate the hydraulic impacts of pumping from the Negley Subdivision wells and a hypothetical release from a failed ISR injection well into the shallow water supply sands. Many of the simulations utilized pumping and injection rates that may be unrealistically high but serve as conservative, worst-case scenarios for maximizing the hydraulic gradient between the Negley wells and the wellfield area. Table 4 provides a brief summary description of these simulations.

The simulations included a steady state (non-pumping) scenario to establish the regional groundwater flow field, a scenario of maximized Negley well pumping, and several scenarios with a hypothetical injection well release coupled with the maximized Negley well pumping. Additional scenarios were simulated using pumping and injection rates that are closer to values reasonably expected given typical domestic well usage rates and the hydraulic properties of the shallow aquifers. The description of those simulations is provided below.

The initial model was a steady state simulation to establish the regional groundwater flow field. Because water level elevations were only available for two wells completed in the 110 Sand, and those were one-time measurements, there was insufficient data to develop a fully calibrated model. However, potentiometric data from the deeper 80 and 90 Sands, as well as regional studies, suggest that the potentiometric surface of the Ft Union hydrostratigraphic units along the southern flank of the Powder River Basin, generally follows the regional geologic dip, decreasing to the north-northeast. The objective for the steady state simulation was to approximate the potentiometric surface with a water level elevation of approximately 5,190 ft amsl in the vicinity of the MU1 wellfield and a hydraulic gradient of approximately 0.006 ft/ft to the north-northeast. A more northerly hydraulic gradient between the MU1 wellfield and the Negley Subdivision provides the shortest potential flowpath for a release to reach the water supply wells.

Figure 6 shows the potentiometric surface of the steady state simulation. No operating wells were included in this simulation. The no-flow boundary condition in the southwest portion of the model domain represents the absence of the 110 Sand due to erosion. Figure 7 shows a closer view of the area of interest. Particle tracking was used to show the steady state non-pumping groundwater flowpaths from the northward edge of the closest wellfield (MU1) to the Negley Subdivision. It is important to note that the wellfield shown on the figure represents the projection of the 90 Sand wellfield into the 110 Sand and that the wellfield will not actually exist within the 110 Sand. Projection of the wellfield allows for the accurate placement of injection wells for the simulation of a hypothetical release to the 110 Sand.

The groundwater flowpaths in Figure 7 represent a travel time of 100 years. The arrows on the particle tracks indicate 10-year travel increments. Under steady state, non-pumping conditions, it takes approximately 100 years for particles leaving the projected edge of the wellfield to reach the closest Negley well (N-2), a distance of approximately 975 ft. As an independent check of the veracity of the model, groundwater flow velocity was calculated using the Darcy equation. The Darcy equation is stated as

$$v = k * i / \Phi$$

where

v = groundwater velocity in ft/d
k = hydraulic conductivity in ft/d
i = gradient in ft/ft
Φ = porosity

Using the values input or derived from the model of k = 1.34 ft/d, i ~ 0.006 ft/ft, and Φ of 0.25, groundwater velocity is calculated from the Darcy equation as 0.032 ft/d. As indicated, the simulation indicates it takes 36,500 days (100 years) to travel approximately 975 ft for an average groundwater flow velocity of 0.027 ft/d, which is reasonably close to the Darcy estimate. For comparison to the simulations that

follow, the steady state simulation particle tracking indicates that groundwater leaving the edge of the projected MU1 wellfield will travel approximately 50 feet (toward the Negley Subdivision) over five years.

In order to maximize the hydraulic gradient between the hypothetical release and the Negley wells (to develop the worst-case scenario) it was necessary to determine the maximum pumping that could be sustained by the 110 Sand. Summing of permitted flow rates for all of the Negley wells results in a value of 246 gpm. Many of the individual wells have permitted rates of up to 25 gpm. However pumping simulations of individual wells indicated that the maximum long-term continuous pumping rate for a single well was only approximately 10 to 12 gpm. Rates exceeding this value resulted in the well going dry within a couple of years of operation. Similarly, multiple wells pumping at rates approaching 10 gpm could not be sustained in the model simulations without causing the well nodes to go dry. Various pumping configurations were attempted with the objective of lowering the potentiometric surface in the Negley Subdivision, particularly near the boundary of the LLAA, to greatest extent possible (without drying up the well nodes). This was accomplished with a simulation in which each of the twenty two Negley wells were pumped at a rate of 5 gpm (for a total pumping rate of 110 gpm) (Figure 8). The simulation was run for a period of ten years resulting in up to 50 feet of drawdown in portions of the Negley Subdivision and 25 to 30 feet of drawdown along the line of wells just north of the LLAA boundary.

Particle tracking indicates that after ten years, groundwater leaving the edge of the projected wellfield has traveled a maximum distance of 240 feet for this simulation. This is an average rate of 0.066 ft/d. The particle tracks do not reach as far as the monitor well ring (400 feet away from the edge of the wellfield) within ten years. Note that this simulation does not include a release from an injection well. For a five-year period, groundwater leaving the north edge of the MU1 field will travel less than 120 feet. This simulation demonstrates that pumping from the Negley Subdivision (under extreme conditions) can have a measurable effect on in the vicinity of MU1, increasing groundwater velocity from 0.027 (10 ft/yr) to 0.066 ft/d (24 ft/yr). This equates to an additional 14 ft of travel distance per year or 70 ft over five years.

The 5 gpm pumping rate used in the previous simulation may be unrealistically high. As a point of reference, the U.S. Geological Survey reports that the average per capita use of water for domestic purposes, both inside and outside, is 89 gallons per day (gpd) (Maupin, et al. 2010). For Converse County, the per capita consumption water for domestic use is even lower at 74 gpd. A typical family of four persons in Converse County would require just under 300 gpd or a continuous pumping rate of less than 0.21 gpm. That figure does not account for livestock or irrigation uses, although it is Petrotek's understanding (based on discussions with Uranium One personnel) that none of the Negley wells are used for agricultural irrigation. A continuous pumping rate of 5 gpm means that each home in the Negley Subdivision would have a daily surplus of almost 7,000 gpd that would

require storage, if not used. Although each well pumping at a continuous rate of 5 gpm is an unlikely scenario, it presents a “worst case” simulation with respect to maximizing the hydraulic gradient between the Negley Subdivision and a hypothetical failed injection well at the northern edge of the Ludeman wellfield.

The next simulation incorporates a hypothetical release into the 110 Sand from an injection well located along the north edge of the wellfield. The injection well was placed at the north edge of the wellfield to provide the shortest travel distance to the Negley wells. The simulation was run initially for a period of five years with only the Negley wells pumping. Then injection was added to the northern most point of the wellfield at a rate of 20 gpm for a period of five years (while the Negley wells were still pumping). Figure 9 shows the potentiometric surface for that simulation after five years of injection. The particle tracking is also shown on the figure but in this case, all of the particles start at the injection well. The maximum travel distance from the injection well after five years of injection is approximately 525 feet (a groundwater velocity of almost 0.3 ft/d). However, in this simulation, the particles have not reached the boundary of the LLAA and are still over 400 feet from the closest Negley well.

A simulation was run in which one well along the south boundary of the Negley Subdivision was pumped at a higher rate that the surrounding wells to create a more substantial localized cone of depression. The point of this simulation was to determine if the injectate from the hypothetical release could be forced to move more rapidly to a single well in the Negley Subdivision than in the previous simulation (with all Negley wells being pumped at equal rates). For this simulation all of Negley wells were pumped at 5 gpm except for the four wells located along the southern boundary of the Negley Subdivision. Three of those wells were pumped at 2 gpm and the remaining well (N-2) was pumped at 8 gpm. Figure 10 shows the potentiometric surface and particle tracking (groundwater flowpaths) for that simulation. The maximum travel distance after five years is approximately 535 feet. Figure 11 compares the flowpaths for this simulation with the one in which all of the Negley wells are pumped at 5 gpm. The difference between the flowpaths for the two simulations over the five year period is minimal at approximately 10 feet. These simulations demonstrate that the shape and size of the injectate plume within the five-year operating period is primarily controlled by the injection rate and is only minimally influenced by pumpage from the Negley wells.

Another simulation included only the hypothetical release, without any pumping from the Negley wells. The injection well was simulated at 20 gpm. Results of the simulation indicate that the maximum travel distance after five years is approximately 455 ft (Figure 12). This distance is approximately 400 ft greater than for the simulation of steady state non-pumping conditions (an additional 80 ft/yr).

It should be noted that a continuous injection rate of 20 gpm is not likely to be achieved in the Ludeman wellfields. Typically, the maximum injection rate for a wellfield will not be greater than the extraction rate of a single production well (in

order to maintain wellfield balance). As previously noted the maximum sustained pumping rate determined for the 110 Sand is around 10 gpm. The properties used to represent the 110 Sand are based largely on the pumping tests of the 80 and 90 Sands. Although some additional head will be available in the deeper ore bearing sands, the maximum pumping rates are not anticipated to be much higher than those projected in these simulations for the 110 Sand.

The previous simulations of pumping from Negley wells and a release from a failed injection well were run using rates that are probably unrealistic, particularly for a sustained five-year period. Although these simulations are useful to evaluate hydraulic effects of generally “worst case” scenarios, rates more typical of what would be expected in this area provide a better assessment of how a monitoring network should be designed to adequately protect the water supply aquifers of the Negley Subdivision.

A simulation was run under conditions that are considered more representative of what might actually occur under a casing failure scenario. In this simulation, all of the Negley wells were pumped at a rate of 1 gpm except for one well closest to the injection well that was pumped at 5 gpm (well N-2). One gpm is still almost five times greater than an average rate needed for domestic use for a family of four and accounts for additional consumption for livestock or local irrigation. The higher simulated pumping at well N-2 was intended to focus the injectate migration toward that well. The injection well is operated at 10 gpm. The results of that simulation are shown in Figure 13. Particle tracking indicates that after five years the injectate has traveled a maximum distance of approximately 370 ft from the injection well. Under this scenario, which is still conservative with respect to long-term continuous pumping rates within the Negley Subdivision, the leaking well would have been discovered before the injectate reaches a distance of 400 feet beyond the projected wellfield boundary.

An additional run was simulated in which all of the Negley wells were pumping at a rate of 1 gpm. After five years of simulated leakage, the maximum distance that the injectate travelled was only 13 feet less than for the case with one higher rate pumping well (N-2 at 5 gpm) in the Negley Subdivision (Figure 14).

A simulation was run that included only the hypothetical release at 10 gpm, without any pumping from the Negley wells. Results of the simulation indicate that the maximum travel distance after five years is approximately 350 ft (Figure 15). This distance is approximately 300 ft greater than for the simulation of steady state non-pumping conditions (an additional 60 ft/yr).

Table 4 presents a summary of the all of the model simulations previously described.

10 Sensitivity Analysis

Additional simulations were run in which key parameters in the model were varied to analyze the sensitivity of the model solution to those parameters. The base model was the last simulation previously described in which the injection well rate was 10 gpm and the Negley wells were simulated as 1 gpm. The parameters analyzed included hydraulic conductivity, specific storage, specific yield, porosity, recharge and injection rate (of the failed well). Table 5 summarizes the sensitivity analysis simulations.

The results of the simulations in which the injection rate was varied (Sens1 and Sens2) are shown on Figure 16. This parameter has significant impact on the travel time and distance of the injectate. The maximum distance that the injectate travels from the injection well and the maximum width of the release at the end of five years are summarized in Table 6. Varying the hydraulic conductivity (Sens3 and Sens4) also has significant impact to injectate travel distance as shown on Figure 17 and Table 6. Negligible impacts to injectate transport occurs as a result of changes to the specific storage (Sens5 and Sens6), specific yield (Sens7 and Sens8) and recharge (Sens11 and Sens12) (Figures 18, 19, 20, and Table 6). The porosity value also has significant impact on injectate migration (Figure 21, Table 6).

In every simulation, the width of injectate release exceeds 400 feet, which is the spacing between monitor ring wells surrounding the production zones. Also note that the maximum width for the injectate release is always greater than the maximum downgradient travel distance (within the five-year travel time).

11 Monitor Well Design and Spacing

The model results were used to design a groundwater monitoring system that will adequately protect the shallow water supply aquifers of the Negley Subdivision from potential releases from the Ludeman uranium ISR operations. As previously described, and illustrated in the model simulation figures, the maximum width of the injectate plume is always greater than the maximum downgradient travel distance, at least within the first five years. This suggests that earlier detection of a release would occur from overlying monitoring points within or immediately adjacent to the projected wellfield rather than at monitor wells placed some distance away from the wellfield, as will be demonstrated.

Currently, Uranium One will be required to monitor the overlying aquifer within the wellfield with a density of no less than 1 monitor well per 4 acres. The overlying aquifer across most of the MU1 wellfield is the 100 Sand. Figure 22 depicts a grouping of circles placed over the footprint of the MU1 wellfield. Each circle represents a 4-acre area. A four-acre circle has a radius of approximately 236 feet. In the center of each circle is an overlying aquifer monitoring well. Therefore, the maximum distance between two adjacent monitor wells is approximately 472 feet.

The figure also shows a series of overlying monitor wells placed coincident with the production zone monitor ring, at a distance of 400 feet from the wellfield and spaced 400 feet apart.

Hypothetical releases (using the 10 gpm injection rate and the 1 gpm pumping rate from each Negley well) are also shown on the figure at four different locations. In each of the four releases, the lateral spreading of an injected fluid into the overlying aquifer (100 Sand) would be detected in the overlying monitor wells within the projected wellfield footprint much sooner than in the overlying monitor wells placed in a ring 400 feet from the projected wellfield boundary. As previously demonstrated in model simulations, the hydraulic impacts of pumpage from the Negley wells is not great enough to overcome the initial radial flow from the source of injection. Based on these observations, placing additional monitor wells in the 100 Sand downgradient of the wellfield is unnecessary.

For the 100 Sand, monitor wells should be installed within the footprint of the wellfield at a frequency of 1 well per 4 acres, as already prescribed. Possible locations of the 100 Sand monitor wells are shown on Figure 23. Exact locations would be adjusted based revisions to the final MU1 wellfield configuration and the presence or absence of the 100 Sand as the overlying aquifer. In areas where the 100 Sand is absent, monitor wells would be completed in the 110 Sand, as necessary.

For the 110 Sand, a line of monitor wells placed along the northern extent of the wellfield spaced from 450 to 500 ft apart would similarly provide adequate early detection of a release from a failed injection well (Figure 23). This would require approximately 10 monitor wells completed within the 110 Sand.

Based on the available data, it is not expected that the 120 Sand will be water-bearing over the MU1 wellfield. The nearest known water supply wells completed in the 120 Sand are more than 4000 feet north of MU1. Therefore, no monitor wells are proposed for this hydrostratigraphic unit. If during installation of the 100 and 110 Sand monitoring network, it is determined that saturated conditions are present in the 120 Sand, then a similar strategy as proposed for the 110 Sand would be employed, placing one monitor well every 450 to 500 feet along the northern perimeter of the MU1 wellfield.

12 Summary and Conclusions

Petrotek developed a numerical groundwater flow model to assist in the design of a monitoring system to detect potential releases to shallow water supply sands from uranium ISR mining at the Ludeman Project in Converse County, Wyoming. Potential leakage from failed casing in an ISR operating well could release production fluids into the shallower, overlying sands that provide water supply to residents of the Negley Subdivision.

The numerical model was developed to assess how changes in hydraulic gradient caused by the drawdown in the Negley Subdivision from active pumping of the private water wells could impact migration of a potential release from an ISR operating well. The model was used to estimate the rate and distance that a potential release from an operating ISR well could travel during the five-year period between MITs under various pumping scenarios.

Key points related to the modeling and assessment of the shallow water supply aquifers include the following.

- Closest production to the Negley Subdivision within the LLAA will be from the 90 and/or 80 Sands.
- There will be a sufficient monitoring well ring in place to identify potential lateral excursions (within the 80 or 90 Sand) during mining and restoration.
- The Negley Subdivision wells are completed in (and produce water from) the shallower 100, 110 and 120 Sands.
- There is limited aquifer characterization data for the shallower sands but it is reasonable to assume that aquifer properties will be similar to those of the 80 and 90 Sands.
- The Negley subdivision is hydraulically downgradient from the proposed wellfields in the northwest portion of the LLAA (although vertically separated by a shaley unit).
- Pumping from the private wells will increase the hydraulic gradient between the Negley Subdivision and the nearest wellfield.
- MITs will be conducted on all operating wells at least once every five years (which would be the maximum period of time that a release could go undetected).

The shortest pathway for a release to reach the Negley private wells would be via a failed casing of an injection well near the northern margin of the wellfield into either the 100, 110 or 120 Sand. The fastest travel time would be under a scenario where the hydraulic gradient between the Negley Subdivision and the failed injection well is maximized (steepest).

Hydrologic data for each of the shallow sands are limited. The approach used in the model was to simulate all of the Negley wells within a single sand unit. The 110 Sand was used to simulate the scenario of a release from an injection well because most of the Negley wells are completed in that unit and three of those wells are located immediately north of the LLAA boundary. The 120 sand may not be saturated directly above the wellfield and the closest Negley wells completed in that unit are approximately 4,000 feet away. The 100 Sand appears thinner and less continuous than the 110 Sand and would probably not sustain as high a

pumping rate as the 110 Sand. Placing all of the Negley wells into a single model layer maximizes the drawdown associated with pumping of those wells for water supply. This results in the maximum hydraulic gradient between the hypothetical failed injection well and the Negley wells.

Simulations were run to evaluate the hydraulic impacts of pumping from the Negley Subdivision wells and a hypothetical release from a failed ISR injection well into the shallow water supply sands. The simulations utilized pumping and injection rates that may be unrealistically high, but serve as conservative, "worst-case" scenarios for maximizing the hydraulic gradient between the Negley wells and the wellfield area. The simulated distance that groundwater or injectate migrates from the MU1 wellfield after five years is summarized below.

- Steady-state simulation (with no pumping) - 50 ft.
- All Negley wells pumping at 5 gpm (but no injection release) - 120 ft
- No Negley wells pumping, an injection release of 20 gpm - 455 ft.
- All Negley wells pumping at 5 gpm, an injection release of 20 gpm, - 525 ft
- Most Negley wells pumping at 5 gpm, one at 8 gpm, an injection release of 20 gpm - 535 ft
- No Negley wells pumping, an injection release of 10 gpm - 350 ft.
- All Negley wells pumping at 1 gpm, an injection release of 10 gpm – 357 ft
- Most Negley wells pumping at 1 gpm, one at 5 gpm, with an injection release of 10 gpm - 370 ft

Results of the simulations indicate that the hydraulic impacts from pumpage in the Negley Subdivision are relatively minor in the vicinity of the hypothetical injectate release. The hydraulic gradient at the north edge of the wellfield is dominated by the injection into the shallow aquifer. Pumping from the Negley wells only increases the migration distance of a hypothetical release a maximum of 80 ft over a five-year period, or roughly 16 ft/yr under the simulated conditions. In contrast, the simulation of a release at 20 gpm with no pumping from the Negley wells, increases the migration rate by 80 ft/yr.

The U.S. Geological Survey reports that the average per capita use of water for domestic purposes in Converse County is 74 gallons per day (gpd) (Maupin, et al. 2010). A typical family of four persons in Converse County would require just under 300 gpd or a continuous pumping rate of less than 0.21 gpm. This is substantially less than the rates used in the simulations that included pumping from the Negley wells.

The model simulations demonstrate that the hydraulic impacts of pumpage from the Negley Subdivision (even at rates substantially higher than would be expected)

are not great enough to overcome the initial radial flow from the source of injection. There is substantial lateral spreading of the release at the point of injection. The simulations show that the maximum width of the injectate plume is always greater than the maximum downgradient travel distance within the first five years of the release. Therefore, the most effective means of detecting potential releases in the shallower sands overlying the production zone is placement of shallow monitor wells within the projected footprint of the wellfield or at the very northern edge. The lateral spreading of an injected fluid would be detected in the interior wellfield shallow monitor wells much sooner than in monitor wells placed hundreds of feet downgradient.

A monitoring network is proposed that will allow early detection of potential releases from a failed injection well into the shallow aquifers that supply water to the Negley Subdivision. The monitoring network includes one well every 4 acres within the projected footprint of the MU1 wellfield in the 100 Sand and a row of wells along the north margin of the wellfield completed in the 110 Sand. The well spacing of the 110 Sand completions will be approximately 450 to 500 feet. The 120 Sand is not anticipated to be water bearing in the immediate vicinity of the MU1 wellfield. If during installation of the monitoring network, it is determined that saturated conditions are present in the 120 Sand, monitor wells will be installed along the north perimeter of MU1 within that unit at the same spacing as for the 110 Sand. The proposed groundwater monitoring system will adequately protect the shallow water supply aquifers of the Negley Subdivision from potential releases from the Ludeman uranium ISR operations.

13 References

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Table 1. Negley Subdivision Well Information

Uranium One Identification	Permit Number	Groundwater Permit Priority Date	NAD 27 East	NAD27 North	Surface Elevation	Type of Well	Pump Type	Casing ID	TD	TD Elev
N-1	50986	4/20/76	357587	824383	5262	Mon	Monitor	5"	131	5131
N-2	26629	1/21/80	357984	823579	5255	Dom	Subm	5"	120	5135
N-3	42818/83767	4/20/78	359265	827070	5277	Dom	Subm	5"	120	5157
N-4	40688	11/2/77	357843	826605	5269	Stk	Wind	5"	200	5069
N-5	40689	11/2/77	357388	826681	5307	Dom	Subm	5"	125	5182
N-6	50985	1/21/80	358428	825982	5260	Mon	Monitor	5"	196	5064
N-7	26631	5/16/74	357980	827187	5290	Dom	Subm	6"	120	5170
N-9	180	8/31/22	361050	829865	5371	Dom	Wind	5"	180	5191
N-10	24572 (canc.)	7/31/56	356045	826143	5237	Dom,Stk	Wind	5"	150	5087
N-11	P08605P	9/20/73	359302	828746	5310	Dom,Stk	NA	5"	140	5170
N-12	64309	6/9/83	358413	823613	5288	Dom,Stk	Subm	5"	160	5128
N-13	30262/30263 both(canc.)	6/25/75	359199	825139	5293	Dom	NA	5"	210	5083
N-14	46720	2/28/79	358405	825217	5272	Dom	Subm	6"	180	5100
N-15	32804	2/28/79	357805	824929	5258	Dom	Subm	5"	195	5063
N-16	30265	6/21/75	358868	823646	5281	Dom	Subm	6"	160	5121
N-17	30264	6/25/75	359112	824046	5261	Dom	Subm	5"	180	5081
N-18	9485	7/31/56	358285	824525	5252	Dom,Stk	NR	5"	130	5122
N-19	26630	5/16/74	357368	823619	5214	Dom	Subm	5"	135	5079
N-20	26415	4/23/74	358156	825327	5289	Dom	Subm	5"	180	5109
N-21	26463	4/25/74	358501	824888	5285	Dom	Subm	5"	180	5105
N-22	42928	4/20/78	358583	825179	5265	Dom	Subm	5"	180	5085
N-23	161492	8/25/04	357885	824783	5260	Dom	NA	5"	165	5095

Uranium One Identification	Completion Zone	Reported Yield	SWL	Top Completion Depth	Bottom Completion Depth	Top Completion Elevation	Bottom Completion Elevation	Base of 120 Sd	Base of 110 Sd	Base of 100 Sd
N-1	110	0	45	71	131	5191	5131	5227	5110	
N-2	110	25	100	80	120	5175	5135	5237	5122	
N-3	120	20	85	40	120	5237	5157	5169	5037	
N-4	110	12	170	140	200	5129	5069	5188	5058	
N-5	120	12	65	60	125	5247	5182	5188	5060	
N-6	110	0	67	106	186	5154	5074	5203	5068	
N-7	120	25	70	80	120	5210	5170	5172	5044	
N-9	120	2	40	SEO Doc NA	SEO Doc NA	SEO Doc NA	SEO Doc NA	~5100	~4980	
N-10	110	NA	NA	NA	NA	NA	NA	5201	5093	
N-11	120	4	40	SEO Doc NA	SEO Doc NA	SEO Doc NA	SEO Doc NA	5132	5001	
N-12	110	10	80	120	160	5168	5128	5237	5114	
N-13	110	NA	NA	200	210	5093	5083	5220	5082	
N-14	110	23	100	135	175	5137	5097	5217	5085	
N-15	100	6	80	160	195	5098	5063	5219	5095	5046
N-16	110	10	45	120	160	5161	5121	5238	5104	
N-17	110	10	55	140	180	5121	5081	5235	5093	
N-18	110	25	60	50	130	5202	5122	5227	5090	
N-19	100	25	80	95	135	5119	5079	5236	5129	5080
N-20	110	12	80	120	160	5169	5129	5214	5084	5033
N-21	110	5	80	140	180	5145	5105	5223	5090	
N-22	110	20	100	135	175	5130	5090	5219	5085	
N-23	110	NA	NA	NA	NA	NA	NA	5223	5098	

All data in this table as reported by Uranium One, Americas, Inc.

Table 2. Geologic Contacts, Negley Subdivision and Vicinity

Boring ID	Easting	Northing	Surface Elev	120 Sand Top	120 Sand Bottom	120 Sand Bottom Elevation	110 Sand Top	110 Sand Top Elevation	110 Sand Bottom	110 Sand Bottom Elevation	100 Sand Top	100 Sand Top Elevation	100 Sand Bottom	100 Sand Bottom Elevation	90 Sand Top	90 Sand Top Elevation
	(feet)	(feet)	(ft amsl)	(ft bgs)	(ft bgs)	(ft amsl)	(ft bgs)	(ft amsl)	(ft bgs)	(ft amsl)	(ft bgs)	(ft amsl)	(ft bgs)	(ft amsl)	(ft bgs)	(ft amsl)
17KM	356754	827663	5272	NP	111	5161	182	5090	235	5037	258	5014	326	4946	404	4868
10KM	355860	827003	5257	NP	68	5189	129	5128	194	5063	220	5037	259	4998	365	4892
14KM	355210	824177	5219	NP	NP				81	5138	103	5116	141	5078	257	4962
150CEGB	354629	824844	5262	NP	32	5230	90	5172	145	5117	182	5080	209	5053	316	4946
16KM	355804	823417	5207	NP	NP				59	5148	75	5132	123	5084	222	4985
18KM	356670	826964	5253	NP	61	5192	135	5118	189	5064	210	5043	250	5003	365	4888
2250-1150	355750	826150	5234	NP	32	5202	83	5151	134	5100	162	5072	212	5022	316	4918
2850-1650	355750	826150	5261	NP	59	5202	141	5120	182	5079	197	5064	238	5023	352	4909
41KM	356117	824394	5222	NP	NP		48	5174	98	5124	124	5098	164	5058	283	4939
5	358273	828292	5335	115	193	5142	246	5089	314	5021	343	4992	376	4959		
56KM	355706	823667	5210	NP	NP		12	5198	60	5150	76	5134	135	5075	231	4979
64KM	356567	825041	5229	NP	12	5217	62	5167	120	5109	132	5097	172	5057	281	4948
71KM	356685	825565	5232	NP	34	5198	74	5158	149	5083	154	5078	198	5034	302	4930
73KM	356780	826350	5255	NP	59	5196	109	5146	181	5074	212	5043	237	5018	355	4900
KT-2	358428	825982	5258	NP	54	5204	106	5152	190	5068						
LaPlant-1	357624	824295	5235	NP	NP		47	5188	123	5112						
1000	360583	823628	5299	NP	72	5227	135	5164	232	5067	243	5056	262	5037		
1007	363253	825568	5367	72	169	5198	225	5142	310	5057	345	5022	379	4988		
532CEGB	359717	827252	5287	58	126	5161	167	5120	259	5028	284	5003	314	4973		
72-3	359825	824991	5287	NP	65	5222	123	5164	204	5083	235	5052	297	4990		
IDA-105	363636	825367	5368	90	175	5193	225	5143	314	5054	346	5022	378	4990		
IDA-190	363007	825153	5345	NP	144	5201	190	5155	286	5059	331	5014	353	4992		
IDA-201	362401	825187	5336	NP	145	5191	191	5145	275	5061	309	5027	349	4987		
IDA-218	361415	826489	5333	92	167	5166	221	5112	295	5038	318	5015	366	4967		
IDA-245	362299	826326	5350	85	184	5166	242	5108	320	5030	357	4993	393	4957		
IDA-369	363042	826115	5357	94	175	5182	215	5142	325	5032	353	5004	385	4972		
IDA-370	359543	823333	5281	NP	38	5243	92	5189	187	5094	212	5069	236	5045	308	4973
IDA-378	359605	824254	5262	NP	NP		100	5162	181	5081	199	5063	232	5030	305	4957
IDA-380	359677	826058	5289	NP	98	5191	165	5124	228	5061	262	5027	289	5000	356	4933
IDA-4	362528	825652	5360	78	171	5189	206	5154	306	5054	340	5020	370	4990		
IDA-438	360385	827737	5304	86	163	5141	187	5117	288	5016	360	4944	384	4920		
IDA-464	360751	824670	5284	NP	101	5183	148	5136	224	5060	249	5035				
IDA-466	359983	825416	5313	NP	99	5214	160	5153	231	5082	269	5044	299	5014		
IDA-484	360539	825308	5296	24	100	5196	157	5139	231	5065	263	5033	322	4974		
IDA-487	361515	825431	5306	37	116	5190	185	5121	274	5032	287	5019	320	4986		
IDA-498	361408	824746	5303	NP	85	5218	142	5161	225	5078	267	5036	287	5016		
IDA-508	360198	824532	5265	NP	50	5215	104	5161	187	5078	223	5042	294	4971		
IDA-6	361952	825839	5340	NP	153	5187	209	5131	285	5055	320	5020	352	4988		
IDA-91	361117	825837	5317	NP	122	5195	189	5128	288	5029	322	4995	359	4958		
IDA-93	360514	826039	5301	NP	114	5187	169	5132	241	5060	282	5019	314	4987		
IDA-94	360505	826842	5305	NP	126	5179	182	5123	263	5042	307	4998	334	4971		
IDA-371	359538	822390	5334	NP			135	5199	214	5120					336	4998
1012	358571	821976	5299	NP			73	5226	146	5153					311	4988
1014	355928	821840	5213	NP					30	5183	48	5165	81	5132	210	5003
1073	357555	822047	5241	NP					74	5167	85	5156	122	5119	234	5007

NP - Erosional Contact
Geologic contacts provided by Uranium One, Americas, Inc.

Table 2. Geologic Contacts, Negley Subdivision and Vicinity

Boring ID	Easting	Northing	Surface Elev	120 Sand Top	120 Sand Bottom	120 Sand Bottom Elevation	110 Sand Top	110 Sand Top Elevation	110 Sand Bottom	110 Sand Bottom Elevation	100 Sand Top	100 Sand Top Elevation	100 Sand Bottom	100 Sand Bottom Elevation	90 Sand Top	90 Sand Top Elevation
	(feet)	(feet)	(ft amsl)	(ft bgs)	(ft bgs)	(ft amsl)	(ft bgs)	(ft amsl)	(ft bgs)	(ft amsl)	(ft bgs)	(ft amsl)	(ft bgs)	(ft amsl)	(ft bgs)	(ft amsl)
IDA-381	358879	823127	5285	NP	44	5241	96	5189	171	5114	196	5089	222	5063	294	4991
L10	354361	823028	5228	NP					68	5160	93	5135	128	5100	234	4994
L22	355227	822517	5205	NP							32	5173	82	5123	192	5013
L270	354733	822796	5216	NP					67	5149	84	5132	97	5119	230	4986
L30	356865	821965	5223	NP					53	5170	62	5161	98	5125	205	5018
L367	355153	823200	5226	NP					78	5148	105	5121	128	5098	237	4989
L384	355213	821817	5190	NP							10	5180	49	5141	168	5022
L483	357712	822392	5265	NP					100	5165	123	5142	170	5095	263	5002
L571	357973	823119	5253	NP					119	5134	127	5126	168	5085	256	4997
L595	354453	822307	5222	NP							61	5161	118	5104	233	4989
L619	356974	822275	5235	NP							78	5157	120	5115	207	5028
L82	356836	823107	5219	NP					80	5139	114	5105	128	5091	203	5016
LMP-1	356440	822380	5225	NP					60	5165	74	5151	128	5097	221	5004
IDA-27	362929	827125	5344	NP	190	5154	257	5087	322	5022	347	4997	364	4980	546	4798
131CEGB	356589	828316	5242	NP	82	5160	135	5107	209	5033	232	5010	265	4977	374	4868
83CEGB	354281	828603	5273	65	156	5117	199	5074	260	5013	281	4992	325	4948	423	4850
20KM	356413	825557	5211				78	5133	115	5096	130	5081	174	5037	285	4926
23KM	355138	825483	5217				91	5126	133	5084	152	5065	201	5016	306	4911
1250-0550	354644	824551	5222				68	5154	126	5096	149	5073	200	5022	290	4932
IDA-453	360937	824372	5262		60	5202	111	5151	194	5068	237	5025	283	4979		
70-1	363213	824059	5313	56	127	5186	177	5136	261	5052	337	4976	388	4925	480	4833
IDA-272	364435	824735	5333	81	153	5180	179	5154	294	5039	330	5003	407	4926		
IDA-33	364117	826010	5351	91	185	5166	221	5130	343	5008	402	4949	460	4891	550	4801
IDA-411	364277	827569	5322	45	171	5151	208	5114	343	4979	390	4932	408	4914		
IDA-95	362641	826131	5335	91	168	5167	216	5119	307	5028	337	4998	409	4926		
IDA-29	360504	827146	5301	69	154	5147	178	5123	287	5014	326	4975	381	4920	500	4801
IDA-434	360280	828408	5291	64	157	5134	183	5108	300	4991	315	4976	385	4906		
IDA-433	361779	828437	5312	81	189	5123	234	5078	324	4988	368	4944	406	4906		
IDA-42	362933	827813	5348	135	219	5129	246	5102	356	4992	388	4960	431	4917	558	4790
M-8	358350	821550	5257				38	5219	116	5141					226	5031
L563	357767	821345	5240						84	5156					234	5006
L9	358031	822666	5255				93	5162	139	5116	152	5103	178	5077	262	4993
L218	356264	821357	5226								64	5162	117	5109	211	5015
L144	356318	822587	5195						56	5139	63	5132	120	5075	208	4987
L269	354615	821309	5166								21	5145	43	5123	152	5014
L440	354828	822679	5191						61	5130	74	5117	95	5096	194	4997

NP - Erosional Contact
Geologic contacts provided by Uranium One, Americas, Inc.

Table 3. Aquifer Test Data and Results

Operator	Well ID	Test Date	Type Test	Well Type	Location	Completion zone	Distance to pumping well	Pumping Rate	Test Duration	Maximum Drawdown	Analytical Method	Transmissivity		Storativity	Hydraulic Conductivity
							(feet)	(gpm)	(hrs)			(gpd/f)t	(ft^2/d)	(unitless)	(ft/d)
TETON	PN5-L317	6/26/1979	Multi-well	Pump	Luenberger	90 Sand	0	43.1	36.5			700	93.6	8.30E-05	1.9
	PN5-L313	-	-	Obs	Luenberger	90 Sand	295.4	-	-	32.17	Theis, CJ				
	PN5-L319	-	-	Obs	Luenberger	90 Sand	297.9	-	-	30.45	Theis, CJ				
	PN5-L320	-	-	Obs	Luenberger	90 Sand	248.8	-	-	31.79	Theis, CJ				
	PN5-L572	-	-	Obs	Luenberger	90 Sand	98.3	-	-	50.39	Theis, CJ				
	PN5-L573	-	-	Obs	Luenberger	90 Sand	67.5	-	-	48.55	Theis, CJ				
	PN5-L574	-	-	Obs	Luenberger	90 Sand	81.1	-	-	39.34	Theis, CJ				
	PN5-L570	-	-	Obs	Luenberger	110 Sand	?	-	-	0.08	-				
	PN5-L307	-	-	Obs	Luenberger	80 Sand	?	-	-	0.21	-				
TETON	PN5-L301	2/21/1979	Multi-well	Pump	Luenberger	80 Sand	0	44	48			410	54.8	2.60E-04	1.9
	PN5-L305	-	-	Obs	Luenberger	80 Sand	297.2	-	-	127.6	Theis, CJ				
	PN5-L306	-	-	Obs	Luenberger	80 Sand	95.2	-	-	24.38	Theis, CJ				
	PN5-L307	-	-	Obs	Luenberger	80 Sand	196.8	-	-	41.48	Theis, CJ				
	PN5-L308	-	-	Obs	Luenberger	80 Sand	57.1	-	-	28.92	Theis, CJ				
	PN5-L302	-	-	Obs	Luenberger	90 Sand	?	-	-	No Resp	-				
	PN5-L314	-	-	Obs	Luenberger	70 Sand	?	-	-	No Resp	-				
TETON	PN5-LMM6	7/21/1980	Multi-well	Pump	Luenberger	80 Sand	0	29.8	96			290	38.8	6.50E-05	0.6
	PN5-LMM8	-	-	Obs	Luenberger	80 Sand	499.7	-	-	33.13	Theis, CJ				
	PN5-LMM9	-	-	Obs	Luenberger	80 Sand	246.1	-	-	50.4	Theis, CJ				
	PN5-LMM3	-	-	Obs	Luenberger	90 Sand		-	-	0.11	-				
	PN5-LMM2	-	-	Obs	Luenberger	70 Sand		-	-	-0.38	-				
TETON	PN5-LMM10	7/29/1980	Multi-well	Pump	Luenberger	80 Sand		26.3	96			260	34.8	2.60E-04	0.6
	PN5-LMM3	-	-	Obs	Luenberger	80 Sand	789.9	-	-	19.29	Theis, CJ				
	PN5-LMM4	-	-	Obs	Luenberger	80 Sand	40.2	-	-	79.49	Theis, CJ				
	PN5-LMM7	-	-	Obs	Luenberger	80 Sand	642.5	-	-	30.99	Theis, CJ				
	PN5-LNM4	-	-	Obs	Luenberger	90 Sand	?	-	-	0.52	-				
	PN5-LBM1	-	-	Obs	Luenberger	70 Sand	?	-	-	-0.57	-				
TETON	LAP-1	8/27/1981	Single	Pump	Luenberger	110 Sand	0	19	1.67	NR		620	82.9		
TETON	PN5-LBM2	7/14/1980	Single	Pump	Luenberger	70 Sand	0	15.2	1.67	NR		120	16.0		
TETON	PN5-LBM1	7/18/1980	Single	Pump	Luenberger	70 Sand	0	28.6	1.67	NR		540	72.2		

Aquifer test data and analytical results from NRC License SUA1341 Amendment Application, Technical Report. 2009

Table 3. Aquifer Test Data and Results

Operator	Well ID	Test Date	Type Test	Well Type	Location	Completion zone	Distance to pumping well	Pumping Rate	Test Duration	Maximum Drawdown	Analytical Method	Transmissivity		Storativity	Hydraulic Conductivity
Uranium One	LPW-1	2008	Multi	Pump	Luenberger	80 Sand	0	27	72	221.9	Theis	523.6	70	7.80E-05	1.1
	LMP-1	-	-	Obs	Luenberger	80 Sand	?	-	-	27.88	Theis				
	LMP-2	-	-	Obs	Luenberger	80 Sand	?	-	-	21.28	Theis				
	LPW-2			Obs	Luenberger	90 Sand	?	-	-	No Resp					
	LMO-1	-	-	Obs	Luenberger	100 Sand	?	-	-	No Resp					
	LMU-1	-	-	Obs	Luenberger	80 Sand	?	-	-	No Resp					
Uranium One	LPW-2	2008	Multi	Pump	Luenberger	90 Sand	0	32.2	72.5	71.75	Theis	707.6	94.6	5.60E-05	1.9
	LMP-3	-	-	Obs	Luenberger	90 Sand	?	-	-	20.2	Theis				
	LMP-4	-	-	Obs	Luenberger	90 Sand	?	-	-	20.71	Theis				
	LMO-1	-	-	Obs	Luenberger	110 Sand	?	-	-	No Resp					
	LMU-1	-	-	Obs	Luenberger	80 Sand	?	-	-	No Resp					
Uranium One	LPW-3A	2008	Multi	Pump	North Platte	70 Sand		22.3	83.2	131.7	Theis	721.1	96.4	5.10E-05	2.3
	LMP-5	-	-	Obs	North Platte	70 Sand	?	-	-	18.32	Theis				
	M-11	-	-	Obs	North Platte	70 Sand	?	-	-	15.92	Theis				
	LMO-2A	-	-	Obs	North Platte	100 Sand	?	-	-	No Resp					
	LMU-2A	-	-	Obs	North Platte	60 Sand	?	-	-	No Resp					
Uranium One	LPW-4	2008	Multi	Pump	Peterson	90 Sand	0	8.9	72.5	59.68	Theis	121.9	16.3	7.00E-05	0.44
	LMP-6	-	-	Obs	Peterson	90 Sand	?	-	-	19.32	Theis				
	LMP-7	-	-	Obs	Peterson	90 Sand	?	-	-	17.98	Theis				
	LMU-3	-	-	Obs	Peterson	80 Sand	?	-	-	No Resp					
											Average	455.8	60.9	1.15E-04	1.3425

Aquifer test data and analytical results from NRC License SUA1341 Amendment Application, Technical Report. 2009

Table 4. Summary of Shallow Aquifer Assessment Model Simulations

Model Simulation	Condition	Simulated Time	Stress Periods	Injection Well	Injection Rate	Negley Well Pumping Rates	Maximum travel distance in 5 years	Maximum width in 5 years	Description
		(years)			(gpm)		(feet)	(feet)	
Ludeman110Sd_SS_K134_051815	Steady State	-	1	No	NA	0	50	NA	Steady state run to establish regional flow field
Ludeman110Sd_K134_allextract5gpm_052015	Transient	10	1	No	NA	22 wells @ 5gpm ea.	95	NA	Estimate reduction in potentiometric surface in response to pumping water supply wells
Ludeman110Sd_K134_1inject20allextract5gpm_052015	Transient	10	2 (5 years each)	Yes	20	22 wells @ 5gpm ea.	525	835	Simulate hypothetical release from injection well under extreme generalized hydraulic gradient
Ludeman110Sd_K134_1inject20extract5_1hi10_052015	Transient	10	2 (5 years each)	Yes	20	18 wells @ 5gpm ea; 3 wells @ 2 gpm; 1 well @ 10gpm	535	835	Simulate hypothetical release from injection well under extreme localized hydraulic gradient
Ludeman110Sd_K134_Injectonly_20gpm_052015	Transient	5	1	Yes	10	0	455	835	Simulate hypothetical release from injection well under normal hydraulic gradient
Ludeman110Sd_K134_1injectextract1gpm__051815	Transient	10	2 (5 years each)	Yes	10	22 wells @ 1gpm ea.	357	600	Simulate hypothetical release from injection well under more representative hydraulic gradient
Ludeman110Sd_K134_1injectextract1gpm_1hi5_051815	Transient	10	2 (5 years each)	Yes	10	21 wells @ 1gpm ea; 1 well @ 5gpm	370	600	Simulate hypothetical release from injection well under more representative but localized hydraulic gradient
Ludeman110Sd_K134_Injectonly_051815	Transient	5	1	Yes	10	0	350	600	Simulate hypothetical release from injection well under normal hydraulic gradient

All simulations listed above were run using the following parameter values: hydraulic conductivity - 1.34 ft/d, porosity - 0.25, specific storage-2.333E-06, specific yield - 0.2, recharge - 8.0E-05 ft/d

Table 5. Sensitivity Analysis Simulations

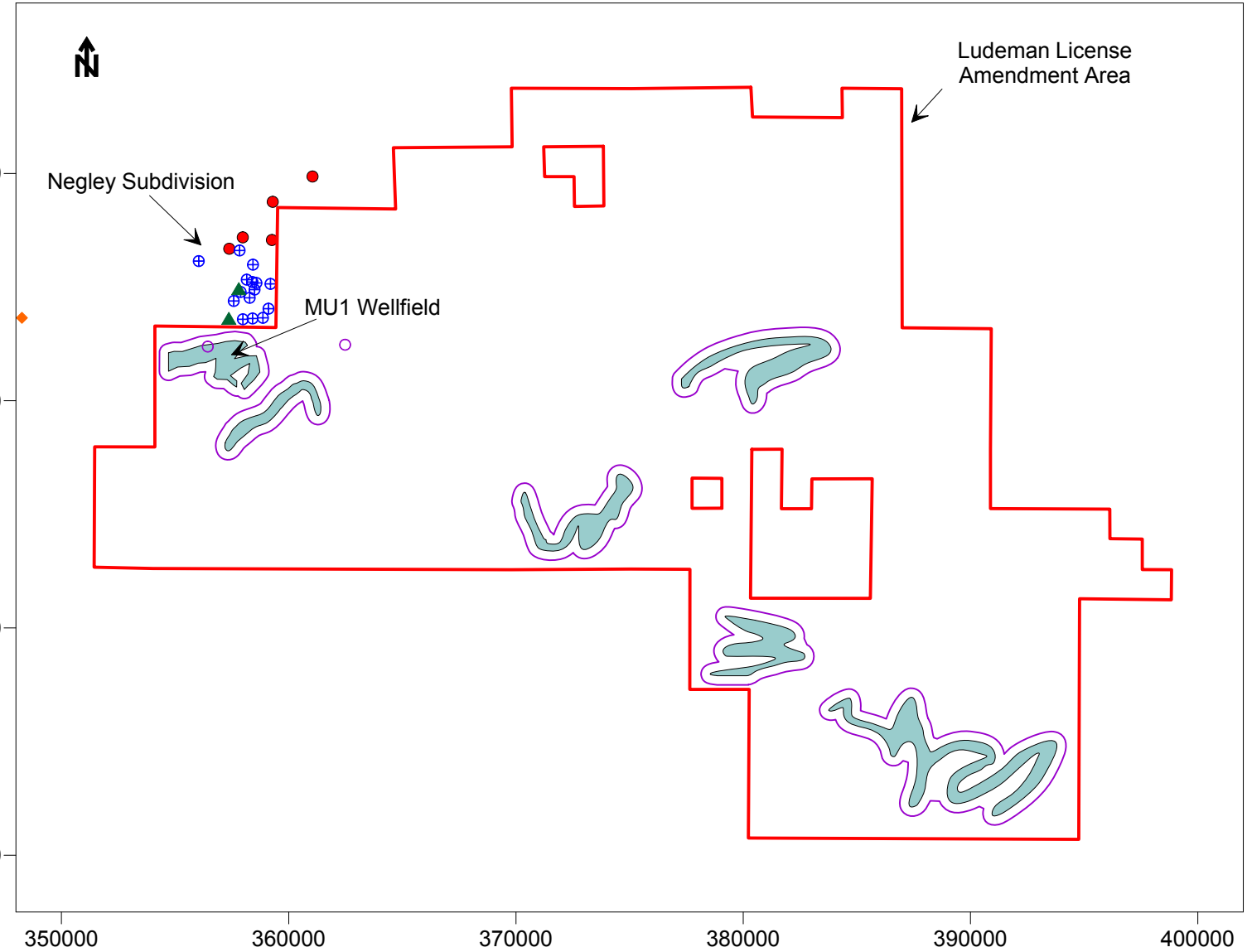
Simulation ID	Injection Rate	Hydraulic Conductivity	Specific Storage	Specific Yield	Porosity	Recharge
	(gpm)	(ft/d)	(unitless)	(unitless)	(unitless)	(ft/d)
Base	10	1.34	2.33E-06	0.2	0.25	8.0E-05
Sens1	20	1.34	2.33E-06	0.2	0.25	8.0E-05
Sens2	5	1.34	2.33E-06	0.2	0.25	8.0E-05
Sens3	10	2.7	2.33E-06	0.2	0.25	8.0E-05
Sens4	10	0.67	2.33E-06	0.2	0.25	8.0E-05
Sens5	10	1.34	4.66E-06	0.2	0.25	8.0E-05
Sens6	10	1.34	1.17E-06	0.2	0.25	8.0E-05
Sens7	10	1.34	2.33E-06	0.1	0.25	8.0E-05
Sens8	10	1.34	2.33E-06	0.25	0.25	8.0E-05
Sens9	10	1.34	2.33E-06	0.2	0.35	8.0E-05
Sens10	10	1.34	2.33E-06	0.15	0.15	8.0E-05
Sens11	10	1.34	2.33E-06	0.2	0.25	1.6E-04
Sens12	10	1.34	2.33E-06	0.2	0.25	4.0E-05

gpm - gallons per minute
ft/d - feet per day

Table 6. Results of Sensitivity Analysis Simulations

Simulation ID	Changed Parameter	Parameter Value	Maximum Travel Distance At 5 Years	Maximum Width At 5 Years
			(feet)	(feet)
Base*	-	-	360	600
Sens1	Injection Rate	20 gpm	470	850
Sens2	Injection Rate	5 gpm	275	425
Sens3	Hydraulic Conductivity	2.7 ft/d	445	615
Sens4	Hydraulic Conductivity	0.67 ft/d	320	590
Sens5	Specific Storage	4.66E-06	360	600
Sens6	Specific Storage	1.17E-06	360	600
Sens7	Specific Yield	0.1	360	600
Sens8	Specific Yield	0.25	345	600
Sens9	Porosity	0.35	295	515
Sens10	Porosity	0.15	490	775
Sens11	Recharge	1.6E-04 ft/d	345	600
Sens12	Recharge	4.0E-05 ft/d	365	600

gpm - gallons per minute
ft/d - feet per day
* - Base simulation values: Hydraulic Conductivity = 1.34 ft/d, Injection Rate = 10 gpm, Specific Storage = 2.33E-06, Specific Yield, = 0.20, Porosity = 0.25, Recharge = 8.0E-05



Coordinates in NAD27 Wyoming State Plane-feet

0 5000 10000
feet

Negley Wells
- 120 Sand Private Well
- 110 Sand Private Well
- 100 Sand Private Well
- 80 Sand Private Well
- 110 Sand Monitor Well

Wellfield

Monitor Well Ring

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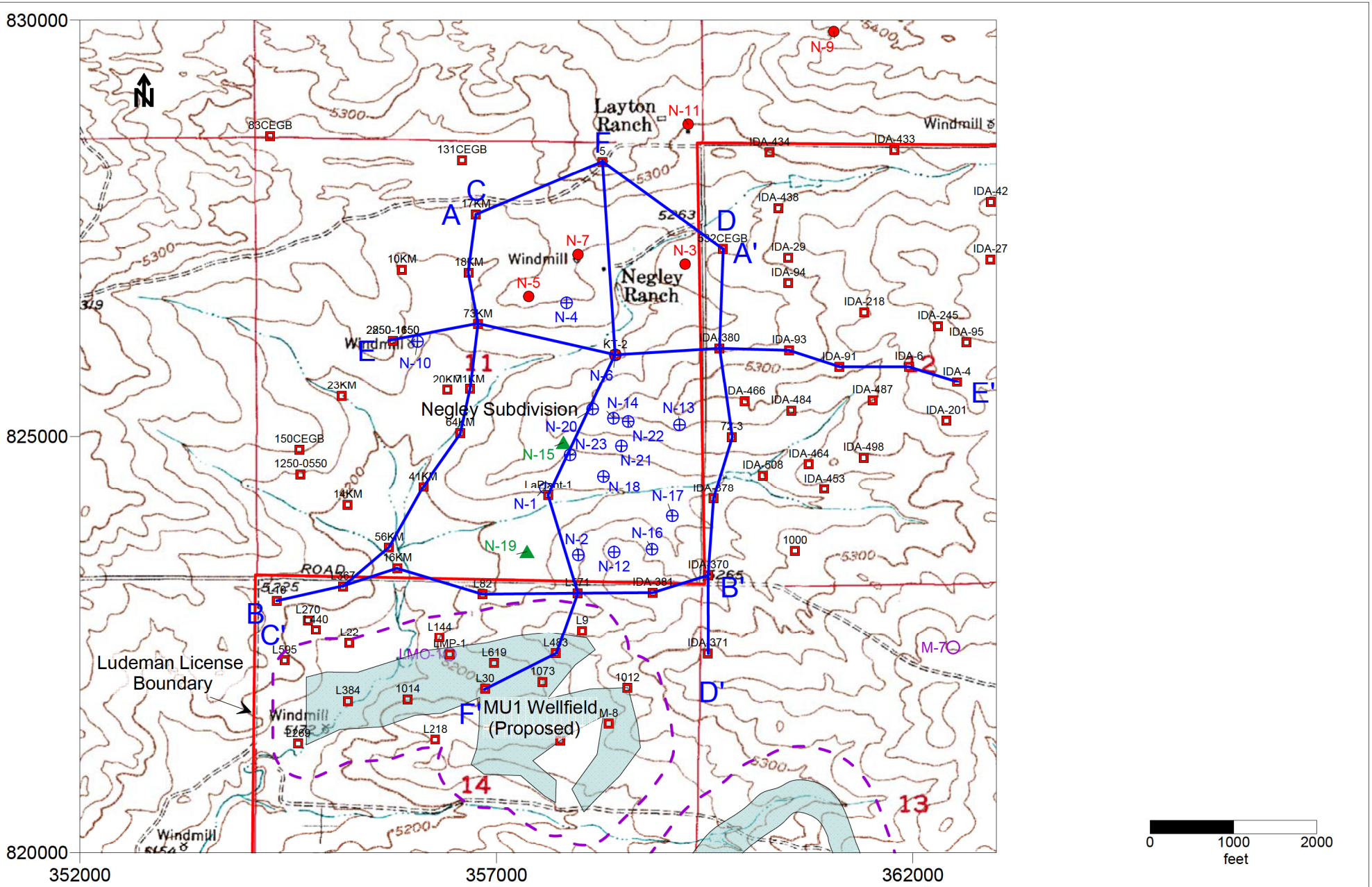
Figure 1. Ludeman License Amendment Area and Negley Subdivision Ludeman Uranium Project, Wyoming

By: EPL Checked: HD File ID:fig1Negleymodel Date: 5/20/15



Wellfield

Monitor Well Ring

Negley Wells

- 120 Sand Private Well
- 110 Sand Private Well
- 100 Sand Private Well
- 110 Sand Monitor Well
- Exploration Boring

Cross-Sections are included in Attachment A

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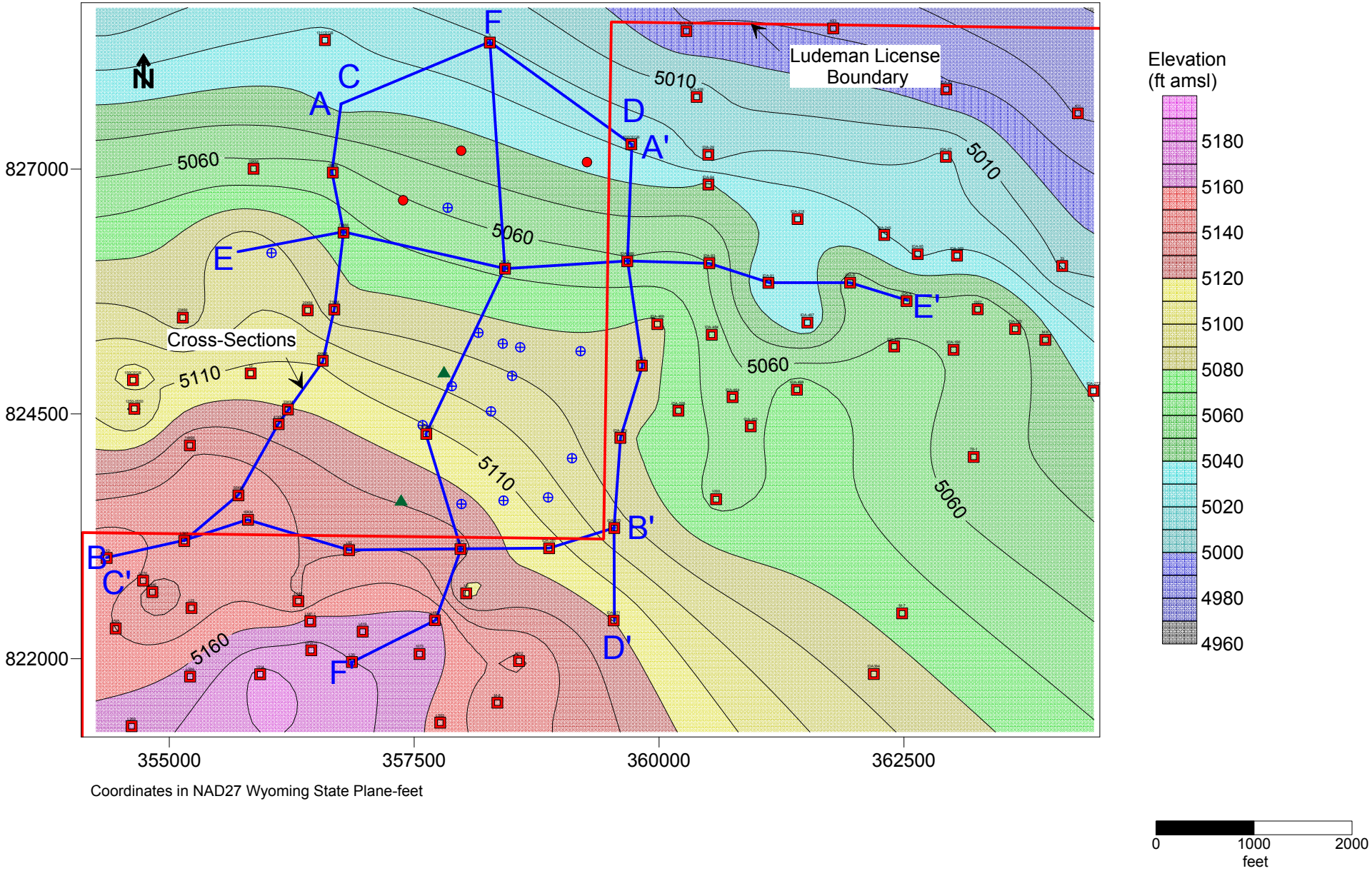
Figure 2. Geologic Cross-Section Locations
Ludeman Uranium Project, Wyoming

By: EPL Checked: HD File ID:fig2Negleymodel Date: 5/20/15



Negley Wells
- 120 Sand Private Well
- 110 Sand Private Well
- 100 Sand Private Well
- 80 Sand Private Well
- 110 Sand Monitor Well

Exploration Boring

*Geologic contacts provide by Uranium One geologists

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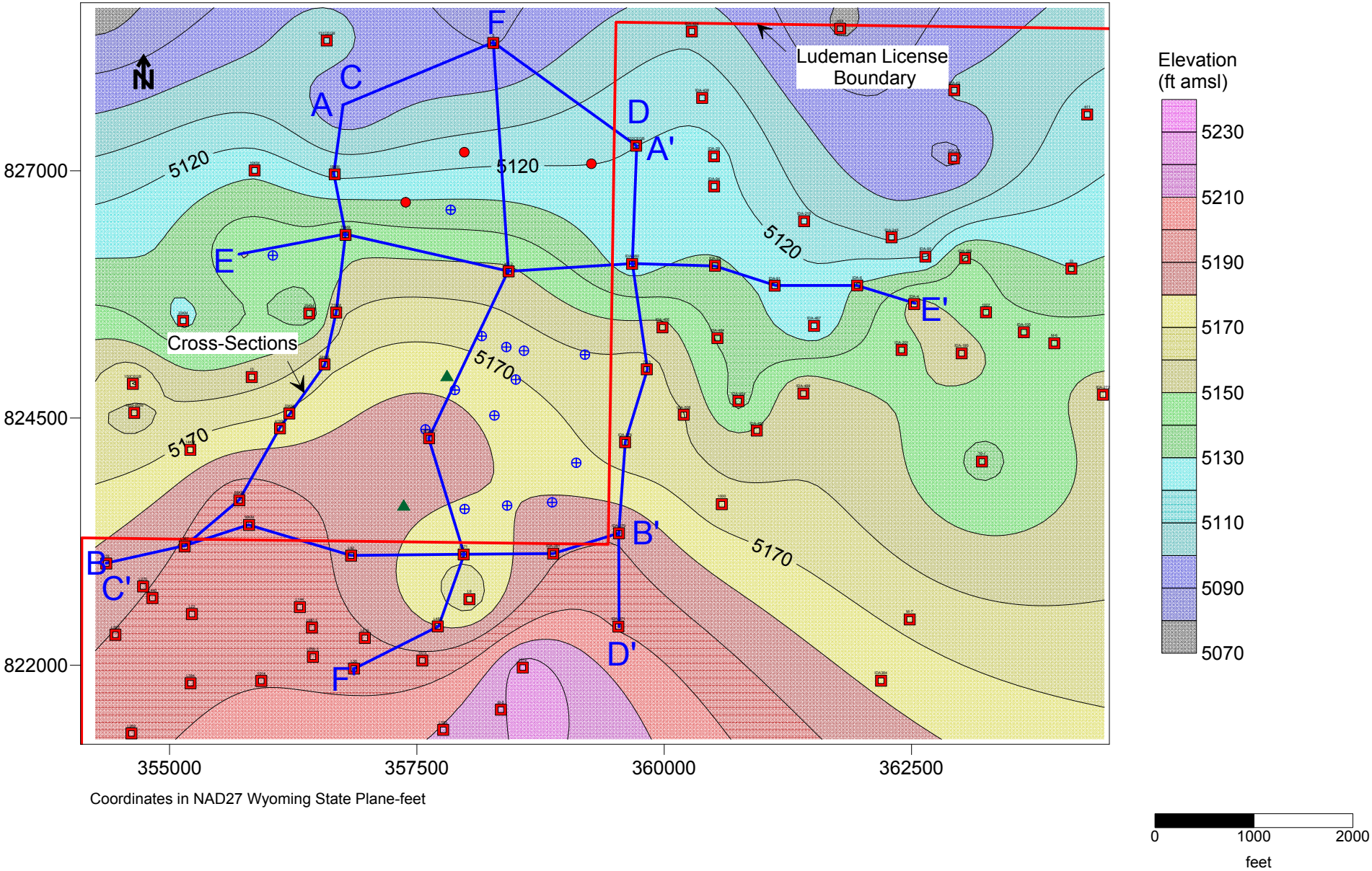
Figure 3. Structure Map-Bottom 110 Sand Ludeman Uranium Project, Wyoming

By: EPL Checked: HD File ID:fig4Negleymodel Date: 5/20/15



Negley Wells
- 120 Sand Private Well
- 110 Sand Private Well
- 100 Sand Private Well
- 80 Sand Private Well
- 110 Sand Monitor Well

Exploration Boring

*Geologic contacts provide by Uranium One geologists

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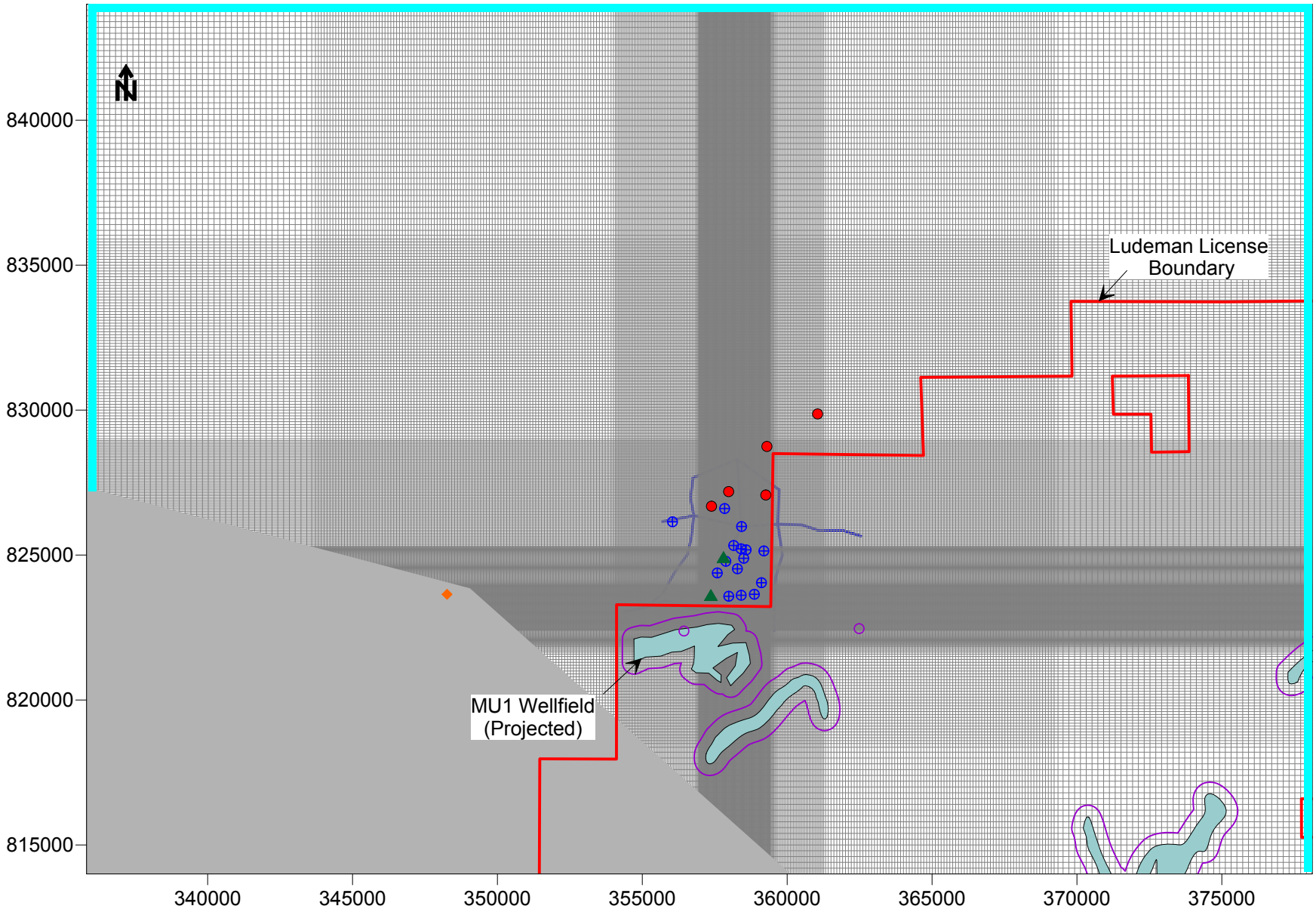
Figure 4. Structure Map-Top 110 Sand
Ludeman Uranium Project, Wyoming

By: EPL Checked: HD File ID:fig4Negleymodel Date: 5/20/15



Coordinates in NAD27 Wyoming State Plane-feet

Boundary Conditions
- No Flow
- General Head

Negley Wells
- 120 Sand Private Well
- 110 Sand Private Well
- 100 Sand Private Well
- 80 Sand Private Well
- 110 Sand Monitor Well

- Wellfield (projected to the 110 Sand)
- Monitor Well Ring (projected to the 110 Sand

0 5000 10000
feet

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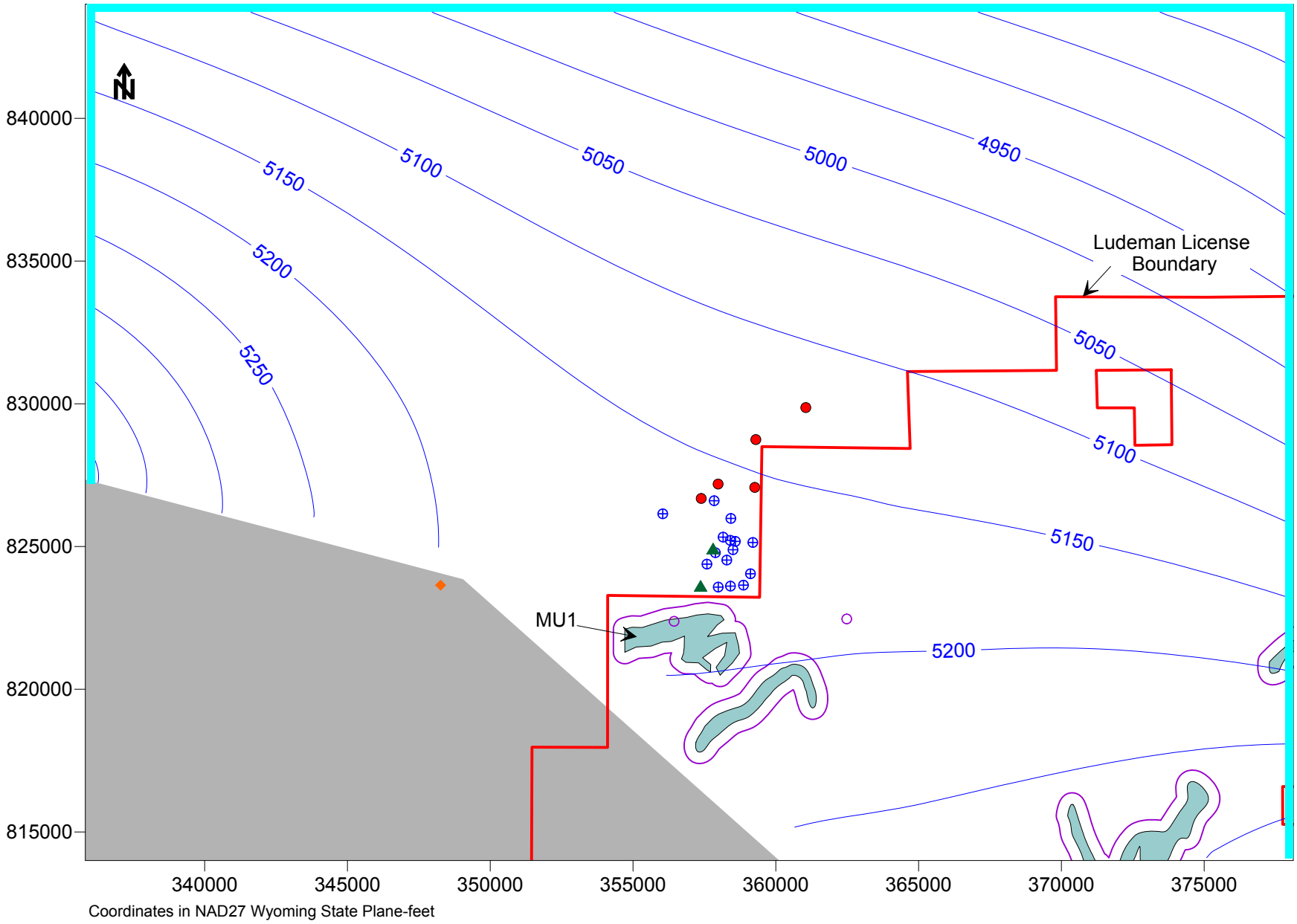
Figure 5. Model Domain, Grid and Boundary Conditions
Ludeman Uranium Project, Wyoming

By: EPL Checked: HD File ID:fig5Negleymodel Date: 5/20/15



Coordinates in NAD27 Wyoming State Plane-feet

Boundary Conditions
- No Flow
- General Head

Negley Wells
- 120 Sand Private Well
- 110 Sand Private Well
- 100 Sand Private Well
- 80 Sand Private Well
- 110 Sand Monitor Well

0 5000 10000 feet

- Wellfield (projected to the 110 Sand)
- Monitor Well Ring (projected to the 110 Sand
- Potentiometric contours (feet above mean level) CI = 50 ft

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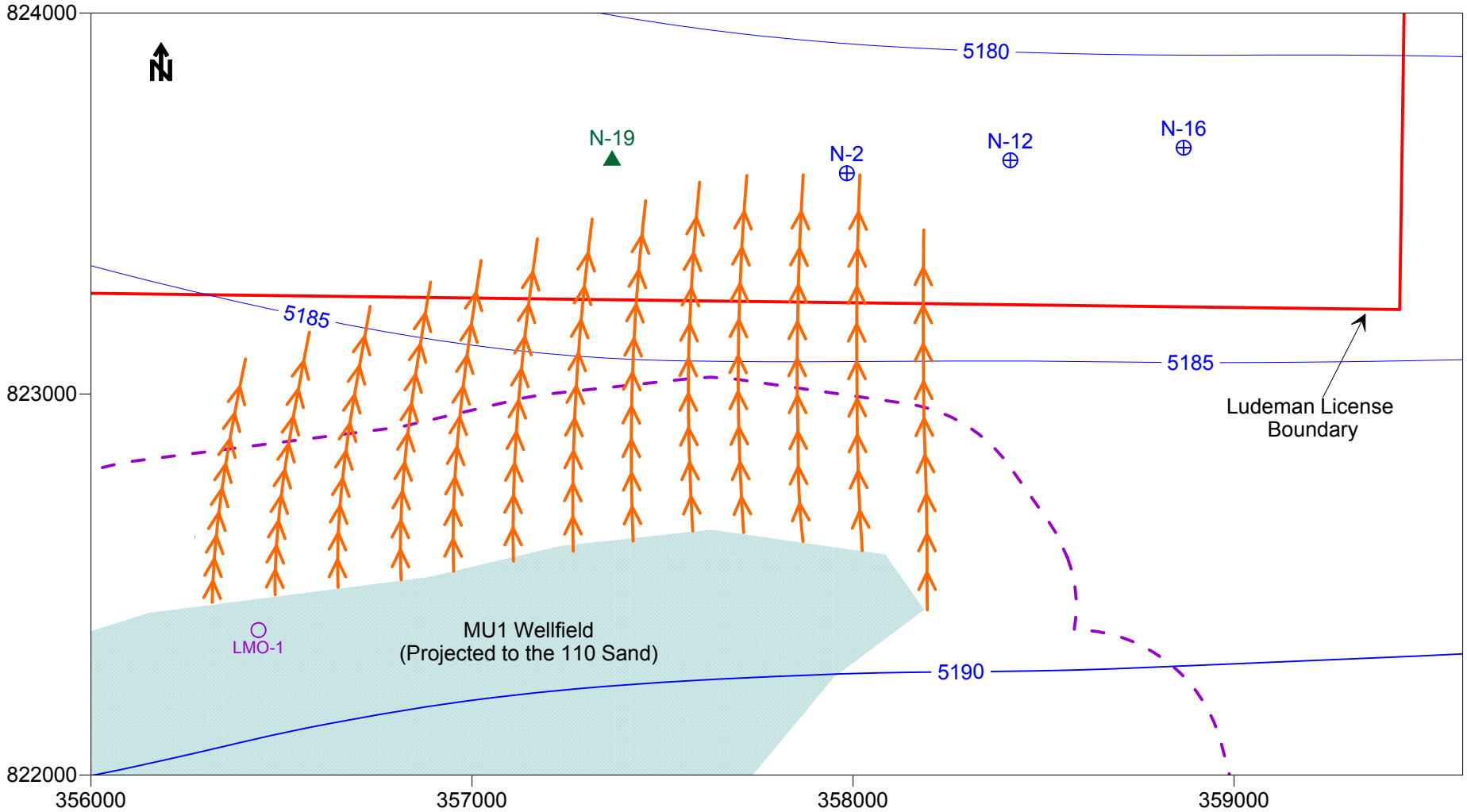
Figure 6. Potentiometric Surface, 110 Sand Steady-State (Non-Pumping) Simulation Ludeman Uranium Project, Wyoming

By: EPL Checked: HD File ID:fig6Negleymodel Date: 5/20/15



110 Sand Private Well

100 Sand Private Well

110 Sand Monitor Well

Wellfield (projected to the 110 Sand)*

Monitor Well Ring (projected to the 110 Sand)*

Potentiometric Surface -110 Sand (feet above mean sea level)
Contour interval is 5 feet

Groundwater Flowpath
(arrows mark 10 year increments)

Coordinates in NAD27 Wyoming State Plane-feet

0 250 500
feet

* Wellfield and Monitor Well Ring are actually located within the deeper ore-bearing 90 Sand

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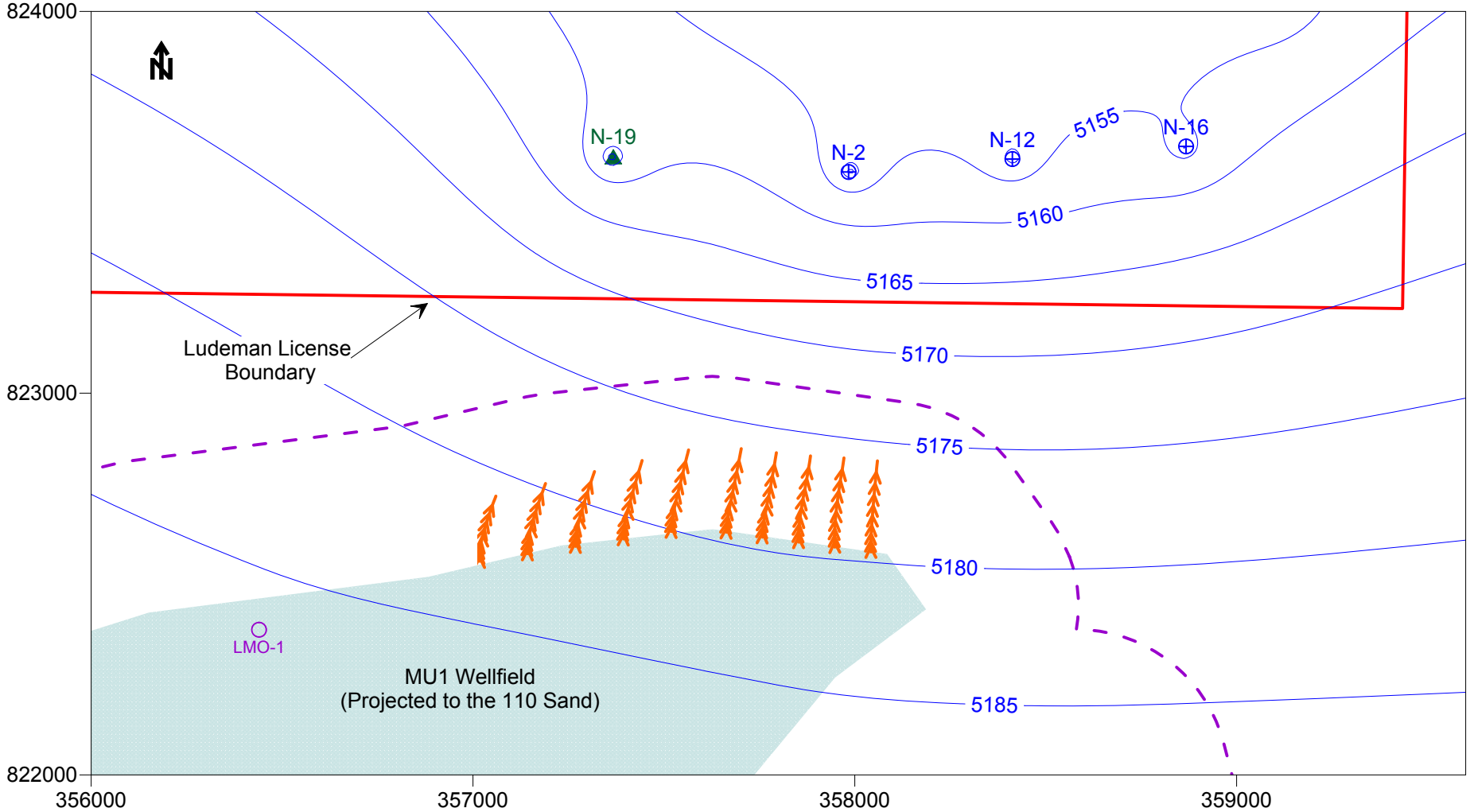
Figure 7. 100-Year Groundwater Flowpaths
110 Sand,Steady-State, Non-Pumping Simulation
Ludeman Uranium Project, Wyoming

By: EPL Checked: HD File ID:fig7Negleymodel Date: 5/20/15



110 Sand Private Well

100 Sand Private Well

110 Sand Monitor Well

Wellfield (projected to the 110 Sand)*

Monitor Well Ring (projected to the 110 Sand)*

Potentiometric Surface -110 Sand
(feet above mean sea level)
Contour interval is 5 feet

Groundwater Flowpath after 10 years
(arrows mark 1 year increments)

Coordinates in NAD27 Wyoming State Plane-feet

0 250 500
feet

* Wellfield and Monitor Well Ring are actually located within the deeper ore-bearing 90 Sand

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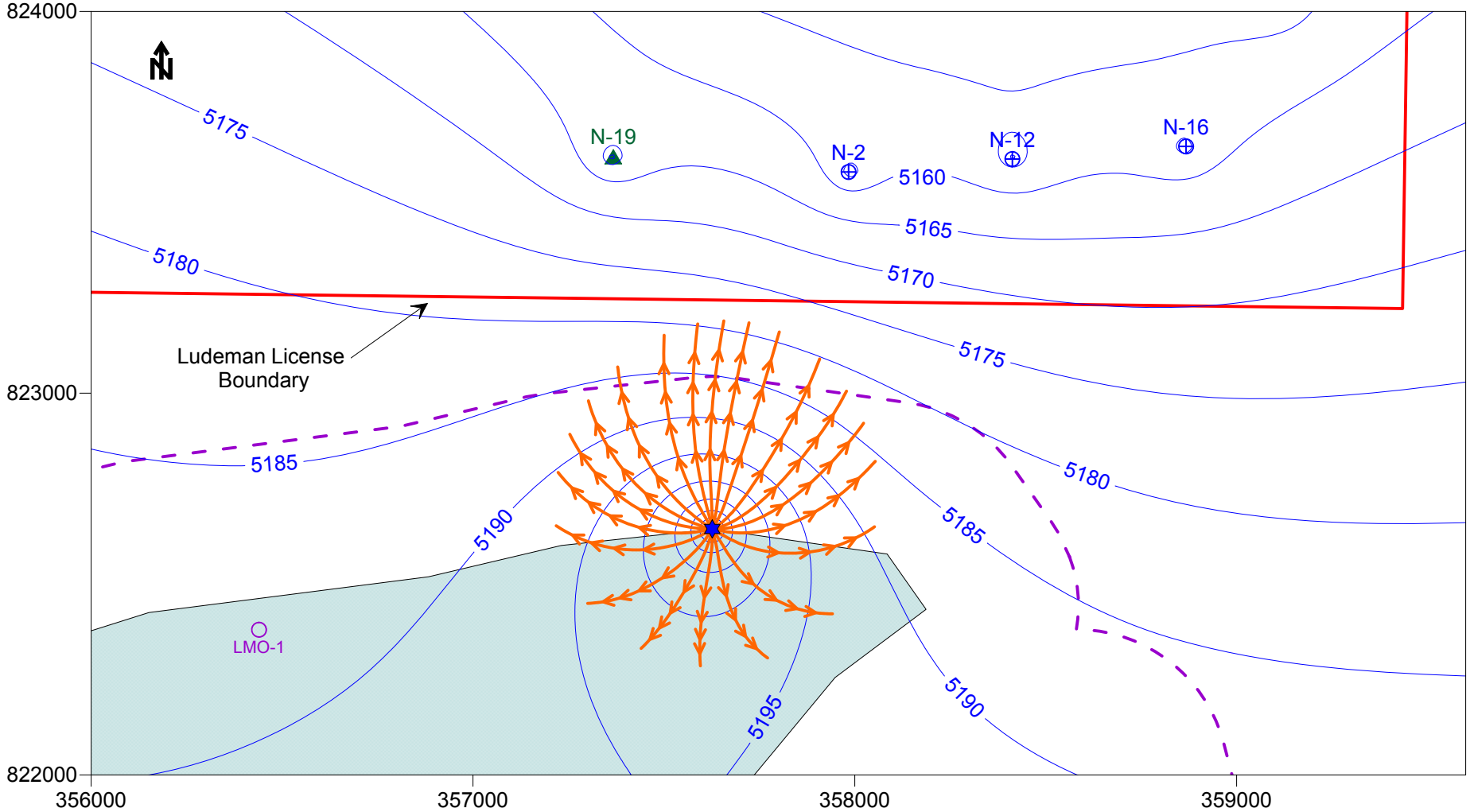
Figure 8. Simulation of Negley Wells Pumping 5 GPM (each) Potentiometric Surface and 10-Year Groundwater Flowpaths 110 Sand, Ludeman Uranium Project, Wyoming

By: EPL Checked: HD File ID:fig8Negleymodel Date: 5/20/15



110 Sand Private Well

100 Sand Private Well

110 Sand Monitor Well

Injection Well
Discharging to 110 Sand at 20 gpm

All Negley Wells Pumping 5 gpm

Wellfield (projected to the 110 Sand)*

Monitor Well Ring (projected to the 110 Sand)*

Potentiometric Surface -110 Sand
(feet above mean sea level)
Contour interval is 5 feet

Injectate Flowpath after 5 years
(arrows mark 1 year increments)

Coordinates in NAD27 Wyoming State Plane-feet

0 250 500
feet

* Wellfield and Monitor Well Ring are actually located within the deeper ore-bearing 90 Sand

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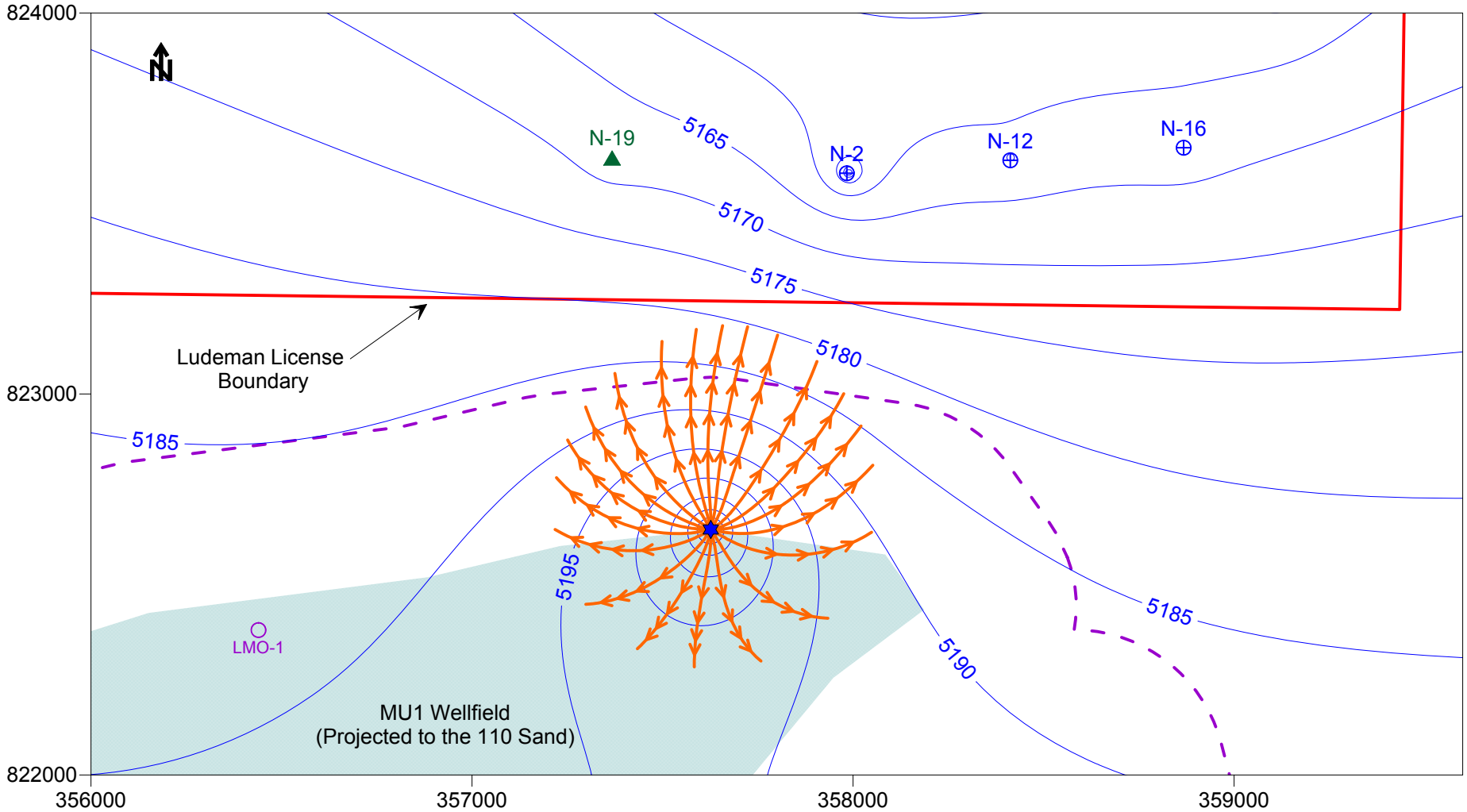
Figure 9. Simulation of Negley Wells Pumping 5 GPM (each) and Hypothetical Injection Well Release (20 GPM) Potentiometric Surface and 5-Year Groundwater Flowpaths 110 Sand, Ludeman Uranium Project, Wyoming

By: EPL Checked: HD File ID:fig9Negleymodel Date: 5/20/15



110 Sand Private Well

100 Sand Private Well

110 Sand Monitor Well

Injection Well
Discharging to 110 Sand at 20 gpm

Most Negley Wells Pumping 5 gpm
Well N-2 Pumping 8 gpm
N-19, N-12 and N-16 Pumping 2 gpm

Wellfield (projected to the 110 Sand)*

Monitor Well Ring (projected to the 110 Sand)*

Potentiometric Surface -110 Sand
(feet above mean sea level)
Contour interval is 5 feet

Injectate Flowpath after 5 years
(arrows mark 1 year increments)

Coordinates in NAD27 Wyoming State Plane-feet

0 250 500
feet

* Wellfield and Monitor Well Ring are actually located within the deeper ore-bearing 90 Sand

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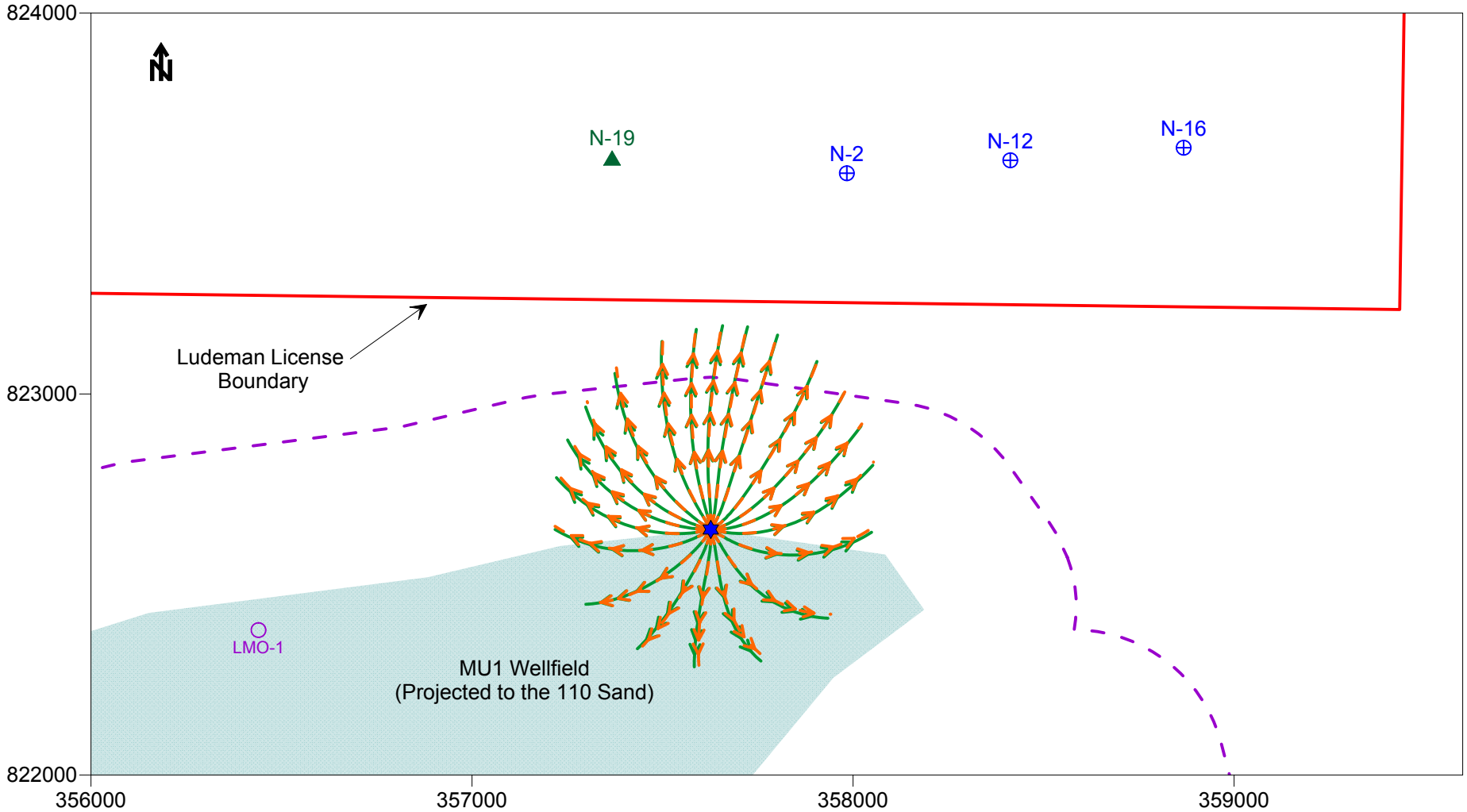
Figure 10. Simulation of Negley Wells Pumping at Variable Rates and Hypothetical Injection Well Release (20 GPM) Potentiometric Surface and 5-Year Groundwater Flowpaths 110 Sand, Ludeman Uranium Project, Wyoming

By: EPL Checked: HD File ID:fig9Negleymodel Date: 5/20/15



110 Sand Private Well

100 Sand Private Well

110 Sand Monitor Well

Injection Well
Discharging to 110 Sand at 20 gpm

Wellfield (projected to the 110 Sand)*

Monitor Well Ring (projected to the 110 Sand)*

Injectate Flowpaths after 5 years
(arrows mark 1 year increments)

All Negley Wells Pumping 5 gpm

Most Negley Wells Pumping 5 gpm
Well N-2 Pumping 8 gpm

* Wellfield and Monitor Well Ring are actually located within the deeper ore-bearing 90 Sand

Coordinates in NAD27 Wyoming State Plane-feet

0 250 500
feet

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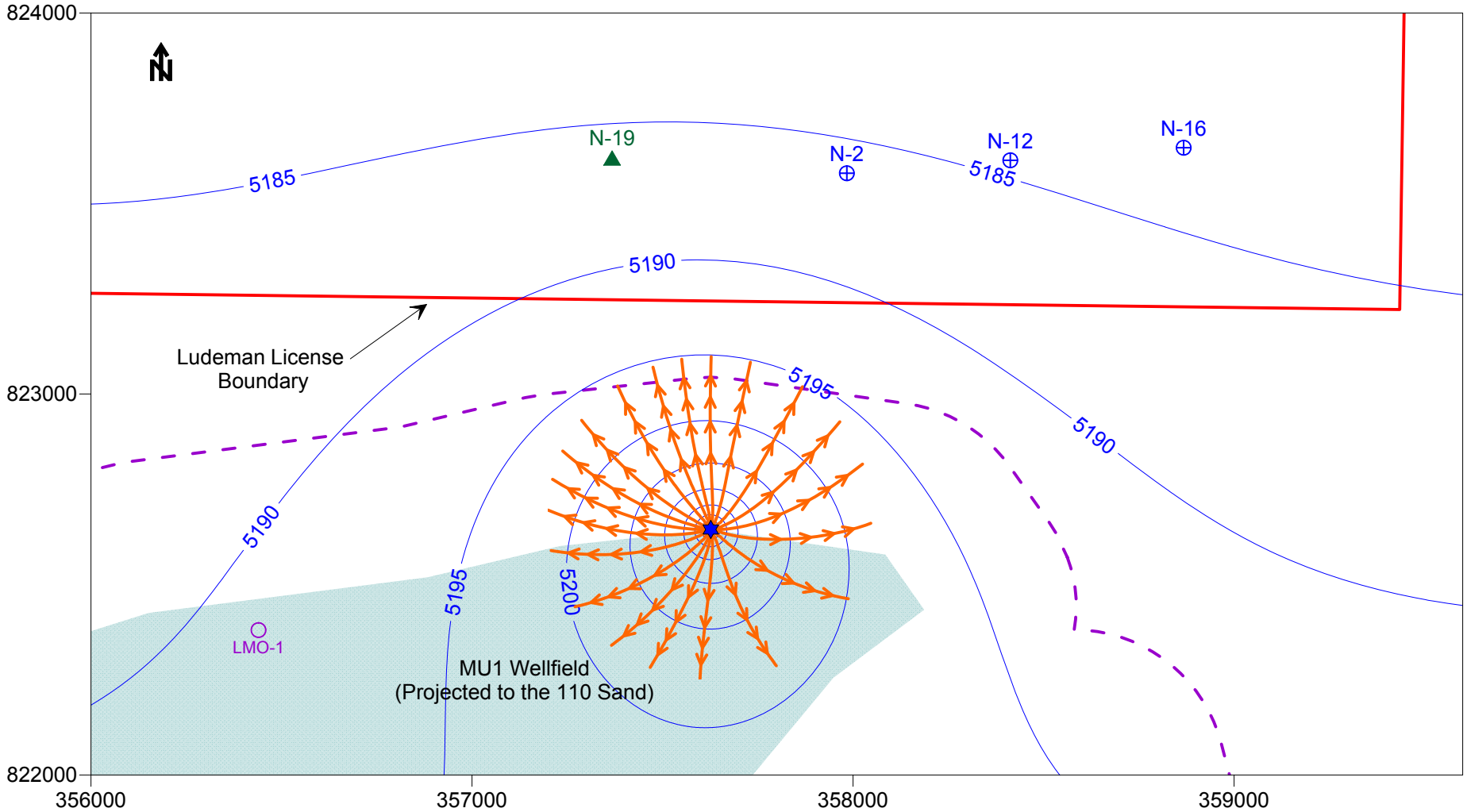
Figure 11. Comparison of Simulations of Negley Wells Pumping 5 GPM and Negley Wells Pumping at Variable Rates, and Hypothetical Injection Well Release (20 GPM), 5-Year Groundwater Flowpaths Ludeman Uranium Project, Wyoming

By: EPL Checked: HD File ID:fig10Neglmodel Date: 5/20/15



110 Sand Private Well

100 Sand Private Well

110 Sand Monitor Well

Injection Well Discharging to 110 Sand at 20 gpm

Wellfield (projected to the 110 Sand)*

Monitor Well Ring (projected to the 110 Sand)*

Potentiometric Surface -110 Sand (feet above mean sea level) Contour interval is 5 feet

Injectate Flowpath after 5 years (arrows mark 1 year increments)

Coordinates in NAD27 Wyoming State Plane-feet

0 250 500 feet

* Wellfield and Monitor Well Ring are actually located within the deeper ore-bearing 90 Sand

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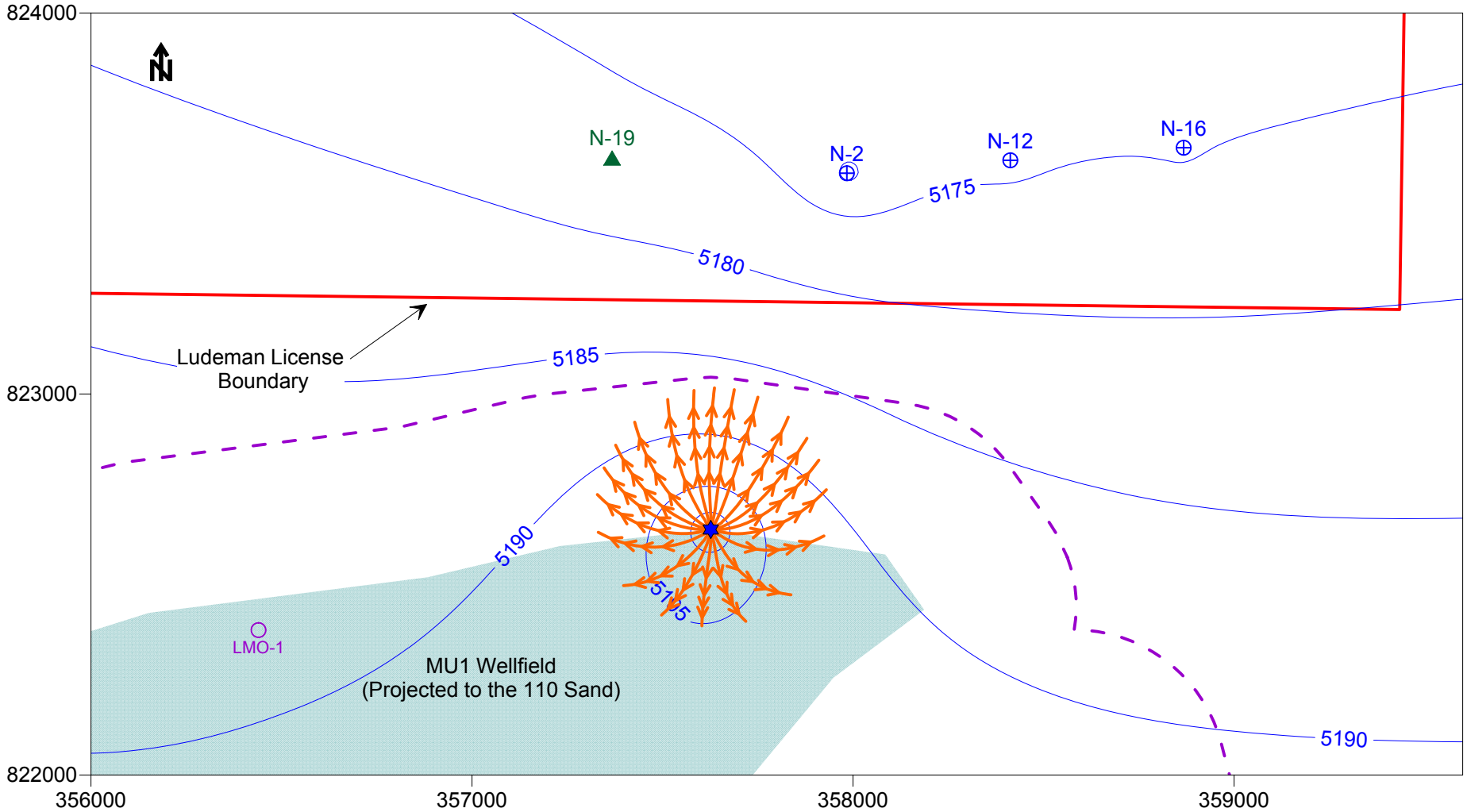
Figure 12. Simulation of Hypothetical Injection Well Release (20 GPM) No Pumping From Negley Wells, Potentiometric Surface and 5-Year Groundwater Flowpaths, 110 Sand Ludeman Uranium Project, Wyoming

By: EPL Checked: HD File ID:fig12Neglmodel Date: 5/20/15



110 Sand Private Well

100 Sand Private Well

110 Sand Monitor Well

Injection Well-
Discharging to 110 Sand at 10 gpm

Wellfield (projected to the 110 Sand)*

Monitor Well Ring (projected to the 110 Sand)*

Potentiometric Surface -110 Sand
(feet above mean sea level)
Contour interval is 5 feet

Injectate Flowpath after 5 years
(arrows mark 1 year increments)

Coordinates in NAD27 Wyoming State Plane-feet

0 250 500
feetfeet

* Wellfield and Monitor Well Ring are actually located within the deeper ore-bearing 90 Sand

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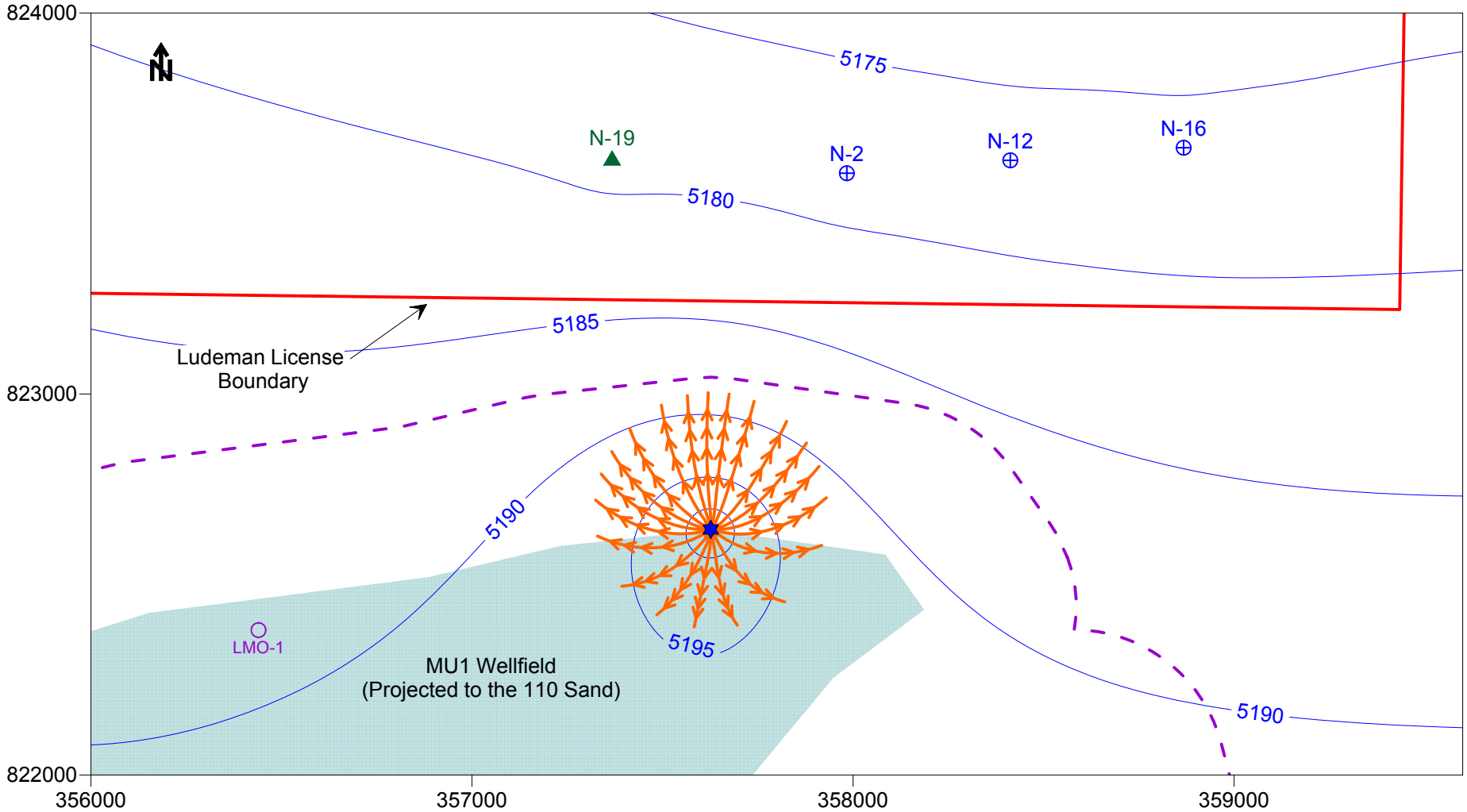
Figure 13. Simulation of Negley Wells Pumping at Variable Rates and Hypothetical Injection Well Release (10 GPM) Potentiometric Surface and 5-Year Groundwater Flowpaths 110 Sand, Ludeman Uranium Project, Wyoming

By: EPL Checked: HD File ID:fig13Negleymodel Date: 5/20/15



110 Sand Private Well

100 Sand Private Well

110 Sand Monitor Well

Injection Well-
Discharging to 110 Sand at 10 gpm

Wellfield (projected to the 110 Sand)*

Monitor Well Ring (projected to the 110 Sand)*

Potentiometric Surface -110 Sand
(feet above mean sea level)
Contour interval is 5 feet

Injectate Flowpath after 5 years
(arrows mark 1 year increments)

Coordinates in NAD27 Wyoming State Plane-feet

0 250 500
feet

* Wellfield and Monitor Well Ring are actually located within the deeper ore-bearing 90 Sand

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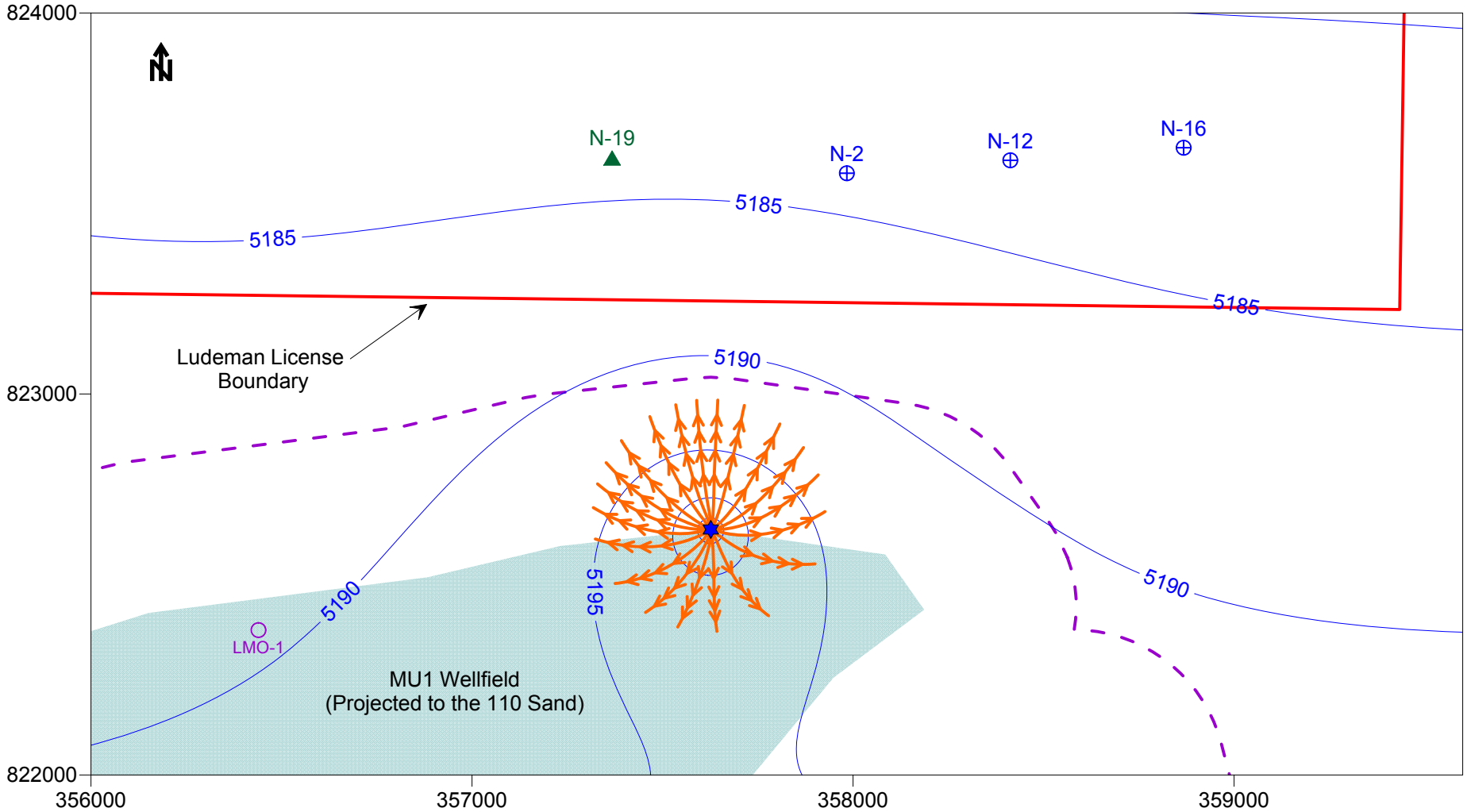
Figure 14. Simulation of Negley Wells Pumping 1 GPM (Each) Rates and Hypothetical Injection Well Release (10 GPM) Potentiometric Surface and 5-Year Groundwater Flowpaths 110 Sand, Ludeman Uranium Project, Wyoming

By: EPL Checked: HD File ID:fig14Negleymodel Date: 5/20/15



110 Sand Private Well

100 Sand Private Well

110 Sand Monitor Well

Injection Well Discharging to 110 Sand at 20 gpm

Wellfield (projected to the 110 Sand)*

Monitor Well Ring (projected to the 110 Sand)*

Potentiometric Surface -110 Sand (feet above mean sea level) Contour interval is 5 feet

Injectate Flowpath after 5 years (arrows mark 1 year increments)

* Wellfield and Monitor Well Ring are actually located within the deeper ore-bearing 90 Sand

Coordinates in NAD27 Wyoming State Plane-feet

0 250 500
feet

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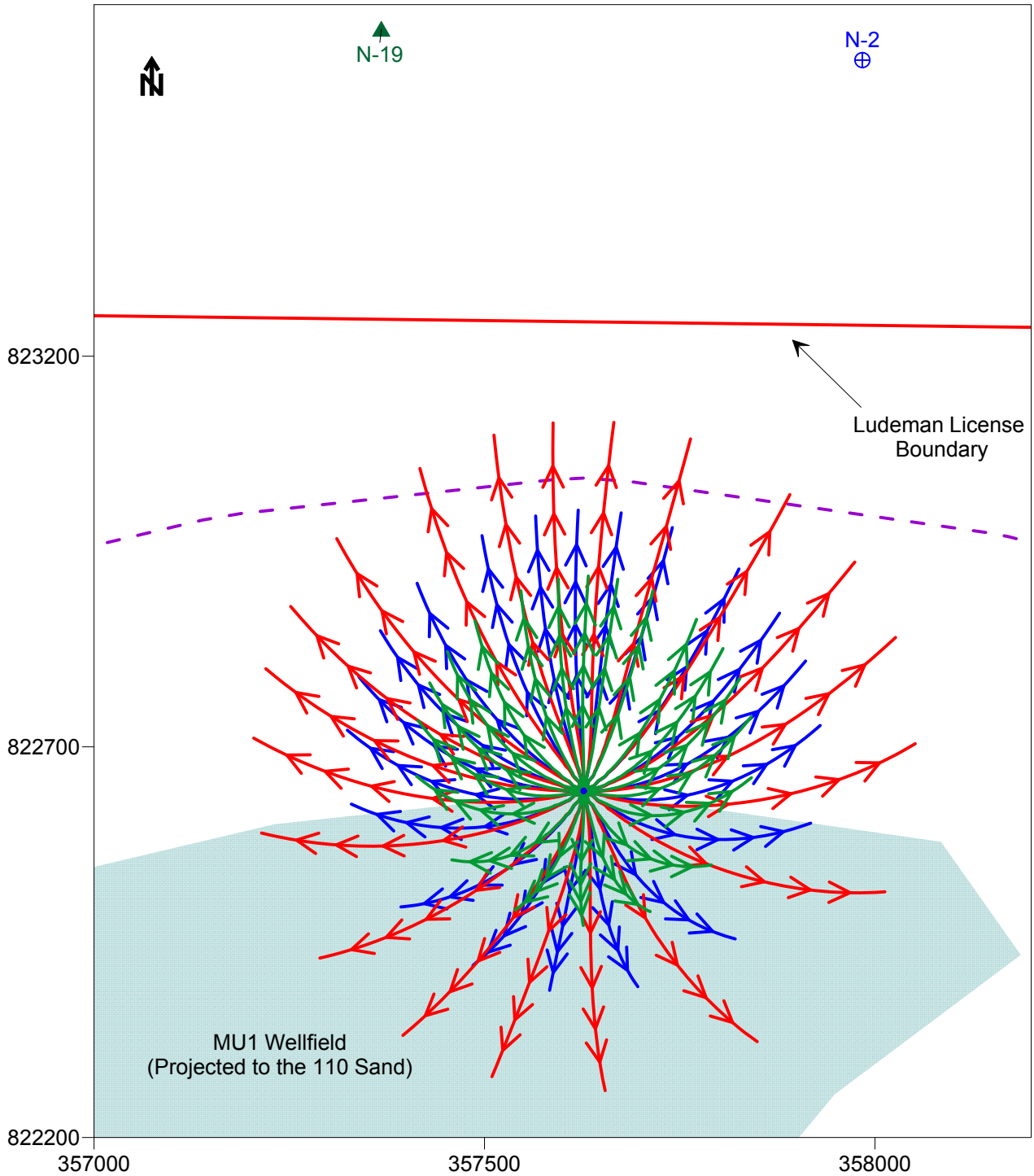
Figure 15. Simulation of Hypothetical Injection Well Release (10 GPM) No Pumping From Negley Wells, Potentiometric Surface and 5-Year Groundwater Flowpaths, 110 Sand Ludeman Uranium Project, Wyoming

By: EPL Checked: HD File ID:fig15Neglmodel Date: 5/20/15



Coordinates in NAD27 Wyoming State Plane-feet

* Wellfield and Monitor Well Ring are actually located within the deeper ore-bearing 90 Sand

0 250 500
Feet

110 Sand Private Well

100 Sand Private Well

Injection Well-
Discharging to 110 Sand

Wellfield (projected to the 110 Sand)*

Monitor Well Ring (projected to the 110 Sand)*

Injectate Flowpath after 5 years (arrows mark 1 year increments)	Maximum Distance From Injection Well (ft)
Injection Rate = 5 gpm	275
Injection Rate = 10 gpm	360
Injection Rate = 20 gpm	470

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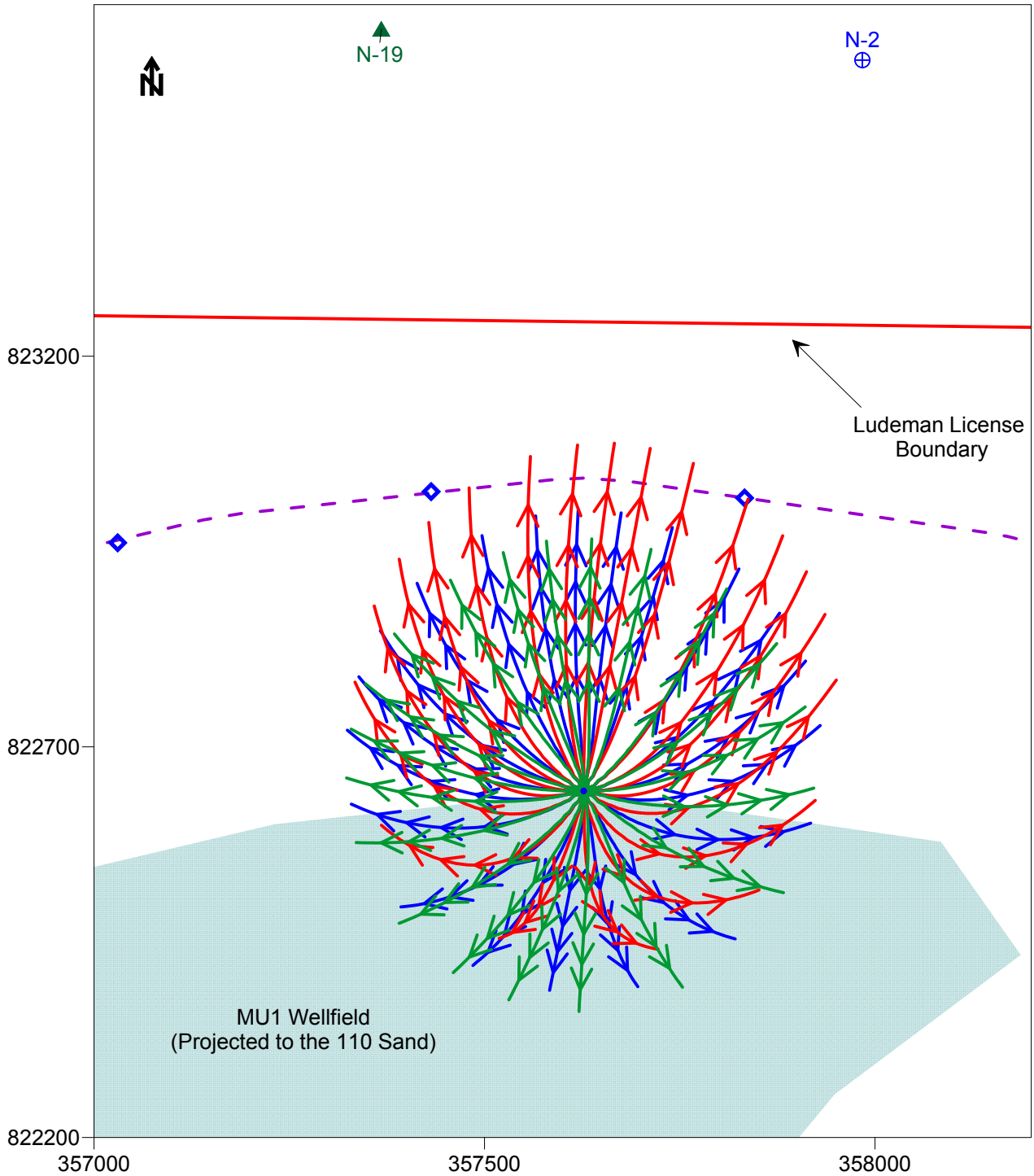
Figure 16. Sensitivity Analysis
Effects of Injection Rate on Hypothetical Release Travel Distance, 5-Year Groundwater Flowpaths

By: EPL Checked: HD File ID:fig16Neglmodel Date: 5/20/15



Coordinates in NAD27 Wyoming State Plane-feet

* Wellfield and Monitor Well Ring are actually located within the deeper ore-bearing 90 Sand

0 250 500
Feet

110 Sand Private Well

100 Sand Private Well

Injection Well-
Discharging to 110 Sand

Wellfield (projected to the 110 Sand)*

Monitor Well Ring (projected to the 110 Sand)*

Injectate Flowpath after 5 years (arrows mark 1 year increments)	Maximum Distance From Injection Well (ft)
Hydraulic Conductivity = 0.67 ft/d	320
Hydraulic Conductivity = 1.34 ft/d	360
Hydraulic Conductivity =2.7 ft/d	445

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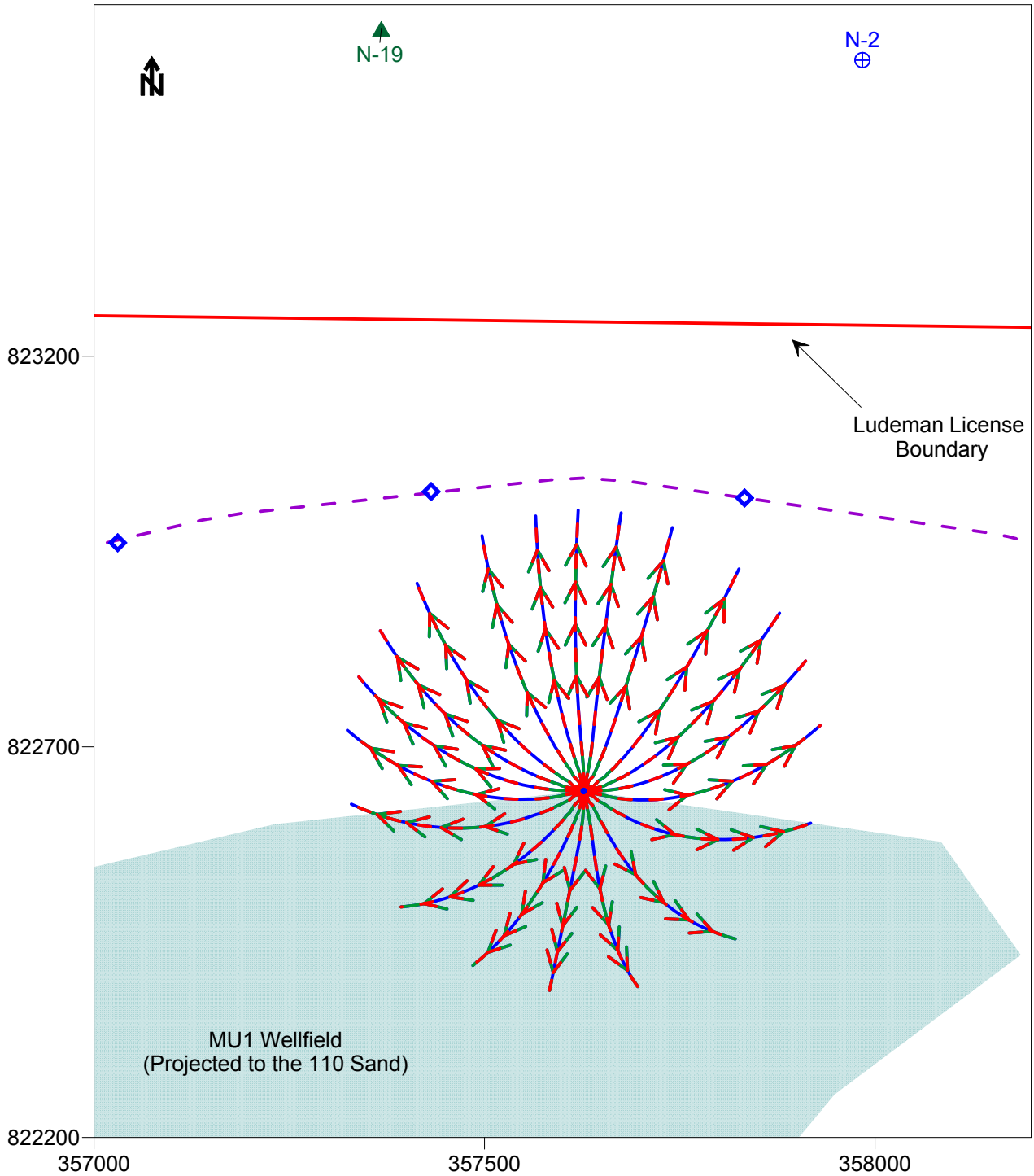
Figure 17. Sensitivity Analysis - Effects of Hydraulic Conductivity on Hypothetical Release Travel Distance, 5-Year Groundwater Flowpaths

By: EPL Checked: HD File ID:fig17Neglmodel Date: 5/20/15



Coordinates in NAD27 Wyoming State Plane-feet

* Wellfield and Monitor Well Ring are actually located within the deeper ore-bearing 90 Sand

0 250 500
Feet

110 Sand Private Well

100 Sand Private Well

Injection Well-
Discharging to 110 Sand

Wellfield (projected to the 110 Sand)*

Monitor Well Ring (projected to the 110 Sand)*

Injectate Flowpath after 5 years (arrows mark 1 year increments)	Maximum Distance From Injection Well (ft)
Specific Storage = 1.17 E-06	360
Specific Storage = 2.33 E-06	360
Specific Storage = 4.66E-06	360

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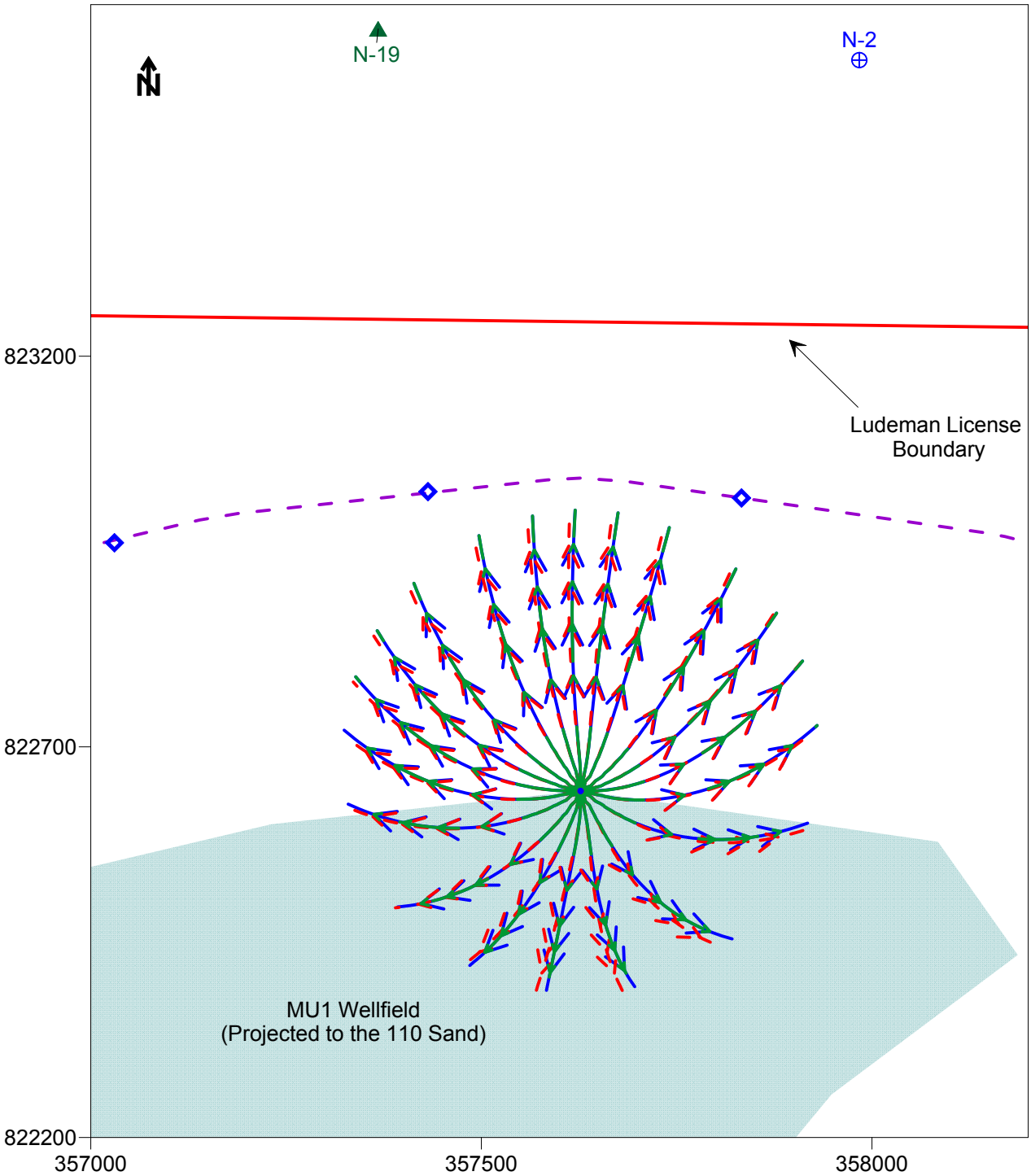
Figure 18. Sensitivity Analysis - Effects of Specific Storage on Hypothetical Release Travel Distance, 5-Year Groundwater Flowpaths

By: EPL Checked: HD File ID:fig18Neglmodel Date: 5/20/15



Coordinates in NAD27 Wyoming State Plane-feet

* Wellfield and Monitor Well Ring are actually located within the deeper ore-bearing 90 Sand

0 250 500
Feet

110 Sand Private Well

100 Sand Private Well

Injection Well-
Discharging to 110 Sand

Wellfield (projected to the 110 Sand)*

Monitor Well Ring (projected to the 110 Sand)*

Injectate Flowpath after 5 years (arrows mark 1 year increments)	Maximum Distance From Injection Well (ft)
Specific Yield = 0.10	360
Specific Yield = 0.20	360
Specific Yield = 0.25	345

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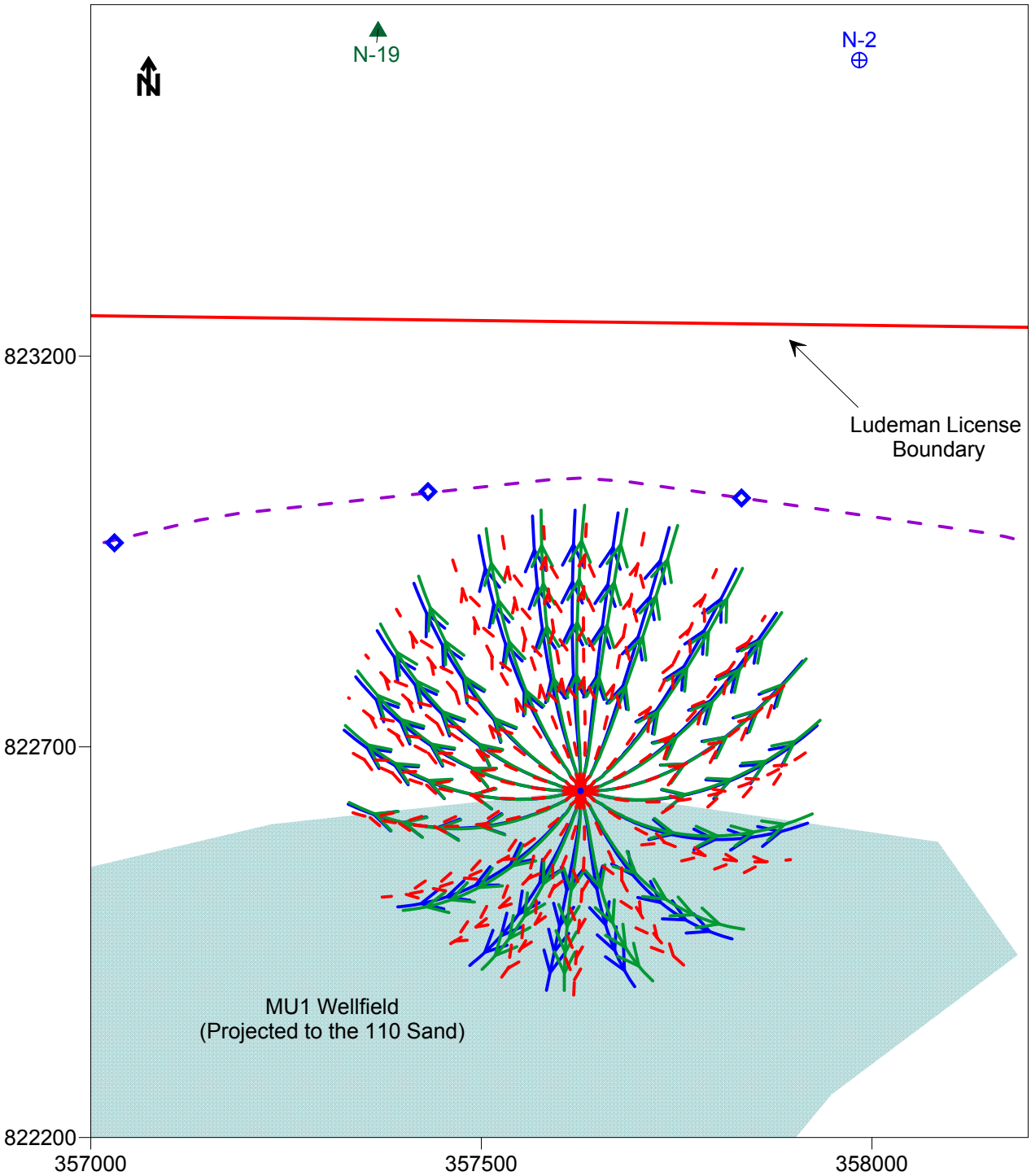
Figure 19. Sensitivity Analysis - Effects of Specific Yield on Hypothetical Release Travel Distance, 5-Year Groundwater Flowpaths

By: EPL Checked: HD File ID:fig19Neglmodel Date: 5/20/15



Coordinates in NAD27 Wyoming State Plane-feet

* Wellfield and Monitor Well Ring are actually located within the deeper ore-bearing 90 Sand

0 250 500
Feet

110 Sand Private Well

100 Sand Private Well

Injection Well-
Discharging to 110 Sand

Wellfield (projected to the 110 Sand)*

Monitor Well Ring (projected to the 110 Sand)*

Injectate Flowpath after 5 years (arrows mark 1 year increments)	Maximum Distance From Injection Well (ft)
Recharge = 4.0E-05 ft/d	365
Recharge = 8.0E-05 ft/d	360
Recharge = 1.6E-04 ft/d	345

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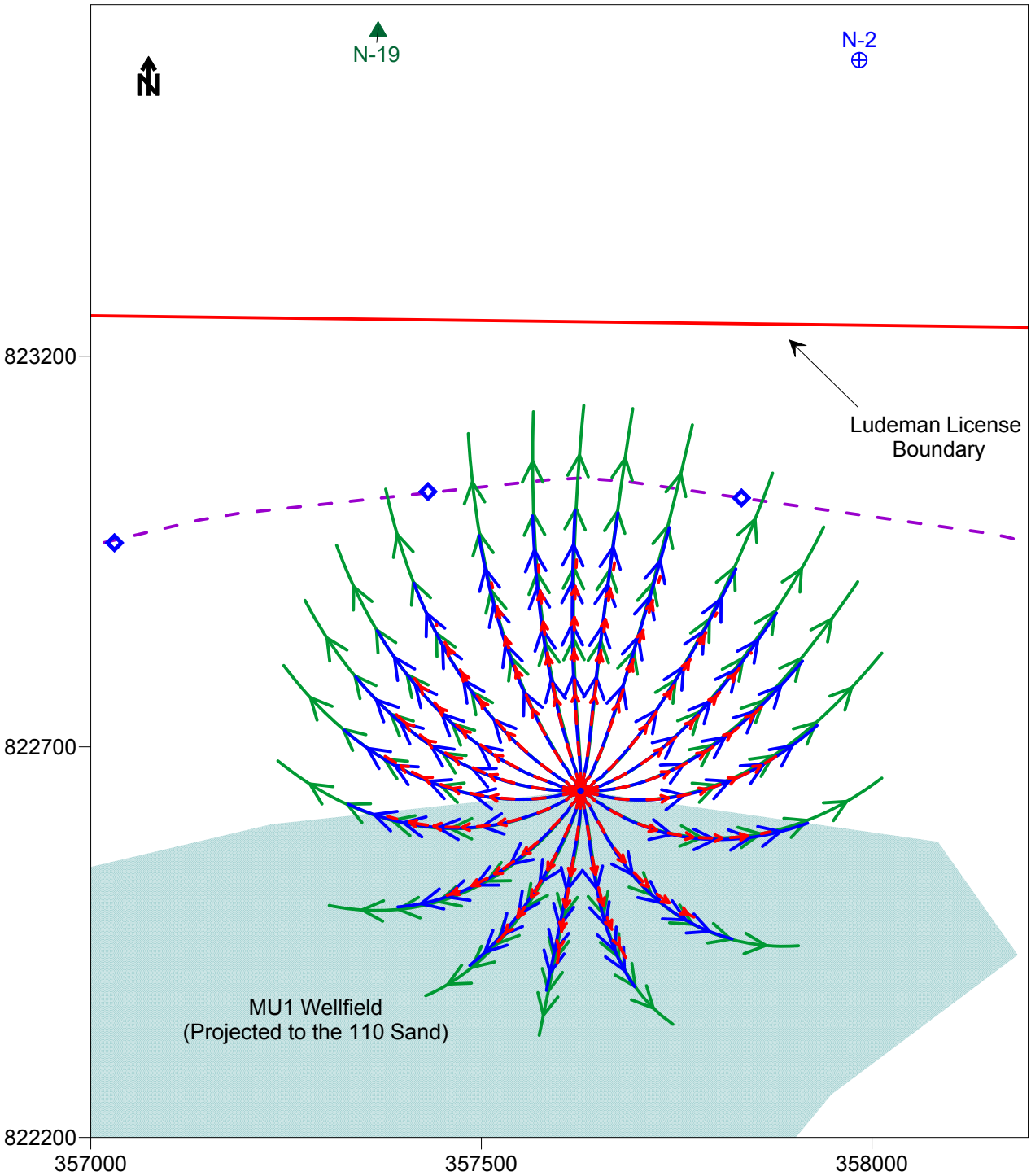
Figure 20. Sensitivity Analysis - Effects of Recharge on Hypothetical Release Travel Distance, 5-Year Groundwater Flowpaths

By: EPL Checked: HD File ID:fig21Neglmodel Date: 5/20/15



Coordinates in NAD27 Wyoming State Plane-feet

* Wellfield and Monitor Well Ring are actually located within the deeper ore-bearing 90 Sand

0 250 500
Feet

110 Sand Private Well

100 Sand Private Well

Injection Well-
Discharging to 110 Sand

Wellfield (projected to the 110 Sand)*

Monitor Well Ring (projected to the 110 Sand)*

Injectate Flowpath after 5 years (arrows mark 1 year increments)	Maximum Distance From Injection Well (ft)
Porosity = 0.15	490
Porosity = 0.25	360
Porosity = 0.35	295

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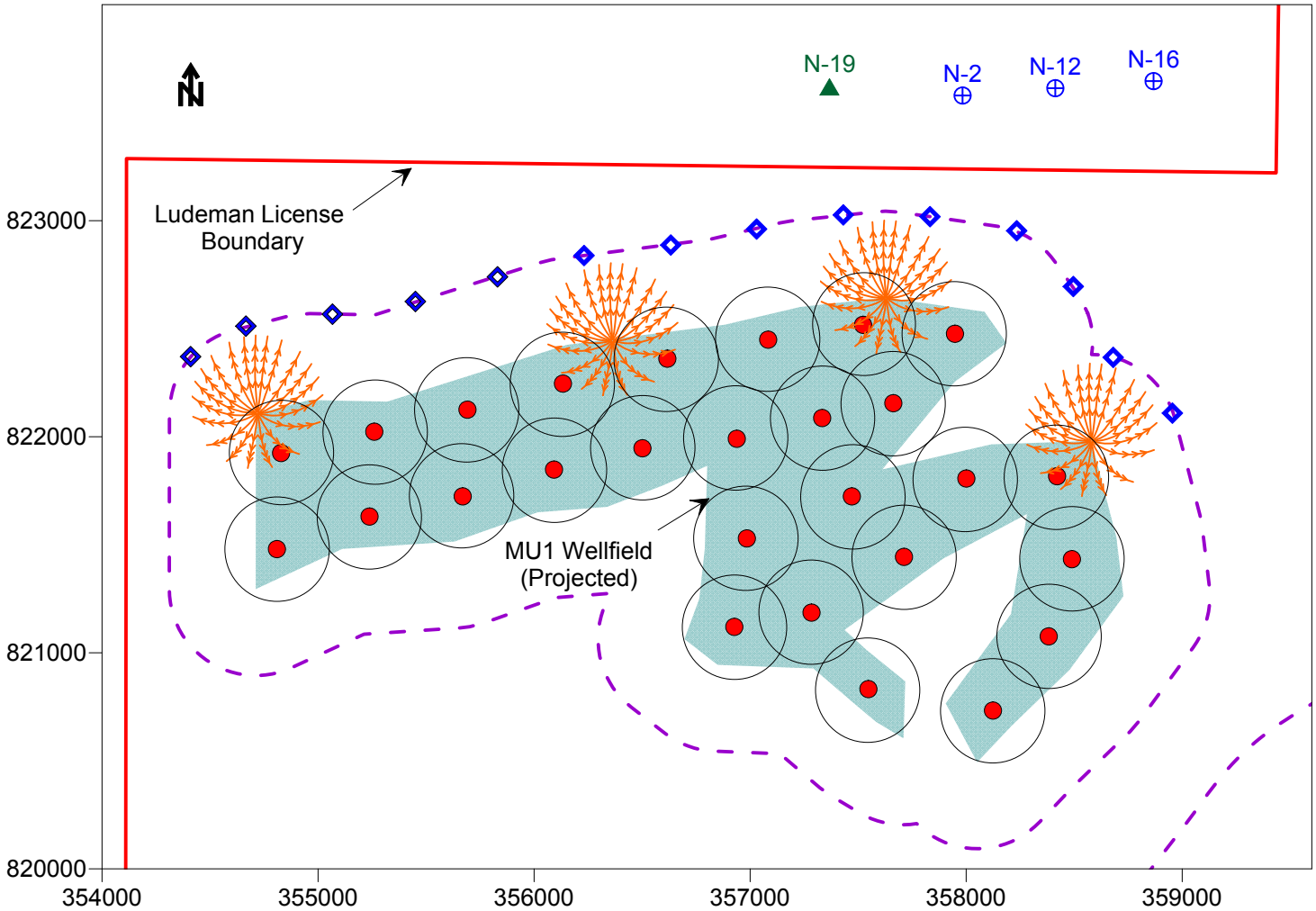
Figure 21. Sensitivity Analysis - Effects of Porosity on Hypothetical Release Travel Distance, 5-Year Groundwater Flowpaths

By: EPL Checked: HD File ID:fig20Neglmodel Date: 5/20/15



110 Sand Private Well

100 Sand Private Well

Overlying Aquifer Ring Monitor Well

Overlying Aquifer Interior Monitor Well

4 Acre Area

Wellfield (projected to the Overlying Aquifer)*

Monitor Well Ring (projected to the Overlying Aquifer)*

Groundwater Flowpath of Hypothetical Release at 10 gpm after 5 years (arrows mark 1 year increments)

* Wellfield and Monitor Well Ring are actually located within the deeper ore-bearing 90 Sand

Coordinates in NAD27 Wyoming State Plane-feet

0 500 1000 feet

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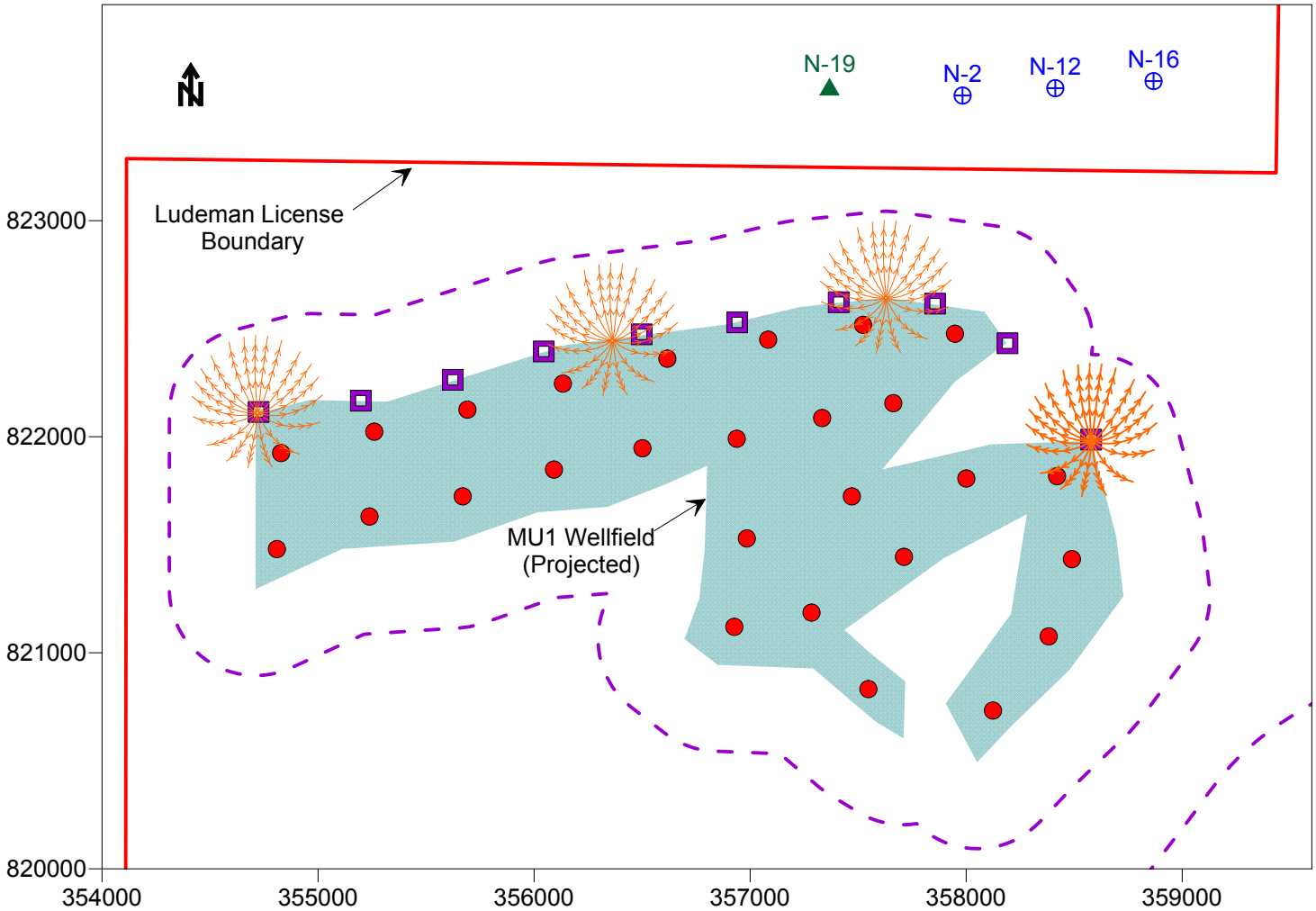
Figure 22. Comparison of Potential Monitoring Networks, Shallow (Overlying) Aquifers Ludeman Uranium Project, Wyoming

By:EPL Checked:HD File ID:fig22Negleymodel Date: 5/20/15



110 Sand Private Well

100 Sand Private Well

110 Sand Monitor Well

100 Sand Monitor Well

Wellfield (projected to the Overlying Aquifer)*

Monitor Well Ring (projected to the Overlying Aquifer)*

Groundwater Flowpath of Hypothetical Release after 5 years (arrows mark 1 year increments)

Coordinates in NAD27 Wyoming State Plane-feet

0 500 1000 feet

* Wellfield and Monitor Well Ring are actually located within the deeper ore-bearing 90 Sand

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Figure 23. Proposed Monitoring Networks 100 and 110 Sands Ludeman Uranium Project, Wyoming

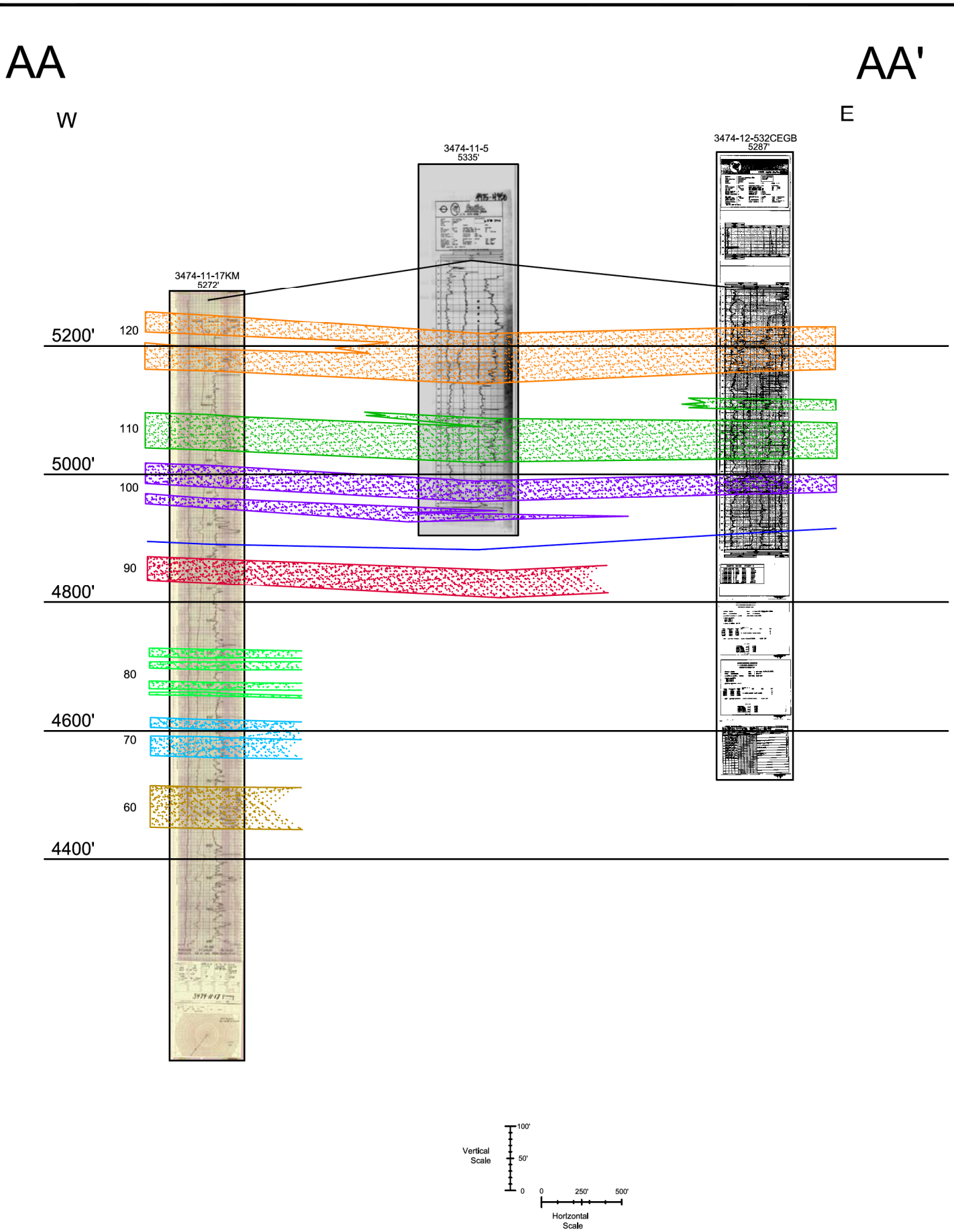
By:EPL Checked:HD File ID:fig23Negleymodel Date: 5/20/15

HYDRAULIC EFFECTS OF NEGLEY SUBDIVSION PUMPAGE ON THE LUDEMAN URANIUM ISR PROJECT WYOMING

Attachment A

Geologic Cross-Sections

Negley Subdivision and Ludeman License Amendment Area


AA
AA'
W
E
3474-11-17KM
5272'
3474-11-5
5335'
3474-12-532CEGB
5287'
5200'
5000'
4800'
4600'
4400'
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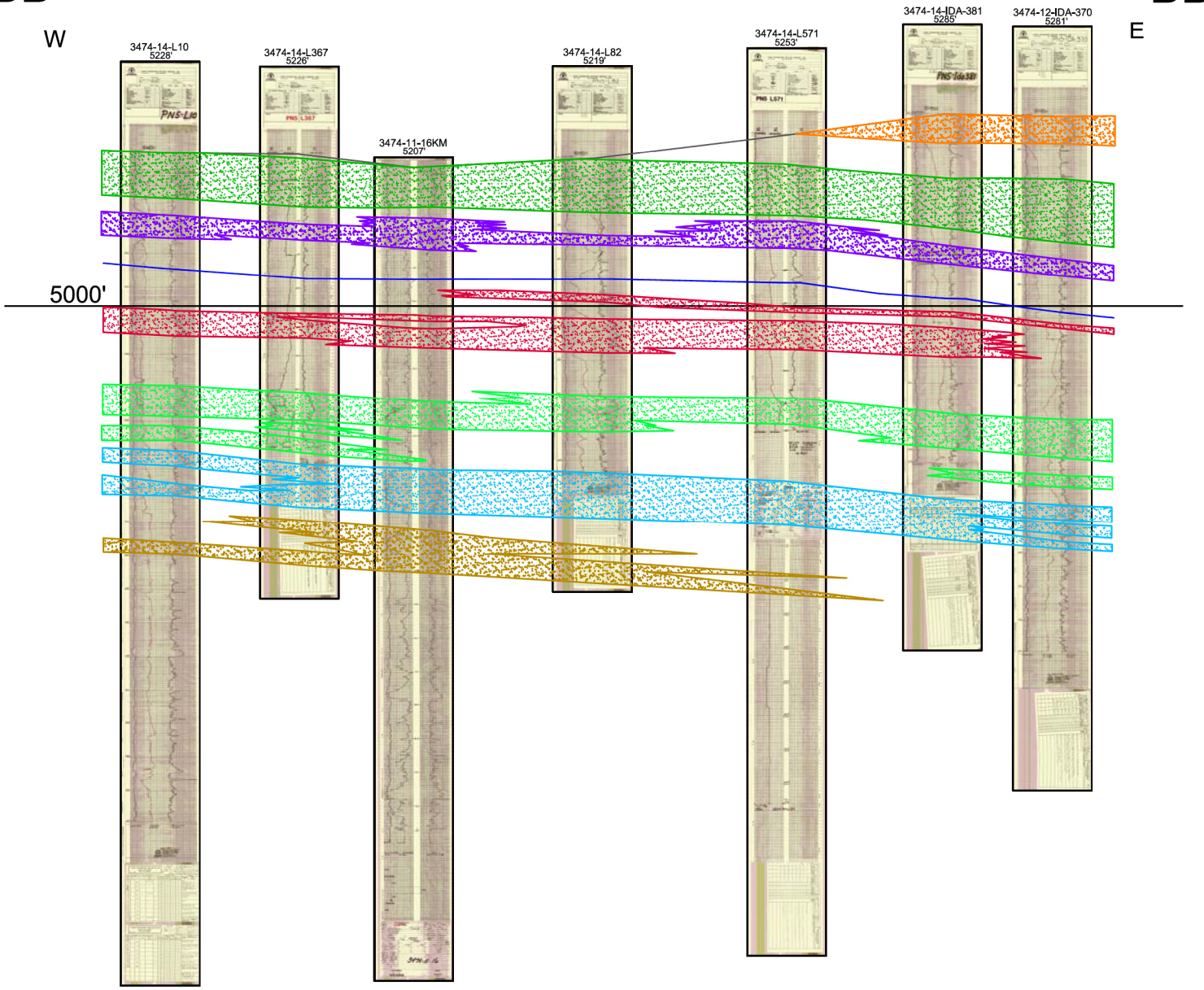
110
100
90
80
70
60
Vertical Scale
100'
50'
0
0
250'
500'
Horizontal Scale


BB
BB'
W
E
3474-14-L10
5228'
3474-14-L367
5226'
3474-11-16KM
5207'
3474-14-L82
5219'
3474-14-L571
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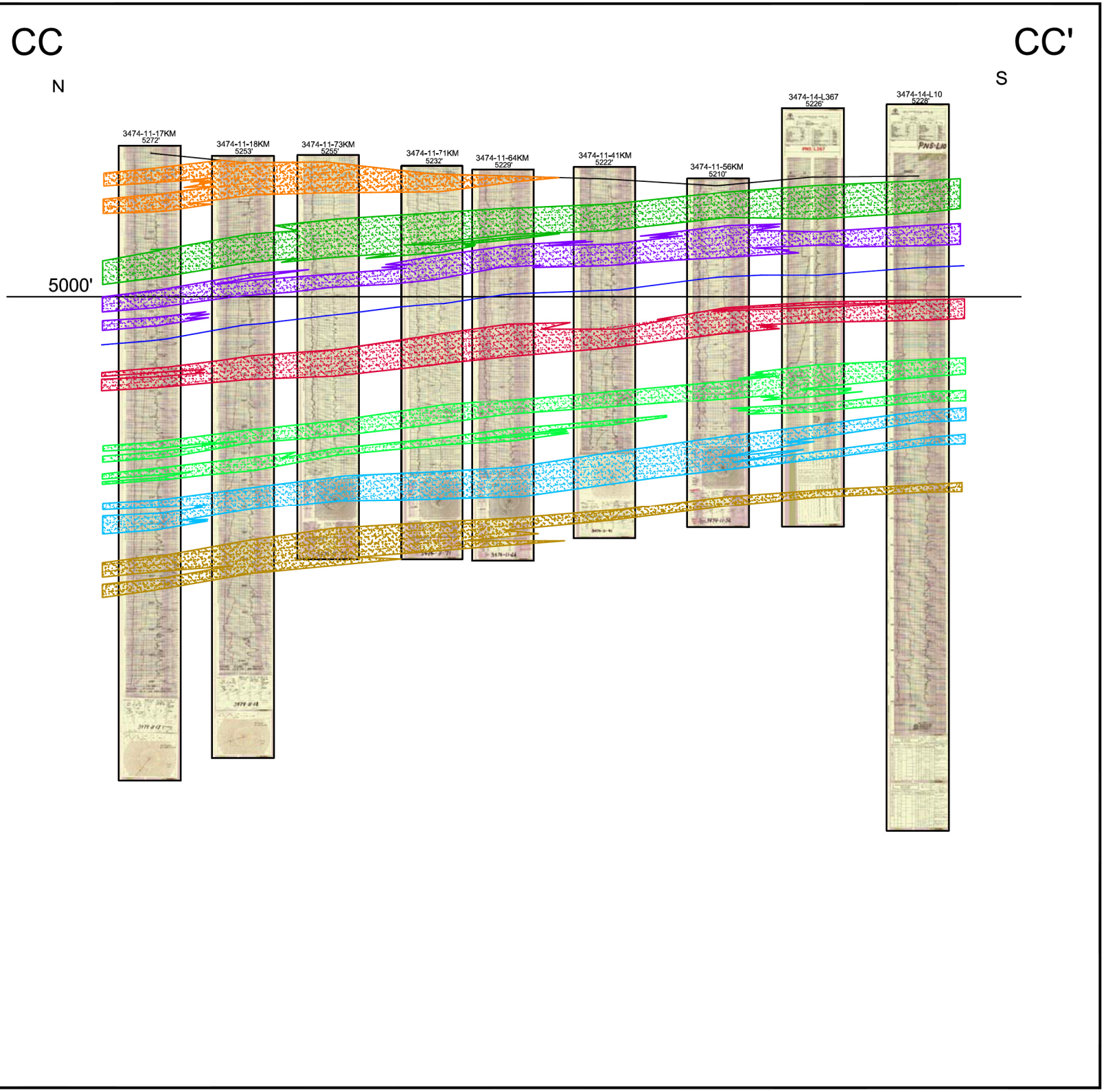
3474-14-IDA-381
5285'
3474-12-IDA-370
5281'
5000'


CC
CC'
N
S
5000'
3474-11-17KM
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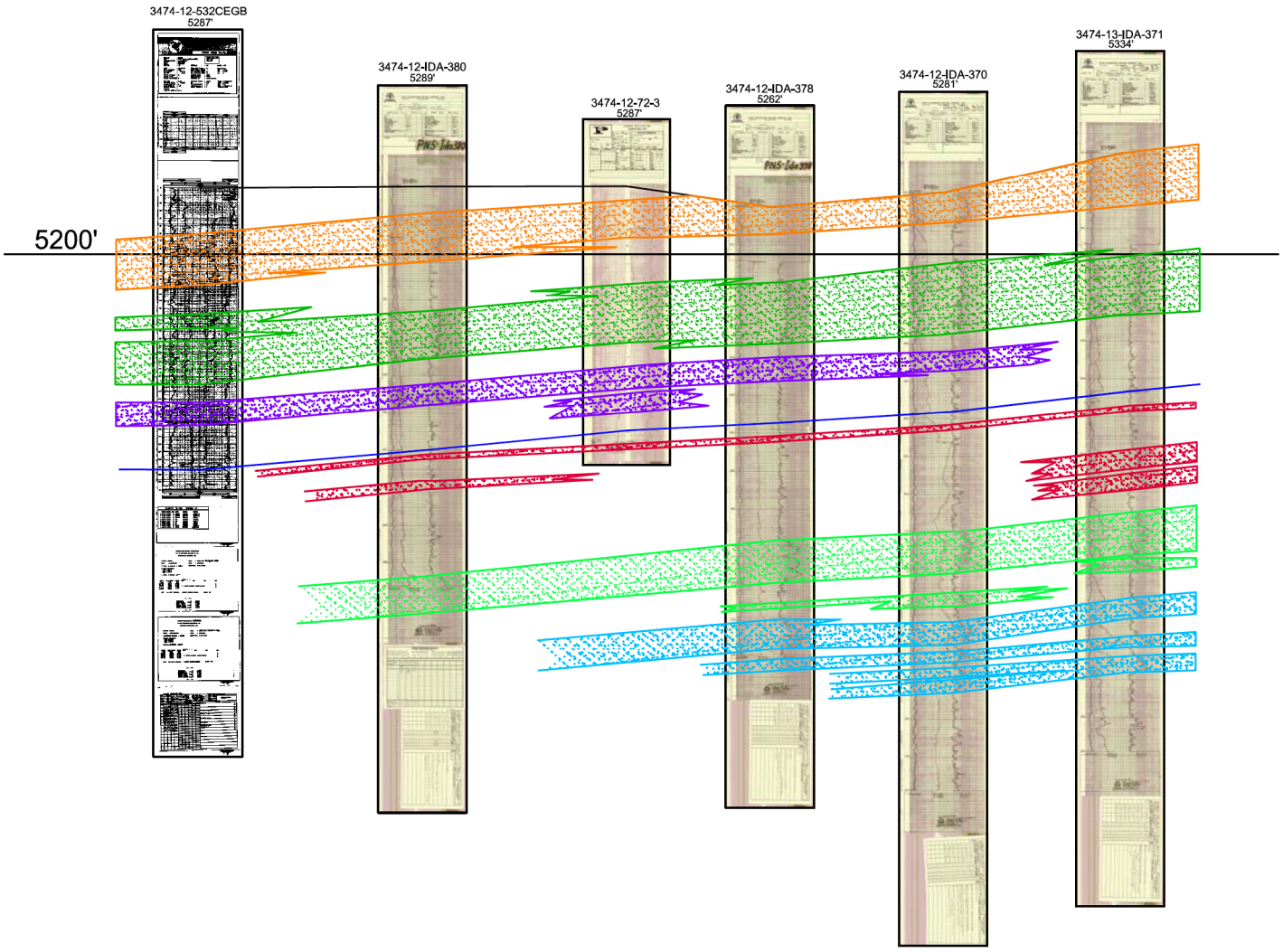
3474-11-18KM
5253'
3474-11-73KM
5255'
3474-11-71KM
5232'
3474-11-64KM
5229'
3474-11-41KM
5222'
3474-11-56KM
5210'
3474-14-L367
5226'
3474-14-L10
5228'


DD
DD'
N
S
3474-12-532CEGB
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3474-12-IDA-380
5289'
3474-12-72-3
5287'
3474-12-IDA-378
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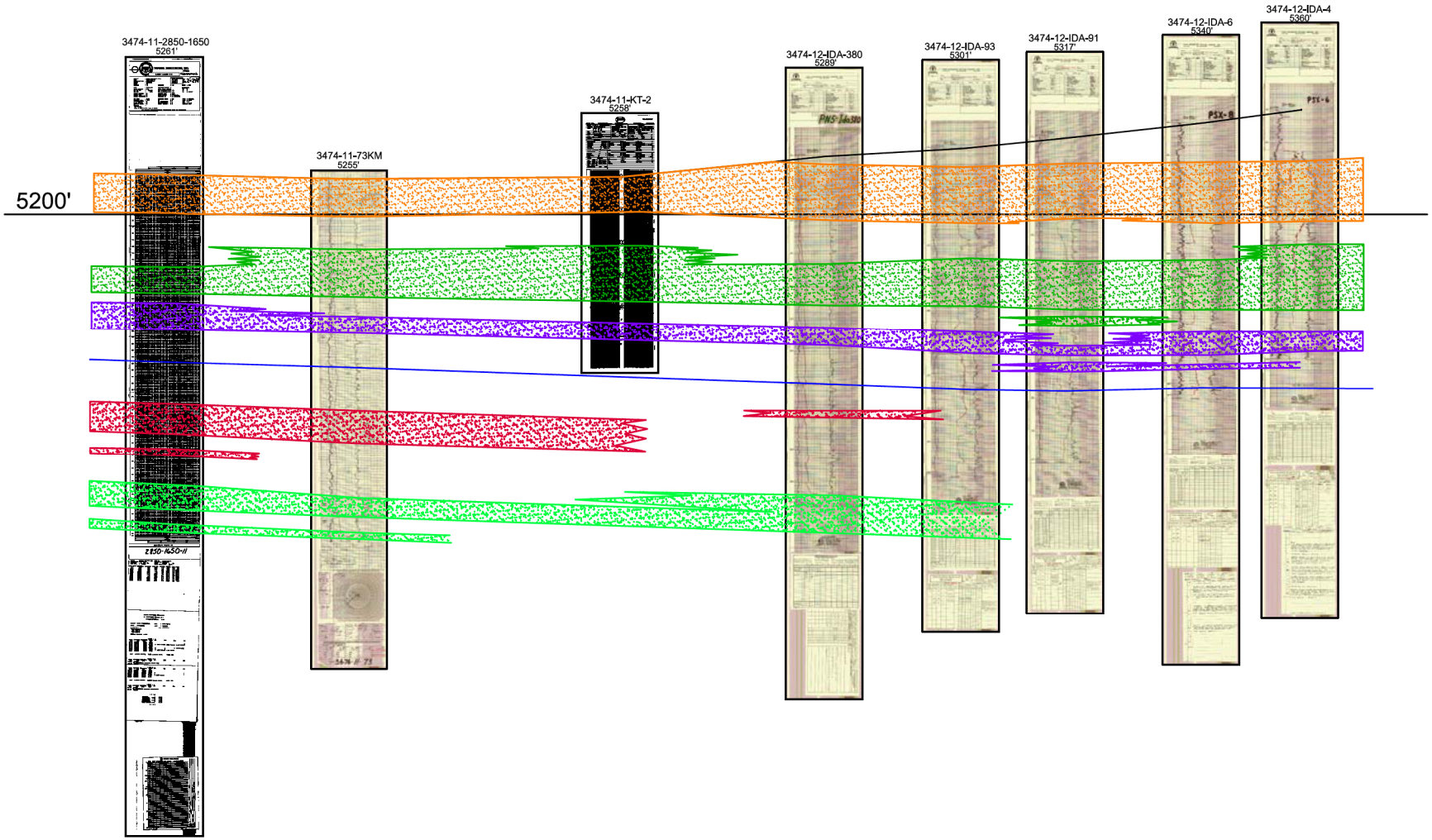
3474-12-IDA-370
5281'
3474-13-IDA-371
5334'
5200'

EE

EE'

W

E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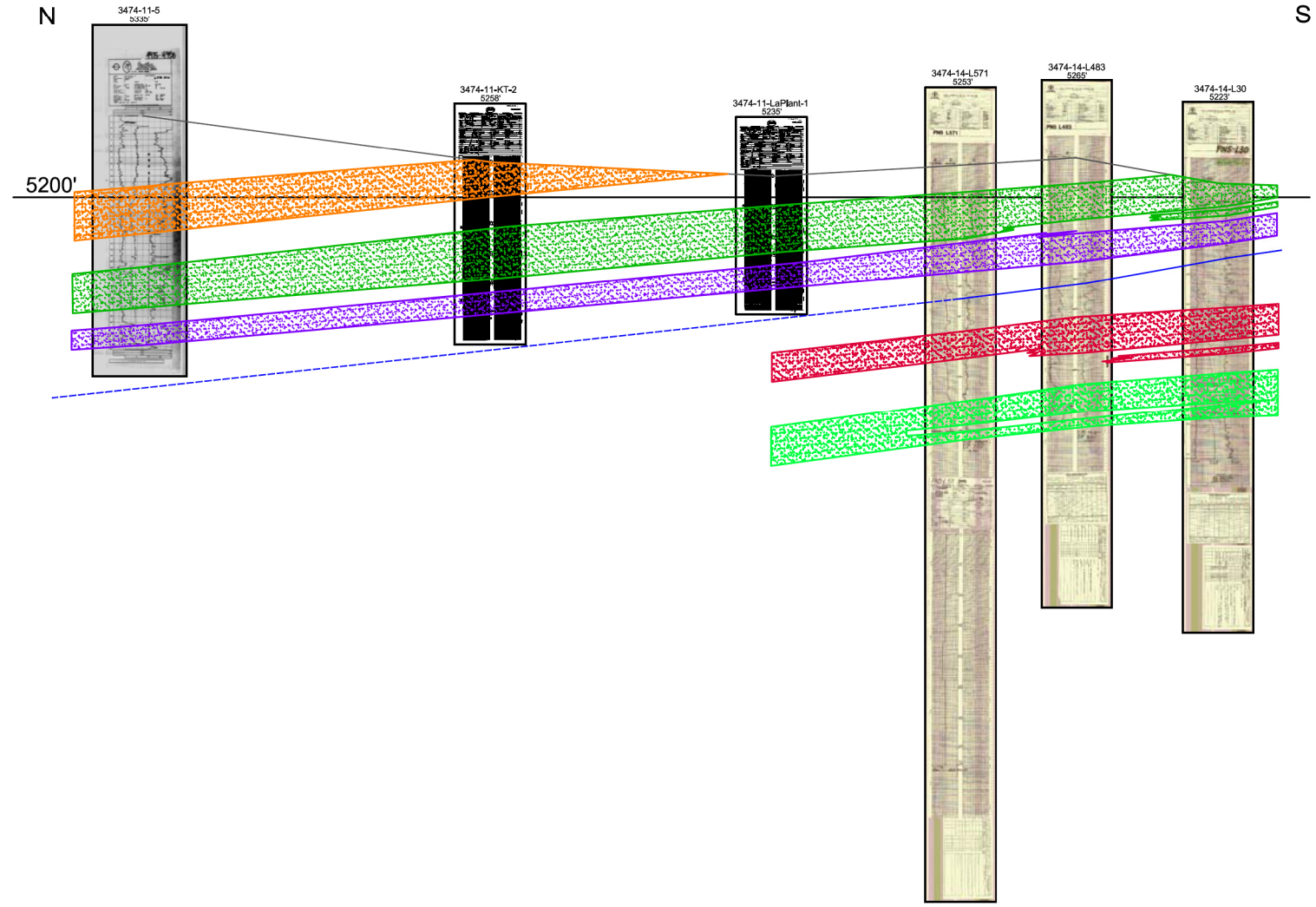
5261'
3474-11-73KM
5255'
3474-11-KT-2
5258'
3474-12-IDA-380
5289'
3474-12-IDA-93
5301'
3474-12-IDA-91
5317'
3474-12-IDA-6
5340'
3474-12-IDA-4
5360'
5200'


FF
FF'
N
S
3474-11-5
5335'
3474-11-KT-2
5258'
3474-11-LaPlant-1
5235'
3474-14-L571
5253'
3474-14-L483
5265'
3474-14-L30
5223'
5200'

APPENDIX B:

Change of Design Impact Matrix

Introduction

Due to the current uranium market conditions, Uranium One evaluated the currently proposed development and operating plans for the Ludeman Project to assess if certain operational components of the proposed plan could be optimized:

1) Single satellite plant opposed to multiple satellite plants;
2) Use of evaporation ponds opposed to Deep Disposal Wells (DDWs); and
3) Removal of lands from the proposed project area.

The need for these modifications was discussed with NRC on January 31, 2013 at NRC headquarters in Rockville, Maryland. This action will be completed concurrently with Uranium One's ongoing efforts to respond to the RAI's (January 15, 2013). Thus, both the TR and ER will eventually contain both the proposed modifications summarized here in and the accompanying RAI responses.

Uranium One believes that these minor modifications will improve the viability of the project, and reduce the overall potential environmental and other impacts. Further discussion is provided below.

Satellite Plant Reduction

First and foremost, this evaluation identified the utilization of a single satellite plant as opposed to the three satellites proposed in the original amendment application. A single satellite plant has been deemed more economically feasible and would lessen a number of potential environmental impacts.

The primary modification to the amendment application involves the use of a single satellite as opposed to the three satellites originally proposed. The single satellite will be constructed at the same location as the proposed Leuenberger satellite location, on the west end of the project area. The previously proposed North Platte and Peterson Satellites will not be constructed. Such a modification will result in a maximum flow rate of 9,000 gpm for the satellite plant. The current application identifies 3,000 gpm/satellite for the equivalent project total of 9,000 gpm.

As a result of the single satellite configuration, additional trunk lines will be necessary to transmit production and injection fluids, and restoration flow to, and from, the wellfields in the eastern portion of the project area. Three booster pump stations will be utilized to

accommodate the greater trunk line distances. Two of these stations will be located at the same locations as the original North Platte and Peterson satellite locations (Figure 1). The third pump station location will be centrally located between the other two stations in T34N R73W Section 17.

More specifically, a single trunk line corridor will run west-to-east from the Leuenberger location in Section 14, through Section 13 of T34N R74W, and Sections 18 and 17 of T34N R73W. From there, the trunk line corridor will split with one additional corridor running northeast to the booster pump station at the previous North Platte Satellite location. The other corridor will run southeast to the pump station at the previous Peterson Satellite location. These trunk line locations were chosen to optimize fewer challenging topographic features, avoid previously surveyed cultural resource sites, avoid any identified wetlands, and avoid surface land that Uranium One does not control.

Evaporation Ponds

In the Ludeman Amendment application currently under review by NRC, Uranium One proposes the use of surge ponds and Class I UIC deep disposal wells as part of the liquid 11e.(2) byproduct storage and disposal infrastructure for the Proposed Project. The surge pond and deep DDW option is still considered a viable and key component of Uranium One's plans. However, Uranium One is investigating the use of evaporation ponds as a potential alternative to DDWs for site waste water disposal. Evaporation ponds can be used in conjunction with DDWs or could provide the main wastewater disposal option (no DDWs).

Removal of Lands from Project Area

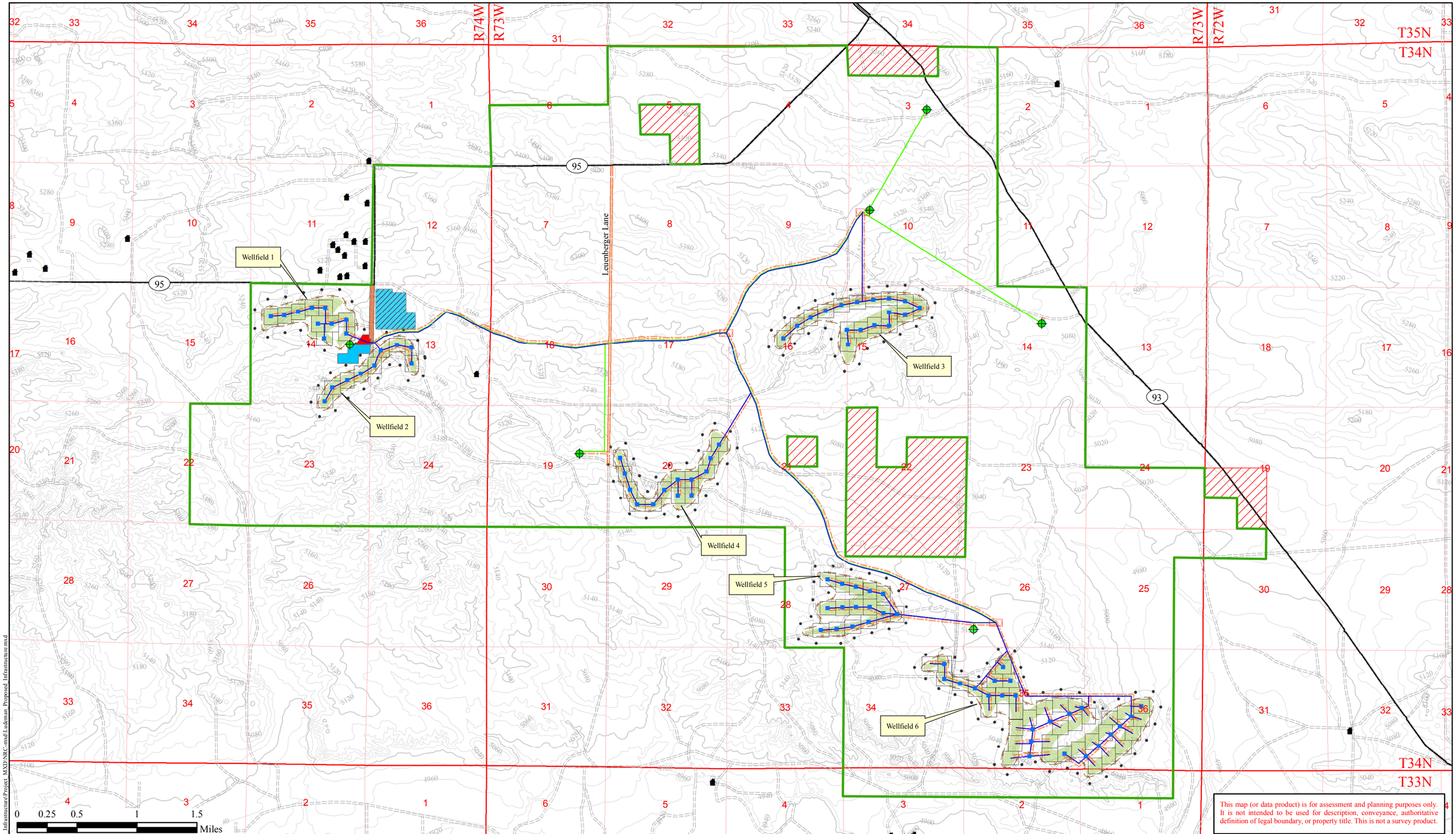
The original Proposed Project area included approximately 400 acres of BLM administered lands. These small in-holdings of Federal lands are located in Sections 5, 3 and 21 T34N R73W and Section 19 T34N R72W. Following discussions with the BLM's Casper field office, Uranium One has decided to follow the suggestion of the BLM staff to withdraw those lands from the proposed project area. in both the NRC license amendment application and the WDEQ Permit to Mine application.

Additionally, the current SUA-1341 Amendment Application includes approximately 640 acres of land owned by Chapman University. This land is located in T34N R73W Sections 22 and 27.

Uranium One never intended to operate within, disturb or even cross the BLM or Chapman University lands during the project's lifespan. The removal of the BLM and Chapman land totals approximately 1,040 acres.

Uranium One believes these modifications are minor in nature and should result in limited additional review and should not affect the previously completed and ongoing review process by NRC staff. The modifications to the Ludeman Amendment Application represented in this summary will not significantly increase (<10 percent) the overall foot print of the project and most project impacts will be lessened as a result of the single satellite, as compared to three satellites and associated infrastructure.

As shown in attached impact matrix, the majority of the TR and ER will not require major changes as a result of the modifications. The impact matrix is a summary of the proposed modifications and associated impacts compared to the current document.



This map (or data product) is for assessment and planning purposes only. It is not intended to be used for description, conveyance, authoritative definition of legal boundary, or property title. This is not a survey product.

PREPARED FOR

uranium one™ investing in our energy

LUDEMAN PROJECT
CONVERSE COUNTY, WY

TREC, Inc.
Engineering & Environmental Management
900 Werner Court
Suite 150
Casper, Wyoming 82601
Phone: (307) 265-0696
Fax: (307) 265-2498

Legend

- Ludeman Project Boundary
- Excluded Area
- Fenced Area
- Residence
- Plant Facility Site Area
- Permeate Pond Area
- Evaporation Ponds
- Header House
- Trunkline
- Deep Disposal Well
- Deep Disposal Well Pipeline
- Well Pattern
- Wellfield
- Monitor Well Ring
- Booster Station
- Primary Access
- Secondary Access Road

N W E S

DRAWN BY: RMD
CHECKED BY: CT
APPROVED BY: RMD

Conceptual Infrastructure

REV #	DESCRIPTION	BY	DATE	FIGURE
0	For Submittal	RMD	3-22-13	1
1	Revisions made - Final Draft for Review	EGS	6-4-15	

Path: O:\WY Projects\8201-2013-102_Infrastructure\Project_MXD\NRC-mxd\Ludeman Proposed Infrastructure.mxd

1 - Small: The section content is minimally modified with no new information presented (e.g. values, terminology, description).

2 - Moderate: The section content has been enhanced with additional language or presented in a different manner.

3 - Large: The section content has been significantly revised, moved, or removed.

No color indicates changes to the document are not anticipated

NRC Technical Report	Impact			Comments
	Plant Reduction	Land Exclusion	Evaporation Pond	
Section 1-Proposed Activities				
1.1 Licensing Action Requested				
1.2 Project History				
1.3 Corporate Entities Involved				
1.4 Site Location & Description		1		Change project location description
1.5 Orebody Description				
1.6 Ore Body Description				
1.7 Estimated Annual Production	1			Update values, if necessary
1.8 Solution Recovery Method				
1.8.1 Advantages of ISR Uranium Recovery				
1.8.2 Ore Amenability	1			Update values, if necessary
1.9 Operating Plans, Design Throughput, & Production	1			Update values, if necessary
1.10 Project Construction, Operation, and Restoration Schedule	1			Update values, if necessary
1.11 Byproduct Management				
1.11.1 11e.(2) Liquid Byproduct			2	Add utilization of evaporation ponds to the discussion
1.11.2 Non 11e.(2) Liquid Byproduct				
1.11.3 11e.(2) Solid Byproduct				
1.11.4 Non-11e.(2) Solid Byproduct				
1.12 Groundwater Restoration				
1.13 Decommissioning & Restoration				
1.14 Surety Arrangements				
Section 2-Site Characteristics				
2.1 Site Location & Layout		1		Change project location description
2.2 Land Use				
2.2.1 General Setting				
2.2.2 Land Use		1		Revise tables to reflect new project land use acreage
2.2.2.1 Oil and Gas Development				
2.2.2.2 Aesthetics				
2.2.2.3 Transportation and Utilities				
2.2.2.4 Fuel Cycle Facilities				
2.2.3 Water Use				
2.2.3.1 Surface Water		1		Update surface water rights with current data
2.2.3.2 Groundwater		1		Update SEO with current data
2.2.4 Precautions and Impacts				
2.2.4.1 Potential Impacts				
2.3 Population Distribution				
2.3.1 Demography				
2.3.1.1 Regional Population				
2.3.1.2 Population Characteristics				
2.3.1.3 Population Projections				
2.3.1.4 Seasonal Population and Visitors				
2.3.1.5 Schools				
2.3.1.6 Sectorial Population				
2.3.2 Local Socioeconomics				
2.3.2.1 Major Economic Sectors				
2.3.2.2 Housing				
2.3.2.3 Temporary Housing				
2.3.3 Evaluation of Socioeconomic Impacts				

NRC Technical Report	Impact			Comments
	Plant Reduction	Land Exclusion	Evaporation Pond	
2.3.3.1 Construction				
2.3.3.2 Operations Workforce				
2.3.3.3 Effects to Housing				
2.3.3.4 Effects to Services				
2.3.3.5 Effects to Transportation				
2.3.4 Environmental Justice				
2.3.4.1 Geographic Unit of Analysis				
2.3.4.2 Minority Populations				
2.3.4.3 Environmental Justice Conclusions				
2.4 Historic, Scenic and Cultural Resources				
2.4.1 Historic, Archeological & Cultural Resources				
2.4.2 Visual and Scenic Resources				
2.4.2.1 Introduction				
2.4.2.2 Methods				
2.4.2.3 Visual Resource Management Classes				
2.4.2.4 Visual Resource Resource Management Rating				
2.4.2.5 Environmental Consequences				
2.4.2.6 Mitigation				
Addendum 2.4-A: Visual Resource Map and Photos	2	1		Update Visual Resource figure
2.5 Meteorology				
2.5.1 Introduction				
2.5.2 Regional Overview				
2.5.2.1 Temperature				
2.5.2.2 Relative Humidity				
2.5.2.3 Precipitation				
2.5.2.4 Wind Patterns				
2.5.2.5 Cooling, Heating, and Growing Degree Days				
2.5.3 Site Specific Analysis				
2.5.3.1 Temperature				
2.5.3.2 Wind Patterns				
2.5.3.3 Surrogate Site Justification and Specifications				
2.5.3.4 Upper Atmosphere Characteristics				
2.5.3.5 Bodies of Water and Special Terrain Features				
2.5.3.6 Air Quality	2		2	Estimated air quality impacts will be updated and the discussion moved to TR Section 7 Potential Impacts
2.6 Geology				
2.6.1 Regional Geology				
2.6.2 Site Geology				
2.6.3 Mineralogy of the Uranium Ore				
2.6.4 Drill Holes				
2.6.5 Soils				
2.6.5.1 Methodology				
2.6.5.2 Results and Discussion				
2.6.6 Seismology				
2.6.6.1 Historic Seismicity				
2.6.6.2 Deterministic Analysis of Regional Active Faults with a Surficial Expression				
2.6.6.3 Floating or Random Earthquake Sources				
2.6.6.4 Probabilistic Seismic Hazard Analyses				
Addendum 2.6-A: Geology Figures and Tables				
Addendum 2.6-B: Ludeman Soils Tables				
Addendum 2.6-C: Soils Mapping Unit Descriptions				
Addendum 2.6-D: Ludeman Sampled Soil Series Descriptions				
Addendum 2.6-E: Ludeman Laboratory Results				
Addendum 2.6-F: Prime Farmland Designation				
Addendum 2.6-G: Ludeman Soil Maps				
Addendum 2.6-H: Professional Certifications				
2.7 Hydrology				
2.7.1 Surface Water Hydrology				

NRC Technical Report	Impact			Comments
	Plant Reduction	Land Exclusion	Evaporation Pond	
2.7.1.1 Regional Description				
2.7.1.1.1 Surface Water Drainage Basin Descriptions				
2.7.1.1.2 Other Surface Water Bodies				
2.7.1.2 Stream Gauging				
2.7.1.3 Flood Frequency	1			Update values
2.7.1.4 Precipitation				
2.7.1.5 Surface Water Runoff				
2.7.1.5.1 TR-55 Graphical Method				
2.7.1.5.2 SCS Unit Hydrograph				
2.7.1.5.3 USGS Peak Flow Estimates in Wyoming				
2.7.2 Groundwater				
2.7.2.1 Regional Hydrogeology				
2.7.2.1.1 Groundwater Flow				
2.7.2.1.2 Groundwater Recharge				
2.7.2.1.3 Aquifers				
2.7.2.2 Site Hydrogeology				
2.7.2.2.1 Groundwater Monitoring Well Locations				
2.7.2.2.2 Hydrostratigraphic Units				
2.7.2.3 Potentiometric Surface, Groundwater Flow Direction and Hydraulic Gradient				
2.7.2.4 Site Specific Aquifer Properties				
2.7.2.4.1 Historic Aquifer Pumping Tests				
2.7.2.4.2 2008 Aquifer Pump Tests	1			Change description of pump test areas to reflect wellfield numbers vs. satellite area name
2.7.2.5 Possible Effects of ISR Mining on the North Platte River				
2.7.3 Water Quality				
2.7.3.1 Surface Water Quality				
2.7.3.2 Groundwater Quality				
2.7.3.2.1 Regional Groundwater Quality				
2.7.3.2.2 Groundwater Monitoring Well Network and Parameters				
2.7.3.2.3 Groundwater Quality Sampling Program				
2.7.3.2.4 Groundwater Quality Analysis				
2.7.3.2.5 Groundwater Quality Results				
Addendum 2.7-A: Water Rights		2		Update water rights based on revised project boundary
Addendum 2.7-B: FEMA 100 year Map	2			Map will be revised to reflect one satellite facility
Addendum 2.7-C: Well Completion Data				
Addendum 2.7-D: Surface Water Quality Data				
Addendum 2.7-E: Ground Water Quality Data				
Addendum 2.7-F: Negley Subdivision Wells				
Addendum 2.8-G: Effect of Negley Subdivision Pumpage	3	3	3	New addendum per TR RAI-57
2.8 Ecological Resources				
2.8.1 Introduction				
2.8.2 Regional Setting				
2.8.3 Climate				
2.8.4 Baseline Data				
2.8.5 Terrestrial Ecology				
2.8.5.1 Vegetation				
2.8.5.1.1 Survey Methodology				
2.8.5.1.2 Vegetation Survey Results		1		Total coverage acreages will be updated to reflect the revised project area
2.8.5.1.3 Upland Grassland		1		Total coverage acreages will be updated to reflect the revised project area
2.8.5.1.4 Big Sagebrush Scrubland		1		Total coverage acreages will be updated to reflect the revised project area
2.8.5.1.5 Upland Grassland Rough Breaks Complex		1		Total coverage acreages will be updated to reflect the revised project area
2.8.5.1.6 Lowland Grassland		1		Total coverage acreages will be updated to reflect the revised project area
2.8.5.1.7 Silver Sagebrush Scrubland		1		Total coverage acreages will be updated to reflect the revised project area
2.8.5.1.8 Crested Wheatgrass		1		Total coverage acreages will be updated to reflect the revised project area
2.8.5.1.9 Vegetation Survey Discussion				
2.8.5.2 Wetlands				
2.8.5.2.1 Introduction		1		Update project location description
2.8.5.2.2 Methodology				
2.8.5.2.3 Results				

NRC Technical Report	Impact			Comments
	Plant Reduction	Land Exclusion	Evaporation Pond	
2.8.5.2.4 Discussion				
2.8.5.2.5 Impact Analysis				
2.8.5.2.6 Conclusion		1		Total coverage acreages will be updated to reflect the revised project area
2.8.5.3 Wildlife				
2.8.5.3.1 Introduction				
2.8.5.3.2 Survey Area Description				
2.8.5.3.3 Methods				
2.8.5.3.4 Results and Discussion				
2.8.5.3.5 Other Animals				
2.8.5.3.6 Conclusions				
2.8.5.4 T&E Species				
2.8.5.5 Aquatic Resources				
Addendum 2.8-A: Vegetation Species Summary				
Addendum 2.8-B: Vegetation Cover Summaries		1		Total coverage acreages will be updated to reflect the revised project area
Addendum 2.8-C: Vegetation Density Summaries		1		Total density will be updated to reflect the revised project area
Addendum 2.8-D: Vegetation Map		2		Map will be updated to depict revised project area
Addendum 2.8-E: Ute ladies Tresses Orchid Survey Report				
Addendum 2.8-F: Wetland Maps		2		Map will be updated to depict revised project area
Addendum 2.8-G: Wetland Summary				
Addendum 2.8-H: Wetland Species List				
Addendum 2.8-I: Wetland Photographs				
Addendum 2.8-J: Wetland Data Forms – Great Plains Region				
Addendum 2.8-K: Wildlife Species List				
2.9 Baseline Radiological Characteristics	2	2		Several figures will be revised to depict revised project boundary; Section structure will be revised so it is easier to follow
2.9.1 Introduction				
2.9.2 Gamma Survey				
2.9.2.1 Methods				
2.9.2.1.1 Gamma Scanning				
2.9.2.1.2 Cross-calibration of NaI Detectors				
2.9.2.1.3 Gamma / Soil Radionuclide Correlations				
2.9.2.1.4 Data Quality Assurance / Quality Control				
2.9.2.2 Gamma Survey Results				
2.9.2.2.1 Baseline Gamma Survey Results	2		2	Section revised to include results from expanded gamma survey
2.9.2.2.2 HPIC / NaI Cross-calibration Results				
2.9.2.2.3 Final Gamma Exposure Rate Mapping	2		2	Section revised to include results from expanded gamma survey
2.9.2.2.4 NaI/Ra-226 Correlation Results	2		2	Section revised to include results from expanded gamma survey
2.9.2.2.5 Soil Radionuclide Concentration Mapping	2		2	Section revised to include results from expanded gamma survey
2.9.2.3 Data Utility				
2.9.2.4 Data Uncertainty				
2.9.2.4.1 Gamma Exposure Rates				
2.9.2.4.2 Gamma-Based Soil Ra-226 Estimates				
2.9.2.4.3 Gamma-Based Soil U-nat Estimates				
2.9.2.5 Data Uncertainty Implications				
2.9.2.6 Conclusions				
2.9.3 Soil Sampling				
2.9.3.1 Methods				
2.9.3.1.1 Surface Soil Sampling				
2.9.3.1.2 Subsurface Soil Sampling				
2.9.3.2 Soil Sampling Results				
2.9.3.2.1 Surface Soil Sampling				
2.9.3.2.2 Subsurface Soil Sampling				
2.9.3.3 Conclusions				
2.9.4 Soil Sampling				
2.9.4.1 Methods				
2.9.4.2 Sediment Sampling Results				
2.9.4.3 Conclusions				
2.9.5 Ambient Gamma Dose Rate and Radon Monitoring				
2.9.5.1 Methods				

NRC Technical Report	Impact			Comments
	Plant Reduction	Land Exclusion	Evaporation Pond	
2.9.5.1.1 Ambient Gamma Dose Rate Monitoring				
2.9.5.1.2 Ambient Radon-222 Monitoring				
2.9.5.2 Ambient Gamma Dose Rate and Radon Results				
2.9.5.2.1 Ambient Gamma Dose Rate Results				
2.9.5.2.2 Ambient Rn-222 Monitoring Results				
2.9.5.3 Conclusions				
2.9.6 Air Particulate Monitoring	2		2	
2.9.6.1 Methods				
2.9.6.2 Air Particulate Sampling Results				
2.9.6.3 Conclusions				
2.9.7 Radon Flux Measurements				
2.9.8 Groundwater Sampling				
2.9.8.1 Methods				
2.9.8.2 Groundwater Sampling Results				
2.9.8.3 Conclusions				
2.9.9 Surface Water Sampling				
2.9.9.1 Methods				
2.9.9.2 Surface Water Sampling Results				
2.9.9.3 Conclusions				
2.9.10 Vegetation Sampling				
2.9.10.1 Methods				
2.9.10.2 Vegetation Sampling Results				
2.9.10.3 Conclusions				
2.9.11 Food Sampling				
2.9.12 Summary and Overall Conclusions				
Section 3 Description of Proposed Facility				
3.1 ISR Process & Equipment				
3.1.1 Proposed Ludeman Project Area Ore Bodies				
3.1.2 Delineation Drilling				
3.1.3 Well Construction and Integrity Testing				
3.1.3.1 Well Construction Materials				
3.1.3.2 Well Construction Methods				
3.1.3.3 Well Development				
3.1.3.4 Well Mechanical Integrity Testing				
3.1.4 ISR Process				
3.1.4.1 ISR Reactions				
3.1.4.2 Uranium Extraction				
3.1.5 Wellfield Design and Operation				
3.1.6 Wellfield Operational Monitoring				
3.1.6.1 Water Balance	3		3	Water balance will be revised to reflect one satellite and evaporation pond alternative
3.2 Satellite Facility, Processing, and Chemical Storage	2			Satellite facility description will be revised to one satellite location.
3.2.1 Satellite Facility Equipment				
3.2.1.1 Ion Exchange Circuit				
3.2.1.1.1 Ion Exchange Circuit Equipment				
3.2.1.2 Restoration Circuit			2	Potential addition of a second RO unit or a High Efficency RO (HERO) during restoration
3.2.1.2.1 Restoration Circuit Equipment				
3.2.1.3 Bleed Treatment Circuit			2	Add evaporation ponds as an alternative for liquid 11(e.)2 byproduct diposal
3.2.1.4 Resin Transfer and Elution				
3.2.2 Satellite Facility Chemical Storage				
3.2.2.1 Process Related Chemicals				
3.2.2.1.1 Oxygen Storage and Delivery System				
3.2.2.1.2 Carbon Dioxide Storage and Delivery System				
3.2.2.1.3 Chemical Reductants				
3.2.2.2 Non-Process Related Chemicals				
3.2.2.3 Facility Areas Where Fumes or Gases May Be Generated				
3.2.3 Proposed Operating Schedule	3			Schedule will be revised to reflect one satellite and number of wellfields
3.3 Instrumentation and Control				
3.3.1 Wellfield Operations/Ion Exchange Circuit				
3.3.2 Process Areas				

NRC Technical Report	Impact			Comments
	Plant Reduction	Land Exclusion	Evaporation Pond	
3.3.3 Process Waste Water Disposal			3	Add evaporation ponds as an alternative for liquid 11(e.)2 byproduct diposal
3.3.4 Radiological Monitoring Instrumentation				
3.3.5 Byproduct Material Disposal				
3.4 Access Roads Construction and Maintenance				
3.4.1 Main Access Roads	2			Main access road will reflect the location of the proposed satellite location
3.4.1.1 Design Requirements				
3.4.2 Field Access Roads				
3.4.3 Construction, Drainage, Maintenance				
3.4.3.1 Construction				
3.4.3.2 Road Drainage Design				
3.4.3.2.1 Surface Drainage				
3.4.3.2.2 Drainage Structures				
3.4.3.3 Road Maintenance				
Section 4 Effluent Control System				
4.1 Gaseous & Airborne Particulates				
4.1.1 Non-Radioactive Emissions and Control Measures				
4.1.2 Radioactive Gaseous Emissions and Control Measures				
4.1.2.1 Gaseous Effluents-Tank and Process Vessel, and Work Area Ventilation				
4.1.3 Air Particulate Effluents				
4.1.4 Reporting Effluent Releases			2	Add evaporation ponds as an alternative for liquid 11(e.)2 byproduct diposal
4.2 Waste Management				
4.2.1 11e.(2) Liquid Waste				
4.2.1.1 Brine			2	Add evaporation ponds as an alternative for liquid 11(e.)2 byproduct diposal
4.2.1.2 Excess Permeate				
4.2.1.3 Other 11e.(2) Liquid Waste				
4.2.2 Non 11e.(2) Liquid Waste				
4.2.2.1 Storm water Runoff				
4.2.2.2 Domestic Liquid Waste				
4.2.2.3 Waste Petroleum Products and Chemicals				
4.2.3 Solid 11e.(2) Byproduct Material	1			The estimated byproduct produced per year will be updated based on the one satellite facility
4.2.4 Non-11e.(2) Solid Waste	1			The estimated byproduct produced per year will be updated based on the one satellite facility
4.2.4.1 Uncontaminated Solid Waste				
4.2.4.2 Septic System Solid Waste				
4.2.4.3 Hazardous Waste				
4.2.4.4 Deep Disposal Well Permitting				
4.2.4.5 Ponds				
4.2.4.5.1 Pond Liner and Leak Detection Systems				
4.2.4.5.2 Pond Inspection Plan			3	After the Surge Pond section, a evaporation pond discussion will be added.
Addendum 4-A: Pond Design Plan			3	Evaporation Design Plan will be developed to address this alternative for liquid 11e.(2) byproduct disposal
Section 5 Operations				
5.1 Corporate Organization and Administrative Procedures				
5.1.1 Senior Vice President, Americas				
5.1.2 Director of Operations				
5.1.3 Mine Manager				
5.1.4 Director of Safety, Health, and Environment				
5.1.5 Manager of Satellite Safety, Health, and Environment				
5.1.6 Satellite Operations Supervisor				
5.1.7 Safety Supervisor/Radiation Safety Officer				
5.1.8 Radiation Safety Technician				
5.1.9 ALARA Program Responsibilities				
5.1.9.1 Management Responsibilities within the ALARA Program				
5.1.10 Reporting Procedures				
5.2 Management Control Program				
5.2.1 Operating Procedures				
5.2.2 Radiation Work Permits				
5.2.3 Record Keeping and Retention				
5.2.4 Safety and Environmental Review Panel				
5.2.5 Reporting				

NRC Technical Report	Impact			Comments
	Plant Reduction	Land Exclusion	Evaporation Pond	
5.2.6 Radioactive Materials Postings				
5.2.7 Historic and Cultural Resources Inventory				
5.3 Management Audit and Inspection Program				
5.3.1 Pond Inspections				
5.3.1.1 Inspection Frequency and Reporting			3	After the Pond section, an audit and inspection program for the evaporation ponds will be added.
5.4 Radiation Safety Staff Qualifications				
5.5 Radiation Safety Training				
5.6 Security				
5.6.1 License Area and Facility Security				
5.6.2 Transportation Security				
5.7 Radiation Safety Controls And Monitoring				
5.7.1 Effluent Control Techniques				
5.7.1.1 Gaseous and Airborne Particulate Effluents	2		2	MILDOS values will be updated to reflect one satellite facility location
5.7.2 External Radiation Exposure Monitoring Program				
5.7.2.1 Gamma Surveys				
5.7.2.2 Personnel Dosimetry				
5.7.3 In-Facility Airborne Radiation Monitoring Program				
5.7.3.1 Airborne Uranium Particulate Monitoring				
5.7.3.2 Radon Daughter Concentration Monitoring				
5.7.3.3 Respiratory Protection Program				
5.7.4 Exposure Determination and Records Calculations				
5.7.4.1 Natural Uranium Internal Exposure				
5.7.4.2 Radon Daughter Internal Exposure				
5.7.4.3 External Exposure				
5.7.4.4 Prenatal and Fetal Exposure				
5.7.4.5 Exposure Recording and Reporting				
5.7.5 Bioassay Program				
5.7.6 Contamination Control Program				
5.7.7 Airborne Effluent and Environmental Monitoring Programs				
5.7.7.1 Air Particulate				
5.7.7.2 Radon				
5.7.8 Groundwater/Surface Water Monitoring Program				
5.7.8.1 Program Description				
5.7.8.2 Groundwater Monitoring				
5.7.8.2.1 Wellfield Baseline Sampling				
5.7.8.2.2 Well Sampling Methods				
5.7.8.2.3 Monitor Well Baseline Water Quality				
5.7.8.2.4 Wellfield Hydrologic Data Package				
5.7.8.2.5 Operational Upper Control Limits and Excursion Monitoring				
5.7.8.2.6 Excursion Verification and Corrective Action				
5.7.8.2.7 Surface Water Monitoring				
5.7.9 Pond Leak Detection Monitoring			3	After the Surge Pond section, a leak detection montioring program for the evaporation ponds will be added.
5.7.10 Wildlife Monitoring				
5.7.11 Quality Assurance Program				
Section 6 Groundwater Quality Restoration, Surface Reclamation & Facility Decommissioning				
6.1 Plans & Schedules for Groundwater Quality Restoration				
6.1.1 Groundwater Restoration Criteria				
6.1.2 Estimate of Post-Mining Groundwater Quality				
6.1.3 Groundwater Restoration Method				
6.1.3.1 Groundwater Sweep				
6.1.3.2 Groundwater Treatment			2	Potential addition of a second RO unit or a High Efficency RO (HERO) during restoration
6.1.4 Estimate of Treated Pore Volumes				
6.1.4.1 Christensen Ranch and Irigaray ISR Projects Pore Volumes				
6.1.4.2 Leuenberger ISR Pilot Project Pore Volumes				
6.1.5 Restoration Schedule	3			Schedule will be revised to reflect one satellite facility and number of wellfields
6.1.6 Effectiveness of Groundwater Restoration Techniques				
6.1.7 Potential Environmental Impacts of Groundwater Restoration				
6.1.7.1 Alternatives for Groundwater Quality Restoration				

NRC Technical Report	Impact			Comments
	Plant Reduction	Land Exclusion	Evaporation Pond	
6.1.8 Groundwater Restoration Monitoring				
6.1.8.1 Monitoring During Active Restoration				
6.1.8.2 Restoration Stability Monitoring				
6.1.9 Well Plugging and Abandonment				
6.1.10 Restoration Wastewater Disposal			2	Add evaporation ponds as an alternative for liquid 11(e.)2 byproduct diposal
6.2 Plans & Schedules for Reclaiming Disturbed Lands				
6.2.1 Introduction				
6.2.2 Surface Disturbance			2	Add evaporation ponds as potential for surface disturbance
6.2.3 Topsoil Handling and Replacement				
6.2.4 Final Contouring				
6.2.5 Revegetation Practices				
6.3 Procedures for Removing & Disposing of Structures & Equipment				
6.3.1 Preliminary Radiological Surveys and Contamination Control				
6.3.2 Removal of Process Buildings and Equipment				
6.3.2.1 Building Materials, Equipment and Piping to be Released for Unrestricted				
6.3.2.2 Preparation for Disposal at a Licensed Facility				
6.3.3 Decommissioning of Non-11e.(2) Hazardous Constituents				
6.3.4 Waste Transportation and Disposal				
6.4 Methodologies for Conducting Post-Reclamation and Decommissioning Radiological				
6.4.1 Cleanup Criteria				
6.4.1.1 Determination of Radium Benchmark Dose				
6.4.1.2 Determination of Natural Uranium Soil Standard				
6.4.1.3 Uranium Chemical Toxicity Assessment				
6.4.2 Excavation Control Monitoring				
6.4.3 Surface Soil Cleanup Verification and Sampling Plan				
6.4.4 Quality Assurance				
6.5 Decommissioning Health Physics and Radiation Safety				
6.5.1 Records and Reporting Procedures				
6.6 Financial Assurance				
Addendum 6-A: Willow Creek Wellfield Restoration Report Figures				
Section 7 Environmental Effects				
7.1 Potential Environmental Effects of Site Preperation and Constrcution	1		1	Minor text revisions to reflect one and not 3 satellites; add evap pond option.
7.1.1 Potential Air Quality Effects of Construction				
7.1.2 Potential Land Use Impacts of Construction	1	1	1	Minor text revisions to reflect one and not 3 satellites; revise the amount of acres disturbed; add evap pond option.
7.1.3 Potential Surface Water Impacts of Construction	1			Minor text revisions to reflect one and not 3 satellites.
7.1.4 Potential Population, Social, and Economic Impacts of Construction	1			Minor text revisions to reflect one and not 3 satellites
7.1.5 Potential Noise Impacts of Construction				
7.2 Potential Environmental Effects of Operations	1		1	Add the phrase 'and pump houses' to the anticipated construction activities revise Fig. 7-2 to reflect evap pond option
7.2.1 Potential Air Quality Impacts of Operations				
7.2.2 Potential Land Use Impacts of Operations	1		1	Minor text revisions to reflect one and not 3 satellites; add evap pond option; revise surface and road disturbance acreages
7.2.3 Potential Geologic and Soil Impacts of Operations				
7.2.3.1 Potential Geologic Impacts of Operations				
7.2.3.2 Potential Soil Impacts of Operations	1			Minor text revisions to reflect one and not 3 satellites.
7.2.4 Potential Archeological Resources Impacts of Operations				
7.2.4.1 Potential Effects to Visual Resources	1		1	Minor text revisions to reflect one and not 3 satellites; if necessary change satellite plant dimensions and disturbed area for satellite location; add evap pond option.
7.2.5 Groundwater Impacts of Operations				
7.2.5.1 Groundwater Consumption				
7.2.5.2 Potential Impacts on Production Zone Groundwater Quality				
7.2.5.2.1 Negley Subdivision Water Wells				
7.2.5.3 Potential Groundwater Quality Impacts from Accidents				
7.2.5.3.1 Lixiviant Excursions				
7.2.5.3.2 Potential Groundwater Quality Impacts from Spills				
7.2.6 Potential Surface Water Impacts of Operations				
7.2.6.1 Surface Waters and Wetlands	1			Minor text revisions to reflect one and not 3 satellites.
7.2.6.2 Potential Surface Water Impacts from Sedimentation	1			Minor text revisions to reflect one and not 3 satellites.

NRC Technical Report	Impact			Comments
	Plant Reduction	Land Exclusion	Evaporation Pond	
7.2.6.3 Potential Surface Water Impacts from Accidents				
7.2.7 Potential Ecological Impacts of Operations				
7.2.7.1 Vegetation	1			Edit text with new disturbance area calculation changes; a numerical change of 3 to 1 in the text for number of satellites
7.2.7.2 Wildlife and Fisheries	1		1	Edit text with new disturbance area calculation changes; a numerical change of 3 to 1 in the text for number of satellites; add evap pond option
7.2.7.3 Medium-Sized and Small Mammals				
7.2.7.4 Big Game Mammals				
7.2.7.5 Upland Game Birds				
7.2.7.6 Other Birds				
7.2.7.7 Raptors				
7.2.7.8 Fish and Macroinvertebrates				
7.2.7.9 Threatened and Endangered Species				
7.2.7.9.1 Bald Eagle				
7.2.7.9.2 Reptiles, Amphibians, and Fish				
7.2.7.10 Waterfowl and Shorebirds				
7.2.8 Potential Noise Impacts of Operations	1			Delete text reference to N. Platte satellite facility.
7.2.9 Potential Cumulative Impacts				
7.2.9.1 Potential Cumulative Impacts of Other Uranium Development Projects				
7.2.9.1.1 Potential Cumulative Land Use Impacts	1			Edit for revised disturbance calculations.
7.2.9.1.2 Potential Cumulative Transportation Impacts				
7.2.9.1.3 Potential Cumulative Geology and Soils Impacts	1			Minor text revisions to reflect one and not 3 satellites.
7.2.9.1.4 Potential Cumulative Water Resources Impacts				
7.2.9.1.5 Potential Cumulative Ecological Resources Impacts				
7.2.9.1.6 Potential Cumulative Air Quality Impacts				
7.2.9.1.7 Potential Cumulative Noise Impacts				
7.2.9.1.8 Potential Cumulative Cultural Resources Impacts				
7.2.9.1.9 Potential Cumulative Visual Impacts				
7.2.9.1.10 Potential Cumulative Socioeconomic Impacts				
7.2.9.1.11 Potential Cumulative Health Impacts				
7.2.9.2 Potential Cumulative Impacts of Coal Bed Methane Development Projects				
7.2.9.3 Potential Cumulative Impacts of Wind Farm Projects				
7.2.9.3.1 Potential Cumulative Land Use Impacts	1			Edit for revised disturbance calculations.
7.2.9.3.2 Potential Cumulative Transportation Impacts				
7.2.9.3.3 Potential Cumulative Geology and Soils Impacts	1			Minor text revisions to reflect one and not 3 satellites.
7.2.9.3.4 Potential Cumulative Water Resources Impacts				
7.2.9.3.5 Potential Cumulative Ecological Resources Impacts				
7.2.9.3.6 Potential Cumulative Air Quality Impacts				
7.2.9.3.7 Potential Cumulative Noise Impacts				
7.2.9.3.8 Potential Cumulative Cultural Resources Impacts				
7.2.9.3.9 Potential Cumulative Visual Impacts	1			Minor text revisions to reflect one and not 3 satellites.
7.2.9.3.10 Potential Cumulative Socioeconomic Impacts				
7.2.9.3.11 Potential Cumulative Health Impacts				
7.3 Radiological Effects				
7.3.1 Potential Public Radiological Effects	1		1	Revise text regarding facility flow rates to reflect one satellite; add evap pond option.
7.3.1.1 Exposure Pathways				
7.3.1.2 Exposures from Water Pathways	1		1	Add evap pond as an option for potential waste disposal.
7.3.1.3 Exposures from Air Pathways				
7.3.1.3.1 Source Term Estimates	2			Minor text revisions to reflect one and not 3 satellites; delete the phrase 'at each facility' in Table 7-2 and in the text; revise Table 7-3 and its associated text to reflect one satellite facility
7.3.1.3.2 Receptors	2			Revise text and Table 7-6 to reflect the reduction in satellite facilities
7.3.1.3.3 Miscellaneous Parameters				
7.3.1.3.4 Total Effective Dose Equivalent to Individual Receptors				
7.3.1.3.5 Population Dose				
7.3.1.3.6 Exposure to Flora and Fauna				
7.3.2 Occupational Radiological Impacts	1			Minor text revisions to reflect one and not 3 satellites.
7.4 Potential Non-Radiological Effects	1		1	Minor text revisions to reflect one and not 3 satellites and to add the evap pond option.
7.5 Potential Effects of Accidents				
7.5.1 Chemical Risk				
7.5.1.1 Oxygen				

NRC Technical Report	Impact			Comments
	Plant Reduction	Land Exclusion	Evaporation Pond	
7.5.1.2 Carbon Dioxide	1			Minor text revisions to reflect one and not 3 satellites.
7.5.1.3 Sodium Sulfide				
7.5.2 Radiological Risk				
7.5.2.1 Tank Failure	1			Minor text revisions to reflect one and not 3 satellites.
7.5.2.2 Plant Pipe Failure				
7.5.2.3 Radiological Release Reporting				
7.5.3 Groundwater Contamination Risk				
7.5.3.1 Lixiviant Excursion				
7.5.4 Wellfield Spill Risk	1			Minor text revisions to reflect one and not 3 satellites.
7.5.5 Transportation Accident Risk	1			Minor text revisions to reflect one and not 3 satellites.
7.5.5.1 Potential Accidents Involving Ion Exchange Resin Shipments	1			Minor text revisions to reflect one and not 3 satellites; revise number of resin shipments.
7.5.5.2 Potential Accidents Involving Shipments of Process Chemicals				
7.5.5.3 Accidents Involving Radioactive Wastes				
7.5.6 Fires and Explosions	1			Minor text revisions to reflect one and not 3 satellites.
7.5.7 Natural Disaster Risk				
7.6 Potential Economic and Social Effects of Construction and Decommissioning				
7.6.1 Construction				
7.6.2 Operations Workforce				
7.6.3 Potential Effects to Housing				
7.6.4 Potential Effects to Services				
7.6.5 Potential Effects to Traffic				
7.6.6 Economic Impact Summary				
7.7 Environmental Justice				
7.8 References				
Section 8 Alternatives to Proposed Action				
8.1 Description of Alternatives				
8.1.1 Description of Alternatives				
8.1.2 Proposed Action	2		2	Add evaporation ponds as the proposed for liquid 11(e.)2 byproduct diposal
8.1.3 Reasonable Alternatives Considered But Rejected				
8.1.3.1 Conventional Uranium Milling and Underground Milling				
8.1.3.2 Open Pit Mining				
8.1.3.3 Underground Mining				
8.1.4 Satellite Facilities versus Central Processing Facility				
8.1.5 Lixiviant Chemistry				
8.1.5.1 Acidic Leach Solutions				
8.1.5.2 Ammonia-based Lixiviants				
8.1.5.3 Other Potential Lixiviants				
8.1.6 Groundwater Restoration				
8.1.7 Alternate Waste Management Options			2	Add evaporation ponds as an alternative for liquid 11(e.)2 byproduct diposal
8.1.7.1 Deep Well Disposal				
8.1.7.2 Mechanical Evaporation				
8.1.7.3 Chemical Precipitation and Reverse Osmosis			2	May change if Uranium One elects to utilize a secondary RO during restoration
8.1.7.4 Spray/Solar Evaporation			2	Revise based on the evaporation pond alternative
8.1.8 Uranium Processing Alternatives				
8.1.8.1 Higgins Loop				
8.1.8.2 Central Processing Facility				
8.2 Comparison of the Predicted Environmental Impacts	2			The comparative Evaluation Matrix values will be revised to reflect one satellite facility and the use of evapoartion ponds
Section 9 Benefit - Cost Analysis				
9.1 Benefit-Cost Analysis General Background				
9.2 Alternatives and Assumptions				
9.2.1 Development Alternatives				
9.2.1.1 No Action Alternative				
9.2.1.2 Proposed Action				
9.2.2 Key Assumptions and Limitations				
9.2.2.1 Operating Life of Project	1			Values will be revised to reflect one satellite facility and updated schedule
9.2.2.2 Discount Rate				
9.2.2.3 Scope of Impact				
9.2.2.4 Potential Non-monetary Impacts and Benefit-Cost Ratio				
9.3 Economic Benefits of Project Construction and Operation				

NRC Technical Report	Impact			Comments
	Plant Reduction	Land Exclusion	Evaporation Pond	
9.3.1 IMPLAN Input Data				
9.3.2 Employment Benefits				
9.3.3 State and Local Tax Revenue Benefits				
9.4 External Costs of Project Construction and Operation				
9.4.1 Short Term External Costs				
9.4.1.1 Housing Shortages				
9.4.1.2 Impacts on Schools and Other Public Services				
9.4.1.3 Impacts on Noise and Congestion				
9.4.2 Long Term External Costs				
9.4.2.1 Impairment of Recreational and Aesthetic Values				
9.4.2.2 Land Disturbance				
9.4.2.3 Habitat Disturbance				
9.4.3 Groundwater Impacts				
9.4.4 Radiological Impacts				
9.5 Benefit-Cost Summary	2			Values will be revised to reflect one satellite facility and updated schedule
Section 10 Environmental Approvals & Consultations				
10.1 Applicable Regulatory Requirements, Permits & Required Consultations				
10.2 Environmental Consultation				
Appendices				
Appendix A - Site Pump Tests				
Appendix B - Site Class III Cultural Resources Report				
Appendix C - Site MILDOS	3		3	Model will be revised to reflect one satellite facility, updated schedule, and evaporation pond alternative
Appendix D - Site RESRAD	3		3	Model will be revised to reflect one satellite facility, updated schedule, and evaporation pond alternative
Appendix E - Surety	3		3	Model will be revised to reflect one satellite facility, updated schedule, and evaporation pond alternative

Application Impact

1 - Small: The section content is minimally modified with no new conetent(e.g. values, terminology, description).

2 - Moderate: The section content has been enhanced with additional language or presented in a different manner.

3 - Large: The section content has been significantly revised, moved, or removed.

No color indicates changes to the document are not anticipated

NRC Environmental Report	Impact			Comments
	Plant Reduction	Land Exclusion	Evaporation Pond	
Section 1 Introduction				
1.1 Licensing Action Requested	1			
1.2 Proposed Action				
1.3 Project History				
1.4 Corporate Entities Involved				
1.5 Description and Site Location		1		Change project location description
1.6 Surface and Mineral Ownership				
1.7 Proposed Project Ore Body				
1.8 ISR Wellfield				
1.8.1 Well Construction and Integrity Testing				
1.8.1.1 Well Construction Materials				
1.8.1.2 Well Construction Methods				
1.8.1.3 Well Development				
1.8.1.4 Well Mechanical Integrity Testing				
1.9 Ion Exchange System				
1.9.1 Ion Exchange Circuit Equipment				
1.9.2 Restoration Circuit				
1.9.2.1 Restoration Circuit Equipment				
1.9.3 Bleed Treatment Circuit				
1.9.4 Resin Transfer and Elution				
1.10 Chemical Storage Facilities				
1.10.1 Process Related Chemicals				
1.10.2 Oxygen Storage and Delivery System				
1.10.3 Carbon Dioxide Storage and Delivery System				
1.10.4 Chemical Reductants				
1.10.5 Non-Process Related Chemicals				
1.10.6 Facility Areas Where Fumes or Gases May Be Generated				
1.11 Waste Management				
1.11.1 11e.(2) Liquid Waste			2	Add ponds to the liquid waste management language
1.11.1.1 Brine				
1.11.1.2 Excess Permeate				
1.11.1.3 Other 11e.(2) Liquid Waste				
1.11.2 Non 11e.(2) Liquid Waste				
1.11.2.1 Storm water Runoff				
1.11.2.2 Domestic Liquid Waste				
1.11.2.3 Waste Petroleum Products and Chemicals				
1.11.3 Solid 11e.(2) Byproduct Material				
1.11.4 Non-11e.(2) Solid Waste				
1.11.4.1 Uncontaminated Solid Waste				
1.11.4.2 Septic System Solid Waste				
1.11.4.3 Hazardous Waste				
1.12 Instrumentation and Control				
1.12.1 Wellfield Operations/Ion Exchange Circuit				
1.12.2 Process Areas				

NRC Environmental Report	Impact			Comments
	Plant Reduction	Land Exclusion	Evaporation Pond	
1.12.3 Process Waste Water Disposal				
1.12.4 Radiological Monitoring Instrumentation				
1.12.5 Byproduct Material Disposal				
1.13 Applicable Regulatory Requirements and Permits				
1.14 Surety Arrangements				
Section 2 Alternatives				
2.1 Description of Alternatives				
2.1.1 No-Action Alternative				
2.1.2 Proposed Action				
2.1.3 Reasonable Alternatives Considered But Rejected				
2.1.3.1 Conventional Uranium Milling and Underground Milling				
2.1.3.2 Open Pit Mining				
2.1.3.3 Underground Mining				
2.1.4 Satellite Facilities versus Central Processing Facility				
2.1.5 Lixiviant Chemistry				
2.1.5.1 Acidic Leach Solutions				
2.1.5.2 Ammonia-based Lixiviants				
2.1.5.3 Other Potential Lixiviants				
2.1.6 Groundwater Restoration				
2.1.7 Alternate Waste Management Options			2	Add evaporation ponds as an alternative for liquid 11(e.)2 byproduct diposal
2.1.7.1.1 Deep Well Disposal				
2.1.7.1.2 Mechanical Evaporation				
2.1.7.1.3 Chemical Precipitation and Reverse Osmosis			2	May change if Uranium One elects to utilize a secondary RO during restoration
2.1.7.1.4 Spray/Solar Evaporation			2	Revise based on the evaporation pond alternative
2.1.8 Uranium Processing Alternatives				
2.1.8.1 Higgins Loop				
2.1.8.2 Central Processing Facility				
2.2 Comparison of the Predicted Environmental Impacts	2			The comparative Evaluation Matrix values will be revised to reflect one satellite facility and the use of evapoartion ponds
3 Description of Affected Environment				
3.1 Land Use				
3.1.1 General Setting				
3.1.2 Land Use Classification		1		Revise tables to reflect new project land use acreage
3.1.2.1 Oil and Gas Development				
3.1.2.2 Aesthetics				
3.1.2.3 Transportation and Utilities	1			Traffic counts may be updated
3.1.2.4 Fuel Cycle Facilities				
3.2 Transportation				
3.2.1 Access Roads Construction and Maintenance				
3.2.1.1 Main Access Roads	1			Description of project access roads will be modified to reflect one satellite facility
3.2.1.2 Design Requirements				
3.2.2 Field Access Roads				
3.2.3 Construction				
3.2.4 Road Drainage Design				
3.2.4.1 Surface Drainage				
3.2.4.2 Drainage Structures				
3.2.5 Road Maintenance				
3.2.6 Transportation Routes	2			Description of transportation routes will be modified to reflect one satellite facility
3.2.7 Railroads				
3.3 Geology				
3.3.1 Regional Geology				
3.3.2 Site Geology				
3.3.3 Ore Mineralogy and Geochemistry				
3.3.4 Drill Holes				
3.3.5 Soils				

NRC Environmental Report	Impact			Comments
	Plant Reduction	Land Exclusion	Evaporation Pond	
3.3.5.1 Methodology				
3.3.5.2 Results and Discussion				
3.3.6 Seismology				
3.3.6.1 Historic Seismicity				
3.3.6.2 Deterministic Analysis of Regional Active Faults with a Surficial				
3.3.6.3 Floating or Random Earthquake Sources				
3.3.6.4 Probabilistic Seismic Hazard Analyses				
3.3.7 References				
Addendum 3.3-A: Geology Figures and Tables				
Addendum 3.3-B: Ludeman Soils Tables				
Addendum 3.3-C: Soils Mapping Unit Descriptions	2	2		Figure will be updated to depict revised project boundary and one satellite facility
Addendum 3.3-D: Ludeman Sampled Soil Series Descriptions				
Addendum 3.3-E: Ludeman Laboratory Results				
Addendum 3.3-F: Prime Farmland Designation				
Addendum 3.3-G: Ludeman Soil Maps	2	2		Figure will be updated to depict revised project boundary and one satellite facility
Addendum 3.3-H: Professional Certifications				
3.4 Hydrology				
3.4.1 Surface Water Hydrology				
3.4.1.1 Regional Description				
3.4.1.1.1 Surface Water Drainage Basin Descriptions				
3.4.1.1.2 Other Surface Water Bodies				
3.4.1.2 Stream Gauging				
3.4.1.3 Flood Frequency				
3.4.1.4 Precipitation				
3.4.1.5 Surface Water Runoff				
3.4.1.5.1 TR-55 Graphical Method				
3.4.1.5.2 SCS Unit Hydrograph				
3.4.1.5.3 USGS Peak Flow Estimates in Wyoming				
3.4.2 Groundwater				
3.4.2.1 Regional Hydrogeology				
3.4.2.1.1 Groundwater Flow				
3.4.2.1.2 Groundwater Recharge				
3.4.2.1.3 Aquifers				
3.4.2.2 Site Hydrogeology				
3.4.2.2.1 Groundwater Monitoring Well Locations				
3.4.2.2.2 Hydrostratigraphic Units				
3.4.2.3 Potentiometric Surface, Groundwater Flow Direction and Hydraulic				
3.4.2.4 Site Specific Aquifer Properties				
3.4.2.4.1 Historic Aquifer Pumping Tests				
3.4.2.4.2 2008 Aquifer Pump Tests	1			Change description of pump test areas to reflect wellfield numbers vs. satellite area name
3.4.2.5 Possible Effects of ISR Mining on the North Platte River				
3.4.3 Water Quality				
3.4.3.1 Surface Water Quality				
3.4.3.2 Groundwater Quality				
3.4.3.2.1 Regional Groundwater Quality				
3.4.3.2.2 Groundwater Monitoring Well Network and Parameters				
3.4.3.2.3 Groundwater Quality Sampling Program				
3.4.3.2.4 Groundwater Quality Analysis				
3.4.3.2.5 Groundwater Quality Results				
3.4.4 References				
Addendum 3.4-A: Water Rights				
Addendum 3.4-B: FEMA 100 year Map	2			FEMA flood map will be revised to depict one satellite facility
Addendum 3.4-C: Well Completion Data				

NRC Environmental Report	Impact			Comments
	Plant Reduction	Land Exclusion	Evaporation Pond	
Addendum 3.4-D: Surface Water Quality Data				
Addendum 3.4-E: Ground Water Quality Data				
Addendum 3.4-F: Negley Subdivision Wells				
3.5 Ecological Resources				
3.5.1 Introduction				
3.5.2 Regional Setting				
3.5.3 Climate				
3.5.4 Baseline Data				
3.5.5 Terrestrial Ecology				
3.5.5.1 Vegetation				
3.5.5.1.1 Survey Methodology				
3.5.5.1.2 Vegetation Survey Results		1		Total coverage acreages will be updated to reflect the revised project area
3.5.5.1.3 Upland Grassland		1		Total coverage acreages will be updated to reflect the revised project area
3.5.5.1.4 Big Sagebrush Shrubland		1		Total coverage acreages will be updated to reflect the revised project area
3.5.5.1.5 Upland Grassland Rough Breaks Complex		1		Total coverage acreages will be updated to reflect the revised project area
3.5.5.1.6 Lowland Grassland		1		Total coverage acreages will be updated to reflect the revised project area
3.5.5.1.7 Silver Sagebrush Shrubland		1		Total coverage acreages will be updated to reflect the revised project area
3.5.5.1.8 Crested Wheatgrass Field		1		Total coverage acreages will be updated to reflect the revised project area
3.5.5.1.9 Vegetation Survey Discussion				
3.5.5.2 Wetlands				
3.5.5.2.1 Introduction		1		Change project location description
3.5.5.2.2 Methodology				
3.5.5.2.3 Results				
3.5.5.2.4 Discussion				
3.5.5.2.5 Impact Analysis	3		3	All impacts will be addressed in TR Section 7 and ER Section 4 Potential Impacts
3.5.5.2.6 Conclusion		1		Total coverage acreages will be updated to reflect the revised project area
3.5.5.3 Wildlife				
3.5.5.3.1 Introduction				
3.5.5.3.2 Survey Area Description				
3.5.5.3.3 Methods				
3.5.5.3.4 Results and Discussion				
3.5.5.3.5 Other Animals				
3.5.5.3.6 Conclusions				
3.5.5.4 Threatened and Endangered Species				
3.5.5.5 Aquatic Resources				
Addendum 3.5-A: Vegetation Species Summary				
Addendum 3.5-B: Vegetation Cover Summaries		1		Total coverage acreages will be updated to reflect the revised project area
Addendum 3.5-C: Vegetation Density Summaries		1		Total density will be updated to reflect the revised project area
Addendum 3.5-D: Vegetation Map	2	2		Figure will be updated to depict revised project boundary and one satellite facility
Addendum 3.5-E: Ute ladies Tresses Orchid Survey Report				
Addendum 3.5-F: Wetland Maps		2		Map will be updated to depict revised project area
Addendum 3.5-G: Wetland Summary				
Addendum 3.5-H: Wetland Species List				
Addendum 3.5-I: Wetland Photographs				
Addendum 3.5-J: Wetland Data Forms – Great Plains Region				
Addendum 3.5-K: Wildlife Species List				
3.6 Meteorology				
3.6.1 Introduction				
3.6.2 Regional Overview				
3.6.2.1 Temperature				
3.6.2.2 Relative Humidity				
3.6.2.3 Precipitation				
3.6.2.4 Wind Patterns				
3.6.2.5 Cooling, Heating, and Growing Degree Days				

NRC Environmental Report	Impact			Comments
	Plant Reduction	Land Exclusion	Evaporation Pond	
3.6.3 Site Specific Analysis				
3.6.3.1 Temperature				
3.6.3.2 Wind Patterns				
3.6.3.3 Surrogate Site Justification and Specifications				
3.6.3.4 Upper Atmosphere Characteristics				
3.6.3.5 Bodies of Water and Special Terrain Features				
3.6.3.6 Air Quality	2			Estimated air quality impacts will be updated and the discussion moved to TR Section 7 Potential Impacts
3.7 Noise				
3.7.1 Affected Environment	1			Update noise levels and distances for one satellite facility
3.7.1.1 Construction Phase				
3.7.1.2 Operation Phase				
3.7.1.3 Groundwater Restoration Phase				
3.7.1.4 Decommissioning and Reclamation Phase				
3.8 Historic and Cultural Resources				
3.8.1 Historic, Archeological, and Cultural Resources		1		Update project acreage values
3.8.2 Tribal Consultation				
3.9 Visual and Scenic Resources				
3.9.1 Introduction				
3.9.2 Methods				
3.9.3 Visual Resource Management Classes				
3.9.4 Ludeman Visual Resource Management Rating				
3.9.5 Environmental Consequences	2			Description of potential environmental consequences will be modified to reflect one satellite facility
3.10 Socioeconomics				
3.10.1 Demography				
3.10.1.1 Regional Population				
3.10.1.2 Population Characteristics				
3.10.1.3 Population Projections				
3.10.1.4 Seasonal Population and Visitors				
3.10.1.5 Schools				
3.10.1.6 Sectorial Population				
3.10.2 Local Socioeconomic Characteristics				
3.10.2.1 Major Economic Sectors				
3.10.2.2 Housing				
3.10.2.3 Temporary Housing				
3.10.3 Evaluation of Socioeconomic Impacts of the Proposed Operation				
3.10.3.1 Construction				
3.10.3.2 Operations Workforce				
3.10.3.3 Effects to Housing				
3.10.3.4 Effects to Services				
3.10.3.5 Effects to Traffic				
3.10.4 Environmental Justice				
3.10.4.1 Geographic Unit of Analysis				
3.10.4.2 Minority Populations				
3.10.4.2.1 Native American Populations in Wyoming				
3.10.4.2.2 Hispanic Populations in Wyoming				
3.10.4.2.3 Basques in Wyoming				
3.10.4.3 Environmental Justice Conclusions				
3.11 Public and Occupational Health				
3.11.1 Background Exposure to Ionizing Radiation	1		1	Update total effective dose equivalent values based on new MILDOS calculation
3.11.2 Occupational Health and Safety				
3.11.3 Summary of Health Effects Studies				
Addendum 3.11-A: Incident Rates of Nonfatal Occupational Injuries				
3.12 Waste Management				
3.12.1 Non 11e.(2) Liquid Wastes			2	Add ponds as liquid waste management

NRC Environmental Report	Impact			Comments
	Plant Reduction	Land Exclusion	Evaporation Pond	
3.12.1.1 Domestic Liquid Septic Wastes				
3.12.1.2 Hazardous and CESQG Liquid Wastes				
3.12.2 Non 11e.(2) Solid Wastes				
3.12.2.1 Municipal Solid Wastes				
3.12.2.2 Hazardous and CESQG Solid Wastes				
4 Potential Environmental Impacts				
Per ER RAI CI-2 (Round 1) and ER RAI AQ-2 (Round 2): Add a Cumulative Impact discussion reflecting potential impacts				
4.1 Potential Land Use Impacts	1	1	1	A numerical change of 3 to 1 in the text for number of satellites; add evap pond option; edit project acreage numbers.
4.2 Potential Transportation Impacts	1			A numerical change of 3 to 1 in the text for number of satellites
4.2.1 Potential Access Road Construction Impacts				
4.2.2 Potential Traffic Impacts	1			Edit number of resin shipments and subsequent transportation numbers
4.2.3 Potential Transportation Accident Impacts	1			A numerical change of 3 to 1 in the text for number of satellites
4.2.3.1 Potential Accidents Involving Ion Exchange Resin Shipments				
4.2.3.2 Accidents Involving Shipments of Process Chemicals and Fuel				
4.2.3.3 Potential Accidents Involving Radioactive Wastes				
4.3 Potential Geology and Soils Impacts				
4.3.1 Potential Geologic Impacts				
4.3.2 Potential Soil Impacts	1			A numerical change of 3 to 1 in the text for number of satellites
4.4 Potential Water Resources Impacts				
4.4.1 Potential Surface Water Impacts				
4.4.1.1 Potential Impacts on Surface Waters and Wetlands	1			A numerical change of 3 to 1 in the text for number of satellites; edit changes in project acreages (total, disturbed, etc.)
4.4.1.2 Potential Surface Water Impacts from Sedimentation	1			A numerical change of 3 to 1 in the text for number of satellites
4.4.1.3 Potential Surface Water Impacts from Accidents				
4.4.2 Potential Groundwater Impacts				
4.4.2.1 Groundwater Consumption				
4.4.2.2 Potential Impacts on Production Zone Groundwater Quality				
4.4.2.2.1 Negley Subdivision Water Wells				
4.4.2.3 Potential Groundwater Quality Impacts from Accidents				
4.4.2.3.1 Lixiviant Excursions				
4.4.2.3.2 Wellfield Spills				
4.5 Potential Ecological Resources Impacts				
4.5.1 Vegetation	1			Edit text for changes in project acreages (total, disturbed, etc.)
4.5.2 Wildlife and Fisheries	1		1	Edit text for changes in project acreages (total, disturbed, etc.); add evap pond option; A numerical change of 3 to 1 in the text for number of satellites
4.5.3 Medium-Sized and Small Mammals				
4.5.4 Big Game Mammals				
4.5.5 Upland Game Birds				
4.5.6 Other Birds				
4.5.7 Raptors				
4.5.8 Fish and Macroinvertebrates				
4.5.9 Threatened and Endangered Species				
4.5.9.1 Bald Eagle (Federal Threatened)				
4.5.9.2 Reptiles, Amphibians				
4.5.10 Waterfowl and Shorebirds				
4.6 Potential Air Quality Impacts				
4.7 Potential Noise Impacts	1			Delete reference to N. Platte satellite facility
4.8 Potential Historic and Cultural Resources Impacts	1			Edit text for changes in project acreages (total, disturbed, etc.)
4.9 Potential Visual/Scenic Resources Impacts	1		1	Edit text for changes in project acreages (total, disturbed, etc.); add evap pond option; A numerical change of 3 to 1 in the text for number of satellites; delete N. Platte and Peterson satellite descriptions
4.10 Potential Socioeconomic Impacts	1			Edit socioecon numbers which change as a result of one satellite and new project schedule
4.10.1 Construction	1			Edit socioecon numbers which change as a result of one satellite and new project schedule
4.10.2 Operations Workforce	1			Edit socioecon numbers which change as a result of one satellite and new project schedule
4.10.3 Potential Effects to Housing	1			Edit socioecon numbers which change as a result of one satellite and new project schedule
4.10.4 Potential Effects to Services	1			Edit socioecon numbers which change as a result of one satellite and new project schedule
4.10.5 Economic Impact Summary	1			Edit socioecon numbers which change as a result of one satellite and new project schedule

NRC Environmental Report	Impact			Comments
	Plant Reduction	Land Exclusion	Evaporation Pond	
4.11 Environmental Justice				
4.12 Potential Public and Occupational Health Impacts			1	Revise Fig. 4.12-1 to include evap pond
4.12.1 Potential Nonradiological Impacts				
4.12.1.1 Potential Public Health Impacts	1			Edit text to reflect one satellite and not 3.
4.12.1.2 Potential Occupational Health Impacts				
4.12.2 Chemical Risk				
4.12.2.1 Oxygen				
4.12.2.2 Carbon Dioxide	1			Edit text to reflect one satellite and not 3.
4.12.2.3 Sodium Sulfide				
4.12.3 Potential Radiological Impacts	1		1	Revise text regarding facility flow rates to reflect one satellite; add evap pond option.
4.12.3.1 Potential Exposure Pathways				
4.12.3.2 Potential Exposures from Water Pathways	1		1	Add evap pond as an option for potential waste disposal
4.12.3.3 Potential Exposures from Air Pathways				
4.12.3.3.1 Source Term Estimates	1			Edit text to reflect one satellite and not 3;delete the phrase 'at each facility' in Table 4-2; delete references to N. Platte and Peterson facilities in Table 4-3
4.12.3.3.2 Receptors				
4.12.3.3.3 Miscellaneous Parameters				
4.12.3.3.4 Total Effective Dose Equivalent (TEDE) to Individual Receptors				
4.12.3.3.5 Population Dose				
4.12.3.3.6 Potential Exposure to Flora and Fauna				
4.12.3.4 Potential Radiological Accidents				
4.12.3.4.1 Potential Tank Failure	1			Edit text to reflect one satellite and not 3.
4.12.3.4.2 Potential Facility Pipe Failure				
4.12.3.4.3 Wellfield Spill	1			Edit text to reflect one satellite and not 3.
4.12.4 Gaseous and Airborne Particulates	1			Edit text to reflect one satellite and not 3.
4.13 Potential Waste Management Impacts				
4.13.1 Proposed Waste Management Systems				
4.13.1.1 11e.(2) Liquid Waste				
4.13.1.1.1 Brine	1		1	Edit text to reflect one satellite and not 3; add evap pond option
4.13.1.1.2 Excess Permeate	1		1	Edit text to reflect one satellite and not 3; add evap pond option
4.13.1.2 Other 11e.(2) Liquid Waste	1		1	Edit text to reflect one satellite and not 3; add evap pond option
4.13.1.3 Liquid Waste Disposal	1		2	Edit text to reflect one satellite and not 3; add evap pond option
4.13.1.4 Solid 11e.(2) Byproduct Material	1			Edit text to reflect one satellite and not 3.
4.13.1.5 Non-11e.(2) Solid Waste				
4.13.1.5.1 Uncontaminated Solid Waste				
4.13.1.5.2 Hazardous Waste				
4.13.1.5.3 Domestic Sewage				
4.14 Potential Cumulative Impacts				
4.14.1 Potential Cumulative Impacts of Other Uranium Development Projects				Revise discussions below to reflect design changes, etc.
4.14.1.1 Potential Cumulative Land Use Impacts	1			Edit text to reflect one satellite and not 3.
4.14.1.2 Potential Cumulative Transportation Impacts				
4.14.1.3 Potential Cumulative Geology and Soils Impacts				
4.14.1.4 Potential Cumulative Water Resources Impacts				
4.14.1.5 Potential Cumulative Ecological Resources Impacts				
4.14.1.6 Potential Cumulative Air Quality Impacts	1			Edit text to reflect one satellite and not 3.
4.14.1.7 Potential Cumulative Noise Impacts				
4.14.1.8 Potential Cumulative Cultural Resources Impacts				
4.14.1.9 Potential Cumulative Visual Impacts	1			Edit text to reflect one satellite and not 3.
4.14.1.10 Potential Cumulative Socioeconomic Impacts				
4.14.1.11 Potential Cumulative Health Impacts				
4.14.2 Potential Cumulative Impacts of Coal Bed Methane Development				
4.14.3 Potential Cumulative Impacts of Wind Farm Projects				
4.14.3.1 Potential Cumulative Land Use Impacts				
4.14.3.2 Potential Cumulative Transportation Impacts				
4.14.3.3 Potential Cumulative Geology and Soils Impacts	1			Edit text to reflect one satellite and not 3.

NRC Environmental Report	Impact			Comments
	Plant Reduction	Land Exclusion	Evaporation Pond	
4.14.3.4 Potential Cumulative Water Resources Impacts				
4.14.3.5 Potential Cumulative Ecological Resources Impacts				
4.14.3.6 Potential Cumulative Air Quality Impacts				
4.14.3.7 Potential Cumulative Noise Impacts				
4.14.3.8 Potential Cumulative Cultural Resources Impacts				
4.14.3.9 Potential Cumulative Visual Impact	1			Edit text to reflect one satellite and not 3.
4.14.3.10 Potential Cumulative Socioeconomic Impacts				
4.14.3.11 Potential Cumulative Health Impacts				
Section 5 Mitigation Measures				
5.1 Mitigation Measures for Land Use Impacts	1			Edit text to reflect one satellite and not 3.
5.1.1 Well Plugging and Abandonment				
5.1.2 Surface Disturbance	1		1	Descritpion of facilties will be revised to one satellite and evaporation ponds
5.1.3 Topsoil Handling and Replacement				
5.1.4 Final Contouring				
5.1.5 Revegetation Practices				
5.1.6 Procedures for Removing and Disposing of Structures and Equipment				
5.1.6.1 Preliminary Radiological Surveys and Contamination Control				
5.1.6.2 Removal of Process Buildings and Equipment				
5.1.6.2.1 Building Materials, Equipment and Piping to be Released				
5.1.6.2.2 Preparation for Disposal at a Licensed Facility				
5.1.6.3 Waste Transportation and Disposal				
5.1.7 Methodologies for Conducting Post-Reclamation and Decommissioning				
5.1.7.1 Cleanup Criteria				
5.1.7.2 Determination of Radium Benchmark Dose				
5.1.7.3 Determination of Natural Uranium Soil Standard				
5.1.7.4 Uranium Chemical Toxicity Assessment				
5.1.7.5 Excavation Control Monitoring				
5.1.7.6 Surface Soil Cleanup Verification and Sampling Plan				
5.1.7.7 Quality Assurance				
5.2 Mitigation Measures for Transportation Impacts				
5.2.1 Access Road Construction Impacts				
5.2.2 Transportation Accident Risk				
5.2.2.1 Accidents Involving Ion Exchange Resin Shipments				
5.2.2.2 Accidents Involving Shipments of Process Chemicals				
5.2.2.3 Accidents Involving 11e.(2) Wastes				
5.2.3 Fires and Explosions				
5.2.4 Natural Disaster Risk				
5.3 Mitigation Measures for Geologic and Soils Impacts				
5.3.1 Geologic Impacts				
5.3.2 Soil Impacts				
5.4 Mitigation Measures for Water Resources Impacts				
5.4.1 Surface Water Impacts			1	Add evaporation ponds to the list of surface facilities
5.4.1.1 Surface Water Impacts from Sedimentation				
5.4.2 Groundwater Impacts				
5.4.2.1 Groundwater Consumption				
5.4.2.1.1 Monitoring				
5.4.2.1.2 Mitigation				
5.4.2.2 Impacts on Groundwater Quality				
5.4.2.2.1 Groundwater Restoration Criteria				
5.4.2.2.2 Ground Water Restoration Method				
5.4.2.2.3 Estimate of Treated Pore Volumes				
5.4.2.2.4 Restoration Schedule	3			Schedule will be revised to reflect one satellite facility
5.4.2.2.5 Effectiveness of Ground Water Restoration Techniques				
5.4.2.2.6 Groundwater Restoration Monitoring				
5.4.2.2.7 Restoration Wastewater Disposal			2	Add evaporation ponds as alternative to 11e.(2) liquid byproduct disposal

NRC Environmental Report	Impact			Comments
	Plant Reduction	Land Exclusion	Evaporation Pond	
5.4.2.3 Potential Groundwater Impacts from Accidents				
5.4.2.3.1 Lixiviant Excursions				
5.4.2.3.2 Wellfield Spills				
5.5 Mitigation Measures for Ecological Resources Impacts				
5.5.1 Vegetation				
5.5.2 Wildlife and Fisheries				
5.5.3 Birds				
5.5.4 Raptors				
5.5.5 Threatened and Endangered Species				
5.5.5.1 Bald Eagle (Federal Threatened)				
5.5.6 Waterfowl and Shorebirds				
5.6 Mitigation Measures for Air Quality Impacts				
5.7 Mitigation Measures for Noise Impacts				
5.8 Mitigation Measures for Historic and Cultural Resources Impacts				
5.9 Mitigation Measures for Visual/Scenic Resources Impacts				
5.10 Mitigation Measures for Socioeconomic Impacts				
5.11 Mitigation Measures for Environmental Justice				
5.12 Mitigation Measures for Public and Occupational Health Impacts				
5.12.1 Non-Radiological Impacts				
5.12.2 Radiological Impacts				
5.12.2.1 Radiological Impacts from Routine Operations				
5.12.3 Air Particulate Effluents				
5.12.3.1 Radiological Impacts from Accidents				
5.13 Mitigation Measures for Waste Management Impacts				
5.13.1 Gaseous Effluents-Tank and Process Vessel, and Work Area				
5.13.2 Air Particulate Effluents				
5.13.3 Liquid Waste				
5.13.3.1 Aquifer Restoration				
5.13.3.2 Water Collected from Wellfield Releases				
5.13.3.3 Storm water Runoff				
5.13.3.4 Domestic Liquid Waste				
5.13.4 Liquid Waste Disposal	2			Values will be revised to reflect one satellite facility and increased GPM
5.13.4.1 Liquid Waste Monitoring and Reporting				
5.13.4.2 Disposal Well Mechanical Integrity				
5.13.5 Potential Pollution Events Involving Liquid Waste				
5.13.5.1 Potential Spills from Header Houses, Pipelines, and Well Heads				
5.13.5.2 Potential Spills from the Proposed Ludeman Satellite facilities				
5.13.5.3 Potential Spills from Deep Well Pump Houses and Wellheads				
5.13.6 Solid Waste				
5.13.7 Uncontaminated Solid Waste				
5.13.8 11e.(2) Byproduct Material	2			Values will be revised to reflect one satellite facility
5.13.9 Septic System Solid Waste				
5.13.10 Hazardous Waste				
5.13.11 Soil Contaminated as a Result of Wellfield Releases				
5.14 Transportation Vehicles				
Addendum 5-A: Willow Creek Wellfield Restoration Report Figures				
6 Environmental Measurements and Monitoring Programs				
6.1 Radiological Monitoring		1		Update proposed project area acreage and several figures will be revised to depict revised project boundary
6.1.1 Introduction				
6.1.2 Gamma Survey				
6.1.2.1 Methods				
6.1.2.1.1 Gamma Scanning				
6.1.2.1.2 Cross-calibration of NaI Detectors against a High-Pressure				
6.1.2.1.3 Gamma / Soil Radionuclide Correlations				

NRC Environmental Report	Impact			Comments
	Plant Reduction	Land Exclusion	Evaporation Pond	
6.1.2.1.4 Data Quality Assurance / Quality Control				
6.1.2.2 Gamma Survey Results				
6.1.2.2.1 Baseline Gamma Survey Results				
6.1.2.2.2 HPIC / NaI Cross-calibration Results				
6.1.2.2.3 Final Gamma Exposure Rate Mapping				
6.1.2.2.4 NaI/Ra-226 Correlation Results				
6.1.2.2.5 Soil Radionuclide Concentration Mapping				
6.1.2.3 Data Utility				
6.1.2.4 Data Uncertainty				
6.1.2.4.1 Gamma Exposure Rates				
6.1.2.4.2 Gamma-Based Soil Ra-226 Estimates				
6.1.2.4.3 Gamma-Based Soil U-nat Estimates				
6.1.2.5 Data Uncertainty Implications				
6.1.2.6 Conclusions				
6.1.3 Soil Sampling				
6.1.3.1 Methods				
6.1.3.1.1 Surface Soil Sampling				
6.1.3.1.2 Subsurface Soil Sampling				
6.1.3.2 Soil Sampling Results				
6.1.3.2.1 Surface Soil Sampling Results				
6.1.3.2.2 Subsurface Soil Sampling Results				
6.1.3.3 Conclusions				
6.1.4 Sediment Sampling				Per TR RAI-47 (Round 2): Revise discussion to reflect results of second set of sediment sampling in 2015.
6.1.4.1 Methods				
6.1.4.2 Sediment Sampling Results				
6.1.4.3 Conclusions				
6.1.5 Ambient Gamma Dose Rate and Radon Monitoring				
6.1.5.1 Methods				
6.1.5.1.1 Ambient Gamma Dose Rate Monitoring				
6.1.5.1.2 Ambient Radon-222 Monitoring				
6.1.5.2 Ambient Gamma Dose Rate and Radon Results				
6.1.5.2.1 Ambient Gamma Dose Rate Results				
6.1.5.2.2 Ambient Rn-222 Monitoring Results				
6.1.5.3 Conclusions				
6.1.6 Air Particulate Monitoring				
6.1.6.1 Methods				
6.1.6.2 Air Particulate Sampling Results				
6.1.6.3 Conclusions				
6.1.7 Radon Flux Measurements				
6.1.8 Groundwater Sampling				
6.1.8.1 Methods				
6.1.8.2 Groundwater Sampling Results				
6.1.8.3 Conclusions				
6.1.9 Surface Water Sampling				
6.1.9.1 Methods				
6.1.9.2 Surface Water Sampling Results				
6.1.9.3 Conclusions				
6.1.10 Vegetation Sampling				
6.1.10.1 Methods				
6.1.10.2 Vegetation Sampling Results				
6.1.10.3 Conclusions				
6.1.11 Food Sampling				
6.1.12 Summary and Overall Conclusions				
6.2 Physiochemical groundwater Monitoring				
6.2.1 Program Description				

NRC Environmental Report	Impact			Comments
	Plant Reduction	Land Exclusion	Evaporation Pond	
6.2.2 Groundwater Monitoring				
6.2.2.1 Wellfield Baseline Sampling				
6.2.2.2 Monitor Well Baseline Water Quality				
6.2.2.3 Wellfield Hydrologic Data Package				
6.2.2.4 Operational Upper Control Limits and Excursion Monitoring				
6.2.2.5 Excursion Verification and Corrective Action				
6.3 Ecological Monitoring				
6.3.1 Wildlife				
6.4 Quality Assurance Program				
Addendum 6-A: Quality Assurance Plan				
Section 7 Benefit/Cost Analysis				
7.1 Benefit-Cost Analysis General Background				
7.2 Alternatives and Assumptions				
7.2.1 Development Alternatives				
7.2.1.1 No Action Alternative				
7.2.1.2 Proposed Action				
7.2.2 Key Assumptions and Limitations				
7.2.2.1 Operating Life of Project	1			:Values will be revised to reflect one satellite facility and updated schedule
7.2.2.2 Discount Rate				
7.2.2.3 Scope of Impact				
7.2.2.4 Potential Non-monetary Impacts and Benefit-Cost Ratio				
7.3 Economic Benefits of Project Construction and Operation				
7.3.1 IMPLAN Input Data				
7.3.2 Employment Benefits				
7.3.3 State and Local Tax Revenue Benefits				
7.4 External Costs of Project Construction and Operation				
7.4.1 Short Term External Costs				
7.4.1.1 Housing Shortages				
7.4.1.2 Impacts on Schools and Other Public Services				
7.4.1.3 Impacts on Noise and Congestion				
7.4.2 Long Term External Costs				
7.4.2.1 Impairment of Recreational and Aesthetic Values				
7.4.2.2 Land Disturbance				
7.4.2.3 Habitat Disturbance				
7.4.3 Groundwater Impacts				
7.4.4 Radiological Impacts				
7.5 Benefit-Cost Summary	2			Values will be revised to reflect one satellite facility and updated schedule
Section 8 Summary of Environmental Consequences				
Majority of table to be revised	3	3	3	Values will be revised to reflect one satellite facility, land exclusion and evaporation ponds
Section 9 List of References				
Section 10 List of Preparers				

APPENDIX C:

Conceptual Pond Design Plan

APPENDIX D:

Updated MILDOS Results

Radiological Assessment of the Ludeman Uranium In-Situ Recovery Facility

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Table of Contents

1.0 Introduction 1
2.0 Facility Description 1
3.0 Potential Exposure Pathways 2
3.1 Exposures from Water Pathways 2
3.2 Exposures from Air Pathways 3
3.2.1 Source Term Description and Estimates 3
3.2.1.1 Production Releases 4
3.2.1.2 Restoration Releases 5
3.2.1.3 New Wellfield Releases 6
3.2.1.4 Resin Transfer Releases 6
3.2.1.5 Radon-222 Release Summary 7
3.2.2 Receptors 8
3.2.3 Miscellaneous Parameters 8
3.2.4 Estimated Total Effective Dose Equivalent (TEDE) to Receptors. 9
3.2.5 Population Dose 10
3.2.6 Exposure to Flora and Fauna 11
4.0 References 12

List of Figures

Page

Figure 1. Human Exposure Pathways for Known and Potential Sources from theLudeman Project 14
Figure 2(a-k). Isodose Maps of Ludeman Project..... 15-25

Table of Acronyms and Abbreviations

CBM	Coal Bed Methane
CFR	Code of Federal Regulations
Ci	Curies
cm	centimeter
d	day
ERG	Environmental Restoration Group, Inc.
g	gram
gpm	gallons per minute
IX	ion exchange
km	kilometer
L	Liter
m	meter
min	minute
mrem	millirem
pCi	picoCurie
RG	Regulatory Guide
RO	reverse osmosis
Rn	Radon
TEDE	Total Effective Dose Equivalent
UIC	Underground Injection Control
USNRC	United States Nuclear Regulatory Commission
wk	week
WDEQ	Wyoming Department of Environment Quality
yr	year
U1	Uranium One USA Inc

1.0 Introduction

On behalf of Uranium One USA Inc. (U1), Environmental Restoration Group, Inc. (ERG) performed an assessment of the potential radiological effects of the proposed Ludeman satellite facility (the facility) located in Converse County, Wyoming, approximately 8 miles northeast of the town of Glenrock, Wyoming. This assessment includes evaluation of all potential releases and release pathways important for the evaluation of radiological impacts on potential human and ecological receptors. The methods, assumptions, and results of this assessment are provided herein. This evaluation is in support of a license application to US Nuclear Regulatory Commission (USNRC) for the facility.

2.0 Facility Description

U1 is proposing to develop a uranium in-situ recovery (ISR) facility that includes one satellite plant with a maximum production flow of approximately 9000 gallons per minute (gpm) and a restoration flow of 3000 gpm. The satellite plant will be supported at any given time by three of six well fields each operating at a production flow of 3000 gpm and a restoration flow of 1000 gpm. An assessment of the potential radiological effects of the facility must consider the types of effluent and emissions, the potential exposure pathways present, and an evaluation of potential consequences of radiological emissions.

The facility will use fixed-bed pressurized down-flow ion exchange (IX) columns to separate uranium from the pregnant production fluid and restoration solutions. The IX resin containing the uranium will be removed from the ion exchange column and transported to an off-site facility for further processing.

The groundwater restoration process will also use reverse osmosis (RO) to remove dissolved solids. Liquid and solid wastes will be disposed of via an evaporation pond or possibly deep well injection. The deep well will be supplied by wastes stored in two surge water ponds located near the satellite plant. For this evaluation, radon-222 emissions from an evaporation pond near the satellite facility was assumed.

Since the drying and packaging operation will be conducted at a separate off-site location, the only expected routine radiological emission at the facility will be radon-222 gas. Radon-222, a decay product of radium-226, is dissolved in the lixiviant as it travels through the ore bearing formation to a production well, where it is brought to the surface. The concentration of radon-222 in the production solution and estimated releases are calculated using the methods found in USNRC Regulatory Guide 3.59, "*Methods for Estimating Radioactive and Toxic Airborne Source Terms for Uranium Milling Operations*" (USNRC, 1987). The details of, and assumptions used in, these calculations are found in Section 3.2.1.

MILDOS-AREA (ANL 1997) was used to model radiological impacts on human and environmental receptors (e.g. air and soil) using site specific radon-222 release estimates, meteorological and population data, and other parameters. All of the pathways related to air emissions of radon-222 are evaluated by MILDOS-AREA. The estimated radiological impacts resulting from routine site activities are compared to applicable public dose limits as well as naturally occurring background levels.

3.0 Potential Exposure Pathways

Figure 1 depicts conceptually all exposure pathways from all potential sources at the facility. The predominant pathways for planned and unplanned releases are identified. Atmospheric radon-222 is expected to be the predominant pathway for impacts on human and environmental media. Potential impacts of radon-222 releases can be expected in all quadrants surrounding the facility, the magnitude of which is driven predominantly by wind direction and atmospheric stability. As a noble gas, radon-222 itself has very little radiological impact on human health or the environment. Radon-222 has a relatively short half-life (3.8 days) and its decay products include short lived, alpha-emitting, nongaseous radionuclides. These decay products have the potential for radiological impacts to human health and the environment. As Figure 1 depicts, all exposure pathways, with the possible exception of skin absorption, can be important depending on the environmental media impacted.

3.1 Exposures from Water Pathways

The production solution in the ore zone will be controlled and adequately monitored to ensure that migration does not occur laterally in the production sand aquifer. The overlying and underlying aquifers, if present, will also be monitored.

The primary method of waste disposal at the facility will be by evaporation or by deep well injection. If by deep well(s), the well(s) will be completed at depths significantly deeper than zones planned for mining and current operations and will be isolated geologically from underground sources of drinking water. The well(s) will be constructed under a permit from the Wyoming Department of Environment Quality (WDEQ) and all requirements of the Underground Injection Control (UIC) program will be met.

The uranium IX facility will be located on curbed concrete pads to prevent any liquids from entering the environment. Solutions used to wash down equipment will drain to a sump and will either be pumped back into the processing circuit or to the disposal well. The curbed concrete pads will be of sufficient size to contain the contents of the largest tank in the event of a rupture.

No routine liquid environmental discharges, other than waste disposal via deep well injection, are planned and as such, no definable water related pathways for routine operations exist.

3.2 Exposures from Air Pathways

The only source of planned radionuclide emissions from the facility is radon-222 released into the atmosphere through a vent system in the main plant area, releases from the wellfields, and aeration while discharging into the evaporation pond. As shown in Figure 1, atmospheric releases of radon-222 can result in radiation exposure via three pathways; inhalation, ingestion, and external exposure. These pathways potentially could result in a radiation dose to receptors (i.e. individual members of the public) in and around the permit area. The Total Effective Dose Equivalent (TEDE) to these potential receptors was estimated using MILDOS-AREA. Additionally, radiological impacts to ecological receptors in and around the within the permit area were evaluated with MILDOS-AREA.

3.2.1 Source Term Description and Estimates

The source terms used to estimate radon-222 releases from the facility include six wellfields and one satellite facility called the Leuenberger Satellite Facility. Radon-222 releases over the proposed lifetime of the facility were modeled with wellfields either in production, restoration or inactive and the satellite facility in production. Table 1 shows the proposed schedule of wellfield and satellite facility operation and was the basis for defining radon release estimates for a given time period. The parameters used to characterize and estimate releases are provided in Table 2.

Table 1. The Proposed Schedule of Wellfield and Satellite Facility Operation for the Ludeman Facility.

Location	Year of Operation										
	1	2	3	4	5	6	7	8	9	10	11
Leuenberger	P	P	P	P	P	P	P	P	P	P	P
Wellfield 1	P	P	P	R	R	R	I	I	I	I	I
Wellfield 2	I	P	P	P	R	R	R	I	I	I	I
Wellfield 3	I	I	P	P	P	R	R	R	I	I	I
Wellfield 4	I	I	I	P	P	P	R	R	R	I	I
Wellfield 5	I	I	I	I	P	P	P	P	R	R	R
Wellfield 6	I	I	I	I	I	P	P	P	R	R	R
P = Production R = Restoration I = Inactive											

Table 2. Parameters used to Estimate and Characterize Source Terms at the Ludeman Facility.

Parameter	Value	Unit	Source
Average Ore Grade	0.1	%	Correspondence (U1, 2011)
Ore radium-226 Concentration	282	pCi g^{-1}	Reg. Guide 3.59
Average Lixiviant Flow	1.14 E+04	L m^{-1}	Correspondence (U1, 2011)
Average Restoration Flow	3.79E+03	L m^{-1}	Correspondence (U1, 2011)
Operating days per year	365	days	Est. based on planned activities
Ore formation thickness	3	meters	Correspondence (U1, 2011)
Ore formation porosity	0.25	NA	Correspondence (U1, 2011)
Ore formation rock density	1.83	g cm^{-3}	Correspondence (U1, 2011)
Average residence time for lixiviant	7	days	Correspondence (U1, 2011)
Average residence time for restoration solutions	35	days	Correspondence (U1, 2011)
Average mass of ore material in mud pit	5.44E+05	g	Est. based on planned activities
Number of mud pits generated per year	600	NA	Est. based on planned activities
Storage time in mud pits	30	days	Est. based on planned activities
Radon-222 emanating power	0.25	NA	NUREG 1569
Resin Porosity	0.3	NA	NUREG 1569
Ion Exchange Column Volume	1.42E+04	L	Est. based on planned activities
Number of Resin Transfers per day	1	NA	Est. based on planned activities
Stack Height	16	m	Est. based on planned activities
Stack Diameter	0.3	m	Est. based on planned activities
Stack Velocity	11	m s^{-1}	Est. based on planned activities
Radon-222 decay constant	0.181	d^{-1}	NUREG 1569

3.2.1.1 Production Releases

Currently plans are to have up to six wellfields supporting one satellite facility. The potential radon-222 releases from the production wellfields were estimated using methods described in USNRC Regulatory Guide (RG) 3.59*, "Methods for Estimating Radioactive and Toxic Airborne Source Terms for Uranium Milling Operation"* as follows:

Radon released (equilibrium condition) to production fluid from leaching is calculated using Equation 1:

$$G = R\rho E \frac{(1-p)}{p} x10^{-6} \qquad \text{(Equation 1)}$$

Where:

G = radon released (Ci/m^3)

R = radium content of ore (pCi/g)

E = emanating power

ρ = ore formation rock density (g cm^{-3})

p	=	ore formation porosity

The yearly radon released to the production fluid is calculated using Equation 2:

$$Y = 1.44GMD(1 - e^{-\lambda t}) \qquad \text{(Equation 2)}$$

Where:

Y	=	yearly radon released to production fluid (Ci yr^{-1})
G	=	radon released at equilibrium (Ci m^{-3})
M	=	average lixiviant flow rate (L min^{-1})
D	=	production days per year (d)
λ	=	radon-222 decay constant (d^{-1})
t	=	lixiviant residence time
1.44	=	unit conversion factor

Using Equations 1 and 2 and the parameters in Table 1, the yearly radon released to production fluid is 1655 Ci yr^{-1}. USNRC RG 3.59 assumes all the radon-222 that is released to the production fluid is ultimately released to the atmosphere, which in the case of IX columns operating at atmospheric pressure in an open system is an appropriate conservative assumption (NRC,1987). In cases where pressurized down-flow ion exchange columns are used and wellfields are operated under pressure, the majority of radon released to the production fluid stays in solution and is not released. The radon which is released is from occasional wellfield venting for sampling events, small unavoidable leaks in wellfield and IX equipment, maintenance of wellfield and IX equipment, and radon contained in the production bleed going to the surge ponds. For this reason, an annual release of 10% of the radon-222 in the wellfield production fluid and an additional 10% in the IX circuit or each well field reporting was assumed. It is estimated that 3 well fields will report to the IX circuit at any given time. Given this assumption, the annual radon-222 released from production in the wellfield and at the satellite facility is 166 and 447 (3 x 149) Ci yr^{-1}, respectively. Of the radon released from the satellite processing area, one percent is attributable to the production water bleed rate and is assumed to be released at the evaporation pond location. For purposes of MILDOS-AREA model simulations, the wellfield release of 166 Ci yr^{-1} was assumed to be released from each wellfield in production at the time.

3.2.1.2 Restoration Releases

Radon-222 releases resulting from wellfield restoration activities were estimated in the same manner as the production activities above (i.e. using Equation 2) but modified for the lower restoration flow rate and the

longer restoration fluid residence time, both of which are listed in Table 1. The assumption of a 10% release in the wellfield and satellite/ evaporation pond facility results in releases of 76.9 and 207.6 Ci yr^{-1} respectively. For purposes of MILDOS-AREA model simulations, the wellfield release of 76.9 Ci yr^{-1} was assumed to be released from each wellfield in restoration at the time.

3.2.1.3 New Wellfield Releases

Radon-222 releases resulting from new wellfield development activities were estimated using methods described in NUREG-1569*, Standard Review Plan for In Situ Leach Uranium Extraction License Applications* as follows *(NRC, 2003)*:

$$Rn_{nw} = EL[Ra]TmNx10^{-12} \qquad \text{(Equation 3)}$$

Where:

Rn_{nw}	=	radon-222 release rate from new wellfield (Ci yr^{-1})
E	=	emanating power
[Ra]	=	concentration of radium-226 in ore (pCi g^{-1})
L	=	decay constant of radon-222
T	=	storage time in mud pit (d)
m	=	average mass of ore material in the pit (g)
N	=	number of mud pits generated per year
1×10^{-12}	=	unit conversion factor (Ci pCi^{-1})

Since development of new wellfields are planned to occur throughout the site, the number of mud pits generated per year for the entire site were assumed to be equally distributed among the wellfields supporting the satellite facility. Therefore, the number of mud pits generated per year at the facility was assumed to be 200. Using Equation 3 and the parameters in Table 7.3-1, the yearly radon released from new well field development for the facility is 0.041 Ci yr^{-1}. For purposes of the MILDOS-AREA model simulations, the new wellfield release was assumed to occur at each wellfield while in production and restoration.

3.2.1.4 Resin Transfer Releases

Radon-222 releases resulting from resin transfers from the satellite facility was estimated using methods described in NUREG-1569*, Standard Review Plan for In Situ Leach Uranium Extraction License Applications (NRC, 2003)* as follows:

$$Rn_x = 3.65x10^{-10} F_i C_{Rn} \qquad \text{(Equation 4)}$$

Where:

Rn_x	=	radon release rate from resin transfers (Ci yr^{-1})
F_i	=	water discharge rate from resin unloading (L d^{-1})
C_{Rn}	=	steady state radon-222 concentration in process water (pCi L^{-1})
3.65E-1 0=		unit conversion factor (Ci pCi^{-1})(d yr^{-1})

The steady state radon-222 concentration in process water (C_{Rn}) can be estimated from the following expression:

$$C_{Rn} = \frac{Y * 1.9E6}{M} \qquad \text{(Equation 5)}$$

Where:

C_{Rn}	=	steady state radon-222 concentration in process water (pCi L^{-1})
Y	=	yearly radon released to production fluid (Ci yr-^{1})
M	=	lixiviant flow rate (L min^{-1})
1.9E+6 =		unit conversion factor (pCi Ci^{-1})(yr min^{1})

The water discharge rate from resin unloading (Fi) can be estimated from the following expression:

$$F_i = N_i * V_i * P_i \qquad \text{(Equation 6)}$$

Where:

F_i	=	water discharge rate from resin unloading (L d^{-1})
N_i	=	number of resin transfers per day
V_i	=	volume of resin in transfer (L)
P_i	=	porosity of resin

Using Equations 6 and the parameters in Table 2, the yearly radon released from resin transfers from the satellite facility is 0.43 Ci yr^{-1}. For purposes of the MILDOS-AREA model simulations, the resin transfer release was assumed to occur at the satellite plant location.

3.2.1.5 Radon-222 Release Summary

A summary of estimated radon-222 releases from the facility is presented in Table 3. The source coordinates in Table 3 are relative to the North Platte satellite processing area.

Table 3. Estimated Radon-222 Releases (Ci yr^{-1}) from the Ludeman Facility.

Location	X (km)	Y (km)	Production	Restoration	Drilling	Resin Transfer	Total
Leuenberger	0.0	0.0	447	207.6	-	0.43	655
Evaporation Pond	0.64	0.33	4.5	2	-	-	6.5
Wellfield 1	-0.5	0.24	166	76.9	0.04	-	242.9
Wellfield 2	0.23	-0.46	166	76.9	0.04	-	242.9
Wellfield 3	6.88	0.21	166	76.9	0.04	-	242.9
Wellfield 4	4.39	-1.91	166	76.9	0.04	-	242.9
Wellfield 5	6.77	-5.12	166	76.9	0.04	-	242.9
Wellfield 6	9.39	-6.77	166	76.9	0.04	-	242.9

For the wellfields listed above, the total release was multiplied by 0.68 when in production, 0.32 when in restoration and 0 when inactive in accordance with the schedule in Table 1.0 above.

3.2.2 Receptors

Two types of receptors were used in the MILDOS-AREA simulation. First, arbitrary receptors were identified based on a 0.5 km grid system across the site. The grid system was established using a random starting point. A total of 1189 arbitrary receptors were modeled to develop iso-dose curves within the permit boundary using the kriging method described in ArcMap GIS software. Second, potential receptor locations were identified and modeled. Data regarding the arbitraty receptors is shown in Appendix A (Table A.1). Potential receptors used in the MILDOS-AREA model are presented in Table 4. The receptor coordinates in Table 4 are relative to the satellite processing facility. Annual dose estimates for residential receptors are based on 24 hours per day for one year.

Table 4. Potential Ludeman Facility Receptors and Estimated Exposure Times.

Location	X (km)	Y (km)	Distance (km)	Activities	Annual Exposure Hours	Annual Exposure Hours (Calculation)
Resident 1	1.69	-0.52	1.77	Resident	8760	24hr/d x 365 d/yr
Resident 2	9.56	3.41	10.15	Resident	8760	24hr/d x 365 d/yr
Resident 3	-0.05	0.80	0.80	Resident	8760	24hr/d x 365 d/yr
Resident 4	9.83	-7.43	12.32	Resident	8760	24hr/d x 365 d/yr
Resident 5	13.38	-5.31	14.40	Resident	8760	24hr/d x 365 d/yr
Resident 6	7.55	-6.70	10.09	Resident	8760	24hr/d x 365 d/yr
Resident 7	-4.10	0.91	4.20	Resident	8760	24hr/d x 365 d/yr

3.2.3 Miscellaneous Parameters

The site-specific metrological data used in the MILDOS-AREA model is from the Joint Frequency Distribution data presented in Section 2.5 of the facility application and updated (U1, 2015).

The population distribution used in the MILDOS-AREA model to estimate population doses is from the demographic information presented in Section 2.3 of the facility license application (U1, 2011).

3.2.4 Estimated Total Effective Dose Equivalent (TEDE) to Receptors.

To show compliance with the annual dose limit found in 10 CFR 20.1301, U1 has demonstrated by calculation that the TEDE to the individual most likely to receive the highest dose from the facility operation is less than 100 mrem per year. The results of the MILDOS-AREA model for each potential receptor are presented in Table 5. Eleven years of operations were modeled, with each year representing the well field and satellite facility operation schedule in Table 1 above. The year with the highest TEDE for each potential receptor are presented in Table 5.

Using the ESRI ArcGIS Spatial Analyst extension, a kriging interpolation of the estimated dose rates for the arbitrary and potential receptor locations was performed over the extent of the permit boundary for each year of operation. Iso-dose contour lines were generated from the interpolation. Figures 2a -2k show the results of the interpolation for the arbitrary and potential receptors, respectively. The MILDOS-AREA results for the arbitrary receptors are shown in table format in Appendix A.

An evaluation of the TEDE follows:

1) The maximum TEDE of 1.59 mrem/yr, is located at the residence east of the Leuenberger plant site (resident 1) and occurs in the third year of operation. This dose represents 1.59 percent of the annual public dose limit of 100 mrem. This receptor also represents the highest potentially exposed member of the public since the time spent in the project area by members of the public using the area for recreational purposes is expected to be much lower than a resident.
2) Since radon-222 is the only radionuclide emitted, public dose requirements in 40 CFR 190 and the 10 mrem/yr constraint rule in 10 CFR 20.1101 do not apply.
3) As shown on Figures 2a -2i all annual dose rates outside of the permit boundary are less than 10 mrem per year and in most cases annual dose rates outside of the permit boundary are less than 1 mrem per year.

Table 5. Estimated Total Effective Dose Equivalent (TEDE) to Receptors Near the Ludeman Facility.

Description	Operating Year with Highest TEDE	Dose Rate (mrem/yr)
Resident 1	3	1.59
Resident 2	4	0.24
Resident 3	3	1.27
Resident 4	6	0.26
Resident 5	6	0.36
Resident 6	6	0.27
Resident 7	3	0.33

3.2.5 Population Dose

The annual population dose commitment to the population in the region within 80 km (50 mi) of the facility is also predicted by the MILDOS-AREA code. The year with the highest radon-222 release (year 5) was used to estimate population doses. These results are contained in Table 6 where TEDE is expressed in terms of person-rems. For comparison, the dose to the population within 80 km of the facility due to background radiation has been included in Table 6. Background radiation doses are based on a North American population of 346 million and an average TEDE of 300 mrem per year from naturally occurring sources (NCRP,2009).

The atmospheric release of radon also results in a dose to the population on the North American continent. This continental dose is calculated by comparison with a previous calculation based on a 1 kilocurie release near Casper, Wyoming, during the year 1978. The results of these calculations are combined with dose to the region within 80 km of the facility to arrive at the total radiological effects of one year of operation at the facility.

The based on the MILDOS-Area model output, the maximum radiological effect of the facility operation on the continental population is very low and not measurable.

Table 6. Total Effective Dose Equivalent to the Population from One Year's (Year 4) Operation at the Ludeman Facility

Criteria	TEDE (person-rem/yr)
Dose received by population within 80 km of the facility	0.44
Dose received by population beyond 80 km of the facility	9.7
Total Continental Dose	10.2
Background North American Dose	1.0E+8
Fractional increase to background dose	3.1 E-8

3.2.6 Exposure to Flora and Fauna

To estimate potential radiological impacts to flora and fauna, the most important pathway for exposure should be identified. Since the only planned emissions from the facility is radon-222 to the atmosphere, the most important pathway for exposure to flora and fauna is deposition of radon-222 decay products on surface water, surface soils, and vegetation. MILDOS-AREA estimates surface deposition rate as a function of distance from the source for the radon-222 decay products and calculates surface concentrations. Table 6 presents the highest surface concentrations of radon-222 decay products predicted by MILDOS-AREA over a 100 year period for the year with the highest radon-222 release (year 5). Soil concentrations were calculated based on a conservative assumption of 1.5 g cm^{-3} bulk soil density.

Table 7. Highest Surface Concentrations of Radon-222 Decay Products Resulting from Ludeman Facility Operation.

Radionuclide	Distance from Site (km)	Direction	Surface Concentration (pCi/m^2)	Soil Concentration in Upper 0.5 cm (pCi/g)
Polonium-218	1.5	ESE	11.6	0.002
Lead-214	1.5	ESE	11.6	0.002
Bismuth-214	1.5	ESE	11.6	0.002
Lead-210	65	E	28.1	0.004

All radionuclide concentrations in Table 7 are similar in magnitude and at least an order of magnitude below most analytical laboratories detection limits

It is likely that soil re-suspension from background soils would be the predominant source of radionuclide concentrations in vegetation, therefore it is expected that the radionuclide concentrations in vegetation would be similar to that of soil.

From this evaluation, the likely impact to flora and fauna from operations at the facility would be minimal and indistinguishable from current conditions.

4.0 References

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Figures

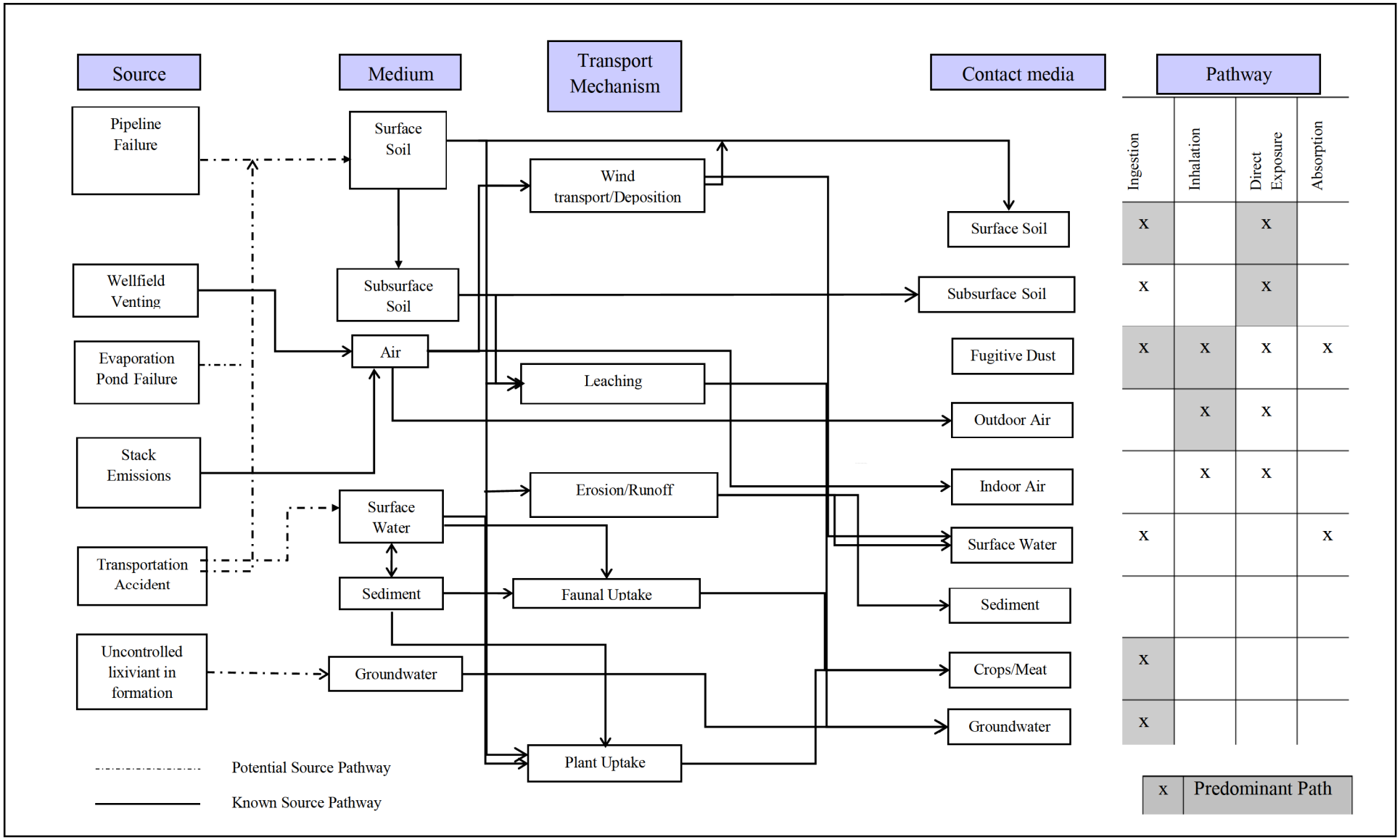

Figure 1. Human Exposure Pathways for Known and Potential Sources from the Ludeman Project

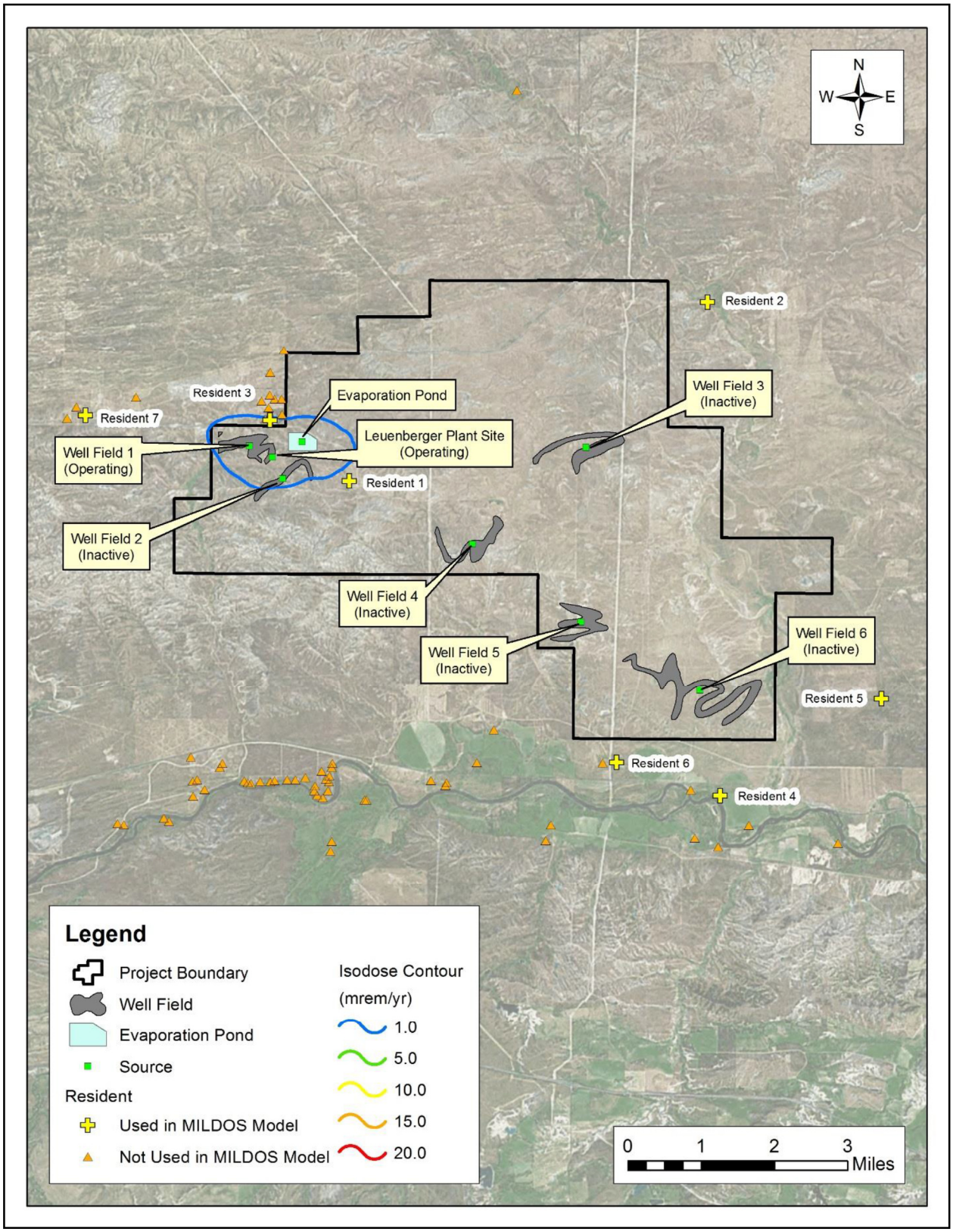

Figure 2a. Iso-Dose Map of Ludeman Project –Year 1

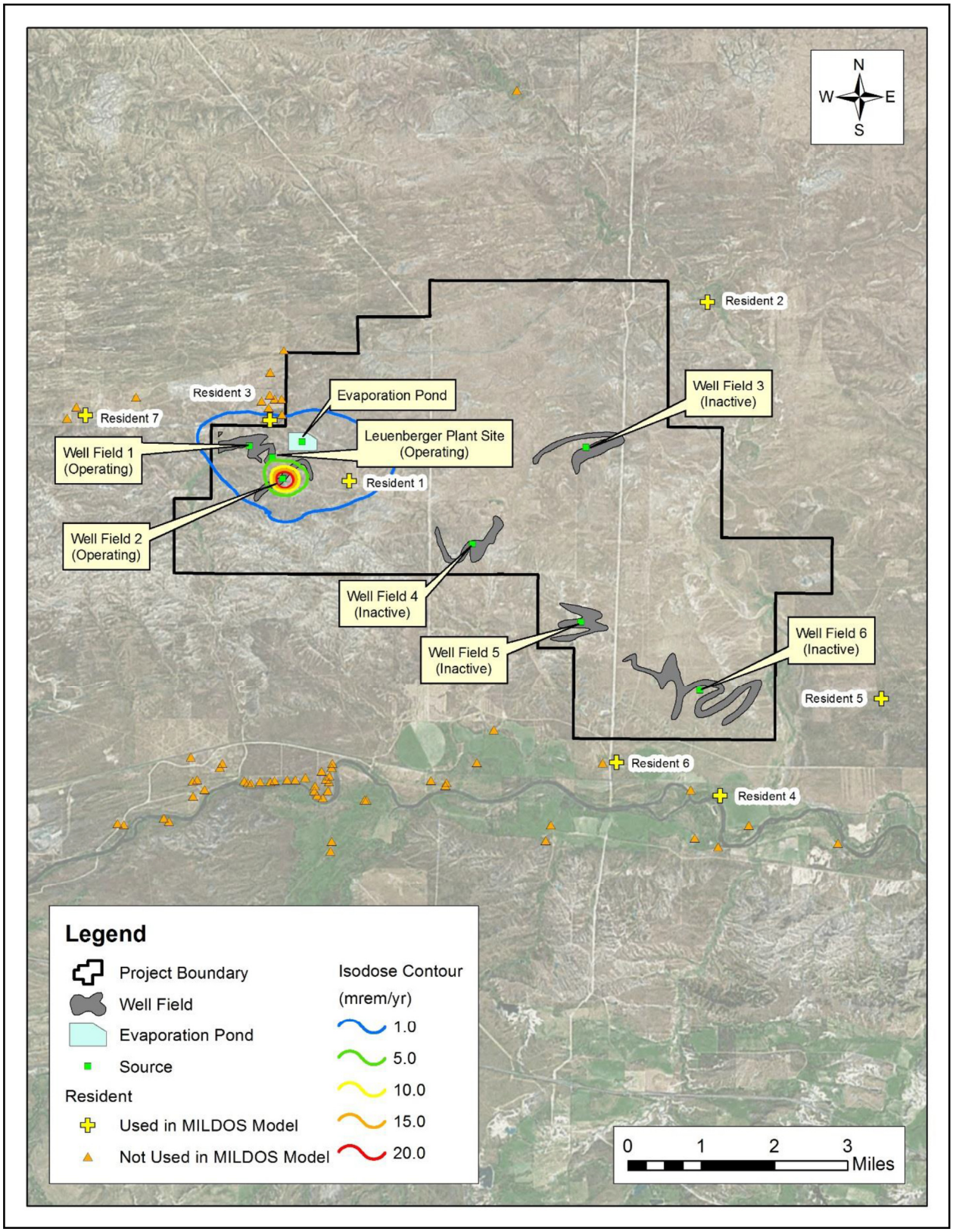

Figure 2b. Iso-Dose Map of Ludeman Project –Year 2

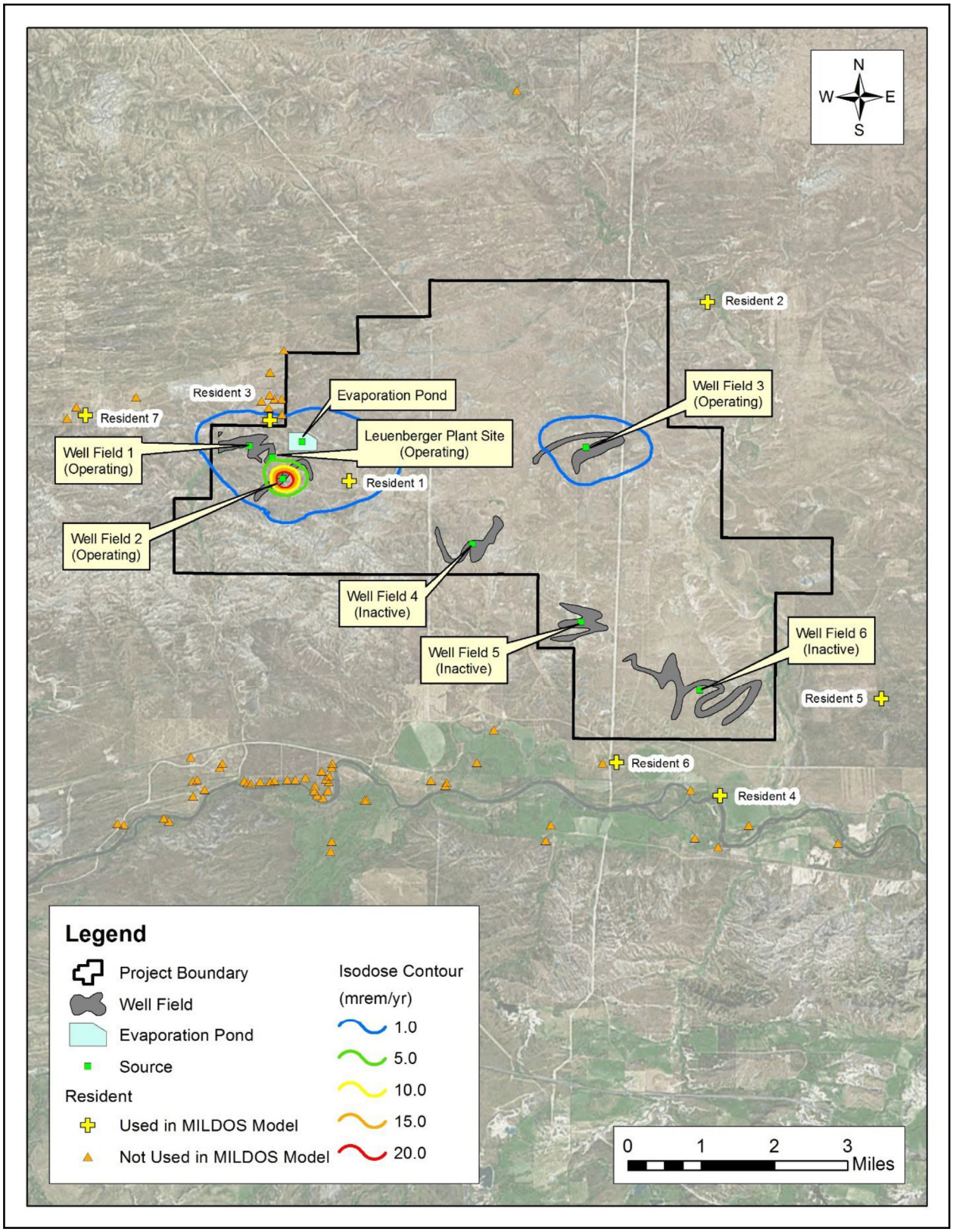

Figure 2c. Iso-Dose Map of Ludeman Project –Year 3

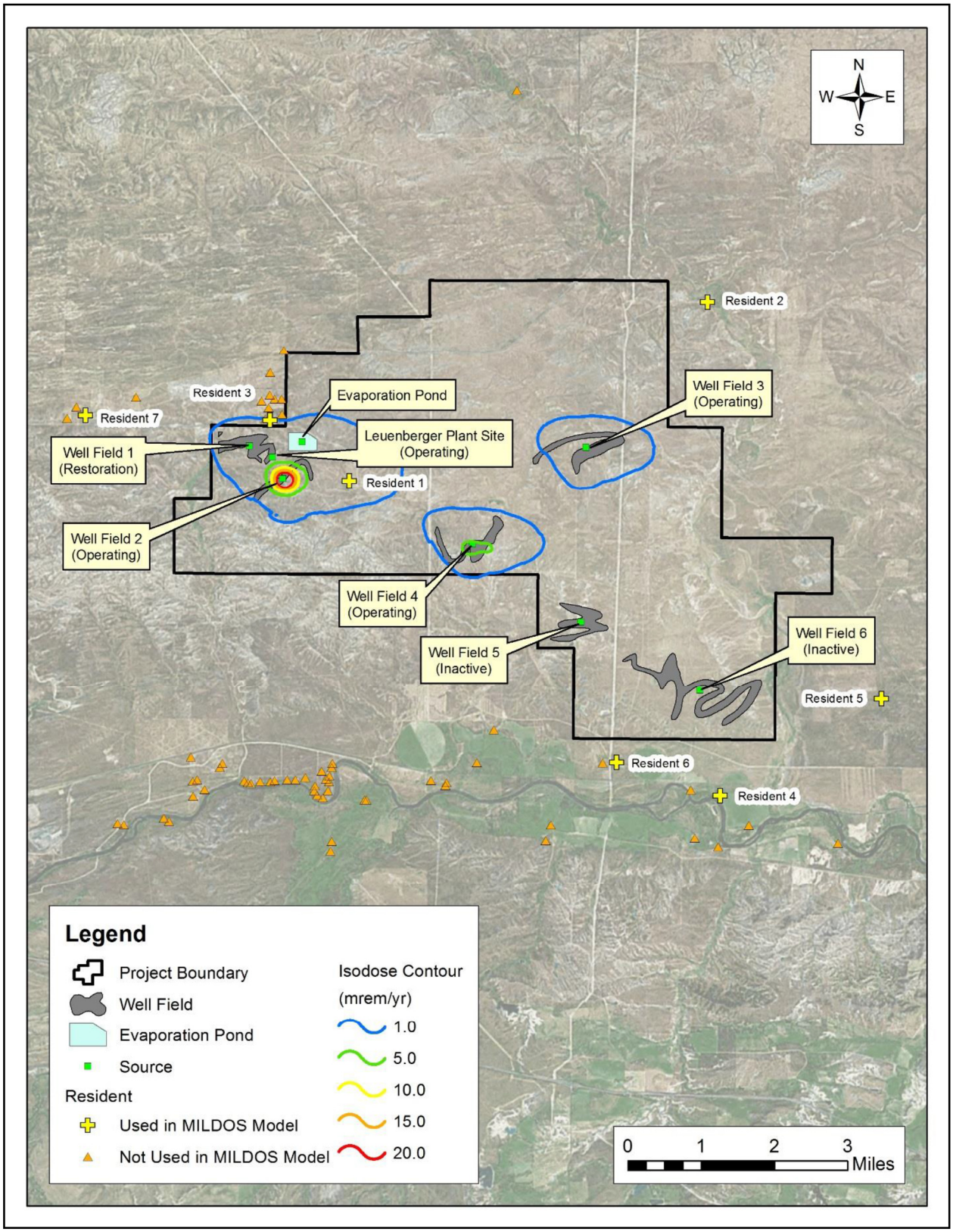

Figure 2d. Iso-Dose Map of Ludeman Project –Year 4

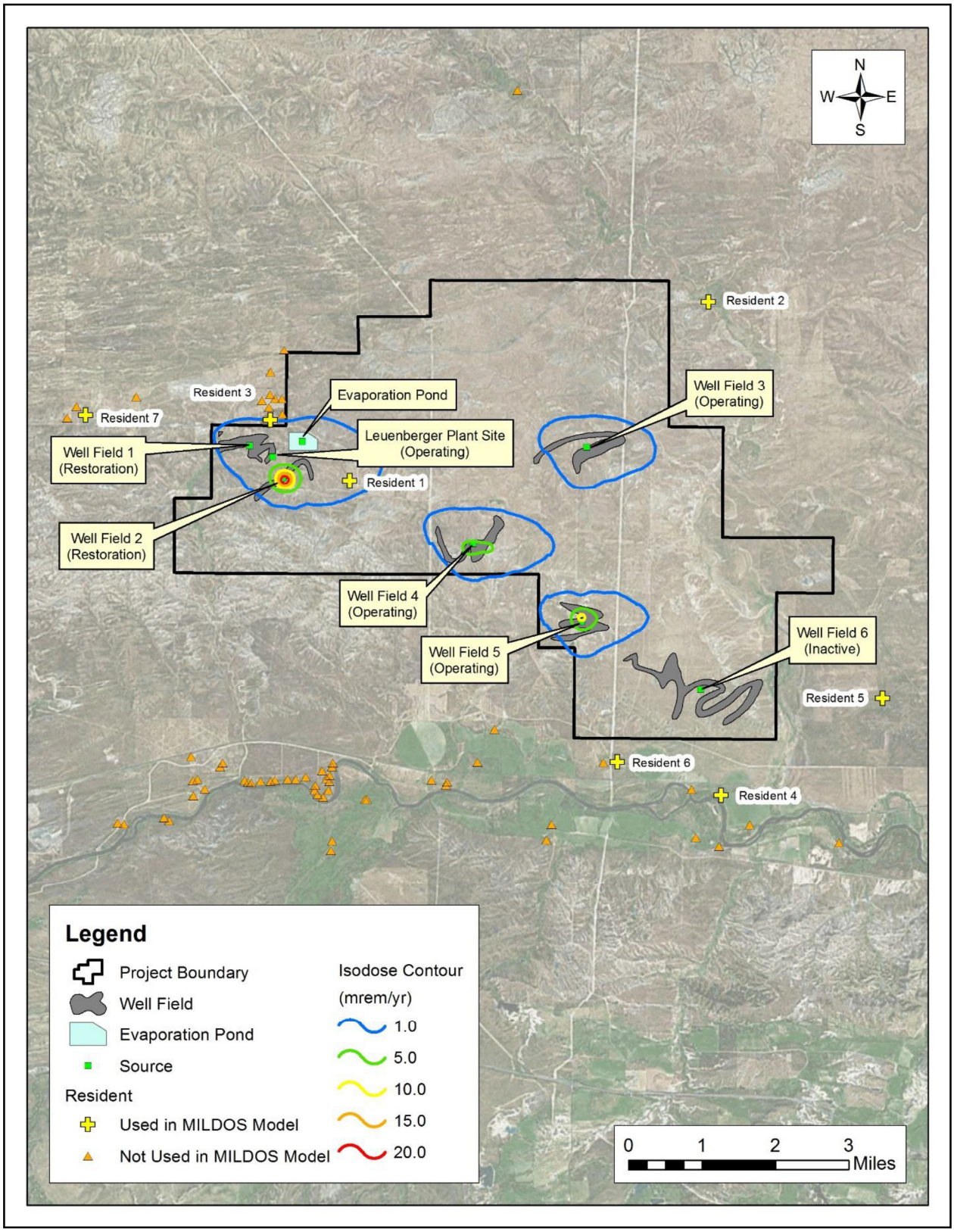

Figure 2e. Iso-Dose Map of Ludeman Project –Year 5

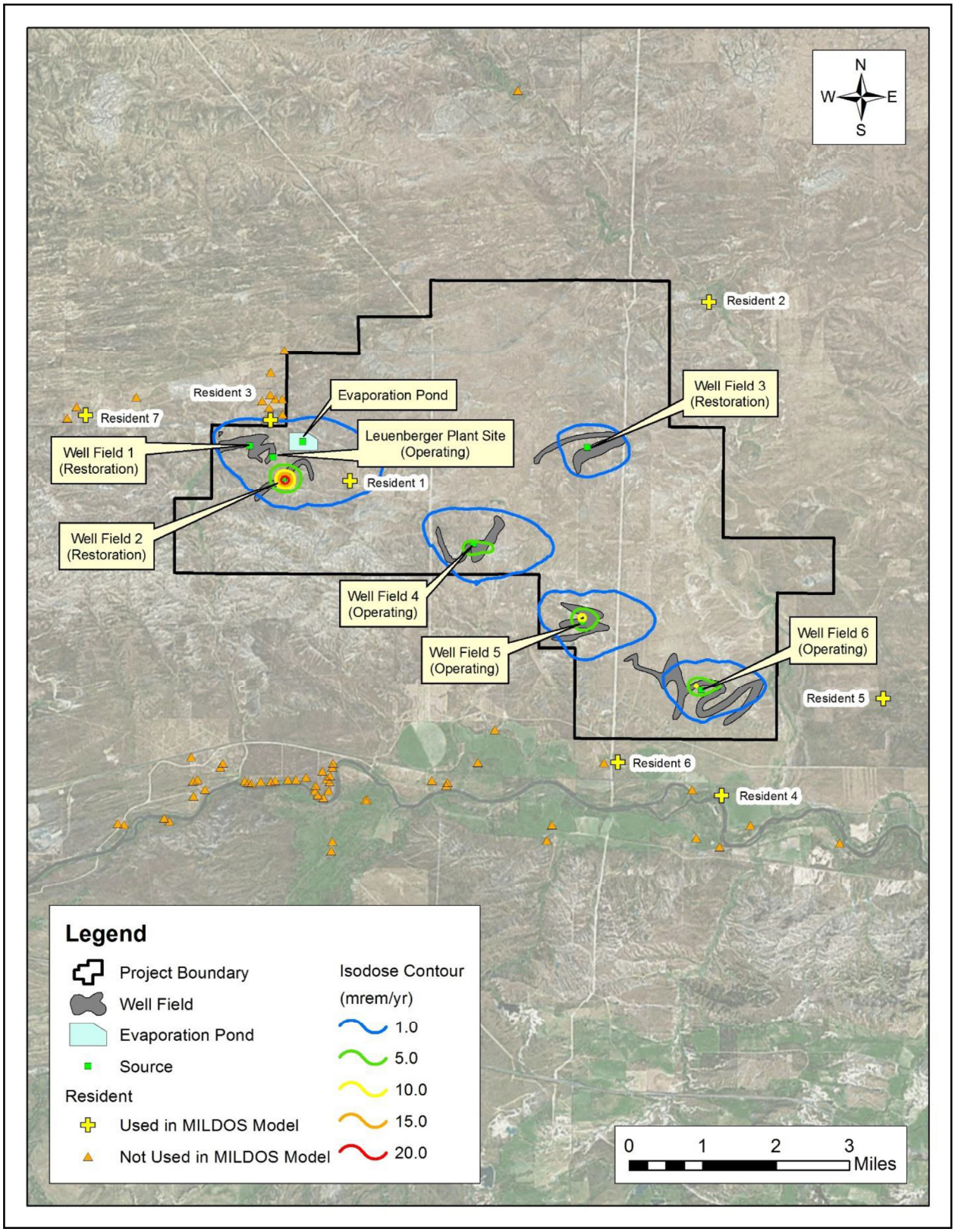

Figure 2f. Iso-Dose Map of Ludeman Project –Year 6

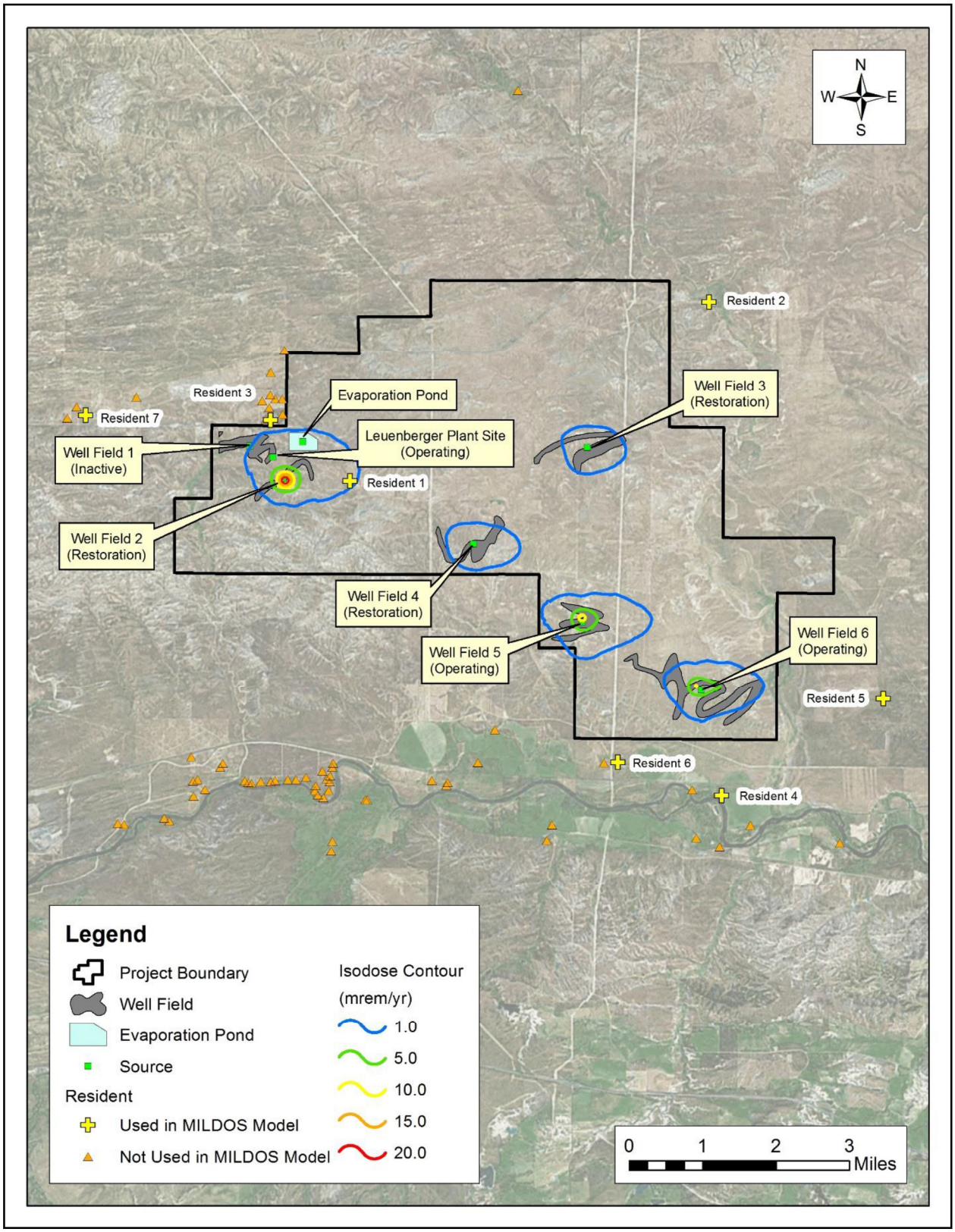

Figure 2g. Iso-Dose Map of Ludeman Project –Year 7

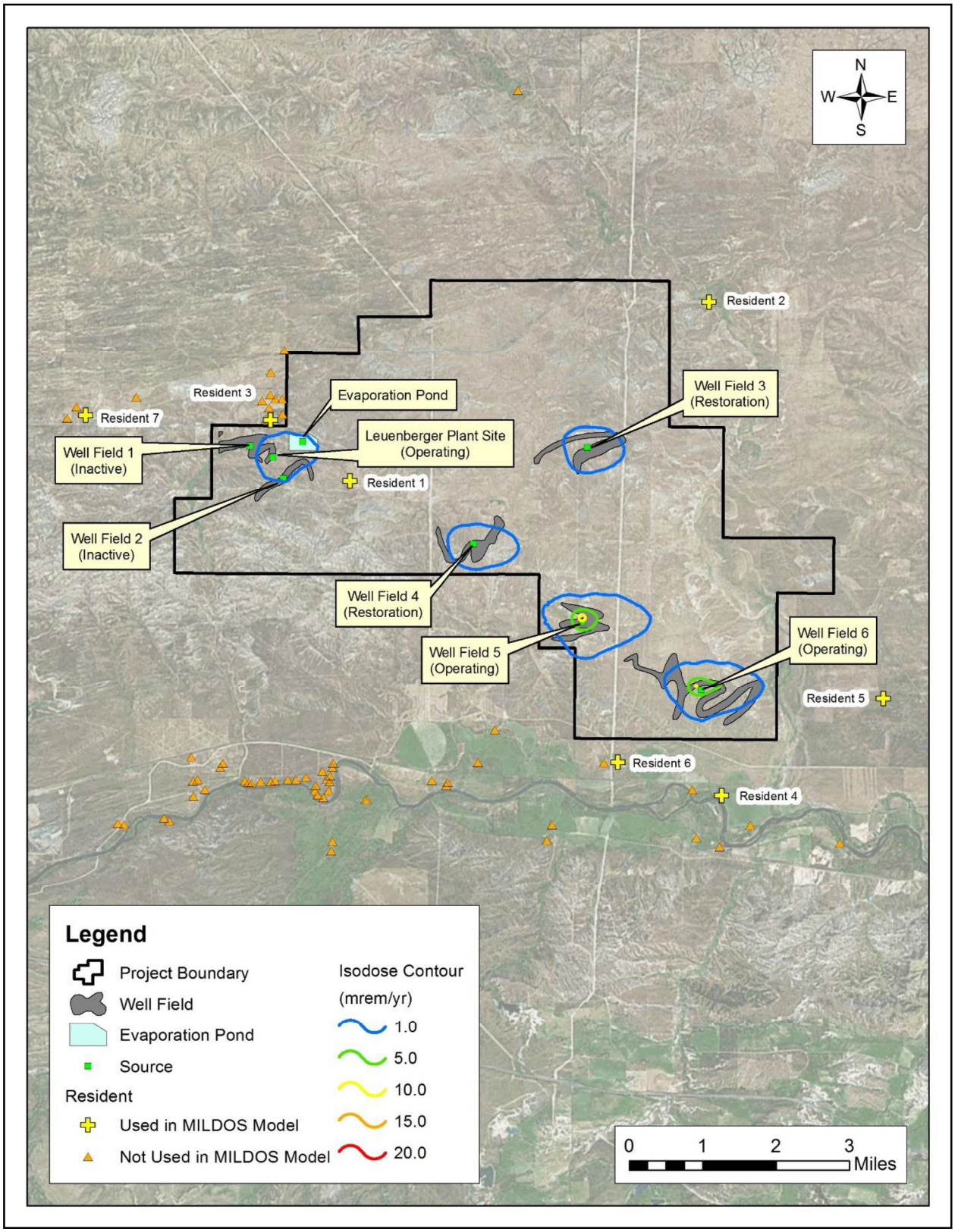

Figure 2h. Iso-Dose Map of Ludeman Project –Year 8

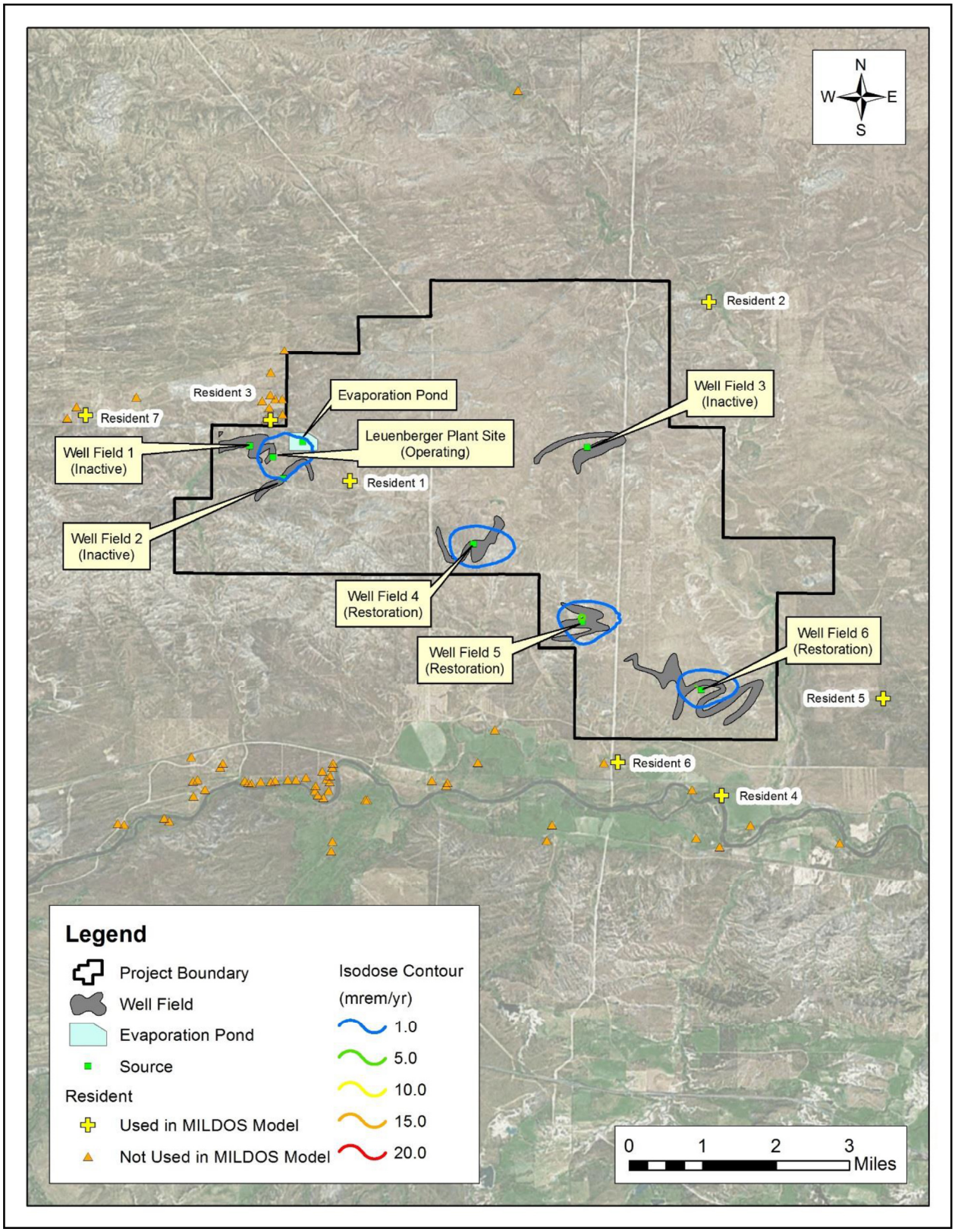

Figure 2i. Iso-Dose Map of Ludeman Project –Year 9

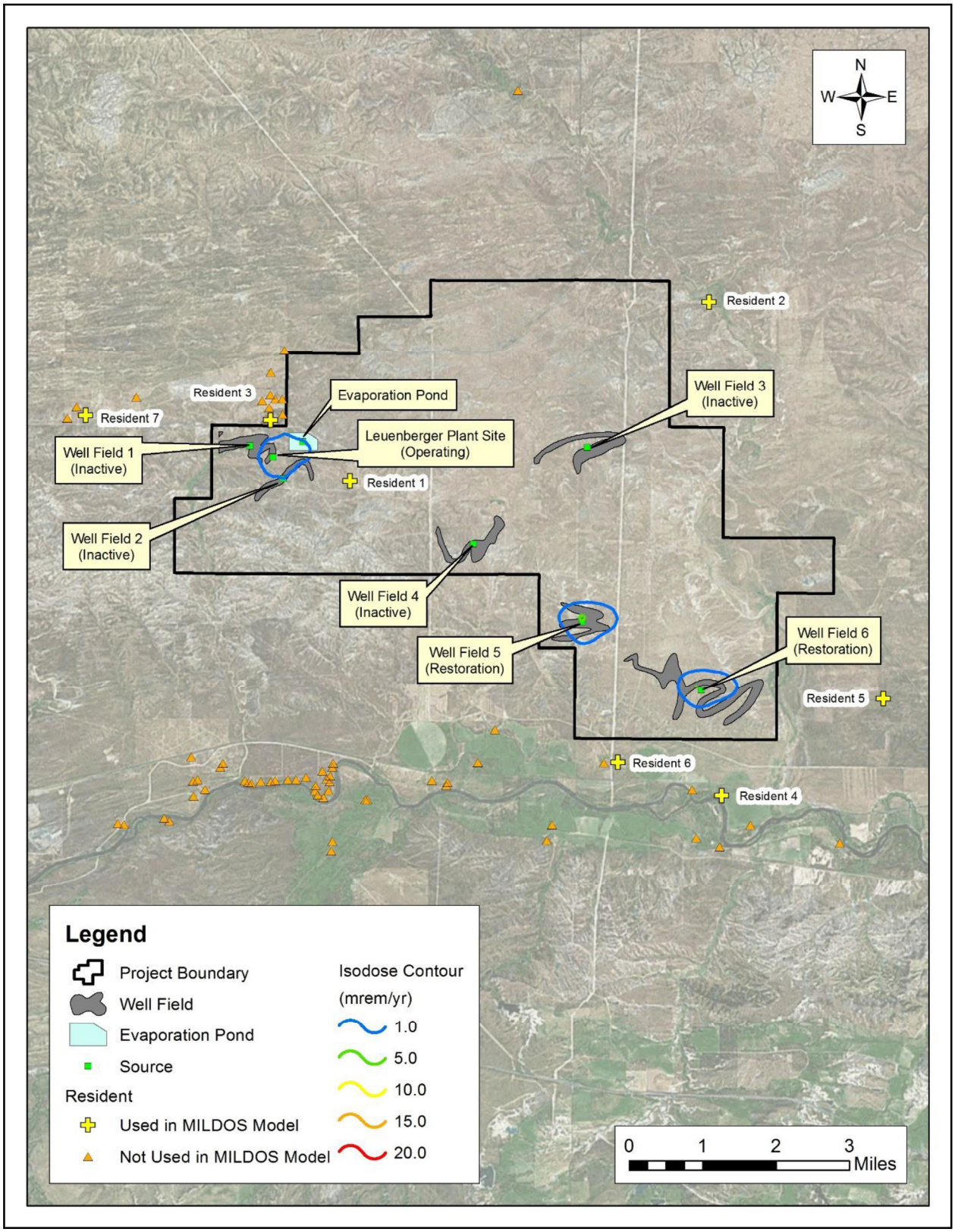

Figure 2j. Iso-Dose Map of Ludeman Project –Year 10

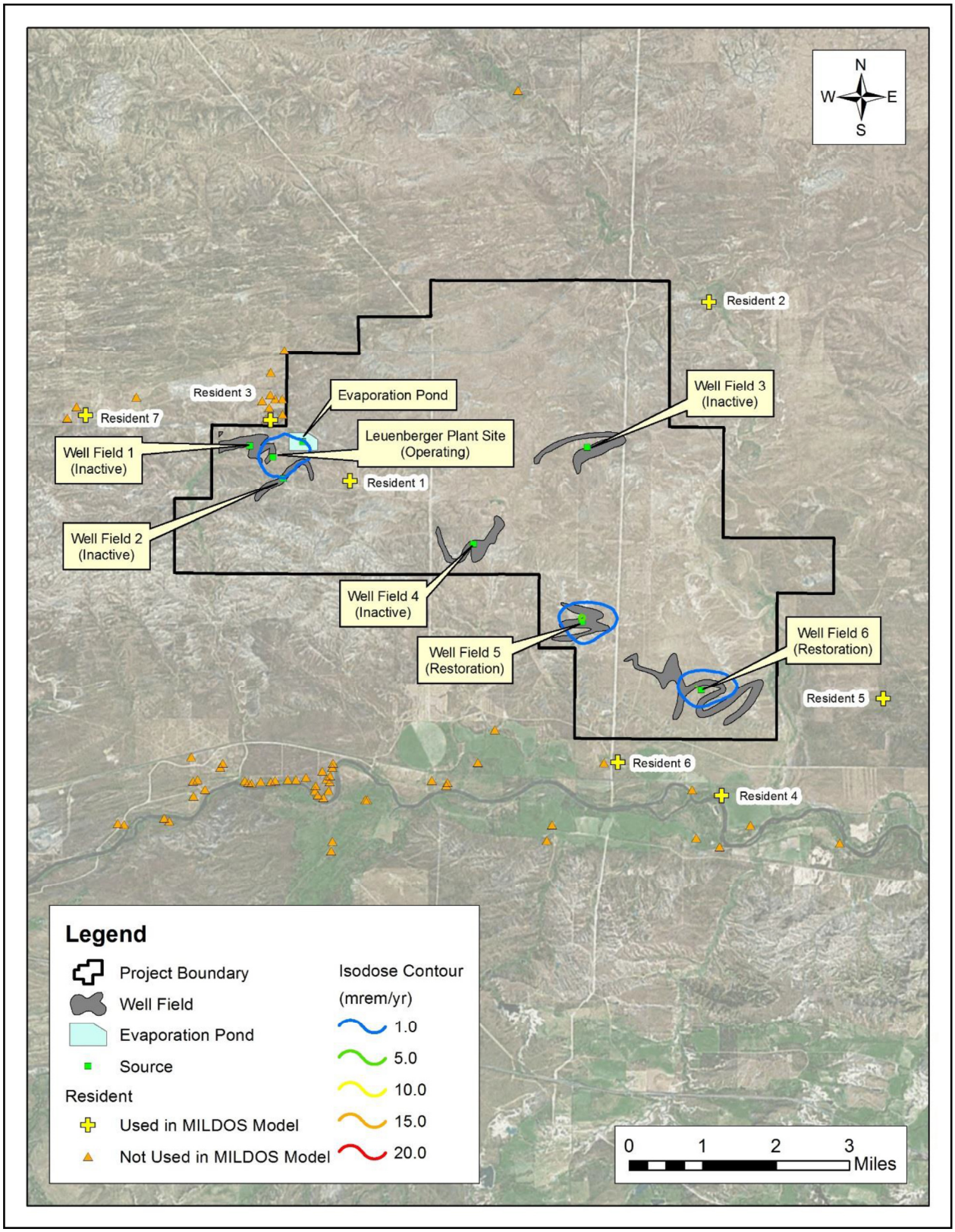

Figure 2k. Iso-Dose Map of Ludeman Project –Year 11

Appendix A.

Table A.1. Arbitrary Receptor Locations and MILDOS-AREA Modeled Dose Rate

Receptor	X	Y	t1	t2	t3	t4	t5	t6	t7	t8	t9	t10	t11
AR1	437500	4756500	0.0603	0.088	0.143	0.146	0.147	0.131	0.105	0.0919	0.0506	0.041	0.041
AR2	438000	4756500	0.0618	0.0889	0.144	0.148	0.149	0.133	0.107	0.0945	0.053	0.0433	0.0432
AR3	438500	4756500	0.0651	0.0929	0.151	0.154	0.156	0.138	0.111	0.0983	0.0553	0.0456	0.0455
AR4	439000	4756500	0.0662	0.0943	0.155	0.158	0.16	0.141	0.114	0.101	0.0561	0.0462	0.0462
AR5	439500	4756500	0.0662	0.0955	0.159	0.161	0.162	0.142	0.114	0.1	0.0546	0.0448	0.0447
AR6	440000	4756500	0.0648	0.0947	0.159	0.16	0.161	0.14	0.112	0.0982	0.0524	0.0426	0.0426
AR7	440500	4756500	0.0627	0.0927	0.156	0.158	0.158	0.138	0.11	0.0961	0.0506	0.0411	0.041
AR8	441000	4756500	0.0648	0.0938	0.157	0.158	0.158	0.138	0.111	0.0975	0.0524	0.0432	0.0432
AR9	441500	4756500	0.0641	0.0926	0.154	0.156	0.156	0.137	0.111	0.0973	0.0536	0.0439	0.0439
AR10	442000	4756500	0.0586	0.0864	0.142	0.147	0.148	0.131	0.105	0.0924	0.051	0.041	0.041
AR11	442500	4756500	0.0533	0.0796	0.141	0.149	0.151	0.131	0.107	0.0944	0.0504	0.0402	0.0402
AR12	443000	4756500	0.054	0.0774	0.144	0.152	0.156	0.134	0.11	0.0987	0.0516	0.0412	0.0412
AR13	443500	4756500	0.0589	0.0797	0.149	0.155	0.16	0.136	0.11	0.1	0.0516	0.0412	0.0412
AR14	444000	4756500	0.0612	0.0851	0.156	0.16	0.164	0.14	0.112	0.101	0.0514	0.0412	0.0411
AR15	444500	4756500	0.0643	0.0912	0.165	0.167	0.169	0.144	0.116	0.103	0.0523	0.0424	0.0424
AR16	445000	4756500	0.0685	0.0969	0.17	0.172	0.173	0.148	0.12	0.106	0.0558	0.0459	0.0459
AR17	445500	4756500	0.0685	0.0982	0.169	0.169	0.17	0.146	0.118	0.104	0.0543	0.0448	0.0448
AR18	446000	4756500	0.0657	0.0959	0.166	0.166	0.166	0.143	0.114	0.1	0.0516	0.0423	0.0423
AR19	446500	4756500	0.0666	0.0979	0.17	0.17	0.168	0.144	0.117	0.102	0.0531	0.0443	0.0442
AR20	447000	4756500	0.0689	0.1	0.175	0.174	0.172	0.146	0.12	0.106	0.0552	0.0471	0.0471
AR21	447500	4756500	0.0705	0.101	0.177	0.174	0.172	0.145	0.121	0.107	0.0557	0.0488	0.0488
AR22	448000	4756500	0.0718	0.101	0.176	0.173	0.172	0.145	0.119	0.105	0.0555	0.048	0.048
AR23	448500	4756500	0.0704	0.099	0.173	0.171	0.17	0.143	0.116	0.103	0.054	0.0454	0.0454
AR24	449000	4756500	0.0684	0.0976	0.169	0.169	0.167	0.141	0.113	0.0997	0.0523	0.0431	0.043
AR25	449500	4756500	0.0662	0.0968	0.165	0.166	0.162	0.138	0.11	0.0953	0.0505	0.0408	0.0407
AR26	450000	4756500	0.0649	0.0961	0.158	0.159	0.154	0.134	0.106	0.091	0.0496	0.0397	0.0397
AR27	450500	4756500	0.0633	0.0947	0.158	0.16	0.156	0.134	0.106	0.0915	0.049	0.0392	0.0391
AR28	451000	4756500	0.0616	0.0929	0.159	0.163	0.16	0.136	0.108	0.0937	0.0493	0.0388	0.0388
AR29	451500	4756500	0.0615	0.0925	0.161	0.166	0.164	0.138	0.111	0.096	0.0507	0.0399	0.0399
AR30	452000	4756500	0.0614	0.0919	0.158	0.164	0.163	0.138	0.11	0.0959	0.0516	0.0408	0.0408
AR31	452500	4756500	0.0611	0.0909	0.159	0.165	0.164	0.138	0.111	0.0969	0.052	0.0413	0.0412
AR32	453000	4756500	0.0615	0.0908	0.159	0.165	0.165	0.138	0.112	0.0979	0.0525	0.042	0.042
AR33	453500	4756500	0.0593	0.0878	0.155	0.161	0.162	0.137	0.112	0.0985	0.053	0.0428	0.0428
AR34	454000	4756500	0.0591	0.0869	0.152	0.159	0.16	0.137	0.112	0.0991	0.0538	0.0436	0.0436
AR35	454500	4756500	0.0581	0.0852	0.149	0.154	0.157	0.135	0.111	0.0982	0.0531	0.0433	0.0432
AR36	455000	4756500	0.0568	0.0835	0.148	0.155	0.158	0.136	0.111	0.0989	0.0529	0.0425	0.0425
AR37	455500	4756500	0.0556	0.0819	0.147	0.155	0.159	0.137	0.112	0.0991	0.0524	0.0417	0.0417
AR38	456000	4756500	0.0543	0.0787	0.144	0.153	0.157	0.135	0.11	0.0985	0.0517	0.0408	0.0407
AR39	456500	4756500	0.053	0.0772	0.142	0.151	0.155	0.134	0.109	0.0974	0.0509	0.0399	0.0398
AR40	457000	4756500	0.0518	0.076	0.14	0.149	0.153	0.132	0.107	0.0957	0.0499	0.0389	0.0388
AR41	457500	4756500	0.0509	0.0749	0.138	0.147	0.151	0.131	0.106	0.0947	0.0494	0.0384	0.0384
AR42	437500	4756000	0.0659	0.0972	0.158	0.16	0.16	0.141	0.112	0.0975	0.0526	0.0425	0.0425
AR43	438000	4756000	0.0685	0.0998	0.162	0.164	0.164	0.145	0.115	0.101	0.0553	0.045	0.0449
AR44	438500	4756000	0.0705	0.101	0.163	0.165	0.166	0.148	0.118	0.104	0.0582	0.0477	0.0477
AR45	439000	4756000	0.0745	0.106	0.172	0.174	0.174	0.154	0.124	0.109	0.0612	0.0506	0.0506
AR46	439500	4756000	0.0763	0.108	0.177	0.179	0.18	0.157	0.127	0.112	0.0624	0.0516	0.0516
AR47	440000	4756000	0.0767	0.11	0.182	0.183	0.182	0.159	0.127	0.111	0.0609	0.0501	0.05
AR48	440500	4756000	0.0757	0.11	0.181	0.181	0.18	0.157	0.125	0.109	0.0593	0.0486	0.0486
AR49	441000	4756000	0.0724	0.106	0.179	0.18	0.18	0.155	0.124	0.109	0.0575	0.0469	0.0469
AR50	441500	4756000	0.0748	0.107	0.176	0.177	0.177	0.154	0.124	0.109	0.0596	0.0494	0.0494
AR51	442000	4756000	0.0703	0.102	0.165	0.167	0.167	0.148	0.118	0.103	0.0576	0.047	0.047
AR52	442500	4756000	0.0638	0.0944	0.165	0.171	0.172	0.149	0.122	0.107	0.0577	0.0468	0.0468
AR53	443000	4756000	0.0628	0.09	0.167	0.174	0.177	0.149	0.122	0.109	0.0566	0.0454	0.0453
AR54	443500	4756000	0.069	0.0927	0.173	0.178	0.183	0.154	0.123	0.112	0.0573	0.0459	0.0458
AR55	444000	4756000	0.0732	0.101	0.185	0.187	0.191	0.16	0.128	0.115	0.0589	0.0475	0.0475
AR56	444500	4756000	0.0751	0.106	0.192	0.193	0.195	0.164	0.132	0.117	0.06	0.0489	0.0488
AR57	445000	4756000	0.08	0.113	0.197	0.196	0.197	0.167	0.134	0.119	0.0618	0.0513	0.0513
AR58	445500	4756000	0.0773	0.11	0.192	0.192	0.192	0.163	0.131	0.115	0.0594	0.0488	0.0487
AR59	446000	4756000	0.0783	0.114	0.195	0.195	0.194	0.165	0.134	0.117	0.0618	0.0514	0.0513
AR60	446500	4756000	0.0797	0.115	0.2	0.199	0.197	0.167	0.136	0.119	0.0632	0.0533	0.0532
AR61	447000	4756000	0.0817	0.117	0.204	0.201	0.199	0.168	0.138	0.122	0.0643	0.0553	0.0552
AR62	447500	4756000	0.0828	0.116	0.205	0.198	0.197	0.164	0.136	0.12	0.0621	0.0544	0.0543
AR63	448000	4756000	0.0806	0.113	0.2	0.195	0.194	0.162	0.132	0.117	0.0598	0.0514	0.0513
AR64	448500	4756000	0.0777	0.111	0.195	0.192	0.19	0.159	0.128	0.112	0.0579	0.0483	0.0482
AR65	449000	4756000	0.0747	0.11	0.191	0.191	0.187	0.157	0.126	0.109	0.0561	0.0457	0.0456
AR66	449500	4756000	0.0726	0.108	0.185	0.187	0.181	0.153	0.122	0.105	0.0549	0.0441	0.044

Receptor	X	Y	t1	t2	t3	t4	t5	t6	t7	t8	t9	t10	t11
AR67	450000	4756000	0.0714	0.107	0.176	0.178	0.172	0.148	0.117	0.101	0.0548	0.0437	0.0436
AR68	450500	4756000	0.0714	0.107	0.179	0.183	0.177	0.152	0.121	0.104	0.0565	0.0452	0.0452
AR69	451000	4756000	0.0709	0.105	0.18	0.185	0.181	0.154	0.124	0.107	0.0584	0.0466	0.0465
AR70	451500	4756000	0.0706	0.104	0.18	0.187	0.184	0.156	0.125	0.109	0.0593	0.0474	0.0473
AR71	452000	4756000	0.0695	0.102	0.18	0.186	0.185	0.155	0.126	0.11	0.0595	0.0477	0.0476
AR72	452500	4756000	0.0678	0.0998	0.178	0.186	0.186	0.154	0.125	0.11	0.0592	0.0476	0.0476
AR73	453000	4756000	0.0674	0.0985	0.176	0.183	0.183	0.152	0.124	0.11	0.0588	0.0475	0.0475
AR74	453500	4756000	0.0657	0.0959	0.171	0.177	0.179	0.15	0.122	0.108	0.0578	0.0466	0.0466
AR75	454000	4756000	0.064	0.0939	0.166	0.172	0.174	0.148	0.121	0.107	0.057	0.0461	0.0461
AR76	454500	4756000	0.0622	0.0908	0.164	0.172	0.175	0.149	0.121	0.108	0.0569	0.0454	0.0453
AR77	455000	4756000	0.0605	0.0877	0.162	0.171	0.175	0.149	0.121	0.108	0.0563	0.0445	0.0445
AR78	455500	4756000	0.0589	0.086	0.16	0.169	0.174	0.148	0.12	0.107	0.0555	0.0435	0.0434
AR79	456000	4756000	0.0575	0.0845	0.157	0.167	0.171	0.147	0.119	0.106	0.0547	0.0426	0.0426
AR80	456500	4756000	0.0563	0.0831	0.154	0.165	0.168	0.145	0.117	0.104	0.054	0.0419	0.0418
AR81	457000	4756000	0.055	0.0816	0.151	0.161	0.165	0.142	0.115	0.103	0.0531	0.0411	0.0411
AR82	457500	4756000	0.0539	0.0801	0.148	0.158	0.162	0.14	0.114	0.101	0.0526	0.0407	0.0407
AR83	437500	4755500	0.0735	0.108	0.176	0.176	0.175	0.154	0.122	0.105	0.0568	0.0461	0.0461
AR84	438000	4755500	0.0752	0.111	0.181	0.181	0.179	0.157	0.124	0.107	0.0575	0.0466	0.0465
AR85	438500	4755500	0.079	0.115	0.186	0.186	0.185	0.162	0.128	0.111	0.0608	0.0497	0.0496
AR86	439000	4755500	0.082	0.117	0.187	0.188	0.187	0.165	0.132	0.115	0.0646	0.0531	0.0531
AR87	439500	4755500	0.0868	0.123	0.199	0.2	0.199	0.174	0.139	0.122	0.0684	0.0568	0.0568
AR88	440000	4755500	0.0897	0.127	0.208	0.208	0.207	0.179	0.144	0.126	0.0701	0.0583	0.0583
AR89	440500	4755500	0.0913	0.13	0.213	0.212	0.21	0.181	0.144	0.126	0.0689	0.057	0.057
AR90	441000	4755500	0.0909	0.13	0.213	0.212	0.209	0.181	0.144	0.125	0.0684	0.0565	0.0565
AR91	441500	4755500	0.0873	0.126	0.206	0.206	0.204	0.176	0.14	0.122	0.0663	0.0547	0.0546
AR92	442000	4755500	0.0849	0.122	0.194	0.194	0.192	0.169	0.135	0.117	0.0654	0.0542	0.0542
AR93	442500	4755500	0.0766	0.113	0.195	0.2	0.198	0.169	0.138	0.121	0.0648	0.0531	0.0531
AR94	443000	4755500	0.0749	0.107	0.197	0.203	0.204	0.171	0.139	0.124	0.0636	0.0514	0.0514
AR95	443500	4755500	0.0829	0.11	0.204	0.206	0.21	0.175	0.138	0.125	0.0639	0.0514	0.0513
AR96	444000	4755500	0.0877	0.121	0.22	0.22	0.222	0.185	0.147	0.132	0.0671	0.0543	0.0543
AR97	444500	4755500	0.0919	0.129	0.227	0.227	0.226	0.189	0.15	0.133	0.0684	0.0558	0.0557
AR98	445000	4755500	0.0934	0.132	0.228	0.226	0.225	0.189	0.15	0.132	0.0689	0.0567	0.0567
AR99	445500	4755500	0.0941	0.134	0.232	0.231	0.229	0.193	0.155	0.137	0.072	0.0601	0.0601
AR100	446000	4755500	0.0943	0.136	0.237	0.236	0.233	0.195	0.159	0.139	0.0734	0.0616	0.0616
AR101	446500	4755500	0.0965	0.137	0.237	0.235	0.232	0.195	0.159	0.14	0.0745	0.0633	0.0633
AR102	447000	4755500	0.0971	0.136	0.236	0.23	0.228	0.191	0.155	0.137	0.0721	0.0619	0.0619
AR103	447500	4755500	0.0937	0.131	0.232	0.223	0.221	0.183	0.15	0.132	0.067	0.0583	0.0583
AR104	448000	4755500	0.0895	0.128	0.229	0.223	0.22	0.182	0.147	0.129	0.0643	0.0548	0.0548
AR105	448500	4755500	0.0851	0.126	0.223	0.22	0.216	0.179	0.144	0.125	0.0623	0.0514	0.0513
AR106	449000	4755500	0.0851	0.126	0.22	0.221	0.215	0.179	0.144	0.125	0.0643	0.0525	0.0525
AR107	449500	4755500	0.0845	0.125	0.214	0.216	0.209	0.176	0.141	0.122	0.0652	0.053	0.053
AR108	450000	4755500	0.0834	0.123	0.201	0.204	0.196	0.169	0.135	0.116	0.0653	0.0533	0.0533
AR109	450500	4755500	0.0831	0.122	0.205	0.21	0.204	0.174	0.139	0.121	0.067	0.0541	0.054
AR110	451000	4755500	0.0795	0.117	0.206	0.214	0.21	0.176	0.143	0.125	0.0681	0.0548	0.0548
AR111	451500	4755500	0.0793	0.116	0.206	0.214	0.212	0.177	0.144	0.127	0.0683	0.055	0.055
AR112	452000	4755500	0.0775	0.113	0.205	0.212	0.212	0.174	0.142	0.125	0.0665	0.0535	0.0535
AR113	452500	4755500	0.0752	0.109	0.2	0.207	0.207	0.17	0.138	0.122	0.0638	0.0513	0.0512
AR114	453000	4755500	0.0728	0.107	0.194	0.201	0.202	0.167	0.135	0.119	0.0625	0.05	0.05
AR115	453500	4755500	0.0705	0.102	0.184	0.191	0.194	0.162	0.131	0.117	0.0612	0.0491	0.049
AR116	454000	4755500	0.0682	0.0991	0.184	0.193	0.196	0.164	0.133	0.119	0.0612	0.0484	0.0483
AR117	454500	4755500	0.066	0.0968	0.182	0.192	0.196	0.165	0.133	0.119	0.0607	0.0475	0.0474
AR118	455000	4755500	0.0643	0.0949	0.179	0.19	0.194	0.164	0.133	0.118	0.0602	0.0468	0.0467
AR119	455500	4755500	0.0627	0.0929	0.175	0.186	0.19	0.161	0.131	0.117	0.0594	0.046	0.0459
AR120	456000	4755500	0.0611	0.0909	0.171	0.182	0.186	0.158	0.128	0.114	0.0584	0.0451	0.045
AR121	456500	4755500	0.0596	0.089	0.167	0.178	0.181	0.155	0.125	0.112	0.0572	0.044	0.044
AR122	457000	4755500	0.0581	0.087	0.162	0.173	0.177	0.153	0.124	0.11	0.0565	0.0436	0.0435
AR123	457500	4755500	0.0567	0.0851	0.157	0.169	0.172	0.149	0.121	0.108	0.0555	0.0427	0.0427
AR124	437500	4755000	0.0829	0.121	0.194	0.193	0.191	0.167	0.133	0.115	0.0627	0.0516	0.0515
AR125	438000	4755000	0.0863	0.126	0.204	0.202	0.199	0.173	0.137	0.118	0.0641	0.0526	0.0526
AR126	438500	4755000	0.0895	0.131	0.211	0.209	0.206	0.179	0.141	0.121	0.0654	0.0535	0.0535
AR127	439000	4755000	0.0937	0.136	0.22	0.217	0.215	0.185	0.146	0.127	0.0684	0.0562	0.0561
AR128	439500	4755000	0.0974	0.139	0.223	0.221	0.218	0.19	0.15	0.131	0.0724	0.0598	0.0598
AR129	440000	4755000	0.104	0.146	0.239	0.237	0.234	0.201	0.16	0.14	0.0774	0.0646	0.0646
AR130	440500	4755000	0.11	0.154	0.253	0.25	0.246	0.21	0.167	0.146	0.0804	0.0673	0.0673
AR131	441000	4755000	0.114	0.16	0.256	0.251	0.247	0.212	0.167	0.145	0.0804	0.0672	0.0672
AR132	441500	4755000	0.108	0.155	0.252	0.248	0.244	0.208	0.165	0.143	0.0781	0.0648	0.0648

Receptor	X	Y	t1	t2	t3	t4	t5	t6	t7	t8	t9	t10	t11
AR133	442000	4755000	0.104	0.148	0.232	0.228	0.224	0.196	0.154	0.133	0.0743	0.0612	0.0612
AR134	442500	4755000	0.0933	0.137	0.235	0.236	0.232	0.197	0.159	0.138	0.073	0.0604	0.0604
AR135	443000	4755000	0.0918	0.131	0.239	0.24	0.239	0.198	0.159	0.141	0.0714	0.0582	0.0582
AR136	443500	4755000	0.102	0.135	0.252	0.249	0.252	0.206	0.162	0.147	0.0726	0.0589	0.0589
AR137	444000	4755000	0.106	0.146	0.263	0.261	0.259	0.213	0.168	0.149	0.0751	0.061	0.0609
AR138	444500	4755000	0.112	0.157	0.27	0.266	0.263	0.219	0.171	0.15	0.0774	0.0631	0.0631
AR139	445000	4755000	0.115	0.16	0.277	0.273	0.271	0.225	0.179	0.157	0.0827	0.0686	0.0686
AR140	445500	4755000	0.116	0.165	0.285	0.281	0.277	0.229	0.186	0.163	0.086	0.0728	0.0728
AR141	446000	4755000	0.117	0.166	0.287	0.283	0.279	0.231	0.187	0.165	0.0875	0.0741	0.0741
AR142	446500	4755000	0.116	0.163	0.282	0.277	0.273	0.226	0.182	0.16	0.0844	0.0716	0.0715
AR143	447000	4755000	0.111	0.155	0.271	0.263	0.259	0.215	0.173	0.152	0.0783	0.0666	0.0666
AR144	447500	4755000	0.107	0.153	0.267	0.256	0.252	0.208	0.169	0.147	0.0743	0.0646	0.0645
AR145	448000	4755000	0.104	0.152	0.27	0.263	0.257	0.211	0.172	0.15	0.0752	0.0644	0.0643
AR146	448500	4755000	0.103	0.15	0.265	0.263	0.256	0.212	0.172	0.15	0.0775	0.065	0.065
AR147	449000	4755000	0.101	0.147	0.26	0.261	0.254	0.21	0.17	0.148	0.078	0.0646	0.0646
AR148	449500	4755000	0.0987	0.144	0.252	0.255	0.247	0.205	0.166	0.145	0.0777	0.0639	0.0639
AR149	450000	4755000	0.0953	0.139	0.234	0.239	0.231	0.196	0.158	0.137	0.0773	0.0631	0.0631
AR150	450500	4755000	0.0943	0.137	0.237	0.245	0.238	0.2	0.161	0.141	0.0778	0.063	0.0629
AR151	451000	4755000	0.0908	0.132	0.239	0.246	0.243	0.2	0.162	0.143	0.0759	0.0609	0.0609
AR152	451500	4755000	0.0874	0.127	0.235	0.243	0.241	0.197	0.16	0.141	0.0733	0.0587	0.0586
AR153	452000	4755000	0.084	0.122	0.231	0.239	0.238	0.193	0.157	0.139	0.0704	0.0562	0.0562
AR154	452500	4755000	0.0808	0.117	0.221	0.229	0.23	0.186	0.15	0.133	0.0676	0.0536	0.0536
AR155	453000	4755000	0.0777	0.114	0.211	0.218	0.219	0.18	0.145	0.128	0.0657	0.052	0.052
AR156	453500	4755000	0.0749	0.11	0.211	0.22	0.223	0.183	0.148	0.131	0.066	0.0516	0.0515
AR157	454000	4755000	0.0727	0.108	0.208	0.219	0.222	0.184	0.149	0.132	0.0661	0.0512	0.0512
AR158	454500	4755000	0.0705	0.105	0.203	0.215	0.219	0.182	0.147	0.131	0.0656	0.0506	0.0505
AR159	455000	4755000	0.0684	0.102	0.197	0.209	0.213	0.179	0.145	0.129	0.0646	0.0497	0.0497
AR160	455500	4755000	0.0665	0.0996	0.191	0.203	0.207	0.175	0.142	0.126	0.0635	0.0487	0.0486
AR161	456000	4755000	0.0646	0.097	0.184	0.197	0.201	0.171	0.138	0.123	0.0623	0.0478	0.0478
AR162	456500	4755000	0.0628	0.0945	0.178	0.191	0.194	0.166	0.135	0.12	0.0609	0.0467	0.0466
AR163	457000	4755000	0.0611	0.0921	0.173	0.185	0.188	0.163	0.132	0.117	0.0598	0.0458	0.0458
AR164	457500	4755000	0.0594	0.0898	0.167	0.179	0.184	0.16	0.13	0.116	0.0594	0.0458	0.0458
AR165	437500	4754500	0.0922	0.134	0.212	0.21	0.207	0.181	0.143	0.123	0.0686	0.0569	0.0568
AR166	438000	4754500	0.0971	0.141	0.225	0.222	0.218	0.189	0.15	0.129	0.0708	0.0587	0.0587
AR167	438500	4754500	0.103	0.149	0.241	0.236	0.231	0.199	0.157	0.135	0.073	0.0605	0.0605
AR168	439000	4754500	0.108	0.156	0.257	0.251	0.245	0.209	0.164	0.142	0.0752	0.0623	0.0622
AR169	439500	4754500	0.117	0.167	0.274	0.267	0.261	0.221	0.173	0.15	0.0799	0.0665	0.0665
AR170	440000	4754500	0.124	0.174	0.281	0.272	0.267	0.227	0.178	0.155	0.0845	0.0707	0.0707
AR171	440500	4754500	0.13	0.18	0.301	0.292	0.287	0.24	0.19	0.166	0.0889	0.0746	0.0746
AR172	441000	4754500	0.138	0.192	0.319	0.308	0.301	0.251	0.197	0.171	0.0909	0.0764	0.0763
AR173	441500	4754500	0.141	0.198	0.322	0.31	0.301	0.253	0.197	0.17	0.0907	0.0758	0.0758
AR174	442000	4754500	0.135	0.192	0.295	0.284	0.277	0.239	0.185	0.158	0.0888	0.0739	0.0739
AR175	442500	4754500	0.119	0.174	0.299	0.295	0.288	0.239	0.191	0.165	0.0849	0.0701	0.0701
AR176	443000	4754500	0.119	0.169	0.303	0.298	0.293	0.239	0.191	0.167	0.0833	0.069	0.069
AR177	443500	4754500	0.132	0.172	0.316	0.305	0.305	0.246	0.191	0.172	0.084	0.0691	0.069
AR178	444000	4754500	0.14	0.191	0.327	0.315	0.31	0.254	0.196	0.172	0.0869	0.0712	0.0712
AR179	444500	4754500	0.145	0.201	0.346	0.335	0.328	0.267	0.209	0.182	0.0937	0.0775	0.0775
AR180	445000	4754500	0.143	0.202	0.348	0.341	0.333	0.272	0.216	0.189	0.0983	0.082	0.082
AR181	445500	4754500	0.146	0.206	0.351	0.341	0.332	0.273	0.217	0.189	0.0997	0.084	0.084
AR182	446000	4754500	0.145	0.202	0.342	0.333	0.326	0.269	0.214	0.187	0.0989	0.0836	0.0836
AR183	446500	4754500	0.141	0.193	0.333	0.324	0.32	0.264	0.211	0.186	0.0992	0.0842	0.0842
AR184	447000	4754500	0.136	0.192	0.331	0.321	0.314	0.259	0.209	0.183	0.0966	0.083	0.0829
AR185	447500	4754500	0.129	0.187	0.323	0.311	0.303	0.249	0.205	0.178	0.092	0.0807	0.0807
AR186	448000	4754500	0.126	0.183	0.32	0.313	0.304	0.249	0.205	0.178	0.0927	0.0802	0.0802
AR187	448500	4754500	0.119	0.174	0.318	0.318	0.31	0.251	0.208	0.182	0.0936	0.0791	0.0791
AR188	449000	4754500	0.118	0.171	0.312	0.314	0.306	0.248	0.203	0.179	0.0929	0.0773	0.0773
AR189	449500	4754500	0.114	0.165	0.3	0.304	0.295	0.24	0.196	0.172	0.0899	0.0739	0.0739
AR190	450000	4754500	0.109	0.157	0.273	0.28	0.27	0.225	0.18	0.158	0.0858	0.0691	0.0691
AR191	450500	4754500	0.103	0.151	0.276	0.284	0.277	0.227	0.183	0.16	0.0835	0.0664	0.0663
AR192	451000	4754500	0.0986	0.141	0.273	0.281	0.279	0.225	0.182	0.162	0.0809	0.0641	0.0641
AR193	451500	4754500	0.0941	0.137	0.272	0.28	0.279	0.222	0.181	0.161	0.0778	0.0616	0.0616
AR194	452000	4754500	0.0898	0.132	0.262	0.27	0.27	0.215	0.175	0.155	0.0747	0.0589	0.0588
AR195	452500	4754500	0.0862	0.128	0.246	0.255	0.256	0.205	0.166	0.146	0.0722	0.0565	0.0565
AR196	453000	4754500	0.083	0.124	0.247	0.259	0.261	0.208	0.168	0.149	0.072	0.0555	0.0554
AR197	453500	4754500	0.0801	0.12	0.24	0.254	0.257	0.207	0.168	0.149	0.0722	0.0553	0.0553
AR198	454000	4754500	0.0774	0.116	0.231	0.245	0.248	0.203	0.165	0.147	0.0716	0.0547	0.0547

Receptor	X	Y	t1	t2	t3	t4	t5	t6	t7	t8	t9	t10	t11
AR199	454500	4754500	0.0748	0.113	0.223	0.237	0.241	0.199	0.162	0.144	0.0706	0.0538	0.0538
AR200	455000	4754500	0.0723	0.109	0.213	0.228	0.232	0.194	0.157	0.14	0.0692	0.0527	0.0526
AR201	455500	4754500	0.07	0.106	0.206	0.22	0.224	0.189	0.153	0.136	0.0675	0.0514	0.0514
AR202	456000	4754500	0.0678	0.103	0.196	0.21	0.214	0.182	0.147	0.13	0.0658	0.0501	0.0501
AR203	456500	4754500	0.0658	0.0997	0.191	0.205	0.209	0.178	0.145	0.129	0.0646	0.0493	0.0492
AR204	457000	4754500	0.0638	0.0969	0.186	0.2	0.205	0.177	0.144	0.128	0.0642	0.0493	0.0492
AR205	457500	4754500	0.062	0.0942	0.181	0.194	0.201	0.174	0.142	0.127	0.0634	0.0489	0.0489
AR206	437500	4754000	0.092	0.138	0.217	0.214	0.21	0.184	0.146	0.124	0.0687	0.0569	0.0569
AR207	438000	4754000	0.103	0.15	0.237	0.234	0.229	0.199	0.157	0.135	0.0747	0.062	0.062
AR208	438500	4754000	0.118	0.169	0.272	0.265	0.258	0.22	0.173	0.149	0.0808	0.0675	0.0674
AR209	439000	4754000	0.125	0.179	0.295	0.285	0.278	0.233	0.184	0.158	0.084	0.0703	0.0703
AR210	439500	4754000	0.138	0.196	0.328	0.314	0.305	0.252	0.198	0.17	0.0877	0.0735	0.0735
AR211	440000	4754000	0.154	0.215	0.363	0.346	0.336	0.275	0.214	0.186	0.0949	0.0801	0.0801
AR212	440500	4754000	0.165	0.229	0.379	0.358	0.348	0.286	0.221	0.191	0.0992	0.0839	0.0839
AR213	441000	4754000	0.172	0.237	0.411	0.39	0.379	0.305	0.238	0.208	0.104	0.0878	0.0877
AR214	441500	4754000	0.187	0.257	0.434	0.407	0.394	0.318	0.245	0.212	0.106	0.0901	0.09
AR215	442000	4754000	0.182	0.257	0.401	0.376	0.36	0.303	0.23	0.195	0.105	0.0878	0.0878
AR216	442500	4754000	0.171	0.243	0.422	0.405	0.391	0.315	0.248	0.215	0.108	0.0905	0.0905
AR217	443000	4754000	0.166	0.232	0.428	0.411	0.4	0.314	0.247	0.216	0.101	0.084	0.084
AR218	443500	4754000	0.18	0.231	0.412	0.386	0.383	0.305	0.233	0.209	0.101	0.0843	0.0843
AR219	444000	4754000	0.198	0.266	0.457	0.428	0.415	0.333	0.255	0.223	0.111	0.0941	0.0941
AR220	444500	4754000	0.187	0.262	0.448	0.427	0.412	0.331	0.258	0.223	0.113	0.0945	0.0945
AR221	445000	4754000	0.198	0.276	0.452	0.43	0.414	0.339	0.263	0.226	0.121	0.102	0.102
AR222	445500	4754000	0.197	0.271	0.438	0.419	0.404	0.335	0.262	0.227	0.125	0.107	0.107
AR223	446000	4754000	0.187	0.254	0.415	0.4	0.391	0.324	0.256	0.225	0.126	0.107	0.107
AR224	446500	4754000	0.176	0.248	0.412	0.402	0.39	0.322	0.259	0.226	0.125	0.107	0.107
AR225	447000	4754000	0.165	0.237	0.407	0.397	0.385	0.314	0.256	0.222	0.118	0.102	0.102
AR226	447500	4754000	0.155	0.224	0.4	0.387	0.375	0.301	0.25	0.217	0.112	0.0986	0.0985
AR227	448000	4754000	0.151	0.217	0.393	0.385	0.374	0.3	0.248	0.217	0.111	0.0963	0.0963
AR228	448500	4754000	0.142	0.205	0.38	0.379	0.37	0.296	0.242	0.213	0.108	0.0902	0.0902
AR229	449000	4754000	0.134	0.192	0.378	0.38	0.371	0.292	0.239	0.211	0.102	0.0839	0.0839
AR230	449500	4754000	0.126	0.182	0.359	0.364	0.354	0.278	0.226	0.199	0.0962	0.0776	0.0776
AR231	450000	4754000	0.118	0.171	0.321	0.33	0.32	0.258	0.207	0.182	0.0922	0.0725	0.0725
AR232	450500	4754000	0.112	0.163	0.328	0.339	0.331	0.261	0.211	0.187	0.0893	0.0696	0.0696
AR233	451000	4754000	0.105	0.156	0.329	0.339	0.334	0.26	0.212	0.188	0.0861	0.0672	0.0671
AR234	451500	4754000	0.101	0.15	0.322	0.333	0.33	0.255	0.209	0.186	0.0834	0.0651	0.0651
AR235	452000	4754000	0.0962	0.144	0.299	0.311	0.31	0.243	0.198	0.175	0.0811	0.0628	0.0627
AR236	452500	4754000	0.0921	0.139	0.3	0.315	0.315	0.242	0.197	0.175	0.0792	0.06	0.0599
AR237	453000	4754000	0.0884	0.134	0.287	0.303	0.306	0.238	0.194	0.173	0.079	0.0596	0.0595
AR238	453500	4754000	0.0849	0.129	0.27	0.287	0.291	0.232	0.188	0.168	0.0786	0.0592	0.0591
AR239	454000	4754000	0.0817	0.124	0.254	0.271	0.275	0.224	0.182	0.162	0.0774	0.0583	0.0583
AR240	454500	4754000	0.0787	0.12	0.242	0.259	0.264	0.217	0.176	0.157	0.0758	0.0571	0.0571
AR241	455000	4754000	0.0759	0.116	0.231	0.248	0.252	0.21	0.17	0.151	0.0738	0.0557	0.0557
AR242	455500	4754000	0.0733	0.112	0.224	0.24	0.244	0.204	0.166	0.148	0.072	0.0545	0.0544
AR243	456000	4754000	0.0708	0.108	0.216	0.232	0.236	0.198	0.161	0.144	0.07	0.0531	0.053
AR244	456500	4754000	0.0686	0.105	0.208	0.223	0.23	0.195	0.159	0.142	0.0695	0.0532	0.0531
AR245	457000	4754000	0.0664	0.101	0.201	0.216	0.225	0.192	0.157	0.141	0.0691	0.0528	0.0528
AR246	457500	4754000	0.0644	0.0984	0.194	0.207	0.216	0.186	0.153	0.137	0.0671	0.0521	0.0521
AR247	437500	4753500	0.0887	0.134	0.21	0.208	0.205	0.181	0.144	0.122	0.0669	0.055	0.055
AR248	438000	4753500	0.1	0.149	0.236	0.232	0.227	0.198	0.157	0.133	0.0727	0.0601	0.0601
AR249	438500	4753500	0.113	0.167	0.269	0.263	0.255	0.219	0.173	0.147	0.0792	0.066	0.0659
AR250	439000	4753500	0.132	0.192	0.314	0.303	0.293	0.246	0.194	0.166	0.0871	0.073	0.073
AR251	439500	4753500	0.156	0.221	0.372	0.356	0.344	0.282	0.221	0.19	0.0973	0.0819	0.0819
AR252	440000	4753500	0.181	0.254	0.445	0.418	0.403	0.32	0.249	0.214	0.103	0.0869	0.0869
AR253	440500	4753500	0.21	0.291	0.528	0.49	0.471	0.364	0.281	0.243	0.109	0.0929	0.0929
AR254	441000	4753500	0.238	0.325	0.584	0.536	0.515	0.397	0.302	0.262	0.116	0.0993	0.0992
AR255	441500	4753500	0.255	0.342	0.659	0.609	0.588	0.439	0.339	0.299	0.126	0.108	0.108
AR256	442000	4753500	0.288	0.386	0.648	0.583	0.557	0.438	0.325	0.278	0.131	0.112	0.112
AR257	442500	4753500	0.273	0.373	0.693	0.64	0.614	0.464	0.358	0.311	0.136	0.116	0.116
AR258	443000	4753500	0.273	0.368	0.671	0.618	0.595	0.454	0.347	0.303	0.135	0.116	0.116
AR259	443500	4753500	0.304	0.373	0.68	0.613	0.603	0.461	0.342	0.309	0.14	0.12	0.12
AR260	444000	4753500	0.296	0.392	0.66	0.604	0.579	0.458	0.35	0.304	0.154	0.134	0.134
AR261	444500	4753500	0.306	0.41	0.641	0.585	0.555	0.454	0.343	0.293	0.161	0.14	0.14
AR262	445000	4753500	0.285	0.389	0.602	0.56	0.532	0.439	0.336	0.287	0.162	0.141	0.141
AR263	445500	4753500	0.255	0.346	0.548	0.521	0.5	0.412	0.321	0.278	0.158	0.136	0.136
AR264	446000	4753500	0.229	0.328	0.521	0.504	0.48	0.398	0.317	0.27	0.154	0.132	0.132

Receptor	X	Y	t1	t2	t3	t4	t5	t6	t7	t8	t9	t10	t11
AR265	446500	4753500	0.216	0.312	0.503	0.489	0.468	0.386	0.309	0.264	0.148	0.127	0.127
AR266	447000	4753500	0.202	0.29	0.494	0.482	0.464	0.377	0.306	0.265	0.142	0.122	0.122
AR267	447500	4753500	0.185	0.265	0.478	0.461	0.446	0.354	0.291	0.253	0.127	0.111	0.111
AR268	448000	4753500	0.17	0.246	0.474	0.465	0.452	0.353	0.29	0.254	0.121	0.103	0.103
AR269	448500	4753500	0.157	0.225	0.465	0.465	0.456	0.35	0.287	0.255	0.117	0.0954	0.0954
AR270	449000	4753500	0.146	0.213	0.458	0.464	0.453	0.344	0.282	0.251	0.111	0.0885	0.0885
AR271	449500	4753500	0.135	0.201	0.458	0.468	0.456	0.34	0.279	0.248	0.105	0.0816	0.0815
AR272	450000	4753500	0.127	0.19	0.409	0.422	0.409	0.312	0.253	0.224	0.0992	0.0757	0.0757
AR273	450500	4753500	0.12	0.18	0.426	0.439	0.429	0.319	0.263	0.234	0.0962	0.0737	0.0737
AR274	451000	4753500	0.113	0.171	0.429	0.443	0.437	0.32	0.266	0.239	0.0938	0.0721	0.0721
AR275	451500	4753500	0.107	0.163	0.39	0.405	0.403	0.301	0.249	0.222	0.0917	0.07	0.0699
AR276	452000	4753500	0.102	0.156	0.389	0.407	0.407	0.3	0.248	0.223	0.09	0.0673	0.0672
AR277	452500	4753500	0.0976	0.149	0.358	0.378	0.38	0.283	0.233	0.208	0.0874	0.0645	0.0645
AR278	453000	4753500	0.0933	0.143	0.326	0.347	0.351	0.269	0.22	0.197	0.0864	0.0638	0.0638
AR279	453500	4753500	0.0893	0.137	0.299	0.32	0.325	0.256	0.209	0.187	0.0851	0.0632	0.0632
AR280	454000	4753500	0.0857	0.131	0.284	0.305	0.31	0.248	0.202	0.181	0.0833	0.0621	0.062
AR281	454500	4753500	0.0823	0.126	0.27	0.289	0.295	0.239	0.195	0.174	0.081	0.0605	0.0605
AR282	455000	4753500	0.0792	0.121	0.257	0.276	0.282	0.23	0.188	0.168	0.0786	0.059	0.0589
AR283	455500	4753500	0.0763	0.117	0.245	0.264	0.269	0.222	0.181	0.162	0.0763	0.0574	0.0573
AR284	456000	4753500	0.0736	0.113	0.234	0.252	0.26	0.217	0.178	0.159	0.0758	0.0575	0.0575
AR285	456500	4753500	0.0711	0.109	0.224	0.24	0.25	0.211	0.174	0.156	0.0743	0.0572	0.0571
AR286	457000	4753500	0.0688	0.106	0.214	0.231	0.242	0.206	0.17	0.152	0.0735	0.0564	0.0564
AR287	457500	4753500	0.0666	0.102	0.205	0.222	0.234	0.201	0.165	0.149	0.0723	0.0554	0.0553
AR288	437500	4753000	0.0843	0.128	0.199	0.199	0.196	0.175	0.139	0.118	0.065	0.0532	0.0532
AR289	438000	4753000	0.0951	0.144	0.225	0.223	0.218	0.192	0.152	0.129	0.0707	0.0583	0.0582
AR290	438500	4753000	0.109	0.164	0.26	0.255	0.248	0.215	0.17	0.144	0.0778	0.0646	0.0645
AR291	439000	4753000	0.129	0.191	0.308	0.298	0.289	0.244	0.193	0.164	0.0864	0.0723	0.0723
AR292	439500	4753000	0.156	0.226	0.375	0.357	0.344	0.283	0.222	0.189	0.0963	0.0813	0.0813
AR293	440000	4753000	0.19	0.277	0.479	0.449	0.428	0.34	0.265	0.224	0.106	0.0896	0.0895
AR294	440500	4753000	0.241	0.339	0.638	0.59	0.563	0.424	0.328	0.282	0.117	0.0995	0.0995
AR295	441000	4753000	0.323	0.438	0.943	0.86	0.825	0.577	0.448	0.394	0.132	0.113	0.113
AR296	441500	4753000	0.417	0.546	1.34	1.21	1.17	0.771	0.601	0.54	0.143	0.124	0.124
AR297	442000	4753000	0.488	0.619	1.53	1.38	1.34	0.875	0.677	0.615	0.159	0.139	0.139
AR298	442500	4753000	0.56	0.715	1.68	1.49	1.44	0.947	0.714	0.641	0.162	0.14	0.14
AR299	443000	4753000	0.523	0.673	1.42	1.24	1.19	0.812	0.578	0.507	0.128	0.105	0.105
AR300	443500	4753000	0.495	0.6	1.11	0.948	0.922	0.671	0.452	0.402	0.133	0.109	0.109
AR301	444000	4753000	0.544	0.697	1.1	0.953	0.902	0.709	0.503	0.431	0.213	0.189	0.189
AR302	444500	4753000	0.467	0.63	0.955	0.852	0.795	0.646	0.483	0.406	0.226	0.203	0.203
AR303	445000	4753000	0.4	0.539	0.811	0.739	0.694	0.572	0.433	0.367	0.212	0.187	0.187
AR304	445500	4753000	0.352	0.502	0.74	0.691	0.642	0.537	0.412	0.341	0.202	0.174	0.174
AR305	446000	4753000	0.303	0.441	0.658	0.627	0.585	0.491	0.38	0.315	0.185	0.157	0.157
AR306	446500	4753000	0.265	0.385	0.594	0.574	0.542	0.454	0.356	0.299	0.172	0.146	0.146
AR307	447000	4753000	0.235	0.342	0.559	0.547	0.523	0.43	0.342	0.292	0.161	0.135	0.135
AR308	447500	4753000	0.21	0.304	0.54	0.522	0.504	0.402	0.326	0.282	0.142	0.122	0.122
AR309	448000	4753000	0.189	0.281	0.552	0.546	0.528	0.408	0.333	0.29	0.134	0.111	0.111
AR310	448500	4753000	0.172	0.259	0.591	0.597	0.582	0.43	0.355	0.314	0.13	0.103	0.103
AR311	449000	4753000	0.158	0.24	0.645	0.657	0.643	0.452	0.38	0.342	0.123	0.0958	0.0958
AR312	449500	4753000	0.147	0.224	0.689	0.709	0.694	0.47	0.399	0.363	0.118	0.0893	0.0892
AR313	450000	4753000	0.138	0.21	0.658	0.678	0.662	0.447	0.379	0.345	0.111	0.0829	0.0829
AR314	450500	4753000	0.129	0.198	0.687	0.706	0.696	0.458	0.395	0.363	0.107	0.0809	0.0809
AR315	451000	4753000	0.122	0.186	0.629	0.65	0.645	0.432	0.371	0.341	0.106	0.079	0.079
AR316	451500	4753000	0.115	0.176	0.581	0.606	0.605	0.411	0.35	0.321	0.104	0.0764	0.0764
AR317	452000	4753000	0.109	0.167	0.493	0.52	0.521	0.366	0.308	0.28	0.1	0.073	0.073
AR318	452500	4753000	0.103	0.159	0.434	0.461	0.465	0.335	0.279	0.252	0.097	0.0703	0.0703
AR319	453000	4753000	0.0984	0.151	0.392	0.418	0.425	0.314	0.26	0.235	0.0948	0.0692	0.0691
AR320	453500	4753000	0.0939	0.145	0.355	0.38	0.387	0.295	0.244	0.22	0.0926	0.0681	0.0681
AR321	454000	4753000	0.0898	0.138	0.324	0.347	0.354	0.277	0.228	0.205	0.0898	0.0665	0.0665
AR322	454500	4753000	0.0861	0.133	0.297	0.321	0.328	0.262	0.215	0.193	0.0873	0.0647	0.0646
AR323	455000	4753000	0.0826	0.127	0.281	0.301	0.308	0.249	0.205	0.184	0.0837	0.0631	0.0631
AR324	455500	4753000	0.0794	0.122	0.264	0.285	0.295	0.243	0.2	0.179	0.0832	0.0627	0.0627
AR325	456000	4753000	0.0765	0.118	0.25	0.271	0.283	0.237	0.195	0.175	0.0826	0.0624	0.0624
AR326	456500	4753000	0.0737	0.114	0.237	0.259	0.272	0.23	0.189	0.171	0.0814	0.0615	0.0615
AR327	457000	4753000	0.0712	0.11	0.226	0.247	0.261	0.223	0.183	0.165	0.0797	0.0603	0.0602
AR328	457500	4753000	0.0688	0.106	0.216	0.237	0.251	0.216	0.177	0.16	0.0778	0.0588	0.0588
AR329	437500	4752500	0.0808	0.123	0.189	0.19	0.188	0.17	0.136	0.116	0.0661	0.0545	0.0545
AR330	438000	4752500	0.0901	0.137	0.211	0.211	0.207	0.185	0.148	0.126	0.0711	0.0588	0.0588

Receptor	X	Y	t1	t2	t3	t4	t5	t6	t7	t8	t9	t10	t11
AR331	438500	4752500	0.102	0.155	0.241	0.239	0.233	0.205	0.164	0.139	0.077	0.0639	0.0638
AR332	439000	4752500	0.119	0.18	0.283	0.277	0.268	0.232	0.184	0.156	0.0848	0.0708	0.0708
AR333	439500	4752500	0.145	0.216	0.345	0.332	0.318	0.269	0.213	0.179	0.0958	0.0809	0.0808
AR334	440000	4752500	0.177	0.263	0.433	0.41	0.39	0.32	0.25	0.21	0.105	0.0892	0.0891
AR335	440500	4752500	0.228	0.335	0.582	0.54	0.509	0.398	0.308	0.258	0.116	0.0992	0.0991
AR336	441000	4752500	0.316	0.454	0.888	0.808	0.763	0.553	0.425	0.36	0.13	0.112	0.112
AR337	441500	4752500	0.512	0.692	1.9	1.73	1.66	1.05	0.834	0.749	0.155	0.135	0.135
AR338	442000	4752500	1.09	1.32	33.7	33.2	33.1	16	15.5	15.4	0.178	0.156	0.156
AR339	442500	4752500	2.65	2.89	9.54	8.26	8.16	4.66	3.45	3.34	0.177	0.153	0.153
AR340	443000	4752500	3.03	3.33	5.03	3.62	3.5	2.62	1.3	1.15	0.327	0.302	0.302
AR341	443500	4752500	1.76	1.97	2.81	2.12	2.04	1.62	0.926	0.827	0.403	0.376	0.376
AR342	444000	4752500	1.11	1.43	1.96	1.61	1.47	1.21	0.808	0.659	0.376	0.348	0.348
AR343	444500	4752500	0.758	1.03	1.42	1.22	1.11	0.928	0.659	0.533	0.318	0.288	0.288
AR344	445000	4752500	0.56	0.83	1.14	1.02	0.91	0.77	0.571	0.445	0.268	0.238	0.238
AR345	445500	4752500	0.435	0.654	0.914	0.844	0.762	0.648	0.488	0.385	0.232	0.199	0.199
AR346	446000	4752500	0.358	0.535	0.766	0.732	0.672	0.574	0.436	0.353	0.214	0.178	0.178
AR347	446500	4752500	0.304	0.464	0.68	0.664	0.615	0.524	0.405	0.33	0.197	0.162	0.162
AR348	447000	4752500	0.264	0.405	0.626	0.622	0.585	0.492	0.387	0.321	0.185	0.151	0.151
AR349	447500	4752500	0.233	0.356	0.592	0.581	0.553	0.453	0.363	0.305	0.161	0.135	0.135
AR350	448000	4752500	0.209	0.321	0.593	0.599	0.576	0.457	0.368	0.316	0.155	0.124	0.124
AR351	448500	4752500	0.19	0.293	0.648	0.667	0.649	0.486	0.399	0.35	0.151	0.116	0.116
AR352	449000	4752500	0.175	0.269	0.838	0.868	0.852	0.577	0.49	0.446	0.146	0.109	0.109
AR353	449500	4752500	0.161	0.248	1.56	1.59	1.58	0.907	0.825	0.784	0.138	0.101	0.101
AR354	450000	4752500	0.15	0.231	2.84	2.87	2.85	1.5	1.42	1.38	0.127	0.0933	0.0933
AR355	450500	4752500	0.14	0.215	2.57	2.6	2.6	1.37	1.3	1.26	0.125	0.0909	0.0908
AR356	451000	4752500	0.131	0.202	1.4	1.44	1.43	0.823	0.751	0.717	0.123	0.0886	0.0886
AR357	451500	4752500	0.123	0.19	0.926	0.963	0.964	0.597	0.528	0.497	0.119	0.0853	0.0853
AR358	452000	4752500	0.116	0.179	0.685	0.72	0.724	0.477	0.412	0.382	0.114	0.0818	0.0817
AR359	452500	4752500	0.11	0.17	0.548	0.581	0.589	0.406	0.345	0.317	0.109	0.0784	0.0784
AR360	453000	4752500	0.105	0.161	0.461	0.492	0.502	0.362	0.304	0.277	0.105	0.0766	0.0766
AR361	453500	4752500	0.0998	0.153	0.401	0.431	0.441	0.332	0.276	0.251	0.102	0.075	0.0749
AR362	454000	4752500	0.0952	0.146	0.357	0.384	0.393	0.305	0.253	0.229	0.0982	0.0728	0.0728
AR363	454500	4752500	0.091	0.14	0.323	0.351	0.361	0.288	0.238	0.215	0.0963	0.0713	0.0712
AR364	455000	4752500	0.0872	0.134	0.302	0.33	0.343	0.279	0.23	0.208	0.0953	0.0708	0.0708
AR365	455500	4752500	0.0837	0.128	0.283	0.31	0.325	0.269	0.222	0.201	0.0937	0.0699	0.0699
AR366	456000	4752500	0.0804	0.123	0.266	0.293	0.309	0.26	0.214	0.194	0.092	0.0689	0.0688
AR367	456500	4752500	0.0774	0.119	0.252	0.277	0.294	0.251	0.206	0.187	0.0897	0.0673	0.0673
AR368	457000	4752500	0.0747	0.115	0.239	0.264	0.28	0.241	0.198	0.18	0.0871	0.0655	0.0654
AR369	457500	4752500	0.0721	0.111	0.227	0.252	0.268	0.232	0.191	0.172	0.0844	0.0634	0.0634
AR370	437500	4752000	0.0789	0.118	0.178	0.181	0.18	0.165	0.133	0.114	0.0666	0.0553	0.0553
AR371	438000	4752000	0.0876	0.131	0.199	0.2	0.198	0.179	0.144	0.124	0.0718	0.0598	0.0597
AR372	438500	4752000	0.0981	0.147	0.225	0.224	0.221	0.197	0.158	0.135	0.0778	0.065	0.065
AR373	439000	4752000	0.113	0.169	0.26	0.257	0.25	0.22	0.176	0.15	0.0852	0.0715	0.0714
AR374	439500	4752000	0.133	0.199	0.308	0.3	0.289	0.251	0.199	0.168	0.0937	0.079	0.0789
AR375	440000	4752000	0.158	0.239	0.374	0.358	0.341	0.29	0.228	0.19	0.102	0.0857	0.0857
AR376	440500	4752000	0.199	0.302	0.474	0.445	0.418	0.348	0.27	0.222	0.116	0.0983	0.0983
AR377	441000	4752000	0.265	0.402	0.649	0.596	0.552	0.443	0.34	0.275	0.132	0.114	0.114
AR378	441500	4752000	0.386	0.582	1.03	0.923	0.85	0.636	0.482	0.39	0.153	0.133	0.133
AR379	442000	4752000	0.648	0.958	2.36	2.13	2	1.28	1.01	0.863	0.176	0.153	0.153
AR380	442500	4752000	1.89	2.45	3.29	2.44	2.17	1.75	0.919	0.654	0.229	0.205	0.205
AR381	443000	4752000	2.77	3.6	4.25	3.04	2.63	2.31	1.15	0.761	0.425	0.397	0.397
AR382	443500	4752000	1.78	2.58	3.03	2.37	1.98	1.77	1.1	0.721	0.479	0.448	0.448
AR383	444000	4752000	1.12	2.1	2.47	2.13	1.65	1.48	1.08	0.616	0.408	0.374	0.374
AR384	444500	4752000	0.758	1.42	1.73	1.55	1.23	1.1	0.825	0.512	0.336	0.298	0.298
AR385	445000	4752000	0.572	1.05	1.3	1.21	0.994	0.885	0.676	0.453	0.298	0.257	0.257
AR386	445500	4752000	0.452	0.805	1.03	0.979	0.831	0.741	0.571	0.404	0.265	0.223	0.223
AR387	446000	4752000	0.371	0.641	0.842	0.83	0.725	0.646	0.498	0.371	0.241	0.196	0.196
AR388	446500	4752000	0.312	0.526	0.716	0.733	0.659	0.586	0.45	0.349	0.225	0.175	0.175
AR389	447000	4752000	0.273	0.448	0.642	0.668	0.618	0.541	0.421	0.339	0.211	0.164	0.164
AR390	447500	4752000	0.243	0.389	0.594	0.608	0.574	0.492	0.39	0.321	0.188	0.15	0.15
AR391	448000	4752000	0.218	0.347	0.577	0.612	0.588	0.493	0.39	0.329	0.183	0.139	0.139
AR392	448500	4752000	0.199	0.314	0.598	0.647	0.629	0.507	0.404	0.349	0.178	0.129	0.129
AR393	449000	4752000	0.182	0.286	0.699	0.76	0.746	0.556	0.454	0.404	0.173	0.121	0.121
AR394	449500	4752000	0.168	0.263	1.02	1.07	1.06	0.688	0.595	0.55	0.16	0.113	0.113
AR395	450000	4752000	0.156	0.244	4.28	4.34	4.32	2.21	2.12	2.08	0.152	0.104	0.103
AR396	450500	4752000	0.145	0.227	3.17	3.24	3.23	1.7	1.61	1.57	0.148	0.101	0.101

Receptor	X	Y	t1	t2	t3	t4	t5	t6	t7	t8	t9	t10	t11
AR397	451000	4752000	0.136	0.212	1.56	1.62	1.62	0.932	0.85	0.815	0.142	0.0986	0.0985
AR398	451500	4752000	0.128	0.199	0.965	1.01	1.02	0.641	0.566	0.532	0.135	0.0953	0.0952
AR399	452000	4752000	0.121	0.187	0.7	0.745	0.756	0.508	0.437	0.406	0.128	0.0913	0.0912
AR400	452500	4752000	0.114	0.177	0.556	0.596	0.609	0.427	0.363	0.333	0.12	0.0866	0.0866
AR401	453000	4752000	0.108	0.167	0.467	0.507	0.52	0.383	0.32	0.293	0.117	0.084	0.084
AR402	453500	4752000	0.103	0.159	0.405	0.445	0.457	0.352	0.291	0.265	0.113	0.0817	0.0817
AR403	454000	4752000	0.0982	0.152	0.36	0.399	0.413	0.329	0.271	0.246	0.111	0.0804	0.0803
AR404	454500	4752000	0.0938	0.145	0.326	0.363	0.381	0.312	0.257	0.233	0.109	0.0798	0.0797
AR405	455000	4752000	0.0898	0.138	0.305	0.34	0.36	0.3	0.246	0.223	0.106	0.0782	0.0782
AR406	455500	4752000	0.0861	0.133	0.285	0.319	0.339	0.288	0.237	0.215	0.104	0.0771	0.077
AR407	456000	4752000	0.0827	0.127	0.268	0.3	0.321	0.277	0.227	0.207	0.101	0.0752	0.0752
AR408	456500	4752000	0.0796	0.122	0.253	0.284	0.304	0.265	0.218	0.198	0.0976	0.0729	0.0729
AR409	457000	4752000	0.0767	0.118	0.24	0.27	0.289	0.254	0.208	0.189	0.0941	0.0704	0.0704
AR410	457500	4752000	0.0741	0.114	0.229	0.257	0.276	0.243	0.199	0.18	0.0905	0.0678	0.0678
AR411	437500	4751500	0.0703	0.107	0.162	0.165	0.165	0.153	0.123	0.106	0.0606	0.0497	0.0497
AR412	438000	4751500	0.0775	0.118	0.178	0.18	0.179	0.165	0.132	0.113	0.0651	0.0536	0.0535
AR413	438500	4751500	0.0858	0.131	0.197	0.199	0.197	0.179	0.144	0.122	0.0703	0.058	0.058
AR414	439000	4751500	0.0982	0.149	0.222	0.222	0.218	0.198	0.158	0.134	0.0773	0.064	0.064
AR415	439500	4751500	0.114	0.173	0.253	0.25	0.243	0.22	0.174	0.147	0.0861	0.0719	0.0719
AR416	440000	4751500	0.132	0.202	0.302	0.296	0.284	0.251	0.198	0.165	0.0939	0.0785	0.0785
AR417	440500	4751500	0.153	0.24	0.37	0.359	0.339	0.291	0.231	0.19	0.104	0.0868	0.0868
AR418	441000	4751500	0.184	0.298	0.458	0.438	0.407	0.344	0.272	0.218	0.116	0.0979	0.0979
AR419	441500	4751500	0.257	0.415	0.702	0.657	0.603	0.475	0.375	0.3	0.137	0.117	0.117
AR420	442000	4751500	0.36	0.607	1.07	0.989	0.89	0.667	0.525	0.408	0.159	0.137	0.137
AR421	442500	4751500	0.685	1.17	1.53	1.27	1.05	0.882	0.575	0.347	0.146	0.121	0.121
AR422	443000	4751500	0.89	2.52	2.77	2.5	1.68	1.57	1.25	0.483	0.33	0.302	0.302
AR423	443500	4751500	0.663	79.6	79.9	79.8	38	37.9	37.7	0.529	0.374	0.342	0.342
AR424	444000	4751500	0.549	4.67	4.9	4.8	2.66	2.56	2.35	0.415	0.27	0.232	0.232
AR425	444500	4751500	0.493	1.83	2.03	1.98	1.32	1.24	1.06	0.433	0.3	0.256	0.256
AR426	445000	4751500	0.416	1.11	1.3	1.29	0.965	0.896	0.731	0.403	0.278	0.225	0.225
AR427	445500	4751500	0.356	0.803	0.979	1.01	0.816	0.752	0.592	0.382	0.259	0.198	0.198
AR428	446000	4751500	0.308	0.627	0.794	0.846	0.724	0.665	0.514	0.364	0.245	0.18	0.18
AR429	446500	4751500	0.27	0.514	0.676	0.756	0.673	0.617	0.469	0.355	0.238	0.165	0.165
AR430	447000	4751500	0.241	0.436	0.601	0.695	0.639	0.581	0.44	0.348	0.229	0.155	0.155
AR431	447500	4751500	0.215	0.376	0.547	0.62	0.586	0.525	0.402	0.327	0.204	0.141	0.141
AR432	448000	4751500	0.195	0.335	0.515	0.618	0.597	0.532	0.401	0.335	0.206	0.133	0.133
AR433	448500	4751500	0.179	0.304	0.503	0.628	0.614	0.539	0.403	0.344	0.206	0.125	0.125
AR434	449000	4751500	0.165	0.278	0.54	0.648	0.639	0.532	0.411	0.358	0.19	0.118	0.118
AR435	449500	4751500	0.153	0.256	0.638	0.755	0.748	0.578	0.456	0.408	0.186	0.111	0.111
AR436	450000	4751500	0.143	0.237	1.07	1.18	1.17	0.758	0.645	0.601	0.171	0.101	0.101
AR437	450500	4751500	0.134	0.221	0.856	0.948	0.948	0.643	0.542	0.501	0.161	0.1	0.1
AR438	451000	4751500	0.126	0.206	0.661	0.74	0.75	0.54	0.448	0.41	0.153	0.0991	0.099
AR439	451500	4751500	0.119	0.194	0.59	0.657	0.67	0.49	0.409	0.373	0.143	0.0959	0.0959
AR440	452000	4751500	0.112	0.183	0.488	0.552	0.571	0.437	0.359	0.326	0.138	0.0931	0.0931
AR441	452500	4751500	0.107	0.173	0.449	0.509	0.529	0.405	0.331	0.3	0.13	0.0873	0.0873
AR442	453000	4751500	0.101	0.164	0.403	0.46	0.477	0.376	0.306	0.276	0.124	0.084	0.084
AR443	453500	4751500	0.0967	0.156	0.364	0.417	0.436	0.355	0.289	0.261	0.121	0.0839	0.0838
AR444	454000	4751500	0.0924	0.149	0.331	0.381	0.405	0.339	0.276	0.25	0.119	0.084	0.084
AR445	454500	4751500	0.0885	0.142	0.304	0.351	0.376	0.322	0.263	0.238	0.116	0.0828	0.0828
AR446	455000	4751500	0.0849	0.136	0.287	0.33	0.356	0.309	0.253	0.229	0.112	0.081	0.081
AR447	455500	4751500	0.0816	0.131	0.27	0.311	0.336	0.296	0.243	0.22	0.109	0.0792	0.0791
AR448	456000	4751500	0.0785	0.125	0.256	0.294	0.318	0.283	0.232	0.21	0.105	0.0767	0.0766
AR449	456500	4751500	0.0756	0.121	0.243	0.279	0.302	0.27	0.222	0.2	0.101	0.0738	0.0738
AR450	457000	4751500	0.0729	0.116	0.231	0.265	0.287	0.258	0.211	0.191	0.0964	0.0709	0.0708
AR451	457500	4751500	0.0705	0.112	0.22	0.253	0.275	0.248	0.203	0.184	0.0932	0.0688	0.0688
AR452	437500	4751000	0.06	0.0939	0.142	0.146	0.147	0.138	0.111	0.095	0.0537	0.0435	0.0434
AR453	438000	4751000	0.0657	0.103	0.153	0.157	0.157	0.148	0.119	0.101	0.0581	0.0472	0.0471
AR454	438500	4751000	0.0721	0.113	0.169	0.173	0.173	0.161	0.13	0.11	0.0635	0.0518	0.0518
AR455	439000	4751000	0.0805	0.127	0.189	0.193	0.191	0.177	0.143	0.121	0.0698	0.0573	0.0572
AR456	439500	4751000	0.0895	0.143	0.215	0.22	0.216	0.196	0.159	0.134	0.0773	0.0639	0.0639
AR457	440000	4751000	0.104	0.166	0.251	0.253	0.245	0.22	0.177	0.148	0.0841	0.0696	0.0695
AR458	440500	4751000	0.124	0.2	0.294	0.291	0.277	0.248	0.198	0.162	0.0925	0.0767	0.0767
AR459	441000	4751000	0.153	0.247	0.384	0.374	0.353	0.302	0.241	0.197	0.106	0.0884	0.0884
AR460	441500	4751000	0.184	0.303	0.487	0.47	0.437	0.362	0.29	0.233	0.119	0.0996	0.0995
AR461	442000	4751000	0.281	0.433	0.685	0.632	0.584	0.475	0.364	0.293	0.144	0.123	0.123
AR462	442500	4751000	0.392	0.647	0.875	0.771	0.671	0.576	0.412	0.292	0.153	0.129	0.129

Receptor	X	Y	t1	t2	t3	t4	t5	t6	t7	t8	t9	t10	t11
AR463	443000	4751000	0.398	0.898	1.08	0.981	0.754	0.683	0.512	0.276	0.156	0.129	0.129
AR464	443500	4751000	0.322	1.65	1.79	1.74	1.08	1.03	0.898	0.274	0.17	0.139	0.139
AR465	444000	4751000	0.324	0.932	1.08	1.08	0.805	0.753	0.638	0.352	0.242	0.205	0.205
AR466	444500	4751000	0.34	0.879	1.03	1.04	0.804	0.753	0.622	0.369	0.257	0.21	0.21
AR467	445000	4751000	0.303	0.681	0.824	0.872	0.721	0.676	0.537	0.359	0.249	0.189	0.189
AR468	445500	4751000	0.271	0.58	0.715	0.82	0.708	0.669	0.515	0.369	0.261	0.179	0.179
AR469	446000	4751000	0.235	0.482	0.606	0.769	0.694	0.661	0.491	0.375	0.27	0.166	0.166
AR470	446500	4751000	0.219	0.419	0.546	0.759	0.71	0.676	0.484	0.39	0.282	0.155	0.155
AR471	447000	4751000	0.201	0.367	0.495	0.766	0.737	0.703	0.486	0.408	0.299	0.147	0.147
AR472	447500	4751000	0.184	0.324	0.46	0.704	0.689	0.651	0.452	0.386	0.273	0.135	0.135
AR473	448000	4751000	0.169	0.293	0.441	0.726	0.726	0.681	0.465	0.407	0.285	0.129	0.129
AR474	448500	4751000	0.156	0.268	0.432	0.69	0.699	0.647	0.449	0.396	0.265	0.123	0.123
AR475	449000	4751000	0.145	0.247	0.432	0.692	0.704	0.641	0.445	0.398	0.257	0.116	0.116
AR476	449500	4751000	0.136	0.229	0.501	0.706	0.718	0.611	0.448	0.404	0.225	0.11	0.11
AR477	450000	4751000	0.128	0.214	0.597	0.754	0.756	0.59	0.456	0.416	0.191	0.1	0.1
AR478	450500	4751000	0.121	0.2	0.537	0.676	0.695	0.554	0.432	0.394	0.184	0.103	0.103
AR479	451000	4751000	0.114	0.188	0.448	0.567	0.594	0.493	0.384	0.349	0.173	0.102	0.102
AR480	451500	4751000	0.108	0.178	0.392	0.493	0.527	0.449	0.352	0.319	0.163	0.101	0.101
AR481	452000	4751000	0.103	0.168	0.387	0.474	0.509	0.426	0.339	0.308	0.151	0.0964	0.0963
AR482	452500	4751000	0.0983	0.16	0.357	0.436	0.468	0.39	0.308	0.28	0.139	0.0886	0.0886
AR483	453000	4751000	0.0939	0.152	0.328	0.399	0.433	0.37	0.294	0.267	0.134	0.0882	0.0882
AR484	453500	4751000	0.0898	0.145	0.302	0.367	0.404	0.355	0.285	0.259	0.132	0.0893	0.0892
AR485	454000	4751000	0.0861	0.139	0.287	0.346	0.384	0.342	0.276	0.251	0.128	0.0882	0.0882
AR486	454500	4751000	0.0827	0.133	0.272	0.326	0.363	0.326	0.264	0.24	0.122	0.0856	0.0856
AR487	455000	4751000	0.0795	0.128	0.259	0.31	0.345	0.314	0.256	0.233	0.118	0.084	0.084
AR488	455500	4751000	0.0766	0.123	0.247	0.294	0.327	0.3	0.245	0.223	0.113	0.0813	0.0813
AR489	456000	4751000	0.0738	0.118	0.236	0.279	0.31	0.286	0.233	0.213	0.108	0.0781	0.078
AR490	456500	4751000	0.0713	0.114	0.225	0.266	0.295	0.272	0.222	0.202	0.103	0.0746	0.0746
AR491	457000	4751000	0.0689	0.11	0.216	0.254	0.281	0.26	0.212	0.193	0.0989	0.0718	0.0717
AR492	457500	4751000	0.0667	0.106	0.207	0.243	0.27	0.254	0.209	0.19	0.0974	0.0717	0.0716
AR493	437500	4750500	0.0529	0.0841	0.126	0.132	0.134	0.128	0.104	0.089	0.0508	0.0412	0.0412
AR494	438000	4750500	0.0567	0.0905	0.137	0.143	0.145	0.137	0.112	0.0958	0.0548	0.0446	0.0446
AR495	438500	4750500	0.0631	0.1	0.151	0.157	0.158	0.148	0.121	0.104	0.0594	0.0486	0.0485
AR496	439000	4750500	0.0697	0.11	0.167	0.173	0.173	0.161	0.132	0.113	0.0647	0.0531	0.0531
AR497	439500	4750500	0.0807	0.125	0.188	0.192	0.192	0.178	0.144	0.123	0.0713	0.0588	0.0588
AR498	440000	4750500	0.0902	0.141	0.207	0.21	0.208	0.192	0.154	0.13	0.0755	0.0621	0.0621
AR499	440500	4750500	0.103	0.159	0.246	0.247	0.243	0.218	0.175	0.149	0.0828	0.0683	0.0683
AR500	441000	4750500	0.117	0.184	0.295	0.295	0.287	0.25	0.201	0.17	0.0909	0.075	0.075
AR501	441500	4750500	0.157	0.243	0.385	0.372	0.357	0.304	0.24	0.199	0.104	0.0869	0.0869
AR502	442000	4750500	0.202	0.316	0.485	0.458	0.43	0.364	0.282	0.228	0.119	0.0999	0.0999
AR503	442500	4750500	0.268	0.418	0.579	0.531	0.487	0.427	0.318	0.248	0.14	0.119	0.119
AR504	443000	4750500	0.283	0.565	0.695	0.652	0.54	0.498	0.385	0.252	0.157	0.132	0.132
AR505	443500	4750500	0.25	0.676	0.796	0.786	0.601	0.566	0.469	0.269	0.176	0.147	0.147
AR506	444000	4750500	0.241	0.542	0.643	0.656	0.541	0.518	0.424	0.282	0.195	0.16	0.16
AR507	444500	4750500	0.212	0.412	0.518	0.563	0.506	0.481	0.388	0.293	0.201	0.157	0.157
AR508	445000	4750500	0.213	0.429	0.54	0.61	0.551	0.525	0.412	0.311	0.212	0.154	0.154
AR509	445500	4750500	0.203	0.391	0.499	0.619	0.577	0.554	0.417	0.328	0.229	0.148	0.148
AR510	446000	4750500	0.191	0.352	0.458	0.673	0.651	0.63	0.448	0.372	0.27	0.147	0.147
AR511	446500	4750500	0.178	0.317	0.423	0.847	0.843	0.823	0.537	0.471	0.366	0.145	0.145
AR512	447000	4750500	0.17	0.297	0.406	1.3	1.3	1.28	0.755	0.695	0.584	0.145	0.145
AR513	447500	4750500	0.154	0.268	0.38	1.67	1.69	1.67	0.931	0.877	0.762	0.137	0.137
AR514	448000	4750500	0.146	0.25	0.369	1.57	1.6	1.57	0.884	0.834	0.715	0.131	0.131
AR515	448500	4750500	0.137	0.234	0.36	1.19	1.22	1.2	0.708	0.663	0.535	0.13	0.13
AR516	449000	4750500	0.129	0.219	0.38	0.915	0.957	0.911	0.579	0.536	0.392	0.124	0.124
AR517	449500	4750500	0.122	0.205	0.4	0.773	0.814	0.752	0.507	0.468	0.31	0.118	0.118
AR518	450000	4750500	0.115	0.193	0.434	0.704	0.726	0.641	0.453	0.417	0.247	0.105	0.105
AR519	450500	4750500	0.11	0.182	0.41	0.615	0.661	0.584	0.433	0.399	0.223	0.113	0.113
AR520	451000	4750500	0.105	0.173	0.358	0.518	0.572	0.516	0.39	0.358	0.201	0.111	0.111
AR521	451500	4750500	0.0999	0.164	0.323	0.452	0.514	0.471	0.363	0.333	0.186	0.112	0.112
AR522	452000	4750500	0.0956	0.156	0.296	0.402	0.456	0.421	0.327	0.298	0.166	0.104	0.104
AR523	452500	4750500	0.0916	0.149	0.297	0.392	0.449	0.402	0.315	0.288	0.156	0.099	0.099
AR524	453000	4750500	0.0879	0.143	0.284	0.368	0.427	0.388	0.308	0.283	0.151	0.0995	0.0994
AR525	453500	4750500	0.0845	0.137	0.268	0.343	0.399	0.37	0.297	0.272	0.145	0.0982	0.0981
AR526	454000	4750500	0.0813	0.131	0.252	0.32	0.371	0.35	0.282	0.259	0.138	0.095	0.095
AR527	454500	4750500	0.0783	0.126	0.237	0.299	0.347	0.333	0.269	0.246	0.132	0.0921	0.0921
AR528	455000	4750500	0.0755	0.121	0.231	0.288	0.332	0.321	0.261	0.239	0.126	0.0897	0.0896

Receptor	X	Y	t1	t2	t3	t4	t5	t6	t7	t8	t9	t10	t11
AR529	455500	4750500	0.073	0.117	0.224	0.276	0.315	0.304	0.247	0.226	0.119	0.0848	0.0848
AR530	456000	4750500	0.0705	0.113	0.216	0.264	0.304	0.292	0.238	0.218	0.114	0.0822	0.0821
AR531	456500	4750500	0.0683	0.109	0.209	0.253	0.292	0.28	0.23	0.21	0.11	0.0797	0.0797
AR532	457000	4750500	0.0661	0.105	0.201	0.243	0.28	0.274	0.225	0.207	0.108	0.0792	0.0792
AR533	457500	4750500	0.0641	0.102	0.194	0.233	0.269	0.266	0.22	0.202	0.105	0.0778	0.0778
AR534	437500	4750000	0.0492	0.0769	0.117	0.124	0.128	0.122	0.1	0.0869	0.0501	0.0407	0.0407
AR535	438000	4750000	0.0538	0.0833	0.126	0.133	0.137	0.131	0.107	0.0929	0.0538	0.0439	0.0439
AR536	438500	4750000	0.0593	0.0906	0.137	0.143	0.147	0.14	0.114	0.0991	0.0577	0.0472	0.0472
AR537	439000	4750000	0.0637	0.0968	0.146	0.153	0.156	0.148	0.12	0.105	0.0607	0.0495	0.0495
AR538	439500	4750000	0.0695	0.104	0.156	0.162	0.166	0.157	0.126	0.11	0.0641	0.0522	0.0521
AR539	440000	4750000	0.0779	0.118	0.181	0.187	0.189	0.176	0.142	0.123	0.0708	0.0579	0.0579
AR540	440500	4750000	0.0863	0.134	0.211	0.217	0.217	0.196	0.159	0.137	0.0763	0.0625	0.0625
AR541	441000	4750000	0.104	0.161	0.252	0.252	0.249	0.223	0.178	0.151	0.0823	0.0673	0.0673
AR542	441500	4750000	0.13	0.198	0.31	0.304	0.297	0.26	0.205	0.173	0.0928	0.0764	0.0764
AR543	442000	4750000	0.157	0.236	0.36	0.347	0.336	0.294	0.228	0.191	0.103	0.0855	0.0854
AR544	442500	4750000	0.196	0.322	0.444	0.422	0.389	0.349	0.269	0.21	0.121	0.101	0.101
AR545	443000	4750000	0.204	0.384	0.488	0.47	0.411	0.383	0.299	0.214	0.132	0.109	0.109
AR546	443500	4750000	0.184	0.41	0.506	0.507	0.427	0.405	0.327	0.221	0.14	0.114	0.114
AR547	444000	4750000	0.176	0.358	0.445	0.464	0.412	0.395	0.319	0.234	0.153	0.122	0.122
AR548	444500	4750000	0.155	0.303	0.379	0.419	0.39	0.382	0.303	0.234	0.155	0.117	0.117
AR549	445000	4750000	0.143	0.253	0.335	0.404	0.4	0.392	0.307	0.255	0.17	0.121	0.121
AR550	445500	4750000	0.147	0.267	0.354	0.457	0.455	0.445	0.339	0.282	0.19	0.124	0.124
AR551	446000	4750000	0.148	0.264	0.355	0.525	0.534	0.524	0.381	0.326	0.227	0.129	0.129
AR552	446500	4750000	0.145	0.25	0.342	0.673	0.697	0.688	0.462	0.413	0.306	0.134	0.134
AR553	447000	4750000	0.139	0.232	0.327	1.22	1.26	1.25	0.732	0.688	0.573	0.137	0.137
AR554	447500	4750000	0.133	0.215	0.311	7.48	7.54	7.54	3.69	3.66	3.53	0.142	0.142
AR555	448000	4750000	0.129	0.211	0.308	6.08	6.15	6.15	3.05	3.01	2.88	0.145	0.145
AR556	448500	4750000	0.119	0.198	0.309	1.94	2.02	2.01	1.1	1.06	0.925	0.142	0.142
AR557	449000	4750000	0.114	0.19	0.32	1.09	1.19	1.17	0.716	0.68	0.523	0.146	0.146
AR558	449500	4750000	0.11	0.181	0.335	0.803	0.894	0.859	0.572	0.538	0.372	0.139	0.139
AR559	450000	4750000	0.105	0.173	0.346	0.665	0.72	0.678	0.471	0.439	0.282	0.119	0.119
AR560	450500	4750000	0.1	0.165	0.334	0.567	0.662	0.626	0.464	0.434	0.258	0.135	0.135
AR561	451000	4750000	0.0955	0.157	0.296	0.475	0.584	0.563	0.432	0.403	0.234	0.138	0.138
AR562	451500	4750000	0.0918	0.151	0.281	0.423	0.52	0.503	0.392	0.364	0.208	0.129	0.129
AR563	452000	4750000	0.0884	0.144	0.259	0.375	0.475	0.463	0.367	0.341	0.192	0.126	0.126
AR564	452500	4750000	0.0852	0.139	0.242	0.345	0.443	0.426	0.339	0.313	0.178	0.118	0.118
AR565	453000	4750000	0.0822	0.133	0.244	0.334	0.421	0.407	0.326	0.302	0.167	0.113	0.113
AR566	453500	4750000	0.0793	0.128	0.237	0.318	0.393	0.386	0.312	0.289	0.158	0.109	0.109
AR567	454000	4750000	0.0766	0.124	0.228	0.301	0.365	0.362	0.293	0.271	0.147	0.103	0.103
AR568	454500	4750000	0.0741	0.119	0.22	0.287	0.347	0.35	0.285	0.264	0.142	0.101	0.101
AR569	455000	4750000	0.0717	0.115	0.212	0.273	0.331	0.335	0.275	0.254	0.136	0.0983	0.0982
AR570	455500	4750000	0.0694	0.111	0.205	0.261	0.317	0.319	0.261	0.242	0.129	0.0937	0.0937
AR571	456000	4750000	0.0673	0.108	0.195	0.247	0.3	0.303	0.249	0.23	0.123	0.0901	0.09
AR572	456500	4750000	0.0653	0.104	0.191	0.239	0.288	0.296	0.245	0.226	0.12	0.0889	0.0889
AR573	457000	4750000	0.0633	0.101	0.186	0.231	0.277	0.287	0.238	0.22	0.116	0.0866	0.0866
AR574	457500	4750000	0.0615	0.0979	0.18	0.223	0.267	0.276	0.229	0.212	0.112	0.0838	0.0838
AR575	437500	4749500	0.0467	0.0703	0.108	0.115	0.119	0.115	0.094	0.0828	0.0479	0.039	0.0389
AR576	438000	4749500	0.0495	0.0738	0.113	0.12	0.125	0.121	0.0981	0.0866	0.0499	0.0404	0.0404
AR577	438500	4749500	0.0523	0.0792	0.12	0.127	0.132	0.127	0.103	0.0903	0.0519	0.0419	0.0419
AR578	439000	4749500	0.0549	0.0837	0.126	0.133	0.138	0.133	0.108	0.094	0.054	0.0434	0.0433
AR579	439500	4749500	0.0597	0.0916	0.141	0.149	0.153	0.145	0.118	0.103	0.0589	0.0476	0.0476
AR580	440000	4749500	0.066	0.103	0.161	0.169	0.172	0.16	0.131	0.113	0.0639	0.0517	0.0517
AR581	440500	4749500	0.0772	0.119	0.186	0.192	0.194	0.178	0.144	0.124	0.0692	0.0561	0.0561
AR582	441000	4749500	0.0926	0.139	0.215	0.217	0.218	0.199	0.158	0.137	0.0759	0.0617	0.0617
AR583	441500	4749500	0.109	0.16	0.251	0.251	0.251	0.226	0.179	0.155	0.0854	0.07	0.07
AR584	442000	4749500	0.132	0.206	0.303	0.297	0.288	0.26	0.204	0.169	0.0952	0.0783	0.0783
AR585	442500	4749500	0.151	0.247	0.344	0.335	0.317	0.29	0.226	0.181	0.106	0.0869	0.0869
AR586	443000	4749500	0.158	0.287	0.373	0.369	0.336	0.316	0.249	0.189	0.116	0.0948	0.0948
AR587	443500	4749500	0.15	0.297	0.375	0.382	0.342	0.329	0.264	0.195	0.123	0.0995	0.0995
AR588	444000	4749500	0.133	0.263	0.338	0.361	0.335	0.325	0.262	0.201	0.127	0.0997	0.0997
AR589	444500	4749500	0.129	0.233	0.303	0.34	0.332	0.327	0.26	0.211	0.136	0.103	0.103
AR590	445000	4749500	0.118	0.208	0.273	0.329	0.335	0.335	0.264	0.222	0.145	0.105	0.105
AR591	445500	4749500	0.108	0.181	0.25	0.331	0.353	0.353	0.274	0.24	0.156	0.106	0.106
AR592	446000	4749500	0.108	0.186	0.262	0.366	0.395	0.395	0.301	0.264	0.171	0.109	0.109
AR593	446500	4749500	0.111	0.191	0.269	0.444	0.486	0.488	0.356	0.318	0.213	0.118	0.118
AR594	447000	4749500	0.111	0.187	0.267	0.575	0.639	0.642	0.439	0.403	0.286	0.128	0.128

Receptor	X	Y	t1	t2	t3	t4	t5	t6	t7	t8	t9	t10	t11
AR595	447500	4749500	0.108	0.18	0.261	1.24	1.33	1.34	0.781	0.747	0.614	0.14	0.14
AR596	448000	4749500	0.107	0.175	0.265	0.99	1.12	1.12	0.698	0.666	0.51	0.156	0.156
AR597	448500	4749500	0.105	0.169	0.269	0.782	0.94	0.942	0.633	0.603	0.425	0.172	0.172
AR598	449000	4749500	0.103	0.162	0.273	0.638	0.811	0.808	0.58	0.552	0.362	0.178	0.178
AR599	449500	4749500	0.0992	0.158	0.283	0.569	0.768	0.76	0.574	0.546	0.335	0.189	0.189
AR600	450000	4749500	0.0932	0.151	0.283	0.515	0.644	0.633	0.478	0.451	0.273	0.153	0.153
AR601	450500	4749500	0.0903	0.146	0.277	0.462	0.659	0.653	0.524	0.497	0.282	0.184	0.184
AR602	451000	4749500	0.0872	0.141	0.258	0.408	0.606	0.612	0.501	0.476	0.265	0.184	0.184
AR603	451500	4749500	0.0841	0.136	0.242	0.365	0.563	0.571	0.474	0.45	0.247	0.178	0.178
AR604	452000	4749500	0.0811	0.132	0.231	0.334	0.506	0.517	0.432	0.408	0.222	0.164	0.164
AR605	452500	4749500	0.0784	0.127	0.216	0.309	0.449	0.451	0.373	0.35	0.193	0.14	0.14
AR606	453000	4749500	0.0761	0.123	0.205	0.288	0.403	0.418	0.345	0.323	0.179	0.13	0.13
AR607	453500	4749500	0.0738	0.119	0.207	0.281	0.386	0.406	0.338	0.316	0.172	0.128	0.128
AR608	454000	4749500	0.0716	0.115	0.204	0.272	0.365	0.387	0.324	0.303	0.163	0.122	0.122
AR609	454500	4749500	0.0695	0.112	0.2	0.261	0.346	0.37	0.31	0.29	0.155	0.117	0.117
AR610	455000	4749500	0.0675	0.108	0.194	0.251	0.328	0.348	0.292	0.272	0.145	0.11	0.11
AR611	455500	4749500	0.0656	0.105	0.188	0.24	0.311	0.33	0.277	0.258	0.137	0.104	0.104
AR612	456000	4749500	0.0638	0.102	0.182	0.231	0.295	0.319	0.268	0.25	0.133	0.102	0.102
AR613	456500	4749500	0.0621	0.0989	0.177	0.222	0.281	0.306	0.258	0.241	0.127	0.0979	0.0978
AR614	457000	4749500	0.0604	0.0961	0.169	0.212	0.267	0.292	0.246	0.229	0.121	0.0937	0.0936
AR615	457500	4749500	0.0588	0.0934	0.166	0.205	0.256	0.279	0.235	0.219	0.116	0.0894	0.0894
AR616	437500	4749000	0.0417	0.0629	0.0972	0.104	0.109	0.106	0.086	0.0761	0.0433	0.0347	0.0347
AR617	438000	4749000	0.0434	0.066	0.101	0.108	0.114	0.11	0.0893	0.0787	0.0447	0.0356	0.0356
AR618	438500	4749000	0.0448	0.0696	0.106	0.114	0.119	0.115	0.0931	0.0814	0.046	0.0364	0.0364
AR619	439000	4749000	0.0477	0.0749	0.116	0.124	0.128	0.124	0.1	0.0875	0.0493	0.0392	0.0392
AR620	439500	4749000	0.0529	0.0826	0.129	0.137	0.142	0.135	0.11	0.0958	0.054	0.0433	0.0432
AR621	440000	4749000	0.0614	0.0933	0.146	0.153	0.158	0.149	0.121	0.106	0.0599	0.0484	0.0484
AR622	440500	4749000	0.0717	0.106	0.164	0.169	0.174	0.163	0.131	0.114	0.0648	0.0525	0.0525
AR623	441000	4749000	0.0836	0.121	0.187	0.191	0.195	0.181	0.144	0.127	0.0719	0.0587	0.0587
AR624	441500	4749000	0.0942	0.144	0.219	0.222	0.222	0.203	0.163	0.14	0.0791	0.065	0.065
AR625	442000	4749000	0.112	0.175	0.254	0.253	0.247	0.228	0.18	0.151	0.0866	0.0713	0.0713
AR626	442500	4749000	0.124	0.198	0.278	0.276	0.267	0.249	0.196	0.161	0.095	0.0783	0.0783
AR627	443000	4749000	0.129	0.225	0.3	0.3	0.282	0.269	0.214	0.169	0.102	0.0841	0.0841
AR628	443500	4749000	0.125	0.231	0.298	0.305	0.285	0.277	0.223	0.173	0.108	0.088	0.088
AR629	444000	4749000	0.111	0.209	0.275	0.293	0.281	0.276	0.225	0.179	0.111	0.089	0.089
AR630	444500	4749000	0.105	0.183	0.247	0.272	0.275	0.273	0.22	0.184	0.113	0.0888	0.0888
AR631	445000	4749000	0.101	0.173	0.234	0.271	0.283	0.285	0.229	0.195	0.122	0.0928	0.0928
AR632	445500	4749000	0.0942	0.157	0.215	0.27	0.294	0.3	0.239	0.21	0.133	0.0963	0.0963
AR633	446000	4749000	0.0889	0.142	0.203	0.284	0.323	0.331	0.259	0.234	0.148	0.1	0.1
AR634	446500	4749000	0.0886	0.145	0.21	0.312	0.365	0.374	0.289	0.262	0.165	0.107	0.107
AR635	447000	4749000	0.0874	0.146	0.214	0.423	0.495	0.507	0.364	0.336	0.224	0.115	0.115
AR636	447500	4749000	0.0862	0.145	0.22	0.578	0.684	0.699	0.475	0.448	0.311	0.131	0.131
AR637	448000	4749000	0.0863	0.144	0.225	0.523	0.684	0.698	0.507	0.48	0.31	0.159	0.159
AR638	448500	4749000	0.0872	0.143	0.23	0.434	0.698	0.714	0.573	0.547	0.318	0.211	0.211
AR639	449000	4749000	0.087	0.14	0.234	0.412	0.823	0.841	0.715	0.69	0.377	0.283	0.283
AR640	449500	4749000	0.0861	0.137	0.242	0.411	0.951	0.969	0.849	0.825	0.436	0.347	0.347
AR641	450000	4749000	0.0847	0.131	0.24	0.381	0.803	0.823	0.718	0.697	0.368	0.292	0.292
AR642	450500	4749000	0.084	0.131	0.239	0.352	0.969	0.99	0.901	0.879	0.447	0.384	0.384
AR643	451000	4749000	0.0783	0.124	0.222	0.329	0.849	0.884	0.801	0.779	0.399	0.34	0.34
AR644	451500	4749000	0.0762	0.122	0.209	0.305	0.668	0.712	0.635	0.613	0.319	0.265	0.265
AR645	452000	4749000	0.0742	0.119	0.203	0.287	0.57	0.612	0.541	0.52	0.272	0.224	0.223
AR646	452500	4749000	0.0721	0.116	0.195	0.273	0.498	0.525	0.457	0.436	0.231	0.186	0.186
AR647	453000	4749000	0.07	0.112	0.185	0.257	0.437	0.479	0.414	0.394	0.211	0.168	0.168
AR648	453500	4749000	0.068	0.109	0.178	0.244	0.39	0.445	0.384	0.365	0.195	0.156	0.156
AR649	454000	4749000	0.0664	0.106	0.18	0.241	0.361	0.418	0.361	0.342	0.182	0.145	0.145
AR650	454500	4749000	0.0648	0.104	0.179	0.235	0.339	0.388	0.334	0.315	0.167	0.132	0.132
AR651	455000	4749000	0.0632	0.101	0.176	0.228	0.321	0.366	0.315	0.297	0.157	0.124	0.124
AR652	455500	4749000	0.0616	0.0983	0.173	0.221	0.304	0.353	0.304	0.287	0.15	0.12	0.12
AR653	456000	4749000	0.0601	0.0958	0.169	0.214	0.288	0.334	0.287	0.271	0.142	0.113	0.113
AR654	456500	4749000	0.0587	0.0933	0.164	0.206	0.274	0.315	0.27	0.254	0.133	0.106	0.106
AR655	457000	4749000	0.0573	0.091	0.16	0.199	0.262	0.299	0.256	0.24	0.126	0.1	0.1
AR656	457500	4749000	0.0559	0.0887	0.155	0.193	0.25	0.284	0.242	0.227	0.119	0.0944	0.0944
AR657	437500	4748500	0.0365	0.0565	0.0876	0.0944	0.0996	0.0976	0.0789	0.0695	0.0388	0.0306	0.0306
AR658	438000	4748500	0.0373	0.0589	0.0911	0.0983	0.103	0.101	0.0818	0.0717	0.0398	0.0312	0.0312
AR659	438500	4748500	0.0406	0.0638	0.0987	0.106	0.111	0.109	0.0884	0.0774	0.0435	0.0345	0.0345
AR660	439000	4748500	0.0453	0.0702	0.109	0.117	0.122	0.118	0.0963	0.0845	0.0478	0.0383	0.0383

Receptor	X	Y	t1	t2	t3	t4	t5	t6	t7	t8	t9	t10	t11
AR661	439500	4748500	0.0514	0.0779	0.121	0.129	0.134	0.128	0.105	0.0921	0.0524	0.0424	0.0424
AR662	440000	4748500	0.0583	0.0858	0.133	0.139	0.145	0.138	0.111	0.0984	0.056	0.0454	0.0454
AR663	440500	4748500	0.0638	0.0928	0.143	0.148	0.154	0.146	0.117	0.103	0.0587	0.0475	0.0475
AR664	441000	4748500	0.0732	0.11	0.168	0.173	0.176	0.165	0.133	0.116	0.0655	0.0537	0.0536
AR665	441500	4748500	0.0845	0.129	0.194	0.197	0.197	0.184	0.148	0.127	0.0723	0.0597	0.0597
AR666	442000	4748500	0.0969	0.15	0.217	0.217	0.215	0.201	0.161	0.136	0.0787	0.0653	0.0653
AR667	442500	4748500	0.105	0.169	0.237	0.236	0.23	0.218	0.174	0.144	0.0852	0.071	0.071
AR668	443000	4748500	0.109	0.185	0.25	0.251	0.241	0.231	0.186	0.151	0.0908	0.0758	0.0758
AR669	443500	4748500	0.106	0.188	0.248	0.251	0.24	0.235	0.192	0.153	0.0939	0.0786	0.0786
AR670	444000	4748500	0.098	0.175	0.232	0.244	0.239	0.237	0.194	0.158	0.0974	0.0798	0.0798
AR671	444500	4748500	0.0902	0.155	0.213	0.235	0.24	0.24	0.196	0.165	0.101	0.0801	0.0801
AR672	445000	4748500	0.0851	0.143	0.199	0.231	0.244	0.247	0.2	0.173	0.105	0.0801	0.0801
AR673	445500	4748500	0.0816	0.135	0.189	0.232	0.253	0.261	0.209	0.184	0.113	0.0833	0.0833
AR674	446000	4748500	0.0758	0.123	0.174	0.227	0.261	0.273	0.218	0.196	0.12	0.0867	0.0867
AR675	446500	4748500	0.0747	0.116	0.17	0.261	0.31	0.324	0.251	0.232	0.147	0.0954	0.0953
AR676	447000	4748500	0.0748	0.119	0.179	0.31	0.376	0.391	0.296	0.276	0.175	0.105	0.105
AR677	447500	4748500	0.0742	0.122	0.188	0.379	0.47	0.488	0.36	0.337	0.216	0.117	0.117
AR678	448000	4748500	0.0724	0.121	0.192	0.369	0.508	0.53	0.408	0.385	0.233	0.14	0.14
AR679	448500	4748500	0.0699	0.118	0.194	0.324	0.56	0.586	0.489	0.466	0.257	0.186	0.186
AR680	449000	4748500	0.0714	0.118	0.201	0.299	0.803	0.836	0.756	0.734	0.374	0.319	0.319
AR681	449500	4748500	0.0723	0.117	0.208	0.298	2.11	2.15	2.07	2.05	0.992	0.94	0.94
AR682	450000	4748500	0.0726	0.116	0.209	0.304	13.7	13.7	13.7	13.6	6.44	6.39	6.39
AR683	450500	4748500	0.0723	0.114	0.206	0.293	4.21	4.27	4.2	4.18	1.99	1.94	1.94
AR684	451000	4748500	0.0717	0.112	0.198	0.275	1.6	1.67	1.6	1.58	0.77	0.725	0.725
AR685	451500	4748500	0.0711	0.109	0.186	0.256	0.939	1.03	0.968	0.95	0.472	0.431	0.431
AR686	452000	4748500	0.0689	0.107	0.18	0.242	0.673	0.764	0.707	0.689	0.347	0.31	0.31
AR687	452500	4748500	0.0656	0.103	0.172	0.234	0.535	0.604	0.548	0.53	0.272	0.236	0.236
AR688	453000	4748500	0.0643	0.102	0.168	0.227	0.451	0.541	0.487	0.469	0.243	0.208	0.207
AR689	453500	4748500	0.0628	0.0996	0.162	0.218	0.393	0.498	0.446	0.429	0.223	0.189	0.189
AR690	454000	4748500	0.0613	0.0975	0.157	0.209	0.35	0.452	0.401	0.384	0.201	0.169	0.169
AR691	454500	4748500	0.0598	0.0952	0.158	0.208	0.327	0.421	0.373	0.356	0.186	0.155	0.155
AR692	455000	4748500	0.0586	0.0933	0.158	0.205	0.309	0.403	0.356	0.34	0.176	0.147	0.147
AR693	455500	4748500	0.0574	0.0913	0.157	0.2	0.293	0.375	0.33	0.314	0.163	0.135	0.135
AR694	456000	4748500	0.0563	0.0894	0.155	0.196	0.279	0.347	0.304	0.289	0.15	0.124	0.124
AR695	456500	4748500	0.0551	0.0875	0.152	0.191	0.266	0.326	0.284	0.269	0.14	0.115	0.115
AR696	457000	4748500	0.054	0.0856	0.149	0.185	0.254	0.305	0.265	0.25	0.13	0.106	0.106
AR697	457500	4748500	0.0529	0.0837	0.145	0.18	0.243	0.293	0.254	0.239	0.125	0.102	0.102
AR698	437500	4748000	0.033	0.0521	0.0806	0.0873	0.0926	0.0913	0.074	0.065	0.0361	0.0284	0.0284
AR699	438000	4748000	0.0355	0.0558	0.0862	0.0934	0.0987	0.097	0.0791	0.0696	0.0392	0.0312	0.0311
AR700	438500	4748000	0.0394	0.0608	0.0945	0.102	0.107	0.104	0.0854	0.0754	0.0427	0.0343	0.0343
AR701	439000	4748000	0.0441	0.0665	0.103	0.11	0.116	0.112	0.092	0.0814	0.0465	0.0377	0.0377
AR702	439500	4748000	0.0493	0.0724	0.113	0.118	0.125	0.12	0.0975	0.0867	0.0493	0.0401	0.0401
AR703	440000	4748000	0.0533	0.0778	0.121	0.126	0.133	0.127	0.102	0.0909	0.051	0.0414	0.0414
AR704	440500	4748000	0.0588	0.0876	0.135	0.139	0.144	0.137	0.111	0.0972	0.0545	0.0445	0.0445
AR705	441000	4748000	0.0666	0.101	0.154	0.157	0.161	0.152	0.123	0.107	0.0599	0.0494	0.0494
AR706	441500	4748000	0.0769	0.117	0.174	0.176	0.178	0.168	0.136	0.117	0.0674	0.0566	0.0566
AR707	442000	4748000	0.0836	0.13	0.19	0.189	0.19	0.179	0.145	0.123	0.0703	0.0591	0.0591
AR708	442500	4748000	0.0902	0.144	0.205	0.205	0.203	0.193	0.157	0.131	0.0765	0.0644	0.0644
AR709	443000	4748000	0.0938	0.155	0.215	0.216	0.212	0.205	0.167	0.138	0.0824	0.0694	0.0694
AR710	443500	4748000	0.092	0.158	0.213	0.219	0.216	0.212	0.173	0.142	0.0861	0.0716	0.0715
AR711	444000	4748000	0.0855	0.148	0.201	0.213	0.214	0.214	0.175	0.146	0.0884	0.0721	0.0721
AR712	444500	4748000	0.0799	0.135	0.188	0.206	0.215	0.216	0.177	0.151	0.091	0.0725	0.0725
AR713	445000	4748000	0.0772	0.125	0.176	0.201	0.218	0.222	0.181	0.159	0.0959	0.0752	0.0751
AR714	445500	4748000	0.07	0.115	0.165	0.195	0.218	0.226	0.184	0.163	0.0961	0.0733	0.0733
AR715	446000	4748000	0.0669	0.109	0.157	0.205	0.237	0.25	0.2	0.18	0.108	0.0775	0.0775
AR716	446500	4748000	0.0644	0.102	0.151	0.223	0.267	0.283	0.223	0.205	0.126	0.0846	0.0846
AR717	447000	4748000	0.0645	0.0995	0.152	0.251	0.311	0.33	0.256	0.24	0.148	0.095	0.095
AR718	447500	4748000	0.0644	0.101	0.16	0.282	0.363	0.384	0.297	0.28	0.172	0.107	0.107
AR719	448000	4748000	0.0643	0.103	0.167	0.284	0.396	0.421	0.336	0.317	0.186	0.123	0.123
AR720	448500	4748000	0.063	0.103	0.17	0.259	0.424	0.456	0.385	0.366	0.2	0.15	0.15
AR721	449000	4748000	0.0614	0.102	0.175	0.251	0.5	0.542	0.477	0.458	0.238	0.194	0.194
AR722	449500	4748000	0.0608	0.101	0.179	0.237	0.843	0.901	0.845	0.826	0.405	0.369	0.369
AR723	450000	4748000	0.0605	0.0995	0.179	0.234	2.65	2.74	2.69	2.67	1.27	1.24	1.24
AR724	450500	4748000	0.0615	0.0995	0.179	0.239	1.37	1.48	1.43	1.41	0.681	0.645	0.645
AR725	451000	4748000	0.0619	0.0988	0.175	0.233	0.91	1.06	1	0.984	0.481	0.446	0.446
AR726	451500	4748000	0.062	0.0976	0.167	0.222	0.718	0.872	0.821	0.804	0.397	0.364	0.364

Receptor	X	Y	t1	t2	t3	t4	t5	t6	t7	t8	t9	t10	t11
AR727	452000	4748000	0.0617	0.097	0.162	0.214	0.566	0.769	0.719	0.703	0.35	0.318	0.318
AR728	452500	4748000	0.0613	0.0934	0.157	0.206	0.469	0.634	0.586	0.571	0.288	0.258	0.258
AR729	453000	4748000	0.0613	0.0935	0.156	0.198	0.401	0.599	0.554	0.539	0.272	0.244	0.244
AR730	453500	4748000	0.0577	0.09	0.147	0.191	0.353	0.562	0.519	0.504	0.255	0.228	0.228
AR731	454000	4748000	0.0564	0.0885	0.142	0.186	0.318	0.514	0.471	0.456	0.233	0.206	0.206
AR732	454500	4748000	0.0554	0.0872	0.139	0.181	0.294	0.474	0.432	0.417	0.214	0.188	0.188
AR733	455000	4748000	0.0543	0.0857	0.141	0.181	0.281	0.425	0.384	0.369	0.19	0.164	0.164
AR734	455500	4748000	0.0532	0.0841	0.141	0.179	0.268	0.38	0.34	0.326	0.168	0.143	0.143
AR735	456000	4748000	0.0523	0.0827	0.14	0.177	0.257	0.359	0.32	0.305	0.157	0.134	0.134
AR736	456500	4748000	0.0514	0.0813	0.139	0.174	0.247	0.335	0.297	0.283	0.146	0.123	0.123
AR737	457000	4748000	0.0506	0.0799	0.137	0.171	0.237	0.313	0.276	0.263	0.136	0.114	0.114
AR738	457500	4748000	0.0497	0.0785	0.135	0.167	0.228	0.298	0.262	0.249	0.129	0.107	0.107
AR739	437500	4747500	0.0316	0.0495	0.0763	0.0828	0.0883	0.0871	0.0713	0.0629	0.0355	0.0283	0.0283
AR740	438000	4747500	0.0349	0.0536	0.0829	0.0893	0.095	0.0931	0.0764	0.0676	0.0384	0.0309	0.0309
AR741	438500	4747500	0.0384	0.0578	0.0903	0.0966	0.103	0.0996	0.082	0.0728	0.0414	0.0338	0.0337
AR742	439000	4747500	0.0426	0.0624	0.0977	0.103	0.11	0.106	0.0865	0.0772	0.0437	0.0357	0.0357
AR743	439500	4747500	0.0457	0.0667	0.104	0.109	0.116	0.111	0.0902	0.0803	0.0449	0.0367	0.0367
AR744	440000	4747500	0.0484	0.0725	0.114	0.117	0.123	0.118	0.0952	0.0839	0.046	0.0375	0.0375
AR745	440500	4747500	0.0537	0.0818	0.126	0.129	0.134	0.127	0.104	0.0905	0.05	0.0414	0.0414
AR746	441000	4747500	0.0614	0.0935	0.143	0.144	0.148	0.14	0.115	0.0999	0.0562	0.0474	0.0474
AR747	441500	4747500	0.0705	0.106	0.159	0.159	0.163	0.154	0.125	0.109	0.0621	0.0524	0.0524
AR748	442000	4747500	0.0741	0.113	0.168	0.168	0.171	0.162	0.131	0.112	0.0637	0.0534	0.0534
AR749	442500	4747500	0.0793	0.126	0.181	0.182	0.182	0.174	0.141	0.12	0.0691	0.0579	0.0578
AR750	443000	4747500	0.0829	0.134	0.188	0.191	0.191	0.185	0.151	0.127	0.0751	0.0628	0.0628
AR751	443500	4747500	0.0818	0.136	0.188	0.194	0.195	0.191	0.156	0.131	0.0782	0.0647	0.0647
AR752	444000	4747500	0.0762	0.128	0.176	0.186	0.19	0.19	0.156	0.131	0.0786	0.0642	0.0642
AR753	444500	4747500	0.0699	0.118	0.164	0.179	0.189	0.192	0.158	0.135	0.0804	0.0648	0.0648
AR754	445000	4747500	0.0692	0.11	0.156	0.175	0.192	0.197	0.162	0.143	0.0854	0.0685	0.0685
AR755	445500	4747500	0.065	0.104	0.15	0.179	0.2	0.208	0.169	0.151	0.0894	0.0681	0.0681
AR756	446000	4747500	0.0587	0.0964	0.143	0.185	0.212	0.223	0.178	0.16	0.0944	0.0671	0.0671
AR757	446500	4747500	0.0563	0.0915	0.139	0.193	0.228	0.242	0.192	0.176	0.104	0.0718	0.0718
AR758	447000	4747500	0.0561	0.0881	0.137	0.211	0.257	0.275	0.215	0.2	0.122	0.0799	0.0799
AR759	447500	4747500	0.0566	0.0866	0.138	0.225	0.281	0.302	0.237	0.223	0.135	0.0881	0.088
AR760	448000	4747500	0.0564	0.0871	0.143	0.228	0.299	0.325	0.261	0.246	0.145	0.0981	0.0981
AR761	448500	4747500	0.0564	0.0897	0.15	0.218	0.324	0.356	0.299	0.284	0.156	0.117	0.117
AR762	449000	4747500	0.0556	0.0901	0.156	0.213	0.364	0.407	0.355	0.339	0.177	0.143	0.143
AR763	449500	4747500	0.0546	0.0894	0.159	0.209	0.521	0.582	0.534	0.518	0.258	0.227	0.227
AR764	450000	4747500	0.0543	0.089	0.16	0.199	0.748	0.838	0.795	0.779	0.378	0.352	0.352
AR765	450500	4747500	0.0537	0.0879	0.159	0.195	0.57	0.708	0.667	0.651	0.317	0.292	0.292
AR766	451000	4747500	0.0528	0.0864	0.155	0.197	0.442	0.665	0.621	0.606	0.297	0.27	0.27
AR767	451500	4747500	0.0532	0.086	0.151	0.194	0.442	0.807	0.763	0.747	0.365	0.338	0.338
AR768	452000	4747500	0.0538	0.0857	0.145	0.188	0.386	0.844	0.801	0.786	0.385	0.358	0.358
AR769	452500	4747500	0.054	0.085	0.143	0.184	0.348	0.922	0.88	0.865	0.422	0.396	0.396
AR770	453000	4747500	0.054	0.0846	0.141	0.18	0.326	0.969	0.928	0.914	0.445	0.42	0.42
AR771	453500	4747500	0.0538	0.083	0.137	0.174	0.301	0.851	0.813	0.799	0.391	0.368	0.368
AR772	454000	4747500	0.054	0.0818	0.134	0.169	0.278	0.663	0.625	0.612	0.304	0.281	0.281
AR773	454500	4747500	0.0522	0.0802	0.129	0.161	0.258	0.553	0.518	0.504	0.253	0.231	0.231
AR774	455000	4747500	0.0501	0.0781	0.124	0.157	0.245	0.481	0.446	0.433	0.219	0.198	0.198
AR775	455500	4747500	0.0494	0.0772	0.126	0.158	0.238	0.424	0.389	0.376	0.191	0.17	0.17
AR776	456000	4747500	0.0486	0.0762	0.126	0.158	0.23	0.379	0.345	0.332	0.169	0.149	0.148
AR777	456500	4747500	0.0478	0.0751	0.126	0.157	0.223	0.344	0.31	0.297	0.152	0.132	0.132
AR778	457000	4747500	0.047	0.074	0.125	0.155	0.216	0.316	0.282	0.269	0.138	0.119	0.119
AR779	457500	4747500	0.0464	0.073	0.124	0.153	0.21	0.298	0.265	0.253	0.13	0.111	0.111
AR780	437500	4747000	0.0312	0.0477	0.0745	0.0801	0.0858	0.0846	0.0698	0.062	0.0349	0.0283	0.0283
AR781	438000	4747000	0.034	0.0511	0.0799	0.0854	0.0914	0.0895	0.0741	0.0661	0.0374	0.0307	0.0307
AR782	438500	4747000	0.0374	0.0547	0.0858	0.0904	0.0969	0.0944	0.0777	0.0695	0.0392	0.0323	0.0323
AR783	439000	4747000	0.0398	0.0582	0.0916	0.0953	0.102	0.0987	0.0808	0.0722	0.0401	0.0331	0.0331
AR784	439500	4747000	0.042	0.0625	0.098	0.101	0.107	0.103	0.0843	0.0746	0.0409	0.0337	0.0337
AR785	440000	4747000	0.0447	0.0684	0.106	0.109	0.114	0.11	0.0894	0.0783	0.0428	0.0351	0.0351
AR786	440500	4747000	0.0512	0.0779	0.12	0.122	0.127	0.121	0.0993	0.0867	0.0482	0.0403	0.0403
AR787	441000	4747000	0.0584	0.088	0.134	0.136	0.14	0.133	0.109	0.0951	0.054	0.0455	0.0455
AR788	441500	4747000	0.0638	0.0959	0.144	0.145	0.149	0.142	0.116	0.1	0.0572	0.048	0.048
AR789	442000	4747000	0.0663	0.103	0.152	0.154	0.157	0.149	0.121	0.104	0.0586	0.0487	0.0487
AR790	442500	4747000	0.0702	0.112	0.162	0.164	0.165	0.159	0.129	0.109	0.0628	0.0521	0.0521
AR791	443000	4747000	0.0744	0.119	0.168	0.172	0.173	0.168	0.137	0.116	0.0688	0.0574	0.0574
AR792	443500	4747000	0.0737	0.121	0.168	0.174	0.176	0.173	0.142	0.119	0.0711	0.059	0.059

Receptor	X	Y	t1	t2	t3	t4	t5	t6	t7	t8	t9	t10	t11
AR793	444000	4747000	0.0678	0.113	0.157	0.165	0.17	0.17	0.139	0.118	0.0696	0.057	0.0569
AR794	444500	4747000	0.0634	0.106	0.148	0.159	0.167	0.17	0.14	0.12	0.0709	0.0577	0.0577
AR795	445000	4747000	0.062	0.0999	0.143	0.161	0.174	0.178	0.147	0.129	0.0767	0.0608	0.0608
AR796	445500	4747000	0.0604	0.0946	0.138	0.165	0.182	0.188	0.153	0.136	0.0816	0.062	0.0619
AR797	446000	4747000	0.0554	0.0892	0.134	0.169	0.188	0.196	0.157	0.141	0.0834	0.06	0.06
AR798	446500	4747000	0.0499	0.0821	0.128	0.171	0.194	0.204	0.162	0.146	0.0854	0.0585	0.0585
AR799	447000	4747000	0.0496	0.0797	0.126	0.184	0.216	0.23	0.181	0.166	0.0989	0.0654	0.0654
AR800	447500	4747000	0.0496	0.0772	0.124	0.189	0.234	0.252	0.2	0.187	0.111	0.0747	0.0747
AR801	448000	4747000	0.0503	0.0765	0.126	0.191	0.25	0.272	0.221	0.209	0.121	0.085	0.085
AR802	448500	4747000	0.05	0.0766	0.13	0.187	0.258	0.285	0.239	0.226	0.126	0.0939	0.0939
AR803	449000	4747000	0.0502	0.0789	0.138	0.181	0.298	0.334	0.293	0.279	0.146	0.12	0.12
AR804	449500	4747000	0.0496	0.0796	0.142	0.182	0.359	0.41	0.37	0.355	0.18	0.154	0.154
AR805	450000	4747000	0.049	0.0794	0.143	0.178	0.431	0.505	0.468	0.453	0.224	0.201	0.201
AR806	450500	4747000	0.0489	0.0795	0.143	0.171	0.367	0.484	0.45	0.435	0.213	0.194	0.194
AR807	451000	4747000	0.0486	0.0789	0.141	0.168	0.32	0.518	0.484	0.47	0.229	0.21	0.21
AR808	451500	4747000	0.048	0.078	0.137	0.169	0.279	0.68	0.644	0.629	0.306	0.285	0.285
AR809	452000	4747000	0.0473	0.0767	0.132	0.166	0.291	1.51	1.47	1.46	0.698	0.676	0.675
AR810	452500	4747000	0.0468	0.0756	0.129	0.162	0.277	11.4	11.4	11.4	5.37	5.35	5.35
AR811	453000	4747000	0.0474	0.0755	0.128	0.161	0.261	5.84	5.8	5.79	2.73	2.71	2.71
AR812	453500	4747000	0.0477	0.0752	0.126	0.158	0.242	1.87	1.84	1.82	0.871	0.85	0.85
AR813	454000	4747000	0.0479	0.0747	0.123	0.154	0.233	1.01	0.974	0.962	0.465	0.445	0.445
AR814	454500	4747000	0.0478	0.0746	0.121	0.151	0.226	0.697	0.664	0.651	0.32	0.3	0.3
AR815	455000	4747000	0.0479	0.0725	0.117	0.146	0.218	0.54	0.508	0.496	0.247	0.228	0.228
AR816	455500	4747000	0.0476	0.0722	0.115	0.141	0.208	0.445	0.415	0.403	0.203	0.185	0.185
AR817	456000	4747000	0.0454	0.07	0.113	0.14	0.203	0.384	0.355	0.343	0.174	0.156	0.156
AR818	456500	4747000	0.0445	0.0691	0.114	0.14	0.199	0.342	0.313	0.301	0.154	0.136	0.136
AR819	457000	4747000	0.0439	0.0684	0.114	0.14	0.195	0.311	0.281	0.27	0.138	0.121	0.121
AR820	457500	4747000	0.0433	0.0676	0.114	0.139	0.19	0.292	0.263	0.252	0.129	0.112	0.112
AR821	437500	4746500	0.0304	0.0456	0.0716	0.0763	0.0822	0.0809	0.0672	0.0601	0.0339	0.028	0.0279
AR822	438000	4746500	0.0332	0.0486	0.0766	0.0805	0.0867	0.0849	0.0702	0.063	0.0353	0.0293	0.0293
AR823	438500	4746500	0.0352	0.0515	0.0814	0.0845	0.0909	0.0885	0.0729	0.0652	0.0361	0.03	0.0299
AR824	439000	4746500	0.0369	0.0549	0.0866	0.09	0.0961	0.0933	0.0762	0.0678	0.0372	0.0305	0.0304
AR825	439500	4746500	0.0386	0.0589	0.0925	0.0953	0.101	0.0976	0.0795	0.0699	0.0378	0.031	0.031
AR826	440000	4746500	0.0429	0.0658	0.102	0.105	0.11	0.106	0.0865	0.0757	0.0417	0.0345	0.0345
AR827	440500	4746500	0.0479	0.0731	0.113	0.116	0.12	0.115	0.095	0.0831	0.0467	0.039	0.039
AR828	441000	4746500	0.0552	0.0824	0.125	0.127	0.131	0.126	0.103	0.0901	0.0516	0.0433	0.0433
AR829	441500	4746500	0.0581	0.0869	0.131	0.133	0.137	0.131	0.107	0.0933	0.0528	0.0441	0.0441
AR830	442000	4746500	0.0598	0.0934	0.139	0.141	0.144	0.138	0.112	0.0958	0.0538	0.0445	0.0445
AR831	442500	4746500	0.0637	0.101	0.147	0.149	0.151	0.146	0.119	0.101	0.058	0.0482	0.0482
AR832	443000	4746500	0.0674	0.107	0.152	0.156	0.157	0.154	0.126	0.107	0.0631	0.0528	0.0527
AR833	443500	4746500	0.0669	0.109	0.153	0.157	0.159	0.157	0.129	0.109	0.0647	0.054	0.054
AR834	444000	4746500	0.062	0.102	0.144	0.15	0.154	0.155	0.127	0.108	0.0633	0.0521	0.0521
AR835	444500	4746500	0.0576	0.0958	0.136	0.147	0.153	0.156	0.128	0.11	0.0643	0.0515	0.0514
AR836	445000	4746500	0.0556	0.0905	0.131	0.149	0.157	0.162	0.133	0.116	0.0691	0.0541	0.054
AR837	445500	4746500	0.0559	0.0872	0.129	0.153	0.166	0.172	0.14	0.125	0.0749	0.0572	0.0572
AR838	446000	4746500	0.0522	0.0825	0.125	0.154	0.17	0.178	0.144	0.129	0.076	0.0561	0.0561
AR839	446500	4746500	0.0477	0.0772	0.121	0.158	0.179	0.19	0.152	0.138	0.0798	0.0563	0.0563
AR840	447000	4746500	0.0438	0.0719	0.116	0.162	0.19	0.204	0.162	0.149	0.0856	0.058	0.058
AR841	447500	4746500	0.0442	0.0705	0.114	0.165	0.201	0.218	0.175	0.163	0.0941	0.0647	0.0647
AR842	448000	4746500	0.0443	0.0686	0.113	0.165	0.206	0.228	0.185	0.174	0.1	0.0708	0.0708
AR843	448500	4746500	0.0451	0.0684	0.116	0.163	0.225	0.252	0.212	0.201	0.111	0.0845	0.0845
AR844	449000	4746500	0.0448	0.0682	0.12	0.158	0.248	0.282	0.247	0.236	0.125	0.102	0.102
AR845	449500	4746500	0.045	0.0703	0.126	0.159	0.285	0.331	0.297	0.285	0.145	0.124	0.124
AR846	450000	4746500	0.0447	0.0711	0.128	0.158	0.312	0.376	0.343	0.33	0.165	0.145	0.145
AR847	450500	4746500	0.0443	0.0713	0.129	0.155	0.288	0.381	0.35	0.337	0.167	0.148	0.148
AR848	451000	4746500	0.0444	0.0716	0.128	0.15	0.253	0.394	0.364	0.352	0.173	0.156	0.156
AR849	451500	4746500	0.0442	0.0714	0.126	0.147	0.231	0.451	0.422	0.409	0.2	0.184	0.184
AR850	452000	4746500	0.0439	0.0708	0.122	0.148	0.211	0.692	0.661	0.648	0.314	0.296	0.296
AR851	452500	4746500	0.0434	0.07	0.12	0.147	0.223	2	1.97	1.96	0.93	0.912	0.912
AR852	453000	4746500	0.0428	0.069	0.117	0.145	0.219	1.34	1.31	1.29	0.618	0.6	0.6
AR853	453500	4746500	0.0421	0.0678	0.115	0.143	0.211	1.01	0.978	0.966	0.464	0.445	0.445
AR854	454000	4746500	0.0423	0.0674	0.113	0.14	0.202	0.737	0.706	0.694	0.337	0.318	0.318
AR855	454500	4746500	0.0426	0.0673	0.111	0.138	0.197	0.573	0.543	0.531	0.261	0.243	0.243
AR856	455000	4746500	0.0429	0.0669	0.109	0.135	0.187	0.463	0.433	0.422	0.21	0.192	0.192
AR857	455500	4746500	0.0429	0.0669	0.107	0.132	0.184	0.395	0.366	0.355	0.178	0.162	0.162
AR858	456000	4746500	0.043	0.0658	0.105	0.129	0.18	0.347	0.319	0.308	0.157	0.14	0.14

Receptor	X	Y	t1	t2	t3	t4	t5	t6	t7	t8	t9	t10	t11
AR859	456500	4746500	0.0433	0.0651	0.106	0.128	0.178	0.312	0.285	0.274	0.14	0.125	0.125
AR860	457000	4746500	0.0418	0.0638	0.105	0.126	0.174	0.284	0.258	0.247	0.127	0.112	0.112
AR861	457500	4746500	0.0403	0.0624	0.103	0.125	0.17	0.268	0.242	0.232	0.119	0.104	0.104
AR862	437500	4746000	0.0298	0.0436	0.069	0.0729	0.0788	0.0776	0.0643	0.0578	0.0324	0.0268	0.0268
AR863	438000	4746000	0.0314	0.0461	0.0732	0.0767	0.0827	0.081	0.0667	0.0598	0.0331	0.0273	0.0273
AR864	438500	4746000	0.0329	0.0487	0.0774	0.0805	0.0863	0.0843	0.0691	0.0617	0.0337	0.0277	0.0277
AR865	439000	4746000	0.0343	0.0522	0.0823	0.0853	0.0906	0.0883	0.0721	0.0637	0.0345	0.0282	0.0282
AR866	439500	4746000	0.0366	0.0565	0.088	0.0911	0.0958	0.0934	0.0761	0.0668	0.0364	0.0297	0.0297
AR867	440000	4746000	0.0411	0.0629	0.0973	0.101	0.105	0.102	0.0834	0.0731	0.0407	0.0337	0.0337
AR868	440500	4746000	0.0463	0.0699	0.107	0.11	0.114	0.11	0.0905	0.0794	0.045	0.0376	0.0376
AR869	441000	4746000	0.051	0.0761	0.115	0.118	0.122	0.117	0.0958	0.084	0.0478	0.04	0.04
AR870	441500	4746000	0.0531	0.0805	0.122	0.124	0.127	0.122	0.0993	0.0864	0.0487	0.0405	0.0405
AR871	442000	4746000	0.0542	0.0853	0.128	0.13	0.132	0.127	0.103	0.0883	0.0492	0.0406	0.0406
AR872	442500	4746000	0.0582	0.0921	0.134	0.137	0.138	0.134	0.109	0.0932	0.0534	0.0445	0.0444
AR873	443000	4746000	0.0615	0.0972	0.139	0.142	0.142	0.14	0.115	0.098	0.0575	0.0483	0.0483
AR874	443500	4746000	0.0612	0.0989	0.139	0.143	0.144	0.143	0.117	0.0997	0.059	0.0493	0.0493
AR875	444000	4746000	0.0571	0.0932	0.132	0.139	0.141	0.143	0.116	0.0994	0.0582	0.0474	0.0474
AR876	444500	4746000	0.0525	0.0872	0.125	0.137	0.141	0.145	0.117	0.101	0.0589	0.0463	0.0463
AR877	445000	4746000	0.0513	0.0836	0.122	0.139	0.147	0.152	0.123	0.108	0.0639	0.0495	0.0495
AR878	445500	4746000	0.0506	0.0795	0.119	0.14	0.153	0.159	0.129	0.116	0.0685	0.0524	0.0524
AR879	446000	4746000	0.0492	0.0764	0.117	0.141	0.157	0.165	0.134	0.121	0.0707	0.0534	0.0534
AR880	446500	4746000	0.0455	0.0725	0.114	0.145	0.164	0.174	0.14	0.127	0.0734	0.0528	0.0527
AR881	447000	4746000	0.0415	0.0675	0.109	0.147	0.169	0.181	0.145	0.133	0.0757	0.0524	0.0524
AR882	447500	4746000	0.0396	0.0644	0.106	0.147	0.172	0.188	0.15	0.138	0.0785	0.0542	0.0541
AR883	448000	4746000	0.0398	0.0631	0.106	0.147	0.184	0.203	0.166	0.155	0.0869	0.0625	0.0625
AR884	448500	4746000	0.04	0.0616	0.106	0.145	0.199	0.221	0.186	0.176	0.0965	0.0736	0.0736
AR885	449000	4746000	0.0408	0.0618	0.108	0.141	0.21	0.238	0.207	0.197	0.105	0.0849	0.0848
AR886	449500	4746000	0.0405	0.0613	0.111	0.14	0.232	0.267	0.238	0.228	0.118	0.0995	0.0995
AR887	450000	4746000	0.0408	0.0632	0.114	0.142	0.248	0.29	0.261	0.25	0.127	0.109	0.109
AR888	450500	4746000	0.0406	0.0641	0.116	0.141	0.236	0.293	0.265	0.254	0.128	0.111	0.111
AR889	451000	4746000	0.0404	0.0645	0.116	0.138	0.212	0.298	0.271	0.26	0.129	0.114	0.114
AR890	451500	4746000	0.0406	0.065	0.115	0.133	0.199	0.331	0.305	0.294	0.145	0.131	0.131
AR891	452000	4746000	0.0406	0.0651	0.113	0.13	0.184	0.437	0.411	0.4	0.195	0.181	0.181
AR892	452500	4746000	0.0404	0.0648	0.11	0.131	0.172	0.69	0.663	0.651	0.314	0.299	0.299
AR893	453000	4746000	0.04	0.0642	0.109	0.131	0.181	0.581	0.553	0.542	0.263	0.248	0.248
AR894	453500	4746000	0.0396	0.0635	0.107	0.13	0.182	0.42	0.392	0.38	0.187	0.171	0.171
AR895	454000	4746000	0.0391	0.0626	0.106	0.129	0.18	0.433	0.404	0.393	0.194	0.178	0.178
AR896	454500	4746000	0.0385	0.0617	0.104	0.127	0.175	0.38	0.352	0.342	0.169	0.153	0.153
AR897	455000	4746000	0.038	0.0608	0.101	0.124	0.17	0.331	0.304	0.293	0.147	0.131	0.131
AR898	455500	4746000	0.0385	0.0607	0.0996	0.122	0.165	0.311	0.284	0.274	0.138	0.123	0.123
AR899	456000	4746000	0.0387	0.0606	0.0978	0.119	0.159	0.286	0.26	0.249	0.127	0.112	0.112
AR900	456500	4746000	0.0389	0.0605	0.0968	0.118	0.156	0.265	0.24	0.229	0.118	0.103	0.103
AR901	457000	4746000	0.0389	0.0602	0.0972	0.117	0.156	0.249	0.224	0.214	0.11	0.0962	0.0962
AR902	457500	4746000	0.0392	0.0591	0.0973	0.117	0.156	0.24	0.215	0.206	0.107	0.0924	0.0923
AR903	437500	4745500	0.0283	0.0417	0.0664	0.0698	0.0753	0.0741	0.0612	0.0549	0.0304	0.0251	0.025
AR904	438000	4745500	0.0296	0.0438	0.0699	0.0732	0.0786	0.0771	0.0633	0.0566	0.0309	0.0254	0.0254
AR905	438500	4745500	0.0308	0.0467	0.0741	0.0773	0.0822	0.0805	0.0658	0.0583	0.0316	0.0258	0.0258
AR906	439000	4745500	0.0328	0.0503	0.0788	0.082	0.0865	0.0846	0.069	0.0608	0.0331	0.027	0.0269
AR907	439500	4745500	0.0356	0.0547	0.0848	0.0881	0.0921	0.09	0.0736	0.0645	0.0356	0.0292	0.0292
AR908	440000	4745500	0.04	0.0607	0.0934	0.0966	0.1	0.0973	0.0798	0.0701	0.0394	0.0326	0.0326
AR909	440500	4745500	0.0446	0.0666	0.102	0.105	0.108	0.104	0.0858	0.0755	0.0431	0.0361	0.0361
AR910	441000	4745500	0.0472	0.0712	0.108	0.11	0.113	0.109	0.0892	0.078	0.0442	0.0369	0.0369
AR911	441500	4745500	0.0488	0.0747	0.113	0.115	0.117	0.113	0.0918	0.0796	0.0447	0.0371	0.0371
AR912	442000	4745500	0.05	0.0788	0.118	0.12	0.121	0.117	0.0949	0.0813	0.0453	0.0374	0.0374
AR913	442500	4745500	0.0536	0.0846	0.123	0.125	0.125	0.123	0.0999	0.0853	0.0489	0.0408	0.0408
AR914	443000	4745500	0.0565	0.0889	0.127	0.13	0.131	0.129	0.106	0.0908	0.0533	0.0448	0.0448
AR915	443500	4745500	0.0563	0.0905	0.129	0.133	0.133	0.133	0.109	0.0931	0.0549	0.0457	0.0456
AR916	444000	4745500	0.0529	0.0856	0.123	0.131	0.134	0.135	0.11	0.0943	0.0551	0.0444	0.0444
AR917	444500	4745500	0.0487	0.0804	0.117	0.129	0.134	0.137	0.111	0.0957	0.0553	0.0432	0.0432
AR918	445000	4745500	0.0474	0.0773	0.114	0.13	0.138	0.142	0.115	0.101	0.0589	0.0455	0.0454
AR919	445500	4745500	0.0471	0.0743	0.112	0.131	0.142	0.147	0.12	0.107	0.0626	0.048	0.048
AR920	446000	4745500	0.0463	0.0722	0.111	0.133	0.147	0.153	0.125	0.112	0.066	0.0499	0.0499
AR921	446500	4745500	0.0433	0.068	0.107	0.135	0.151	0.159	0.127	0.116	0.0673	0.0487	0.0487
AR922	447000	4745500	0.04	0.0641	0.103	0.136	0.152	0.162	0.129	0.118	0.0676	0.0472	0.0472
AR923	447500	4745500	0.0376	0.0609	0.0999	0.134	0.158	0.17	0.137	0.126	0.071	0.0498	0.0497
AR924	448000	4745500	0.036	0.0582	0.099	0.134	0.168	0.181	0.148	0.138	0.076	0.0548	0.0548

Receptor	X	Y	t1	t2	t3	t4	t5	t6	t7	t8	t9	t10	t11
AR925	448500	4745500	0.0362	0.057	0.0991	0.133	0.177	0.191	0.16	0.15	0.0816	0.0614	0.0613
AR926	449000	4745500	0.0364	0.0559	0.0992	0.129	0.184	0.201	0.172	0.163	0.087	0.0686	0.0686
AR927	449500	4745500	0.0373	0.0563	0.1	0.127	0.197	0.22	0.193	0.184	0.0965	0.08	0.08
AR928	450000	4745500	0.0369	0.0557	0.102	0.126	0.205	0.238	0.212	0.203	0.105	0.0888	0.0888
AR929	450500	4745500	0.0372	0.0574	0.104	0.127	0.2	0.245	0.219	0.21	0.107	0.0914	0.0914
AR930	451000	4745500	0.0371	0.0583	0.105	0.126	0.185	0.243	0.218	0.208	0.105	0.0905	0.0905
AR931	451500	4745500	0.037	0.0588	0.105	0.123	0.174	0.265	0.241	0.231	0.115	0.102	0.102
AR932	452000	4745500	0.0373	0.0594	0.104	0.119	0.165	0.319	0.296	0.285	0.14	0.128	0.128
AR933	452500	4745500	0.0374	0.0597	0.102	0.117	0.154	0.393	0.37	0.36	0.176	0.164	0.164
AR934	453000	4745500	0.0373	0.0596	0.101	0.118	0.148	0.364	0.34	0.33	0.162	0.149	0.149
AR935	453500	4745500	0.0371	0.0592	0.1	0.119	0.155	0.313	0.288	0.278	0.138	0.124	0.124
AR936	454000	4745500	0.0368	0.0587	0.099	0.119	0.158	0.266	0.241	0.231	0.116	0.102	0.102
AR937	454500	4745500	0.0364	0.0581	0.0976	0.117	0.157	0.278	0.253	0.243	0.122	0.108	0.108
AR938	455000	4745500	0.036	0.0574	0.0958	0.116	0.155	0.268	0.243	0.233	0.117	0.103	0.103
AR939	455500	4745500	0.0355	0.0566	0.0937	0.113	0.151	0.25	0.225	0.215	0.109	0.0951	0.095
AR940	456000	4745500	0.035	0.0557	0.0916	0.111	0.147	0.234	0.21	0.2	0.102	0.0883	0.0883
AR941	456500	4745500	0.0349	0.0553	0.0898	0.109	0.143	0.219	0.195	0.185	0.0953	0.0818	0.0817
AR942	457000	4745500	0.0352	0.0552	0.089	0.107	0.141	0.213	0.19	0.18	0.0935	0.0802	0.0802
AR943	457500	4745500	0.0354	0.0552	0.0894	0.107	0.137	0.205	0.182	0.173	0.09	0.077	0.077
AR944	437500	4745000	0.0268	0.0397	0.0636	0.067	0.0719	0.0708	0.0582	0.0521	0.0285	0.0233	0.0233
AR945	438000	4745000	0.0279	0.0422	0.0673	0.0705	0.0751	0.0737	0.0603	0.0536	0.0291	0.0237	0.0236
AR946	438500	4745000	0.0296	0.0453	0.0714	0.0747	0.0788	0.0773	0.0631	0.0557	0.0303	0.0247	0.0246
AR947	439000	4745000	0.0312	0.0483	0.076	0.0793	0.0829	0.081	0.0661	0.0581	0.0316	0.0257	0.0257
AR948	439500	4745000	0.0344	0.0527	0.0817	0.0851	0.0884	0.0863	0.0707	0.0621	0.0346	0.0284	0.0284
AR949	440000	4745000	0.038	0.0576	0.0887	0.0921	0.095	0.0923	0.076	0.0668	0.0378	0.0314	0.0314
AR950	440500	4745000	0.0421	0.0627	0.0957	0.0984	0.101	0.0978	0.0802	0.0705	0.0403	0.0336	0.0336
AR951	441000	4745000	0.0439	0.0656	0.1	0.102	0.104	0.101	0.0823	0.072	0.0407	0.0339	0.0338
AR952	441500	4745000	0.045	0.0695	0.105	0.107	0.108	0.105	0.0849	0.0734	0.041	0.034	0.034
AR953	442000	4745000	0.0465	0.0733	0.11	0.111	0.112	0.109	0.0887	0.0761	0.0424	0.0352	0.0352
AR954	442500	4745000	0.0497	0.0782	0.114	0.116	0.117	0.115	0.0935	0.0801	0.0459	0.0383	0.0383
AR955	443000	4745000	0.0522	0.0819	0.118	0.121	0.122	0.121	0.099	0.0851	0.0498	0.0417	0.0417
AR956	443500	4745000	0.0521	0.0834	0.119	0.125	0.126	0.126	0.103	0.0882	0.052	0.0428	0.0428
AR957	444000	4745000	0.0492	0.0791	0.115	0.123	0.127	0.127	0.103	0.0892	0.0519	0.0416	0.0416
AR958	444500	4745000	0.0457	0.0748	0.11	0.122	0.127	0.128	0.104	0.0902	0.0519	0.0404	0.0404
AR959	445000	4745000	0.0439	0.0716	0.106	0.121	0.128	0.131	0.106	0.093	0.0539	0.0414	0.0414
AR960	445500	4745000	0.0429	0.0686	0.104	0.122	0.131	0.135	0.11	0.0979	0.0572	0.0435	0.0435
AR961	446000	4745000	0.0429	0.066	0.102	0.123	0.135	0.14	0.113	0.102	0.0602	0.0452	0.0452
AR962	446500	4745000	0.0412	0.0638	0.101	0.126	0.138	0.144	0.115	0.105	0.0612	0.0443	0.0443
AR963	447000	4745000	0.0384	0.0608	0.0979	0.126	0.143	0.149	0.119	0.109	0.0625	0.0443	0.0442
AR964	447500	4745000	0.0357	0.0575	0.0951	0.125	0.148	0.155	0.125	0.114	0.0642	0.0454	0.0454
AR965	448000	4745000	0.0344	0.0554	0.0944	0.125	0.155	0.163	0.133	0.123	0.0678	0.049	0.049
AR966	448500	4745000	0.033	0.053	0.093	0.122	0.158	0.169	0.14	0.131	0.0704	0.0522	0.0522
AR967	449000	4745000	0.0331	0.052	0.0926	0.12	0.165	0.18	0.153	0.144	0.0766	0.0598	0.0598
AR968	449500	4745000	0.0334	0.0511	0.0923	0.116	0.172	0.191	0.167	0.159	0.083	0.068	0.068
AR969	450000	4745000	0.0342	0.0517	0.0929	0.115	0.176	0.202	0.179	0.171	0.0886	0.0745	0.0744
AR970	450500	4745000	0.0338	0.0509	0.0932	0.115	0.172	0.204	0.181	0.173	0.0891	0.0752	0.0752
AR971	451000	4745000	0.0341	0.0525	0.0951	0.115	0.164	0.209	0.187	0.178	0.0908	0.0775	0.0774
AR972	451500	4745000	0.0341	0.0533	0.0957	0.113	0.153	0.227	0.204	0.195	0.0983	0.0857	0.0857
AR973	452000	4745000	0.0341	0.054	0.0953	0.111	0.148	0.253	0.232	0.222	0.11	0.0988	0.0987
AR974	452500	4745000	0.0345	0.0547	0.0945	0.108	0.141	0.282	0.262	0.252	0.124	0.114	0.114
AR975	453000	4745000	0.0346	0.055	0.0932	0.106	0.134	0.269	0.249	0.239	0.118	0.108	0.108
AR976	453500	4745000	0.0346	0.055	0.0929	0.107	0.132	0.23	0.209	0.199	0.1	0.0887	0.0887
AR977	454000	4745000	0.0345	0.0549	0.0925	0.109	0.137	0.221	0.199	0.189	0.0956	0.0835	0.0835
AR978	454500	4745000	0.0343	0.0546	0.0917	0.108	0.14	0.202	0.179	0.17	0.0868	0.0744	0.0743
AR979	455000	4745000	0.034	0.0541	0.0905	0.108	0.14	0.209	0.186	0.177	0.0903	0.0777	0.0777
AR980	455500	4745000	0.0337	0.0535	0.089	0.106	0.138	0.208	0.186	0.176	0.0902	0.0775	0.0775
AR981	456000	4745000	0.0333	0.0529	0.0873	0.105	0.136	0.201	0.179	0.169	0.087	0.0744	0.0743
AR982	456500	4745000	0.0329	0.0522	0.0855	0.103	0.133	0.192	0.17	0.16	0.0828	0.0704	0.0703
AR983	457000	4745000	0.0324	0.0515	0.0836	0.1	0.13	0.185	0.163	0.154	0.0798	0.0675	0.0675
AR984	457500	4745000	0.032	0.0507	0.0823	0.0989	0.127	0.175	0.154	0.145	0.0755	0.0634	0.0634
AR985	437500	4744500	0.0255	0.0384	0.0615	0.0648	0.0689	0.0678	0.0555	0.0494	0.0268	0.0218	0.0218
AR986	438000	4744500	0.027	0.0411	0.0652	0.0684	0.0721	0.0709	0.0579	0.0512	0.0279	0.0226	0.0226
AR987	438500	4744500	0.0284	0.0437	0.0686	0.0718	0.0751	0.0738	0.0602	0.053	0.029	0.0235	0.0235
AR988	439000	4744500	0.0302	0.0466	0.0724	0.0756	0.0785	0.0771	0.0629	0.0552	0.0304	0.0248	0.0248
AR989	439500	4744500	0.0339	0.0514	0.0792	0.0822	0.0846	0.0826	0.0675	0.0593	0.0333	0.0274	0.0274
AR990	440000	4744500	0.037	0.0555	0.0851	0.0881	0.0901	0.0875	0.072	0.0633	0.0361	0.0301	0.0301

Receptor	X	Y	t1	t2	t3	t4	t5	t6	t7	t8	t9	t10	t11
AR991	440500	4744500	0.0395	0.0593	0.0904	0.0928	0.095	0.0921	0.0755	0.0662	0.0376	0.0314	0.0314
AR992	441000	4744500	0.0409	0.0618	0.0941	0.0959	0.0979	0.0949	0.0773	0.0675	0.0379	0.0316	0.0315
AR993	441500	4744500	0.0419	0.0651	0.0982	0.0995	0.101	0.098	0.0798	0.0689	0.0383	0.0319	0.0319
AR994	442000	4744500	0.0435	0.0685	0.102	0.104	0.105	0.102	0.0834	0.0717	0.04	0.0332	0.0332
AR995	442500	4744500	0.0462	0.0726	0.107	0.109	0.11	0.108	0.0882	0.0758	0.0433	0.0361	0.0361
AR996	443000	4744500	0.0486	0.0759	0.11	0.114	0.116	0.114	0.0934	0.0805	0.0472	0.0391	0.0391
AR997	443500	4744500	0.0485	0.0772	0.112	0.118	0.12	0.119	0.0968	0.0833	0.049	0.04	0.0399
AR998	444000	4744500	0.0459	0.0735	0.108	0.116	0.12	0.119	0.0968	0.0838	0.0487	0.0388	0.0387
AR999	444500	4744500	0.0429	0.0699	0.104	0.115	0.12	0.12	0.0969	0.0842	0.0483	0.0376	0.0375
AR1000	445000	4744500	0.0411	0.0669	0.1	0.113	0.12	0.121	0.0978	0.0856	0.0492	0.0377	0.0377
AR1001	445500	4744500	0.0402	0.0644	0.0981	0.113	0.121	0.123	0.0999	0.0885	0.0513	0.0391	0.0391
AR1002	446000	4744500	0.0403	0.0625	0.0966	0.116	0.125	0.127	0.103	0.0921	0.0542	0.0402	0.0402
AR1003	446500	4744500	0.0392	0.0604	0.095	0.118	0.13	0.133	0.107	0.0966	0.0569	0.0414	0.0414
AR1004	447000	4744500	0.0369	0.0576	0.0929	0.118	0.135	0.139	0.112	0.102	0.0588	0.0424	0.0423
AR1005	447500	4744500	0.0342	0.0547	0.0907	0.117	0.139	0.144	0.117	0.107	0.0599	0.043	0.0429
AR1006	448000	4744500	0.0329	0.0527	0.0899	0.117	0.142	0.149	0.122	0.113	0.0619	0.045	0.045
AR1007	448500	4744500	0.0317	0.0508	0.0889	0.115	0.144	0.154	0.127	0.118	0.0638	0.0474	0.0474
AR1008	449000	4744500	0.0305	0.0487	0.0872	0.112	0.15	0.162	0.137	0.129	0.0678	0.0523	0.0523
AR1009	449500	4744500	0.0305	0.0477	0.0863	0.108	0.153	0.168	0.145	0.137	0.0715	0.0575	0.0574
AR1010	450000	4744500	0.0308	0.047	0.0859	0.106	0.155	0.173	0.152	0.144	0.0747	0.0616	0.0616
AR1011	450500	4744500	0.0316	0.0477	0.0859	0.105	0.152	0.177	0.156	0.149	0.0772	0.0646	0.0646
AR1012	451000	4744500	0.0312	0.0468	0.0857	0.104	0.147	0.188	0.167	0.16	0.0822	0.0698	0.0698
AR1013	451500	4744500	0.0315	0.0483	0.0871	0.104	0.138	0.193	0.173	0.165	0.0841	0.0723	0.0723
AR1014	452000	4744500	0.0315	0.0491	0.0874	0.103	0.134	0.212	0.192	0.184	0.0922	0.081	0.081
AR1015	452500	4744500	0.0316	0.0498	0.087	0.101	0.13	0.224	0.205	0.196	0.0979	0.0875	0.0875
AR1016	453000	4744500	0.032	0.0505	0.0863	0.0979	0.124	0.217	0.198	0.19	0.0946	0.085	0.085
AR1017	453500	4744500	0.0322	0.0509	0.0859	0.0967	0.12	0.191	0.172	0.164	0.0823	0.0731	0.073
AR1018	454000	4744500	0.0322	0.0511	0.0862	0.0988	0.119	0.181	0.162	0.153	0.0776	0.0675	0.0674
AR1019	454500	4744500	0.0322	0.0511	0.0859	0.0998	0.123	0.174	0.154	0.145	0.0743	0.0635	0.0635
AR1020	455000	4744500	0.0321	0.0509	0.0852	0.0999	0.125	0.166	0.145	0.136	0.0703	0.0592	0.0592
AR1021	455500	4744500	0.0319	0.0505	0.0842	0.0994	0.126	0.17	0.149	0.141	0.0726	0.0612	0.0612
AR1022	456000	4744500	0.0316	0.0501	0.083	0.0984	0.125	0.172	0.151	0.142	0.0736	0.0622	0.0621
AR1023	456500	4744500	0.0313	0.0496	0.0816	0.097	0.123	0.17	0.149	0.141	0.0728	0.0614	0.0614
AR1024	457000	4744500	0.031	0.0491	0.0801	0.0954	0.121	0.166	0.146	0.137	0.0714	0.0601	0.0601
AR1025	457500	4744500	0.0306	0.0485	0.0785	0.0937	0.119	0.162	0.141	0.133	0.0695	0.0582	0.0582
AR1026	437500	4744000	0.0248	0.0376	0.0599	0.063	0.0663	0.0652	0.0533	0.0472	0.0258	0.0208	0.0208
AR1027	438000	4744000	0.0261	0.0399	0.063	0.0661	0.0689	0.0678	0.0552	0.0487	0.0266	0.0216	0.0216
AR1028	438500	4744000	0.0273	0.0421	0.0663	0.0695	0.0719	0.0704	0.0574	0.0504	0.0275	0.0223	0.0223
AR1029	439000	4744000	0.0294	0.0452	0.0702	0.0733	0.0755	0.074	0.0605	0.0531	0.0296	0.0242	0.0241
AR1030	439500	4744000	0.0321	0.0487	0.0754	0.0786	0.0812	0.0791	0.0652	0.0574	0.0324	0.0269	0.0268
AR1031	440000	4744000	0.0356	0.053	0.0812	0.0838	0.086	0.0836	0.0687	0.0605	0.0346	0.0289	0.0289
AR1032	440500	4744000	0.0371	0.0551	0.0846	0.0865	0.089	0.0863	0.0706	0.0621	0.0351	0.0293	0.0293
AR1033	441000	4744000	0.0382	0.0582	0.0886	0.09	0.092	0.0892	0.0728	0.0634	0.0354	0.0295	0.0295
AR1034	441500	4744000	0.0395	0.0614	0.0923	0.0939	0.0956	0.0929	0.0756	0.0653	0.0365	0.0303	0.0303
AR1035	442000	4744000	0.0408	0.0642	0.0965	0.0982	0.0999	0.0969	0.0789	0.0679	0.0379	0.0314	0.0314
AR1036	442500	4744000	0.0432	0.0678	0.0999	0.103	0.105	0.102	0.0833	0.0717	0.0411	0.0339	0.0339
AR1037	443000	4744000	0.0453	0.0706	0.103	0.108	0.11	0.108	0.0879	0.076	0.0445	0.0365	0.0365
AR1038	443500	4744000	0.0453	0.0719	0.105	0.111	0.113	0.111	0.0907	0.0782	0.0459	0.0372	0.0372
AR1039	444000	4744000	0.043	0.0686	0.102	0.11	0.113	0.112	0.0903	0.0783	0.0454	0.0359	0.0359
AR1040	444500	4744000	0.0405	0.0655	0.0983	0.108	0.113	0.111	0.0898	0.078	0.0448	0.0347	0.0346
AR1041	445000	4744000	0.0389	0.0631	0.0953	0.107	0.112	0.112	0.09	0.0787	0.0453	0.0345	0.0345
AR1042	445500	4744000	0.0376	0.0605	0.0925	0.107	0.113	0.114	0.0917	0.0809	0.0469	0.0353	0.0352
AR1043	446000	4744000	0.0369	0.0581	0.0903	0.109	0.118	0.119	0.0959	0.0859	0.0504	0.0373	0.0373
AR1044	446500	4744000	0.0371	0.0569	0.0896	0.11	0.124	0.126	0.102	0.0926	0.0543	0.0401	0.0401
AR1045	447000	4744000	0.0354	0.0546	0.0878	0.11	0.127	0.131	0.106	0.097	0.0557	0.0408	0.0408
AR1046	447500	4744000	0.0331	0.0522	0.0867	0.11	0.13	0.135	0.11	0.101	0.0565	0.0411	0.0411
AR1047	448000	4744000	0.0313	0.05	0.0856	0.109	0.132	0.139	0.113	0.105	0.0573	0.0419	0.0419
AR1048	448500	4744000	0.0304	0.0486	0.0848	0.108	0.135	0.143	0.119	0.11	0.0592	0.0442	0.0442
AR1049	449000	4744000	0.0294	0.0468	0.0835	0.106	0.138	0.147	0.124	0.116	0.0613	0.047	0.047
AR1050	449500	4744000	0.0283	0.045	0.0817	0.102	0.139	0.149	0.127	0.119	0.0619	0.0488	0.0488
AR1051	450000	4744000	0.0282	0.0441	0.0806	0.0982	0.139	0.153	0.133	0.126	0.0647	0.0529	0.0529
AR1052	450500	4744000	0.0285	0.0435	0.0797	0.097	0.136	0.16	0.141	0.134	0.069	0.0575	0.0574
AR1053	451000	4744000	0.0294	0.0442	0.0796	0.0966	0.132	0.167	0.147	0.14	0.0727	0.0613	0.0613
AR1054	451500	4744000	0.0289	0.0433	0.079	0.0955	0.127	0.169	0.15	0.143	0.0738	0.0628	0.0627
AR1055	452000	4744000	0.0292	0.0447	0.0801	0.0951	0.123	0.182	0.163	0.156	0.0792	0.0687	0.0687
AR1056	452500	4744000	0.0293	0.0455	0.0802	0.0937	0.12	0.188	0.17	0.162	0.0817	0.0717	0.0717

Receptor	X	Y	t1	t2	t3	t4	t5	t6	t7	t8	t9	t10	t11
AR1057	453000	4744000	0.0295	0.0462	0.0799	0.0917	0.116	0.183	0.166	0.158	0.0795	0.0701	0.0701
AR1058	453500	4744000	0.0298	0.0469	0.0803	0.0906	0.112	0.169	0.152	0.144	0.0725	0.0638	0.0638
AR1059	454000	4744000	0.0301	0.0474	0.0801	0.0896	0.109	0.154	0.137	0.129	0.0656	0.0572	0.0572
AR1060	454500	4744000	0.0302	0.0476	0.0803	0.0914	0.109	0.15	0.132	0.124	0.0635	0.0544	0.0543
AR1061	455000	4744000	0.0302	0.0477	0.0801	0.0923	0.111	0.145	0.127	0.119	0.0614	0.0517	0.0517
AR1062	455500	4744000	0.0301	0.0476	0.0795	0.0925	0.114	0.141	0.123	0.114	0.0596	0.0495	0.0495
AR1063	456000	4744000	0.0299	0.0474	0.0787	0.0921	0.114	0.144	0.125	0.117	0.0611	0.0508	0.0508
AR1064	456500	4744000	0.0297	0.0471	0.0777	0.0914	0.114	0.148	0.129	0.121	0.0631	0.0527	0.0527
AR1065	457000	4744000	0.0295	0.0467	0.0766	0.0903	0.113	0.148	0.129	0.121	0.0633	0.0529	0.0529
AR1066	457500	4744000	0.0292	0.0462	0.0753	0.0891	0.112	0.147	0.128	0.12	0.0626	0.0523	0.0522
AR1067	437500	4743500	0.024	0.0366	0.0581	0.0611	0.0635	0.0625	0.0509	0.045	0.0246	0.0199	0.0199
AR1068	438000	4743500	0.0251	0.0386	0.0607	0.0637	0.0663	0.0651	0.0531	0.0468	0.0256	0.0208	0.0207
AR1069	438500	4743500	0.0262	0.0405	0.0633	0.0662	0.0687	0.0675	0.0551	0.0483	0.0265	0.0215	0.0215
AR1070	439000	4743500	0.0289	0.044	0.0681	0.0709	0.0732	0.0716	0.0586	0.0515	0.0289	0.0237	0.0237
AR1071	439500	4743500	0.0314	0.0472	0.0728	0.0755	0.0779	0.0758	0.0625	0.055	0.0313	0.026	0.026
AR1072	440000	4743500	0.0338	0.0503	0.0771	0.0793	0.0817	0.0793	0.0651	0.0573	0.0326	0.0273	0.0273
AR1073	440500	4743500	0.0349	0.0524	0.0801	0.0817	0.0842	0.0815	0.0667	0.0586	0.0329	0.0275	0.0275
AR1074	441000	4743500	0.0358	0.055	0.0836	0.0852	0.0873	0.0845	0.0689	0.0598	0.0334	0.0277	0.0277
AR1075	441500	4743500	0.0373	0.058	0.0876	0.0891	0.0911	0.088	0.0717	0.062	0.0346	0.0287	0.0287
AR1076	442000	4743500	0.0385	0.0604	0.091	0.0935	0.0953	0.0921	0.0748	0.0645	0.0361	0.0296	0.0296
AR1077	442500	4743500	0.0406	0.0635	0.0943	0.098	0.0999	0.0968	0.0786	0.0678	0.0389	0.0318	0.0318
AR1078	443000	4743500	0.0425	0.066	0.0974	0.102	0.105	0.101	0.0825	0.0714	0.0418	0.034	0.034
AR1079	443500	4743500	0.0425	0.0672	0.0989	0.105	0.107	0.104	0.0847	0.073	0.0429	0.0345	0.0345
AR1080	444000	4743500	0.0405	0.0642	0.0959	0.104	0.107	0.104	0.0838	0.0726	0.0421	0.0332	0.0331
AR1081	444500	4743500	0.0383	0.0616	0.0932	0.102	0.106	0.105	0.0842	0.0732	0.0419	0.0324	0.0324
AR1082	445000	4743500	0.0369	0.0596	0.0907	0.102	0.106	0.105	0.0845	0.0738	0.0424	0.0324	0.0323
AR1083	445500	4743500	0.0353	0.0569	0.0874	0.101	0.107	0.108	0.0867	0.0766	0.0441	0.033	0.033
AR1084	446000	4743500	0.0347	0.055	0.0855	0.102	0.112	0.114	0.0918	0.0822	0.0477	0.0355	0.0355
AR1085	446500	4743500	0.0348	0.0534	0.085	0.104	0.117	0.119	0.0968	0.0881	0.051	0.0379	0.0379
AR1086	447000	4743500	0.0339	0.0518	0.0836	0.104	0.12	0.124	0.101	0.0921	0.0529	0.0392	0.0391
AR1087	447500	4743500	0.032	0.0499	0.0829	0.104	0.122	0.127	0.103	0.0948	0.0531	0.0391	0.0391
AR1088	448000	4743500	0.0299	0.0475	0.0814	0.103	0.124	0.129	0.106	0.0978	0.0533	0.0393	0.0393
AR1089	448500	4743500	0.0291	0.0464	0.0809	0.102	0.127	0.133	0.11	0.102	0.0547	0.041	0.041
AR1090	449000	4743500	0.0283	0.045	0.0799	0.1	0.129	0.135	0.114	0.106	0.056	0.0428	0.0428
AR1091	449500	4743500	0.0274	0.0434	0.0784	0.0969	0.129	0.138	0.117	0.11	0.0573	0.045	0.045
AR1092	450000	4743500	0.0264	0.0418	0.0766	0.0932	0.129	0.143	0.124	0.117	0.0598	0.0486	0.0486
AR1093	450500	4743500	0.0263	0.0409	0.075	0.0904	0.124	0.146	0.128	0.121	0.0618	0.0513	0.0513
AR1094	451000	4743500	0.0265	0.0404	0.0742	0.0898	0.122	0.15	0.132	0.125	0.0645	0.054	0.0539
AR1095	451500	4743500	0.0274	0.0412	0.0739	0.0891	0.118	0.154	0.136	0.13	0.0669	0.0566	0.0566
AR1096	452000	4743500	0.0269	0.0403	0.073	0.0877	0.113	0.159	0.142	0.136	0.0699	0.06	0.06
AR1097	452500	4743500	0.0272	0.0415	0.0739	0.0872	0.111	0.162	0.145	0.139	0.0706	0.0611	0.0611
AR1098	453000	4743500	0.0273	0.0423	0.0739	0.0859	0.108	0.159	0.143	0.136	0.069	0.06	0.06
AR1099	453500	4743500	0.0275	0.043	0.0736	0.0842	0.105	0.15	0.134	0.127	0.0645	0.056	0.056
AR1100	454000	4743500	0.0279	0.0438	0.0742	0.0834	0.102	0.137	0.122	0.114	0.0584	0.0505	0.0505
AR1101	454500	4743500	0.0282	0.0442	0.0748	0.0833	0.0995	0.132	0.117	0.109	0.0558	0.0481	0.0481
AR1102	455000	4743500	0.0283	0.0445	0.0751	0.0849	0.0998	0.129	0.112	0.105	0.054	0.0457	0.0457
AR1103	455500	4743500	0.0283	0.0447	0.0749	0.0858	0.102	0.126	0.109	0.101	0.0527	0.0439	0.0438
AR1104	456000	4743500	0.0283	0.0446	0.0745	0.086	0.104	0.125	0.108	0.1	0.0524	0.0433	0.0433
AR1105	456500	4743500	0.0282	0.0445	0.0738	0.0858	0.105	0.128	0.11	0.103	0.0538	0.0444	0.0444
AR1106	457000	4743500	0.0281	0.0443	0.073	0.0853	0.105	0.131	0.113	0.106	0.0554	0.0459	0.0459
AR1107	457500	4743500	0.0279	0.044	0.0721	0.0845	0.104	0.132	0.114	0.107	0.0559	0.0464	0.0464
AR1108	437500	4743000	0.0232	0.0356	0.0562	0.0591	0.0616	0.0604	0.0493	0.0435	0.0238	0.0193	0.0193
AR1109	438000	4743000	0.0242	0.0373	0.0586	0.0614	0.0638	0.0625	0.051	0.0448	0.0246	0.0199	0.0199
AR1110	438500	4743000	0.0256	0.0395	0.0613	0.0641	0.0665	0.0651	0.0533	0.0468	0.026	0.0212	0.0212
AR1111	439000	4743000	0.0282	0.0427	0.0659	0.0685	0.0709	0.0691	0.0568	0.0499	0.0281	0.0233	0.0233
AR1112	439500	4743000	0.0307	0.0458	0.0702	0.0725	0.0751	0.0728	0.0601	0.053	0.0303	0.0254	0.0253
AR1113	440000	4743000	0.032	0.048	0.0735	0.0752	0.0777	0.0751	0.0617	0.0542	0.0306	0.0257	0.0257
AR1114	440500	4743000	0.033	0.0498	0.0761	0.0778	0.0804	0.0775	0.0633	0.0554	0.0311	0.0258	0.0258
AR1115	441000	4743000	0.034	0.0524	0.0798	0.0813	0.0835	0.0803	0.0655	0.0568	0.0316	0.0263	0.0263
AR1116	441500	4743000	0.0353	0.055	0.083	0.0852	0.0872	0.0839	0.0681	0.0589	0.033	0.0271	0.0271
AR1117	442000	4743000	0.0363	0.0571	0.0864	0.0895	0.0914	0.0875	0.0709	0.0611	0.0343	0.0279	0.0279
AR1118	442500	4743000	0.0382	0.0597	0.0893	0.0934	0.0953	0.0914	0.074	0.0639	0.0367	0.0297	0.0297
AR1119	443000	4743000	0.04	0.062	0.0921	0.0973	0.0993	0.0958	0.0778	0.0674	0.0394	0.0319	0.0319
AR1120	443500	4743000	0.04	0.0631	0.0935	0.0998	0.102	0.0986	0.08	0.0691	0.0405	0.0325	0.0324
AR1121	444000	4743000	0.0382	0.0604	0.0908	0.0983	0.101	0.0982	0.0792	0.0688	0.0398	0.0313	0.0313
AR1122	444500	4743000	0.0363	0.0582	0.0885	0.0971	0.1	0.0984	0.0793	0.0689	0.0394	0.0305	0.0305

Receptor	X	Y	t1	t2	t3	t4	t5	t6	t7	t8	t9	t10	t11
AR1123	445000	4743000	0.0351	0.0565	0.0864	0.0966	0.101	0.1	0.0808	0.0708	0.0404	0.031	0.031
AR1124	445500	4743000	0.0337	0.0542	0.0836	0.0966	0.104	0.104	0.0838	0.0742	0.0425	0.032	0.032
AR1125	446000	4743000	0.0328	0.0521	0.0817	0.0972	0.107	0.108	0.0876	0.0785	0.045	0.0336	0.0336
AR1126	446500	4743000	0.0328	0.0508	0.08	0.0974	0.11	0.112	0.0912	0.0827	0.0478	0.0357	0.0356
AR1127	447000	4743000	0.0325	0.0501	0.0806	0.0994	0.114	0.117	0.0953	0.0871	0.05	0.0374	0.0373
AR1128	447500	4743000	0.0309	0.0476	0.0792	0.0985	0.115	0.118	0.0967	0.0888	0.0499	0.037	0.0369
AR1129	448000	4743000	0.029	0.0457	0.0781	0.0975	0.116	0.12	0.0979	0.0901	0.0494	0.0365	0.0365
AR1130	448500	4743000	0.0279	0.0443	0.0772	0.0964	0.119	0.123	0.101	0.0937	0.0505	0.0378	0.0377
AR1131	449000	4743000	0.0272	0.0432	0.0764	0.0948	0.121	0.126	0.106	0.0981	0.0521	0.0398	0.0398
AR1132	449500	4743000	0.0264	0.0419	0.0752	0.0924	0.121	0.13	0.111	0.104	0.0541	0.0425	0.0425
AR1133	450000	4743000	0.0256	0.0405	0.0737	0.0894	0.121	0.134	0.116	0.109	0.056	0.0453	0.0453
AR1134	450500	4743000	0.0247	0.039	0.0715	0.086	0.116	0.134	0.116	0.11	0.0559	0.0459	0.0459
AR1135	451000	4743000	0.0246	0.0382	0.07	0.0841	0.113	0.136	0.119	0.113	0.0576	0.0479	0.0479
AR1136	451500	4743000	0.0248	0.0378	0.0692	0.0833	0.11	0.139	0.123	0.117	0.0601	0.0505	0.0505
AR1137	452000	4743000	0.0256	0.0386	0.0688	0.0824	0.105	0.142	0.126	0.12	0.0619	0.0526	0.0526
AR1138	452500	4743000	0.0252	0.0376	0.0677	0.0809	0.102	0.142	0.127	0.121	0.0624	0.0533	0.0533
AR1139	453000	4743000	0.0255	0.0388	0.0684	0.0804	0.101	0.141	0.126	0.119	0.0613	0.0527	0.0526
AR1140	453500	4743000	0.0256	0.0395	0.0684	0.0791	0.0986	0.135	0.12	0.113	0.0582	0.05	0.0499
AR1141	454000	4743000	0.0258	0.0402	0.0692	0.0787	0.0965	0.126	0.111	0.104	0.0535	0.0457	0.0457
AR1142	454500	4743000	0.0262	0.0409	0.0696	0.078	0.0939	0.12	0.105	0.0981	0.0505	0.0431	0.0431
AR1143	455000	4743000	0.0265	0.0415	0.0702	0.0778	0.0918	0.116	0.102	0.0949	0.0488	0.0417	0.0417
AR1144	455500	4743000	0.0266	0.0418	0.0704	0.0792	0.0923	0.114	0.0991	0.092	0.0478	0.0401	0.0401
AR1145	456000	4743000	0.0267	0.042	0.0703	0.08	0.094	0.113	0.097	0.0898	0.047	0.0389	0.0389
AR1146	456500	4743000	0.0267	0.042	0.07	0.0803	0.0958	0.112	0.0964	0.0892	0.0469	0.0386	0.0386
AR1147	457000	4743000	0.0267	0.042	0.0695	0.0803	0.0967	0.114	0.0982	0.091	0.048	0.0394	0.0394
AR1148	457500	4743000	0.0266	0.0418	0.0688	0.0799	0.0969	0.118	0.101	0.0939	0.0495	0.0408	0.0407
AR1149	437500	4742500	0.0225	0.0345	0.0543	0.057	0.0595	0.0582	0.0475	0.0418	0.023	0.0186	0.0186
AR1150	438000	4742500	0.0233	0.036	0.0566	0.0593	0.0617	0.0602	0.0492	0.0432	0.0237	0.0192	0.0192
AR1151	438500	4742500	0.0251	0.0384	0.0596	0.0621	0.0646	0.063	0.0517	0.0454	0.0254	0.0209	0.0209
AR1152	439000	4742500	0.0271	0.041	0.0633	0.0658	0.0684	0.0663	0.0547	0.0482	0.0273	0.0228	0.0227
AR1153	439500	4742500	0.0294	0.0437	0.0671	0.0689	0.0716	0.0691	0.057	0.0502	0.0286	0.024	0.024
AR1154	440000	4742500	0.0304	0.0452	0.0695	0.0713	0.0741	0.0713	0.0583	0.0514	0.029	0.0242	0.0241
AR1155	440500	4742500	0.0312	0.0474	0.0728	0.0743	0.0768	0.0735	0.06	0.0523	0.0291	0.0242	0.0242
AR1156	441000	4742500	0.0324	0.05	0.0761	0.0781	0.0803	0.0767	0.0623	0.054	0.0303	0.0249	0.0249
AR1157	441500	4742500	0.0336	0.0522	0.0792	0.082	0.0839	0.08	0.0647	0.0559	0.0315	0.0256	0.0256
AR1158	442000	4742500	0.0344	0.054	0.0823	0.0857	0.0876	0.0839	0.0679	0.0587	0.0329	0.0266	0.0266
AR1159	442500	4742500	0.0361	0.0564	0.0848	0.0891	0.0909	0.0872	0.0705	0.061	0.035	0.0282	0.0282
AR1160	443000	4742500	0.0377	0.0584	0.0873	0.0925	0.0943	0.0909	0.0737	0.064	0.0374	0.0301	0.0301
AR1161	443500	4742500	0.0377	0.0595	0.0886	0.0948	0.0962	0.0933	0.0756	0.0654	0.0382	0.0306	0.0305
AR1162	444000	4742500	0.0361	0.057	0.0862	0.0933	0.0956	0.0933	0.0753	0.0655	0.0378	0.0297	0.0297
AR1163	444500	4742500	0.0344	0.0551	0.0841	0.0929	0.096	0.0945	0.076	0.0663	0.0379	0.0292	0.0291
AR1164	445000	4742500	0.0335	0.0536	0.0824	0.0923	0.0974	0.0967	0.0782	0.0687	0.0391	0.03	0.03
AR1165	445500	4742500	0.0323	0.0517	0.08	0.0922	0.0995	0.0998	0.0806	0.0715	0.0408	0.0308	0.0308
AR1166	446000	4742500	0.031	0.0494	0.0774	0.0918	0.101	0.103	0.0829	0.0742	0.0424	0.0316	0.0316
AR1167	446500	4742500	0.0305	0.0478	0.0758	0.092	0.104	0.106	0.086	0.0778	0.0447	0.0334	0.0334
AR1168	447000	4742500	0.0305	0.0466	0.0758	0.0931	0.107	0.109	0.089	0.0814	0.0466	0.0348	0.0348
AR1169	447500	4742500	0.0298	0.0455	0.0757	0.0934	0.109	0.111	0.0908	0.0834	0.047	0.035	0.035
AR1170	448000	4742500	0.0282	0.0439	0.0748	0.0926	0.11	0.112	0.0919	0.0845	0.0466	0.0346	0.0346
AR1171	448500	4742500	0.0267	0.0422	0.0737	0.0913	0.112	0.115	0.0952	0.0879	0.0473	0.0355	0.0355
AR1172	449000	4742500	0.0261	0.0414	0.0731	0.0901	0.114	0.12	0.1	0.0932	0.0494	0.038	0.0379
AR1173	449500	4742500	0.0255	0.0403	0.0721	0.0881	0.114	0.123	0.104	0.0974	0.0509	0.04	0.04
AR1174	450000	4742500	0.0248	0.0392	0.071	0.0857	0.113	0.126	0.108	0.102	0.0524	0.0422	0.0422
AR1175	450500	4742500	0.024	0.0379	0.069	0.0822	0.109	0.124	0.108	0.101	0.0519	0.0425	0.0425
AR1176	451000	4742500	0.0232	0.0365	0.067	0.0797	0.105	0.124	0.109	0.102	0.052	0.043	0.043
AR1177	451500	4742500	0.023	0.0358	0.0655	0.0784	0.102	0.128	0.112	0.106	0.0542	0.0452	0.0452
AR1178	452000	4742500	0.0233	0.0354	0.0646	0.0775	0.0991	0.129	0.114	0.108	0.0554	0.0466	0.0466
AR1179	452500	4742500	0.0241	0.0363	0.0642	0.0764	0.0964	0.129	0.114	0.108	0.0559	0.0473	0.0473
AR1180	453000	4742500	0.0236	0.0353	0.063	0.0749	0.0941	0.126	0.112	0.107	0.0552	0.0469	0.0469
AR1181	453500	4742500	0.0239	0.0363	0.0635	0.0744	0.0926	0.123	0.108	0.103	0.0531	0.0452	0.0452
AR1182	454000	4742500	0.024	0.037	0.0638	0.0735	0.0905	0.117	0.103	0.0967	0.05	0.0424	0.0424
AR1183	454500	4742500	0.0243	0.0377	0.0644	0.0731	0.0886	0.111	0.0974	0.0911	0.0471	0.0399	0.0399
AR1184	455000	4742500	0.0247	0.0385	0.0654	0.0732	0.0871	0.108	0.0946	0.0881	0.0455	0.0387	0.0387
AR1185	455500	4742500	0.0249	0.039	0.066	0.0731	0.0854	0.105	0.0915	0.0849	0.0438	0.0373	0.0373
AR1186	456000	4742500	0.0251	0.0393	0.0662	0.0742	0.0858	0.103	0.0891	0.0824	0.0429	0.0359	0.0359
AR1187	456500	4742500	0.0252	0.0395	0.0662	0.075	0.0872	0.102	0.0874	0.0807	0.0424	0.035	0.0349
AR1188	457000	4742500	0.0252	0.0396	0.0659	0.0753	0.0889	0.102	0.0874	0.0806	0.0426	0.0349	0.0348

Receptor	X	Y	t1	t2	t3	t4	t5	t6	t7	t8	t9	t10	t11
AR1189	457500	4742500	0.0252	0.0396	0.0655	0.0753	0.0897	0.104	0.0887	0.0819	0.0433	0.0354	0.0354

Appendix B.

MILDOS-AREA Output Potential Receptor

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TABLE OF CONTENTS

0METEOROLOGICAL DATA 4
INDIVIDUAL RECEPTORS & MISCELLANEOUS INPUT DATA 5
POPULATION DISTRIBUTION 6
SOURCE PARAMETERS 7

TIME STEP 1,
CONCENTRATION DATA FOR SPATIAL INTERVALS 8
100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR
INHALATION PATHWAY 12
GROUND PATHWAY 16
CLOUD PATHWAY 17
VEGETATION INGESTION PATHWAY 18
MEAT INGESTION PATHWAY 20
MILK INGESTION PATHWAY 22
POPULATION DOSE SUMMARY 24
INDIVIDUAL RECEPTOR PARTICULATE CONCENTRATIONS 25
INDIVIDUAL RECEPTOR RADON AND RADON DAUGHTER CONCENTRATIONS 26
INDIVIDUAL RECEPTOR ALC CHECK AND/OR ANNUAL DOSE COMMITMENTS 27

TIME STEP 2,
CONCENTRATION DATA FOR SPATIAL INTERVALS 31
100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR
INHALATION PATHWAY 35
GROUND PATHWAY 39
CLOUD PATHWAY 40
VEGETATION INGESTION PATHWAY 41
MEAT INGESTION PATHWAY 43
MILK INGESTION PATHWAY 45
POPULATION DOSE SUMMARY 47
INDIVIDUAL RECEPTOR PARTICULATE CONCENTRATIONS 48
INDIVIDUAL RECEPTOR RADON AND RADON DAUGHTER CONCENTRATIONS 49
INDIVIDUAL RECEPTOR ALC CHECK AND/OR ANNUAL DOSE COMMITMENTS 50

TIME STEP 3,
CONCENTRATION DATA FOR SPATIAL INTERVALS 54
100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR
INHALATION PATHWAY 58
GROUND PATHWAY 62
CLOUD PATHWAY 63
VEGETATION INGESTION PATHWAY 64
MEAT INGESTION PATHWAY 66
MILK INGESTION PATHWAY 68
POPULATION DOSE SUMMARY 70
INDIVIDUAL RECEPTOR PARTICULATE CONCENTRATIONS 71
INDIVIDUAL RECEPTOR RADON AND RADON DAUGHTER CONCENTRATIONS 72
INDIVIDUAL RECEPTOR ALC CHECK AND/OR ANNUAL DOSE COMMITMENTS 73

TABLE OF CONTENTS

TIME STEP 4,
CONCENTRATION DATA FOR SPATIAL INTERVALS 77
100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR
INHALATION PATHWAY 82
GROUND PATHWAY 86
CLOUD PATHWAY 87
VEGETATION INGESTION PATHWAY 88
MEAT INGESTION PATHWAY 90
MILK INGESTION PATHWAY 92
POPULATION DOSE SUMMARY 94
INDIVIDUAL RECEPTOR PARTICULATE CONCENTRATIONS 95
INDIVIDUAL RECEPTOR RADON AND RADON DAUGHTER CONCENTRATIONS 96
INDIVIDUAL RECEPTOR ALC CHECK AND/OR ANNUAL DOSE COMMITMENTS 97

TIME STEP 5,
CONCENTRATION DATA FOR SPATIAL INTERVALS 101
100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR
INHALATION PATHWAY 106
GROUND PATHWAY 110
CLOUD PATHWAY 111
VEGETATION INGESTION PATHWAY 112
MEAT INGESTION PATHWAY 114
MILK INGESTION PATHWAY 116
POPULATION DOSE SUMMARY 118
INDIVIDUAL RECEPTOR PARTICULATE CONCENTRATIONS 119
INDIVIDUAL RECEPTOR RADON AND RADON DAUGHTER CONCENTRATIONS 120
INDIVIDUAL RECEPTOR ALC CHECK AND/OR ANNUAL DOSE COMMITMENTS 121

TIME STEP 6,
CONCENTRATION DATA FOR SPATIAL INTERVALS 125
100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR
INHALATION PATHWAY 130
GROUND PATHWAY 134
CLOUD PATHWAY 135
VEGETATION INGESTION PATHWAY 136
MEAT INGESTION PATHWAY 138
MILK INGESTION PATHWAY 140
POPULATION DOSE SUMMARY 142
INDIVIDUAL RECEPTOR PARTICULATE CONCENTRATIONS 143
INDIVIDUAL RECEPTOR RADON AND RADON DAUGHTER CONCENTRATIONS 144
INDIVIDUAL RECEPTOR ALC CHECK AND/OR ANNUAL DOSE COMMITMENTS 145

TIME STEP 7,
CONCENTRATION DATA FOR SPATIAL INTERVALS 149
100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR
INHALATION PATHWAY 154
GROUND PATHWAY 158
CLOUD PATHWAY 159
VEGETATION INGESTION PATHWAY 160
MEAT INGESTION PATHWAY 162
MILK INGESTION PATHWAY 164
POPULATION DOSE SUMMARY 166
INDIVIDUAL RECEPTOR PARTICULATE CONCENTRATIONS 167
INDIVIDUAL RECEPTOR RADON AND RADON DAUGHTER CONCENTRATIONS 168
INDIVIDUAL RECEPTOR ALC CHECK AND/OR ANNUAL DOSE COMMITMENTS 169

TABLE OF CONTENTS

TIME STEP 8,
CONCENTRATION DATA FOR SPATIAL INTERVALS 173
100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR
INHALATION PATHWAY 178
GROUND PATHWAY 182
CLOUD PATHWAY 183
VEGETATION INGESTION PATHWAY 184
MEAT INGESTION PATHWAY 186
MILK INGESTION PATHWAY 188
POPULATION DOSE SUMMARY 190
INDIVIDUAL RECEPTOR PARTICULATE CONCENTRATIONS 191
INDIVIDUAL RECEPTOR RADON AND RADON DAUGHTER CONCENTRATIONS 192
INDIVIDUAL RECEPTOR ALC CHECK AND/OR ANNUAL DOSE COMMITMENTS 193

TIME STEP 9,
CONCENTRATION DATA FOR SPATIAL INTERVALS 197
100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR
INHALATION PATHWAY 202
GROUND PATHWAY 206
CLOUD PATHWAY 207
VEGETATION INGESTION PATHWAY 208
MEAT INGESTION PATHWAY 210
MILK INGESTION PATHWAY 212
POPULATION DOSE SUMMARY 214
INDIVIDUAL RECEPTOR PARTICULATE CONCENTRATIONS 215
INDIVIDUAL RECEPTOR RADON AND RADON DAUGHTER CONCENTRATIONS 216
INDIVIDUAL RECEPTOR ALC CHECK AND/OR ANNUAL DOSE COMMITMENTS 217

TIME STEP 10,
CONCENTRATION DATA FOR SPATIAL INTERVALS 221
100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR
INHALATION PATHWAY 225
GROUND PATHWAY 229
CLOUD PATHWAY 230
VEGETATION INGESTION PATHWAY 231
MEAT INGESTION PATHWAY 233
MILK INGESTION PATHWAY 235
POPULATION DOSE SUMMARY 237
ENVIRONMENTAL DOSE COMMITMENTS, INTEGRATED OVER ALL TIME STEPS 238
INDIVIDUAL RECEPTOR PARTICULATE CONCENTRATIONS 239
INDIVIDUAL RECEPTOR RADON AND RADON DAUGHTER CONCENTRATIONS 240
INDIVIDUAL RECEPTOR ALC CHECK AND/OR ANNUAL DOSE COMMITMENTS 241

1REGION: Ludeman CODE: MILDOS-AREA (02/97) PAGE 4
METSET: DATA: 060315A.MIL 06/03/15

JOINT FREQUENCY IN PERCENT, DIRECTION INDICATES WHERE WIND IS FROM FREQWS=0.05455,0.23046,0.29646,0.24260,0.10633,0.06967

MPH	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTALS
STABILITY CLASS 1																	
1.5	0.0470	0.0590	0.0470	0.0350	0.1290	0.1170	0.1640	0.1640	0.1290	0.2460	0.1870	0.1870	0.1520	0.1170	0.0700	0.0350	1.8850
5.5	0.1260	0.0910	0.1600	0.1710	0.1830	0.2170	0.3200	0.2630	0.3080	0.2400	0.2630	0.2740	0.2400	0.1830	0.1370	0.1140	3.2900
10.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
15.5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
21.5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
28.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
ALL	0.1730	0.1500	0.2070	0.2060	0.3120	0.3340	0.4840	0.4270	0.4370	0.4860	0.4500	0.4610	0.3920	0.3000	0.2070	0.1490	5.1750
STABILITY CLASS 2																	
1.5	0.0000	0.0000	0.0120	0.0120	0.0120	0.0120	0.0470	0.0120	0.0350	0.0230	0.0120	0.0470	0.0000	0.0120	0.0000	0.0000	0.2360
5.5	0.0910	0.0570	0.0690	0.1600	0.1600	0.3770	0.3770	0.0570	0.0800	0.0570	0.2280	0.1940	0.2510	0.2970	0.1370	0.1030	2.6950
10.0	0.0230	0.0000	0.0000	0.0110	0.0000	0.0570	0.0230	0.0110	0.0000	0.0110	0.0110	0.0110	0.0340	0.0230	0.0230	0.0110	0.2490
15.5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
21.5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
28.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
ALL	0.1140	0.0570	0.0810	0.1830	0.1720	0.4460	0.4470	0.0800	0.1150	0.0910	0.2510	0.2520	0.2850	0.3320	0.1600	0.1140	3.1800
STABILITY CLASS 3																	
1.5	0.0000	0.0000	0.0000	0.0120	0.0230	0.0000	0.0000	0.0120	0.0000	0.0000	0.0230	0.0230	0.0230	0.0000	0.0000	0.0000	0.1160
5.5	0.0340	0.0230	0.0230	0.0800	0.1370	0.1370	0.0460	0.0110	0.0110	0.0230	0.0910	0.1140	0.2060	0.0800	0.0230	0.0110	1.0500
10.0	0.4800	0.1830	0.1370	0.1830	0.2170	0.6740	0.3310	0.1260	0.0340	0.0230	0.1260	0.5600	0.6400	0.6400	0.3540	0.4340	5.1420
15.5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
21.5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
28.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
ALL	0.5140	0.2060	0.1600	0.2750	0.3770	0.8110	0.3770	0.1490	0.0450	0.0460	0.2400	0.6970	0.8690	0.7200	0.3770	0.4450	6.3080
STABILITY CLASS 4																	
1.5	0.0000	0.0230	0.0000	0.0000	0.0000	0.0120	0.0350	0.0000	0.0000	0.0350	0.0350	0.0470	0.0350	0.0120	0.0000	0.0000	0.2340
5.5	0.4340	0.4570	0.4340	0.4110	0.8110	0.8790	0.3430	0.0800	0.0230	0.1480	0.4110	0.9140	1.4960	0.8110	0.4450	0.3770	8.4740
10.0	1.4900	1.0280	0.7420	0.9020	1.3820	2.9350	0.7310	0.1480	0.0690	0.1260	0.2740	1.2560	5.4130	2.3180	1.0850	1.1700	21.0690
15.5	1.9800	1.0160	0.6170	0.5140	0.7880	2.2500	0.7080	0.1140	0.0570	0.0910	0.2860	2.5350	7.6860	3.0260	1.1420	1.4500	24.2600
21.5	0.8450	0.3200	0.1480	0.0570	0.0340	0.2630	0.2860	0.0230	0.0000	0.0230	0.1260	2.1590	3.7570	1.3130	0.4800	0.7990	10.6330
28.0	0.4110	0.0570	0.0000	0.0000	0.0000	0.0000	0.0110	0.0000	0.0000	0.0000	0.0690	2.8440	2.2040	0.3200	0.2970	0.7540	6.9670
ALL	5.1600	2.9010	1.9410	1.8840	3.0150	6.3390	2.1140	0.3650	0.1490	0.4230	1.2010	9.7550	20.5910	7.8000	3.4490	4.5500	71.6370
STABILITY CLASS 5																	
1.5	0.0000	0.0230	0.0000	0.0230	0.0350	0.0000	0.0470	0.0000	0.0000	0.0350	0.0230	0.0590	0.0940	0.0470	0.0000	0.0120	0.3980
5.5	0.1600	0.3080	0.2170	0.2280	0.2510	0.3880	0.2280	0.0910	0.0690	0.0570	0.3200	0.4450	0.6400	0.4340	0.2170	0.1830	4.2360
10.0	0.0460	0.1480	0.1260	0.1480	0.4230	0.8450	0.0800	0.0230	0.0000	0.0340	0.0230	0.1830	0.6620	0.2630	0.0910	0.0910	3.1860
15.5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
21.5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
28.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
ALL	0.2060	0.4790	0.3430	0.3990	0.7090	1.2330	0.3550	0.1140	0.0690	0.1260	0.3660	0.6870	1.3960	0.7440	0.3080	0.2860	7.8200
STABILITY CLASS 6																	
1.5	0.1870	0.1290	0.0820	0.1050	0.1520	0.1050	0.1520	0.2460	0.1050	0.1990	0.2110	0.2230	0.2690	0.1870	0.1050	0.1290	2.5860
5.5	0.1480	0.0690	0.1260	0.1140	0.1600	0.1830	0.1140	0.1600	0.2400	0.1710	0.3080	0.3200	0.3880	0.4000	0.2740	0.1260	3.3010
10.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
15.5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
21.5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
28.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
ALL	0.3350	0.1980	0.2080	0.2190	0.3120	0.2880	0.2660	0.4060	0.3450	0.3700	0.5190	0.5430	0.6570	0.5870	0.3790	0.2550	5.8870
ALL	6.5020	3.9910	2.9400	3.1660	4.8970	9.4510	4.0430	1.5410	1.1600	1.5420	3.0270	12.3950	24.1900	10.4830	4.8800	5.7990	100.0070

INDIVIDUAL RECEPTOR LOCATION DATA, 7 LOCATIONS INPUT THIS RUN

I	LOCATION NAMES	X(KM)	Y(KM)	Z(M)	DIST(KM)	TYPE	I	LOCATION NAMES	X(KM)	Y(KM)	Z(M)	DIST(KM)	TYPE
1	Receptor 1	1.69	-0.52	0.00	1.77	1	5	Receptor 5	13.38	-5.31	0.00	14.40	1
2	Receptor 2	9.56	3.41	0.00	10.15	1	6	Receptor 6	7.55	-6.70	0.00	10.09	1
3	Receptor 3	-0.05	0.80	0.00	0.80	1	7	Receptor 7	-4.10	0.91	0.00	4.20	1
4	Receptor 4	9.83	-7.43	0.00	12.32	1							

MISCELLANEOUS INPUTABLE PARAMETER VALUES

DMM	DMA	TSTART	FFORI	FHAYI	FFORP	FHAYP	FPR(1)	FPR(2)	FPR(3)	ACTRAT
100.0	100.0	2014.00	0.50	0.50	0.50	0.50	0.00	0.00	0.00	2.50

IPACT EQUALS 0, 0, 0, 0, 0, 1, 0, 0,

JC EQUALS 0, 1, 1, 1, 0, 0, 1, 0, 1, 0

TIME STEP DATA....	STEP NAMES	LENGTH, YRS	IFTODO
1		1.00	1
2		1.00	1
3		1.00	1
4		1.00	1
5		1.00	1
6		1.00	1
7		1.00	1
8		1.00	1
9		1.00	1
10		1.00	1

XRHO EQUALS 1.5, 2.5, 3.5, 4.5, 7.5, 15.0, 25.0, 35.0, 45.0, 55.0, 65.0, 75.0,

HDP EQUALS 50.0

POPULATION DISTRIBUTION

KILOMETERS	N 0.0	NNE 22.5	NE 45.0	ENE 67.5	E 90.0	ESE 112.5	SE 135.0	SSE 157.5	S 180.0	SSW 202.5	SW 225.0	WSW 247.5	W 270.0	WNW 292.5	NW 315.0	NNW 337.5
1.0- 2.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2.0- 3.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.0- 4.0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
4.0- 5.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5.0-10.0	3	3	3	3	3	3	4	6	5	6	5	3	3	3	3	59
10.0-20.0	13	13	13	13	13	15	23	23	23	23	22	1677	13	13	13	1923
20.0-30.0	22	22	22	22	22	489	4899	52	38	38	38	1087	28	22	22	6845
30.0-40.0	32	32	32	32	32	979	667	57	57	53	53	59	73	46	32	2268
40.0-50.0	40	40	40	40	40	79	82	82	80	67	77	132	174	161	40	1240
50.0-60.0	49	49	49	49	52	101	96	99	66	67	136	1537	45129	210	49	47898
60.0-70.0	123	68	59	45	34	80	113	94	69	37	170	1246	15800	433	83	18693
70.0-80.0	223	144	64	36	37	67	130	90	41	38	122	207	75	545	178	2301
1.0-80.0	505	371	282	240	233	1813	6014	503	379	329	623	5948	61296	1433	420	81227

TOTAL 1-80 KM POPULATION IS 161616 PERSONS

NUMBER OF SOURCES= 8

NO.	KM X	KM Y	M Z	KM2 AREA	CI/YEAR U-238	Th-230	Ra-226	Pb-210	Rn-222	ID	PSIZE SET	M/SEC EXIT VEL	SOURCE NAME
1	0.00	0.00	10.00	2.0000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.55E+02	1001	1	3.00E-01	Leuenberger Plant
2	-0.50	0.24	0.00	0.0000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.43E+02	1002	1	0.00E+00	Well Field 1
3	0.23	-0.46	0.00	0.0000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.43E+02	1003	1	0.00E+00	Well Field 2
4	6.88	0.21	0.00	0.0000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.43E+02	1004	1	0.00E+00	Well Field 3
5	4.39	-1.91	0.00	0.0000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.43E+02	1005	1	0.00E+00	Well Field 4
6	6.77	-3.62	0.00	0.0000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.43E+02	1006	1	0.00E+00	Well Field 5
7	9.39	-5.12	0.00	0.0000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.43E+02	1007	1	0.00E+00	Well Field 6
8	0.64	0.33	0.00	0.0000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.50E+00	1008	1	0.00E+00	Evaporation Pond

INPUT TAILS ACTIVITIES, PCI/G

SET	URANIUM	THORIUM	RADIUM	LEAD
1	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3	0.00E+00	0.00E+00	0.00E+00	0.00E+00

AMAD AND FRACTIONAL DISTRIBUTION

SET	1.5	3.0	7.7	54.0
1	0.000	1.000	0.000	0.000
2	1.000	0.000	0.000	0.000
3	0.000	0.000	0.300	0.700

PARTICULATE SOURCE STRENGTH MULTIPLIERS BY TIME STEP, 10 TIME STEP(S) USED FOR THIS RUN

SOURCE NUMBER	TSTEP 1 1.00YRS	TSTEP 2 1.00YRS	TSTEP 3 1.00YRS	TSTEP 4 1.00YRS	TSTEP 5 1.00YRS	TSTEP 6 1.00YRS	TSTEP 7 1.00YRS	TSTEP 8 1.00YRS	TSTEP 9 1.00YRS	TSTEP10 1.00YRS
1	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00
2	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00
3	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00
4	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00
5	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00
6	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00
7	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00
8	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00

RADON SOURCE STRENGTH MULTIPLIERS BY TIME STEP,10 TIME STEP(S) USED FOR THIS RUN

SOURCE NUMBER	TSTEP 1 1.00YRS	TSTEP 2 1.00YRS	TSTEP 3 1.00YRS	TSTEP 4 1.00YRS	TSTEP 5 1.00YRS	TSTEP 6 1.00YRS	TSTEP 7 1.00YRS	TSTEP 8 1.00YRS	TSTEP 9 1.00YRS	TSTEP10 1.00YRS
1	6.800E-01	6.800E-01	6.800E-01	6.800E-01	6.800E-01	6.800E-01	6.800E-01	6.800E-01	6.800E-01	6.800E-01
2	6.800E-01	6.800E-01	6.800E-01	3.200E-01	3.200E-01	3.200E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
3	0.000E+00	6.800E-01	6.800E-01	6.800E-01	3.200E-01	3.200E-01	3.200E-01	0.000E+00	0.000E+00	0.000E+00
4	0.000E+00	0.000E+00	6.800E-01	6.800E-01	6.800E-01	3.200E-01	3.200E-01	3.200E-01	0.000E+00	0.000E+00
5	0.000E+00	0.000E+00	0.000E+00	6.800E-01	6.800E-01	6.800E-01	3.200E-01	3.200E-01	3.200E-01	0.000E+00
6	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.800E-01	6.800E-01	6.800E-01	6.800E-01	3.200E-01	3.200E-01
7	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.800E-01	6.800E-01	6.800E-01	3.200E-01	3.200E-01
8	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00

TIME STEP NUMBER 1, DURATION IN YRS IS... 1.0

CONCENTRATION DATA FOR THE N DIRECTION, THETA EQUALS 0.0 DEGREES

TOTAL AIR CONCENTRATIONS, PCI/M3, AND WL

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210	WL
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.660E+00	5.329E+00	2.241E+00	9.025E-01	6.575E-07	2.022E-05
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.972E+00	2.910E+00	1.663E+00	9.493E-01	1.277E-06	1.497E-05
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.849E+00	1.840E+00	1.274E+00	8.823E-01	1.866E-06	1.165E-05
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.397E+00	1.394E+00	1.056E+00	8.025E-01	2.325E-06	9.785E-06
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.160E-01	7.162E-01	6.183E-01	5.278E-01	2.979E-06	5.841E-06
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.793E-01	2.795E-01	2.674E-01	2.497E-01	3.125E-06	2.575E-06
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.387E-01	1.388E-01	1.376E-01	1.349E-01	2.916E-06	1.344E-06
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.827E-02	8.832E-02	8.834E-02	8.791E-02	2.747E-06	8.668E-07
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.315E-02	6.319E-02	6.338E-02	6.337E-02	2.613E-06	6.228E-07
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.834E-02	4.837E-02	4.856E-02	4.865E-02	2.503E-06	4.775E-07
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.868E-02	3.871E-02	3.888E-02	3.898E-02	2.410E-06	3.824E-07
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.213E-02	3.215E-02	3.230E-02	3.240E-02	2.346E-06	3.177E-07

GROUND SURFACE CONCENTRATIONS, PCI/M2

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.220E+00	4.220E+00	4.220E+00	1.370E+00
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.305E+00	2.305E+00	2.305E+00	2.660E+00
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.457E+00	1.457E+00	1.457E+00	3.886E+00
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.104E+00	1.104E+00	1.104E+00	4.843E+00
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.672E-01	5.672E-01	5.672E-01	6.206E+00
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.214E-01	2.214E-01	2.214E-01	6.509E+00
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.099E-01	1.099E-01	1.099E-01	6.075E+00
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.995E-02	6.995E-02	6.995E-02	5.721E+00
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.005E-02	5.005E-02	5.005E-02	5.443E+00
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.831E-02	3.831E-02	3.831E-02	5.214E+00
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.066E-02	3.066E-02	3.066E-02	5.021E+00
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.546E-02	2.546E-02	2.546E-02	4.886E+00

TOTAL DEPOSITION RATES, PCI/M2-SEC

XRHO, KM	U-238	Th-230	Ra-226	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	1.972E-09
2.5	0.000E+00	0.000E+00	0.000E+00	3.831E-09
3.5	0.000E+00	0.000E+00	0.000E+00	5.597E-09
4.5	0.000E+00	0.000E+00	0.000E+00	6.975E-09
7.5	0.000E+00	0.000E+00	0.000E+00	8.938E-09
15.0	0.000E+00	0.000E+00	0.000E+00	9.375E-09
25.0	0.000E+00	0.000E+00	0.000E+00	8.749E-09
35.0	0.000E+00	0.000E+00	0.000E+00	8.240E-09
45.0	0.000E+00	0.000E+00	0.000E+00	7.839E-09
55.0	0.000E+00	0.000E+00	0.000E+00	7.509E-09
65.0	0.000E+00	0.000E+00	0.000E+00	7.231E-09
75.0	0.000E+00	0.000E+00	0.000E+00	7.037E-09

TIME STEP NUMBER 1, DURATION IN YRS IS... 1.0

CONCENTRATION DATA FOR THE E DIRECTION, THETA EQUALS 90.0 DEGREES

TOTAL AIR CONCENTRATIONS, PCI/M3, AND WL

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210	WL
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.503E+01	1.223E+01	3.299E+00	1.238E+00	1.069E-06	3.394E-05
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.942E+00	8.926E+00	3.158E+00	1.514E+00	2.147E-06	3.085E-05
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.292E+00	6.865E+00	2.905E+00	1.591E+00	3.269E-06	2.774E-05
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.779E+00	5.571E+00	2.645E+00	1.547E+00	4.121E-06	2.492E-05
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.498E+00	3.465E+00	2.025E+00	1.289E+00	5.634E-06	1.864E-05
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.694E+00	1.694E+00	1.287E+00	9.503E-01	6.840E-06	1.181E-05
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.777E-01	9.782E-01	8.579E-01	7.198E-01	7.316E-06	8.042E-06
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.782E-01	6.786E-01	6.338E-01	5.704E-01	7.499E-06	6.039E-06
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.154E-01	5.157E-01	4.971E-01	4.660E-01	7.568E-06	4.789E-06
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.137E-01	4.139E-01	4.058E-01	3.899E-01	7.579E-06	3.938E-06
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.442E-01	3.444E-01	3.409E-01	3.326E-01	7.558E-06	3.324E-06
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.945E-01	2.947E-01	2.934E-01	2.891E-01	7.538E-06	2.869E-06

GROUND SURFACE CONCENTRATIONS, PCI/M2

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.688E+00	9.688E+00	9.688E+00	2.227E+00
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.070E+00	7.070E+00	7.070E+00	4.472E+00
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.437E+00	5.437E+00	5.437E+00	6.809E+00
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.412E+00	4.412E+00	4.412E+00	8.585E+00
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.744E+00	2.744E+00	2.744E+00	1.174E+01
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.341E+00	1.341E+00	1.341E+00	1.425E+01
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.748E-01	7.748E-01	7.748E-01	1.524E+01
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.375E-01	5.375E-01	5.375E-01	1.562E+01
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.085E-01	4.085E-01	4.085E-01	1.576E+01
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.278E-01	3.278E-01	3.278E-01	1.579E+01
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.728E-01	2.728E-01	2.728E-01	1.574E+01
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.334E-01	2.334E-01	2.334E-01	1.570E+01

TOTAL DEPOSITION RATES, PCI/M2-SEC

XRHO, KM	U-238	Th-230	Ra-226	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	3.207E-09
2.5	0.000E+00	0.000E+00	0.000E+00	6.440E-09
3.5	0.000E+00	0.000E+00	0.000E+00	9.806E-09
4.5	0.000E+00	0.000E+00	0.000E+00	1.236E-08
7.5	0.000E+00	0.000E+00	0.000E+00	1.690E-08
15.0	0.000E+00	0.000E+00	0.000E+00	2.052E-08
25.0	0.000E+00	0.000E+00	0.000E+00	2.195E-08
35.0	0.000E+00	0.000E+00	0.000E+00	2.250E-08
45.0	0.000E+00	0.000E+00	0.000E+00	2.270E-08
55.0	0.000E+00	0.000E+00	0.000E+00	2.274E-08
65.0	0.000E+00	0.000E+00	0.000E+00	2.267E-08
75.0	0.000E+00	0.000E+00	0.000E+00	2.261E-08

TIME STEP NUMBER 1, DURATION IN YRS IS... 1.0

CONCENTRATION DATA FOR THE S DIRECTION, THETA EQUALS 180.0 DEGREES

TOTAL AIR CONCENTRATIONS, PCI/M3, AND WL

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210	WL
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.178E+00	5.122E+00	1.527E+00	5.967E-01	4.969E-07	1.524E-05
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.917E+00	3.570E+00	1.421E+00	7.323E-01	1.042E-06	1.361E-05
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.732E+00	2.603E+00	1.252E+00	7.528E-01	1.602E-06	1.184E-05
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.130E+00	2.070E+00	1.106E+00	7.135E-01	2.015E-06	1.040E-05
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.236E+00	1.228E+00	7.832E-01	5.445E-01	2.685E-06	7.266E-06
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.647E-01	5.648E-01	4.498E-01	3.498E-01	3.066E-06	4.167E-06
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.130E-01	3.132E-01	2.817E-01	2.438E-01	3.093E-06	2.660E-06
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.128E-01	2.129E-01	2.018E-01	1.854E-01	3.059E-06	1.934E-06
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.596E-01	1.597E-01	1.553E-01	1.477E-01	3.010E-06	1.503E-06
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.268E-01	1.269E-01	1.251E-01	1.214E-01	2.957E-06	1.218E-06
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.047E-01	1.047E-01	1.041E-01	1.022E-01	2.904E-06	1.017E-06
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.909E-02	8.914E-02	8.896E-02	8.805E-02	2.861E-06	8.713E-07

GROUND SURFACE CONCENTRATIONS, PCI/M2

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.057E+00	4.057E+00	4.057E+00	1.035E+00
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.827E+00	2.827E+00	2.827E+00	2.171E+00
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.061E+00	2.061E+00	2.061E+00	3.336E+00
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.639E+00	1.639E+00	1.639E+00	4.196E+00
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.723E-01	9.723E-01	9.723E-01	5.594E+00
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.473E-01	4.473E-01	4.473E-01	6.386E+00
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.481E-01	2.481E-01	2.481E-01	6.443E+00
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.686E-01	1.686E-01	1.686E-01	6.372E+00
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.265E-01	1.265E-01	1.265E-01	6.271E+00
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.005E-01	1.005E-01	1.005E-01	6.160E+00
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.296E-02	8.296E-02	8.296E-02	6.049E+00
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.060E-02	7.060E-02	7.060E-02	5.959E+00

TOTAL DEPOSITION RATES, PCI/M2-SEC

XRHO, KM	U-238	Th-230	Ra-226	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	1.491E-09
2.5	0.000E+00	0.000E+00	0.000E+00	3.127E-09
3.5	0.000E+00	0.000E+00	0.000E+00	4.805E-09
4.5	0.000E+00	0.000E+00	0.000E+00	6.044E-09
7.5	0.000E+00	0.000E+00	0.000E+00	8.056E-09
15.0	0.000E+00	0.000E+00	0.000E+00	9.198E-09
25.0	0.000E+00	0.000E+00	0.000E+00	9.279E-09
35.0	0.000E+00	0.000E+00	0.000E+00	9.177E-09
45.0	0.000E+00	0.000E+00	0.000E+00	9.031E-09
55.0	0.000E+00	0.000E+00	0.000E+00	8.872E-09
65.0	0.000E+00	0.000E+00	0.000E+00	8.712E-09
75.0	0.000E+00	0.000E+00	0.000E+00	8.583E-09

TIME STEP NUMBER 1, DURATION IN YRS IS... 1.0

CONCENTRATION DATA FOR THE W DIRECTION, THETA EQUALS 270.0 DEGREES

TOTAL AIR CONCENTRATIONS, PCI/M3, AND WL

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210	WL
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.696E+00	7.939E+00	1.993E+00	6.280E-01	4.049E-07	2.062E-05
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.126E+00	4.762E+00	1.780E+00	8.227E-01	9.990E-07	1.700E-05
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.422E+00	3.319E+00	1.556E+00	8.636E-01	1.627E-06	1.453E-05
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.582E+00	2.544E+00	1.374E+00	8.386E-01	2.129E-06	1.271E-05
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.436E+00	1.433E+00	9.766E-01	6.777E-01	3.043E-06	8.955E-06
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.266E-01	6.270E-01	5.404E-01	4.454E-01	3.768E-06	5.047E-06
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.375E-01	3.377E-01	3.210E-01	2.955E-01	3.991E-06	3.078E-06
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.244E-01	2.246E-01	2.205E-01	2.125E-01	4.021E-06	2.142E-06
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.656E-01	1.657E-01	1.648E-01	1.621E-01	3.990E-06	1.611E-06
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.299E-01	1.300E-01	1.300E-01	1.291E-01	3.937E-06	1.274E-06
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.061E-01	1.062E-01	1.064E-01	1.063E-01	3.877E-06	1.045E-06
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.961E-02	8.966E-02	8.999E-02	9.006E-02	3.826E-06	8.845E-07

GROUND SURFACE CONCENTRATIONS, PCI/M2

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.288E+00	6.288E+00	6.288E+00	8.434E-01
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.771E+00	3.771E+00	3.771E+00	2.081E+00
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.628E+00	2.628E+00	2.628E+00	3.390E+00
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.015E+00	2.015E+00	2.015E+00	4.436E+00
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.135E+00	1.135E+00	1.135E+00	6.338E+00
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.966E-01	4.966E-01	4.966E-01	7.850E+00
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.675E-01	2.675E-01	2.675E-01	8.314E+00
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.779E-01	1.779E-01	1.779E-01	8.376E+00
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.312E-01	1.312E-01	1.312E-01	8.312E+00
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.029E-01	1.029E-01	1.029E-01	8.202E+00
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.409E-02	8.409E-02	8.409E-02	8.076E+00
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.102E-02	7.102E-02	7.102E-02	7.969E+00

TOTAL DEPOSITION RATES, PCI/M2-SEC

XRHO, KM	U-238	Th-230	Ra-226	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	1.215E-09
2.5	0.000E+00	0.000E+00	0.000E+00	2.997E-09
3.5	0.000E+00	0.000E+00	0.000E+00	4.882E-09
4.5	0.000E+00	0.000E+00	0.000E+00	6.388E-09
7.5	0.000E+00	0.000E+00	0.000E+00	9.128E-09
15.0	0.000E+00	0.000E+00	0.000E+00	1.131E-08
25.0	0.000E+00	0.000E+00	0.000E+00	1.197E-08
35.0	0.000E+00	0.000E+00	0.000E+00	1.206E-08
45.0	0.000E+00	0.000E+00	0.000E+00	1.197E-08
55.0	0.000E+00	0.000E+00	0.000E+00	1.181E-08
65.0	0.000E+00	0.000E+00	0.000E+00	1.163E-08
75.0	0.000E+00	0.000E+00	0.000E+00	1.148E-08

TIME STEP NUMBER 1, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS INHAL. EXPOSED ORGAN IS EFFECTIV

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.526E-07	2.967E-06	4.688E-06	6.425E-06	7.643E-06	8.972E-06	2.170E-05	3.830E-05
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.314E-07	4.656E-06	7.808E-06	1.101E-05	1.333E-05	1.584E-05	2.136E-05	4.415E-05
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.036E-06	5.079E-06	8.475E-06	1.194E-05	1.446E-05	1.717E-05	2.008E-05	2.129E-05
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.192E-06	6.040E-06	1.045E-05	1.511E-05	1.862E-05	2.244E-05	2.025E-05	1.599E-05
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.234E-06	6.495E-06	1.176E-05	1.754E-05	2.213E-05	2.881E-05	1.879E-05	2.040E-05
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.729E-07	5.149E-06	1.741E-04	3.489E-04	2.790E-05	3.521E-05	2.748E-05	2.277E-05
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.521E-07	4.237E-06	9.096E-04	1.219E-04	1.468E-05	1.682E-05	1.940E-05	2.200E-05
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.603E-07	4.110E-06	9.279E-06	9.994E-06	1.408E-05	1.666E-05	1.550E-05	1.462E-05
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.804E-07	5.150E-06	8.587E-06	1.274E-05	1.761E-05	1.427E-05	1.466E-05	8.583E-06
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.061E-06	4.644E-06	7.722E-06	1.060E-05	1.315E-05	1.288E-05	6.963E-06	7.030E-06
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.483E-07	3.198E-06	5.529E-06	7.593E-06	1.082E-05	1.873E-05	2.294E-05	1.623E-05
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.725E-07	3.048E-04	1.992E-04	1.063E-05	2.324E-05	2.641E-04	2.092E-04	3.415E-05
W	0.000E+00	0.000E+00	1.188E-07	0.000E+00	6.665E-07	3.578E-06	8.164E-06	2.145E-05	5.076E-05	1.299E-02	4.481E-03	2.100E-05
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.088E-07	3.245E-06	5.935E-06	1.281E-05	4.543E-05	5.950E-05	1.226E-04	1.543E-04
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.175E-07	4.229E-06	7.351E-06	1.059E-05	1.301E-05	1.563E-05	2.594E-05	5.475E-05
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.675E-05	6.256E-04	2.183E-03	6.941E-04	3.640E-04	1.353E-02	5.095E-03	6.091E-04

TOTAL DOSE COMMITMENT IS 4.490E-02 PERSON-REM/YR

TIME STEP NUMBER 1, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS INHAL. EXPOSED ORGAN IS BONE

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.296E-06	2.407E-05	3.801E-05	5.208E-05	6.193E-05	7.267E-05	1.757E-04	3.099E-04
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.558E-06	3.777E-05	6.331E-05	8.923E-05	1.080E-04	1.283E-04	1.729E-04	3.572E-04
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.403E-06	4.120E-05	6.873E-05	9.682E-05	1.171E-04	1.391E-04	1.626E-04	1.723E-04
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.669E-06	4.900E-05	8.477E-05	1.225E-04	1.509E-04	1.818E-04	1.640E-04	1.295E-04
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.001E-05	5.269E-05	9.537E-05	1.422E-04	1.794E-04	2.335E-04	1.522E-04	1.652E-04
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.083E-06	4.177E-05	1.412E-03	2.829E-03	2.261E-04	2.853E-04	2.226E-04	1.844E-04
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.291E-06	3.437E-05	7.377E-03	9.882E-04	1.190E-04	1.363E-04	1.571E-04	1.782E-04
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.793E-06	3.334E-05	7.525E-05	8.103E-05	1.142E-04	1.350E-04	1.255E-04	1.184E-04
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.955E-06	4.178E-05	6.963E-05	1.033E-04	1.427E-04	1.156E-04	1.187E-04	6.950E-05
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.607E-06	3.767E-05	6.262E-05	8.597E-05	1.066E-04	1.043E-04	5.639E-05	5.692E-05
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.261E-06	2.595E-05	4.484E-05	6.156E-05	8.772E-05	1.517E-04	1.858E-04	1.314E-04
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.834E-06	2.473E-03	1.615E-03	8.618E-05	1.883E-04	2.140E-03	1.694E-03	2.765E-04
W	0.000E+00	0.000E+00	9.641E-07	0.000E+00	5.408E-06	2.903E-05	6.621E-05	1.739E-04	4.114E-04	1.053E-01	3.629E-02	1.700E-04
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.940E-06	2.632E-05	4.813E-05	1.039E-04	3.683E-04	4.822E-04	9.932E-04	1.250E-03
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.634E-06	3.430E-05	5.961E-05	8.586E-05	1.054E-04	1.266E-04	2.101E-04	4.432E-04
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.359E-04	5.075E-03	1.770E-02	5.626E-03	2.949E-03	1.096E-01	4.125E-02	4.928E-03

TOTAL DOSE COMMITMENT IS 3.637E-01 PERSON-REM/YR

TIME STEP NUMBER 1, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS INHAL. EXPOSED ORGAN IS AVG.LUNG

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.549E-08	3.494E-07	5.655E-07	7.936E-07	9.663E-07	1.161E-06	2.871E-06	5.182E-06
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.078E-07	5.490E-07	9.442E-07	1.365E-06	1.695E-06	2.063E-06	2.850E-06	6.033E-06
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.198E-07	5.980E-07	1.021E-06	1.472E-06	1.822E-06	2.212E-06	2.644E-06	2.864E-06
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.379E-07	7.106E-07	1.257E-06	1.855E-06	2.332E-06	2.865E-06	2.636E-06	2.121E-06
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.428E-07	7.629E-07	1.407E-06	2.133E-06	2.734E-06	3.615E-06	2.392E-06	2.634E-06
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.010E-07	6.048E-07	2.083E-05	4.250E-05	3.457E-06	4.435E-06	3.518E-06	2.960E-06
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.540E-08	4.974E-07	1.088E-04	1.483E-05	1.816E-06	2.115E-06	2.478E-06	2.855E-06
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.111E-07	4.831E-07	1.112E-06	1.220E-06	1.749E-06	2.103E-06	1.989E-06	1.906E-06
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.134E-07	6.059E-07	1.031E-06	1.560E-06	2.194E-06	1.810E-06	1.890E-06	1.125E-06
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.227E-07	5.462E-07	9.277E-07	1.300E-06	1.643E-06	1.640E-06	9.034E-07	9.289E-07
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.496E-08	3.755E-07	6.618E-07	9.253E-07	1.342E-06	2.363E-06	2.943E-06	2.116E-06
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.462E-08	3.581E-05	2.387E-05	1.298E-06	2.889E-06	3.343E-05	2.694E-05	4.473E-06
W	0.000E+00	0.000E+00	1.362E-08	0.000E+00	7.706E-08	4.204E-07	9.791E-07	2.623E-06	6.326E-06	1.650E-03	5.795E-04	2.765E-06
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.035E-08	3.803E-07	7.069E-07	1.549E-06	5.572E-06	7.400E-06	1.545E-05	1.972E-05
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.455E-08	4.976E-07	8.847E-07	1.303E-06	1.635E-06	2.006E-06	3.400E-06	7.322E-06
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.938E-06	7.375E-05	2.639E-04	8.601E-05	4.623E-05	1.760E-03	6.788E-04	8.306E-05

TOTAL DOSE COMMITMENT IS 5.755E-03 PERSON-REM/YR

TIME STEP NUMBER 1, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS INHAL. EXPOSED ORGAN IS BRONCHI

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.685E-03	4.539E-03	3.815E-03	3.531E-03	3.158E-03	2.961E-03	5.948E-03	8.957E-03
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.586E-03	6.400E-03	5.575E-03	5.248E-03	4.745E-03	4.478E-03	4.992E-03	8.786E-03
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.393E-03	9.525E-03	8.201E-03	7.692E-03	6.944E-03	6.558E-03	6.353E-03	5.752E-03
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.394E-03	1.775E-02	1.616E-02	1.573E-02	1.458E-02	1.407E-02	1.059E-02	7.180E-03
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.312E-02	2.752E-02	2.689E-02	2.713E-02	2.577E-02	2.689E-02	1.463E-02	1.362E-02
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.638E-03	1.915E-02	3.369E-01	4.496E-01	2.683E-02	2.699E-02	1.752E-02	1.243E-02
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.228E-03	1.524E-02	1.707E+00	1.525E-01	1.372E-02	1.254E-02	1.203E-02	1.169E-02
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.443E-03	1.433E-02	1.761E-02	1.296E-02	1.386E-02	1.322E-02	1.032E-02	8.396E-03
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.726E-03	1.624E-02	1.487E-02	1.516E-02	1.596E-02	1.046E-02	9.029E-03	4.566E-03
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.774E-03	1.283E-02	1.128E-02	1.043E-02	9.737E-03	7.644E-03	3.451E-03	2.995E-03
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.254E-03	9.743E-03	8.856E-03	8.154E-03	8.722E-03	1.207E-02	1.233E-02	7.478E-03
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.624E-03	8.607E-01	2.945E-01	1.055E-02	1.733E-02	1.578E-01	1.043E-01	1.462E-02
W	0.000E+00	0.000E+00	4.277E-03	0.000E+00	5.384E-03	1.018E-02	1.181E-02	2.048E-02	3.601E-02	7.328E+00	2.096E+00	8.401E-03
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.896E-03	1.381E-02	1.317E-02	1.887E-02	4.981E-02	5.187E-02	8.865E-02	9.521E-02
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.997E-03	9.324E-03	8.409E-03	8.085E-03	7.424E-03	7.110E-03	9.809E-03	1.772E-02
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.752E-02	9.040E-01	1.645E+00	3.495E-01	1.369E-01	4.046E+00	1.261E+00	1.285E-01

TOTAL DOSE COMMITMENT IS 2.351E+01 PERSON-REM/YR

TIME STEP NUMBER 1, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS GROUND EXPOSED ORGAN IS EFFECTIV

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.390E-07	6.727E-07	6.825E-07	7.429E-07	7.655E-07	8.139E-07	1.830E-06	3.055E-06
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.558E-07	9.737E-07	1.048E-06	1.182E-06	1.249E-06	1.352E-06	1.704E-06	3.348E-06
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.631E-07	1.350E-06	1.382E-06	1.509E-06	1.558E-06	1.658E-06	1.790E-06	1.786E-06
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.116E-06	2.331E-06	2.389E-06	2.589E-06	2.645E-06	2.790E-06	2.280E-06	1.666E-06
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.537E-06	3.463E-06	3.674E-06	4.010E-06	4.101E-06	4.584E-06	2.660E-06	2.631E-06
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.018E-06	2.443E-06	4.747E-05	6.956E-05	4.529E-06	4.936E-06	3.450E-06	2.623E-06
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.357E-07	1.952E-06	2.420E-04	2.378E-05	2.338E-06	2.319E-06	2.397E-06	2.498E-06
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.995E-07	1.842E-06	2.490E-06	2.001E-06	2.322E-06	2.386E-06	1.996E-06	1.731E-06
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.212E-07	2.114E-06	2.143E-06	2.398E-06	2.747E-06	1.947E-06	1.805E-06	9.748E-07
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.331E-07	1.702E-06	1.690E-06	1.748E-06	1.805E-06	1.553E-06	7.622E-07	7.141E-07
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.281E-07	1.275E-06	1.299E-06	1.329E-06	1.566E-06	2.367E-06	2.620E-06	1.713E-06
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.350E-07	1.138E-04	4.400E-05	1.763E-06	3.203E-06	3.197E-05	2.297E-05	3.477E-06
W	0.000E+00	0.000E+00	4.761E-07	0.000E+00	6.442E-07	1.345E-06	1.774E-06	3.465E-06	6.789E-06	1.523E-03	4.764E-04	2.071E-06
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.112E-07	1.738E-06	1.809E-06	2.821E-06	8.068E-06	9.052E-06	1.658E-05	1.902E-05
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.083E-07	1.282E-06	1.345E-06	1.481E-06	1.535E-06	1.639E-06	2.494E-06	4.925E-06
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.537E-06	1.358E-04	3.029E-04	7.664E-05	3.493E-05	1.180E-03	4.145E-04	4.701E-05

TOTAL DOSE COMMITMENT IS 5.058E-03 PERSON-REM/YR

TIME STEP NUMBER 1, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS CLOUD EXPOSED ORGAN IS EFFECTIV

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.771E-05	3.587E-05	3.258E-05	3.082E-05	2.776E-05	2.610E-05	5.249E-05	7.910E-05
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.401E-05	5.112E-05	4.767E-05	4.576E-05	4.166E-05	3.944E-05	4.403E-05	7.756E-05
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.982E-05	6.854E-05	6.688E-05	6.547E-05	6.017E-05	5.732E-05	5.580E-05	5.064E-05
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.846E-05	1.011E-04	1.114E-04	1.189E-04	1.161E-04	1.158E-04	8.913E-05	6.133E-05
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.540E-05	1.413E-04	1.776E-04	2.027E-04	2.058E-04	2.232E-04	1.242E-04	1.173E-04
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.211E-05	1.067E-04	2.371E-03	3.511E-03	2.210E-04	2.288E-04	1.510E-04	1.082E-04
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.431E-05	8.817E-05	1.230E-02	1.208E-03	1.139E-04	1.068E-04	1.039E-04	1.018E-04
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.275E-05	7.876E-05	1.206E-04	9.872E-05	1.118E-04	1.103E-04	8.784E-05	7.236E-05
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.147E-05	9.129E-05	1.034E-04	1.170E-04	1.302E-04	8.807E-05	7.742E-05	3.958E-05
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.422E-05	7.854E-05	8.362E-05	8.409E-05	8.179E-05	6.562E-05	2.998E-05	2.620E-05
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.311E-05	6.138E-05	6.751E-05	6.703E-05	7.420E-05	1.045E-04	1.077E-04	6.564E-05
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.649E-05	5.577E-03	2.289E-03	8.785E-05	1.487E-04	1.374E-03	9.146E-04	1.287E-04
W	0.000E+00	0.000E+00	1.042E-05	0.000E+00	2.350E-05	6.512E-05	9.160E-05	1.707E-04	3.095E-04	6.386E-02	1.839E-02	7.396E-05
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.536E-05	7.889E-05	9.581E-05	1.518E-04	4.197E-04	4.471E-04	7.730E-04	8.352E-04
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.510E-05	6.280E-05	6.604E-05	6.742E-05	6.361E-05	6.175E-05	8.582E-05	1.557E-04
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.387E-04	7.040E-03	1.387E-02	3.027E-03	1.198E-03	3.558E-02	1.112E-02	1.134E-03

TOTAL DOSE COMMITMENT IS 1.967E-01 PERSON-REM/YR

TIME STEP NUMBER 1, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS VEG. ING EXPOSED ORGAN IS EFFECTIV

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

TOTAL DOSE COMMITMENT IS 0.000E+00 PERSON-REM/YR

WARNING--POPULATION FOOD INGESTION DOSES SHOWN
ABOVE HAVE NOT BEEN CORRECTED TO REFLECT POTENTIAL
FOOD EXPORT AND MAY EXCEED DOSES ACTUALLY RECEIVED
BY THE POPULATION OF THIS REGION. SEE SUMMARY
TABLE FOR THIS INFORMATION.

TIME STEP NUMBER 1, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS VEG. ING EXPOSED ORGAN IS BONE

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

TOTAL DOSE COMMITMENT IS 0.000E+00 PERSON-REM/YR

WARNING--POPULATION FOOD INGESTION DOSES SHOWN
ABOVE HAVE NOT BEEN CORRECTED TO REFLECT POTENTIAL
FOOD EXPORT AND MAY EXCEED DOSES ACTUALLY RECEIVED
BY THE POPULATION OF THIS REGION. SEE SUMMARY
TABLE FOR THIS INFORMATION.

TIME STEP NUMBER 1, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS MEAT ING EXPOSED ORGAN IS EFFECTIV

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

TOTAL DOSE COMMITMENT IS 0.000E+00 PERSON-REM/YR

WARNING--POPULATION FOOD INGESTION DOSES SHOWN
ABOVE HAVE NOT BEEN CORRECTED TO REFLECT POTENTIAL
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EXPOSURE PATHWAY IS MEAT ING EXPOSED ORGAN IS BONE

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

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DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

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N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

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SUMMARY PRINT OF POPULATION DOSES COMPUTED FOR TSTEP 1--DOSES SHOWN ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DOSES RECEIVED BY PEOPLE WITHIN 80 KILOMETERS

PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INHAL.	4.490E-02	3.637E-01	5.755E-03	2.728E-01	1.311E-01	2.351E+01
GROUND	5.058E-03	5.058E-03	5.058E-03	5.058E-03	5.058E-03	5.058E-03
CLOUD	1.967E-01	1.967E-01	1.967E-01	1.967E-01	1.967E-01	1.967E-01
VEG. ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MEAT ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MILK ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RNPLUS50	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOTALS	2.466E-01	5.654E-01	2.075E-01	4.745E-01	3.329E-01	2.371E+01

DOSES RECEIVED BY PEOPLE BEYOND 80 KILOMETERS

PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INHAL.	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GROUND	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CLOUD	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
VEG. ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MEAT ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MILK ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RNPLUS50	5.431E+00	7.406E+01	1.234E+00	5.431E+00	5.431E+00	3.456E+01
TOTALS	5.431E+00	7.406E+01	1.234E+00	5.431E+00	5.431E+00	3.456E+01

TOTAL DOSES COMPUTED OVER ALL POPULATIONS

PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INHAL.	4.490E-02	3.637E-01	5.755E-03	2.728E-01	1.311E-01	2.351E+01
GROUND	5.058E-03	5.058E-03	5.058E-03	5.058E-03	5.058E-03	5.058E-03
CLOUD	1.967E-01	1.967E-01	1.967E-01	1.967E-01	1.967E-01	1.967E-01
VEG. ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MEAT ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MILK ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RNPLUS50	5.431E+00	7.406E+01	1.234E+00	5.431E+00	5.431E+00	3.456E+01
TOTALS	5.677E+00	7.462E+01	1.442E+00	5.905E+00	5.764E+00	5.827E+01

TIME STEP NUMBER 1, DURATION IN YRS IS... 1.0

INDIVIDUAL RECEPTOR PARTICULATE CONCENTRATIONS

NO.	NAME	PTSZ	AIRBORNE CONCENTRATIONS, PCI/M3 U-238	Th-230	Ra-226	Pb-210	GROUND CONCENTRATIONS, PCI/M2 U-238	Th-230	Ra-226	Pb-210
1	Receptor 1	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1	Receptor 1	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1	Receptor 1	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1	Receptor 1	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2	Receptor 2	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2	Receptor 2	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2	Receptor 2	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2	Receptor 2	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
3	Receptor 3	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
3	Receptor 3	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
3	Receptor 3	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
3	Receptor 3	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
4	Receptor 4	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
4	Receptor 4	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
4	Receptor 4	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
4	Receptor 4	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
5	Receptor 5	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
5	Receptor 5	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
5	Receptor 5	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
5	Receptor 5	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
6	Receptor 6	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
6	Receptor 6	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
6	Receptor 6	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
6	Receptor 6	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
7	Receptor 7	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
7	Receptor 7	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
7	Receptor 7	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
7	Receptor 7	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

TIME STEP NUMBER 1, DURATION IN YRS IS... 1.0

INDIVIDUAL RECEPTOR RADON AND RADON DAUGHTER CONCENTRATIONS

	AIRBORNE CONCENTRATIONS, PCI/M3								GROUND CONCENTRATIONS, PCI/M2			
NO.	Rn-222	Po-218	Pb-214	Bi-214	Pb-210	Bi-210	Po-210	WL	Po-218	Pb-214	Bi-214	Pb-210
1	1.059E+01	8.938E+00	2.637E+00	1.068E+00	1.064E-06	1.330E-09	4.826E-14	2.656E-05	7.080E+00	7.080E+00	7.080E+00	9.855E-02
2	1.828E+00	1.821E+00	1.260E+00	9.128E-01	5.813E-06	4.872E-08	1.104E-11	1.167E-05	1.442E+00	1.442E+00	1.442E+00	5.382E-01
3	1.388E+01	1.147E+01	2.713E+00	6.396E-01	2.410E-07	1.156E-10	1.667E-15	2.795E-05	9.083E+00	9.083E+00	9.083E+00	2.231E-02
4	7.770E-01	7.768E-01	5.928E-01	4.414E-01	2.843E-06	2.825E-08	7.916E-12	5.452E-06	6.152E-01	6.152E-01	6.152E-01	2.633E-01
5	1.077E+00	1.077E+00	8.434E-01	6.412E-01	4.655E-06	5.497E-08	1.851E-11	7.777E-06	8.531E-01	8.531E-01	8.531E-01	4.310E-01
6	9.051E-01	9.036E-01	6.433E-01	4.561E-01	2.505E-06	2.001E-08	4.453E-12	5.894E-06	7.157E-01	7.157E-01	7.157E-01	2.319E-01
7	3.128E+00	3.058E+00	1.478E+00	8.341E-01	1.843E-06	5.019E-09	3.813E-13	1.376E-05	2.422E+00	2.422E+00	2.422E+00	1.706E-01

TIME STEP NUMBER 1, DURATION IN YRS IS... 1.0

NUMBER 1 NAME=Receptor 1 X= 1.7KM, Y= -0.5KM, Z= 0.0M, DIST= 1.8KM, IRTYPE= 1

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	8.10E-01	1.57E-02	1.52E-02	1.81E-02	1.63E-02	1.33E+01
CHILD	TOTALS	8.10E-01	1.61E-02	1.53E-02	1.66E-02	1.58E-02	1.33E+01
TEENAGE	TOTALS	8.10E-01	1.71E-02	1.54E-02	1.60E-02	1.56E-02	1.33E+01
ADULT	TOTALS	8.10E-01	1.70E-02	1.55E-02	1.60E-02	1.57E-02	1.33E+01

NUMBER 2 NAME=Receptor 2 X= 9.6KM, Y= 3.4KM, Z= 0.0M, DIST= 10.1KM, IRTYPE= 1

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	1.49E-01	1.39E-02	1.10E-02	2.70E-02	1.71E-02	2.30E+00
CHILD	TOTALS	1.49E-01	1.59E-02	1.17E-02	1.88E-02	1.44E-02	2.30E+00
TEENAGE	TOTALS	1.49E-01	2.12E-02	1.22E-02	1.52E-02	1.33E-02	2.30E+00
ADULT	TOTALS	1.49E-01	2.07E-02	1.27E-02	1.53E-02	1.36E-02	2.30E+00

TIME STEP NUMBER 1, DURATION IN YRS IS... 1.0

NUMBER 3 NAME=Receptor 3 X= -0.1KM, Y= 0.8KM, Z= 0.0M, DIST= 0.8KM, IRTYPE= 1

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	1.05E+00	1.17E-02	1.15E-02	1.22E-02	1.18E-02	1.74E+01
CHILD	TOTALS	1.05E+00	1.17E-02	1.16E-02	1.19E-02	1.17E-02	1.74E+01
TEENAGE	TOTALS	1.05E+00	1.20E-02	1.16E-02	1.17E-02	1.16E-02	1.74E+01
ADULT	TOTALS	1.05E+00	1.19E-02	1.16E-02	1.17E-02	1.16E-02	1.74E+01

NUMBER 4 NAME=Receptor 4 X= 9.8KM, Y= -7.4KM, Z= 0.0M, DIST= 12.3KM, IRTYPE= 1

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	6.39E-02	6.69E-03	5.30E-03	1.31E-02	8.25E-03	9.76E-01
CHILD	TOTALS	6.38E-02	7.67E-03	5.62E-03	9.09E-03	6.94E-03	9.76E-01
TEENAGE	TOTALS	6.39E-02	1.03E-02	5.85E-03	7.34E-03	6.42E-03	9.76E-01
ADULT	TOTALS	6.39E-02	1.00E-02	6.13E-03	7.37E-03	6.53E-03	9.76E-01

TIME STEP NUMBER 1, DURATION IN YRS IS... 1.0

NUMBER 5 NAME=Receptor 5 X= 13.4KM, Y= -5.3KM, Z= 0.0M, DIST= 14.4KM, IRTYPE= 1

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	8.90E-02	9.96E-03	7.69E-03	2.05E-02	1.25E-02	1.35E+00
CHILD	TOTALS	8.88E-02	1.16E-02	8.23E-03	1.39E-02	1.04E-02	1.35E+00
TEENAGE	TOTALS	8.90E-02	1.58E-02	8.59E-03	1.10E-02	9.53E-03	1.35E+00
ADULT	TOTALS	8.90E-02	1.54E-02	9.05E-03	1.11E-02	9.72E-03	1.35E+00

NUMBER 6 NAME=Receptor 6 X= 7.6KM, Y= -6.7KM, Z= 0.0M, DIST= 10.1KM, IRTYPE= 1

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	7.37E-02	6.73E-03	5.51E-03	1.24E-02	8.11E-03	1.14E+00
CHILD	TOTALS	7.36E-02	7.60E-03	5.80E-03	8.85E-03	6.95E-03	1.14E+00
TEENAGE	TOTALS	7.37E-02	9.88E-03	5.99E-03	7.30E-03	6.50E-03	1.14E+00
ADULT	TOTALS	7.37E-02	9.69E-03	6.24E-03	7.33E-03	6.60E-03	1.14E+00

TIME STEP NUMBER 1, DURATION IN YRS IS... 1.0

NUMBER 7 NAME=Receptor 7 X= -4.1KM, Y= 0.9KM, Z= 0.0M, DIST= 4.2KM, IRTYPE= 1

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	2.45E-01	1.15E-02	1.06E-02	1.56E-02	1.25E-02	3.92E+00
CHILD	TOTALS	2.45E-01	1.21E-02	1.08E-02	1.30E-02	1.16E-02	3.92E+00
TEENAGE	TOTALS	2.45E-01	1.38E-02	1.09E-02	1.19E-02	1.13E-02	3.92E+00
ADULT	TOTALS	2.45E-01	1.36E-02	1.11E-02	1.19E-02	1.14E-02	3.92E+00

TIME STEP NUMBER 2, DURATION IN YRS IS... 1.0

CONCENTRATION DATA FOR THE N DIRECTION, THETA EQUALS 0.0 DEGREES

TOTAL AIR CONCENTRATIONS, PCI/M3, AND WL

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210	WL
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.721E+00	6.361E+00	2.762E+00	1.161E+00	9.264E-07	2.488E-05
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.524E+00	3.458E+00	2.006E+00	1.166E+00	1.654E-06	1.808E-05
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.207E+00	2.197E+00	1.527E+00	1.063E+00	2.324E-06	1.397E-05
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.657E+00	1.654E+00	1.255E+00	9.551E-01	2.843E-06	1.163E-05
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.531E-01	8.533E-01	7.369E-01	6.282E-01	3.592E-06	6.958E-06
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.389E-01	3.391E-01	3.247E-01	3.033E-01	3.807E-06	3.127E-06
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.718E-01	1.719E-01	1.704E-01	1.671E-01	3.620E-06	1.665E-06
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.105E-01	1.106E-01	1.106E-01	1.101E-01	3.447E-06	1.085E-06
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.963E-02	7.967E-02	7.991E-02	7.991E-02	3.302E-06	7.853E-07
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.127E-02	6.130E-02	6.155E-02	6.166E-02	3.178E-06	6.052E-07
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.921E-02	4.924E-02	4.946E-02	4.959E-02	3.072E-06	4.865E-07
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.094E-02	4.097E-02	4.116E-02	4.129E-02	2.994E-06	4.049E-07

GROUND SURFACE CONCENTRATIONS, PCI/M2

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.038E+00	5.038E+00	5.038E+00	1.930E+00
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.739E+00	2.739E+00	2.739E+00	3.445E+00
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.740E+00	1.740E+00	1.740E+00	4.842E+00
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.310E+00	1.310E+00	1.310E+00	5.922E+00
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.759E-01	6.759E-01	6.759E-01	7.482E+00
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.686E-01	2.686E-01	2.686E-01	7.929E+00
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.361E-01	1.361E-01	1.361E-01	7.541E+00
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.758E-02	8.758E-02	8.758E-02	7.179E+00
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.310E-02	6.310E-02	6.310E-02	6.877E+00
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.855E-02	4.855E-02	4.855E-02	6.621E+00
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.900E-02	3.900E-02	3.900E-02	6.399E+00
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.245E-02	3.245E-02	3.245E-02	6.237E+00

TOTAL DEPOSITION RATES, PCI/M2-SEC

XRHO, KM	U-238	Th-230	Ra-226	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	2.779E-09
2.5	0.000E+00	0.000E+00	0.000E+00	4.962E-09
3.5	0.000E+00	0.000E+00	0.000E+00	6.973E-09
4.5	0.000E+00	0.000E+00	0.000E+00	8.529E-09
7.5	0.000E+00	0.000E+00	0.000E+00	1.078E-08
15.0	0.000E+00	0.000E+00	0.000E+00	1.142E-08
25.0	0.000E+00	0.000E+00	0.000E+00	1.086E-08
35.0	0.000E+00	0.000E+00	0.000E+00	1.034E-08
45.0	0.000E+00	0.000E+00	0.000E+00	9.905E-09
55.0	0.000E+00	0.000E+00	0.000E+00	9.535E-09
65.0	0.000E+00	0.000E+00	0.000E+00	9.216E-09
75.0	0.000E+00	0.000E+00	0.000E+00	8.982E-09

TIME STEP NUMBER 2, DURATION IN YRS IS... 1.0

CONCENTRATION DATA FOR THE E DIRECTION, THETA EQUALS 90.0 DEGREES

TOTAL AIR CONCENTRATIONS, PCI/M3, AND WL

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210	WL
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.201E+01	1.765E+01	4.762E+00	1.736E+00	1.391E-06	4.879E-05
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.392E+01	1.238E+01	4.328E+00	2.054E+00	2.796E-06	4.236E-05
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.772E+00	9.163E+00	3.837E+00	2.092E+00	4.188E-06	3.670E-05
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.503E+00	7.221E+00	3.411E+00	1.995E+00	5.243E-06	3.217E-05
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.482E+00	4.437E+00	2.579E+00	1.638E+00	7.114E-06	2.376E-05
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.152E+00	2.152E+00	1.631E+00	1.202E+00	8.608E-06	1.497E-05
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.240E+00	1.241E+00	1.087E+00	9.113E-01	9.219E-06	1.019E-05
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.620E-01	8.625E-01	8.052E-01	7.243E-01	9.491E-06	7.673E-06
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.560E-01	6.564E-01	6.325E-01	5.928E-01	9.605E-06	6.094E-06
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.270E-01	5.272E-01	5.169E-01	4.966E-01	9.637E-06	5.016E-06
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.388E-01	4.390E-01	4.346E-01	4.240E-01	9.622E-06	4.237E-06
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.755E-01	3.757E-01	3.740E-01	3.685E-01	9.601E-06	3.658E-06

GROUND SURFACE CONCENTRATIONS, PCI/M2

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.398E+01	1.398E+01	1.398E+01	2.898E+00
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.809E+00	9.809E+00	9.809E+00	5.824E+00
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.258E+00	7.258E+00	7.258E+00	8.724E+00
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.720E+00	5.720E+00	5.720E+00	1.092E+01
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.514E+00	3.514E+00	3.514E+00	1.482E+01
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.704E+00	1.704E+00	1.704E+00	1.793E+01
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.827E-01	9.827E-01	9.827E-01	1.920E+01
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.831E-01	6.831E-01	6.831E-01	1.977E+01
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.199E-01	5.199E-01	5.199E-01	2.001E+01
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.176E-01	4.176E-01	4.176E-01	2.007E+01
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.477E-01	3.477E-01	3.477E-01	2.004E+01
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.976E-01	2.976E-01	2.976E-01	2.000E+01

TOTAL DEPOSITION RATES, PCI/M2-SEC

XRHO, KM	U-238	Th-230	Ra-226	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	4.174E-09
2.5	0.000E+00	0.000E+00	0.000E+00	8.388E-09
3.5	0.000E+00	0.000E+00	0.000E+00	1.257E-08
4.5	0.000E+00	0.000E+00	0.000E+00	1.573E-08
7.5	0.000E+00	0.000E+00	0.000E+00	2.134E-08
15.0	0.000E+00	0.000E+00	0.000E+00	2.582E-08
25.0	0.000E+00	0.000E+00	0.000E+00	2.766E-08
35.0	0.000E+00	0.000E+00	0.000E+00	2.847E-08
45.0	0.000E+00	0.000E+00	0.000E+00	2.881E-08
55.0	0.000E+00	0.000E+00	0.000E+00	2.891E-08
65.0	0.000E+00	0.000E+00	0.000E+00	2.887E-08
75.0	0.000E+00	0.000E+00	0.000E+00	2.880E-08

TIME STEP NUMBER 2, DURATION IN YRS IS... 1.0

CONCENTRATION DATA FOR THE S DIRECTION, THETA EQUALS 180.0 DEGREES

TOTAL AIR CONCENTRATIONS, PCI/M3, AND WL

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210	WL
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.132E+01	9.021E+00	2.461E+00	8.616E-01	6.253E-07	2.498E-05
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.762E+00	5.196E+00	2.015E+00	1.008E+00	1.338E-06	1.933E-05
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.746E+00	3.554E+00	1.684E+00	1.000E+00	2.038E-06	1.593E-05
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.796E+00	2.714E+00	1.442E+00	9.277E-01	2.554E-06	1.357E-05
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.579E+00	1.568E+00	9.968E-01	6.929E-01	3.388E-06	9.253E-06
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.152E-01	7.153E-01	5.685E-01	4.416E-01	3.863E-06	5.267E-06
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.979E-01	3.981E-01	3.578E-01	3.094E-01	3.919E-06	3.378E-06
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.711E-01	2.712E-01	2.570E-01	2.360E-01	3.888E-06	2.463E-06
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.036E-01	2.037E-01	1.982E-01	1.883E-01	3.834E-06	1.917E-06
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.620E-01	1.621E-01	1.598E-01	1.550E-01	3.772E-06	1.555E-06
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.338E-01	1.339E-01	1.331E-01	1.307E-01	3.708E-06	1.300E-06
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.139E-01	1.140E-01	1.137E-01	1.126E-01	3.654E-06	1.114E-06

GROUND SURFACE CONCENTRATIONS, PCI/M2

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.145E+00	7.145E+00	7.145E+00	1.302E+00
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.115E+00	4.115E+00	4.115E+00	2.788E+00
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.815E+00	2.815E+00	2.815E+00	4.244E+00
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.149E+00	2.149E+00	2.149E+00	5.320E+00
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.242E+00	1.242E+00	1.242E+00	7.057E+00
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.665E-01	5.665E-01	5.665E-01	8.048E+00
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.153E-01	3.153E-01	3.153E-01	8.163E+00
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.148E-01	2.148E-01	2.148E-01	8.099E+00
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.614E-01	1.614E-01	1.614E-01	7.986E+00
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.284E-01	1.284E-01	1.284E-01	7.857E+00
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.061E-01	1.061E-01	1.061E-01	7.724E+00
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.027E-02	9.027E-02	9.027E-02	7.611E+00

TOTAL DEPOSITION RATES, PCI/M2-SEC

XRHO, KM	U-238	Th-230	Ra-226	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	1.876E-09
2.5	0.000E+00	0.000E+00	0.000E+00	4.015E-09
3.5	0.000E+00	0.000E+00	0.000E+00	6.113E-09
4.5	0.000E+00	0.000E+00	0.000E+00	7.661E-09
7.5	0.000E+00	0.000E+00	0.000E+00	1.016E-08
15.0	0.000E+00	0.000E+00	0.000E+00	1.159E-08
25.0	0.000E+00	0.000E+00	0.000E+00	1.176E-08
35.0	0.000E+00	0.000E+00	0.000E+00	1.166E-08
45.0	0.000E+00	0.000E+00	0.000E+00	1.150E-08
55.0	0.000E+00	0.000E+00	0.000E+00	1.132E-08
65.0	0.000E+00	0.000E+00	0.000E+00	1.112E-08
75.0	0.000E+00	0.000E+00	0.000E+00	1.096E-08

TIME STEP NUMBER 2, DURATION IN YRS IS... 1.0

CONCENTRATION DATA FOR THE W DIRECTION, THETA EQUALS 270.0 DEGREES

TOTAL AIR CONCENTRATIONS, PCI/M3, AND WL

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210	WL
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.287E+01	1.067E+01	2.711E+00	8.859E-01	6.229E-07	2.804E-05
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.653E+00	6.203E+00	2.337E+00	1.093E+00	1.391E-06	2.232E-05
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.352E+00	4.226E+00	1.997E+00	1.115E+00	2.161E-06	1.863E-05
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.242E+00	3.197E+00	1.739E+00	1.066E+00	2.773E-06	1.609E-05
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.785E+00	1.782E+00	1.222E+00	8.515E-01	3.880E-06	1.121E-05
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.776E-01	7.780E-01	6.727E-01	5.563E-01	4.761E-06	6.287E-06
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.202E-01	4.204E-01	4.001E-01	3.690E-01	5.035E-06	3.838E-06
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.817E-01	2.819E-01	2.769E-01	2.670E-01	5.090E-06	2.690E-06
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.089E-01	2.091E-01	2.080E-01	2.046E-01	5.063E-06	2.033E-06
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.645E-01	1.646E-01	1.646E-01	1.636E-01	5.005E-06	1.614E-06
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.348E-01	1.349E-01	1.352E-01	1.350E-01	4.935E-06	1.328E-06
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.140E-01	1.140E-01	1.145E-01	1.146E-01	4.873E-06	1.125E-06

GROUND SURFACE CONCENTRATIONS, PCI/M2

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.450E+00	8.450E+00	8.450E+00	1.298E+00
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.913E+00	4.913E+00	4.913E+00	2.897E+00
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.348E+00	3.348E+00	3.348E+00	4.502E+00
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.532E+00	2.532E+00	2.532E+00	5.777E+00
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.412E+00	1.412E+00	1.412E+00	8.083E+00
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.162E-01	6.162E-01	6.162E-01	9.916E+00
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.330E-01	3.330E-01	3.330E-01	1.049E+01
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.232E-01	2.232E-01	2.232E-01	1.060E+01
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.656E-01	1.656E-01	1.656E-01	1.055E+01
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.304E-01	1.304E-01	1.304E-01	1.043E+01
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.068E-01	1.068E-01	1.068E-01	1.028E+01
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.033E-02	9.033E-02	9.033E-02	1.015E+01

TOTAL DEPOSITION RATES, PCI/M2-SEC

XRHO, KM	U-238	Th-230	Ra-226	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	1.869E-09
2.5	0.000E+00	0.000E+00	0.000E+00	4.173E-09
3.5	0.000E+00	0.000E+00	0.000E+00	6.484E-09
4.5	0.000E+00	0.000E+00	0.000E+00	8.320E-09
7.5	0.000E+00	0.000E+00	0.000E+00	1.164E-08
15.0	0.000E+00	0.000E+00	0.000E+00	1.428E-08
25.0	0.000E+00	0.000E+00	0.000E+00	1.511E-08
35.0	0.000E+00	0.000E+00	0.000E+00	1.527E-08
45.0	0.000E+00	0.000E+00	0.000E+00	1.519E-08
55.0	0.000E+00	0.000E+00	0.000E+00	1.502E-08
65.0	0.000E+00	0.000E+00	0.000E+00	1.481E-08
75.0	0.000E+00	0.000E+00	0.000E+00	1.462E-08

TIME STEP NUMBER 2, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS INHAL. EXPOSED ORGAN IS EFFECTIV

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.868E-07	3.614E-06	5.820E-06	8.062E-06	9.657E-06	1.139E-05	2.765E-05	4.888E-05
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.175E-06	5.855E-06	9.860E-06	1.396E-05	1.694E-05	2.016E-05	2.722E-05	5.630E-05
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.290E-06	6.325E-06	1.061E-05	1.506E-05	1.830E-05	2.180E-05	2.556E-05	2.713E-05
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.486E-06	7.547E-06	1.312E-05	1.907E-05	2.359E-05	2.850E-05	2.578E-05	2.037E-05
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.558E-06	8.173E-06	1.482E-05	2.219E-05	2.808E-05	3.664E-05	2.393E-05	2.599E-05
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.096E-06	6.422E-06	2.184E-04	4.404E-04	3.535E-05	4.474E-05	3.500E-05	2.902E-05
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.913E-07	5.212E-06	1.135E-03	1.534E-04	1.858E-05	2.139E-05	2.473E-05	2.809E-05
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.196E-06	5.150E-06	1.171E-05	1.267E-05	1.792E-05	2.124E-05	1.981E-05	1.869E-05
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.237E-06	6.490E-06	1.088E-05	1.620E-05	2.242E-05	1.820E-05	1.871E-05	1.096E-05
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.320E-06	5.813E-06	9.729E-06	1.343E-05	1.670E-05	1.639E-05	8.876E-06	8.967E-06
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.969E-07	3.948E-06	6.886E-06	9.539E-06	1.368E-05	2.376E-05	2.920E-05	2.068E-05
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.986E-07	3.810E-04	2.490E-04	1.337E-05	2.937E-05	3.351E-04	2.661E-04	4.350E-05
W	0.000E+00	0.000E+00	1.578E-07	0.000E+00	8.500E-07	4.520E-06	1.030E-05	2.715E-05	6.440E-05	1.652E-02	5.704E-03	2.674E-05
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.535E-07	4.012E-06	7.423E-06	1.615E-05	5.754E-05	7.559E-05	1.561E-04	1.966E-04
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.036E-06	5.333E-06	9.301E-06	1.344E-05	1.655E-05	1.991E-05	3.310E-05	6.987E-05
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.159E-05	7.956E-04	2.775E-03	8.836E-04	4.641E-04	1.727E-02	6.511E-03	7.784E-04

TOTAL DOSE COMMITMENT IS 5.715E-02 PERSON-REM/YR

TIME STEP NUMBER 2, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS INHAL. EXPOSED ORGAN IS BONE

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.385E-06	2.932E-05	4.719E-05	6.535E-05	7.825E-05	9.227E-05	2.239E-04	3.956E-04
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.530E-06	4.749E-05	7.995E-05	1.131E-04	1.373E-04	1.633E-04	2.203E-04	4.555E-04
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.047E-05	5.131E-05	8.606E-05	1.220E-04	1.483E-04	1.766E-04	2.070E-04	2.196E-04
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.206E-05	6.122E-05	1.064E-04	1.546E-04	1.911E-04	2.308E-04	2.088E-04	1.649E-04
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.265E-05	6.630E-05	1.202E-04	1.799E-04	2.276E-04	2.969E-04	1.938E-04	2.105E-04
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.890E-06	5.210E-05	1.771E-03	3.570E-03	2.866E-04	3.625E-04	2.835E-04	2.350E-04
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.421E-06	4.228E-05	9.204E-03	1.244E-03	1.506E-04	1.733E-04	2.004E-04	2.275E-04
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.703E-06	4.177E-05	9.496E-05	1.027E-04	1.452E-04	1.721E-04	1.604E-04	1.514E-04
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.004E-05	5.265E-05	8.823E-05	1.313E-04	1.817E-04	1.475E-04	1.516E-04	8.876E-05
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.071E-05	4.716E-05	7.890E-05	1.089E-04	1.353E-04	1.328E-04	7.189E-05	7.260E-05
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.467E-06	3.203E-05	5.584E-05	7.733E-05	1.108E-04	1.926E-04	2.365E-04	1.675E-04
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.858E-06	3.091E-03	2.020E-03	1.084E-04	2.380E-04	2.715E-03	2.156E-03	3.522E-04
W	0.000E+00	0.000E+00	1.281E-06	0.000E+00	6.897E-06	3.667E-05	8.353E-05	2.201E-04	5.220E-04	1.338E-01	4.620E-02	2.165E-04
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.114E-06	3.254E-05	6.021E-05	1.309E-04	4.664E-04	6.127E-04	1.265E-03	1.593E-03
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.409E-06	4.326E-05	7.542E-05	1.090E-04	1.341E-04	1.613E-04	2.680E-04	5.655E-04
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.752E-04	6.454E-03	2.250E-02	7.161E-03	3.760E-03	1.398E-01	5.270E-02	6.298E-03

TOTAL DOSE COMMITMENT IS 4.629E-01 PERSON-REM/YR

TIME STEP NUMBER 2, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS INHAL. EXPOSED ORGAN IS AVG.LUNG

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.104E-08	4.258E-07	7.022E-07	9.961E-07	1.221E-06	1.474E-06	3.661E-06	6.616E-06
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.360E-07	6.905E-07	1.193E-06	1.731E-06	2.154E-06	2.627E-06	3.633E-06	7.694E-06
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.493E-07	7.448E-07	1.279E-06	1.856E-06	2.307E-06	2.809E-06	3.366E-06	3.649E-06
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.720E-07	8.879E-07	1.577E-06	2.340E-06	2.953E-06	3.639E-06	3.355E-06	2.701E-06
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.802E-07	9.599E-07	1.772E-06	2.699E-06	3.469E-06	4.595E-06	3.045E-06	3.355E-06
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.267E-07	7.543E-07	2.614E-05	5.364E-05	4.380E-06	5.635E-06	4.480E-06	3.772E-06
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.148E-08	6.117E-07	1.357E-04	1.866E-05	2.298E-06	2.689E-06	3.159E-06	3.644E-06
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.383E-07	6.052E-07	1.404E-06	1.547E-06	2.225E-06	2.682E-06	2.541E-06	2.436E-06
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.431E-07	7.633E-07	1.306E-06	1.982E-06	2.794E-06	2.308E-06	2.413E-06	1.437E-06
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.527E-07	6.837E-07	1.169E-06	1.646E-06	2.087E-06	2.087E-06	1.152E-06	1.185E-06
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.213E-08	4.636E-07	8.241E-07	1.162E-06	1.696E-06	2.998E-06	3.746E-06	2.697E-06
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.922E-08	4.476E-05	2.984E-05	1.632E-06	3.652E-06	4.241E-05	3.427E-05	5.697E-06
W	0.000E+00	0.000E+00	1.810E-08	0.000E+00	9.830E-08	5.312E-07	1.236E-06	3.321E-06	8.029E-06	2.098E-03	7.379E-04	3.522E-06
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.709E-08	4.702E-07	8.843E-07	1.952E-06	7.057E-06	9.402E-06	1.968E-05	2.513E-05
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.199E-07	6.278E-07	1.120E-06	1.654E-06	2.080E-06	2.556E-06	4.339E-06	9.346E-06
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.500E-06	9.382E-05	3.356E-04	1.095E-04	5.896E-05	2.247E-03	8.677E-04	1.062E-04

TOTAL DOSE COMMITMENT IS 7.328E-03 PERSON-REM/YR

TIME STEP NUMBER 2, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS INHAL. EXPOSED ORGAN IS BRONCHI

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.199E-03	5.508E-03	4.724E-03	4.420E-03	3.981E-03	3.753E-03	7.566E-03	1.141E-02
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.365E-03	7.893E-03	6.961E-03	6.605E-03	6.001E-03	5.683E-03	6.352E-03	1.119E-02
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.508E-03	1.165E-02	1.017E-02	9.631E-03	8.754E-03	8.307E-03	8.078E-03	7.325E-03
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.145E-02	2.190E-02	2.017E-02	1.978E-02	1.843E-02	1.785E-02	1.348E-02	9.146E-03
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.681E-02	3.497E-02	3.410E-02	3.448E-02	3.280E-02	3.425E-02	1.865E-02	1.737E-02
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.096E-02	2.385E-02	4.219E-01	5.669E-01	3.400E-02	3.432E-02	2.233E-02	1.587E-02
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.676E-03	1.882E-02	2.133E+00	1.922E-01	1.739E-02	1.597E-02	1.536E-02	1.495E-02
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.068E-02	1.807E-02	2.231E-02	1.648E-02	1.768E-02	1.690E-02	1.321E-02	1.075E-02
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.870E-03	2.056E-02	1.890E-02	1.932E-02	2.036E-02	1.336E-02	1.154E-02	5.838E-03
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.675E-03	1.598E-02	1.416E-02	1.318E-02	1.235E-02	9.728E-03	4.401E-03	3.823E-03
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.494E-03	1.206E-02	1.104E-02	1.025E-02	1.102E-02	1.532E-02	1.569E-02	9.530E-03
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.521E-03	1.068E+00	3.667E-01	1.323E-02	2.186E-02	2.000E-01	1.326E-01	1.861E-02
W	0.000E+00	0.000E+00	5.440E-03	0.000E+00	6.695E-03	1.264E-02	1.471E-02	2.570E-02	4.544E-02	9.282E+00	2.662E+00	1.069E-02
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.540E-03	1.723E-02	1.655E-02	2.383E-02	6.310E-02	6.585E-02	1.127E-01	1.211E-01
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.043E-03	1.147E-02	1.048E-02	1.016E-02	9.381E-03	9.018E-03	1.248E-02	2.257E-02
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.266E-02	1.119E+00	2.058E+00	4.404E-01	1.733E-01	5.140E+00	1.607E+00	1.639E-01

TOTAL DOSE COMMITMENT IS 2.969E+01 PERSON-REM/YR

TIME STEP NUMBER 2, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS GROUND EXPOSED ORGAN IS EFFECTIV

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.044E-07	8.170E-07	8.459E-07	9.310E-07	9.663E-07	1.033E-06	2.331E-06	3.898E-06
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.570E-07	1.207E-06	1.315E-06	1.493E-06	1.584E-06	1.719E-06	2.170E-06	4.267E-06
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.029E-07	1.657E-06	1.718E-06	1.895E-06	1.968E-06	2.104E-06	2.278E-06	2.276E-06
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.362E-06	2.882E-06	2.986E-06	3.258E-06	3.346E-06	3.542E-06	2.901E-06	2.122E-06
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.967E-06	4.396E-06	4.655E-06	5.091E-06	5.215E-06	5.835E-06	3.389E-06	3.353E-06
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.291E-06	3.044E-06	5.946E-05	8.773E-05	5.739E-06	6.275E-06	4.397E-06	3.345E-06
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.061E-07	2.410E-06	3.023E-04	2.996E-05	2.962E-06	2.950E-06	3.060E-06	3.192E-06
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.263E-06	2.321E-06	3.153E-06	2.544E-06	2.959E-06	3.048E-06	2.553E-06	2.215E-06
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.176E-06	2.675E-06	2.722E-06	3.053E-06	3.503E-06	2.485E-06	2.306E-06	1.246E-06
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.161E-06	2.121E-06	2.124E-06	2.210E-06	2.291E-06	1.976E-06	9.720E-07	9.112E-07
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.762E-07	1.577E-06	1.618E-06	1.670E-06	1.979E-06	3.004E-06	3.335E-06	2.182E-06
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.432E-07	1.413E-04	5.484E-05	2.212E-06	4.044E-06	4.053E-05	2.921E-05	4.428E-06
W	0.000E+00	0.000E+00	6.067E-07	0.000E+00	8.023E-07	1.673E-06	2.216E-06	4.362E-06	8.585E-06	1.933E-03	6.058E-04	2.636E-06
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.005E-06	2.166E-06	2.271E-06	3.562E-06	1.022E-05	1.149E-05	2.109E-05	2.421E-05
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.383E-07	1.584E-06	1.684E-06	1.869E-06	1.946E-06	2.083E-06	3.178E-06	6.280E-06
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.051E-05	1.693E-04	3.813E-04	9.704E-05	4.439E-05	1.503E-03	5.290E-04	6.004E-05

TOTAL DOSE COMMITMENT IS 6.411E-03 PERSON-REM/YR

TIME STEP NUMBER 2, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS CLOUD EXPOSED ORGAN IS EFFECTIV

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.109E-05	4.356E-05	4.037E-05	3.860E-05	3.500E-05	3.308E-05	6.678E-05	1.008E-04
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.959E-05	6.329E-05	5.958E-05	5.762E-05	5.270E-05	5.005E-05	5.603E-05	9.878E-05
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.670E-05	8.466E-05	8.328E-05	8.215E-05	7.592E-05	7.264E-05	7.096E-05	6.449E-05
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.758E-05	1.253E-04	1.391E-04	1.494E-04	1.467E-04	1.469E-04	1.134E-04	7.812E-05
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.771E-05	1.788E-04	2.249E-04	2.574E-04	2.619E-04	2.842E-04	1.584E-04	1.496E-04
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.066E-05	1.331E-04	2.972E-03	4.429E-03	2.800E-04	2.909E-04	1.925E-04	1.381E-04
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.986E-05	1.090E-04	1.538E-02	1.522E-03	1.443E-04	1.359E-04	1.327E-04	1.302E-04
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.114E-05	9.893E-05	1.526E-04	1.254E-04	1.426E-04	1.409E-04	1.124E-04	9.264E-05
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.004E-05	1.153E-04	1.313E-04	1.490E-04	1.661E-04	1.125E-04	9.897E-05	5.061E-05
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.278E-05	9.808E-05	1.051E-04	1.063E-04	1.038E-04	8.351E-05	3.824E-05	3.344E-05
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.853E-05	7.603E-05	8.420E-05	8.426E-05	9.380E-05	1.326E-04	1.371E-04	8.366E-05
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.070E-05	6.937E-03	2.852E-03	1.102E-04	1.877E-04	1.741E-03	1.163E-03	1.638E-04
W	0.000E+00	0.000E+00	1.343E-05	0.000E+00	2.951E-05	8.128E-05	1.143E-04	2.144E-04	3.907E-04	8.090E-02	2.336E-02	9.408E-05
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.139E-05	9.844E-05	1.205E-04	1.918E-04	5.319E-04	5.676E-04	9.827E-04	1.062E-03
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.090E-05	7.785E-05	8.256E-05	8.482E-05	8.041E-05	7.834E-05	1.092E-04	1.982E-04
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.463E-04	8.770E-03	1.739E-02	3.816E-03	1.517E-03	4.520E-02	1.416E-02	1.447E-03

TOTAL DOSE COMMITMENT IS 2.487E-01 PERSON-REM/YR

TIME STEP NUMBER 2, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS VEG. ING EXPOSED ORGAN IS EFFECTIV

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

TOTAL DOSE COMMITMENT IS 0.000E+00 PERSON-REM/YR

WARNING--POPULATION FOOD INGESTION DOSES SHOWN
ABOVE HAVE NOT BEEN CORRECTED TO REFLECT POTENTIAL
FOOD EXPORT AND MAY EXCEED DOSES ACTUALLY RECEIVED
BY THE POPULATION OF THIS REGION. SEE SUMMARY
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TIME STEP NUMBER 2, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS VEG. ING EXPOSED ORGAN IS BONE

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

TOTAL DOSE COMMITMENT IS 0.000E+00 PERSON-REM/YR

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DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

TOTAL DOSE COMMITMENT IS 0.000E+00 PERSON-REM/YR

WARNING--POPULATION FOOD INGESTION DOSES SHOWN
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TIME STEP NUMBER 2, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS MEAT ING EXPOSED ORGAN IS BONE

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

TOTAL DOSE COMMITMENT IS 0.000E+00 PERSON-REM/YR

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ABOVE HAVE NOT BEEN CORRECTED TO REFLECT POTENTIAL
FOOD EXPORT AND MAY EXCEED DOSES ACTUALLY RECEIVED
BY THE POPULATION OF THIS REGION. SEE SUMMARY
TABLE FOR THIS INFORMATION.

TIME STEP NUMBER 2, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS MILK ING EXPOSED ORGAN IS EFFECTIV

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

TOTAL DOSE COMMITMENT IS 0.000E+00 PERSON-REM/YR

WARNING--POPULATION FOOD INGESTION DOSES SHOWN
ABOVE HAVE NOT BEEN CORRECTED TO REFLECT POTENTIAL
FOOD EXPORT AND MAY EXCEED DOSES ACTUALLY RECEIVED
BY THE POPULATION OF THIS REGION. SEE SUMMARY
TABLE FOR THIS INFORMATION.

TIME STEP NUMBER 2, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS MILK ING EXPOSED ORGAN IS BONE

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

TOTAL DOSE COMMITMENT IS 0.000E+00 PERSON-REM/YR

WARNING--POPULATION FOOD INGESTION DOSES SHOWN
ABOVE HAVE NOT BEEN CORRECTED TO REFLECT POTENTIAL
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BY THE POPULATION OF THIS REGION. SEE SUMMARY
TABLE FOR THIS INFORMATION.

TIME STEP NUMBER 2, DURATION IN YRS IS... 1.0

SUMMARY PRINT OF POPULATION DOSES COMPUTED FOR TSTEP 2--DOSES SHOWN ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DOSES RECEIVED BY PEOPLE WITHIN 80 KILOMETERS

PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INHAL.	5.715E-02	4.629E-01	7.328E-03	3.472E-01	1.669E-01	2.969E+01
GROUND	6.411E-03	6.411E-03	6.411E-03	6.411E-03	6.411E-03	6.411E-03
CLOUD	2.487E-01	2.487E-01	2.487E-01	2.487E-01	2.487E-01	2.487E-01
VEG. ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MEAT ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MILK ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RNPLUS50	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOTALS	3.122E-01	7.180E-01	2.624E-01	6.023E-01	4.220E-01	2.994E+01

DOSES RECEIVED BY PEOPLE BEYOND 80 KILOMETERS

PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INHAL.	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GROUND	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CLOUD	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
VEG. ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MEAT ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MILK ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RNPLUS50	6.885E+00	9.389E+01	1.565E+00	6.885E+00	6.885E+00	4.381E+01
TOTALS	6.885E+00	9.389E+01	1.565E+00	6.885E+00	6.885E+00	4.381E+01

TOTAL DOSES COMPUTED OVER ALL POPULATIONS

PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INHAL.	5.715E-02	4.629E-01	7.328E-03	3.472E-01	1.669E-01	2.969E+01
GROUND	6.411E-03	6.411E-03	6.411E-03	6.411E-03	6.411E-03	6.411E-03
CLOUD	2.487E-01	2.487E-01	2.487E-01	2.487E-01	2.487E-01	2.487E-01
VEG. ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MEAT ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MILK ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RNPLUS50	6.885E+00	9.389E+01	1.565E+00	6.885E+00	6.885E+00	4.381E+01
TOTALS	7.197E+00	9.460E+01	1.827E+00	7.487E+00	7.307E+00	7.376E+01

TIME STEP NUMBER 2, DURATION IN YRS IS... 1.0

INDIVIDUAL RECEPTOR PARTICULATE CONCENTRATIONS

NO.	NAME	PTSZ	AIRBORNE CONCENTRATIONS, PCI/M3 U-238	Th-230	Ra-226	Pb-210	GROUND CONCENTRATIONS, PCI/M2 U-238	Th-230	Ra-226	Pb-210
1	Receptor 1	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1	Receptor 1	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1	Receptor 1	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1	Receptor 1	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2	Receptor 2	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2	Receptor 2	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2	Receptor 2	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2	Receptor 2	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
3	Receptor 3	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
3	Receptor 3	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
3	Receptor 3	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
3	Receptor 3	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
4	Receptor 4	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
4	Receptor 4	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
4	Receptor 4	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
4	Receptor 4	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
5	Receptor 5	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
5	Receptor 5	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
5	Receptor 5	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
5	Receptor 5	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
6	Receptor 6	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
6	Receptor 6	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
6	Receptor 6	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
6	Receptor 6	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
7	Receptor 7	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
7	Receptor 7	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
7	Receptor 7	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
7	Receptor 7	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

TIME STEP NUMBER 2, DURATION IN YRS IS... 1.0

INDIVIDUAL RECEPTOR RADON AND RADON DAUGHTER CONCENTRATIONS

	AIRBORNE CONCENTRATIONS, PCI/M3								GROUND CONCENTRATIONS, PCI/M2			
NO.	Rn-222	Po-218	Pb-214	Bi-214	Pb-210	Bi-210	Po-210	WL	Po-218	Pb-214	Bi-214	Pb-210
1	2.034E+01	1.635E+01	4.343E+00	1.635E+00	1.460E-06	1.670E-09	5.663E-14	4.495E-05	1.295E+01	1.295E+01	1.295E+01	2.294E-01
2	2.254E+00	2.245E+00	1.563E+00	1.141E+00	7.369E-06	6.197E-08	1.406E-11	1.449E-05	1.778E+00	1.778E+00	1.778E+00	1.197E+00
3	1.621E+01	1.366E+01	3.571E+00	9.532E-01	4.366E-07	2.605E-10	4.735E-15	3.573E-05	1.082E+01	1.082E+01	1.082E+01	6.176E-02
4	1.007E+00	1.006E+00	7.655E-01	5.686E-01	3.636E-06	3.574E-08	9.902E-12	7.038E-06	7.971E-01	7.971E-01	7.971E-01	5.884E-01
5	1.355E+00	1.355E+00	1.061E+00	8.067E-01	5.846E-06	6.867E-08	2.298E-11	9.785E-06	1.073E+00	1.073E+00	1.073E+00	9.533E-01
6	1.147E+00	1.145E+00	8.135E-01	5.756E-01	3.133E-06	2.473E-08	5.443E-12	7.451E-06	9.073E-01	9.073E-01	9.073E-01	5.118E-01
7	3.950E+00	3.866E+00	1.865E+00	1.044E+00	2.346E-06	6.600E-09	5.201E-13	1.733E-05	3.062E+00	3.062E+00	3.062E+00	3.803E-01

TIME STEP NUMBER 2, DURATION IN YRS IS... 1.0

NUMBER 1 NAME=Receptor 1 X= 1.7KM, Y= -0.5KM, Z= 0.0M, DIST= 1.8KM, IRTYPE= 1

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	1.55E+00	2.48E-02	2.41E-02	2.81E-02	2.56E-02	2.54E+01
CHILD	TOTALS	1.55E+00	2.53E-02	2.42E-02	2.60E-02	2.49E-02	2.54E+01
TEENAGE	TOTALS	1.55E+00	2.66E-02	2.44E-02	2.51E-02	2.47E-02	2.54E+01
ADULT	TOTALS	1.55E+00	2.65E-02	2.45E-02	2.51E-02	2.47E-02	2.54E+01

NUMBER 2 NAME=Receptor 2 X= 9.6KM, Y= 3.4KM, Z= 0.0M, DIST= 10.1KM, IRTYPE= 1

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	1.84E-01	1.74E-02	1.38E-02	3.40E-02	2.14E-02	2.83E+00
CHILD	TOTALS	1.83E-01	2.00E-02	1.46E-02	2.36E-02	1.80E-02	2.83E+00
TEENAGE	TOTALS	1.84E-01	2.67E-02	1.52E-02	1.91E-02	1.67E-02	2.83E+00
ADULT	TOTALS	1.84E-01	2.61E-02	1.59E-02	1.92E-02	1.70E-02	2.83E+00

TIME STEP NUMBER 2, DURATION IN YRS IS... 1.0

NUMBER 3 NAME=Receptor 3 X= -0.1KM, Y= 0.8KM, Z= 0.0M, DIST= 0.8KM, IRTYPE= 1

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	1.23E+00	1.63E-02	1.60E-02	1.72E-02	1.65E-02	2.03E+01
CHILD	TOTALS	1.23E+00	1.64E-02	1.61E-02	1.66E-02	1.63E-02	2.03E+01
TEENAGE	TOTALS	1.23E+00	1.68E-02	1.61E-02	1.64E-02	1.62E-02	2.03E+01
ADULT	TOTALS	1.23E+00	1.68E-02	1.62E-02	1.64E-02	1.62E-02	2.03E+01

NUMBER 4 NAME=Receptor 4 X= 9.8KM, Y= -7.4KM, Z= 0.0M, DIST= 12.3KM, IRTYPE= 1

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	8.28E-02	8.60E-03	6.83E-03	1.68E-02	1.06E-02	1.27E+00
CHILD	TOTALS	8.26E-02	9.87E-03	7.25E-03	1.17E-02	8.93E-03	1.27E+00
TEENAGE	TOTALS	8.27E-02	1.32E-02	7.54E-03	9.44E-03	8.27E-03	1.27E+00
ADULT	TOTALS	8.28E-02	1.29E-02	7.90E-03	9.48E-03	8.42E-03	1.27E+00

TIME STEP NUMBER 2, DURATION IN YRS IS... 1.0

NUMBER 5 NAME=Receptor 5 X= 13.4KM, Y= -5.3KM, Z= 0.0M, DIST= 14.4KM, IRTYPE= 1

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	1.12E-01	1.25E-02	9.68E-03	2.57E-02	1.57E-02	1.70E+00
CHILD	TOTALS	1.12E-01	1.46E-02	1.04E-02	1.75E-02	1.31E-02	1.70E+00
TEENAGE	TOTALS	1.12E-01	1.99E-02	1.08E-02	1.39E-02	1.20E-02	1.70E+00
ADULT	TOTALS	1.12E-01	1.95E-02	1.14E-02	1.39E-02	1.22E-02	1.70E+00

NUMBER 6 NAME=Receptor 6 X= 7.6KM, Y= -6.7KM, Z= 0.0M, DIST= 10.1KM, IRTYPE= 1

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	9.34E-02	8.48E-03	6.96E-03	1.56E-02	1.02E-02	1.44E+00
CHILD	TOTALS	9.33E-02	9.58E-03	7.32E-03	1.11E-02	8.76E-03	1.44E+00
TEENAGE	TOTALS	9.33E-02	1.24E-02	7.56E-03	9.20E-03	8.20E-03	1.44E+00
ADULT	TOTALS	9.34E-02	1.22E-02	7.88E-03	9.24E-03	8.32E-03	1.44E+00

TIME STEP NUMBER 2, DURATION IN YRS IS... 1.0

NUMBER 7 NAME=Receptor 7 X= -4.1KM, Y= 0.9KM, Z= 0.0M, DIST= 4.2KM, IRTYPE= 1

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	3.10E-01	1.44E-02	1.32E-02	1.97E-02	1.57E-02	4.95E+00
CHILD	TOTALS	3.10E-01	1.52E-02	1.35E-02	1.64E-02	1.46E-02	4.95E+00
TEENAGE	TOTALS	3.10E-01	1.73E-02	1.37E-02	1.49E-02	1.42E-02	4.95E+00
ADULT	TOTALS	3.10E-01	1.72E-02	1.39E-02	1.49E-02	1.43E-02	4.95E+00

TIME STEP NUMBER 3, DURATION IN YRS IS... 1.0

CONCENTRATION DATA FOR THE N DIRECTION, THETA EQUALS 0.0 DEGREES

TOTAL AIR CONCENTRATIONS, PCI/M3, AND WL

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210	WL
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.180E+00	6.819E+00	3.050E+00	1.348E+00	1.662E-06	2.751E-05
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.005E+00	3.938E+00	2.296E+00	1.343E+00	2.304E-06	2.071E-05
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.660E+00	2.649E+00	1.807E+00	1.237E+00	2.988E-06	1.650E-05
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.043E+00	2.040E+00	1.514E+00	1.130E+00	3.653E-06	1.399E-05
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.066E+00	1.067E+00	9.125E-01	7.720E-01	4.660E-06	8.605E-06
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.242E-01	4.244E-01	4.064E-01	3.802E-01	4.975E-06	3.916E-06
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.153E-01	2.155E-01	2.136E-01	2.094E-01	4.649E-06	2.086E-06
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.382E-01	1.383E-01	1.383E-01	1.375E-01	4.364E-06	1.356E-06
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.921E-02	9.926E-02	9.955E-02	9.952E-02	4.145E-06	9.782E-07
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.610E-02	7.614E-02	7.644E-02	7.657E-02	3.968E-06	7.516E-07
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.097E-02	6.101E-02	6.128E-02	6.144E-02	3.820E-06	6.027E-07
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.058E-02	5.061E-02	5.085E-02	5.100E-02	3.708E-06	5.002E-07

GROUND SURFACE CONCENTRATIONS, PCI/M2

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.401E+00	5.401E+00	5.401E+00	3.463E+00
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.119E+00	3.119E+00	3.119E+00	4.799E+00
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.098E+00	2.098E+00	2.098E+00	6.224E+00
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.616E+00	1.616E+00	1.616E+00	7.610E+00
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.448E-01	8.448E-01	8.448E-01	9.707E+00
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.361E-01	3.361E-01	3.361E-01	1.036E+01
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.706E-01	1.706E-01	1.706E-01	9.684E+00
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.095E-01	1.095E-01	1.095E-01	9.090E+00
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.862E-02	7.862E-02	7.862E-02	8.634E+00
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.031E-02	6.031E-02	6.031E-02	8.265E+00
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.832E-02	4.832E-02	4.832E-02	7.957E+00
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.009E-02	4.009E-02	4.009E-02	7.725E+00

TOTAL DEPOSITION RATES, PCI/M2-SEC

XRHO, KM	U-238	Th-230	Ra-226	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	4.987E-09
2.5	0.000E+00	0.000E+00	0.000E+00	6.911E-09
3.5	0.000E+00	0.000E+00	0.000E+00	8.964E-09
4.5	0.000E+00	0.000E+00	0.000E+00	1.096E-08
7.5	0.000E+00	0.000E+00	0.000E+00	1.398E-08
15.0	0.000E+00	0.000E+00	0.000E+00	1.493E-08
25.0	0.000E+00	0.000E+00	0.000E+00	1.395E-08
35.0	0.000E+00	0.000E+00	0.000E+00	1.309E-08
45.0	0.000E+00	0.000E+00	0.000E+00	1.244E-08
55.0	0.000E+00	0.000E+00	0.000E+00	1.190E-08
65.0	0.000E+00	0.000E+00	0.000E+00	1.146E-08
75.0	0.000E+00	0.000E+00	0.000E+00	1.113E-08

TIME STEP NUMBER 3, DURATION IN YRS IS... 1.0

CONCENTRATION DATA FOR THE E DIRECTION, THETA EQUALS 90.0 DEGREES

TOTAL AIR CONCENTRATIONS, PCI/M3, AND WL

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210	WL
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.251E+01	1.814E+01	5.074E+00	1.947E+00	2.110E-06	5.167E-05
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.455E+01	1.300E+01	4.691E+00	2.288E+00	3.426E-06	4.571E-05
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.068E+01	1.005E+01	4.286E+00	2.355E+00	4.702E-06	4.086E-05
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.996E+00	8.630E+00	3.990E+00	2.280E+00	5.605E-06	3.762E-05
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.928E+01	1.899E+01	4.546E+00	1.976E+00	7.207E-06	4.998E-05
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.046E+00	3.039E+00	2.156E+00	1.534E+00	1.014E-05	1.979E-05
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.617E+00	1.617E+00	1.390E+00	1.144E+00	1.108E-05	1.298E-05
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.097E+00	1.098E+00	1.017E+00	9.060E-01	1.148E-05	9.664E-06
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.256E-01	8.261E-01	7.929E-01	7.392E-01	1.165E-05	7.628E-06
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.589E-01	6.592E-01	6.449E-01	6.176E-01	1.171E-05	6.252E-06
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.463E-01	5.466E-01	5.404E-01	5.262E-01	1.171E-05	5.265E-06
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.659E-01	4.662E-01	4.637E-01	4.563E-01	1.169E-05	4.533E-06

GROUND SURFACE CONCENTRATIONS, PCI/M2

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.437E+01	1.437E+01	1.437E+01	4.395E+00
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.030E+01	1.030E+01	1.030E+01	7.137E+00
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.957E+00	7.957E+00	7.957E+00	9.795E+00
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.836E+00	6.836E+00	6.836E+00	1.167E+01
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.504E+01	1.504E+01	1.504E+01	1.501E+01
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.407E+00	2.407E+00	2.407E+00	2.111E+01
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.281E+00	1.281E+00	1.281E+00	2.307E+01
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.695E-01	8.695E-01	8.695E-01	2.390E+01
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.543E-01	6.543E-01	6.543E-01	2.427E+01
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.221E-01	5.221E-01	5.221E-01	2.439E+01
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.329E-01	4.329E-01	4.329E-01	2.439E+01
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.692E-01	3.692E-01	3.692E-01	2.434E+01

TOTAL DEPOSITION RATES, PCI/M2-SEC

XRHO, KM	U-238	Th-230	Ra-226	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	6.330E-09
2.5	0.000E+00	0.000E+00	0.000E+00	1.028E-08
3.5	0.000E+00	0.000E+00	0.000E+00	1.411E-08
4.5	0.000E+00	0.000E+00	0.000E+00	1.681E-08
7.5	0.000E+00	0.000E+00	0.000E+00	2.162E-08
15.0	0.000E+00	0.000E+00	0.000E+00	3.041E-08
25.0	0.000E+00	0.000E+00	0.000E+00	3.323E-08
35.0	0.000E+00	0.000E+00	0.000E+00	3.443E-08
45.0	0.000E+00	0.000E+00	0.000E+00	3.495E-08
55.0	0.000E+00	0.000E+00	0.000E+00	3.513E-08
65.0	0.000E+00	0.000E+00	0.000E+00	3.512E-08
75.0	0.000E+00	0.000E+00	0.000E+00	3.506E-08

TIME STEP NUMBER 3, DURATION IN YRS IS... 1.0

CONCENTRATION DATA FOR THE S DIRECTION, THETA EQUALS 180.0 DEGREES

TOTAL AIR CONCENTRATIONS, PCI/M3, AND WL

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210	WL
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.162E+01	9.316E+00	2.666E+00	1.007E+00	1.270E-06	2.687E-05
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.982E+00	5.415E+00	2.171E+00	1.119E+00	1.857E-06	2.076E-05
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.952E+00	3.759E+00	1.831E+00	1.105E+00	2.542E-06	1.728E-05
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.982E+00	2.899E+00	1.576E+00	1.024E+00	3.032E-06	1.480E-05
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.713E+00	1.702E+00	1.100E+00	7.699E-01	3.847E-06	1.020E-05
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.095E-01	8.096E-01	6.503E-01	5.102E-01	4.564E-06	6.034E-06
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.640E-01	4.643E-01	4.189E-01	3.639E-01	4.687E-06	3.959E-06
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.206E-01	3.208E-01	3.045E-01	2.802E-01	4.675E-06	2.919E-06
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.425E-01	2.426E-01	2.361E-01	2.247E-01	4.621E-06	2.285E-06
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.937E-01	1.938E-01	1.911E-01	1.855E-01	4.552E-06	1.861E-06
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.604E-01	1.605E-01	1.595E-01	1.567E-01	4.478E-06	1.559E-06
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.367E-01	1.368E-01	1.365E-01	1.352E-01	4.414E-06	1.337E-06

GROUND SURFACE CONCENTRATIONS, PCI/M2

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.379E+00	7.379E+00	7.379E+00	2.645E+00
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.289E+00	4.289E+00	4.289E+00	3.867E+00
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.978E+00	2.978E+00	2.978E+00	5.294E+00
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.296E+00	2.296E+00	2.296E+00	6.315E+00
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.348E+00	1.348E+00	1.348E+00	8.012E+00
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.412E-01	6.412E-01	6.412E-01	9.507E+00
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.677E-01	3.677E-01	3.677E-01	9.763E+00
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.541E-01	2.541E-01	2.541E-01	9.738E+00
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.922E-01	1.922E-01	1.922E-01	9.625E+00
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.535E-01	1.535E-01	1.535E-01	9.482E+00
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.271E-01	1.271E-01	1.271E-01	9.329E+00
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.084E-01	1.084E-01	1.084E-01	9.194E+00

TOTAL DEPOSITION RATES, PCI/M2-SEC

XRHO, KM	U-238	Th-230	Ra-226	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	3.810E-09
2.5	0.000E+00	0.000E+00	0.000E+00	5.570E-09
3.5	0.000E+00	0.000E+00	0.000E+00	7.625E-09
4.5	0.000E+00	0.000E+00	0.000E+00	9.095E-09
7.5	0.000E+00	0.000E+00	0.000E+00	1.154E-08
15.0	0.000E+00	0.000E+00	0.000E+00	1.369E-08
25.0	0.000E+00	0.000E+00	0.000E+00	1.406E-08
35.0	0.000E+00	0.000E+00	0.000E+00	1.402E-08
45.0	0.000E+00	0.000E+00	0.000E+00	1.386E-08
55.0	0.000E+00	0.000E+00	0.000E+00	1.366E-08
65.0	0.000E+00	0.000E+00	0.000E+00	1.344E-08
75.0	0.000E+00	0.000E+00	0.000E+00	1.324E-08

TIME STEP NUMBER 3, DURATION IN YRS IS... 1.0

CONCENTRATION DATA FOR THE W DIRECTION, THETA EQUALS 270.0 DEGREES

TOTAL AIR CONCENTRATIONS, PCI/M3, AND WL

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210	WL
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.317E+01	1.096E+01	2.930E+00	1.048E+00	1.496E-06	3.006E-05
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.911E+00	6.461E+00	2.537E+00	1.244E+00	2.295E-06	2.415E-05
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.582E+00	4.456E+00	2.179E+00	1.256E+00	3.090E-06	2.033E-05
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.448E+00	3.404E+00	1.908E+00	1.200E+00	3.721E-06	1.765E-05
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.944E+00	1.942E+00	1.360E+00	9.665E-01	4.877E-06	1.250E-05
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.771E-01	8.776E-01	7.662E-01	6.411E-01	5.819E-06	7.180E-06
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.854E-01	4.857E-01	4.640E-01	4.300E-01	6.121E-06	4.457E-06
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.297E-01	3.299E-01	3.246E-01	3.137E-01	6.179E-06	3.155E-06
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.466E-01	2.467E-01	2.456E-01	2.419E-01	6.147E-06	2.402E-06
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.953E-01	1.954E-01	1.955E-01	1.944E-01	6.078E-06	1.917E-06
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.607E-01	1.608E-01	1.612E-01	1.610E-01	5.996E-06	1.584E-06
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.363E-01	1.363E-01	1.369E-01	1.370E-01	5.920E-06	1.345E-06

GROUND SURFACE CONCENTRATIONS, PCI/M2

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.683E+00	8.683E+00	8.683E+00	3.117E+00
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.117E+00	5.117E+00	5.117E+00	4.780E+00
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.529E+00	3.529E+00	3.529E+00	6.436E+00
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.696E+00	2.696E+00	2.696E+00	7.751E+00
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.538E+00	1.538E+00	1.538E+00	1.016E+01
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.951E-01	6.951E-01	6.951E-01	1.212E+01
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.847E-01	3.847E-01	3.847E-01	1.275E+01
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.613E-01	2.613E-01	2.613E-01	1.287E+01
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.954E-01	1.954E-01	1.954E-01	1.280E+01
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.548E-01	1.548E-01	1.548E-01	1.266E+01
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.274E-01	1.274E-01	1.274E-01	1.249E+01
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.080E-01	1.080E-01	1.080E-01	1.233E+01

TOTAL DEPOSITION RATES, PCI/M2-SEC

XRHO, KM	U-238	Th-230	Ra-226	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	4.489E-09
2.5	0.000E+00	0.000E+00	0.000E+00	6.884E-09
3.5	0.000E+00	0.000E+00	0.000E+00	9.269E-09
4.5	0.000E+00	0.000E+00	0.000E+00	1.116E-08
7.5	0.000E+00	0.000E+00	0.000E+00	1.463E-08
15.0	0.000E+00	0.000E+00	0.000E+00	1.746E-08
25.0	0.000E+00	0.000E+00	0.000E+00	1.836E-08
35.0	0.000E+00	0.000E+00	0.000E+00	1.854E-08
45.0	0.000E+00	0.000E+00	0.000E+00	1.844E-08
55.0	0.000E+00	0.000E+00	0.000E+00	1.823E-08
65.0	0.000E+00	0.000E+00	0.000E+00	1.799E-08
75.0	0.000E+00	0.000E+00	0.000E+00	1.776E-08

TIME STEP NUMBER 3, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS INHAL. EXPOSED ORGAN IS EFFECTIV

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.021E-06	4.724E-06	7.473E-06	1.021E-05	1.212E-05	1.422E-05	3.439E-05	6.055E-05
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.410E-06	6.592E-06	1.127E-05	1.630E-05	2.000E-05	2.395E-05	3.247E-05	6.733E-05
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.479E-06	7.459E-06	1.277E-05	1.819E-05	2.215E-05	2.642E-05	3.099E-05	3.289E-05
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.549E-06	8.777E-06	1.566E-05	2.289E-05	2.841E-05	3.438E-05	3.115E-05	2.462E-05
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.579E-06	9.623E-06	1.780E-05	2.684E-05	3.406E-05	4.452E-05	2.911E-05	3.163E-05
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.194E-06	7.100E-06	2.541E-04	5.206E-04	4.213E-05	5.357E-05	4.205E-05	3.492E-05
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.660E-07	6.238E-06	1.358E-03	1.845E-04	2.242E-05	2.586E-05	2.995E-05	3.402E-05
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.450E-06	6.474E-06	1.464E-05	1.573E-05	2.214E-05	2.617E-05	2.434E-05	2.292E-05
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.404E-06	7.667E-06	1.301E-05	1.947E-05	2.702E-05	2.197E-05	2.260E-05	1.324E-05
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.544E-06	6.663E-06	1.142E-05	1.593E-05	1.992E-05	1.961E-05	1.065E-05	1.077E-05
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.011E-06	4.880E-06	8.454E-06	1.167E-05	1.669E-05	2.897E-05	3.557E-05	2.516E-05
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.718E-07	4.732E-04	3.059E-04	1.633E-05	3.577E-05	4.074E-04	3.232E-04	5.274E-05
W	0.000E+00	0.000E+00	2.256E-07	0.000E+00	1.068E-06	5.525E-06	1.252E-05	3.297E-05	7.819E-05	2.006E-02	6.930E-03	3.249E-05
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.537E-07	4.919E-06	9.022E-06	1.956E-05	6.963E-05	9.143E-05	1.887E-04	2.376E-04
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.211E-06	6.286E-06	1.109E-05	1.612E-05	1.991E-05	2.399E-05	3.994E-05	8.434E-05
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.573E-05	9.595E-04	3.373E-03	1.076E-03	5.656E-04	2.105E-02	7.934E-03	9.478E-04

TOTAL DOSE COMMITMENT IS 6.947E-02 PERSON-REM/YR

TIME STEP NUMBER 3, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS INHAL. EXPOSED ORGAN IS BONE

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.283E-06	3.832E-05	6.060E-05	8.274E-05	9.823E-05	1.152E-04	2.784E-04	4.900E-04
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.144E-05	5.347E-05	9.140E-05	1.322E-04	1.620E-04	1.940E-04	2.628E-04	5.447E-04
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.200E-05	6.051E-05	1.035E-04	1.475E-04	1.795E-04	2.140E-04	2.509E-04	2.662E-04
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.257E-05	7.120E-05	1.270E-04	1.856E-04	2.302E-04	2.786E-04	2.522E-04	1.993E-04
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.281E-05	7.807E-05	1.444E-04	2.176E-04	2.761E-04	3.608E-04	2.358E-04	2.562E-04
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.689E-06	5.760E-05	2.060E-03	4.221E-03	3.415E-04	4.341E-04	3.406E-04	2.828E-04
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.839E-06	5.061E-05	1.102E-02	1.496E-03	1.817E-04	2.095E-04	2.426E-04	2.756E-04
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.177E-05	5.252E-05	1.188E-04	1.275E-04	1.795E-04	2.120E-04	1.972E-04	1.856E-04
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.139E-05	6.219E-05	1.055E-04	1.579E-04	2.190E-04	1.780E-04	1.831E-04	1.072E-04
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.253E-05	5.405E-05	9.263E-05	1.291E-04	1.614E-04	1.589E-04	8.623E-05	8.720E-05
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.207E-06	3.959E-05	6.856E-05	9.460E-05	1.353E-04	2.347E-04	2.881E-04	2.037E-04
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.262E-06	3.839E-03	2.481E-03	1.324E-04	2.899E-04	3.301E-03	2.618E-03	4.270E-04
W	0.000E+00	0.000E+00	1.831E-06	0.000E+00	8.669E-06	4.482E-05	1.015E-04	2.673E-04	6.337E-04	1.625E-01	5.613E-02	2.630E-04
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.738E-06	3.991E-05	7.317E-05	1.586E-04	5.644E-04	7.410E-04	1.529E-03	1.925E-03
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.826E-06	5.099E-05	8.995E-05	1.307E-04	1.613E-04	1.944E-04	3.234E-04	6.827E-04
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.088E-04	7.783E-03	2.735E-02	8.723E-03	4.582E-03	1.704E-01	6.422E-02	7.669E-03

TOTAL DOSE COMMITMENT IS 5.627E-01 PERSON-REM/YR

TIME STEP NUMBER 3, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS INHAL. EXPOSED ORGAN IS AVG.LUNG

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.183E-07	5.571E-07	9.024E-07	1.262E-06	1.534E-06	1.841E-06	4.552E-06	8.195E-06
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.632E-07	7.771E-07	1.362E-06	2.020E-06	2.540E-06	3.117E-06	4.327E-06	9.187E-06
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.710E-07	8.773E-07	1.536E-06	2.239E-06	2.788E-06	3.398E-06	4.074E-06	4.416E-06
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.792E-07	1.031E-06	1.878E-06	2.804E-06	3.550E-06	4.381E-06	4.046E-06	3.259E-06
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.826E-07	1.128E-06	2.125E-06	3.257E-06	4.200E-06	5.574E-06	3.698E-06	4.077E-06
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.380E-07	8.329E-07	3.036E-05	6.330E-05	5.210E-06	6.735E-06	5.372E-06	4.532E-06
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.116E-07	7.315E-07	1.622E-04	2.242E-05	2.770E-06	3.247E-06	3.821E-06	4.409E-06
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.678E-07	7.607E-07	1.755E-06	1.919E-06	2.748E-06	3.302E-06	3.121E-06	2.985E-06
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.626E-07	9.023E-07	1.563E-06	2.384E-06	3.368E-06	2.786E-06	2.916E-06	1.736E-06
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.788E-07	7.843E-07	1.373E-06	1.953E-06	2.490E-06	2.499E-06	1.382E-06	1.424E-06
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.173E-07	5.743E-07	1.014E-06	1.424E-06	2.073E-06	3.660E-06	4.569E-06	3.286E-06
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.953E-08	5.574E-05	3.674E-05	1.998E-06	4.457E-06	5.167E-05	4.170E-05	6.921E-06
W	0.000E+00	0.000E+00	2.599E-08	0.000E+00	1.240E-07	6.511E-07	1.506E-06	4.042E-06	9.771E-06	2.554E-03	8.985E-04	4.288E-06
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.105E-07	5.779E-07	1.077E-06	2.370E-06	8.555E-06	1.139E-05	2.384E-05	3.042E-05
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.403E-07	7.408E-07	1.337E-06	1.986E-06	2.504E-06	3.083E-06	5.238E-06	1.129E-05
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.983E-06	1.133E-04	4.082E-04	1.335E-04	7.187E-05	2.739E-03	1.057E-03	1.293E-04

TOTAL DOSE COMMITMENT IS 8.917E-03 PERSON-REM/YR

TIME STEP NUMBER 3, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS INHAL. EXPOSED ORGAN IS BRONCHI

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.999E-03	6.893E-03	5.922E-03	5.527E-03	4.960E-03	4.661E-03	9.375E-03	1.410E-02
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.293E-03	9.155E-03	8.177E-03	7.887E-03	7.213E-03	6.856E-03	7.680E-03	1.354E-02
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.720E-03	1.386E-02	1.236E-02	1.176E-02	1.070E-02	1.016E-02	9.878E-03	8.951E-03
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.357E-02	2.725E-02	2.505E-02	2.443E-02	2.269E-02	2.194E-02	1.655E-02	1.122E-02
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.098E-01	4.950E-02	4.445E-02	4.389E-02	4.128E-02	4.283E-02	2.322E-02	2.155E-02
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.475E-02	2.865E-02	5.176E-01	6.952E-01	4.166E-02	4.203E-02	2.735E-02	1.942E-02
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.581E-03	2.377E-02	2.663E+00	2.388E-01	2.154E-02	1.973E-02	1.895E-02	1.840E-02
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.227E-02	2.244E-02	2.796E-02	2.056E-02	2.197E-02	2.093E-02	1.632E-02	1.324E-02
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.071E-02	2.327E-02	2.204E-02	2.285E-02	2.425E-02	1.598E-02	1.384E-02	7.007E-03
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.056E-02	1.789E-02	1.639E-02	1.548E-02	1.463E-02	1.158E-02	5.257E-03	4.575E-03
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.177E-03	1.387E-02	1.299E-02	1.217E-02	1.316E-02	1.835E-02	1.883E-02	1.145E-02
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.028E-03	1.228E+00	4.296E-01	1.563E-02	2.596E-02	2.381E-01	1.582E-01	2.224E-02
W	0.000E+00	0.000E+00	5.727E-03	0.000E+00	7.291E-03	1.425E-02	1.699E-02	3.008E-02	5.363E-02	1.102E+01	3.174E+00	1.277E-02
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.319E-03	1.946E-02	1.910E-02	2.781E-02	7.417E-02	7.776E-02	1.335E-01	1.438E-01
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.017E-03	1.375E-02	1.273E-02	1.239E-02	1.145E-02	1.101E-02	1.522E-02	2.750E-02
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.002E-01	1.369E+00	2.557E+00	5.484E-01	2.157E-01	6.386E+00	1.993E+00	2.029E-01

TOTAL DOSE COMMITMENT IS 3.609E+01 PERSON-REM/YR

TIME STEP NUMBER 3, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS GROUND EXPOSED ORGAN IS EFFECTIV

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.074E-07	1.033E-06	1.070E-06	1.171E-06	1.209E-06	1.287E-06	2.895E-06	4.823E-06
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.746E-07	1.389E-06	1.528E-06	1.764E-06	1.884E-06	2.054E-06	2.601E-06	5.121E-06
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.500E-07	1.968E-06	2.082E-06	2.303E-06	2.394E-06	2.559E-06	2.771E-06	2.767E-06
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.602E-06	3.551E-06	3.674E-06	3.989E-06	4.086E-06	4.319E-06	3.535E-06	2.583E-06
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.149E-06	6.107E-06	5.987E-06	6.405E-06	6.495E-06	7.227E-06	4.183E-06	4.128E-06
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.698E-06	3.623E-06	7.221E-05	1.065E-04	6.968E-06	7.620E-06	5.341E-06	4.062E-06
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.129E-06	3.024E-06	3.742E-04	3.691E-05	3.637E-06	3.615E-06	3.745E-06	3.899E-06
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.456E-06	2.887E-06	3.950E-06	3.170E-06	3.670E-06	3.767E-06	3.147E-06	2.722E-06
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.279E-06	3.045E-06	3.192E-06	3.628E-06	4.189E-06	2.982E-06	2.773E-06	1.500E-06
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.274E-06	2.382E-06	2.466E-06	2.604E-06	2.720E-06	2.358E-06	1.163E-06	1.092E-06
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.650E-07	1.832E-06	1.923E-06	2.002E-06	2.382E-06	3.625E-06	4.031E-06	2.639E-06
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.099E-07	1.644E-04	6.501E-05	2.642E-06	4.850E-06	4.871E-05	3.516E-05	5.331E-06
W	0.000E+00	0.000E+00	6.428E-07	0.000E+00	8.815E-07	1.910E-06	2.593E-06	5.168E-06	1.025E-05	2.318E-03	7.291E-04	3.179E-06
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.104E-06	2.468E-06	2.645E-06	4.195E-06	1.212E-05	1.369E-05	2.520E-05	2.897E-05
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.580E-07	1.893E-06	2.035E-06	2.264E-06	2.359E-06	2.527E-06	3.854E-06	7.610E-06
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.272E-05	2.063E-04	4.698E-04	1.196E-04	5.460E-05	1.846E-03	6.486E-04	7.348E-05

TOTAL DOSE COMMITMENT IS 7.789E-03 PERSON-REM/YR

TIME STEP NUMBER 3, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS CLOUD EXPOSED ORGAN IS EFFECTIV

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.595E-05	5.459E-05	5.058E-05	4.823E-05	4.359E-05	4.108E-05	8.273E-05	1.245E-04
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.545E-05	7.306E-05	6.989E-05	6.877E-05	6.334E-05	6.038E-05	6.774E-05	1.196E-04
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.407E-05	1.017E-04	1.014E-04	1.004E-04	9.281E-05	8.880E-05	8.676E-05	7.880E-05
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.432E-05	1.552E-04	1.713E-04	1.834E-04	1.799E-04	1.801E-04	1.390E-04	9.565E-05
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.574E-05	2.296E-04	2.831E-04	3.224E-04	3.268E-04	3.537E-04	1.966E-04	1.853E-04
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.957E-05	1.544E-04	3.583E-03	5.384E-03	3.415E-04	3.554E-04	2.353E-04	1.688E-04
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.727E-05	1.327E-04	1.882E-02	1.872E-03	1.778E-04	1.674E-04	1.633E-04	1.601E-04
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.867E-05	1.231E-04	1.906E-04	1.562E-04	1.769E-04	1.743E-04	1.388E-04	1.141E-04
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.444E-05	1.330E-04	1.543E-04	1.768E-04	1.981E-04	1.346E-04	1.187E-04	6.076E-05
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.789E-05	1.113E-04	1.224E-04	1.253E-04	1.231E-04	9.947E-05	4.569E-05	4.003E-05
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.279E-05	8.923E-05	9.987E-05	1.005E-04	1.122E-04	1.590E-04	1.646E-04	1.005E-04
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.393E-05	8.131E-03	3.368E-03	1.307E-04	2.232E-04	2.075E-03	1.388E-03	1.957E-04
W	0.000E+00	0.000E+00	1.504E-05	0.000E+00	3.339E-05	9.352E-05	1.332E-04	2.519E-04	4.618E-04	9.612E-02	2.786E-02	1.125E-04
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.589E-05	1.139E-04	1.406E-04	2.250E-04	6.267E-04	6.712E-04	1.165E-03	1.262E-03
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.596E-05	9.343E-05	1.003E-04	1.035E-04	9.816E-05	9.563E-05	1.332E-04	2.416E-04
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.418E-04	1.063E-02	2.150E-02	4.740E-03	1.885E-03	5.612E-02	1.756E-02	1.790E-03

TOTAL DOSE COMMITMENT IS 3.010E-01 PERSON-REM/YR

TIME STEP NUMBER 3, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS VEG. ING EXPOSED ORGAN IS EFFECTIV

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

TOTAL DOSE COMMITMENT IS 0.000E+00 PERSON-REM/YR

WARNING--POPULATION FOOD INGESTION DOSES SHOWN
ABOVE HAVE NOT BEEN CORRECTED TO REFLECT POTENTIAL
FOOD EXPORT AND MAY EXCEED DOSES ACTUALLY RECEIVED
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DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

TOTAL DOSE COMMITMENT IS 0.000E+00 PERSON-REM/YR

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DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

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N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

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N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

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N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

TOTAL DOSE COMMITMENT IS 0.000E+00 PERSON-REM/YR

WARNING--POPULATION FOOD INGESTION DOSES SHOWN
ABOVE HAVE NOT BEEN CORRECTED TO REFLECT POTENTIAL
FOOD EXPORT AND MAY EXCEED DOSES ACTUALLY RECEIVED
BY THE POPULATION OF THIS REGION. SEE SUMMARY
TABLE FOR THIS INFORMATION.

TIME STEP NUMBER 3, DURATION IN YRS IS... 1.0

SUMMARY PRINT OF POPULATION DOSES COMPUTED FOR TSTEP 3--DOSES SHOWN ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DOSES RECEIVED BY PEOPLE WITHIN 80 KILOMETERS

PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INHAL.	6.947E-02	5.627E-01	8.917E-03	4.220E-01	2.029E-01	3.609E+01
GROUND	7.789E-03	7.789E-03	7.789E-03	7.789E-03	7.789E-03	7.789E-03
CLOUD	3.010E-01	3.010E-01	3.010E-01	3.010E-01	3.010E-01	3.010E-01
VEG. ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MEAT ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MILK ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RNPLUS50	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOTALS	3.783E-01	8.715E-01	3.177E-01	7.308E-01	5.117E-01	3.640E+01

DOSES RECEIVED BY PEOPLE BEYOND 80 KILOMETERS

PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INHAL.	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GROUND	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CLOUD	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
VEG. ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MEAT ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MILK ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RNPLUS50	8.339E+00	1.137E+02	1.895E+00	8.339E+00	8.339E+00	5.307E+01
TOTALS	8.339E+00	1.137E+02	1.895E+00	8.339E+00	8.339E+00	5.307E+01

TOTAL DOSES COMPUTED OVER ALL POPULATIONS

PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INHAL.	6.947E-02	5.627E-01	8.917E-03	4.220E-01	2.029E-01	3.609E+01
GROUND	7.789E-03	7.789E-03	7.789E-03	7.789E-03	7.789E-03	7.789E-03
CLOUD	3.010E-01	3.010E-01	3.010E-01	3.010E-01	3.010E-01	3.010E-01
VEG. ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MEAT ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MILK ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RNPLUS50	8.339E+00	1.137E+02	1.895E+00	8.339E+00	8.339E+00	5.307E+01
TOTALS	8.717E+00	1.146E+02	2.213E+00	9.070E+00	8.851E+00	8.947E+01

TIME STEP NUMBER 3, DURATION IN YRS IS... 1.0

INDIVIDUAL RECEPTOR PARTICULATE CONCENTRATIONS

NO.	NAME	PTSZ	AIRBORNE CONCENTRATIONS, PCI/M3 U-238	Th-230	Ra-226	Pb-210	GROUND CONCENTRATIONS, PCI/M2 U-238	Th-230	Ra-226	Pb-210
1	Receptor 1	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1	Receptor 1	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1	Receptor 1	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1	Receptor 1	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2	Receptor 2	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2	Receptor 2	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2	Receptor 2	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2	Receptor 2	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
3	Receptor 3	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
3	Receptor 3	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
3	Receptor 3	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
3	Receptor 3	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
4	Receptor 4	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
4	Receptor 4	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
4	Receptor 4	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
4	Receptor 4	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
5	Receptor 5	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
5	Receptor 5	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
5	Receptor 5	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
5	Receptor 5	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
6	Receptor 6	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
6	Receptor 6	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
6	Receptor 6	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
6	Receptor 6	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
7	Receptor 7	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
7	Receptor 7	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
7	Receptor 7	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
7	Receptor 7	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

TIME STEP NUMBER 3, DURATION IN YRS IS... 1.0

INDIVIDUAL RECEPTOR RADON AND RADON DAUGHTER CONCENTRATIONS

	AIRBORNE CONCENTRATIONS, PCI/M3								GROUND CONCENTRATIONS, PCI/M2			
NO.	Rn-222	Po-218	Pb-214	Bi-214	Pb-210	Bi-210	Po-210	WL	Po-218	Pb-214	Bi-214	Pb-210
1	2.082E+01	1.682E+01	4.638E+00	1.833E+00	2.101E-06	4.122E-09	3.119E-13	4.767E-05	1.332E+01	1.332E+01	1.332E+01	4.138E-01
2	2.892E+00	2.880E+00	2.007E+00	1.460E+00	8.227E-06	6.451E-08	1.427E-11	1.859E-05	2.281E+00	2.281E+00	2.281E+00	1.906E+00
3	1.663E+01	1.407E+01	3.844E+00	1.139E+00	1.228E-06	4.496E-09	6.216E-13	3.823E-05	1.114E+01	1.114E+01	1.114E+01	1.727E-01
4	1.248E+00	1.246E+00	9.194E-01	6.743E-01	4.184E-06	3.936E-08	1.055E-11	8.460E-06	9.873E-01	9.873E-01	9.873E-01	9.498E-01
5	1.635E+00	1.635E+00	1.249E+00	9.348E-01	6.455E-06	7.268E-08	2.371E-11	1.150E-05	1.295E+00	1.295E+00	1.295E+00	1.509E+00
6	1.497E+00	1.492E+00	1.027E+00	7.224E-01	3.805E-06	2.839E-08	5.975E-12	9.437E-06	1.181E+00	1.181E+00	1.181E+00	8.415E-01
7	4.184E+00	4.099E+00	2.049E+00	1.185E+00	3.270E-06	1.497E-08	2.601E-12	1.903E-05	3.247E+00	3.247E+00	3.247E+00	6.664E-01

TIME STEP NUMBER 3, DURATION IN YRS IS... 1.0

NUMBER 1 NAME=Receptor 1 X= 1.7KM, Y= -0.5KM, Z= 0.0M, DIST= 1.8KM, IRTYPE= 1

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	1.59E+00	2.75E-02	2.65E-02	3.22E-02	2.87E-02	2.60E+01
CHILD	TOTALS	1.59E+00	2.82E-02	2.67E-02	2.93E-02	2.77E-02	2.60E+01
TEENAGE	TOTALS	1.59E+00	3.02E-02	2.69E-02	2.80E-02	2.73E-02	2.60E+01
ADULT	TOTALS	1.59E+00	3.00E-02	2.71E-02	2.80E-02	2.74E-02	2.60E+01

NUMBER 2 NAME=Receptor 2 X= 9.6KM, Y= 3.4KM, Z= 0.0M, DIST= 10.1KM, IRTYPE= 1

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	2.35E-01	2.16E-02	1.76E-02	4.02E-02	2.61E-02	3.63E+00
CHILD	TOTALS	2.35E-01	2.45E-02	1.85E-02	2.86E-02	2.23E-02	3.63E+00
TEENAGE	TOTALS	2.35E-01	3.20E-02	1.92E-02	2.35E-02	2.09E-02	3.63E+00
ADULT	TOTALS	2.35E-01	3.14E-02	2.00E-02	2.36E-02	2.12E-02	3.63E+00

TIME STEP NUMBER 3, DURATION IN YRS IS... 1.0

NUMBER 3 NAME=Receptor 3 X= -0.1KM, Y= 0.8KM, Z= 0.0M, DIST= 0.8KM, IRTYPE= 1

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	1.27E+00	1.89E-02	1.83E-02	2.17E-02	1.96E-02	2.08E+01
CHILD	TOTALS	1.27E+00	1.93E-02	1.84E-02	1.99E-02	1.90E-02	2.08E+01
TEENAGE	TOTALS	1.27E+00	2.04E-02	1.85E-02	1.92E-02	1.88E-02	2.08E+01
ADULT	TOTALS	1.27E+00	2.04E-02	1.87E-02	1.92E-02	1.88E-02	2.08E+01

NUMBER 4 NAME=Receptor 4 X= 9.8KM, Y= -7.4KM, Z= 0.0M, DIST= 12.3KM, IRTYPE= 1

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	1.02E-01	1.02E-02	8.12E-03	1.96E-02	1.25E-02	1.57E+00
CHILD	TOTALS	1.02E-01	1.16E-02	8.60E-03	1.37E-02	1.05E-02	1.57E+00
TEENAGE	TOTALS	1.02E-01	1.54E-02	8.93E-03	1.11E-02	9.78E-03	1.57E+00
ADULT	TOTALS	1.02E-01	1.51E-02	9.35E-03	1.12E-02	9.95E-03	1.57E+00

TIME STEP NUMBER 3, DURATION IN YRS IS... 1.0

NUMBER 5 NAME=Receptor 5 X= 13.4KM, Y= -5.3KM, Z= 0.0M, DIST= 14.4KM, IRTYPE= 1

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	1.35E-01	1.44E-02	1.12E-02	2.90E-02	1.79E-02	2.06E+00
CHILD	TOTALS	1.34E-01	1.67E-02	1.20E-02	1.99E-02	1.50E-02	2.06E+00
TEENAGE	TOTALS	1.35E-01	2.26E-02	1.25E-02	1.59E-02	1.38E-02	2.06E+00
ADULT	TOTALS	1.35E-01	2.21E-02	1.31E-02	1.60E-02	1.41E-02	2.06E+00

NUMBER 6 NAME=Receptor 6 X= 7.6KM, Y= -6.7KM, Z= 0.0M, DIST= 10.1KM, IRTYPE= 1

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	1.21E-01	1.06E-02	8.74E-03	1.92E-02	1.27E-02	1.88E+00
CHILD	TOTALS	1.21E-01	1.19E-02	9.18E-03	1.38E-02	1.09E-02	1.88E+00
TEENAGE	TOTALS	1.21E-01	1.54E-02	9.48E-03	1.15E-02	1.03E-02	1.88E+00
ADULT	TOTALS	1.21E-01	1.51E-02	9.86E-03	1.15E-02	1.04E-02	1.88E+00

TIME STEP NUMBER 3, DURATION IN YRS IS... 1.0

NUMBER 7 NAME=Receptor 7 X= -4.1KM, Y= 0.9KM, Z= 0.0M, DIST= 4.2KM, IRTYPE= 1

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	3.29E-01	1.65E-02	1.49E-02	2.39E-02	1.83E-02	5.24E+00
CHILD	TOTALS	3.29E-01	1.77E-02	1.53E-02	1.93E-02	1.68E-02	5.24E+00
TEENAGE	TOTALS	3.29E-01	2.06E-02	1.56E-02	1.73E-02	1.62E-02	5.24E+00
ADULT	TOTALS	3.29E-01	2.04E-02	1.59E-02	1.73E-02	1.64E-02	5.24E+00

TIME STEP NUMBER 4, DURATION IN YRS IS... 1.0

CONCENTRATION DATA FOR THE N DIRECTION, THETA EQUALS 0.0 DEGREES

TOTAL AIR CONCENTRATIONS, PCI/M3, AND WL

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210	WL
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.403E+00	6.097E+00	2.835E+00	1.355E+00	2.289E-06	2.570E-05
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.885E+00	3.825E+00	2.287E+00	1.393E+00	3.036E-06	2.073E-05
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.692E+00	2.682E+00	1.859E+00	1.301E+00	3.719E-06	1.704E-05
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.118E+00	2.114E+00	1.588E+00	1.203E+00	4.415E-06	1.471E-05
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.127E+00	1.128E+00	9.734E-01	8.318E-01	5.447E-06	9.199E-06
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.594E-01	4.596E-01	4.410E-01	4.138E-01	5.628E-06	4.253E-06
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.346E-01	2.347E-01	2.328E-01	2.283E-01	5.180E-06	2.274E-06
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.504E-01	1.505E-01	1.505E-01	1.497E-01	4.820E-06	1.476E-06
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.078E-01	1.079E-01	1.082E-01	1.081E-01	4.552E-06	1.063E-06
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.257E-02	8.262E-02	8.294E-02	8.308E-02	4.342E-06	8.155E-07
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.609E-02	6.612E-02	6.642E-02	6.659E-02	4.169E-06	6.532E-07
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.476E-02	5.479E-02	5.504E-02	5.521E-02	4.038E-06	5.414E-07

GROUND SURFACE CONCENTRATIONS, PCI/M2

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.829E+00	4.829E+00	4.829E+00	4.768E+00
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.029E+00	3.029E+00	3.029E+00	6.325E+00
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.124E+00	2.124E+00	2.124E+00	7.746E+00
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.675E+00	1.675E+00	1.675E+00	9.196E+00
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.931E-01	8.931E-01	8.931E-01	1.135E+01
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.640E-01	3.640E-01	3.640E-01	1.172E+01
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.859E-01	1.859E-01	1.859E-01	1.079E+01
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.192E-01	1.192E-01	1.192E-01	1.004E+01
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.543E-02	8.543E-02	8.543E-02	9.483E+00
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.544E-02	6.544E-02	6.544E-02	9.044E+00
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.237E-02	5.237E-02	5.237E-02	8.684E+00
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.339E-02	4.339E-02	4.339E-02	8.411E+00

TOTAL DEPOSITION RATES, PCI/M2-SEC

XRHO, KM	U-238	Th-230	Ra-226	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	6.866E-09
2.5	0.000E+00	0.000E+00	0.000E+00	9.109E-09
3.5	0.000E+00	0.000E+00	0.000E+00	1.116E-08
4.5	0.000E+00	0.000E+00	0.000E+00	1.324E-08
7.5	0.000E+00	0.000E+00	0.000E+00	1.634E-08
15.0	0.000E+00	0.000E+00	0.000E+00	1.688E-08
25.0	0.000E+00	0.000E+00	0.000E+00	1.554E-08
35.0	0.000E+00	0.000E+00	0.000E+00	1.446E-08
45.0	0.000E+00	0.000E+00	0.000E+00	1.366E-08
55.0	0.000E+00	0.000E+00	0.000E+00	1.303E-08
65.0	0.000E+00	0.000E+00	0.000E+00	1.251E-08
75.0	0.000E+00	0.000E+00	0.000E+00	1.211E-08

TIME STEP NUMBER 4, DURATION IN YRS IS... 1.0

CONCENTRATION DATA FOR THE E DIRECTION, THETA EQUALS 90.0 DEGREES

TOTAL AIR CONCENTRATIONS, PCI/M3, AND WL

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210	WL
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.073E+01	1.678E+01	4.859E+00	1.927E+00	2.330E-06	4.910E-05
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.412E+01	1.267E+01	4.735E+00	2.354E+00	3.506E-06	4.584E-05
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.091E+01	1.030E+01	4.556E+00	2.496E+00	4.596E-06	4.302E-05
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.185E+00	8.815E+00	4.079E+00	2.284E+00	5.185E-06	3.828E-05
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.001E+01	1.968E+01	4.897E+00	2.197E+00	7.274E-06	5.330E-05
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.372E+00	3.364E+00	2.358E+00	1.669E+00	1.082E-05	2.165E-05
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.778E+00	1.779E+00	1.519E+00	1.243E+00	1.190E-05	1.417E-05
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.201E+00	1.201E+00	1.109E+00	9.847E-01	1.234E-05	1.053E-05
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.008E-01	9.013E-01	8.636E-01	8.033E-01	1.253E-05	8.303E-06
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.174E-01	7.178E-01	7.015E-01	6.709E-01	1.261E-05	6.798E-06
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.940E-01	5.943E-01	5.872E-01	5.713E-01	1.261E-05	5.720E-06
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.060E-01	5.063E-01	5.035E-01	4.951E-01	1.258E-05	4.921E-06

GROUND SURFACE CONCENTRATIONS, PCI/M2

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.329E+01	1.329E+01	1.329E+01	4.853E+00
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.004E+01	1.004E+01	1.004E+01	7.303E+00
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.159E+00	8.159E+00	8.159E+00	9.573E+00
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.982E+00	6.982E+00	6.982E+00	1.080E+01
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.559E+01	1.559E+01	1.559E+01	1.515E+01
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.664E+00	2.664E+00	2.664E+00	2.255E+01
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.409E+00	1.409E+00	1.409E+00	2.478E+01
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.516E-01	9.516E-01	9.516E-01	2.570E+01
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.138E-01	7.138E-01	7.138E-01	2.611E+01
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.685E-01	5.685E-01	5.685E-01	2.626E+01
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.707E-01	4.707E-01	4.707E-01	2.626E+01
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.010E-01	4.010E-01	4.010E-01	2.621E+01

TOTAL DEPOSITION RATES, PCI/M2-SEC

XRHO, KM	U-238	Th-230	Ra-226	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	6.990E-09
2.5	0.000E+00	0.000E+00	0.000E+00	1.052E-08
3.5	0.000E+00	0.000E+00	0.000E+00	1.379E-08
4.5	0.000E+00	0.000E+00	0.000E+00	1.556E-08
7.5	0.000E+00	0.000E+00	0.000E+00	2.182E-08
15.0	0.000E+00	0.000E+00	0.000E+00	3.247E-08
25.0	0.000E+00	0.000E+00	0.000E+00	3.569E-08
35.0	0.000E+00	0.000E+00	0.000E+00	3.702E-08
45.0	0.000E+00	0.000E+00	0.000E+00	3.760E-08
55.0	0.000E+00	0.000E+00	0.000E+00	3.782E-08
65.0	0.000E+00	0.000E+00	0.000E+00	3.782E-08
75.0	0.000E+00	0.000E+00	0.000E+00	3.775E-08

TIME STEP NUMBER 4, DURATION IN YRS IS... 1.0

CONCENTRATION DATA FOR THE ESE DIRECTION, THETA EQUALS 112.5 DEGREES

TOTAL AIR CONCENTRATIONS, PCI/M3, AND WL

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210	WL
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.509E+01	1.913E+01	4.712E+00	1.685E+00	1.907E-06	4.988E-05
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.328E+01	1.183E+01	3.991E+00	1.828E+00	2.559E-06	3.923E-05
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.252E+01	1.089E+01	3.705E+00	1.790E+00	3.170E-06	3.668E-05
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.038E+01	3.064E+01	4.496E+00	1.634E+00	3.622E-06	6.045E-05
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.773E+00	5.526E+00	2.776E+00	1.655E+00	5.428E-06	2.594E-05
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.782E+00	1.782E+00	1.357E+00	1.015E+00	6.943E-06	1.250E-05
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.517E-01	9.522E-01	8.483E-01	7.272E-01	7.680E-06	7.994E-06
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.313E-01	6.316E-01	5.979E-01	5.486E-01	7.877E-06	5.728E-06
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.664E-01	4.666E-01	4.542E-01	4.322E-01	7.908E-06	4.395E-06
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.669E-01	3.671E-01	3.624E-01	3.521E-01	7.870E-06	3.529E-06
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.007E-01	3.009E-01	2.993E-01	2.945E-01	7.800E-06	2.926E-06
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.545E-01	2.546E-01	2.543E-01	2.521E-01	7.734E-06	2.492E-06

GROUND SURFACE CONCENTRATIONS, PCI/M2

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.515E+01	1.515E+01	1.515E+01	3.972E+00
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.369E+00	9.369E+00	9.369E+00	5.331E+00
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.627E+00	8.627E+00	8.627E+00	6.604E+00
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.427E+01	2.427E+01	2.427E+01	7.544E+00
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.377E+00	4.377E+00	4.377E+00	1.131E+01
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.411E+00	1.411E+00	1.411E+00	1.446E+01
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.542E-01	7.542E-01	7.542E-01	1.600E+01
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.003E-01	5.003E-01	5.003E-01	1.641E+01
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.696E-01	3.696E-01	3.696E-01	1.647E+01
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.907E-01	2.907E-01	2.907E-01	1.639E+01
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.383E-01	2.383E-01	2.383E-01	1.625E+01
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.017E-01	2.017E-01	2.017E-01	1.611E+01

TOTAL DEPOSITION RATES, PCI/M2-SEC

XRHO, KM	U-238	Th-230	Ra-226	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	5.720E-09
2.5	0.000E+00	0.000E+00	0.000E+00	7.677E-09
3.5	0.000E+00	0.000E+00	0.000E+00	9.511E-09
4.5	0.000E+00	0.000E+00	0.000E+00	1.086E-08
7.5	0.000E+00	0.000E+00	0.000E+00	1.628E-08
15.0	0.000E+00	0.000E+00	0.000E+00	2.083E-08
25.0	0.000E+00	0.000E+00	0.000E+00	2.304E-08
35.0	0.000E+00	0.000E+00	0.000E+00	2.363E-08
45.0	0.000E+00	0.000E+00	0.000E+00	2.372E-08
55.0	0.000E+00	0.000E+00	0.000E+00	2.361E-08
65.0	0.000E+00	0.000E+00	0.000E+00	2.340E-08
75.0	0.000E+00	0.000E+00	0.000E+00	2.320E-08

TIME STEP NUMBER 4, DURATION IN YRS IS... 1.0

CONCENTRATION DATA FOR THE S DIRECTION, THETA EQUALS 180.0 DEGREES

TOTAL AIR CONCENTRATIONS, PCI/M3, AND WL

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210	WL
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.121E+01	9.078E+00	2.747E+00	1.116E+00	1.770E-06	2.744E-05
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.956E+00	5.434E+00	2.275E+00	1.211E+00	2.245E-06	2.164E-05
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.969E+00	3.790E+00	1.888E+00	1.148E+00	2.727E-06	1.776E-05
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.037E+00	2.959E+00	1.629E+00	1.058E+00	3.138E-06	1.525E-05
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.775E+00	1.764E+00	1.147E+00	8.022E-01	3.928E-06	1.062E-05
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.622E-01	8.623E-01	6.947E-01	5.468E-01	4.867E-06	6.450E-06
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.018E-01	5.020E-01	4.528E-01	3.933E-01	5.051E-06	4.280E-06
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.471E-01	3.473E-01	3.295E-01	3.031E-01	5.045E-06	3.159E-06
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.625E-01	2.626E-01	2.555E-01	2.430E-01	4.987E-06	2.472E-06
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.095E-01	2.097E-01	2.068E-01	2.006E-01	4.913E-06	2.013E-06
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.735E-01	1.736E-01	1.725E-01	1.695E-01	4.833E-06	1.686E-06
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.478E-01	1.479E-01	1.476E-01	1.461E-01	4.762E-06	1.446E-06

GROUND SURFACE CONCENTRATIONS, PCI/M2

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.190E+00	7.190E+00	7.190E+00	3.686E+00
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.304E+00	4.304E+00	4.304E+00	4.675E+00
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.002E+00	3.002E+00	3.002E+00	5.681E+00
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.343E+00	2.343E+00	2.343E+00	6.537E+00
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.397E+00	1.397E+00	1.397E+00	8.182E+00
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.830E-01	6.830E-01	6.830E-01	1.014E+01
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.976E-01	3.976E-01	3.976E-01	1.052E+01
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.751E-01	2.751E-01	2.751E-01	1.051E+01
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.080E-01	2.080E-01	2.080E-01	1.039E+01
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.661E-01	1.661E-01	1.661E-01	1.023E+01
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.375E-01	1.375E-01	1.375E-01	1.007E+01
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.172E-01	1.172E-01	1.172E-01	9.920E+00

TOTAL DEPOSITION RATES, PCI/M2-SEC

XRHO, KM	U-238	Th-230	Ra-226	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	5.309E-09
2.5	0.000E+00	0.000E+00	0.000E+00	6.734E-09
3.5	0.000E+00	0.000E+00	0.000E+00	8.181E-09
4.5	0.000E+00	0.000E+00	0.000E+00	9.415E-09
7.5	0.000E+00	0.000E+00	0.000E+00	1.178E-08
15.0	0.000E+00	0.000E+00	0.000E+00	1.460E-08
25.0	0.000E+00	0.000E+00	0.000E+00	1.515E-08
35.0	0.000E+00	0.000E+00	0.000E+00	1.513E-08
45.0	0.000E+00	0.000E+00	0.000E+00	1.496E-08
55.0	0.000E+00	0.000E+00	0.000E+00	1.474E-08
65.0	0.000E+00	0.000E+00	0.000E+00	1.450E-08
75.0	0.000E+00	0.000E+00	0.000E+00	1.429E-08

TIME STEP NUMBER 4, DURATION IN YRS IS... 1.0

CONCENTRATION DATA FOR THE W DIRECTION, THETA EQUALS 270.0 DEGREES

TOTAL AIR CONCENTRATIONS, PCI/M3, AND WL

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210	WL
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.108E+01	9.442E+00	2.778E+00	1.110E+00	2.044E-06	2.795E-05
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.386E+00	6.014E+00	2.490E+00	1.276E+00	2.825E-06	2.358E-05
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.422E+00	4.314E+00	2.186E+00	1.287E+00	3.595E-06	2.033E-05
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.420E+00	3.381E+00	1.943E+00	1.236E+00	4.208E-06	1.794E-05
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.992E+00	1.990E+00	1.415E+00	1.012E+00	5.344E-06	1.300E-05
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.227E-01	9.232E-01	8.102E-01	6.814E-01	6.300E-06	7.600E-06
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.153E-01	5.156E-01	4.934E-01	4.583E-01	6.608E-06	4.742E-06
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.512E-01	3.513E-01	3.459E-01	3.347E-01	6.662E-06	3.364E-06
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.630E-01	2.632E-01	2.621E-01	2.583E-01	6.623E-06	2.563E-06
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.085E-01	2.087E-01	2.088E-01	2.076E-01	6.546E-06	2.048E-06
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.717E-01	1.718E-01	1.722E-01	1.720E-01	6.455E-06	1.692E-06
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.456E-01	1.457E-01	1.462E-01	1.464E-01	6.371E-06	1.437E-06

GROUND SURFACE CONCENTRATIONS, PCI/M2

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.478E+00	7.478E+00	7.478E+00	4.258E+00
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.763E+00	4.763E+00	4.763E+00	5.885E+00
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.417E+00	3.417E+00	3.417E+00	7.489E+00
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.678E+00	2.678E+00	2.678E+00	8.765E+00
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.576E+00	1.576E+00	1.576E+00	1.113E+01
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.312E-01	7.312E-01	7.312E-01	1.312E+01
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.084E-01	4.084E-01	4.084E-01	1.376E+01
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.783E-01	2.783E-01	2.783E-01	1.388E+01
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.085E-01	2.085E-01	2.085E-01	1.379E+01
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.653E-01	1.653E-01	1.653E-01	1.364E+01
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.361E-01	1.361E-01	1.361E-01	1.345E+01
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.154E-01	1.154E-01	1.154E-01	1.327E+01

TOTAL DEPOSITION RATES, PCI/M2-SEC

XRHO, KM	U-238	Th-230	Ra-226	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	6.132E-09
2.5	0.000E+00	0.000E+00	0.000E+00	8.476E-09
3.5	0.000E+00	0.000E+00	0.000E+00	1.079E-08
4.5	0.000E+00	0.000E+00	0.000E+00	1.262E-08
7.5	0.000E+00	0.000E+00	0.000E+00	1.603E-08
15.0	0.000E+00	0.000E+00	0.000E+00	1.890E-08
25.0	0.000E+00	0.000E+00	0.000E+00	1.982E-08
35.0	0.000E+00	0.000E+00	0.000E+00	1.999E-08
45.0	0.000E+00	0.000E+00	0.000E+00	1.987E-08
55.0	0.000E+00	0.000E+00	0.000E+00	1.964E-08
65.0	0.000E+00	0.000E+00	0.000E+00	1.937E-08
75.0	0.000E+00	0.000E+00	0.000E+00	1.911E-08

TIME STEP NUMBER 4, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS INHAL. EXPOSED ORGAN IS EFFECTIV

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.193E-06	5.344E-06	8.326E-06	1.127E-05	1.332E-05	1.556E-05	3.753E-05	6.593E-05
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.464E-06	6.718E-06	1.184E-05	1.729E-05	2.131E-05	2.559E-05	3.475E-05	7.215E-05
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.507E-06	8.017E-06	1.380E-05	1.967E-05	2.394E-05	2.854E-05	3.348E-05	3.552E-05
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.607E-06	9.275E-06	1.676E-05	2.458E-05	3.054E-05	3.700E-05	3.353E-05	2.651E-05
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.593E-06	1.028E-05	1.912E-05	2.885E-05	3.665E-05	4.792E-05	3.134E-05	3.406E-05
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.189E-06	7.606E-06	2.743E-04	5.635E-04	4.566E-05	5.812E-05	4.564E-05	3.791E-05
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.009E-06	6.670E-06	1.458E-03	1.985E-04	2.414E-05	2.786E-05	3.228E-05	3.667E-05
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.574E-06	7.193E-06	1.609E-05	1.718E-05	2.411E-05	2.843E-05	2.641E-05	2.483E-05
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.434E-06	8.176E-06	1.402E-05	2.101E-05	2.917E-05	2.371E-05	2.439E-05	1.429E-05
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.606E-06	6.900E-06	1.211E-05	1.701E-05	2.134E-05	2.105E-05	1.144E-05	1.158E-05
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.153E-06	5.409E-06	9.304E-06	1.278E-05	1.821E-05	3.153E-05	3.865E-05	2.730E-05
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.093E-07	5.365E-04	3.410E-04	1.803E-05	3.927E-05	4.455E-04	3.524E-04	5.738E-05
W	0.000E+00	0.000E+00	2.625E-07	0.000E+00	1.171E-06	5.982E-06	1.352E-05	3.555E-05	8.425E-05	2.161E-02	7.461E-03	3.497E-05
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.051E-06	5.355E-06	9.794E-06	2.122E-05	7.551E-05	9.915E-05	2.047E-04	2.577E-04
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.319E-06	6.774E-06	1.194E-05	1.734E-05	2.142E-05	2.582E-05	4.297E-05	9.074E-05
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.829E-05	1.042E-03	3.654E-03	1.164E-03	6.113E-04	2.273E-02	8.565E-03	1.023E-03

TOTAL DOSE COMMITMENT IS 7.500E-02 PERSON-REM/YR

TIME STEP NUMBER 4, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS INHAL. EXPOSED ORGAN IS BONE

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.682E-06	4.335E-05	6.751E-05	9.138E-05	1.079E-04	1.260E-04	3.038E-04	5.335E-04
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.188E-05	5.450E-05	9.599E-05	1.402E-04	1.727E-04	2.072E-04	2.813E-04	5.838E-04
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.223E-05	6.503E-05	1.119E-04	1.594E-04	1.940E-04	2.312E-04	2.711E-04	2.875E-04
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.304E-05	7.524E-05	1.359E-04	1.993E-04	2.475E-04	2.997E-04	2.716E-04	2.146E-04
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.293E-05	8.338E-05	1.551E-04	2.340E-04	2.971E-04	3.884E-04	2.539E-04	2.758E-04
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.647E-06	6.170E-05	2.225E-03	4.569E-03	3.701E-04	4.709E-04	3.697E-04	3.070E-04
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.188E-06	5.411E-05	1.183E-02	1.609E-03	1.957E-04	2.257E-04	2.615E-04	2.970E-04
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.277E-05	5.835E-05	1.305E-04	1.393E-04	1.954E-04	2.304E-04	2.139E-04	2.011E-04
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.164E-05	6.633E-05	1.137E-04	1.704E-04	2.364E-04	1.921E-04	1.976E-04	1.157E-04
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.303E-05	5.598E-05	9.820E-05	1.379E-04	1.729E-04	1.705E-04	9.265E-05	9.375E-05
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.353E-06	4.388E-05	7.545E-05	1.036E-04	1.476E-04	2.555E-04	3.131E-04	2.211E-04
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.378E-06	4.352E-03	2.765E-03	1.462E-04	3.183E-04	3.610E-03	2.854E-03	4.646E-04
W	0.000E+00	0.000E+00	2.130E-06	0.000E+00	9.498E-06	4.852E-05	1.096E-04	2.882E-04	6.827E-04	1.750E-01	6.043E-02	2.831E-04
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.531E-06	4.344E-05	7.943E-05	1.721E-04	6.121E-04	8.035E-04	1.658E-03	2.087E-03
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.070E-05	5.495E-05	9.679E-05	1.406E-04	1.735E-04	2.091E-04	3.480E-04	7.344E-04
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.295E-04	8.452E-03	2.963E-02	9.437E-03	4.953E-03	1.841E-01	6.933E-02	8.274E-03

TOTAL DOSE COMMITMENT IS 6.075E-01 PERSON-REM/YR

TIME STEP NUMBER 4, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS INHAL. EXPOSED ORGAN IS AVG.LUNG

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.384E-07	6.309E-07	1.006E-06	1.395E-06	1.686E-06	2.016E-06	4.971E-06	8.929E-06
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.695E-07	7.920E-07	1.431E-06	2.143E-06	2.706E-06	3.329E-06	4.632E-06	9.845E-06
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.742E-07	9.427E-07	1.660E-06	2.420E-06	3.012E-06	3.670E-06	4.399E-06	4.767E-06
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.857E-07	1.088E-06	2.009E-06	3.008E-06	3.813E-06	4.710E-06	4.352E-06	3.506E-06
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.840E-07	1.203E-06	2.280E-06	3.499E-06	4.515E-06	5.994E-06	3.978E-06	4.386E-06
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.372E-07	8.908E-07	3.273E-05	6.843E-05	5.640E-06	7.298E-06	5.824E-06	4.914E-06
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.165E-07	7.812E-07	1.740E-04	2.409E-05	2.979E-06	3.494E-06	4.114E-06	4.747E-06
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.819E-07	8.443E-07	1.926E-06	2.094E-06	2.989E-06	3.584E-06	3.383E-06	3.231E-06
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.660E-07	9.619E-07	1.683E-06	2.571E-06	3.633E-06	3.005E-06	3.145E-06	1.872E-06
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.860E-07	8.122E-07	1.455E-06	2.086E-06	2.667E-06	2.681E-06	1.484E-06	1.530E-06
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.338E-07	6.369E-07	1.116E-06	1.560E-06	2.263E-06	3.985E-06	4.967E-06	3.566E-06
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.056E-07	6.327E-05	4.100E-05	2.208E-06	4.897E-06	5.655E-05	4.551E-05	7.535E-06
W	0.000E+00	0.000E+00	3.029E-08	0.000E+00	1.360E-07	7.058E-07	1.627E-06	4.363E-06	1.054E-05	2.753E-03	9.683E-04	4.620E-06
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.220E-07	6.298E-07	1.170E-06	2.573E-06	9.287E-06	1.237E-05	2.588E-05	3.302E-05
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.531E-07	7.994E-07	1.440E-06	2.139E-06	2.698E-06	3.321E-06	5.644E-06	1.216E-05
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.284E-06	1.232E-04	4.428E-04	1.446E-04	7.777E-05	2.962E-03	1.143E-03	1.396E-04

TOTAL DOSE COMMITMENT IS 9.636E-03 PERSON-REM/YR

TIME STEP NUMBER 4, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS INHAL. EXPOSED ORGAN IS BRONCHI

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.228E-03	7.464E-03	6.452E-03	6.016E-03	5.390E-03	5.058E-03	1.016E-02	1.526E-02
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.358E-03	9.385E-03	8.630E-03	8.400E-03	7.711E-03	7.346E-03	8.241E-03	1.454E-02
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.721E-03	1.450E-02	1.324E-02	1.266E-02	1.153E-02	1.096E-02	1.066E-02	9.663E-03
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.382E-02	2.863E-02	2.687E-02	2.630E-02	2.446E-02	2.368E-02	1.787E-02	1.211E-02
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.125E-01	5.480E-02	4.890E-02	4.803E-02	4.504E-02	4.663E-02	2.524E-02	2.340E-02
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.165E-02	3.342E-02	5.817E-01	7.725E-01	4.605E-02	4.632E-02	3.007E-02	2.131E-02
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.279E-02	2.733E-02	2.971E+00	2.635E-01	2.364E-02	2.158E-02	2.068E-02	2.005E-02
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.439E-02	2.598E-02	3.148E-02	2.285E-02	2.423E-02	2.298E-02	1.786E-02	1.446E-02
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.109E-02	2.479E-02	2.383E-02	2.473E-02	2.625E-02	1.729E-02	1.497E-02	7.576E-03
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.082E-02	1.867E-02	1.749E-02	1.663E-02	1.574E-02	1.247E-02	5.666E-03	4.932E-03
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.514E-03	1.486E-02	1.405E-02	1.319E-02	1.425E-02	1.986E-02	2.037E-02	1.237E-02
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.317E-03	1.328E+00	4.669E-01	1.697E-02	2.814E-02	2.578E-01	1.711E-01	2.402E-02
W	0.000E+00	0.000E+00	5.528E-03	0.000E+00	7.471E-03	1.499E-02	1.804E-02	3.204E-02	5.721E-02	1.176E+01	3.391E+00	1.365E-02
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.306E-03	2.013E-02	2.009E-02	2.949E-02	7.902E-02	8.311E-02	1.430E-01	1.543E-01
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.200E-03	1.443E-02	1.348E-02	1.316E-02	1.218E-02	1.172E-02	1.622E-02	2.931E-02
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.044E-01	1.466E+00	2.757E+00	5.920E-01	2.328E-01	6.891E+00	2.150E+00	2.186E-01

TOTAL DOSE COMMITMENT IS 3.893E+01 PERSON-REM/YR

TIME STEP NUMBER 4, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS GROUND EXPOSED ORGAN IS EFFECTIV

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.426E-07	1.131E-06	1.175E-06	1.283E-06	1.321E-06	1.403E-06	3.152E-06	5.242E-06
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.848E-07	1.422E-06	1.610E-06	1.875E-06	2.010E-06	2.197E-06	2.786E-06	5.492E-06
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.520E-07	2.071E-06	2.236E-06	2.484E-06	2.584E-06	2.763E-06	2.993E-06	2.988E-06
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.636E-06	3.733E-06	3.940E-06	4.292E-06	4.401E-06	4.656E-06	3.812E-06	2.786E-06
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.442E-06	6.739E-06	6.560E-06	6.982E-06	7.059E-06	7.840E-06	4.532E-06	4.468E-06
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.410E-06	4.189E-06	8.055E-05	1.176E-04	7.655E-06	8.348E-06	5.841E-06	4.436E-06
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.471E-06	3.449E-06	4.144E-04	4.045E-05	3.966E-06	3.931E-06	4.065E-06	4.227E-06
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.699E-06	3.325E-06	4.425E-06	3.506E-06	4.032E-06	4.120E-06	3.432E-06	2.962E-06
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.325E-06	3.244E-06	3.449E-06	3.924E-06	4.530E-06	3.223E-06	2.997E-06	1.620E-06
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.307E-06	2.483E-06	2.628E-06	2.792E-06	2.922E-06	2.536E-06	1.252E-06	1.176E-06
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.109E-07	1.972E-06	2.089E-06	2.176E-06	2.586E-06	3.932E-06	4.369E-06	2.858E-06
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.501E-07	1.791E-04	7.111E-05	2.885E-06	5.283E-06	5.297E-05	3.818E-05	5.780E-06
W	0.000E+00	0.000E+00	6.247E-07	0.000E+00	9.075E-07	2.018E-06	2.765E-06	5.527E-06	1.098E-05	2.485E-03	7.820E-04	3.410E-06
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.108E-06	2.566E-06	2.799E-06	4.474E-06	1.298E-05	1.471E-05	2.713E-05	3.123E-05
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.847E-07	1.996E-06	2.164E-06	2.416E-06	2.523E-06	2.705E-06	4.129E-06	8.156E-06
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.333E-05	2.217E-04	5.075E-04	1.292E-04	5.899E-05	1.993E-03	7.000E-04	7.925E-05

TOTAL DOSE COMMITMENT IS 8.405E-03 PERSON-REM/YR

TIME STEP NUMBER 4, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS CLOUD EXPOSED ORGAN IS EFFECTIV

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.791E-05	5.940E-05	5.514E-05	5.249E-05	4.737E-05	4.457E-05	8.966E-05	1.348E-04
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.600E-05	7.486E-05	7.378E-05	7.325E-05	6.771E-05	6.469E-05	7.269E-05	1.284E-04
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.476E-05	1.073E-04	1.087E-04	1.081E-04	1.001E-04	9.581E-05	9.365E-05	8.506E-05
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.798E-05	1.652E-04	1.842E-04	1.975E-04	1.939E-04	1.942E-04	1.500E-04	1.033E-04
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.357E-05	2.500E-04	3.079E-04	3.506E-04	3.552E-04	3.842E-04	2.135E-04	2.010E-04
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.905E-05	1.738E-04	3.976E-03	5.948E-03	3.763E-04	3.909E-04	2.585E-04	1.852E-04
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.413E-05	1.474E-04	2.073E-02	2.054E-03	1.945E-04	1.828E-04	1.781E-04	1.743E-04
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.636E-05	1.398E-04	2.125E-04	1.727E-04	1.946E-04	1.911E-04	1.518E-04	1.245E-04
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.631E-05	1.424E-04	1.668E-04	1.913E-04	2.143E-04	1.456E-04	1.283E-04	6.568E-05
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.960E-05	1.167E-04	1.309E-04	1.346E-04	1.325E-04	1.072E-04	4.925E-05	4.316E-05
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.540E-05	9.664E-05	1.085E-04	1.090E-04	1.216E-04	1.721E-04	1.781E-04	1.087E-04
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.620E-05	8.913E-03	3.677E-03	1.421E-04	2.421E-04	2.247E-03	1.501E-03	2.114E-04
W	0.000E+00	0.000E+00	1.534E-05	0.000E+00	3.493E-05	9.932E-05	1.419E-04	2.687E-04	4.930E-04	1.027E-01	2.977E-02	1.202E-04
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.763E-05	1.204E-04	1.492E-04	2.396E-04	6.690E-04	7.181E-04	1.249E-03	1.355E-03
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.722E-05	9.863E-05	1.065E-04	1.100E-04	1.045E-04	1.019E-04	1.420E-04	2.576E-04
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.664E-04	1.135E-02	2.315E-02	5.114E-03	2.035E-03	6.055E-02	1.894E-02	1.929E-03

TOTAL DOSE COMMITMENT IS 3.241E-01 PERSON-REM/YR

TIME STEP NUMBER 4, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS VEG. ING EXPOSED ORGAN IS EFFECTIV

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

TOTAL DOSE COMMITMENT IS 0.000E+00 PERSON-REM/YR

WARNING--POPULATION FOOD INGESTION DOSES SHOWN
ABOVE HAVE NOT BEEN CORRECTED TO REFLECT POTENTIAL
FOOD EXPORT AND MAY EXCEED DOSES ACTUALLY RECEIVED
BY THE POPULATION OF THIS REGION. SEE SUMMARY
TABLE FOR THIS INFORMATION.

TIME STEP NUMBER 4, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS VEG. ING EXPOSED ORGAN IS BONE

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

TOTAL DOSE COMMITMENT IS 0.000E+00 PERSON-REM/YR

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DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

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N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

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N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

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N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

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DOSES RECEIVED BY PEOPLE WITHIN 80 KILOMETERS

PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INHAL.	7.500E-02	6.075E-01	9.636E-03	4.556E-01	2.190E-01	3.893E+01
GROUND	8.405E-03	8.405E-03	8.405E-03	8.405E-03	8.405E-03	8.405E-03
CLOUD	3.241E-01	3.241E-01	3.241E-01	3.241E-01	3.241E-01	3.241E-01
VEG. ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MEAT ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MILK ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RNPLUS50	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOTALS	4.076E-01	9.401E-01	3.422E-01	7.882E-01	5.516E-01	3.926E+01

DOSES RECEIVED BY PEOPLE BEYOND 80 KILOMETERS

PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INHAL.	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GROUND	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CLOUD	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
VEG. ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MEAT ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MILK ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RNPLUS50	9.023E+00	1.230E+02	2.051E+00	9.023E+00	9.023E+00	5.742E+01
TOTALS	9.023E+00	1.230E+02	2.051E+00	9.023E+00	9.023E+00	5.742E+01

TOTAL DOSES COMPUTED OVER ALL POPULATIONS

PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INHAL.	7.500E-02	6.075E-01	9.636E-03	4.556E-01	2.190E-01	3.893E+01
GROUND	8.405E-03	8.405E-03	8.405E-03	8.405E-03	8.405E-03	8.405E-03
CLOUD	3.241E-01	3.241E-01	3.241E-01	3.241E-01	3.241E-01	3.241E-01
VEG. ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MEAT ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MILK ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RNPLUS50	9.023E+00	1.230E+02	2.051E+00	9.023E+00	9.023E+00	5.742E+01
TOTALS	9.431E+00	1.240E+02	2.393E+00	9.812E+00	9.575E+00	9.668E+01

TIME STEP NUMBER 4, DURATION IN YRS IS... 1.0

INDIVIDUAL RECEPTOR PARTICULATE CONCENTRATIONS

NO.	NAME	PTSZ	AIRBORNE CONCENTRATIONS, PCI/M3 U-238	Th-230	Ra-226	Pb-210	GROUND CONCENTRATIONS, PCI/M2 U-238	Th-230	Ra-226	Pb-210
1	Receptor 1	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1	Receptor 1	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1	Receptor 1	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1	Receptor 1	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2	Receptor 2	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2	Receptor 2	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2	Receptor 2	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2	Receptor 2	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
3	Receptor 3	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
3	Receptor 3	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
3	Receptor 3	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
3	Receptor 3	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
4	Receptor 4	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
4	Receptor 4	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
4	Receptor 4	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
4	Receptor 4	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
5	Receptor 5	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
5	Receptor 5	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
5	Receptor 5	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
5	Receptor 5	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
6	Receptor 6	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
6	Receptor 6	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
6	Receptor 6	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
6	Receptor 6	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
7	Receptor 7	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
7	Receptor 7	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
7	Receptor 7	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
7	Receptor 7	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

TIME STEP NUMBER 4, DURATION IN YRS IS... 1.0

INDIVIDUAL RECEPTOR RADON AND RADON DAUGHTER CONCENTRATIONS

	AIRBORNE CONCENTRATIONS, PCI/M3								GROUND CONCENTRATIONS, PCI/M2			
NO.	Rn-222	Po-218	Pb-214	Bi-214	Pb-210	Bi-210	Po-210	WL	Po-218	Pb-214	Bi-214	Pb-210
1	2.069E+01	1.679E+01	4.677E+00	1.862E+00	2.224E-06	4.491E-09	3.375E-13	4.795E-05	1.330E+01	1.330E+01	1.330E+01	6.016E-01
2	2.964E+00	2.953E+00	2.096E+00	1.546E+00	8.549E-06	6.419E-08	1.367E-11	1.944E-05	2.339E+00	2.339E+00	2.339E+00	2.614E+00
3	1.212E+01	1.048E+01	3.283E+00	1.165E+00	1.810E-06	6.860E-09	8.655E-13	3.179E-05	8.303E+00	8.303E+00	8.303E+00	3.327E-01
4	1.400E+00	1.397E+00	1.006E+00	7.254E-01	4.267E-06	3.808E-08	9.801E-12	9.244E-06	1.106E+00	1.106E+00	1.106E+00	1.303E+00
5	1.922E+00	1.920E+00	1.431E+00	1.053E+00	6.918E-06	7.335E-08	2.278E-11	1.316E-05	1.521E+00	1.521E+00	1.521E+00	2.083E+00
6	1.768E+00	1.757E+00	1.159E+00	8.002E-01	3.937E-06	2.754E-08	5.539E-12	1.067E-05	1.391E+00	1.391E+00	1.391E+00	1.169E+00
7	4.020E+00	3.951E+00	2.062E+00	1.219E+00	3.720E-06	1.915E-08	3.483E-12	1.907E-05	3.129E+00	3.129E+00	3.129E+00	9.815E-01

TIME STEP NUMBER 4, DURATION IN YRS IS... 1.0

NUMBER 1 NAME=Receptor 1 X= 1.7KM, Y= -0.5KM, Z= 0.0M, DIST= 1.8KM, IRTYPE= 1

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	1.58E+00	2.79E-02	2.68E-02	3.29E-02	2.91E-02	2.59E+01
CHILD	TOTALS	1.58E+00	2.87E-02	2.71E-02	2.98E-02	2.81E-02	2.59E+01
TEENAGE	TOTALS	1.58E+00	3.07E-02	2.72E-02	2.84E-02	2.77E-02	2.59E+01
ADULT	TOTALS	1.58E+00	3.06E-02	2.75E-02	2.84E-02	2.78E-02	2.59E+01

NUMBER 2 NAME=Receptor 2 X= 9.6KM, Y= 3.4KM, Z= 0.0M, DIST= 10.1KM, IRTYPE= 1

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	2.42E-01	2.27E-02	1.86E-02	4.21E-02	2.74E-02	3.72E+00
CHILD	TOTALS	2.42E-01	2.58E-02	1.96E-02	3.00E-02	2.35E-02	3.72E+00
TEENAGE	TOTALS	2.42E-01	3.36E-02	2.02E-02	2.47E-02	2.20E-02	3.72E+00
ADULT	TOTALS	2.42E-01	3.30E-02	2.11E-02	2.48E-02	2.23E-02	3.72E+00

TIME STEP NUMBER 4, DURATION IN YRS IS... 1.0

NUMBER 3 NAME=Receptor 3 X= -0.1KM, Y= 0.8KM, Z= 0.0M, DIST= 0.8KM, IRTYPE= 1

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	9.26E-01	1.82E-02	1.73E-02	2.23E-02	1.92E-02	1.52E+01
CHILD	TOTALS	9.26E-01	1.88E-02	1.75E-02	1.97E-02	1.83E-02	1.52E+01
TEENAGE	TOTALS	9.26E-01	2.04E-02	1.76E-02	1.86E-02	1.80E-02	1.52E+01
ADULT	TOTALS	9.26E-01	2.03E-02	1.78E-02	1.86E-02	1.81E-02	1.52E+01

NUMBER 4 NAME=Receptor 4 X= 9.8KM, Y= -7.4KM, Z= 0.0M, DIST= 12.3KM, IRTYPE= 1

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	1.14E-01	1.08E-02	8.75E-03	2.05E-02	1.32E-02	1.76E+00
CHILD	TOTALS	1.14E-01	1.24E-02	9.25E-03	1.45E-02	1.12E-02	1.76E+00
TEENAGE	TOTALS	1.14E-01	1.63E-02	9.59E-03	1.18E-02	1.05E-02	1.76E+00
ADULT	TOTALS	1.14E-01	1.60E-02	1.00E-02	1.19E-02	1.06E-02	1.76E+00

TIME STEP NUMBER 4, DURATION IN YRS IS... 1.0

NUMBER 5 NAME=Receptor 5 X= 13.4KM, Y= -5.3KM, Z= 0.0M, DIST= 14.4KM, IRTYPE= 1

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	1.58E-01	1.61E-02	1.27E-02	3.17E-02	1.99E-02	2.42E+00
CHILD	TOTALS	1.57E-01	1.85E-02	1.35E-02	2.19E-02	1.67E-02	2.42E+00
TEENAGE	TOTALS	1.58E-01	2.48E-02	1.41E-02	1.77E-02	1.54E-02	2.42E+00
ADULT	TOTALS	1.58E-01	2.44E-02	1.47E-02	1.78E-02	1.57E-02	2.42E+00

NUMBER 6 NAME=Receptor 6 X= 7.6KM, Y= -6.7KM, Z= 0.0M, DIST= 10.1KM, IRTYPE= 1

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	1.43E-01	1.16E-02	9.71E-03	2.05E-02	1.38E-02	2.22E+00
CHILD	TOTALS	1.43E-01	1.30E-02	1.02E-02	1.50E-02	1.20E-02	2.22E+00
TEENAGE	TOTALS	1.43E-01	1.66E-02	1.05E-02	1.25E-02	1.13E-02	2.22E+00
ADULT	TOTALS	1.43E-01	1.64E-02	1.09E-02	1.26E-02	1.14E-02	2.22E+00

TIME STEP NUMBER 4, DURATION IN YRS IS... 1.0

NUMBER 7 NAME=Receptor 7 X= -4.1KM, Y= 0.9KM, Z= 0.0M, DIST= 4.2KM, IRTYPE= 1

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	3.17E-01	1.71E-02	1.53E-02	2.55E-02	1.91E-02	5.04E+00
CHILD	TOTALS	3.17E-01	1.84E-02	1.57E-02	2.02E-02	1.74E-02	5.04E+00
TEENAGE	TOTALS	3.17E-01	2.18E-02	1.60E-02	1.79E-02	1.67E-02	5.04E+00
ADULT	TOTALS	3.17E-01	2.15E-02	1.64E-02	1.80E-02	1.69E-02	5.04E+00

TIME STEP NUMBER 5, DURATION IN YRS IS... 1.0

CONCENTRATION DATA FOR THE N DIRECTION, THETA EQUALS 0.0 DEGREES

TOTAL AIR CONCENTRATIONS, PCI/M3, AND WL

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210	WL
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.170E+00	5.879E+00	2.794E+00	1.388E+00	3.061E-06	2.540E-05
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.851E+00	3.792E+00	2.307E+00	1.435E+00	3.849E-06	2.096E-05
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.721E+00	2.711E+00	1.904E+00	1.351E+00	4.537E-06	1.749E-05
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.175E+00	2.172E+00	1.647E+00	1.260E+00	5.251E-06	1.529E-05
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.189E+00	1.189E+00	1.032E+00	8.872E-01	6.299E-06	9.768E-06
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.905E-01	4.908E-01	4.720E-01	4.446E-01	6.394E-06	4.557E-06
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.531E-01	2.532E-01	2.512E-01	2.465E-01	5.783E-06	2.454E-06
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.626E-01	1.626E-01	1.627E-01	1.618E-01	5.332E-06	1.596E-06
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.165E-01	1.166E-01	1.169E-01	1.169E-01	5.006E-06	1.149E-06
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.921E-02	8.926E-02	8.961E-02	8.976E-02	4.755E-06	8.811E-07
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.136E-02	7.140E-02	7.171E-02	7.190E-02	4.551E-06	7.053E-07
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.907E-02	5.910E-02	5.938E-02	5.956E-02	4.396E-06	5.841E-07

GROUND SURFACE CONCENTRATIONS, PCI/M2

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.656E+00	4.656E+00	4.656E+00	6.376E+00
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.004E+00	3.004E+00	3.004E+00	8.017E+00
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.147E+00	2.147E+00	2.147E+00	9.450E+00
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.720E+00	1.720E+00	1.720E+00	1.094E+01
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.419E-01	9.419E-01	9.419E-01	1.312E+01
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.887E-01	3.887E-01	3.887E-01	1.332E+01
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.006E-01	2.006E-01	2.006E-01	1.205E+01
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.288E-01	1.288E-01	1.288E-01	1.111E+01
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.234E-02	9.234E-02	9.234E-02	1.043E+01
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.070E-02	7.070E-02	7.070E-02	9.904E+00
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.655E-02	5.655E-02	5.655E-02	9.480E+00
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.681E-02	4.681E-02	4.681E-02	9.157E+00

TOTAL DEPOSITION RATES, PCI/M2-SEC

XRHO, KM	U-238	Th-230	Ra-226	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	9.182E-09
2.5	0.000E+00	0.000E+00	0.000E+00	1.155E-08
3.5	0.000E+00	0.000E+00	0.000E+00	1.361E-08
4.5	0.000E+00	0.000E+00	0.000E+00	1.575E-08
7.5	0.000E+00	0.000E+00	0.000E+00	1.890E-08
15.0	0.000E+00	0.000E+00	0.000E+00	1.918E-08
25.0	0.000E+00	0.000E+00	0.000E+00	1.735E-08
35.0	0.000E+00	0.000E+00	0.000E+00	1.600E-08
45.0	0.000E+00	0.000E+00	0.000E+00	1.502E-08
55.0	0.000E+00	0.000E+00	0.000E+00	1.426E-08
65.0	0.000E+00	0.000E+00	0.000E+00	1.365E-08
75.0	0.000E+00	0.000E+00	0.000E+00	1.319E-08

TIME STEP NUMBER 5, DURATION IN YRS IS... 1.0

CONCENTRATION DATA FOR THE E DIRECTION, THETA EQUALS 90.0 DEGREES

TOTAL AIR CONCENTRATIONS, PCI/M3, AND WL

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210	WL
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.752E+01	1.440E+01	4.385E+00	1.863E+00	2.933E-06	4.401E-05
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.251E+01	1.133E+01	4.429E+00	2.289E+00	3.972E-06	4.266E-05
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.010E+01	9.581E+00	4.401E+00	2.479E+00	4.921E-06	4.143E-05
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.813E+00	8.478E+00	4.055E+00	2.331E+00	5.397E-06	3.799E-05
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.998E+01	1.965E+01	4.957E+00	2.267E+00	7.088E-06	5.383E-05
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.593E+00	3.581E+00	2.494E+00	1.772E+00	1.133E-05	2.294E-05
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.937E+00	1.938E+00	1.640E+00	1.335E+00	1.268E-05	1.529E-05
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.307E+00	1.308E+00	1.201E+00	1.061E+00	1.319E-05	1.140E-05
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.781E-01	9.787E-01	9.353E-01	8.672E-01	1.341E-05	8.984E-06
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.776E-01	7.780E-01	7.592E-01	7.246E-01	1.350E-05	7.353E-06
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.430E-01	6.433E-01	6.351E-01	6.171E-01	1.350E-05	6.184E-06
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.471E-01	5.474E-01	5.441E-01	5.346E-01	1.348E-05	5.317E-06

GROUND SURFACE CONCENTRATIONS, PCI/M2

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.140E+01	1.140E+01	1.140E+01	6.109E+00
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.972E+00	8.972E+00	8.972E+00	8.273E+00
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.588E+00	7.588E+00	7.588E+00	1.025E+01
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.715E+00	6.715E+00	6.715E+00	1.124E+01
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.557E+01	1.557E+01	1.557E+01	1.476E+01
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.837E+00	2.837E+00	2.837E+00	2.360E+01
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.535E+00	1.535E+00	1.535E+00	2.641E+01
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.036E+00	1.036E+00	1.036E+00	2.747E+01
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.751E-01	7.751E-01	7.751E-01	2.794E+01
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.162E-01	6.162E-01	6.162E-01	2.811E+01
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.095E-01	5.095E-01	5.095E-01	2.812E+01
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.336E-01	4.336E-01	4.336E-01	2.808E+01

TOTAL DEPOSITION RATES, PCI/M2-SEC

XRHO, KM	U-238	Th-230	Ra-226	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	8.799E-09
2.5	0.000E+00	0.000E+00	0.000E+00	1.192E-08
3.5	0.000E+00	0.000E+00	0.000E+00	1.476E-08
4.5	0.000E+00	0.000E+00	0.000E+00	1.619E-08
7.5	0.000E+00	0.000E+00	0.000E+00	2.126E-08
15.0	0.000E+00	0.000E+00	0.000E+00	3.399E-08
25.0	0.000E+00	0.000E+00	0.000E+00	3.803E-08
35.0	0.000E+00	0.000E+00	0.000E+00	3.956E-08
45.0	0.000E+00	0.000E+00	0.000E+00	4.024E-08
55.0	0.000E+00	0.000E+00	0.000E+00	4.049E-08
65.0	0.000E+00	0.000E+00	0.000E+00	4.050E-08
75.0	0.000E+00	0.000E+00	0.000E+00	4.044E-08

TIME STEP NUMBER 5, DURATION IN YRS IS... 1.0

CONCENTRATION DATA FOR THE ESE DIRECTION, THETA EQUALS 112.5 DEGREES

TOTAL AIR CONCENTRATIONS, PCI/M3, AND WL

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210	WL
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.847E+01	1.461E+01	4.027E+00	1.600E+00	2.432E-06	4.144E-05
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.174E+01	1.058E+01	3.762E+00	1.794E+00	2.925E-06	3.667E-05
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.223E+01	1.066E+01	3.701E+00	1.817E+00	3.387E-06	3.653E-05
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.082E+01	3.105E+01	4.681E+00	1.731E+00	3.699E-06	6.217E-05
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.097E+01	1.002E+01	3.784E+00	1.800E+00	4.981E-06	3.622E-05
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.333E+00	2.327E+00	1.659E+00	1.196E+00	7.452E-06	1.527E-05
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.099E+00	1.100E+00	9.654E-01	8.161E-01	8.262E-06	9.072E-06
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.065E-01	7.069E-01	6.656E-01	6.069E-01	8.458E-06	6.367E-06
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.145E-01	5.148E-01	4.999E-01	4.742E-01	8.481E-06	4.834E-06
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.025E-01	4.028E-01	3.971E-01	3.852E-01	8.448E-06	3.865E-06
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.292E-01	3.294E-01	3.274E-01	3.218E-01	8.385E-06	3.199E-06
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.780E-01	2.782E-01	2.778E-01	2.751E-01	8.321E-06	2.721E-06

GROUND SURFACE CONCENTRATIONS, PCI/M2

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.158E+01	1.158E+01	1.158E+01	5.066E+00
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.383E+00	8.383E+00	8.383E+00	6.093E+00
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.445E+00	8.445E+00	8.445E+00	7.055E+00
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.460E+01	2.460E+01	2.460E+01	7.705E+00
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.939E+00	7.939E+00	7.939E+00	1.038E+01
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.843E+00	1.843E+00	1.843E+00	1.552E+01
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.711E-01	8.711E-01	8.711E-01	1.721E+01
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.599E-01	5.599E-01	5.599E-01	1.762E+01
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.077E-01	4.077E-01	4.077E-01	1.767E+01
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.190E-01	3.190E-01	3.190E-01	1.760E+01
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.609E-01	2.609E-01	2.609E-01	1.747E+01
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.203E-01	2.203E-01	2.203E-01	1.733E+01

TOTAL DEPOSITION RATES, PCI/M2-SEC

XRHO, KM	U-238	Th-230	Ra-226	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	7.296E-09
2.5	0.000E+00	0.000E+00	0.000E+00	8.776E-09
3.5	0.000E+00	0.000E+00	0.000E+00	1.016E-08
4.5	0.000E+00	0.000E+00	0.000E+00	1.110E-08
7.5	0.000E+00	0.000E+00	0.000E+00	1.494E-08
15.0	0.000E+00	0.000E+00	0.000E+00	2.236E-08
25.0	0.000E+00	0.000E+00	0.000E+00	2.479E-08
35.0	0.000E+00	0.000E+00	0.000E+00	2.537E-08
45.0	0.000E+00	0.000E+00	0.000E+00	2.544E-08
55.0	0.000E+00	0.000E+00	0.000E+00	2.535E-08
65.0	0.000E+00	0.000E+00	0.000E+00	2.516E-08
75.0	0.000E+00	0.000E+00	0.000E+00	2.496E-08

TIME STEP NUMBER 5, DURATION IN YRS IS... 1.0

CONCENTRATION DATA FOR THE S DIRECTION, THETA EQUALS 180.0 DEGREES

TOTAL AIR CONCENTRATIONS, PCI/M3, AND WL

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210	WL
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.979E+00	7.502E+00	2.547E+00	1.156E+00	2.359E-06	2.495E-05
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.440E+00	5.032E+00	2.249E+00	1.253E+00	2.831E-06	2.126E-05
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.813E+00	3.667E+00	1.922E+00	1.204E+00	3.312E-06	1.801E-05
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.034E+00	2.967E+00	1.692E+00	1.114E+00	3.588E-06	1.579E-05
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.799E+00	1.789E+00	1.180E+00	8.280E-01	4.052E-06	1.091E-05
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.016E-01	9.018E-01	7.295E-01	5.760E-01	5.069E-06	6.776E-06
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.317E-01	5.320E-01	4.803E-01	4.178E-01	5.364E-06	4.541E-06
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.715E-01	3.717E-01	3.526E-01	3.242E-01	5.390E-06	3.380E-06
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.817E-01	2.818E-01	2.741E-01	2.606E-01	5.340E-06	2.652E-06
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.251E-01	2.252E-01	2.221E-01	2.154E-01	5.265E-06	2.161E-06
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.865E-01	1.866E-01	1.854E-01	1.821E-01	5.182E-06	1.811E-06
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.589E-01	1.589E-01	1.586E-01	1.570E-01	5.107E-06	1.553E-06

GROUND SURFACE CONCENTRATIONS, PCI/M2

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.942E+00	5.942E+00	5.942E+00	4.913E+00
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.985E+00	3.985E+00	3.985E+00	5.896E+00
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.904E+00	2.904E+00	2.904E+00	6.900E+00
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.350E+00	2.350E+00	2.350E+00	7.473E+00
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.417E+00	1.417E+00	1.417E+00	8.440E+00
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.142E-01	7.142E-01	7.142E-01	1.056E+01
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.214E-01	4.214E-01	4.214E-01	1.117E+01
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.944E-01	2.944E-01	2.944E-01	1.123E+01
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.232E-01	2.232E-01	2.232E-01	1.112E+01
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.784E-01	1.784E-01	1.784E-01	1.097E+01
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.478E-01	1.478E-01	1.478E-01	1.079E+01
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.259E-01	1.259E-01	1.259E-01	1.064E+01

TOTAL DEPOSITION RATES, PCI/M2-SEC

XRHO, KM	U-238	Th-230	Ra-226	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	7.076E-09
2.5	0.000E+00	0.000E+00	0.000E+00	8.492E-09
3.5	0.000E+00	0.000E+00	0.000E+00	9.937E-09
4.5	0.000E+00	0.000E+00	0.000E+00	1.076E-08
7.5	0.000E+00	0.000E+00	0.000E+00	1.216E-08
15.0	0.000E+00	0.000E+00	0.000E+00	1.521E-08
25.0	0.000E+00	0.000E+00	0.000E+00	1.609E-08
35.0	0.000E+00	0.000E+00	0.000E+00	1.617E-08
45.0	0.000E+00	0.000E+00	0.000E+00	1.602E-08
55.0	0.000E+00	0.000E+00	0.000E+00	1.580E-08
65.0	0.000E+00	0.000E+00	0.000E+00	1.555E-08
75.0	0.000E+00	0.000E+00	0.000E+00	1.532E-08

TIME STEP NUMBER 5, DURATION IN YRS IS... 1.0

CONCENTRATION DATA FOR THE W DIRECTION, THETA EQUALS 270.0 DEGREES

TOTAL AIR CONCENTRATIONS, PCI/M3, AND WL

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210	WL
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.785E+00	8.378E+00	2.650E+00	1.134E+00	2.598E-06	2.629E-05
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.920E+00	5.593E+00	2.432E+00	1.289E+00	3.313E-06	2.290E-05
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.235E+00	4.139E+00	2.175E+00	1.306E+00	4.061E-06	2.016E-05
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.346E+00	3.310E+00	1.957E+00	1.263E+00	4.660E-06	1.804E-05
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.014E+00	2.012E+00	1.455E+00	1.053E+00	5.789E-06	1.338E-05
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.645E-01	9.650E-01	8.519E-01	7.208E-01	6.778E-06	8.002E-06
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.468E-01	5.471E-01	5.244E-01	4.882E-01	7.107E-06	5.043E-06
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.739E-01	3.741E-01	3.686E-01	3.570E-01	7.158E-06	3.586E-06
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.805E-01	2.807E-01	2.796E-01	2.757E-01	7.111E-06	2.735E-06
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.226E-01	2.227E-01	2.228E-01	2.217E-01	7.026E-06	2.186E-06
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.833E-01	1.834E-01	1.839E-01	1.837E-01	6.925E-06	1.807E-06
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.554E-01	1.555E-01	1.561E-01	1.563E-01	6.832E-06	1.535E-06

GROUND SURFACE CONCENTRATIONS, PCI/M2

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.636E+00	6.636E+00	6.636E+00	5.411E+00
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.430E+00	4.430E+00	4.430E+00	6.901E+00
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.279E+00	3.279E+00	3.279E+00	8.459E+00
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.622E+00	2.622E+00	2.622E+00	9.708E+00
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.594E+00	1.594E+00	1.594E+00	1.206E+01
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.643E-01	7.643E-01	7.643E-01	1.412E+01
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.333E-01	4.333E-01	4.333E-01	1.480E+01
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.963E-01	2.963E-01	2.963E-01	1.491E+01
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.223E-01	2.223E-01	2.223E-01	1.481E+01
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.764E-01	1.764E-01	1.764E-01	1.463E+01
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.453E-01	1.453E-01	1.453E-01	1.443E+01
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.232E-01	1.232E-01	1.232E-01	1.423E+01

TOTAL DEPOSITION RATES, PCI/M2-SEC

XRHO, KM	U-238	Th-230	Ra-226	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	7.793E-09
2.5	0.000E+00	0.000E+00	0.000E+00	9.939E-09
3.5	0.000E+00	0.000E+00	0.000E+00	1.218E-08
4.5	0.000E+00	0.000E+00	0.000E+00	1.398E-08
7.5	0.000E+00	0.000E+00	0.000E+00	1.737E-08
15.0	0.000E+00	0.000E+00	0.000E+00	2.033E-08
25.0	0.000E+00	0.000E+00	0.000E+00	2.132E-08
35.0	0.000E+00	0.000E+00	0.000E+00	2.147E-08
45.0	0.000E+00	0.000E+00	0.000E+00	2.133E-08
55.0	0.000E+00	0.000E+00	0.000E+00	2.108E-08
65.0	0.000E+00	0.000E+00	0.000E+00	2.078E-08
75.0	0.000E+00	0.000E+00	0.000E+00	2.050E-08

TIME STEP NUMBER 5, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS INHAL. EXPOSED ORGAN IS EFFECTIV

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.380E-06	6.071E-06	9.296E-06	1.247E-05	1.464E-05	1.704E-05	4.097E-05	7.177E-05
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.581E-06	6.796E-06	1.212E-05	1.800E-05	2.236E-05	2.698E-05	3.676E-05	7.648E-05
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.557E-06	8.412E-06	1.477E-05	2.111E-05	2.572E-05	3.067E-05	3.598E-05	3.816E-05
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.574E-06	9.709E-06	1.767E-05	2.612E-05	3.256E-05	3.950E-05	3.584E-05	2.835E-05
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.553E-06	1.076E-05	2.038E-05	3.084E-05	3.921E-05	5.131E-05	3.357E-05	3.648E-05
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.091E-06	8.163E-06	2.951E-04	6.051E-04	4.897E-05	6.239E-05	4.906E-05	4.078E-05
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.884E-07	7.058E-06	1.557E-03	2.124E-04	2.587E-05	2.987E-05	3.463E-05	3.935E-05
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.602E-06	7.916E-06	1.767E-05	1.876E-05	2.621E-05	3.084E-05	2.859E-05	2.684E-05
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.479E-06	8.514E-06	1.489E-05	2.245E-05	3.123E-05	2.541E-05	2.616E-05	1.532E-05
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.739E-06	7.137E-06	1.257E-05	1.789E-05	2.258E-05	2.235E-05	1.218E-05	1.234E-05
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.386E-06	6.019E-06	1.026E-05	1.400E-05	1.988E-05	3.431E-05	4.197E-05	2.959E-05
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.055E-06	6.128E-04	3.836E-04	2.007E-05	4.341E-05	4.900E-04	3.861E-04	6.266E-05
W	0.000E+00	0.000E+00	2.965E-07	0.000E+00	1.268E-06	6.436E-06	1.454E-05	3.819E-05	9.046E-05	2.319E-02	8.005E-03	3.750E-05
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.159E-06	5.811E-06	1.055E-05	2.280E-05	8.113E-05	1.066E-04	2.200E-04	2.771E-04
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.431E-06	7.261E-06	1.277E-05	1.856E-05	2.291E-05	2.762E-05	4.599E-05	9.709E-05
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.064E-05	1.121E-03	3.929E-03	1.252E-03	6.570E-04	2.443E-02	9.201E-03	1.098E-03

TOTAL DOSE COMMITMENT IS 8.061E-02 PERSON-REM/YR

TIME STEP NUMBER 5, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS INHAL. EXPOSED ORGAN IS BONE

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.120E-05	4.925E-05	7.538E-05	1.011E-04	1.186E-04	1.380E-04	3.317E-04	5.808E-04
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.283E-05	5.513E-05	9.830E-05	1.459E-04	1.811E-04	2.185E-04	2.976E-04	6.188E-04
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.263E-05	6.824E-05	1.198E-04	1.711E-04	2.084E-04	2.484E-04	2.913E-04	3.089E-04
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.277E-05	7.877E-05	1.433E-04	2.118E-04	2.638E-04	3.200E-04	2.903E-04	2.295E-04
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.260E-05	8.726E-05	1.653E-04	2.500E-04	3.179E-04	4.158E-04	2.720E-04	2.955E-04
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.854E-06	6.623E-05	2.394E-03	4.906E-03	3.970E-04	5.056E-04	3.974E-04	3.303E-04
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.021E-06	5.726E-05	1.263E-02	1.722E-03	2.097E-04	2.421E-04	2.806E-04	3.187E-04
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.300E-05	6.422E-05	1.433E-04	1.521E-04	2.125E-04	2.499E-04	2.316E-04	2.174E-04
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.200E-05	6.907E-05	1.208E-04	1.820E-04	2.531E-04	2.059E-04	2.119E-04	1.241E-04
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.411E-05	5.789E-05	1.019E-04	1.450E-04	1.830E-04	1.811E-04	9.862E-05	9.993E-05
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.125E-05	4.882E-05	8.317E-05	1.135E-04	1.611E-04	2.780E-04	3.400E-04	2.396E-04
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.557E-06	4.971E-03	3.111E-03	1.627E-04	3.518E-04	3.970E-03	3.127E-03	5.074E-04
W	0.000E+00	0.000E+00	2.406E-06	0.000E+00	1.029E-05	5.221E-05	1.179E-04	3.096E-04	7.331E-04	1.879E-01	6.483E-02	3.036E-04
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.403E-06	4.714E-05	8.559E-05	1.848E-04	6.577E-04	8.636E-04	1.783E-03	2.244E-03
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.161E-05	5.890E-05	1.036E-04	1.504E-04	1.857E-04	2.237E-04	3.723E-04	7.858E-04
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.486E-04	9.089E-03	3.186E-02	1.014E-02	5.323E-03	1.978E-01	7.447E-02	8.884E-03

TOTAL DOSE COMMITMENT IS 6.529E-01 PERSON-REM/YR

TIME STEP NUMBER 5, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS INHAL. EXPOSED ORGAN IS AVG.LUNG

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.604E-07	7.183E-07	1.126E-06	1.545E-06	1.856E-06	2.210E-06	5.434E-06	9.732E-06
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.833E-07	8.015E-07	1.465E-06	2.230E-06	2.839E-06	3.510E-06	4.898E-06	1.043E-05
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.801E-07	9.893E-07	1.777E-06	2.597E-06	3.235E-06	3.943E-06	4.726E-06	5.120E-06
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.818E-07	1.138E-06	2.116E-06	3.193E-06	4.060E-06	5.024E-06	4.646E-06	3.746E-06
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.792E-07	1.257E-06	2.426E-06	3.735E-06	4.825E-06	6.411E-06	4.257E-06	4.693E-06
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.259E-07	9.540E-07	3.515E-05	7.335E-05	6.039E-06	7.822E-06	6.251E-06	5.279E-06
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.140E-07	8.253E-07	1.855E-04	2.574E-05	3.187E-06	3.741E-06	4.407E-06	5.086E-06
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.851E-07	9.279E-07	2.113E-06	2.283E-06	3.246E-06	3.882E-06	3.658E-06	3.489E-06
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.712E-07	1.001E-06	1.786E-06	2.745E-06	3.887E-06	3.218E-06	3.369E-06	2.006E-06
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.017E-07	8.401E-07	1.510E-06	2.193E-06	2.821E-06	2.846E-06	1.579E-06	1.630E-06
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.611E-07	7.095E-07	1.231E-06	1.711E-06	2.471E-06	4.339E-06	5.396E-06	3.867E-06
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.228E-07	7.240E-05	4.619E-05	2.462E-06	5.420E-06	6.226E-05	4.992E-05	8.238E-06
W	0.000E+00	0.000E+00	3.428E-08	0.000E+00	1.476E-07	7.604E-07	1.753E-06	4.693E-06	1.133E-05	2.958E-03	1.040E-03	4.960E-06
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.347E-07	6.845E-07	1.263E-06	2.768E-06	9.992E-06	1.331E-05	2.786E-05	3.555E-05
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.664E-07	8.586E-07	1.544E-06	2.293E-06	2.892E-06	3.560E-06	6.050E-06	1.303E-05
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.565E-06	1.327E-04	4.768E-04	1.556E-04	8.370E-05	3.187E-03	1.229E-03	1.501E-04

TOTAL DOSE COMMITMENT IS 1.037E-02 PERSON-REM/YR

TIME STEP NUMBER 5, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS INHAL. EXPOSED ORGAN IS BRONCHI

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.459E-03	7.971E-03	6.960E-03	6.502E-03	5.826E-03	5.464E-03	1.097E-02	1.646E-02
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.424E-03	9.489E-03	8.885E-03	8.781E-03	8.121E-03	7.771E-03	8.743E-03	1.546E-02
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.675E-03	1.484E-02	1.384E-02	1.341E-02	1.228E-02	1.170E-02	1.141E-02	1.035E-02
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.339E-02	2.919E-02	2.797E-02	2.781E-02	2.603E-02	2.526E-02	1.910E-02	1.296E-02
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.124E-01	5.838E-02	5.327E-02	5.227E-02	4.891E-02	5.055E-02	2.733E-02	2.530E-02
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.112E-02	4.374E-02	6.719E-01	8.646E-01	5.080E-02	5.082E-02	3.292E-02	2.329E-02
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.718E-02	3.285E-02	3.373E+00	2.934E-01	2.607E-02	2.367E-02	2.260E-02	2.184E-02
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.555E-02	3.023E-02	3.582E-02	2.558E-02	2.687E-02	2.531E-02	1.959E-02	1.580E-02
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.124E-02	2.592E-02	2.526E-02	2.647E-02	2.817E-02	1.857E-02	1.608E-02	8.141E-03
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.106E-02	1.934E-02	1.831E-02	1.763E-02	1.677E-02	1.332E-02	6.062E-03	5.281E-03
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.953E-03	1.570E-02	1.509E-02	1.422E-02	1.538E-02	2.143E-02	2.198E-02	1.334E-02
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.512E-03	1.424E+00	5.070E-01	1.845E-02	3.056E-02	2.796E-01	1.854E-01	2.598E-02
W	0.000E+00	0.000E+00	5.294E-03	0.000E+00	7.553E-03	1.567E-02	1.914E-02	3.412E-02	6.102E-02	1.256E+01	3.620E+00	1.457E-02
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.223E-03	2.053E-02	2.082E-02	3.082E-02	8.308E-02	8.772E-02	1.514E-01	1.637E-01
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.300E-03	1.495E-02	1.412E-02	1.385E-02	1.286E-02	1.239E-02	1.717E-02	3.105E-02
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.067E-01	1.544E+00	2.941E+00	6.342E-01	2.498E-01	7.400E+00	2.309E+00	2.348E-01

TOTAL DOSE COMMITMENT IS 4.194E+01 PERSON-REM/YR

TIME STEP NUMBER 5, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS GROUND EXPOSED ORGAN IS EFFECTIV

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.787E-07	1.227E-06	1.285E-06	1.402E-06	1.441E-06	1.528E-06	3.427E-06	5.690E-06
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.986E-07	1.438E-06	1.654E-06	1.955E-06	2.113E-06	2.319E-06	2.950E-06	5.826E-06
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.496E-07	2.130E-06	2.357E-06	2.646E-06	2.764E-06	2.961E-06	3.210E-06	3.206E-06
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.586E-06	3.820E-06	4.112E-06	4.546E-06	4.686E-06	4.969E-06	4.075E-06	2.980E-06
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.429E-06	7.164E-06	7.123E-06	7.568E-06	7.634E-06	8.464E-06	4.887E-06	4.812E-06
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.314E-06	5.376E-06	9.188E-05	1.303E-04	8.370E-06	9.086E-06	6.346E-06	4.813E-06
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.924E-06	4.089E-06	4.652E-04	4.458E-05	4.334E-06	4.276E-06	4.408E-06	4.573E-06
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.830E-06	3.844E-06	5.002E-06	3.900E-06	4.443E-06	4.513E-06	3.745E-06	3.222E-06
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.345E-06	3.390E-06	3.656E-06	4.198E-06	4.858E-06	3.460E-06	3.217E-06	1.739E-06
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.341E-06	2.572E-06	2.745E-06	2.952E-06	3.105E-06	2.702E-06	1.336E-06	1.256E-06
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.733E-07	2.100E-06	2.258E-06	2.359E-06	2.803E-06	4.259E-06	4.728E-06	3.089E-06
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.799E-07	1.940E-04	7.793E-05	3.162E-06	5.779E-06	5.782E-05	4.159E-05	6.284E-06
W	0.000E+00	0.000E+00	6.017E-07	0.000E+00	9.221E-07	2.119E-06	2.944E-06	5.904E-06	1.174E-05	2.659E-03	8.370E-04	3.650E-06
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.105E-06	2.636E-06	2.923E-06	4.709E-06	1.374E-05	1.562E-05	2.889E-05	3.332E-05
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.020E-07	2.081E-06	2.281E-06	2.560E-06	2.679E-06	2.877E-06	4.397E-06	8.691E-06
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.372E-05	2.348E-04	5.429E-04	1.386E-04	6.335E-05	2.141E-03	7.519E-04	8.509E-05

TOTAL DOSE COMMITMENT IS 9.045E-03 PERSON-REM/YR

TIME STEP NUMBER 5, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS CLOUD EXPOSED ORGAN IS EFFECTIV

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.975E-05	6.379E-05	5.953E-05	5.675E-05	5.120E-05	4.815E-05	9.681E-05	1.454E-04
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.668E-05	7.570E-05	7.598E-05	7.659E-05	7.132E-05	6.844E-05	7.712E-05	1.365E-04
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.496E-05	1.106E-04	1.140E-04	1.146E-04	1.066E-04	1.023E-04	1.002E-04	9.108E-05
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.714E-05	1.723E-04	1.934E-04	2.094E-04	2.064E-04	2.072E-04	1.603E-04	1.105E-04
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.582E-05	2.653E-04	3.309E-04	3.781E-04	3.836E-04	4.151E-04	2.306E-04	2.171E-04
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.740E-05	2.061E-04	4.471E-03	6.586E-03	4.131E-04	4.277E-04	2.825E-04	2.021E-04
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.924E-05	1.661E-04	2.300E-02	2.264E-03	2.135E-04	1.999E-04	1.943E-04	1.897E-04
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.011E-05	1.592E-04	2.383E-04	1.918E-04	2.148E-04	2.100E-04	1.662E-04	1.359E-04
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.777E-05	1.500E-04	1.771E-04	2.046E-04	2.298E-04	1.563E-04	1.379E-04	7.056E-05
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.187E-05	1.217E-04	1.374E-04	1.428E-04	1.412E-04	1.145E-04	5.270E-05	4.621E-05
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.908E-05	1.037E-04	1.171E-04	1.178E-04	1.314E-04	1.859E-04	1.922E-04	1.172E-04
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.809E-05	9.713E-03	4.016E-03	1.549E-04	2.633E-04	2.439E-03	1.627E-03	2.287E-04
W	0.000E+00	0.000E+00	1.551E-05	0.000E+00	3.625E-05	1.050E-04	1.511E-04	2.866E-04	5.262E-04	1.096E-01	3.179E-02	1.283E-04
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.895E-05	1.256E-04	1.561E-04	2.515E-04	7.049E-04	7.588E-04	1.323E-03	1.437E-03
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.821E-05	1.029E-04	1.119E-04	1.160E-04	1.104E-04	1.078E-04	1.504E-04	2.729E-04
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.808E-04	1.195E-02	2.467E-02	5.475E-03	2.183E-03	6.500E-02	2.034E-02	2.071E-03

TOTAL DOSE COMMITMENT IS 3.482E-01 PERSON-REM/YR

TIME STEP NUMBER 5, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS VEG. ING EXPOSED ORGAN IS EFFECTIV

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

TOTAL DOSE COMMITMENT IS 0.000E+00 PERSON-REM/YR

WARNING--POPULATION FOOD INGESTION DOSES SHOWN
ABOVE HAVE NOT BEEN CORRECTED TO REFLECT POTENTIAL
FOOD EXPORT AND MAY EXCEED DOSES ACTUALLY RECEIVED
BY THE POPULATION OF THIS REGION. SEE SUMMARY
TABLE FOR THIS INFORMATION.

TIME STEP NUMBER 5, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS VEG. ING EXPOSED ORGAN IS BONE

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

TOTAL DOSE COMMITMENT IS 0.000E+00 PERSON-REM/YR

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DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

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DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

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N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

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N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

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DOSES RECEIVED BY PEOPLE WITHIN 80 KILOMETERS

PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INHAL.	8.061E-02	6.529E-01	1.037E-02	4.897E-01	2.354E-01	4.194E+01
GROUND	9.045E-03	9.045E-03	9.045E-03	9.045E-03	9.045E-03	9.045E-03
CLOUD	3.482E-01	3.482E-01	3.482E-01	3.482E-01	3.482E-01	3.482E-01
VEG. ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MEAT ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MILK ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RNPLUS50	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOTALS	4.378E-01	1.010E+00	3.676E-01	8.469E-01	5.926E-01	4.230E+01

DOSES RECEIVED BY PEOPLE BEYOND 80 KILOMETERS

PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INHAL.	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GROUND	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CLOUD	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
VEG. ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MEAT ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MILK ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RNPLUS50	9.708E+00	1.324E+02	2.206E+00	9.708E+00	9.708E+00	6.178E+01
TOTALS	9.708E+00	1.324E+02	2.206E+00	9.708E+00	9.708E+00	6.178E+01

TOTAL DOSES COMPUTED OVER ALL POPULATIONS

PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INHAL.	8.061E-02	6.529E-01	1.037E-02	4.897E-01	2.354E-01	4.194E+01
GROUND	9.045E-03	9.045E-03	9.045E-03	9.045E-03	9.045E-03	9.045E-03
CLOUD	3.482E-01	3.482E-01	3.482E-01	3.482E-01	3.482E-01	3.482E-01
VEG. ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MEAT ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MILK ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RNPLUS50	9.708E+00	1.324E+02	2.206E+00	9.708E+00	9.708E+00	6.178E+01
TOTALS	1.015E+01	1.334E+02	2.574E+00	1.055E+01	1.030E+01	1.041E+02

TIME STEP NUMBER 5, DURATION IN YRS IS... 1.0

INDIVIDUAL RECEPTOR PARTICULATE CONCENTRATIONS

NO.	NAME	PTSZ	AIRBORNE CONCENTRATIONS, PCI/M3 U-238	Th-230	Ra-226	Pb-210	GROUND CONCENTRATIONS, PCI/M2 U-238	Th-230	Ra-226	Pb-210
1	Receptor 1	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1	Receptor 1	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1	Receptor 1	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1	Receptor 1	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2	Receptor 2	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2	Receptor 2	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2	Receptor 2	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2	Receptor 2	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
3	Receptor 3	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
3	Receptor 3	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
3	Receptor 3	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
3	Receptor 3	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
4	Receptor 4	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
4	Receptor 4	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
4	Receptor 4	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
4	Receptor 4	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
5	Receptor 5	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
5	Receptor 5	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
5	Receptor 5	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
5	Receptor 5	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
6	Receptor 6	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
6	Receptor 6	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
6	Receptor 6	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
6	Receptor 6	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
7	Receptor 7	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
7	Receptor 7	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
7	Receptor 7	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
7	Receptor 7	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

TIME STEP NUMBER 5, DURATION IN YRS IS... 1.0

INDIVIDUAL RECEPTOR RADON AND RADON DAUGHTER CONCENTRATIONS

	AIRBORNE CONCENTRATIONS, PCI/M3								GROUND CONCENTRATIONS, PCI/M2			
NO.	Rn-222	Po-218	Pb-214	Bi-214	Pb-210	Bi-210	Po-210	WL	Po-218	Pb-214	Bi-214	Pb-210
1	1.609E+01	1.342E+01	4.097E+00	1.764E+00	2.708E-06	7.334E-09	6.948E-13	4.118E-05	1.063E+01	1.063E+01	1.063E+01	8.258E-01
2	2.962E+00	2.952E+00	2.136E+00	1.605E+00	8.874E-06	6.443E-08	1.326E-11	1.986E-05	2.338E+00	2.338E+00	2.338E+00	3.320E+00
3	1.126E+01	9.701E+00	3.085E+00	1.174E+00	2.536E-06	1.201E-08	1.764E-12	3.001E-05	7.684E+00	7.684E+00	7.684E+00	5.529E-01
4	1.736E+00	1.724E+00	1.154E+00	8.047E-01	4.262E-06	3.555E-08	8.887E-12	1.063E-05	1.365E+00	1.365E+00	1.365E+00	1.640E+00
5	2.591E+00	2.580E+00	1.779E+00	1.258E+00	7.439E-06	7.202E-08	2.124E-11	1.637E-05	2.043E+00	2.043E+00	2.043E+00	2.680E+00
6	2.547E+00	2.476E+00	1.445E+00	9.504E-01	3.992E-06	2.585E-08	5.062E-12	1.342E-05	1.961E+00	1.961E+00	1.961E+00	1.487E+00
7	3.880E+00	3.819E+00	2.078E+00	1.262E+00	4.223E-06	2.520E-08	5.241E-12	1.917E-05	3.025E+00	3.025E+00	3.025E+00	1.329E+00

TIME STEP NUMBER 5, DURATION IN YRS IS... 1.0

NUMBER 1 NAME=Receptor 1 X= 1.7KM, Y= -0.5KM, Z= 0.0M, DIST= 1.8KM, IRTYPE= 1

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	1.23E+00	2.59E-02	2.46E-02	3.21E-02	2.74E-02	2.01E+01
CHILD	TOTALS	1.23E+00	2.69E-02	2.49E-02	2.82E-02	2.62E-02	2.01E+01
TEENAGE	TOTALS	1.23E+00	2.94E-02	2.51E-02	2.66E-02	2.57E-02	2.01E+01
ADULT	TOTALS	1.23E+00	2.92E-02	2.54E-02	2.66E-02	2.58E-02	2.01E+01

NUMBER 2 NAME=Receptor 2 X= 9.6KM, Y= 3.4KM, Z= 0.0M, DIST= 10.1KM, IRTYPE= 1

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	2.42E-01	2.35E-02	1.92E-02	4.36E-02	2.84E-02	3.72E+00
CHILD	TOTALS	2.42E-01	2.67E-02	2.02E-02	3.11E-02	2.43E-02	3.72E+00
TEENAGE	TOTALS	2.42E-01	3.48E-02	2.10E-02	2.56E-02	2.27E-02	3.72E+00
ADULT	TOTALS	2.42E-01	3.42E-02	2.19E-02	2.57E-02	2.31E-02	3.72E+00

TIME STEP NUMBER 5, DURATION IN YRS IS... 1.0

NUMBER 3 NAME=Receptor 3 X= -0.1KM, Y= 0.8KM, Z= 0.0M, DIST= 0.8KM, IRTYPE= 1

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	8.62E-01	1.83E-02	1.70E-02	2.40E-02	1.96E-02	1.41E+01
CHILD	TOTALS	8.62E-01	1.91E-02	1.73E-02	2.04E-02	1.85E-02	1.41E+01
TEENAGE	TOTALS	8.62E-01	2.15E-02	1.75E-02	1.88E-02	1.80E-02	1.41E+01
ADULT	TOTALS	8.62E-01	2.13E-02	1.78E-02	1.89E-02	1.81E-02	1.41E+01

NUMBER 4 NAME=Receptor 4 X= 9.8KM, Y= -7.4KM, Z= 0.0M, DIST= 12.3KM, IRTYPE= 1

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	1.41E-01	1.18E-02	9.76E-03	2.15E-02	1.42E-02	2.18E+00
CHILD	TOTALS	1.40E-01	1.34E-02	1.03E-02	1.55E-02	1.22E-02	2.18E+00
TEENAGE	TOTALS	1.40E-01	1.73E-02	1.06E-02	1.28E-02	1.15E-02	2.18E+00
ADULT	TOTALS	1.40E-01	1.70E-02	1.10E-02	1.29E-02	1.16E-02	2.18E+00

TIME STEP NUMBER 5, DURATION IN YRS IS... 1.0

NUMBER 5 NAME=Receptor 5 X= 13.4KM, Y= -5.3KM, Z= 0.0M, DIST= 14.4KM, IRTYPE= 1

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	2.10E-01	1.89E-02	1.52E-02	3.57E-02	2.30E-02	3.25E+00
CHILD	TOTALS	2.10E-01	2.15E-02	1.61E-02	2.52E-02	1.96E-02	3.25E+00
TEENAGE	TOTALS	2.10E-01	2.84E-02	1.67E-02	2.06E-02	1.82E-02	3.25E+00
ADULT	TOTALS	2.10E-01	2.78E-02	1.75E-02	2.07E-02	1.85E-02	3.25E+00

NUMBER 6 NAME=Receptor 6 X= 7.6KM, Y= -6.7KM, Z= 0.0M, DIST= 10.1KM, IRTYPE= 1

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	2.03E-01	1.36E-02	1.16E-02	2.26E-02	1.58E-02	3.20E+00
CHILD	TOTALS	2.03E-01	1.50E-02	1.21E-02	1.70E-02	1.40E-02	3.20E+00
TEENAGE	TOTALS	2.03E-01	1.87E-02	1.24E-02	1.45E-02	1.32E-02	3.20E+00
ADULT	TOTALS	2.03E-01	1.84E-02	1.28E-02	1.46E-02	1.34E-02	3.20E+00

TIME STEP NUMBER 5, DURATION IN YRS IS... 1.0

NUMBER 7 NAME=Receptor 7 X= -4.1KM, Y= 0.9KM, Z= 0.0M, DIST= 4.2KM, IRTYPE= 1

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	3.07E-01	1.78E-02	1.57E-02	2.73E-02	2.01E-02	4.87E+00
CHILD	TOTALS	3.07E-01	1.93E-02	1.62E-02	2.14E-02	1.82E-02	4.87E+00
TEENAGE	TOTALS	3.07E-01	2.31E-02	1.65E-02	1.88E-02	1.74E-02	4.87E+00
ADULT	TOTALS	3.07E-01	2.28E-02	1.70E-02	1.88E-02	1.76E-02	4.87E+00

TIME STEP NUMBER 6, DURATION IN YRS IS... 1.0

CONCENTRATION DATA FOR THE N DIRECTION, THETA EQUALS 0.0 DEGREES

TOTAL AIR CONCENTRATIONS, PCI/M3, AND WL

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210	WL
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.170E+00	5.880E+00	2.831E+00	1.433E+00	3.635E-06	2.576E-05
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.803E+00	3.745E+00	2.322E+00	1.475E+00	4.541E-06	2.113E-05
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.653E+00	2.644E+00	1.903E+00	1.381E+00	5.279E-06	1.752E-05
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.125E+00	2.122E+00	1.646E+00	1.283E+00	5.960E-06	1.532E-05
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.194E+00	1.194E+00	1.047E+00	9.076E-01	6.918E-06	9.923E-06
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.038E-01	5.041E-01	4.859E-01	4.590E-01	6.933E-06	4.695E-06
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.645E-01	2.646E-01	2.627E-01	2.581E-01	6.281E-06	2.567E-06
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.715E-01	1.716E-01	1.717E-01	1.709E-01	5.786E-06	1.685E-06
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.236E-01	1.237E-01	1.241E-01	1.240E-01	5.426E-06	1.219E-06
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.494E-02	9.499E-02	9.537E-02	9.553E-02	5.148E-06	9.377E-07
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.608E-02	7.613E-02	7.647E-02	7.667E-02	4.923E-06	7.521E-07
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.305E-02	6.309E-02	6.338E-02	6.358E-02	4.751E-06	6.234E-07

GROUND SURFACE CONCENTRATIONS, PCI/M2

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.657E+00	4.657E+00	4.657E+00	7.571E+00
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.967E+00	2.967E+00	2.967E+00	9.458E+00
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.094E+00	2.094E+00	2.094E+00	1.100E+01
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.681E+00	1.681E+00	1.681E+00	1.242E+01
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.456E-01	9.456E-01	9.456E-01	1.441E+01
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.993E-01	3.993E-01	3.993E-01	1.444E+01
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.096E-01	2.096E-01	2.096E-01	1.308E+01
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.359E-01	1.359E-01	1.359E-01	1.205E+01
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.797E-02	9.797E-02	9.797E-02	1.130E+01
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.524E-02	7.524E-02	7.524E-02	1.072E+01
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.030E-02	6.030E-02	6.030E-02	1.026E+01
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.997E-02	4.997E-02	4.997E-02	9.895E+00

TOTAL DEPOSITION RATES, PCI/M2-SEC

XRHO, KM	U-238	Th-230	Ra-226	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	1.090E-08
2.5	0.000E+00	0.000E+00	0.000E+00	1.362E-08
3.5	0.000E+00	0.000E+00	0.000E+00	1.584E-08
4.5	0.000E+00	0.000E+00	0.000E+00	1.788E-08
7.5	0.000E+00	0.000E+00	0.000E+00	2.075E-08
15.0	0.000E+00	0.000E+00	0.000E+00	2.080E-08
25.0	0.000E+00	0.000E+00	0.000E+00	1.884E-08
35.0	0.000E+00	0.000E+00	0.000E+00	1.736E-08
45.0	0.000E+00	0.000E+00	0.000E+00	1.628E-08
55.0	0.000E+00	0.000E+00	0.000E+00	1.544E-08
65.0	0.000E+00	0.000E+00	0.000E+00	1.477E-08
75.0	0.000E+00	0.000E+00	0.000E+00	1.425E-08

TIME STEP NUMBER 6, DURATION IN YRS IS... 1.0

CONCENTRATION DATA FOR THE E DIRECTION, THETA EQUALS 90.0 DEGREES

TOTAL AIR CONCENTRATIONS, PCI/M3, AND WL

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210	WL
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.758E+01	1.445E+01	4.449E+00	1.914E+00	3.426E-06	4.459E-05
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.250E+01	1.133E+01	4.472E+00	2.334E+00	4.548E-06	4.305E-05
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.945E+00	9.436E+00	4.400E+00	2.517E+00	5.597E-06	4.141E-05
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.344E+00	8.053E+00	3.990E+00	2.368E+00	6.164E-06	3.736E-05
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.718E+01	1.227E+01	4.184E+00	2.313E+00	7.967E-06	4.248E-05
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.453E+00	3.444E+00	2.481E+00	1.809E+00	1.169E-05	2.288E-05
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.012E+00	2.013E+00	1.699E+00	1.386E+00	1.336E-05	1.586E-05
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.387E+00	1.387E+00	1.270E+00	1.120E+00	1.399E-05	1.204E-05
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.043E+00	1.043E+00	9.948E-01	9.203E-01	1.425E-05	9.551E-06
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.303E-01	8.307E-01	8.096E-01	7.714E-01	1.436E-05	7.837E-06
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.870E-01	6.873E-01	6.780E-01	6.580E-01	1.437E-05	6.600E-06
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.847E-01	5.850E-01	5.812E-01	5.706E-01	1.435E-05	5.677E-06

GROUND SURFACE CONCENTRATIONS, PCI/M2

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.145E+01	1.145E+01	1.145E+01	7.136E+00
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.972E+00	8.972E+00	8.972E+00	9.474E+00
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.473E+00	7.473E+00	7.473E+00	1.166E+01
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.378E+00	6.378E+00	6.378E+00	1.284E+01
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.720E+00	9.720E+00	9.720E+00	1.660E+01
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.728E+00	2.728E+00	2.728E+00	2.436E+01
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.594E+00	1.594E+00	1.594E+00	2.784E+01
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.099E+00	1.099E+00	1.099E+00	2.913E+01
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.263E-01	8.263E-01	8.263E-01	2.969E+01
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.580E-01	6.580E-01	6.580E-01	2.990E+01
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.444E-01	5.444E-01	5.444E-01	2.994E+01
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.633E-01	4.633E-01	4.633E-01	2.990E+01

TOTAL DEPOSITION RATES, PCI/M2-SEC

XRHO, KM	U-238	Th-230	Ra-226	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	1.028E-08
2.5	0.000E+00	0.000E+00	0.000E+00	1.364E-08
3.5	0.000E+00	0.000E+00	0.000E+00	1.679E-08
4.5	0.000E+00	0.000E+00	0.000E+00	1.849E-08
7.5	0.000E+00	0.000E+00	0.000E+00	2.390E-08
15.0	0.000E+00	0.000E+00	0.000E+00	3.508E-08
25.0	0.000E+00	0.000E+00	0.000E+00	4.009E-08
35.0	0.000E+00	0.000E+00	0.000E+00	4.196E-08
45.0	0.000E+00	0.000E+00	0.000E+00	4.276E-08
55.0	0.000E+00	0.000E+00	0.000E+00	4.307E-08
65.0	0.000E+00	0.000E+00	0.000E+00	4.311E-08
75.0	0.000E+00	0.000E+00	0.000E+00	4.306E-08

TIME STEP NUMBER 6, DURATION IN YRS IS... 1.0

CONCENTRATION DATA FOR THE ESE DIRECTION, THETA EQUALS 112.5 DEGREES

TOTAL AIR CONCENTRATIONS, PCI/M3, AND WL

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210	WL
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.858E+01	1.473E+01	4.119E+00	1.664E+00	2.886E-06	4.226E-05
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.188E+01	1.072E+01	3.873E+00	1.871E+00	3.434E-06	3.766E-05
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.242E+01	1.085E+01	3.843E+00	1.916E+00	3.948E-06	3.781E-05
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.102E+01	3.126E+01	4.844E+00	1.850E+00	4.288E-06	6.366E-05
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.132E+01	1.038E+01	4.029E+00	1.963E+00	5.333E-06	3.844E-05
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.757E+00	3.695E+00	2.269E+00	1.538E+00	8.179E-06	2.104E-05
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.319E+00	1.319E+00	1.129E+00	9.349E-01	9.014E-06	1.057E-05
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.038E-01	8.043E-01	7.512E-01	6.790E-01	9.159E-06	7.170E-06
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.730E-01	5.733E-01	5.549E-01	5.242E-01	9.147E-06	5.359E-06
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.431E-01	4.433E-01	4.365E-01	4.225E-01	9.089E-06	4.245E-06
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.597E-01	3.599E-01	3.574E-01	3.509E-01	9.005E-06	3.492E-06
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.025E-01	3.026E-01	3.020E-01	2.990E-01	8.927E-06	2.958E-06

GROUND SURFACE CONCENTRATIONS, PCI/M2

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.167E+01	1.167E+01	1.167E+01	6.011E+00
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.493E+00	8.493E+00	8.493E+00	7.154E+00
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.596E+00	8.596E+00	8.596E+00	8.224E+00
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.476E+01	2.476E+01	2.476E+01	8.931E+00
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.225E+00	8.225E+00	8.225E+00	1.111E+01
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.927E+00	2.927E+00	2.927E+00	1.704E+01
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.045E+00	1.045E+00	1.045E+00	1.878E+01
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.370E-01	6.370E-01	6.370E-01	1.908E+01
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.541E-01	4.541E-01	4.541E-01	1.905E+01
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.511E-01	3.511E-01	3.511E-01	1.893E+01
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.850E-01	2.850E-01	2.850E-01	1.876E+01
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.397E-01	2.397E-01	2.397E-01	1.859E+01

TOTAL DEPOSITION RATES, PCI/M2-SEC

XRHO, KM	U-238	Th-230	Ra-226	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	8.658E-09
2.5	0.000E+00	0.000E+00	0.000E+00	1.030E-08
3.5	0.000E+00	0.000E+00	0.000E+00	1.184E-08
4.5	0.000E+00	0.000E+00	0.000E+00	1.286E-08
7.5	0.000E+00	0.000E+00	0.000E+00	1.600E-08
15.0	0.000E+00	0.000E+00	0.000E+00	2.454E-08
25.0	0.000E+00	0.000E+00	0.000E+00	2.704E-08
35.0	0.000E+00	0.000E+00	0.000E+00	2.748E-08
45.0	0.000E+00	0.000E+00	0.000E+00	2.744E-08
55.0	0.000E+00	0.000E+00	0.000E+00	2.727E-08
65.0	0.000E+00	0.000E+00	0.000E+00	2.701E-08
75.0	0.000E+00	0.000E+00	0.000E+00	2.678E-08

TIME STEP NUMBER 6, DURATION IN YRS IS... 1.0

CONCENTRATION DATA FOR THE S DIRECTION, THETA EQUALS 180.0 DEGREES

TOTAL AIR CONCENTRATIONS, PCI/M3, AND WL

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210	WL
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.160E+00	7.683E+00	2.673E+00	1.235E+00	2.720E-06	2.608E-05
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.659E+00	5.250E+00	2.403E+00	1.354E+00	3.330E-06	2.264E-05
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.021E+00	3.875E+00	2.072E+00	1.308E+00	3.881E-06	1.938E-05
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.217E+00	3.150E+00	1.832E+00	1.218E+00	4.222E-06	1.708E-05
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.931E+00	1.921E+00	1.282E+00	9.055E-01	4.514E-06	1.186E-05
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.441E-01	9.443E-01	7.636E-01	6.018E-01	5.156E-06	7.089E-06
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.652E-01	5.655E-01	5.105E-01	4.442E-01	5.659E-06	4.828E-06
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.966E-01	3.968E-01	3.762E-01	3.458E-01	5.725E-06	3.606E-06
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.023E-01	3.025E-01	2.940E-01	2.794E-01	5.696E-06	2.844E-06
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.420E-01	2.421E-01	2.386E-01	2.313E-01	5.627E-06	2.322E-06
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.006E-01	2.007E-01	1.993E-01	1.957E-01	5.544E-06	1.947E-06
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.709E-01	1.710E-01	1.706E-01	1.687E-01	5.466E-06	1.670E-06

GROUND SURFACE CONCENTRATIONS, PCI/M2

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.086E+00	6.086E+00	6.086E+00	5.665E+00
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.159E+00	4.159E+00	4.159E+00	6.936E+00
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.069E+00	3.069E+00	3.069E+00	8.084E+00
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.495E+00	2.495E+00	2.495E+00	8.794E+00
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.521E+00	1.521E+00	1.521E+00	9.402E+00
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.479E-01	7.479E-01	7.479E-01	1.074E+01
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.479E-01	4.479E-01	4.479E-01	1.179E+01
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.143E-01	3.143E-01	3.143E-01	1.193E+01
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.396E-01	2.396E-01	2.396E-01	1.186E+01
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.918E-01	1.918E-01	1.918E-01	1.172E+01
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.590E-01	1.590E-01	1.590E-01	1.155E+01
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.354E-01	1.354E-01	1.354E-01	1.139E+01

TOTAL DEPOSITION RATES, PCI/M2-SEC

XRHO, KM	U-238	Th-230	Ra-226	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	8.159E-09
2.5	0.000E+00	0.000E+00	0.000E+00	9.989E-09
3.5	0.000E+00	0.000E+00	0.000E+00	1.164E-08
4.5	0.000E+00	0.000E+00	0.000E+00	1.267E-08
7.5	0.000E+00	0.000E+00	0.000E+00	1.354E-08
15.0	0.000E+00	0.000E+00	0.000E+00	1.547E-08
25.0	0.000E+00	0.000E+00	0.000E+00	1.698E-08
35.0	0.000E+00	0.000E+00	0.000E+00	1.718E-08
45.0	0.000E+00	0.000E+00	0.000E+00	1.709E-08
55.0	0.000E+00	0.000E+00	0.000E+00	1.688E-08
65.0	0.000E+00	0.000E+00	0.000E+00	1.663E-08
75.0	0.000E+00	0.000E+00	0.000E+00	1.640E-08

TIME STEP NUMBER 6, DURATION IN YRS IS... 1.0

CONCENTRATION DATA FOR THE W DIRECTION, THETA EQUALS 270.0 DEGREES

TOTAL AIR CONCENTRATIONS, PCI/M3, AND WL

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210	WL
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.901E+00	8.495E+00	2.739E+00	1.195E+00	2.916E-06	2.710E-05
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.042E+00	5.715E+00	2.526E+00	1.353E+00	3.605E-06	2.374E-05
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.353E+00	4.257E+00	2.267E+00	1.371E+00	4.356E-06	2.099E-05
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.455E+00	3.419E+00	2.045E+00	1.327E+00	4.971E-06	1.884E-05
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.104E+00	2.102E+00	1.532E+00	1.114E+00	6.158E-06	1.409E-05
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.023E+00	1.023E+00	9.060E-01	7.686E-01	7.222E-06	8.515E-06
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.839E-01	5.842E-01	5.605E-01	5.223E-01	7.586E-06	5.391E-06
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.002E-01	4.004E-01	3.946E-01	3.823E-01	7.645E-06	3.839E-06
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.004E-01	3.006E-01	2.994E-01	2.953E-01	7.596E-06	2.929E-06
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.384E-01	2.385E-01	2.387E-01	2.374E-01	7.505E-06	2.341E-06
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.962E-01	1.964E-01	1.969E-01	1.967E-01	7.398E-06	1.934E-06
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.663E-01	1.664E-01	1.671E-01	1.672E-01	7.296E-06	1.642E-06

GROUND SURFACE CONCENTRATIONS, PCI/M2

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.728E+00	6.728E+00	6.728E+00	6.073E+00
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.527E+00	4.527E+00	4.527E+00	7.509E+00
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.372E+00	3.372E+00	3.372E+00	9.073E+00
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.708E+00	2.708E+00	2.708E+00	1.035E+01
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.665E+00	1.665E+00	1.665E+00	1.283E+01
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.106E-01	8.106E-01	8.106E-01	1.504E+01
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.627E-01	4.627E-01	4.627E-01	1.580E+01
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.172E-01	3.172E-01	3.172E-01	1.593E+01
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.381E-01	2.381E-01	2.381E-01	1.582E+01
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.889E-01	1.889E-01	1.889E-01	1.563E+01
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.555E-01	1.555E-01	1.555E-01	1.541E+01
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.318E-01	1.318E-01	1.318E-01	1.520E+01

TOTAL DEPOSITION RATES, PCI/M2-SEC

XRHO, KM	U-238	Th-230	Ra-226	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	8.747E-09
2.5	0.000E+00	0.000E+00	0.000E+00	1.081E-08
3.5	0.000E+00	0.000E+00	0.000E+00	1.307E-08
4.5	0.000E+00	0.000E+00	0.000E+00	1.491E-08
7.5	0.000E+00	0.000E+00	0.000E+00	1.848E-08
15.0	0.000E+00	0.000E+00	0.000E+00	2.167E-08
25.0	0.000E+00	0.000E+00	0.000E+00	2.276E-08
35.0	0.000E+00	0.000E+00	0.000E+00	2.294E-08
45.0	0.000E+00	0.000E+00	0.000E+00	2.279E-08
55.0	0.000E+00	0.000E+00	0.000E+00	2.252E-08
65.0	0.000E+00	0.000E+00	0.000E+00	2.219E-08
75.0	0.000E+00	0.000E+00	0.000E+00	2.189E-08

TIME STEP NUMBER 6, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS INHAL. EXPOSED ORGAN IS EFFECTIV

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.516E-06	6.583E-06	1.010E-05	1.353E-05	1.587E-05	1.845E-05	4.432E-05	7.757E-05
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.714E-06	7.302E-06	1.251E-05	1.872E-05	2.343E-05	2.839E-05	3.880E-05	8.090E-05
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.708E-06	8.566E-06	1.561E-05	2.245E-05	2.744E-05	3.278E-05	3.848E-05	4.084E-05
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.761E-06	1.029E-05	1.847E-05	2.749E-05	3.446E-05	4.194E-05	3.812E-05	3.019E-05
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.745E-06	1.110E-05	2.148E-05	3.270E-05	4.167E-05	5.458E-05	3.573E-05	3.885E-05
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.168E-06	8.959E-06	3.220E-04	6.552E-04	5.282E-05	6.712E-05	5.268E-05	4.375E-05
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.072E-06	7.467E-06	1.655E-03	2.266E-04	2.764E-05	3.196E-05	3.708E-05	4.214E-05
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.734E-06	8.365E-06	1.923E-05	2.030E-05	2.832E-05	3.328E-05	3.083E-05	2.892E-05
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.648E-06	8.660E-06	1.571E-05	2.385E-05	3.331E-05	2.716E-05	2.798E-05	1.640E-05
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.993E-06	7.662E-06	1.304E-05	1.871E-05	2.381E-05	2.367E-05	1.293E-05	1.313E-05
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.640E-06	6.756E-06	1.116E-05	1.521E-05	2.156E-05	3.718E-05	4.543E-05	3.199E-05
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.175E-06	6.903E-04	4.281E-04	2.226E-05	4.790E-05	5.388E-04	4.234E-04	6.854E-05
W	0.000E+00	0.000E+00	3.181E-07	0.000E+00	1.349E-06	6.858E-06	1.552E-05	4.079E-05	9.664E-05	2.477E-02	8.551E-03	4.005E-05
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.249E-06	6.228E-06	1.129E-05	2.437E-05	8.670E-05	1.139E-04	2.355E-04	2.967E-04
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.569E-06	7.829E-06	1.369E-05	1.985E-05	2.449E-05	2.952E-05	4.914E-05	1.037E-04
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.354E-05	1.202E-03	4.203E-03	1.339E-03	7.028E-04	2.613E-02	9.845E-03	1.175E-03

TOTAL DOSE COMMITMENT IS 8.628E-02 PERSON-REM/YR

TIME STEP NUMBER 6, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS INHAL. EXPOSED ORGAN IS BONE

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.230E-05	5.340E-05	8.186E-05	1.097E-04	1.286E-04	1.495E-04	3.588E-04	6.277E-04
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.391E-05	5.923E-05	1.015E-04	1.517E-04	1.898E-04	2.299E-04	3.141E-04	6.546E-04
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.386E-05	6.949E-05	1.266E-04	1.820E-04	2.223E-04	2.655E-04	3.116E-04	3.305E-04
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.429E-05	8.349E-05	1.498E-04	2.228E-04	2.792E-04	3.397E-04	3.087E-04	2.444E-04
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.416E-05	9.006E-05	1.742E-04	2.652E-04	3.378E-04	4.423E-04	2.895E-04	3.147E-04
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.480E-06	7.269E-05	2.612E-03	5.312E-03	4.282E-04	5.439E-04	4.268E-04	3.544E-04
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.699E-06	6.058E-05	1.342E-02	1.837E-03	2.241E-04	2.590E-04	3.004E-04	3.413E-04
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.407E-05	6.786E-05	1.560E-04	1.646E-04	2.296E-04	2.696E-04	2.497E-04	2.342E-04
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.337E-05	7.026E-05	1.274E-04	1.934E-04	2.700E-04	2.200E-04	2.266E-04	1.328E-04
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.617E-05	6.216E-05	1.058E-04	1.517E-04	1.930E-04	1.918E-04	1.047E-04	1.063E-04
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.331E-05	5.480E-05	9.048E-05	1.233E-04	1.748E-04	3.013E-04	3.680E-04	2.591E-04
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.535E-06	5.599E-03	3.471E-03	1.804E-04	3.882E-04	4.365E-03	3.429E-03	5.550E-04
W	0.000E+00	0.000E+00	2.581E-06	0.000E+00	1.095E-05	5.563E-05	1.258E-04	3.307E-04	7.831E-04	2.007E-01	6.925E-02	3.242E-04
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.014E-05	5.052E-05	9.155E-05	1.976E-04	7.028E-04	9.232E-04	1.908E-03	2.403E-03
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.273E-05	6.350E-05	1.110E-04	1.609E-04	1.985E-04	2.391E-04	3.979E-04	8.396E-04
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.721E-04	9.749E-03	3.407E-02	1.085E-02	5.694E-03	2.116E-01	7.969E-02	9.506E-03

TOTAL DOSE COMMITMENT IS 6.988E-01 PERSON-REM/YR

TIME STEP NUMBER 6, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS INHAL. EXPOSED ORGAN IS AVG.LUNG

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.766E-07	7.808E-07	1.225E-06	1.681E-06	2.016E-06	2.398E-06	5.889E-06	1.054E-05
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.992E-07	8.624E-07	1.514E-06	2.321E-06	2.977E-06	3.697E-06	5.174E-06	1.105E-05
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.979E-07	1.008E-06	1.880E-06	2.765E-06	3.454E-06	4.216E-06	5.058E-06	5.482E-06
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.036E-07	1.207E-06	2.212E-06	3.360E-06	4.296E-06	5.332E-06	4.940E-06	3.987E-06
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.014E-07	1.297E-06	2.556E-06	3.959E-06	5.125E-06	6.816E-06	4.529E-06	4.995E-06
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.348E-07	1.045E-06	3.828E-05	7.930E-05	6.504E-06	8.403E-06	6.703E-06	5.656E-06
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.236E-07	8.717E-07	1.968E-04	2.741E-05	3.401E-06	3.997E-06	4.711E-06	5.439E-06
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.003E-07	9.793E-07	2.295E-06	2.467E-06	3.502E-06	4.184E-06	3.938E-06	3.753E-06
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.908E-07	1.018E-06	1.883E-06	2.913E-06	4.142E-06	3.436E-06	3.601E-06	2.145E-06
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.314E-07	9.019E-07	1.566E-06	2.292E-06	2.972E-06	3.011E-06	1.675E-06	1.732E-06
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.910E-07	7.972E-07	1.341E-06	1.860E-06	2.682E-06	4.702E-06	5.842E-06	4.181E-06
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.370E-07	8.169E-05	5.161E-05	2.733E-06	5.987E-06	6.852E-05	5.478E-05	9.018E-06
W	0.000E+00	0.000E+00	3.681E-08	0.000E+00	1.572E-07	8.109E-07	1.872E-06	5.015E-06	1.211E-05	3.161E-03	1.111E-03	5.299E-06
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.455E-07	7.345E-07	1.352E-06	2.962E-06	1.069E-05	1.424E-05	2.984E-05	3.811E-05
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.829E-07	9.277E-07	1.658E-06	2.457E-06	3.097E-06	3.812E-06	6.478E-06	1.396E-05
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.911E-06	1.426E-04	5.110E-04	1.668E-04	8.970E-05	3.416E-03	1.317E-03	1.609E-04

TOTAL DOSE COMMITMENT IS 1.111E-02 PERSON-REM/YR

TIME STEP NUMBER 6, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS INHAL. EXPOSED ORGAN IS BRONCHI

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.476E-03	8.187E-03	7.273E-03	6.862E-03	6.181E-03	5.815E-03	1.170E-02	1.758E-02
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.374E-03	9.766E-03	9.049E-03	9.059E-03	8.461E-03	8.145E-03	9.201E-03	1.631E-02
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.519E-03	1.474E-02	1.411E-02	1.388E-02	1.286E-02	1.233E-02	1.206E-02	1.097E-02
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.295E-02	2.853E-02	2.795E-02	2.851E-02	2.711E-02	2.652E-02	2.014E-02	1.371E-02
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.442E-02	5.611E-02	5.533E-02	5.546E-02	5.214E-02	5.397E-02	2.920E-02	2.704E-02
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.244E-02	7.045E-02	8.062E-01	9.837E-01	5.658E-02	5.594E-02	3.597E-02	2.533E-02
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.965E-02	4.259E-02	3.861E+00	3.270E-01	2.872E-02	2.591E-02	2.465E-02	2.376E-02
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.696E-02	3.340E-02	4.065E-02	2.856E-02	2.972E-02	2.784E-02	2.145E-02	1.725E-02
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.207E-02	2.714E-02	2.684E-02	2.826E-02	3.023E-02	1.996E-02	1.730E-02	8.756E-03
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.187E-02	2.063E-02	1.921E-02	1.865E-02	1.786E-02	1.424E-02	6.489E-03	5.658E-03
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.566E-03	1.698E-02	1.613E-02	1.530E-02	1.658E-02	2.313E-02	2.372E-02	1.440E-02
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.857E-03	1.528E+00	5.502E-01	2.008E-02	3.328E-02	3.044E-01	2.016E-01	2.823E-02
W	0.000E+00	0.000E+00	5.441E-03	0.000E+00	7.892E-03	1.662E-02	2.044E-02	3.652E-02	6.535E-02	1.345E+01	3.876E+00	1.559E-02
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.450E-03	2.127E-02	2.175E-02	3.237E-02	8.752E-02	9.266E-02	1.603E-01	1.736E-01
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.331E-03	1.523E-02	1.456E-02	1.439E-02	1.342E-02	1.298E-02	1.804E-02	3.267E-02
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.061E-01	1.587E+00	3.063E+00	6.658E-01	2.636E-01	7.833E+00	2.449E+00	2.494E-01

TOTAL DOSE COMMITMENT IS 4.499E+01 PERSON-REM/YR

TIME STEP NUMBER 6, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS GROUND EXPOSED ORGAN IS EFFECTIV

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.879E-07	1.279E-06	1.363E-06	1.500E-06	1.547E-06	1.643E-06	3.688E-06	6.124E-06
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.002E-07	1.496E-06	1.693E-06	2.025E-06	2.208E-06	2.437E-06	3.111E-06	6.158E-06
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.400E-07	2.127E-06	2.433E-06	2.771E-06	2.921E-06	3.145E-06	3.419E-06	3.419E-06
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.548E-06	3.778E-06	4.153E-06	4.697E-06	4.910E-06	5.241E-06	4.315E-06	3.162E-06
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.304E-06	6.930E-06	7.414E-06	8.029E-06	8.131E-06	9.027E-06	5.214E-06	5.135E-06
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.472E-06	8.324E-06	1.085E-04	1.464E-04	9.229E-06	9.919E-06	6.885E-06	5.203E-06
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.203E-06	5.188E-06	5.257E-04	4.914E-05	4.730E-06	4.641E-06	4.771E-06	4.939E-06
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.996E-06	4.226E-06	5.632E-06	4.319E-06	4.879E-06	4.929E-06	4.075E-06	3.496E-06
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.448E-06	3.537E-06	3.880E-06	4.475E-06	5.202E-06	3.710E-06	3.452E-06	1.866E-06
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.447E-06	2.747E-06	2.873E-06	3.112E-06	3.294E-06	2.876E-06	1.425E-06	1.341E-06
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.056E-06	2.284E-06	2.423E-06	2.545E-06	3.029E-06	4.604E-06	5.111E-06	3.337E-06
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.256E-07	2.100E-04	8.520E-05	3.463E-06	6.326E-06	6.322E-05	4.542E-05	6.852E-06
W	0.000E+00	0.000E+00	6.195E-07	0.000E+00	9.648E-07	2.249E-06	3.144E-06	6.314E-06	1.256E-05	2.845E-03	8.951E-04	3.901E-06
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.135E-06	2.742E-06	3.067E-06	4.968E-06	1.454E-05	1.658E-05	3.072E-05	3.549E-05
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.129E-07	2.144E-06	2.380E-06	2.689E-06	2.827E-06	3.045E-06	4.663E-06	9.230E-06
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.380E-05	2.439E-04	5.713E-04	1.469E-04	6.735E-05	2.281E-03	8.022E-04	9.085E-05

TOTAL DOSE COMMITMENT IS 9.696E-03 PERSON-REM/YR

TIME STEP NUMBER 6, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS CLOUD EXPOSED ORGAN IS EFFECTIV

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.039E-05	6.583E-05	6.232E-05	5.992E-05	5.433E-05	5.125E-05	1.032E-04	1.552E-04
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.687E-05	7.833E-05	7.750E-05	7.905E-05	7.431E-05	7.174E-05	8.116E-05	1.440E-04
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.475E-05	1.101E-04	1.167E-04	1.188E-04	1.117E-04	1.079E-04	1.060E-04	9.657E-05
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.835E-05	1.734E-04	1.970E-04	2.164E-04	2.157E-04	2.179E-04	1.691E-04	1.169E-04
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.385E-05	2.696E-04	3.435E-04	3.990E-04	4.072E-04	4.420E-04	2.459E-04	2.317E-04
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.310E-05	2.678E-04	5.138E-03	7.377E-03	4.568E-04	4.692E-04	3.081E-04	2.196E-04
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.677E-05	1.961E-04	2.551E-02	2.492E-03	2.338E-04	2.182E-04	2.116E-04	2.061E-04
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.609E-05	1.746E-04	2.658E-04	2.121E-04	2.364E-04	2.302E-04	1.817E-04	1.482E-04
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.219E-05	1.567E-04	1.883E-04	2.183E-04	2.464E-04	1.679E-04	1.482E-04	7.586E-05
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.687E-05	1.306E-04	1.443E-04	1.511E-04	1.504E-04	1.223E-04	5.641E-05	4.951E-05
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.322E-05	1.132E-04	1.255E-04	1.269E-04	1.417E-04	2.007E-04	2.075E-04	1.265E-04
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.032E-05	1.054E-02	4.375E-03	1.688E-04	2.869E-04	2.655E-03	1.770E-03	2.485E-04
W	0.000E+00	0.000E+00	1.626E-05	0.000E+00	3.832E-05	1.119E-04	1.616E-04	3.069E-04	5.637E-04	1.174E-01	3.404E-02	1.373E-04
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.063E-05	1.315E-04	1.639E-04	2.647E-04	7.436E-04	8.021E-04	1.401E-03	1.525E-03
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.919E-05	1.061E-04	1.160E-04	1.208E-04	1.154E-04	1.130E-04	1.580E-04	2.872E-04
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.931E-04	1.236E-02	2.576E-02	5.754E-03	2.304E-03	6.882E-02	2.158E-02	2.200E-03

TOTAL DOSE COMMITMENT IS 3.724E-01 PERSON-REM/YR

TIME STEP NUMBER 6, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS VEG. ING EXPOSED ORGAN IS EFFECTIV

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

TOTAL DOSE COMMITMENT IS 0.000E+00 PERSON-REM/YR

WARNING--POPULATION FOOD INGESTION DOSES SHOWN
ABOVE HAVE NOT BEEN CORRECTED TO REFLECT POTENTIAL
FOOD EXPORT AND MAY EXCEED DOSES ACTUALLY RECEIVED
BY THE POPULATION OF THIS REGION. SEE SUMMARY
TABLE FOR THIS INFORMATION.

TIME STEP NUMBER 6, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS VEG. ING EXPOSED ORGAN IS BONE

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

TOTAL DOSE COMMITMENT IS 0.000E+00 PERSON-REM/YR

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DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

TOTAL DOSE COMMITMENT IS 0.000E+00 PERSON-REM/YR

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DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

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N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

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N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

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SUMMARY PRINT OF POPULATION DOSES COMPUTED FOR TSTEP 6--DOSES SHOWN ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DOSES RECEIVED BY PEOPLE WITHIN 80 KILOMETERS

PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INHAL.	8.628E-02	6.988E-01	1.111E-02	5.241E-01	2.520E-01	4.499E+01
GROUND	9.696E-03	9.696E-03	9.696E-03	9.696E-03	9.696E-03	9.696E-03
CLOUD	3.724E-01	3.724E-01	3.724E-01	3.724E-01	3.724E-01	3.724E-01
VEG. ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MEAT ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MILK ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RNPLUS50	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOTALS	4.684E-01	1.081E+00	3.932E-01	9.062E-01	6.341E-01	4.538E+01

DOSES RECEIVED BY PEOPLE BEYOND 80 KILOMETERS

PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INHAL.	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GROUND	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CLOUD	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
VEG. ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MEAT ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MILK ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RNPLUS50	1.039E+01	1.417E+02	2.362E+00	1.039E+01	1.039E+01	6.613E+01
TOTALS	1.039E+01	1.417E+02	2.362E+00	1.039E+01	1.039E+01	6.613E+01

TOTAL DOSES COMPUTED OVER ALL POPULATIONS

PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INHAL.	8.628E-02	6.988E-01	1.111E-02	5.241E-01	2.520E-01	4.499E+01
GROUND	9.696E-03	9.696E-03	9.696E-03	9.696E-03	9.696E-03	9.696E-03
CLOUD	3.724E-01	3.724E-01	3.724E-01	3.724E-01	3.724E-01	3.724E-01
VEG. ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MEAT ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MILK ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RNPLUS50	1.039E+01	1.417E+02	2.362E+00	1.039E+01	1.039E+01	6.613E+01
TOTALS	1.086E+01	1.428E+02	2.755E+00	1.130E+01	1.103E+01	1.115E+02

TIME STEP NUMBER 6, DURATION IN YRS IS... 1.0

INDIVIDUAL RECEPTOR PARTICULATE CONCENTRATIONS

NO.	NAME	PTSZ	AIRBORNE CONCENTRATIONS, PCI/M3 U-238	Th-230	Ra-226	Pb-210	GROUND CONCENTRATIONS, PCI/M2 U-238	Th-230	Ra-226	Pb-210
1	Receptor 1	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1	Receptor 1	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1	Receptor 1	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1	Receptor 1	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2	Receptor 2	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2	Receptor 2	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2	Receptor 2	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2	Receptor 2	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
3	Receptor 3	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
3	Receptor 3	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
3	Receptor 3	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
3	Receptor 3	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
4	Receptor 4	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
4	Receptor 4	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
4	Receptor 4	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
4	Receptor 4	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
5	Receptor 5	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
5	Receptor 5	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
5	Receptor 5	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
5	Receptor 5	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
6	Receptor 6	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
6	Receptor 6	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
6	Receptor 6	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
6	Receptor 6	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
7	Receptor 7	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
7	Receptor 7	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
7	Receptor 7	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
7	Receptor 7	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

TIME STEP NUMBER 6, DURATION IN YRS IS... 1.0

INDIVIDUAL RECEPTOR RADON AND RADON DAUGHTER CONCENTRATIONS

	AIRBORNE CONCENTRATIONS, PCI/M3								GROUND CONCENTRATIONS, PCI/M2			
NO.	Rn-222	Po-218	Pb-214	Bi-214	Pb-210	Bi-210	Po-210	WL	Po-218	Pb-214	Bi-214	Pb-210
1	1.619E+01	1.352E+01	4.184E+00	1.826E+00	3.189E-06	1.175E-08	1.659E-12	4.195E-05	1.071E+01	1.071E+01	1.071E+01	1.085E+00
2	2.748E+00	2.739E+00	2.009E+00	1.528E+00	9.031E-06	6.745E-08	1.397E-11	1.871E-05	2.169E+00	2.169E+00	2.169E+00	4.011E+00
3	1.131E+01	9.752E+00	3.144E+00	1.224E+00	3.019E-06	1.780E-08	3.425E-12	3.055E-05	7.724E+00	7.724E+00	7.724E+00	8.081E-01
4	3.093E+00	2.920E+00	1.575E+00	9.965E-01	4.283E-06	3.410E-08	8.565E-12	1.471E-05	2.313E+00	2.313E+00	2.313E+00	1.965E+00
5	4.450E+00	4.342E+00	2.507E+00	1.651E+00	8.172E-06	7.283E-08	2.108E-11	2.334E-05	3.439E+00	3.439E+00	3.439E+00	3.319E+00
6	3.253E+00	3.130E+00	1.657E+00	1.025E+00	3.828E-06	2.421E-08	4.793E-12	1.545E-05	2.479E+00	2.479E+00	2.479E+00	1.776E+00
7	3.976E+00	3.915E+00	2.158E+00	1.322E+00	4.540E-06	2.980E-08	7.218E-12	1.990E-05	3.100E+00	3.100E+00	3.100E+00	1.691E+00

TIME STEP NUMBER 6, DURATION IN YRS IS... 1.0

NUMBER 1 NAME=Receptor 1 X= 1.7KM, Y= -0.5KM, Z= 0.0M, DIST= 1.8KM, IRTYPE= 1

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	1.24E+00	2.69E-02	2.54E-02	3.41E-02	2.87E-02	2.03E+01
CHILD	TOTALS	1.24E+00	2.81E-02	2.57E-02	2.96E-02	2.72E-02	2.03E+01
TEENAGE	TOTALS	1.24E+00	3.10E-02	2.60E-02	2.77E-02	2.66E-02	2.03E+01
ADULT	TOTALS	1.24E+00	3.08E-02	2.63E-02	2.77E-02	2.68E-02	2.03E+01

NUMBER 2 NAME=Receptor 2 X= 9.6KM, Y= 3.4KM, Z= 0.0M, DIST= 10.1KM, IRTYPE= 1

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	2.25E-01	2.27E-02	1.83E-02	4.31E-02	2.76E-02	3.45E+00
CHILD	TOTALS	2.25E-01	2.59E-02	1.93E-02	3.04E-02	2.35E-02	3.45E+00
TEENAGE	TOTALS	2.25E-01	3.42E-02	2.01E-02	2.48E-02	2.19E-02	3.45E+00
ADULT	TOTALS	2.25E-01	3.36E-02	2.10E-02	2.49E-02	2.23E-02	3.45E+00

TIME STEP NUMBER 6, DURATION IN YRS IS... 1.0

NUMBER 3 NAME=Receptor 3 X= -0.1KM, Y= 0.8KM, Z= 0.0M, DIST= 0.8KM, IRTYPE= 1

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	8.67E-01	1.91E-02	1.76E-02	2.59E-02	2.07E-02	1.42E+01
CHILD	TOTALS	8.66E-01	2.02E-02	1.80E-02	2.17E-02	1.94E-02	1.42E+01
TEENAGE	TOTALS	8.67E-01	2.29E-02	1.82E-02	1.98E-02	1.88E-02	1.42E+01
ADULT	TOTALS	8.67E-01	2.27E-02	1.85E-02	1.98E-02	1.89E-02	1.42E+01

NUMBER 4 NAME=Receptor 4 X= 9.8KM, Y= -7.4KM, Z= 0.0M, DIST= 12.3KM, IRTYPE= 1

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	2.45E-01	1.44E-02	1.24E-02	2.41E-02	1.68E-02	3.88E+00
CHILD	TOTALS	2.45E-01	1.60E-02	1.29E-02	1.81E-02	1.48E-02	3.88E+00
TEENAGE	TOTALS	2.45E-01	1.99E-02	1.32E-02	1.55E-02	1.41E-02	3.88E+00
ADULT	TOTALS	2.45E-01	1.96E-02	1.36E-02	1.55E-02	1.43E-02	3.88E+00

TIME STEP NUMBER 6, DURATION IN YRS IS... 1.0

NUMBER 5 NAME=Receptor 5 X= 13.4KM, Y= -5.3KM, Z= 0.0M, DIST= 14.4KM, IRTYPE= 1

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	3.55E-01	2.43E-02	2.03E-02	4.28E-02	2.88E-02	5.58E+00
CHILD	TOTALS	3.55E-01	2.72E-02	2.13E-02	3.12E-02	2.50E-02	5.58E+00
TEENAGE	TOTALS	3.55E-01	3.47E-02	2.19E-02	2.62E-02	2.36E-02	5.58E+00
ADULT	TOTALS	3.55E-01	3.42E-02	2.28E-02	2.63E-02	2.39E-02	5.58E+00

NUMBER 6 NAME=Receptor 6 X= 7.6KM, Y= -6.7KM, Z= 0.0M, DIST= 10.1KM, IRTYPE= 1

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	2.57E-01	1.46E-02	1.27E-02	2.33E-02	1.67E-02	4.08E+00
CHILD	TOTALS	2.57E-01	1.60E-02	1.32E-02	1.79E-02	1.50E-02	4.08E+00
TEENAGE	TOTALS	2.57E-01	1.95E-02	1.35E-02	1.55E-02	1.43E-02	4.08E+00
ADULT	TOTALS	2.57E-01	1.93E-02	1.39E-02	1.56E-02	1.44E-02	4.08E+00

TIME STEP NUMBER 6, DURATION IN YRS IS... 1.0

NUMBER 7 NAME=Receptor 7 X= -4.1KM, Y= 0.9KM, Z= 0.0M, DIST= 4.2KM, IRTYPE= 1

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	3.15E-01	1.86E-02	1.64E-02	2.89E-02	2.11E-02	4.99E+00
CHILD	TOTALS	3.15E-01	2.03E-02	1.70E-02	2.25E-02	1.91E-02	4.99E+00
TEENAGE	TOTALS	3.15E-01	2.44E-02	1.73E-02	1.97E-02	1.82E-02	4.99E+00
ADULT	TOTALS	3.15E-01	2.41E-02	1.78E-02	1.98E-02	1.84E-02	4.99E+00

TIME STEP NUMBER 7, DURATION IN YRS IS... 1.0

CONCENTRATION DATA FOR THE N DIRECTION, THETA EQUALS 0.0 DEGREES

TOTAL AIR CONCENTRATIONS, PCI/M3, AND WL

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210	WL
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.730E+00	4.495E+00	2.180E+00	1.128E+00	3.099E-06	1.989E-05
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.141E+00	3.092E+00	1.913E+00	1.215E+00	3.852E-06	1.742E-05
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.230E+00	2.222E+00	1.601E+00	1.161E+00	4.518E-06	1.474E-05
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.816E+00	1.813E+00	1.406E+00	1.094E+00	5.133E-06	1.308E-05
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.035E+00	1.035E+00	9.069E-01	7.851E-01	6.001E-06	8.593E-06
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.365E-01	4.367E-01	4.210E-01	3.979E-01	6.059E-06	4.069E-06
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.291E-01	2.293E-01	2.276E-01	2.236E-01	5.481E-06	2.224E-06
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.483E-01	1.484E-01	1.485E-01	1.478E-01	5.029E-06	1.457E-06
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.067E-01	1.067E-01	1.070E-01	1.070E-01	4.701E-06	1.052E-06
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.178E-02	8.183E-02	8.215E-02	8.229E-02	4.449E-06	8.077E-07
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.545E-02	6.549E-02	6.578E-02	6.595E-02	4.246E-06	6.470E-07
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.421E-02	5.424E-02	5.449E-02	5.466E-02	4.093E-06	5.360E-07

GROUND SURFACE CONCENTRATIONS, PCI/M2

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.560E+00	3.560E+00	3.560E+00	6.454E+00
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.449E+00	2.449E+00	2.449E+00	8.024E+00
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.760E+00	1.760E+00	1.760E+00	9.412E+00
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.436E+00	1.436E+00	1.436E+00	1.069E+01
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.202E-01	8.202E-01	8.202E-01	1.250E+01
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.459E-01	3.459E-01	3.459E-01	1.262E+01
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.816E-01	1.816E-01	1.816E-01	1.142E+01
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.175E-01	1.175E-01	1.175E-01	1.048E+01
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.453E-02	8.453E-02	8.453E-02	9.792E+00
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.481E-02	6.481E-02	6.481E-02	9.267E+00
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.187E-02	5.187E-02	5.187E-02	8.845E+00
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.296E-02	4.296E-02	4.296E-02	8.526E+00

TOTAL DEPOSITION RATES, PCI/M2-SEC

XRHO, KM	U-238	Th-230	Ra-226	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	9.296E-09
2.5	0.000E+00	0.000E+00	0.000E+00	1.156E-08
3.5	0.000E+00	0.000E+00	0.000E+00	1.356E-08
4.5	0.000E+00	0.000E+00	0.000E+00	1.540E-08
7.5	0.000E+00	0.000E+00	0.000E+00	1.800E-08
15.0	0.000E+00	0.000E+00	0.000E+00	1.818E-08
25.0	0.000E+00	0.000E+00	0.000E+00	1.644E-08
35.0	0.000E+00	0.000E+00	0.000E+00	1.509E-08
45.0	0.000E+00	0.000E+00	0.000E+00	1.410E-08
55.0	0.000E+00	0.000E+00	0.000E+00	1.335E-08
65.0	0.000E+00	0.000E+00	0.000E+00	1.274E-08
75.0	0.000E+00	0.000E+00	0.000E+00	1.228E-08

TIME STEP NUMBER 7, DURATION IN YRS IS... 1.0

CONCENTRATION DATA FOR THE E DIRECTION, THETA EQUALS 90.0 DEGREES

TOTAL AIR CONCENTRATIONS, PCI/M3, AND WL

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210	WL
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.448E+01	1.178E+01	3.587E+00	1.526E+00	2.908E-06	3.601E-05
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.047E+01	9.444E+00	3.691E+00	1.919E+00	3.887E-06	3.560E-05
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.334E+00	7.888E+00	3.642E+00	2.099E+00	4.868E-06	3.442E-05
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.100E+00	6.845E+00	3.410E+00	2.054E+00	5.473E-06	3.200E-05
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.611E+01	1.123E+01	3.601E+00	1.945E+00	6.794E-06	3.708E-05
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.948E+00	2.940E+00	2.121E+00	1.550E+00	9.980E-06	1.956E-05
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.731E+00	1.731E+00	1.459E+00	1.189E+00	1.146E-05	1.361E-05
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.195E+00	1.195E+00	1.093E+00	9.622E-01	1.201E-05	1.036E-05
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.979E-01	8.984E-01	8.560E-01	7.912E-01	1.223E-05	8.217E-06
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.146E-01	7.150E-01	6.965E-01	6.632E-01	1.232E-05	6.741E-06
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.909E-01	5.913E-01	5.831E-01	5.657E-01	1.233E-05	5.675E-06
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.028E-01	5.031E-01	4.998E-01	4.905E-01	1.232E-05	4.882E-06

GROUND SURFACE CONCENTRATIONS, PCI/M2

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.330E+00	9.330E+00	9.330E+00	6.057E+00
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.480E+00	7.480E+00	7.480E+00	8.096E+00
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.247E+00	6.247E+00	6.247E+00	1.014E+01
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.422E+00	5.422E+00	5.422E+00	1.140E+01
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.896E+00	8.896E+00	8.896E+00	1.415E+01
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.329E+00	2.329E+00	2.329E+00	2.079E+01
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.371E+00	1.371E+00	1.371E+00	2.388E+01
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.466E-01	9.466E-01	9.466E-01	2.501E+01
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.116E-01	7.116E-01	7.116E-01	2.548E+01
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.663E-01	5.663E-01	5.663E-01	2.566E+01
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.683E-01	4.683E-01	4.683E-01	2.569E+01
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.985E-01	3.985E-01	3.985E-01	2.566E+01

TOTAL DEPOSITION RATES, PCI/M2-SEC

XRHO, KM	U-238	Th-230	Ra-226	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	8.723E-09
2.5	0.000E+00	0.000E+00	0.000E+00	1.166E-08
3.5	0.000E+00	0.000E+00	0.000E+00	1.460E-08
4.5	0.000E+00	0.000E+00	0.000E+00	1.642E-08
7.5	0.000E+00	0.000E+00	0.000E+00	2.038E-08
15.0	0.000E+00	0.000E+00	0.000E+00	2.994E-08
25.0	0.000E+00	0.000E+00	0.000E+00	3.439E-08
35.0	0.000E+00	0.000E+00	0.000E+00	3.602E-08
45.0	0.000E+00	0.000E+00	0.000E+00	3.670E-08
55.0	0.000E+00	0.000E+00	0.000E+00	3.696E-08
65.0	0.000E+00	0.000E+00	0.000E+00	3.700E-08
75.0	0.000E+00	0.000E+00	0.000E+00	3.695E-08

TIME STEP NUMBER 7, DURATION IN YRS IS... 1.0

CONCENTRATION DATA FOR THE ESE DIRECTION, THETA EQUALS 112.5 DEGREES

TOTAL AIR CONCENTRATIONS, PCI/M3, AND WL

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210	WL
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.642E+01	1.278E+01	3.455E+00	1.372E+00	2.510E-06	3.579E-05
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.885E+00	8.893E+00	3.245E+00	1.583E+00	3.021E-06	3.152E-05
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.022E+00	8.125E+00	3.151E+00	1.645E+00	3.529E-06	3.048E-05
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.152E+01	1.743E+01	3.592E+00	1.630E+00	3.877E-06	4.224E-05
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.962E+00	9.116E+00	3.481E+00	1.665E+00	4.560E-06	3.325E-05
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.443E+00	3.381E+00	2.033E+00	1.363E+00	7.023E-06	1.887E-05
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.160E+00	1.161E+00	9.881E-01	8.141E-01	7.748E-06	9.241E-06
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.989E-01	6.993E-01	6.519E-01	5.880E-01	7.858E-06	6.219E-06
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.952E-01	4.955E-01	4.792E-01	4.522E-01	7.837E-06	4.627E-06
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.817E-01	3.819E-01	3.759E-01	3.636E-01	7.780E-06	3.655E-06
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.092E-01	3.094E-01	3.072E-01	3.015E-01	7.704E-06	3.001E-06
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.598E-01	2.599E-01	2.594E-01	2.567E-01	7.637E-06	2.540E-06

GROUND SURFACE CONCENTRATIONS, PCI/M2

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.012E+01	1.012E+01	1.012E+01	5.228E+00
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.043E+00	7.043E+00	7.043E+00	6.293E+00
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.435E+00	6.435E+00	6.435E+00	7.352E+00
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.380E+01	1.380E+01	1.380E+01	8.076E+00
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.221E+00	7.221E+00	7.221E+00	9.498E+00
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.678E+00	2.678E+00	2.678E+00	1.463E+01
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.192E-01	9.192E-01	9.192E-01	1.614E+01
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.539E-01	5.539E-01	5.539E-01	1.637E+01
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.925E-01	3.925E-01	3.925E-01	1.632E+01
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.025E-01	3.025E-01	3.025E-01	1.621E+01
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.450E-01	2.450E-01	2.450E-01	1.605E+01
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.059E-01	2.059E-01	2.059E-01	1.591E+01

TOTAL DEPOSITION RATES, PCI/M2-SEC

XRHO, KM	U-238	Th-230	Ra-226	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	7.530E-09
2.5	0.000E+00	0.000E+00	0.000E+00	9.063E-09
3.5	0.000E+00	0.000E+00	0.000E+00	1.059E-08
4.5	0.000E+00	0.000E+00	0.000E+00	1.163E-08
7.5	0.000E+00	0.000E+00	0.000E+00	1.368E-08
15.0	0.000E+00	0.000E+00	0.000E+00	2.107E-08
25.0	0.000E+00	0.000E+00	0.000E+00	2.324E-08
35.0	0.000E+00	0.000E+00	0.000E+00	2.357E-08
45.0	0.000E+00	0.000E+00	0.000E+00	2.351E-08
55.0	0.000E+00	0.000E+00	0.000E+00	2.334E-08
65.0	0.000E+00	0.000E+00	0.000E+00	2.311E-08
75.0	0.000E+00	0.000E+00	0.000E+00	2.291E-08

TIME STEP NUMBER 7, DURATION IN YRS IS... 1.0

CONCENTRATION DATA FOR THE S DIRECTION, THETA EQUALS 180.0 DEGREES

TOTAL AIR CONCENTRATIONS, PCI/M3, AND WL

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210	WL
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.790E+00	6.476E+00	2.203E+00	9.987E-01	2.292E-06	2.156E-05
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.810E+00	4.449E+00	2.018E+00	1.128E+00	2.849E-06	1.902E-05
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.457E+00	3.328E+00	1.782E+00	1.125E+00	3.419E-06	1.666E-05
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.779E+00	2.720E+00	1.588E+00	1.059E+00	3.738E-06	1.480E-05
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.667E+00	1.658E+00	1.110E+00	7.854E-01	3.940E-06	1.026E-05
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.097E-01	8.099E-01	6.550E-01	5.161E-01	4.402E-06	6.080E-06
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.849E-01	4.851E-01	4.382E-01	3.815E-01	4.861E-06	4.145E-06
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.406E-01	3.408E-01	3.231E-01	2.971E-01	4.920E-06	3.097E-06
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.597E-01	2.599E-01	2.526E-01	2.400E-01	4.893E-06	2.444E-06
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.079E-01	2.080E-01	2.050E-01	1.987E-01	4.832E-06	1.995E-06
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.722E-01	1.723E-01	1.712E-01	1.680E-01	4.759E-06	1.672E-06
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.467E-01	1.468E-01	1.465E-01	1.449E-01	4.692E-06	1.434E-06

GROUND SURFACE CONCENTRATIONS, PCI/M2

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.129E+00	5.129E+00	5.129E+00	4.775E+00
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.524E+00	3.524E+00	3.524E+00	5.934E+00
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.636E+00	2.636E+00	2.636E+00	7.122E+00
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.155E+00	2.155E+00	2.155E+00	7.786E+00
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.313E+00	1.313E+00	1.313E+00	8.207E+00
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.414E-01	6.414E-01	6.414E-01	9.169E+00
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.842E-01	3.842E-01	3.842E-01	1.013E+01
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.699E-01	2.699E-01	2.699E-01	1.025E+01
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.058E-01	2.058E-01	2.058E-01	1.019E+01
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.647E-01	1.647E-01	1.647E-01	1.007E+01
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.365E-01	1.365E-01	1.365E-01	9.914E+00
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.163E-01	1.163E-01	1.163E-01	9.774E+00

TOTAL DEPOSITION RATES, PCI/M2-SEC

XRHO, KM	U-238	Th-230	Ra-226	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	6.877E-09
2.5	0.000E+00	0.000E+00	0.000E+00	8.546E-09
3.5	0.000E+00	0.000E+00	0.000E+00	1.026E-08
4.5	0.000E+00	0.000E+00	0.000E+00	1.121E-08
7.5	0.000E+00	0.000E+00	0.000E+00	1.182E-08
15.0	0.000E+00	0.000E+00	0.000E+00	1.321E-08
25.0	0.000E+00	0.000E+00	0.000E+00	1.458E-08
35.0	0.000E+00	0.000E+00	0.000E+00	1.476E-08
45.0	0.000E+00	0.000E+00	0.000E+00	1.468E-08
55.0	0.000E+00	0.000E+00	0.000E+00	1.450E-08
65.0	0.000E+00	0.000E+00	0.000E+00	1.428E-08
75.0	0.000E+00	0.000E+00	0.000E+00	1.408E-08

TIME STEP NUMBER 7, DURATION IN YRS IS... 1.0

CONCENTRATION DATA FOR THE W DIRECTION, THETA EQUALS 270.0 DEGREES

TOTAL AIR CONCENTRATIONS, PCI/M3, AND WL

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210	WL
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.235E+00	6.332E+00	2.149E+00	9.832E-01	2.543E-06	2.108E-05
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.899E+00	4.644E+00	2.070E+00	1.124E+00	3.105E-06	1.947E-05
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.639E+00	3.560E+00	1.897E+00	1.152E+00	3.746E-06	1.758E-05
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.937E+00	2.907E+00	1.734E+00	1.125E+00	4.273E-06	1.598E-05
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.807E+00	1.805E+00	1.313E+00	9.537E-01	5.300E-06	1.207E-05
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.811E-01	8.816E-01	7.803E-01	6.618E-01	6.222E-06	7.333E-06
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.025E-01	5.027E-01	4.823E-01	4.495E-01	6.528E-06	4.639E-06
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.441E-01	3.443E-01	3.393E-01	3.288E-01	6.574E-06	3.301E-06
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.581E-01	2.583E-01	2.573E-01	2.537E-01	6.528E-06	2.517E-06
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.047E-01	2.048E-01	2.049E-01	2.039E-01	6.447E-06	2.010E-06
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.684E-01	1.685E-01	1.690E-01	1.688E-01	6.352E-06	1.660E-06
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.427E-01	1.428E-01	1.434E-01	1.435E-01	6.265E-06	1.409E-06

GROUND SURFACE CONCENTRATIONS, PCI/M2

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.015E+00	5.015E+00	5.015E+00	5.298E+00
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.678E+00	3.678E+00	3.678E+00	6.469E+00
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.819E+00	2.819E+00	2.819E+00	7.802E+00
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.302E+00	2.302E+00	2.302E+00	8.901E+00
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.430E+00	1.430E+00	1.430E+00	1.104E+01
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.982E-01	6.982E-01	6.982E-01	1.296E+01
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.982E-01	3.982E-01	3.982E-01	1.360E+01
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.727E-01	2.727E-01	2.727E-01	1.369E+01
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.046E-01	2.046E-01	2.046E-01	1.360E+01
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.622E-01	1.622E-01	1.622E-01	1.343E+01
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.335E-01	1.335E-01	1.335E-01	1.323E+01
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.131E-01	1.131E-01	1.131E-01	1.305E+01

TOTAL DEPOSITION RATES, PCI/M2-SEC

XRHO, KM	U-238	Th-230	Ra-226	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	7.630E-09
2.5	0.000E+00	0.000E+00	0.000E+00	9.316E-09
3.5	0.000E+00	0.000E+00	0.000E+00	1.124E-08
4.5	0.000E+00	0.000E+00	0.000E+00	1.282E-08
7.5	0.000E+00	0.000E+00	0.000E+00	1.590E-08
15.0	0.000E+00	0.000E+00	0.000E+00	1.867E-08
25.0	0.000E+00	0.000E+00	0.000E+00	1.958E-08
35.0	0.000E+00	0.000E+00	0.000E+00	1.972E-08
45.0	0.000E+00	0.000E+00	0.000E+00	1.958E-08
55.0	0.000E+00	0.000E+00	0.000E+00	1.934E-08
65.0	0.000E+00	0.000E+00	0.000E+00	1.906E-08
75.0	0.000E+00	0.000E+00	0.000E+00	1.879E-08

TIME STEP NUMBER 7, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS INHAL. EXPOSED ORGAN IS EFFECTIV

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.315E-06	5.753E-06	8.812E-06	1.176E-05	1.375E-05	1.595E-05	3.823E-05	6.683E-05
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.496E-06	6.322E-06	1.068E-05	1.601E-05	2.005E-05	2.430E-05	3.322E-05	6.927E-05
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.496E-06	7.324E-06	1.346E-05	1.934E-05	2.361E-05	2.817E-05	3.306E-05	3.507E-05
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.498E-06	8.883E-06	1.587E-05	2.360E-05	2.958E-05	3.598E-05	3.269E-05	2.589E-05
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.488E-06	9.475E-06	1.842E-05	2.807E-05	3.577E-05	4.684E-05	3.066E-05	3.334E-05
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.987E-07	7.693E-06	2.768E-04	5.621E-04	4.525E-05	5.745E-05	4.507E-05	3.743E-05
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.395E-07	6.500E-06	1.433E-03	1.955E-04	2.381E-05	2.748E-05	3.184E-05	3.618E-05
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.491E-06	7.231E-06	1.670E-05	1.757E-05	2.446E-05	2.869E-05	2.654E-05	2.488E-05
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.438E-06	7.394E-06	1.350E-05	2.049E-05	2.862E-05	2.332E-05	2.402E-05	1.408E-05
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.748E-06	6.639E-06	1.118E-05	1.605E-05	2.042E-05	2.030E-05	1.108E-05	1.126E-05
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.449E-06	5.905E-06	9.686E-06	1.317E-05	1.862E-05	3.205E-05	3.911E-05	2.752E-05
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.020E-06	6.020E-04	3.721E-04	1.929E-05	4.142E-05	4.651E-04	3.650E-04	5.904E-05
W	0.000E+00	0.000E+00	2.735E-07	0.000E+00	1.161E-06	5.908E-06	1.336E-05	3.508E-05	8.305E-05	2.128E-02	7.343E-03	3.439E-05
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.097E-06	5.411E-06	9.737E-06	2.094E-05	7.435E-05	9.759E-05	2.016E-04	2.540E-04
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.355E-06	6.753E-06	1.178E-05	1.706E-05	2.104E-05	2.534E-05	4.216E-05	8.899E-05
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.891E-05	1.037E-03	3.623E-03	1.153E-03	6.047E-04	2.247E-02	8.459E-03	1.009E-03

TOTAL DOSE COMMITMENT IS 7.418E-02 PERSON-REM/YR

TIME STEP NUMBER 7, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS INHAL. EXPOSED ORGAN IS BONE

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.067E-05	4.667E-05	7.145E-05	9.535E-05	1.114E-04	1.292E-04	3.095E-04	5.408E-04
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.214E-05	5.128E-05	8.661E-05	1.298E-04	1.624E-04	1.968E-04	2.689E-04	5.605E-04
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.214E-05	5.941E-05	1.091E-04	1.568E-04	1.913E-04	2.282E-04	2.676E-04	2.838E-04
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.216E-05	7.206E-05	1.287E-04	1.914E-04	2.397E-04	2.915E-04	2.648E-04	2.096E-04
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.208E-05	7.687E-05	1.494E-04	2.276E-04	2.899E-04	3.796E-04	2.484E-04	2.700E-04
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.105E-06	6.241E-05	2.245E-03	4.558E-03	3.668E-04	4.656E-04	3.651E-04	3.032E-04
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.624E-06	5.273E-05	1.162E-02	1.585E-03	1.930E-04	2.227E-04	2.580E-04	2.930E-04
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.210E-05	5.866E-05	1.355E-04	1.425E-04	1.983E-04	2.325E-04	2.150E-04	2.015E-04
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.167E-05	5.998E-05	1.095E-04	1.661E-04	2.319E-04	1.890E-04	1.946E-04	1.140E-04
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.418E-05	5.386E-05	9.065E-05	1.301E-04	1.655E-04	1.644E-04	8.977E-05	9.113E-05
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.175E-05	4.790E-05	7.854E-05	1.067E-04	1.509E-04	2.597E-04	3.168E-04	2.229E-04
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.276E-06	4.883E-03	3.017E-03	1.563E-04	3.357E-04	3.768E-03	2.956E-03	4.781E-04
W	0.000E+00	0.000E+00	2.219E-06	0.000E+00	9.420E-06	4.792E-05	1.083E-04	2.843E-04	6.730E-04	1.724E-01	5.946E-02	2.784E-04
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.897E-06	4.389E-05	7.896E-05	1.698E-04	6.027E-04	7.908E-04	1.633E-03	2.057E-03
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.099E-05	5.477E-05	9.553E-05	1.383E-04	1.705E-04	2.052E-04	3.413E-04	7.202E-04
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.346E-04	8.409E-03	2.938E-02	9.342E-03	4.898E-03	1.819E-01	6.847E-02	8.166E-03

TOTAL DOSE COMMITMENT IS 6.008E-01 PERSON-REM/YR

TIME STEP NUMBER 7, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS INHAL. EXPOSED ORGAN IS AVG.LUNG

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.533E-07	6.826E-07	1.070E-06	1.461E-06	1.747E-06	2.073E-06	5.081E-06	9.081E-06
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.739E-07	7.468E-07	1.292E-06	1.985E-06	2.547E-06	3.164E-06	4.429E-06	9.457E-06
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.734E-07	8.620E-07	1.621E-06	2.382E-06	2.972E-06	3.624E-06	4.344E-06	4.707E-06
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.733E-07	1.042E-06	1.900E-06	2.884E-06	3.687E-06	4.574E-06	4.236E-06	3.419E-06
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.718E-07	1.107E-06	2.192E-06	3.397E-06	4.398E-06	5.848E-06	3.885E-06	4.286E-06
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.152E-07	8.970E-07	3.289E-05	6.801E-05	5.570E-06	7.190E-06	5.733E-06	4.837E-06
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.083E-07	7.585E-07	1.703E-04	2.365E-05	2.928E-06	3.435E-06	4.044E-06	4.667E-06
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.723E-07	8.464E-07	1.993E-06	2.135E-06	3.024E-06	3.606E-06	3.390E-06	3.229E-06
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.666E-07	8.688E-07	1.618E-06	2.503E-06	3.558E-06	2.951E-06	3.091E-06	1.841E-06
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.029E-07	7.816E-07	1.342E-06	1.965E-06	2.548E-06	2.581E-06	1.436E-06	1.485E-06
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.688E-07	6.970E-07	1.164E-06	1.610E-06	2.316E-06	4.054E-06	5.029E-06	3.598E-06
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.190E-07	7.127E-05	4.488E-05	2.369E-06	5.178E-06	5.917E-05	4.723E-05	7.770E-06
W	0.000E+00	0.000E+00	3.167E-08	0.000E+00	1.353E-07	6.988E-07	1.611E-06	4.314E-06	1.041E-05	2.716E-03	9.545E-04	4.551E-06
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.277E-07	6.384E-07	1.167E-06	2.546E-06	9.170E-06	1.220E-05	2.555E-05	3.263E-05
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.580E-07	8.004E-07	1.428E-06	2.113E-06	2.661E-06	3.273E-06	5.560E-06	1.197E-05
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.373E-06	1.231E-04	4.407E-04	1.436E-04	7.719E-05	2.937E-03	1.132E-03	1.383E-04

TOTAL DOSE COMMITMENT IS 9.552E-03 PERSON-REM/YR

TIME STEP NUMBER 7, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS INHAL. EXPOSED ORGAN IS BRONCHI

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.882E-03	7.093E-03	6.301E-03	5.933E-03	5.333E-03	5.009E-03	1.006E-02	1.511E-02
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.645E-03	8.443E-03	7.751E-03	7.768E-03	7.254E-03	6.981E-03	7.883E-03	1.398E-02
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.534E-03	1.270E-02	1.216E-02	1.195E-02	1.106E-02	1.059E-02	1.036E-02	9.413E-03
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.114E-02	2.464E-02	2.400E-02	2.449E-02	2.329E-02	2.277E-02	1.728E-02	1.176E-02
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.041E-02	4.791E-02	4.760E-02	4.778E-02	4.489E-02	4.645E-02	2.511E-02	2.326E-02
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.736E-02	6.455E-02	7.091E-01	8.553E-01	4.891E-02	4.819E-02	3.092E-02	2.175E-02
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.702E-02	3.821E-02	3.393E+00	2.851E-01	2.493E-02	2.242E-02	2.128E-02	2.048E-02
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.440E-02	2.900E-02	3.551E-02	2.484E-02	2.577E-02	2.408E-02	1.853E-02	1.488E-02
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.042E-02	2.328E-02	2.303E-02	2.427E-02	2.597E-02	1.715E-02	1.486E-02	7.519E-03
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.026E-02	1.785E-02	1.650E-02	1.602E-02	1.535E-02	1.222E-02	5.568E-03	4.855E-03
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.428E-03	1.470E-02	1.391E-02	1.319E-02	1.428E-02	1.989E-02	2.039E-02	1.237E-02
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.057E-03	1.320E+00	4.753E-01	1.732E-02	2.866E-02	2.619E-01	1.733E-01	2.426E-02
W	0.000E+00	0.000E+00	4.549E-03	0.000E+00	6.776E-03	1.432E-02	1.759E-02	3.140E-02	5.615E-02	1.155E+01	3.327E+00	1.338E-02
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.955E-03	1.804E-02	1.850E-02	2.755E-02	7.456E-02	7.898E-02	1.367E-01	1.481E-01
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.314E-03	1.314E-02	1.253E-02	1.237E-02	1.153E-02	1.114E-02	1.547E-02	2.802E-02
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.127E-02	1.368E+00	2.643E+00	5.740E-01	2.270E-01	6.740E+00	2.106E+00	2.144E-01

TOTAL DOSE COMMITMENT IS 3.881E+01 PERSON-REM/YR

TIME STEP NUMBER 7, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS GROUND EXPOSED ORGAN IS EFFECTIV

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.099E-07	1.111E-06	1.184E-06	1.300E-06	1.338E-06	1.418E-06	3.178E-06	5.273E-06
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.059E-07	1.294E-06	1.448E-06	1.734E-06	1.891E-06	2.087E-06	2.663E-06	5.274E-06
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.174E-07	1.830E-06	2.096E-06	2.386E-06	2.513E-06	2.703E-06	2.936E-06	2.935E-06
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.330E-06	3.263E-06	3.567E-06	4.035E-06	4.217E-06	4.499E-06	3.701E-06	2.713E-06
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.849E-06	5.916E-06	6.375E-06	6.912E-06	6.995E-06	7.762E-06	4.481E-06	4.413E-06
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.924E-06	7.589E-06	9.510E-05	1.269E-04	7.956E-06	8.525E-06	5.907E-06	4.461E-06
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.912E-06	4.642E-06	4.608E-04	4.274E-05	4.095E-06	4.006E-06	4.109E-06	4.249E-06
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.698E-06	3.668E-06	4.915E-06	3.753E-06	4.225E-06	4.259E-06	3.515E-06	3.013E-06
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.250E-06	3.031E-06	3.330E-06	3.843E-06	4.470E-06	3.187E-06	2.964E-06	1.602E-06
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.252E-06	2.376E-06	2.466E-06	2.672E-06	2.828E-06	2.467E-06	1.222E-06	1.150E-06
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.174E-07	1.981E-06	2.094E-06	2.197E-06	2.611E-06	3.964E-06	4.395E-06	2.869E-06
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.268E-07	1.817E-04	7.372E-05	2.992E-06	5.457E-06	5.448E-05	3.910E-05	5.896E-06
W	0.000E+00	0.000E+00	5.184E-07	0.000E+00	8.285E-07	1.938E-06	2.705E-06	5.430E-06	1.079E-05	2.443E-03	7.684E-04	3.349E-06
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.580E-07	2.333E-06	2.615E-06	4.239E-06	1.242E-05	1.416E-05	2.624E-05	3.033E-05
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.865E-07	1.849E-06	2.049E-06	2.312E-06	2.429E-06	2.614E-06	4.000E-06	7.916E-06
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.188E-05	2.104E-04	4.928E-04	1.265E-04	5.797E-05	1.962E-03	6.894E-04	7.806E-05

TOTAL DOSE COMMITMENT IS 8.350E-03 PERSON-REM/YR

TIME STEP NUMBER 7, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS CLOUD EXPOSED ORGAN IS EFFECTIV

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.630E-05	5.706E-05	5.400E-05	5.181E-05	4.688E-05	4.415E-05	8.880E-05	1.334E-04
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.183E-05	6.769E-05	6.636E-05	6.778E-05	6.371E-05	6.149E-05	6.954E-05	1.234E-04
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.886E-05	9.456E-05	1.004E-04	1.022E-04	9.608E-05	9.269E-05	9.098E-05	8.287E-05
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.937E-05	1.499E-04	1.695E-04	1.861E-04	1.853E-04	1.871E-04	1.451E-04	1.003E-04
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.086E-05	2.310E-04	2.946E-04	3.429E-04	3.502E-04	3.800E-04	2.114E-04	1.992E-04
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.227E-05	2.378E-04	4.477E-03	6.390E-03	3.942E-04	4.039E-04	2.648E-04	1.886E-04
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.928E-05	1.733E-04	2.226E-02	2.166E-03	2.026E-04	1.886E-04	1.825E-04	1.776E-04
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.633E-05	1.517E-04	2.317E-04	1.842E-04	2.048E-04	1.991E-04	1.568E-04	1.278E-04
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.525E-05	1.344E-04	1.617E-04	1.875E-04	2.116E-04	1.442E-04	1.273E-04	6.514E-05
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.934E-05	1.130E-04	1.239E-04	1.299E-04	1.292E-04	1.050E-04	4.840E-05	4.248E-05
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.765E-05	9.821E-05	1.084E-04	1.094E-04	1.220E-04	1.726E-04	1.783E-04	1.086E-04
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.619E-05	9.119E-03	3.782E-03	1.457E-04	2.471E-04	2.285E-03	1.521E-03	2.136E-04
W	0.000E+00	0.000E+00	1.365E-05	0.000E+00	3.282E-05	9.635E-05	1.391E-04	2.639E-04	4.843E-04	1.008E-01	2.921E-02	1.179E-04
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.485E-05	1.122E-04	1.397E-04	2.255E-04	6.337E-04	6.839E-04	1.195E-03	1.301E-03
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.366E-05	9.144E-05	9.985E-05	1.039E-04	9.916E-05	9.700E-05	1.355E-04	2.463E-04
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.938E-04	1.065E-02	2.222E-02	4.959E-03	1.984E-03	5.922E-02	1.855E-02	1.891E-03

TOTAL DOSE COMMITMENT IS 3.207E-01 PERSON-REM/YR

TIME STEP NUMBER 7, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS VEG. ING EXPOSED ORGAN IS EFFECTIV

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

TOTAL DOSE COMMITMENT IS 0.000E+00 PERSON-REM/YR

WARNING--POPULATION FOOD INGESTION DOSES SHOWN
ABOVE HAVE NOT BEEN CORRECTED TO REFLECT POTENTIAL
FOOD EXPORT AND MAY EXCEED DOSES ACTUALLY RECEIVED
BY THE POPULATION OF THIS REGION. SEE SUMMARY
TABLE FOR THIS INFORMATION.

TIME STEP NUMBER 7, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS VEG. ING EXPOSED ORGAN IS BONE

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

TOTAL DOSE COMMITMENT IS 0.000E+00 PERSON-REM/YR

WARNING--POPULATION FOOD INGESTION DOSES SHOWN
ABOVE HAVE NOT BEEN CORRECTED TO REFLECT POTENTIAL
FOOD EXPORT AND MAY EXCEED DOSES ACTUALLY RECEIVED
BY THE POPULATION OF THIS REGION. SEE SUMMARY
TABLE FOR THIS INFORMATION.

TIME STEP NUMBER 7, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS MEAT ING EXPOSED ORGAN IS EFFECTIV

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

TOTAL DOSE COMMITMENT IS 0.000E+00 PERSON-REM/YR

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EXPOSURE PATHWAY IS MEAT ING EXPOSED ORGAN IS BONE

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

TOTAL DOSE COMMITMENT IS 0.000E+00 PERSON-REM/YR

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DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

TOTAL DOSE COMMITMENT IS 0.000E+00 PERSON-REM/YR

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DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

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SUMMARY PRINT OF POPULATION DOSES COMPUTED FOR TSTEP 7--DOSES SHOWN ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DOSES RECEIVED BY PEOPLE WITHIN 80 KILOMETERS

PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INHAL.	7.418E-02	6.008E-01	9.552E-03	4.506E-01	2.166E-01	3.881E+01
GROUND	8.350E-03	8.350E-03	8.350E-03	8.350E-03	8.350E-03	8.350E-03
CLOUD	3.207E-01	3.207E-01	3.207E-01	3.207E-01	3.207E-01	3.207E-01
VEG. ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MEAT ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MILK ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RNPLUS50	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOTALS	4.032E-01	9.299E-01	3.386E-01	7.797E-01	5.457E-01	3.913E+01

DOSES RECEIVED BY PEOPLE BEYOND 80 KILOMETERS

PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INHAL.	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GROUND	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CLOUD	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
VEG. ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MEAT ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MILK ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RNPLUS50	8.938E+00	1.219E+02	2.031E+00	8.938E+00	8.938E+00	5.688E+01
TOTALS	8.938E+00	1.219E+02	2.031E+00	8.938E+00	8.938E+00	5.688E+01

TOTAL DOSES COMPUTED OVER ALL POPULATIONS

PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INHAL.	7.418E-02	6.008E-01	9.552E-03	4.506E-01	2.166E-01	3.881E+01
GROUND	8.350E-03	8.350E-03	8.350E-03	8.350E-03	8.350E-03	8.350E-03
CLOUD	3.207E-01	3.207E-01	3.207E-01	3.207E-01	3.207E-01	3.207E-01
VEG. ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MEAT ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MILK ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RNPLUS50	8.938E+00	1.219E+02	2.031E+00	8.938E+00	8.938E+00	5.688E+01
TOTALS	9.341E+00	1.228E+02	2.370E+00	9.717E+00	9.483E+00	9.601E+01

TIME STEP NUMBER 7, DURATION IN YRS IS... 1.0

INDIVIDUAL RECEPTOR PARTICULATE CONCENTRATIONS

NO.	NAME	PTSZ	AIRBORNE CONCENTRATIONS, PCI/M3 U-238	Th-230	Ra-226	Pb-210	GROUND CONCENTRATIONS, PCI/M2 U-238	Th-230	Ra-226	Pb-210
1	Receptor 1	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1	Receptor 1	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1	Receptor 1	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1	Receptor 1	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2	Receptor 2	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2	Receptor 2	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2	Receptor 2	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2	Receptor 2	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
3	Receptor 3	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
3	Receptor 3	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
3	Receptor 3	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
3	Receptor 3	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
4	Receptor 4	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
4	Receptor 4	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
4	Receptor 4	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
4	Receptor 4	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
5	Receptor 5	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
5	Receptor 5	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
5	Receptor 5	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
5	Receptor 5	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
6	Receptor 6	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
6	Receptor 6	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
6	Receptor 6	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
6	Receptor 6	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
7	Receptor 7	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
7	Receptor 7	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
7	Receptor 7	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
7	Receptor 7	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

TIME STEP NUMBER 7, DURATION IN YRS IS... 1.0

INDIVIDUAL RECEPTOR RADON AND RADON DAUGHTER CONCENTRATIONS

	AIRBORNE CONCENTRATIONS, PCI/M3								GROUND CONCENTRATIONS, PCI/M2			
NO.	Rn-222	Po-218	Pb-214	Bi-214	Pb-210	Bi-210	Po-210	WL	Po-218	Pb-214	Bi-214	Pb-210
1	1.406E+01	1.158E+01	3.500E+00	1.512E+00	2.767E-06	1.103E-08	1.625E-12	3.531E-05	9.170E+00	9.170E+00	9.170E+00	1.293E+00
2	2.361E+00	2.353E+00	1.720E+00	1.306E+00	7.690E-06	5.738E-08	1.187E-11	1.601E-05	1.864E+00	1.864E+00	1.864E+00	4.546E+00
3	6.383E+00	5.648E+00	2.144E+00	9.414E-01	2.627E-06	1.651E-08	3.295E-12	2.020E-05	4.473E+00	4.473E+00	4.473E+00	1.016E+00
4	2.859E+00	2.687E+00	1.410E+00	8.801E-01	3.647E-06	2.869E-08	7.192E-12	1.320E-05	2.128E+00	2.128E+00	2.128E+00	2.216E+00
5	4.115E+00	4.007E+00	2.262E+00	1.472E+00	7.044E-06	6.156E-08	1.773E-11	2.109E-05	3.173E+00	3.173E+00	3.173E+00	3.825E+00
6	2.950E+00	2.831E+00	1.470E+00	9.004E-01	3.281E-06	2.065E-08	4.084E-12	1.373E-05	2.242E+00	2.242E+00	2.242E+00	2.002E+00
7	3.293E+00	3.245E+00	1.810E+00	1.118E+00	3.931E-06	2.668E-08	6.689E-12	1.669E-05	2.571E+00	2.571E+00	2.571E+00	1.981E+00

TIME STEP NUMBER 7, DURATION IN YRS IS... 1.0

NUMBER 1 NAME=Receptor 1 X= 1.7KM, Y= -0.5KM, Z= 0.0M, DIST= 1.8KM, IRTYPE= 1

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	1.08E+00	2.25E-02	2.11E-02	2.87E-02	2.40E-02	1.76E+01
CHILD	TOTALS	1.08E+00	2.35E-02	2.14E-02	2.48E-02	2.27E-02	1.76E+01
TEENAGE	TOTALS	1.08E+00	2.60E-02	2.17E-02	2.31E-02	2.22E-02	1.76E+01
ADULT	TOTALS	1.08E+00	2.58E-02	2.20E-02	2.32E-02	2.23E-02	1.76E+01

NUMBER 2 NAME=Receptor 2 X= 9.6KM, Y= 3.4KM, Z= 0.0M, DIST= 10.1KM, IRTYPE= 1

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	1.94E-01	1.94E-02	1.56E-02	3.67E-02	2.36E-02	2.97E+00
CHILD	TOTALS	1.93E-01	2.22E-02	1.65E-02	2.59E-02	2.01E-02	2.97E+00
TEENAGE	TOTALS	1.94E-01	2.93E-02	1.72E-02	2.12E-02	1.87E-02	2.97E+00
ADULT	TOTALS	1.94E-01	2.88E-02	1.80E-02	2.13E-02	1.90E-02	2.97E+00

TIME STEP NUMBER 7, DURATION IN YRS IS... 1.0

NUMBER 3 NAME=Receptor 3 X= -0.1KM, Y= 0.8KM, Z= 0.0M, DIST= 0.8KM, IRTYPE= 1

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	4.92E-01	1.42E-02	1.29E-02	2.01E-02	1.56E-02	7.99E+00
CHILD	TOTALS	4.92E-01	1.51E-02	1.32E-02	1.64E-02	1.44E-02	7.99E+00
TEENAGE	TOTALS	4.92E-01	1.76E-02	1.34E-02	1.48E-02	1.40E-02	7.99E+00
ADULT	TOTALS	4.92E-01	1.74E-02	1.37E-02	1.49E-02	1.41E-02	7.99E+00

NUMBER 4 NAME=Receptor 4 X= 9.8KM, Y= -7.4KM, Z= 0.0M, DIST= 12.3KM, IRTYPE= 1

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	2.26E-01	1.27E-02	1.09E-02	2.10E-02	1.47E-02	3.58E+00
CHILD	TOTALS	2.26E-01	1.41E-02	1.14E-02	1.58E-02	1.31E-02	3.58E+00
TEENAGE	TOTALS	2.26E-01	1.74E-02	1.17E-02	1.36E-02	1.24E-02	3.58E+00
ADULT	TOTALS	2.26E-01	1.72E-02	1.21E-02	1.37E-02	1.26E-02	3.58E+00

TIME STEP NUMBER 7, DURATION IN YRS IS... 1.0

NUMBER 5 NAME=Receptor 5 X= 13.4KM, Y= -5.3KM, Z= 0.0M, DIST= 14.4KM, IRTYPE= 1

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	3.28E-01	2.16E-02	1.82E-02	3.75E-02	2.55E-02	5.16E+00
CHILD	TOTALS	3.27E-01	2.42E-02	1.90E-02	2.76E-02	2.22E-02	5.16E+00
TEENAGE	TOTALS	3.28E-01	3.07E-02	1.96E-02	2.33E-02	2.10E-02	5.16E+00
ADULT	TOTALS	3.28E-01	3.02E-02	2.03E-02	2.34E-02	2.13E-02	5.16E+00

NUMBER 6 NAME=Receptor 6 X= 7.6KM, Y= -6.7KM, Z= 0.0M, DIST= 10.1KM, IRTYPE= 1

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	2.33E-01	1.28E-02	1.12E-02	2.02E-02	1.46E-02	3.70E+00
CHILD	TOTALS	2.33E-01	1.40E-02	1.16E-02	1.56E-02	1.31E-02	3.70E+00
TEENAGE	TOTALS	2.33E-01	1.71E-02	1.19E-02	1.36E-02	1.25E-02	3.70E+00
ADULT	TOTALS	2.33E-01	1.69E-02	1.22E-02	1.37E-02	1.27E-02	3.70E+00

TIME STEP NUMBER 7, DURATION IN YRS IS... 1.0

NUMBER 7 NAME=Receptor 7 X= -4.1KM, Y= 0.9KM, Z= 0.0M, DIST= 4.2KM, IRTYPE= 1

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	2.61E-01	1.58E-02	1.39E-02	2.47E-02	1.79E-02	4.13E+00
CHILD	TOTALS	2.61E-01	1.72E-02	1.43E-02	1.91E-02	1.62E-02	4.13E+00
TEENAGE	TOTALS	2.61E-01	2.08E-02	1.47E-02	1.67E-02	1.55E-02	4.13E+00
ADULT	TOTALS	2.61E-01	2.06E-02	1.51E-02	1.68E-02	1.56E-02	4.13E+00

TIME STEP NUMBER 8, DURATION IN YRS IS... 1.0

CONCENTRATION DATA FOR THE N DIRECTION, THETA EQUALS 0.0 DEGREES

TOTAL AIR CONCENTRATIONS, PCI/M3, AND WL

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210	WL
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.231E+00	4.009E+00	1.935E+00	1.006E+00	2.972E-06	1.770E-05
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.881E+00	2.834E+00	1.752E+00	1.113E+00	3.674E-06	1.595E-05
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.061E+00	2.054E+00	1.482E+00	1.076E+00	4.303E-06	1.365E-05
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.693E+00	1.691E+00	1.312E+00	1.023E+00	4.889E-06	1.221E-05
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.707E-01	9.709E-01	8.511E-01	7.379E-01	5.712E-06	8.067E-06
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.084E-01	4.086E-01	3.941E-01	3.727E-01	5.738E-06	3.809E-06
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.136E-01	2.137E-01	2.121E-01	2.085E-01	5.150E-06	2.073E-06
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.379E-01	1.379E-01	1.380E-01	1.373E-01	4.700E-06	1.354E-06
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.891E-02	9.897E-02	9.926E-02	9.923E-02	4.377E-06	9.753E-07
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.570E-02	7.574E-02	7.604E-02	7.617E-02	4.131E-06	7.477E-07
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.050E-02	6.053E-02	6.080E-02	6.096E-02	3.935E-06	5.980E-07
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.006E-02	5.009E-02	5.032E-02	5.048E-02	3.788E-06	4.950E-07

GROUND SURFACE CONCENTRATIONS, PCI/M2

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.175E+00	3.175E+00	3.175E+00	6.191E+00
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.245E+00	2.245E+00	2.245E+00	7.654E+00
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.627E+00	1.627E+00	1.627E+00	8.962E+00
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.340E+00	1.340E+00	1.340E+00	1.018E+01
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.690E-01	7.690E-01	7.690E-01	1.190E+01
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.237E-01	3.237E-01	3.237E-01	1.195E+01
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.693E-01	1.693E-01	1.693E-01	1.073E+01
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.092E-01	1.092E-01	1.092E-01	9.789E+00
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.838E-02	7.838E-02	7.838E-02	9.117E+00
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.999E-02	5.999E-02	5.999E-02	8.605E+00
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.794E-02	4.794E-02	4.794E-02	8.197E+00
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.967E-02	3.967E-02	3.967E-02	7.890E+00

TOTAL DEPOSITION RATES, PCI/M2-SEC

XRHO, KM	U-238	Th-230	Ra-226	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	8.916E-09
2.5	0.000E+00	0.000E+00	0.000E+00	1.102E-08
3.5	0.000E+00	0.000E+00	0.000E+00	1.291E-08
4.5	0.000E+00	0.000E+00	0.000E+00	1.467E-08
7.5	0.000E+00	0.000E+00	0.000E+00	1.714E-08
15.0	0.000E+00	0.000E+00	0.000E+00	1.721E-08
25.0	0.000E+00	0.000E+00	0.000E+00	1.545E-08
35.0	0.000E+00	0.000E+00	0.000E+00	1.410E-08
45.0	0.000E+00	0.000E+00	0.000E+00	1.313E-08
55.0	0.000E+00	0.000E+00	0.000E+00	1.239E-08
65.0	0.000E+00	0.000E+00	0.000E+00	1.180E-08
75.0	0.000E+00	0.000E+00	0.000E+00	1.136E-08

TIME STEP NUMBER 8, DURATION IN YRS IS... 1.0

CONCENTRATION DATA FOR THE E DIRECTION, THETA EQUALS 90.0 DEGREES

TOTAL AIR CONCENTRATIONS, PCI/M3, AND WL

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210	WL
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.120E+01	9.232E+00	2.898E+00	1.291E+00	2.756E-06	2.902E-05
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.603E+00	7.816E+00	3.140E+00	1.665E+00	3.581E-06	3.018E-05
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.167E+00	6.806E+00	3.203E+00	1.863E+00	4.435E-06	3.020E-05
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.289E+00	6.069E+00	3.049E+00	1.843E+00	4.945E-06	2.858E-05
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.565E+01	1.077E+01	3.340E+00	1.781E+00	6.097E-06	3.468E-05
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.733E+00	2.725E+00	1.959E+00	1.432E+00	9.148E-06	1.808E-05
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.607E+00	1.608E+00	1.351E+00	1.099E+00	1.057E-05	1.260E-05
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.108E+00	1.109E+00	1.012E+00	8.897E-01	1.107E-05	9.591E-06
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.317E-01	8.322E-01	7.923E-01	7.316E-01	1.128E-05	7.603E-06
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.612E-01	6.616E-01	6.442E-01	6.130E-01	1.135E-05	6.234E-06
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.464E-01	5.467E-01	5.390E-01	5.227E-01	1.136E-05	5.246E-06
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.648E-01	4.650E-01	4.618E-01	4.532E-01	1.135E-05	4.511E-06

GROUND SURFACE CONCENTRATIONS, PCI/M2

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.312E+00	7.312E+00	7.312E+00	5.741E+00
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.191E+00	6.191E+00	6.191E+00	7.459E+00
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.391E+00	5.391E+00	5.391E+00	9.238E+00
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.807E+00	4.807E+00	4.807E+00	1.030E+01
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.534E+00	8.534E+00	8.534E+00	1.270E+01
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.158E+00	2.158E+00	2.158E+00	1.906E+01
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.273E+00	1.273E+00	1.273E+00	2.201E+01
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.781E-01	8.781E-01	8.781E-01	2.306E+01
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.591E-01	6.591E-01	6.591E-01	2.349E+01
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.240E-01	5.240E-01	5.240E-01	2.365E+01
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.330E-01	4.330E-01	4.330E-01	2.366E+01
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.683E-01	3.683E-01	3.683E-01	2.364E+01

TOTAL DEPOSITION RATES, PCI/M2-SEC

XRHO, KM	U-238	Th-230	Ra-226	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	8.269E-09
2.5	0.000E+00	0.000E+00	0.000E+00	1.074E-08
3.5	0.000E+00	0.000E+00	0.000E+00	1.330E-08
4.5	0.000E+00	0.000E+00	0.000E+00	1.484E-08
7.5	0.000E+00	0.000E+00	0.000E+00	1.829E-08
15.0	0.000E+00	0.000E+00	0.000E+00	2.744E-08
25.0	0.000E+00	0.000E+00	0.000E+00	3.170E-08
35.0	0.000E+00	0.000E+00	0.000E+00	3.321E-08
45.0	0.000E+00	0.000E+00	0.000E+00	3.383E-08
55.0	0.000E+00	0.000E+00	0.000E+00	3.406E-08
65.0	0.000E+00	0.000E+00	0.000E+00	3.408E-08
75.0	0.000E+00	0.000E+00	0.000E+00	3.404E-08

TIME STEP NUMBER 8, DURATION IN YRS IS... 1.0

CONCENTRATION DATA FOR THE ESE DIRECTION, THETA EQUALS 112.5 DEGREES

TOTAL AIR CONCENTRATIONS, PCI/M3, AND WL

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210	WL
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.004E+01	8.280E+00	2.563E+00	1.122E+00	2.378E-06	2.571E-05
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.929E+00	7.207E+00	2.727E+00	1.363E+00	2.785E-06	2.633E-05
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.037E+00	7.208E+00	2.786E+00	1.457E+00	3.211E-06	2.698E-05
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.091E+01	1.684E+01	3.312E+00	1.469E+00	3.498E-06	3.961E-05
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.670E+00	8.827E+00	3.305E+00	1.550E+00	4.081E-06	3.163E-05
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.324E+00	3.263E+00	1.938E+00	1.290E+00	6.476E-06	1.800E-05
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.095E+00	1.095E+00	9.287E-01	7.622E-01	7.164E-06	8.680E-06
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.538E-01	6.541E-01	6.089E-01	5.481E-01	7.256E-06	5.805E-06
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.611E-01	4.614E-01	4.459E-01	4.203E-01	7.229E-06	4.303E-06
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.544E-01	3.546E-01	3.488E-01	3.373E-01	7.173E-06	3.392E-06
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.865E-01	2.867E-01	2.846E-01	2.792E-01	7.099E-06	2.780E-06
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.405E-01	2.406E-01	2.401E-01	2.375E-01	7.037E-06	2.351E-06

GROUND SURFACE CONCENTRATIONS, PCI/M2

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.558E+00	6.558E+00	6.558E+00	4.954E+00
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.708E+00	5.708E+00	5.708E+00	5.801E+00
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.709E+00	5.709E+00	5.709E+00	6.688E+00
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.334E+01	1.334E+01	1.334E+01	7.287E+00
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.991E+00	6.991E+00	6.991E+00	8.501E+00
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.584E+00	2.584E+00	2.584E+00	1.349E+01
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.673E-01	8.673E-01	8.673E-01	1.492E+01
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.181E-01	5.181E-01	5.181E-01	1.511E+01
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.654E-01	3.654E-01	3.654E-01	1.506E+01
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.809E-01	2.809E-01	2.809E-01	1.494E+01
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.271E-01	2.271E-01	2.271E-01	1.479E+01
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.906E-01	1.906E-01	1.906E-01	1.466E+01

TOTAL DEPOSITION RATES, PCI/M2-SEC

XRHO, KM	U-238	Th-230	Ra-226	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	7.134E-09
2.5	0.000E+00	0.000E+00	0.000E+00	8.355E-09
3.5	0.000E+00	0.000E+00	0.000E+00	9.632E-09
4.5	0.000E+00	0.000E+00	0.000E+00	1.049E-08
7.5	0.000E+00	0.000E+00	0.000E+00	1.224E-08
15.0	0.000E+00	0.000E+00	0.000E+00	1.943E-08
25.0	0.000E+00	0.000E+00	0.000E+00	2.149E-08
35.0	0.000E+00	0.000E+00	0.000E+00	2.177E-08
45.0	0.000E+00	0.000E+00	0.000E+00	2.169E-08
55.0	0.000E+00	0.000E+00	0.000E+00	2.152E-08
65.0	0.000E+00	0.000E+00	0.000E+00	2.130E-08
75.0	0.000E+00	0.000E+00	0.000E+00	2.111E-08

TIME STEP NUMBER 8, DURATION IN YRS IS... 1.0

CONCENTRATION DATA FOR THE S DIRECTION, THETA EQUALS 180.0 DEGREES

TOTAL AIR CONCENTRATIONS, PCI/M3, AND WL

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210	WL
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.369E+00	4.641E+00	1.764E+00	8.740E-01	2.232E-06	1.698E-05
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.941E+00	3.684E+00	1.738E+00	9.982E-01	2.709E-06	1.633E-05
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.980E+00	2.881E+00	1.579E+00	1.009E+00	3.214E-06	1.473E-05
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.465E+00	2.417E+00	1.430E+00	9.584E-01	3.484E-06	1.331E-05
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.505E+00	1.498E+00	1.009E+00	7.156E-01	3.610E-06	9.328E-06
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.389E-01	7.390E-01	5.991E-01	4.729E-01	4.027E-06	5.563E-06
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.449E-01	4.452E-01	4.024E-01	3.507E-01	4.473E-06	3.807E-06
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.132E-01	3.133E-01	2.971E-01	2.733E-01	4.530E-06	2.848E-06
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.390E-01	2.391E-01	2.325E-01	2.209E-01	4.506E-06	2.249E-06
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.913E-01	1.914E-01	1.886E-01	1.829E-01	4.449E-06	1.836E-06
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.585E-01	1.586E-01	1.575E-01	1.546E-01	4.381E-06	1.539E-06
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.350E-01	1.351E-01	1.348E-01	1.334E-01	4.319E-06	1.320E-06

GROUND SURFACE CONCENTRATIONS, PCI/M2

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.676E+00	3.676E+00	3.676E+00	4.649E+00
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.918E+00	2.918E+00	2.918E+00	5.644E+00
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.282E+00	2.282E+00	2.282E+00	6.695E+00
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.915E+00	1.915E+00	1.915E+00	7.257E+00
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.187E+00	1.187E+00	1.187E+00	7.519E+00
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.854E-01	5.854E-01	5.854E-01	8.387E+00
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.526E-01	3.526E-01	3.526E-01	9.317E+00
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.482E-01	2.482E-01	2.482E-01	9.435E+00
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.894E-01	1.894E-01	1.894E-01	9.385E+00
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.516E-01	1.516E-01	1.516E-01	9.267E+00
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.256E-01	1.256E-01	1.256E-01	9.125E+00
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.070E-01	1.070E-01	1.070E-01	8.996E+00

TOTAL DEPOSITION RATES, PCI/M2-SEC

XRHO, KM	U-238	Th-230	Ra-226	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	6.696E-09
2.5	0.000E+00	0.000E+00	0.000E+00	8.128E-09
3.5	0.000E+00	0.000E+00	0.000E+00	9.642E-09
4.5	0.000E+00	0.000E+00	0.000E+00	1.045E-08
7.5	0.000E+00	0.000E+00	0.000E+00	1.083E-08
15.0	0.000E+00	0.000E+00	0.000E+00	1.208E-08
25.0	0.000E+00	0.000E+00	0.000E+00	1.342E-08
35.0	0.000E+00	0.000E+00	0.000E+00	1.359E-08
45.0	0.000E+00	0.000E+00	0.000E+00	1.352E-08
55.0	0.000E+00	0.000E+00	0.000E+00	1.335E-08
65.0	0.000E+00	0.000E+00	0.000E+00	1.314E-08
75.0	0.000E+00	0.000E+00	0.000E+00	1.296E-08

TIME STEP NUMBER 8, DURATION IN YRS IS... 1.0

CONCENTRATION DATA FOR THE W DIRECTION, THETA EQUALS 270.0 DEGREES

TOTAL AIR CONCENTRATIONS, PCI/M3, AND WL

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210	WL
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.740E+00	5.047E+00	1.810E+00	8.619E-01	2.441E-06	1.759E-05
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.180E+00	3.965E+00	1.808E+00	9.965E-01	2.921E-06	1.697E-05
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.201E+00	3.132E+00	1.690E+00	1.034E+00	3.494E-06	1.565E-05
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.627E+00	2.599E+00	1.562E+00	1.018E+00	3.970E-06	1.439E-05
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.642E+00	1.641E+00	1.198E+00	8.719E-01	4.906E-06	1.101E-05
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.101E-01	8.105E-01	7.180E-01	6.097E-01	5.755E-06	6.749E-06
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.636E-01	4.638E-01	4.450E-01	4.149E-01	6.037E-06	4.282E-06
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.172E-01	3.173E-01	3.128E-01	3.031E-01	6.071E-06	3.043E-06
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.377E-01	2.379E-01	2.370E-01	2.337E-01	6.023E-06	2.318E-06
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.884E-01	1.885E-01	1.886E-01	1.876E-01	5.944E-06	1.850E-06
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.549E-01	1.550E-01	1.555E-01	1.553E-01	5.854E-06	1.527E-06
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.313E-01	1.313E-01	1.319E-01	1.320E-01	5.772E-06	1.296E-06

GROUND SURFACE CONCENTRATIONS, PCI/M2

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.997E+00	3.997E+00	3.997E+00	5.084E+00
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.141E+00	3.141E+00	3.141E+00	6.085E+00
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.481E+00	2.481E+00	2.481E+00	7.278E+00
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.059E+00	2.059E+00	2.059E+00	8.270E+00
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.300E+00	1.300E+00	1.300E+00	1.022E+01
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.419E-01	6.419E-01	6.419E-01	1.199E+01
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.674E-01	3.674E-01	3.674E-01	1.257E+01
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.513E-01	2.513E-01	2.513E-01	1.265E+01
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.884E-01	1.884E-01	1.884E-01	1.255E+01
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.493E-01	1.493E-01	1.493E-01	1.238E+01
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.228E-01	1.228E-01	1.228E-01	1.219E+01
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.040E-01	1.040E-01	1.040E-01	1.202E+01

TOTAL DEPOSITION RATES, PCI/M2-SEC

XRHO, KM	U-238	Th-230	Ra-226	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	7.322E-09
2.5	0.000E+00	0.000E+00	0.000E+00	8.763E-09
3.5	0.000E+00	0.000E+00	0.000E+00	1.048E-08
4.5	0.000E+00	0.000E+00	0.000E+00	1.191E-08
7.5	0.000E+00	0.000E+00	0.000E+00	1.472E-08
15.0	0.000E+00	0.000E+00	0.000E+00	1.726E-08
25.0	0.000E+00	0.000E+00	0.000E+00	1.811E-08
35.0	0.000E+00	0.000E+00	0.000E+00	1.821E-08
45.0	0.000E+00	0.000E+00	0.000E+00	1.807E-08
55.0	0.000E+00	0.000E+00	0.000E+00	1.783E-08
65.0	0.000E+00	0.000E+00	0.000E+00	1.756E-08
75.0	0.000E+00	0.000E+00	0.000E+00	1.732E-08

TIME STEP NUMBER 8, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS INHAL. EXPOSED ORGAN IS EFFECTIV

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.251E-06	5.449E-06	8.279E-06	1.099E-05	1.280E-05	1.481E-05	3.542E-05	6.185E-05
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.382E-06	5.758E-06	9.715E-06	1.462E-05	1.835E-05	2.227E-05	3.046E-05	6.355E-05
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.376E-06	6.737E-06	1.245E-05	1.788E-05	2.180E-05	2.599E-05	3.048E-05	3.232E-05
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.360E-06	8.174E-06	1.461E-05	2.174E-05	2.724E-05	3.313E-05	3.009E-05	2.383E-05
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.336E-06	8.685E-06	1.698E-05	2.588E-05	3.296E-05	4.316E-05	2.824E-05	3.071E-05
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.939E-07	7.093E-06	2.559E-04	5.191E-04	4.174E-05	5.297E-05	4.153E-05	3.449E-05
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.740E-07	6.041E-06	1.327E-03	1.807E-04	2.197E-05	2.533E-05	2.933E-05	3.331E-05
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.380E-06	6.742E-06	1.556E-05	1.631E-05	2.266E-05	2.653E-05	2.452E-05	2.297E-05
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.318E-06	6.764E-06	1.242E-05	1.887E-05	2.635E-05	2.147E-05	2.211E-05	1.296E-05
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.625E-06	6.089E-06	1.023E-05	1.472E-05	1.875E-05	1.864E-05	1.018E-05	1.034E-05
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.379E-06	5.552E-06	9.047E-06	1.225E-05	1.728E-05	2.968E-05	3.616E-05	2.543E-05
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.607E-07	5.662E-04	3.486E-04	1.800E-05	3.853E-05	4.317E-04	3.382E-04	5.464E-05
W	0.000E+00	0.000E+00	2.551E-07	0.000E+00	1.075E-06	5.465E-06	1.235E-05	3.239E-05	7.663E-05	1.962E-02	6.767E-03	3.168E-05
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.029E-06	5.050E-06	9.036E-06	1.937E-05	6.866E-05	9.001E-05	1.858E-04	2.340E-04
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.252E-06	6.233E-06	1.086E-05	1.572E-05	1.937E-05	2.332E-05	3.879E-05	8.187E-05
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.663E-05	9.568E-04	3.344E-03	1.064E-03	5.576E-04	2.071E-02	7.793E-03	9.297E-04

TOTAL DOSE COMMITMENT IS 6.841E-02 PERSON-REM/YR

TIME STEP NUMBER 8, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS INHAL. EXPOSED ORGAN IS BONE

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.015E-05	4.420E-05	6.713E-05	8.910E-05	1.037E-04	1.199E-04	2.868E-04	5.005E-04
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.121E-05	4.671E-05	7.878E-05	1.185E-04	1.486E-04	1.803E-04	2.465E-04	5.142E-04
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.116E-05	5.466E-05	1.010E-04	1.449E-04	1.767E-04	2.105E-04	2.468E-04	2.616E-04
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.103E-05	6.631E-05	1.185E-04	1.763E-04	2.208E-04	2.684E-04	2.437E-04	1.930E-04
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.084E-05	7.046E-05	1.377E-04	2.099E-04	2.672E-04	3.498E-04	2.288E-04	2.487E-04
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.254E-06	5.755E-05	2.076E-03	4.209E-03	3.384E-04	4.292E-04	3.365E-04	2.793E-04
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.093E-06	4.901E-05	1.076E-02	1.465E-03	1.781E-04	2.053E-04	2.376E-04	2.698E-04
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.120E-05	5.469E-05	1.262E-04	1.323E-04	1.836E-04	2.150E-04	1.986E-04	1.860E-04
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.069E-05	5.487E-05	1.007E-04	1.530E-04	2.136E-04	1.740E-04	1.791E-04	1.049E-04
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.319E-05	4.940E-05	8.300E-05	1.193E-04	1.519E-04	1.510E-04	8.248E-05	8.375E-05
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.119E-05	4.503E-05	7.337E-05	9.932E-05	1.400E-04	2.405E-04	2.929E-04	2.059E-04
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.794E-06	4.592E-03	2.827E-03	1.459E-04	3.123E-04	3.497E-03	2.739E-03	4.424E-04
W	0.000E+00	0.000E+00	2.070E-06	0.000E+00	8.720E-06	4.433E-05	1.001E-04	2.626E-04	6.210E-04	1.589E-01	5.480E-02	2.565E-04
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.345E-06	4.096E-05	7.328E-05	1.571E-04	5.565E-04	7.295E-04	1.505E-03	1.896E-03
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.016E-05	5.056E-05	8.809E-05	1.274E-04	1.570E-04	1.889E-04	3.141E-04	6.626E-04
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.160E-04	7.760E-03	2.712E-02	8.619E-03	4.517E-03	1.677E-01	6.308E-02	7.522E-03

TOTAL DOSE COMMITMENT IS 5.541E-01 PERSON-REM/YR

TIME STEP NUMBER 8, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS INHAL. EXPOSED ORGAN IS AVG.LUNG

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.460E-07	6.467E-07	1.006E-06	1.366E-06	1.627E-06	1.925E-06	4.710E-06	8.406E-06
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.607E-07	6.802E-07	1.175E-06	1.813E-06	2.331E-06	2.899E-06	4.060E-06	8.675E-06
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.595E-07	7.929E-07	1.500E-06	2.201E-06	2.744E-06	3.343E-06	4.005E-06	4.338E-06
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.572E-07	9.583E-07	1.749E-06	2.656E-06	3.395E-06	4.210E-06	3.898E-06	3.146E-06
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.541E-07	1.014E-06	2.020E-06	3.131E-06	4.052E-06	5.386E-06	3.578E-06	3.946E-06
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.031E-07	8.267E-07	3.039E-05	6.277E-05	5.135E-06	6.625E-06	5.280E-06	4.455E-06
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.008E-07	7.047E-07	1.576E-04	2.185E-05	2.701E-06	3.165E-06	3.724E-06	4.295E-06
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.594E-07	7.889E-07	1.856E-06	1.981E-06	2.800E-06	3.334E-06	3.130E-06	2.979E-06
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.526E-07	7.947E-07	1.488E-06	2.304E-06	3.276E-06	2.716E-06	2.845E-06	1.695E-06
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.888E-07	7.169E-07	1.229E-06	1.802E-06	2.339E-06	2.371E-06	1.319E-06	1.364E-06
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.607E-07	6.555E-07	1.088E-06	1.498E-06	2.150E-06	3.755E-06	4.652E-06	3.324E-06
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.121E-07	6.706E-05	4.207E-05	2.212E-06	4.819E-06	5.494E-05	4.378E-05	7.194E-06
W	0.000E+00	0.000E+00	2.957E-08	0.000E+00	1.253E-07	6.467E-07	1.491E-06	3.985E-06	9.606E-06	2.505E-03	8.800E-04	4.195E-06
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.199E-07	5.961E-07	1.083E-06	2.357E-06	8.471E-06	1.126E-05	2.357E-05	3.008E-05
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.460E-07	7.391E-07	1.317E-06	1.948E-06	2.452E-06	3.014E-06	5.118E-06	1.102E-05
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.108E-06	1.136E-04	4.069E-04	1.326E-04	7.120E-05	2.708E-03	1.043E-03	1.274E-04

TOTAL DOSE COMMITMENT IS 8.812E-03 PERSON-REM/YR

TIME STEP NUMBER 8, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS INHAL. EXPOSED ORGAN IS BRONCHI

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.640E-03	6.637E-03	5.874E-03	5.514E-03	4.946E-03	4.637E-03	9.302E-03	1.395E-02
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.278E-03	7.740E-03	7.098E-03	7.129E-03	6.663E-03	6.414E-03	7.243E-03	1.285E-02
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.010E-03	1.170E-02	1.124E-02	1.104E-02	1.021E-02	9.772E-03	9.545E-03	8.672E-03
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.017E-02	2.268E-02	2.212E-02	2.259E-02	2.148E-02	2.099E-02	1.592E-02	1.083E-02
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.867E-02	4.441E-02	4.420E-02	4.432E-02	4.159E-02	4.298E-02	2.322E-02	2.150E-02
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.626E-02	6.233E-02	6.691E-01	8.001E-01	4.553E-02	4.474E-02	2.865E-02	2.014E-02
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.634E-02	3.653E-02	3.192E+00	2.665E-01	2.320E-02	2.081E-02	1.971E-02	1.894E-02
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.335E-02	2.724E-02	3.329E-02	2.318E-02	2.398E-02	2.235E-02	1.717E-02	1.377E-02
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.409E-03	2.124E-02	2.113E-02	2.231E-02	2.390E-02	1.578E-02	1.367E-02	6.920E-03
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.368E-03	1.636E-02	1.514E-02	1.473E-02	1.411E-02	1.124E-02	5.121E-03	4.465E-03
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.845E-03	1.361E-02	1.289E-02	1.220E-02	1.320E-02	1.837E-02	1.880E-02	1.140E-02
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.635E-03	1.223E+00	4.414E-01	1.606E-02	2.653E-02	2.421E-01	1.600E-01	2.238E-02
W	0.000E+00	0.000E+00	4.001E-03	0.000E+00	6.159E-03	1.316E-02	1.622E-02	2.894E-02	5.171E-02	1.063E+01	3.060E+00	1.231E-02
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.181E-03	1.643E-02	1.690E-02	2.521E-02	6.830E-02	7.241E-02	1.254E-01	1.360E-01
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.822E-03	1.213E-02	1.156E-02	1.139E-02	1.061E-02	1.025E-02	1.421E-02	2.574E-02
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.415E-02	1.267E+00	2.448E+00	5.312E-01	2.099E-01	6.225E+00	1.943E+00	1.977E-01

TOTAL DOSE COMMITMENT IS 3.590E+01 PERSON-REM/YR

TIME STEP NUMBER 8, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS GROUND EXPOSED ORGAN IS EFFECTIV

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.791E-07	1.043E-06	1.107E-06	1.211E-06	1.243E-06	1.315E-06	2.942E-06	4.876E-06
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.582E-07	1.184E-06	1.323E-06	1.588E-06	1.734E-06	1.914E-06	2.444E-06	4.841E-06
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.516E-07	1.685E-06	1.938E-06	2.205E-06	2.320E-06	2.493E-06	2.706E-06	2.705E-06
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.214E-06	3.004E-06	3.286E-06	3.720E-06	3.887E-06	4.145E-06	3.409E-06	2.498E-06
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.646E-06	5.477E-06	5.914E-06	6.403E-06	6.471E-06	7.172E-06	4.138E-06	4.073E-06
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.796E-06	7.306E-06	8.946E-05	1.184E-04	7.387E-06	7.895E-06	5.462E-06	4.121E-06
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.832E-06	4.426E-06	4.324E-04	3.984E-05	3.801E-06	3.709E-06	3.797E-06	3.922E-06
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.574E-06	3.443E-06	4.603E-06	3.497E-06	3.925E-06	3.948E-06	3.253E-06	2.785E-06
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.131E-06	2.767E-06	3.057E-06	3.535E-06	4.114E-06	2.934E-06	2.728E-06	1.475E-06
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.145E-06	2.179E-06	2.262E-06	2.454E-06	2.599E-06	2.268E-06	1.123E-06	1.057E-06
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.477E-07	1.838E-06	1.943E-06	2.037E-06	2.417E-06	3.664E-06	4.059E-06	2.648E-06
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.758E-07	1.688E-04	6.862E-05	2.780E-06	5.062E-06	5.045E-05	3.616E-05	5.449E-06
W	0.000E+00	0.000E+00	4.570E-07	0.000E+00	7.541E-07	1.783E-06	2.498E-06	5.008E-06	9.947E-06	2.250E-03	7.075E-04	3.083E-06
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.669E-07	2.131E-06	2.398E-06	3.891E-06	1.140E-05	1.301E-05	2.412E-05	2.788E-05
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.253E-07	1.707E-06	1.889E-06	2.130E-06	2.235E-06	2.405E-06	3.678E-06	7.279E-06
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.095E-05	1.946E-04	4.559E-04	1.169E-04	5.352E-05	1.809E-03	6.355E-04	7.193E-05

TOTAL DOSE COMMITMENT IS 7.713E-03 PERSON-REM/YR

TIME STEP NUMBER 8, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS CLOUD EXPOSED ORGAN IS EFFECTIV

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.471E-05	5.344E-05	5.034E-05	4.815E-05	4.347E-05	4.086E-05	8.208E-05	1.232E-04
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.920E-05	6.196E-05	6.075E-05	6.220E-05	5.852E-05	5.650E-05	6.389E-05	1.134E-04
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.562E-05	8.698E-05	9.270E-05	9.438E-05	8.867E-05	8.548E-05	8.385E-05	7.635E-05
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.508E-05	1.385E-04	1.565E-04	1.717E-04	1.709E-04	1.724E-04	1.337E-04	9.235E-05
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.506E-05	2.134E-04	2.724E-04	3.172E-04	3.238E-04	3.513E-04	1.954E-04	1.841E-04
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.825E-05	2.254E-04	4.194E-03	5.958E-03	3.664E-04	3.746E-04	2.452E-04	1.745E-04
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.667E-05	1.635E-04	2.081E-02	2.018E-03	1.883E-04	1.749E-04	1.690E-04	1.643E-04
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.239E-05	1.422E-04	2.167E-04	1.716E-04	1.904E-04	1.847E-04	1.453E-04	1.183E-04
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.121E-05	1.231E-04	1.486E-04	1.724E-04	1.948E-04	1.327E-04	1.171E-04	5.995E-05
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.531E-05	1.038E-04	1.138E-04	1.194E-04	1.188E-04	9.661E-05	4.452E-05	3.907E-05
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.510E-05	9.131E-05	1.006E-04	1.013E-04	1.128E-04	1.594E-04	1.645E-04	1.002E-04
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.421E-05	8.479E-03	3.517E-03	1.352E-04	2.288E-04	2.112E-03	1.405E-03	1.971E-04
W	0.000E+00	0.000E+00	1.223E-05	0.000E+00	3.000E-05	8.874E-05	1.284E-04	2.433E-04	4.461E-04	9.279E-02	2.687E-02	1.084E-04
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.201E-05	1.030E-04	1.280E-04	2.067E-04	5.810E-04	6.271E-04	1.096E-03	1.194E-03
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.093E-05	8.436E-05	9.208E-05	9.570E-05	9.126E-05	8.920E-05	1.245E-04	2.263E-04
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.432E-04	9.835E-03	2.056E-02	4.588E-03	1.834E-03	5.469E-02	1.712E-02	1.744E-03

TOTAL DOSE COMMITMENT IS 2.962E-01 PERSON-REM/YR

TIME STEP NUMBER 8, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS VEG. ING EXPOSED ORGAN IS EFFECTIV

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

TOTAL DOSE COMMITMENT IS 0.000E+00 PERSON-REM/YR

WARNING--POPULATION FOOD INGESTION DOSES SHOWN
ABOVE HAVE NOT BEEN CORRECTED TO REFLECT POTENTIAL
FOOD EXPORT AND MAY EXCEED DOSES ACTUALLY RECEIVED
BY THE POPULATION OF THIS REGION. SEE SUMMARY
TABLE FOR THIS INFORMATION.

TIME STEP NUMBER 8, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS VEG. ING EXPOSED ORGAN IS BONE

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

TOTAL DOSE COMMITMENT IS 0.000E+00 PERSON-REM/YR

WARNING--POPULATION FOOD INGESTION DOSES SHOWN
ABOVE HAVE NOT BEEN CORRECTED TO REFLECT POTENTIAL
FOOD EXPORT AND MAY EXCEED DOSES ACTUALLY RECEIVED
BY THE POPULATION OF THIS REGION. SEE SUMMARY
TABLE FOR THIS INFORMATION.

TIME STEP NUMBER 8, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS MEAT ING EXPOSED ORGAN IS EFFECTIV

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

TOTAL DOSE COMMITMENT IS 0.000E+00 PERSON-REM/YR

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DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

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DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

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N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

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SUMMARY PRINT OF POPULATION DOSES COMPUTED FOR TSTEP 8--DOSES SHOWN ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DOSES RECEIVED BY PEOPLE WITHIN 80 KILOMETERS

PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INHAL.	6.841E-02	5.541E-01	8.812E-03	4.156E-01	1.998E-01	3.590E+01
GROUND	7.713E-03	7.713E-03	7.713E-03	7.713E-03	7.713E-03	7.713E-03
CLOUD	2.962E-01	2.962E-01	2.962E-01	2.962E-01	2.962E-01	2.962E-01
VEG. ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MEAT ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MILK ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RNPLUS50	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOTALS	3.724E-01	8.581E-01	3.128E-01	7.196E-01	5.038E-01	3.620E+01

DOSES RECEIVED BY PEOPLE BEYOND 80 KILOMETERS

PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INHAL.	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GROUND	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CLOUD	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
VEG. ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MEAT ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MILK ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RNPLUS50	8.254E+00	1.125E+02	1.876E+00	8.254E+00	8.254E+00	5.252E+01
TOTALS	8.254E+00	1.125E+02	1.876E+00	8.254E+00	8.254E+00	5.252E+01

TOTAL DOSES COMPUTED OVER ALL POPULATIONS

PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INHAL.	6.841E-02	5.541E-01	8.812E-03	4.156E-01	1.998E-01	3.590E+01
GROUND	7.713E-03	7.713E-03	7.713E-03	7.713E-03	7.713E-03	7.713E-03
CLOUD	2.962E-01	2.962E-01	2.962E-01	2.962E-01	2.962E-01	2.962E-01
VEG. ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MEAT ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MILK ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RNPLUS50	8.254E+00	1.125E+02	1.876E+00	8.254E+00	8.254E+00	5.252E+01
TOTALS	8.626E+00	1.134E+02	2.189E+00	8.973E+00	8.757E+00	8.873E+01

TIME STEP NUMBER 8, DURATION IN YRS IS... 1.0

INDIVIDUAL RECEPTOR PARTICULATE CONCENTRATIONS

NO.	NAME	PTSZ	AIRBORNE CONCENTRATIONS, PCI/M3 U-238	Th-230	Ra-226	Pb-210	GROUND CONCENTRATIONS, PCI/M2 U-238	Th-230	Ra-226	Pb-210
1	Receptor 1	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1	Receptor 1	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1	Receptor 1	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1	Receptor 1	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2	Receptor 2	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2	Receptor 2	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2	Receptor 2	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2	Receptor 2	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
3	Receptor 3	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
3	Receptor 3	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
3	Receptor 3	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
3	Receptor 3	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
4	Receptor 4	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
4	Receptor 4	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
4	Receptor 4	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
4	Receptor 4	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
5	Receptor 5	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
5	Receptor 5	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
5	Receptor 5	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
5	Receptor 5	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
6	Receptor 6	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
6	Receptor 6	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
6	Receptor 6	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
6	Receptor 6	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
7	Receptor 7	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
7	Receptor 7	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
7	Receptor 7	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
7	Receptor 7	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

TIME STEP NUMBER 8, DURATION IN YRS IS... 1.0

INDIVIDUAL RECEPTOR RADON AND RADON DAUGHTER CONCENTRATIONS

	AIRBORNE CONCENTRATIONS, PCI/M3								GROUND CONCENTRATIONS, PCI/M2			
NO.	Rn-222	Po-218	Pb-214	Bi-214	Pb-210	Bi-210	Po-210	WL	Po-218	Pb-214	Bi-214	Pb-210
1	9.469E+00	8.091E+00	2.698E+00	1.245E+00	2.581E-06	1.088E-08	1.621E-12	2.665E-05	6.408E+00	6.408E+00	6.408E+00	1.475E+00
2	2.161E+00	2.154E+00	1.577E+00	1.198E+00	6.958E-06	5.115E-08	1.045E-11	1.468E-05	1.706E+00	1.706E+00	1.706E+00	4.991E+00
3	5.287E+00	4.617E+00	1.740E+00	7.939E-01	2.535E-06	1.645E-08	3.294E-12	1.654E-05	3.657E+00	3.657E+00	3.657E+00	1.206E+00
4	2.750E+00	2.579E+00	1.329E+00	8.203E-01	3.274E-06	2.516E-08	6.257E-12	1.245E-05	2.042E+00	2.042E+00	2.042E+00	2.422E+00
5	3.984E+00	3.876E+00	2.159E+00	1.395E+00	6.484E-06	5.511E-08	1.562E-11	2.014E-05	3.070E+00	3.070E+00	3.070E+00	4.258E+00
6	2.836E+00	2.717E+00	1.390E+00	8.442E-01	2.986E-06	1.843E-08	3.618E-12	1.300E-05	2.152E+00	2.152E+00	2.152E+00	2.191E+00
7	2.906E+00	2.865E+00	1.628E+00	1.020E+00	3.694E-06	2.593E-08	6.623E-12	1.501E-05	2.269E+00	2.269E+00	2.269E+00	2.236E+00

TIME STEP NUMBER 8, DURATION IN YRS IS... 1.0

NUMBER 1 NAME=Receptor 1 X= 1.7KM, Y= -0.5KM, Z= 0.0M, DIST= 1.8KM, IRTYPE= 1

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	7.27E-01	1.82E-02	1.69E-02	2.40E-02	1.96E-02	1.19E+01
CHILD	TOTALS	7.27E-01	1.91E-02	1.72E-02	2.04E-02	1.84E-02	1.19E+01
TEENAGE	TOTALS	7.27E-01	2.15E-02	1.75E-02	1.88E-02	1.80E-02	1.19E+01
ADULT	TOTALS	7.27E-01	2.14E-02	1.77E-02	1.89E-02	1.81E-02	1.19E+01

NUMBER 2 NAME=Receptor 2 X= 9.6KM, Y= 3.4KM, Z= 0.0M, DIST= 10.1KM, IRTYPE= 1

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	1.77E-01	1.77E-02	1.43E-02	3.34E-02	2.15E-02	2.72E+00
CHILD	TOTALS	1.77E-01	2.03E-02	1.52E-02	2.37E-02	1.84E-02	2.72E+00
TEENAGE	TOTALS	1.77E-01	2.67E-02	1.57E-02	1.94E-02	1.71E-02	2.72E+00
ADULT	TOTALS	1.77E-01	2.64E-02	1.65E-02	1.95E-02	1.74E-02	2.72E+00

TIME STEP NUMBER 8, DURATION IN YRS IS... 1.0

NUMBER 3 NAME=Receptor 3 X= -0.1KM, Y= 0.8KM, Z= 0.0M, DIST= 0.8KM, IRTYPE= 1

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	4.08E-01	1.20E-02	1.08E-02	1.78E-02	1.34E-02	6.62E+00
CHILD	TOTALS	4.07E-01	1.30E-02	1.11E-02	1.42E-02	1.23E-02	6.62E+00
TEENAGE	TOTALS	4.08E-01	1.53E-02	1.13E-02	1.26E-02	1.18E-02	6.62E+00
ADULT	TOTALS	4.08E-01	1.51E-02	1.16E-02	1.27E-02	1.19E-02	6.62E+00

NUMBER 4 NAME=Receptor 4 X= 9.8KM, Y= -7.4KM, Z= 0.0M, DIST= 12.3KM, IRTYPE= 1

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	2.17E-01	1.18E-02	1.02E-02	1.92E-02	1.36E-02	3.45E+00
CHILD	TOTALS	2.17E-01	1.30E-02	1.06E-02	1.46E-02	1.21E-02	3.45E+00
TEENAGE	TOTALS	2.17E-01	1.61E-02	1.09E-02	1.26E-02	1.16E-02	3.45E+00
ADULT	TOTALS	2.17E-01	1.59E-02	1.12E-02	1.27E-02	1.17E-02	3.45E+00

TIME STEP NUMBER 8, DURATION IN YRS IS... 1.0

NUMBER 5 NAME=Receptor 5 X= 13.4KM, Y= -5.3KM, Z= 0.0M, DIST= 14.4KM, IRTYPE= 1

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	3.17E-01	2.04E-02	1.72E-02	3.50E-02	2.39E-02	5.00E+00
CHILD	TOTALS	3.17E-01	2.28E-02	1.80E-02	2.59E-02	2.10E-02	5.00E+00
TEENAGE	TOTALS	3.17E-01	2.88E-02	1.85E-02	2.19E-02	1.98E-02	5.00E+00
ADULT	TOTALS	3.17E-01	2.84E-02	1.92E-02	2.20E-02	2.01E-02	5.00E+00

NUMBER 6 NAME=Receptor 6 X= 7.6KM, Y= -6.7KM, Z= 0.0M, DIST= 10.1KM, IRTYPE= 1

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	2.24E-01	1.20E-02	1.05E-02	1.88E-02	1.36E-02	3.56E+00
CHILD	TOTALS	2.24E-01	1.31E-02	1.09E-02	1.46E-02	1.23E-02	3.56E+00
TEENAGE	TOTALS	2.24E-01	1.59E-02	1.12E-02	1.27E-02	1.18E-02	3.56E+00
ADULT	TOTALS	2.24E-01	1.57E-02	1.15E-02	1.28E-02	1.19E-02	3.56E+00

TIME STEP NUMBER 8, DURATION IN YRS IS... 1.0

NUMBER 7 NAME=Receptor 7 X= -4.1KM, Y= 0.9KM, Z= 0.0M, DIST= 4.2KM, IRTYPE= 1

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	2.31E-01	1.44E-02	1.26E-02	2.28E-02	1.64E-02	3.65E+00
CHILD	TOTALS	2.31E-01	1.58E-02	1.31E-02	1.76E-02	1.48E-02	3.65E+00
TEENAGE	TOTALS	2.31E-01	1.92E-02	1.34E-02	1.53E-02	1.41E-02	3.65E+00
ADULT	TOTALS	2.31E-01	1.90E-02	1.37E-02	1.54E-02	1.43E-02	3.65E+00

TIME STEP NUMBER 9, DURATION IN YRS IS... 1.0

CONCENTRATION DATA FOR THE N DIRECTION, THETA EQUALS 0.0 DEGREES

TOTAL AIR CONCENTRATIONS, PCI/M3, AND WL

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210	WL
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.712E+00	3.491E+00	1.575E+00	7.525E-01	1.631E-06	1.439E-05
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.409E+00	2.362E+00	1.419E+00	8.759E-01	2.285E-06	1.290E-05
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.641E+00	1.635E+00	1.178E+00	8.528E-01	2.850E-06	1.084E-05
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.326E+00	1.324E+00	1.031E+00	8.056E-01	3.317E-06	9.598E-06
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.372E-01	7.373E-01	6.470E-01	5.616E-01	3.960E-06	6.135E-06
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.042E-01	3.044E-01	2.929E-01	2.760E-01	3.978E-06	2.828E-06
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.558E-01	1.559E-01	1.547E-01	1.519E-01	3.597E-06	1.512E-06
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.965E-02	9.971E-02	9.974E-02	9.927E-02	3.303E-06	9.786E-07
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.121E-02	7.125E-02	7.147E-02	7.145E-02	3.088E-06	7.023E-07
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.439E-02	5.442E-02	5.464E-02	5.474E-02	2.922E-06	5.373E-07
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.342E-02	4.345E-02	4.364E-02	4.376E-02	2.789E-06	4.292E-07
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.596E-02	3.598E-02	3.615E-02	3.626E-02	2.693E-06	3.556E-07

GROUND SURFACE CONCENTRATIONS, PCI/M2

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.765E+00	2.765E+00	2.765E+00	3.398E+00
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.871E+00	1.871E+00	1.871E+00	4.759E+00
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.295E+00	1.295E+00	1.295E+00	5.936E+00
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.049E+00	1.049E+00	1.049E+00	6.909E+00
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.840E-01	5.840E-01	5.840E-01	8.249E+00
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.411E-01	2.411E-01	2.411E-01	8.287E+00
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.235E-01	1.235E-01	1.235E-01	7.493E+00
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.897E-02	7.897E-02	7.897E-02	6.881E+00
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.644E-02	5.644E-02	5.644E-02	6.432E+00
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.311E-02	4.311E-02	4.311E-02	6.087E+00
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.441E-02	3.441E-02	3.441E-02	5.809E+00
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.850E-02	2.850E-02	2.850E-02	5.609E+00

TOTAL DEPOSITION RATES, PCI/M2-SEC

XRHO, KM	U-238	Th-230	Ra-226	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	4.894E-09
2.5	0.000E+00	0.000E+00	0.000E+00	6.854E-09
3.5	0.000E+00	0.000E+00	0.000E+00	8.550E-09
4.5	0.000E+00	0.000E+00	0.000E+00	9.951E-09
7.5	0.000E+00	0.000E+00	0.000E+00	1.188E-08
15.0	0.000E+00	0.000E+00	0.000E+00	1.194E-08
25.0	0.000E+00	0.000E+00	0.000E+00	1.079E-08
35.0	0.000E+00	0.000E+00	0.000E+00	9.910E-09
45.0	0.000E+00	0.000E+00	0.000E+00	9.264E-09
55.0	0.000E+00	0.000E+00	0.000E+00	8.766E-09
65.0	0.000E+00	0.000E+00	0.000E+00	8.366E-09
75.0	0.000E+00	0.000E+00	0.000E+00	8.078E-09

TIME STEP NUMBER 9, DURATION IN YRS IS... 1.0

CONCENTRATION DATA FOR THE E DIRECTION, THETA EQUALS 90.0 DEGREES

TOTAL AIR CONCENTRATIONS, PCI/M3, AND WL

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210	WL
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.054E+01	8.575E+00	2.471E+00	1.000E+00	1.546E-06	2.509E-05
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.876E+00	7.094E+00	2.679E+00	1.349E+00	2.374E-06	2.592E-05
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.307E+00	5.958E+00	2.688E+00	1.515E+00	3.261E-06	2.542E-05
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.131E+00	4.952E+00	2.447E+00	1.459E+00	3.841E-06	2.295E-05
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.547E+00	3.496E+00	2.085E+00	1.368E+00	5.246E-06	1.928E-05
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.890E+00	1.887E+00	1.403E+00	1.038E+00	7.046E-06	1.293E-05
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.127E+00	1.128E+00	9.640E-01	7.947E-01	7.862E-06	9.014E-06
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.815E-01	7.820E-01	7.199E-01	6.387E-01	8.148E-06	6.838E-06
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.898E-01	5.901E-01	5.644E-01	5.241E-01	8.259E-06	5.424E-06
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.707E-01	4.709E-01	4.597E-01	4.390E-01	8.292E-06	4.453E-06
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.900E-01	3.902E-01	3.853E-01	3.745E-01	8.281E-06	3.752E-06
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.325E-01	3.327E-01	3.307E-01	3.250E-01	8.266E-06	3.232E-06

GROUND SURFACE CONCENTRATIONS, PCI/M2

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.792E+00	6.792E+00	6.792E+00	3.220E+00
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.619E+00	5.619E+00	5.619E+00	4.945E+00
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.719E+00	4.719E+00	4.719E+00	6.793E+00
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.922E+00	3.922E+00	3.922E+00	8.001E+00
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.769E+00	2.769E+00	2.769E+00	1.093E+01
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.495E+00	1.495E+00	1.495E+00	1.468E+01
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.933E-01	8.933E-01	8.933E-01	1.638E+01
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.193E-01	6.193E-01	6.193E-01	1.697E+01
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.674E-01	4.674E-01	4.674E-01	1.720E+01
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.730E-01	3.730E-01	3.730E-01	1.727E+01
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.091E-01	3.091E-01	3.091E-01	1.725E+01
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.635E-01	2.635E-01	2.635E-01	1.722E+01

TOTAL DEPOSITION RATES, PCI/M2-SEC

XRHO, KM	U-238	Th-230	Ra-226	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	4.638E-09
2.5	0.000E+00	0.000E+00	0.000E+00	7.122E-09
3.5	0.000E+00	0.000E+00	0.000E+00	9.783E-09
4.5	0.000E+00	0.000E+00	0.000E+00	1.152E-08
7.5	0.000E+00	0.000E+00	0.000E+00	1.574E-08
15.0	0.000E+00	0.000E+00	0.000E+00	2.114E-08
25.0	0.000E+00	0.000E+00	0.000E+00	2.359E-08
35.0	0.000E+00	0.000E+00	0.000E+00	2.444E-08
45.0	0.000E+00	0.000E+00	0.000E+00	2.478E-08
55.0	0.000E+00	0.000E+00	0.000E+00	2.488E-08
65.0	0.000E+00	0.000E+00	0.000E+00	2.484E-08
75.0	0.000E+00	0.000E+00	0.000E+00	2.480E-08

TIME STEP NUMBER 9, DURATION IN YRS IS... 1.0

CONCENTRATION DATA FOR THE ESE DIRECTION, THETA EQUALS 112.5 DEGREES

TOTAL AIR CONCENTRATIONS, PCI/M3, AND WL

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210	WL
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.359E+00	7.599E+00	2.135E+00	8.421E-01	1.286E-06	2.179E-05
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.148E+00	6.431E+00	2.268E+00	1.072E+00	1.788E-06	2.212E-05
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.139E+00	6.323E+00	2.297E+00	1.155E+00	2.319E-06	2.247E-05
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.976E+01	1.572E+01	2.754E+00	1.143E+00	2.707E-06	3.442E-05
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.803E+00	5.372E+00	2.214E+00	1.133E+00	3.509E-06	2.098E-05
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.016E+00	1.987E+00	1.267E+00	8.777E-01	5.031E-06	1.174E-05
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.437E-01	7.440E-01	6.435E-01	5.380E-01	5.360E-06	6.035E-06
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.569E-01	4.571E-01	4.287E-01	3.893E-01	5.378E-06	4.097E-06
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.261E-01	3.262E-01	3.164E-01	2.997E-01	5.331E-06	3.058E-06
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.519E-01	2.521E-01	2.484E-01	2.408E-01	5.268E-06	2.417E-06
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.042E-01	2.043E-01	2.030E-01	1.995E-01	5.197E-06	1.984E-06
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.718E-01	1.719E-01	1.716E-01	1.700E-01	5.144E-06	1.681E-06

GROUND SURFACE CONCENTRATIONS, PCI/M2

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.019E+00	6.019E+00	6.019E+00	2.679E+00
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.094E+00	5.094E+00	5.094E+00	3.725E+00
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.008E+00	5.008E+00	5.008E+00	4.830E+00
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.245E+01	1.245E+01	1.245E+01	5.638E+00
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.255E+00	4.255E+00	4.255E+00	7.309E+00
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.574E+00	1.574E+00	1.574E+00	1.048E+01
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.893E-01	5.893E-01	5.893E-01	1.117E+01
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.621E-01	3.621E-01	3.621E-01	1.120E+01
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.584E-01	2.584E-01	2.584E-01	1.110E+01
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.996E-01	1.996E-01	1.996E-01	1.097E+01
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.618E-01	1.618E-01	1.618E-01	1.083E+01
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.361E-01	1.361E-01	1.361E-01	1.071E+01

TOTAL DEPOSITION RATES, PCI/M2-SEC

XRHO, KM	U-238	Th-230	Ra-226	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	3.859E-09
2.5	0.000E+00	0.000E+00	0.000E+00	5.365E-09
3.5	0.000E+00	0.000E+00	0.000E+00	6.956E-09
4.5	0.000E+00	0.000E+00	0.000E+00	8.120E-09
7.5	0.000E+00	0.000E+00	0.000E+00	1.053E-08
15.0	0.000E+00	0.000E+00	0.000E+00	1.509E-08
25.0	0.000E+00	0.000E+00	0.000E+00	1.608E-08
35.0	0.000E+00	0.000E+00	0.000E+00	1.613E-08
45.0	0.000E+00	0.000E+00	0.000E+00	1.599E-08
55.0	0.000E+00	0.000E+00	0.000E+00	1.580E-08
65.0	0.000E+00	0.000E+00	0.000E+00	1.559E-08
75.0	0.000E+00	0.000E+00	0.000E+00	1.543E-08

TIME STEP NUMBER 9, DURATION IN YRS IS... 1.0

CONCENTRATION DATA FOR THE S DIRECTION, THETA EQUALS 180.0 DEGREES

TOTAL AIR CONCENTRATIONS, PCI/M3, AND WL

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210	WL
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.792E+00	4.065E+00	1.387E+00	6.276E-01	1.209E-06	1.356E-05
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.417E+00	3.160E+00	1.386E+00	7.612E-01	1.663E-06	1.312E-05
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.513E+00	2.415E+00	1.249E+00	7.759E-01	2.103E-06	1.172E-05
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.044E+00	1.996E+00	1.128E+00	7.410E-01	2.400E-06	1.054E-05
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.226E+00	1.219E+00	8.003E-01	5.614E-01	2.758E-06	7.407E-06
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.826E-01	5.827E-01	4.679E-01	3.666E-01	3.125E-06	4.340E-06
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.379E-01	3.381E-01	3.046E-01	2.644E-01	3.342E-06	2.879E-06
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.334E-01	2.336E-01	2.213E-01	2.033E-01	3.346E-06	2.121E-06
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.764E-01	1.765E-01	1.715E-01	1.629E-01	3.309E-06	1.659E-06
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.405E-01	1.406E-01	1.385E-01	1.343E-01	3.257E-06	1.348E-06
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.161E-01	1.161E-01	1.153E-01	1.132E-01	3.201E-06	1.127E-06
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.875E-02	9.880E-02	9.858E-02	9.753E-02	3.154E-06	9.653E-07

GROUND SURFACE CONCENTRATIONS, PCI/M2

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.220E+00	3.220E+00	3.220E+00	2.518E+00
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.503E+00	2.503E+00	2.503E+00	3.464E+00
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.913E+00	1.913E+00	1.913E+00	4.380E+00
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.581E+00	1.581E+00	1.581E+00	5.000E+00
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.657E-01	9.657E-01	9.657E-01	5.745E+00
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.615E-01	4.615E-01	4.615E-01	6.508E+00
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.678E-01	2.678E-01	2.678E-01	6.962E+00
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.850E-01	1.850E-01	1.850E-01	6.970E+00
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.398E-01	1.398E-01	1.398E-01	6.893E+00
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.113E-01	1.113E-01	1.113E-01	6.784E+00
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.198E-02	9.198E-02	9.198E-02	6.667E+00
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.826E-02	7.826E-02	7.826E-02	6.569E+00

TOTAL DEPOSITION RATES, PCI/M2-SEC

XRHO, KM	U-238	Th-230	Ra-226	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	3.627E-09
2.5	0.000E+00	0.000E+00	0.000E+00	4.989E-09
3.5	0.000E+00	0.000E+00	0.000E+00	6.308E-09
4.5	0.000E+00	0.000E+00	0.000E+00	7.201E-09
7.5	0.000E+00	0.000E+00	0.000E+00	8.274E-09
15.0	0.000E+00	0.000E+00	0.000E+00	9.374E-09
25.0	0.000E+00	0.000E+00	0.000E+00	1.003E-08
35.0	0.000E+00	0.000E+00	0.000E+00	1.004E-08
45.0	0.000E+00	0.000E+00	0.000E+00	9.927E-09
55.0	0.000E+00	0.000E+00	0.000E+00	9.771E-09
65.0	0.000E+00	0.000E+00	0.000E+00	9.602E-09
75.0	0.000E+00	0.000E+00	0.000E+00	9.461E-09

TIME STEP NUMBER 9, DURATION IN YRS IS... 1.0

CONCENTRATION DATA FOR THE W DIRECTION, THETA EQUALS 270.0 DEGREES

TOTAL AIR CONCENTRATIONS, PCI/M3, AND WL

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210	WL
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.256E+00	4.562E+00	1.465E+00	6.228E-01	1.262E-06	1.445E-05
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.740E+00	3.526E+00	1.484E+00	7.666E-01	1.720E-06	1.401E-05
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.805E+00	2.736E+00	1.386E+00	8.127E-01	2.245E-06	1.288E-05
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.268E+00	2.241E+00	1.279E+00	8.058E-01	2.674E-06	1.180E-05
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.366E+00	1.364E+00	9.631E-01	6.833E-01	3.491E-06	8.836E-06
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.400E-01	6.403E-01	5.600E-01	4.688E-01	4.194E-06	5.247E-06
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.551E-01	3.553E-01	3.394E-01	3.146E-01	4.411E-06	3.260E-06
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.391E-01	2.392E-01	2.354E-01	2.276E-01	4.433E-06	2.289E-06
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.775E-01	1.776E-01	1.768E-01	1.742E-01	4.394E-06	1.729E-06
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.398E-01	1.398E-01	1.399E-01	1.391E-01	4.332E-06	1.372E-06
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.144E-01	1.145E-01	1.148E-01	1.147E-01	4.262E-06	1.128E-06
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.673E-02	9.679E-02	9.715E-02	9.725E-02	4.203E-06	9.550E-07

GROUND SURFACE CONCENTRATIONS, PCI/M2

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.614E+00	3.614E+00	3.614E+00	2.629E+00
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.793E+00	2.793E+00	2.793E+00	3.582E+00
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.167E+00	2.167E+00	2.167E+00	4.676E+00
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.775E+00	1.775E+00	1.775E+00	5.570E+00
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.080E+00	1.080E+00	1.080E+00	7.272E+00
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.072E-01	5.072E-01	5.072E-01	8.736E+00
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.814E-01	2.814E-01	2.814E-01	9.188E+00
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.895E-01	1.895E-01	1.895E-01	9.234E+00
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.407E-01	1.407E-01	1.407E-01	9.152E+00
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.108E-01	1.108E-01	1.108E-01	9.023E+00
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.068E-02	9.068E-02	9.068E-02	8.878E+00
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.666E-02	7.666E-02	7.666E-02	8.754E+00

TOTAL DEPOSITION RATES, PCI/M2-SEC

XRHO, KM	U-238	Th-230	Ra-226	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	3.787E-09
2.5	0.000E+00	0.000E+00	0.000E+00	5.160E-09
3.5	0.000E+00	0.000E+00	0.000E+00	6.735E-09
4.5	0.000E+00	0.000E+00	0.000E+00	8.022E-09
7.5	0.000E+00	0.000E+00	0.000E+00	1.047E-08
15.0	0.000E+00	0.000E+00	0.000E+00	1.258E-08
25.0	0.000E+00	0.000E+00	0.000E+00	1.323E-08
35.0	0.000E+00	0.000E+00	0.000E+00	1.330E-08
45.0	0.000E+00	0.000E+00	0.000E+00	1.318E-08
55.0	0.000E+00	0.000E+00	0.000E+00	1.299E-08
65.0	0.000E+00	0.000E+00	0.000E+00	1.279E-08
75.0	0.000E+00	0.000E+00	0.000E+00	1.261E-08

TIME STEP NUMBER 9, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS INHAL. EXPOSED ORGAN IS EFFECTIV

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.675E-07	3.778E-06	5.783E-06	7.727E-06	9.033E-06	1.047E-05	2.510E-05	4.396E-05
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.004E-06	4.560E-06	7.723E-06	1.128E-05	1.392E-05	1.673E-05	2.273E-05	4.724E-05
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.057E-06	5.246E-06	9.275E-06	1.318E-05	1.598E-05	1.899E-05	2.221E-05	2.354E-05
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.148E-06	6.290E-06	1.106E-05	1.622E-05	2.016E-05	2.440E-05	2.209E-05	1.747E-05
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.149E-06	6.689E-06	1.263E-05	1.905E-05	2.415E-05	3.152E-05	2.059E-05	2.237E-05
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.686E-07	5.511E-06	1.915E-04	3.847E-04	3.078E-05	3.890E-05	3.041E-05	2.521E-05
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.705E-07	4.575E-06	9.915E-04	1.336E-04	1.614E-05	1.853E-05	2.138E-05	2.425E-05
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.039E-06	4.835E-06	1.101E-05	1.161E-05	1.618E-05	1.898E-05	1.756E-05	1.649E-05
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.007E-06	5.249E-06	9.279E-06	1.394E-05	1.935E-05	1.572E-05	1.615E-05	9.461E-06
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.180E-06	4.720E-06	7.906E-06	1.115E-05	1.403E-05	1.385E-05	7.529E-06	7.627E-06
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.181E-07	3.929E-06	6.508E-06	8.818E-06	1.244E-05	2.137E-05	2.604E-05	1.833E-05
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.545E-07	3.941E-04	2.459E-04	1.277E-05	2.744E-05	3.081E-04	2.418E-04	3.917E-05
W	0.000E+00	0.000E+00	1.639E-07	0.000E+00	7.648E-07	3.982E-06	9.024E-06	2.365E-05	5.589E-05	1.430E-02	4.927E-03	2.307E-05
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.329E-07	3.691E-06	6.627E-06	1.420E-05	5.026E-05	6.579E-05	1.356E-04	1.707E-04
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.269E-07	4.649E-06	8.045E-06	1.159E-05	1.423E-05	1.709E-05	2.839E-05	5.989E-05
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.938E-05	7.014E-04	2.439E-03	7.735E-04	4.049E-04	1.502E-02	5.650E-03	6.744E-04

TOTAL DOSE COMMITMENT IS 4.976E-02 PERSON-REM/YR

TIME STEP NUMBER 9, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS INHAL. EXPOSED ORGAN IS BONE

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.039E-06	3.064E-05	4.689E-05	6.263E-05	7.318E-05	8.483E-05	2.032E-04	3.557E-04
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.147E-06	3.699E-05	6.262E-05	9.140E-05	1.128E-04	1.355E-04	1.840E-04	3.822E-04
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.574E-06	4.255E-05	7.521E-05	1.068E-04	1.295E-04	1.538E-04	1.799E-04	1.906E-04
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.315E-06	5.103E-05	8.967E-05	1.315E-04	1.634E-04	1.977E-04	1.789E-04	1.414E-04
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.324E-06	5.427E-05	1.025E-04	1.545E-04	1.957E-04	2.555E-04	1.668E-04	1.812E-04
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.237E-06	4.471E-05	1.553E-03	3.119E-03	2.495E-04	3.152E-04	2.463E-04	2.042E-04
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.441E-06	3.711E-05	8.042E-03	1.083E-03	1.308E-04	1.501E-04	1.732E-04	1.964E-04
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.428E-06	3.923E-05	8.928E-05	9.415E-05	1.311E-04	1.538E-04	1.423E-04	1.335E-04
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.171E-06	4.258E-05	7.525E-05	1.130E-04	1.568E-04	1.274E-04	1.308E-04	7.661E-05
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.573E-06	3.829E-05	6.411E-05	9.038E-05	1.137E-04	1.122E-04	6.097E-05	6.175E-05
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.449E-06	3.187E-05	5.278E-05	7.149E-05	1.008E-04	1.731E-04	2.109E-04	1.484E-04
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.310E-06	3.197E-03	1.994E-03	1.035E-04	2.224E-04	2.496E-03	1.958E-03	3.172E-04
W	0.000E+00	0.000E+00	1.330E-06	0.000E+00	6.205E-06	3.230E-05	7.317E-05	1.917E-04	4.529E-04	1.158E-01	3.990E-02	1.867E-04
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.946E-06	2.994E-05	5.374E-05	1.151E-04	4.074E-04	5.332E-04	1.099E-03	1.383E-03
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.521E-06	3.771E-05	6.523E-05	9.392E-05	1.153E-04	1.385E-04	2.298E-04	4.847E-04
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.573E-04	5.689E-03	1.978E-02	6.269E-03	3.280E-03	1.217E-01	4.574E-02	5.456E-03

TOTAL DOSE COMMITMENT IS 4.031E-01 PERSON-REM/YR

TIME STEP NUMBER 9, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS INHAL. EXPOSED ORGAN IS AVG.LUNG

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.009E-07	4.473E-07	7.009E-07	9.584E-07	1.146E-06	1.360E-06	3.333E-06	5.968E-06
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.166E-07	5.383E-07	9.343E-07	1.399E-06	1.769E-06	2.179E-06	3.032E-06	6.453E-06
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.224E-07	6.176E-07	1.117E-06	1.624E-06	2.013E-06	2.445E-06	2.922E-06	3.163E-06
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.327E-07	7.385E-07	1.326E-06	1.985E-06	2.517E-06	3.106E-06	2.867E-06	2.310E-06
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.327E-07	7.831E-07	1.506E-06	2.310E-06	2.974E-06	3.942E-06	2.613E-06	2.880E-06
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.873E-08	6.440E-07	2.280E-05	4.664E-05	3.796E-06	4.877E-06	3.875E-06	3.264E-06
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.737E-08	5.348E-07	1.181E-04	1.619E-05	1.988E-06	2.320E-06	2.720E-06	3.134E-06
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.200E-07	5.664E-07	1.315E-06	1.412E-06	2.002E-06	2.388E-06	2.246E-06	2.142E-06
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.165E-07	6.167E-07	1.112E-06	1.703E-06	2.407E-06	1.990E-06	2.080E-06	1.238E-06
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.368E-07	5.553E-07	9.492E-07	1.365E-06	1.751E-06	1.762E-06	9.755E-07	1.006E-06
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.067E-07	4.629E-07	7.810E-07	1.077E-06	1.545E-06	2.700E-06	3.345E-06	2.394E-06
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.615E-08	4.655E-05	2.959E-05	1.565E-06	3.424E-06	3.913E-05	3.124E-05	5.147E-06
W	0.000E+00	0.000E+00	1.893E-08	0.000E+00	8.888E-08	4.699E-07	1.086E-06	2.903E-06	6.990E-06	1.822E-03	6.393E-04	3.047E-06
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.515E-08	4.346E-07	7.927E-07	1.724E-06	6.188E-06	8.214E-06	1.716E-05	2.190E-05
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.078E-07	5.499E-07	9.730E-07	1.432E-06	1.797E-06	2.205E-06	3.737E-06	8.047E-06
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.256E-06	8.308E-05	2.962E-04	9.624E-05	5.162E-05	1.962E-03	7.555E-04	9.228E-05

TOTAL DOSE COMMITMENT IS 6.398E-03 PERSON-REM/YR

TIME STEP NUMBER 9, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS INHAL. EXPOSED ORGAN IS BRONCHI

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.764E-03	4.943E-03	4.285E-03	3.986E-03	3.561E-03	3.332E-03	6.676E-03	1.003E-02
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.355E-03	6.172E-03	5.575E-03	5.437E-03	5.003E-03	4.772E-03	5.356E-03	9.469E-03
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.894E-03	9.323E-03	8.573E-03	8.250E-03	7.542E-03	7.166E-03	6.968E-03	6.318E-03
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.468E-03	1.756E-02	1.676E-02	1.679E-02	1.580E-02	1.535E-02	1.161E-02	7.886E-03
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.330E-02	3.071E-02	3.100E-02	3.126E-02	2.949E-02	3.059E-02	1.657E-02	1.538E-02
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.176E-02	3.780E-02	4.546E-01	5.591E-01	3.220E-02	3.180E-02	2.042E-02	1.439E-02
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.087E-02	2.373E-02	2.204E+00	1.867E-01	1.637E-02	1.473E-02	1.398E-02	1.347E-02
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.017E-02	1.898E-02	2.288E-02	1.611E-02	1.678E-02	1.573E-02	1.212E-02	9.764E-03
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.664E-03	1.675E-02	1.605E-02	1.663E-02	1.764E-02	1.159E-02	1.001E-02	5.061E-03
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.615E-03	1.301E-02	1.176E-02	1.116E-02	1.055E-02	8.334E-03	3.776E-03	3.284E-03
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.427E-03	1.047E-02	9.716E-03	9.057E-03	9.712E-03	1.345E-02	1.373E-02	8.316E-03
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.717E-03	9.387E-01	3.297E-01	1.186E-02	1.947E-02	1.769E-01	1.167E-01	1.631E-02
W	0.000E+00	0.000E+00	3.506E-03	0.000E+00	5.121E-03	1.040E-02	1.243E-02	2.182E-02	3.861E-02	7.885E+00	2.260E+00	9.069E-03
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.059E-03	1.319E-02	1.316E-02	1.931E-02	5.177E-02	5.449E-02	9.387E-02	1.014E-01
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.728E-03	9.393E-03	8.717E-03	8.489E-03	7.850E-03	7.550E-03	1.044E-02	1.890E-02
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.580E-02	9.552E-01	1.796E+00	3.856E-01	1.516E-01	4.484E+00	1.398E+00	1.423E-01

TOTAL DOSE COMMITMENT IS 2.615E+01 PERSON-REM/YR

TIME STEP NUMBER 9, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS GROUND EXPOSED ORGAN IS EFFECTIV

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.594E-07	7.618E-07	7.942E-07	8.640E-07	8.853E-07	9.360E-07	2.094E-06	3.478E-06
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.335E-07	9.428E-07	1.044E-06	1.218E-06	1.309E-06	1.433E-06	1.818E-06	3.589E-06
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.083E-07	1.336E-06	1.466E-06	1.638E-06	1.707E-06	1.825E-06	1.974E-06	1.970E-06
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.011E-06	2.323E-06	2.489E-06	2.769E-06	2.866E-06	3.041E-06	2.493E-06	1.824E-06
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.546E-06	3.830E-06	4.187E-06	4.559E-06	4.630E-06	5.148E-06	2.976E-06	2.936E-06
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.322E-06	4.513E-06	6.172E-05	8.388E-05	5.291E-06	5.679E-06	3.935E-06	2.974E-06
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.229E-06	2.916E-06	3.026E-04	2.829E-05	2.715E-06	2.657E-06	2.724E-06	2.820E-06
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.198E-06	2.407E-06	3.180E-06	2.445E-06	2.764E-06	2.794E-06	2.310E-06	1.985E-06
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.167E-07	2.177E-06	2.314E-06	2.628E-06	3.031E-06	2.152E-06	1.996E-06	1.078E-06
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.224E-07	1.725E-06	1.754E-06	1.860E-06	1.944E-06	1.683E-06	8.293E-07	7.786E-07
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.625E-07	1.396E-06	1.448E-06	1.497E-06	1.764E-06	2.664E-06	2.944E-06	1.920E-06
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.555E-07	1.274E-04	5.048E-05	2.025E-06	3.669E-06	3.648E-05	2.611E-05	3.937E-06
W	0.000E+00	0.000E+00	3.960E-07	0.000E+00	6.200E-07	1.391E-06	1.890E-06	3.734E-06	7.357E-06	1.656E-03	5.187E-04	2.257E-06
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.240E-07	1.692E-06	1.845E-06	2.946E-06	8.548E-06	9.684E-06	1.787E-05	2.060E-05
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.840E-07	1.312E-06	1.417E-06	1.580E-06	1.649E-06	1.767E-06	2.697E-06	5.332E-06
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.484E-06	1.457E-04	3.337E-04	8.496E-05	3.877E-05	1.309E-03	4.595E-04	5.204E-05

TOTAL DOSE COMMITMENT IS 5.616E-03 PERSON-REM/YR

TIME STEP NUMBER 9, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS CLOUD EXPOSED ORGAN IS EFFECTIV

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.881E-05	3.959E-05	3.668E-05	3.481E-05	3.130E-05	2.936E-05	5.892E-05	8.852E-05
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.277E-05	4.937E-05	4.770E-05	4.743E-05	4.394E-05	4.203E-05	4.725E-05	8.359E-05
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.817E-05	6.823E-05	7.030E-05	7.036E-05	6.541E-05	6.266E-05	6.120E-05	5.563E-05
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.727E-05	1.048E-04	1.177E-04	1.276E-04	1.259E-04	1.263E-04	9.756E-05	6.728E-05
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.793E-05	1.543E-04	1.966E-04	2.274E-04	2.318E-04	2.515E-04	1.399E-04	1.320E-04
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.172E-05	1.523E-04	2.952E-03	4.227E-03	2.611E-04	2.674E-04	1.752E-04	1.249E-04
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.286E-05	1.141E-04	1.484E-02	1.435E-03	1.338E-04	1.244E-04	1.201E-04	1.170E-04
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.923E-05	1.000E-04	1.510E-04	1.202E-04	1.338E-04	1.303E-04	1.028E-04	8.394E-05
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.239E-05	9.555E-05	1.121E-04	1.283E-04	1.437E-04	9.745E-05	8.575E-05	4.385E-05
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.523E-05	8.102E-05	8.770E-05	9.020E-05	8.870E-05	7.158E-05	3.282E-05	2.873E-05
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.624E-05	6.852E-05	7.508E-05	7.488E-05	8.287E-05	1.166E-04	1.200E-04	7.303E-05
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.842E-05	6.342E-03	2.602E-03	9.938E-05	1.676E-04	1.543E-03	1.024E-03	1.436E-04
W	0.000E+00	0.000E+00	9.695E-06	0.000E+00	2.361E-05	6.837E-05	9.742E-05	1.827E-04	3.326E-04	6.879E-02	1.984E-02	7.986E-05
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.535E-05	8.006E-05	9.827E-05	1.573E-04	4.389E-04	4.711E-04	8.198E-04	8.904E-04
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.447E-05	6.450E-05	6.909E-05	7.113E-05	6.744E-05	6.568E-05	9.147E-05	1.661E-04
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.273E-04	7.421E-03	1.511E-02	3.334E-03	1.326E-03	3.941E-02	1.232E-02	1.255E-03

TOTAL DOSE COMMITMENT IS 2.168E-01 PERSON-REM/YR

TIME STEP NUMBER 9, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS VEG. ING EXPOSED ORGAN IS EFFECTIV

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

TOTAL DOSE COMMITMENT IS 0.000E+00 PERSON-REM/YR

WARNING--POPULATION FOOD INGESTION DOSES SHOWN
ABOVE HAVE NOT BEEN CORRECTED TO REFLECT POTENTIAL
FOOD EXPORT AND MAY EXCEED DOSES ACTUALLY RECEIVED
BY THE POPULATION OF THIS REGION. SEE SUMMARY
TABLE FOR THIS INFORMATION.

TIME STEP NUMBER 9, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS VEG. ING EXPOSED ORGAN IS BONE

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

TOTAL DOSE COMMITMENT IS 0.000E+00 PERSON-REM/YR

WARNING--POPULATION FOOD INGESTION DOSES SHOWN
ABOVE HAVE NOT BEEN CORRECTED TO REFLECT POTENTIAL
FOOD EXPORT AND MAY EXCEED DOSES ACTUALLY RECEIVED
BY THE POPULATION OF THIS REGION. SEE SUMMARY
TABLE FOR THIS INFORMATION.

TIME STEP NUMBER 9, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS MEAT ING EXPOSED ORGAN IS EFFECTIV

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

TOTAL DOSE COMMITMENT IS 0.000E+00 PERSON-REM/YR

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DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

TOTAL DOSE COMMITMENT IS 0.000E+00 PERSON-REM/YR

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DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

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N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

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SUMMARY PRINT OF POPULATION DOSES COMPUTED FOR TSTEP 9--DOSES SHOWN ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DOSES RECEIVED BY PEOPLE WITHIN 80 KILOMETERS

PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INHAL.	4.976E-02	4.031E-01	6.398E-03	3.023E-01	1.453E-01	2.615E+01
GROUND	5.616E-03	5.616E-03	5.616E-03	5.616E-03	5.616E-03	5.616E-03
CLOUD	2.168E-01	2.168E-01	2.168E-01	2.168E-01	2.168E-01	2.168E-01
VEG. ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MEAT ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MILK ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RNPLUS50	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOTALS	2.722E-01	6.255E-01	2.288E-01	5.247E-01	3.678E-01	2.637E+01

DOSES RECEIVED BY PEOPLE BEYOND 80 KILOMETERS

PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INHAL.	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GROUND	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CLOUD	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
VEG. ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MEAT ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MILK ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RNPLUS50	6.030E+00	8.222E+01	1.370E+00	6.030E+00	6.030E+00	3.837E+01
TOTALS	6.030E+00	8.222E+01	1.370E+00	6.030E+00	6.030E+00	3.837E+01

TOTAL DOSES COMPUTED OVER ALL POPULATIONS

PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INHAL.	4.976E-02	4.031E-01	6.398E-03	3.023E-01	1.453E-01	2.615E+01
GROUND	5.616E-03	5.616E-03	5.616E-03	5.616E-03	5.616E-03	5.616E-03
CLOUD	2.168E-01	2.168E-01	2.168E-01	2.168E-01	2.168E-01	2.168E-01
VEG. ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MEAT ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MILK ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RNPLUS50	6.030E+00	8.222E+01	1.370E+00	6.030E+00	6.030E+00	3.837E+01
TOTALS	6.302E+00	8.285E+01	1.599E+00	6.554E+00	6.397E+00	6.474E+01

TIME STEP NUMBER 9, DURATION IN YRS IS... 1.0

INDIVIDUAL RECEPTOR PARTICULATE CONCENTRATIONS

NO.	NAME	PTSZ	AIRBORNE CONCENTRATIONS, PCI/M3 U-238	Th-230	Ra-226	Pb-210	GROUND CONCENTRATIONS, PCI/M2 U-238	Th-230	Ra-226	Pb-210
1	Receptor 1	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1	Receptor 1	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1	Receptor 1	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1	Receptor 1	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2	Receptor 2	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2	Receptor 2	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2	Receptor 2	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2	Receptor 2	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
3	Receptor 3	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
3	Receptor 3	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
3	Receptor 3	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
3	Receptor 3	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
4	Receptor 4	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
4	Receptor 4	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
4	Receptor 4	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
4	Receptor 4	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
5	Receptor 5	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
5	Receptor 5	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
5	Receptor 5	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
5	Receptor 5	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
6	Receptor 6	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
6	Receptor 6	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
6	Receptor 6	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
6	Receptor 6	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
7	Receptor 7	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
7	Receptor 7	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
7	Receptor 7	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
7	Receptor 7	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

TIME STEP NUMBER 9, DURATION IN YRS IS... 1.0

INDIVIDUAL RECEPTOR RADON AND RADON DAUGHTER CONCENTRATIONS

	AIRBORNE CONCENTRATIONS, PCI/M3								GROUND CONCENTRATIONS, PCI/M2			
NO.	Rn-222	Po-218	Pb-214	Bi-214	Pb-210	Bi-210	Po-210	WL	Po-218	Pb-214	Bi-214	Pb-210
1	8.764E+00	7.389E+00	2.259E+00	9.565E-01	1.478E-06	5.097E-09	7.268E-13	2.263E-05	5.852E+00	5.852E+00	5.852E+00	1.547E+00
2	1.677E+00	1.672E+00	1.205E+00	9.042E-01	5.622E-06	4.380E-08	9.290E-12	1.120E-05	1.324E+00	1.324E+00	1.324E+00	5.292E+00
3	4.750E+00	4.081E+00	1.369E+00	5.345E-01	1.246E-06	7.434E-09	1.475E-12	1.314E-05	3.232E+00	3.232E+00	3.232E+00	1.268E+00
4	1.609E+00	1.528E+00	8.638E-01	5.617E-01	2.632E-06	2.246E-08	5.871E-12	8.048E-06	1.210E+00	1.210E+00	1.210E+00	2.559E+00
5	2.357E+00	2.306E+00	1.388E+00	9.357E-01	5.029E-06	4.854E-08	1.472E-11	1.290E-05	1.827E+00	1.827E+00	1.827E+00	4.536E+00
6	1.720E+00	1.662E+00	9.190E-01	5.813E-01	2.364E-06	1.613E-08	3.336E-12	8.539E-06	1.316E+00	1.316E+00	1.316E+00	2.313E+00
7	2.523E+00	2.482E+00	1.331E+00	8.008E-01	2.425E-06	1.356E-08	3.045E-12	1.229E-05	1.966E+00	1.966E+00	1.966E+00	2.362E+00

TIME STEP NUMBER 9, DURATION IN YRS IS... 1.0

NUMBER 1 NAME=Receptor 1 X= 1.7KM, Y= -0.5KM, Z= 0.0M, DIST= 1.8KM, IRTYPE= 1

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	6.71E-01	1.41E-02	1.34E-02	1.75E-02	1.49E-02	1.10E+01
CHILD	TOTALS	6.71E-01	1.47E-02	1.36E-02	1.54E-02	1.43E-02	1.10E+01
TEENAGE	TOTALS	6.71E-01	1.61E-02	1.37E-02	1.45E-02	1.40E-02	1.10E+01
ADULT	TOTALS	6.71E-01	1.60E-02	1.39E-02	1.45E-02	1.41E-02	1.10E+01

NUMBER 2 NAME=Receptor 2 X= 9.6KM, Y= 3.4KM, Z= 0.0M, DIST= 10.1KM, IRTYPE= 1

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	1.37E-01	1.36E-02	1.09E-02	2.63E-02	1.67E-02	2.11E+00
CHILD	TOTALS	1.37E-01	1.57E-02	1.16E-02	1.84E-02	1.41E-02	2.11E+00
TEENAGE	TOTALS	1.37E-01	2.10E-02	1.20E-02	1.50E-02	1.32E-02	2.11E+00
ADULT	TOTALS	1.37E-01	2.07E-02	1.26E-02	1.51E-02	1.34E-02	2.11E+00

TIME STEP NUMBER 9, DURATION IN YRS IS... 1.0

NUMBER 3 NAME=Receptor 3 X= -0.1KM, Y= 0.8KM, Z= 0.0M, DIST= 0.8KM, IRTYPE= 1

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	3.64E-01	8.27E-03	7.66E-03	1.11E-02	8.95E-03	5.95E+00
CHILD	TOTALS	3.64E-01	8.75E-03	7.81E-03	9.34E-03	8.39E-03	5.95E+00
TEENAGE	TOTALS	3.64E-01	9.91E-03	7.92E-03	8.57E-03	8.17E-03	5.95E+00
ADULT	TOTALS	3.64E-01	9.85E-03	8.06E-03	8.60E-03	8.23E-03	5.95E+00

NUMBER 4 NAME=Receptor 4 X= 9.8KM, Y= -7.4KM, Z= 0.0M, DIST= 12.3KM, IRTYPE= 1

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	1.28E-01	8.21E-03	6.93E-03	1.42E-02	9.66E-03	2.02E+00
CHILD	TOTALS	1.28E-01	9.22E-03	7.26E-03	1.05E-02	8.47E-03	2.02E+00
TEENAGE	TOTALS	1.28E-01	1.17E-02	7.48E-03	8.86E-03	8.01E-03	2.02E+00
ADULT	TOTALS	1.28E-01	1.15E-02	7.76E-03	8.91E-03	8.13E-03	2.02E+00

TIME STEP NUMBER 9, DURATION IN YRS IS... 1.0

NUMBER 5 NAME=Receptor 5 X= 13.4KM, Y= -5.3KM, Z= 0.0M, DIST= 14.4KM, IRTYPE= 1

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	1.89E-01	1.39E-02	1.15E-02	2.53E-02	1.67E-02	2.96E+00
CHILD	TOTALS	1.89E-01	1.58E-02	1.21E-02	1.82E-02	1.44E-02	2.96E+00
TEENAGE	TOTALS	1.89E-01	2.05E-02	1.25E-02	1.52E-02	1.35E-02	2.96E+00
ADULT	TOTALS	1.89E-01	2.03E-02	1.31E-02	1.52E-02	1.38E-02	2.96E+00

NUMBER 6 NAME=Receptor 6 X= 7.6KM, Y= -6.7KM, Z= 0.0M, DIST= 10.1KM, IRTYPE= 1

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	1.36E-01	8.35E-03	7.19E-03	1.37E-02	9.65E-03	2.16E+00
CHILD	TOTALS	1.36E-01	9.26E-03	7.49E-03	1.04E-02	8.58E-03	2.16E+00
TEENAGE	TOTALS	1.36E-01	1.15E-02	7.69E-03	8.93E-03	8.16E-03	2.16E+00
ADULT	TOTALS	1.36E-01	1.13E-02	7.95E-03	8.98E-03	8.27E-03	2.16E+00

TIME STEP NUMBER 9, DURATION IN YRS IS... 1.0

NUMBER 7 NAME=Receptor 7 X= -4.1KM, Y= 0.9KM, Z= 0.0M, DIST= 4.2KM, IRTYPE= 1

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	2.00E-01	1.12E-02	9.98E-03	1.66E-02	1.25E-02	3.16E+00
CHILD	TOTALS	1.99E-01	1.21E-02	1.03E-02	1.32E-02	1.14E-02	3.16E+00
TEENAGE	TOTALS	2.00E-01	1.44E-02	1.05E-02	1.18E-02	1.10E-02	3.16E+00
ADULT	TOTALS	2.00E-01	1.42E-02	1.08E-02	1.18E-02	1.11E-02	3.16E+00

TIME STEP NUMBER10, DURATION IN YRS IS... 1.0

CONCENTRATION DATA FOR THE N DIRECTION, THETA EQUALS 0.0 DEGREES

TOTAL AIR CONCENTRATIONS, PCI/M3, AND WL

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210	WL
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.464E+00	3.244E+00	1.422E+00	6.494E-01	1.269E-06	1.297E-05
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.225E+00	2.179E+00	1.287E+00	7.749E-01	1.840E-06	1.166E-05
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.491E+00	1.485E+00	1.062E+00	7.609E-01	2.382E-06	9.754E-06
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.202E+00	1.200E+00	9.300E-01	7.217E-01	2.818E-06	8.643E-06
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.666E-01	6.668E-01	5.826E-01	5.034E-01	3.423E-06	5.518E-06
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.715E-01	2.716E-01	2.612E-01	2.458E-01	3.496E-06	2.521E-06
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.384E-01	1.385E-01	1.374E-01	1.349E-01	3.176E-06	1.342E-06
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.834E-02	8.839E-02	8.842E-02	8.800E-02	2.918E-06	8.676E-07
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.306E-02	6.309E-02	6.328E-02	6.327E-02	2.727E-06	6.218E-07
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.812E-02	4.815E-02	4.834E-02	4.842E-02	2.580E-06	4.753E-07
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.839E-02	3.841E-02	3.858E-02	3.868E-02	2.461E-06	3.794E-07
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.180E-02	3.182E-02	3.197E-02	3.206E-02	2.377E-06	3.144E-07

GROUND SURFACE CONCENTRATIONS, PCI/M2

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.569E+00	2.569E+00	2.569E+00	2.643E+00
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.725E+00	1.725E+00	1.725E+00	3.833E+00
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.176E+00	1.176E+00	1.176E+00	4.962E+00
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.505E-01	9.505E-01	9.505E-01	5.870E+00
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.281E-01	5.281E-01	5.281E-01	7.131E+00
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.151E-01	2.151E-01	2.151E-01	7.282E+00
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.097E-01	1.097E-01	1.097E-01	6.615E+00
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.001E-02	7.001E-02	7.001E-02	6.078E+00
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.997E-02	4.997E-02	4.997E-02	5.681E+00
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.813E-02	3.813E-02	3.813E-02	5.374E+00
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.042E-02	3.042E-02	3.042E-02	5.126E+00
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.520E-02	2.520E-02	2.520E-02	4.952E+00

TOTAL DEPOSITION RATES, PCI/M2-SEC

XRHO, KM	U-238	Th-230	Ra-226	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	3.806E-09
2.5	0.000E+00	0.000E+00	0.000E+00	5.520E-09
3.5	0.000E+00	0.000E+00	0.000E+00	7.146E-09
4.5	0.000E+00	0.000E+00	0.000E+00	8.453E-09
7.5	0.000E+00	0.000E+00	0.000E+00	1.027E-08
15.0	0.000E+00	0.000E+00	0.000E+00	1.049E-08
25.0	0.000E+00	0.000E+00	0.000E+00	9.527E-09
35.0	0.000E+00	0.000E+00	0.000E+00	8.753E-09
45.0	0.000E+00	0.000E+00	0.000E+00	8.182E-09
55.0	0.000E+00	0.000E+00	0.000E+00	7.739E-09
65.0	0.000E+00	0.000E+00	0.000E+00	7.383E-09
75.0	0.000E+00	0.000E+00	0.000E+00	7.132E-09

TIME STEP NUMBER10, DURATION IN YRS IS... 1.0

CONCENTRATION DATA FOR THE E DIRECTION, THETA EQUALS 90.0 DEGREES

TOTAL AIR CONCENTRATIONS, PCI/M3, AND WL

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210	WL
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.004E+01	8.088E+00	2.248E+00	8.771E-01	1.309E-06	2.300E-05
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.328E+00	6.567E+00	2.407E+00	1.192E+00	2.131E-06	2.341E-05
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.702E+00	5.369E+00	2.357E+00	1.335E+00	3.050E-06	2.246E-05
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.662E+00	4.497E+00	2.228E+00	1.354E+00	3.735E-06	2.098E-05
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.975E+00	2.947E+00	1.789E+00	1.181E+00	4.837E-06	1.651E-05
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.626E+00	1.624E+00	1.224E+00	9.124E-01	6.275E-06	1.128E-05
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.864E-01	9.868E-01	8.462E-01	7.000E-01	6.989E-06	7.918E-06
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.873E-01	6.877E-01	6.339E-01	5.633E-01	7.236E-06	6.023E-06
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.196E-01	5.199E-01	4.975E-01	4.624E-01	7.329E-06	4.783E-06
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.150E-01	4.153E-01	4.055E-01	3.874E-01	7.352E-06	3.928E-06
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.441E-01	3.442E-01	3.400E-01	3.305E-01	7.340E-06	3.311E-06
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.936E-01	2.937E-01	2.920E-01	2.870E-01	7.326E-06	2.853E-06

GROUND SURFACE CONCENTRATIONS, PCI/M2

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.406E+00	6.406E+00	6.406E+00	2.727E+00
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.201E+00	5.201E+00	5.201E+00	4.439E+00
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.252E+00	4.252E+00	4.252E+00	6.354E+00
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.562E+00	3.562E+00	3.562E+00	7.781E+00
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.335E+00	2.335E+00	2.335E+00	1.007E+01
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.286E+00	1.286E+00	1.286E+00	1.307E+01
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.816E-01	7.816E-01	7.816E-01	1.456E+01
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.446E-01	5.446E-01	5.446E-01	1.507E+01
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.118E-01	4.118E-01	4.118E-01	1.527E+01
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.289E-01	3.289E-01	3.289E-01	1.532E+01
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.727E-01	2.727E-01	2.727E-01	1.529E+01
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.326E-01	2.326E-01	2.326E-01	1.526E+01

TOTAL DEPOSITION RATES, PCI/M2-SEC

XRHO, KM	U-238	Th-230	Ra-226	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	3.928E-09
2.5	0.000E+00	0.000E+00	0.000E+00	6.393E-09
3.5	0.000E+00	0.000E+00	0.000E+00	9.151E-09
4.5	0.000E+00	0.000E+00	0.000E+00	1.121E-08
7.5	0.000E+00	0.000E+00	0.000E+00	1.451E-08
15.0	0.000E+00	0.000E+00	0.000E+00	1.882E-08
25.0	0.000E+00	0.000E+00	0.000E+00	2.097E-08
35.0	0.000E+00	0.000E+00	0.000E+00	2.171E-08
45.0	0.000E+00	0.000E+00	0.000E+00	2.199E-08
55.0	0.000E+00	0.000E+00	0.000E+00	2.206E-08
65.0	0.000E+00	0.000E+00	0.000E+00	2.202E-08
75.0	0.000E+00	0.000E+00	0.000E+00	2.198E-08

TIME STEP NUMBER10, DURATION IN YRS IS... 1.0

CONCENTRATION DATA FOR THE S DIRECTION, THETA EQUALS 180.0 DEGREES

TOTAL AIR CONCENTRATIONS, PCI/M3, AND WL

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210	WL
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.457E+00	3.734E+00	1.207E+00	5.169E-01	9.198E-07	1.189E-05
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.142E+00	2.889E+00	1.228E+00	6.592E-01	1.389E-06	1.166E-05
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.321E+00	2.224E+00	1.136E+00	7.027E-01	1.895E-06	1.067E-05
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.882E+00	1.836E+00	1.031E+00	6.782E-01	2.208E-06	9.648E-06
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.120E+00	1.114E+00	7.293E-01	5.120E-01	2.544E-06	6.754E-06
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.224E-01	5.225E-01	4.188E-01	3.274E-01	2.785E-06	3.883E-06
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.002E-01	3.003E-01	2.706E-01	2.349E-01	2.970E-06	2.558E-06
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.070E-01	2.072E-01	1.963E-01	1.803E-01	2.970E-06	1.881E-06
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.564E-01	1.565E-01	1.521E-01	1.445E-01	2.935E-06	1.471E-06
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.245E-01	1.245E-01	1.228E-01	1.190E-01	2.887E-06	1.195E-06
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.028E-01	1.029E-01	1.022E-01	1.003E-01	2.836E-06	9.980E-07
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.746E-02	8.751E-02	8.731E-02	8.639E-02	2.794E-06	8.550E-07

GROUND SURFACE CONCENTRATIONS, PCI/M2

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.958E+00	2.958E+00	2.958E+00	1.916E+00
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.288E+00	2.288E+00	2.288E+00	2.893E+00
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.762E+00	1.762E+00	1.762E+00	3.947E+00
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.454E+00	1.454E+00	1.454E+00	4.600E+00
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.821E-01	8.821E-01	8.821E-01	5.299E+00
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.138E-01	4.138E-01	4.138E-01	5.801E+00
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.379E-01	2.379E-01	2.379E-01	6.187E+00
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.641E-01	1.641E-01	1.641E-01	6.186E+00
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.239E-01	1.239E-01	1.239E-01	6.113E+00
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.865E-02	9.865E-02	9.865E-02	6.013E+00
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.146E-02	8.146E-02	8.146E-02	5.907E+00
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.931E-02	6.931E-02	6.931E-02	5.820E+00

TOTAL DEPOSITION RATES, PCI/M2-SEC

XRHO, KM	U-238	Th-230	Ra-226	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	2.759E-09
2.5	0.000E+00	0.000E+00	0.000E+00	4.167E-09
3.5	0.000E+00	0.000E+00	0.000E+00	5.684E-09
4.5	0.000E+00	0.000E+00	0.000E+00	6.625E-09
7.5	0.000E+00	0.000E+00	0.000E+00	7.631E-09
15.0	0.000E+00	0.000E+00	0.000E+00	8.355E-09
25.0	0.000E+00	0.000E+00	0.000E+00	8.911E-09
35.0	0.000E+00	0.000E+00	0.000E+00	8.909E-09
45.0	0.000E+00	0.000E+00	0.000E+00	8.804E-09
55.0	0.000E+00	0.000E+00	0.000E+00	8.660E-09
65.0	0.000E+00	0.000E+00	0.000E+00	8.507E-09
75.0	0.000E+00	0.000E+00	0.000E+00	8.382E-09

TIME STEP NUMBER10, DURATION IN YRS IS... 1.0

CONCENTRATION DATA FOR THE W DIRECTION, THETA EQUALS 270.0 DEGREES

TOTAL AIR CONCENTRATIONS, PCI/M3, AND WL

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210	WL
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.985E+00	4.293E+00	1.314E+00	5.342E-01	9.773E-07	1.307E-05
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.516E+00	3.302E+00	1.346E+00	6.810E-01	1.398E-06	1.277E-05
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.615E+00	2.546E+00	1.262E+00	7.310E-01	1.893E-06	1.175E-05
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.105E+00	2.078E+00	1.165E+00	7.282E-01	2.299E-06	1.076E-05
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.253E+00	1.251E+00	8.744E-01	6.168E-01	3.069E-06	8.022E-06
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.795E-01	5.798E-01	5.053E-01	4.214E-01	3.720E-06	4.731E-06
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.192E-01	3.194E-01	3.048E-01	2.821E-01	3.916E-06	2.927E-06
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.142E-01	2.143E-01	2.108E-01	2.036E-01	3.935E-06	2.049E-06
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.586E-01	1.587E-01	1.580E-01	1.556E-01	3.899E-06	1.545E-06
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.247E-01	1.248E-01	1.248E-01	1.241E-01	3.843E-06	1.224E-06
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.020E-01	1.020E-01	1.023E-01	1.022E-01	3.780E-06	1.005E-06
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.616E-02	8.621E-02	8.653E-02	8.662E-02	3.727E-06	8.506E-07

GROUND SURFACE CONCENTRATIONS, PCI/M2

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.401E+00	3.401E+00	3.401E+00	2.036E+00
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.615E+00	2.615E+00	2.615E+00	2.911E+00
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.017E+00	2.017E+00	2.017E+00	3.944E+00
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.646E+00	1.646E+00	1.646E+00	4.789E+00
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.909E-01	9.909E-01	9.909E-01	6.392E+00
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.592E-01	4.592E-01	4.592E-01	7.749E+00
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.530E-01	2.530E-01	2.530E-01	8.158E+00
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.697E-01	1.697E-01	1.697E-01	8.197E+00
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.257E-01	1.257E-01	1.257E-01	8.121E+00
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.882E-02	9.882E-02	9.882E-02	8.004E+00
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.080E-02	8.080E-02	8.080E-02	7.873E+00
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.828E-02	6.828E-02	6.828E-02	7.764E+00

TOTAL DEPOSITION RATES, PCI/M2-SEC

XRHO, KM	U-238	Th-230	Ra-226	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	2.932E-09
2.5	0.000E+00	0.000E+00	0.000E+00	4.193E-09
3.5	0.000E+00	0.000E+00	0.000E+00	5.680E-09
4.5	0.000E+00	0.000E+00	0.000E+00	6.897E-09
7.5	0.000E+00	0.000E+00	0.000E+00	9.206E-09
15.0	0.000E+00	0.000E+00	0.000E+00	1.116E-08
25.0	0.000E+00	0.000E+00	0.000E+00	1.175E-08
35.0	0.000E+00	0.000E+00	0.000E+00	1.181E-08
45.0	0.000E+00	0.000E+00	0.000E+00	1.170E-08
55.0	0.000E+00	0.000E+00	0.000E+00	1.153E-08
65.0	0.000E+00	0.000E+00	0.000E+00	1.134E-08
75.0	0.000E+00	0.000E+00	0.000E+00	1.118E-08

TIME STEP NUMBER10, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS INHAL. EXPOSED ORGAN IS EFFECTIV

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.500E-07	3.320E-06	5.105E-06	6.825E-06	7.977E-06	9.248E-06	2.215E-05	3.881E-05
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.160E-07	4.197E-06	6.948E-06	1.009E-05	1.241E-05	1.489E-05	2.020E-05	4.196E-05
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.780E-07	4.669E-06	8.255E-06	1.171E-05	1.418E-05	1.684E-05	1.968E-05	2.085E-05
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.044E-06	5.676E-06	9.867E-06	1.444E-05	1.791E-05	2.165E-05	1.958E-05	1.548E-05
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.059E-06	5.957E-06	1.123E-05	1.692E-05	2.143E-05	2.795E-05	1.825E-05	1.983E-05
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.139E-07	4.941E-06	1.705E-04	3.412E-04	2.723E-05	3.435E-05	2.682E-05	2.223E-05
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.139E-07	4.126E-06	8.882E-04	1.192E-04	1.436E-05	1.645E-05	1.895E-05	2.149E-05
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.216E-07	4.247E-06	9.744E-06	1.028E-05	1.432E-05	1.679E-05	1.553E-05	1.459E-05
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.287E-07	4.678E-06	8.246E-06	1.237E-05	1.716E-05	1.393E-05	1.431E-05	8.382E-06
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.080E-06	4.311E-06	7.085E-06	9.943E-06	1.248E-05	1.231E-05	6.682E-06	6.766E-06
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.130E-07	3.490E-06	5.769E-06	7.813E-06	1.101E-05	1.891E-05	2.303E-05	1.622E-05
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.625E-07	3.462E-04	2.170E-04	1.128E-05	2.425E-05	2.724E-04	2.138E-04	3.465E-05
W	0.000E+00	0.000E+00	1.382E-07	0.000E+00	6.722E-07	3.532E-06	8.012E-06	2.100E-05	4.960E-05	1.268E-02	4.369E-03	2.046E-05
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.534E-07	3.292E-06	5.884E-06	1.258E-05	4.443E-05	5.810E-05	1.197E-04	1.506E-04
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.240E-07	4.148E-06	7.165E-06	1.030E-05	1.264E-05	1.517E-05	2.517E-05	5.311E-05
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.709E-05	6.222E-04	2.164E-03	6.859E-04	3.588E-04	1.331E-02	5.004E-03	5.973E-04

TOTAL DOSE COMMITMENT IS 4.411E-02 PERSON-REM/YR

TIME STEP NUMBER10, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS INHAL. EXPOSED ORGAN IS BONE

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.085E-06	2.693E-05	4.139E-05	5.532E-05	6.463E-05	7.489E-05	1.793E-04	3.141E-04
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.433E-06	3.405E-05	5.634E-05	8.175E-05	1.006E-04	1.206E-04	1.635E-04	3.395E-04
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.935E-06	3.788E-05	6.694E-05	9.491E-05	1.149E-04	1.364E-04	1.593E-04	1.688E-04
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.471E-06	4.604E-05	8.002E-05	1.170E-04	1.452E-04	1.754E-04	1.586E-04	1.253E-04
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.597E-06	4.833E-05	9.110E-05	1.372E-04	1.737E-04	2.265E-04	1.479E-04	1.606E-04
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.793E-06	4.009E-05	1.383E-03	2.766E-03	2.207E-04	2.784E-04	2.173E-04	1.801E-04
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.981E-06	3.348E-05	7.204E-03	9.666E-04	1.164E-04	1.333E-04	1.536E-04	1.741E-04
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.478E-06	3.445E-05	7.903E-05	8.334E-05	1.160E-04	1.361E-04	1.258E-04	1.181E-04
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.536E-06	3.795E-05	6.687E-05	1.003E-04	1.391E-04	1.129E-04	1.159E-04	6.787E-05
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.763E-06	3.497E-05	5.746E-05	8.061E-05	1.012E-04	9.970E-05	5.412E-05	5.478E-05
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.596E-06	2.831E-05	4.679E-05	6.334E-05	8.926E-05	1.532E-04	1.865E-04	1.313E-04
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.564E-06	2.808E-03	1.759E-03	9.147E-05	1.966E-04	2.207E-03	1.732E-03	2.806E-04
W	0.000E+00	0.000E+00	1.122E-06	0.000E+00	5.454E-06	2.865E-05	6.497E-05	1.702E-04	4.019E-04	1.027E-01	3.538E-02	1.656E-04
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.301E-06	2.670E-05	4.772E-05	1.020E-04	3.602E-04	4.708E-04	9.695E-04	1.220E-03
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.685E-06	3.365E-05	5.809E-05	8.350E-05	1.024E-04	1.229E-04	2.038E-04	4.298E-04
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.387E-04	5.047E-03	1.755E-02	5.559E-03	2.907E-03	1.078E-01	4.051E-02	4.833E-03

TOTAL DOSE COMMITMENT IS 3.573E-01 PERSON-REM/YR

TIME STEP NUMBER10, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS INHAL. EXPOSED ORGAN IS AVG.LUNG

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.723E-08	3.930E-07	6.186E-07	8.464E-07	1.012E-06	1.201E-06	2.941E-06	5.268E-06
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.063E-07	4.955E-07	8.406E-07	1.251E-06	1.578E-06	1.939E-06	2.695E-06	5.732E-06
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.133E-07	5.498E-07	9.948E-07	1.443E-06	1.787E-06	2.168E-06	2.589E-06	2.802E-06
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.208E-07	6.667E-07	1.184E-06	1.767E-06	2.237E-06	2.758E-06	2.543E-06	2.048E-06
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.224E-07	6.978E-07	1.340E-06	2.052E-06	2.640E-06	3.497E-06	2.317E-06	2.554E-06
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.247E-08	5.778E-07	2.031E-05	4.138E-05	3.359E-06	4.309E-06	3.420E-06	2.880E-06
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.087E-08	4.826E-07	1.058E-04	1.445E-05	1.769E-06	2.060E-06	2.412E-06	2.778E-06
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.065E-07	4.977E-07	1.164E-06	1.251E-06	1.772E-06	2.114E-06	1.987E-06	1.895E-06
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.075E-07	5.498E-07	9.888E-07	1.512E-06	2.135E-06	1.764E-06	1.843E-06	1.097E-06
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.252E-07	5.072E-07	8.507E-07	1.218E-06	1.558E-06	1.565E-06	8.658E-07	8.928E-07
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.450E-08	4.112E-07	6.922E-07	9.540E-07	1.368E-06	2.389E-06	2.958E-06	2.117E-06
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.541E-08	4.088E-05	2.610E-05	1.383E-06	3.026E-06	3.458E-05	2.761E-05	4.552E-06
W	0.000E+00	0.000E+00	1.596E-08	0.000E+00	7.808E-08	4.166E-07	9.639E-07	2.575E-06	6.200E-06	1.615E-03	5.667E-04	2.701E-06
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.588E-08	3.874E-07	7.036E-07	1.526E-06	5.469E-06	7.250E-06	1.514E-05	1.932E-05
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.579E-08	4.904E-07	8.660E-07	1.273E-06	1.595E-06	1.955E-06	3.313E-06	7.132E-06
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.989E-06	7.368E-05	2.626E-04	8.531E-05	4.573E-05	1.737E-03	6.689E-04	8.172E-05

TOTAL DOSE COMMITMENT IS 5.670E-03 PERSON-REM/YR

TIME STEP NUMBER10, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS INHAL. EXPOSED ORGAN IS BRONCHI

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.500E-03	4.411E-03	3.806E-03	3.534E-03	3.153E-03	2.947E-03	5.902E-03	8.864E-03
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.093E-03	5.666E-03	5.010E-03	4.858E-03	4.456E-03	4.242E-03	4.754E-03	8.399E-03
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.567E-03	8.458E-03	7.667E-03	7.346E-03	6.701E-03	6.355E-03	6.170E-03	5.592E-03
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.790E-03	1.586E-02	1.491E-02	1.491E-02	1.401E-02	1.360E-02	1.027E-02	6.974E-03
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.116E-02	2.643E-02	2.713E-02	2.749E-02	2.598E-02	2.698E-02	1.462E-02	1.358E-02
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.804E-02	3.444E-02	4.035E-01	4.937E-01	2.836E-02	2.797E-02	1.794E-02	1.264E-02
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.056E-03	2.123E-02	1.958E+00	1.655E-01	1.449E-02	1.302E-02	1.235E-02	1.190E-02
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.701E-03	1.648E-02	2.014E-02	1.420E-02	1.480E-02	1.387E-02	1.070E-02	8.620E-03
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.003E-03	1.502E-02	1.426E-02	1.475E-02	1.564E-02	1.027E-02	8.866E-03	4.482E-03
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.004E-03	1.185E-02	1.053E-02	9.954E-03	9.385E-03	7.403E-03	3.350E-03	2.912E-03
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.950E-03	9.428E-03	8.668E-03	8.058E-03	8.626E-03	1.193E-02	1.217E-02	7.369E-03
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.367E-03	8.402E-01	2.939E-01	1.055E-02	1.729E-02	1.570E-01	1.035E-01	1.447E-02
W	0.000E+00	0.000E+00	3.269E-03	0.000E+00	4.698E-03	9.417E-03	1.117E-02	1.954E-02	3.450E-02	7.034E+00	2.014E+00	8.078E-03
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.567E-03	1.193E-02	1.179E-02	1.722E-02	4.604E-02	4.837E-02	8.324E-02	8.988E-02
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.336E-03	8.497E-03	7.827E-03	7.593E-03	7.006E-03	6.728E-03	9.297E-03	1.682E-02
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.966E-02	8.543E-01	1.598E+00	3.423E-01	1.344E-01	3.973E+00	1.238E+00	1.260E-01

TOTAL DOSE COMMITMENT IS 2.326E+01 PERSON-REM/YR

TIME STEP NUMBER10, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS GROUND EXPOSED ORGAN IS EFFECTIV

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.232E-07	6.771E-07	7.037E-07	7.646E-07	7.827E-07	8.270E-07	1.850E-06	3.072E-06
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.992E-07	8.660E-07	9.386E-07	1.089E-06	1.167E-06	1.274E-06	1.615E-06	3.187E-06
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.670E-07	1.207E-06	1.309E-06	1.457E-06	1.516E-06	1.618E-06	1.748E-06	1.745E-06
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.289E-07	2.099E-06	2.216E-06	2.460E-06	2.543E-06	2.695E-06	2.208E-06	1.615E-06
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.308E-06	3.307E-06	3.673E-06	4.018E-06	4.087E-06	4.548E-06	2.630E-06	2.596E-06
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.931E-06	4.102E-06	5.481E-05	7.414E-05	4.666E-06	5.002E-06	3.463E-06	2.618E-06
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.031E-06	2.610E-06	2.692E-04	2.512E-05	2.408E-06	2.353E-06	2.410E-06	2.494E-06
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.027E-06	2.092E-06	2.802E-06	2.157E-06	2.441E-06	2.468E-06	2.041E-06	1.754E-06
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.378E-07	1.951E-06	2.056E-06	2.332E-06	2.687E-06	1.907E-06	1.768E-06	9.547E-07
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.479E-07	1.573E-06	1.571E-06	1.658E-06	1.729E-06	1.495E-06	7.358E-07	6.906E-07
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.029E-07	1.254E-06	1.290E-06	1.330E-06	1.565E-06	2.361E-06	2.607E-06	1.700E-06
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.108E-07	1.137E-04	4.488E-05	1.797E-06	3.253E-06	3.232E-05	2.313E-05	3.487E-06
W	0.000E+00	0.000E+00	3.678E-07	0.000E+00	5.671E-07	1.256E-06	1.694E-06	3.335E-06	6.555E-06	1.473E-03	4.611E-04	2.006E-06
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.640E-07	1.527E-06	1.650E-06	2.622E-06	7.587E-06	8.581E-06	1.581E-05	1.822E-05
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.342E-07	1.184E-06	1.269E-06	1.410E-06	1.468E-06	1.571E-06	2.395E-06	4.736E-06
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.666E-06	1.300E-04	2.966E-04	7.538E-05	3.437E-05	1.160E-03	4.069E-04	4.610E-05

TOTAL DOSE COMMITMENT IS 4.987E-03 PERSON-REM/YR

TIME STEP NUMBER10, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS CLOUD EXPOSED ORGAN IS EFFECTIV

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.687E-05	3.526E-05	3.258E-05	3.086E-05	2.771E-05	2.598E-05	5.208E-05	7.827E-05
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.094E-05	4.531E-05	4.286E-05	4.237E-05	3.913E-05	3.736E-05	4.193E-05	7.414E-05
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.601E-05	6.140E-05	6.272E-05	6.258E-05	5.808E-05	5.556E-05	5.419E-05	4.924E-05
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.321E-05	9.409E-05	1.048E-04	1.133E-04	1.117E-04	1.119E-04	8.634E-05	5.952E-05
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.131E-05	1.355E-04	1.731E-04	2.005E-04	2.045E-04	2.219E-04	1.235E-04	1.165E-04
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.533E-05	1.366E-04	2.617E-03	3.733E-03	2.300E-04	2.352E-04	1.540E-04	1.097E-04
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.835E-05	1.023E-04	1.320E-02	1.274E-03	1.185E-04	1.100E-04	1.061E-04	1.034E-04
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.373E-05	8.749E-05	1.332E-04	1.061E-04	1.181E-04	1.150E-04	9.069E-05	7.412E-05
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.954E-05	8.536E-05	9.963E-05	1.138E-04	1.274E-04	8.636E-05	7.596E-05	3.884E-05
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.222E-05	7.361E-05	7.846E-05	8.039E-05	7.889E-05	6.357E-05	2.911E-05	2.547E-05
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.362E-05	6.135E-05	6.686E-05	6.657E-05	7.357E-05	1.034E-04	1.063E-04	6.471E-05
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.638E-05	5.640E-03	2.314E-03	8.832E-05	1.488E-04	1.369E-03	9.080E-04	1.274E-04
W	0.000E+00	0.000E+00	8.742E-06	0.000E+00	2.133E-05	6.150E-05	8.737E-05	1.635E-04	2.970E-04	6.136E-02	1.768E-02	7.113E-05
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.292E-05	7.175E-05	8.769E-05	1.400E-04	3.899E-04	4.180E-04	7.268E-04	7.891E-04
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.226E-05	5.811E-05	6.193E-05	6.358E-05	6.017E-05	5.852E-05	8.141E-05	1.478E-04
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.870E-04	6.640E-03	1.345E-02	2.960E-03	1.175E-03	3.492E-02	1.091E-02	1.112E-03

TOTAL DOSE COMMITMENT IS 1.928E-01 PERSON-REM/YR

TIME STEP NUMBER10, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS VEG. ING EXPOSED ORGAN IS EFFECTIV

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

TOTAL DOSE COMMITMENT IS 0.000E+00 PERSON-REM/YR

WARNING--POPULATION FOOD INGESTION DOSES SHOWN
ABOVE HAVE NOT BEEN CORRECTED TO REFLECT POTENTIAL
FOOD EXPORT AND MAY EXCEED DOSES ACTUALLY RECEIVED
BY THE POPULATION OF THIS REGION. SEE SUMMARY
TABLE FOR THIS INFORMATION.

TIME STEP NUMBER10, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS VEG. ING EXPOSED ORGAN IS BONE

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

TOTAL DOSE COMMITMENT IS 0.000E+00 PERSON-REM/YR

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ABOVE HAVE NOT BEEN CORRECTED TO REFLECT POTENTIAL
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TIME STEP NUMBER10, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS MEAT ING EXPOSED ORGAN IS EFFECTIV

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

TOTAL DOSE COMMITMENT IS 0.000E+00 PERSON-REM/YR

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TIME STEP NUMBER10, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS MEAT ING EXPOSED ORGAN IS BONE

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

TOTAL DOSE COMMITMENT IS 0.000E+00 PERSON-REM/YR

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TIME STEP NUMBER10, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS MILK ING EXPOSED ORGAN IS EFFECTIV

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

TOTAL DOSE COMMITMENT IS 0.000E+00 PERSON-REM/YR

WARNING--POPULATION FOOD INGESTION DOSES SHOWN
ABOVE HAVE NOT BEEN CORRECTED TO REFLECT POTENTIAL
FOOD EXPORT AND MAY EXCEED DOSES ACTUALLY RECEIVED
BY THE POPULATION OF THIS REGION. SEE SUMMARY
TABLE FOR THIS INFORMATION.

TIME STEP NUMBER10, DURATION IN YRS IS... 1.0

EXPOSURE PATHWAY IS MILK ING EXPOSED ORGAN IS BONE

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRHO 75.0
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

TOTAL DOSE COMMITMENT IS 0.000E+00 PERSON-REM/YR

WARNING--POPULATION FOOD INGESTION DOSES SHOWN
ABOVE HAVE NOT BEEN CORRECTED TO REFLECT POTENTIAL
FOOD EXPORT AND MAY EXCEED DOSES ACTUALLY RECEIVED
BY THE POPULATION OF THIS REGION. SEE SUMMARY
TABLE FOR THIS INFORMATION.

TIME STEP NUMBER10, DURATION IN YRS IS... 1.0

SUMMARY PRINT OF POPULATION DOSES COMPUTED FOR TSTEP10--DOSES SHOWN ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DOSES RECEIVED BY PEOPLE WITHIN 80 KILOMETERS

PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INHAL.	4.411E-02	3.573E-01	5.670E-03	2.680E-01	1.288E-01	2.326E+01
GROUND	4.987E-03	4.987E-03	4.987E-03	4.987E-03	4.987E-03	4.987E-03
CLOUD	1.928E-01	1.928E-01	1.928E-01	1.928E-01	1.928E-01	1.928E-01
VEG. ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MEAT ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MILK ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RNPLUS50	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOTALS	2.419E-01	5.552E-01	2.035E-01	4.658E-01	3.267E-01	2.346E+01

DOSES RECEIVED BY PEOPLE BEYOND 80 KILOMETERS

PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INHAL.	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GROUND	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CLOUD	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
VEG. ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MEAT ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MILK ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RNPLUS50	5.345E+00	7.289E+01	1.215E+00	5.345E+00	5.345E+00	3.402E+01
TOTALS	5.345E+00	7.289E+01	1.215E+00	5.345E+00	5.345E+00	3.402E+01

TOTAL DOSES COMPUTED OVER ALL POPULATIONS

PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INHAL.	4.411E-02	3.573E-01	5.670E-03	2.680E-01	1.288E-01	2.326E+01
GROUND	4.987E-03	4.987E-03	4.987E-03	4.987E-03	4.987E-03	4.987E-03
CLOUD	1.928E-01	1.928E-01	1.928E-01	1.928E-01	1.928E-01	1.928E-01
VEG. ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MEAT ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MILK ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RNPLUS50	5.345E+00	7.289E+01	1.215E+00	5.345E+00	5.345E+00	3.402E+01
TOTALS	5.587E+00	7.345E+01	1.418E+00	5.811E+00	5.672E+00	5.747E+01

COMPLETE SUMMARY OF COMPUTED ENVIRONMENTAL DOSE COMMITMENTS, INTEGRATED OVER ALL TIME STEPS

100-YEAR ENVIRONMENTAL DOSE COMMITMENTS RECEIVED BY PEOPLE WITHIN 80 KILOMETERS, PERSON-REM

NO.	T-START	T-END	T-LONG	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
1	2014.00	2015.00	1.00	TOTALS	2.466E-01	5.654E-01	2.075E-01	4.745E-01	3.329E-01	2.371E+01
2	2015.00	2016.00	1.00	TOTALS	3.122E-01	7.180E-01	2.624E-01	6.023E-01	4.220E-01	2.994E+01
3	2016.00	2017.00	1.00	TOTALS	3.783E-01	8.715E-01	3.177E-01	7.308E-01	5.117E-01	3.640E+01
4	2017.00	2018.00	1.00	TOTALS	4.076E-01	9.401E-01	3.422E-01	7.882E-01	5.516E-01	3.926E+01
5	2018.00	2019.00	1.00	TOTALS	4.378E-01	1.010E+00	3.676E-01	8.469E-01	5.926E-01	4.230E+01
6	2019.00	2020.00	1.00	TOTALS	4.684E-01	1.081E+00	3.932E-01	9.062E-01	6.341E-01	4.538E+01
7	2020.00	2021.00	1.00	TOTALS	4.032E-01	9.299E-01	3.386E-01	7.797E-01	5.457E-01	3.913E+01
8	2021.00	2022.00	1.00	TOTALS	3.724E-01	8.581E-01	3.128E-01	7.196E-01	5.038E-01	3.620E+01
9	2022.00	2023.00	1.00	TOTALS	2.722E-01	6.255E-01	2.288E-01	5.247E-01	3.678E-01	2.637E+01
10	2023.00	2024.00	1.00	TOTALS	2.419E-01	5.552E-01	2.035E-01	4.658E-01	3.267E-01	2.346E+01
TOTALS OVER ALL10 TIME STEPS					3.541E+00	8.155E+00	2.974E+00	6.839E+00	4.789E+00	3.422E+02

100-YEAR ENVIRONMENTAL DOSE COMMITMENTS RECEIVED BY PEOPLE BEYOND 80 KILOMETERS, PERSON-REM

NO.	T-START	T-END	T-LONG	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
1	2014.00	2015.00	1.00	TOTALS	5.431E+00	7.406E+01	1.234E+00	5.431E+00	5.431E+00	3.456E+01
2	2015.00	2016.00	1.00	TOTALS	6.885E+00	9.389E+01	1.565E+00	6.885E+00	6.885E+00	4.381E+01
3	2016.00	2017.00	1.00	TOTALS	8.339E+00	1.137E+02	1.895E+00	8.339E+00	8.339E+00	5.307E+01
4	2017.00	2018.00	1.00	TOTALS	9.023E+00	1.230E+02	2.051E+00	9.023E+00	9.023E+00	5.742E+01
5	2018.00	2019.00	1.00	TOTALS	9.708E+00	1.324E+02	2.206E+00	9.708E+00	9.708E+00	6.178E+01
6	2019.00	2020.00	1.00	TOTALS	1.039E+01	1.417E+02	2.362E+00	1.039E+01	1.039E+01	6.613E+01
7	2020.00	2021.00	1.00	TOTALS	8.938E+00	1.219E+02	2.031E+00	8.938E+00	8.938E+00	5.688E+01
8	2021.00	2022.00	1.00	TOTALS	8.254E+00	1.125E+02	1.876E+00	8.254E+00	8.254E+00	5.252E+01
9	2022.00	2023.00	1.00	TOTALS	6.030E+00	8.222E+01	1.370E+00	6.030E+00	6.030E+00	3.837E+01
10	2023.00	2024.00	1.00	TOTALS	5.345E+00	7.289E+01	1.215E+00	5.345E+00	5.345E+00	3.402E+01
TOTALS OVER ALL10 TIME STEPS					7.834E+01	1.068E+03	1.781E+01	7.834E+01	7.834E+01	4.986E+02

GRAND TOTAL 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS RECEIVED OVER ALL POPULATIONS, PERSON-REM

NO.	T-START	T-END	T-LONG	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
1	2014.00	2015.00	1.00	TOTALS	5.677E+00	7.462E+01	1.442E+00	5.905E+00	5.764E+00	5.827E+01
2	2015.00	2016.00	1.00	TOTALS	7.197E+00	9.460E+01	1.827E+00	7.487E+00	7.307E+00	7.376E+01
3	2016.00	2017.00	1.00	TOTALS	8.717E+00	1.146E+02	2.213E+00	9.070E+00	8.851E+00	8.947E+01
4	2017.00	2018.00	1.00	TOTALS	9.431E+00	1.240E+02	2.393E+00	9.812E+00	9.575E+00	9.668E+01
5	2018.00	2019.00	1.00	TOTALS	1.015E+01	1.334E+02	2.574E+00	1.055E+01	1.030E+01	1.041E+02
6	2019.00	2020.00	1.00	TOTALS	1.086E+01	1.428E+02	2.755E+00	1.130E+01	1.103E+01	1.115E+02
7	2020.00	2021.00	1.00	TOTALS	9.341E+00	1.228E+02	2.370E+00	9.717E+00	9.483E+00	9.601E+01
8	2021.00	2022.00	1.00	TOTALS	8.626E+00	1.134E+02	2.189E+00	8.973E+00	8.757E+00	8.873E+01
9	2022.00	2023.00	1.00	TOTALS	6.302E+00	8.285E+01	1.599E+00	6.554E+00	6.397E+00	6.474E+01
10	2023.00	2024.00	1.00	TOTALS	5.587E+00	7.345E+01	1.418E+00	5.811E+00	5.672E+00	5.747E+01
TOTALS OVER ALL10 TIME STEPS					8.188E+01	1.076E+03	2.078E+01	8.518E+01	8.313E+01	8.407E+02

TIME STEP NUMBER10, DURATION IN YRS IS... 1.0

INDIVIDUAL RECEPTOR PARTICULATE CONCENTRATIONS

NO.	NAME	PTSZ	AIRBORNE CONCENTRATIONS, PCI/M3 U-238	Th-230	Ra-226	Pb-210	GROUND CONCENTRATIONS, PCI/M2 U-238	Th-230	Ra-226	Pb-210
1	Receptor 1	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1	Receptor 1	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1	Receptor 1	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
1	Receptor 1	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2	Receptor 2	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2	Receptor 2	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2	Receptor 2	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2	Receptor 2	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
3	Receptor 3	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
3	Receptor 3	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
3	Receptor 3	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
3	Receptor 3	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
4	Receptor 4	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
4	Receptor 4	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
4	Receptor 4	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
4	Receptor 4	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
5	Receptor 5	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
5	Receptor 5	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
5	Receptor 5	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
5	Receptor 5	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
6	Receptor 6	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
6	Receptor 6	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
6	Receptor 6	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
6	Receptor 6	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
7	Receptor 7	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
7	Receptor 7	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
7	Receptor 7	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
7	Receptor 7	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

TIME STEP NUMBER10, DURATION IN YRS IS... 1.0

INDIVIDUAL RECEPTOR RADON AND RADON DAUGHTER CONCENTRATIONS

	AIRBORNE CONCENTRATIONS, PCI/M3								GROUND CONCENTRATIONS, PCI/M2			
NO.	Rn-222	Po-218	Pb-214	Bi-214	Pb-210	Bi-210	Po-210	WL	Po-218	Pb-214	Bi-214	Pb-210
1	8.094E+00	6.754E+00	2.020E+00	8.434E-01	1.302E-06	4.752E-09	7.077E-13	2.035E-05	5.350E+00	5.350E+00	5.350E+00	1.600E+00
2	1.528E+00	1.522E+00	1.082E+00	8.049E-01	5.082E-06	4.056E-08	8.772E-12	1.006E-05	1.206E+00	1.206E+00	1.206E+00	5.530E+00
3	4.443E+00	3.777E+00	1.202E+00	4.332E-01	9.441E-07	6.312E-09	1.360E-12	1.160E-05	2.992E+00	2.992E+00	2.992E+00	1.300E+00
4	1.486E+00	1.406E+00	7.838E-01	5.080E-01	2.397E-06	2.104E-08	5.636E-12	7.317E-06	1.114E+00	1.114E+00	1.114E+00	2.669E+00
5	2.161E+00	2.111E+00	1.253E+00	8.417E-01	4.518E-06	4.460E-08	1.388E-11	1.167E-05	1.672E+00	1.672E+00	1.672E+00	4.755E+00
6	1.539E+00	1.484E+00	8.181E-01	5.169E-01	2.143E-06	1.520E-08	3.229E-12	7.605E-06	1.176E+00	1.176E+00	1.176E+00	2.410E+00
7	2.345E+00	2.304E+00	1.212E+00	7.233E-01	2.090E-06	1.130E-08	2.609E-12	1.122E-05	1.825E+00	1.825E+00	1.825E+00	2.452E+00

TIME STEP NUMBER10, DURATION IN YRS IS... 1.0

NUMBER 1 NAME=Receptor 1 X= 1.7KM, Y= -0.5KM, Z= 0.0M, DIST= 1.8KM, IRTYPE= 1

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	6.19E-01	1.25E-02	1.19E-02	1.55E-02	1.33E-02	1.01E+01
CHILD	TOTALS	6.19E-01	1.31E-02	1.21E-02	1.37E-02	1.27E-02	1.01E+01
TEENAGE	TOTALS	6.19E-01	1.43E-02	1.22E-02	1.29E-02	1.24E-02	1.01E+01
ADULT	TOTALS	6.19E-01	1.42E-02	1.23E-02	1.29E-02	1.25E-02	1.01E+01

NUMBER 2 NAME=Receptor 2 X= 9.6KM, Y= 3.4KM, Z= 0.0M, DIST= 10.1KM, IRTYPE= 1

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	1.25E-01	1.22E-02	9.68E-03	2.37E-02	1.50E-02	1.92E+00
CHILD	TOTALS	1.25E-01	1.41E-02	1.03E-02	1.65E-02	1.27E-02	1.92E+00
TEENAGE	TOTALS	1.25E-01	1.89E-02	1.08E-02	1.34E-02	1.18E-02	1.92E+00
ADULT	TOTALS	1.25E-01	1.87E-02	1.13E-02	1.35E-02	1.20E-02	1.92E+00

TIME STEP NUMBER10, DURATION IN YRS IS... 1.0

NUMBER 3 NAME=Receptor 3 X= -0.1KM, Y= 0.8KM, Z= 0.0M, DIST= 0.8KM, IRTYPE= 1

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	3.40E-01	6.86E-03	6.40E-03	8.99E-03	7.38E-03	5.56E+00
CHILD	TOTALS	3.40E-01	7.24E-03	6.52E-03	7.67E-03	6.96E-03	5.56E+00
TEENAGE	TOTALS	3.40E-01	8.13E-03	6.61E-03	7.10E-03	6.79E-03	5.56E+00
ADULT	TOTALS	3.40E-01	8.10E-03	6.71E-03	7.12E-03	6.84E-03	5.56E+00

NUMBER 4 NAME=Receptor 4 X= 9.8KM, Y= -7.4KM, Z= 0.0M, DIST= 12.3KM, IRTYPE= 1

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	1.18E-01	7.44E-03	6.27E-03	1.29E-02	8.76E-03	1.86E+00
CHILD	TOTALS	1.18E-01	8.38E-03	6.58E-03	9.50E-03	7.68E-03	1.86E+00
TEENAGE	TOTALS	1.18E-01	1.06E-02	6.79E-03	8.04E-03	7.26E-03	1.86E+00
ADULT	TOTALS	1.18E-01	1.05E-02	7.05E-03	8.09E-03	7.37E-03	1.86E+00

TIME STEP NUMBER10, DURATION IN YRS IS... 1.0

NUMBER 5 NAME=Receptor 5 X= 13.4KM, Y= -5.3KM, Z= 0.0M, DIST= 14.4KM, IRTYPE= 1

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	1.73E-01	1.25E-02	1.03E-02	2.27E-02	1.50E-02	2.71E+00
CHILD	TOTALS	1.73E-01	1.43E-02	1.09E-02	1.64E-02	1.30E-02	2.71E+00
TEENAGE	TOTALS	1.73E-01	1.85E-02	1.13E-02	1.37E-02	1.22E-02	2.71E+00
ADULT	TOTALS	1.73E-01	1.83E-02	1.18E-02	1.37E-02	1.24E-02	2.71E+00

NUMBER 6 NAME=Receptor 6 X= 7.6KM, Y= -6.7KM, Z= 0.0M, DIST= 10.1KM, IRTYPE= 1

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	1.22E-01	7.45E-03	6.40E-03	1.23E-02	8.63E-03	1.93E+00
CHILD	TOTALS	1.22E-01	8.29E-03	6.68E-03	9.29E-03	7.66E-03	1.93E+00
TEENAGE	TOTALS	1.22E-01	1.03E-02	6.86E-03	7.98E-03	7.29E-03	1.93E+00
ADULT	TOTALS	1.22E-01	1.02E-02	7.09E-03	8.03E-03	7.39E-03	1.93E+00

TIME STEP NUMBER10, DURATION IN YRS IS... 1.0

NUMBER 7 NAME=Receptor 7 X= -4.1KM, Y= 0.9KM, Z= 0.0M, DIST= 4.2KM, IRTYPE= 1

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	TOTALS	1.85E-01	1.01E-02	9.04E-03	1.48E-02	1.12E-02	2.94E+00
CHILD	TOTALS	1.85E-01	1.09E-02	9.30E-03	1.19E-02	1.03E-02	2.94E+00
TEENAGE	TOTALS	1.85E-01	1.28E-02	9.49E-03	1.06E-02	9.90E-03	2.94E+00
ADULT	TOTALS	1.85E-01	1.27E-02	9.71E-03	1.06E-02	1.00E-02	2.94E+00

0Program execution time = 1.93 seconds

APPENDIX E:

Baseline Gamma Survey Update

Baseline Radiological Survey of the

Ludeman Permit Area

Prepared for:

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Prepared by:

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January 2014

TABLE OF CONTENTS

1 BASELINE RADIOLOGICAL SURVEY 1
1.1 Introduction 1
1.2 Site Description 1
1.3 Previous Gamma Survey 1
1.4 Current Survey 1
1.4.1 Method to Conduct GPS-Based Survey 3
1.4.2 Method to Correlate Gamma Count and Exposure Rates 4
1.4.3 Method to Correlate Gamma Count Rates to Radionuclide Concentrations in Soil 6
1.4.4 Data Quality Assurance and Quality Control 6
1.4.5 Results 9
1.4.5.1 Baseline Gamma Survey Results 9
1.4.5.2 Correlation of Gamma Count and Exposure Rates 12
1.4.5.3 Maps of Predicted Exposure Rates 14
1.4.5.4 Correlation of Radium-226 Concentrations in Soil to Gamma Count Rates 20
1.4.5.5 Soil Radionuclide Concentration Mapping 22
1.4.6 Conclusions 25
1.4.7 References 26

TABLE OF CONTENTS (concluded)

List of Figures

Figure 1-1 Location of Ludeman permit area
Figure 1-2 Initial and current gamma survey areas
Figure 1-3 Gamma count and exposure rate correlation locations
Figure 1-4 Instrument function check location
Figure 1-5 Sodium iodide detector response (serial number PR090262)
Figure 1-6 Sodium iodide detector response (serial number PR321856)
Figure 1-7 Sodium iodide detector response (serial number PR320678)
Figure 1-8 Sodium iodide detector response (serial number PR144074)
Figure 1-9 Frequency histogram for current gamma count rates
Figure 1-10 Gamma count rates for entire current survey
Figure 1-11 Gamma count rates in northern survey areas
Figure 1-12 Gamma count rates in southern area
Figure 1-13 Correlation of gamma count and exposure rates
Figure 1-14 Predicted exposure rates in current survey area
Figure 1-15 Predicted exposure rates in northern survey areas
Figure 1-16 Predicted exposure rates in southern survey area
Figure 1-17 Predicted exposure rates at elevated reading and surrounding area
Figure 1-18 Outcropping at location of elevated readings
Figure 1-19 Correlation of gamma count rates to radium-226 concentrations in soil
Figure 1-20 Predicted radium-226 concentrations in surface soils (0-15 cm): current survey area
Figure 1-21 Predicted radium-226 concentrations in surface soils (0-15 cm): northern areas
Figure 1-22 Predicted radium-226 concentrations in surface soils (0-15 cm): southern area

List of Tables

Table 1-1 Gamma count and exposure rate correlation locations
Table 1-2 Summary statistics for gamma count rates
Table 1-3 Gamma count and exposure rate correlation measurements
Table 1-4 Summary statistics for predicted exposure rates
Table 1-5 Correlation of gamma count rates and radium-226 concentrations in soil
Table 1-6 Summary statistics for predicted radium-226 concentrations in soil

List of Appendices

Appendix A Instrument Calibration and Function Check Forms

1 BASELINE RADIOLOGICAL SURVEY

The following sections present the methods and results of a supplemental baseline radiological survey of the Ludeman Permit Area (permit area).

1.1 Introduction

On behalf of Uranium One Americas Inc. (Uranium One), Environmental Restoration Group, Inc. (ERG) performed a pre-operational baseline radiological survey of the proposed Ludeman Permit Area (Permit Area) (see Figure 1-1). This assessment is provided as a revision to Appendix D-11 of the Class III UIC Permit Application (WDEQ/LQD, 2007).

The work entailed a Global Positioning System (GPS)-based gamma radiation survey of areas within the permit area that were not included in an initial site gamma survey conducted in 2008 (reported in Tetra Tech, 2011). In addition, gamma count rates were correlated to exposure rates and known radium-226 concentrations in soil.

The work was guided by U.S. Nuclear Regulatory Commission (NRC) Regulatory Guide 4.14 Regulatory Guide 4.14, Revision 1, "Radiological Effluent and Environmental Monitoring at Uranium Mills," which suggests the pre-operational collection of up to 80 discrete radial grid-based gamma exposure rate measurements for each processing facility location (NRC, 1980). The GPS-based survey described herein provides a more conservative, comprehensive characterization of gamma emissions across large land areas.

1.2 Site Description

The permit area is located in Converse County, Wyoming, approximately 8 miles northeast of Glenrock, Wyoming. The permit area covers approximately 20,000 acres with some areas of privately held; and federal and state-owned lands.

The permit area is the proposed site for an in-situ recovery (ISR) facility that will include three satellite plants, each with maximum production and restoration flows of approximately 3,000 and 1,000 gallons per minute, respectively.

The facility will use fixed-bed pressurized down-flow ion exchange (IX) columns to separate uranium from the pregnant production fluid and restoration solutions. The IX resin containing the uranium will be removed from the IX column and transported to an off-site facility for further processing.

1.3 Previous Gamma Survey

On behalf of Uranium One, Tetra Tech conducted in 2008 an initial survey of baseline gamma exposure rates and radionuclide concentrations in soil at the proposed project area (Tetra Tech, 2011). The surveyed areas consisted of approximately 11,000 acres in potential in situ recovery (ISR) well field areas. These are shown in Figure 1-2. The purpose of the survey was to establish baseline levels and spatial distributions of radiological parameters prior to in situ recovery operations at the site (Tetra Tech, 2011).

1.4 Current Survey

To supplement the initial survey for areas added to the permit area, ERG conducted a GPS-based gamma survey from July 15 through 27, 2013, the methods of which were comparable to the initial survey.

The survey consisted of three primary areas within the permit area, as defined by Uranium One. The areas (approximately 7,214 acres) are in the northern and south-eastern portions of the permit area. Additional

areas also were defined by Uranium One as inaccessible, thus were not surveyed by field personnel. The surveyed and inaccessible areas are shown in Figure 1-2. In addition, gamma count rates were correlated to exposure rates and known radium-226 concentrations in soil.

Figure 1-1. Location of Ludeman permit area

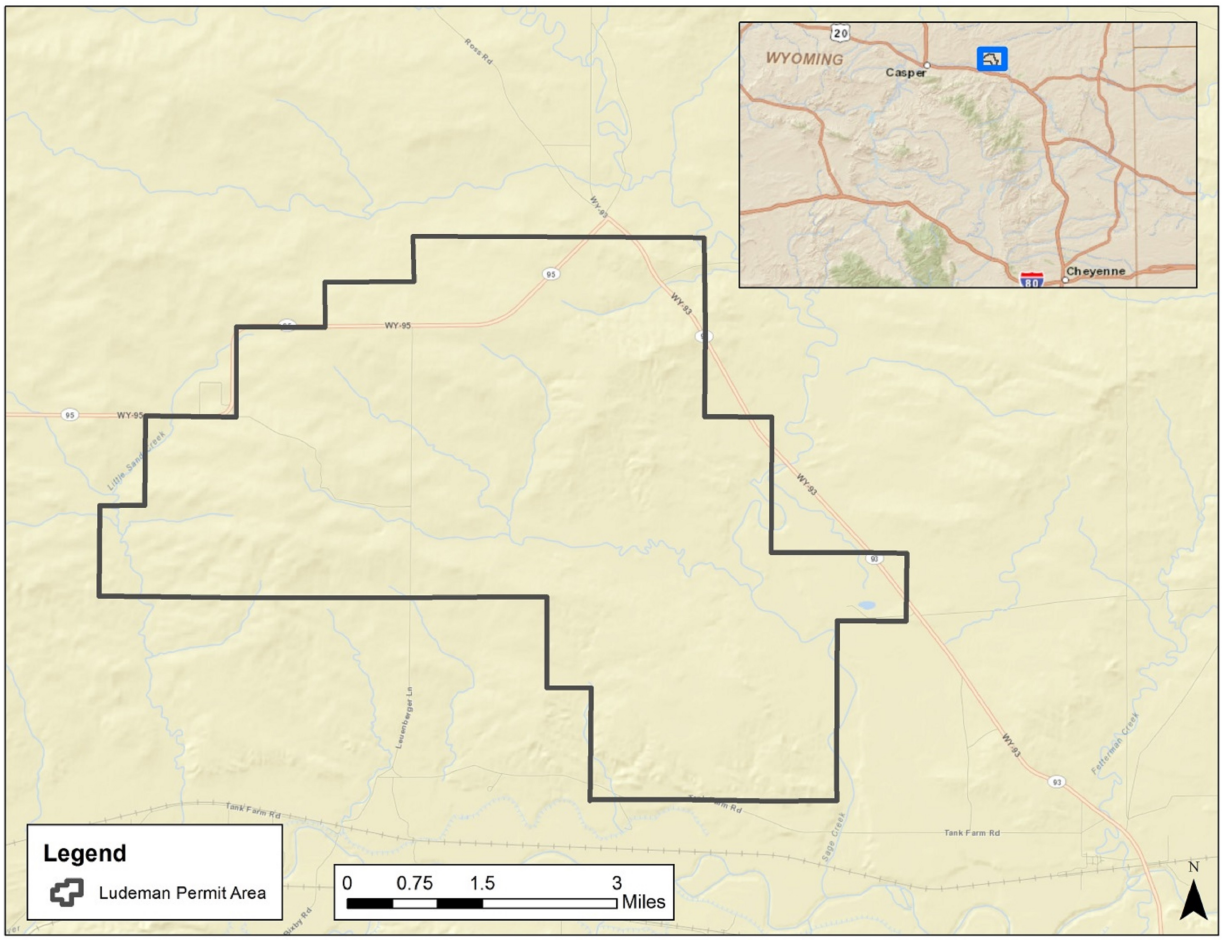
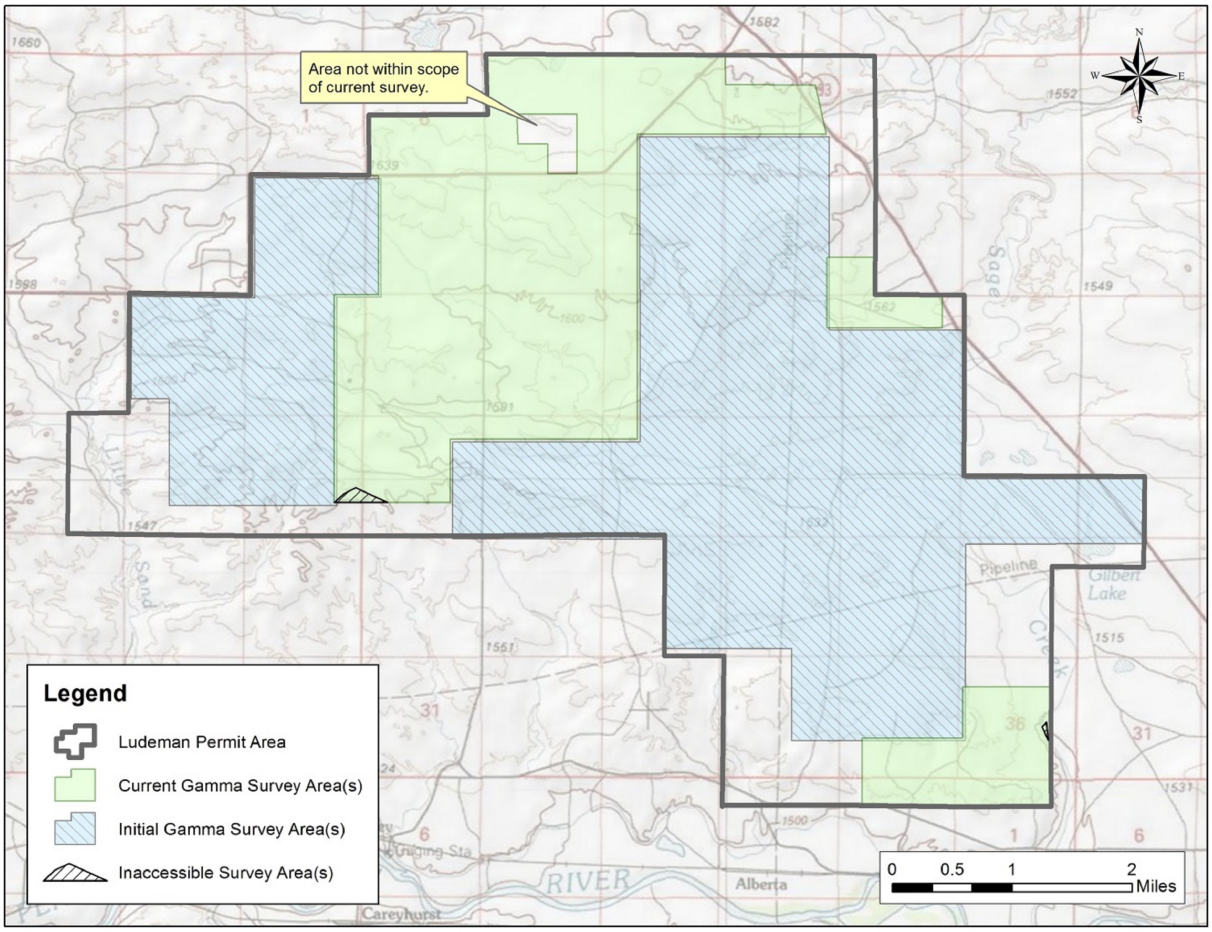


Figure 1-2. Initial and current gamma survey areas



1.4.1 Method to Conduct GPS-Based Survey

The gamma survey was performed using two, four-wheeled all-terrain vehicles (ATVs). The ATVs were chosen to satisfy survey speed requirements and contend with the known rugged terrain of the site. The ATVs were equipped with custom outriggers and mounting racks, designed to hold the associated surveying equipment.

Each ATV outrigger held two Ludlum Model 44-10 2-inch by 2-inch sodium iodide detectors mounted at approximately 3 meters (m) apart. Each 44-10 was coupled to a Ludlum Model 2221 ratemeter/scaler with the response time set to fast, operated in ratemeter mode, and the window setting out. The radiological instrumentation was paired with a Trimble Pro XRS sub-meter grade GPS unit with data logger. The GPS antennas, two per ATV, were mounted directly above the detectors. Gamma count rates and associated coordinates were set to be recorded every second.

Every attempt was made to match the methods of the initial gamma survey (Tetra Tech, 2011). The detectors were mounted at approximately 1.4 m above the ground surface and the surveying speed ranged from 1 to 4.5 m per second (m/s).

Whenever possible, field personnel surveyed at a transect spacing of approximately 50 m, a distance more conservative than recommendations in the Wyoming Department of Environmental Quality Land Quality Division Guideline Number 3 (WDEQ/LQD, 1984) and U.S. Nuclear Regulatory Commission (NRC) Regulatory Guide 4.14 (NRC, 1980). Data loggers provided real-time display of GPS locations, therefore personnel could follow pre-generated transect lines. Because only two detectors were used per ATV, the 50 m spacing was used to meet the initial gamma survey's goal of 10-15 percent coverage of the survey area (Tetra Tech, 2011).

Data were downloaded daily onto a computer and plotted using ESRI ArcGIS 9.3. The dataset was assessed for consistency and/or anomalies (e.g., spurious gamma count rates due to bad cables, spatial data gaps, and elevated areas) and survey coverage was verified after each work day.

1.4.2 Method to Correlate Gamma Count and Exposure Rates

The detection systems used in the gamma survey provide data in counts per minute (cpm). To estimate survey area-wide exposure rates, field personnel 1) made co-located measurements with the sodium iodide detectors and a General Electric Model RSS-131 (Serial Number 07J00KM1) high pressure ionization chamber (HPIC) and 2) converted each gamma count rate to a predicted exposure rate by way of linear correlation methods.

The HPIC measures exposure rates directly and is considered a primary standard by the National Institute of Standards and Technology, when calibrated. It is highly stable, relatively energy independent, and serves as an excellent tool to calibrate other survey equipment to measure exposure rates.

Gamma count and exposure rate measurements were made at correlation locations established previously by Tetra Tech. The geopositions of the correlation locations are listed in Table 1-1 and shown on Figure 1-3. Gamma count rate measurements were made from the location out to a radius of approximately 5 to 8 m with both ATVs, in the same configuration used in the gamma survey. The transect spacing was at most 1 m. An average gamma count rate was calculated for each of the four detectors, from all measurements that fell within a 5 m radius of the each location.

The HPIC was placed at each location, mounted on a tripod that established the base of the HPIC at 1 m above the ground surface. Exposure rate measurements were made at 6-second intervals for a minimum five minutes and an average exposure rate for the 60 or more measurements then was calculated for each location.

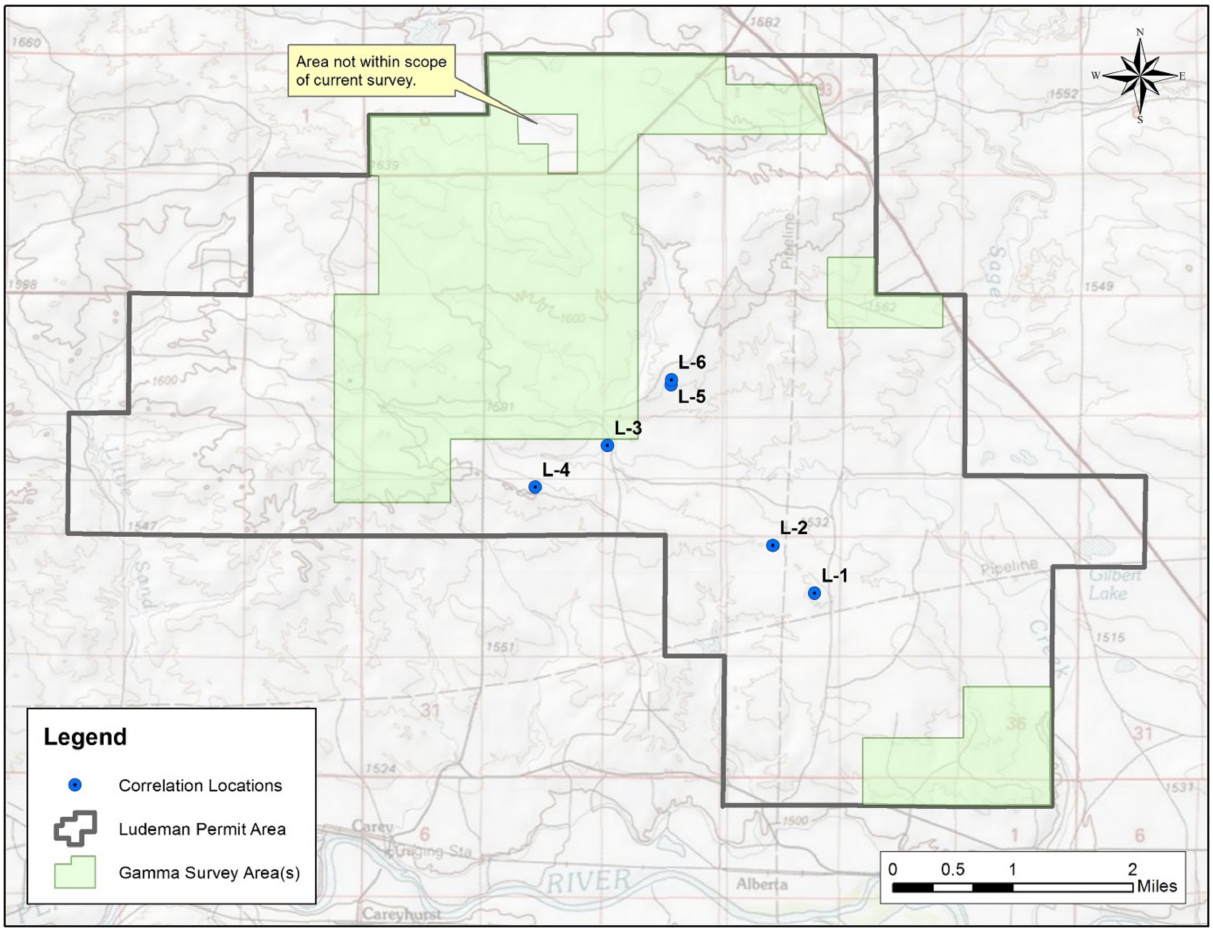
The linear regression feature of MS Excel was used to develop a mathematical relationship between the gamma count rates for each of the four detectors and exposure rate measurements at each of the six locations. The individual gamma count rates observed in the GPS-based radiological survey were subsequently converted to predicted exposure rates (in units of microRoentgens per hour [μR/hr]), using the resultant linear regression model.

Table 1-1. Gamma count and exposure rate correlation locations

Location ID	Coordinate[1]	
	Easting	Northing
L-1	384313	810094
L-2	382480	812192
L-3	375189	816587
L-4	372009	814746
L-5	378003	819246
L-6	378018	819478

Notes:
[1] Projected coordinate system is North American Datum 1927 State Plane Wyoming East 4901

Figure 1-3. Gamma count and exposure rate correlation locations



1.4.3 Method to Correlate Gamma Count Rates to Radionuclide Concentrations in Soil

A correlation was performed between the current gamma count rates and 2008 soil sample results; i.e., radium-226 concentrations in surface soils. The correlation locations, shown in Figure 1-3, were the same as those used for the current co-located gamma count and exposure rate measurements. The soil concentrations and associated gamma count rates were correlated using the linear regression feature of MS Excel. The individual gamma count rates observed in the GPS-based radiological survey were subsequently converted to predicted radium-226 concentrations in soil, using the linear regression model.

1.4.4 Data Quality Assurance and Quality Control

Daily function checks were performed each morning and at the end of the workday to evaluate the instrument performance and ensure a matched response across multiple detectors over several days. The checks were performed at the Smith Residence studio, shown in Figure 1-4.

One-minute integrated counts were obtained for each detector for, with and without a NIST traceable cesium-137 source of known activity. The net (source minus the count without source) detector count rate was compared to the cumulative average of all previous quality checks to ensure functionality was consistent. If any single quality check was greater or less than 10 percent of the average, the instrument was checked for damage; and repaired or replaced if necessary. A second quality check was to prepare control charts for each net detector response. The control charts were set up for normal counting statistics, in which 99 percent of the net responses are expected to fall within three standard deviations of the mean. These are shown by detector and sequential number in Figures 1-5 through 1-8. None of the net responses exceeded the expected range of counts.

Figure 1-4. Instrument function check location

Figure 1-5. Sodium iodide detector response (serial number PR090262)

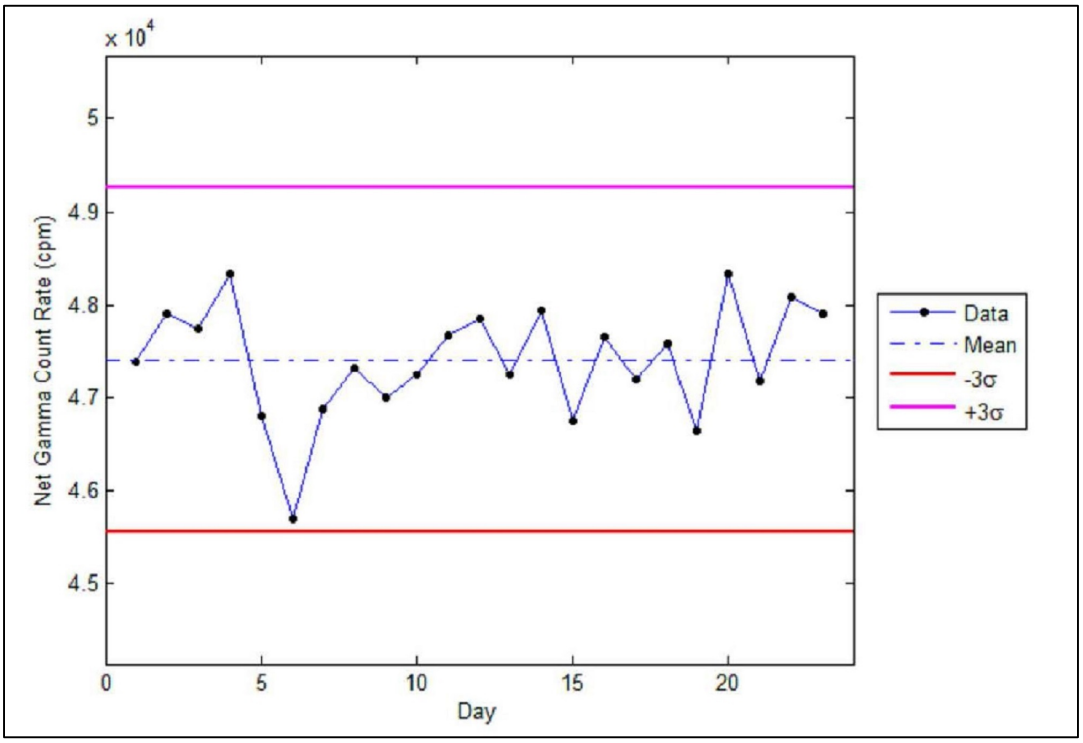


Figure 1-6. Sodium iodide detector response (serial number PR321856)

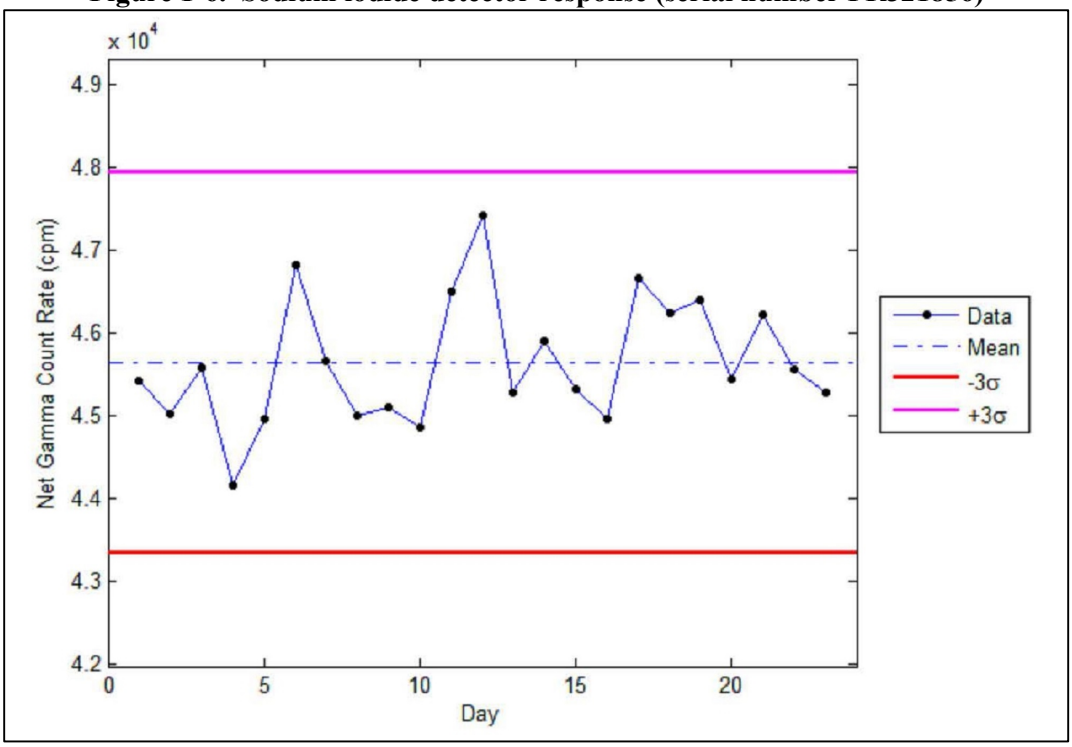


Figure 1-7. Sodium iodide detector response (serial number PR320678)

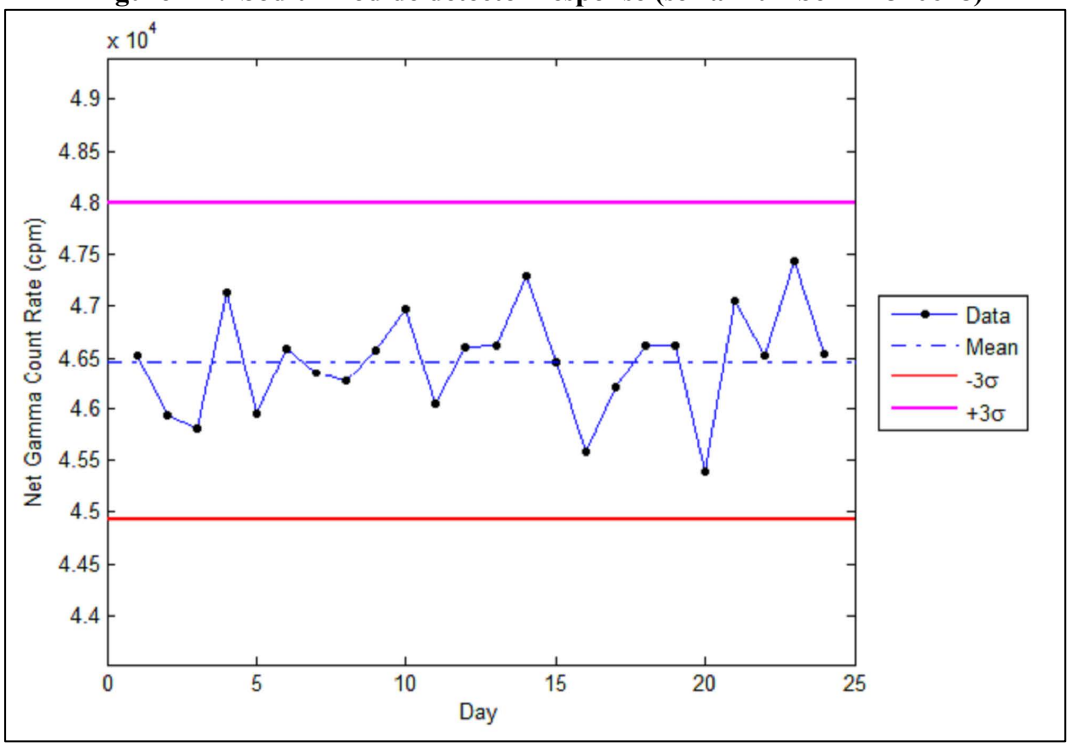
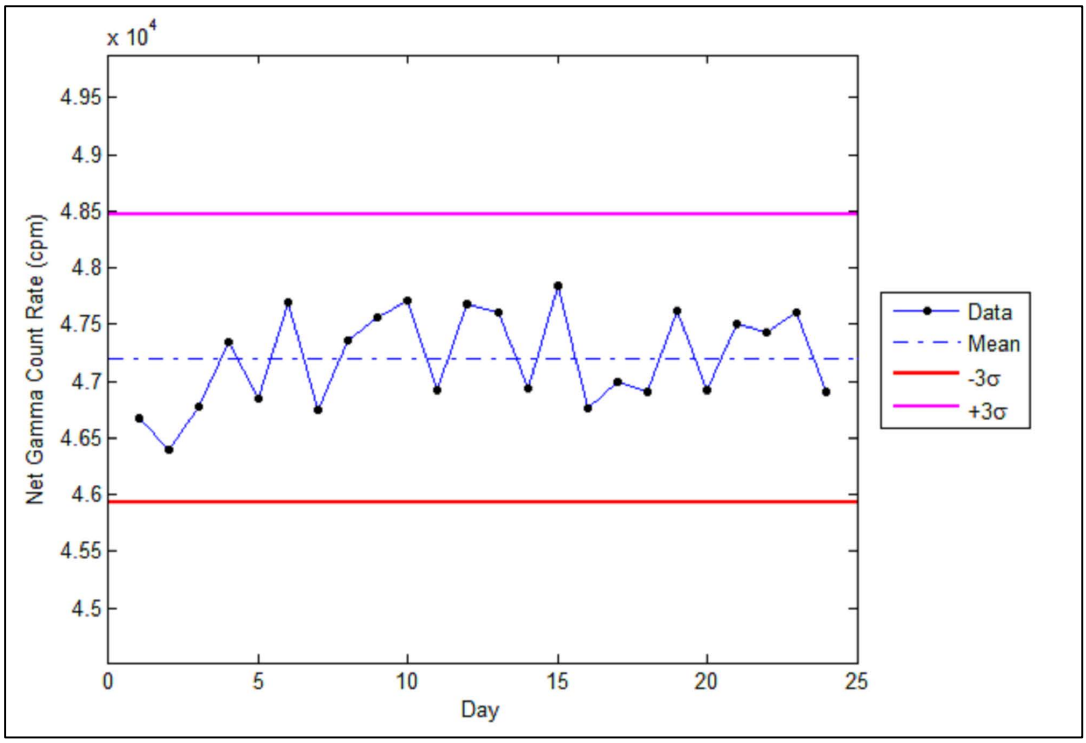


Figure 1-8. Sodium iodide detector response (serial number PR144074)



All calibration forms and function check forms are attached in Appendix A.

1.4.5 Results

The following sections describe the results of the gamma survey; correlation of gamma count and exposure rates, and the correlation of radium-226 concentrations in soil to gamma count rates.

1.4.5.1 Baseline Gamma Survey Results

The frequency histogram for the gamma survey data is shown in Figure 1-9. Summary statistics of the gamma count rate measurements are listed in Table 1-2. The frequency histogram indicates that the distribution is right-skewed, roughly centered on a mean of 14,358 cpm, and consists of a relatively small number of elevated measurements. The distributions were rejected statistically as normal and lognormal, using an Anderson Darling test in Minitab 15. Thus, the data are best described non-parametrically. The median of the of the 525,242 gamma count rate measurements is 14,321 cpm, slightly below the mean, with a range of 6,480 to 92,183 cpm. Seventy-five percent of the count rates are below 15,365 cpm.

The gamma count rates are displayed individually as colored dots in Figures 1-10 (overall survey), 1-11 (northern areas), and 1-12 (southern area). The figures indicate relatively consistent count rates across the permit area, with higher count rates primarily in the southwest portion of the northern survey area. These elevated count rates are attributed to rock outcroppings or other naturally occurring sources of gamma-emitting radionuclides.

Figure 1-9. Frequency histogram for current gamma count rates

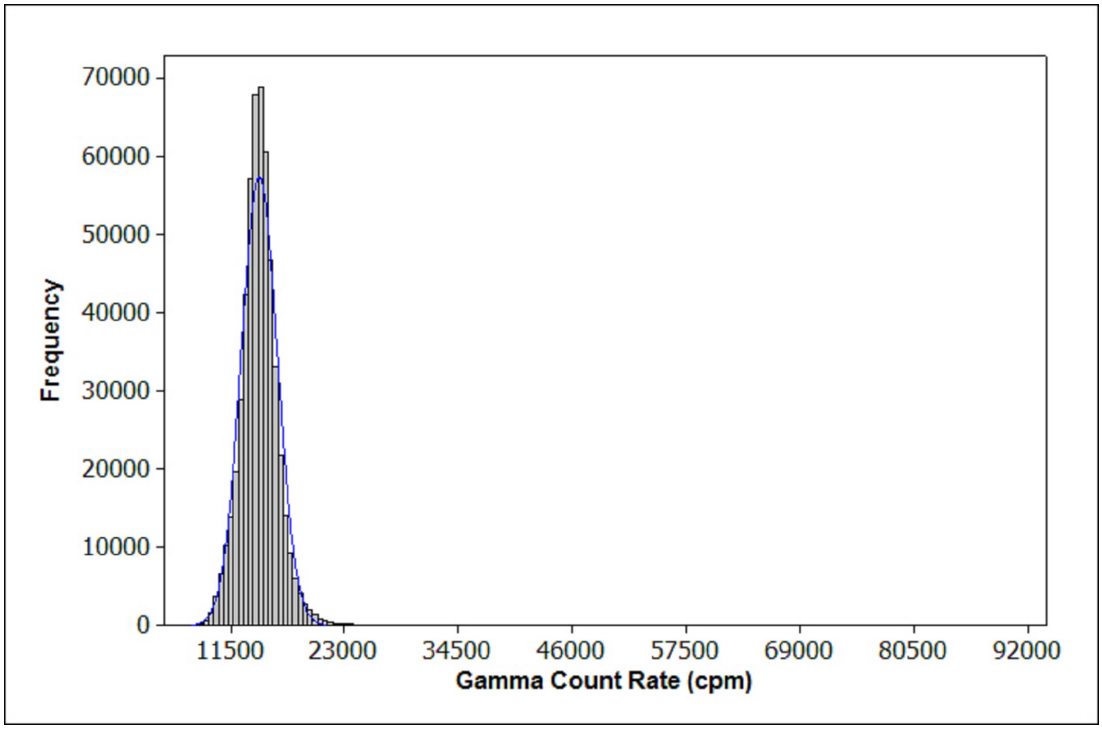


Table 1-2. Summary statistics for gamma count rates

Parameter	Gamma Count Rate (cpm)
n	525,242
mean	14,358
standard deviation	1,828
median	14,321
minimum	6,480
maximum	92,183
1st quartile	13,287
3rd quartile	15,365

Notes:
cpm = counts per minute

Figure 1-10. Gamma count rates for entire current survey

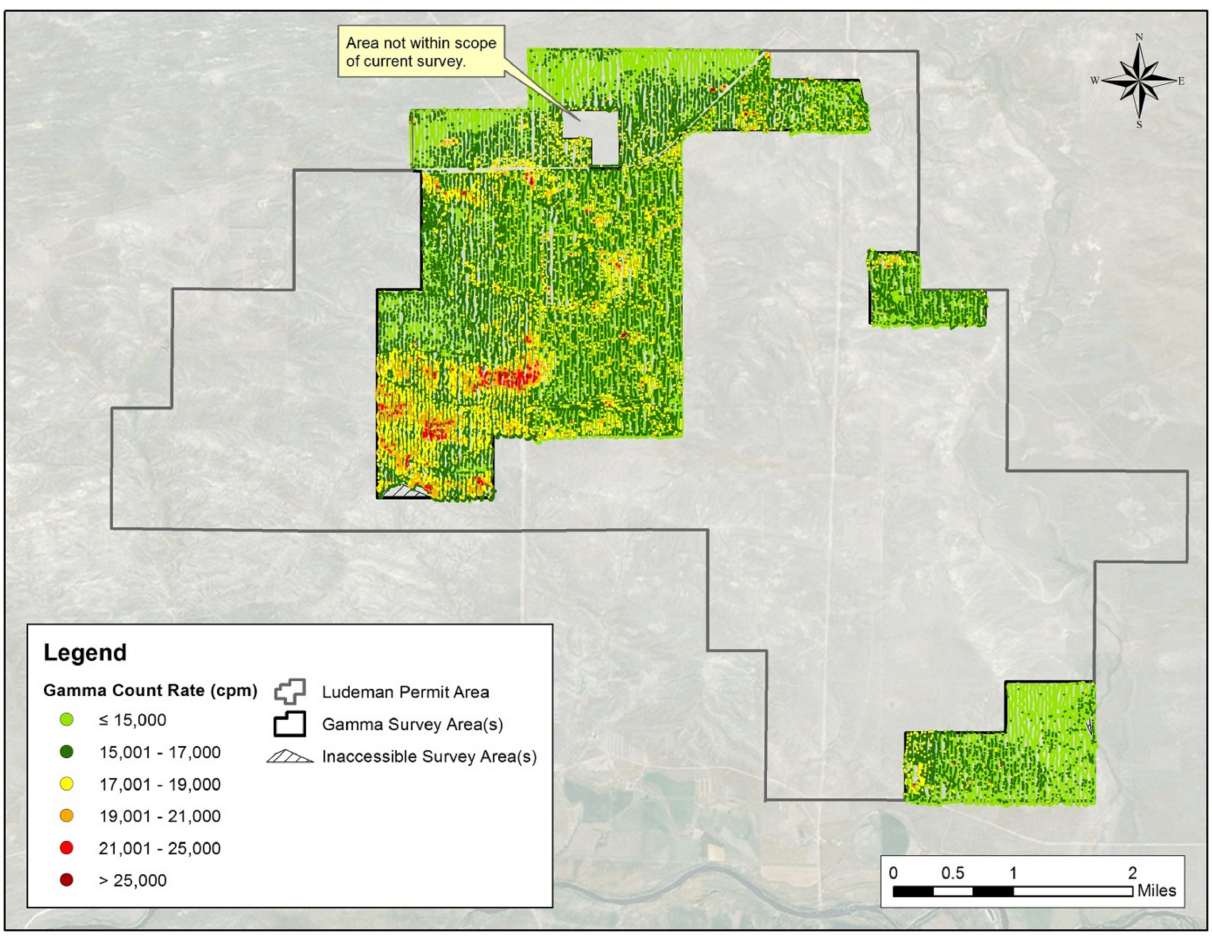


Figure 1-11. Gamma count rates in northern survey areas

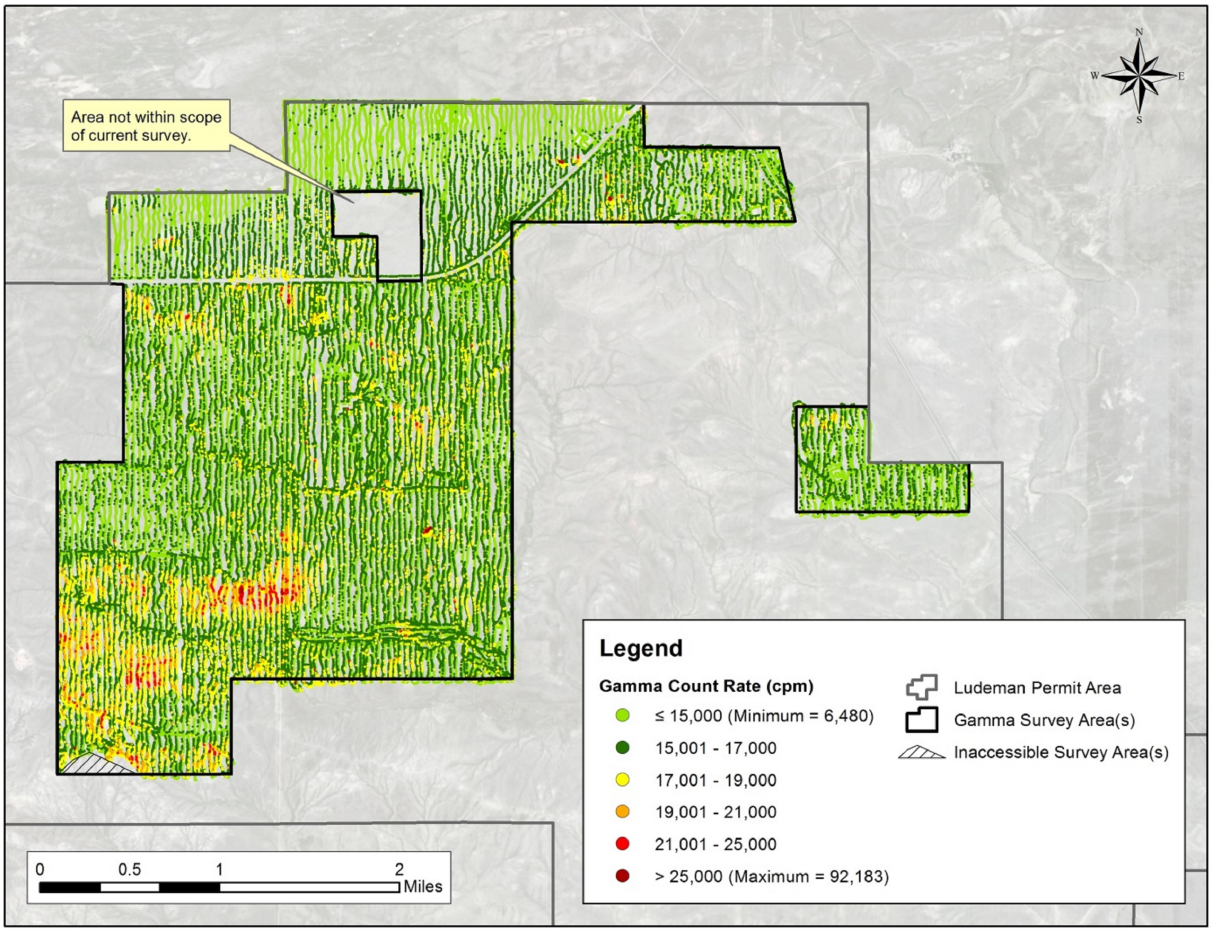
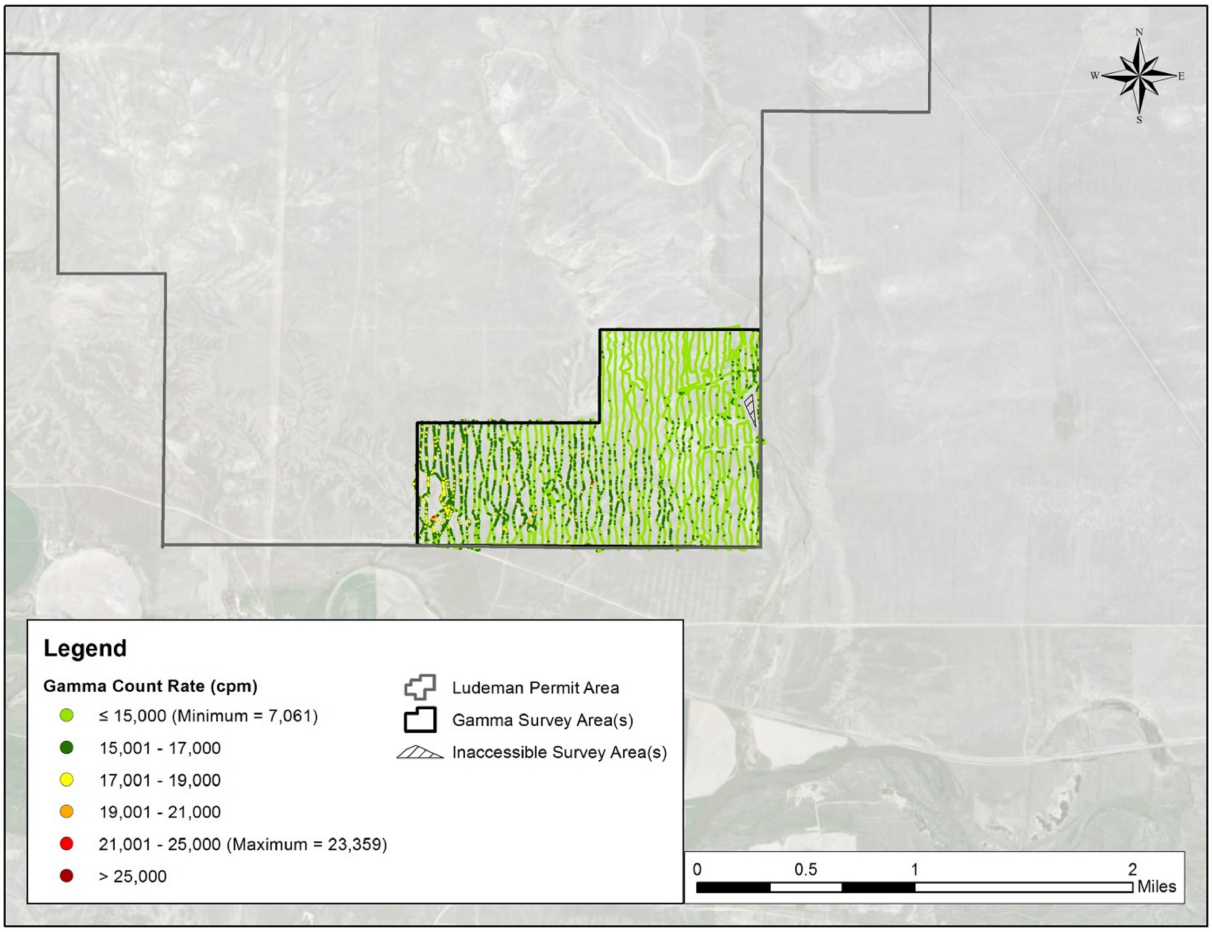


Figure 1-12. Gamma count rates in southern area



1.4.5.2 Correlation of Gamma Count and Exposure Rates

Table 1-3 lists the average exposure rate, and average count rate for the four sodium iodide detectors at each of the six measurement locations shown in Figure 1-3. The regression line plots the average gamma count rate for all of the four detectors (last column in Table 1-3) against the exposure rate for the location. The resulting linear regression line for the average of the sodium iodide detectors is shown in Figure 2-9-13.

The linear correlation between gamma count and exposure rates is:

$$\textit{Exposure Rate} = 0.0006 * \textit{Gamma Count Rate} + 6.1871 \qquad \textit{Eq. 1}$$

where,

exposure rate is in µR/hr
gamma count rate is in cpm
0.0006 is in (µR/hr)/cpm
6.1871 is in µR/hr

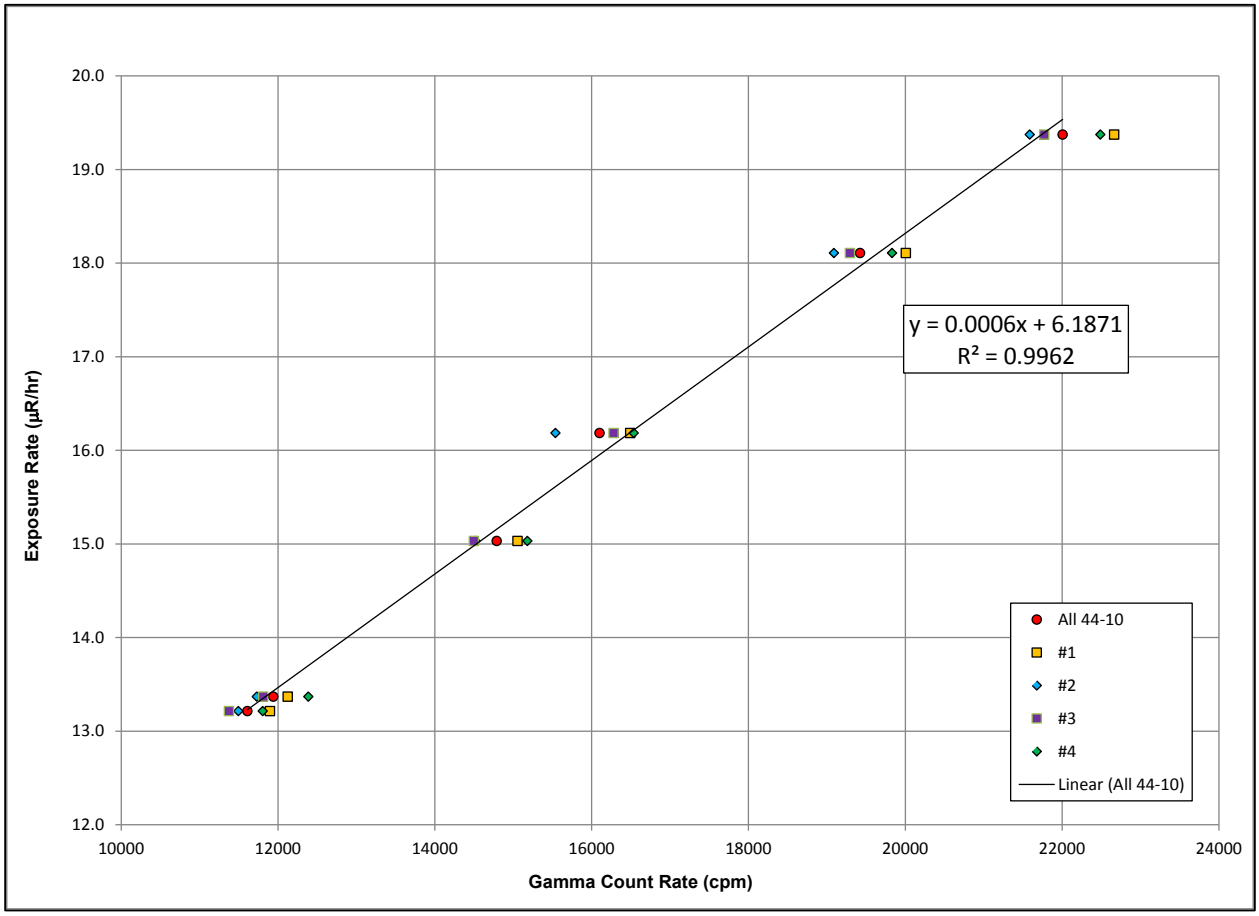
The correlation coefficient (R^2) of 0.99 demonstrates a good fit of the data to the linear regression model.

Table 1-3. Gamma count and exposure rate correlation measurements

Location ID	Exposure Rate (µR/hr)	Average Gamma Count Rate (cpm)				
		Detector 1[1]	Detector 2[1]	Detector 3[1]	Detector 4[1]	Four Detectors
L-1	13.2	11899	11496	11376	11805	11610
L-2	13.4	12125	11731	11813	12388	11940
L-3	15.0	15056	14519	14500	15182	14791
L-4	16.2	16494	15538	16281	16539	16101
L-5	18.1	20009	19092	19294	19831	19423
L-6	19.4	22665	21587	21771	22489	22006

Notes:
[1] Ludlum 44-10/2221 serial numbers: Detector 1 (PR090262/254785), Detector 2 (PR321856/271438), Detector 3 (PR320678/282966), Detector 4 (PR144074/254772).
cpm = counts per minute
µR/hr = microRoentgens per hour

Figure 1-13. Correlation of gamma count and exposure rates



1.4.5.3 Maps of Predicted Exposure Rates

Using Equation 1, each of the 525,242 gamma count rate measurements was converted to predicted exposure rates. Maps of the predicted exposure rates are in Figures 1-14 through 1-16 (entire area; and the northern, and southern survey areas, respectively). Trends in the predicted exposure rates follow those described for the associated gamma count rates in Section 1.4.1. Summary statistics of the predicted exposure rates are listed in Table 1-4. The median of the 525,242 predicted measurements is 14.8, with a range of 10.1 to 61.5 µR/hr. Seventy-five percent of the predicted exposure rates are below 15.4 µR/hr.

The mean predicted exposure rate (14.8 µR/hr) is approximately 1.1 µR/hr higher than observed in 2008. The small change in the central tendency is most likely attributed to cosmic or differences in terrestrial gamma emissions. The legend in Figures 2-9-14 to 1-16 was set to approximate that of the predicted exposure results presented in the 2011 report (Tetra Tech, 2011).

Figure 1-14. Predicted exposure rates in current survey area

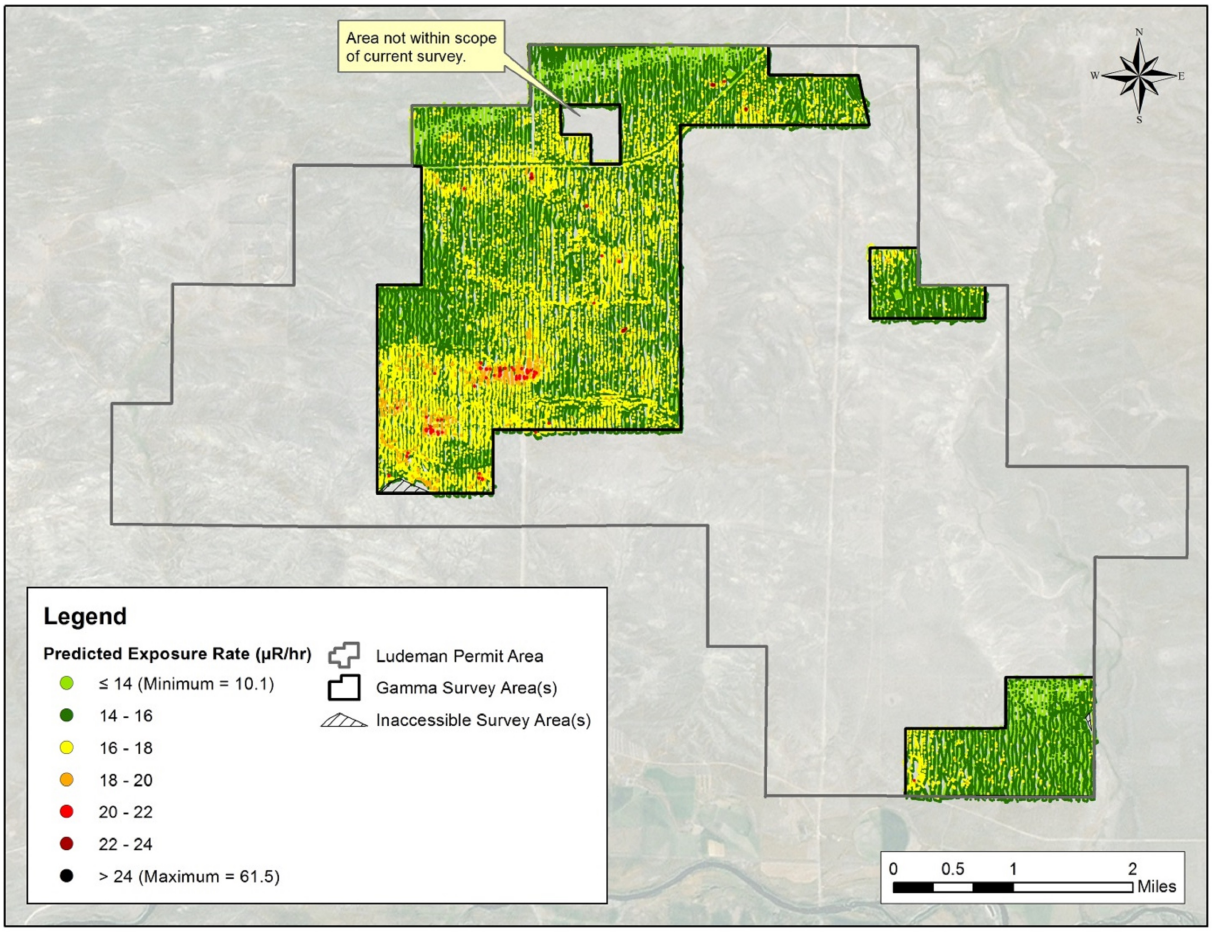


Figure 1-15. Predicted exposure rates in northern survey areas

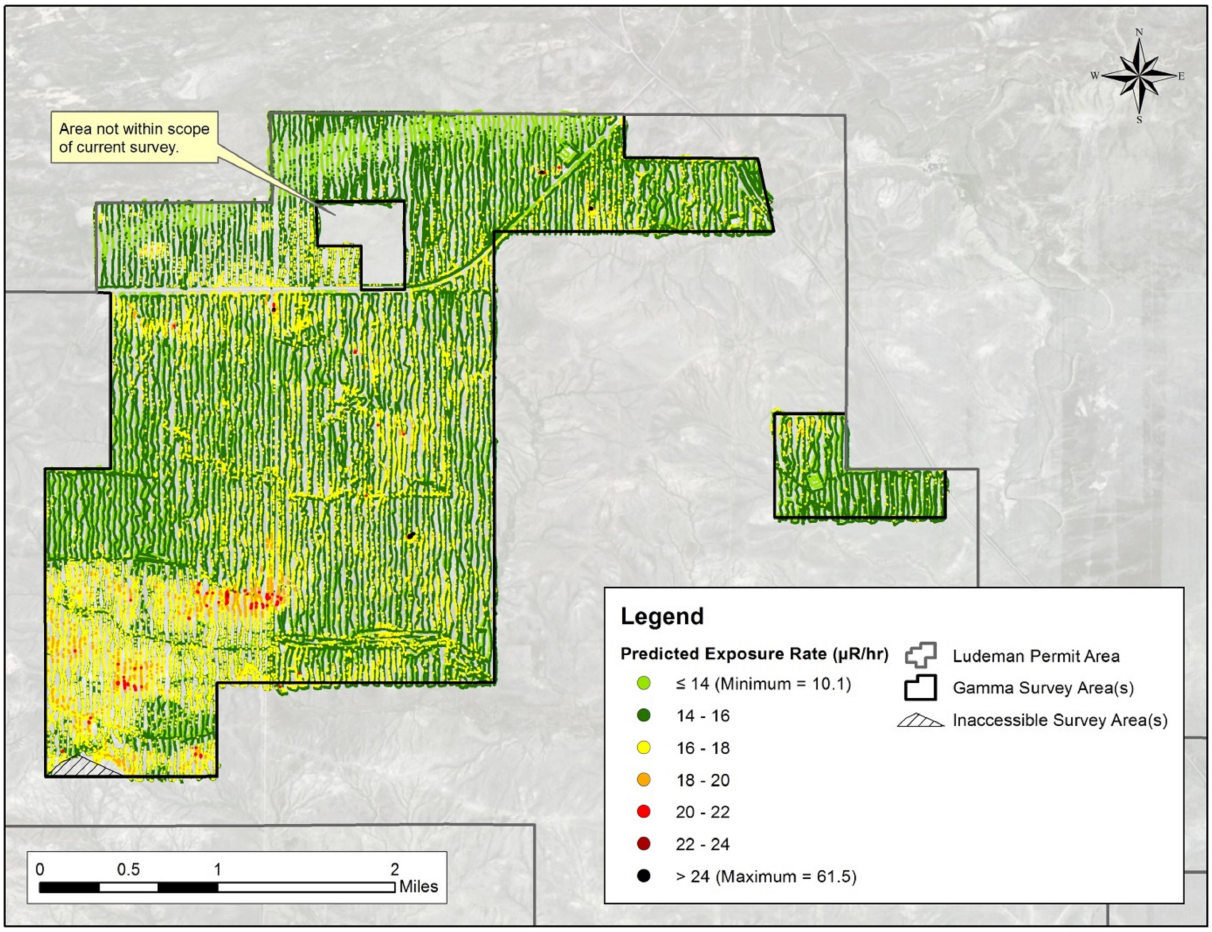


Figure 1-16. Predicted exposure rates in southern survey area

Table 1-4. Summary statistics for predicted exposure rates

Parameter	Predicted Exposure Rate (µR/hr)
n	525,242
mean	14.8
standard deviation	1.1
median	14.8
minimum	10.1
maximum	15.4
1st quartile	14.2
3rd quartile	15.4

Notes:
µR/hr = microRoentgens per hour

A review of the data indicated an anomalous gamma count rates in one area (depicted as predicted exposure rates in Figure 1-17). Field personnel performed a higher density survey and visual inspection therein. A rock outcropping (shown in Figure 1-18) is present, spanning the area of elevated measurements.

Figure 1-17. Predicted exposure rates at elevated reading and surrounding area

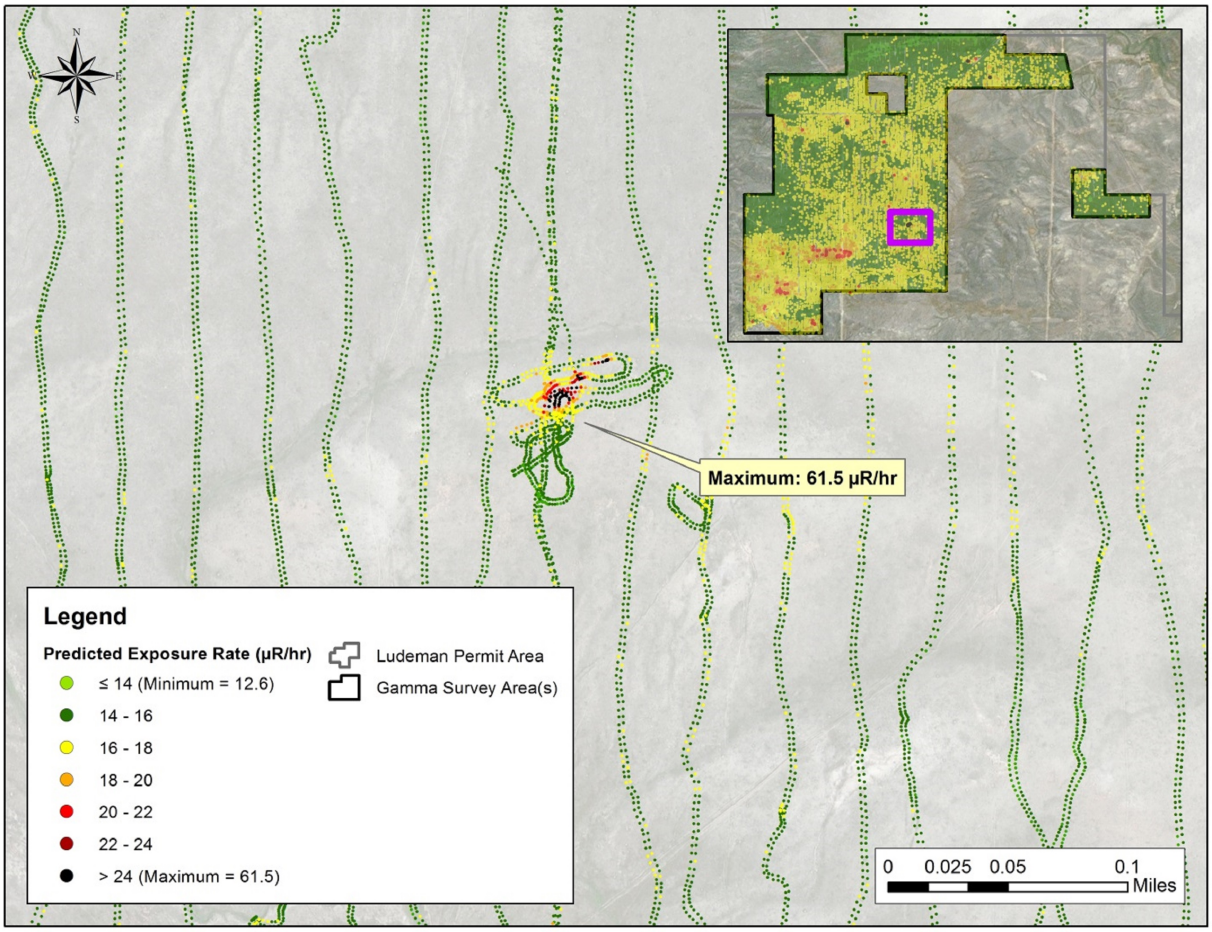


Figure 1-18. Outcropping at location of elevated readings

1.4.5.4 Correlation of Radium-226 Concentrations in Soil to Gamma Count Rates

Table 1-5 lists the 2008 radium-226 concentrations; and current gamma count rate measurements and their corresponding averages observed at each of the six locations shown in Figure 1-3. The gamma count rates were correlated to the radium-226 concentrations in soil average exposure rates; using a linear regression feature of MS Excel. The correlation is:

*Radium-226 Soil Concentration = 0.0007 * Gamma Count Rate + 7.0587 Eq. 2*

where,

Radium-226 soil concentration is in pCi/g
Gamma count rate is in cpm
0.0007 is in pCi/g/cpm
7.0587 is in pCi/g

The resulting linear regression line for the average of all sodium iodide detectors is shown in Figure 1-19. The correlation coefficient (R^2) of 0.97 demonstrates a strong fit of data to the linear regression model. Using Equation 2, each of the 525,242 gamma count rate measurements was converted to predicted radium-226 concentrations in soil. Trends in the predicted radium-226 concentrations follow those described for the associated gamma count rates in Section 1.4.1. Summary statistics of the predicted radium-226 concentrations are listed in Table 1-6. The mean and median of the 525,242 predicted concentrations are 3.0, with a range of -2.5 to 57.5 pCi/g. Seventy-five percent of the predicted concentrations are below 3.7 pCi/g. The mean (and median) is 1 and 2.0 pCi/g higher than the mean predicted and measured radium-226 concentrations, respectively, reported in the initial survey (Tetra Tech, 2011).

Table 1-5. Correlation of gamma count rates and radium-226 concentrations in soil

Location ID	Radium-226 Concentration (pCi/g)	Average Gamma Count Rate (cpm)				
		Detector 1	Detector 2	Detector 3	Detector 4	Four Detectors
L-1	1.1	11899	11496	11376	11805	11610
L-2	1.1	12125	11731	11813	12388	11940
L-3	1.9	15056	14519	14500	15182	14791
L-4	3.6	16494	15538	16281	16539	16101
L-5	5.8	20009	19092	19294	19831	19423
L-6	7.9	22665	21587	21771	22489	22006

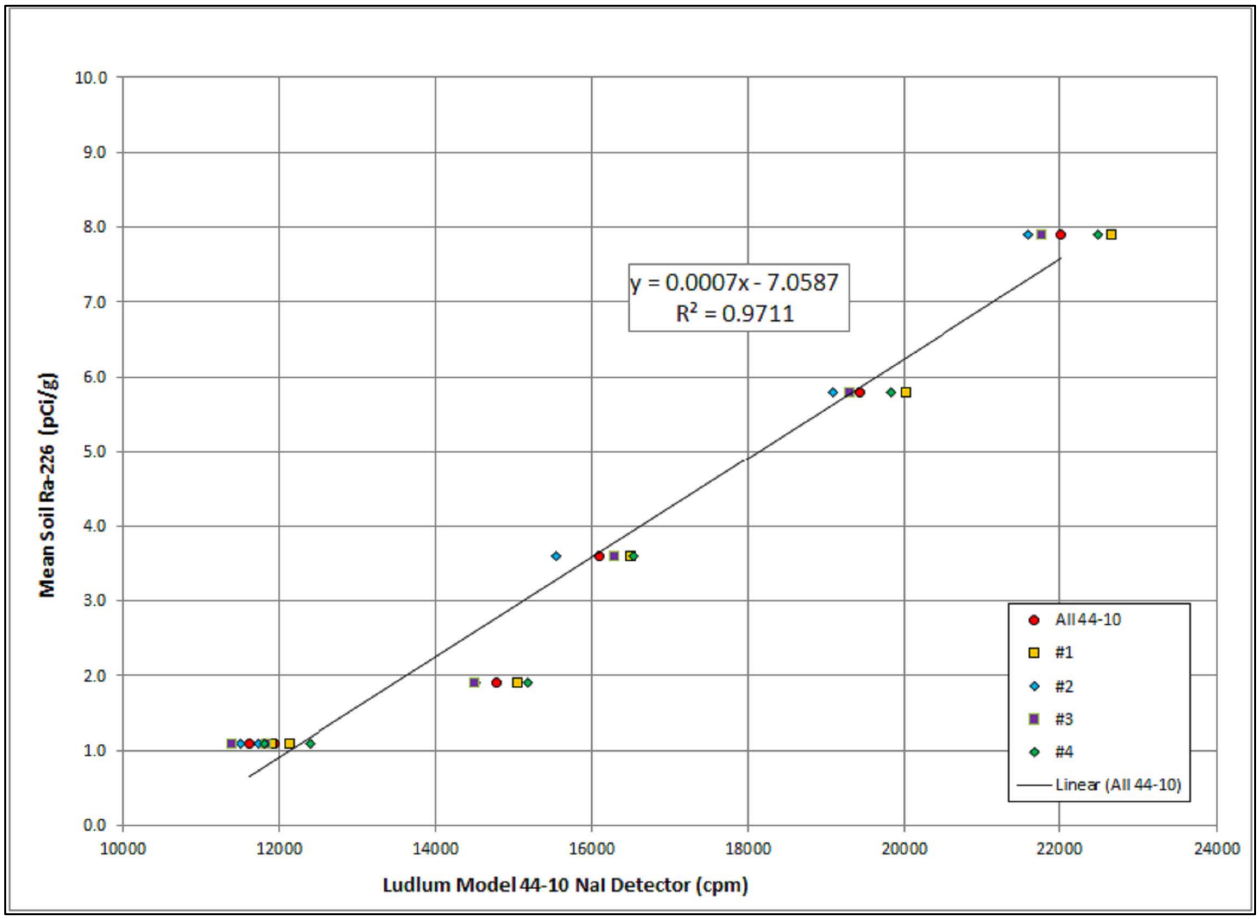
Notes:
cpm = counts per minute
pCi/g =picocuries per gram

Table 1-6. Summary statistics for predicted radium-226 concentrations in soil

Parameter	Predicted Radium-226 Concentration (pCi/g)
n	525,242
mean	3.0
standard deviation	1.3
median	3.0
minimum	-2.5
maximum	57.5
1st quartile	2.2
3rd quartile	3.7

Notes:
pCi/g =picocuries per gram

Figure 1-19. Correlation of gamma count rates to radium-226 concentrations in soil



1.4.5.5 Soil Radionuclide Concentration Mapping

Maps of the predicted radium-226 concentrations are shown in Figures 1-20 through 1-22 (entire area, northern, and southern survey areas, respectively). Spatial trends in the predicted radium-226 concentrations follow those described for gamma count rates in Section 1.4.1.

Figure 1-20. Predicted radium-226 concentrations in surface soils (0-15 cm): current survey area

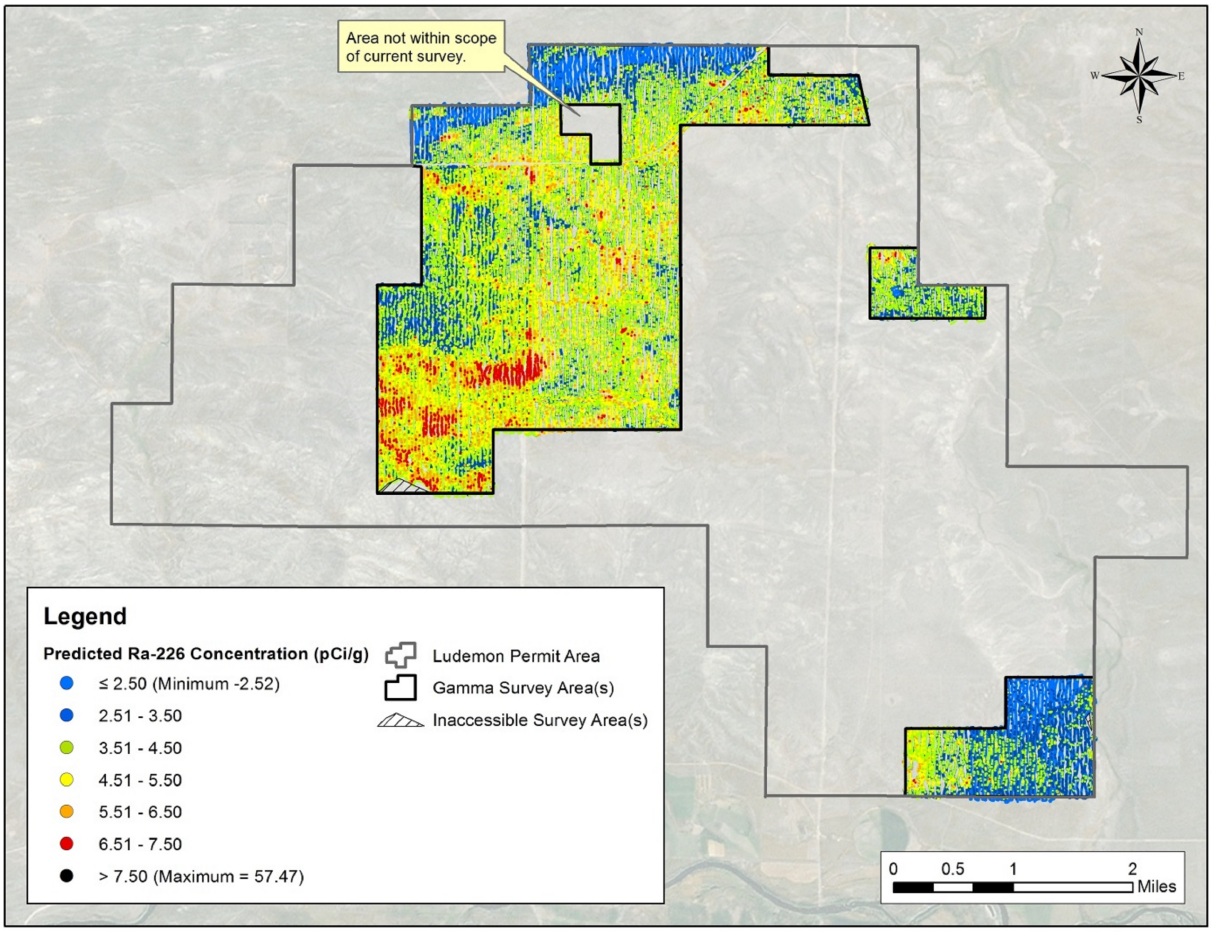


Figure 1-21. Predicted radium-226 concentrations in surface soils (0-15 cm): northern areas

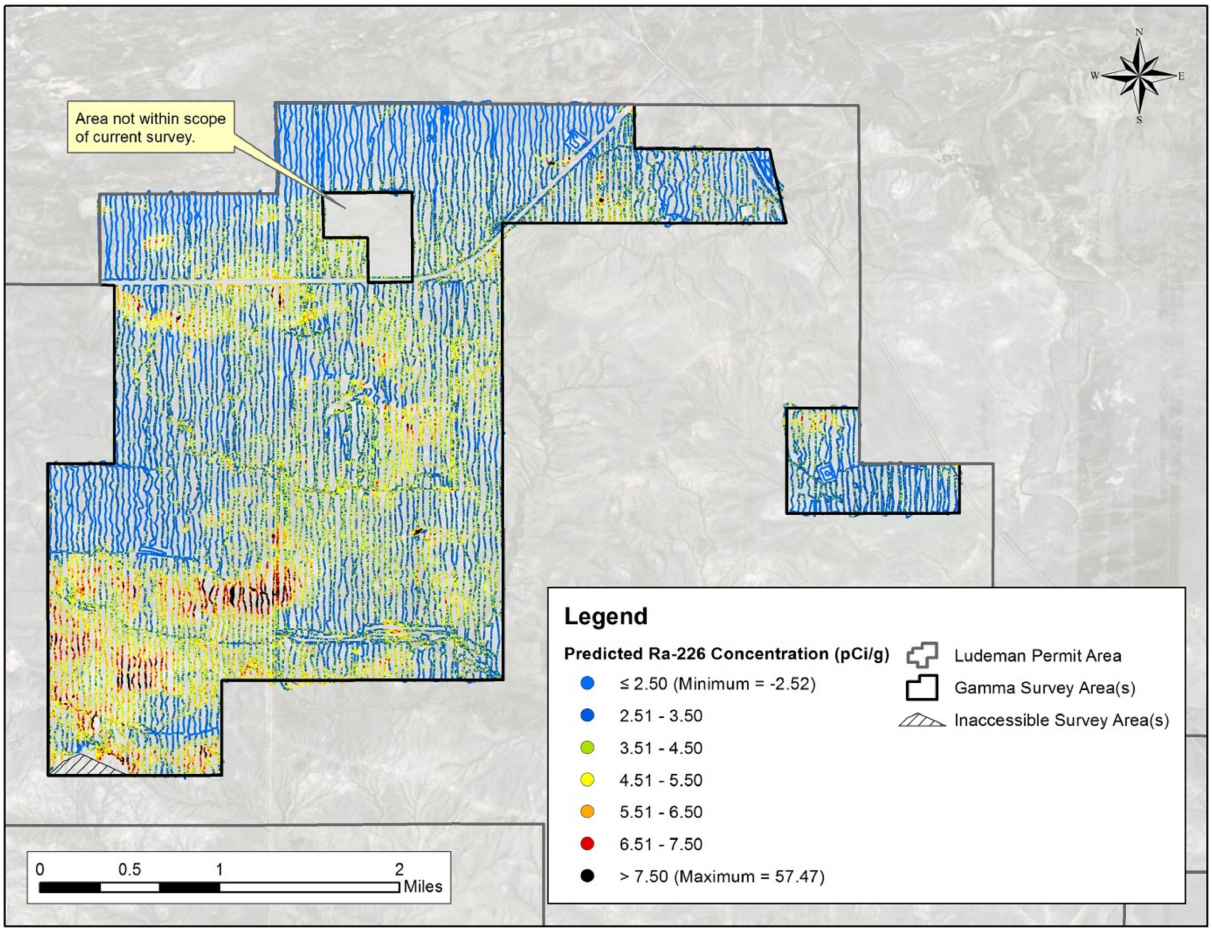
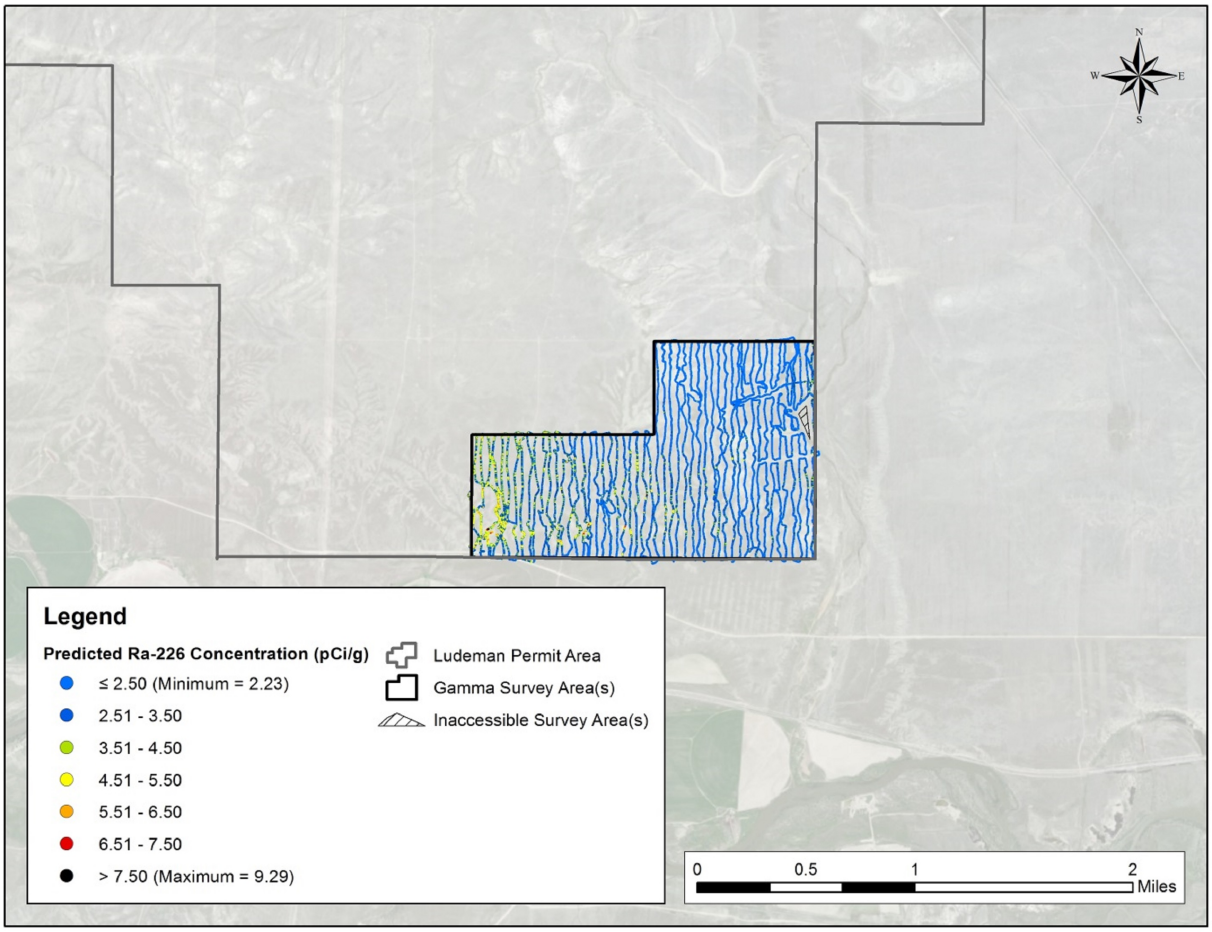


Figure 1-22. Predicted radium-226 concentrations in surface soils (0-15 cm): southern area



1.4.6 Conclusions

The results of the baseline radiological survey documented herein indicate the following:

- 525,242 gamma count (measured) and exposure rates (predicted) were obtained in all accessible previously unsurveyed sections as identified by Uranium One within the permit area boundary.

- A linear regression model comparing gamma count to exposure rate measurements predicts a survey area-wide average and maximum exposure rates of 14.8 and 61.5 µR/hr, respectively. The average and maximum exposure rates predicted in the 2008 survey are 13.7 and 32.8 µR/hr, respectively.

- Outcroppings and other naturally-occurring geomorphological features appear to be the source of elevated gamma count rates in the current, and as compared to, the 2008 survey.

- A linear regression model comparing gamma count to previous soil sample measurements predicts estimated survey area-wide mean and maximum concentrations of radium-226 in surface soil of 3.0 and 57.5 pCi/ g, respectively. The average is 1 and 2.0 pCi/g higher than the mean predicted and measured radium-226 concentrations, respectively, in the initial survey (Tetra Tech, 2011).

The gamma survey, collected with high-accuracy GPS-based technology combined with proven radiation detection equipment demonstrates the extensive quantity of data used to characterize radiological conditions of the survey area. The survey supplements existing data and the methods are consistent with the ISR license guidelines described in Regulatory Guide 4.14 (NRC, 1980).

1.4.7 References

NRC, 1980. NRC Regulatory Guide 4.14, Revision 1, "Radiological Effluent and Environmental Monitoring at Uranium Mills."

Tetra Tech, 2011. "Technical Report, Volume IV Section 2.9 through Section 10.0," December.

WDEQ/LQD. 2007. "In Situ Mining Permit Application Requirements Handbook. Application Content Requirements - Adjudication and Baseline Information." March.

Appendix A

Calibration Sheets and Function Check Forms

Certificate of Calibration

Calibration and Voltage Plateau

Environmental Restoration Group, Inc.
8809 Washington St NE, Suite 150
Albuquerque, NM 87113
(505) 298-4224
www.ERGoffice.com

Meter:	Manufacturer:	Ludlum	Model Number:	2360	Serial Number:	245768
Detector:	Manufacturer:	Ludlum	Model Number:	43-37	Serial Number:	PR302114

☑ Mechanical Check ☐ Geotropism ☐ THR/WIN Operation ☑ Audio Check ☑ Battery Check (Min 4.4 VDC)

☐ F/S Response Check ☑ Meter Zeroed ☑ Reset Check HV Check (+/- 2.5%): ☑ 500 V ☑ 1000 V ☑ 1500 V

Source Distance: ☑ Contact ☐ 6 inches ☐ Other: Cable Length: ☑ 39-inch ☐ 72-inch ☐ Other:

Source Geometry: ☐ Side ☑ Below ☐ Other: Temperature: 75 °F Relative Humidity 20 %

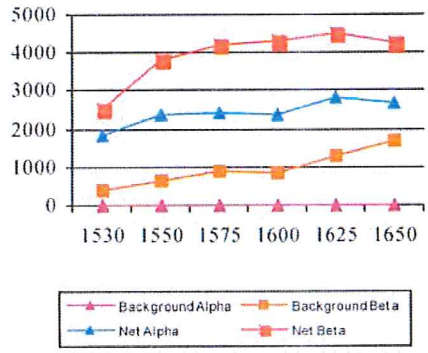
Alpha Threshold: 120 mV Beta Threshold: 4 Barometric Pressure: 24.57 inches Hg

Beta Window: 46 mV Instrument found within tolerance: ☑ Yes ☐ No

Range/Multiplier	Reference Setting	"As Found Reading"		Meter Reading		Integrated 1-Min. Count α	Integrated 1-Min. Count β
x 1000	400	400	kcpm	400	kcpm	401108	401105
x 1000	100	100	kcpm	100	kcpm		
x 100	400	400	kcpm	400	kcpm	40109	40110
x 100	100	100	kcpm	100	kcpm		
x 10	400	400	kcpm	400	kcpm	4011	4011
x 10	100	100	kcpm	100	kcpm		
x 1	400	400	cpm	400	cpm	401	402
x 1	100	100	cpm	100	cpm		

High Voltage	Alpha Source α	Alpha Source β	Beta Source α	Beta Source β	Background α	Background β
1530	1850	1224	17	2934	12	387
1550	2394	1555	8	4462	4	630
1575	2437	1837	10	5081	7	894
1600	2384	1724	13	5151	14	847
1625	2810	2176	14	5791	12	1281
1650	2713	2463	45	5952	17	1691

Voltage Plateau



Comments: HV Plateau Scaler Count Time = 1-min. Recommended HV = 1600V Elevation in ABQ calibration lab at 5100 feet. For use at Ticaboo, UT elevation 4265. HV should be adjusted by approximately +20 V. HV set at 1620.

Reference Instruments and/or Sources:

Ludlum pulser serial number: ☐ 97743 ☑ 201932 Fluke multimeter serial number ☐ 8749012

☑ Alpha Source: Th-230 (s/n 4098-03) Emission Rate of 6,520 cpm (☐ Gamma Source Cs-137 @ 5.2 uCi (1/4/12) sn: 4097-03

☑ Beta Source: Tc-99 (sn: 4099-03) Emission Rate of 11,100 cpm (☐ Other Source:

Calibrated By: Calibration Date: 3/28/13 Calibration Due: 3/28/14

Reviewed By: Date: 3/28/13

This calibration conforms to the requirements and acceptable calibration conditions of ANSI N323A - 1997.
NMRCB Registration No. 921-3 * Calibration of Radiation Detection Instrument Devices

Certificate of Calibration

Calibration and Voltage Plateau

Environmental Restoration Group, Inc.
8809 Washington St NE, Suite 150
Albuquerque, NM 87113
(505) 298-4224
www.ERGoffice.com

Meter:	Manufacturer:	Ludlum	Model Number:	2360	Serial Number:	220246
Detector:	Manufacturer:	Ludlum	Model Number:	43-93	Serial Number:	PR199826

☑ Mechanical Check ☑ Geotropism ☑ THR/WIN Operation ☑ Audio Check ☑ Battery Check (Min 4.4 VDC)

☐ F/S Response Check ☑ Meter Zeroed ☑ Reset Check HV Check (+/- 2.5%): ☑ 500 V ☑ 1000 V ☑ 1500 V

Source Distance: ☑ Contact ☐ 6 inches ☐ Other: Cable Length: ☑ 39-inch ☐ 72-inch ☐ Other:

Source Geometry: ☐ Side ☑ Below ☐ Other: Temperature: 80 °F Relative Humidity 20 %

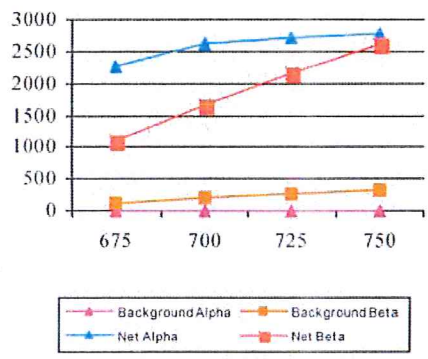
Alpha Threshold: 120 mV Beta Threshold: 4 Barometric Pressure: 24.57 inches Hg

Beta Window: 30 mV Instrument found within tolerance: ☑ Yes ☐ No

Range/Multiplier	Reference Setting	"As Found Reading"		Meter Reading		Integrated 1-Min. Count α	Integrated 1-Min. Count β
x 1000	400	400	kcpm	400	kcpm	401392	401423
x 1000	100	100	kcpm	100	kcpm		
x 100	400	400	kcpm	400	kcpm	40145	40148
x 100	100	100	kcpm	100	kcpm		
x 10	400	400	kcpm	400	kcpm	4015	4015
x 10	100	100	kcpm	100	kcpm		
x 1	400	400	cpm	400	cpm	402	402
x 1	100	100	cpm	100	cpm		

High Voltage	Alpha Source α	Alpha Source β	Beta Source α	Beta Source β	Background α	Background β
675	2257	351	40	1228	9	130
700	2610	449	33	1881	5	205
725	2722	557	38	2426	6	255
750	2776	699	10	2941	3	325

Voltage Plateau



Comments: HV Plateau Scaler Count Time = 1-min. Recommended HV =725

Reference Instruments and/or Sources:

Ludlum pulser serial number: ☐ 97743 ☑ 201932 Fluke multimeter serial number ☑ 8749012

☑ Alpha Source: Th-230 @ 12,800 dpm (1/4/12) sn: 4098-03 ☐ Gamma Source Cs-137 @ 5.2 uCi (1/4/12) sn: 4097-03

☑ Beta Source: Sr-90 @ 17,700 dpm (1/4/12) sn: 4099-03 ☐ Other Source:

Calibrated By: Calibration Date: 3-21-13 Calibration Due: 3-21-14

Reviewed By: Date: 3/21/13

This calibration conforms to the requirements and acceptable calibration conditions of ANSI N323A - 1997.
NMRCB Registration No. 921-3 * Calibration of Radiation Detection Instrument Devices

EBERLINE SERVICES

CERTIFICATE OF CALIBRATION

Electroplated Beta Standard

S.O.# 6984
P.O.# N/A

Description of Standard:

Model No. DNS-12 Serial No. 5444-05 Isotope Tc-99

Electroplated on polished SS disc, 0.79 mm thick.

Total diameter of 4.77 cm and an active diameter of 4.45 cm.

The radioactive material is permanently fixed to the disc by heat treatment without any covering over the active surface.

Measurement Method:

The 2pi beta emission rate was measured using an internal gas flow proportional chamber. Absolute counting of beta particles emitted in the hemisphere above the active surface was verified by counting above, below, and at the operative voltage. The calibration is traceable to NIST by reference to an NIST calibrated beta source S/N 75323-201.

Measurement Result:

The observed beta count rate from the surface of the disc per minute (cpm) on the calibration date was:

7,240 ± 217

The total disintegration rate (dpm) assuming 25 % backscatter of beta particles from the surface of the disc, was:

11,600 ± 347 (0.005 µCi)

The uncertainty of the measurement is 3 %, which is the sum of random counting error at the 99% confidence level, and the estimated upper limit of systematic error in this measurement.

Calibrated by: ART REUST Reviewed by: [signature]

Calibration Technician: [signature] Q.A. Manager: [signature]

Calibration Date: 3-24-2010 Reviewed Date: 3 24/10

Source Manufacturing Lab
7021 Pan American Freeway NE
Albuquerque, New Mexico 87109-4238
(505) 761-5413 Fax (505) 761-5416
areust@eberlineservices.com

EBERLINE SERVICES

CERTIFICATE OF CALIBRATION

Electroplated Alpha Standard

S.O.# 7039
P.O.# N/A

Description of Standard:

Model No. DNS-11 Serial No. 7131A-12 Isotope Th-230

Electroplated on polished SS disc, 0.79 mm thick.

Total diameter of 4.77 cm and an active diameter of 4.45 cm.

The radioactive material is permanently fixed to the disc by heat treatment without any covering over the active surface.

Measurement Method:

The 2pi alpha emission rate was measured using an internal gas flow proportional chamber. Absolute counting of alpha particles emitted in the hemisphere above the active surface was verified by counting above, below, and at the operative voltage. The calibration is traceable to NIST by reference to an NIST calibrated alpha source S/N 75322-201

Measurement Result:

The observed alpha particles emitted from the surface of the disc per minute (cpm) on the calibration date was:

11,500 ± 459

The total disintegration rate (dpm) assuming 1.5% backscatter of alpha particles from the surface of the disc, was:

22,700 ± 906 (0.0102 (Ci)

The uncertainty of the measurement is 4 %, which is the sum of random counting error at the 99% confidence level, and the estimated upper limit of systematic error in this measurement.

Calibrated by: ART REUST Reviewed by:

Calibration Technician: Q.A. Manager:

Calibration Date: 7-11-2012 Reviewed Date:

Source Manufacturing Lab
7021 Pan American Freeway NE
Albuquerque, New Mexico 87109-4238
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art.reust@eberlineservices.com

Function Check Form
Dual Channel

Ratemeter: 2360 **Ratemeter Serial No.:** 245768 **Ratemeter Cal. Date:** 3/28/2014
Detector: 43-37 **Detector Serial No.:** PR302114 **Detector Cal. Date:** 3/28/2014
Alpha Threshold: 120 mV **Beta Threshold:** 4 mV **Beta Window:** 46 mV
Alpha Source: Th-230 **Emission Rate:** 11500 dpm **Activity Date:** 7/11/2012 **Serial Number:** 7131A-12
Beta Source: Tc-99 **Emission Rate:** 7240 dpm **Activity Date:** 3/24/2010 **Serial Number:** 5444-05
Comments: SystemID: 1
ChannelID: 1

Date/Time	HV	Battery OK?	Alpha Source α	Alpha Source β	Beta Source α	Beta Source β	Background α	Background β	Net α	Net β	Instrument Efficiency α	Instrument Efficiency β
4/2/2013 8:00:00 AM	1620	☑	2386	2311	38	3784	40	1159	2346	2625	0.204	0.363
4/2/2013 1:26:00 PM	1620	☑	2586	2251	32	3564	34	1195	2552	2369	0.222	0.327
4/2/2013 3:10:00 PM	1620	☑	2330	2344	32	3867	28	1144	2302	2723	0.200	0.376
4/3/2013 8:00:00 AM	1623	☑	2565	2030	45	3504	46	1117	2519	2387	0.219	0.330
4/3/2013 4:40:00 PM	1620	☑	2345	2267	35	3589	26	1204	2319	2385	0.202	0.329
4/4/2013 10:20:00 AM	1619	☑	2376	1947	29	3522	20	1999	2356	1523	0.205	0.210
4/4/2013 4:00:00 PM	1620	☑	2497	2201	28	3598	22	1142	2475	2456	0.215	0.339
4/9/2013 10:40:00 AM	1621	☑	2420	1976	27	3608	21	1265	2399	2343	0.209	0.324
4/11/2013 10:30:00 AM	1620	☑	2331	1995	32	3598	22	1054	2309	2544	0.201	0.351
4/11/2013 4:50:00 PM	1619	☑	2022	2232	45	3669	15	1300	2007	2369	0.175	0.327
4/15/2013 10:00:00 AM	1620	☑	2193	2083	27	3621	20	1202	2173	2419	0.189	0.334
4/15/2013 4:40:00 PM	1620	☑	2149	2342	40	3699	32	1234	2117	2465	0.184	0.340
4/16/2013 1:30:00 PM	1620	☑	2159	1884	35	3675	25	1180	2134	2495	0.186	0.345
4/16/2013 4:45:00 PM	1620	☑	2105	2211	33	3688	18	1240	2087	2448	0.181	0.338
4/17/2013 9:20:00 AM	1620	☑	2167	1872	34	3543	26	1186	2141	2357	0.186	0.326
4/22/2013 10:30:00 AM	1620	☑	2073	1905	37	3359	22	1176	2051	2183	0.178	0.302
5/2/2013 9:00:00 AM	1620	☑	2126	1833	44	3979	31	1096	2095	2883	0.182	0.398
5/2/2013 11:30:00 AM	1620	☑	2009	1875	30	3535	28	1133	1981	2402	0.172	0.332

Reviewed By: Date:

Function Check Form
Dual Channel

Ratemeter: 2360 **Ratemeter Serial No.:** 245768 **Ratemeter Cal. Date:** 3/28/2014
Detector: 43-37 **Detector Serial No.:** PR302114 **Detector Cal. Date:** 3/28/2014
Alpha Threshold: 120 mV **Beta Threshold:** 4 mV **Beta Window:** 46 mV
Alpha Source: Th-230 **Emission Rate:** 11500 dpm **Activity Date:** 7/11/2012 **Serial Number:** 7131A-12
Beta Source: Tc-99 **Emission Rate:** 7240 dpm **Activity Date:** 3/24/2010 **Serial Number:** 5444-05
Comments: SystemID: 1
ChannelID: 2

Date/Time	HV	Battery OK?	Alpha Source α	Alpha Source β	Beta Source α	Beta Source β	Background α	Background β	Net α	Net β	Instrument Efficiency α	Instrument Efficiency β
4/2/2013 8:00:00 AM	1620	☑	2386	2311	38	3784	40	1159	2346	2625	0.204	0.363
4/2/2013 1:26:00 PM	1620	☑	2586	2251	32	3564	34	1195	2552	2369	0.222	0.327
4/2/2013 3:10:00 PM	1620	☑	2330	2344	32	3867	28	1144	2302	2723	0.200	0.376
4/3/2013 8:00:00 AM	1623	☑	2565	2030	45	3504	46	1117	2519	2387	0.219	0.330
4/3/2013 4:40:00 PM	1620	☑	2345	2267	35	3589	26	1204	2319	2385	0.202	0.329
4/4/2013 10:20:00 AM	1619	☑	2376	1947	29	3522	20	1999	2356	1523	0.205	0.210
4/4/2013 4:00:00 PM	1620	☑	2497	2201	28	3598	22	1142	2475	2456	0.215	0.339
4/9/2013 10:40:00 AM	1621	☑	2420	1976	27	3608	21	1265	2399	2343	0.209	0.324
4/11/2013 10:30:00 AM	1620	☑	2331	1995	32	3598	22	1054	2309	2544	0.201	0.351
4/11/2013 4:50:00 PM	1619	☑	2022	2232	45	3669	15	1300	2007	2369	0.175	0.327
4/15/2013 10:00:00 AM	1620	☑	2193	2083	27	3621	20	1202	2173	2419	0.189	0.334
4/15/2013 4:40:00 PM	1620	☑	2149	2342	40	3699	32	1234	2117	2465	0.184	0.340
4/16/2013 1:30:00 PM	1620	☑	2159	1884	35	3675	25	1180	2134	2495	0.186	0.345
4/16/2013 4:45:00 PM	1620	☑	2105	2211	33	3688	18	1240	2087	2448	0.181	0.338
4/17/2013 9:20:00 AM	1620	☑	2167	1872	34	3543	26	1186	2141	2357	0.186	0.326
4/22/2013 10:30:00 AM	1620	☑	2073	1905	37	3359	22	1176	2051	2183	0.178	0.302
5/2/2013 9:00:00 AM	1620	☑	2126	1833	44	3979	31	1096	2095	2883	0.182	0.398
5/2/2013 11:30:00 AM	1620	☑	2009	1875	30	3535	28	1133	1981	2402	0.172	0.332

Reviewed By: Date:

Function Check Form
Dual Channel

Ratemeter: 2360 **Ratemeter Serial No.:** 245768 **Ratemeter Cal. Date:** 3/28/2014
Detector: 43-37 **Detector Serial No.:** PR302114 **Detector Cal. Date:** 3/28/2014
Alpha Threshold: 120 mV **Beta Threshold:** 4 mV **Beta Window:** 46 mV
Alpha Source: Th-230 **Emission Rate:** 11500 dpm **Activity Date:** 7/11/2012 **Serial Number:** 7131A-12
Beta Source: Tc-99 **Emission Rate:** 7240 dpm **Activity Date:** 3/24/2010 **Serial Number:** 5444-05
Comments: SystemID: 1
ChannelID: 3

Date/Time	HV	Battery OK?	Alpha Source α	Alpha Source β	Beta Source α	Beta Source β	Background α	Background β	Net α	Net β	Instrument Efficiency α	Instrument Efficiency β
4/2/2013 8:00:00 AM	1620	☑	2386	2311	38	3784	40	1159	2346	2625	0.204	0.363
4/2/2013 1:26:00 PM	1620	☑	2586	2251	32	3564	34	1195	2552	2369	0.222	0.327
4/2/2013 3:10:00 PM	1620	☑	2330	2344	32	3867	28	1144	2302	2723	0.200	0.376
4/3/2013 8:00:00 AM	1623	☑	2565	2030	45	3504	46	1117	2519	2387	0.219	0.330
4/3/2013 4:40:00 PM	1620	☑	2345	2267	35	3589	26	1204	2319	2385	0.202	0.329
4/4/2013 10:20:00 AM	1619	☑	2376	1947	29	3522	20	1999	2356	1523	0.205	0.210
4/4/2013 4:00:00 PM	1620	☑	2497	2201	28	3598	22	1142	2475	2456	0.215	0.339
4/9/2013 10:40:00 AM	1621	☑	2420	1976	27	3608	21	1265	2399	2343	0.209	0.324
4/11/2013 10:30:00 AM	1620	☑	2331	1995	32	3598	22	1054	2309	2544	0.201	0.351
4/11/2013 4:50:00 PM	1619	☑	2022	2232	45	3669	15	1300	2007	2369	0.175	0.327
4/15/2013 10:00:00 AM	1620	☑	2193	2083	27	3621	20	1202	2173	2419	0.189	0.334
4/15/2013 4:40:00 PM	1620	☑	2149	2342	40	3699	32	1234	2117	2465	0.184	0.340
4/16/2013 1:30:00 PM	1620	☑	2159	1884	35	3675	25	1180	2134	2495	0.186	0.345
4/16/2013 4:45:00 PM	1620	☑	2105	2211	33	3688	18	1240	2087	2448	0.181	0.338
4/17/2013 9:20:00 AM	1620	☑	2167	1872	34	3543	26	1186	2141	2357	0.186	0.326
4/22/2013 10:30:00 AM	1620	☑	2073	1905	37	3359	22	1176	2051	2183	0.178	0.302
5/2/2013 9:00:00 AM	1620	☑	2126	1833	44	3979	31	1096	2095	2883	0.182	0.398
5/2/2013 11:30:00 AM	1620	☑	2009	1875	30	3535	28	1133	1981	2402	0.172	0.332

Reviewed By: Date:

Function Check Form
Dual Channel

Ratemeter: 2360
Detector: 43-37
Alpha Threshold: 120 mV
Alpha Source: Th-230
Beta Source: Tc-99
Comments: SystemID: 1
ChannelID: 4

Ratemeter Serial No.: 245768
Detector Serial No.: PR302114
Beta Threshold: 4 mV
Emission Rate: 11500 dpm **Activity Date:** 7/11/2012
Emission Rate: 7240 dpm **Activity Date:** 3/24/2010

Ratemeter Cal. Date: 3/28/2014
Detector Cal. Date: 3/28/2014
Beta Window: 46 mV
Serial Number: 7131A-12
Serial Number: 5444-05

Date/Time	HV	Battery OK?	Alpha Source		Beta Source		Background		Net		Instrument Efficiency	
			α	β	α	β	α	β	α	β	α	β
4/2/2013 8:00:00 AM	1620	☑	2386	2311	38	3784	40	1159	2346	2625	0.204	0.363
4/2/2013 1:26:00 PM	1620	☑	2586	2251	32	3564	34	1195	2552	2369	0.222	0.327
4/2/2013 3:10:00 PM	1620	☑	2330	2344	32	3867	28	1144	2302	2723	0.200	0.376
4/3/2013 8:00:00 AM	1623	☑	2565	2030	45	3504	46	1117	2519	2387	0.219	0.330
4/3/2013 4:40:00 PM	1620	☑	2345	2267	35	3589	26	1204	2319	2385	0.202	0.329
4/4/2013 10:20:00 AM	1619	☑	2376	1947	29	3522	20	1999	2356	1523	0.205	0.210
4/4/2013 4:00:00 PM	1620	☑	2497	2201	28	3598	22	1142	2475	2456	0.215	0.339
4/9/2013 10:40:00 AM	1621	☑	2420	1976	27	3608	21	1265	2399	2343	0.209	0.324
4/11/2013 10:30:00 AM	1620	☑	2331	1995	32	3598	22	1054	2309	2544	0.201	0.351
4/11/2013 4:50:00 PM	1619	☑	2022	2232	45	3669	15	1300	2007	2369	0.175	0.327
4/15/2013 10:00:00 AM	1620	☑	2193	2083	27	3621	20	1202	2173	2419	0.189	0.334
4/15/2013 4:40:00 PM	1620	☑	2149	2342	40	3699	32	1234	2117	2465	0.184	0.340
4/16/2013 1:30:00 PM	1620	☑	2159	1884	35	3675	25	1180	2134	2495	0.186	0.345
4/16/2013 4:45:00 PM	1620	☑	2105	2211	33	3688	18	1240	2087	2448	0.181	0.338
4/17/2013 9:20:00 AM	1620	☑	2167	1872	34	3543	26	1186	2141	2357	0.186	0.326
4/22/2013 10:30:00 AM	1620	☑	2073	1905	37	3359	22	1176	2051	2183	0.178	0.302
5/2/2013 9:00:00 AM	1620	☑	2126	1833	44	3979	31	1096	2095	2883	0.182	0.398
5/2/2013 11:30:00 AM	1620	☑	2009	1875	30	3535	28	1133	1981	2402	0.172	0.332

Reviewed By: Date:

Function Check Form
Dual Channel

Ratemeter: 2360 **Ratemeter Serial No.:** 220246 **Ratemeter Cal. Date:** 3/21/2014
Detector: 43-93 **Detector Serial No.:** PR199826 **Detector Cal. Date:** 3/21/2014
Alpha Threshold: 120 mV **Beta Threshold:** 4 mV **Beta Window:** 30 mV
Alpha Source: Th-230 **Emission Rate:** 11500 dpm **Activity Date:** 7/11/2012 **Serial Number:** 7131A-12
Beta Source: Tc-99 **Emission Rate:** 7240 dpm **Activity Date:** 3/24/2010 **Serial Number:** 5444-05
Comments: SystemID: 2
ChannelID: 1

Date/Time	HV	Battery OK?	Alpha Source α	Alpha Source β	Beta Source α	Beta Source β	Background α	Background β	Net α	Net β	Instrument Efficiency α	Instrument Efficiency β
4/10/2013 1:00:00 PM	790	☑	3302	465	18	1674	0	181	3302	1493	0.287	0.206
4/10/2013 4:45:00 PM	790	☑	3284	455	18	169	0	181	3284	-12	0.286	-0.002
4/11/2013 11:15:00 AM	790	☑	3384	499	13	1659	0	202	3384	1457	0.294	0.201
4/11/2013 5:00:00 PM	790	☑	3309	485	20	1695	1	202	3308	1493	0.288	0.206
4/16/2013 1:30:00 PM	790	☑	3136	458	9	1683	11	195	3125	1488	0.272	0.206
4/16/2013 5:00:00 PM	790	☑	3117	584	15	1710	1	219	3116	1491	0.271	0.206
4/17/2013 2:00:00 PM	790	☑	3104	494	23	1640	17	211	3087	1429	0.268	0.197
4/17/2013 5:00:00 PM	790	☑	3206	478	26	2050	1	197	3205	1853	0.279	0.256
4/18/2013 10:00:00 AM	790	☑	3017	434	16	1629	6	184	3011	1445	0.262	0.200
4/22/2013 10:00:00 AM	790	☑	3108	488	61	1675	1	201	3107	1474	0.270	0.204
4/22/2013 5:00:00 PM	790	☑	3170	477	31	1628	2	177	3168	1451	0.275	0.200
4/23/2013 10:00:00 AM	790	☑	2965	466	17	1674	0	243	2965	1431	0.258	0.198
4/23/2013 5:00:00 PM	790	☑	2974	417	17	1681	4	204	2970	1477	0.258	0.204
4/24/2013 2:00:00 PM	790	☑	2898	409	19	1659	0	196	2898	1463	0.252	0.202
4/24/2013 5:00:00 PM	790	☑	2930	521	111	1706	3	213	2927	1493	0.255	0.206
4/25/2013 10:00:00 AM	790	☑	2844	470	40	1727	4	199	2840	1528	0.247	0.211
4/25/2013 5:00:00 PM	790	☑	2788	439	46	1752	1	197	2787	1555	0.242	0.215

Reviewed By: Date: