

**HANFORD SITE NEAR-FACILITY ENVIRONMENTAL  
MONITORING DATA REPORT FOR CALENDAR YEAR 2001**

C. J. Perkins  
B. M. Markes  
S. M. McKinney  
R. M. Mitchell  
R. C. Roos

Duratek Federal Services, Inc., Northwest Operations  
Richland, Washington 99352

September 2002

Prepared for  
the U.S. Department of Energy  
under Contract DE-AC06-76RL0 1830

Submitted by  
Pacific Northwest National Laboratory  
Richland, Washington 99352

## CONTENTS

1.0	NEAR-FACILITY ENVIRONMENTAL MONITORING AT HANFORD .....	1-1
2.0	AMBIENT AIR MONITORING.....	2-1
3.0	SOIL AND VEGETATION MONITORING.....	3-1
4.0	EXTERNAL RADIATION .....	4-1
5.0	100-N RIVERBANK SPRINGS MONITORING.....	5-1
6.0	RADIOLOGICAL SURVEYS .....	6-1
7.0	INVESTIGATIVE SAMPLING.....	7-1
8.0	NOXIOUS WEED CONTROL PROGRAM .....	8-1
9.0	QUALITY ASSURANCE .....	9-1
10.0	GLOSSARY .....	10-1
11.0	STANDARDS.....	11-1
12.0	DATA SUMMARY METHODS .....	12-1
13.0	REFERENCES .....	13-1

## LIST OF TERMS

ACV	Administrative Control Value
ALARA	As Low As Reasonably Achievable
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CFR	<i>Code of Federal Regulations</i>
CSB	Canister Storage Building
CVDF	Cold Vacuum Drying Facility
DCG	derived concentration guide
DOE	U.S. Department of Energy
Ecology	U.S. Department of Ecology
EDE	effective dose equivalent
EMP	environmental monitoring plan
EPA	U.S. Environmental Protection Agency
ERC	Environmental Restoration Contractor
ERDF	Environmental Restoration Disposal Facility
ESD	environmental sites database
Federal Services	Duratek Federal Services, Inc., Northwest Operations
GPR	Ground Penetrating Radar
GPS	global positioning system
HEPA	high-efficiency particulate air (filter)
HGIS	Hanford Geographical Information System
ILAW	Immobilized Low-Activity Waste
LWDF	Liquid Waste Disposal Facility
MCL	maximum contaminant level
PHMC	Project Hanford Management Contract
PNNL	Pacific Northwest National Laboratory
PFP	Plutonium Finishing Plant
PUREX	Plutonium-Uranium Extraction
QA	quality assurance
RCRA	Resource Conservation and Recovery Act
RPP	River Protection Project
TEDF	Treated Effluent Disposal Facility
TLD	thermoluminescent dosimeters
TRU	transuranic
WAC	<i>Washington Administrative Code</i>
WIDS	Waste Information Data System
WSCF	Waste Sampling and Characterization Facility

## 1.0 NEAR-FACILITY ENVIRONMENTAL MONITORING AT HANFORD

Near-facility environmental monitoring is defined as monitoring near facilities that have the potential to discharge or have discharged, stored, or disposed of radioactive or hazardous materials. Monitoring locations are associated with nuclear facilities such as the Plutonium Finishing Plant (PFP), Canister Storage Building (CSB), and the K Basins; inactive nuclear facilities such as N Reactor and the Plutonium-Uranium Extraction Plant (PUREX); and waste storage or disposal facilities such as burial grounds, cribs, ditches, ponds, tank farms, and trenches.

Much of the monitoring consists of collecting and analyzing environmental samples and methodically surveying areas near facilities. The program is also designed to evaluate acquired analytical data, determine the effectiveness of facility effluent monitoring and controls, assess the adequacy of containment at waste disposal units, and detect and monitor unusual conditions. The monitoring implements applicable portions of U.S. Department of Energy (DOE) Orders 435.1 (DOE 2001), 5400.1 (DOE 1990), and 5400.5 (DOE 1993); *Washington Administrative Code* (WAC) 246-247; Title 40, *Code of Federal Regulations* (CFR) Part 61, Subpart H; and 10 CFR 835.

Several types of environmental media are sampled near facilities to monitor waste management and restoration activities, and to evaluate the effectiveness of effluent treatment and control practices. Routine sampling and monitoring includes ambient air, water, external radiation, soil, and vegetation. The parameters typically monitored are radionuclide concentrations and radiation fields. Sampling methods are discussed in detail in the Duratek Federal Services, Inc., Northwest Operations (Federal Services) *Operational Environmental Monitoring*, DFSNW-OEM-001.

Samples are collected from known or expected effluent pathways. These pathways are generally downwind of potential or actual airborne releases and down gradient of liquid discharges. Table 1-1 shows the type, quantity, and location of routine near-facility monitoring samples collected in 2001.

Table 1-1. Near-Facility Routine Environmental Monitoring Samples and Locations, 2001.

Sample Type	Number of Sample Locations	Operational Area								
		100-B,C	100-D,DR	100-K	100-F	100-H	100-N	ERDF <sup>a</sup>	200/600	300/400
Air	76	3	3	8	6	6	5	3	41 <sup>b</sup>	1
Water	10	0	0	0	0	0	10	0	0	0
Soil	91	1	0	0	2	2	10	1	57	18
Vegetation	75	0	0	0	0	0	9	0	49	17
External Radiation	133	5	0	15 <sup>c</sup>	5	3	14	3	67 <sup>d</sup>	21

a - Environmental Restoration Disposal Facility in the 200 West Area.

b - Includes 1 station at the Wye Barricade, 19 in the 200 East Area, and 21 in the 200 West Area.

c - Includes 11 locations in 100 KE/KW Areas and 4 at the Cold Vacuum Drying Facility.

d - Includes 66 locations in the 200 Areas, and 1 at the 212-R Facility.



Waste disposal sites and the surrounding terrain are surveyed to detect and characterize any radioactive surface contamination. Routine radiological survey locations include cribs, trenches, retention basin perimeters, pond perimeters, ditch banks, perimeters of active solid waste disposal sites, unplanned release sites, tank farm perimeters, stabilized waste disposal sites, roads, and firebreaks in and around the Site operational areas.

Nonroutine, investigative samples are also collected as part of the Near-Facility Environmental Monitoring Program to confirm the absence or presence of radioactive and/or hazardous contaminants.

A Noxious Weed Control Program has been developed on the Hanford Site in response to Federal, State, and local laws requiring eradication or control of noxious weeds. Technical and administrative implementation of this program is, in part, provided by Near-Facility Environmental Monitoring staff. A general discussion of the program and of control measures is provided in Section 8.0 of this report.

This Appendix contains brief discussions, specific sampling location information, and complete analytical data results for the various near-facility environmental monitoring efforts for 2001. Detailed discussions and summarized analytical results are provided in Section 3.2 (“Near-Facility Environmental Monitoring”) of the *Hanford Site Environmental Report for Calendar Year 2001* (PNNL-13910).

## **AIR MONITORING**

Near-facility air sampling monitors the effectiveness of waste management and environmental remediation controls, and effluent treatment systems in reducing effluents and emissions. These air samplers also monitor diffuse source emissions.

Ambient air monitoring is conducted to determine baseline concentrations of radionuclides in the operations areas, assess the impact of operations on the local environment, and monitor diffuse and fugitive emissions from sources located within the operations area. These measurements also provide an indication of the Project Hanford Management Contract (PHMC), River Protection Project (RPP) and Environmental Restoration Contractor (ERC) managed facilities' performance and are used to demonstrate compliance with environmental protection criteria.

In 2001, air radioactivity was sampled by a network of continuously operating samplers at 76 locations. Location-specific maps and monitoring results are provided in Section 2.0.

## **GROUNDWATER MONITORING**

The Near-Facility Environmental Monitoring Program did not conduct groundwater monitoring in 2001.

Groundwater monitoring at the Hanford Site is integrated through the Groundwater/Vadose Zone Integration Project as described in the *Groundwater/Vadose Zone Integration Project, Management Plan* (RL 1999). This plan integrates monitoring at active waste disposal facilities to comply with monitoring requirements of the *Resources Conservation and Recovery Act of 1976* (RCRA), the *Comprehensive Environmental Response, Compensation, and Liability Act of 1980* (CERCLA), and Washington State regulations, as well as requirements for operational monitoring around reactor and chemical processing facilities, and environmental surveillance monitoring. Pacific Northwest National Laboratory (PNNL) supports these monitoring efforts through the Groundwater Monitoring Project. This project is responsible for assessing the distribution and movement of existing groundwater contamination, identifying potential and emerging groundwater contamination problems, and integrating the various groundwater projects to minimize redundancy. Summary results for 2001 are discussed in PNL-13910, Section 6.0, "Groundwater and Vadose Zone Monitoring."

Information on groundwater contaminant distribution and transport are integrated into a Site-wide evaluation of groundwater quality, which is documented in an annual groundwater monitoring report (Hartman 2002). Groundwater monitoring is also carried out during cleanup investigations under CERCLA.

## **SOIL AND VEGETATION SAMPLING**

Soil and vegetation samples were collected on or adjacent to waste disposal units, and from locations downwind and near or within the boundaries of the operating facilities. Samples were collected to detect potential migration and deposition of facility effluents. Migration of radionuclides can occur as the result of resuspension from radioactively contaminated surface areas, absorption by the roots of vegetation growing on or near underground and surface water disposal units, or intrusion by animals.

Radiological analyses of soil and vegetation samples included strontium-90, plutonium-239,240, isotopic uranium, and gamma-emitting radionuclides. Location-specific maps and the analytical results are presented in Section 3.0.

## **EXTERNAL RADIATION**

External radiation levels were monitored near facilities and waste handling, storage, and disposal sites to measure, assess, and control the impacts of operations. Thermoluminescent dosimeters (TLDs) are used at numerous fixed locations to gather dose rate information over extended periods of time. TLD results can be used individually or averaged to determine dose rates in a given area for a particular sampling period.

Environmental dosimeters measure dose rates from all types of external radiation sources, including cosmic radiation, naturally occurring radioactivity in air and soil, and fallout from nuclear weapons testing, as well as any contribution from Hanford Site activities. During any year, changes in soil moisture and snow cover can cause external radiation levels to vary from

15% to 25% at any given location. The results are reported in units of millirems per year (mrem/yr). Individual TLD results and their locations are provided in Section 4.0.

## **RIVERBANK SPRINGS MONITORING**

The springs along the 100-N Area Columbia River shoreline (N-Springs) were sampled in 2001 to assess the effectiveness of effluent and contamination controls. Ten water samples were collected. The radiological analyses were performed onsite at the Waste Sampling and Characterization Facility (WSCF), and the analyses included tritium, strontium-90, and gamma-emitting radionuclides. A location-specific map and the analytical results of the sampling are presented in Section 5.0.

## **RADIOLOGICAL SURVEYS**

In 2001, the Hanford Site had approximately 8,990 acres (3,638 ha) of posted outdoor surface contamination, and 1,650 acres (668 ha) of posted underground radioactive material, not including the production facilities (e.g., PUREX, T-Plant, etc.). The total area of surface contamination was approximately six times larger than the area of underground radioactive material.

Since 1996, a global positioning system (GPS) has been utilized to accurately measure the surface area of these radiologically controlled sites. This collected information was entered into the Hanford Geographical Information System (HGIS), a computer database maintained by the ERC. Survey location maps are provided in Section 6.0.

## **INVESTIGATIVE SAMPLING**

Investigative sampling was conducted in the operations areas to confirm the absence or presence of radioactive and/or hazardous contaminants. Investigative sampling took place near facilities, such as storage and disposal sites, for at least one of the following reasons:

- To follow up radiological surface surveys that had indicated radioactive contamination was present.
- To conduct preoperational surveys to characterize the radiological/hazardous conditions at a site prior to facility construction, operation, or ultimate remediation.
- To determine if biotic intrusion (e.g., animal burrows or deep-rooted vegetation) has created a potential for contaminants to spread.
- To determine the integrity of waste containment systems.

Generally, the predominant radionuclides detected during these efforts were activation and fission products in the 100 Areas, fission products in the 200 Areas, and uranium in the 300 Area. Hazardous chemicals generally have not been identified above background levels in preoperational environmental monitoring samples. Special characterization samples were collected in 2001 from three boreholes at the proposed Immobilized Low-Activity Waste (ILAW) Disposal Facility in the 200 East Area. Complete results, including counting errors, and field instrument and dose rate readings, where appropriate, are provided in Section 7.0.

## **NOXIOUS WEED CONTROL PROGRAM**

The Noxious Weed Control Program on the Hanford Site has been developed in response to Federal, State, and local laws requiring eradication or control of noxious weeds. A noxious weed is defined as “any plant which when established is highly destructive, competitive, or difficult to control by cultural or chemical practices.” Typically, noxious weeds are non-native (alien) species that invade and displace native species, reduce habitat for fish and wildlife, and contribute to the extinction of sensitive species.

Nine plant species are on a high priority list for control at Hanford. These species are Yellow Starthistle (*Centaurea solstitialis*), Rush Skeletonweed (*Chondrilla juncea*), Babysbreath (*Gypsophila paniculata*), Dalmatian Toadflax (*Linaria genistifolia* ssp. *Dalmatica*), Spotted Knapweed (*Centaurea maculosa*), Diffuse Knapweed (*Centaurea diffusa*), Russian Knapweed (*Acroptilon repens*), Saltcedar (*Tamarix* spp.), and Purple Loosestrife (*Lythrum salicaria*).

Maps generally depicting the spatial distribution of these species across the Hanford Site can be found in Section 8.0.

This page intentionally left blank.

## 2.0 AMBIENT AIR MONITORING

Air samplers are located primarily at or near (within approximately 500 m [1,500 ft]) sites and/or facilities having the potential for, or history of, environmental releases, with emphasis on potential source terms as well as prevailing wind direction. Meteorological conditions are monitored continuously by the PNNL meteorology stations, which are strategically positioned in and around the Hanford Site.

For 2001, a network of continuously operating samplers at 76 locations (Table 2-1) sampled radioactivity in air. Location-specific maps are illustrated in Figures 2-1 through 2-11. Historical air sampling results for the 100-K, 100-N, 200 and 300 Areas are represented in graph form in Figures 2-12 through 2-23. The 2001 composited, sampler-specific monitoring results are provided in Table 2-2. Additional discussion of the 2001 results can be found in Section 3.2 of the *Hanford Site Environmental Report for Calendar Year 2001* (PNNL-13910).

Several PNNL ambient air monitoring stations were utilized to provide additional information for five ERC remediation projects. The projects and the associated PNNL stations are the 100-B/C, 100-H, 100-F and 100-NR-1 remedial action projects (PNNL station “Yakima Barricade”); and the Environmental Restoration Disposal Facility (ERDF) project (PNNL station “200 West SE”). The 2001 air monitoring data results for these locations can be found in Table 2-3.

Air monitoring within the 300 and 400 Areas was performed by PNNL as part of the Site Surface Environmental Surveillance Project. Data acquired are reviewed by Near-Facility Monitoring personnel. A more detailed discussion of these results is provided in PNNL-13910, Section 4.1, “Air Surveillance.”

Near-facility environmental air samplers operate at a flow rate of 0.057 m<sup>3</sup>/min (2 ft<sup>3</sup>/min), drawing a sample through a 47-mm (2-in.), open-faced filter about 2 m (6 ft) aboveground. All sample filters are exchanged biweekly, held one week (to allow for decay of short-lived natural radioactivity), and then sent to the analytical laboratory for initial analysis of total alpha and total beta activity. These initial analyses serve as an indicator of potential environmental problems.

The filters were stored until the end of either a three- or six-month sample period, then segregated and composited by sample location for specific radionuclide analysis as shown in Table 2-1. Segregating and compositing air filters by site provides a larger sample size and, thus, a more sensitive and accurate measurement of the concentration of airborne radionuclides.

To help assess the impact of Site operations, monitoring results are compared to DOE derived concentration guides (DCGs) and to the results obtained from the distant communities of Yakima and Sunnyside as reported by PNNL Site Environmental Surveillance Program. The data acquired from distant station N-981 is compared to the data from samples collected in

the operating areas and to data from samples collected by PNNL and the Washington State Department of Health. Collocated sampling sites are used for comparability and precision.

Table 2-1. Near-Facility Air Sampling Locations and Analyses, 2001.

Site	Number of Samplers	EDP Code <sup>a</sup>	Analyses	
			Bi-weekly	Composite <sup>b,c,d</sup>
100-B/C Remedial Action Project	3	N464, N465, N466	Gross $\alpha$ , $\beta$	GEA, Sr-90, Pu-iso, U-iso
105-D Interim Safe Storage Project	1	N523	Gross $\alpha$ , $\beta$	GEA, Sr-90, Pu-iso, U-iso
105-DR Interim Safe Storage Project	2	N492, N493	Gross $\alpha$ , $\beta$	GEA, Sr-90, Pu-iso, U-iso
105-F Interim Safe Storage Project	2	N494, N495	Gross $\alpha$ , $\beta$	GEA, Sr-90, Pu-iso, U-iso
105-F Remedial Action Project	4	N519, N520, N521, N522	Gross $\alpha$ , $\beta$	GEA, Sr-90, Pu-iso, U-iso
105-H Interim Safe Storage Project	2	N524, N525	Gross $\alpha$ , $\beta$	GEA, Sr-90, Pu-iso, U-iso
100-H Remedial Action Project	4	N507, N508, N509, N510	Gross $\alpha$ , $\beta$	GEA, Sr-90, Pu-iso, U-iso
100-K Spent Nuclear Fuels	8	N401, N402, N403 <sup>e</sup> , N404, N476 N477, N478, N479	Gross $\alpha$ , $\beta$	GEA, Sr-90, Pu-iso, U-iso, Pu-241, Am-241
100-N Surveillance and Maintenance/Transition project and 100-NR-1 Remedial Action project	5	N102, N103, N105, N106, N526	Gross $\alpha$ , $\beta$	GEA, Sr-90, Pu-iso, U-iso
200 East Area	17	N019, N158, N498, N499, N957 N967, N968, N969, N970, N972 N973, N976, N977, N978, N984 N985, N999	Gross $\alpha$ , $\beta$	GEA, Sr-90, Pu-iso, U-iso
Canister Storage Building (200 East Area)	2	N480, N481	Gross $\alpha$ , $\beta$	GEA, Sr-90, Pu-iso, U-iso, Pu-241, Am-241
200 West Area	21	N155, N161, N165, N168, N200 N304, N433, N441, N442, N449, N456, N457, N956, N963, N964, N965, N966, N974, N975, N987, N994	Gross $\alpha$ , $\beta$	GEA, Sr-90, Pu-iso, U-iso
300 Area	1	N130	Gross $\alpha$ , $\beta$	GEA, Sr-90, Pu-iso, U-iso
Environmental Restoration Disposal Facility (ERDF)	3	N482 <sup>e</sup> , N517, N518,	Gross $\alpha$ , $\beta$	GEA, Sr-90, Pu-iso, U-iso
600 Area	1	N981 <sup>f</sup>	Gross $\alpha$ , $\beta$	GEA, Sr-90, Pu-iso, U-iso

a - EDP Code = sampler location code.

b - GEA = Gamma energy analysis

c - Isotopic plutonium-238 and -239/240

d - Isotopic uranium-234, -235, -238

e - Collocated sampling location with Washington State Department of Health.

f - Collocated sampling location with Washington State Department of Health and PNNL.

Figure 2-1. 100-B/C Area Air Sampler Locations.

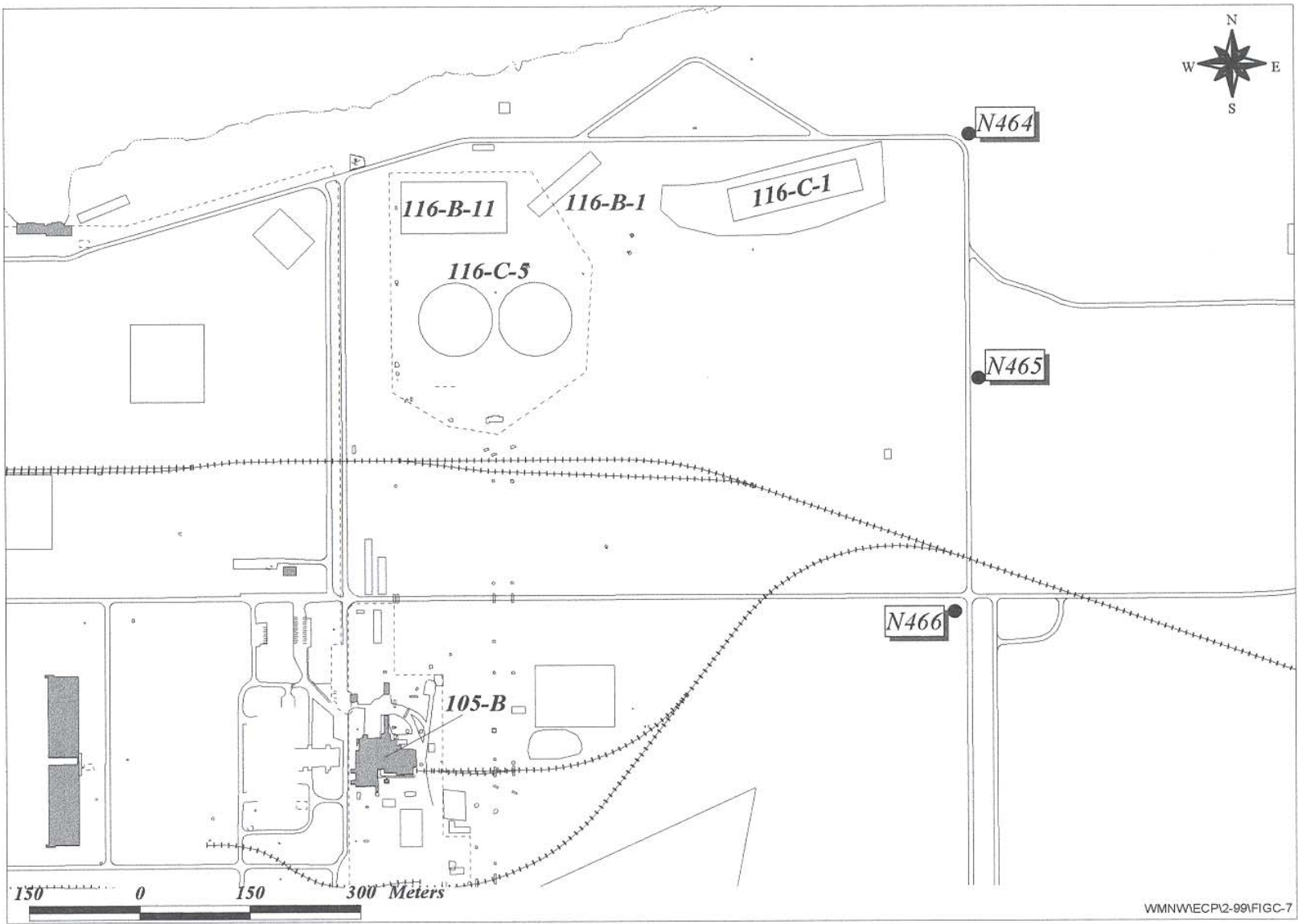




Figure 2-2. 100-D/DR Area Air Sampler Locations.

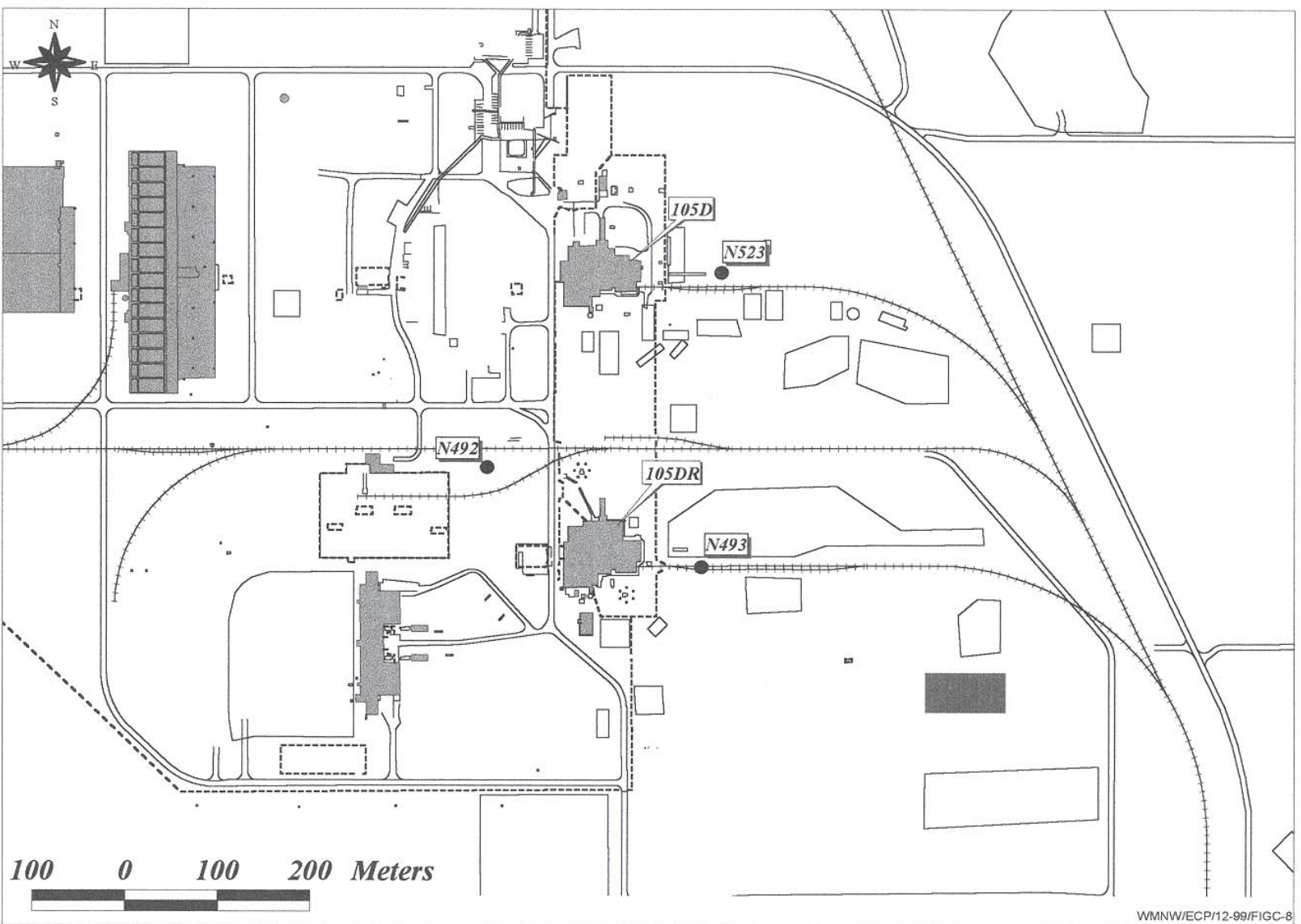


Figure 2-3. 100-F Area Air Sampler Locations.

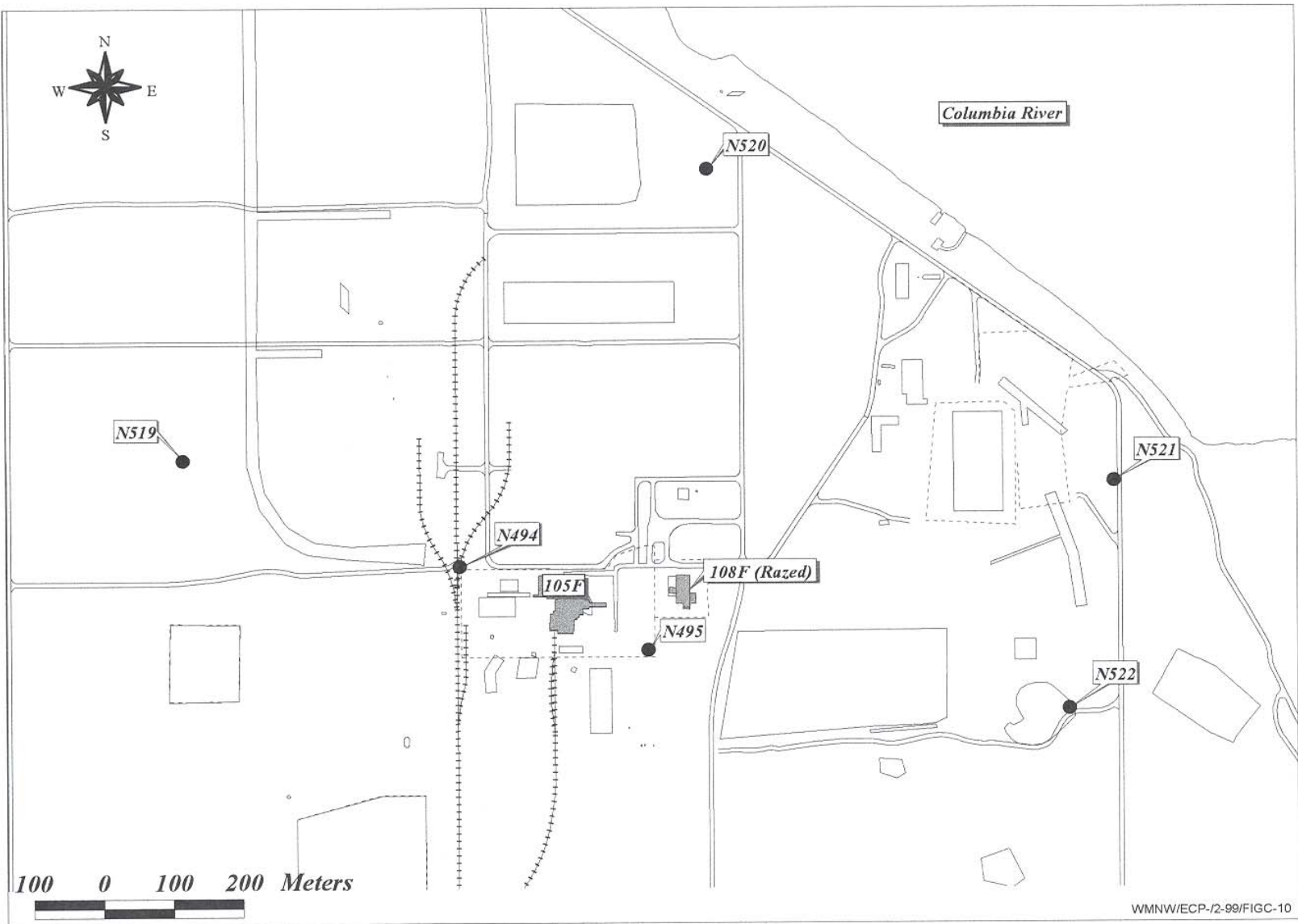
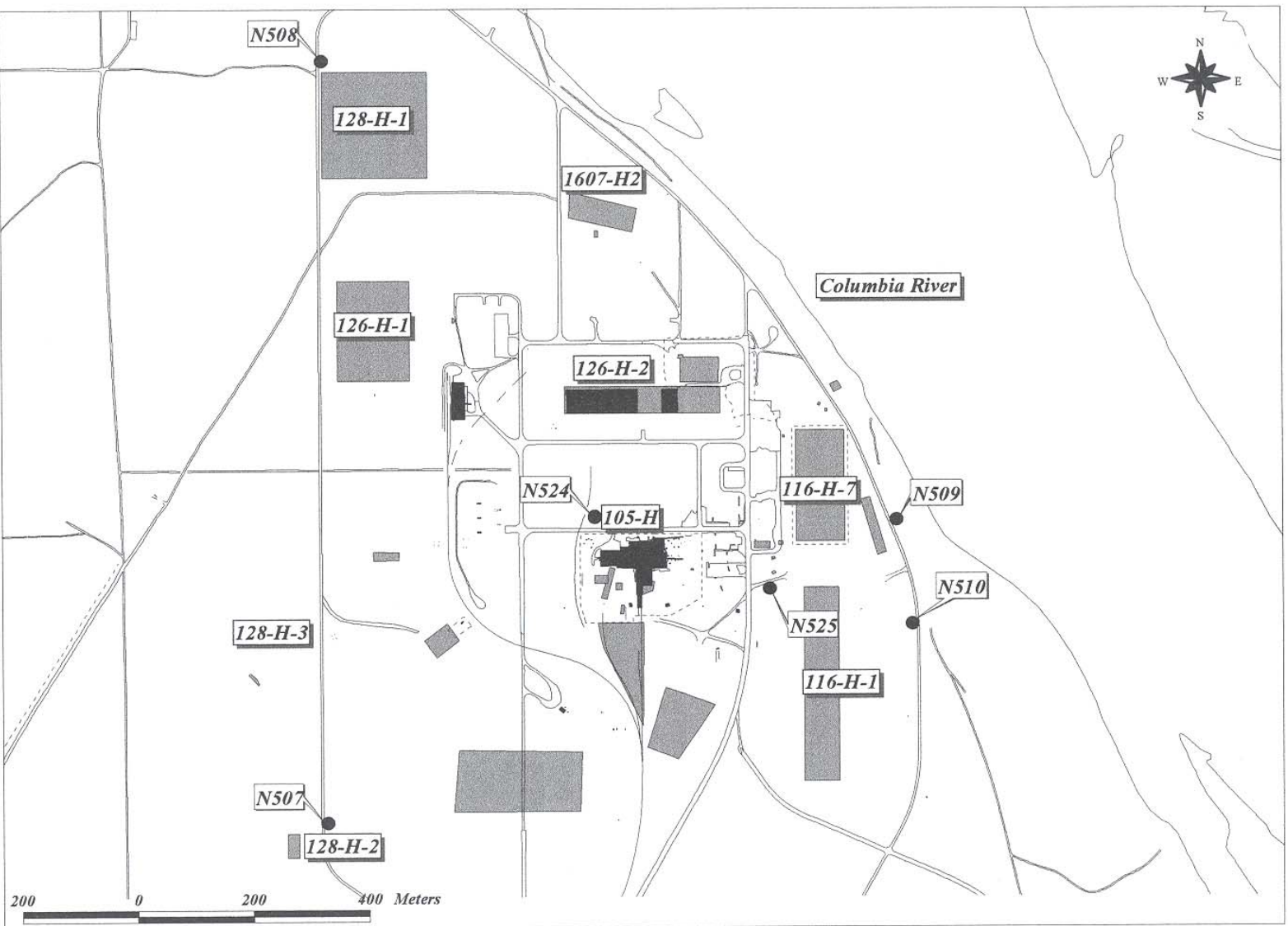


Figure 2-4. 100-H Area Air Sampler Locations.



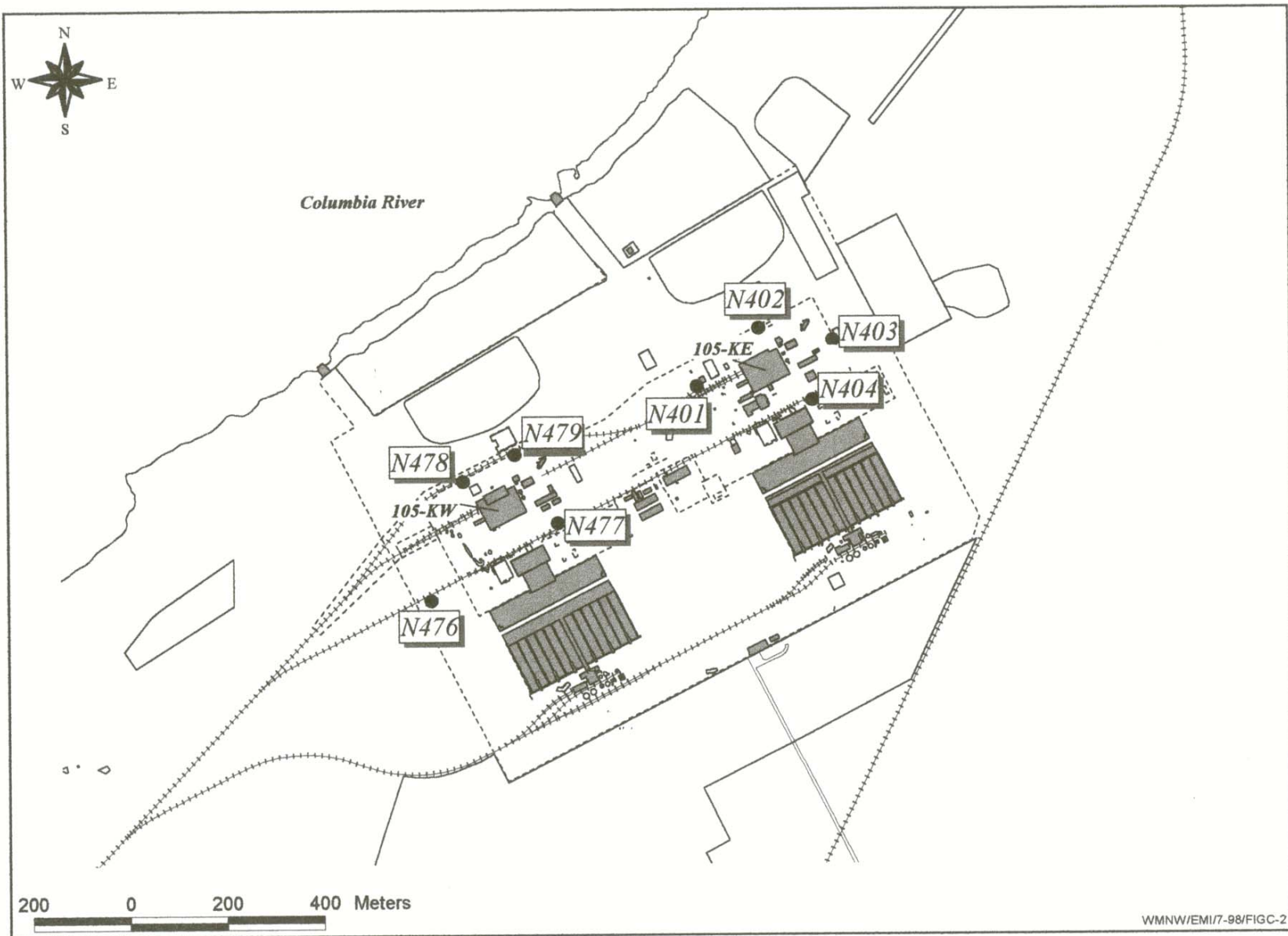


Figure 2-5. 100-K Area Air Sampler Locations.

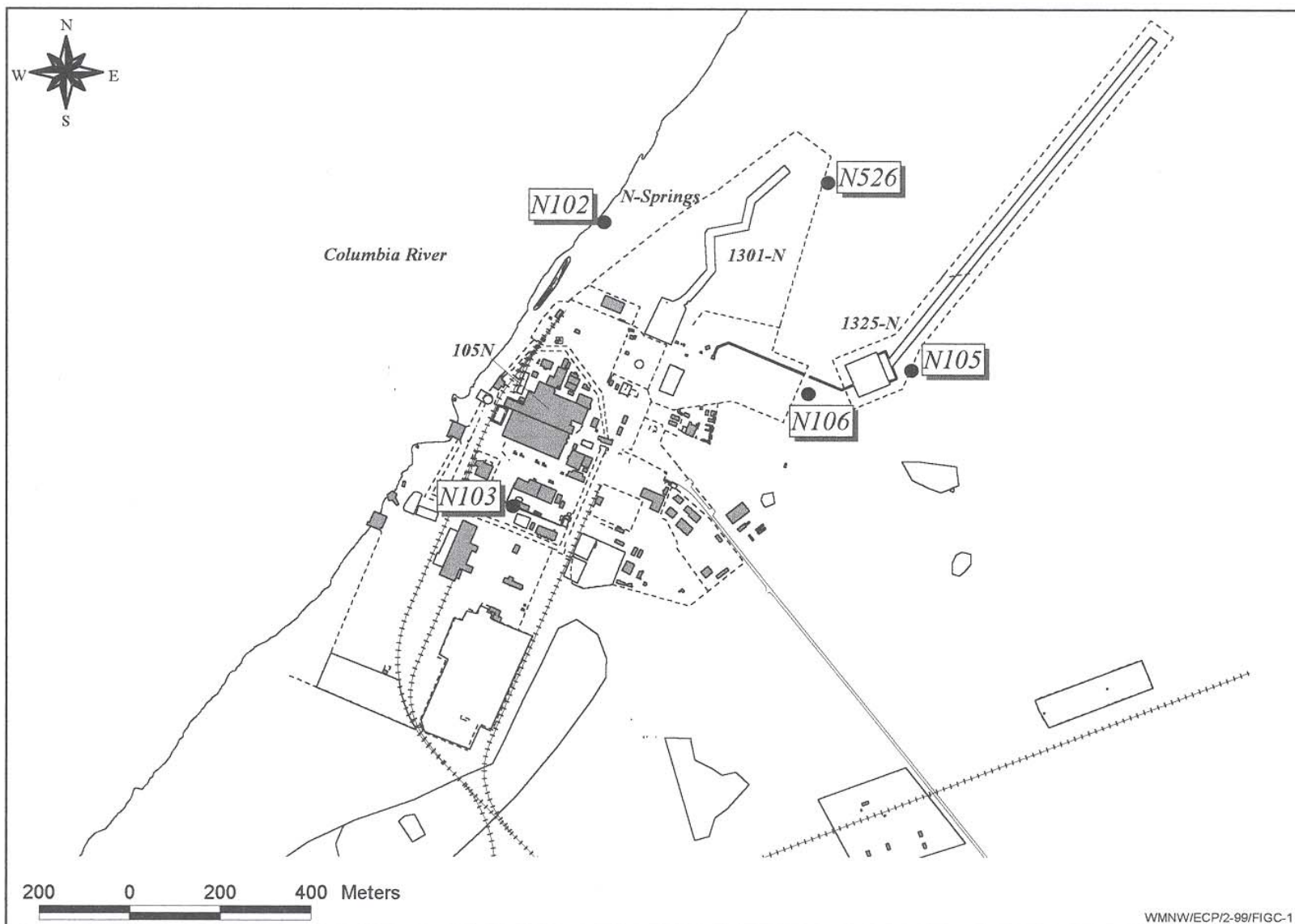


Figure 2-6. 100-N Area Air Sampler Locations.



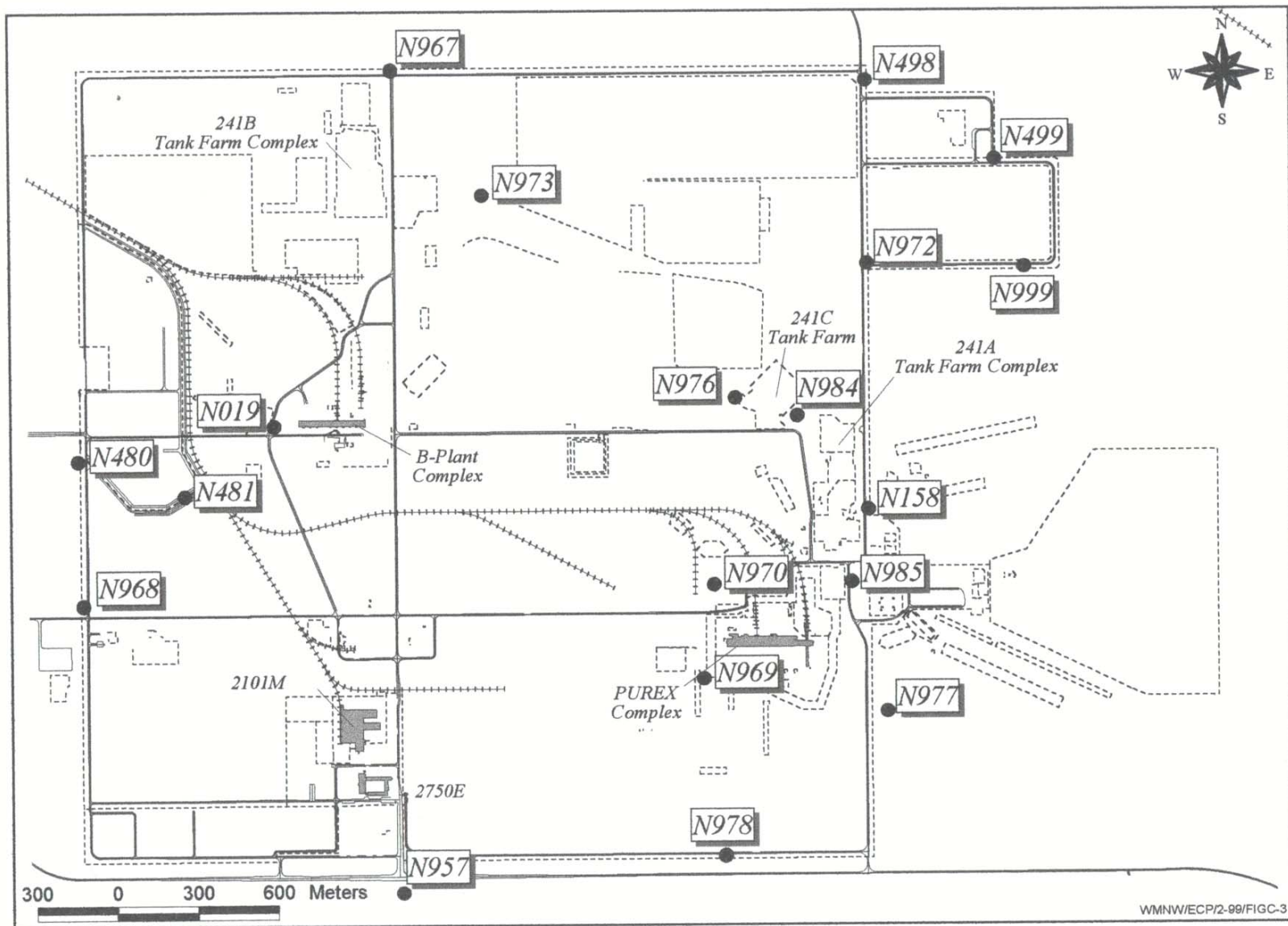


Figure 2-7. 200 East Area Air Sampler Locations.

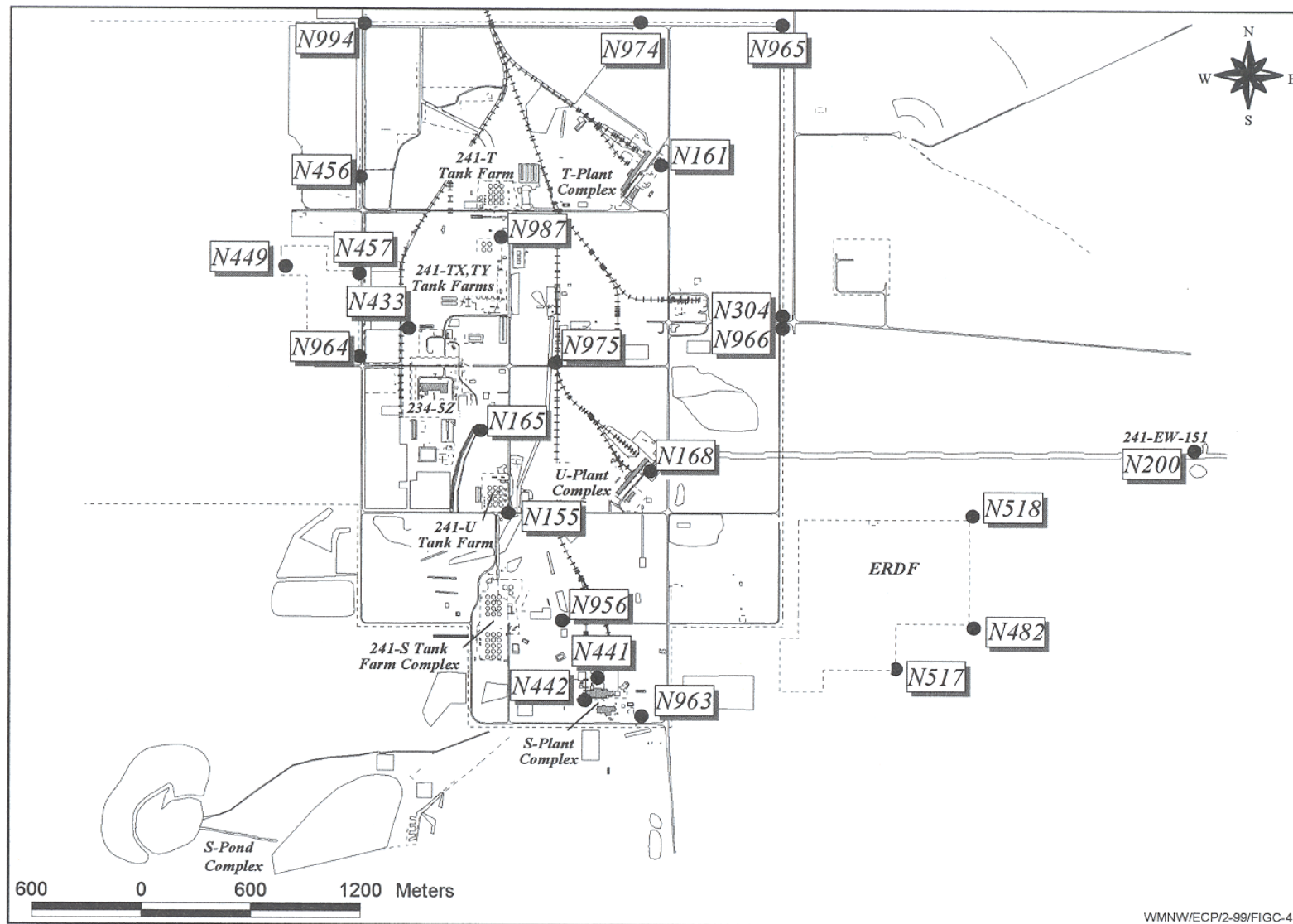


Figure 2-8. 200 West Area Air Sampler Locations.

Figure 2-9. 300 Area Air Sampler Location.

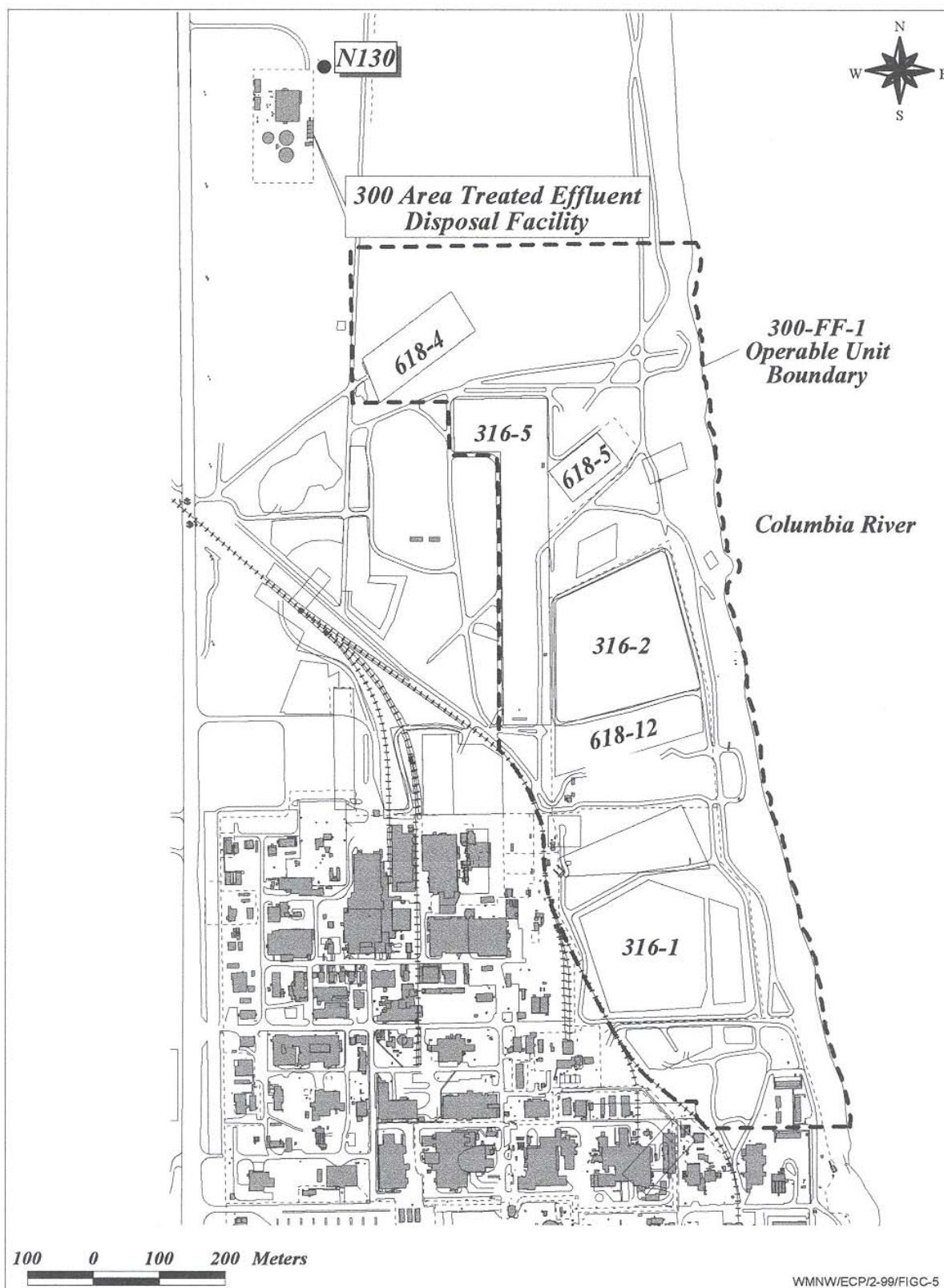




Figure 2-10. Environmental Restoration Disposal Facility Air Sampler Locations.

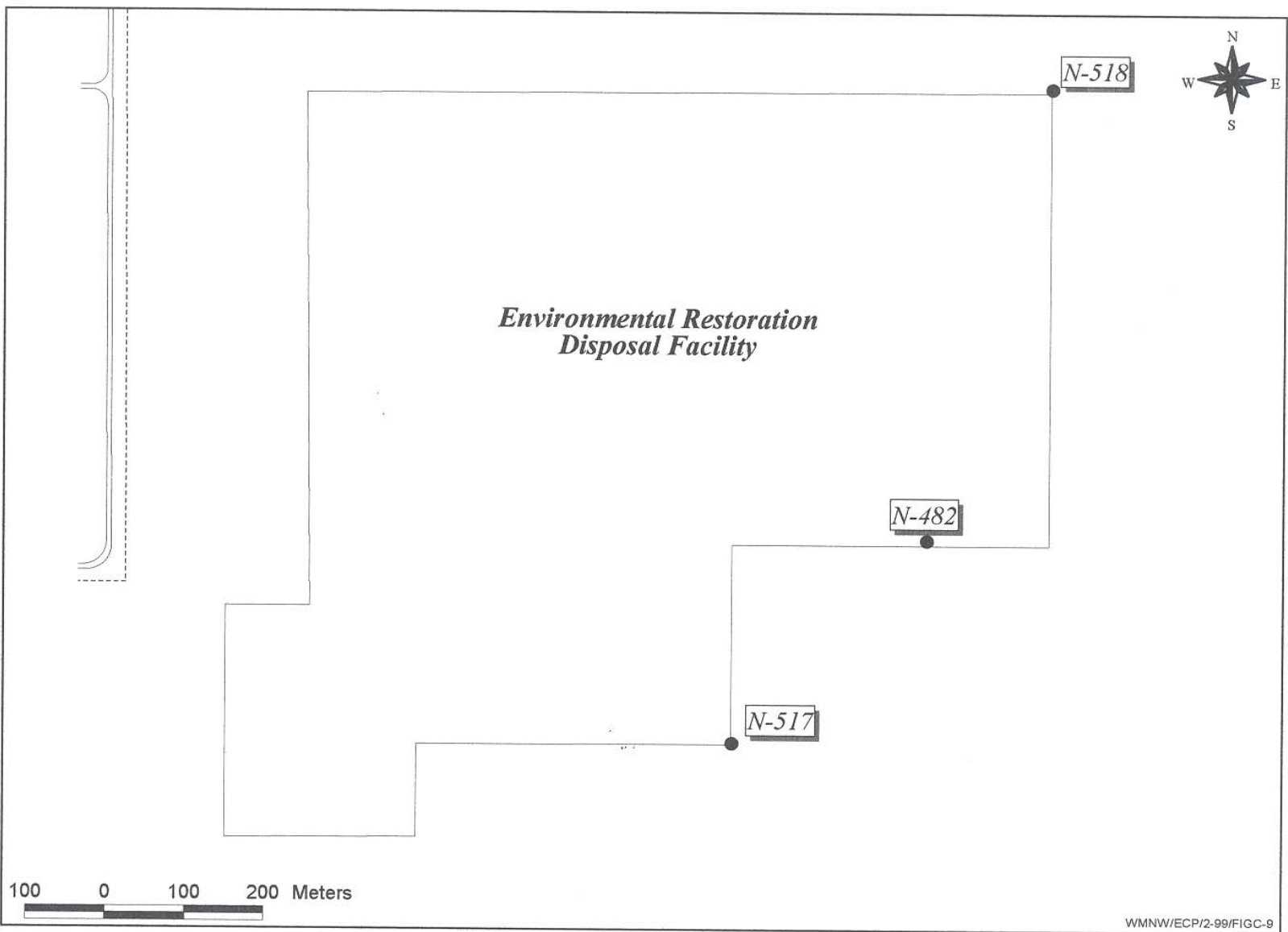


Figure 2-11. 600 Area Air Sampler Location.

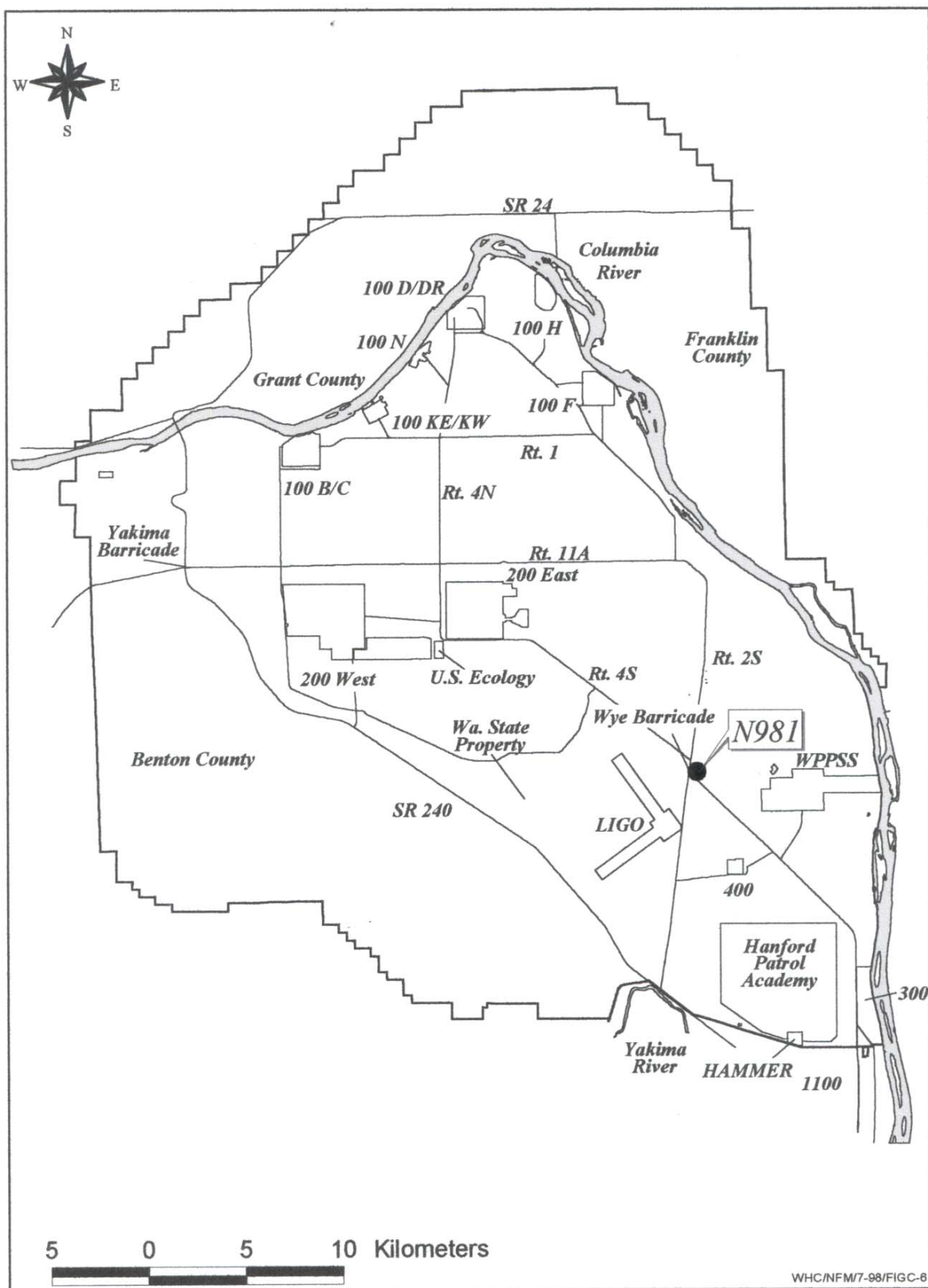


Figure 2-12. Annual Average Strontium-90 Concentrations in Air, 100-K Area.

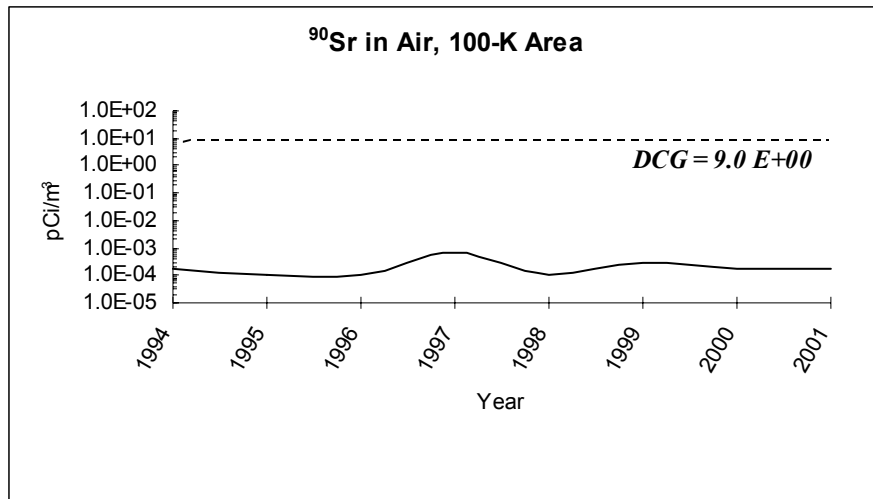


Figure 2-13. Annual Average Plutonium-239/240 Concentrations in Air, 100-K Area.

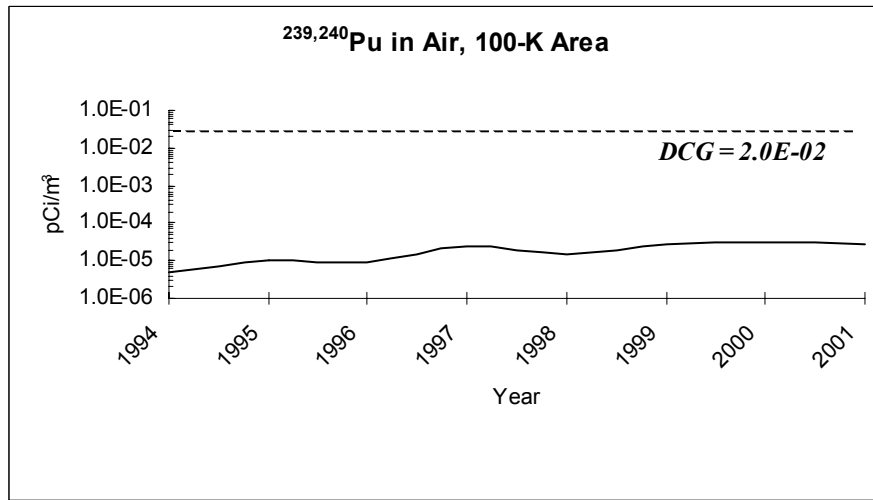


Figure 2-14. Annual Average Americium-241 Concentrations in Air, 100-K Area.

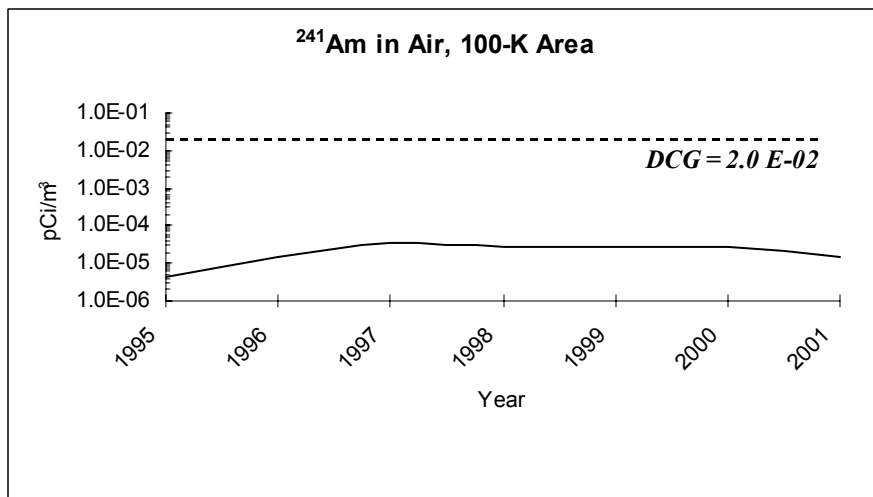


Figure 2-15. Annual Average Cobalt-60 Concentrations in Air, 100-N.

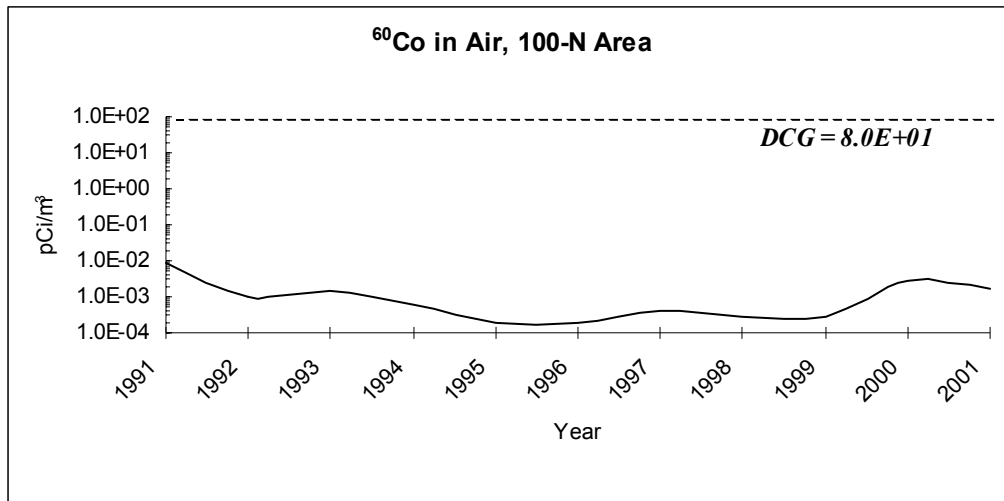


Figure 2-16. Annual Average Strontium-90 Concentrations in Air, 100-N.

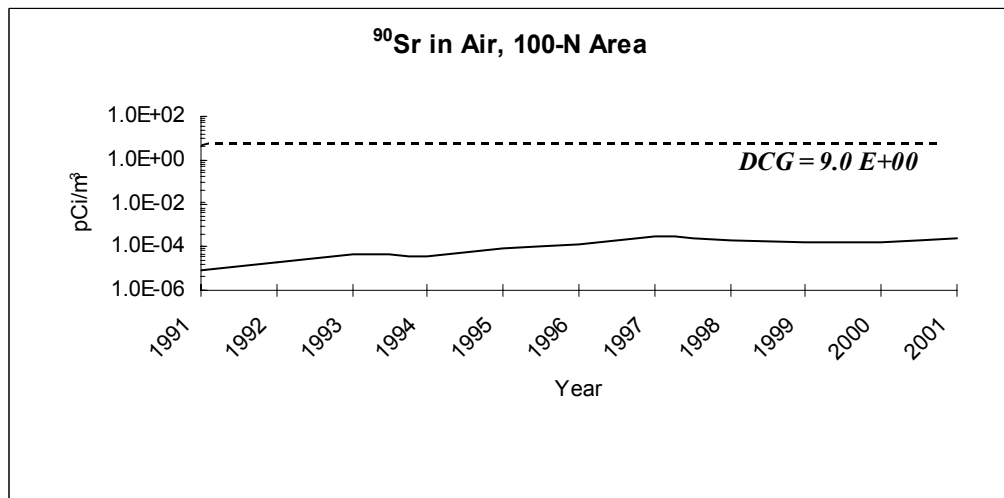


Figure 2-17. Annual Average Cesium-137 Concentrations in Air, 100-N.

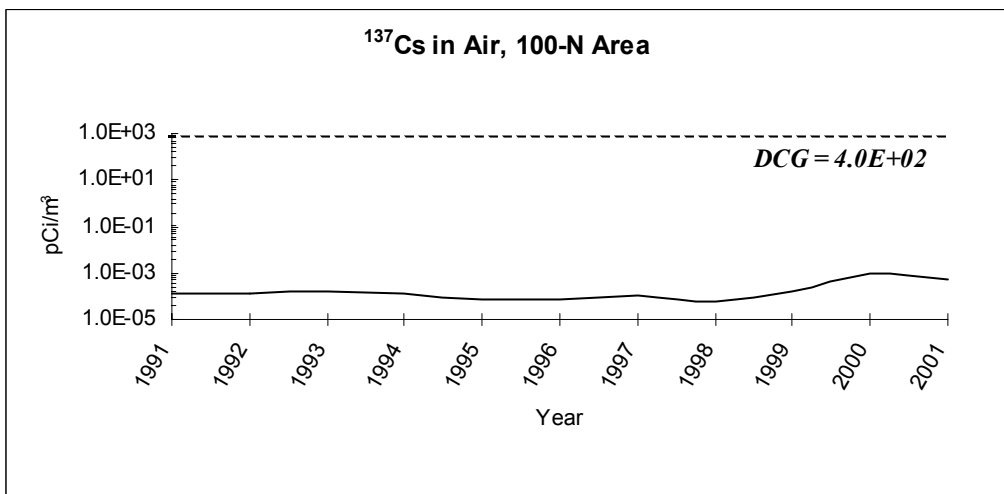


Figure 2-18. Annual Average Plutonium-239/240 Concentrations in Air, 100-N Area.

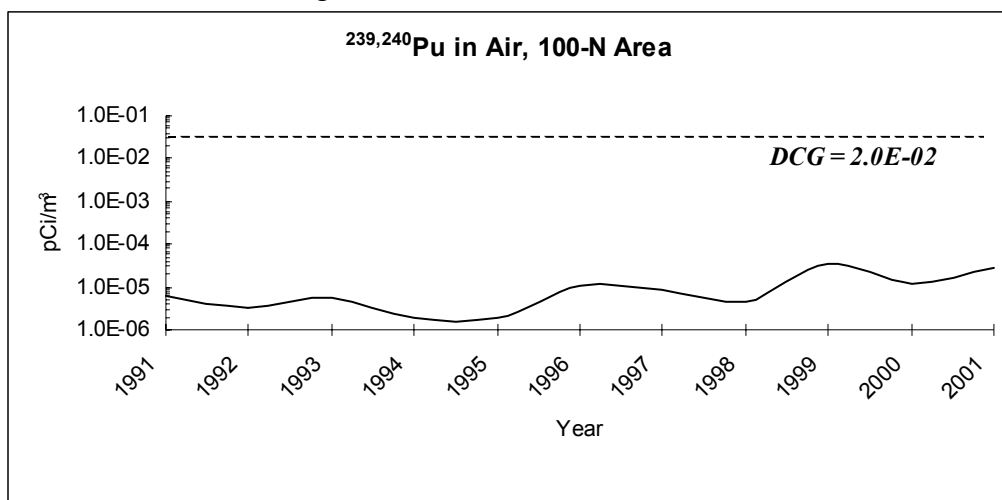


Figure 2-19. Annual Average Strontium-90 Concentrations in Air, 200 Areas.

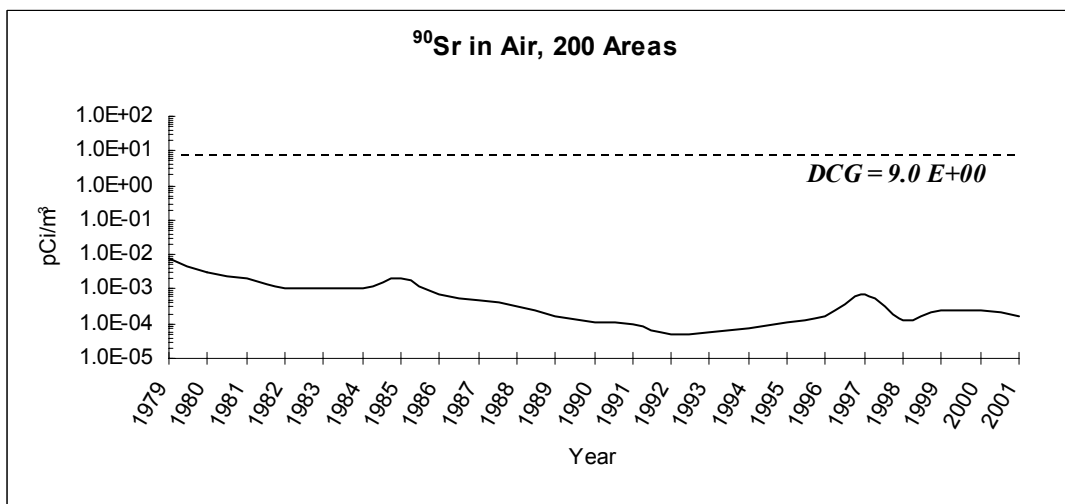


Figure 2-20. Annual Average Cesium-137 Concentrations in Air, 200 Areas.

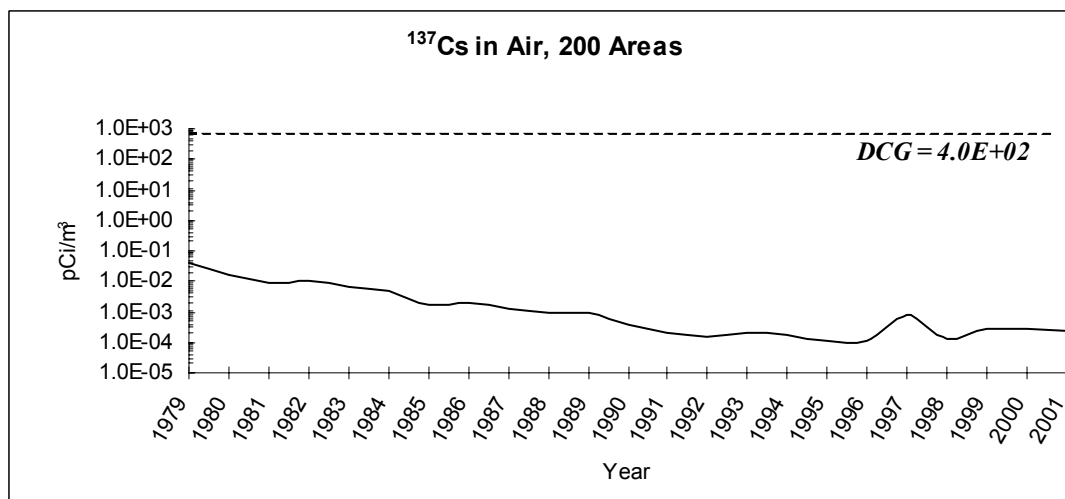


Figure 2-21. Annual Average Plutonium-239/240 Concentrations in Air, 200 Areas.

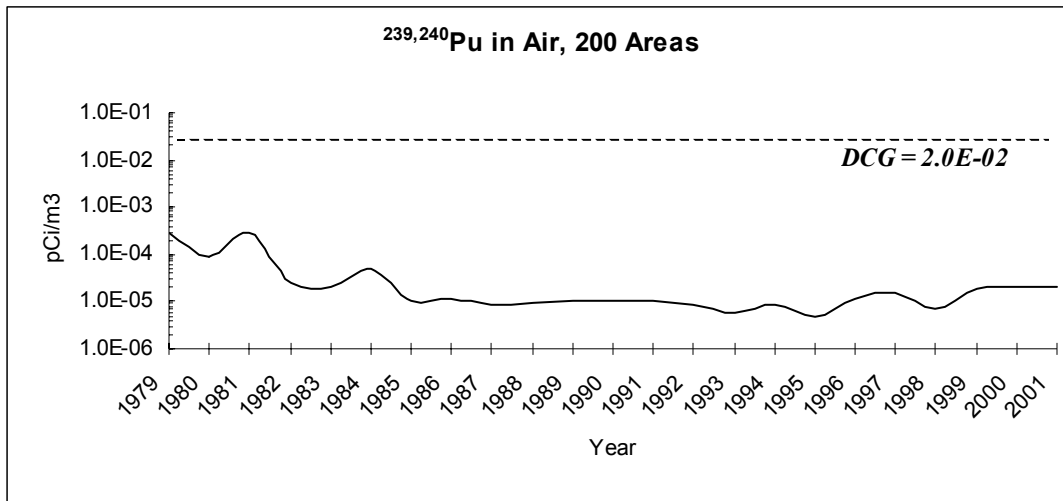


Figure 2-22. Annual Average Uranium-234 Concentrations in Air, 300 Area.

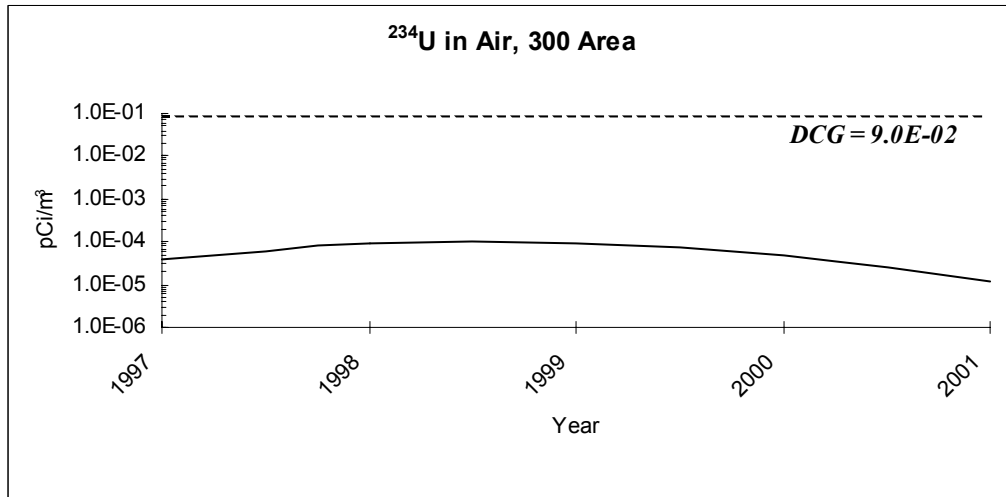


Figure 2-23. Annual Average Uranium-238 Concentrations in Air, 300 Area.

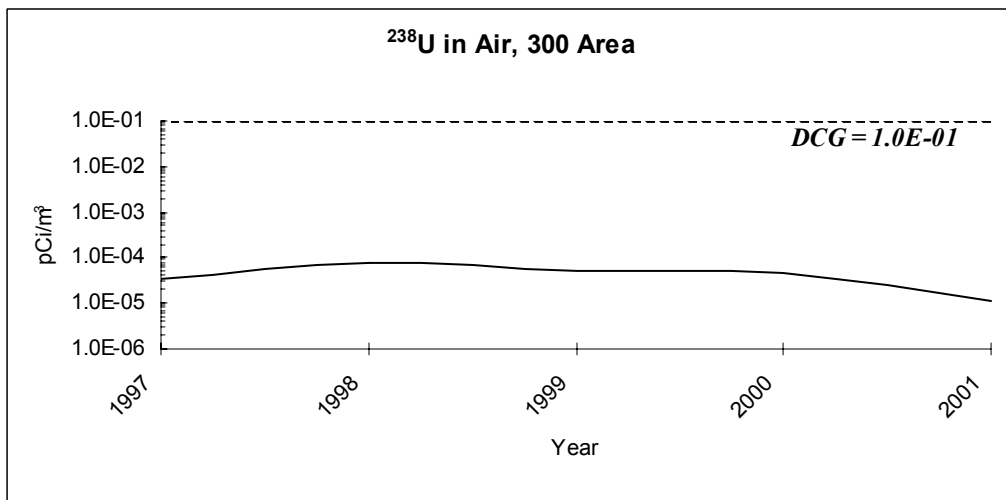


Table 2-2. Near-Facility Air Sampling Results, 2001 (pCi/m<sup>3</sup> ± total analytical uncertainty).

EDP Code	Composite Period	Isotope	Result ± Uncertainty	RQ*	EDP Code	Composite Period	Isotope	Result ± Uncertainty	RQ*
N464 (100-B/C)	02/12/2001 - 06/26/2001	<sup>144</sup> Ce	-5.0E-04 ± 1.2E-03	U	N464 (100-B/C)	06/26/2001 - 12/26/2001	<sup>144</sup> Ce	4.4E-04 ± 7.3E-04	U
		<sup>60</sup> Co	-1.6E-04 ± 1.6E-04	U			<sup>60</sup> Co	-2.6E-05 ± 8.6E-05	U
		<sup>134</sup> Cs	1.2E-04 ± 1.4E-04	U			<sup>134</sup> Cs	-2.4E-05 ± 9.4E-05	U
		<sup>137</sup> Cs	5.7E-05 ± 1.1E-04	U			<sup>137</sup> Cs	4.9E-05 ± 7.8E-05	U
		<sup>152</sup> Eu	6.5E-06 ± 6.5E-05	U			<sup>152</sup> Eu	1.0E-04 ± 2.0E-04	U
		<sup>154</sup> Eu	2.2E-04 ± 3.3E-04	U			<sup>154</sup> Eu	-2.4E-04 ± 2.5E-04	U
		<sup>155</sup> Eu	-5.6E-05 ± 3.1E-04	U			<sup>155</sup> Eu	4.9E-05 ± 2.0E-04	U
		<sup>238</sup> Pu	7.4E-07 ± 7.4E-06	U			<sup>238</sup> Pu	1.3E-05 ± 1.1E-05	U
		<sup>239,240</sup> Pu	7.5E-07 ± 1.5E-06	U			<sup>239,240</sup> Pu	2.1E-06 ± 3.2E-06	U
		<sup>103</sup> Ru	4.2E-05 ± 1.2E-04	U			<sup>103</sup> Ru	-5.5E-06 ± 5.5E-05	U
		<sup>106</sup> Ru	2.8E-04 ± 9.8E-04	U			<sup>106</sup> Ru	5.3E-04 ± 7.3E-04	U
		<sup>125</sup> Sb	-2.7E-04 ± 2.8E-04	U			<sup>125</sup> Sb	7.7E-05 ± 1.8E-04	U
		<sup>113</sup> Sn	3.1E-06 ± 3.1E-05	U			<sup>113</sup> Sn	-8.0E-05 ± 1.0E-04	U
		<sup>90</sup> Sr	9.6E-06 ± 9.6E-05	U			<sup>90</sup> Sr	3.0E-05 ± 7.8E-05	U
		<sup>234</sup> U	1.4E-05 ± 8.3E-06				<sup>234</sup> U	9.7E-06 ± 7.2E-06	
		<sup>235</sup> U	4.1E-06 ± 4.2E-06	U			<sup>235</sup> U	3.6E-06 ± 5.4E-06	U
		<sup>238</sup> U	1.2E-05 ± 7.5E-06				<sup>238</sup> U	1.3E-05 ± 8.9E-06	
		<sup>65</sup> Zn	3.4E-04 ± 2.8E-04	U			<sup>65</sup> Zn	1.5E-04 ± 2.1E-04	U
N465 (100-B/C)	02/12/2001 - 06/26/2001	<sup>144</sup> Ce	3.3E-04 ± 7.8E-04	U	N465 (100-B/C)	06/26/2001 - 12/26/2001	<sup>144</sup> Ce	4.8E-04 ± 6.7E-04	U
		<sup>60</sup> Co	7.7E-07 ± 7.8E-06	U			<sup>60</sup> Co	2.2E-05 ± 7.7E-05	U
		<sup>134</sup> Cs	-7.3E-05 ± 1.0E-04	U			<sup>134</sup> Cs	1.8E-06 ± 1.8E-05	U
		<sup>137</sup> Cs	5.1E-05 ± 1.0E-04	U			<sup>137</sup> Cs	3.9E-05 ± 7.4E-05	U
		<sup>152</sup> Eu	6.3E-05 ± 2.1E-04	U			<sup>152</sup> Eu	6.8E-06 ± 6.8E-05	U
		<sup>154</sup> Eu	1.6E-04 ± 2.8E-04	U			<sup>154</sup> Eu	-1.0E-04 ± 2.3E-04	U
		<sup>155</sup> Eu	5.6E-05 ± 2.2E-04	U			<sup>155</sup> Eu	-2.0E-05 ± 1.6E-04	U
		<sup>238</sup> Pu	1.2E-05 ± 1.6E-05	U			<sup>238</sup> Pu	2.9E-06 ± 9.6E-06	U
		<sup>239,240</sup> Pu	3.0E-06 ± 4.5E-06	U			<sup>239,240</sup> Pu	7.3E-07 ± 4.4E-06	U
		<sup>103</sup> Ru	-9.8E-05 ± 1.0E-04	U			<sup>103</sup> Ru	-1.0E-04 ± 1.1E-04	U
		<sup>106</sup> Ru	-4.6E-04 ± 8.3E-04	U			<sup>106</sup> Ru	1.1E-04 ± 6.6E-04	U
		<sup>125</sup> Sb	-1.5E-04 ± 2.1E-04	U			<sup>125</sup> Sb	-8.3E-05 ± 1.6E-04	U
		<sup>113</sup> Sn	6.2E-06 ± 6.2E-05	U			<sup>113</sup> Sn	1.7E-06 ± 1.7E-05	U
		<sup>90</sup> Sr	-4.9E-05 ± 1.2E-04	U			<sup>90</sup> Sr	1.0E-04 ± 1.1E-04	U
		<sup>234</sup> U	1.5E-05 ± 8.9E-06				<sup>234</sup> U	8.2E-06 ± 5.8E-06	
		<sup>235</sup> U	8.5E-06 ± 6.5E-06				<sup>235</sup> U	6.8E-07 ± 7.0E-07	U
		<sup>238</sup> U	5.8E-06 ± 5.8E-06	U			<sup>238</sup> U	8.2E-06 ± 5.5E-06	
		<sup>65</sup> Zn	-3.8E-04 ± 3.9E-04	U			<sup>65</sup> Zn	1.6E-04 ± 1.9E-04	U
N466 (100-B/C)	02/12/2001 - 06/26/2001	<sup>144</sup> Ce	3.6E-05 ± 3.6E-04	U	N466 (100-B/C)	06/26/2001 - 12/26/2001	<sup>144</sup> Ce	3.3E-05 ± 3.3E-04	U
		<sup>60</sup> Co	1.1E-05 ± 9.3E-05	U			<sup>60</sup> Co	5.2E-05 ± 7.6E-05	U
		<sup>134</sup> Cs	-2.8E-05 ± 1.0E-04	U			<sup>134</sup> Cs	-1.5E-05 ± 8.8E-05	U
		<sup>137</sup> Cs	-9.8E-05 ± 1.0E-04	U			<sup>137</sup> Cs	1.1E-05 ± 7.6E-05	U
		<sup>152</sup> Eu	-5.0E-05 ± 2.9E-04	U			<sup>152</sup> Eu	4.1E-05 ± 2.1E-04	U
		<sup>154</sup> Eu	-1.3E-04 ± 2.8E-04	U			<sup>154</sup> Eu	9.9E-05 ± 1.9E-04	U
		<sup>155</sup> Eu	-5.5E-05 ± 2.9E-04	U			<sup>155</sup> Eu	-1.3E-04 ± 2.1E-04	U
		<sup>238</sup> Pu	1.2E-05 ± 1.2E-05	U			<sup>238</sup> Pu	7.1E-06 ± 9.5E-06	U
		<sup>239,240</sup> Pu	2.9E-06 ± 4.3E-06	U			<sup>239,240</sup> Pu	1.4E-06 ± 1.9E-06	U
		<sup>103</sup> Ru	-9.1E-05 ± 1.1E-04	U			<sup>103</sup> Ru	-5.1E-06 ± 5.1E-05	U
		<sup>106</sup> Ru	5.1E-04 ± 8.8E-04	U			<sup>106</sup> Ru	-2.5E-04 ± 6.8E-04	U
		<sup>125</sup> Sb	-3.5E-05 ± 2.2E-04	U			<sup>125</sup> Sb	-9.9E-05 ± 1.7E-04	U
		<sup>113</sup> Sn	5.1E-05 ± 1.2E-04	U			<sup>113</sup> Sn	-2.6E-05 ± 9.0E-05	U
		<sup>90</sup> Sr	-3.8E-05 ± 8.4E-05	U			<sup>90</sup> Sr	1.4E-04 ± 1.0E-04	
		<sup>234</sup> U	1.2E-05 ± 7.8E-06				<sup>234</sup> U	1.2E-05 ± 7.6E-06	
		<sup>235</sup> U	6.3E-06 ± 5.5E-06				<sup>235</sup> U	7.9E-07 ± 8.2E-07	U
		<sup>238</sup> U	1.0E-05 ± 7.5E-06				<sup>238</sup> U	1.4E-05 ± 8.5E-06	
		<sup>65</sup> Zn	-1.5E-04 ± 2.1E-04	U			<sup>65</sup> Zn	-1.7E-04 ± 1.8E-04	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.

Table 2-2. Near-Facility Air Sampling Results, 2001 (pCi/m<sup>3</sup> ± total analytical uncertainty). (cont)

EDP Code	Composite Period	Isotope	Result ± Uncertainty	RQ*	EDP Code	Composite Period	Isotope	Result ± Uncertainty	RQ*
N492 (100-D/DR)	12/27/2000 - 03/21/2001	<sup>144</sup> Ce	-2.1E-04 ± 1.4E-03	U	N492 (100-D/DR)	03/21/2001 - 06/26/2001	<sup>144</sup> Ce	-3.8E-04 ± 1.2E-03	U
		<sup>60</sup> Co	1.7E-04 ± 1.7E-04	U			<sup>60</sup> Co	1.1E-04 ± 1.4E-04	U
		<sup>134</sup> Cs	1.3E-04 ± 1.6E-04	U			<sup>134</sup> Cs	-7.9E-05 ± 1.4E-04	U
		<sup>137</sup> Cs	1.4E-04 ± 1.6E-04	U			<sup>137</sup> Cs	-6.0E-06 ± 6.0E-05	U
		<sup>152</sup> Eu	1.4E-04 ± 3.9E-04	U			<sup>152</sup> Eu	4.4E-04 ± 4.0E-04	U
		<sup>154</sup> Eu	-1.0E-04 ± 4.7E-04	U			<sup>154</sup> Eu	3.2E-05 ± 3.2E-04	U
		<sup>155</sup> Eu	-4.1E-06 ± 4.1E-05	U			<sup>155</sup> Eu	-1.9E-04 ± 3.4E-04	U
		<sup>238</sup> Pu	-4.8E-06 ± 2.0E-05	U			<sup>238</sup> Pu	1.2E-06 ± 4.1E-06	U
		<sup>239,240</sup> Pu	2.2E-05 ± 1.4E-05				<sup>239,240</sup> Pu	9.5E-06 ± 7.2E-06	
		<sup>103</sup> Ru	-7.6E-05 ± 1.2E-04	U			<sup>103</sup> Ru	2.3E-05 ± 1.1E-04	U
		<sup>106</sup> Ru	3.0E-05 ± 3.0E-04	U			<sup>106</sup> Ru	-8.0E-04 ± 1.2E-03	U
		<sup>125</sup> Sb	1.5E-04 ± 3.4E-04	U			<sup>125</sup> Sb	1.3E-04 ± 2.7E-04	U
		<sup>113</sup> Sn	2.8E-06 ± 2.8E-05	U			<sup>113</sup> Sn	-3.2E-05 ± 1.3E-04	U
		<sup>90</sup> Sr	6.2E-04 ± 2.4E-04				<sup>90</sup> Sr	1.8E-04 ± 1.3E-04	
		<sup>234</sup> U	8.5E-06 ± 7.3E-06				<sup>234</sup> U	1.7E-05 ± 1.1E-05	
		<sup>235</sup> U	4.7E-06 ± 5.7E-06	U			<sup>235</sup> U	1.3E-05 ± 9.6E-06	
		<sup>238</sup> U	8.5E-06 ± 7.3E-06				<sup>238</sup> U	1.5E-05 ± 8.9E-06	
N492 (100-D/DR)	06/26/2001 - 09/20/2001	<sup>65</sup> Zn	2.5E-04 ± 3.4E-04	U	N492 (100-D/DR)	09/20/2001 - 12/26/2001	<sup>65</sup> Zn	-3.0E-04 ± 3.3E-04	U
		<sup>144</sup> Ce	2.4E-04 ± 1.5E-03	U			<sup>144</sup> Ce	-5.6E-04 ± 1.2E-03	U
		<sup>60</sup> Co	1.2E-04 ± 1.7E-04	U			<sup>60</sup> Co	8.4E-06 ± 8.4E-05	U
		<sup>134</sup> Cs	4.0E-05 ± 1.6E-04	U			<sup>134</sup> Cs	2.9E-06 ± 2.9E-05	U
		<sup>137</sup> Cs	-6.9E-05 ± 1.7E-04	U			<sup>137</sup> Cs	-2.6E-05 ± 1.5E-04	U
		<sup>152</sup> Eu	-3.5E-04 ± 3.7E-04	U			<sup>152</sup> Eu	2.6E-04 ± 3.5E-04	U
		<sup>154</sup> Eu	2.9E-04 ± 4.6E-04	U			<sup>154</sup> Eu	4.0E-04 ± 4.5E-04	U
		<sup>155</sup> Eu	-1.7E-04 ± 4.1E-04	U			<sup>155</sup> Eu	-8.5E-05 ± 3.7E-04	U
		<sup>238</sup> Pu	-2.9E-06 ± 1.9E-05	U			<sup>238</sup> Pu	1.2E-05 ± 2.5E-05	U
		<sup>239,240</sup> Pu	8.6E-06 ± 1.0E-05	U			<sup>239,240</sup> Pu	2.7E-05 ± 1.5E-05	
		<sup>103</sup> Ru	-6.8E-05 ± 1.3E-04	U			<sup>103</sup> Ru	-2.1E-05 ± 1.4E-04	U
		<sup>106</sup> Ru	-7.6E-05 ± 7.6E-04	U			<sup>106</sup> Ru	-5.6E-04 ± 1.3E-03	U
		<sup>125</sup> Sb	3.8E-05 ± 3.4E-04	U			<sup>125</sup> Sb	-8.7E-05 ± 3.1E-04	U
		<sup>113</sup> Sn	-2.7E-05 ± 1.5E-04	U			<sup>113</sup> Sn	-1.1E-06 ± 1.1E-05	U
		<sup>90</sup> Sr	4.7E-04 ± 2.0E-04				<sup>90</sup> Sr	1.1E-04 ± 1.5E-04	U
		<sup>234</sup> U	1.8E-05 ± 1.4E-05	U			<sup>234</sup> U	1.7E-05 ± 1.2E-05	
		<sup>235</sup> U	6.8E-06 ± 8.2E-06	U			<sup>235</sup> U	9.3E-06 ± 8.1E-06	
N493 (100-D/DR)	12/27/2000 - 03/21/2001	<sup>238</sup> U	1.7E-05 ± 1.1E-05		N493 (100-D/DR)	03/21/2001 - 06/26/2001	<sup>238</sup> U	2.3E-05 ± 1.4E-05	
		<sup>65</sup> Zn	-8.7E-05 ± 3.5E-04	U			<sup>65</sup> Zn	1.2E-04 ± 3.2E-04	U
		<sup>144</sup> Ce	-1.1E-03 ± 2.6E-03	U			<sup>144</sup> Ce	-7.1E-04 ± 1.3E-03	U
		<sup>60</sup> Co	1.2E-04 ± 2.2E-04	U			<sup>60</sup> Co	6.4E-05 ± 1.6E-04	U
		<sup>134</sup> Cs	-2.5E-04 ± 2.5E-04	U			<sup>134</sup> Cs	1.1E-04 ± 1.8E-04	U
		<sup>137</sup> Cs	4.8E-05 ± 2.0E-04	U			<sup>137</sup> Cs	-7.4E-06 ± 7.4E-05	U
		<sup>152</sup> Eu	-1.1E-04 ± 6.4E-04	U			<sup>152</sup> Eu	2.2E-04 ± 3.3E-04	U
		<sup>154</sup> Eu	-4.6E-04 ± 5.9E-04	U			<sup>154</sup> Eu	1.0E-04 ± 4.3E-04	U
		<sup>155</sup> Eu	-3.8E-05 ± 3.8E-04	U			<sup>155</sup> Eu	-5.5E-05 ± 3.4E-04	U
		<sup>238</sup> Pu	2.8E-05 ± 2.1E-05				<sup>238</sup> Pu	2.9E-06 ± 4.2E-06	U
		<sup>239,240</sup> Pu	5.7E-06 ± 6.9E-06	U			<sup>239,240</sup> Pu	4.5E-06 ± 6.8E-06	U
		<sup>103</sup> Ru	-2.2E-05 ± 1.7E-04	U			<sup>103</sup> Ru	-5.1E-05 ± 1.1E-04	U
		<sup>106</sup> Ru	-1.4E-03 ± 1.7E-03	U			<sup>106</sup> Ru	7.0E-04 ± 1.2E-03	U
		<sup>125</sup> Sb	-1.0E-04 ± 4.9E-04	U			<sup>125</sup> Sb	3.4E-06 ± 3.4E-05	U
		<sup>113</sup> Sn	1.6E-04 ± 2.3E-04	U			<sup>113</sup> Sn	-1.4E-04 ± 1.4E-04	U
		<sup>90</sup> Sr	4.7E-04 ± 2.3E-04				<sup>90</sup> Sr	7.3E-06 ± 7.3E-05	U
		<sup>234</sup> U	3.5E-05 ± 2.0E-05				<sup>234</sup> U	2.3E-05 ± 1.3E-05	
		<sup>235</sup> U	-2.1E-06 ± 4.2E-06	U			<sup>235</sup> U	1.0E-05 ± 8.1E-06	
N493 (100-D/DR)	12/27/2000 - 03/21/2001	<sup>238</sup> U	4.3E-05 ± 2.1E-05		N493 (100-D/DR)	03/21/2001 - 06/26/2001	<sup>238</sup> U	1.3E-05 ± 9.8E-06	
		<sup>65</sup> Zn	-7.8E-04 ± 7.9E-04	U			<sup>65</sup> Zn	2.1E-04 ± 3.1E-04	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.



Table 2-2. Near-Facility Air Sampling Results, 2001 (pCi/m<sup>3</sup> ± total analytical uncertainty). (cont)

EDP Code	Composite Period	Isotope	Result ± Uncertainty	RQ*	EDP Code	Composite Period	Isotope	Result ± Uncertainty	RQ*
N493 (100-D/DR)	06/26/2001 - 09/20/2001	<sup>144</sup> Ce	1.2E-03 ± 1.8E-03	U	N493 (100-D/DR)	09/20/2001 - 12/26/2001	<sup>144</sup> Ce	6.0E-04 ± 9.9E-04	U
		<sup>60</sup> Co	-1.6E-04 ± 1.6E-04	U			<sup>60</sup> Co	3.2E-05 ± 1.6E-04	U
		<sup>134</sup> Cs	-2.9E-06 ± 2.9E-05	U			<sup>134</sup> Cs	-5.0E-05 ± 1.2E-04	U
		<sup>137</sup> Cs	1.6E-06 ± 1.6E-05	U			<sup>137</sup> Cs	3.4E-05 ± 1.2E-04	U
		<sup>152</sup> Eu	-4.6E-04 ± 4.7E-04	U			<sup>152</sup> Eu	-4.5E-05 ± 2.8E-04	U
		<sup>154</sup> Eu	3.1E-05 ± 3.1E-04	U			<sup>154</sup> Eu	5.0E-05 ± 3.6E-04	U
		<sup>155</sup> Eu	-2.0E-04 ± 4.3E-04	U			<sup>155</sup> Eu	4.7E-05 ± 2.7E-04	U
		<sup>238</sup> Pu	1.6E-06 ± 1.6E-05	U			<sup>238</sup> Pu	-4.8E-06 ± 1.8E-05	U
		<sup>239,240</sup> Pu	-1.6E-06 ± 5.6E-06	U			<sup>239,240</sup> Pu	-1.2E-06 ± 5.5E-06	U
		<sup>103</sup> Ru	2.8E-05 ± 1.2E-04	U			<sup>103</sup> Ru	6.8E-05 ± 1.1E-04	U
		<sup>106</sup> Ru	-2.1E-04 ± 1.3E-03	U			<sup>106</sup> Ru	-3.2E-04 ± 1.1E-03	U
		<sup>125</sup> Sb	1.1E-05 ± 1.1E-04	U			<sup>125</sup> Sb	-3.5E-04 ± 3.6E-04	U
		<sup>113</sup> Sn	-5.4E-05 ± 1.6E-04	U			<sup>113</sup> Sn	1.9E-05 ± 1.2E-04	U
		<sup>90</sup> Sr	2.2E-04 ± 1.7E-04				<sup>90</sup> Sr	-8.0E-05 ± 1.3E-04	U
		<sup>234</sup> U	1.9E-05 ± 1.1E-05				<sup>234</sup> U	1.0E-05 ± 9.2E-06	U
		<sup>235</sup> U	1.6E-06 ± 3.2E-06	U			<sup>235</sup> U	4.8E-06 ± 8.7E-06	U
		<sup>238</sup> U	1.6E-05 ± 9.8E-06				<sup>238</sup> U	8.6E-06 ± 7.5E-06	
		<sup>65</sup> Zn	1.9E-05 ± 1.9E-04	U			<sup>65</sup> Zn	2.0E-06 ± 2.0E-05	U
N523 (100-D/DR)	12/27/2000 - 06/26/2001	<sup>144</sup> Ce	2.8E-03 ± 4.8E-03	U	N523 (100-D/DR)	06/26/2001 - 09/20/2001	<sup>144</sup> Ce	2.3E-03 ± 6.3E-03	U
		<sup>60</sup> Co	-2.8E-05 ± 2.8E-04	U			<sup>60</sup> Co	-5.3E-04 ± 9.2E-04	U
		<sup>134</sup> Cs	-9.7E-05 ± 4.9E-04	U			<sup>134</sup> Cs	-9.5E-04 ± 9.6E-04	U
		<sup>137</sup> Cs	-3.1E-05 ± 3.1E-04	U			<sup>137</sup> Cs	1.1E-03 ± 8.8E-04	U
		<sup>152</sup> Eu	-6.3E-04 ± 1.4E-03	U			<sup>152</sup> Eu	8.9E-04 ± 1.8E-03	U
		<sup>154</sup> Eu	-1.5E-03 ± 1.6E-03	U			<sup>154</sup> Eu	-9.4E-04 ± 2.2E-03	U
		<sup>155</sup> Eu	-2.4E-04 ± 1.1E-03	U			<sup>155</sup> Eu	-1.5E-04 ± 1.5E-03	U
		<sup>238</sup> Pu	8.4E-05 ± 6.4E-05	U			<sup>238</sup> Pu	2.8E-05 ± 8.1E-05	U
		<sup>239,240</sup> Pu	1.3E-04 ± 6.2E-05				<sup>239,240</sup> Pu	6.9E-06 ± 2.4E-05	U
		<sup>103</sup> Ru	-1.1E-04 ± 4.9E-04	U			<sup>103</sup> Ru	-2.8E-04 ± 7.1E-04	U
		<sup>106</sup> Ru	1.4E-03 ± 4.1E-03	U			<sup>106</sup> Ru	-4.8E-03 ± 7.5E-03	U
		<sup>125</sup> Sb	-2.0E-04 ± 9.9E-04	U			<sup>125</sup> Sb	6.4E-04 ± 1.7E-03	U
		<sup>113</sup> Sn	6.1E-04 ± 5.5E-04	U			<sup>113</sup> Sn	1.9E-04 ± 7.8E-04	U
		<sup>90</sup> Sr	4.0E-05 ± 3.1E-04	U			<sup>90</sup> Sr	7.3E-04 ± 7.4E-04	U
		<sup>234</sup> U	3.5E-05 ± 3.0E-05	U			<sup>234</sup> U	1.5E-05 ± 2.9E-05	U
		<sup>235</sup> U	1.3E-05 ± 1.6E-05	U			<sup>235</sup> U	3.2E-05 ± 3.9E-05	U
		<sup>238</sup> U	1.2E-05 ± 1.7E-05	U			<sup>238</sup> U	3.7E-05 ± 3.4E-05	
		<sup>65</sup> Zn	-5.0E-04 ± 1.2E-03	U			<sup>65</sup> Zn	-4.0E-03 ± 4.1E-03	U
N523 (100-D/DR)	09/20/2001 - 12/26/2001	<sup>144</sup> Ce	-5.7E-03 ± 6.0E-03	U	N401 (100-K)	12/27/2000 - 06/26/2001	<sup>241</sup> Am	4.2E-06 ± 9.3E-06	U
		<sup>60</sup> Co	-9.4E-05 ± 8.3E-04	U			<sup>144</sup> Ce	3.5E-04 ± 5.6E-04	U
		<sup>134</sup> Cs	-4.9E-04 ± 8.2E-04	U			<sup>60</sup> Co	-4.3E-06 ± 4.3E-05	U
		<sup>137</sup> Cs	3.5E-04 ± 7.8E-04	U			<sup>134</sup> Cs	-3.4E-05 ± 6.9E-05	U
		<sup>152</sup> Eu	-7.3E-04 ± 1.7E-03	U			<sup>137</sup> Cs	2.4E-05 ± 7.0E-05	U
		<sup>154</sup> Eu	7.0E-04 ± 2.3E-03	U			<sup>152</sup> Eu	-4.7E-05 ± 1.6E-04	U
		<sup>155</sup> Eu	1.0E-03 ± 1.8E-03	U			<sup>154</sup> Eu	2.9E-06 ± 2.9E-05	U
		<sup>238</sup> Pu	-4.1E-05 ± 7.3E-05	U			<sup>155</sup> Eu	1.2E-05 ± 1.2E-04	U
		<sup>239,240</sup> Pu	2.8E-05 ± 6.9E-05	U			<sup>238</sup> Pu	1.4E-05 ± 2.1E-05	U
		<sup>103</sup> Ru	-2.5E-04 ± 6.1E-04	U			<sup>239,240</sup> Pu	4.2E-06 ± 6.3E-06	U
		<sup>106</sup> Ru	8.1E-04 ± 6.9E-03	U			<sup>241</sup> Pu	-8.4E-04 ± 8.7E-04	U
		<sup>125</sup> Sb	7.0E-04 ± 1.7E-03	U			<sup>103</sup> Ru	-1.3E-05 ± 6.1E-05	U
		<sup>113</sup> Sn	7.7E-05 ± 7.3E-04	U			<sup>106</sup> Ru	1.4E-04 ± 5.8E-04	U
		<sup>90</sup> Sr	1.9E-03 ± 9.5E-04				<sup>125</sup> Sb	6.0E-05 ± 1.4E-04	U
		<sup>234</sup> U	1.4E-05 ± 4.4E-05	U			<sup>113</sup> Sn	-1.9E-05 ± 7.2E-05	U
		<sup>235</sup> U	-2.3E-05 ± 2.7E-05	U			<sup>90</sup> Sr	1.6E-04 ± 1.0E-04	
		<sup>238</sup> U	2.8E-05 ± 2.8E-05	U			<sup>234</sup> U	5.2E-06 ± 4.4E-06	
		<sup>65</sup> Zn	1.5E-03 ± 1.9E-03	U			<sup>235</sup> U	2.8E-06 ± 2.9E-06	U
							<sup>238</sup> U	1.1E-05 ± 6.2E-06	
							<sup>65</sup> Zn	-3.3E-05 ± 1.6E-04	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.

Table 2-2. Near-Facility Air Sampling Results, 2001 (pCi/m<sup>3</sup> ± total analytical uncertainty). (cont)

EDP Code	Composite Period	Isotope	Result ± Uncertainty	RQ*	EDP Code	Composite Period	Isotope	Result ± Uncertainty	RQ*
<b>N401</b> (100-K)	06/26/2001 - 12/26/2001	<sup>241</sup> Am	6.5E-06 ± 9.9E-06	U	<b>N402</b> (100-K)	12/27/2000 - 06/26/2001	<sup>241</sup> Am	2.6E-06 ± 9.6E-06	U
		<sup>144</sup> Ce	1.3E-04 ± 6.6E-04	U			<sup>144</sup> Ce	-7.5E-04 ± 7.8E-04	U
		<sup>60</sup> Co	-3.5E-05 ± 7.4E-05	U			<sup>60</sup> Co	3.3E-05 ± 7.4E-05	U
		<sup>134</sup> Cs	2.6E-06 ± 2.6E-05	U			<sup>134</sup> Cs	-1.1E-05 ± 7.5E-05	U
		<sup>137</sup> Cs	9.5E-05 ± 7.4E-05	U			<sup>137</sup> Cs	9.6E-05 ± 7.8E-05	U
		<sup>152</sup> Eu	1.0E-05 ± 1.1E-04	U			<sup>152</sup> Eu	1.6E-04 ± 1.8E-04	U
		<sup>154</sup> Eu	1.8E-04 ± 2.2E-04	U			<sup>154</sup> Eu	7.0E-05 ± 2.2E-04	U
		<sup>155</sup> Eu	-1.0E-04 ± 1.9E-04	U			<sup>155</sup> Eu	8.1E-05 ± 1.9E-04	U
		<sup>238</sup> Pu	2.9E-06 ± 2.1E-05	U			<sup>238</sup> Pu	-2.7E-06 ± 2.7E-05	U
		<sup>239,240</sup> Pu	9.0E-06 ± 9.1E-06	U			<sup>239,240</sup> Pu	9.6E-06 ± 1.1E-05	U
		<sup>241</sup> Pu	-2.7E-04 ± 2.8E-04	U			<sup>241</sup> Pu	-4.4E-04 ± 4.6E-04	U
		<sup>103</sup> Ru	2.4E-05 ± 6.6E-05	U			<sup>103</sup> Ru	-8.1E-06 ± 6.2E-05	U
		<sup>106</sup> Ru	-2.2E-04 ± 7.1E-04	U			<sup>106</sup> Ru	3.3E-04 ± 6.4E-04	U
		<sup>125</sup> Sb	-6.1E-05 ± 1.5E-04	U			<sup>125</sup> Sb	7.4E-05 ± 1.6E-04	U
		<sup>113</sup> Sn	2.6E-05 ± 7.4E-05	U			<sup>113</sup> Sn	2.7E-05 ± 7.0E-05	U
		<sup>90</sup> Sr	2.4E-04 ± 1.2E-04				<sup>90</sup> Sr	6.8E-05 ± 8.4E-05	U
		<sup>234</sup> U	9.7E-06 ± 7.0E-06				<sup>234</sup> U	1.1E-05 ± 7.2E-06	
		<sup>235</sup> U	7.7E-07 ± 3.5E-06	U			<sup>235</sup> U	1.6E-06 ± 2.2E-06	U
		<sup>238</sup> U	9.0E-06 ± 6.1E-06				<sup>238</sup> U	8.9E-06 ± 6.2E-06	
		<sup>65</sup> Zn	-1.4E-05 ± 1.4E-04	U			<sup>65</sup> Zn	-9.0E-07 ± 9.0E-06	U
<b>N402</b> (100-K)	06/26/2001 - 12/26/2001	<sup>241</sup> Am	6.2E-06 ± 8.9E-06	U	<b>N403</b> (100-K)	12/27/2000 - 06/26/2001	<sup>241</sup> Am	-9.4E-07 ± 9.4E-06	U
		<sup>144</sup> Ce	7.8E-05 ± 6.6E-04	U			<sup>144</sup> Ce	-1.6E-04 ± 5.9E-04	U
		<sup>60</sup> Co	2.4E-05 ± 7.2E-05	U			<sup>60</sup> Co	-3.4E-05 ± 7.0E-05	U
		<sup>134</sup> Cs	3.0E-05 ± 6.5E-05	U			<sup>134</sup> Cs	8.8E-05 ± 7.8E-05	U
		<sup>137</sup> Cs	3.2E-05 ± 6.9E-05	U			<sup>137</sup> Cs	7.4E-05 ± 7.2E-05	U
		<sup>152</sup> Eu	-5.0E-05 ± 1.6E-04	U			<sup>152</sup> Eu	-2.0E-05 ± 1.5E-04	U
		<sup>154</sup> Eu	9.0E-05 ± 1.9E-04	U			<sup>154</sup> Eu	2.4E-05 ± 2.2E-04	U
		<sup>155</sup> Eu	1.0E-04 ± 1.9E-04	U			<sup>155</sup> Eu	-8.9E-05 ± 1.6E-04	U
		<sup>238</sup> Pu	6.5E-06 ± 1.7E-05	U			<sup>238</sup> Pu	2.9E-06 ± 2.1E-05	U
		<sup>239,240</sup> Pu	-2.6E-06 ± 3.7E-06	U			<sup>239,240</sup> Pu	4.8E-05 ± 2.4E-05	
		<sup>241</sup> Pu	5.6E-05 ± 4.1E-04	U			<sup>241</sup> Pu	-1.5E-04 ± 1.6E-04	U
		<sup>103</sup> Ru	9.9E-06 ± 6.7E-05	U			<sup>103</sup> Ru	6.0E-06 ± 6.0E-05	U
		<sup>106</sup> Ru	2.5E-04 ± 6.0E-04	U			<sup>106</sup> Ru	-4.6E-05 ± 4.6E-04	U
		<sup>125</sup> Sb	-7.8E-05 ± 1.6E-04	U			<sup>125</sup> Sb	-3.5E-05 ± 1.5E-04	U
		<sup>113</sup> Sn	-2.9E-05 ± 7.5E-05	U			<sup>113</sup> Sn	-5.1E-05 ± 6.6E-05	U
		<sup>90</sup> Sr	1.7E-04 ± 1.0E-04				<sup>90</sup> Sr	1.4E-04 ± 9.1E-05	
		<sup>234</sup> U	6.1E-06 ± 6.9E-06	U			<sup>234</sup> U	2.6E-05 ± 1.2E-05	
		<sup>235</sup> U	1.7E-06 ± 2.4E-06	U			<sup>235</sup> U	2.3E-06 ± 2.8E-06	U
		<sup>238</sup> U	5.3E-06 ± 6.1E-06	U			<sup>238</sup> U	2.6E-05 ± 1.2E-05	
		<sup>65</sup> Zn	1.6E-05 ± 1.5E-04	U			<sup>65</sup> Zn	-4.0E-05 ± 1.6E-04	U
<b>N403</b> (100-K)	06/26/2001 - 12/26/2001	<sup>241</sup> Am	1.1E-05 ± 9.6E-06	U	<b>N404</b> (100-K)	12/27/2000 - 06/26/2001	<sup>241</sup> Am	1.8E-06 ± 1.0E-05	U
		<sup>144</sup> Ce	-2.1E-04 ± 6.5E-04	U			<sup>144</sup> Ce	2.5E-04 ± 7.4E-04	U
		<sup>60</sup> Co	-6.8E-05 ± 7.1E-05	U			<sup>60</sup> Co	-1.2E-05 ± 6.3E-05	U
		<sup>134</sup> Cs	4.9E-06 ± 4.9E-05	U			<sup>134</sup> Cs	-9.8E-05 ± 1.0E-04	U
		<sup>137</sup> Cs	2.8E-05 ± 6.5E-05	U			<sup>137</sup> Cs	1.2E-04 ± 7.9E-05	U
		<sup>152</sup> Eu	-1.9E-05 ± 1.7E-04	U			<sup>152</sup> Eu	-7.1E-05 ± 2.2E-04	U
		<sup>154</sup> Eu	1.8E-04 ± 1.7E-04	U			<sup>154</sup> Eu	-5.1E-05 ± 1.7E-04	U
		<sup>155</sup> Eu	-3.0E-05 ± 1.8E-04	U			<sup>155</sup> Eu	-1.0E-04 ± 2.1E-04	U
		<sup>238</sup> Pu	1.4E-05 ± 1.7E-05	U			<sup>238</sup> Pu	4.7E-06 ± 2.1E-05	U
		<sup>239,240</sup> Pu	1.3E-05 ± 9.6E-06				<sup>239,240</sup> Pu	1.5E-06 ± 3.1E-06	U
		<sup>241</sup> Pu	2.7E-04 ± 4.4E-04	U			<sup>241</sup> Pu	9.4E-05 ± 3.4E-05	U
		<sup>103</sup> Ru	8.8E-05 ± 7.2E-05	U			<sup>103</sup> Ru	-2.3E-05 ± 6.4E-05	U
		<sup>106</sup> Ru	2.4E-04 ± 5.8E-04	U			<sup>106</sup> Ru	-2.5E-04 ± 6.3E-04	U
		<sup>125</sup> Sb	-3.3E-05 ± 1.5E-04	U			<sup>125</sup> Sb	1.9E-05 ± 1.6E-04	U
		<sup>113</sup> Sn	1.2E-05 ± 6.7E-05	U			<sup>113</sup> Sn	-7.3E-06 ± 7.3E-05	U
		<sup>90</sup> Sr	1.0E-04 ± 8.6E-05				<sup>90</sup> Sr	1.2E-04 ± 7.9E-05	
		<sup>234</sup> U	7.4E-06 ± 5.8E-06				<sup>234</sup> U	8.1E-06 ± 5.3E-06	
		<sup>235</sup> U	1.5E-06 ± 3.0E-06	U			<sup>235</sup> U	6.9E-07 ± 7.2E-07	U
		<sup>238</sup> U	1.1E-05 ± 6.8E-06				<sup>238</sup> U	5.5E-06 ± 4.3E-06	
		<sup>65</sup> Zn	-4.5E-05 ± 1.3E-04	U			<sup>65</sup> Zn	-1.4E-04 ± 1.5E-04	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.

Table 2-2. Near-Facility Air Sampling Results, 2001 (pCi/m<sup>3</sup> ± total analytical uncertainty). (cont)

EDP Code	Composite Period	Isotope	Result ± Uncertainty	RQ*	EDP Code	Composite Period	Isotope	Result ± Uncertainty	RQ*
<b>N404</b> (100-K)	06/26/2001 - 12/26/2001	<sup>241</sup> Am	1.4E-06 ± 9.2E-06	U	<b>N476</b> (100-K)	12/27/2000 - 06/26/2001	<sup>241</sup> Am	1.5E-05 ± 1.0E-05	
		<sup>144</sup> Ce	3.7E-04 ± 6.8E-04	U			<sup>144</sup> Ce	-3.3E-04 ± 8.7E-04	U
		<sup>60</sup> Co	-2.0E-08 ± 2.0E-07	U			<sup>60</sup> Co	-5.2E-06 ± 5.2E-05	U
		<sup>134</sup> Cs	-4.0E-05 ± 8.5E-05	U			<sup>134</sup> Cs	-6.0E-05 ± 1.0E-04	U
		<sup>137</sup> Cs	1.2E-05 ± 7.5E-05	U			<sup>137</sup> Cs	1.6E-04 ± 1.5E-04	
		<sup>152</sup> Eu	-5.1E-05 ± 1.7E-04	U			<sup>152</sup> Eu	-7.1E-05 ± 2.1E-04	U
		<sup>154</sup> Eu	-1.7E-04 ± 2.2E-04	U			<sup>154</sup> Eu	5.2E-05 ± 2.6E-04	U
		<sup>155</sup> Eu	-1.9E-04 ± 2.2E-04	U			<sup>155</sup> Eu	-9.4E-05 ± 2.5E-04	U
		<sup>238</sup> Pu	2.3E-06 ± 5.7E-06	U			<sup>238</sup> Pu	3.2E-06 ± 1.7E-05	U
		<sup>239,240</sup> Pu	4.5E-06 ± 5.5E-06	U			<sup>239,240</sup> Pu	4.8E-06 ± 8.7E-06	U
		<sup>241</sup> Pu	3.5E-04 ± 4.0E-04	U			<sup>241</sup> Pu	2.9E-04 ± 1.0E-04	U
		<sup>103</sup> Ru	-7.6E-05 ± 8.2E-05	U			<sup>103</sup> Ru	-3.0E-05 ± 8.2E-05	U
		<sup>106</sup> Ru	2.7E-04 ± 6.7E-04	U			<sup>106</sup> Ru	-1.8E-04 ± 8.4E-04	U
		<sup>125</sup> Sb	2.4E-05 ± 1.9E-04	U			<sup>125</sup> Sb	-5.8E-05 ± 2.0E-04	U
		<sup>113</sup> Sn	-5.3E-05 ± 8.2E-05	U			<sup>113</sup> Sn	2.8E-05 ± 9.1E-05	U
		<sup>90</sup> Sr	2.2E-04 ± 1.2E-04				<sup>90</sup> Sr	8.5E-05 ± 7.1E-05	
		<sup>234</sup> U	9.9E-06 ± 7.3E-06				<sup>234</sup> U	7.7E-06 ± 5.9E-06	
		<sup>235</sup> U	-9.9E-07 ± 2.0E-06	U			<sup>235</sup> U	3.3E-06 ± 3.4E-06	U
		<sup>238</sup> U	1.1E-05 ± 7.4E-06				<sup>238</sup> U	6.1E-06 ± 5.1E-06	
		<sup>65</sup> Zn	1.8E-05 ± 1.8E-04	U			<sup>65</sup> Zn	5.8E-05 ± 2.3E-04	U
<b>N476</b> (100-K)	06/26/2001 - 12/26/2001	<sup>241</sup> Am	-5.2E-06 ± 9.5E-06	U	<b>N477</b> (100-K)	12/27/2000 - 06/26/2001	<sup>241</sup> Am	1.3E-05 ± 1.2E-05	U
		<sup>144</sup> Ce	1.5E-04 ± 5.4E-04	U			<sup>144</sup> Ce	-1.3E-04 ± 5.7E-04	U
		<sup>60</sup> Co	-4.2E-05 ± 7.9E-05	U			<sup>60</sup> Co	2.2E-05 ± 6.1E-05	U
		<sup>134</sup> Cs	1.5E-06 ± 1.5E-05	U			<sup>134</sup> Cs	-1.7E-05 ± 7.2E-05	U
		<sup>137</sup> Cs	-4.4E-06 ± 4.4E-05	U			<sup>137</sup> Cs	1.5E-05 ± 7.3E-05	U
		<sup>152</sup> Eu	9.7E-06 ± 9.7E-05	U			<sup>152</sup> Eu	1.1E-04 ± 1.6E-04	U
		<sup>154</sup> Eu	-4.4E-05 ± 2.0E-04	U			<sup>154</sup> Eu	-5.3E-05 ± 1.9E-04	U
		<sup>155</sup> Eu	-1.5E-05 ± 1.5E-04	U			<sup>155</sup> Eu	-3.2E-05 ± 1.5E-04	U
		<sup>238</sup> Pu	2.9E-06 ± 2.0E-05	U			<sup>238</sup> Pu	-6.0E-06 ± 2.1E-05	U
		<sup>239,240</sup> Pu	2.9E-06 ± 8.1E-06	U			<sup>239,240</sup> Pu	2.0E-05 ± 1.4E-05	
		<sup>241</sup> Pu	-4.2E-05 ± 4.4E-05	U			<sup>241</sup> Pu	-3.6E-04 ± 3.7E-04	U
		<sup>103</sup> Ru	1.0E-06 ± 1.0E-05	U			<sup>103</sup> Ru	6.2E-06 ± 6.1E-05	U
		<sup>106</sup> Ru	-6.0E-04 ± 6.3E-04	U			<sup>106</sup> Ru	7.1E-05 ± 5.8E-04	U
		<sup>125</sup> Sb	1.9E-04 ± 1.7E-04	U			<sup>125</sup> Sb	-3.2E-05 ± 1.4E-04	U
		<sup>113</sup> Sn	4.1E-05 ± 6.7E-05	U			<sup>113</sup> Sn	-1.2E-05 ± 6.6E-05	U
		<sup>90</sup> Sr	1.8E-04 ± 1.0E-04				<sup>90</sup> Sr	4.2E-05 ± 7.8E-05	U
		<sup>234</sup> U	8.4E-06 ± 5.7E-06				<sup>234</sup> U	9.8E-06 ± 7.0E-06	
		<sup>235</sup> U	7.7E-07 ± 1.6E-06	U			<sup>235</sup> U	6.4E-07 ± 6.6E-07	U
		<sup>238</sup> U	6.5E-06 ± 4.9E-06				<sup>238</sup> U	2.0E-06 ± 3.6E-06	U
		<sup>65</sup> Zn	7.3E-05 ± 1.5E-04	U			<sup>65</sup> Zn	-2.6E-05 ± 1.4E-04	U
<b>N477</b> (100-K)	06/26/2001 - 12/26/2001	<sup>241</sup> Am	6.2E-06 ± 1.2E-05	U	<b>N478</b> (100-K)	12/27/2000 - 06/26/2001	<sup>241</sup> Am	1.3E-05 ± 1.0E-05	U
		<sup>144</sup> Ce	-3.1E-04 ± 6.8E-04	U			<sup>144</sup> Ce	-7.8E-04 ± 8.0E-04	U
		<sup>60</sup> Co	2.1E-05 ± 8.3E-05	U			<sup>60</sup> Co	1.5E-05 ± 6.2E-05	U
		<sup>134</sup> Cs	2.3E-05 ± 8.5E-05	U			<sup>134</sup> Cs	-5.4E-05 ± 7.4E-05	U
		<sup>137</sup> Cs	-2.1E-06 ± 2.1E-05	U			<sup>137</sup> Cs	6.7E-05 ± 7.8E-05	U
		<sup>152</sup> Eu	-8.3E-05 ± 1.8E-04	U			<sup>152</sup> Eu	-1.4E-04 ± 1.9E-04	U
		<sup>154</sup> Eu	-8.8E-05 ± 2.3E-04	U			<sup>154</sup> Eu	5.2E-05 ± 2.0E-04	U
		<sup>155</sup> Eu	-2.1E-04 ± 2.2E-04	U			<sup>155</sup> Eu	5.4E-05 ± 2.1E-04	U
		<sup>238</sup> Pu	-9.8E-06 ± 2.2E-05	U			<sup>238</sup> Pu	-1.4E-05 ± 2.1E-05	U
		<sup>239,240</sup> Pu	2.8E-06 ± 7.1E-06	U			<sup>239,240</sup> Pu	2.4E-05 ± 1.4E-05	
		<sup>241</sup> Pu	-4.2E-05 ± 4.4E-05	U			<sup>241</sup> Pu	5.3E-04 ± 1.9E-04	U
		<sup>103</sup> Ru	1.9E-05 ± 7.6E-05	U			<sup>103</sup> Ru	-8.8E-06 ± 6.6E-05	U
		<sup>106</sup> Ru	6.6E-04 ± 7.2E-04	U			<sup>106</sup> Ru	8.2E-05 ± 6.0E-04	U
		<sup>125</sup> Sb	1.9E-04 ± 1.8E-04	U			<sup>125</sup> Sb	-2.5E-06 ± 2.5E-05	U
		<sup>113</sup> Sn	-7.9E-06 ± 7.4E-05	U			<sup>113</sup> Sn	4.8E-05 ± 7.7E-05	U
		<sup>90</sup> Sr	1.8E-04 ± 1.1E-04				<sup>90</sup> Sr	5.6E-05 ± 7.7E-05	U
		<sup>234</sup> U	1.6E-05 ± 9.0E-06				<sup>234</sup> U	5.2E-06 ± 4.5E-06	
		<sup>235</sup> U	1.7E-06 ± 2.4E-06	U			<sup>235</sup> U	2.9E-06 ± 3.0E-06	U
		<sup>238</sup> U	1.4E-05 ± 8.1E-06				<sup>238</sup> U	9.8E-06 ± 5.9E-06	
		<sup>65</sup> Zn	-3.4E-05 ± 2.1E-04	U			<sup>65</sup> Zn	-5.9E-05 ± 1.6E-04	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.

Table 2-2. Near-Facility Air Sampling Results, 2001 (pCi/m<sup>3</sup> ± total analytical uncertainty). (cont)

EDP Code	Composite Period	Isotope	Result ± Uncertainty	RQ*	EDP Code	Composite Period	Isotope	Result ± Uncertainty	RQ*
N478 (100-K)	06/26/2001 - 12/26/2001	<sup>241</sup> Am	4.3E-06 ± 1.2E-05	U	N479 (100-K)	12/27/2000 - 06/26/2001	<sup>241</sup> Am	6.6E-06 ± 1.0E-05	U
		<sup>144</sup> Ce	-5.0E-05 ± 5.0E-04	U			<sup>144</sup> Ce	5.7E-05 ± 5.7E-04	U
		<sup>60</sup> Co	5.5E-05 ± 8.0E-05	U			<sup>60</sup> Co	3.8E-05 ± 8.9E-05	U
		<sup>134</sup> Cs	7.8E-06 ± 7.8E-05	U			<sup>134</sup> Cs	5.4E-05 ± 7.5E-05	U
		<sup>137</sup> Cs	-2.9E-05 ± 7.7E-05	U			<sup>137</sup> Cs	6.6E-05 ± 6.8E-05	U
		<sup>152</sup> Eu	2.5E-05 ± 1.7E-04	U			<sup>152</sup> Eu	-6.8E-05 ± 1.7E-04	U
		<sup>154</sup> Eu	-2.8E-04 ± 2.9E-04	U			<sup>154</sup> Eu	1.0E-04 ± 2.3E-04	U
		<sup>155</sup> Eu	2.6E-05 ± 1.8E-04	U			<sup>155</sup> Eu	-5.1E-05 ± 1.9E-04	U
		<sup>238</sup> Pu	-1.5E-06 ± 8.1E-06	U			<sup>238</sup> Pu	-2.4E-05 ± 2.7E-05	U
		<sup>239,240</sup> Pu	-3.1E-06 ± 6.3E-06	U			<sup>239,240</sup> Pu	9.1E-06 ± 1.1E-05	U
		<sup>241</sup> Pu	1.2E-04 ± 4.7E-04	U			<sup>241</sup> Pu	1.6E-04 ± 6.4E-05	U
		<sup>103</sup> Ru	-2.3E-05 ± 7.0E-05	U			<sup>103</sup> Ru	6.1E-06 ± 6.1E-05	U
		<sup>106</sup> Ru	-2.9E-04 ± 7.4E-04	U			<sup>106</sup> Ru	3.4E-04 ± 6.3E-04	U
		<sup>125</sup> Sb	-2.3E-05 ± 1.6E-04	U			<sup>125</sup> Sb	2.9E-07 ± 2.9E-06	U
		<sup>113</sup> Sn	9.4E-05 ± 7.8E-05	U			<sup>113</sup> Sn	3.8E-05 ± 7.3E-05	U
		<sup>90</sup> Sr	2.3E-04 ± 1.3E-04				<sup>90</sup> Sr	3.5E-05 ± 7.4E-05	U
		<sup>234</sup> U	7.7E-06 ± 6.0E-06				<sup>234</sup> U	7.7E-06 ± 5.3E-06	
		<sup>235</sup> U	4.3E-06 ± 5.3E-06	U			<sup>235</sup> U	2.3E-06 ± 3.5E-06	U
		<sup>238</sup> U	4.8E-06 ± 5.5E-06	U			<sup>238</sup> U	6.5E-06 ± 4.8E-06	
		<sup>65</sup> Zn	4.6E-05 ± 2.0E-04	U			<sup>65</sup> Zn	-6.4E-05 ± 1.6E-04	U
N479 (100-K)	06/26/2001 - 12/26/2001	<sup>241</sup> Am	3.1E-06 ± 9.7E-06	U	N494 (100-F)	12/28/2000 - 03/22/2001	<sup>144</sup> Ce	-1.2E-04 ± 1.1E-03	U
		<sup>144</sup> Ce	9.0E-05 ± 7.3E-04	U			<sup>60</sup> Co	6.2E-05 ± 1.4E-04	U
		<sup>60</sup> Co	6.5E-05 ± 7.4E-05	U			<sup>134</sup> Cs	-5.7E-05 ± 1.4E-04	U
		<sup>134</sup> Cs	-3.9E-05 ± 7.8E-05	U			<sup>137</sup> Cs	1.2E-05 ± 1.2E-04	U
		<sup>137</sup> Cs	1.0E-05 ± 8.0E-05	U			<sup>152</sup> Eu	2.2E-04 ± 3.0E-04	U
		<sup>152</sup> Eu	9.7E-06 ± 9.8E-05	U			<sup>154</sup> Eu	1.5E-04 ± 4.1E-04	U
		<sup>154</sup> Eu	-9.9E-05 ± 2.5E-04	U			<sup>155</sup> Eu	2.8E-04 ± 3.0E-04	U
		<sup>155</sup> Eu	6.7E-05 ± 1.9E-04	U			<sup>238</sup> Pu	2.7E-06 ± 2.7E-05	U
		<sup>238</sup> Pu	3.1E-06 ± 1.2E-05	U			<sup>239,240</sup> Pu	8.0E-06 ± 1.2E-05	U
		<sup>239,240</sup> Pu	4.7E-06 ± 5.8E-06	U			<sup>103</sup> Ru	1.0E-04 ± 1.2E-04	U
		<sup>241</sup> Pu	-2.0E-04 ± 2.1E-04	U			<sup>106</sup> Ru	-3.6E-04 ± 1.3E-03	U
		<sup>103</sup> Ru	-2.4E-05 ± 7.1E-05	U			<sup>125</sup> Sb	3.2E-05 ± 3.2E-04	U
		<sup>106</sup> Ru	2.4E-04 ± 6.0E-04	U			<sup>113</sup> Sn	4.9E-05 ± 1.4E-04	U
		<sup>125</sup> Sb	-9.0E-05 ± 1.7E-04	U			<sup>90</sup> Sr	3.3E-04 ± 1.9E-04	
		<sup>113</sup> Sn	-2.9E-05 ± 7.7E-05	U			<sup>234</sup> U	5.1E-06 ± 1.4E-05	U
		<sup>90</sup> Sr	2.7E-04 ± 1.3E-04				<sup>235</sup> U	5.6E-06 ± 7.9E-06	U
		<sup>234</sup> U	9.4E-06 ± 6.5E-06				<sup>238</sup> U	-5.1E-06 ± 7.2E-06	U
		<sup>235</sup> U	3.8E-06 ± 4.0E-06	U			<sup>65</sup> Zn	-2.9E-04 ± 3.5E-04	U
		<sup>238</sup> U	6.1E-06 ± 5.1E-06						
		<sup>65</sup> Zn	1.2E-04 ± 1.6E-04	U					
N494 (100-F)	03/22/2001 - 06/27/2001	<sup>144</sup> Ce	-1.9E-05 ± 1.9E-04	U	N494 (100-F)	06/27/2001 - 09/18/2001	<sup>144</sup> Ce	-6.7E-04 ± 1.5E-03	U
		<sup>60</sup> Co	3.7E-05 ± 1.3E-04	U			<sup>60</sup> Co	4.4E-05 ± 1.9E-04	U
		<sup>134</sup> Cs	-7.2E-05 ± 1.3E-04	U			<sup>134</sup> Cs	7.2E-05 ± 1.7E-04	U
		<sup>137</sup> Cs	-6.3E-05 ± 1.3E-04	U			<sup>137</sup> Cs	1.4E-05 ± 1.4E-04	U
		<sup>152</sup> Eu	-1.3E-04 ± 4.2E-04	U			<sup>152</sup> Eu	-7.0E-06 ± 7.0E-05	U
		<sup>154</sup> Eu	-2.7E-04 ± 4.1E-04	U			<sup>154</sup> Eu	-2.3E-05 ± 2.3E-04	U
		<sup>155</sup> Eu	-1.3E-04 ± 4.0E-04	U			<sup>155</sup> Eu	1.9E-04 ± 4.4E-04	U
		<sup>238</sup> Pu	1.3E-06 ± 1.3E-05	U			<sup>238</sup> Pu	1.9E-05 ± 2.3E-05	U
		<sup>239,240</sup> Pu	4.0E-06 ± 7.3E-06	U			<sup>239,240</sup> Pu	-3.2E-06 ± 6.4E-06	U
		<sup>103</sup> Ru	5.6E-05 ± 1.2E-04	U			<sup>103</sup> Ru	-5.9E-05 ± 1.5E-04	U
		<sup>106</sup> Ru	-6.5E-04 ± 1.2E-03	U			<sup>106</sup> Ru	-4.6E-05 ± 4.6E-04	U
		<sup>125</sup> Sb	-1.0E-04 ± 3.1E-04	U			<sup>125</sup> Sb	2.5E-05 ± 2.5E-04	U
		<sup>113</sup> Sn	-4.1E-06 ± 4.1E-05	U			<sup>113</sup> Sn	-1.5E-04 ± 1.7E-04	U
		<sup>90</sup> Sr	2.7E-05 ± 9.4E-05	U			<sup>90</sup> Sr	5.1E-06 ± 5.1E-05	U
		<sup>234</sup> U	2.3E-05 ± 1.2E-05				<sup>234</sup> U	2.4E-05 ± 1.3E-05	
		<sup>235</sup> U	7.6E-06 ± 6.6E-06				<sup>235</sup> U	6.8E-06 ± 6.9E-06	U
		<sup>238</sup> U	5.9E-06 ± 6.6E-06	U			<sup>238</sup> U	8.2E-06 ± 8.0E-06	U
		<sup>65</sup> Zn	-1.7E-04 ± 3.1E-04	U			<sup>65</sup> Zn	-4.2E-05 ± 4.2E-04	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.

Table 2-2. Near-Facility Air Sampling Results, 2001 (pCi/m<sup>3</sup> ± total analytical uncertainty). (cont)

EDP Code	Composite Period	Isotope	Result ± Uncertainty	RQ*	EDP Code	Composite Period	Isotope	Result ± Uncertainty	RQ*
N494 (100-F)	09/18/2001 - 12/27/2001	<sup>144</sup> Ce	1.6E-04 ± 1.1E-03	U	N495 (100-F)	12/28/2000 - 03/22/2001	Ce-144	5.3E-04 ± 1.4E-03	U
		<sup>60</sup> Co	-8.1E-05 ± 1.6E-04	U			Co-60	4.7E-05 ± 1.4E-04	U
		<sup>134</sup> Cs	7.1E-05 ± 1.6E-04	U			Cs-134	3.6E-05 ± 1.4E-04	U
		<sup>137</sup> Cs	5.8E-05 ± 1.5E-04	U			Cs-137	1.1E-04 ± 1.4E-04	U
		<sup>152</sup> Eu	-2.2E-05 ± 2.2E-04	U			Eu-152	8.9E-05 ± 3.8E-04	U
		<sup>154</sup> Eu	-1.6E-04 ± 4.3E-04	U			Eu-154	-9.4E-05 ± 3.6E-04	U
		<sup>155</sup> Eu	-1.1E-04 ± 3.6E-04	U			Eu-155	1.3E-04 ± 3.7E-04	U
		<sup>238</sup> Pu	-1.0E-05 ± 2.0E-05	U			Pu-238	6.3E-06 ± 1.8E-05	U
		<sup>239,240</sup> Pu	1.3E-06 ± 1.3E-05	U			Pu-239/40	1.4E-05 ± 1.3E-05	U
		<sup>103</sup> Ru	1.3E-05 ± 1.2E-04	U			Ru-103	-8.5E-05 ± 1.3E-04	U
		<sup>106</sup> Ru	4.1E-05 ± 4.1E-04	U			Ru-106	-2.7E-04 ± 1.3E-03	U
		<sup>125</sup> Sb	2.6E-04 ± 3.4E-04	U			Sb-125	-1.8E-04 ± 3.4E-04	U
		<sup>113</sup> Sn	1.1E-04 ± 1.4E-04	U			Sn-113	6.6E-05 ± 1.5E-04	U
		<sup>90</sup> Sr	-1.3E-05 ± 1.3E-04	U			Sr-90	3.4E-04 ± 2.1E-04	U
		<sup>234</sup> U	1.8E-05 ± 1.1E-05	U			U-234	1.8E-05 ± 1.1E-05	U
		<sup>235</sup> U	4.2E-06 ± 6.4E-06	U			U-235	6.7E-06 ± 6.8E-06	U
		<sup>238</sup> U	1.5E-05 ± 1.0E-05	U			U-238	9.3E-06 ± 1.0E-05	U
		<sup>65</sup> Zn	4.5E-04 ± 3.8E-04	U			Zn-65	3.1E-04 ± 3.3E-04	U
N495 (100-F)	03/22/2001 - 06/27/2001	Ce-144	1.2E-03 ± 1.2E-03	U	N495 (100-F)	06/27/2001 - 09/18/2001	<sup>144</sup> Ce	-4.5E-04 ± 1.1E-03	U
		Co-60	-5.0E-05 ± 1.5E-04	U			<sup>60</sup> Co	3.4E-05 ± 1.3E-04	U
		Cs-134	3.0E-05 ± 1.5E-04	U			<sup>134</sup> Cs	1.7E-04 ± 1.6E-04	U
		Cs-137	-3.8E-05 ± 1.5E-04	U			<sup>137</sup> Cs	1.1E-04 ± 1.5E-04	U
		Eu-152	2.2E-05 ± 2.2E-04	U			<sup>152</sup> Eu	-1.2E-04 ± 3.2E-04	U
		Eu-154	1.4E-04 ± 4.3E-04	U			<sup>154</sup> Eu	9.3E-05 ± 4.1E-04	U
		Eu-155	1.7E-04 ± 3.7E-04	U			<sup>155</sup> Eu	6.9E-05 ± 3.3E-04	U
		Pu-238	1.3E-06 ± 1.3E-05	U			<sup>238</sup> Pu	-6.5E-06 ± 2.1E-05	U
		Pu-239/40	5.4E-06 ± 5.5E-06	U			<sup>239,240</sup> Pu	6.5E-06 ± 6.6E-06	U
		Ru-103	-3.3E-05 ± 1.2E-04	U			<sup>103</sup> Ru	-2.9E-05 ± 1.1E-04	U
		Ru-106	1.1E-03 ± 1.3E-03	U			<sup>106</sup> Ru	-2.7E-04 ± 1.3E-03	U
		Sb-125	1.2E-04 ± 3.2E-04	U			<sup>125</sup> Sb	-8.1E-05 ± 3.3E-04	U
		Sn-113	7.7E-05 ± 1.3E-04	U			<sup>113</sup> Sn	3.9E-05 ± 1.3E-04	U
		Sr-90	5.4E-05 ± 1.3E-04	U			<sup>90</sup> Sr	3.8E-04 ± 2.1E-04	U
		U-234	2.3E-05 ± 1.2E-05	U			<sup>234</sup> U	1.7E-05 ± 1.0E-05	U
		U-235	5.0E-06 ± 5.0E-06	U			<sup>235</sup> U	4.9E-06 ± 5.9E-06	U
		U-238	1.6E-05 ± 1.1E-05	U			<sup>238</sup> U	5.2E-06 ± 5.3E-06	U
		Zn-65	7.8E-05 ± 3.4E-04	U			<sup>65</sup> Zn	-1.8E-04 ± 3.4E-04	U
N495 (100-F)	09/18/2001 - 12/27/2001	<sup>144</sup> Ce	2.9E-04 ± 9.7E-04	U	N519 (100-F)	12/28/2000 - 06/27/2001	<sup>144</sup> Ce	-7.4E-05 ± 7.4E-04	U
		<sup>60</sup> Co	2.3E-05 ± 1.3E-04	U			<sup>60</sup> Co	3.1E-05 ± 9.2E-05	U
		<sup>134</sup> Cs	7.9E-05 ± 1.3E-04	U			<sup>134</sup> Cs	4.5E-05 ± 8.9E-05	U
		<sup>137</sup> Cs	4.3E-05 ± 1.2E-04	U			<sup>137</sup> Cs	8.9E-06 ± 8.3E-05	U
		<sup>152</sup> Eu	1.2E-04 ± 2.9E-04	U			<sup>152</sup> Eu	-6.1E-05 ± 2.3E-04	U
		<sup>154</sup> Eu	1.3E-04 ± 3.9E-04	U			<sup>154</sup> Eu	-1.2E-05 ± 1.2E-04	U
		<sup>155</sup> Eu	-2.5E-04 ± 2.8E-04	U			<sup>155</sup> Eu	4.4E-05 ± 2.1E-04	U
		<sup>238</sup> Pu	4.2E-06 ± 2.0E-05	U			<sup>238</sup> Pu	2.7E-06 ± 8.8E-06	U
		<sup>239,240</sup> Pu	7.0E-06 ± 7.9E-06	U			<sup>239,240</sup> Pu	6.7E-07 ± 1.4E-06	U
		<sup>103</sup> Ru	1.0E-04 ± 1.1E-04	U			<sup>103</sup> Ru	-1.5E-05 ± 9.2E-05	U
		<sup>106</sup> Ru	-3.3E-04 ± 1.0E-03	U			<sup>106</sup> Ru	-2.5E-04 ± 7.3E-04	U
		<sup>125</sup> Sb	2.8E-04 ± 2.9E-04	U			<sup>125</sup> Sb	-2.7E-05 ± 2.0E-04	U
		<sup>113</sup> Sn	5.7E-06 ± 5.7E-05	U			<sup>113</sup> Sn	4.1E-05 ± 9.7E-05	U
		<sup>90</sup> Sr	1.3E-05 ± 1.3E-04	U			<sup>90</sup> Sr	-1.4E-05 ± 5.6E-05	U
		<sup>234</sup> U	3.3E-05 ± 1.7E-05	U			<sup>234</sup> U	6.4E-06 ± 5.8E-06	U
		<sup>235</sup> U	1.6E-06 ± 5.5E-06	U			<sup>235</sup> U	4.7E-06 ± 4.1E-06	U
		<sup>238</sup> U	1.4E-05 ± 1.1E-05	U			<sup>238</sup> U	7.5E-06 ± 5.1E-06	U
		<sup>65</sup> Zn	1.7E-04 ± 2.9E-04	U			<sup>65</sup> Zn	-5.2E-05 ± 2.3E-04	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.

Table 2-2. Near-Facility Air Sampling Results, 2001 (pCi/m<sup>3</sup> ± total analytical uncertainty). (cont)

EDP Code	Composite Period	Isotope	Result ± Uncertainty	RQ*	EDP Code	Composite Period	Isotope	Result ± Uncertainty	RQ*
N519 (100-F)	06/27/2001 - 12/27/2001	<sup>144</sup> Ce	6.2E-05 ± 6.2E-04	U	N520 (100-F)	12/28/2000 - 06/27/2001	<sup>144</sup> Ce	5.8E-06 ± 5.8E-05	U
		<sup>60</sup> Co	2.1E-05 ± 7.4E-05	U			<sup>60</sup> Co	-2.0E-06 ± 2.0E-05	U
		<sup>134</sup> Cs	-5.5E-05 ± 8.6E-05	U			<sup>134</sup> Cs	4.4E-05 ± 9.6E-05	U
		<sup>137</sup> Cs	4.6E-05 ± 7.6E-05	U			<sup>137</sup> Cs	1.8E-05 ± 7.6E-05	U
		<sup>152</sup> Eu	6.4E-05 ± 1.7E-04	U			<sup>152</sup> Eu	9.8E-05 ± 1.9E-04	U
		<sup>154</sup> Eu	-1.1E-05 ± 1.1E-04	U			<sup>154</sup> Eu	5.2E-05 ± 2.3E-04	U
		<sup>155</sup> Eu	1.3E-04 ± 1.8E-04	U			<sup>155</sup> Eu	1.3E-04 ± 2.0E-04	U
		<sup>238</sup> Pu	-2.7E-06 ± 1.4E-05	U			<sup>238</sup> Pu	-7.4E-07 ± 7.4E-06	U
		<sup>239,240</sup> Pu	9.1E-07 ± 4.8E-06	U			<sup>239,240</sup> Pu	-7.4E-07 ± 2.6E-06	U
		<sup>103</sup> Ru	2.4E-05 ± 9.7E-05	U			<sup>103</sup> Ru	6.7E-05 ± 9.1E-05	U
		<sup>106</sup> Ru	7.5E-06 ± 7.5E-05	U			<sup>106</sup> Ru	-2.7E-04 ± 7.3E-04	U
		<sup>125</sup> Sb	-3.1E-05 ± 1.8E-04	U			<sup>125</sup> Sb	2.3E-05 ± 1.6E-04	U
		<sup>113</sup> Sn	5.3E-05 ± 8.6E-05	U			<sup>113</sup> Sn	-1.6E-05 ± 8.1E-05	U
		<sup>90</sup> Sr	2.5E-04 ± 1.3E-04				<sup>90</sup> Sr	3.0E-05 ± 8.1E-05	U
		<sup>234</sup> U	9.1E-06 ± 6.5E-06				<sup>234</sup> U	1.2E-05 ± 7.3E-06	
		<sup>235</sup> U	3.9E-06 ± 4.0E-06	U			<sup>235</sup> U	4.7E-06 ± 4.2E-06	
		<sup>238</sup> U	9.1E-06 ± 6.5E-06				<sup>238</sup> U	1.2E-05 ± 7.3E-06	
N520 (100-F)	06/27/2001 - 12/27/2001	<sup>65</sup> Zn	4.9E-05 ± 1.9E-04	U	N521 (100-F)	12/28/2000 - 06/27/2001	<sup>65</sup> Zn	-2.7E-04 ± 2.8E-04	U
		<sup>144</sup> Ce	-2.5E-04 ± 5.9E-04	U			<sup>144</sup> Ce	6.2E-04 ± 5.9E-04	U
		<sup>60</sup> Co	-7.4E-05 ± 7.9E-05	U			<sup>60</sup> Co	8.3E-06 ± 6.2E-05	U
		<sup>134</sup> Cs	-1.6E-05 ± 8.5E-05	U			<sup>134</sup> Cs	4.0E-05 ± 6.7E-05	U
		<sup>137</sup> Cs	-3.2E-06 ± 3.2E-05	U			<sup>137</sup> Cs	-3.2E-06 ± 3.2E-05	U
		<sup>152</sup> Eu	-3.7E-05 ± 1.6E-04	U			<sup>152</sup> Eu	1.7E-04 ± 1.7E-04	U
		<sup>154</sup> Eu	6.9E-05 ± 1.9E-04	U			<sup>154</sup> Eu	-2.0E-04 ± 2.4E-04	U
		<sup>155</sup> Eu	-9.7E-05 ± 1.6E-04	U			<sup>155</sup> Eu	-8.1E-05 ± 1.5E-04	U
		<sup>238</sup> Pu	1.6E-05 ± 1.4E-05	U			<sup>238</sup> Pu	4.0E-06 ± 8.8E-06	U
		<sup>239,240</sup> Pu	9.1E-07 ± 4.1E-06	U			<sup>239,240</sup> Pu	1.1E-05 ± 6.8E-06	
		<sup>103</sup> Ru	-2.4E-05 ± 1.0E-04	U			<sup>103</sup> Ru	-5.2E-05 ± 6.9E-05	U
		<sup>106</sup> Ru	-3.5E-05 ± 3.5E-04	U			<sup>106</sup> Ru	-2.7E-04 ± 5.9E-04	U
		<sup>125</sup> Sb	8.5E-05 ± 1.5E-04	U			<sup>125</sup> Sb	-1.3E-04 ± 1.6E-04	U
		<sup>113</sup> Sn	7.0E-05 ± 7.8E-05	U			<sup>113</sup> Sn	-5.1E-05 ± 7.1E-05	U
		<sup>90</sup> Sr	2.8E-05 ± 6.8E-05	U			<sup>90</sup> Sr	8.2E-05 ± 6.9E-05	U
		<sup>234</sup> U	2.0E-05 ± 1.1E-05				<sup>234</sup> U	1.3E-05 ± 7.2E-06	
		<sup>235</sup> U	4.5E-06 ± 4.3E-06				<sup>235</sup> U	2.1E-06 ± 2.6E-06	U
N521 (100-F)	06/27/2001 - 12/27/2001	<sup>238</sup> U	1.8E-05 ± 1.0E-05		N522 (100-F)	12/28/2000 - 06/27/2001	<sup>238</sup> U	7.5E-06 ± 5.0E-06	
		<sup>65</sup> Zn	-8.4E-05 ± 1.7E-04	U			<sup>65</sup> Zn	-6.7E-05 ± 1.5E-04	U
		<sup>144</sup> Ce	4.6E-04 ± 7.5E-04	U			<sup>144</sup> Ce	-4.0E-04 ± 7.8E-04	U
		<sup>60</sup> Co	1.6E-05 ± 7.7E-05	U			<sup>60</sup> Co	5.6E-06 ± 5.6E-05	U
		<sup>134</sup> Cs	-6.2E-05 ± 7.2E-05	U			<sup>134</sup> Cs	-4.7E-05 ± 8.0E-05	U
		<sup>137</sup> Cs	-2.9E-05 ± 7.3E-05	U			<sup>137</sup> Cs	-1.1E-05 ± 7.3E-05	U
		<sup>152</sup> Eu	1.8E-04 ± 2.2E-04	U			<sup>152</sup> Eu	-1.6E-04 ± 2.2E-04	U
		<sup>154</sup> Eu	1.7E-04 ± 2.2E-04	U			<sup>154</sup> Eu	1.5E-04 ± 2.2E-04	U
		<sup>155</sup> Eu	-8.6E-05 ± 2.1E-04	U			<sup>155</sup> Eu	3.0E-05 ± 2.1E-04	U
		<sup>238</sup> Pu	3.9E-06 ± 1.0E-05	U			<sup>238</sup> Pu	4.5E-06 ± 1.0E-05	U
		<sup>239,240</sup> Pu	1.1E-05 ± 8.1E-06				<sup>239,240</sup> Pu	5.2E-06 ± 5.3E-06	U
		<sup>103</sup> Ru	-9.1E-05 ± 1.1E-04	U			<sup>103</sup> Ru	3.6E-05 ± 7.8E-05	U
		<sup>106</sup> Ru	-1.2E-04 ± 6.4E-04	U			<sup>106</sup> Ru	4.9E-04 ± 6.5E-04	U
		<sup>125</sup> Sb	-9.0E-05 ± 1.9E-04	U			<sup>125</sup> Sb	5.2E-05 ± 1.7E-04	U
		<sup>113</sup> Sn	-4.2E-05 ± 9.6E-05	U			<sup>113</sup> Sn	-8.1E-05 ± 9.0E-05	U
		<sup>90</sup> Sr	1.8E-04 ± 1.1E-04				<sup>90</sup> Sr	-7.1E-06 ± 7.1E-05	U
		<sup>234</sup> U	1.7E-05 ± 1.1E-05				<sup>234</sup> U	2.6E-05 ± 1.3E-05	
N522 (100-F)	06/27/2001 - 12/27/2001	<sup>235</sup> U	2.9E-06 ± 3.5E-06	U			<sup>235</sup> U	1.6E-06 ± 2.3E-06	U
		<sup>238</sup> U	8.6E-06 ± 6.1E-06				<sup>238</sup> U	2.6E-05 ± 1.2E-05	
		<sup>65</sup> Zn	4.2E-05 ± 1.6E-04	U			<sup>65</sup> Zn	-1.3E-04 ± 1.7E-04	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.

Table 2-2. Near-Facility Air Sampling Results, 2001 (pCi/m<sup>3</sup> ± total analytical uncertainty). (cont)

EDP Code	Composite Period	Isotope	Result ± Uncertainty	RQ*	EDP Code	Composite Period	Isotope	Result ± Uncertainty	RQ*
N522 (100-F)	06/27/2001 - 12/27/2001	<sup>144</sup> Ce	5.0E-04 ± 7.2E-04	U	N507 (100-H)	12/28/2000 - 03/09/2001	<sup>144</sup> Ce	-9.1E-04 ± 1.3E-03	U
		<sup>60</sup> Co	-3.6E-05 ± 8.7E-05	U			<sup>60</sup> Co	8.2E-05 ± 1.9E-04	U
		<sup>134</sup> Cs	-3.8E-05 ± 8.6E-05	U			<sup>134</sup> Cs	4.3E-06 ± 4.3E-05	U
		<sup>137</sup> Cs	1.6E-05 ± 7.8E-05	U			<sup>137</sup> Cs	-1.0E-04 ± 1.6E-04	U
		<sup>152</sup> Eu	-5.5E-05 ± 1.9E-04	U			<sup>152</sup> Eu	-2.5E-04 ± 3.7E-04	U
		<sup>154</sup> Eu	7.5E-07 ± 7.5E-06	U			<sup>154</sup> Eu	-1.8E-04 ± 5.0E-04	U
		<sup>155</sup> Eu	-5.0E-05 ± 2.0E-04	U			<sup>155</sup> Eu	3.1E-05 ± 3.1E-04	U
		<sup>238</sup> Pu	-1.0E-06 ± 1.0E-05	U			<sup>238</sup> Pu	3.0E-05 ± 2.7E-05	U
		<sup>239,240</sup> Pu	8.0E-06 ± 6.2E-06				<sup>239,240</sup> Pu	4.2E-05 ± 2.3E-05	
		<sup>103</sup> Ru	-4.1E-05 ± 1.2E-04	U			<sup>103</sup> Ru	4.6E-05 ± 1.8E-04	U
		<sup>106</sup> Ru	-8.2E-04 ± 8.5E-04	U			<sup>106</sup> Ru	-3.8E-04 ± 1.5E-03	U
		<sup>125</sup> Sb	5.4E-05 ± 1.8E-04	U			<sup>125</sup> Sb	-5.0E-04 ± 5.1E-04	U
		<sup>113</sup> Sn	-4.0E-05 ± 9.2E-05	U			<sup>113</sup> Sn	-5.5E-05 ± 1.8E-04	U
		<sup>90</sup> Sr	1.4E-04 ± 9.6E-05				<sup>90</sup> Sr	2.8E-04 ± 2.3E-04	U
		<sup>234</sup> U	1.2E-05 ± 6.8E-06				<sup>234</sup> U	1.2E-05 ± 9.3E-06	
		<sup>235</sup> U	3.3E-06 ± 3.4E-06	U			<sup>235</sup> U	5.4E-06 ± 6.5E-06	U
		<sup>238</sup> U	6.6E-06 ± 4.8E-06				<sup>238</sup> U	1.6E-06 ± 3.3E-06	U
		<sup>65</sup> Zn	2.5E-04 ± 2.5E-04	U			<sup>65</sup> Zn	2.1E-05 ± 2.1E-04	U
N508 (100-H)	12/28/2000 - 03/09/2001	<sup>144</sup> Ce	-1.5E-05 ± 1.6E-04	U	N509 (100-H)	12/28/2000 - 03/09/2001	<sup>144</sup> Ce	1.4E-04 ± 1.4E-03	U
		<sup>60</sup> Co	1.8E-04 ± 1.9E-04	U			<sup>60</sup> Co	4.2E-05 ± 2.2E-04	U
		<sup>134</sup> Cs	-4.0E-05 ± 1.9E-04	U			<sup>134</sup> Cs	-1.0E-04 ± 2.0E-04	U
		<sup>137</sup> Cs	-2.1E-04 ± 2.1E-04	U			<sup>137</sup> Cs	8.7E-05 ± 1.9E-04	U
		<sup>152</sup> Eu	-3.9E-05 ± 3.9E-04	U			<sup>152</sup> Eu	3.6E-04 ± 5.6E-04	U
		<sup>154</sup> Eu	-5.0E-04 ± 5.6E-04	U			<sup>154</sup> Eu	2.0E-04 ± 6.1E-04	U
		<sup>155</sup> Eu	2.5E-04 ± 5.2E-04	U			<sup>155</sup> Eu	1.6E-05 ± 1.6E-04	U
		<sup>238</sup> Pu	-1.6E-05 ± 2.8E-05	U			<sup>238</sup> Pu	-1.5E-05 ± 2.9E-05	U
		<sup>239,240</sup> Pu	1.7E-05 ± 1.3E-05				<sup>239,240</sup> Pu	1.3E-05 ± 1.3E-05	U
		<sup>103</sup> Ru	5.9E-05 ± 2.1E-04	U			<sup>103</sup> Ru	5.4E-05 ± 2.2E-04	U
		<sup>106</sup> Ru	1.8E-04 ± 1.7E-03	U			<sup>106</sup> Ru	-1.0E-03 ± 1.7E-03	U
		<sup>125</sup> Sb	-3.2E-04 ± 4.5E-04	U			<sup>125</sup> Sb	1.3E-04 ± 5.1E-04	U
		<sup>113</sup> Sn	6.7E-05 ± 2.2E-04	U			<sup>113</sup> Sn	7.9E-05 ± 2.1E-04	U
		<sup>90</sup> Sr	-5.5E-05 ± 1.6E-04	U			<sup>90</sup> Sr	-1.8E-05 ± 1.1E-04	U
		<sup>234</sup> U	1.4E-05 ± 1.1E-05				<sup>234</sup> U	-1.8E-06 ± 1.4E-05	U
		<sup>235</sup> U	1.8E-06 ± 3.5E-06	U			<sup>235</sup> U	1.2E-05 ± 1.3E-05	U
		<sup>238</sup> U	9.6E-06 ± 9.3E-06	U			<sup>238</sup> U	-5.3E-06 ± 6.4E-06	U
		<sup>65</sup> Zn	2.3E-04 ± 4.3E-04	U			<sup>65</sup> Zn	-1.9E-04 ± 4.9E-04	U
N510 (100-H)	12/28/2000 - 03/09/2001	<sup>144</sup> Ce	1.4E-03 ± 2.1E-03	U	N524 (100-H)	12/28/2000 - 06/26/2001	<sup>144</sup> Ce	3.0E-05 ± 3.0E-04	U
		<sup>60</sup> Co	-1.2E-04 ± 2.0E-04	U			<sup>60</sup> Co	2.1E-04 ± 1.2E-04	
		<sup>134</sup> Cs	1.8E-05 ± 1.8E-04	U			<sup>134</sup> Cs	-1.3E-05 ± 1.1E-04	U
		<sup>137</sup> Cs	5.9E-05 ± 2.0E-04	U			<sup>137</sup> Cs	-3.3E-05 ± 1.1E-04	U
		<sup>152</sup> Eu	-1.3E-05 ± 1.3E-04	U			<sup>152</sup> Eu	2.8E-05 ± 2.2E-04	U
		<sup>154</sup> Eu	-1.4E-04 ± 5.9E-04	U			<sup>154</sup> Eu	1.3E-05 ± 1.3E-04	U
		<sup>155</sup> Eu	1.9E-04 ± 5.8E-04	U			<sup>155</sup> Eu	-8.9E-05 ± 2.3E-04	U
		<sup>238</sup> Pu	-1.7E-06 ± 1.7E-05	U			<sup>238</sup> Pu	-4.4E-06 ± 1.8E-05	U
		<sup>239,240</sup> Pu	1.7E-06 ± 7.6E-06	U			<sup>239,240</sup> Pu	4.4E-06 ± 5.4E-06	U
		<sup>103</sup> Ru	-6.6E-05 ± 2.0E-04	U			<sup>103</sup> Ru	-4.7E-05 ± 1.2E-04	U
		<sup>106</sup> Ru	7.3E-04 ± 1.6E-03	U			<sup>106</sup> Ru	3.6E-04 ± 9.4E-04	U
		<sup>125</sup> Sb	-1.4E-04 ± 4.7E-04	U			<sup>125</sup> Sb	1.0E-04 ± 2.2E-04	U
		<sup>113</sup> Sn	-9.0E-05 ± 2.2E-04	U			<sup>113</sup> Sn	-6.8E-05 ± 1.1E-04	U
		<sup>90</sup> Sr	-1.1E-04 ± 1.7E-04	U			<sup>90</sup> Sr	2.1E-05 ± 8.5E-05	U
		<sup>234</sup> U	1.0E-05 ± 1.0E-05	U			<sup>234</sup> U	2.0E-05 ± 1.3E-05	
		<sup>235</sup> U	7.6E-06 ± 7.7E-06	U			<sup>235</sup> U	8.3E-06 ± 7.3E-06	
		<sup>238</sup> U	1.7E-06 ± 1.8E-06	U			<sup>238</sup> U	1.5E-05 ± 1.0E-05	
		<sup>65</sup> Zn	1.4E-04 ± 4.7E-04	U			<sup>65</sup> Zn	1.3E-05 ± 1.3E-04	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.

Table 2-2. Near-Facility Air Sampling Results, 2001 (pCi/m<sup>3</sup> ± total analytical uncertainty). (cont)

EDP Code	Composite Period	Isotope	Result ± Uncertainty	RQ*	EDP Code	Composite Period	Isotope	Result ± Uncertainty	RQ*
N524 (100-H)	06/26/2001 - 09/20/2001	<sup>144</sup> Ce	-8.4E-04 ± 1.1E-03	U	N524 (100-H)	09/20/2001 - 12/27/2001	<sup>144</sup> Ce	-1.9E-04 ± 1.0E-03	U
		<sup>60</sup> Co	1.1E-05 ± 1.1E-04	U			<sup>60</sup> Co	-1.1E-04 ± 1.5E-04	U
		<sup>134</sup> Cs	6.2E-05 ± 1.4E-04	U			<sup>134</sup> Cs	3.5E-06 ± 3.5E-05	U
		<sup>137</sup> Cs	-9.1E-05 ± 1.5E-04	U			<sup>137</sup> Cs	-4.0E-05 ± 1.4E-04	U
		<sup>152</sup> Eu	-1.7E-04 ± 3.0E-04	U			<sup>152</sup> Eu	-1.1E-04 ± 2.8E-04	U
		<sup>154</sup> Eu	4.0E-04 ± 3.9E-04	U			<sup>154</sup> Eu	-1.0E-04 ± 4.1E-04	U
		<sup>155</sup> Eu	-4.1E-05 ± 3.4E-04	U			<sup>155</sup> Eu	7.3E-05 ± 2.6E-04	U
		<sup>238</sup> Pu	3.0E-06 ± 9.5E-06	U			<sup>238</sup> Pu	2.6E-06 ± 5.3E-06	U
		<sup>239,240</sup> Pu	1.6E-05 ± 1.1E-05				<sup>239,240</sup> Pu	-1.3E-06 ± 2.6E-06	U
		<sup>103</sup> Ru	1.8E-05 ± 1.1E-04	U			<sup>103</sup> Ru	-5.8E-05 ± 9.9E-05	U
		<sup>106</sup> Ru	-4.6E-04 ± 1.2E-03	U			<sup>106</sup> Ru	-1.9E-04 ± 1.1E-03	U
		<sup>125</sup> Sb	-1.1E-04 ± 3.0E-04	U			<sup>125</sup> Sb	1.5E-05 ± 1.5E-04	U
		<sup>113</sup> Sn	6.1E-06 ± 6.1E-05	U			<sup>113</sup> Sn	-1.5E-05 ± 1.2E-04	U
		<sup>90</sup> Sr	2.5E-04 ± 2.0E-04				<sup>90</sup> Sr	2.9E-04 ± 1.6E-04	
		<sup>234</sup> U	1.0E-05 ± 8.3E-06				<sup>234</sup> U	2.1E-05 ± 1.2E-05	
		<sup>235</sup> U	3.1E-06 ± 4.4E-06	U			<sup>235</sup> U	1.3E-06 ± 2.5E-06	U
		<sup>238</sup> U	1.8E-05 ± 1.2E-05				<sup>238</sup> U	2.0E-05 ± 1.1E-05	
		<sup>65</sup> Zn	-9.5E-05 ± 3.0E-04	U			<sup>65</sup> Zn	8.2E-05 ± 2.8E-04	U
N525 (100-H)	12/28/2000 - 06/26/2001	<sup>144</sup> Ce	-3.8E-04 ± 1.0E-03	U	N525 (100-H)	06/26/2001 - 09/20/2001	<sup>144</sup> Ce	1.5E-03 ± 1.6E-03	U
		<sup>60</sup> Co	5.8E-05 ± 1.2E-04	U			<sup>60</sup> Co	-8.4E-06 ± 8.4E-05	U
		<sup>134</sup> Cs	-2.1E-06 ± 2.1E-05	U			<sup>134</sup> Cs	1.9E-05 ± 1.6E-04	U
		<sup>137</sup> Cs	2.0E-05 ± 1.3E-04	U			<sup>137</sup> Cs	4.3E-05 ± 1.4E-04	U
		<sup>152</sup> Eu	-1.9E-04 ± 2.8E-04	U			<sup>152</sup> Eu	-1.2E-04 ± 4.1E-04	U
		<sup>154</sup> Eu	2.4E-04 ± 4.0E-04	U			<sup>154</sup> Eu	2.3E-05 ± 2.3E-04	U
		<sup>155</sup> Eu	-3.0E-04 ± 3.1E-04	U			<sup>155</sup> Eu	-4.2E-05 ± 4.1E-04	U
		<sup>238</sup> Pu	-9.7E-06 ± 2.5E-05	U			<sup>238</sup> Pu	8.3E-06 ± 8.2E-06	U
		<sup>239,240</sup> Pu	1.1E-05 ± 1.1E-05	U			<sup>239,240</sup> Pu	2.4E-05 ± 1.4E-05	
		<sup>103</sup> Ru	-8.1E-05 ± 1.7E-04	U			<sup>103</sup> Ru	-7.6E-05 ± 1.6E-04	U
		<sup>106</sup> Ru	-3.4E-04 ± 1.2E-03	U			<sup>106</sup> Ru	-1.3E-03 ± 1.4E-03	U
		<sup>125</sup> Sb	-2.0E-04 ± 3.0E-04	U			<sup>125</sup> Sb	5.5E-05 ± 3.6E-04	U
		<sup>113</sup> Sn	-1.5E-06 ± 1.5E-05	U			<sup>113</sup> Sn	1.5E-05 ± 1.5E-04	U
		<sup>90</sup> Sr	6.7E-05 ± 1.2E-04	U			<sup>90</sup> Sr	-7.6E-05 ± 1.4E-04	U
		<sup>234</sup> U	2.0E-05 ± 1.5E-05				<sup>234</sup> U	1.1E-05 ± 8.0E-06	
		<sup>235</sup> U	1.7E-06 ± 3.5E-06	U			<sup>235</sup> U	1.5E-06 ± 3.0E-06	U
		<sup>238</sup> U	1.7E-05 ± 1.3E-05				<sup>238</sup> U	1.2E-05 ± 8.6E-06	
		<sup>65</sup> Zn	1.4E-04 ± 2.9E-04	U			<sup>65</sup> Zn	-3.8E-05 ± 3.5E-04	U
N525 (100-H)	09/20/2001 - 12/27/2001	<sup>144</sup> Ce	7.4E-04 ± 1.3E-03	U	N102 (100-N)	12/27/2000 - 06/26/2001	<sup>144</sup> Ce	2.9E-04 ± 7.7E-04	U
		<sup>60</sup> Co	4.1E-05 ± 1.3E-04	U			<sup>60</sup> Co	2.9E-04 ± 1.4E-04	
		<sup>134</sup> Cs	1.3E-05 ± 1.3E-04	U			<sup>134</sup> Cs	3.3E-05 ± 8.1E-05	U
		<sup>137</sup> Cs	1.9E-04 ± 2.3E-04	U			<sup>137</sup> Cs	2.1E-05 ± 8.3E-05	U
		<sup>152</sup> Eu	-2.4E-04 ± 3.8E-04	U			<sup>152</sup> Eu	-9.4E-05 ± 1.9E-04	U
		<sup>154</sup> Eu	-3.4E-05 ± 3.4E-04	U			<sup>154</sup> Eu	-2.2E-06 ± 2.2E-05	U
		<sup>155</sup> Eu	-1.7E-04 ± 3.6E-04	U			<sup>155</sup> Eu	5.7E-05 ± 2.0E-04	U
		<sup>238</sup> Pu	5.8E-06 ± 5.4E-06				<sup>238</sup> Pu	2.0E-06 ± 1.0E-05	U
		<sup>239,240</sup> Pu	2.0E-05 ± 1.2E-05				<sup>239,240</sup> Pu	1.3E-05 ± 8.3E-06	
		<sup>103</sup> Ru	9.5E-06 ± 9.5E-05	U			<sup>103</sup> Ru	-7.6E-05 ± 9.0E-05	U
		<sup>106</sup> Ru	-1.2E-04 ± 1.2E-03	U			<sup>106</sup> Ru	1.9E-04 ± 7.0E-04	U
		<sup>125</sup> Sb	-3.6E-04 ± 3.7E-04	U			<sup>125</sup> Sb	4.1E-05 ± 1.7E-04	U
		<sup>113</sup> Sn	2.2E-05 ± 1.4E-04	U			<sup>113</sup> Sn	5.6E-05 ± 8.2E-05	U
		<sup>90</sup> Sr	1.6E-04 ± 1.4E-04				<sup>90</sup> Sr	1.4E-04 ± 9.6E-05	
		<sup>234</sup> U	2.0E-05 ± 1.2E-05				<sup>234</sup> U	9.7E-06 ± 6.5E-06	
		<sup>235</sup> U	6.4E-06 ± 6.1E-06				<sup>235</sup> U	5.6E-06 ± 4.7E-06	
		<sup>238</sup> U	8.3E-06 ± 9.3E-06	U			<sup>238</sup> U	5.1E-06 ± 4.8E-06	U
		<sup>65</sup> Zn	-3.5E-04 ± 3.6E-04	U			<sup>65</sup> Zn	-2.7E-04 ± 2.8E-04	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.



Table 2-2. Near-Facility Air Sampling Results, 2001 (pCi/m<sup>3</sup> ± total analytical uncertainty). (cont)

EDP Code	Composite Period	Isotope	Result ± Uncertainty	RQ*	EDP Code	Composite Period	Isotope	Result ± Uncertainty	RQ*
<b>N102</b> (100-N)	06/26/2001 - 12/26/2001	<sup>144</sup> Ce	-3.3E-05 ± 3.3E-04	U	<b>N103</b> (100-N)	12/27/2000 - 06/26/2001	<sup>144</sup> Ce	-8.1E-05 ± 5.9E-04	U
		<sup>60</sup> Co	7.0E-05 ± 9.9E-05	U			<sup>60</sup> Co	3.4E-06 ± 3.4E-05	U
		<sup>134</sup> Cs	2.1E-05 ± 8.7E-05	U			<sup>134</sup> Cs	-5.1E-05 ± 6.7E-05	U
		<sup>137</sup> Cs	-2.7E-05 ± 8.2E-05	U			<sup>137</sup> Cs	5.0E-06 ± 5.0E-05	U
		<sup>152</sup> Eu	-1.9E-04 ± 1.9E-04	U			<sup>152</sup> Eu	5.5E-05 ± 1.5E-04	U
		<sup>154</sup> Eu	-7.2E-05 ± 2.5E-04	U			<sup>154</sup> Eu	-6.1E-05 ± 2.0E-04	U
		<sup>155</sup> Eu	-1.5E-04 ± 2.0E-04	U			<sup>155</sup> Eu	1.5E-04 ± 1.5E-04	U
		<sup>238</sup> Pu	-2.9E-06 ± 1.0E-05	U			<sup>238</sup> Pu	1.5E-06 ± 1.9E-06	U
		<sup>239,240</sup> Pu	7.3E-07 ± 1.5E-06	U			<sup>239,240</sup> Pu	8.3E-06 ± 4.8E-06	U
		<sup>103</sup> Ru	-1.3E-05 ± 1.1E-04	U			<sup>103</sup> Ru	-5.8E-05 ± 6.9E-05	U
		<sup>106</sup> Ru	-3.7E-05 ± 3.7E-04	U			<sup>106</sup> Ru	-2.2E-05 ± 2.2E-04	U
		<sup>125</sup> Sb	-1.3E-04 ± 1.8E-04	U			<sup>125</sup> Sb	6.6E-05 ± 1.5E-04	U
		<sup>113</sup> Sn	-8.1E-06 ± 8.1E-05	U			<sup>113</sup> Sn	3.0E-06 ± 3.0E-05	U
		<sup>90</sup> Sr	2.9E-04 ± 1.4E-04				<sup>90</sup> Sr	2.8E-05 ± 6.7E-05	U
		<sup>234</sup> U	1.2E-05 ± 7.8E-06				<sup>234</sup> U	1.0E-05 ± 6.3E-06	
		<sup>235</sup> U	6.4E-06 ± 5.3E-06				<sup>235</sup> U	2.3E-06 ± 2.9E-06	U
<b>N103</b> (100-N)	06/26/2001 - 12/26/2001	<sup>238</sup> U	8.1E-06 ± 6.6E-06		<b>N105</b> (100-N)	12/28/2000 - 06/26/2001	<sup>238</sup> U	1.1E-05 ± 6.8E-06	
		<sup>65</sup> Zn	-5.6E-05 ± 1.7E-04	U			<sup>65</sup> Zn	9.9E-05 ± 1.5E-04	U
		<sup>144</sup> Ce	-3.0E-04 ± 6.4E-04	U			<sup>144</sup> Ce	-6.9E-04 ± 8.3E-04	U
		<sup>60</sup> Co	1.6E-04 ± 1.8E-04	U			<sup>60</sup> Co	2.9E-03 ± 8.3E-04	
		<sup>134</sup> Cs	2.4E-05 ± 8.7E-05	U			<sup>134</sup> Cs	3.9E-05 ± 8.6E-05	U
		<sup>137</sup> Cs	2.7E-05 ± 7.4E-05	U			<sup>137</sup> Cs	7.4E-04 ± 2.7E-04	
		<sup>152</sup> Eu	5.9E-05 ± 1.7E-04	U			<sup>152</sup> Eu	2.3E-06 ± 2.3E-05	U
		<sup>154</sup> Eu	1.9E-05 ± 1.9E-04	U			<sup>154</sup> Eu	-3.0E-05 ± 2.0E-04	U
		<sup>155</sup> Eu	-1.4E-04 ± 1.9E-04	U			<sup>155</sup> Eu	4.9E-05 ± 2.2E-04	U
		<sup>238</sup> Pu	-8.3E-06 ± 1.4E-05	U			<sup>238</sup> Pu	8.9E-06 ± 5.2E-06	
		<sup>239,240</sup> Pu	3.0E-06 ± 3.7E-06	U			<sup>239,240</sup> Pu	5.0E-05 ± 1.8E-05	
		<sup>103</sup> Ru	-7.9E-05 ± 1.0E-04	U			<sup>103</sup> Ru	-2.1E-05 ± 8.3E-05	U
		<sup>106</sup> Ru	1.4E-04 ± 6.5E-04	U			<sup>106</sup> Ru	-4.4E-04 ± 7.2E-04	U
		<sup>125</sup> Sb	1.6E-04 ± 1.9E-04	U			<sup>125</sup> Sb	4.8E-06 ± 4.8E-05	U
		<sup>113</sup> Sn	-5.1E-05 ± 9.1E-05	U			<sup>113</sup> Sn	8.2E-05 ± 8.6E-05	U
		<sup>90</sup> Sr	8.4E-05 ± 8.7E-05	U			<sup>90</sup> Sr	1.9E-04 ± 1.0E-04	
<b>N105</b> (100-N)	06/26/2001 - 12/26/2001	<sup>234</sup> U	9.0E-06 ± 6.1E-06		<b>N106</b> (100-N)	12/27/2000 - 06/26/2001	<sup>234</sup> U	1.3E-05 ± 7.5E-06	
		<sup>235</sup> U	8.3E-07 ± 1.7E-06	U			<sup>235</sup> U	3.5E-06 ± 3.3E-06	
		<sup>238</sup> U	3.7E-06 ± 5.6E-06	U			<sup>238</sup> U	6.9E-06 ± 5.3E-06	
		<sup>65</sup> Zn	-1.2E-04 ± 1.9E-04	U			<sup>65</sup> Zn	1.1E-04 ± 2.2E-04	U
		<sup>144</sup> Ce	-4.1E-04 ± 6.1E-04	U			<sup>144</sup> Ce	-6.7E-05 ± 6.7E-04	U
		<sup>60</sup> Co	1.8E-03 ± 5.2E-04				<sup>60</sup> Co	2.1E-04 ± 1.2E-04	U
		<sup>134</sup> Cs	-3.9E-06 ± 3.9E-05	U			<sup>134</sup> Cs	-7.2E-05 ± 8.9E-05	U
		<sup>137</sup> Cs	5.5E-04 ± 2.3E-04				<sup>137</sup> Cs	1.4E-05 ± 7.8E-05	U
		<sup>152</sup> Eu	4.2E-06 ± 4.2E-05	U			<sup>152</sup> Eu	6.8E-06 ± 6.8E-05	U
		<sup>154</sup> Eu	-1.5E-05 ± 1.5E-04	U			<sup>154</sup> Eu	1.3E-04 ± 2.9E-04	U
		<sup>155</sup> Eu	1.3E-04 ± 1.7E-04	U			<sup>155</sup> Eu	-2.0E-05 ± 2.0E-04	U
		<sup>238</sup> Pu	1.8E-05 ± 1.6E-05	U			<sup>238</sup> Pu	5.7E-07 ± 5.9E-07	U
		<sup>239,240</sup> Pu	4.2E-05 ± 1.9E-05				<sup>239,240</sup> Pu	3.9E-06 ± 3.6E-06	U
		<sup>103</sup> Ru	-2.3E-05 ± 9.9E-05	U			<sup>103</sup> Ru	-3.8E-05 ± 8.8E-05	U
		<sup>106</sup> Ru	-7.9E-04 ± 8.2E-04	U			<sup>106</sup> Ru	-2.5E-04 ± 7.4E-04	U
		<sup>125</sup> Sb	7.4E-05 ± 1.5E-04	U			<sup>125</sup> Sb	-2.4E-06 ± 2.4E-05	U
		<sup>113</sup> Sn	-8.3E-06 ± 8.2E-05	U			<sup>113</sup> Sn	-2.9E-05 ± 9.7E-05	U
<b>N106</b> (100-N)	06/26/2001 - 12/26/2001	<sup>90</sup> Sr	2.8E-04 ± 1.3E-04				<sup>90</sup> Sr	-3.6E-05 ± 6.9E-05	U
		<sup>234</sup> U	1.6E-05 ± 8.8E-06				<sup>234</sup> U	1.3E-05 ± 7.9E-06	
		<sup>235</sup> U	1.6E-06 ± 3.2E-06	U			<sup>235</sup> U	1.6E-06 ± 3.3E-06	U
		<sup>238</sup> U	6.6E-06 ± 5.3E-06				<sup>238</sup> U	9.3E-06 ± 6.2E-06	
		<sup>65</sup> Zn	-7.4E-05 ± 1.7E-04	U			<sup>65</sup> Zn	1.3E-04 ± 2.1E-04	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.

Table 2-2. Near-Facility Air Sampling Results, 2001 (pCi/m<sup>3</sup> ± total analytical uncertainty). (cont)

EDP Code	Composite Period	Isotope	Result ± Uncertainty	RQ*	EDP Code	Composite Period	Isotope	Result ± Uncertainty	RQ*
<b>N106</b> (100-N)	06/26/2001 - 12/26/2001	<sup>144</sup> Ce	-1.0E-03 ± 2.6E-03	U	<b>N526</b> (100-N)	08/30/2001 - 12/26/2001 sampling initiated: 8/30/01	<sup>144</sup> Ce	1.6E-04 ± 9.0E-04	U
		<sup>60</sup> Co	4.9E-05 ± 5.5E-05	U			<sup>60</sup> Co	1.4E-04 ± 1.4E-04	U
		<sup>134</sup> Cs	4.7E-05 ± 8.7E-05	U			<sup>134</sup> Cs	5.7E-05 ± 1.3E-04	U
		<sup>137</sup> Cs	8.1E-05 ± 1.0E-04	U			<sup>137</sup> Cs	2.9E-04 ± 1.5E-04	U
		<sup>152</sup> Eu	-9.8E-05 ± 3.5E-04	U			<sup>152</sup> Eu	2.1E-04 ± 2.4E-04	U
		<sup>154</sup> Eu	7.3E-05 ± 1.9E-04	U			<sup>154</sup> Eu	-1.2E-05 ± 1.2E-04	U
		<sup>155</sup> Eu	1.2E-04 ± 5.9E-04	U			<sup>155</sup> Eu	-8.3E-06 ± 8.3E-05	U
		<sup>238</sup> Pu	-6.6E-07 ± 6.6E-06	U			<sup>238</sup> Pu	5.2E-06 ± 1.1E-05	U
		<sup>239,240</sup> Pu	6.6E-06 ± 5.7E-06	U			<sup>239,240</sup> Pu	2.7E-05 ± 1.4E-05	U
		<sup>103</sup> Ru	1.2E-04 ± 1.7E-04	U			<sup>103</sup> Ru	-5.9E-05 ± 1.7E-04	U
		<sup>106</sup> Ru	3.2E-04 ± 8.6E-04	U			<sup>106</sup> Ru	2.6E-04 ± 9.4E-04	U
		<sup>125</sup> Sb	-6.2E-05 ± 3.9E-04	U			<sup>125</sup> Sb	-1.7E-04 ± 2.5E-04	U
		<sup>113</sup> Sn	-5.2E-06 ± 5.2E-05	U			<sup>113</sup> Sn	6.4E-05 ± 1.2E-04	U
		<sup>90</sup> Sr	5.9E-05 ± 8.4E-05	U			<sup>90</sup> Sr	6.5E-05 ± 1.2E-04	U
		<sup>234</sup> U	1.9E-05 ± 9.9E-06	U			<sup>234</sup> U	1.6E-05 ± 9.6E-06	U
		<sup>235</sup> U	8.1E-07 ± 2.9E-06	U			<sup>235</sup> U	3.7E-06 ± 4.5E-06	U
		<sup>238</sup> U	6.2E-06 ± 4.8E-06	U			<sup>238</sup> U	6.9E-06 ± 5.7E-06	U
<b>N482</b> (ERDF)	12/28/2000 - 06/27/2001	<sup>65</sup> Zn	-8.4E-05 ± 1.4E-04	U	<b>N482</b> (ERDF)	06/27/2001 - 12/27/2001	<sup>65</sup> Zn	-1.8E-04 ± 2.7E-04	U
		<sup>144</sup> Ce	1.2E-04 ± 9.0E-04	U			<sup>144</sup> Ce	-1.3E-04 ± 6.9E-04	U
		<sup>60</sup> Co	3.0E-04 ± 1.4E-04	U			<sup>60</sup> Co	1.4E-04 ± 1.1E-04	U
		<sup>134</sup> Cs	-2.3E-05 ± 9.0E-05	U			<sup>134</sup> Cs	3.0E-05 ± 8.8E-05	U
		<sup>137</sup> Cs	1.6E-04 ± 1.3E-04	U			<sup>137</sup> Cs	1.5E-05 ± 8.3E-05	U
		<sup>152</sup> Eu	-1.1E-04 ± 2.5E-04	U			<sup>152</sup> Eu	-5.9E-05 ± 2.0E-04	U
		<sup>154</sup> Eu	8.6E-05 ± 2.9E-04	U			<sup>154</sup> Eu	-1.2E-04 ± 2.7E-04	U
		<sup>155</sup> Eu	-3.2E-05 ± 2.3E-04	U			<sup>155</sup> Eu	-8.1E-05 ± 1.8E-04	U
		<sup>238</sup> Pu	-2.8E-06 ± 8.9E-06	U			<sup>238</sup> Pu	7.8E-06 ± 5.3E-06	U
		<sup>239,240</sup> Pu	1.2E-05 ± 7.2E-06	U			<sup>239,240</sup> Pu	4.3E-04 ± 1.3E-04	U
		<sup>103</sup> Ru	2.7E-06 ± 2.7E-05	U			<sup>103</sup> Ru	-6.3E-05 ± 1.2E-04	U
		<sup>106</sup> Ru	2.5E-05 ± 2.5E-04	U			<sup>106</sup> Ru	-1.8E-04 ± 6.9E-04	U
		<sup>125</sup> Sb	2.1E-05 ± 2.1E-04	U			<sup>125</sup> Sb	1.4E-04 ± 1.8E-04	U
		<sup>113</sup> Sn	1.7E-05 ± 9.9E-05	U			<sup>113</sup> Sn	1.5E-05 ± 9.3E-05	U
		<sup>90</sup> Sr	-5.1E-05 ± 6.3E-05	U			<sup>90</sup> Sr	2.3E-04 ± 1.1E-04	U
		<sup>234</sup> U	1.7E-05 ± 9.2E-06	U			<sup>234</sup> U	1.7E-05 ± 1.0E-05	U
		<sup>235</sup> U	3.0E-06 ± 3.7E-06	U			<sup>235</sup> U	6.3E-06 ± 5.6E-06	U
		<sup>238</sup> U	1.1E-05 ± 6.7E-06	U			<sup>238</sup> U	1.6E-05 ± 1.0E-05	U
<b>N517</b> (ERDF)	12/28/2000 - 06/27/2001	<sup>65</sup> Zn	-1.2E-04 ± 2.3E-04	U	<b>N517</b> (ERDF)	06/27/2001 - 12/27/2001	<sup>65</sup> Zn	1.8E-04 ± 2.1E-04	U
		<sup>144</sup> Ce	1.3E-04 ± 6.8E-04	U			<sup>144</sup> Ce	-1.8E-04 ± 6.7E-04	U
		<sup>60</sup> Co	2.9E-04 ± 1.2E-04	U			<sup>60</sup> Co	1.4E-04 ± 1.0E-04	U
		<sup>134</sup> Cs	2.5E-05 ± 7.5E-05	U			<sup>134</sup> Cs	7.7E-06 ± 7.7E-05	U
		<sup>137</sup> Cs	1.3E-04 ± 1.1E-04	U			<sup>137</sup> Cs	4.6E-05 ± 7.9E-05	U
		<sup>152</sup> Eu	7.9E-05 ± 1.7E-04	U			<sup>152</sup> Eu	-1.2E-04 ± 2.0E-04	U
		<sup>154</sup> Eu	6.1E-05 ± 2.2E-04	U			<sup>154</sup> Eu	2.7E-04 ± 2.7E-04	U
		<sup>155</sup> Eu	-1.5E-05 ± 1.5E-04	U			<sup>155</sup> Eu	3.8E-06 ± 3.8E-05	U
		<sup>238</sup> Pu	-3.4E-06 ± 9.8E-06	U			<sup>238</sup> Pu	6.5E-07 ± 2.9E-06	U
		<sup>239,240</sup> Pu	1.4E-05 ± 8.3E-06	U			<sup>239,240</sup> Pu	7.0E-06 ± 5.0E-06	U
		<sup>103</sup> Ru	-3.1E-06 ± 3.1E-05	U			<sup>103</sup> Ru	1.3E-05 ± 1.2E-04	U
		<sup>106</sup> Ru	-5.1E-05 ± 5.1E-04	U			<sup>106</sup> Ru	-6.8E-04 ± 7.6E-04	U
		<sup>125</sup> Sb	-3.0E-05 ± 1.7E-04	U			<sup>125</sup> Sb	-1.8E-05 ± 1.7E-04	U
		<sup>113</sup> Sn	-1.5E-05 ± 8.8E-05	U			<sup>113</sup> Sn	-3.9E-05 ± 9.6E-05	U
		<sup>90</sup> Sr	1.5E-05 ± 7.7E-05	U			<sup>90</sup> Sr	2.8E-04 ± 1.2E-04	U
		<sup>234</sup> U	2.3E-05 ± 1.1E-05	U			<sup>234</sup> U	1.9E-05 ± 1.0E-05	U
		<sup>235</sup> U	-8.2E-07 ± 1.7E-06	U			<sup>235</sup> U	4.7E-06 ± 4.7E-06	U
		<sup>238</sup> U	2.0E-05 ± 1.0E-05	U			<sup>238</sup> U	7.7E-06 ± 6.0E-06	U
		<sup>65</sup> Zn	1.8E-04 ± 1.8E-04	U			<sup>65</sup> Zn	-2.0E-05 ± 2.0E-04	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.

Table 2-2. Near-Facility Air Sampling Results, 2001 (pCi/m<sup>3</sup> ± total analytical uncertainty). (cont)

EDP Code	Composite Period	Isotope	Result ± Uncertainty	RQ*	EDP Code	Composite Period	Isotope	Result ± Uncertainty	RQ*
N518 (ERDF)	12/28/2000 - 06/27/2001	<sup>144</sup> Ce	-1.0E-04 ± 7.5E-04	U	N518 (ERDF)	06/27/2001 - 12/27/2001	<sup>144</sup> Ce	-5.7E-05 ± 5.7E-04	U
		<sup>60</sup> Co	6.3E-05 ± 8.7E-05	U			<sup>60</sup> Co	-5.1E-05 ± 9.0E-05	U
		<sup>134</sup> Cs	-6.4E-07 ± 6.4E-06	U			<sup>134</sup> Cs	-2.4E-05 ± 8.9E-05	U
		<sup>137</sup> Cs	1.0E-04 ± 1.6E-04	U			<sup>137</sup> Cs	7.8E-05 ± 8.5E-05	U
		<sup>152</sup> Eu	6.9E-05 ± 1.8E-04	U			<sup>152</sup> Eu	1.5E-04 ± 1.9E-04	U
		<sup>154</sup> Eu	4.6E-05 ± 2.2E-04	U			<sup>154</sup> Eu	-2.3E-04 ± 2.4E-04	U
		<sup>155</sup> Eu	-1.4E-04 ± 2.1E-04	U			<sup>155</sup> Eu	-1.7E-04 ± 2.0E-04	U
		<sup>238</sup> Pu	9.3E-06 ± 1.1E-05	U			<sup>238</sup> Pu	4.8E-06 ± 1.4E-05	U
		<sup>239,240</sup> Pu	1.5E-05 ± 9.1E-06	U			<sup>239,240</sup> Pu	4.0E-06 ± 6.1E-06	U
		<sup>103</sup> Ru	-5.0E-05 ± 9.1E-05	U			<sup>103</sup> Ru	-8.2E-05 ± 1.4E-04	U
		<sup>106</sup> Ru	-4.6E-04 ± 7.4E-04	U			<sup>106</sup> Ru	-2.5E-04 ± 7.2E-04	U
		<sup>125</sup> Sb	6.3E-05 ± 1.7E-04	U			<sup>125</sup> Sb	5.3E-05 ± 1.6E-04	U
		<sup>113</sup> Sn	-2.1E-05 ± 1.0E-04	U			<sup>113</sup> Sn	-2.8E-05 ± 9.4E-05	U
		<sup>90</sup> Sr	6.2E-05 ± 8.8E-05	U			<sup>90</sup> Sr	1.4E-04 ± 9.5E-05	U
		<sup>234</sup> U	1.5E-05 ± 8.4E-06	U			<sup>234</sup> U	1.8E-05 ± 9.8E-06	U
		<sup>235</sup> U	1.8E-06 ± 2.5E-06	U			<sup>235</sup> U	3.4E-06 ± 4.2E-06	U
		<sup>238</sup> U	6.5E-06 ± 5.0E-06	U			<sup>238</sup> U	1.4E-05 ± 8.4E-06	U
		<sup>65</sup> Zn	2.3E-04 ± 2.0E-04	U			<sup>65</sup> Zn	3.3E-05 ± 2.0E-04	U
N019 (200-East)	12/27/2000 - 06/25/2001	<sup>144</sup> Ce	-9.2E-04 ± 9.8E-04	U	N019 (200-East)	06/25/2001 - 12/26/2001	<sup>144</sup> Ce	-7.5E-04 ± 7.8E-04	U
		<sup>60</sup> Co	-2.5E-05 ± 9.1E-05	U			<sup>60</sup> Co	-6.6E-05 ± 8.0E-05	U
		<sup>134</sup> Cs	-8.2E-05 ± 1.0E-04	U			<sup>134</sup> Cs	-1.1E-04 ± 1.1E-04	U
		<sup>137</sup> Cs	2.2E-04 ± 2.0E-04	U			<sup>137</sup> Cs	4.0E-05 ± 7.0E-05	U
		<sup>152</sup> Eu	-2.5E-04 ± 2.8E-04	U			<sup>152</sup> Eu	-6.0E-05 ± 2.1E-04	U
		<sup>154</sup> Eu	-9.7E-05 ± 2.2E-04	U			<sup>154</sup> Eu	-1.9E-05 ± 1.9E-04	U
		<sup>155</sup> Eu	-4.0E-05 ± 2.7E-04	U			<sup>155</sup> Eu	6.2E-05 ± 2.0E-04	U
		<sup>238</sup> Pu	-1.8E-06 ± 1.0E-05	U			<sup>238</sup> Pu	3.7E-06 ± 9.0E-06	U
		<sup>239,240</sup> Pu	8.3E-06 ± 6.1E-06	U			<sup>239,240</sup> Pu	1.3E-05 ± 7.4E-06	U
		<sup>103</sup> Ru	1.5E-05 ± 7.5E-05	U			<sup>103</sup> Ru	7.2E-06 ± 6.4E-05	U
		<sup>106</sup> Ru	-1.2E-04 ± 8.8E-04	U			<sup>106</sup> Ru	-1.2E-04 ± 6.9E-04	U
		<sup>125</sup> Sb	-1.0E-04 ± 2.1E-04	U			<sup>125</sup> Sb	1.3E-04 ± 1.7E-04	U
		<sup>113</sup> Sn	-2.8E-06 ± 2.8E-05	U			<sup>113</sup> Sn	-5.8E-05 ± 7.7E-05	U
		<sup>90</sup> Sr	8.3E-05 ± 8.2E-05	U			<sup>90</sup> Sr	1.8E-04 ± 1.0E-04	U
		<sup>234</sup> U	1.9E-05 ± 1.0E-05	U			<sup>234</sup> U	7.8E-06 ± 5.3E-06	U
		<sup>235</sup> U	2.8E-06 ± 3.5E-06	U			<sup>235</sup> U	7.8E-07 ± 1.6E-06	U
		<sup>238</sup> U	1.2E-05 ± 7.6E-06	U			<sup>238</sup> U	1.8E-05 ± 9.5E-06	U
		<sup>65</sup> Zn	-6.6E-05 ± 2.1E-04	U			<sup>65</sup> Zn	1.2E-04 ± 1.9E-04	U
N158 (200-East)	12/27/2000 - 06/25/2001	<sup>144</sup> Ce	-9.2E-04 ± 1.1E-03	U	N158 (200-East)	06/25/2001 - 12/26/2001	<sup>144</sup> Ce	-3.7E-04 ± 7.6E-04	U
		<sup>60</sup> Co	-5.1E-06 ± 5.1E-05	U			<sup>60</sup> Co	2.2E-05 ± 7.7E-05	U
		<sup>134</sup> Cs	1.7E-05 ± 9.9E-05	U			<sup>134</sup> Cs	7.6E-07 ± 7.7E-06	U
		<sup>137</sup> Cs	8.0E-05 ± 1.1E-04	U			<sup>137</sup> Cs	2.0E-04 ± 1.1E-04	U
		<sup>152</sup> Eu	-7.2E-06 ± 7.2E-05	U			<sup>152</sup> Eu	-1.5E-05 ± 1.5E-04	U
		<sup>154</sup> Eu	4.9E-05 ± 2.6E-04	U			<sup>154</sup> Eu	4.6E-05 ± 2.2E-04	U
		<sup>155</sup> Eu	-1.8E-04 ± 2.9E-04	U			<sup>155</sup> Eu	2.1E-05 ± 2.0E-04	U
		<sup>238</sup> Pu	1.1E-06 ± 1.1E-05	U			<sup>238</sup> Pu	-5.6E-06 ± 1.0E-05	U
		<sup>239,240</sup> Pu	4.9E-06 ± 4.6E-06	U			<sup>239,240</sup> Pu	8.2E-07 ± 4.3E-06	U
		<sup>103</sup> Ru	2.1E-05 ± 8.7E-05	U			<sup>103</sup> Ru	-3.1E-05 ± 7.9E-05	U
		<sup>106</sup> Ru	1.9E-04 ± 8.5E-04	U			<sup>106</sup> Ru	1.6E-03 ± 1.5E-03	U
		<sup>125</sup> Sb	-1.8E-04 ± 2.2E-04	U			<sup>125</sup> Sb	5.4E-05 ± 1.9E-04	U
		<sup>113</sup> Sn	4.1E-05 ± 1.1E-04	U			<sup>113</sup> Sn	-7.8E-06 ± 7.8E-05	U
		<sup>90</sup> Sr	1.9E-05 ± 1.0E-04	U			<sup>90</sup> Sr	1.9E-04 ± 1.1E-04	U
		<sup>234</sup> U	2.2E-05 ± 1.9E-05	U			<sup>234</sup> U	9.6E-06 ± 7.2E-06	U
		<sup>235</sup> U	3.7E-06 ± 3.7E-05	U			<sup>235</sup> U	4.9E-06 ± 4.9E-06	U
		<sup>238</sup> U	1.1E-05 ± 1.4E-05	U			<sup>238</sup> U	1.1E-05 ± 7.1E-06	U
		<sup>65</sup> Zn	1.1E-04 ± 2.3E-04	U			<sup>65</sup> Zn	8.1E-05 ± 1.9E-04	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.

Table 2-2. Near-Facility Air Sampling Results, 2001 (pCi/m<sup>3</sup> ± total analytical uncertainty). (cont)

EDP Code	Composite Period	Isotope	Result ± Uncertainty	RQ*	EDP Code	Composite Period	Isotope	Result ± Uncertainty	RQ*
N480 (200-East, Canister Storage Building)	12/27/2000 - 06/25/2001	<sup>241</sup> Am	4.7E-06 ± 9.0E-06	U	N480 (200-East, Canister Storage Building)	06/25/2001 - 12/26/2001	<sup>241</sup> Am	2.1E-06 ± 1.0E-05	U
		<sup>144</sup> Ce	-3.5E-04 ± 8.7E-04	U			<sup>144</sup> Ce	-5.1E-04 ± 7.4E-04	U
		<sup>60</sup> Co	1.1E-05 ± 9.0E-05	U			<sup>60</sup> Co	6.3E-05 ± 7.7E-05	U
		<sup>134</sup> Cs	-1.3E-05 ± 8.3E-05	U			<sup>134</sup> Cs	3.4E-05 ± 7.8E-05	U
		<sup>137</sup> Cs	1.1E-04 ± 8.4E-05	U			<sup>137</sup> Cs	-3.1E-05 ± 7.2E-05	U
		<sup>152</sup> Eu	7.5E-06 ± 7.5E-05	U			<sup>152</sup> Eu	-1.6E-04 ± 1.7E-04	U
		<sup>154</sup> Eu	-9.4E-05 ± 2.5E-04	U			<sup>154</sup> Eu	7.8E-05 ± 2.3E-04	U
		<sup>155</sup> Eu	-1.3E-04 ± 2.2E-04	U			<sup>155</sup> Eu	-2.9E-04 ± 3.0E-04	U
		<sup>238</sup> Pu	1.9E-05 ± 2.3E-05	U			<sup>238</sup> Pu	1.5E-06 ± 1.5E-06	U
		<sup>239,240</sup> Pu	1.7E-05 ± 1.2E-05	U			<sup>239,240</sup> Pu	2.9E-06 ± 5.9E-06	U
		<sup>241</sup> Pu	-4.9E-05 ± 5.0E-05	U			<sup>241</sup> Pu	-3.1E-04 ± 3.2E-04	U
		<sup>103</sup> Ru	-4.2E-05 ± 8.1E-05	U			<sup>103</sup> Ru	-4.0E-05 ± 8.2E-05	U
		<sup>106</sup> Ru	6.1E-04 ± 7.4E-04	U			<sup>106</sup> Ru	3.7E-04 ± 7.2E-04	U
		<sup>125</sup> Sb	3.0E-05 ± 1.9E-04	U			<sup>125</sup> Sb	1.9E-05 ± 1.7E-04	U
		<sup>113</sup> Sn	-2.1E-05 ± 9.1E-05	U			<sup>113</sup> Sn	-2.8E-05 ± 7.4E-05	U
		<sup>90</sup> Sr	1.2E-04 ± 8.3E-05	U			<sup>90</sup> Sr	3.0E-04 ± 1.3E-04	U
		<sup>234</sup> U	9.8E-06 ± 6.4E-06	U			<sup>234</sup> U	9.1E-06 ± 6.4E-06	U
		<sup>235</sup> U	1.5E-06 ± 2.2E-06	U			<sup>235</sup> U	8.4E-07 ± 1.7E-06	U
		<sup>238</sup> U	7.7E-06 ± 5.2E-06	U			<sup>238</sup> U	9.1E-06 ± 6.4E-06	U
		<sup>65</sup> Zn	7.9E-05 ± 2.0E-04	U			<sup>65</sup> Zn	-2.7E-05 ± 1.8E-04	U
N481 (200-East, Canister Storage Building)	12/27/2000 - 06/25/2001	<sup>241</sup> Am	1.8E-06 ± 1.1E-05	U	N481 (200-East, Canister Storage Building)	06/25/2001 - 12/26/2001	<sup>241</sup> Am	4.2E-06 ± 9.8E-06	U
		<sup>144</sup> Ce	1.3E-04 ± 7.0E-04	U			<sup>144</sup> Ce	-9.9E-05 ± 6.5E-04	U
		<sup>60</sup> Co	2.2E-05 ± 8.2E-05	U			<sup>60</sup> Co	5.2E-05 ± 7.5E-05	U
		<sup>134</sup> Cs	2.3E-06 ± 2.4E-05	U			<sup>134</sup> Cs	1.0E-05 ± 8.0E-05	U
		<sup>137</sup> Cs	8.1E-05 ± 7.7E-05	U			<sup>137</sup> Cs	-1.4E-05 ± 7.1E-05	U
		<sup>152</sup> Eu	2.6E-05 ± 1.8E-04	U			<sup>152</sup> Eu	4.9E-06 ± 5.0E-05	U
		<sup>154</sup> Eu	2.8E-05 ± 2.2E-04	U			<sup>154</sup> Eu	-2.0E-04 ± 2.4E-04	U
		<sup>155</sup> Eu	2.3E-05 ± 1.9E-04	U			<sup>155</sup> Eu	-9.6E-05 ± 2.0E-04	U
		<sup>238</sup> Pu	1.2E-05 ± 1.9E-05	U			<sup>238</sup> Pu	1.4E-06 ± 8.3E-06	U
		<sup>239,240</sup> Pu	7.0E-06 ± 6.7E-06	U			<sup>239,240</sup> Pu	2.8E-06 ± 5.6E-06	U
		<sup>241</sup> Pu	-8.0E-04 ± 8.2E-04	U			<sup>241</sup> Pu	-2.1E-04 ± 2.2E-04	U
		<sup>103</sup> Ru	1.6E-05 ± 7.3E-05	U			<sup>103</sup> Ru	-2.8E-06 ± 2.8E-05	U
		<sup>106</sup> Ru	-5.2E-05 ± 5.2E-04	U			<sup>106</sup> Ru	-3.9E-04 ± 7.7E-04	U
		<sup>125</sup> Sb	-2.1E-04 ± 2.1E-04	U			<sup>125</sup> Sb	-6.7E-05 ± 1.6E-04	U
		<sup>113</sup> Sn	2.3E-06 ± 2.3E-05	U			<sup>113</sup> Sn	-2.4E-05 ± 7.3E-05	U
		<sup>90</sup> Sr	2.5E-06 ± 2.5E-05	U			<sup>90</sup> Sr	1.5E-04 ± 9.0E-05	U
		<sup>234</sup> U	6.8E-06 ± 4.8E-06	U			<sup>234</sup> U	5.5E-06 ± 5.6E-06	U
		<sup>235</sup> U	2.2E-06 ± 2.7E-06	U			<sup>235</sup> U	5.2E-06 ± 5.2E-06	U
		<sup>238</sup> U	8.7E-06 ± 5.6E-06	U			<sup>238</sup> U	1.2E-05 ± 8.2E-06	U
		<sup>65</sup> Zn	6.0E-07 ± 6.0E-06	U			<sup>65</sup> Zn	-1.9E-04 ± 2.0E-04	U
N498 (200-East)	12/27/2000 - 06/25/2001	<sup>144</sup> Ce	-5.7E-04 ± 6.1E-04	U	N498 (200-East)	06/25/2001 - 12/26/2001	<sup>144</sup> Ce	1.0E-04 ± 5.6E-04	U
		<sup>60</sup> Co	-4.1E-06 ± 4.1E-05	U			<sup>60</sup> Co	3.0E-05 ± 5.8E-05	U
		<sup>134</sup> Cs	-3.5E-05 ± 7.1E-05	U			<sup>134</sup> Cs	1.2E-05 ± 6.8E-05	U
		<sup>137</sup> Cs	-2.8E-06 ± 2.8E-05	U			<sup>137</sup> Cs	-1.6E-05 ± 6.2E-05	U
		<sup>152</sup> Eu	5.8E-05 ± 1.7E-04	U			<sup>152</sup> Eu	-7.4E-05 ± 1.4E-04	U
		<sup>154</sup> Eu	-3.4E-05 ± 1.9E-04	U			<sup>154</sup> Eu	1.1E-04 ± 1.8E-04	U
		<sup>155</sup> Eu	1.4E-04 ± 1.8E-04	U			<sup>155</sup> Eu	1.3E-05 ± 1.3E-04	U
		<sup>238</sup> Pu	9.3E-06 ± 1.5E-05	U			<sup>238</sup> Pu	1.8E-06 ± 1.0E-05	U
		<sup>239,240</sup> Pu	4.8E-06 ± 5.4E-06	U			<sup>239,240</sup> Pu	4.8E-06 ± 4.5E-06	U
		<sup>103</sup> Ru	-4.0E-05 ± 6.7E-05	U			<sup>103</sup> Ru	-9.5E-06 ± 6.3E-05	U
		<sup>106</sup> Ru	1.2E-04 ± 6.0E-04	U			<sup>106</sup> Ru	-8.0E-06 ± 8.0E-05	U
		<sup>125</sup> Sb	2.3E-05 ± 1.5E-04	U			<sup>125</sup> Sb	-3.3E-05 ± 1.4E-04	U
		<sup>113</sup> Sn	6.5E-06 ± 6.5E-05	U			<sup>113</sup> Sn	1.4E-05 ± 6.0E-05	U
		<sup>90</sup> Sr	1.1E-04 ± 8.0E-05	U			<sup>90</sup> Sr	1.4E-05 ± 7.3E-05	U
		<sup>234</sup> U	1.9E-05 ± 9.1E-06	U			<sup>234</sup> U	9.2E-06 ± 8.1E-06	U
		<sup>235</sup> U	4.3E-06 ± 4.2E-06	U			<sup>235</sup> U	5.5E-06 ± 4.7E-06	U
		<sup>238</sup> U	1.9E-05 ± 9.3E-06	U			<sup>238</sup> U	9.2E-06 ± 6.7E-06	U
		<sup>65</sup> Zn	4.9E-05 ± 1.5E-04	U			<sup>65</sup> Zn	-8.2E-05 ± 1.3E-04	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.

Table 2-2. Near-Facility Air Sampling Results, 2001 (pCi/m<sup>3</sup> ± total analytical uncertainty). (cont)

EDP Code	Composite Period	Isotope	Result ± Uncertainty	RQ*	EDP Code	Composite Period	Isotope	Result ± Uncertainty	RQ*
N499 (200-East)	12/27/2000 - 06/25/2001	<sup>144</sup> Ce	-2.4E-05 ± 2.4E-04	U	N499 (200-East)	06/25/2001 - 12/26/2001	<sup>144</sup> Ce	6.6E-04 ± 7.3E-04	U
		<sup>60</sup> Co	1.9E-05 ± 6.5E-05	U			<sup>60</sup> Co	2.6E-05 ± 8.1E-05	U
		<sup>134</sup> Cs	-2.5E-05 ± 7.7E-05	U			<sup>134</sup> Cs	3.2E-05 ± 7.9E-05	U
		<sup>137</sup> Cs	4.8E-05 ± 7.4E-05	U			<sup>137</sup> Cs	8.0E-05 ± 7.5E-05	U
		<sup>152</sup> Eu	-8.5E-06 ± 8.5E-05	U			<sup>152</sup> Eu	-6.1E-05 ± 1.7E-04	U
		<sup>154</sup> Eu	2.0E-04 ± 2.3E-04	U			<sup>154</sup> Eu	-3.3E-04 ± 3.4E-04	U
		<sup>155</sup> Eu	7.2E-05 ± 2.1E-04	U			<sup>155</sup> Eu	-1.4E-05 ± 1.4E-04	U
		<sup>238</sup> Pu	-2.0E-06 ± 1.0E-05	U			<sup>238</sup> Pu	7.0E-07 ± 7.0E-06	U
		<sup>239,240</sup> Pu	1.3E-05 ± 7.2E-06	U			<sup>239,240</sup> Pu	3.5E-06 ± 4.0E-06	U
		<sup>103</sup> Ru	4.6E-05 ± 6.6E-05	U			<sup>103</sup> Ru	-1.8E-05 ± 7.9E-05	U
		<sup>106</sup> Ru	-1.1E-04 ± 6.6E-04	U			<sup>106</sup> Ru	3.4E-04 ± 6.6E-04	U
		<sup>125</sup> Sb	2.7E-05 ± 1.6E-04	U			<sup>125</sup> Sb	1.0E-04 ± 1.7E-04	U
		<sup>113</sup> Sn	3.7E-05 ± 9.4E-05	U			<sup>113</sup> Sn	1.4E-05 ± 6.9E-05	U
		<sup>90</sup> Sr	-9.8E-05 ± 1.0E-04	U			<sup>90</sup> Sr	1.3E-04 ± 9.0E-05	U
		<sup>234</sup> U	7.7E-06 ± 5.9E-06	U			<sup>234</sup> U	3.9E-06 ± 3.7E-06	U
		<sup>235</sup> U	3.3E-06 ± 3.4E-06	U			<sup>235</sup> U	3.4E-06 ± 4.2E-06	U
		<sup>238</sup> U	1.0E-05 ± 6.6E-06	U			<sup>238</sup> U	1.2E-05 ± 8.2E-06	U
		<sup>65</sup> Zn	1.0E-04 ± 1.5E-04	U			<sup>65</sup> Zn	1.5E-04 ± 1.7E-04	U
N957 (200-East)	12/27/2000 - 06/25/2001	<sup>144</sup> Ce	1.4E-04 ± 5.5E-04	U	N957 (200-East)	06/25/2001 - 12/26/2001	<sup>144</sup> Ce	-3.5E-04 ± 6.6E-04	U
		<sup>60</sup> Co	5.8E-05 ± 7.0E-05	U			<sup>60</sup> Co	6.6E-05 ± 8.6E-05	U
		<sup>134</sup> Cs	2.9E-05 ± 6.7E-05	U			<sup>134</sup> Cs	9.3E-06 ± 8.3E-05	U
		<sup>137</sup> Cs	5.5E-05 ± 7.0E-05	U			<sup>137</sup> Cs	2.1E-05 ± 7.4E-05	U
		<sup>152</sup> Eu	-2.5E-05 ± 1.4E-04	U			<sup>152</sup> Eu	-6.2E-05 ± 1.8E-04	U
		<sup>154</sup> Eu	-4.6E-05 ± 2.0E-04	U			<sup>154</sup> Eu	-1.4E-05 ± 1.4E-04	U
		<sup>155</sup> Eu	-1.2E-05 ± 1.2E-04	U			<sup>155</sup> Eu	1.7E-05 ± 1.7E-04	U
		<sup>238</sup> Pu	-8.3E-06 ± 1.4E-05	U			<sup>238</sup> Pu	4.2E-06 ± 8.8E-06	U
		<sup>239,240</sup> Pu	5.8E-06 ± 5.7E-06	U			<sup>239,240</sup> Pu	-5.9E-07 ± 2.7E-06	U
		<sup>103</sup> Ru	-5.0E-05 ± 6.8E-05	U			<sup>103</sup> Ru	-3.7E-05 ± 9.1E-05	U
		<sup>106</sup> Ru	-3.4E-04 ± 5.6E-04	U			<sup>106</sup> Ru	2.5E-04 ± 6.6E-04	U
		<sup>125</sup> Sb	4.9E-05 ± 1.5E-04	U			<sup>125</sup> Sb	4.2E-06 ± 4.2E-05	U
		<sup>113</sup> Sn	-6.2E-06 ± 6.1E-05	U			<sup>113</sup> Sn	-3.5E-05 ± 8.5E-05	U
		<sup>90</sup> Sr	1.7E-04 ± 9.8E-05	U			<sup>90</sup> Sr	-8.5E-05 ± 8.8E-05	U
		<sup>234</sup> U	1.6E-05 ± 8.6E-06	U			<sup>234</sup> U	1.2E-05 ± 7.0E-06	U
		<sup>235</sup> U	2.4E-06 ± 2.9E-06	U			<sup>235</sup> U	5.6E-06 ± 4.4E-06	U
		<sup>238</sup> U	1.2E-05 ± 6.8E-06	U			<sup>238</sup> U	9.2E-06 ± 5.8E-06	U
		<sup>65</sup> Zn	-7.0E-05 ± 1.4E-04	U			<sup>65</sup> Zn	-3.6E-05 ± 2.1E-04	U
N967 (200-East)	12/27/2000 - 06/25/2001	<sup>144</sup> Ce	-9.5E-04 ± 9.8E-04	U	N967 (200-East)	06/25/2001 - 12/26/2001	<sup>144</sup> Ce	5.5E-04 ± 6.4E-04	U
		<sup>60</sup> Co	-2.0E-06 ± 2.0E-05	U			<sup>60</sup> Co	-6.1E-05 ± 8.1E-05	U
		<sup>134</sup> Cs	-3.5E-05 ± 7.1E-05	U			<sup>134</sup> Cs	8.7E-05 ± 7.8E-05	U
		<sup>137</sup> Cs	1.8E-04 ± 1.3E-04	U			<sup>137</sup> Cs	1.9E-04 ± 1.0E-04	U
		<sup>152</sup> Eu	-7.5E-05 ± 1.9E-04	U			<sup>152</sup> Eu	5.1E-05 ± 1.6E-04	U
		<sup>154</sup> Eu	3.0E-05 ± 1.9E-04	U			<sup>154</sup> Eu	-1.3E-04 ± 2.6E-04	U
		<sup>155</sup> Eu	1.7E-08 ± 1.7E-07	U			<sup>155</sup> Eu	1.0E-04 ± 1.6E-04	U
		<sup>238</sup> Pu	-4.9E-06 ± 9.8E-06	U			<sup>238</sup> Pu	6.6E-06 ± 1.2E-05	U
		<sup>239,240</sup> Pu	5.6E-06 ± 4.7E-06	U			<sup>239,240</sup> Pu	2.5E-06 ± 3.7E-06	U
		<sup>103</sup> Ru	-8.3E-05 ± 8.5E-05	U			<sup>103</sup> Ru	3.8E-05 ± 7.5E-05	U
		<sup>106</sup> Ru	-1.1E-04 ± 6.3E-04	U			<sup>106</sup> Ru	1.9E-05 ± 1.9E-04	U
		<sup>125</sup> Sb	5.2E-05 ± 1.7E-04	U			<sup>125</sup> Sb	-7.9E-07 ± 7.9E-06	U
		<sup>113</sup> Sn	-1.8E-05 ± 8.8E-05	U			<sup>113</sup> Sn	-3.4E-05 ± 7.0E-05	U
		<sup>90</sup> Sr	2.9E-05 ± 6.3E-05	U			<sup>90</sup> Sr	1.6E-04 ± 1.0E-04	U
		<sup>234</sup> U	8.7E-06 ± 5.8E-06	U			<sup>234</sup> U	7.0E-06 ± 5.1E-06	U
		<sup>235</sup> U	8.0E-07 ± 1.6E-06	U			<sup>235</sup> U	1.8E-06 ± 2.5E-06	U
		<sup>238</sup> U	1.4E-05 ± 7.7E-06	U			<sup>238</sup> U	4.2E-06 ± 3.7E-06	U
		<sup>65</sup> Zn	-7.7E-05 ± 1.6E-04	U			<sup>65</sup> Zn	2.4E-04 ± 2.0E-04	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.

Table 2-2. Near-Facility Air Sampling Results, 2001 (pCi/m<sup>3</sup> ± total analytical uncertainty). (cont)

EDP Code	Composite Period	Isotope	Result ± Uncertainty	RQ*	EDP Code	Composite Period	Isotope	Result ± Uncertainty	RQ*
N968 (200-East)	12/27/2000 - 06/25/2001	<sup>144</sup> Ce	-2.2E-04 ± 5.4E-04	U	N968 (200-East)	06/25/2001 - 12/26/2001	<sup>144</sup> Ce	1.7E-04 ± 7.0E-04	U
		<sup>60</sup> Co	1.3E-05 ± 6.9E-05	U			<sup>60</sup> Co	3.3E-05 ± 9.3E-05	U
		<sup>134</sup> Cs	3.4E-05 ± 6.1E-05	U			<sup>134</sup> Cs	3.3E-05 ± 8.7E-05	U
		<sup>137</sup> Cs	1.0E-05 ± 6.6E-05	U			<sup>137</sup> Cs	2.4E-05 ± 8.7E-05	U
		<sup>152</sup> Eu	2.6E-05 ± 1.4E-04	U			<sup>152</sup> Eu	-1.5E-04 ± 1.9E-04	U
		<sup>154</sup> Eu	-2.2E-04 ± 2.2E-04	U			<sup>154</sup> Eu	-6.4E-05 ± 2.6E-04	U
		<sup>155</sup> Eu	-1.3E-04 ± 1.5E-04	U			<sup>155</sup> Eu	-3.6E-04 ± 3.8E-04	U
		<sup>238</sup> Pu	-4.2E-06 ± 1.0E-05	U			<sup>238</sup> Pu	5.6E-06 ± 9.6E-06	U
		<sup>239,240</sup> Pu	1.9E-05 ± 9.4E-06				<sup>239,240</sup> Pu	2.8E-06 ± 4.6E-06	U
		<sup>103</sup> Ru	-6.0E-05 ± 7.0E-05	U			<sup>103</sup> Ru	-1.2E-04 ± 1.2E-04	U
		<sup>106</sup> Ru	-4.8E-04 ± 6.0E-04	U			<sup>106</sup> Ru	2.0E-04 ± 7.4E-04	U
		<sup>125</sup> Sb	1.4E-05 ± 1.4E-04	U			<sup>125</sup> Sb	7.1E-05 ± 1.9E-04	U
		<sup>113</sup> Sn	-1.2E-05 ± 6.9E-05	U			<sup>113</sup> Sn	-6.3E-05 ± 8.3E-05	U
		<sup>90</sup> Sr	1.4E-05 ± 6.2E-05	U			<sup>90</sup> Sr	1.0E-04 ± 1.0E-04	U
		<sup>234</sup> U	1.6E-05 ± 8.6E-06				<sup>234</sup> U	1.1E-05 ± 7.7E-06	
		<sup>235</sup> U	5.5E-06 ± 4.5E-06				<sup>235</sup> U	8.2E-07 ± 8.5E-07	U
		<sup>238</sup> U	1.4E-05 ± 7.8E-06				<sup>238</sup> U	1.2E-05 ± 8.0E-06	
		<sup>65</sup> Zn	-5.1E-05 ± 1.5E-04	U			<sup>65</sup> Zn	1.1E-04 ± 2.3E-04	U
N969 (200-East)	12/27/2000 - 06/25/2001	<sup>144</sup> Ce	-1.3E-05 ± 1.3E-04	U	N969 (200-East)	06/25/2001 - 12/26/2001	<sup>144</sup> Ce	-1.7E-04 ± 5.6E-04	U
		<sup>60</sup> Co	2.0E-05 ± 8.4E-05	U			<sup>60</sup> Co	-3.3E-06 ± 3.3E-05	U
		<sup>134</sup> Cs	-5.9E-06 ± 5.9E-05	U			<sup>134</sup> Cs	-4.8E-06 ± 4.8E-05	U
		<sup>137</sup> Cs	1.8E-05 ± 7.7E-05	U			<sup>137</sup> Cs	-6.2E-05 ± 6.9E-05	U
		<sup>152</sup> Eu	-9.2E-06 ± 9.2E-05	U			<sup>152</sup> Eu	9.3E-06 ± 9.3E-05	U
		<sup>154</sup> Eu	2.1E-04 ± 2.4E-04	U			<sup>154</sup> Eu	4.6E-05 ± 2.3E-04	U
		<sup>155</sup> Eu	9.4E-05 ± 1.9E-04	U			<sup>155</sup> Eu	2.3E-05 ± 1.4E-04	U
		<sup>238</sup> Pu	8.9E-06 ± 1.0E-05	U			<sup>238</sup> Pu	-2.6E-06 ± 8.6E-06	U
		<sup>239,240</sup> Pu	3.8E-06 ± 3.6E-06				<sup>239,240</sup> Pu	5.9E-06 ± 5.1E-06	U
		<sup>103</sup> Ru	2.1E-05 ± 6.9E-05	U			<sup>103</sup> Ru	5.0E-05 ± 7.4E-05	U
		<sup>106</sup> Ru	-4.2E-04 ± 8.0E-04	U			<sup>106</sup> Ru	9.0E-05 ± 6.1E-04	U
		<sup>125</sup> Sb	-9.6E-05 ± 1.7E-04	U			<sup>125</sup> Sb	1.4E-04 ± 1.6E-04	U
		<sup>113</sup> Sn	1.5E-05 ± 8.1E-05	U			<sup>113</sup> Sn	2.5E-06 ± 2.5E-05	U
		<sup>90</sup> Sr	5.2E-05 ± 8.9E-05	U			<sup>90</sup> Sr	4.9E-05 ± 6.6E-05	U
		<sup>234</sup> U	1.3E-05 ± 8.1E-06				<sup>234</sup> U	2.7E-05 ± 1.2E-05	
		<sup>235</sup> U	7.4E-06 ± 5.4E-06				<sup>235</sup> U	6.4E-07 ± 6.6E-07	U
		<sup>238</sup> U	1.3E-05 ± 8.1E-06				<sup>238</sup> U	1.3E-05 ± 7.3E-06	
		<sup>65</sup> Zn	-1.2E-04 ± 1.6E-04	U			<sup>65</sup> Zn	1.1E-04 ± 1.9E-04	U
N970 (200-East)	12/27/2000 - 06/25/2001	<sup>144</sup> Ce	-6.9E-04 ± 7.8E-04	U	N970 (200-East)	06/25/2001 - 12/26/2001	<sup>144</sup> Ce	-3.6E-04 ± 7.5E-04	U
		<sup>60</sup> Co	-2.4E-05 ± 6.7E-05	U			<sup>60</sup> Co	-7.1E-06 ± 7.1E-05	U
		<sup>134</sup> Cs	-4.0E-05 ± 8.4E-05	U			<sup>134</sup> Cs	3.5E-05 ± 8.8E-05	U
		<sup>137</sup> Cs	1.2E-05 ± 7.0E-05	U			<sup>137</sup> Cs	-1.2E-05 ± 8.2E-05	U
		<sup>152</sup> Eu	-3.3E-05 ± 1.8E-04	U			<sup>152</sup> Eu	3.7E-05 ± 1.7E-04	U
		<sup>154</sup> Eu	1.3E-04 ± 2.0E-04	U			<sup>154</sup> Eu	1.0E-04 ± 2.5E-04	U
		<sup>155</sup> Eu	-3.7E-05 ± 2.4E-04	U			<sup>155</sup> Eu	-4.7E-05 ± 1.9E-04	U
		<sup>238</sup> Pu	9.8E-06 ± 9.3E-06	U			<sup>238</sup> Pu	-3.4E-06 ± 8.9E-06	U
		<sup>239,240</sup> Pu	5.0E-06 ± 4.1E-06				<sup>239,240</sup> Pu	1.4E-06 ± 3.9E-06	U
		<sup>103</sup> Ru	1.8E-05 ± 6.9E-05	U			<sup>103</sup> Ru	3.4E-05 ± 9.1E-05	U
		<sup>106</sup> Ru	3.8E-04 ± 6.1E-04	U			<sup>106</sup> Ru	4.1E-04 ± 7.4E-04	U
		<sup>125</sup> Sb	8.5E-05 ± 1.6E-04	U			<sup>125</sup> Sb	4.2E-05 ± 1.7E-04	U
		<sup>113</sup> Sn	-2.6E-05 ± 7.8E-05	U			<sup>113</sup> Sn	-5.5E-05 ± 9.1E-05	U
		<sup>90</sup> Sr	1.3E-04 ± 8.8E-05				<sup>90</sup> Sr	-5.8E-05 ± 7.7E-05	U
		<sup>234</sup> U	9.8E-06 ± 9.1E-06	U			<sup>234</sup> U	8.0E-06 ± 5.3E-06	
		<sup>235</sup> U	4.2E-06 ± 5.1E-06	U			<sup>235</sup> U	8.0E-07 ± 1.6E-06	U
		<sup>238</sup> U	1.4E-05 ± 8.9E-06				<sup>238</sup> U	3.2E-06 ± 3.1E-06	
		<sup>65</sup> Zn	-1.2E-04 ± 1.5E-04	U			<sup>65</sup> Zn	-2.4E-04 ± 2.5E-04	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.

Table 2-2. Near-Facility Air Sampling Results, 2001 (pCi/m<sup>3</sup> ± total analytical uncertainty). (cont)

EDP Code	Composite Period	Isotope	Result ± Uncertainty	RQ*	EDP Code	Composite Period	Isotope	Result ± Uncertainty	RQ*
N972 (200-East)	12/27/2000 - 06/25/2001	<sup>144</sup> Ce	6.3E-04 ± 7.5E-04	U	N972 (200-East)	06/25/2001 - 12/26/2001	<sup>144</sup> Ce	-2.8E-04 ± 5.8E-04	U
		<sup>60</sup> Co	-1.3E-05 ± 7.3E-05	U			<sup>60</sup> Co	3.0E-05 ± 6.8E-05	U
		<sup>134</sup> Cs	-3.1E-05 ± 8.8E-05	U			<sup>134</sup> Cs	1.8E-05 ± 6.9E-05	U
		<sup>137</sup> Cs	8.0E-05 ± 9.8E-05	U			<sup>137</sup> Cs	7.7E-05 ± 7.1E-05	U
		<sup>152</sup> Eu	2.3E-05 ± 1.7E-04	U			<sup>152</sup> Eu	-2.3E-05 ± 1.4E-04	U
		<sup>154</sup> Eu	-1.0E-05 ± 1.0E-04	U			<sup>154</sup> Eu	1.1E-04 ± 2.2E-04	U
		<sup>155</sup> Eu	1.1E-05 ± 1.1E-04	U			<sup>155</sup> Eu	4.4E-05 ± 1.6E-04	U
		<sup>238</sup> Pu	2.3E-06 ± 3.4E-06	U			<sup>238</sup> Pu	5.2E-06 ± 9.9E-06	U
		<sup>239,240</sup> Pu	6.1E-06 ± 4.7E-06				<sup>239,240</sup> Pu	7.0E-06 ± 4.8E-06	
		<sup>103</sup> Ru	2.8E-05 ± 7.4E-05	U			<sup>103</sup> Ru	-1.8E-05 ± 7.4E-05	U
		<sup>106</sup> Ru	1.0E-04 ± 6.6E-04	U			<sup>106</sup> Ru	2.2E-04 ± 6.0E-04	U
		<sup>125</sup> Sb	6.4E-05 ± 1.6E-04	U			<sup>125</sup> Sb	-1.7E-05 ± 1.5E-04	U
		<sup>113</sup> Sn	4.5E-05 ± 7.3E-05	U			<sup>113</sup> Sn	-2.9E-05 ± 7.8E-05	U
		<sup>90</sup> Sr	4.2E-05 ± 7.5E-05	U			<sup>90</sup> Sr	2.1E-05 ± 7.3E-05	U
		<sup>234</sup> U	7.7E-06 ± 6.0E-06				<sup>234</sup> U	8.3E-06 ± 6.0E-06	
		<sup>235</sup> U	3.2E-06 ± 3.9E-06	U			<sup>235</sup> U	2.2E-06 ± 2.7E-06	U
		<sup>238</sup> U	9.9E-06 ± 6.3E-06				<sup>238</sup> U	9.0E-06 ± 5.7E-06	
		<sup>65</sup> Zn	-1.3E-04 ± 1.7E-04	U			<sup>65</sup> Zn	1.0E-04 ± 1.5E-04	U
N973 (200-East)	12/27/2000 - 06/25/2001	<sup>144</sup> Ce	-6.1E-04 ± 7.2E-04	U	N973 (200-East)	06/25/2001 - 12/26/2001	<sup>144</sup> Ce	-3.9E-04 ± 6.8E-04	U
		<sup>60</sup> Co	2.2E-05 ± 7.8E-05	U			<sup>60</sup> Co	-9.1E-06 ± 6.8E-05	U
		<sup>134</sup> Cs	1.2E-05 ± 7.0E-05	U			<sup>134</sup> Cs	-2.2E-06 ± 2.2E-05	U
		<sup>137</sup> Cs	1.4E-04 ± 1.0E-04	U			<sup>137</sup> Cs	2.6E-04 ± 1.3E-04	
		<sup>152</sup> Eu	1.2E-05 ± 1.2E-04	U			<sup>152</sup> Eu	-2.5E-05 ± 1.6E-04	U
		<sup>154</sup> Eu	2.9E-04 ± 3.0E-04	U			<sup>154</sup> Eu	1.1E-04 ± 1.9E-04	U
		<sup>155</sup> Eu	-1.0E-04 ± 1.9E-04	U			<sup>155</sup> Eu	-7.9E-05 ± 2.0E-04	U
		<sup>238</sup> Pu	6.7E-07 ± 1.4E-06	U			<sup>238</sup> Pu	5.0E-06 ± 1.2E-05	U
		<sup>239,240</sup> Pu	3.4E-06 ± 3.2E-06				<sup>239,240</sup> Pu	3.6E-06 ± 5.8E-06	U
		<sup>103</sup> Ru	1.2E-05 ± 7.7E-05	U			<sup>103</sup> Ru	5.2E-05 ± 8.5E-05	U
		<sup>106</sup> Ru	1.5E-04 ± 6.3E-04	U			<sup>106</sup> Ru	1.6E-04 ± 6.1E-04	U
		<sup>125</sup> Sb	-1.6E-04 ± 1.7E-04	U			<sup>125</sup> Sb	-6.1E-05 ± 1.7E-04	U
		<sup>113</sup> Sn	-4.0E-05 ± 7.8E-05	U			<sup>113</sup> Sn	-1.3E-06 ± 1.3E-05	U
		<sup>90</sup> Sr	-1.4E-05 ± 6.1E-05	U			<sup>90</sup> Sr	1.2E-04 ± 1.0E-04	U
		<sup>234</sup> U	1.2E-05 ± 7.9E-06				<sup>234</sup> U	9.0E-06 ± 5.7E-06	
		<sup>235</sup> U	4.0E-06 ± 3.8E-06				<sup>235</sup> U	6.4E-07 ± 6.6E-07	U
		<sup>238</sup> U	1.1E-05 ± 6.6E-06				<sup>238</sup> U	7.6E-06 ± 5.7E-06	
		<sup>65</sup> Zn	-1.1E-04 ± 2.1E-04	U			<sup>65</sup> Zn	7.6E-05 ± 1.6E-04	U
N976 (200-East)	12/27/2000 - 06/25/2001	<sup>144</sup> Ce	-5.2E-04 ± 8.7E-04	U	N976 (200-East)	06/25/2001 - 12/26/2001	<sup>144</sup> Ce	2.4E-05 ± 2.4E-04	U
		<sup>60</sup> Co	1.7E-05 ± 9.6E-05	U			<sup>60</sup> Co	8.4E-06 ± 8.5E-05	U
		<sup>134</sup> Cs	-3.2E-05 ± 8.4E-05	U			<sup>134</sup> Cs	9.8E-05 ± 1.2E-04	U
		<sup>137</sup> Cs	-4.2E-05 ± 8.8E-05	U			<sup>137</sup> Cs	9.9E-05 ± 1.2E-04	U
		<sup>152</sup> Eu	-7.7E-05 ± 2.3E-04	U			<sup>152</sup> Eu	5.9E-05 ± 1.8E-04	U
		<sup>154</sup> Eu	-1.8E-04 ± 2.9E-04	U			<sup>154</sup> Eu	9.9E-05 ± 2.4E-04	U
		<sup>155</sup> Eu	8.0E-05 ± 2.1E-04	U			<sup>155</sup> Eu	4.8E-05 ± 2.0E-04	U
		<sup>238</sup> Pu	8.0E-07 ± 8.0E-06	U			<sup>238</sup> Pu	7.4E-07 ± 7.7E-07	U
		<sup>239,240</sup> Pu	5.4E-06 ± 4.9E-06	U			<sup>239,240</sup> Pu	5.3E-06 ± 4.8E-06	U
		<sup>103</sup> Ru	3.4E-05 ± 9.6E-05	U			<sup>103</sup> Ru	-4.8E-05 ± 1.1E-04	U
		<sup>106</sup> Ru	9.2E-05 ± 7.3E-04	U			<sup>106</sup> Ru	-2.1E-04 ± 7.5E-04	U
		<sup>125</sup> Sb	-9.5E-05 ± 1.9E-04	U			<sup>125</sup> Sb	7.6E-05 ± 1.9E-04	U
		<sup>113</sup> Sn	-1.7E-07 ± 1.7E-06	U			<sup>113</sup> Sn	-1.7E-05 ± 9.5E-05	U
		<sup>90</sup> Sr	1.8E-04 ± 8.7E-05				<sup>90</sup> Sr	1.8E-04 ± 1.1E-04	
		<sup>234</sup> U	2.2E-05 ± 1.1E-05				<sup>234</sup> U	2.4E-05 ± 1.2E-05	
		<sup>235</sup> U	7.3E-06 ± 5.8E-06				<sup>235</sup> U	5.0E-06 ± 4.4E-06	
		<sup>238</sup> U	1.7E-05 ± 8.9E-06				<sup>238</sup> U	1.5E-05 ± 8.3E-06	
		<sup>65</sup> Zn	2.6E-05 ± 2.1E-04	U			<sup>65</sup> Zn	4.8E-05 ± 2.0E-04	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.

Table 2-2. Near-Facility Air Sampling Results, 2001 (pCi/m<sup>3</sup> ± total analytical uncertainty). (cont)

EDP Code	Composite Period	Isotope	Result ± Uncertainty	RQ*	EDP Code	Composite Period	Isotope	Result ± Uncertainty	RQ*
N977 (200-East)	12/27/2000 - 06/25/2001	<sup>144</sup> Ce	-5.0E-04 ± 8.2E-04	U	N977 (200-East)	06/25/2001 - 12/26/2001	<sup>144</sup> Ce	-5.7E-04 ± 6.0E-04	U
		<sup>60</sup> Co	-1.3E-05 ± 7.9E-05	U			<sup>60</sup> Co	9.8E-06 ± 7.7E-05	U
		<sup>134</sup> Cs	-3.5E-05 ± 7.7E-05	U			<sup>134</sup> Cs	2.7E-05 ± 6.8E-05	U
		<sup>137</sup> Cs	7.0E-05 ± 7.3E-05	U			<sup>137</sup> Cs	1.1E-05 ± 6.9E-05	U
		<sup>152</sup> Eu	5.1E-05 ± 2.1E-04	U			<sup>152</sup> Eu	4.7E-05 ± 1.6E-04	U
		<sup>154</sup> Eu	-1.5E-04 ± 2.0E-04	U			<sup>154</sup> Eu	-3.7E-04 ± 3.8E-04	U
		<sup>155</sup> Eu	-8.3E-05 ± 2.2E-04	U			<sup>155</sup> Eu	3.7E-05 ± 1.6E-04	U
		<sup>238</sup> Pu	-8.4E-06 ± 9.5E-06	U			<sup>238</sup> Pu	3.0E-06 ± 7.9E-06	U
		<sup>239,240</sup> Pu	2.7E-06 ± 2.8E-06	U			<sup>239,240</sup> Pu	2.5E-06 ± 4.0E-06	U
		<sup>103</sup> Ru	1.0E-04 ± 8.4E-05	U			<sup>103</sup> Ru	1.6E-05 ± 8.8E-05	U
		<sup>106</sup> Ru	-5.3E-04 ± 6.7E-04	U			<sup>106</sup> Ru	-5.0E-04 ± 5.9E-04	U
		<sup>125</sup> Sb	-7.6E-05 ± 1.7E-04	U			<sup>125</sup> Sb	1.2E-05 ± 1.2E-04	U
		<sup>113</sup> Sn	3.4E-07 ± 3.4E-06	U			<sup>113</sup> Sn	-3.8E-06 ± 3.8E-05	U
		<sup>90</sup> Sr	1.3E-04 ± 7.8E-05				<sup>90</sup> Sr	1.1E-04 ± 9.0E-05	
		<sup>234</sup> U	6.5E-06 ± 5.6E-06	U			<sup>234</sup> U	1.5E-05 ± 8.1E-06	
		<sup>235</sup> U	7.0E-07 ± 1.4E-06	U			<sup>235</sup> U	4.6E-06 ± 4.1E-06	
		<sup>238</sup> U	1.1E-05 ± 6.5E-06				<sup>238</sup> U	1.8E-05 ± 9.2E-06	
		<sup>65</sup> Zn	1.6E-06 ± 1.6E-05	U			<sup>65</sup> Zn	-1.6E-04 ± 1.8E-04	U
N978 (200-East)	12/27/2000 - 06/25/2001	<sup>144</sup> Ce	-1.4E-04 ± 8.6E-04	U	N978 (200-East)	06/25/2001 - 12/26/2001	<sup>144</sup> Ce	-5.6E-05 ± 5.6E-04	U
		<sup>60</sup> Co	-2.3E-05 ± 8.4E-05	U			<sup>60</sup> Co	-3.3E-05 ± 7.4E-05	U
		<sup>134</sup> Cs	-3.3E-05 ± 8.1E-05	U			<sup>134</sup> Cs	-2.4E-05 ± 6.9E-05	U
		<sup>137</sup> Cs	7.3E-06 ± 7.3E-05	U			<sup>137</sup> Cs	6.2E-05 ± 7.9E-05	U
		<sup>152</sup> Eu	-7.3E-05 ± 2.0E-04	U			<sup>152</sup> Eu	-1.0E-04 ± 1.7E-04	U
		<sup>154</sup> Eu	9.1E-05 ± 2.4E-04	U			<sup>154</sup> Eu	4.5E-05 ± 2.3E-04	U
		<sup>155</sup> Eu	2.2E-05 ± 2.2E-04	U			<sup>155</sup> Eu	-5.4E-05 ± 2.0E-04	U
		<sup>238</sup> Pu	5.5E-06 ± 8.9E-06	U			<sup>238</sup> Pu	6.3E-07 ± 6.6E-07	U
		<sup>239,240</sup> Pu	1.3E-05 ± 7.1E-06				<sup>239,240</sup> Pu	1.9E-06 ± 3.4E-06	U
		<sup>103</sup> Ru	-6.1E-06 ± 6.1E-05	U			<sup>103</sup> Ru	-3.0E-06 ± 3.0E-05	U
		<sup>106</sup> Ru	1.9E-04 ± 6.7E-04	U			<sup>106</sup> Ru	-4.6E-04 ± 6.7E-04	U
		<sup>125</sup> Sb	1.2E-04 ± 1.9E-04	U			<sup>125</sup> Sb	-5.8E-05 ± 1.7E-04	U
		<sup>113</sup> Sn	-2.8E-05 ± 9.1E-05	U			<sup>113</sup> Sn	3.5E-05 ± 8.4E-05	U
		<sup>90</sup> Sr	8.5E-05 ± 8.3E-05	U			<sup>90</sup> Sr	2.3E-04 ± 1.1E-04	
		<sup>234</sup> U	9.9E-06 ± 6.4E-06				<sup>234</sup> U	2.2E-05 ± 1.1E-05	
		<sup>235</sup> U	2.2E-06 ± 2.7E-06	U			<sup>235</sup> U	5.0E-06 ± 4.2E-06	
		<sup>238</sup> U	5.4E-06 ± 4.2E-06				<sup>238</sup> U	1.7E-05 ± 8.6E-06	
		<sup>65</sup> Zn	-1.5E-04 ± 2.0E-04	U			<sup>65</sup> Zn	-2.5E-05 ± 1.6E-04	U
N984 (200-East)	12/27/2000 - 06/25/2001	<sup>144</sup> Ce	-2.5E-05 ± 2.5E-04	U	N984 (200-East)	06/25/2001 - 12/26/2001	<sup>144</sup> Ce	-8.4E-04 ± 8.7E-04	U
		<sup>60</sup> Co	-3.3E-05 ± 7.9E-05	U			<sup>60</sup> Co	1.7E-05 ± 6.6E-05	U
		<sup>134</sup> Cs	-2.7E-06 ± 2.7E-05	U			<sup>134</sup> Cs	-8.8E-05 ± 9.2E-05	U
		<sup>137</sup> Cs	9.3E-05 ± 7.6E-05	U			<sup>137</sup> Cs	3.4E-04 ± 1.9E-04	
		<sup>152</sup> Eu	1.7E-04 ± 1.7E-04	U			<sup>152</sup> Eu	2.4E-05 ± 1.7E-04	U
		<sup>154</sup> Eu	-1.9E-04 ± 2.1E-04	U			<sup>154</sup> Eu	1.3E-04 ± 1.9E-04	U
		<sup>155</sup> Eu	1.5E-04 ± 1.7E-04	U			<sup>155</sup> Eu	-2.0E-04 ± 2.2E-04	U
		<sup>238</sup> Pu	5.1E-06 ± 1.2E-05	U			<sup>238</sup> Pu	6.6E-07 ± 6.9E-07	U
		<sup>239,240</sup> Pu	6.6E-06 ± 5.3E-06				<sup>239,240</sup> Pu	4.0E-06 ± 3.5E-06	
		<sup>103</sup> Ru	5.1E-05 ± 7.4E-05	U			<sup>103</sup> Ru	-4.6E-06 ± 4.6E-05	U
		<sup>106</sup> Ru	8.9E-05 ± 5.9E-04	U			<sup>106</sup> Ru	-1.6E-04 ± 6.7E-04	U
		<sup>125</sup> Sb	-5.5E-05 ± 1.6E-04	U			<sup>125</sup> Sb	-2.1E-04 ± 2.1E-04	U
		<sup>113</sup> Sn	6.0E-06 ± 6.0E-05	U			<sup>113</sup> Sn	3.9E-05 ± 8.4E-05	U
		<sup>90</sup> Sr	3.0E-05 ± 6.8E-05	U			<sup>90</sup> Sr	1.1E-04 ± 9.0E-05	
		<sup>234</sup> U	1.1E-05 ± 8.2E-06				<sup>234</sup> U	1.8E-05 ± 9.0E-06	
		<sup>235</sup> U	9.1E-07 ± 4.1E-06	U			<sup>235</sup> U	7.8E-06 ± 5.3E-06	
		<sup>238</sup> U	2.1E-05 ± 1.1E-05				<sup>238</sup> U	8.5E-06 ± 5.5E-06	
		<sup>65</sup> Zn	-2.2E-06 ± 2.2E-05	U			<sup>65</sup> Zn	8.1E-05 ± 1.7E-04	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.



Table 2-2. Near-Facility Air Sampling Results, 2001 (pCi/m<sup>3</sup> ± total analytical uncertainty). (cont)

EDP Code	Composite Period	Isotope	Result ± Uncertainty	RQ*	EDP Code	Composite Period	Isotope	Result ± Uncertainty	RQ*
N985 (200-East)	12/27/2000 - 06/25/2001	<sup>144</sup> Ce	4.5E-04 ± 5.7E-04	U	N985 (200-East)	06/25/2001 - 12/26/2001	<sup>144</sup> Ce	-1.5E-04 ± 6.4E-04	U
		<sup>60</sup> Co	7.2E-05 ± 6.8E-05	U			<sup>60</sup> Co	1.0E-04 ± 8.8E-05	U
		<sup>134</sup> Cs	3.7E-05 ± 7.5E-05	U			<sup>134</sup> Cs	1.7E-05 ± 8.3E-05	U
		<sup>137</sup> Cs	5.0E-05 ± 7.2E-05	U			<sup>137</sup> Cs	-2.6E-05 ± 7.6E-05	U
		<sup>152</sup> Eu	1.9E-04 ± 1.4E-04	U			<sup>152</sup> Eu	7.4E-05 ± 1.9E-04	U
		<sup>154</sup> Eu	1.9E-05 ± 1.7E-04	U			<sup>154</sup> Eu	1.4E-05 ± 1.4E-04	U
		<sup>155</sup> Eu	-3.6E-05 ± 1.5E-04	U			<sup>155</sup> Eu	-8.2E-05 ± 2.0E-04	U
		<sup>238</sup> Pu	5.7E-06 ± 1.3E-05	U			<sup>238</sup> Pu	7.7E-06 ± 1.1E-05	U
		<sup>239,240</sup> Pu	3.2E-06 ± 5.2E-06	U			<sup>239,240</sup> Pu	1.5E-06 ± 1.5E-06	U
		<sup>103</sup> Ru	7.7E-05 ± 7.1E-05	U			<sup>103</sup> Ru	6.3E-06 ± 6.3E-05	U
		<sup>106</sup> Ru	2.7E-04 ± 5.6E-04	U			<sup>106</sup> Ru	2.5E-04 ± 6.7E-04	U
		<sup>125</sup> Sb	-1.2E-04 ± 1.5E-04	U			<sup>125</sup> Sb	-2.1E-05 ± 1.7E-04	U
		<sup>113</sup> Sn	9.4E-06 ± 6.9E-05	U			<sup>113</sup> Sn	3.5E-06 ± 3.5E-05	U
		<sup>90</sup> Sr	4.2E-05 ± 7.6E-05	U			<sup>90</sup> Sr	-3.5E-05 ± 7.6E-05	U
		<sup>234</sup> U	1.9E-05 ± 9.4E-06				<sup>234</sup> U	1.8E-05 ± 9.5E-06	
		<sup>235</sup> U	1.5E-06 ± 2.2E-06	U			<sup>235</sup> U	4.2E-06 ± 4.1E-06	U
		<sup>238</sup> U	1.8E-05 ± 9.4E-06				<sup>238</sup> U	1.5E-05 ± 8.1E-06	
N999 (200-East)	12/27/2000 - 06/25/2001	<sup>65</sup> Zn	3.8E-05 ± 1.4E-04	U	N999 (200-East)	06/25/2001 - 12/26/2001	<sup>65</sup> Zn	-1.6E-04 ± 2.2E-04	U
		<sup>144</sup> Ce	4.1E-04 ± 8.4E-04	U			<sup>144</sup> Ce	-3.3E-04 ± 5.9E-04	U
		<sup>60</sup> Co	-2.6E-05 ± 8.3E-05	U			<sup>60</sup> Co	-1.1E-05 ± 6.3E-05	U
		<sup>134</sup> Cs	1.2E-05 ± 9.3E-05	U			<sup>134</sup> Cs	3.1E-05 ± 7.3E-05	U
		<sup>137</sup> Cs	6.6E-05 ± 8.1E-05	U			<sup>137</sup> Cs	-1.9E-05 ± 6.7E-05	U
		<sup>152</sup> Eu	-6.4E-05 ± 1.9E-04	U			<sup>152</sup> Eu	-8.5E-05 ± 1.5E-04	U
		<sup>154</sup> Eu	1.4E-04 ± 2.7E-04	U			<sup>154</sup> Eu	8.4E-05 ± 2.1E-04	U
		<sup>155</sup> Eu	8.1E-05 ± 2.1E-04	U			<sup>155</sup> Eu	-6.1E-05 ± 1.6E-04	U
		<sup>238</sup> Pu	7.9E-06 ± 1.2E-05	U			<sup>238</sup> Pu	-2.7E-06 ± 1.2E-05	U
		<sup>239,240</sup> Pu	6.0E-06 ± 5.1E-06				<sup>239,240</sup> Pu	9.8E-06 ± 6.5E-06	
		<sup>103</sup> Ru	-2.8E-05 ± 8.8E-05	U			<sup>103</sup> Ru	4.4E-05 ± 8.0E-05	U
		<sup>106</sup> Ru	5.8E-04 ± 6.7E-04	U			<sup>106</sup> Ru	3.7E-04 ± 6.3E-04	U
		<sup>125</sup> Sb	2.6E-05 ± 1.9E-04	U			<sup>125</sup> Sb	5.5E-05 ± 1.6E-04	U
		<sup>113</sup> Sn	5.6E-05 ± 9.1E-05	U			<sup>113</sup> Sn	-6.1E-06 ± 6.1E-05	U
		<sup>90</sup> Sr	5.0E-05 ± 6.7E-05	U			<sup>90</sup> Sr	7.7E-05 ± 7.6E-05	U
		<sup>234</sup> U	1.2E-05 ± 7.7E-06				<sup>234</sup> U	9.1E-06 ± 5.9E-06	
		<sup>235</sup> U	1.4E-06 ± 3.6E-06	U			<sup>235</sup> U	1.5E-06 ± 2.1E-06	U
N155 (200-West)	12/27/2000 - 06/25/2001	<sup>238</sup> U	1.5E-05 ± 8.1E-06		N155 (200-West)	06/25/2001 - 12/26/2001	<sup>238</sup> U	6.8E-06 ± 5.6E-06	
		<sup>65</sup> Zn	-6.0E-05 ± 1.7E-04	U			<sup>65</sup> Zn	6.4E-05 ± 1.7E-04	U
		<sup>144</sup> Ce	2.0E-04 ± 7.1E-04	U			<sup>144</sup> Ce	-5.3E-04 ± 7.0E-04	U
		<sup>60</sup> Co	-1.8E-05 ± 8.1E-05	U			<sup>60</sup> Co	-3.6E-05 ± 8.4E-05	U
		<sup>134</sup> Cs	-1.0E-04 ± 1.0E-04	U			<sup>134</sup> Cs	-3.2E-05 ± 8.7E-05	U
		<sup>137</sup> Cs	2.3E-04 ± 1.5E-04				<sup>137</sup> Cs	5.7E-04 ± 2.4E-04	
		<sup>152</sup> Eu	-1.7E-05 ± 1.7E-04	U			<sup>152</sup> Eu	-2.1E-05 ± 1.9E-04	U
		<sup>154</sup> Eu	-6.0E-05 ± 2.3E-04	U			<sup>154</sup> Eu	-9.9E-05 ± 2.5E-04	U
		<sup>155</sup> Eu	1.1E-04 ± 2.0E-04	U			<sup>155</sup> Eu	-2.6E-04 ± 2.7E-04	U
		<sup>238</sup> Pu	7.5E-07 ± 7.5E-06	U			<sup>238</sup> Pu	7.0E-07 ± 7.2E-07	U
		<sup>239,240</sup> Pu	1.4E-05 ± 8.0E-06				<sup>239,240</sup> Pu	1.7E-05 ± 9.5E-06	
		<sup>103</sup> Ru	3.7E-05 ± 6.5E-05	U			<sup>103</sup> Ru	2.7E-05 ± 8.1E-05	U
		<sup>106</sup> Ru	2.3E-04 ± 6.8E-04	U			<sup>106</sup> Ru	-2.5E-04 ± 7.2E-04	U
		<sup>125</sup> Sb	1.2E-05 ± 1.2E-04	U			<sup>125</sup> Sb	-8.4E-05 ± 1.9E-04	U
		<sup>113</sup> Sn	-9.8E-06 ± 8.5E-05	U			<sup>113</sup> Sn	-9.7E-05 ± 1.0E-04	U
		<sup>90</sup> Sr	3.8E-05 ± 7.0E-05	U			<sup>90</sup> Sr	1.6E-04 ± 9.4E-05	
		<sup>234</sup> U	2.3E-05 ± 1.1E-05				<sup>234</sup> U	1.6E-05 ± 8.9E-06	
		<sup>235</sup> U	4.1E-06 ± 3.8E-06				<sup>235</sup> U	7.0E-07 ± 1.4E-06	U
		<sup>238</sup> U	1.9E-05 ± 9.9E-06				<sup>238</sup> U	9.0E-06 ± 6.2E-06	
		<sup>65</sup> Zn	7.5E-05 ± 1.8E-04	U			<sup>65</sup> Zn	1.3E-04 ± 2.2E-04	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.

Table 2-2. Near-Facility Air Sampling Results, 2001 (pCi/m<sup>3</sup> ± total analytical uncertainty). (cont)

EDP Code	Composite Period	Isotope	Result ± Uncertainty	RQ*	EDP Code	Composite Period	Isotope	Result ± Uncertainty	RQ*
N161 (200-West)	12/27/2000 - 06/25/2001	<sup>144</sup> Ce	-6.3E-04 ± 8.1E-04	U	N161 (200-West)	06/25/2001 - 12/26/2001	<sup>144</sup> Ce	4.8E-05 ± 4.8E-04	U
		<sup>60</sup> Co	1.0E-05 ± 7.6E-05	U			<sup>60</sup> Co	2.4E-06 ± 2.4E-05	U
		<sup>134</sup> Cs	-4.4E-05 ± 8.7E-05	U			<sup>134</sup> Cs	5.2E-05 ± 7.3E-05	U
		<sup>137</sup> Cs	7.0E-05 ± 7.8E-05	U			<sup>137</sup> Cs	5.8E-05 ± 8.3E-05	U
		<sup>152</sup> Eu	2.1E-04 ± 2.4E-04	U			<sup>152</sup> Eu	-5.9E-05 ± 1.6E-04	U
		<sup>154</sup> Eu	1.0E-04 ± 2.5E-04	U			<sup>154</sup> Eu	3.9E-06 ± 3.9E-05	U
		<sup>155</sup> Eu	5.4E-06 ± 5.4E-05	U			<sup>155</sup> Eu	-2.1E-04 ± 2.2E-04	U
		<sup>238</sup> Pu	-1.5E-06 ± 9.6E-06	U			<sup>238</sup> Pu	-7.0E-07 ± 7.0E-06	U
		<sup>239,240</sup> Pu	5.2E-05 ± 2.1E-05				<sup>239,240</sup> Pu	2.0E-05 ± 9.9E-06	
		<sup>103</sup> Ru	1.0E-05 ± 7.0E-05	U			<sup>103</sup> Ru	-5.9E-05 ± 8.0E-05	U
		<sup>106</sup> Ru	2.8E-05 ± 2.8E-04	U			<sup>106</sup> Ru	2.5E-04 ± 6.8E-04	U
		<sup>125</sup> Sb	1.9E-04 ± 1.9E-04	U			<sup>125</sup> Sb	-5.8E-05 ± 1.9E-04	U
		<sup>113</sup> Sn	-2.0E-05 ± 8.1E-05	U			<sup>113</sup> Sn	-9.1E-06 ± 7.7E-05	U
		<sup>90</sup> Sr	-1.4E-05 ± 4.7E-05	U			<sup>90</sup> Sr	2.7E-04 ± 1.2E-04	
		<sup>234</sup> U	1.2E-05 ± 6.7E-06				<sup>234</sup> U	1.4E-05 ± 8.3E-06	
		<sup>235</sup> U	3.5E-06 ± 3.3E-06				<sup>235</sup> U	6.0E-06 ± 5.1E-06	
		<sup>238</sup> U	1.1E-05 ± 6.7E-06				<sup>238</sup> U	4.8E-06 ± 4.4E-06	U
		<sup>65</sup> Zn	-2.0E-04 ± 2.0E-04	U			<sup>65</sup> Zn	-2.7E-05 ± 1.8E-04	U
N165 (200-West)	12/27/2000 - 06/25/2001	<sup>144</sup> Ce	2.1E-04 ± 6.0E-04	U	N165 (200-West)	06/25/2001 - 12/26/2001	<sup>144</sup> Ce	-1.6E-05 ± 1.6E-04	U
		<sup>60</sup> Co	-6.6E-05 ± 7.9E-05	U			<sup>60</sup> Co	1.2E-04 ± 9.9E-05	U
		<sup>134</sup> Cs	-4.5E-05 ± 7.3E-05	U			<sup>134</sup> Cs	4.1E-05 ± 7.1E-05	U
		<sup>137</sup> Cs	9.7E-05 ± 8.6E-05	U			<sup>137</sup> Cs	2.4E-05 ± 7.0E-05	U
		<sup>152</sup> Eu	-3.3E-05 ± 1.7E-04	U			<sup>152</sup> Eu	-6.0E-05 ± 1.5E-04	U
		<sup>154</sup> Eu	7.2E-06 ± 7.2E-05	U			<sup>154</sup> Eu	-5.4E-05 ± 1.9E-04	U
		<sup>155</sup> Eu	8.4E-05 ± 1.7E-04	U			<sup>155</sup> Eu	9.9E-05 ± 1.5E-04	U
		<sup>238</sup> Pu	-1.1E-05 ± 1.4E-05	U			<sup>238</sup> Pu	5.2E-06 ± 1.2E-05	U
		<sup>239,240</sup> Pu	5.1E-05 ± 2.1E-05				<sup>239,240</sup> Pu	7.9E-05 ± 3.1E-05	
		<sup>103</sup> Ru	-9.1E-05 ± 9.4E-05	U			<sup>103</sup> Ru	3.0E-05 ± 5.9E-05	U
		<sup>106</sup> Ru	-1.4E-04 ± 6.6E-04	U			<sup>106</sup> Ru	-3.1E-04 ± 6.2E-04	U
		<sup>125</sup> Sb	-1.6E-04 ± 1.6E-04	U			<sup>125</sup> Sb	-6.2E-06 ± 6.2E-05	U
		<sup>113</sup> Sn	-3.9E-05 ± 8.2E-05	U			<sup>113</sup> Sn	3.1E-05 ± 6.3E-05	U
		<sup>90</sup> Sr	-5.8E-05 ± 6.0E-05	U			<sup>90</sup> Sr	1.1E-04 ± 8.2E-05	
		<sup>234</sup> U	1.7E-05 ± 9.0E-06				<sup>234</sup> U	1.3E-05 ± 7.4E-06	
		<sup>235</sup> U	3.2E-06 ± 3.3E-06	U			<sup>235</sup> U	1.6E-06 ± 3.9E-06	U
		<sup>238</sup> U	1.1E-05 ± 6.6E-06				<sup>238</sup> U	4.2E-06 ± 3.7E-06	
		<sup>65</sup> Zn	-6.5E-05 ± 1.9E-04	U			<sup>65</sup> Zn	-4.0E-05 ± 1.6E-04	U
N168 (200-West)	12/27/2000 - 06/25/2001	<sup>144</sup> Ce	7.8E-04 ± 7.7E-04	U	N168 (200-West)	06/25/2001 - 12/26/2001	<sup>144</sup> Ce	-3.5E-04 ± 6.3E-04	U
		<sup>60</sup> Co	5.8E-05 ± 8.3E-05	U			<sup>60</sup> Co	3.3E-05 ± 8.4E-05	U
		<sup>134</sup> Cs	1.1E-06 ± 1.1E-05	U			<sup>134</sup> Cs	5.8E-05 ± 8.8E-05	U
		<sup>137</sup> Cs	1.5E-04 ± 1.1E-04				<sup>137</sup> Cs	1.0E-04 ± 8.7E-05	U
		<sup>152</sup> Eu	4.7E-05 ± 1.9E-04	U			<sup>152</sup> Eu	-8.4E-05 ± 1.6E-04	U
		<sup>154</sup> Eu	-7.2E-05 ± 2.3E-04	U			<sup>154</sup> Eu	2.2E-04 ± 2.3E-04	U
		<sup>155</sup> Eu	6.0E-05 ± 2.1E-04	U			<sup>155</sup> Eu	-7.3E-05 ± 2.1E-04	U
		<sup>238</sup> Pu	-9.0E-07 ± 9.1E-06	U			<sup>238</sup> Pu	-1.5E-06 ± 8.6E-06	U
		<sup>239,240</sup> Pu	1.3E-05 ± 8.8E-06				<sup>239,240</sup> Pu	1.1E-05 ± 7.0E-06	
		<sup>103</sup> Ru	4.4E-05 ± 7.1E-05	U			<sup>103</sup> Ru	1.4E-05 ± 7.9E-05	U
		<sup>106</sup> Ru	-1.8E-04 ± 7.3E-04	U			<sup>106</sup> Ru	5.6E-04 ± 6.5E-04	U
		<sup>125</sup> Sb	1.3E-05 ± 1.3E-04	U			<sup>125</sup> Sb	8.3E-05 ± 1.7E-04	U
		<sup>113</sup> Sn	1.2E-06 ± 1.2E-05	U			<sup>113</sup> Sn	-3.2E-05 ± 7.9E-05	U
		<sup>90</sup> Sr	-2.3E-05 ± 7.6E-05	U			<sup>90</sup> Sr	2.8E-05 ± 8.8E-05	U
		<sup>234</sup> U	2.5E-05 ± 1.2E-05				<sup>234</sup> U	1.2E-05 ± 7.2E-06	
		<sup>235</sup> U	9.0E-06 ± 7.3E-06				<sup>235</sup> U	4.4E-06 ± 3.9E-06	
		<sup>238</sup> U	6.3E-06 ± 6.3E-06	U			<sup>238</sup> U	6.1E-06 ± 4.6E-06	
		<sup>65</sup> Zn	-3.3E-04 ± 3.5E-04	U			<sup>65</sup> Zn	-1.9E-05 ± 1.7E-04	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.

Table 2-2. Near-Facility Air Sampling Results, 2001 (pCi/m<sup>3</sup> ± total analytical uncertainty). (cont)

EDP Code	Composite Period	Isotope	Result ± Uncertainty	RQ*	EDP Code	Composite Period	Isotope	Result ± Uncertainty	RQ*
N200 (200-West)	12/28/2000 - 06/27/2001	<sup>144</sup> Ce	-6.4E-05 ± 6.4E-04	U	N200 (200-West)	06/27/2001 - 12/27/2001	<sup>144</sup> Ce	-3.3E-04 ± 6.9E-04	U
		<sup>60</sup> Co	4.4E-05 ± 9.6E-05	U			<sup>60</sup> Co	-4.5E-05 ± 8.5E-05	U
		<sup>134</sup> Cs	1.7E-05 ± 1.2E-04	U			<sup>134</sup> Cs	4.8E-06 ± 4.8E-05	U
		<sup>137</sup> Cs	1.5E-04 ± 1.1E-04	U			<sup>137</sup> Cs	2.1E-05 ± 8.3E-05	U
		<sup>152</sup> Eu	-3.0E-04 ± 3.1E-04	U			<sup>152</sup> Eu	7.7E-05 ± 1.7E-04	U
		<sup>154</sup> Eu	-7.8E-05 ± 2.5E-04	U			<sup>154</sup> Eu	-6.8E-05 ± 2.4E-04	U
		<sup>155</sup> Eu	1.1E-04 ± 2.8E-04	U			<sup>155</sup> Eu	3.0E-05 ± 2.1E-04	U
		<sup>238</sup> Pu	-3.7E-06 ± 1.2E-05	U			<sup>238</sup> Pu	5.8E-06 ± 1.1E-05	U
		<sup>239,240</sup> Pu	6.6E-06 ± 5.4E-06				<sup>239,240</sup> Pu	2.2E-06 ± 4.0E-06	U
		<sup>103</sup> Ru	-2.2E-05 ± 8.0E-05	U			<sup>103</sup> Ru	-4.5E-05 ± 8.1E-05	U
		<sup>106</sup> Ru	-1.2E-04 ± 7.9E-04	U			<sup>106</sup> Ru	5.7E-06 ± 5.7E-05	U
		<sup>125</sup> Sb	9.5E-05 ± 2.2E-04	U			<sup>125</sup> Sb	1.3E-04 ± 1.8E-04	U
		<sup>113</sup> Sn	1.5E-06 ± 1.5E-05	U			<sup>113</sup> Sn	3.5E-05 ± 8.2E-05	U
		<sup>90</sup> Sr	-5.6E-05 ± 7.1E-05	U			<sup>90</sup> Sr	1.9E-04 ± 1.1E-04	
		<sup>234</sup> U	1.3E-05 ± 8.1E-06				<sup>234</sup> U	1.8E-05 ± 9.5E-06	
		<sup>235</sup> U	2.0E-06 ± 4.9E-06	U			<sup>235</sup> U	4.7E-06 ± 4.7E-06	U
		<sup>238</sup> U	1.9E-05 ± 1.1E-05				<sup>238</sup> U	1.9E-05 ± 9.4E-06	
		<sup>65</sup> Zn	-2.0E-04 ± 2.2E-04	U			<sup>65</sup> Zn	-7.0E-06 ± 7.0E-05	U
N304 (200-West)	12/27/2000 - 06/25/2001	<sup>144</sup> Ce	-1.2E-03 ± 1.2E-03	U	N304 (200-West)	06/25/2001 - 12/26/2001	<sup>144</sup> Ce	-7.3E-05 ± 5.6E-04	U
		<sup>60</sup> Co	-4.4E-06 ± 4.4E-05	U			<sup>60</sup> Co	2.1E-05 ± 6.9E-05	U
		<sup>134</sup> Cs	-5.7E-05 ± 1.0E-04	U			<sup>134</sup> Cs	-1.1E-06 ± 1.1E-05	U
		<sup>137</sup> Cs	-7.3E-06 ± 7.3E-05	U			<sup>137</sup> Cs	2.4E-06 ± 2.4E-05	U
		<sup>152</sup> Eu	6.8E-05 ± 2.5E-04	U			<sup>152</sup> Eu	3.5E-05 ± 1.5E-04	U
		<sup>154</sup> Eu	3.7E-04 ± 2.8E-04	U			<sup>154</sup> Eu	4.1E-05 ± 1.9E-04	U
		<sup>155</sup> Eu	7.2E-05 ± 2.2E-04	U			<sup>155</sup> Eu	-1.6E-05 ± 1.5E-04	U
		<sup>238</sup> Pu	-5.2E-06 ± 1.4E-05	U			<sup>238</sup> Pu	6.4E-06 ± 1.2E-05	U
		<sup>239,240</sup> Pu	7.4E-06 ± 6.4E-06	U			<sup>239,240</sup> Pu	1.8E-05 ± 1.0E-05	
		<sup>103</sup> Ru	-1.2E-05 ± 7.9E-05	U			<sup>103</sup> Ru	-4.1E-05 ± 6.5E-05	U
		<sup>106</sup> Ru	2.1E-04 ± 7.4E-04	U			<sup>106</sup> Ru	-4.4E-04 ± 6.1E-04	U
		<sup>125</sup> Sb	-8.6E-05 ± 2.4E-04	U			<sup>125</sup> Sb	-1.6E-04 ± 1.7E-04	U
		<sup>113</sup> Sn	-2.1E-05 ± 8.3E-05	U			<sup>113</sup> Sn	4.4E-05 ± 7.1E-05	U
		<sup>90</sup> Sr	9.8E-05 ± 8.5E-05				<sup>90</sup> Sr	2.1E-04 ± 1.1E-04	
		<sup>234</sup> U	9.1E-06 ± 7.3E-06				<sup>234</sup> U	8.8E-06 ± 6.3E-06	
		<sup>235</sup> U	5.4E-06 ± 7.1E-06	U			<sup>235</sup> U	1.5E-06 ± 3.0E-06	U
		<sup>238</sup> U	9.8E-06 ± 7.0E-06				<sup>238</sup> U	1.0E-05 ± 6.9E-06	
		<sup>65</sup> Zn	2.6E-05 ± 2.2E-04	U			<sup>65</sup> Zn	-8.2E-06 ± 8.2E-05	U
N433 (200-West)	12/27/2000 - 06/25/2001	<sup>144</sup> Ce	-4.9E-05 ± 5.0E-04	U	N433 (200-West)	06/25/2001 - 12/26/2001	<sup>144</sup> Ce	1.6E-04 ± 6.0E-04	U
		<sup>60</sup> Co	-8.9E-05 ± 1.0E-04	U			<sup>60</sup> Co	3.4E-05 ± 7.3E-05	U
		<sup>134</sup> Cs	-7.6E-05 ± 9.4E-05	U			<sup>134</sup> Cs	-6.8E-06 ± 6.8E-05	U
		<sup>137</sup> Cs	7.6E-05 ± 9.0E-05	U			<sup>137</sup> Cs	-1.2E-05 ± 7.7E-05	U
		<sup>152</sup> Eu	-1.7E-04 ± 2.2E-04	U			<sup>152</sup> Eu	6.6E-06 ± 6.6E-05	U
		<sup>154</sup> Eu	-2.4E-04 ± 3.0E-04	U			<sup>154</sup> Eu	-8.3E-05 ± 2.1E-04	U
		<sup>155</sup> Eu	-1.7E-04 ± 2.3E-04	U			<sup>155</sup> Eu	4.6E-05 ± 1.6E-04	U
		<sup>238</sup> Pu	-1.4E-06 ± 1.1E-05	U			<sup>238</sup> Pu	6.5E-06 ± 1.1E-05	U
		<sup>239,240</sup> Pu	1.1E-05 ± 7.3E-06				<sup>239,240</sup> Pu	1.1E-05 ± 8.2E-06	
		<sup>103</sup> Ru	-2.6E-05 ± 8.9E-05	U			<sup>103</sup> Ru	4.1E-05 ± 6.6E-05	U
		<sup>106</sup> Ru	-3.0E-04 ± 7.4E-04	U			<sup>106</sup> Ru	2.5E-04 ± 5.8E-04	U
		<sup>125</sup> Sb	6.3E-05 ± 2.0E-04	U			<sup>125</sup> Sb	7.9E-05 ± 1.5E-04	U
		<sup>113</sup> Sn	4.9E-05 ± 9.6E-05	U			<sup>113</sup> Sn	2.6E-05 ± 6.5E-05	U
		<sup>90</sup> Sr	2.8E-07 ± 2.8E-06	U			<sup>90</sup> Sr	1.2E-04 ± 8.1E-05	
		<sup>234</sup> U	1.7E-05 ± 8.8E-06				<sup>234</sup> U	1.5E-05 ± 8.8E-06	
		<sup>235</sup> U	4.9E-06 ± 4.3E-06				<sup>235</sup> U	4.7E-06 ± 4.2E-06	
		<sup>238</sup> U	1.5E-05 ± 8.1E-06				<sup>238</sup> U	1.2E-05 ± 7.2E-06	
		<sup>65</sup> Zn	-4.6E-06 ± 4.6E-05	U			<sup>65</sup> Zn	-9.2E-05 ± 1.7E-04	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.

Table 2-2. Near-Facility Air Sampling Results, 2001 (pCi/m<sup>3</sup> ± total analytical uncertainty). (cont)

EDP Code	Composite Period	Isotope	Result ± Uncertainty	RQ*	EDP Code	Composite Period	Isotope	Result ± Uncertainty	RQ*
N441 (200-West)	12/27/2000 - 06/25/2001	<sup>144</sup> Ce	-3.8E-04 ± 7.6E-04	U	N441 (200-West)	06/25/2001 - 12/26/2001	<sup>144</sup> Ce	-1.2E-04 ± 7.0E-04	U
		<sup>60</sup> Co	-1.3E-05 ± 8.6E-05	U			<sup>60</sup> Co	-9.3E-06 ± 6.9E-05	U
		<sup>134</sup> Cs	5.3E-05 ± 7.9E-05	U			<sup>134</sup> Cs	-6.8E-06 ± 6.8E-05	U
		<sup>137</sup> Cs	-1.6E-05 ± 8.7E-05	U			<sup>137</sup> Cs	1.3E-04 ± 1.0E-04	U
		<sup>152</sup> Eu	-6.3E-05 ± 1.9E-04	U			<sup>152</sup> Eu	-1.3E-04 ± 2.0E-04	U
		<sup>154</sup> Eu	-8.5E-06 ± 8.6E-05	U			<sup>154</sup> Eu	8.0E-05 ± 2.0E-04	U
		<sup>155</sup> Eu	-5.4E-05 ± 2.0E-04	U			<sup>155</sup> Eu	-2.1E-04 ± 2.1E-04	U
		<sup>238</sup> Pu	1.5E-06 ± 9.9E-06	U			<sup>238</sup> Pu	7.1E-07 ± 7.1E-06	U
		<sup>239,240</sup> Pu	2.2E-05 ± 1.1E-05	U			<sup>239,240</sup> Pu	1.4E-05 ± 7.7E-06	U
		<sup>103</sup> Ru	5.1E-05 ± 6.8E-05	U			<sup>103</sup> Ru	-3.9E-05 ± 7.1E-05	U
		<sup>106</sup> Ru	2.6E-04 ± 7.1E-04	U			<sup>106</sup> Ru	-9.7E-05 ± 6.1E-04	U
		<sup>125</sup> Sb	1.2E-04 ± 1.4E-04	U			<sup>125</sup> Sb	-1.5E-04 ± 1.7E-04	U
		<sup>113</sup> Sn	-4.9E-05 ± 7.7E-05	U			<sup>113</sup> Sn	1.1E-04 ± 8.3E-05	U
		<sup>90</sup> Sr	9.2E-05 ± 8.7E-05	U			<sup>90</sup> Sr	1.3E-04 ± 8.6E-05	U
		<sup>234</sup> U	1.2E-05 ± 7.2E-06	U			<sup>234</sup> U	2.0E-05 ± 9.7E-06	U
		<sup>235</sup> U	1.5E-06 ± 3.1E-06	U			<sup>235</sup> U	4.3E-06 ± 4.8E-06	U
		<sup>238</sup> U	1.3E-05 ± 7.7E-06	U			<sup>238</sup> U	1.3E-05 ± 7.3E-06	U
		<sup>65</sup> Zn	-1.7E-04 ± 2.0E-04	U			<sup>65</sup> Zn	1.6E-04 ± 1.6E-04	U
N442 (200-West)	12/27/2000 - 06/25/2001	<sup>144</sup> Ce	-5.0E-04 ± 6.1E-04	U	N442 (200-West)	06/25/2001 - 12/26/2001	<sup>144</sup> Ce	-2.0E-05 ± 2.0E-04	U
		<sup>60</sup> Co	-7.8E-06 ± 7.1E-05	U			<sup>60</sup> Co	4.6E-06 ± 4.6E-05	U
		<sup>134</sup> Cs	3.6E-05 ± 7.1E-05	U			<sup>134</sup> Cs	6.8E-07 ± 6.8E-06	U
		<sup>137</sup> Cs	9.4E-05 ± 7.9E-05	U			<sup>137</sup> Cs	5.9E-05 ± 7.6E-05	U
		<sup>152</sup> Eu	-1.6E-05 ± 1.6E-04	U			<sup>152</sup> Eu	-1.1E-04 ± 1.8E-04	U
		<sup>154</sup> Eu	4.0E-05 ± 2.3E-04	U			<sup>154</sup> Eu	1.2E-04 ± 2.3E-04	U
		<sup>155</sup> Eu	6.5E-05 ± 1.6E-04	U			<sup>155</sup> Eu	2.5E-05 ± 1.5E-04	U
		<sup>238</sup> Pu	4.8E-06 ± 1.1E-05	U			<sup>238</sup> Pu	2.2E-06 ± 1.0E-05	U
		<sup>239,240</sup> Pu	2.4E-05 ± 1.1E-05	U			<sup>239,240</sup> Pu	1.3E-05 ± 8.2E-06	U
		<sup>103</sup> Ru	-4.0E-05 ± 6.5E-05	U			<sup>103</sup> Ru	6.3E-05 ± 7.1E-05	U
		<sup>106</sup> Ru	2.6E-05 ± 2.6E-04	U			<sup>106</sup> Ru	-2.3E-04 ± 6.4E-04	U
		<sup>125</sup> Sb	-7.2E-05 ± 1.6E-04	U			<sup>125</sup> Sb	-6.3E-05 ± 1.6E-04	U
		<sup>113</sup> Sn	-7.5E-06 ± 6.4E-05	U			<sup>113</sup> Sn	9.1E-06 ± 7.3E-05	U
		<sup>90</sup> Sr	-7.3E-06 ± 5.6E-05	U			<sup>90</sup> Sr	8.4E-05 ± 9.9E-05	U
		<sup>234</sup> U	6.2E-06 ± 4.6E-06	U			<sup>234</sup> U	1.6E-05 ± 8.5E-06	U
		<sup>235</sup> U	7.3E-07 ± 1.5E-06	U			<sup>235</sup> U	7.6E-07 ± 4.0E-06	U
		<sup>238</sup> U	9.5E-06 ± 6.2E-06	U			<sup>238</sup> U	1.1E-05 ± 7.1E-06	U
		<sup>65</sup> Zn	-1.9E-04 ± 1.9E-04	U			<sup>65</sup> Zn	4.5E-05 ± 1.8E-04	U
N449 (200-West)	12/27/2000 - 06/25/2001	<sup>144</sup> Ce	-1.2E-06 ± 1.2E-05	U	N449 (200-West)	06/25/2001 - 12/26/2001	<sup>144</sup> Ce	-2.0E-04 ± 5.7E-04	U
		<sup>60</sup> Co	-2.3E-05 ± 8.5E-05	U			<sup>60</sup> Co	-3.3E-05 ± 6.7E-05	U
		<sup>134</sup> Cs	-2.9E-06 ± 3.0E-05	U			<sup>134</sup> Cs	1.3E-05 ± 6.9E-05	U
		<sup>137</sup> Cs	4.0E-05 ± 8.0E-05	U			<sup>137</sup> Cs	7.5E-05 ± 6.8E-05	U
		<sup>152</sup> Eu	-9.7E-05 ± 2.5E-04	U			<sup>152</sup> Eu	7.7E-05 ± 1.5E-04	U
		<sup>154</sup> Eu	-4.2E-05 ± 2.3E-04	U			<sup>154</sup> Eu	-1.2E-04 ± 1.9E-04	U
		<sup>155</sup> Eu	3.0E-05 ± 2.3E-04	U			<sup>155</sup> Eu	-1.7E-05 ± 1.5E-04	U
		<sup>238</sup> Pu	-7.5E-07 ± 7.5E-06	U			<sup>238</sup> Pu	-3.2E-06 ± 8.3E-06	U
		<sup>239,240</sup> Pu	1.8E-04 ± 6.1E-05	U			<sup>239,240</sup> Pu	9.1E-06 ± 6.1E-06	U
		<sup>103</sup> Ru	8.2E-05 ± 7.6E-05	U			<sup>103</sup> Ru	4.3E-05 ± 7.2E-05	U
		<sup>106</sup> Ru	-5.9E-04 ± 7.1E-04	U			<sup>106</sup> Ru	-1.3E-04 ± 5.9E-04	U
		<sup>125</sup> Sb	6.8E-05 ± 1.9E-04	U			<sup>125</sup> Sb	-6.1E-05 ± 1.5E-04	U
		<sup>113</sup> Sn	-1.2E-04 ± 1.2E-04	U			<sup>113</sup> Sn	-5.9E-05 ± 7.0E-05	U
		<sup>90</sup> Sr	9.6E-05 ± 8.1E-05	U			<sup>90</sup> Sr	-6.0E-07 ± 6.0E-06	U
		<sup>234</sup> U	1.6E-05 ± 8.7E-06	U			<sup>234</sup> U	9.8E-06 ± 6.2E-06	U
		<sup>235</sup> U	1.6E-06 ± 2.3E-06	U			<sup>235</sup> U	3.3E-06 ± 4.1E-06	U
		<sup>238</sup> U	2.1E-05 ± 1.0E-05	U			<sup>238</sup> U	8.4E-06 ± 5.8E-06	U
		<sup>65</sup> Zn	-4.0E-04 ± 4.2E-04	U			<sup>65</sup> Zn	1.1E-04 ± 1.6E-04	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.

Table 2-2. Near-Facility Air Sampling Results, 2001 (pCi/m<sup>3</sup> ± total analytical uncertainty). (cont)

EDP Code	Composite Period	Isotope	Result ± Uncertainty	RQ*	EDP Code	Composite Period	Isotope	Result ± Uncertainty	RQ*
N456 (200-West)	12/27/2000 - 06/25/2001	<sup>144</sup> Ce	1.8E-04 ± 5.9E-04	U	N456 (200-West)	06/25/2001 - 12/26/2001	<sup>144</sup> Ce	-2.1E-04 ± 7.6E-04	U
		<sup>60</sup> Co	-3.3E-05 ± 7.0E-05	U			<sup>60</sup> Co	-1.4E-05 ± 7.1E-05	U
		<sup>134</sup> Cs	8.8E-05 ± 7.7E-05	U			<sup>134</sup> Cs	4.2E-05 ± 8.3E-05	U
		<sup>137</sup> Cs	-5.2E-05 ± 7.6E-05	U			<sup>137</sup> Cs	2.1E-05 ± 7.3E-05	U
		<sup>152</sup> Eu	-9.1E-07 ± 9.1E-06	U			<sup>152</sup> Eu	-1.3E-05 ± 1.3E-04	U
		<sup>154</sup> Eu	8.7E-05 ± 2.2E-04	U			<sup>154</sup> Eu	-8.5E-05 ± 2.2E-04	U
		<sup>155</sup> Eu	7.1E-05 ± 1.7E-04	U			<sup>155</sup> Eu	9.6E-05 ± 2.0E-04	U
		<sup>238</sup> Pu	3.4E-06 ± 1.0E-05	U			<sup>238</sup> Pu	-5.2E-06 ± 8.5E-06	U
		<sup>239,240</sup> Pu	1.1E-05 ± 7.1E-06				<sup>239,240</sup> Pu	4.0E-06 ± 4.9E-06	U
		<sup>103</sup> Ru	5.7E-05 ± 7.0E-05	U			<sup>103</sup> Ru	1.3E-05 ± 6.9E-05	U
		<sup>106</sup> Ru	-3.2E-04 ± 6.2E-04	U			<sup>106</sup> Ru	2.2E-04 ± 6.7E-04	U
		<sup>125</sup> Sb	8.5E-05 ± 1.8E-04	U			<sup>125</sup> Sb	1.3E-04 ± 2.0E-04	U
		<sup>113</sup> Sn	4.1E-06 ± 4.1E-05	U			<sup>113</sup> Sn	9.6E-05 ± 8.6E-05	U
		<sup>90</sup> Sr	2.3E-04 ± 1.2E-04				<sup>90</sup> Sr	7.9E-05 ± 7.4E-05	U
		<sup>234</sup> U	2.0E-05 ± 1.1E-05				<sup>234</sup> U	1.7E-05 ± 8.8E-06	
		<sup>235</sup> U	4.0E-06 ± 3.7E-06				<sup>235</sup> U	3.8E-06 ± 3.6E-06	
		<sup>238</sup> U	1.4E-05 ± 7.9E-06				<sup>238</sup> U	1.3E-05 ± 7.5E-06	
N457 (200-West)	12/27/2000 - 06/25/2001	<sup>65</sup> Zn	-1.1E-04 ± 1.6E-04	U	N457 (200-West)	06/25/2001 - 12/26/2001	<sup>65</sup> Zn	-2.3E-04 ± 2.4E-04	U
		<sup>144</sup> Ce	1.0E-04 ± 7.4E-04	U			<sup>144</sup> Ce	3.8E-04 ± 6.7E-04	U
		<sup>60</sup> Co	-5.4E-05 ± 7.5E-05	U			<sup>60</sup> Co	6.5E-06 ± 6.5E-05	U
		<sup>134</sup> Cs	-4.6E-06 ± 4.6E-05	U			<sup>134</sup> Cs	-1.5E-05 ± 8.2E-05	U
		<sup>137</sup> Cs	2.8E-05 ± 7.3E-05	U			<sup>137</sup> Cs	6.0E-05 ± 8.1E-05	U
		<sup>152</sup> Eu	3.7E-06 ± 3.7E-05	U			<sup>152</sup> Eu	-1.0E-04 ± 1.7E-04	U
		<sup>154</sup> Eu	-9.4E-05 ± 2.4E-04	U			<sup>154</sup> Eu	1.1E-05 ± 1.1E-04	U
		<sup>155</sup> Eu	-2.3E-06 ± 2.3E-05	U			<sup>155</sup> Eu	-2.0E-04 ± 2.1E-04	U
		<sup>238</sup> Pu	1.0E-05 ± 1.1E-05	U			<sup>238</sup> Pu	1.6E-05 ± 1.1E-05	
		<sup>239,240</sup> Pu	8.7E-06 ± 6.1E-06				<sup>239,240</sup> Pu	6.1E-05 ± 2.4E-05	
		<sup>103</sup> Ru	-7.1E-06 ± 6.8E-05	U			<sup>103</sup> Ru	-1.5E-05 ± 7.7E-05	U
		<sup>106</sup> Ru	-6.7E-04 ± 6.9E-04	U			<sup>106</sup> Ru	-3.5E-04 ± 6.8E-04	U
		<sup>125</sup> Sb	-6.2E-05 ± 1.7E-04	U			<sup>125</sup> Sb	-2.9E-05 ± 1.8E-04	U
		<sup>113</sup> Sn	5.7E-06 ± 5.7E-05	U			<sup>113</sup> Sn	1.2E-05 ± 8.2E-05	U
		<sup>90</sup> Sr	-3.6E-05 ± 6.9E-05	U			<sup>90</sup> Sr	-1.4E-05 ± 6.7E-05	U
		<sup>234</sup> U	2.3E-05 ± 1.1E-05				<sup>234</sup> U	6.4E-06 ± 5.0E-06	
		<sup>235</sup> U	7.2E-07 ± 1.5E-06	U			<sup>235</sup> U	8.5E-07 ± 3.8E-06	U
		<sup>238</sup> U	2.5E-05 ± 1.2E-05				<sup>238</sup> U	1.1E-05 ± 7.5E-06	
N956 (200-West)	12/27/2000 - 06/25/2001	<sup>65</sup> Zn	-1.1E-04 ± 1.5E-04	U	N956 (200-West)	06/25/2001 - 12/26/2001	<sup>65</sup> Zn	-1.9E-04 ± 2.0E-04	U
		<sup>144</sup> Ce	-1.5E-04 ± 8.2E-04	U			<sup>144</sup> Ce	-1.4E-04 ± 7.3E-04	U
		<sup>60</sup> Co	-4.5E-05 ± 8.1E-05	U			<sup>60</sup> Co	6.7E-05 ± 7.8E-05	U
		<sup>134</sup> Cs	-4.3E-05 ± 8.3E-05	U			<sup>134</sup> Cs	-1.2E-04 ± 1.3E-04	U
		<sup>137</sup> Cs	2.1E-04 ± 1.5E-04				<sup>137</sup> Cs	2.8E-04 ± 1.5E-04	
		<sup>152</sup> Eu	-7.1E-06 ± 7.1E-05	U			<sup>152</sup> Eu	-2.2E-04 ± 2.3E-04	U
		<sup>154</sup> Eu	-1.1E-04 ± 2.5E-04	U			<sup>154</sup> Eu	-3.7E-05 ± 2.0E-04	U
		<sup>155</sup> Eu	1.3E-04 ± 2.2E-04	U			<sup>155</sup> Eu	-2.0E-04 ± 2.5E-04	U
		<sup>238</sup> Pu	2.8E-06 ± 9.1E-06	U			<sup>238</sup> Pu	6.0E-07 ± 6.0E-06	U
		<sup>239,240</sup> Pu	2.8E-05 ± 1.4E-05				<sup>239,240</sup> Pu	1.6E-05 ± 8.4E-06	
		<sup>103</sup> Ru	2.3E-06 ± 2.3E-05	U			<sup>103</sup> Ru	4.1E-06 ± 4.1E-05	U
		<sup>106</sup> Ru	5.1E-04 ± 7.8E-04	U			<sup>106</sup> Ru	-1.1E-05 ± 1.1E-04	U
		<sup>125</sup> Sb	6.4E-05 ± 2.0E-04	U			<sup>125</sup> Sb	-2.9E-05 ± 1.6E-04	U
		<sup>113</sup> Sn	-3.4E-06 ± 3.4E-05	U			<sup>113</sup> Sn	-2.3E-06 ± 2.3E-05	U
		<sup>90</sup> Sr	-8.3E-06 ± 6.5E-05	U			<sup>90</sup> Sr	4.4E-05 ± 6.7E-05	U
		<sup>234</sup> U	2.5E-05 ± 1.3E-05				<sup>234</sup> U	1.1E-05 ± 7.0E-06	
		<sup>235</sup> U	2.9E-06 ± 5.9E-06	U			<sup>235</sup> U	-8.0E-07 ± 2.8E-06	U
		<sup>238</sup> U	1.1E-05 ± 7.1E-06				<sup>238</sup> U	1.9E-05 ± 1.0E-05	
		<sup>65</sup> Zn	4.2E-06 ± 4.2E-05	U			<sup>65</sup> Zn	1.3E-06 ± 1.3E-05	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.

Table 2-2. Near-Facility Air Sampling Results, 2001 (pCi/m<sup>3</sup> ± total analytical uncertainty). (cont)

EDP Code	Composite Period	Isotope	Result ± Uncertainty	RQ*	EDP Code	Composite Period	Isotope	Result ± Uncertainty	RQ*
N963 (200-West)	12/27/2000 - 06/25/2001	<sup>144</sup> Ce	1.4E-04 ± 6.9E-04	U	N963 (200-West)	06/25/2001 - 12/26/2001	<sup>144</sup> Ce	-3.0E-04 ± 7.0E-04	U
		<sup>60</sup> Co	-2.7E-05 ± 7.5E-05	U			<sup>60</sup> Co	2.2E-05 ± 7.0E-05	U
		<sup>134</sup> Cs	6.4E-05 ± 7.9E-05	U			<sup>134</sup> Cs	3.0E-05 ± 8.6E-05	U
		<sup>137</sup> Cs	1.0E-04 ± 9.1E-05	U			<sup>137</sup> Cs	4.9E-05 ± 7.8E-05	U
		<sup>152</sup> Eu	3.9E-05 ± 1.6E-04	U			<sup>152</sup> Eu	-5.0E-05 ± 2.0E-04	U
		<sup>154</sup> Eu	-1.6E-04 ± 2.1E-04	U			<sup>154</sup> Eu	-3.6E-06 ± 3.6E-05	U
		<sup>155</sup> Eu	5.0E-05 ± 2.0E-04	U			<sup>155</sup> Eu	6.2E-05 ± 2.1E-04	U
		<sup>238</sup> Pu	7.3E-07 ± 7.3E-06	U			<sup>238</sup> Pu	8.7E-06 ± 1.1E-05	U
		<sup>239,240</sup> Pu	4.5E-06 ± 5.1E-06	U			<sup>239,240</sup> Pu	1.2E-05 ± 7.1E-06	U
		<sup>103</sup> Ru	-7.2E-05 ± 7.4E-05	U			<sup>103</sup> Ru	3.0E-05 ± 7.8E-05	U
		<sup>106</sup> Ru	-3.4E-04 ± 7.0E-04	U			<sup>106</sup> Ru	-8.9E-04 ± 9.2E-04	U
		<sup>125</sup> Sb	-5.6E-05 ± 1.7E-04	U			<sup>125</sup> Sb	8.8E-05 ± 1.7E-04	U
		<sup>113</sup> Sn	-5.6E-05 ± 9.0E-05	U			<sup>113</sup> Sn	-3.8E-05 ± 8.2E-05	U
		<sup>90</sup> Sr	5.1E-05 ± 7.3E-05	U			<sup>90</sup> Sr	9.5E-05 ± 9.8E-05	U
		<sup>234</sup> U	1.2E-05 ± 7.6E-06	U			<sup>234</sup> U	1.2E-05 ± 6.7E-06	U
		<sup>235</sup> U	2.6E-06 ± 4.0E-06	U			<sup>235</sup> U	2.0E-06 ± 3.7E-06	U
		<sup>238</sup> U	5.5E-06 ± 5.1E-06	U			<sup>238</sup> U	1.0E-05 ± 6.4E-06	U
		<sup>65</sup> Zn	-5.1E-06 ± 5.1E-05	U			<sup>65</sup> Zn	-2.0E-04 ± 2.1E-04	U
N964 (200-West)	12/27/2000 - 06/25/2001	<sup>144</sup> Ce	-1.1E-04 ± 8.2E-04	U	N964 (200-West)	06/25/2001 - 12/26/2001	<sup>144</sup> Ce	3.2E-04 ± 6.7E-04	U
		<sup>60</sup> Co	-3.1E-05 ± 7.7E-05	U			<sup>60</sup> Co	8.1E-05 ± 8.7E-05	U
		<sup>134</sup> Cs	3.5E-05 ± 8.2E-05	U			<sup>134</sup> Cs	-4.6E-06 ± 4.6E-05	U
		<sup>137</sup> Cs	1.4E-04 ± 9.9E-05	U			<sup>137</sup> Cs	7.2E-05 ± 7.8E-05	U
		<sup>152</sup> Eu	-1.5E-04 ± 2.3E-04	U			<sup>152</sup> Eu	-6.5E-05 ± 1.7E-04	U
		<sup>154</sup> Eu	-8.3E-05 ± 2.2E-04	U			<sup>154</sup> Eu	-1.2E-05 ± 1.2E-04	U
		<sup>155</sup> Eu	1.4E-04 ± 2.3E-04	U			<sup>155</sup> Eu	-2.1E-04 ± 2.2E-04	U
		<sup>238</sup> Pu	1.1E-05 ± 1.2E-05	U			<sup>238</sup> Pu	1.6E-05 ± 1.4E-05	U
		<sup>239,240</sup> Pu	2.5E-05 ± 1.2E-05	U			<sup>239,240</sup> Pu	8.5E-06 ± 7.2E-06	U
		<sup>103</sup> Ru	-5.3E-05 ± 7.0E-05	U			<sup>103</sup> Ru	2.5E-05 ± 8.5E-05	U
		<sup>106</sup> Ru	-3.0E-04 ± 6.9E-04	U			<sup>106</sup> Ru	1.1E-04 ± 6.7E-04	U
		<sup>125</sup> Sb	-5.5E-06 ± 5.5E-05	U			<sup>125</sup> Sb	3.0E-05 ± 1.7E-04	U
		<sup>113</sup> Sn	-7.0E-05 ± 9.2E-05	U			<sup>113</sup> Sn	-1.8E-05 ± 7.8E-05	U
		<sup>90</sup> Sr	-3.1E-05 ± 7.4E-05	U			<sup>90</sup> Sr	4.3E-05 ± 7.8E-05	U
		<sup>234</sup> U	1.7E-05 ± 9.0E-06	U			<sup>234</sup> U	9.3E-06 ± 5.5E-06	U
		<sup>235</sup> U	8.6E-07 ± 8.9E-07	U			<sup>235</sup> U	1.9E-06 ± 2.9E-06	U
		<sup>238</sup> U	1.7E-05 ± 9.5E-06	U			<sup>238</sup> U	9.3E-06 ± 5.8E-06	U
		<sup>65</sup> Zn	-8.2E-05 ± 1.7E-04	U			<sup>65</sup> Zn	4.1E-05 ± 2.1E-04	U
N965 (200-West)	12/27/2000 - 06/25/2001	<sup>144</sup> Ce	-1.3E-04 ± 5.5E-04	U	N965 (200-West)	06/25/2001 - 12/26/2001	<sup>144</sup> Ce	-4.6E-04 ± 7.4E-04	U
		<sup>60</sup> Co	-8.8E-06 ± 7.7E-05	U			<sup>60</sup> Co	-6.1E-06 ± 6.1E-05	U
		<sup>134</sup> Cs	-1.5E-05 ± 7.9E-05	U			<sup>134</sup> Cs	5.7E-05 ± 7.5E-05	U
		<sup>137</sup> Cs	6.3E-06 ± 6.3E-05	U			<sup>137</sup> Cs	5.6E-05 ± 7.3E-05	U
		<sup>152</sup> Eu	5.7E-05 ± 1.6E-04	U			<sup>152</sup> Eu	-1.4E-04 ± 2.0E-04	U
		<sup>154</sup> Eu	-6.0E-05 ± 2.1E-04	U			<sup>154</sup> Eu	-2.0E-05 ± 1.9E-04	U
		<sup>155</sup> Eu	-5.7E-05 ± 1.6E-04	U			<sup>155</sup> Eu	1.0E-06 ± 1.0E-05	U
		<sup>238</sup> Pu	7.4E-07 ± 7.4E-06	U			<sup>238</sup> Pu	4.1E-06 ± 9.1E-06	U
		<sup>239,240</sup> Pu	3.6E-05 ± 1.6E-05	U			<sup>239,240</sup> Pu	2.7E-06 ± 3.9E-06	U
		<sup>103</sup> Ru	-1.3E-05 ± 7.3E-05	U			<sup>103</sup> Ru	-4.1E-06 ± 4.1E-05	U
		<sup>106</sup> Ru	2.6E-04 ± 6.4E-04	U			<sup>106</sup> Ru	4.5E-04 ± 6.3E-04	U
		<sup>125</sup> Sb	-1.1E-05 ± 1.1E-04	U			<sup>125</sup> Sb	-7.4E-05 ± 1.6E-04	U
		<sup>113</sup> Sn	-1.4E-05 ± 7.0E-05	U			<sup>113</sup> Sn	2.0E-05 ± 7.9E-05	U
		<sup>90</sup> Sr	-3.8E-05 ± 6.9E-05	U			<sup>90</sup> Sr	6.9E-05 ± 6.9E-05	U
		<sup>234</sup> U	1.4E-05 ± 8.4E-06	U			<sup>234</sup> U	9.0E-06 ± 6.1E-06	U
		<sup>235</sup> U	5.6E-06 ± 4.9E-06	U			<sup>235</sup> U	3.7E-06 ± 3.6E-06	U
		<sup>238</sup> U	1.1E-05 ± 7.0E-06	U			<sup>238</sup> U	1.2E-05 ± 7.5E-06	U
		<sup>65</sup> Zn	1.8E-05 ± 1.5E-04	U			<sup>65</sup> Zn	-1.3E-04 ± 1.7E-04	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.

Table 2-2. Near-Facility Air Sampling Results, 2001 (pCi/m<sup>3</sup> ± total analytical uncertainty). (cont)

EDP Code	Composite Period	Isotope	Result ± Uncertainty	RQ*	EDP Code	Composite Period	Isotope	Result ± Uncertainty	RQ*
N966 (200-West)	12/27/2000 - 06/25/2001	<sup>144</sup> Ce	3.4E-04 ± 7.4E-04	U	N966 (200-West)	06/25/2001 - 12/26/2001	<sup>144</sup> Ce	-1.5E-04 ± 6.2E-04	U
		<sup>60</sup> Co	3.0E-06 ± 3.0E-05	U			<sup>60</sup> Co	1.5E-05 ± 8.5E-05	U
		<sup>134</sup> Cs	-3.5E-05 ± 8.3E-05	U			<sup>134</sup> Cs	2.3E-05 ± 8.6E-05	U
		<sup>137</sup> Cs	9.7E-05 ± 1.0E-04	U			<sup>137</sup> Cs	2.1E-05 ± 8.9E-05	U
		<sup>152</sup> Eu	-6.7E-05 ± 1.8E-04	U			<sup>152</sup> Eu	-2.1E-05 ± 1.8E-04	U
		<sup>154</sup> Eu	-8.9E-07 ± 8.9E-06	U			<sup>154</sup> Eu	3.8E-04 ± 3.3E-04	U
		<sup>155</sup> Eu	2.1E-04 ± 2.0E-04	U			<sup>155</sup> Eu	-2.7E-04 ± 2.8E-04	U
		<sup>238</sup> Pu	-7.4E-07 ± 7.4E-06	U			<sup>238</sup> Pu	9.1E-06 ± 9.5E-06	U
		<sup>239,240</sup> Pu	2.4E-05 ± 1.1E-05	U			<sup>239,240</sup> Pu	4.6E-06 ± 4.3E-06	U
		<sup>103</sup> Ru	-1.0E-05 ± 7.5E-05	U			<sup>103</sup> Ru	-7.4E-05 ± 8.9E-05	U
		<sup>106</sup> Ru	9.6E-04 ± 7.7E-04	U			<sup>106</sup> Ru	-3.6E-04 ± 7.0E-04	U
		<sup>125</sup> Sb	9.8E-05 ± 1.7E-04	U			<sup>125</sup> Sb	2.0E-05 ± 1.8E-04	U
		<sup>113</sup> Sn	-5.5E-05 ± 7.7E-05	U			<sup>113</sup> Sn	2.2E-05 ± 7.9E-05	U
		<sup>90</sup> Sr	5.9E-05 ± 8.7E-05	U			<sup>90</sup> Sr	7.0E-06 ± 4.5E-05	U
		<sup>234</sup> U	2.0E-05 ± 1.0E-05				<sup>234</sup> U	2.0E-05 ± 1.1E-05	
		<sup>235</sup> U	4.4E-06 ± 3.9E-06				<sup>235</sup> U	3.9E-06 ± 3.8E-06	
		<sup>238</sup> U	1.4E-05 ± 7.7E-06				<sup>238</sup> U	1.8E-05 ± 9.5E-06	
N974 (200-West)	12/27/2000 - 06/25/2001	<sup>65</sup> Zn	1.8E-04 ± 1.8E-04	U	N974 (200-West)	06/25/2001 - 12/26/2001	<sup>65</sup> Zn	1.3E-05 ± 1.3E-04	U
		<sup>144</sup> Ce	-3.8E-05 ± 3.8E-04	U			<sup>144</sup> Ce	1.2E-04 ± 8.3E-04	U
		<sup>60</sup> Co	-2.3E-06 ± 2.3E-05	U			<sup>60</sup> Co	-5.9E-05 ± 9.3E-05	U
		<sup>134</sup> Cs	-4.6E-05 ± 7.1E-05	U			<sup>134</sup> Cs	9.6E-05 ± 9.5E-05	U
		<sup>137</sup> Cs	1.4E-04 ± 1.0E-04	U			<sup>137</sup> Cs	1.1E-05 ± 8.7E-05	U
		<sup>152</sup> Eu	1.5E-04 ± 2.3E-04	U			<sup>152</sup> Eu	-1.7E-04 ± 2.0E-04	U
		<sup>154</sup> Eu	-5.2E-06 ± 5.2E-05	U			<sup>154</sup> Eu	-1.9E-04 ± 2.4E-04	U
		<sup>155</sup> Eu	6.9E-05 ± 2.1E-04	U			<sup>155</sup> Eu	-2.3E-05 ± 2.0E-04	U
		<sup>238</sup> Pu	1.5E-06 ± 3.0E-06	U			<sup>238</sup> Pu	7.1E-06 ± 1.2E-05	U
		<sup>239,240</sup> Pu	1.1E-05 ± 7.0E-06	U			<sup>239,240</sup> Pu	7.1E-06 ± 6.1E-06	U
		<sup>103</sup> Ru	6.5E-05 ± 7.6E-05	U			<sup>103</sup> Ru	-6.8E-05 ± 1.0E-04	U
		<sup>106</sup> Ru	4.1E-04 ± 6.5E-04	U			<sup>106</sup> Ru	2.0E-04 ± 8.0E-04	U
		<sup>125</sup> Sb	-2.6E-05 ± 1.7E-04	U			<sup>125</sup> Sb	1.3E-04 ± 2.0E-04	U
		<sup>113</sup> Sn	3.8E-05 ± 8.9E-05	U			<sup>113</sup> Sn	-3.7E-05 ± 1.1E-04	U
		<sup>90</sup> Sr	8.9E-05 ± 9.6E-05	U			<sup>90</sup> Sr	1.5E-04 ± 1.0E-04	U
		<sup>234</sup> U	1.6E-05 ± 9.4E-06				<sup>234</sup> U	1.9E-05 ± 1.0E-05	
		<sup>235</sup> U	5.5E-06 ± 4.8E-06				<sup>235</sup> U	3.1E-06 ± 3.3E-06	U
		<sup>238</sup> U	1.5E-05 ± 8.4E-06				<sup>238</sup> U	1.1E-05 ± 7.0E-06	
N975 (200-West)	12/27/2000 - 06/25/2001	<sup>65</sup> Zn	-9.9E-05 ± 1.8E-04	U	N975 (200-West)	06/25/2001 - 12/26/2001	<sup>65</sup> Zn	2.6E-04 ± 2.2E-04	U
		<sup>144</sup> Ce	-9.9E-05 ± 9.1E-04	U			<sup>144</sup> Ce	6.9E-04 ± 7.6E-04	U
		<sup>60</sup> Co	1.7E-05 ± 8.9E-05	U			<sup>60</sup> Co	2.5E-05 ± 7.3E-05	U
		<sup>134</sup> Cs	8.0E-05 ± 8.9E-05	U			<sup>134</sup> Cs	4.3E-06 ± 4.3E-05	U
		<sup>137</sup> Cs	3.6E-05 ± 8.2E-05	U			<sup>137</sup> Cs	1.7E-05 ± 7.4E-05	U
		<sup>152</sup> Eu	5.5E-05 ± 1.9E-04	U			<sup>152</sup> Eu	-6.1E-05 ± 2.0E-04	U
		<sup>154</sup> Eu	-6.1E-05 ± 2.3E-04	U			<sup>154</sup> Eu	3.7E-05 ± 1.9E-04	U
		<sup>155</sup> Eu	2.8E-05 ± 2.4E-04	U			<sup>155</sup> Eu	-8.6E-05 ± 2.2E-04	U
		<sup>238</sup> Pu	-6.4E-06 ± 1.3E-05	U			<sup>238</sup> Pu	7.8E-06 ± 1.1E-05	U
		<sup>239,240</sup> Pu	1.3E-05 ± 9.4E-06	U			<sup>239,240</sup> Pu	2.0E-05 ± 1.1E-05	U
		<sup>103</sup> Ru	-6.3E-05 ± 8.9E-05	U			<sup>103</sup> Ru	-5.6E-05 ± 9.0E-05	U
		<sup>106</sup> Ru	-2.7E-05 ± 2.7E-04	U			<sup>106</sup> Ru	5.8E-05 ± 5.8E-04	U
		<sup>125</sup> Sb	-8.5E-05 ± 2.1E-04	U			<sup>125</sup> Sb	-3.0E-05 ± 1.6E-04	U
		<sup>113</sup> Sn	-1.1E-05 ± 8.8E-05	U			<sup>113</sup> Sn	1.2E-09 ± 1.2E-08	U
		<sup>90</sup> Sr	-8.7E-06 ± 7.2E-05	U			<sup>90</sup> Sr	4.9E-05 ± 7.1E-05	U
		<sup>234</sup> U	1.8E-05 ± 1.2E-05				<sup>234</sup> U	9.9E-06 ± 6.9E-06	
		<sup>235</sup> U	2.8E-06 ± 4.0E-06	U			<sup>235</sup> U	1.5E-06 ± 2.1E-06	U
		<sup>238</sup> U	1.4E-05 ± 1.0E-05				<sup>238</sup> U	8.5E-06 ± 5.5E-06	
		<sup>65</sup> Zn	-1.1E-04 ± 2.0E-04	U			<sup>65</sup> Zn	1.8E-05 ± 1.5E-04	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.

Table 2-2. Near-Facility Air Sampling Results, 2001 (pCi/m<sup>3</sup> ± total analytical uncertainty). (cont)

EDP Code	Composite Period	Isotope	Result ± Uncertainty	RQ*	EDP Code	Composite Period	Isotope	Result ± Uncertainty	RQ*
N987 (200-West)	12/27/2000 - 06/25/2001	<sup>144</sup> Ce	-7.2E-04 ± 7.7E-04	U	N987 (200-West)	06/25/2001 - 12/26/2001	<sup>144</sup> Ce	-2.4E-05 ± 2.4E-04	U
		<sup>60</sup> Co	-4.2E-06 ± 4.2E-05	U			<sup>60</sup> Co	4.4E-05 ± 8.3E-05	U
		<sup>134</sup> Cs	1.0E-04 ± 9.9E-05	U			<sup>134</sup> Cs	-2.6E-05 ± 1.0E-04	U
		<sup>137</sup> Cs	2.1E-05 ± 9.0E-05	U			<sup>137</sup> Cs	2.0E-05 ± 9.4E-05	U
		<sup>152</sup> Eu	5.8E-05 ± 1.8E-04	U			<sup>152</sup> Eu	2.4E-05 ± 2.0E-04	U
		<sup>154</sup> Eu	-4.7E-05 ± 2.3E-04	U			<sup>154</sup> Eu	-1.9E-04 ± 2.7E-04	U
		<sup>155</sup> Eu	-1.7E-04 ± 2.0E-04	U			<sup>155</sup> Eu	-9.1E-05 ± 2.0E-04	U
		<sup>238</sup> Pu	4.9E-06 ± 1.0E-05	U			<sup>238</sup> Pu	6.0E-06 ± 9.1E-06	U
		<sup>239,240</sup> Pu	4.9E-05 ± 2.0E-05				<sup>239,240</sup> Pu	1.0E-05 ± 7.0E-06	
		<sup>103</sup> Ru	-3.8E-05 ± 8.9E-05	U			<sup>103</sup> Ru	1.9E-05 ± 1.0E-04	U
		<sup>106</sup> Ru	-4.8E-04 ± 7.2E-04	U			<sup>106</sup> Ru	-3.2E-04 ± 7.8E-04	U
		<sup>125</sup> Sb	-4.6E-05 ± 1.8E-04	U			<sup>125</sup> Sb	-1.1E-04 ± 1.8E-04	U
		<sup>113</sup> Sn	2.1E-05 ± 8.4E-05	U			<sup>113</sup> Sn	-1.2E-05 ± 9.1E-05	U
		<sup>90</sup> Sr	1.5E-05 ± 7.5E-05	U			<sup>90</sup> Sr	1.3E-04 ± 1.0E-04	
		<sup>234</sup> U	9.1E-06 ± 6.2E-06				<sup>234</sup> U	9.6E-06 ± 5.8E-06	
		<sup>235</sup> U	9.1E-07 ± 1.8E-06	U			<sup>235</sup> U	6.1E-07 ± 6.3E-07	U
		<sup>238</sup> U	1.1E-05 ± 7.4E-06				<sup>238</sup> U	6.7E-06 ± 4.6E-06	
		<sup>65</sup> Zn	-1.7E-05 ± 1.7E-04	U			<sup>65</sup> Zn	-1.5E-04 ± 2.3E-04	U
N994 (200-West)	12/27/2000 - 06/25/2001	<sup>144</sup> Ce	1.8E-04 ± 7.4E-04	U	N994 (200-West)	06/25/2001 - 12/26/2001	<sup>144</sup> Ce	-2.9E-04 ± 8.4E-04	U
		<sup>60</sup> Co	4.9E-06 ± 4.9E-05	U			<sup>60</sup> Co	1.0E-05 ± 7.0E-05	U
		<sup>134</sup> Cs	-1.4E-05 ± 7.4E-05	U			<sup>134</sup> Cs	3.2E-05 ± 7.4E-05	U
		<sup>137</sup> Cs	5.2E-05 ± 7.0E-05	U			<sup>137</sup> Cs	-1.3E-05 ± 8.3E-05	U
		<sup>152</sup> Eu	-6.3E-05 ± 1.8E-04	U			<sup>152</sup> Eu	-1.7E-04 ± 2.1E-04	U
		<sup>154</sup> Eu	3.1E-04 ± 2.2E-04	U			<sup>154</sup> Eu	-4.4E-06 ± 4.4E-05	U
		<sup>155</sup> Eu	8.9E-06 ± 8.9E-05	U			<sup>155</sup> Eu	1.2E-04 ± 2.1E-04	U
		<sup>238</sup> Pu	-1.4E-06 ± 8.5E-06	U			<sup>238</sup> Pu	-6.9E-07 ± 7.0E-06	U
		<sup>239,240</sup> Pu	2.9E-05 ± 1.3E-05				<sup>239,240</sup> Pu	5.5E-06 ± 5.2E-06	U
		<sup>103</sup> Ru	1.2E-04 ± 8.2E-05	U			<sup>103</sup> Ru	1.6E-05 ± 9.2E-05	U
		<sup>106</sup> Ru	2.3E-04 ± 6.4E-04	U			<sup>106</sup> Ru	-1.3E-04 ± 7.0E-04	U
		<sup>125</sup> Sb	6.5E-05 ± 1.7E-04	U			<sup>125</sup> Sb	2.9E-05 ± 1.7E-04	U
		<sup>113</sup> Sn	-7.4E-05 ± 8.5E-05	U			<sup>113</sup> Sn	-1.2E-05 ± 9.2E-05	U
		<sup>90</sup> Sr	2.3E-04 ± 1.1E-04				<sup>90</sup> Sr	1.6E-04 ± 9.6E-05	
		<sup>234</sup> U	1.1E-05 ± 6.9E-06				<sup>234</sup> U	1.4E-05 ± 7.2E-06	
		<sup>235</sup> U	8.5E-07 ± 1.7E-06	U			<sup>235</sup> U	4.3E-06 ± 3.8E-06	
		<sup>238</sup> U	4.5E-06 ± 5.1E-06	U			<sup>238</sup> U	4.0E-06 ± 3.3E-06	
		<sup>65</sup> Zn	9.2E-06 ± 9.2E-05	U			<sup>65</sup> Zn	4.9E-06 ± 4.9E-05	U
N130 (300 TEDF)	12/28/2000 - 06/27/2001	<sup>144</sup> Ce	-3.6E-06 ± 3.6E-05	U	N130 (300 TEDF)	06/27/2001 - 12/27/2001	<sup>144</sup> Ce	-3.0E-04 ± 5.9E-04	U
		<sup>60</sup> Co	-9.6E-06 ± 8.5E-05	U			<sup>60</sup> Co	2.2E-05 ± 6.5E-05	U
		<sup>134</sup> Cs	-4.2E-05 ± 7.9E-05	U			<sup>134</sup> Cs	-2.3E-05 ± 6.9E-05	U
		<sup>137</sup> Cs	-3.3E-05 ± 8.1E-05	U			<sup>137</sup> Cs	2.2E-05 ± 6.1E-05	U
		<sup>152</sup> Eu	-1.0E-04 ± 2.3E-04	U			<sup>152</sup> Eu	1.6E-04 ± 1.5E-04	U
		<sup>154</sup> Eu	-7.8E-05 ± 2.3E-04	U			<sup>154</sup> Eu	3.8E-05 ± 1.9E-04	U
		<sup>155</sup> Eu	6.9E-05 ± 2.1E-04	U			<sup>155</sup> Eu	8.9E-05 ± 1.5E-04	U
		<sup>238</sup> Pu	3.1E-06 ± 8.7E-06	U			<sup>238</sup> Pu	2.0E-06 ± 8.8E-06	U
		<sup>239,240</sup> Pu	7.9E-07 ± 8.2E-07	U			<sup>239,240</sup> Pu	-6.8E-07 ± 3.1E-06	U
		<sup>103</sup> Ru	-6.7E-05 ± 7.1E-05	U			<sup>103</sup> Ru	3.2E-05 ± 6.5E-05	U
		<sup>106</sup> Ru	3.5E-04 ± 6.6E-04	U			<sup>106</sup> Ru	-1.1E-04 ± 5.7E-04	U
		<sup>125</sup> Sb	-7.6E-05 ± 1.8E-04	U			<sup>125</sup> Sb	-5.5E-05 ± 1.5E-04	U
		<sup>113</sup> Sn	7.0E-05 ± 9.9E-05	U			<sup>113</sup> Sn	-3.5E-05 ± 8.1E-05	U
		<sup>90</sup> Sr	-2.2E-05 ± 5.2E-05	U			<sup>90</sup> Sr	8.5E-05 ± 8.4E-05	U
		<sup>234</sup> U	1.1E-05 ± 6.9E-06				<sup>234</sup> U	1.3E-05 ± 7.6E-06	
		<sup>235</sup> U	3.5E-06 ± 4.3E-06	U			<sup>235</sup> U	1.6E-06 ± 2.2E-06	U
		<sup>238</sup> U	6.6E-06 ± 5.6E-06				<sup>238</sup> U	1.6E-05 ± 8.6E-06	
		<sup>65</sup> Zn	-8.6E-05 ± 2.2E-04	U			<sup>65</sup> Zn	-7.0E-05 ± 1.4E-04	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.



Table 2-2. Near-Facility Air Sampling Results, 2001 (pCi/m<sup>3</sup> ± total analytical uncertainty). (cont)

EDP Code	Composite Period	Isotope	Result ± Uncertainty	RQ*	EDP Code	Composite Period	Isotope	Result ± Uncertainty	RQ*
N981 (WYE Barricade)	12/28/2000 - 06/27/2001	<sup>144</sup> Ce	-1.3E-04 ± 7.1E-04	U	N981 (WYE Barricade)	06/27/2001 - 12/27/2001	<sup>144</sup> Ce	3.0E-04 ± 6.8E-04	U
		<sup>60</sup> Co	2.3E-05 ± 7.8E-05	U			<sup>60</sup> Co	3.4E-05 ± 7.8E-05	U
		<sup>134</sup> Cs	-2.8E-05 ± 7.6E-05	U			<sup>134</sup> Cs	-4.6E-05 ± 8.7E-05	U
		<sup>137</sup> Cs	-3.2E-05 ± 7.5E-05	U			<sup>137</sup> Cs	6.7E-07 ± 6.7E-06	U
		<sup>152</sup> Eu	1.8E-06 ± 1.8E-05	U			<sup>152</sup> Eu	1.1E-04 ± 1.8E-04	U
		<sup>154</sup> Eu	-4.3E-05 ± 2.2E-04	U			<sup>154</sup> Eu	-1.6E-04 ± 2.3E-04	U
		<sup>155</sup> Eu	1.7E-05 ± 1.7E-04	U			<sup>155</sup> Eu	1.0E-05 ± 1.0E-04	U
		<sup>238</sup> Pu	1.0E-05 ± 8.8E-06	U			<sup>238</sup> Pu	7.7E-06 ± 1.1E-05	U
		<sup>239,240</sup> Pu	1.9E-06 ± 2.4E-06	U			<sup>239,240</sup> Pu	1.4E-06 ± 3.9E-06	U
		<sup>103</sup> Ru	3.3E-05 ± 7.6E-05	U			<sup>103</sup> Ru	-1.3E-05 ± 9.8E-05	U
		<sup>106</sup> Ru	1.7E-04 ± 6.8E-04	U			<sup>106</sup> Ru	-5.0E-04 ± 7.2E-04	U
		<sup>125</sup> Sb	-1.1E-04 ± 1.7E-04	U			<sup>125</sup> Sb	1.4E-04 ± 1.7E-04	U
		<sup>113</sup> Sn	-3.9E-05 ± 7.4E-05	U			<sup>113</sup> Sn	-2.8E-06 ± 2.8E-05	U
		<sup>90</sup> Sr	9.0E-05 ± 6.7E-05				<sup>90</sup> Sr	1.9E-04 ± 1.2E-04	
		<sup>234</sup> U	8.3E-06 ± 5.8E-06				<sup>234</sup> U	2.3E-05 ± 1.2E-05	
		<sup>235</sup> U	7.6E-07 ± 1.5E-06	U			<sup>235</sup> U	5.7E-06 ± 4.7E-06	
		<sup>238</sup> U	6.2E-06 ± 4.9E-06				<sup>238</sup> U	2.2E-05 ± 1.1E-05	
		<sup>65</sup> Zn	1.4E-04 ± 3.3E-04	U			<sup>65</sup> Zn	1.3E-06 ± 1.3E-05	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.

Table 2-3. Pacific Northwest National Laboratory Air Sampling Data, 2001 (pCi/m<sup>3</sup> ± total analytical uncertainty).

Sampler	Composite Period	Isotope	Result ± Uncertainty	RQ*
200 West SE	03/19/01 - 07/03/01	<sup>60</sup> Co	4.0E-05 ± 5.9E-04	U
		<sup>134</sup> Cs	-7.0E-05 ± 5.3E-04	U
		<sup>137</sup> Cs	-1.2E-04 ± 5.1E-04	U
		<sup>154</sup> Eu	4.7E-04 ± 1.2E-03	U
		<sup>155</sup> Eu	-2.8E-04 ± 8.1E-04	U
		<sup>106</sup> Ru	-3.6E-04 ± 4.3E-03	U
		<sup>125</sup> Sb	2.9E-04 ± 1.0E-03	U

Sampler	Composite Period	Isotope	Result ± Uncertainty	RQ*	Sampler	Composite Period	Isotope	Result ± Uncertainty	RQ*
YAKIMA BARRICADE	12/28/00 - 04/04/01	<sup>60</sup> Co	-1.6E-04 ± 3.0E-04	U	YAKIMA BARRICADE	04/04/01 - 06/28/01	<sup>60</sup> Co	2.3E-04 ± 3.8E-04	U
		<sup>134</sup> Cs	3.0E-04 ± 2.9E-04	U			<sup>134</sup> Cs	-2.4E-06 ± 3.5E-04	U
		<sup>137</sup> Cs	-1.3E-05 ± 2.8E-04	U			<sup>137</sup> Cs	1.2E-04 ± 2.8E-04	U
		<sup>154</sup> Eu	1.2E-05 ± 8.6E-04	U			<sup>154</sup> Eu	-2.2E-04 ± 1.0E-03	U
		<sup>155</sup> Eu	2.7E-04 ± 5.2E-04	U			<sup>155</sup> Eu	-1.5E-04 ± 6.0E-04	U
		<sup>238</sup> Pu	-2.1E-07 ± 2.3E-07	U			<sup>238</sup> Pu	-3.2E-07 ± 3.0E-07	U
		<sup>239,240</sup> Pu	4.4E-07 ± 6.5E-07	U			<sup>239,240</sup> Pu	1.2E-07 ± 5.0E-07	U
		<sup>106</sup> Ru	6.0E-04 ± 2.9E-03	U			<sup>106</sup> Ru	6.1E-04 ± 2.8E-03	U
		<sup>125</sup> Sb	1.2E-04 ± 7.4E-04	U			<sup>125</sup> Sb	-2.0E-04 ± 6.8E-04	U
		<sup>90</sup> Sr	4.8E-05 ± 2.6E-05	U			<sup>90</sup> Sr	5.2E-05 ± 3.2E-05	U

Sampler	Composite Period	Isotope	Result ± Uncertainty	RQ*	Sampler	Composite Period	Isotope	Result ± Uncertainty	RQ*
YAKIMA BARRICADE	06/28/01 - 10/02/01	<sup>60</sup> Co	0.0E+00 ± 0.0E+00	U	YAKIMA BARRICADE	10/02/01 - 12/27/01	<sup>60</sup> Co	0.0E+00 ± 3.7E-04	U
		<sup>134</sup> Cs	0.0E+00 ± 0.0E+00	U			<sup>134</sup> Cs	0.0E+00 ± 3.8E-04	U
		<sup>137</sup> Cs	0.0E+00 ± 0.0E+00	U			<sup>137</sup> Cs	0.0E+00 ± 2.9E-04	U
		<sup>154</sup> Eu	0.0E+00 ± 1.0E-03	U			<sup>154</sup> Eu	0.0E+00 ± 1.1E-03	U
		<sup>155</sup> Eu	0.0E+00 ± 1.0E-03	U			<sup>155</sup> Eu	0.0E+00 ± 6.2E-04	U
		<sup>238</sup> Pu	0.0E+00 ± 3.4E-07	U			<sup>238</sup> Pu	0.0E+00 ± 4.5E-07	U
		<sup>239,240</sup> Pu	0.0E+00 ± 4.4E-07	U			<sup>239,240</sup> Pu	0.0E+00 ± 6.2E-07	U
		<sup>106</sup> Ru	0.0E+00 ± 3.0E-03	U			<sup>106</sup> Ru	2.0E-03 ± 3.1E-03	U
		<sup>125</sup> Sb	0.0E+00 ± 1.0E-03	U			<sup>125</sup> Sb	-1.0E-03 ± 8.0E-04	U
		<sup>90</sup> Sr	0.0E+00 ± 2.0E-05	U			<sup>90</sup> Sr	0.0E+00 ± 2.0E-05	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.

This page intentionally left blank.

### 3.0 SOIL AND VEGETATION MONITORING

The radionuclide content of soil and vegetation was measured to evaluate long-term trends in environmental accumulation of radioactivity in the 100, 200/600, and 300/400 Areas. Soil and vegetation samples were collected on or near facilities that store, handle, or dispose of radioactive waste. The number of soil and vegetation samples collected in 2001 and their locations are shown in Table 3-1.

Table 3-1. Soil and Vegetation Samples Collected in 2001.

Sample Type	Number of Samples	Operational Area							
		100-B,C	100-D,DR	100-H	100-F	100-N	200/600 <sup>a</sup>	300/400	ERDF <sup>b</sup>
Soil	91	1	0	2	2	10	57	18	1
Vegetation	75	0	0	0	0	9	49	17	0

a - Odd-numbered soil and vegetation sampling locations in the 200/600 Areas are sampled in odd-numbered years.

Even-numbered locations are sampled in even-numbered years.

b - Environmental Restoration Disposal Facility.

Soil sampling locations are illustrated in Figures 3-1 through 3-9. Historical soil sampling results for the 100-N (including the 1301-N Liquid Waste Disposal Facility [LWDF]), 200/600, and 300/400 Areas are displayed in Table 3-2. The 2001 soil sampling results for all areas are provided in Table 3-3.

Vegetation sampling locations are illustrated in Figures 3-10 through 3-15. Historical vegetation sampling results for the 100-N (including the N-Springs shoreline and the 1301-N and 1325-N LWDFs), 200/600, and 300/400 Areas are displayed in Table 3-4. The 2001 vegetation sampling results for all areas are provided in Table 3-5.

Radionuclide analyses indicated that cobalt-60, strontium-90, cesium-137, plutonium-239/240, and uranium were consistently detectable in both soil and vegetation samples in 2001. Generally, the predominant radionuclides observed in soil samples were activation products and strontium-90 in the 100-N Area, fission products in the 200 Areas, and uranium in the 300 Area. For vegetation samples, the predominant radionuclides were generally activation and fission products in the 100 Areas, fission products in the 200 Areas, and uranium in the 300 Area.

Additional discussion of the 2001 results can be found in Section 3.2 of the *Hanford Site Environmental Report for Calendar Year 2001* (PNNL-13910).

Figure 3-1. 2001 Soil Sampling Locations, 100-B/C Area.

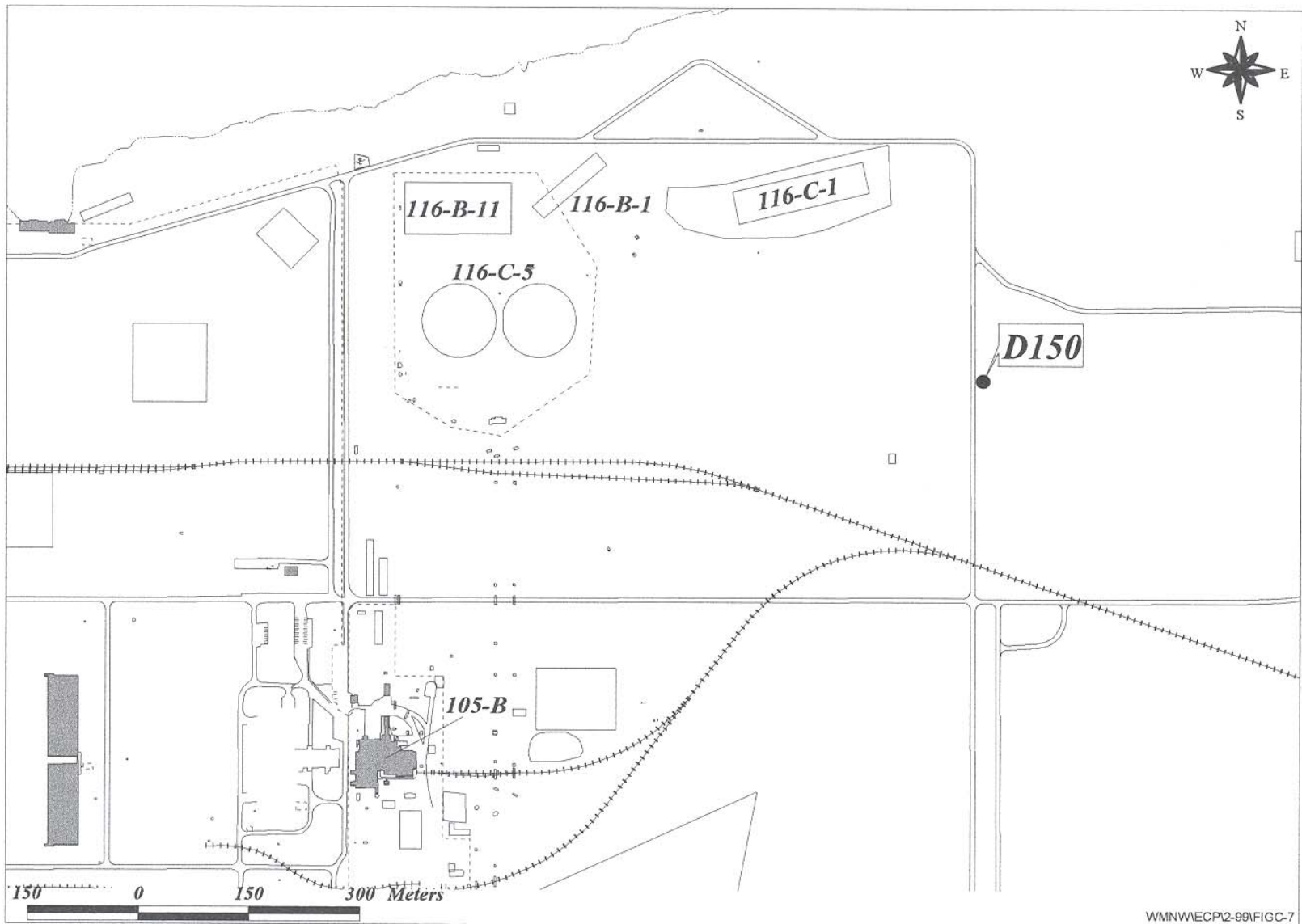


Figure 3-2. 2001 Soil Sampling Locations, 100-H Area.

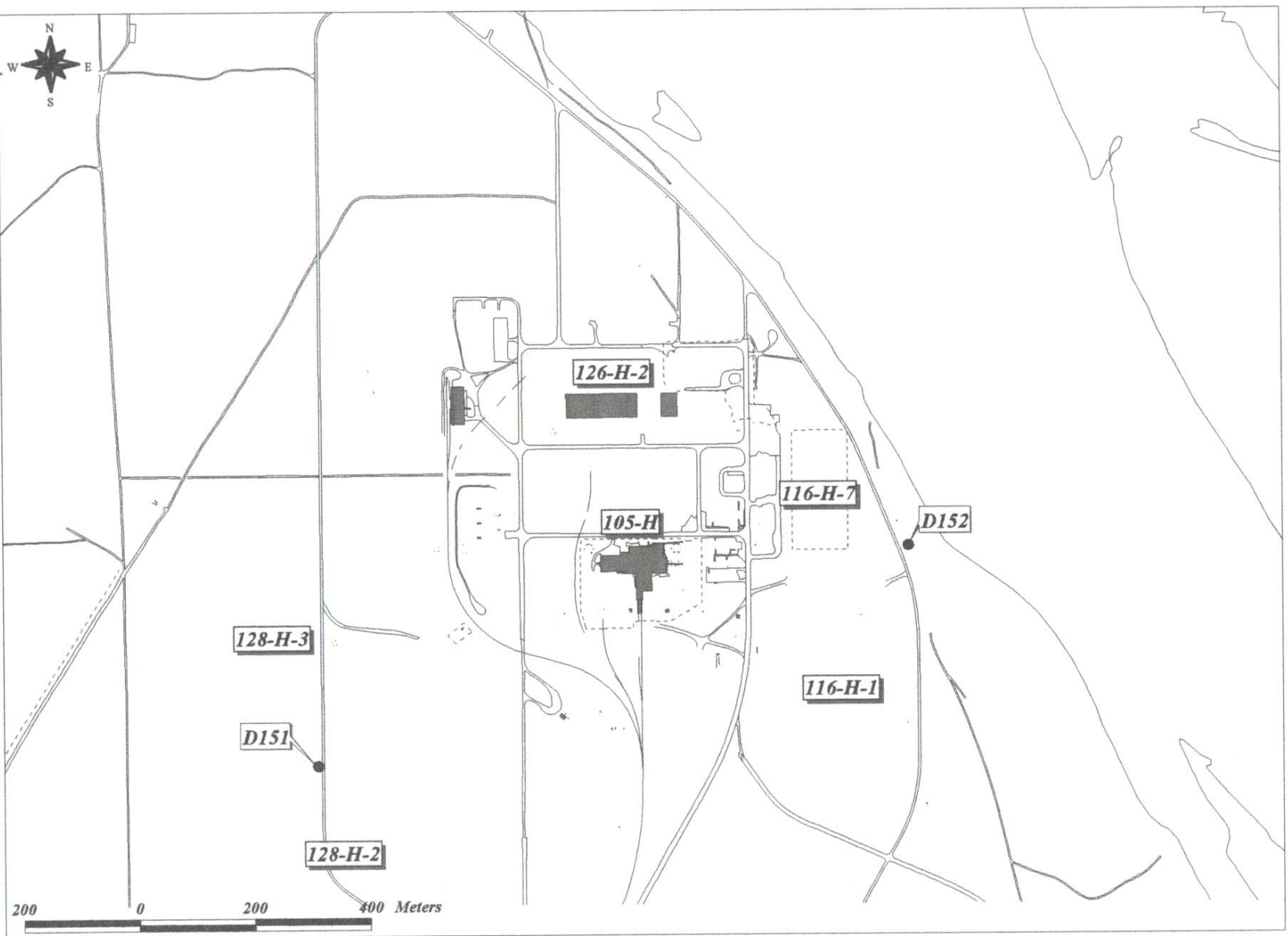
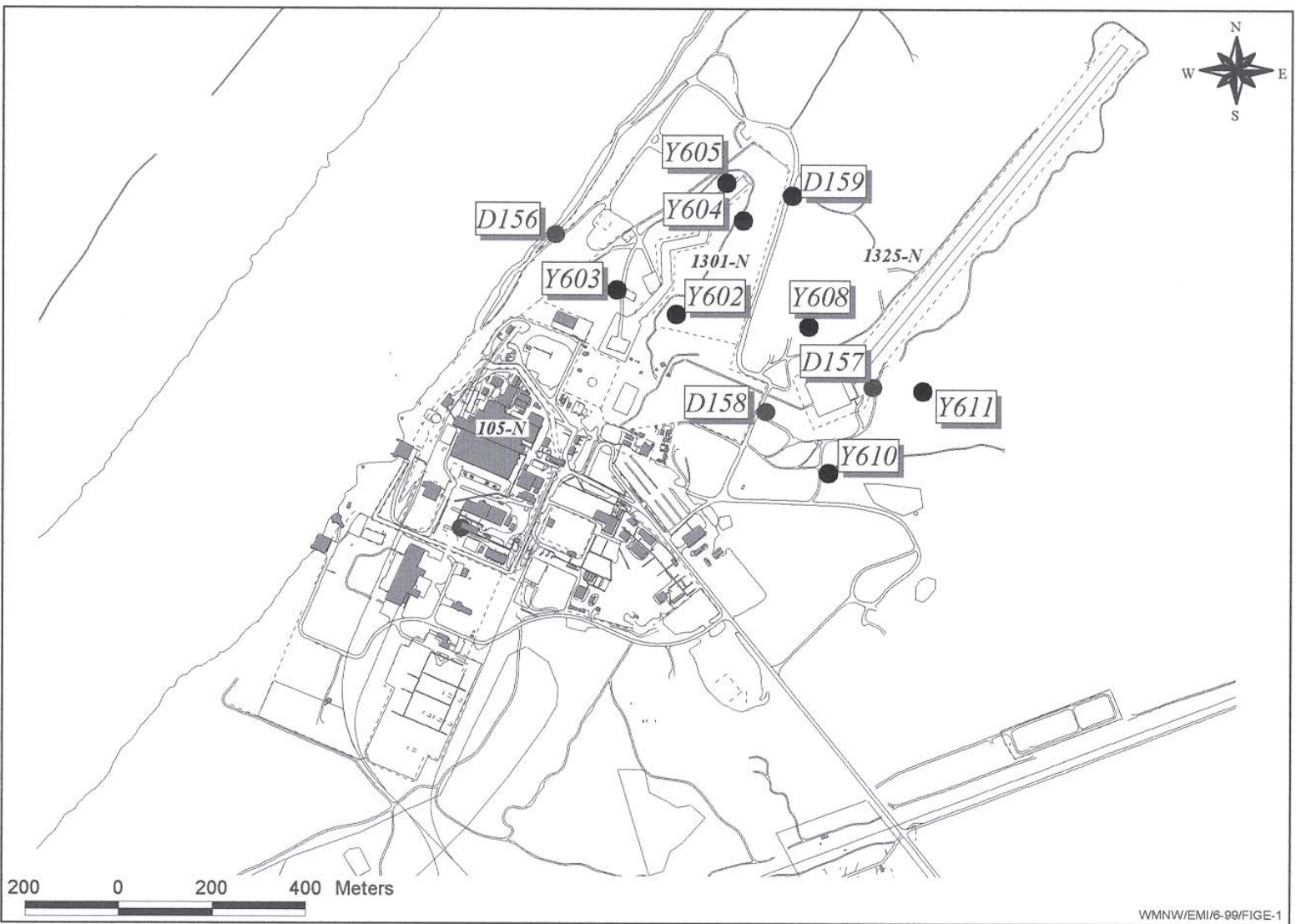


Figure 3-3. 2001 Soil Sampling Locations, 100-F Area.



Figure 3-4. 2001 Soil Sampling Locations, 100-N Area.





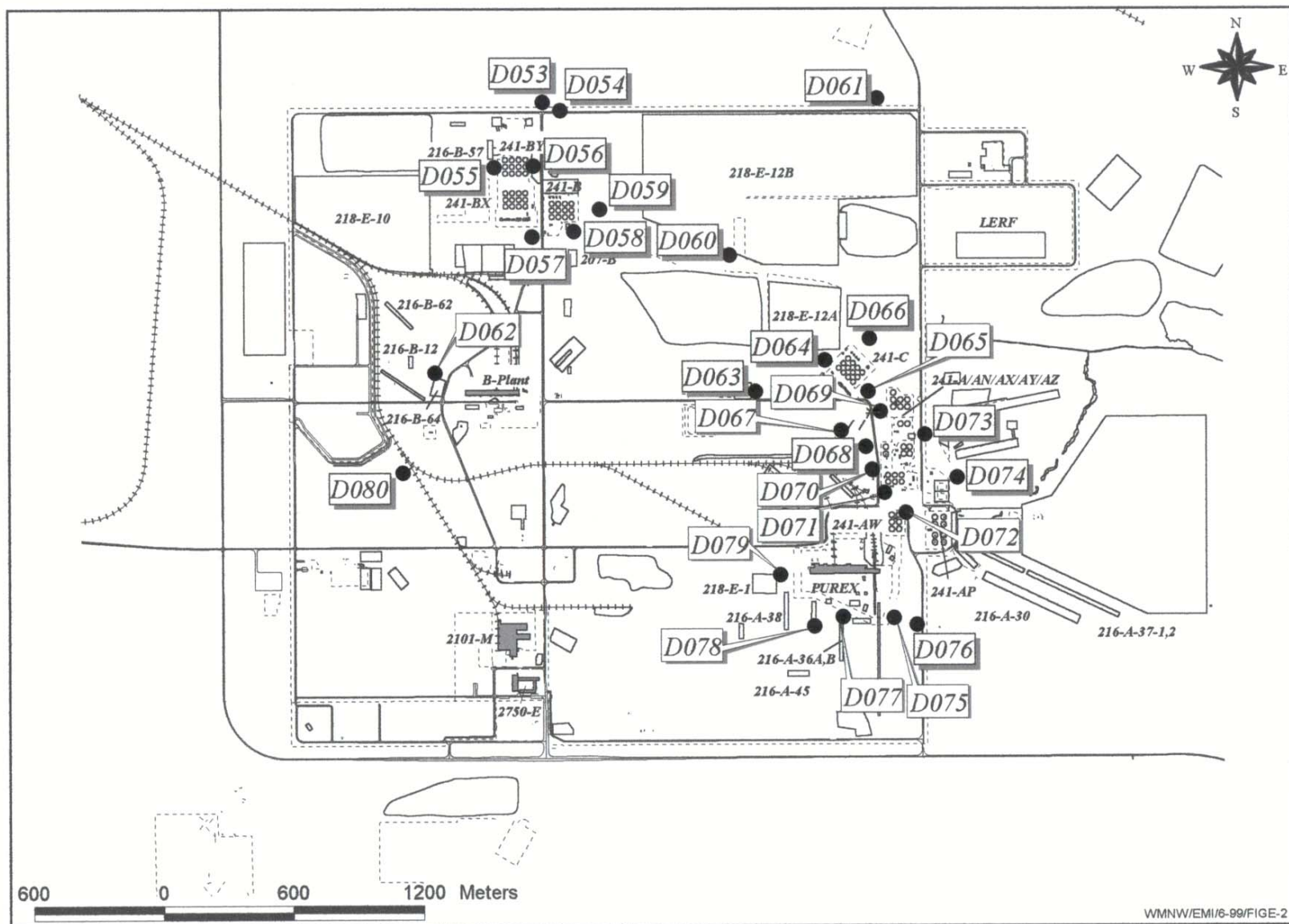


Figure 3-5. 2001 Soil Sampling Locations, 200 East Area.

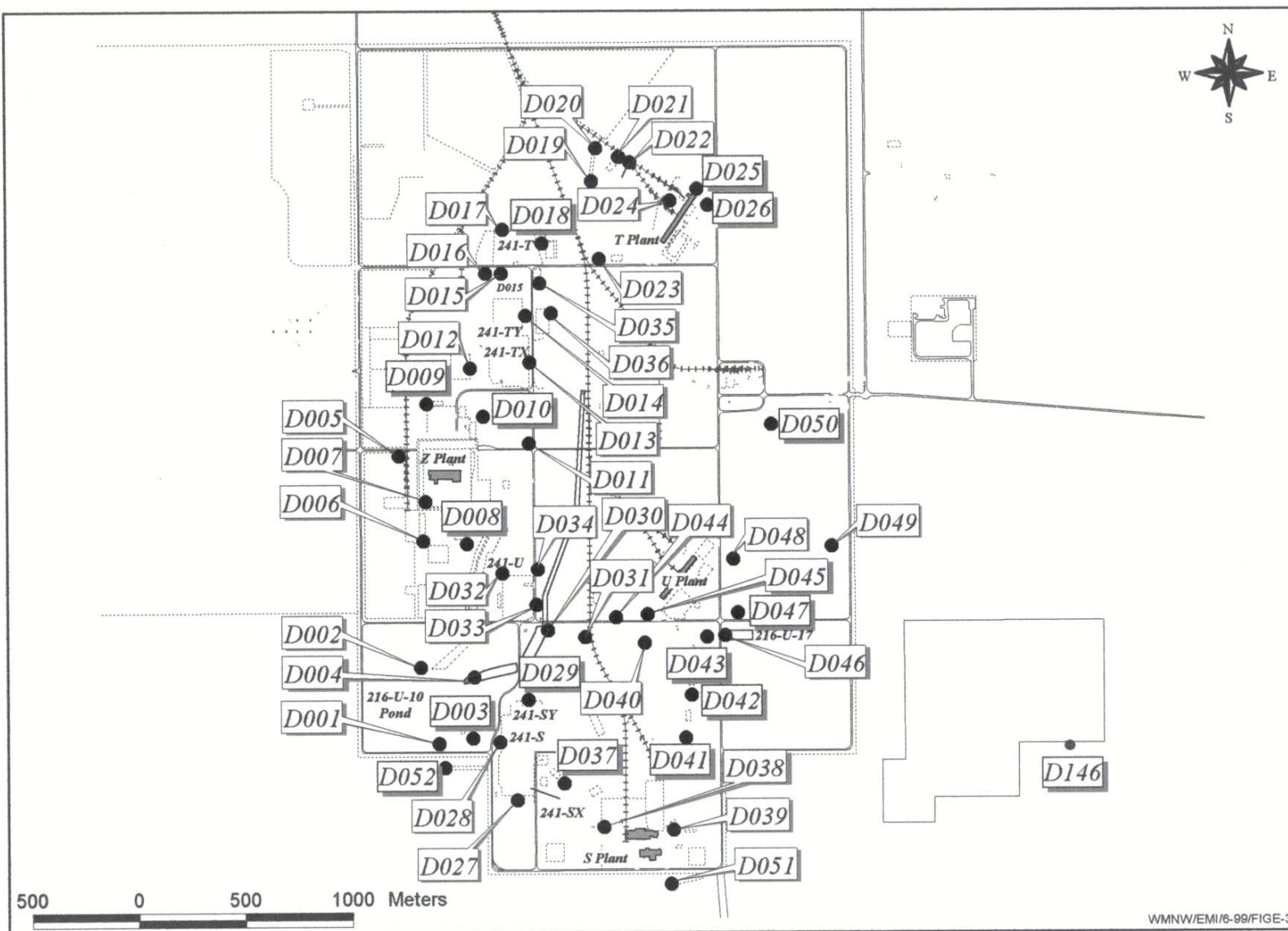


Figure 3-6. 2001 Soil Sampling Locations, 200 West Area.

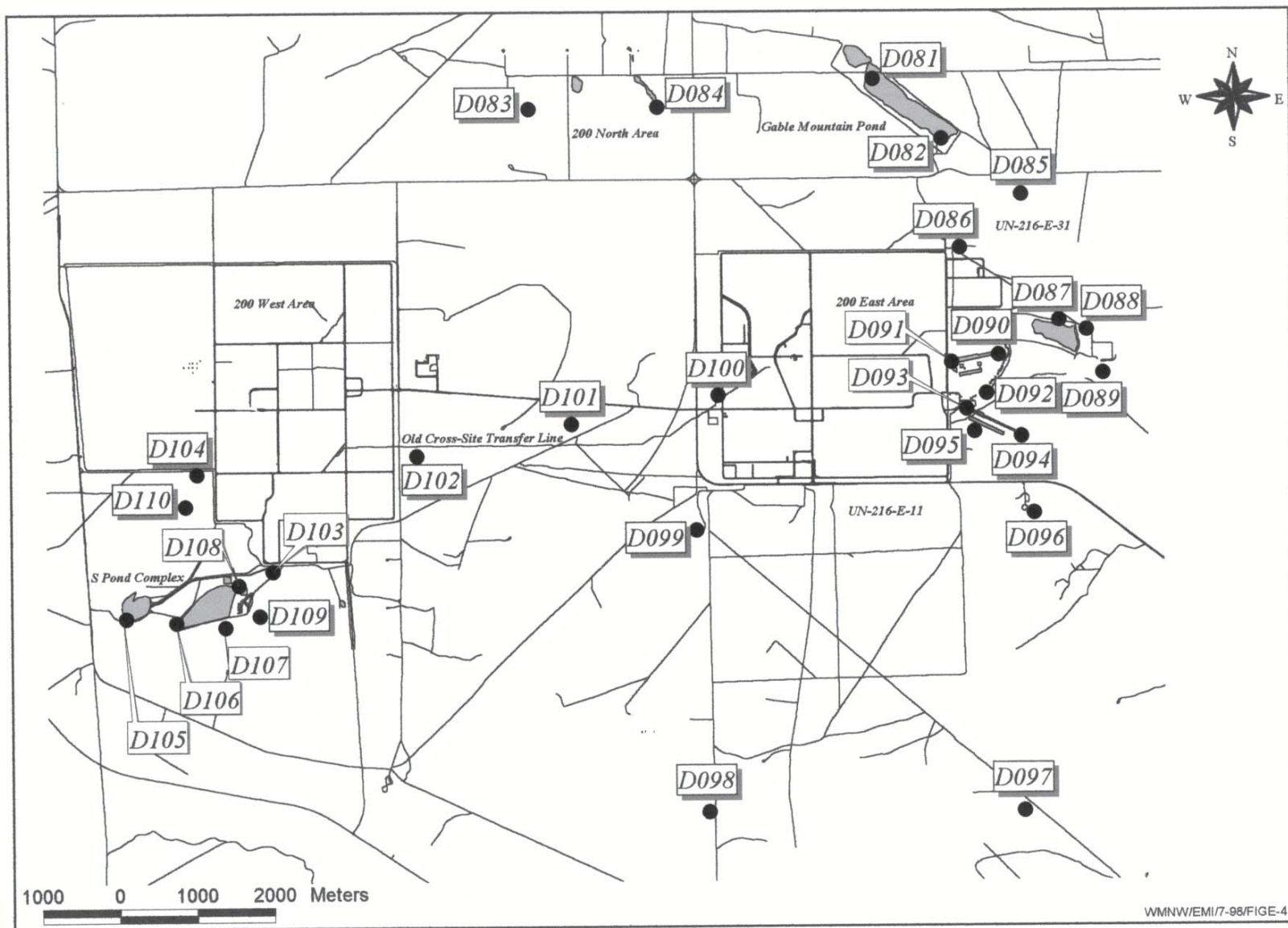


Figure 3-7. 2001 Soil Sampling Locations, 600 Area.

Figure 3-8. 2001 Soil Sampling Locations, 300 Area.

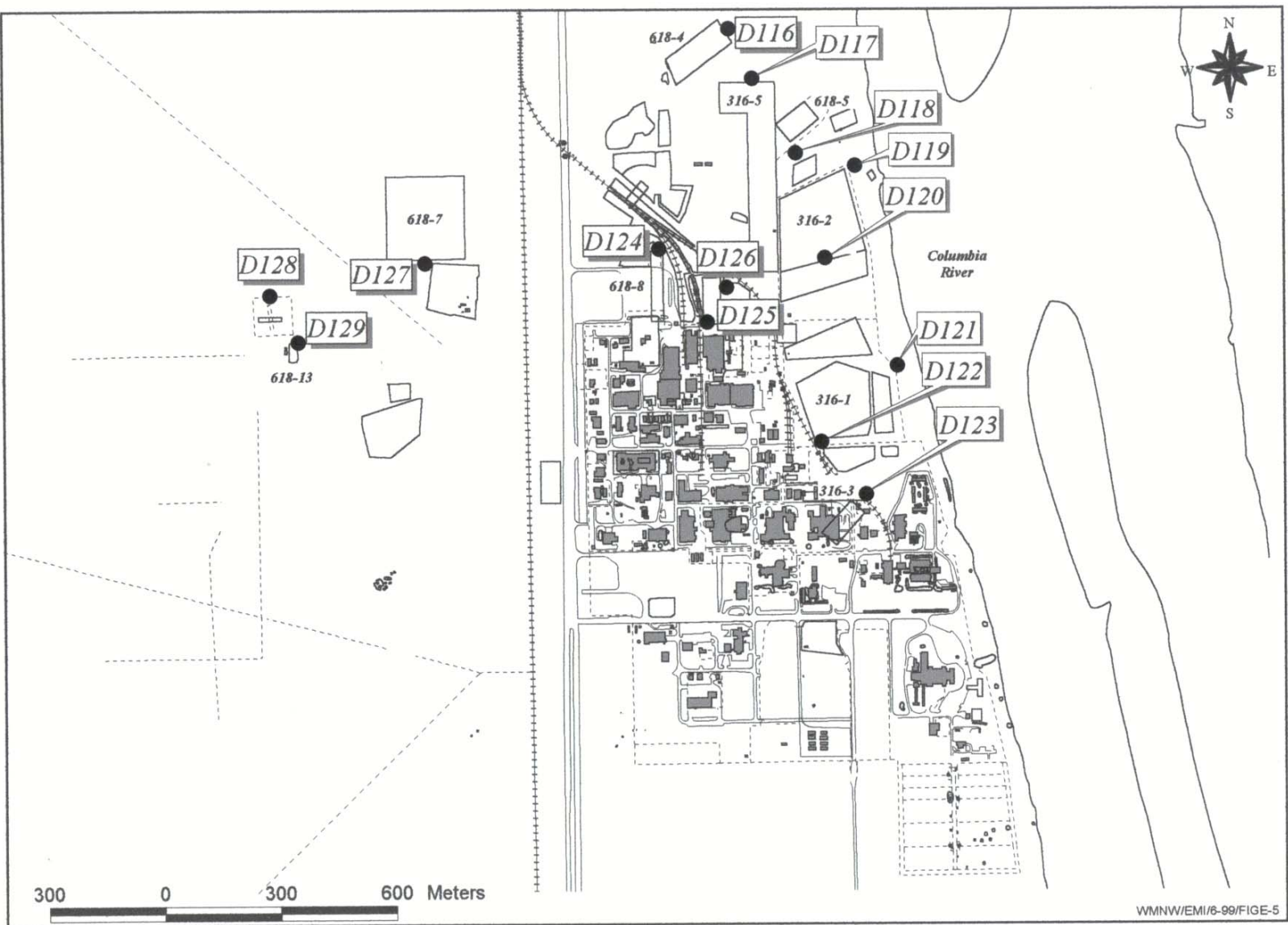




Figure 3-9. 2001 Soil Sampling Locations, 400 Area.

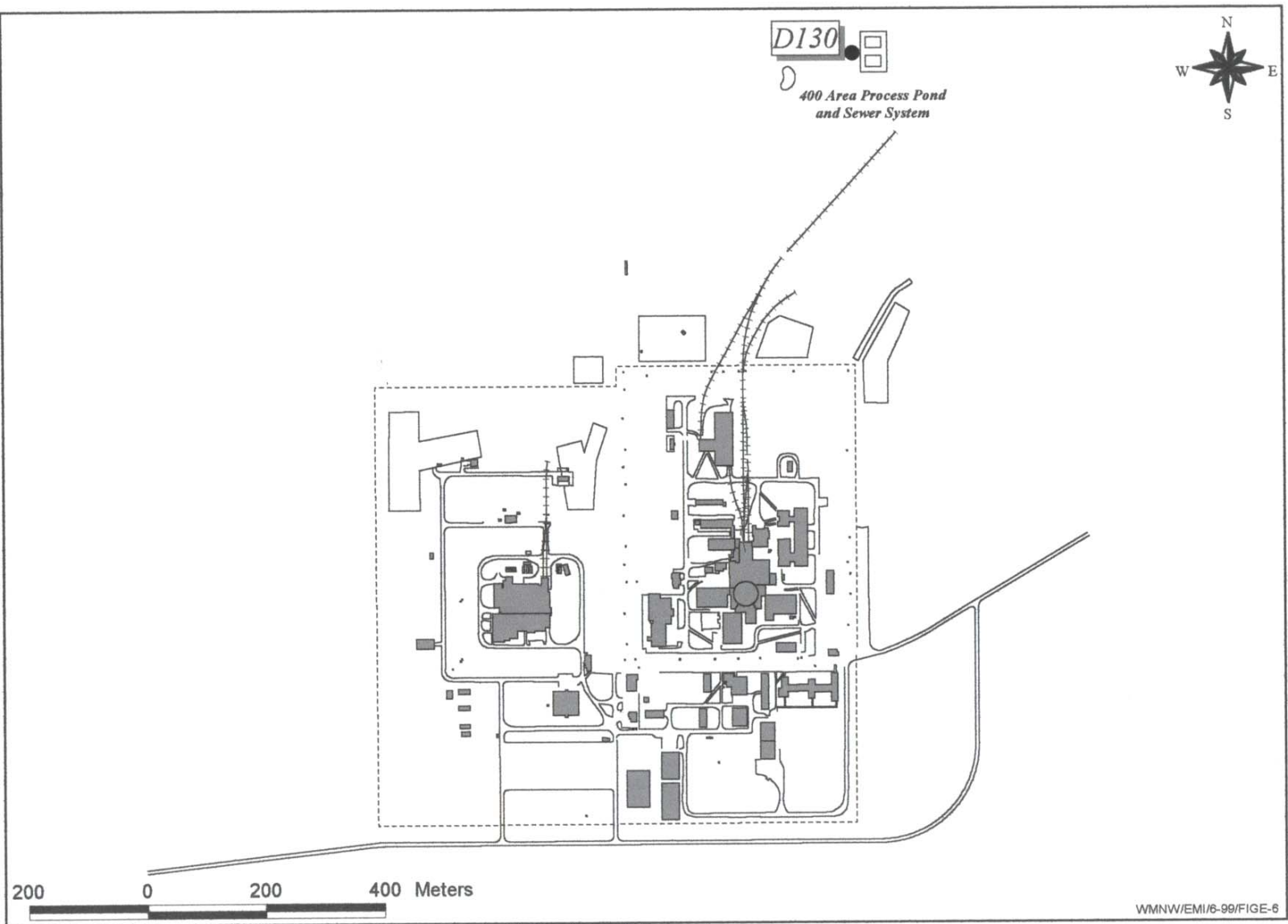


Table 3-2. Average Radionuclide Concentrations (pCi/g  $\pm$  2SD<sup>a</sup>)  
in Hanford Soils, 1996 through 2001.

100 N Area						
Year	<sup>60</sup> Co	<sup>90</sup> Sr	<sup>137</sup> Cs	<sup>234</sup> U	<sup>238</sup> U	<sup>239,240</sup> Pu
1996	1.5E+00 $\pm$ 3.0E+00	2.0E-01 $\pm$ 2.2E-01	7.7E-01 $\pm$ 1.1E+00	5.7E-02 $\pm$ 8.0E-03	5.7E-01 $\pm$ 1.2E-01	7.0E-02 $\pm$ 2.0E-02
1997	2.5E+00 $\pm$ 8.0E+00	3.9E-01 $\pm$ 1.6E+01	8.9E-01 $\pm$ 2.4E+00	2.1E-01 $\pm$ 3.8E-02	2.1E-01 $\pm$ 3.4E-02	9.1E-01 $\pm$ 3.2E+00
1998	4.9E+00 $\pm$ 2.0E+01	1.2E+00 $\pm$ 2.6E+00	3.1E+00 $\pm$ 1.1E+01	2.1E-01 $\pm$ 6.0E-02	1.7E-01 $\pm$ 3.0E-02	1.5E-01 $\pm$ 3.0E-01
1999	1.6E+00 $\pm$ 4.6E+00	2.0E+00 $\pm$ 4.4E+00	8.4E-01 $\pm$ 1.8E+00	2.2E-01 $\pm$ 3.0E-02	2.0E-01 $\pm$ 3.0E-02	3.0E-02 $\pm$ 5.0E-02
2000	3.1E+00 $\pm$ 6.0E-01	8.4E-01 $\pm$ 9.0E-01	2.5E+00 $\pm$ 5.2E+00	2.2E-01 $\pm$ 8.7E-02	2.2E-01 $\pm$ 3.2E-02	5.8E-02 $\pm$ 7.4E-02
2001	4.0E-01 $\pm$ 6.8E-01	4.8E-01 $\pm$ 4.2E-01	3.9E-01 $\pm$ 3.6E-01	2.4E-01 $\pm$ 9.0E-02	2.5E-01 $\pm$ 7.0E-02	3.1E-02 $\pm$ 4.0E-02
1301-N Liquid Waste Disposal Facility (100 N Area)						
Year	<sup>60</sup> Co	<sup>90</sup> Sr	<sup>137</sup> Cs	<sup>234</sup> U	<sup>238</sup> U	<sup>239,240</sup> Pu
1996	2.5E+00 $\pm$ 7.8E+00	2.3E-01 $\pm$ 1.1E-01	9.8E-01 $\pm$ 1.0E+00	5.7E-01 $\pm$ 2.4E-01	5.6E-01 $\pm$ 3.8E-01	6.6E-02 $\pm$ 1.9E-02
1997	4.3E+00 $\pm$ 9.0E+00	5.8E+00 $\pm$ 1.9E+01	1.5E+00 $\pm$ 2.6E+00	2.2E-01 $\pm$ 1.1E-01	2.2E-01 $\pm$ 1.0E-01	1.2E+00 $\pm$ 3.4E+00
1998	8.5E+00 $\pm$ 2.4E+01	1.6E+00 $\pm$ 2.8E+00	5.2E+00 $\pm$ 1.3E+01	2.2E-01 $\pm$ 1.9E-01	1.6E-01 $\pm$ 7.0E-02	1.9E-01 $\pm$ 3.4E-01
1999	2.6E+00 $\pm$ 5.0E+00	2.9E+00 $\pm$ 4.8E+00	1.3E+00 $\pm$ 1.9E+00	2.1E-01 $\pm$ 8.6E-02	1.9E-01 $\pm$ 7.4E-02	4.4E-02 $\pm$ 4.8E-02
2000	1.6E+00 $\pm$ 6.8E-01	1.0E+00 $\pm$ 8.2E-01	2.7E+00 $\pm$ 5.6E+00	2.0E-01 $\pm$ 6.6E-02	2.2E-01 $\pm$ 8.6E-02	6.6E-02 $\pm$ 7.4E-02
2001	4.6E-01 $\pm$ 7.6E-01	4.8E-01 $\pm$ 4.2E-01	3.9E-01 $\pm$ 4.0E-01	2.5E-01 $\pm$ 8.0E-02	2.6E-01 $\pm$ 5.0E-02	3.8E-02 $\pm$ 4.0E-02
200/600 Areas						
Year	<sup>60</sup> Co	<sup>90</sup> Sr	<sup>137</sup> Cs	<sup>234</sup> U	<sup>238</sup> U	<sup>239,240</sup> Pu
1996	2.0E-02 $\pm$ 4.0E-02	3.5E-01 $\pm$ 1.1E+00	2.0E+00 $\pm$ 5.4E+00	1.0E-01 $\pm$ 4.0E-02	1.1E-01 $\pm$ 9.0E-02	1.6E-01 $\pm$ 8.2E-01
1997	3.0E-02 $\pm$ 4.0E-02	6.7E-01 $\pm$ 1.4E+00	1.8E+00 $\pm$ 5.0E+00	2.0E-01 $\pm$ 9.6E-02	2.0E-01 $\pm$ 8.6E-02	1.0E-01 $\pm$ 4.6E-01
1998	1.9E-02 $\pm$ 6.0E-03	5.0E-01 $\pm$ 7.0E-01	1.1E+00 $\pm$ 3.2E+00	1.9E-01 $\pm$ 7.0E-02	1.9E-01 $\pm$ 7.0E-02	1.3E-01 $\pm$ 6.0E-01
1999	Not Detected	1.1E+00 $\pm$ 2.6E+00	1.4E+00 $\pm$ 3.8E+00	2.3E-01 $\pm$ 1.3E-01	2.2E-01 $\pm$ 1.3E-01	1.0E-01 $\pm$ 3.0E-01
2000	6.0E-03 $\pm$ 6.0E-03	1.1E+00 $\pm$ 1.2E+00	1.4E+00 $\pm$ 3.8E+00	2.3E-01 $\pm$ 2.2E-01	2.3E-01 $\pm$ 2.2E-01	4.1E-01 $\pm$ 2.6E+00
2001	Not Detected	5.5E-01 $\pm$ 1.3E+00	1.5E+00 $\pm$ 4.0E+00	2.2E-01 $\pm$ 1.1E-01	2.2E-01 $\pm$ 1.1E-01	1.3E-01 $\pm$ 4.0E-01
300/400 Areas						
Year	<sup>60</sup> Co	<sup>90</sup> Sr	<sup>137</sup> Cs	<sup>234</sup> U	<sup>238</sup> U	<sup>239,240</sup> Pu
1996	2.0E-03 $\pm$ 1.0E-02	4.0E-02 $\pm$ 5.0E-02	1.7E-01 $\pm$ 3.0E-01	1.3E+00 $\pm$ 4.2E+00	1.2E+00 $\pm$ 4.2E+00	2.5E-02 $\pm$ 1.3E-01
1997	1.0E-03 $\pm$ 4.0E-03	4.5E-01 $\pm$ 4.2E-01	7.0E-02 $\pm$ 1.2E-01	9.0E-01 $\pm$ 3.8E+00	9.0E-01 $\pm$ 3.8E+00	3.8E-02 $\pm$ 1.2E-01
1998	2.0E-03 $\pm$ 1.0E-02	2.4E-01 $\pm$ 1.2E-01	9.0E-02 $\pm$ 2.6E-01	1.4E+00 $\pm$ 5.4E+00	1.4E+00 $\pm$ 5.4E+00	6.7E-02 $\pm$ 1.8E-01
1999	Not Detected	8.5E-01 $\pm$ 7.0E-01	9.0E-02 $\pm$ 1.0E-01	7.0E+00 $\pm$ 1.8E+00	7.1E-01 $\pm$ 1.8E+00	4.0E-02 $\pm$ 5.0E-02
2000	Not Detected	5.9E-01 $\pm$ 3.6E-01	1.4E-01 $\pm$ 2.0E-01	5.4E+00 $\pm$ 2.4E+01	5.4E+00 $\pm$ 2.4E+01	1.7E-01 $\pm$ 2.2E-01
2001	Not Detected	Not Detected	5.0E-02 $\pm$ 8.0E-02	9.4E-01 $\pm$ 3.0E+00	9.5E-01 $\pm$ 3.2E+00	4.1E-02 $\pm$ 6.0E-02

a - 2SD = 2 standard deviation.

Table 3-3. 2001 Soil Sampling Results, (pCi/g  $\pm$  total analytical uncertainty).

Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
D146 (ERDF)	<sup>144</sup> Ce	5.2E-02 $\pm$ 6.2E-02	U	D150 (100-B/C Remedial Action)	<sup>144</sup> Ce	-6.0E-02 $\pm$ 8.4E-02	U
	<sup>60</sup> Co	2.2E-03 $\pm$ 5.5E-03	U		<sup>60</sup> Co	9.4E-03 $\pm$ 9.4E-03	U
	<sup>134</sup> Cs	2.5E-02 $\pm$ 9.0E-03			<sup>134</sup> Cs	5.3E-02 $\pm$ 1.7E-02	
	<sup>137</sup> Cs	2.1E-01 $\pm$ 3.4E-02			<sup>137</sup> Cs	2.2E-01 $\pm$ 3.5E-02	
	<sup>152</sup> Eu	-8.8E-03 $\pm$ 3.2E-02	U		<sup>152</sup> Eu	2.6E-01 $\pm$ 3.4E-02	
	<sup>154</sup> Eu	-2.4E-04 $\pm$ 2.4E-03	U		<sup>154</sup> Eu	9.4E-03 $\pm$ 3.4E-02	U
	<sup>155</sup> Eu	-7.8E-03 $\pm$ 3.1E-02	U		<sup>155</sup> Eu	4.2E-02 $\pm$ 4.6E-02	U
	<sup>238</sup> Pu	-1.8E-03 $\pm$ 3.6E-03	U		<sup>238</sup> Pu	5.7E-03 $\pm$ 2.3E-02	U
	<sup>239,240</sup> Pu	1.8E-02 $\pm$ 1.2E-02			<sup>239,240</sup> Pu	1.5E-02 $\pm$ 1.2E-02	
	<sup>103</sup> Ru	1.3E-03 $\pm$ 5.7E-03	U		<sup>103</sup> Ru	-4.2E-03 $\pm$ 9.7E-03	U
	<sup>106</sup> Ru	2.9E-02 $\pm$ 5.5E-02	U		<sup>106</sup> Ru	9.9E-03 $\pm$ 8.6E-02	U
	<sup>125</sup> Sb	-1.1E-02 $\pm$ 1.6E-02	U		<sup>125</sup> Sb	8.9E-03 $\pm$ 2.8E-02	U
	<sup>113</sup> Sn	-5.8E-03 $\pm$ 8.1E-03	U		<sup>113</sup> Sn	-6.2E-03 $\pm$ 1.2E-02	U
	<sup>90</sup> Sr	-3.4E-01 $\pm$ 3.4E-01	U		<sup>90</sup> Sr	3.8E-03 $\pm$ 3.8E-02	U
	<sup>234</sup> U	2.2E-01 $\pm$ 5.7E-02			<sup>234</sup> U	2.1E-01 $\pm$ 5.9E-02	
	<sup>235</sup> U	2.7E-02 $\pm$ 1.6E-02			<sup>235</sup> U	1.4E-02 $\pm$ 1.2E-02	
	<sup>238</sup> U	2.8E-01 $\pm$ 7.0E-02			<sup>238</sup> U	2.3E-01 $\pm$ 6.2E-02	
	<sup>65</sup> Zn	6.2E-03 $\pm$ 1.5E-02	U		<sup>65</sup> Zn	2.5E-02 $\pm$ 4.3E-02	U
Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
D151 (100-H Remedial Action)	<sup>144</sup> Ce	-2.2E-02 $\pm$ 1.8E-01	U	D152 (100-H Remedial Action)	<sup>144</sup> Ce	-1.0E-01 $\pm$ 1.9E-01	U
	<sup>60</sup> Co	3.2E-03 $\pm$ 1.9E-02	U		<sup>60</sup> Co	1.4E-02 $\pm$ 2.2E-02	U
	<sup>134</sup> Cs	5.2E-02 $\pm$ 3.1E-02			<sup>134</sup> Cs	2.2E-02 $\pm$ 2.6E-02	U
	<sup>137</sup> Cs	3.8E-01 $\pm$ 7.2E-02			<sup>137</sup> Cs	5.5E-01 $\pm$ 1.1E-01	
	<sup>152</sup> Eu	-6.8E-03 $\pm$ 6.8E-02	U		<sup>152</sup> Eu	4.3E-01 $\pm$ 7.7E-02	
	<sup>154</sup> Eu	-7.0E-03 $\pm$ 5.6E-02	U		<sup>154</sup> Eu	9.7E-02 $\pm$ 6.2E-02	U
	<sup>155</sup> Eu	-1.4E-01 $\pm$ 1.4E-01	U		<sup>155</sup> Eu	-6.7E-02 $\pm$ 1.1E-01	U
	<sup>238</sup> Pu	1.8E-03 $\pm$ 3.6E-03	U		<sup>238</sup> Pu	1.8E-03 $\pm$ 3.6E-03	U
	<sup>239,240</sup> Pu	8.9E-03 $\pm$ 9.8E-03	U		<sup>239,240</sup> Pu	5.4E-03 $\pm$ 8.1E-03	U
	<sup>103</sup> Ru	3.3E-03 $\pm$ 3.1E-02	U		<sup>103</sup> Ru	-4.4E-02 $\pm$ 4.4E-02	U
	<sup>106</sup> Ru	3.3E-03 $\pm$ 3.3E-02	U		<sup>106</sup> Ru	-2.4E-01 $\pm$ 2.4E-01	U
	<sup>125</sup> Sb	2.3E-02 $\pm$ 5.5E-02	U		<sup>125</sup> Sb	-3.8E-02 $\pm$ 6.5E-02	U
	<sup>113</sup> Sn	-1.1E-02 $\pm$ 3.2E-02	U		<sup>113</sup> Sn	1.1E-02 $\pm$ 3.5E-02	U
	<sup>90</sup> Sr	-3.3E-01 $\pm$ 3.3E-01	U		<sup>90</sup> Sr	-1.1E-01 $\pm$ 1.8E-01	U
	<sup>234</sup> U	1.2E-01 $\pm$ 3.7E-02			<sup>234</sup> U	1.4E-01 $\pm$ 4.3E-02	
	<sup>235</sup> U	3.8E-03 $\pm$ 9.5E-03	U		<sup>235</sup> U	1.7E-02 $\pm$ 1.3E-02	
	<sup>238</sup> U	1.5E-01 $\pm$ 4.4E-02			<sup>238</sup> U	1.6E-01 $\pm$ 4.8E-02	
	<sup>65</sup> Zn	1.6E-02 $\pm$ 5.3E-02	U		<sup>65</sup> Zn	8.9E-02 $\pm$ 7.7E-02	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.

Table 3-3. 2001 Soil Sampling Results, (pCi/g  $\pm$  total analytical uncertainty). (cont)

Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
D154 (100-F Remedial Action)	<sup>144</sup> Ce	-9.0E-02 $\pm$ 9.0E-02	U	D155 (100-F Remedial Action)	<sup>144</sup> Ce	-1.1E-02 $\pm$ 6.9E-02	U
	<sup>60</sup> Co	5.1E-03 $\pm$ 8.2E-03	U		<sup>60</sup> Co	3.3E-03 $\pm$ 8.2E-03	U
	<sup>134</sup> Cs	1.9E-02 $\pm$ 1.0E-02			<sup>134</sup> Cs	3.4E-02 $\pm$ 1.5E-02	
	<sup>137</sup> Cs	2.1E-01 $\pm$ 3.6E-02			<sup>137</sup> Cs	7.7E-02 $\pm$ 1.8E-02	
	<sup>152</sup> Eu	1.4E-01 $\pm$ 2.8E-02			<sup>152</sup> Eu	-3.3E-03 $\pm$ 2.8E-02	U
	<sup>154</sup> Eu	2.4E-03 $\pm$ 2.4E-02	U		<sup>154</sup> Eu	-1.8E-02 $\pm$ 3.1E-02	U
	<sup>155</sup> Eu	9.3E-03 $\pm$ 4.0E-02	U		<sup>155</sup> Eu	4.6E-02 $\pm$ 4.0E-02	U
	<sup>238</sup> Pu	-1.3E-02 $\pm$ 2.5E-02	U		<sup>238</sup> Pu	1.9E-03 $\pm$ 1.9E-02	U
	<sup>239,240</sup> Pu	1.3E-02 $\pm$ 1.1E-02			<sup>239,240</sup> Pu	1.9E-02 $\pm$ 1.3E-02	
	<sup>103</sup> Ru	1.2E-03 $\pm$ 8.4E-03	U		<sup>103</sup> Ru	-8.9E-03 $\pm$ 9.8E-03	U
	<sup>106</sup> Ru	2.9E-02 $\pm$ 7.8E-02	U		<sup>106</sup> Ru	-1.8E-02 $\pm$ 7.4E-02	U
	<sup>125</sup> Sb	2.3E-02 $\pm$ 2.3E-02	U		<sup>125</sup> Sb	2.5E-02 $\pm$ 2.4E-02	U
	<sup>113</sup> Sn	-2.4E-03 $\pm$ 1.1E-02	U		<sup>113</sup> Sn	7.2E-03 $\pm$ 1.1E-02	U
	<sup>90</sup> Sr	1.3E-01 $\pm$ 2.2E-01	U		<sup>90</sup> Sr	3.9E-01 $\pm$ 2.1E-01	
	<sup>234</sup> U	2.4E-01 $\pm$ 6.2E-02			<sup>234</sup> U	1.7E-01 $\pm$ 4.8E-02	
D156 (100-NR-1 Remedial Action)	<sup>235</sup> U	-2.0E-03 $\pm$ 7.0E-03	U	D157 (100-NR-1 Remedial Action)	<sup>235</sup> U	1.6E-02 $\pm$ 1.2E-02	
	<sup>238</sup> U	1.8E-01 $\pm$ 5.0E-02			<sup>238</sup> U	1.9E-01 $\pm$ 5.1E-02	
	<sup>65</sup> Zn	-8.2E-03 $\pm$ 4.8E-02	U		<sup>65</sup> Zn	-2.3E-02 $\pm$ 2.5E-02	U
Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
D156 (100-NR-1 Remedial Action)	<sup>144</sup> Ce	-6.9E-03 $\pm$ 6.1E-02	U	D157 (100-NR-1 Remedial Action)	<sup>144</sup> Ce	-8.5E-04 $\pm$ 8.5E-03	U
	<sup>60</sup> Co	2.1E-02 $\pm$ 1.9E-02			<sup>60</sup> Co	6.8E-01 $\pm$ 5.5E-02	
	<sup>134</sup> Cs	3.3E-02 $\pm$ 1.3E-02	U		<sup>134</sup> Cs	2.5E-02 $\pm$ 9.8E-03	U
	<sup>137</sup> Cs	3.2E-02 $\pm$ 1.3E-02			<sup>137</sup> Cs	4.1E-01 $\pm$ 6.6E-02	
	<sup>152</sup> Eu	8.3E-03 $\pm$ 2.8E-02	U		<sup>152</sup> Eu	2.8E-04 $\pm$ 2.8E-03	U
	<sup>154</sup> Eu	-1.3E-02 $\pm$ 2.2E-02	U		<sup>154</sup> Eu	-9.5E-03 $\pm$ 2.2E-02	U
	<sup>155</sup> Eu	3.9E-02 $\pm$ 3.6E-02	U		<sup>155</sup> Eu	6.8E-02 $\pm$ 2.9E-02	U
	<sup>238</sup> Pu	-5.5E-03 $\pm$ 5.5E-02	U		<sup>238</sup> Pu	6.0E-03 $\pm$ 3.2E-02	U
	<sup>239,240</sup> Pu	1.8E-03 $\pm$ 1.8E-02	U		<sup>239,240</sup> Pu	8.0E-03 $\pm$ 8.0E-03	U
	<sup>103</sup> Ru	2.0E-03 $\pm$ 6.4E-03	U		<sup>103</sup> Ru	-1.2E-03 $\pm$ 6.5E-03	U
	<sup>106</sup> Ru	2.4E-03 $\pm$ 2.4E-02	U		<sup>106</sup> Ru	-1.3E-02 $\pm$ 6.2E-02	U
	<sup>125</sup> Sb	1.1E-02 $\pm$ 1.8E-02	U		<sup>125</sup> Sb	2.5E-03 $\pm$ 1.9E-02	U
	<sup>113</sup> Sn	2.9E-03 $\pm$ 8.7E-03	U		<sup>113</sup> Sn	-2.8E-03 $\pm$ 8.7E-03	U
	<sup>90</sup> Sr	-1.6E-01 $\pm$ 1.6E-01	U		<sup>90</sup> Sr	3.9E-02 $\pm$ 1.6E-01	U
	<sup>234</sup> U	2.8E-01 $\pm$ 7.0E-02			<sup>234</sup> U	1.7E-01 $\pm$ 4.8E-02	
	<sup>235</sup> U	1.6E-02 $\pm$ 1.3E-02			<sup>235</sup> U	1.0E-02 $\pm$ 9.1E-03	
	<sup>238</sup> U	3.1E-01 $\pm$ 7.4E-02			<sup>238</sup> U	1.4E-01 $\pm$ 4.2E-02	
	<sup>65</sup> Zn	2.0E-03 $\pm$ 1.8E-02	U		<sup>65</sup> Zn	6.9E-03 $\pm$ 2.1E-02	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.



Table 3-3. 2001 Soil Sampling Results, (pCi/g  $\pm$  total analytical uncertainty). (cont)

Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
D158 (100-NR-1 Remedial Action)	<sup>144</sup> Ce	7.7E-02 $\pm$ 6.0E-02	U	D159 (100-NR-1 Remedial Action)	<sup>144</sup> Ce	-1.9E-02 $\pm$ 5.3E-02	U
	<sup>60</sup> Co	3.3E-02 $\pm$ 7.3E-03			<sup>60</sup> Co	1.7E-02 $\pm$ 7.7E-03	
	<sup>134</sup> Cs	2.0E-02 $\pm$ 8.6E-03	U		<sup>134</sup> Cs	4.2E-02 $\pm$ 1.3E-02	U
	<sup>137</sup> Cs	3.8E-02 $\pm$ 9.9E-03			<sup>137</sup> Cs	4.9E-02 $\pm$ 1.3E-02	
	<sup>152</sup> Eu	-1.7E-02 $\pm$ 2.4E-02	U		<sup>152</sup> Eu	-1.0E-02 $\pm$ 1.9E-02	U
	<sup>154</sup> Eu	-8.1E-03 $\pm$ 1.8E-02	U		<sup>154</sup> Eu	1.2E-02 $\pm$ 1.8E-02	U
	<sup>155</sup> Eu	9.1E-03 $\pm$ 2.9E-02	U		<sup>155</sup> Eu	1.7E-02 $\pm$ 2.7E-02	U
	<sup>238</sup> Pu	-1.7E-02 $\pm$ 2.7E-02	U		<sup>238</sup> Pu	4.9E-02 $\pm$ 3.2E-02	
	<sup>239,240</sup> Pu	1.1E-02 $\pm$ 1.1E-02	U		<sup>239,240</sup> Pu	1.9E-03 $\pm$ 6.6E-03	U
	<sup>103</sup> Ru	-3.2E-03 $\pm$ 5.4E-03	U		<sup>103</sup> Ru	-2.7E-03 $\pm$ 5.7E-03	U
	<sup>106</sup> Ru	-4.7E-03 $\pm$ 4.7E-02	U		<sup>106</sup> Ru	-2.5E-02 $\pm$ 5.2E-02	U
	<sup>125</sup> Sb	-3.9E-03 $\pm$ 1.6E-02	U		<sup>125</sup> Sb	-1.4E-02 $\pm$ 1.7E-02	U
	<sup>113</sup> Sn	1.9E-03 $\pm$ 7.6E-03	U		<sup>113</sup> Sn	4.0E-03 $\pm$ 7.6E-03	U
	<sup>90</sup> Sr	3.4E-01 $\pm$ 1.9E-01			<sup>90</sup> Sr	-1.6E-02 $\pm$ 1.5E-01	U
	<sup>234</sup> U	1.7E-01 $\pm$ 4.8E-02			<sup>234</sup> U	2.0E-01 $\pm$ 5.4E-02	
	<sup>235</sup> U	1.6E-02 $\pm$ 1.3E-02			<sup>235</sup> U	1.2E-02 $\pm$ 1.3E-02	U
	<sup>238</sup> U	1.9E-01 $\pm$ 5.1E-02			<sup>238</sup> U	2.3E-01 $\pm$ 6.0E-02	
	<sup>65</sup> Zn	-1.4E-02 $\pm$ 1.5E-02	U		<sup>65</sup> Zn	-9.5E-03 $\pm$ 1.5E-02	U
Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
Y602 (100-N)	<sup>144</sup> Ce	-1.9E-01 $\pm$ 2.1E-01	U	Y603 (100-N)	<sup>144</sup> Ce	4.5E-02 $\pm$ 8.6E-02	U
	<sup>60</sup> Co	2.4E-01 $\pm$ 4.3E-02			<sup>60</sup> Co	9.9E-01 $\pm$ 8.0E-02	
	<sup>134</sup> Cs	4.0E-02 $\pm$ 2.4E-02	U		<sup>134</sup> Cs	3.6E-02 $\pm$ 2.0E-02	
	<sup>137</sup> Cs	4.3E-01 $\pm$ 8.6E-02			<sup>137</sup> Cs	4.7E-01 $\pm$ 6.6E-02	
	<sup>152</sup> Eu	-5.0E-02 $\pm$ 8.0E-02	U		<sup>152</sup> Eu	-2.3E-02 $\pm$ 3.7E-02	U
	<sup>154</sup> Eu	-3.4E-02 $\pm$ 5.4E-02	U		<sup>154</sup> Eu	5.0E-02 $\pm$ 3.3E-02	U
	<sup>155</sup> Eu	4.5E-02 $\pm$ 9.9E-02	U		<sup>155</sup> Eu	-6.7E-04 $\pm$ 6.7E-03	U
	<sup>238</sup> Pu	1.2E-02 $\pm$ 2.6E-02	U		<sup>238</sup> Pu	-4.6E-02 $\pm$ 4.6E-02	U
	<sup>239,240</sup> Pu	3.1E-02 $\pm$ 1.7E-02			<sup>239,240</sup> Pu	6.3E-02 $\pm$ 2.7E-02	
	<sup>103</sup> Ru	-2.7E-03 $\pm$ 2.0E-02	U		<sup>103</sup> Ru	2.6E-03 $\pm$ 1.0E-02	U
	<sup>106</sup> Ru	6.3E-02 $\pm$ 1.8E-01	U		<sup>106</sup> Ru	4.1E-03 $\pm$ 4.1E-02	U
	<sup>125</sup> Sb	2.6E-02 $\pm$ 5.7E-02	U		<sup>125</sup> Sb	-1.3E-02 $\pm$ 2.9E-02	U
	<sup>113</sup> Sn	-2.2E-02 $\pm$ 2.6E-02	U		<sup>113</sup> Sn	2.3E-03 $\pm$ 1.3E-02	U
	<sup>90</sup> Sr	2.0E-01 $\pm$ 1.9E-01	U		<sup>90</sup> Sr	6.9E-01 $\pm$ 2.8E-01	
	<sup>234</sup> U	2.6E-01 $\pm$ 6.5E-02			<sup>234</sup> U	2.3E-01 $\pm$ 6.0E-02	
	<sup>235</sup> U	2.6E-02 $\pm$ 1.5E-02			<sup>235</sup> U	2.0E-02 $\pm$ 1.5E-02	
	<sup>238</sup> U	2.6E-01 $\pm$ 6.5E-02			<sup>238</sup> U	2.5E-01 $\pm$ 6.5E-02	
	<sup>65</sup> Zn	5.3E-02 $\pm$ 5.3E-02	U		<sup>65</sup> Zn	-7.6E-03 $\pm$ 3.0E-02	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.

Table 3-3. 2001 Soil Sampling Results, (pCi/g  $\pm$  total analytical uncertainty). (cont)

Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
Y604 (100-N)	<sup>144</sup> Ce	-1.1E-02 $\pm$ 8.9E-02	U	Y605 (100-N)	<sup>144</sup> Ce	2.0E-01 $\pm$ 2.2E-01	U
	<sup>60</sup> Co	1.5E-01 $\pm$ 2.0E-02			<sup>60</sup> Co	1.5E-02 $\pm$ 1.9E-02	U
	<sup>134</sup> Cs	3.1E-02 $\pm$ 2.0E-02			<sup>134</sup> Cs	4.4E-02 $\pm$ 2.5E-02	
	<sup>137</sup> Cs	6.0E-01 $\pm$ 8.4E-02			<sup>137</sup> Cs	6.5E-02 $\pm$ 3.4E-02	
	<sup>152</sup> Eu	8.0E-03 $\pm$ 3.3E-02	U		<sup>152</sup> Eu	-6.9E-03 $\pm$ 5.9E-02	U
	<sup>154</sup> Eu	-6.5E-03 $\pm$ 3.6E-02	U		<sup>154</sup> Eu	-1.3E-02 $\pm$ 5.8E-02	U
	<sup>155</sup> Eu	3.6E-02 $\pm$ 4.7E-02	U		<sup>155</sup> Eu	6.3E-02 $\pm$ 8.2E-02	U
	<sup>238</sup> Pu	2.2E-02 $\pm$ 3.1E-02	U		<sup>238</sup> Pu	4.5E-03 $\pm$ 3.1E-02	U
	<sup>239,240</sup> Pu	2.0E-02 $\pm$ 1.4E-02			<sup>239,240</sup> Pu	2.3E-03 $\pm$ 2.3E-02	U
	<sup>103</sup> Ru	-6.1E-03 $\pm$ 9.8E-03	U		<sup>103</sup> Ru	1.8E-03 $\pm$ 1.8E-02	U
	<sup>106</sup> Ru	-2.1E-02 $\pm$ 8.8E-02	U		<sup>106</sup> Ru	1.4E-01 $\pm$ 1.5E-01	U
	<sup>125</sup> Sb	3.9E-02 $\pm$ 4.7E-02	U		<sup>125</sup> Sb	9.3E-03 $\pm$ 5.0E-02	U
	<sup>113</sup> Sn	-9.5E-03 $\pm$ 1.3E-02	U		<sup>113</sup> Sn	-6.6E-03 $\pm$ 2.3E-02	U
	<sup>90</sup> Sr	2.7E-01 $\pm$ 1.9E-01			<sup>90</sup> Sr	1.0E-01 $\pm$ 2.3E-01	U
	<sup>234</sup> U	3.2E-01 $\pm$ 8.0E-02			<sup>234</sup> U	2.1E-01 $\pm$ 5.5E-02	
	<sup>235</sup> U	2.8E-02 $\pm$ 1.7E-02			<sup>235</sup> U	2.2E-02 $\pm$ 1.4E-02	
	<sup>238</sup> U	3.0E-01 $\pm$ 7.5E-02			<sup>238</sup> U	2.3E-01 $\pm$ 6.0E-02	
	<sup>65</sup> Zn	-8.9E-03 $\pm$ 2.5E-02	U		<sup>65</sup> Zn	9.2E-03 $\pm$ 4.9E-02	U
Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
Y608 (100-N)	<sup>144</sup> Ce	-8.4E-02 $\pm$ 1.0E-01	U	Y611 (100-N)	<sup>144</sup> Ce	3.2E-04 $\pm$ 3.2E-03	U
	<sup>60</sup> Co	2.1E-02 $\pm$ 1.6E-02	U		<sup>60</sup> Co	2.2E-01 $\pm$ 3.3E-02	
	<sup>134</sup> Cs	2.4E-02 $\pm$ 1.8E-02	U		<sup>134</sup> Cs	3.7E-02 $\pm$ 2.6E-02	U
	<sup>137</sup> Cs	-8.4E-03 $\pm$ 1.4E-02	U		<sup>137</sup> Cs	3.6E-01 $\pm$ 6.5E-02	
	<sup>152</sup> Eu	-1.6E-02 $\pm$ 4.0E-02	U		<sup>152</sup> Eu	-3.0E-02 $\pm$ 8.1E-02	U
	<sup>154</sup> Eu	5.9E-03 $\pm$ 4.4E-02	U		<sup>154</sup> Eu	5.8E-03 $\pm$ 5.6E-02	U
	<sup>155</sup> Eu	2.3E-02 $\pm$ 5.5E-02	U		<sup>155</sup> Eu	8.3E-03 $\pm$ 8.3E-02	U
	<sup>238</sup> Pu	-8.4E-03 $\pm$ 2.8E-02	U		<sup>238</sup> Pu	-1.7E-02 $\pm$ 2.2E-02	U
	<sup>239,240</sup> Pu	1.1E-02 $\pm$ 1.0E-02			<sup>239,240</sup> Pu	1.3E-02 $\pm$ 1.1E-02	U
	<sup>103</sup> Ru	1.2E-02 $\pm$ 1.2E-02	U		<sup>103</sup> Ru	4.9E-03 $\pm$ 1.7E-02	U
	<sup>106</sup> Ru	2.4E-02 $\pm$ 1.2E-01	U		<sup>106</sup> Ru	1.0E-01 $\pm$ 1.6E-01	U
	<sup>125</sup> Sb	4.2E-03 $\pm$ 3.2E-02	U		<sup>125</sup> Sb	-2.3E-02 $\pm$ 5.1E-02	U
	<sup>113</sup> Sn	-8.1E-03 $\pm$ 1.6E-02	U		<sup>113</sup> Sn	-1.4E-03 $\pm$ 1.4E-02	U
	<sup>90</sup> Sr	7.6E-02 $\pm$ 1.8E-01	U		<sup>90</sup> Sr	-1.4E-01 $\pm$ 1.5E-01	U
	<sup>234</sup> U	1.8E-01 $\pm$ 5.0E-02			<sup>234</sup> U	2.6E-01 $\pm$ 7.0E-02	
	<sup>235</sup> U	2.2E-02 $\pm$ 1.5E-02			<sup>235</sup> U	2.8E-02 $\pm$ 1.7E-02	
	<sup>238</sup> U	1.9E-01 $\pm$ 5.3E-02			<sup>238</sup> U	2.4E-01 $\pm$ 6.5E-02	
	<sup>65</sup> Zn	-4.2E-03 $\pm$ 3.9E-02	U		<sup>65</sup> Zn	2.1E-03 $\pm$ 2.1E-02	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.

Table 3-3. 2001 Soil Sampling Results, (pCi/g  $\pm$  total analytical uncertainty). (cont)

Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
D001 (200 West)	<sup>144</sup> Ce	-3.8E-02 $\pm$ 4.9E-02	U	D003 (200 West)	<sup>144</sup> Ce	-4.5E-02 $\pm$ 4.9E-02	U
	<sup>60</sup> Co	-2.3E-04 $\pm$ 2.3E-03	U		<sup>60</sup> Co	2.5E-03 $\pm$ 5.0E-03	U
	<sup>134</sup> Cs	3.2E-02 $\pm$ 1.1E-02			<sup>134</sup> Cs	2.6E-02 $\pm$ 8.8E-03	
	<sup>137</sup> Cs	6.7E-01 $\pm$ 8.7E-02			<sup>137</sup> Cs	1.6E+00 $\pm$ 2.1E-01	
	<sup>152</sup> Eu	-4.7E-03 $\pm$ 1.7E-02	U		<sup>152</sup> Eu	2.3E-03 $\pm$ 1.9E-02	U
	<sup>154</sup> Eu	-8.3E-03 $\pm$ 1.7E-02	U		<sup>154</sup> Eu	-8.5E-03 $\pm$ 1.6E-02	U
	<sup>155</sup> Eu	5.2E-02 $\pm$ 2.7E-02			<sup>155</sup> Eu	3.0E-02 $\pm$ 2.6E-02	U
	<sup>238</sup> Pu	1.8E-03 $\pm$ 1.8E-02	U		<sup>238</sup> Pu	1.6E-02 $\pm$ 2.7E-02	U
	<sup>239,240</sup> Pu	4.0E-02 $\pm$ 1.9E-02			<sup>239,240</sup> Pu	5.5E-02 $\pm$ 2.3E-02	
	<sup>103</sup> Ru	7.6E-03 $\pm$ 6.3E-03	U		<sup>103</sup> Ru	1.8E-03 $\pm$ 6.8E-03	U
	<sup>106</sup> Ru	2.6E-02 $\pm$ 4.7E-02	U		<sup>106</sup> Ru	1.0E-02 $\pm$ 4.9E-02	U
	<sup>125</sup> Sb	-5.3E-03 $\pm$ 1.6E-02	U		<sup>125</sup> Sb	1.1E-02 $\pm$ 1.9E-02	U
	<sup>113</sup> Sn	1.7E-03 $\pm$ 7.8E-03	U		<sup>113</sup> Sn	3.5E-03 $\pm$ 8.4E-03	U
	<sup>90</sup> Sr	3.7E-01 $\pm$ 1.1E-01			<sup>90</sup> Sr	3.7E-01 $\pm$ 1.5E-01	
	<sup>234</sup> U	1.7E-01 $\pm$ 4.6E-02			<sup>234</sup> U	1.5E-01 $\pm$ 4.4E-02	
	<sup>235</sup> U	1.5E-02 $\pm$ 1.2E-02			<sup>235</sup> U	5.6E-03 $\pm$ 6.7E-03	U
	<sup>238</sup> U	1.7E-01 $\pm$ 4.8E-02			<sup>238</sup> U	1.3E-01 $\pm$ 3.9E-02	
	<sup>65</sup> Zn	5.9E-04 $\pm$ 5.9E-03	U		<sup>65</sup> Zn	-3.0E-03 $\pm$ 1.3E-02	U
Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
D005 (200 West)	<sup>144</sup> Ce	-1.9E-03 $\pm$ 1.9E-02	U	D007 (200 West)	<sup>144</sup> Ce	-1.6E-02 $\pm$ 6.6E-02	U
	<sup>60</sup> Co	-1.1E-03 $\pm$ 5.9E-03	U		<sup>60</sup> Co	-3.9E-03 $\pm$ 6.6E-03	U
	<sup>134</sup> Cs	3.5E-02 $\pm$ 1.1E-02			<sup>134</sup> Cs	4.3E-02 $\pm$ 1.3E-02	
	<sup>137</sup> Cs	1.2E-01 $\pm$ 2.2E-02			<sup>137</sup> Cs	3.4E-01 $\pm$ 5.1E-02	
	<sup>152</sup> Eu	4.5E-03 $\pm$ 3.1E-02	U		<sup>152</sup> Eu	-6.8E-03 $\pm$ 2.4E-02	U
	<sup>154</sup> Eu	-2.8E-02 $\pm$ 2.8E-02	U		<sup>154</sup> Eu	-3.0E-02 $\pm$ 3.0E-02	U
	<sup>155</sup> Eu	5.0E-02 $\pm$ 3.8E-02	U		<sup>155</sup> Eu	3.7E-02 $\pm$ 3.1E-02	U
	<sup>238</sup> Pu	1.8E-03 $\pm$ 1.8E-02	U		<sup>238</sup> Pu	2.1E-02 $\pm$ 1.7E-02	U
	<sup>239,240</sup> Pu	1.8E-03 $\pm$ 1.8E-02	U		<sup>239,240</sup> Pu	7.5E-01 $\pm$ 1.6E-01	
	<sup>103</sup> Ru	3.2E-03 $\pm$ 7.4E-03	U		<sup>103</sup> Ru	-3.7E-03 $\pm$ 7.8E-03	U
	<sup>106</sup> Ru	1.7E-02 $\pm$ 5.8E-02	U		<sup>106</sup> Ru	1.9E-02 $\pm$ 6.3E-02	U
	<sup>125</sup> Sb	-1.1E-02 $\pm$ 1.8E-02	U		<sup>125</sup> Sb	6.6E-03 $\pm$ 1.9E-02	U
	<sup>113</sup> Sn	3.6E-03 $\pm$ 8.6E-03	U		<sup>113</sup> Sn	-6.1E-03 $\pm$ 9.1E-03	U
	<sup>90</sup> Sr	2.4E-01 $\pm$ 1.2E-01			<sup>90</sup> Sr	8.8E-02 $\pm$ 1.1E-01	U
	<sup>234</sup> U	1.7E-01 $\pm$ 4.8E-02			<sup>234</sup> U	1.7E-01 $\pm$ 4.8E-02	
	<sup>235</sup> U	1.7E-02 $\pm$ 1.2E-02			<sup>235</sup> U	1.7E-02 $\pm$ 1.3E-02	
	<sup>238</sup> U	1.4E-01 $\pm$ 4.1E-02			<sup>238</sup> U	2.2E-01 $\pm$ 5.7E-02	
	<sup>65</sup> Zn	-3.5E-03 $\pm$ 1.6E-02	U		<sup>65</sup> Zn	8.3E-03 $\pm$ 1.8E-02	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.

Table 3-3. 2001 Soil Sampling Results, (pCi/g  $\pm$  total analytical uncertainty). (cont)

Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
D009 (200 West)	<sup>144</sup> Ce	-4.5E-02 $\pm$ 6.3E-02	U	D011 (200 West)	<sup>144</sup> Ce	4.4E-02 $\pm$ 4.8E-02	U
	<sup>60</sup> Co	-6.3E-04 $\pm$ 6.0E-03	U		<sup>60</sup> Co	-2.3E-03 $\pm$ 5.1E-03	U
	<sup>134</sup> Cs	3.9E-02 $\pm$ 1.2E-02			<sup>134</sup> Cs	3.3E-02 $\pm$ 1.0E-02	
	<sup>137</sup> Cs	5.7E-01 $\pm$ 8.0E-02			<sup>137</sup> Cs	2.6E+00 $\pm$ 4.2E-01	
	<sup>152</sup> Eu	2.6E-02 $\pm$ 2.2E-02	U		<sup>152</sup> Eu	7.3E-03 $\pm$ 2.0E-02	U
	<sup>154</sup> Eu	2.2E-03 $\pm$ 2.2E-02	U		<sup>154</sup> Eu	-3.0E-03 $\pm$ 2.0E-02	U
	<sup>155</sup> Eu	4.0E-02 $\pm$ 3.5E-02	U		<sup>155</sup> Eu	2.7E-02 $\pm$ 2.6E-02	U
	<sup>238</sup> Pu	-1.3E-02 $\pm$ 2.1E-02	U		<sup>238</sup> Pu	-5.7E-03 $\pm$ 2.9E-02	U
	<sup>239,240</sup> Pu	7.2E-02 $\pm$ 2.5E-02			<sup>239,240</sup> Pu	8.7E-02 $\pm$ 3.2E-02	
	<sup>103</sup> Ru	8.8E-03 $\pm$ 7.5E-03	U		<sup>103</sup> Ru	3.4E-03 $\pm$ 7.5E-03	U
	<sup>106</sup> Ru	5.8E-03 $\pm$ 5.7E-02	U		<sup>106</sup> Ru	-3.6E-02 $\pm$ 5.4E-02	U
	<sup>125</sup> Sb	8.8E-03 $\pm$ 1.8E-02	U		<sup>125</sup> Sb	-4.4E-03 $\pm$ 2.0E-02	U
	<sup>113</sup> Sn	-1.0E-02 $\pm$ 1.0E-02	U		<sup>113</sup> Sn	7.5E-03 $\pm$ 9.0E-03	U
	<sup>90</sup> Sr	3.0E-01 $\pm$ 1.2E-01			<sup>90</sup> Sr	2.3E-01 $\pm$ 1.2E-01	
	<sup>234</sup> U	1.9E-01 $\pm$ 5.1E-02			<sup>234</sup> U	1.9E-01 $\pm$ 5.3E-02	
	<sup>235</sup> U	1.9E-03 $\pm$ 8.6E-03	U		<sup>235</sup> U	2.1E-02 $\pm$ 1.5E-02	
	<sup>238</sup> U	1.7E-01 $\pm$ 4.6E-02			<sup>238</sup> U	2.0E-01 $\pm$ 5.4E-02	
	<sup>65</sup> Zn	1.4E-02 $\pm$ 1.7E-02	U		<sup>65</sup> Zn	1.4E-02 $\pm$ 1.5E-02	U
Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
D013 (200 West)	<sup>144</sup> Ce	1.6E-03 $\pm$ 1.6E-02	U	D015 (200 West)	<sup>144</sup> Ce	-2.6E-03 $\pm$ 2.6E-02	U
	<sup>60</sup> Co	-4.3E-04 $\pm$ 4.3E-03	U		<sup>60</sup> Co	-7.3E-03 $\pm$ 7.3E-03	U
	<sup>134</sup> Cs	2.5E-02 $\pm$ 1.0E-02			<sup>134</sup> Cs	3.4E-02 $\pm$ 9.5E-03	
	<sup>137</sup> Cs	1.6E+00 $\pm$ 2.1E-01			<sup>137</sup> Cs	1.6E+00 $\pm$ 2.2E-01	
	<sup>152</sup> Eu	-7.8E-03 $\pm$ 1.9E-02	U		<sup>152</sup> Eu	1.1E-02 $\pm$ 2.5E-02	U
	<sup>154</sup> Eu	4.5E-03 $\pm$ 1.6E-02	U		<sup>154</sup> Eu	-9.3E-03 $\pm$ 2.0E-02	U
	<sup>155</sup> Eu	5.1E-02 $\pm$ 2.7E-02			<sup>155</sup> Eu	5.2E-02 $\pm$ 4.1E-02	U
	<sup>238</sup> Pu	2.4E-02 $\pm$ 2.9E-02	U		<sup>238</sup> Pu	3.2E-03 $\pm$ 2.3E-02	U
	<sup>239,240</sup> Pu	1.7E-02 $\pm$ 1.2E-02			<sup>239,240</sup> Pu	2.4E-02 $\pm$ 1.4E-02	
	<sup>103</sup> Ru	-1.3E-03 $\pm$ 7.4E-03	U		<sup>103</sup> Ru	1.3E-02 $\pm$ 9.4E-03	U
	<sup>106</sup> Ru	-1.3E-02 $\pm$ 5.1E-02	U		<sup>106</sup> Ru	5.6E-02 $\pm$ 6.2E-02	U
	<sup>125</sup> Sb	5.2E-03 $\pm$ 1.8E-02	U		<sup>125</sup> Sb	6.3E-03 $\pm$ 2.1E-02	U
	<sup>113</sup> Sn	-6.1E-03 $\pm$ 8.5E-03	U		<sup>113</sup> Sn	2.2E-03 $\pm$ 1.1E-02	U
	<sup>90</sup> Sr	1.7E+00 $\pm$ 3.4E-01			<sup>90</sup> Sr	2.8E-01 $\pm$ 1.3E-01	
	<sup>234</sup> U	2.4E-01 $\pm$ 6.5E-02			<sup>234</sup> U	2.0E-01 $\pm$ 5.4E-02	
	<sup>235</sup> U	2.8E-02 $\pm$ 1.7E-02			<sup>235</sup> U	1.1E-02 $\pm$ 1.2E-02	U
	<sup>238</sup> U	2.3E-01 $\pm$ 6.0E-02			<sup>238</sup> U	1.5E-01 $\pm$ 4.5E-02	
	<sup>65</sup> Zn	-7.4E-04 $\pm$ 7.4E-03	U		<sup>65</sup> Zn	1.4E-02 $\pm$ 1.7E-02	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.

Table 3-3. 2001 Soil Sampling Results, (pCi/g  $\pm$  total analytical uncertainty). (cont)

Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
D017 (200 West)	<sup>144</sup> Ce	1.3E-02 $\pm$ 4.8E-02	U	D019 (200 West)	<sup>144</sup> Ce	-1.6E-03 $\pm$ 1.6E-02	U
	<sup>60</sup> Co	-2.1E-03 $\pm$ 5.7E-03	U		<sup>60</sup> Co	-1.9E-03 $\pm$ 5.7E-03	U
	<sup>134</sup> Cs	3.2E-02 $\pm$ 8.6E-03			<sup>134</sup> Cs	2.9E-02 $\pm$ 9.3E-03	
	<sup>137</sup> Cs	2.5E+00 $\pm$ 4.0E-01			<sup>137</sup> Cs	2.0E+00 $\pm$ 2.8E-01	
	<sup>152</sup> Eu	6.7E-04 $\pm$ 6.7E-03	U		<sup>152</sup> Eu	8.2E-03 $\pm$ 3.2E-02	U
	<sup>154</sup> Eu	-1.4E-02 $\pm$ 1.7E-02	U		<sup>154</sup> Eu	-3.5E-02 $\pm$ 3.5E-02	U
	<sup>155</sup> Eu	4.0E-02 $\pm$ 2.8E-02	U		<sup>155</sup> Eu	3.5E-03 $\pm$ 3.5E-02	U
	<sup>238</sup> Pu	-1.2E-02 $\pm$ 2.5E-02	U		<sup>238</sup> Pu	-3.6E-03 $\pm$ 3.5E-02	U
	<sup>239,240</sup> Pu	2.1E-02 $\pm$ 1.3E-02			<sup>239,240</sup> Pu	3.5E-02 $\pm$ 1.9E-02	
	<sup>103</sup> Ru	8.8E-03 $\pm$ 8.3E-03	U		<sup>103</sup> Ru	4.8E-03 $\pm$ 9.1E-03	U
	<sup>106</sup> Ru	3.4E-02 $\pm$ 5.4E-02	U		<sup>106</sup> Ru	1.6E-02 $\pm$ 6.1E-02	U
	<sup>125</sup> Sb	8.6E-03 $\pm$ 2.0E-02	U		<sup>125</sup> Sb	-1.7E-02 $\pm$ 2.2E-02	U
	<sup>113</sup> Sn	5.0E-03 $\pm$ 9.5E-03	U		<sup>113</sup> Sn	-4.3E-03 $\pm$ 1.1E-02	U
	<sup>90</sup> Sr	2.5E-01 $\pm$ 1.3E-01			<sup>90</sup> Sr	4.1E-01 $\pm$ 1.3E-01	
	<sup>234</sup> U	2.3E-01 $\pm$ 6.0E-02			<sup>234</sup> U	2.1E-01 $\pm$ 5.7E-02	
	<sup>235</sup> U	2.5E-02 $\pm$ 1.5E-02			<sup>235</sup> U	2.3E-02 $\pm$ 1.7E-02	
	<sup>238</sup> U	2.1E-01 $\pm$ 5.7E-02			<sup>238</sup> U	1.7E-01 $\pm$ 4.9E-02	
	<sup>65</sup> Zn	8.9E-03 $\pm$ 1.5E-02	U		<sup>65</sup> Zn	-1.3E-03 $\pm$ 1.3E-02	U
Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
D021 (200 West)	<sup>144</sup> Ce	-2.0E-02 $\pm$ 5.2E-02	U	D023 (200 West)	<sup>144</sup> Ce	2.5E-02 $\pm$ 9.0E-02	U
	<sup>60</sup> Co	-3.7E-03 $\pm$ 5.2E-03	U		<sup>60</sup> Co	-1.3E-03 $\pm$ 6.6E-03	U
	<sup>134</sup> Cs	4.3E-02 $\pm$ 1.2E-02			<sup>134</sup> Cs	3.1E-02 $\pm$ 1.0E-02	
	<sup>137</sup> Cs	4.3E-01 $\pm$ 5.6E-02			<sup>137</sup> Cs	4.8E+00 $\pm$ 7.2E-01	
	<sup>152</sup> Eu	-2.7E-02 $\pm$ 2.7E-02	U		<sup>152</sup> Eu	-2.4E-02 $\pm$ 4.8E-02	U
	<sup>154</sup> Eu	1.5E-02 $\pm$ 1.9E-02	U		<sup>154</sup> Eu	-3.2E-03 $\pm$ 2.0E-02	U
	<sup>155</sup> Eu	3.4E-02 $\pm$ 3.0E-02	U		<sup>155</sup> Eu	-3.6E-03 $\pm$ 3.6E-02	U
	<sup>238</sup> Pu	9.0E-03 $\pm$ 3.0E-02	U		<sup>238</sup> Pu	2.1E-03 $\pm$ 2.1E-02	U
	<sup>239,240</sup> Pu	3.1E-02 $\pm$ 1.8E-02			<sup>239,240</sup> Pu	1.1E-01 $\pm$ 3.7E-02	
	<sup>103</sup> Ru	-1.3E-03 $\pm$ 8.3E-03	U		<sup>103</sup> Ru	1.2E-02 $\pm$ 1.3E-02	U
	<sup>106</sup> Ru	1.0E-02 $\pm$ 5.8E-02	U		<sup>106</sup> Ru	-3.5E-02 $\pm$ 8.0E-02	U
	<sup>125</sup> Sb	9.5E-03 $\pm$ 1.6E-02	U		<sup>125</sup> Sb	-3.1E-02 $\pm$ 3.1E-02	U
	<sup>113</sup> Sn	-6.9E-03 $\pm$ 8.3E-03	U		<sup>113</sup> Sn	2.9E-03 $\pm$ 1.4E-02	U
	<sup>90</sup> Sr	2.2E-01 $\pm$ 1.1E-01			<sup>90</sup> Sr	3.6E-01 $\pm$ 1.4E-01	
	<sup>234</sup> U	2.2E-01 $\pm$ 6.2E-02			<sup>234</sup> U	1.6E-01 $\pm$ 4.8E-02	
	<sup>235</sup> U	2.0E-02 $\pm$ 1.8E-02	U		<sup>235</sup> U	2.2E-02 $\pm$ 1.5E-02	
	<sup>238</sup> U	2.0E-01 $\pm$ 5.8E-02			<sup>238</sup> U	1.8E-01 $\pm$ 5.0E-02	
	<sup>65</sup> Zn	-9.1E-03 $\pm$ 1.5E-02	U		<sup>65</sup> Zn	1.9E-02 $\pm$ 1.8E-02	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.

Table 3-3. 2001 Soil Sampling Results, (pCi/g  $\pm$  total analytical uncertainty). (cont)

Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
D025 (200 West)	<sup>144</sup> Ce	3.0E-02 $\pm$ 5.1E-02	U	D027 (200 West)	<sup>144</sup> Ce	-2.2E-02 $\pm$ 6.6E-02	U
	<sup>60</sup> Co	2.9E-03 $\pm$ 5.8E-03	U		<sup>60</sup> Co	1.4E-03 $\pm$ 5.0E-03	U
	<sup>134</sup> Cs	3.3E-02 $\pm$ 1.1E-02			<sup>134</sup> Cs	2.8E-02 $\pm$ 9.2E-03	
	<sup>137</sup> Cs	3.5E+00 $\pm$ 5.6E-01			<sup>137</sup> Cs	3.4E-01 $\pm$ 5.1E-02	
	<sup>152</sup> Eu	-3.5E-02 $\pm$ 3.5E-02	U		<sup>152</sup> Eu	-2.0E-02 $\pm$ 3.0E-02	U
	<sup>154</sup> Eu	-4.2E-03 $\pm$ 1.9E-02	U		<sup>154</sup> Eu	-8.8E-04 $\pm$ 8.8E-03	U
	<sup>155</sup> Eu	2.8E-02 $\pm$ 3.4E-02	U		<sup>155</sup> Eu	-1.8E-04 $\pm$ 1.8E-03	U
	<sup>238</sup> Pu	3.2E-02 $\pm$ 3.2E-02	U		<sup>238</sup> Pu	-5.7E-03 $\pm$ 1.8E-02	U
	<sup>239,240</sup> Pu	4.3E-01 $\pm$ 9.9E-02			<sup>239,240</sup> Pu	3.4E-02 $\pm$ 1.6E-02	
	<sup>103</sup> Ru	-6.8E-03 $\pm$ 9.5E-03	U		<sup>103</sup> Ru	-6.7E-03 $\pm$ 7.4E-03	U
	<sup>106</sup> Ru	-1.8E-03 $\pm$ 1.8E-02	U		<sup>106</sup> Ru	3.5E-02 $\pm$ 5.2E-02	U
	<sup>125</sup> Sb	-4.3E-03 $\pm$ 2.3E-02	U		<sup>125</sup> Sb	4.9E-03 $\pm$ 1.7E-02	U
	<sup>113</sup> Sn	-1.2E-02 $\pm$ 1.2E-02	U		<sup>113</sup> Sn	-2.4E-03 $\pm$ 8.6E-03	U
	<sup>90</sup> Sr	2.5E-01 $\pm$ 1.3E-01			<sup>90</sup> Sr	1.7E-01 $\pm$ 1.4E-01	U
	<sup>234</sup> U	2.1E-01 $\pm$ 5.5E-02			<sup>234</sup> U	2.2E-01 $\pm$ 5.7E-02	
	<sup>235</sup> U	3.0E-02 $\pm$ 1.6E-02			<sup>235</sup> U	1.7E-02 $\pm$ 1.2E-02	
	<sup>238</sup> U	2.4E-01 $\pm$ 6.0E-02			<sup>238</sup> U	2.1E-01 $\pm$ 5.7E-02	
	<sup>65</sup> Zn	9.0E-03 $\pm$ 1.5E-02	U		<sup>65</sup> Zn	-7.5E-03 $\pm$ 1.5E-02	U
Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
D029 (200 West)	<sup>144</sup> Ce	-7.3E-02 $\pm$ 1.1E-01	U	D031 (200 West)	<sup>144</sup> Ce	-1.6E-01 $\pm$ 1.6E-01	U
	<sup>60</sup> Co	-3.8E-03 $\pm$ 8.7E-03	U		<sup>60</sup> Co	-7.5E-03 $\pm$ 9.7E-03	U
	<sup>134</sup> Cs	2.2E-02 $\pm$ 1.3E-02			<sup>134</sup> Cs	3.6E-02 $\pm$ 1.9E-02	
	<sup>137</sup> Cs	2.3E+00 $\pm$ 3.2E-01			<sup>137</sup> Cs	3.7E+00 $\pm$ 5.6E-01	
	<sup>152</sup> Eu	-4.1E-02 $\pm$ 6.2E-02	U		<sup>152</sup> Eu	7.7E-03 $\pm$ 7.7E-02	U
	<sup>154</sup> Eu	-1.0E-02 $\pm$ 2.7E-02	U		<sup>154</sup> Eu	2.0E-04 $\pm$ 2.0E-03	U
	<sup>155</sup> Eu	-1.5E-02 $\pm$ 5.5E-02	U		<sup>155</sup> Eu	-1.7E-02 $\pm$ 5.8E-02	U
	<sup>238</sup> Pu	5.5E-03 $\pm$ 2.7E-02	U		<sup>238</sup> Pu	1.9E-02 $\pm$ 5.5E-02	U
	<sup>239,240</sup> Pu	7.0E-02 $\pm$ 2.7E-02			<sup>239,240</sup> Pu	1.9E-01 $\pm$ 6.7E-02	
	<sup>103</sup> Ru	1.8E-03 $\pm$ 1.7E-02	U		<sup>103</sup> Ru	-5.9E-03 $\pm$ 2.0E-02	U
	<sup>106</sup> Ru	-3.3E-02 $\pm$ 9.9E-02	U		<sup>106</sup> Ru	6.9E-02 $\pm$ 1.1E-01	U
	<sup>125</sup> Sb	-1.5E-02 $\pm$ 3.6E-02	U		<sup>125</sup> Sb	1.0E-02 $\pm$ 4.1E-02	U
	<sup>113</sup> Sn	-1.2E-03 $\pm$ 1.2E-02	U		<sup>113</sup> Sn	2.1E-03 $\pm$ 2.1E-02	U
	<sup>90</sup> Sr	5.6E-02 $\pm$ 1.2E-01	U		<sup>90</sup> Sr	4.4E-01 $\pm$ 3.7E-01	
	<sup>234</sup> U	1.9E-01 $\pm$ 5.3E-02			<sup>234</sup> U	1.8E-01 $\pm$ 5.0E-02	
	<sup>235</sup> U	1.9E-02 $\pm$ 1.3E-02			<sup>235</sup> U	1.0E-02 $\pm$ 1.3E-02	U
	<sup>238</sup> U	1.9E-01 $\pm$ 5.3E-02			<sup>238</sup> U	2.3E-01 $\pm$ 6.0E-02	
	<sup>65</sup> Zn	1.6E-02 $\pm$ 2.7E-02	U		<sup>65</sup> Zn	1.3E-02 $\pm$ 2.9E-02	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.

Table 3-3. 2001 Soil Sampling Results, (pCi/g  $\pm$  total analytical uncertainty). (cont)

Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
D033 (200 West)	<sup>144</sup> Ce	-1.5E-02 $\pm$ 8.2E-02	U	D035 (200 West)	<sup>144</sup> Ce	-5.7E-02 $\pm$ 8.5E-02	U
	<sup>60</sup> Co	6.5E-03 $\pm$ 8.4E-03	U		<sup>60</sup> Co	-2.2E-04 $\pm$ 2.2E-03	U
	<sup>134</sup> Cs	1.7E-02 $\pm$ 1.1E-02	U		<sup>134</sup> Cs	2.3E-02 $\pm$ 1.1E-02	
	<sup>137</sup> Cs	1.1E+00 $\pm$ 1.5E-01			<sup>137</sup> Cs	2.1E+00 $\pm$ 2.9E-01	
	<sup>152</sup> Eu	-6.5E-04 $\pm$ 6.5E-03	U		<sup>152</sup> Eu	-2.1E-02 $\pm$ 3.6E-02	U
	<sup>154</sup> Eu	-1.6E-02 $\pm$ 2.6E-02	U		<sup>154</sup> Eu	1.4E-03 $\pm$ 1.4E-02	U
	<sup>155</sup> Eu	3.1E-02 $\pm$ 4.0E-02	U		<sup>155</sup> Eu	2.2E-02 $\pm$ 4.4E-02	U
	<sup>238</sup> Pu	2.9E-02 $\pm$ 2.9E-02	U		<sup>238</sup> Pu	-2.1E-02 $\pm$ 2.5E-02	U
	<sup>239,240</sup> Pu	2.2E-02 $\pm$ 2.1E-02	U		<sup>239,240</sup> Pu	4.7E-02 $\pm$ 2.1E-02	
	<sup>103</sup> Ru	3.4E-03 $\pm$ 1.3E-02	U		<sup>103</sup> Ru	1.5E-02 $\pm$ 1.5E-02	U
	<sup>106</sup> Ru	-6.7E-03 $\pm$ 6.7E-02	U		<sup>106</sup> Ru	3.5E-02 $\pm$ 9.1E-02	U
	<sup>125</sup> Sb	2.8E-02 $\pm$ 2.5E-02	U		<sup>125</sup> Sb	-6.5E-04 $\pm$ 6.5E-03	U
	<sup>113</sup> Sn	9.1E-03 $\pm$ 1.4E-02	U		<sup>113</sup> Sn	-2.0E-03 $\pm$ 1.6E-02	U
	<sup>90</sup> Sr	6.4E-01 $\pm$ 1.9E-01			<sup>90</sup> Sr	1.7E-01 $\pm$ 1.1E-01	
	<sup>234</sup> U	2.0E-01 $\pm$ 5.4E-02			<sup>234</sup> U	1.6E-01 $\pm$ 4.5E-02	
	<sup>235</sup> U	-1.9E-03 $\pm$ 1.3E-02	U		<sup>235</sup> U	9.3E-03 $\pm$ 8.5E-03	
	<sup>238</sup> U	2.1E-01 $\pm$ 5.5E-02			<sup>238</sup> U	1.9E-01 $\pm$ 5.1E-02	
	<sup>65</sup> Zn	9.1E-03 $\pm$ 2.4E-02	U		<sup>65</sup> Zn	2.7E-03 $\pm$ 2.3E-02	U
Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
D037 (200 West)	<sup>144</sup> Ce	2.3E-02 $\pm$ 1.1E-01	U	D039 (200 West)	<sup>144</sup> Ce	-1.1E-02 $\pm$ 1.0E-01	U
	<sup>60</sup> Co	-8.3E-04 $\pm$ 8.3E-03	U		<sup>60</sup> Co	-6.2E-03 $\pm$ 8.7E-03	U
	<sup>134</sup> Cs	3.5E-02 $\pm$ 1.3E-02			<sup>134</sup> Cs	2.9E-02 $\pm$ 1.7E-02	
	<sup>137</sup> Cs	2.0E+00 $\pm$ 2.8E-01			<sup>137</sup> Cs	8.8E-01 $\pm$ 1.3E-01	
	<sup>152</sup> Eu	2.3E-04 $\pm$ 2.3E-03	U		<sup>152</sup> Eu	-2.6E-02 $\pm$ 4.9E-02	U
	<sup>154</sup> Eu	-1.7E-02 $\pm$ 3.2E-02	U		<sup>154</sup> Eu	6.8E-04 $\pm$ 6.8E-03	U
	<sup>155</sup> Eu	-1.5E-03 $\pm$ 1.5E-02	U		<sup>155</sup> Eu	4.7E-02 $\pm$ 4.7E-02	U
	<sup>238</sup> Pu	-3.7E-03 $\pm$ 2.0E-02	U		<sup>238</sup> Pu	2.9E-02 $\pm$ 4.3E-02	U
	<sup>239,240</sup> Pu	2.8E-02 $\pm$ 1.6E-02			<sup>239,240</sup> Pu	6.0E-02 $\pm$ 3.0E-02	
	<sup>103</sup> Ru	-6.5E-03 $\pm$ 1.8E-02	U		<sup>103</sup> Ru	-1.3E-03 $\pm$ 1.3E-02	U
	<sup>106</sup> Ru	1.1E-01 $\pm$ 8.8E-02	U		<sup>106</sup> Ru	5.7E-02 $\pm$ 9.1E-02	U
	<sup>125</sup> Sb	4.4E-03 $\pm$ 3.4E-02	U		<sup>125</sup> Sb	-1.3E-03 $\pm$ 1.3E-02	U
	<sup>113</sup> Sn	7.5E-03 $\pm$ 1.7E-02	U		<sup>113</sup> Sn	-2.1E-03 $\pm$ 1.5E-02	U
	<sup>90</sup> Sr	5.1E-01 $\pm$ 1.5E-01			<sup>90</sup> Sr	3.7E-01 $\pm$ 2.6E-01	
	<sup>234</sup> U	2.0E-01 $\pm$ 5.4E-02			<sup>234</sup> U	4.7E-01 $\pm$ 1.0E-01	
	<sup>235</sup> U	7.7E-03 $\pm$ 7.7E-03	U		<sup>235</sup> U	2.8E-02 $\pm$ 1.5E-02	
	<sup>238</sup> U	2.3E-01 $\pm$ 6.0E-02			<sup>238</sup> U	4.3E-01 $\pm$ 9.9E-02	
	<sup>65</sup> Zn	-2.5E-03 $\pm$ 2.5E-02	U		<sup>65</sup> Zn	-9.2E-05 $\pm$ 9.2E-04	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.

Table 3-3. 2001 Soil Sampling Results, (pCi/g  $\pm$  total analytical uncertainty). (cont)

Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
D041 (200 West)	<sup>144</sup> Ce	1.5E-04 $\pm$ 1.5E-03	U	D043 (200 West)	<sup>144</sup> Ce	-1.3E-02 $\pm$ 9.7E-02	U
	<sup>60</sup> Co	2.0E-03 $\pm$ 8.2E-03	U		<sup>60</sup> Co	5.4E-04 $\pm$ 5.4E-03	U
	<sup>134</sup> Cs	1.7E-02 $\pm$ 1.2E-02	U		<sup>134</sup> Cs	3.2E-02 $\pm$ 1.5E-02	
	<sup>137</sup> Cs	7.6E-01 $\pm$ 1.1E-01			<sup>137</sup> Cs	6.6E-01 $\pm$ 9.9E-02	
	<sup>152</sup> Eu	-1.9E-02 $\pm$ 3.2E-02	U		<sup>152</sup> Eu	-1.5E-02 $\pm$ 4.5E-02	U
	<sup>154</sup> Eu	-3.4E-02 $\pm$ 3.4E-02	U		<sup>154</sup> Eu	-1.9E-02 $\pm$ 2.7E-02	U
	<sup>155</sup> Eu	2.9E-02 $\pm$ 4.3E-02	U		<sup>155</sup> Eu	-1.5E-02 $\pm$ 4.8E-02	U
	<sup>238</sup> Pu	2.4E-02 $\pm$ 7.7E-03	U		<sup>238</sup> Pu	-1.7E-02 $\pm$ 3.9E-02	U
	<sup>239,240</sup> Pu	6.1E-02 $\pm$ 3.0E-02			<sup>239,240</sup> Pu	2.0E-02 $\pm$ 1.8E-02	U
	<sup>103</sup> Ru	-6.4E-03 $\pm$ 1.3E-02	U		<sup>103</sup> Ru	-6.5E-03 $\pm$ 1.4E-02	U
	<sup>106</sup> Ru	1.1E-02 $\pm$ 8.4E-02	U		<sup>106</sup> Ru	2.1E-03 $\pm$ 2.1E-02	U
	<sup>125</sup> Sb	1.4E-02 $\pm$ 2.7E-02	U		<sup>125</sup> Sb	1.1E-02 $\pm$ 2.7E-02	U
	<sup>113</sup> Sn	5.9E-03 $\pm$ 1.6E-02	U		<sup>113</sup> Sn	6.6E-03 $\pm$ 1.5E-02	U
	<sup>90</sup> Sr	4.0E-01 $\pm$ 2.0E-01			<sup>90</sup> Sr	3.8E-01 $\pm$ 2.7E-01	
	<sup>234</sup> U	2.6E-01 $\pm$ 6.5E-02			<sup>234</sup> U	3.7E-01 $\pm$ 8.5E-02	
	<sup>235</sup> U	2.1E-02 $\pm$ 1.4E-02			<sup>235</sup> U	3.3E-02 $\pm$ 1.7E-02	
	<sup>238</sup> U	2.9E-01 $\pm$ 7.0E-02			<sup>238</sup> U	4.1E-01 $\pm$ 9.4E-02	
	<sup>65</sup> Zn	4.6E-03 $\pm$ 2.6E-02	U		<sup>65</sup> Zn	1.1E-02 $\pm$ 2.3E-02	U
Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
D045 (200 West)	<sup>144</sup> Ce	-1.2E-01 $\pm$ 1.2E-01	U	D047 (200 West)	<sup>144</sup> Ce	-1.4E-01 $\pm$ 1.4E-01	U
	<sup>60</sup> Co	4.2E-04 $\pm$ 4.2E-03	U		<sup>60</sup> Co	1.6E-03 $\pm$ 7.8E-03	U
	<sup>134</sup> Cs	2.4E-02 $\pm$ 1.2E-02			<sup>134</sup> Cs	1.8E-02 $\pm$ 1.4E-02	U
	<sup>137</sup> Cs	4.4E+00 $\pm$ 6.6E-01			<sup>137</sup> Cs	2.2E+00 $\pm$ 3.1E-01	
	<sup>152</sup> Eu	1.4E-02 $\pm$ 6.7E-02	U		<sup>152</sup> Eu	-1.6E-04 $\pm$ 1.6E-03	U
	<sup>154</sup> Eu	-1.5E-02 $\pm$ 2.7E-02	U		<sup>154</sup> Eu	6.0E-04 $\pm$ 6.0E-03	U
	<sup>155</sup> Eu	3.4E-02 $\pm$ 5.8E-02	U		<sup>155</sup> Eu	-2.6E-02 $\pm$ 5.2E-02	U
	<sup>238</sup> Pu	-5.3E-03 $\pm$ 3.4E-02	U		<sup>238</sup> Pu	2.9E-02 $\pm$ 2.9E-02	U
	<sup>239,240</sup> Pu	1.1E-01 $\pm$ 4.1E-02			<sup>239,240</sup> Pu	3.0E-01 $\pm$ 9.0E-02	
	<sup>103</sup> Ru	2.7E-03 $\pm$ 2.0E-02	U		<sup>103</sup> Ru	-6.3E-03 $\pm$ 1.6E-02	U
	<sup>106</sup> Ru	5.5E-02 $\pm$ 1.1E-01	U		<sup>106</sup> Ru	-4.6E-02 $\pm$ 9.2E-02	U
	<sup>125</sup> Sb	-9.7E-03 $\pm$ 4.3E-02	U		<sup>125</sup> Sb	2.3E-02 $\pm$ 3.4E-02	U
	<sup>113</sup> Sn	1.3E-02 $\pm$ 2.2E-02	U		<sup>113</sup> Sn	6.3E-03 $\pm$ 1.7E-02	U
	<sup>90</sup> Sr	3.8E+00 $\pm$ 7.6E-01			<sup>90</sup> Sr	2.7E-01 $\pm$ 2.2E-01	U
	<sup>234</sup> U	2.5E-01 $\pm$ 6.3E-02			<sup>234</sup> U	1.7E-01 $\pm$ 4.8E-02	
	<sup>235</sup> U	1.6E-02 $\pm$ 1.2E-02			<sup>235</sup> U	9.4E-03 $\pm$ 8.6E-03	
	<sup>238</sup> U	2.2E-01 $\pm$ 5.7E-02			<sup>238</sup> U	1.9E-01 $\pm$ 5.1E-02	
	<sup>65</sup> Zn	2.0E-02 $\pm$ 2.4E-02	U		<sup>65</sup> Zn	9.0E-04 $\pm$ 9.0E-03	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.



Table 3-3. 2001 Soil Sampling Results, (pCi/g  $\pm$  total analytical uncertainty). (cont)

Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
D049 (200 West)	<sup>144</sup> Ce	-5.2E-02 $\pm$ 8.8E-02	U	D051 (200 West)	<sup>144</sup> Ce	9.7E-03 $\pm$ 4.7E-02	U
	<sup>60</sup> Co	1.8E-03 $\pm$ 8.1E-03	U		<sup>60</sup> Co	-2.1E-03 $\pm$ 5.2E-03	U
	<sup>134</sup> Cs	2.6E-02 $\pm$ 1.2E-02			<sup>134</sup> Cs	3.3E-02 $\pm$ 8.6E-03	
	<sup>137</sup> Cs	2.7E-01 $\pm$ 4.3E-02			<sup>137</sup> Cs	7.8E-01 $\pm$ 1.0E-01	
	<sup>152</sup> Eu	1.6E-02 $\pm$ 4.3E-02	U		<sup>152</sup> Eu	2.8E-03 $\pm$ 1.8E-02	U
	<sup>154</sup> Eu	-3.0E-02 $\pm$ 3.0E-02	U		<sup>154</sup> Eu	-1.6E-02 $\pm$ 1.6E-02	U
	<sup>155</sup> Eu	5.6E-02 $\pm$ 4.8E-02	U		<sup>155</sup> Eu	3.0E-02 $\pm$ 2.5E-02	U
	<sup>238</sup> Pu	-2.0E-02 $\pm$ 3.0E-02	U		<sup>238</sup> Pu	1.0E-02 $\pm$ 2.0E-02	U
	<sup>239,240</sup> Pu	2.4E-02 $\pm$ 1.5E-02			<sup>239,240</sup> Pu	7.7E-02 $\pm$ 2.8E-02	
	<sup>103</sup> Ru	8.1E-03 $\pm$ 1.3E-02	U		<sup>103</sup> Ru	1.1E-02 $\pm$ 9.9E-03	U
	<sup>106</sup> Ru	-3.8E-02 $\pm$ 8.0E-02	U		<sup>106</sup> Ru	4.2E-03 $\pm$ 4.2E-02	U
	<sup>125</sup> Sb	-1.9E-02 $\pm$ 2.7E-02	U		<sup>125</sup> Sb	7.6E-03 $\pm$ 1.6E-02	U
	<sup>113</sup> Sn	-7.5E-03 $\pm$ 1.3E-02	U		<sup>113</sup> Sn	1.9E-03 $\pm$ 8.0E-03	U
	<sup>90</sup> Sr	3.1E-01 $\pm$ 2.2E-01			<sup>90</sup> Sr	1.1E-01 $\pm$ 1.1E-01	U
	<sup>234</sup> U	2.2E-01 $\pm$ 5.5E-02			<sup>234</sup> U	2.2E-01 $\pm$ 5.7E-02	
	<sup>235</sup> U	1.5E-02 $\pm$ 1.2E-02			<sup>235</sup> U	1.3E-02 $\pm$ 1.4E-02	U
	<sup>238</sup> U	2.6E-01 $\pm$ 6.5E-02			<sup>238</sup> U	2.4E-01 $\pm$ 6.0E-02	
	<sup>65</sup> Zn	7.3E-03 $\pm$ 2.5E-02	U		<sup>65</sup> Zn	-8.5E-03 $\pm$ 1.4E-02	U
Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
D053 (200 East)	<sup>144</sup> Ce	4.8E-02 $\pm$ 1.7E-01	U	D055 (200 East)	<sup>144</sup> Ce	-1.9E-01 $\pm$ 1.9E-01	U
	<sup>60</sup> Co	-6.5E-03 $\pm$ 1.1E-02	U		<sup>60</sup> Co	-1.0E-02 $\pm$ 1.0E-02	U
	<sup>134</sup> Cs	4.3E-02 $\pm$ 1.8E-02			<sup>134</sup> Cs	1.6E-02 $\pm$ 1.1E-02	U
	<sup>137</sup> Cs	1.1E+01 $\pm$ 1.6E+00			<sup>137</sup> Cs	2.5E+00 $\pm$ 3.5E-01	
	<sup>152</sup> Eu	4.2E-02 $\pm$ 1.0E-01	U		<sup>152</sup> Eu	-1.1E-01 $\pm$ 1.1E-01	U
	<sup>154</sup> Eu	-2.6E-02 $\pm$ 3.6E-02	U		<sup>154</sup> Eu	-1.4E-02 $\pm$ 2.8E-02	U
	<sup>155</sup> Eu	-4.4E-02 $\pm$ 8.4E-02	U		<sup>155</sup> Eu	2.2E-02 $\pm$ 5.5E-02	U
	<sup>238</sup> Pu	7.9E-03 $\pm$ 1.3E-02	U		<sup>238</sup> Pu	-3.2E-02 $\pm$ 2.9E-02	U
	<sup>239,240</sup> Pu	3.4E-02 $\pm$ 1.9E-02			<sup>239,240</sup> Pu	2.7E-02 $\pm$ 1.6E-02	
	<sup>103</sup> Ru	-7.5E-03 $\pm$ 3.5E-02	U		<sup>103</sup> Ru	-2.2E-03 $\pm$ 1.9E-02	U
	<sup>106</sup> Ru	4.2E-02 $\pm$ 1.7E-01	U		<sup>106</sup> Ru	-4.0E-02 $\pm$ 1.0E-01	U
	<sup>125</sup> Sb	3.0E-02 $\pm$ 7.2E-02	U		<sup>125</sup> Sb	-1.5E-02 $\pm$ 3.9E-02	U
	<sup>113</sup> Sn	-3.4E-03 $\pm$ 3.4E-02	U		<sup>113</sup> Sn	-2.6E-02 $\pm$ 2.6E-02	U
	<sup>90</sup> Sr	7.7E-01 $\pm$ 3.1E-01			<sup>90</sup> Sr	-1.3E-01 $\pm$ 2.2E-01	U
	<sup>234</sup> U	2.2E-01 $\pm$ 5.7E-02			<sup>234</sup> U	2.7E-01 $\pm$ 6.8E-02	
	<sup>235</sup> U	1.2E-02 $\pm$ 1.2E-02	U		<sup>235</sup> U	3.1E-02 $\pm$ 1.8E-02	
	<sup>238</sup> U	2.1E-01 $\pm$ 5.7E-02			<sup>238</sup> U	2.6E-01 $\pm$ 6.8E-02	
	<sup>65</sup> Zn	5.2E-03 $\pm$ 3.1E-02	U		<sup>65</sup> Zn	3.7E-02 $\pm$ 2.6E-02	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.

Table 3-3. 2001 Soil Sampling Results, (pCi/g  $\pm$  total analytical uncertainty). (cont)

Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
D057 (200 East)	<sup>144</sup> Ce	7.1E-03 $\pm$ 7.1E-02	U	D059 (200 East)	<sup>144</sup> Ce	7.3E-03 $\pm$ 7.3E-02	U
	<sup>60</sup> Co	4.3E-03 $\pm$ 5.2E-03	U		<sup>60</sup> Co	-9.0E-03 $\pm$ 9.0E-03	U
	<sup>134</sup> Cs	3.7E-02 $\pm$ 9.3E-03			<sup>134</sup> Cs	2.5E-02 $\pm$ 1.2E-02	
	<sup>137</sup> Cs	9.6E+00 $\pm$ 1.2E+00			<sup>137</sup> Cs	2.4E+00 $\pm$ 3.1E-01	
	<sup>152</sup> Eu	-4.1E-02 $\pm$ 4.1E-02	U		<sup>152</sup> Eu	3.3E-03 $\pm$ 3.2E-02	U
	<sup>154</sup> Eu	-2.3E-03 $\pm$ 1.9E-02	U		<sup>154</sup> Eu	-5.7E-03 $\pm$ 3.1E-02	U
	<sup>155</sup> Eu	1.5E-02 $\pm$ 3.6E-02	U		<sup>155</sup> Eu	7.2E-02 $\pm$ 3.8E-02	
	<sup>238</sup> Pu	5.4E-03 $\pm$ 3.1E-02	U		<sup>238</sup> Pu	-8.0E-03 $\pm$ 2.3E-02	U
	<sup>239,240</sup> Pu	2.1E-02 $\pm$ 1.7E-02			<sup>239,240</sup> Pu	1.6E-03 $\pm$ 8.5E-03	U
	<sup>103</sup> Ru	1.2E-03 $\pm$ 1.2E-02	U		<sup>103</sup> Ru	-9.6E-03 $\pm$ 1.6E-02	U
	<sup>106</sup> Ru	7.4E-02 $\pm$ 8.1E-02	U		<sup>106</sup> Ru	4.5E-02 $\pm$ 9.0E-02	U
	<sup>125</sup> Sb	1.5E-05 $\pm$ 1.5E-04	U		<sup>125</sup> Sb	-1.2E-03 $\pm$ 1.2E-02	U
	<sup>113</sup> Sn	-2.5E-03 $\pm$ 1.5E-02	U		<sup>113</sup> Sn	-3.1E-03 $\pm$ 1.6E-02	U
	<sup>90</sup> Sr	4.9E-01 $\pm$ 2.2E-01			<sup>90</sup> Sr	3.2E-01 $\pm$ 2.2E-01	
	<sup>234</sup> U	2.1E-01 $\pm$ 5.7E-02			<sup>234</sup> U	3.3E-01 $\pm$ 8.3E-02	
	<sup>235</sup> U	1.3E-02 $\pm$ 1.1E-02			<sup>235</sup> U	4.5E-03 $\pm$ 6.3E-03	U
	<sup>238</sup> U	1.9E-01 $\pm$ 5.1E-02			<sup>238</sup> U	2.8E-01 $\pm$ 7.3E-02	
	<sup>65</sup> Zn	1.1E-02 $\pm$ 1.4E-02	U		<sup>65</sup> Zn	-1.3E-02 $\pm$ 2.2E-02	U
Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
D061 (200 East)	<sup>144</sup> Ce	-2.5E-02 $\pm$ 6.3E-02	U	D063 (200 East)	<sup>144</sup> Ce	1.8E-02 $\pm$ 8.5E-02	U
	<sup>60</sup> Co	-6.7E-04 $\pm$ 6.7E-03	U		<sup>60</sup> Co	-3.5E-03 $\pm$ 9.1E-03	U
	<sup>134</sup> Cs	2.7E-02 $\pm$ 1.4E-02			<sup>134</sup> Cs	5.2E-02 $\pm$ 1.7E-02	
	<sup>137</sup> Cs	3.4E-01 $\pm$ 4.8E-02			<sup>137</sup> Cs	5.0E-01 $\pm$ 7.0E-02	
	<sup>152</sup> Eu	1.4E-02 $\pm$ 2.7E-02	U		<sup>152</sup> Eu	-1.7E-02 $\pm$ 3.1E-02	U
	<sup>154</sup> Eu	-5.8E-03 $\pm$ 2.7E-02	U		<sup>154</sup> Eu	-1.9E-02 $\pm$ 3.0E-02	U
	<sup>155</sup> Eu	2.8E-02 $\pm$ 3.1E-02	U		<sup>155</sup> Eu	3.3E-02 $\pm$ 4.3E-02	U
	<sup>238</sup> Pu	1.5E-02 $\pm$ 2.4E-02	U		<sup>238</sup> Pu	1.9E-03 $\pm$ 1.4E-03	U
	<sup>239,240</sup> Pu	7.7E-03 $\pm$ 7.7E-03	U		<sup>239,240</sup> Pu	1.9E-02 $\pm$ 1.4E-02	
	<sup>103</sup> Ru	8.5E-03 $\pm$ 1.3E-02	U		<sup>103</sup> Ru	3.7E-03 $\pm$ 1.5E-02	U
	<sup>106</sup> Ru	-1.7E-02 $\pm$ 7.7E-02	U		<sup>106</sup> Ru	-2.7E-02 $\pm$ 8.9E-02	U
	<sup>125</sup> Sb	-8.0E-03 $\pm$ 2.2E-02	U		<sup>125</sup> Sb	-3.0E-02 $\pm$ 3.0E-02	U
	<sup>113</sup> Sn	-9.2E-03 $\pm$ 1.3E-02	U		<sup>113</sup> Sn	-1.6E-02 $\pm$ 1.6E-02	U
	<sup>90</sup> Sr	5.3E-01 $\pm$ 3.2E-01			<sup>90</sup> Sr	8.5E-01 $\pm$ 2.5E-01	
	<sup>234</sup> U	2.0E-01 $\pm$ 5.4E-02			<sup>234</sup> U	2.4E-01 $\pm$ 8.4E-02	
	<sup>235</sup> U	1.2E-02 $\pm$ 1.0E-02			<sup>235</sup> U	2.7E-02 $\pm$ 2.5E-02	
	<sup>238</sup> U	2.4E-01 $\pm$ 6.0E-02			<sup>238</sup> U	2.0E-01 $\pm$ 7.4E-02	
	<sup>65</sup> Zn	-5.1E-04 $\pm$ 5.1E-03	U		<sup>65</sup> Zn	3.0E-02 $\pm$ 2.3E-02	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.

Table 3-3. 2001 Soil Sampling Results, (pCi/g  $\pm$  total analytical uncertainty). (cont)

Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
D065 (200 East)	<sup>144</sup> Ce	6.1E-02 $\pm$ 9.8E-02	U	D067 (200 East)	<sup>144</sup> Ce	-6.2E-02 $\pm$ 8.7E-02	U
	<sup>60</sup> Co	4.2E-03 $\pm$ 8.8E-03	U		<sup>60</sup> Co	-3.8E-03 $\pm$ 8.7E-03	U
	<sup>134</sup> Cs	1.7E-02 $\pm$ 1.5E-02	U		<sup>134</sup> Cs	4.1E-02 $\pm$ 1.3E-02	
	<sup>137</sup> Cs	2.6E+00 $\pm$ 3.4E-01			<sup>137</sup> Cs	5.1E-02 $\pm$ 1.7E-02	
	<sup>152</sup> Eu	-1.0E-02 $\pm$ 3.5E-02	U		<sup>152</sup> Eu	8.2E-03 $\pm$ 3.0E-02	U
	<sup>154</sup> Eu	-1.9E-02 $\pm$ 2.7E-02	U		<sup>154</sup> Eu	-3.4E-04 $\pm$ 3.4E-03	U
	<sup>155</sup> Eu	9.4E-02 $\pm$ 4.9E-02			<sup>155</sup> Eu	1.2E-02 $\pm$ 4.3E-02	U
	<sup>238</sup> Pu	-7.6E-03 $\pm$ 2.9E-02	U		<sup>238</sup> Pu	-2.0E-02 $\pm$ 3.6E-02	U
	<sup>239,240</sup> Pu	5.7E-03 $\pm$ 6.8E-03	U		<sup>239,240</sup> Pu	7.8E-03 $\pm$ 1.1E-02	U
	<sup>103</sup> Ru	-2.8E-02 $\pm$ 2.8E-02	U		<sup>103</sup> Ru	3.8E-03 $\pm$ 1.4E-02	U
	<sup>106</sup> Ru	3.5E-02 $\pm$ 9.4E-02	U		<sup>106</sup> Ru	-7.4E-02 $\pm$ 8.1E-02	U
	<sup>125</sup> Sb	2.4E-03 $\pm$ 2.4E-02	U		<sup>125</sup> Sb	2.4E-02 $\pm$ 2.6E-02	U
	<sup>113</sup> Sn	-1.1E-02 $\pm$ 1.8E-02	U		<sup>113</sup> Sn	-7.2E-03 $\pm$ 1.4E-02	U
	<sup>90</sup> Sr	2.1E-01 $\pm$ 1.9E-01	U		<sup>90</sup> Sr	6.1E-02 $\pm$ 1.8E-01	U
	<sup>234</sup> U	2.0E-01 $\pm$ 5.4E-02			<sup>234</sup> U	2.2E-01 $\pm$ 5.7E-02	
	<sup>235</sup> U	9.4E-03 $\pm$ 1.2E-02	U		<sup>235</sup> U	9.4E-03 $\pm$ 1.6E-02	U
	<sup>238</sup> U	2.1E-01 $\pm$ 5.5E-02			<sup>238</sup> U	2.4E-01 $\pm$ 6.0E-02	
	<sup>65</sup> Zn	2.4E-03 $\pm$ 2.4E-02	U		<sup>65</sup> Zn	3.3E-03 $\pm$ 2.6E-02	U
Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
D071 (200 East)	<sup>144</sup> Ce	-5.6E-02 $\pm$ 7.8E-02	U	D073 (200 East)	<sup>144</sup> Ce	-1.7E-02 $\pm$ 8.2E-02	U
	<sup>60</sup> Co	-2.4E-03 $\pm$ 7.9E-03	U		<sup>60</sup> Co	3.4E-03 $\pm$ 7.1E-03	U
	<sup>134</sup> Cs	4.4E-02 $\pm$ 1.6E-02			<sup>134</sup> Cs	3.9E-02 $\pm$ 1.8E-02	
	<sup>137</sup> Cs	9.1E-02 $\pm$ 2.2E-02			<sup>137</sup> Cs	1.2E+00 $\pm$ 1.6E-01	
	<sup>152</sup> Eu	8.2E-03 $\pm$ 2.8E-02	U		<sup>152</sup> Eu	-5.0E-03 $\pm$ 2.8E-02	U
	<sup>154</sup> Eu	-8.2E-03 $\pm$ 2.8E-02	U		<sup>154</sup> Eu	-1.9E-02 $\pm$ 2.5E-02	U
	<sup>155</sup> Eu	4.4E-02 $\pm$ 4.1E-02	U		<sup>155</sup> Eu	5.2E-02 $\pm$ 4.2E-02	U
	<sup>238</sup> Pu	-2.3E-03 $\pm$ 2.3E-02	U		<sup>238</sup> Pu	7.7E-03 $\pm$ 2.5E-02	U
	<sup>239,240</sup> Pu	1.1E-02 $\pm$ 1.0E-02			<sup>239,240</sup> Pu	1.9E-03 $\pm$ 6.6E-03	U
	<sup>103</sup> Ru	4.0E-03 $\pm$ 1.3E-02	U		<sup>103</sup> Ru	1.4E-02 $\pm$ 1.5E-02	U
	<sup>106</sup> Ru	4.3E-03 $\pm$ 4.3E-02	U		<sup>106</sup> Ru	-9.3E-03 $\pm$ 8.5E-02	U
	<sup>125</sup> Sb	2.6E-03 $\pm$ 2.4E-02	U		<sup>125</sup> Sb	-1.2E-02 $\pm$ 2.9E-02	U
	<sup>113</sup> Sn	3.1E-03 $\pm$ 1.3E-02	U		<sup>113</sup> Sn	-8.0E-03 $\pm$ 1.4E-02	U
	<sup>90</sup> Sr	2.6E-01 $\pm$ 2.3E-01			<sup>90</sup> Sr	2.0E-01 $\pm$ 1.9E-01	U
	<sup>234</sup> U	2.2E-01 $\pm$ 5.7E-02			<sup>234</sup> U	1.8E-01 $\pm$ 4.9E-02	
	<sup>235</sup> U	2.4E-02 $\pm$ 1.5E-02			<sup>235</sup> U	5.5E-03 $\pm$ 6.6E-03	U
	<sup>238</sup> U	2.5E-01 $\pm$ 6.3E-02			<sup>238</sup> U	2.3E-01 $\pm$ 5.8E-02	
	<sup>65</sup> Zn	1.2E-02 $\pm$ 2.4E-02	U		<sup>65</sup> Zn	-2.1E-04 $\pm$ 2.1E-03	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.

Table 3-3. 2001 Soil Sampling Results, (pCi/g  $\pm$  total analytical uncertainty). (cont)

Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
D075 (200 East)	<sup>144</sup> Ce	-1.3E-01 $\pm$ 1.7E-01	U	D077 (200 East)	<sup>144</sup> Ce	-7.5E-02 $\pm$ 1.5E-01	U
	<sup>60</sup> Co	-1.3E-02 $\pm$ 2.0E-02	U		<sup>60</sup> Co	6.5E-03 $\pm$ 1.6E-02	U
	<sup>134</sup> Cs	1.4E-02 $\pm$ 2.5E-02	U		<sup>134</sup> Cs	3.6E-02 $\pm$ 2.0E-02	U
	<sup>137</sup> Cs	2.3E-01 $\pm$ 5.5E-02			<sup>137</sup> Cs	4.6E-01 $\pm$ 8.3E-02	
	<sup>152</sup> Eu	6.7E-02 $\pm$ 8.7E-02	U		<sup>152</sup> Eu	2.2E-02 $\pm$ 9.5E-02	U
	<sup>154</sup> Eu	-1.6E-02 $\pm$ 5.6E-02	U		<sup>154</sup> Eu	-1.8E-02 $\pm$ 5.2E-02	U
	<sup>155</sup> Eu	5.9E-02 $\pm$ 8.9E-02	U		<sup>155</sup> Eu	4.8E-02 $\pm$ 8.2E-02	U
	<sup>238</sup> Pu	6.5E-03 $\pm$ 4.1E-02	U		<sup>238</sup> Pu	2.4E-03 $\pm$ 2.4E-02	U
	<sup>239,240</sup> Pu	1.6E-02 $\pm$ 1.5E-02			<sup>239,240</sup> Pu	2.4E-02 $\pm$ 1.6E-02	
	<sup>103</sup> Ru	2.2E-03 $\pm$ 2.2E-02	U		<sup>103</sup> Ru	7.6E-03 $\pm$ 2.7E-02	U
	<sup>106</sup> Ru	-2.4E-02 $\pm$ 1.7E-01	U		<sup>106</sup> Ru	-7.4E-02 $\pm$ 1.6E-01	U
	<sup>125</sup> Sb	3.2E-02 $\pm$ 5.1E-02	U		<sup>125</sup> Sb	7.3E-03 $\pm$ 5.0E-02	U
	<sup>113</sup> Sn	5.0E-03 $\pm$ 3.1E-02	U		<sup>113</sup> Sn	-7.0E-03 $\pm$ 2.7E-02	U
	<sup>90</sup> Sr	-3.6E-02 $\pm$ 1.9E-01	U		<sup>90</sup> Sr	-1.1E-01 $\pm$ 1.6E-01	U
	<sup>234</sup> U	2.3E-01 $\pm$ 6.2E-02			<sup>234</sup> U	2.1E-01 $\pm$ 5.7E-02	
	<sup>235</sup> U	2.6E-02 $\pm$ 1.6E-02			<sup>235</sup> U	1.3E-02 $\pm$ 1.1E-02	
	<sup>238</sup> U	2.1E-01 $\pm$ 5.7E-02			<sup>238</sup> U	2.7E-01 $\pm$ 6.8E-02	
	<sup>65</sup> Zn	-8.8E-03 $\pm$ 5.2E-02	U		<sup>65</sup> Zn	1.8E-03 $\pm$ 1.8E-02	U
Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
D079 (200 East)	<sup>144</sup> Ce	2.5E-02 $\pm$ 8.5E-02	U	D081 (600 Area)	<sup>144</sup> Ce	-1.0E-01 $\pm$ 1.7E-01	U
	<sup>60</sup> Co	2.9E-03 $\pm$ 8.7E-03	U		<sup>60</sup> Co	-2.8E-03 $\pm$ 2.6E-02	U
	<sup>134</sup> Cs	3.2E-02 $\pm$ 1.6E-02			<sup>134</sup> Cs	2.6E-02 $\pm$ 2.6E-02	U
	<sup>137</sup> Cs	7.7E-01 $\pm$ 1.1E-01			<sup>137</sup> Cs	1.7E-02 $\pm$ 2.0E-02	U
	<sup>152</sup> Eu	-1.5E-02 $\pm$ 3.0E-02	U		<sup>152</sup> Eu	4.3E-02 $\pm$ 9.5E-02	U
	<sup>154</sup> Eu	3.7E-03 $\pm$ 2.9E-02	U		<sup>154</sup> Eu	-4.2E-02 $\pm$ 6.3E-02	U
	<sup>155</sup> Eu	3.1E-03 $\pm$ 3.1E-02	U		<sup>155</sup> Eu	1.3E-01 $\pm$ 9.2E-02	U
	<sup>238</sup> Pu	1.4E-02 $\pm$ 3.6E-02	U		<sup>238</sup> Pu	3.0E-02 $\pm$ 3.9E-02	U
	<sup>239,240</sup> Pu	6.4E-02 $\pm$ 2.9E-02			<sup>239,240</sup> Pu	1.1E-02 $\pm$ 1.1E-02	U
	<sup>103</sup> Ru	-6.7E-03 $\pm$ 1.5E-02	U		<sup>103</sup> Ru	-2.6E-02 $\pm$ 2.9E-02	U
	<sup>106</sup> Ru	9.5E-02 $\pm$ 8.5E-02	U		<sup>106</sup> Ru	5.3E-02 $\pm$ 1.6E-01	U
	<sup>125</sup> Sb	1.4E-02 $\pm$ 2.8E-02	U		<sup>125</sup> Sb	1.2E-03 $\pm$ 1.2E-02	U
	<sup>113</sup> Sn	-1.3E-02 $\pm$ 1.3E-02	U		<sup>113</sup> Sn	1.0E-02 $\pm$ 2.8E-02	U
	<sup>90</sup> Sr	2.7E-02 $\pm$ 1.9E-01	U		<sup>90</sup> Sr	-6.6E-02 $\pm$ 1.7E-01	U
	<sup>234</sup> U	2.1E-01 $\pm$ 5.9E-02			<sup>234</sup> U	1.8E-01 $\pm$ 5.2E-02	
	<sup>235</sup> U	2.4E-02 $\pm$ 1.6E-02			<sup>235</sup> U	9.4E-03 $\pm$ 9.4E-03	U
	<sup>238</sup> U	2.3E-01 $\pm$ 6.2E-02			<sup>238</sup> U	2.4E-01 $\pm$ 6.5E-02	
	<sup>65</sup> Zn	4.5E-03 $\pm$ 2.4E-02	U		<sup>65</sup> Zn	4.2E-03 $\pm$ 4.2E-02	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.

Table 3-3. 2001 Soil Sampling Results, (pCi/g  $\pm$  total analytical uncertainty). (cont)

Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
D083 (600 Area)	<sup>144</sup> Ce	-2.2E-02 $\pm$ 9.0E-02	U	D085 (600 Area)	<sup>144</sup> Ce	-1.1E-01 $\pm$ 2.2E-01	U
	<sup>60</sup> Co	-5.8E-03 $\pm$ 9.3E-03	U		<sup>60</sup> Co	-1.3E-02 $\pm$ 2.0E-02	U
	<sup>134</sup> Cs	2.9E-02 $\pm$ 1.7E-02			<sup>134</sup> Cs	1.4E-02 $\pm$ 2.5E-02	U
	<sup>137</sup> Cs	8.2E-01 $\pm$ 1.1E-01			<sup>137</sup> Cs	3.8E-01 $\pm$ 8.0E-02	
	<sup>152</sup> Eu	1.0E-04 $\pm$ 1.0E-03	U		<sup>152</sup> Eu	4.9E-03 $\pm$ 4.9E-02	U
	<sup>154</sup> Eu	1.7E-02 $\pm$ 3.2E-02	U		<sup>154</sup> Eu	4.7E-02 $\pm$ 6.6E-02	U
	<sup>155</sup> Eu	2.4E-02 $\pm$ 4.6E-02	U		<sup>155</sup> Eu	7.7E-02 $\pm$ 1.1E-01	U
	<sup>238</sup> Pu	-5.2E-02 $\pm$ 5.2E-02	U		<sup>238</sup> Pu	3.1E-03 $\pm$ 3.1E-02	U
	<sup>239,240</sup> Pu	6.9E-02 $\pm$ 2.8E-02			<sup>239,240</sup> Pu	6.3E-03 $\pm$ 1.6E-02	U
	<sup>103</sup> Ru	-7.2E-03 $\pm$ 1.6E-02	U		<sup>103</sup> Ru	3.6E-03 $\pm$ 3.4E-02	U
	<sup>106</sup> Ru	2.1E-02 $\pm$ 8.8E-02	U		<sup>106</sup> Ru	1.3E-01 $\pm$ 1.9E-01	U
	<sup>125</sup> Sb	-1.4E-02 $\pm$ 2.8E-02	U		<sup>125</sup> Sb	-1.8E-02 $\pm$ 6.3E-02	U
	<sup>113</sup> Sn	-1.6E-02 $\pm$ 1.6E-02	U		<sup>113</sup> Sn	1.7E-02 $\pm$ 3.6E-02	U
	<sup>90</sup> Sr	-1.1E-01 $\pm$ 2.0E-01	U		<sup>90</sup> Sr	-2.4E-01 $\pm$ 2.4E-01	U
	<sup>234</sup> U	2.1E-01 $\pm$ 5.7E-02			<sup>234</sup> U	2.2E-01 $\pm$ 5.9E-02	
	<sup>235</sup> U	1.4E-02 $\pm$ 1.4E-02	U		<sup>235</sup> U	1.7E-02 $\pm$ 1.2E-02	
	<sup>238</sup> U	2.0E-01 $\pm$ 5.4E-02			<sup>238</sup> U	2.5E-01 $\pm$ 6.5E-02	
	<sup>65</sup> Zn	3.2E-03 $\pm$ 2.8E-02	U		<sup>65</sup> Zn	3.5E-02 $\pm$ 5.9E-02	U
Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
D087 (600 Area)	<sup>144</sup> Ce	5.5E-02 $\pm$ 9.3E-02	U	D089 (600 Area)	<sup>144</sup> Ce	1.6E-02 $\pm$ 1.6E-01	U
	<sup>60</sup> Co	-4.8E-03 $\pm$ 9.6E-03	U		<sup>60</sup> Co	-5.3E-03 $\pm$ 1.6E-02	U
	<sup>134</sup> Cs	2.9E-02 $\pm$ 1.9E-02			<sup>134</sup> Cs	1.8E-02 $\pm$ 2.3E-02	U
	<sup>137</sup> Cs	3.5E-02 $\pm$ 1.8E-02			<sup>137</sup> Cs	2.3E-01 $\pm$ 5.1E-02	
	<sup>152</sup> Eu	-3.3E-03 $\pm$ 3.3E-02	U		<sup>152</sup> Eu	-1.1E-03 $\pm$ 1.1E-02	U
	<sup>154</sup> Eu	6.7E-03 $\pm$ 3.3E-02	U		<sup>154</sup> Eu	-1.0E-02 $\pm$ 5.1E-02	U
	<sup>155</sup> Eu	7.4E-02 $\pm$ 4.9E-02	U		<sup>155</sup> Eu	3.3E-02 $\pm$ 8.2E-02	U
	<sup>238</sup> Pu	-2.7E-02 $\pm$ 3.5E-02	U		<sup>238</sup> Pu	4.8E-03 $\pm$ 3.0E-02	U
	<sup>239,240</sup> Pu	1.1E-02 $\pm$ 1.1E-02	U		<sup>239,240</sup> Pu	9.5E-03 $\pm$ 9.5E-03	U
	<sup>103</sup> Ru	8.3E-03 $\pm$ 1.7E-02	U		<sup>103</sup> Ru	2.9E-02 $\pm$ 3.2E-02	U
	<sup>106</sup> Ru	-5.9E-02 $\pm$ 9.4E-02	U		<sup>106</sup> Ru	-7.4E-03 $\pm$ 7.4E-02	U
	<sup>125</sup> Sb	2.2E-02 $\pm$ 2.9E-02	U		<sup>125</sup> Sb	-1.1E-02 $\pm$ 4.6E-02	U
	<sup>113</sup> Sn	-1.3E-02 $\pm$ 1.6E-02	U		<sup>113</sup> Sn	-3.1E-02 $\pm$ 3.1E-02	U
	<sup>90</sup> Sr	1.2E-01 $\pm$ 1.9E-01	U		<sup>90</sup> Sr	1.2E-01 $\pm$ 1.9E-01	U
	<sup>234</sup> U	2.2E-01 $\pm$ 6.2E-02			<sup>234</sup> U	2.4E-01 $\pm$ 6.2E-02	
	<sup>235</sup> U	1.2E-02 $\pm$ 1.1E-02			<sup>235</sup> U	1.6E-02 $\pm$ 1.2E-02	
	<sup>238</sup> U	2.1E-01 $\pm$ 5.9E-02			<sup>238</sup> U	3.0E-01 $\pm$ 7.5E-02	
	<sup>65</sup> Zn	1.8E-02 $\pm$ 2.7E-02	U		<sup>65</sup> Zn	-3.1E-02 $\pm$ 5.0E-02	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.

Table 3-3. 2001 Soil Sampling Results, (pCi/g  $\pm$  total analytical uncertainty). (cont)

Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
D091 (600 Area)	<sup>144</sup> Ce	3.4E-02 $\pm$ 8.8E-02	U	D093 (600 Area)	<sup>144</sup> Ce	5.6E-02 $\pm$ 2.1E-01	U
	<sup>60</sup> Co	-5.9E-03 $\pm$ 7.7E-03	U		<sup>60</sup> Co	7.3E-04 $\pm$ 7.3E-03	U
	<sup>134</sup> Cs	3.4E-02 $\pm$ 1.4E-02			<sup>134</sup> Cs	3.1E-02 $\pm$ 3.4E-02	U
	<sup>137</sup> Cs	2.1E+00 $\pm$ 2.7E-01			<sup>137</sup> Cs	7.4E-01 $\pm$ 1.3E-01	
	<sup>152</sup> Eu	-3.4E-02 $\pm$ 4.1E-02	U		<sup>152</sup> Eu	3.1E-02 $\pm$ 9.0E-02	U
	<sup>154</sup> Eu	-4.3E-03 $\pm$ 2.7E-02	U		<sup>154</sup> Eu	-5.2E-03 $\pm$ 5.2E-02	U
	<sup>155</sup> Eu	5.0E-02 $\pm$ 4.5E-02	U		<sup>155</sup> Eu	1.8E-03 $\pm$ 1.8E-02	U
	<sup>238</sup> Pu	-5.7E-03 $\pm$ 3.4E-02	U		<sup>238</sup> Pu	7.0E-03 $\pm$ 2.9E-02	U
	<sup>239,240</sup> Pu	1.7E-02 $\pm$ 1.4E-02			<sup>239,240</sup> Pu	1.4E-02 $\pm$ 1.2E-02	
	<sup>103</sup> Ru	-8.2E-03 $\pm$ 1.7E-02	U		<sup>103</sup> Ru	2.1E-02 $\pm$ 3.2E-02	U
	<sup>106</sup> Ru	3.0E-02 $\pm$ 9.0E-02	U		<sup>106</sup> Ru	-1.1E-02 $\pm$ 1.1E-01	U
	<sup>125</sup> Sb	-1.1E-02 $\pm$ 3.1E-02	U		<sup>125</sup> Sb	4.8E-02 $\pm$ 5.8E-02	U
	<sup>113</sup> Sn	-3.5E-03 $\pm$ 1.6E-02	U		<sup>113</sup> Sn	-2.9E-03 $\pm$ 2.9E-02	U
	<sup>90</sup> Sr	2.0E-01 $\pm$ 1.7E-01	U		<sup>90</sup> Sr	4.2E-01 $\pm$ 2.1E-01	
	<sup>234</sup> U	2.7E-01 $\pm$ 6.8E-02			<sup>234</sup> U	2.5E-01 $\pm$ 6.5E-02	
	<sup>235</sup> U	2.5E-02 $\pm$ 1.7E-02			<sup>235</sup> U	2.7E-02 $\pm$ 1.6E-02	
	<sup>238</sup> U	2.8E-01 $\pm$ 7.0E-02			<sup>238</sup> U	1.9E-01 $\pm$ 5.3E-02	
	<sup>65</sup> Zn	-1.2E-02 $\pm$ 2.4E-02	U		<sup>65</sup> Zn	-7.1E-03 $\pm$ 5.4E-02	U
Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
D095 (600 Area)	<sup>144</sup> Ce	-2.9E-02 $\pm$ 8.1E-02	U	D097 (600 Area)	<sup>144</sup> Ce	-2.1E-01 $\pm$ 2.1E-01	U
	<sup>60</sup> Co	1.1E-04 $\pm$ 1.1E-03	U		<sup>60</sup> Co	-1.5E-02 $\pm$ 1.9E-02	U
	<sup>134</sup> Cs	4.7E-02 $\pm$ 1.6E-02			<sup>134</sup> Cs	3.2E-02 $\pm$ 3.2E-02	U
	<sup>137</sup> Cs	9.7E-02 $\pm$ 2.1E-02			<sup>137</sup> Cs	8.4E-01 $\pm$ 1.4E-01	
	<sup>152</sup> Eu	-9.8E-03 $\pm$ 2.5E-02	U		<sup>152</sup> Eu	6.0E-02 $\pm$ 1.1E-01	U
	<sup>154</sup> Eu	-1.3E-02 $\pm$ 2.5E-02	U		<sup>154</sup> Eu	-1.9E-03 $\pm$ 1.9E-02	U
	<sup>155</sup> Eu	1.8E-02 $\pm$ 3.8E-02	U		<sup>155</sup> Eu	-8.3E-04 $\pm$ 8.3E-03	U
	<sup>238</sup> Pu	3.1E-02 $\pm$ 4.0E-02	U		<sup>238</sup> Pu	-3.4E-02 $\pm$ 4.4E-02	U
	<sup>239,240</sup> Pu	3.4E-02 $\pm$ 2.1E-02			<sup>239,240</sup> Pu	7.1E-02 $\pm$ 2.9E-02	
	<sup>103</sup> Ru	-7.4E-03 $\pm$ 1.3E-02	U		<sup>103</sup> Ru	4.2E-02 $\pm$ 3.4E-02	U
	<sup>106</sup> Ru	1.0E-02 $\pm$ 7.5E-02	U		<sup>106</sup> Ru	1.1E-01 $\pm$ 2.1E-01	U
	<sup>125</sup> Sb	2.9E-03 $\pm$ 2.3E-02	U		<sup>125</sup> Sb	4.3E-02 $\pm$ 6.0E-02	U
	<sup>113</sup> Sn	-3.5E-03 $\pm$ 1.2E-02	U		<sup>113</sup> Sn	-8.5E-03 $\pm$ 3.3E-02	U
	<sup>90</sup> Sr	-1.6E-01 $\pm$ 1.8E-01	U		<sup>90</sup> Sr	2.2E-01 $\pm$ 2.1E-01	U
	<sup>234</sup> U	2.7E-01 $\pm$ 6.8E-02			<sup>234</sup> U	2.7E-01 $\pm$ 7.6E-02	
	<sup>235</sup> U	4.8E-02 $\pm$ 2.2E-02			<sup>235</sup> U	1.6E-02 $\pm$ 1.9E-02	U
	<sup>238</sup> U	2.5E-01 $\pm$ 6.5E-02			<sup>238</sup> U	2.5E-01 $\pm$ 7.2E-02	
	<sup>65</sup> Zn	-2.7E-03 $\pm$ 2.1E-02	U		<sup>65</sup> Zn	3.6E-02 $\pm$ 5.8E-02	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.

Table 3-3. 2001 Soil Sampling Results, (pCi/g  $\pm$  total analytical uncertainty). (cont)

Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
D099 (600 Area)	<sup>144</sup> Ce	4.2E-02 $\pm$ 1.6E-01	U	D101 (600 Area)	<sup>144</sup> Ce	1.0E-03 $\pm$ 1.0E-02	U
	<sup>60</sup> Co	4.5E-03 $\pm$ 1.5E-02	U		<sup>60</sup> Co	2.4E-03 $\pm$ 7.4E-03	U
	<sup>134</sup> Cs	5.2E-02 $\pm$ 2.8E-02			<sup>134</sup> Cs	8.1E-03 $\pm$ 1.1E-02	U
	<sup>137</sup> Cs	1.9E-01 $\pm$ 4.2E-02			<sup>137</sup> Cs	1.1E-01 $\pm$ 2.2E-02	
	<sup>152</sup> Eu	-3.5E-02 $\pm$ 5.2E-02	U		<sup>152</sup> Eu	-3.0E-02 $\pm$ 3.0E-02	U
	<sup>154</sup> Eu	1.3E-02 $\pm$ 4.8E-02	U		<sup>154</sup> Eu	-1.7E-02 $\pm$ 2.6E-02	U
	<sup>155</sup> Eu	-1.5E-02 $\pm$ 7.3E-02	U		<sup>155</sup> Eu	5.0E-02 $\pm$ 3.8E-02	U
	<sup>238</sup> Pu	-2.3E-03 $\pm$ 2.3E-02	U		<sup>238</sup> Pu	-2.4E-03 $\pm$ 2.4E-02	U
	<sup>239,240</sup> Pu	2.1E-02 $\pm$ 1.7E-02	U		<sup>239,240</sup> Pu	1.9E-02 $\pm$ 1.4E-02	
	<sup>103</sup> Ru	1.8E-03 $\pm$ 1.8E-02	U		<sup>103</sup> Ru	-1.6E-03 $\pm$ 1.3E-02	U
	<sup>106</sup> Ru	-8.7E-02 $\pm$ 1.5E-01	U		<sup>106</sup> Ru	-1.7E-02 $\pm$ 7.3E-02	U
	<sup>125</sup> Sb	-3.6E-03 $\pm$ 3.6E-02	U		<sup>125</sup> Sb	1.5E-02 $\pm$ 2.4E-02	U
	<sup>113</sup> Sn	3.8E-03 $\pm$ 2.4E-02	U		<sup>113</sup> Sn	-3.5E-03 $\pm$ 1.3E-02	U
	<sup>90</sup> Sr	5.0E-03 $\pm$ 5.0E-02	U		<sup>90</sup> Sr	-2.5E-01 $\pm$ 2.5E-01	U
	<sup>234</sup> U	3.0E-01 $\pm$ 8.4E-02			<sup>234</sup> U	2.2E-01 $\pm$ 6.2E-02	
	<sup>235</sup> U	3.2E-02 $\pm$ 2.2E-02			<sup>235</sup> U	4.2E-02 $\pm$ 2.2E-02	
	<sup>238</sup> U	1.8E-01 $\pm$ 5.9E-02			<sup>238</sup> U	2.0E-01 $\pm$ 5.6E-02	
	<sup>65</sup> Zn	-5.8E-02 $\pm$ 5.8E-02	U		<sup>65</sup> Zn	-1.5E-02 $\pm$ 2.4E-02	U
Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
D103 (600 Area)	<sup>144</sup> Ce	-6.5E-02 $\pm$ 9.7E-02	U	D105 (600 Area)	<sup>144</sup> Ce	-8.5E-02 $\pm$ 8.5E-02	U
	<sup>60</sup> Co	1.7E-03 $\pm$ 8.3E-03	U		<sup>60</sup> Co	-2.2E-03 $\pm$ 8.6E-03	U
	<sup>134</sup> Cs	4.4E-02 $\pm$ 1.8E-02			<sup>134</sup> Cs	1.7E-02 $\pm$ 2.0E-02	U
	<sup>137</sup> Cs	1.1E+00 $\pm$ 1.7E-01			<sup>137</sup> Cs	2.8E-01 $\pm$ 4.5E-02	
	<sup>152</sup> Eu	-5.2E-03 $\pm$ 5.2E-02	U		<sup>152</sup> Eu	2.2E-02 $\pm$ 3.7E-02	U
	<sup>154</sup> Eu	-2.4E-02 $\pm$ 2.9E-02	U		<sup>154</sup> Eu	-2.1E-02 $\pm$ 2.9E-02	U
	<sup>155</sup> Eu	3.2E-03 $\pm$ 3.2E-02	U		<sup>155</sup> Eu	1.2E-02 $\pm$ 4.1E-02	U
	<sup>238</sup> Pu	-1.2E-02 $\pm$ 4.2E-02	U		<sup>238</sup> Pu	4.6E-02 $\pm$ 3.6E-02	U
	<sup>239,240</sup> Pu	2.2E-01 $\pm$ 7.3E-02			<sup>239,240</sup> Pu	6.0E-01 $\pm$ 1.3E-01	
	<sup>103</sup> Ru	-1.1E-02 $\pm$ 1.6E-02	U		<sup>103</sup> Ru	4.9E-03 $\pm$ 1.3E-02	U
	<sup>106</sup> Ru	-4.5E-02 $\pm$ 9.0E-02	U		<sup>106</sup> Ru	1.6E-02 $\pm$ 8.5E-02	U
	<sup>125</sup> Sb	-1.8E-02 $\pm$ 3.4E-02	U		<sup>125</sup> Sb	-7.1E-03 $\pm$ 2.5E-02	U
	<sup>113</sup> Sn	-5.3E-03 $\pm$ 1.6E-02	U		<sup>113</sup> Sn	-1.1E-02 $\pm$ 1.3E-02	U
	<sup>90</sup> Sr	4.3E-01 $\pm$ 2.4E-01			<sup>90</sup> Sr	1.3E-01 $\pm$ 2.2E-01	U
	<sup>234</sup> U	2.4E-01 $\pm$ 6.0E-02			<sup>234</sup> U	1.7E-01 $\pm$ 4.9E-02	
	<sup>235</sup> U	1.3E-02 $\pm$ 1.3E-02	U		<sup>235</sup> U	1.2E-02 $\pm$ 1.0E-02	
	<sup>238</sup> U	2.5E-01 $\pm$ 6.3E-02			<sup>238</sup> U	1.8E-01 $\pm$ 5.0E-02	
	<sup>65</sup> Zn	1.6E-02 $\pm$ 2.6E-02	U		<sup>65</sup> Zn	1.9E-02 $\pm$ 2.5E-02	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.

Table 3-3. 2001 Soil Sampling Results, (pCi/g  $\pm$  total analytical uncertainty). (cont)

Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
D107 (600 Area)	<sup>144</sup> Ce	-1.1E-03 $\pm$ 1.1E-02	U	D109 (600 Area)	<sup>144</sup> Ce	-1.2E-01 $\pm$ 1.2E-01	U
	<sup>60</sup> Co	4.0E-03 $\pm$ 5.6E-03	U		<sup>60</sup> Co	6.7E-03 $\pm$ 9.4E-03	U
	<sup>134</sup> Cs	2.4E-02 $\pm$ 9.8E-03			<sup>134</sup> Cs	3.4E-02 $\pm$ 1.7E-02	
	<sup>137</sup> Cs	8.8E-01 $\pm$ 1.2E-01			<sup>137</sup> Cs	4.8E-01 $\pm$ 7.2E-02	
	<sup>152</sup> Eu	2.9E-02 $\pm$ 3.2E-02	U		<sup>152</sup> Eu	1.8E-02 $\pm$ 7.7E-02	U
	<sup>154</sup> Eu	-1.7E-02 $\pm$ 1.7E-02	U		<sup>154</sup> Eu	-5.0E-04 $\pm$ 5.0E-03	U
	<sup>155</sup> Eu	-1.4E-02 $\pm$ 3.2E-02	U		<sup>155</sup> Eu	-3.2E-02 $\pm$ 5.1E-02	U
	<sup>238</sup> Pu	1.7E-03 $\pm$ 1.7E-02	U		<sup>238</sup> Pu	2.5E-02 $\pm$ 4.0E-02	U
	<sup>239,240</sup> Pu	9.8E-01 $\pm$ 2.1E-01			<sup>239,240</sup> Pu	3.1E-01 $\pm$ 8.4E-02	
	<sup>103</sup> Ru	-1.8E-03 $\pm$ 7.4E-03	U		<sup>103</sup> Ru	-6.8E-03 $\pm$ 1.5E-02	U
	<sup>106</sup> Ru	-1.7E-02 $\pm$ 6.0E-02	U		<sup>106</sup> Ru	-4.3E-02 $\pm$ 9.0E-02	U
	<sup>125</sup> Sb	-1.4E-03 $\pm$ 1.4E-02	U		<sup>125</sup> Sb	1.0E-02 $\pm$ 2.8E-02	U
	<sup>113</sup> Sn	-1.6E-04 $\pm$ 1.6E-03	U		<sup>113</sup> Sn	5.0E-03 $\pm$ 1.6E-02	U
	<sup>90</sup> Sr	4.3E-01 $\pm$ 1.3E-01			<sup>90</sup> Sr	1.1E-01 $\pm$ 2.0E-01	U
	<sup>234</sup> U	1.8E-01 $\pm$ 5.0E-02			<sup>234</sup> U	1.8E-01 $\pm$ 5.0E-02	
	<sup>235</sup> U	1.0E-02 $\pm$ 9.1E-03			<sup>235</sup> U	1.4E-02 $\pm$ 1.1E-02	
	<sup>238</sup> U	1.4E-01 $\pm$ 4.2E-02			<sup>238</sup> U	1.9E-01 $\pm$ 5.1E-02	
	<sup>65</sup> Zn	-1.2E-02 $\pm$ 1.7E-02	U		<sup>65</sup> Zn	8.1E-03 $\pm$ 2.8E-02	U
Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
D111 (Duplicate of D051, 200 West)	<sup>144</sup> Ce	5.4E-02 $\pm$ 1.0E-01	U	D113 (Duplicate of D083, 600 Area)	<sup>144</sup> Ce	8.7E-03 $\pm$ 8.7E-02	U
	<sup>60</sup> Co	5.0E-03 $\pm$ 9.0E-03	U		<sup>60</sup> Co	5.8E-03 $\pm$ 9.9E-03	U
	<sup>134</sup> Cs	2.5E-02 $\pm$ 1.3E-02			<sup>134</sup> Cs	3.0E-02 $\pm$ 1.7E-02	
	<sup>137</sup> Cs	4.6E-01 $\pm$ 7.4E-02			<sup>137</sup> Cs	5.5E-02 $\pm$ 1.8E-02	
	<sup>152</sup> Eu	2.8E-02 $\pm$ 5.0E-02	U		<sup>152</sup> Eu	-4.6E-03 $\pm$ 2.9E-02	U
	<sup>154</sup> Eu	-3.0E-02 $\pm$ 3.0E-02	U		<sup>154</sup> Eu	1.8E-02 $\pm$ 3.1E-02	U
	<sup>155</sup> Eu	-4.2E-03 $\pm$ 4.2E-02	U		<sup>155</sup> Eu	3.1E-02 $\pm$ 4.6E-02	U
	<sup>238</sup> Pu	1.7E-02 $\pm$ 4.3E-02	U		<sup>238</sup> Pu	-4.0E-03 $\pm$ 3.2E-02	U
	<sup>239,240</sup> Pu	1.5E-01 $\pm$ 5.1E-02			<sup>239,240</sup> Pu	4.0E-03 $\pm$ 1.0E-02	U
	<sup>103</sup> Ru	5.9E-05 $\pm$ 5.9E-04	U		<sup>103</sup> Ru	-1.6E-02 $\pm$ 1.6E-02	U
	<sup>106</sup> Ru	1.8E-02 $\pm$ 8.6E-02	U		<sup>106</sup> Ru	-6.0E-02 $\pm$ 8.4E-02	U
	<sup>125</sup> Sb	2.1E-02 $\pm$ 2.9E-02	U		<sup>125</sup> Sb	1.3E-02 $\pm$ 2.6E-02	U
	<sup>113</sup> Sn	5.6E-03 $\pm$ 1.5E-02	U		<sup>113</sup> Sn	-7.5E-03 $\pm$ 1.4E-02	U
	<sup>90</sup> Sr	4.7E-01 $\pm$ 2.4E-01			<sup>90</sup> Sr	-2.8E-01 $\pm$ 2.8E-01	U
	<sup>234</sup> U	2.1E-01 $\pm$ 5.5E-02			<sup>234</sup> U	2.7E-01 $\pm$ 6.8E-02	
	<sup>235</sup> U	1.4E-02 $\pm$ 1.1E-02			<sup>235</sup> U	1.6E-02 $\pm$ 1.2E-02	
	<sup>238</sup> U	2.5E-01 $\pm$ 6.3E-02			<sup>238</sup> U	2.3E-01 $\pm$ 6.0E-02	
	<sup>65</sup> Zn	-4.2E-03 $\pm$ 2.5E-02	U		<sup>65</sup> Zn	2.6E-02 $\pm$ 2.6E-02	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.



Table 3-3. 2001 Soil Sampling Results, (pCi/g  $\pm$  total analytical uncertainty). (cont)

Location	Isotope	Result $\pm$ Uncertainty	RQ*
<b>D115</b>	<sup>144</sup> Ce	-6.9E-02 $\pm$ 8.3E-02	U
(Duplicate of D093, 600 Area)	<sup>60</sup> Co	3.3E-03 $\pm$ 7.9E-03	U
	<sup>134</sup> Cs	2.8E-02 $\pm$ 1.4E-02	
	<sup>137</sup> Cs	7.7E-01 $\pm$ 1.0E-01	
	<sup>152</sup> Eu	1.7E-02 $\pm$ 2.9E-02	U
	<sup>154</sup> Eu	8.9E-05 $\pm$ 8.9E-04	U
	<sup>155</sup> Eu	-4.0E-03 $\pm$ 4.0E-02	U
	<sup>238</sup> Pu	1.6E-02 $\pm$ 3.2E-02	U
	<sup>239,240</sup> Pu	1.8E-02 $\pm$ 1.2E-02	
	<sup>103</sup> Ru	-2.6E-03 $\pm$ 1.5E-02	U
	<sup>106</sup> Ru	-8.2E-02 $\pm$ 9.0E-02	U
	<sup>125</sup> Sb	-1.7E-02 $\pm$ 2.7E-02	U
	<sup>113</sup> Sn	1.6E-02 $\pm$ 1.5E-02	U
	<sup>90</sup> Sr	-5.4E-03 $\pm$ 5.4E-02	U
	<sup>234</sup> U	2.2E-01 $\pm$ 5.9E-02	
	<sup>235</sup> U	1.5E-02 $\pm$ 1.5E-02	U
	<sup>238</sup> U	2.0E-01 $\pm$ 5.4E-02	
	<sup>65</sup> Zn	-7.9E-03 $\pm$ 2.4E-02	U

Location	Isotope	Result $\pm$ Uncertainty	RQ*
<b>D116</b>	<sup>144</sup> Ce	-2.3E-02 $\pm$ 5.3E-02	U
(300 Area)	<sup>60</sup> Co	-3.3E-04 $\pm$ 3.3E-03	U
	<sup>134</sup> Cs	2.6E-02 $\pm$ 9.1E-03	
	<sup>137</sup> Cs	1.2E-01 $\pm$ 2.3E-02	
	<sup>152</sup> Eu	3.2E-03 $\pm$ 2.2E-02	U
	<sup>154</sup> Eu	-1.3E-02 $\pm$ 2.1E-02	U
	<sup>155</sup> Eu	3.3E-02 $\pm$ 3.3E-02	U
	<sup>238</sup> Pu	-1.4E-02 $\pm$ 2.0E-02	U
	<sup>239,240</sup> Pu	8.9E-03 $\pm$ 8.1E-03	
	<sup>103</sup> Ru	-7.2E-04 $\pm$ 6.2E-03	U
	<sup>106</sup> Ru	3.7E-02 $\pm$ 5.9E-02	U
	<sup>125</sup> Sb	1.1E-02 $\pm$ 1.8E-02	U
	<sup>113</sup> Sn	-3.4E-03 $\pm$ 8.5E-03	U
	<sup>90</sup> Sr	3.0E-01 $\pm$ 2.3E-01	U
	<sup>234</sup> U	2.2E-01 $\pm$ 5.9E-02	
	<sup>235</sup> U	1.7E-02 $\pm$ 1.2E-02	
	<sup>238</sup> U	2.4E-01 $\pm$ 6.2E-02	
	<sup>65</sup> Zn	1.3E-02 $\pm$ 1.8E-02	U

Location	Isotope	Result $\pm$ Uncertainty	RQ*
<b>D117</b>	<sup>144</sup> Ce	-1.9E-02 $\pm$ 4.6E-02	U
(300 Area)	<sup>60</sup> Co	-5.7E-03 $\pm$ 6.8E-03	U
	<sup>134</sup> Cs	3.0E-02 $\pm$ 1.1E-02	
	<sup>137</sup> Cs	2.5E-02 $\pm$ 1.1E-02	
	<sup>152</sup> Eu	-9.7E-03 $\pm$ 1.9E-02	U
	<sup>154</sup> Eu	-3.6E-02 $\pm$ 3.6E-02	U
	<sup>155</sup> Eu	3.0E-02 $\pm$ 2.5E-02	U
	<sup>238</sup> Pu	-6.3E-03 $\pm$ 2.6E-02	U
	<sup>239,240</sup> Pu	1.3E-02 $\pm$ 1.1E-02	
	<sup>103</sup> Ru	-5.6E-03 $\pm$ 5.6E-03	U
	<sup>106</sup> Ru	1.9E-03 $\pm$ 1.9E-02	U
	<sup>125</sup> Sb	4.0E-03 $\pm$ 1.8E-02	U
	<sup>113</sup> Sn	2.6E-03 $\pm$ 7.8E-03	U
	<sup>90</sup> Sr	-2.6E-02 $\pm$ 2.0E-01	U
	<sup>234</sup> U	2.5E-01 $\pm$ 6.5E-02	
	<sup>235</sup> U	1.6E-02 $\pm$ 1.2E-02	
	<sup>238</sup> U	2.7E-01 $\pm$ 6.8E-02	
	<sup>65</sup> Zn	-2.8E-03 $\pm$ 2.0E-02	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.

Table 3-3. 2001 Soil Sampling Results, (pCi/g  $\pm$  total analytical uncertainty). (cont)

Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
D118 (300 Area)	<sup>144</sup> Ce	3.6E-02 $\pm$ 6.5E-02	U	D119 (300 Area)	<sup>144</sup> Ce	-6.4E-02 $\pm$ 6.4E-02	U
	<sup>60</sup> Co	-2.7E-03 $\pm$ 5.9E-03	U		<sup>60</sup> Co	-8.3E-04 $\pm$ 5.7E-03	U
	<sup>134</sup> Cs	2.1E-02 $\pm$ 1.1E-02			<sup>134</sup> Cs	2.9E-02 $\pm$ 1.2E-02	
	<sup>137</sup> Cs	2.4E-02 $\pm$ 1.0E-02			<sup>137</sup> Cs	2.7E-02 $\pm$ 1.6E-02	
	<sup>152</sup> Eu	8.3E-03 $\pm$ 2.5E-02	U		<sup>152</sup> Eu	1.1E-02 $\pm$ 1.6E-02	U
	<sup>154</sup> Eu	-1.9E-02 $\pm$ 2.1E-02	U		<sup>154</sup> Eu	-2.3E-02 $\pm$ 2.3E-02	U
	<sup>155</sup> Eu	1.9E-02 $\pm$ 3.0E-02	U		<sup>155</sup> Eu	2.0E-02 $\pm$ 2.6E-02	U
	<sup>238</sup> Pu	3.0E-02 $\pm$ 2.5E-02	U		<sup>238</sup> Pu	2.0E-02 $\pm$ 2.2E-02	U
	<sup>239,240</sup> Pu	2.1E-01 $\pm$ 2.1E-01	U		<sup>239,240</sup> Pu	8.3E-02 $\pm$ 2.8E-02	
	<sup>103</sup> Ru	-3.1E-03 $\pm$ 6.2E-03	U		<sup>103</sup> Ru	-5.9E-03 $\pm$ 5.9E-03	U
	<sup>106</sup> Ru	4.3E-03 $\pm$ 4.3E-02	U		<sup>106</sup> Ru	1.5E-02 $\pm$ 4.8E-02	U
	<sup>125</sup> Sb	1.9E-03 $\pm$ 1.7E-02	U		<sup>125</sup> Sb	1.8E-03 $\pm$ 1.6E-02	U
	<sup>113</sup> Sn	-3.2E-03 $\pm$ 8.0E-03	U		<sup>113</sup> Sn	-1.2E-03 $\pm$ 7.4E-03	U
	<sup>90</sup> Sr	-7.9E-02 $\pm$ 2.1E-01	U		<sup>90</sup> Sr	8.5E-02 $\pm$ 2.0E-01	U
	<sup>234</sup> U	4.0E-01 $\pm$ 9.2E-02			<sup>234</sup> U	3.0E+00 $\pm$ 6.0E-01	
	<sup>235</sup> U	4.0E-02 $\pm$ 2.0E-02			<sup>235</sup> U	1.7E-01 $\pm$ 5.3E-02	
	<sup>238</sup> U	3.3E-01 $\pm$ 7.9E-02			<sup>238</sup> U	2.9E+00 $\pm$ 5.8E-01	
	<sup>65</sup> Zn	-1.5E-02 $\pm$ 1.8E-02	U		<sup>65</sup> Zn	4.8E-03 $\pm$ 1.5E-02	U
Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
D120 (300 Area)	<sup>144</sup> Ce	3.4E-02 $\pm$ 7.8E-02	U	D121 (300 Area)	<sup>144</sup> Ce	8.5E-03 $\pm$ 5.9E-02	U
	<sup>60</sup> Co	-3.8E-03 $\pm$ 8.0E-03	U		<sup>60</sup> Co	-3.2E-03 $\pm$ 6.7E-03	U
	<sup>134</sup> Cs	1.7E-02 $\pm$ 1.0E-02			<sup>134</sup> Cs	4.3E-02 $\pm$ 1.4E-02	
	<sup>137</sup> Cs	2.4E-02 $\pm$ 1.2E-02			<sup>137</sup> Cs	6.0E-02 $\pm$ 1.7E-02	
	<sup>152</sup> Eu	2.0E-02 $\pm$ 4.0E-02	U		<sup>152</sup> Eu	-9.6E-03 $\pm$ 2.1E-02	U
	<sup>154</sup> Eu	1.3E-02 $\pm$ 2.3E-02	U		<sup>154</sup> Eu	-1.4E-02 $\pm$ 2.1E-02	U
	<sup>155</sup> Eu	-1.9E-02 $\pm$ 4.9E-02	U		<sup>155</sup> Eu	3.9E-02 $\pm$ 3.1E-02	U
	<sup>238</sup> Pu	2.3E-02 $\pm$ 2.8E-02	U		<sup>238</sup> Pu	1.2E-02 $\pm$ 2.2E-02	U
	<sup>239,240</sup> Pu	1.3E-02 $\pm$ 1.3E-02	U		<sup>239,240</sup> Pu	6.6E-02 $\pm$ 2.6E-02	
	<sup>103</sup> Ru	4.9E-03 $\pm$ 7.4E-03	U		<sup>103</sup> Ru	5.0E-03 $\pm$ 6.5E-03	U
	<sup>106</sup> Ru	3.3E-02 $\pm$ 6.6E-02	U		<sup>106</sup> Ru	1.2E-02 $\pm$ 5.9E-02	U
	<sup>125</sup> Sb	-2.0E-02 $\pm$ 2.0E-02	U		<sup>125</sup> Sb	5.2E-04 $\pm$ 5.2E-03	U
	<sup>113</sup> Sn	5.3E-04 $\pm$ 5.3E-03	U		<sup>113</sup> Sn	-6.0E-03 $\pm$ 9.0E-03	U
	<sup>90</sup> Sr	1.0E-01 $\pm$ 1.8E-01	U		<sup>90</sup> Sr	3.0E-01 $\pm$ 2.3E-01	U
	<sup>234</sup> U	5.7E+00 $\pm$ 1.1E+00			<sup>234</sup> U	9.0E-01 $\pm$ 1.9E-01	
	<sup>235</sup> U	3.1E-01 $\pm$ 8.4E-02			<sup>235</sup> U	6.5E-02 $\pm$ 2.7E-02	
	<sup>238</sup> U	5.9E+00 $\pm$ 1.1E+00			<sup>238</sup> U	1.0E+00 $\pm$ 2.1E-01	
	<sup>65</sup> Zn	1.5E-02 $\pm$ 1.9E-02	U		<sup>65</sup> Zn	6.6E-03 $\pm$ 1.8E-02	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.

Table 3-3. 2001 Soil Sampling Results, (pCi/g  $\pm$  total analytical uncertainty). (cont)

Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
D123 (300 Area)	<sup>144</sup> Ce	-3.4E-03 $\pm$ 3.4E-02	U	D124 (300 Area)	<sup>144</sup> Ce	-1.8E-02 $\pm$ 4.7E-02	U
	<sup>60</sup> Co	-4.3E-03 $\pm$ 6.0E-03	U		<sup>60</sup> Co	-1.4E-03 $\pm$ 5.6E-03	U
	<sup>134</sup> Cs	2.6E-02 $\pm$ 8.6E-03			<sup>134</sup> Cs	3.5E-02 $\pm$ 1.1E-02	
	<sup>137</sup> Cs	2.7E-03 $\pm$ 5.7E-03	U		<sup>137</sup> Cs	1.1E-01 $\pm$ 2.0E-02	
	<sup>152</sup> Eu	-6.6E-03 $\pm$ 1.8E-02	U		<sup>152</sup> Eu	8.8E-03 $\pm$ 1.8E-02	U
	<sup>154</sup> Eu	-1.0E-02 $\pm$ 1.9E-02	U		<sup>154</sup> Eu	-2.0E-03 $\pm$ 1.9E-02	U
	<sup>155</sup> Eu	1.9E-02 $\pm$ 2.1E-02	U		<sup>155</sup> Eu	4.0E-02 $\pm$ 2.6E-02	U
	<sup>238</sup> Pu	-1.1E-02 $\pm$ 2.5E-02	U		<sup>238</sup> Pu	-3.6E-03 $\pm$ 1.7E-02	U
	<sup>239,240</sup> Pu	1.9E-03 $\pm$ 1.0E-02	U		<sup>239,240</sup> Pu	1.3E-02 $\pm$ 1.3E-02	U
	<sup>103</sup> Ru	-5.5E-04 $\pm$ 5.2E-03	U		<sup>103</sup> Ru	5.8E-05 $\pm$ 5.8E-04	U
	<sup>106</sup> Ru	1.5E-02 $\pm$ 4.6E-02	U		<sup>106</sup> Ru	2.9E-03 $\pm$ 2.9E-02	U
	<sup>125</sup> Sb	-2.6E-03 $\pm$ 1.5E-02	U		<sup>125</sup> Sb	6.3E-03 $\pm$ 1.6E-02	U
	<sup>113</sup> Sn	-1.2E-03 $\pm$ 6.8E-03	U		<sup>113</sup> Sn	-1.7E-03 $\pm$ 7.7E-03	U
	<sup>90</sup> Sr	1.6E-02 $\pm$ 1.6E-01	U		<sup>90</sup> Sr	8.2E-02 $\pm$ 1.9E-01	U
	<sup>234</sup> U	2.3E-01 $\pm$ 6.0E-02			<sup>234</sup> U	2.9E-01 $\pm$ 7.2E-02	
	<sup>235</sup> U	1.6E-02 $\pm$ 1.2E-02			<sup>235</sup> U	9.8E-03 $\pm$ 8.9E-03	
	<sup>238</sup> U	2.1E-01 $\pm$ 5.5E-02			<sup>238</sup> U	3.2E-01 $\pm$ 7.7E-02	
	<sup>65</sup> Zn	1.7E-02 $\pm$ 1.6E-02	U		<sup>65</sup> Zn	-3.8E-03 $\pm$ 1.6E-02	U
Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
D125 (300 Area)	<sup>144</sup> Ce	-1.1E-02 $\pm$ 4.1E-02	U	D126 (300 Area)	<sup>144</sup> Ce	-4.1E-02 $\pm$ 5.7E-02	U
	<sup>60</sup> Co	3.7E-04 $\pm$ 3.7E-03	U		<sup>60</sup> Co	-3.4E-03 $\pm$ 6.5E-03	U
	<sup>134</sup> Cs	3.4E-02 $\pm$ 1.2E-02			<sup>134</sup> Cs	1.0E-02 $\pm$ 9.4E-03	U
	<sup>137</sup> Cs	1.8E-02 $\pm$ 8.3E-03			<sup>137</sup> Cs	1.0E-02 $\pm$ 7.1E-03	U
	<sup>152</sup> Eu	7.2E-04 $\pm$ 7.2E-03	U		<sup>152</sup> Eu	-9.0E-03 $\pm$ 3.3E-02	U
	<sup>154</sup> Eu	-4.5E-03 $\pm$ 1.8E-02	U		<sup>154</sup> Eu	-2.8E-04 $\pm$ 2.8E-03	U
	<sup>155</sup> Eu	3.0E-02 $\pm$ 2.4E-02	U		<sup>155</sup> Eu	3.2E-02 $\pm$ 3.2E-02	U
	<sup>238</sup> Pu	5.2E-03 $\pm$ 2.3E-02	U		<sup>238</sup> Pu	5.5E-03 $\pm$ 2.3E-02	U
	<sup>239,240</sup> Pu	-3.5E-03 $\pm$ 8.8E-03	U		<sup>239,240</sup> Pu	3.3E-02 $\pm$ 1.7E-02	
	<sup>103</sup> Ru	1.3E-03 $\pm$ 4.9E-03	U		<sup>103</sup> Ru	3.0E-03 $\pm$ 6.6E-03	U
	<sup>106</sup> Ru	1.2E-03 $\pm$ 1.2E-02	U		<sup>106</sup> Ru	8.6E-03 $\pm$ 5.9E-02	U
	<sup>125</sup> Sb	-3.2E-03 $\pm$ 1.4E-02	U		<sup>125</sup> Sb	-4.8E-03 $\pm$ 1.8E-02	U
	<sup>113</sup> Sn	-4.5E-03 $\pm$ 6.7E-03	U		<sup>113</sup> Sn	3.5E-03 $\pm$ 8.8E-03	U
	<sup>90</sup> Sr	-1.6E-01 $\pm$ 1.6E-01	U		<sup>90</sup> Sr	1.7E-01 $\pm$ 2.2E-01	U
	<sup>234</sup> U	2.5E-01 $\pm$ 6.3E-02			<sup>234</sup> U	2.9E-01 $\pm$ 7.0E-02	
	<sup>235</sup> U	1.7E-02 $\pm$ 1.3E-02			<sup>235</sup> U	3.5E-02 $\pm$ 1.8E-02	
	<sup>238</sup> U	2.4E-01 $\pm$ 6.0E-02			<sup>238</sup> U	2.5E-01 $\pm$ 6.3E-02	
	<sup>65</sup> Zn	-1.3E-02 $\pm$ 1.4E-02	U		<sup>65</sup> Zn	-2.4E-03 $\pm$ 1.8E-02	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.

Table 3-3. 2001 Soil Sampling Results, (pCi/g  $\pm$  total analytical uncertainty). (cont)

Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
D127 (300 Area)	<sup>144</sup> Ce	6.0E-02 $\pm$ 7.8E-02	U	D128 (300 Area)	<sup>144</sup> Ce	-2.0E-02 $\pm$ 5.0E-02	U
	<sup>60</sup> Co	-1.6E-03 $\pm$ 6.9E-03	U		<sup>60</sup> Co	8.1E-04 $\pm$ 6.2E-03	U
	<sup>134</sup> Cs	3.8E-02 $\pm$ 1.3E-02			<sup>134</sup> Cs	3.1E-02 $\pm$ 9.0E-03	
	<sup>137</sup> Cs	4.9E-02 $\pm$ 1.3E-02			<sup>137</sup> Cs	6.6E-02 $\pm$ 1.4E-02	
	<sup>152</sup> Eu	-2.9E-02 $\pm$ 3.5E-02	U		<sup>152</sup> Eu	-1.5E-02 $\pm$ 2.1E-02	U
	<sup>154</sup> Eu	-1.3E-02 $\pm$ 2.3E-02	U		<sup>154</sup> Eu	1.8E-03 $\pm$ 1.8E-02	U
	<sup>155</sup> Eu	4.1E-02 $\pm$ 3.7E-02	U		<sup>155</sup> Eu	3.5E-02 $\pm$ 2.7E-02	U
	<sup>238</sup> Pu	3.7E-03 $\pm$ 1.9E-02	U		<sup>238</sup> Pu	-4.1E-03 $\pm$ 2.2E-02	U
	<sup>239,240</sup> Pu	5.6E-03 $\pm$ 1.0E-02	U		<sup>239,240</sup> Pu	8.2E-03 $\pm$ 8.2E-03	U
	<sup>103</sup> Ru	1.3E-04 $\pm$ 1.3E-03	U		<sup>103</sup> Ru	-5.1E-03 $\pm$ 6.1E-03	U
	<sup>106</sup> Ru	-3.4E-03 $\pm$ 3.4E-02	U		<sup>106</sup> Ru	-1.1E-02 $\pm$ 5.3E-02	U
	<sup>125</sup> Sb	-1.7E-03 $\pm$ 1.7E-02	U		<sup>125</sup> Sb	1.6E-03 $\pm$ 1.6E-02	U
	<sup>113</sup> Sn	-2.1E-03 $\pm$ 9.9E-03	U		<sup>113</sup> Sn	4.0E-03 $\pm$ 7.6E-03	U
	<sup>90</sup> Sr	1.8E-01 $\pm$ 1.3E-01	U		<sup>90</sup> Sr	4.2E-02 $\pm$ 1.0E-01	U
	<sup>234</sup> U	2.4E-01 $\pm$ 6.2E-02			<sup>234</sup> U	2.5E-01 $\pm$ 6.5E-02	
	<sup>235</sup> U	3.0E-02 $\pm$ 1.7E-02			<sup>235</sup> U	2.5E-02 $\pm$ 1.5E-02	
	<sup>238</sup> U	2.8E-01 $\pm$ 7.0E-02			<sup>238</sup> U	2.0E-01 $\pm$ 5.4E-02	
	<sup>65</sup> Zn	3.5E-03 $\pm$ 2.0E-02	U		<sup>65</sup> Zn	8.8E-03 $\pm$ 1.6E-02	U
Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
D129 (300 Area)	<sup>144</sup> Ce	1.0E-02 $\pm$ 4.5E-02	U	D130 (400 Area)	<sup>144</sup> Ce	-9.2E-03 $\pm$ 5.2E-02	U
	<sup>60</sup> Co	2.4E-03 $\pm$ 7.0E-03	U		<sup>60</sup> Co	3.6E-03 $\pm$ 6.1E-03	U
	<sup>134</sup> Cs	2.9E-02 $\pm$ 1.3E-02			<sup>134</sup> Cs	3.0E-02 $\pm$ 9.0E-03	
	<sup>137</sup> Cs	1.8E-02 $\pm$ 9.7E-03			<sup>137</sup> Cs	2.1E-02 $\pm$ 9.9E-03	
	<sup>152</sup> Eu	-6.9E-03 $\pm$ 1.9E-02	U		<sup>152</sup> Eu	-3.5E-03 $\pm$ 1.9E-02	U
	<sup>154</sup> Eu	-1.8E-02 $\pm$ 2.3E-02	U		<sup>154</sup> Eu	-1.1E-02 $\pm$ 2.0E-02	U
	<sup>155</sup> Eu	2.1E-02 $\pm$ 2.5E-02	U		<sup>155</sup> Eu	4.1E-02 $\pm$ 3.0E-02	U
	<sup>238</sup> Pu	-1.9E-03 $\pm$ 1.9E-02	U		<sup>238</sup> Pu	-3.7E-03 $\pm$ 2.7E-02	U
	<sup>239,240</sup> Pu	1.9E-03 $\pm$ 1.9E-02	U		<sup>239,240</sup> Pu	1.9E-03 $\pm$ 8.6E-03	U
	<sup>103</sup> Ru	-3.7E-03 $\pm$ 6.3E-03	U		<sup>103</sup> Ru	-7.1E-04 $\pm$ 6.2E-03	U
	<sup>106</sup> Ru	-7.8E-03 $\pm$ 5.8E-02	U		<sup>106</sup> Ru	-1.7E-02 $\pm$ 5.3E-02	U
	<sup>125</sup> Sb	1.1E-02 $\pm$ 1.8E-02	U		<sup>125</sup> Sb	4.2E-03 $\pm$ 1.6E-02	U
	<sup>113</sup> Sn	-8.1E-03 $\pm$ 8.1E-03	U		<sup>113</sup> Sn	-6.2E-03 $\pm$ 7.4E-03	U
	<sup>90</sup> Sr	1.4E-02 $\pm$ 9.2E-02	U		<sup>90</sup> Sr	-1.3E-01 $\pm$ 1.3E-01	U
	<sup>234</sup> U	2.2E-01 $\pm$ 5.7E-02			<sup>234</sup> U	2.0E-01 $\pm$ 5.2E-02	
	<sup>235</sup> U	2.8E-02 $\pm$ 1.6E-02			<sup>235</sup> U	2.4E-02 $\pm$ 1.4E-02	
	<sup>238</sup> U	1.7E-01 $\pm$ 4.8E-02			<sup>238</sup> U	2.2E-01 $\pm$ 5.7E-02	
	<sup>65</sup> Zn	1.8E-02 $\pm$ 2.0E-02	U		<sup>65</sup> Zn	4.4E-03 $\pm$ 1.7E-02	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.

Table 3-3. 2001 Soil Sampling Results, (pCi/g  $\pm$  total analytical uncertainty). (cont)

Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
D131 (Duplicate of D119, 300 Area)	<sup>144</sup> Ce	-4.4E-02 $\pm$ 7.0E-02	U	D132 (Duplicate of D120, 300 Area)	<sup>144</sup> Ce	-1.5E-02 $\pm$ 4.9E-02	U
	<sup>60</sup> Co	1.1E-03 $\pm$ 7.6E-03	U		<sup>60</sup> Co	-2.4E-03 $\pm$ 5.8E-03	U
	<sup>134</sup> Cs	1.9E-02 $\pm$ 1.0E-02			<sup>134</sup> Cs	2.9E-02 $\pm$ 1.2E-02	
	<sup>137</sup> Cs	1.5E-01 $\pm$ 2.9E-02			<sup>137</sup> Cs	2.1E-02 $\pm$ 1.7E-02	
	<sup>152</sup> Eu	-1.1E-02 $\pm$ 4.4E-02	U		<sup>152</sup> Eu	1.5E-02 $\pm$ 1.8E-02	U
	<sup>154</sup> Eu	-6.7E-03 $\pm$ 2.5E-02	U		<sup>154</sup> Eu	-7.9E-03 $\pm$ 2.2E-02	U
	<sup>155</sup> Eu	-6.7E-03 $\pm$ 3.9E-02	U		<sup>155</sup> Eu	1.7E-02 $\pm$ 2.6E-02	U
	<sup>238</sup> Pu	1.3E-02 $\pm$ 1.7E-02	U		<sup>238</sup> Pu	-1.1E-02 $\pm$ 2.9E-02	U
	<sup>239,240</sup> Pu	1.4E-02 $\pm$ 1.2E-02	U		<sup>239,240</sup> Pu	3.6E-03 $\pm$ 5.0E-03	U
	<sup>103</sup> Ru	4.2E-03 $\pm$ 8.0E-03	U		<sup>103</sup> Ru	3.6E-03 $\pm$ 6.1E-03	U
	<sup>106</sup> Ru	-4.1E-02 $\pm$ 7.0E-02	U		<sup>106</sup> Ru	2.7E-02 $\pm$ 5.1E-02	U
	<sup>125</sup> Sb	-3.0E-05 $\pm$ 3.0E-04	U		<sup>125</sup> Sb	-6.0E-03 $\pm$ 1.5E-02	U
	<sup>113</sup> Sn	-3.8E-03 $\pm$ 1.0E-02	U		<sup>113</sup> Sn	1.4E-04 $\pm$ 1.4E-03	U
	<sup>90</sup> Sr	2.1E-02 $\pm$ 1.0E-01	U		<sup>90</sup> Sr	3.2E-02 $\pm$ 1.1E-01	U
	<sup>234</sup> U	3.7E+00 $\pm$ 7.0E-01			<sup>234</sup> U	2.8E-01 $\pm$ 6.7E-02	
	<sup>235</sup> U	2.2E-01 $\pm$ 5.9E-02			<sup>235</sup> U	1.5E-02 $\pm$ 1.1E-02	
	<sup>238</sup> U	3.8E+00 $\pm$ 7.2E-01			<sup>238</sup> U	2.4E-01 $\pm$ 6.0E-02	
	<sup>65</sup> Zn	2.9E-02 $\pm$ 2.0E-02	U		<sup>65</sup> Zn	1.0E-02 $\pm$ 1.7E-02	U
Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
D139 (Duplicate of D118, 300 Area)	<sup>144</sup> Ce	5.0E-02 $\pm$ 4.7E-02	U	D140 (Duplicate of D123, 300 Area)	<sup>144</sup> Ce	1.9E-02 $\pm$ 4.4E-02	U
	<sup>60</sup> Co	1.4E-03 $\pm$ 5.6E-03	U		<sup>60</sup> Co	-1.9E-03 $\pm$ 5.5E-03	U
	<sup>134</sup> Cs	3.3E-02 $\pm$ 1.1E-02			<sup>134</sup> Cs	2.8E-02 $\pm$ 9.0E-03	
	<sup>137</sup> Cs	2.1E-02 $\pm$ 8.4E-03			<sup>137</sup> Cs	-7.8E-03 $\pm$ 7.8E-03	U
	<sup>152</sup> Eu	-1.3E-02 $\pm$ 1.7E-02	U		<sup>152</sup> Eu	-3.4E-03 $\pm$ 1.6E-02	U
	<sup>154</sup> Eu	-2.5E-02 $\pm$ 2.5E-02	U		<sup>154</sup> Eu	-5.2E-03 $\pm$ 1.7E-02	U
	<sup>155</sup> Eu	2.9E-02 $\pm$ 2.7E-02	U		<sup>155</sup> Eu	2.3E-02 $\pm$ 2.3E-02	U
	<sup>238</sup> Pu	4.2E-03 $\pm$ 3.3E-02	U		<sup>238</sup> Pu	5.8E-03 $\pm$ 2.9E-02	U
	<sup>239,240</sup> Pu	2.1E-03 $\pm$ 2.1E-03	U		<sup>239,240</sup> Pu	-5.8E-03 $\pm$ 1.0E-02	U
	<sup>103</sup> Ru	6.1E-04 $\pm$ 5.2E-03	U		<sup>103</sup> Ru	-7.3E-04 $\pm$ 5.3E-03	U
	<sup>106</sup> Ru	1.5E-02 $\pm$ 4.5E-02	U		<sup>106</sup> Ru	1.6E-02 $\pm$ 4.8E-02	U
	<sup>125</sup> Sb	-3.7E-03 $\pm$ 1.4E-02	U		<sup>125</sup> Sb	-9.4E-03 $\pm$ 1.5E-02	U
	<sup>113</sup> Sn	2.9E-03 $\pm$ 7.2E-03	U		<sup>113</sup> Sn	-4.3E-03 $\pm$ 6.9E-03	U
	<sup>90</sup> Sr	1.4E-01 $\pm$ 1.2E-01	U		<sup>90</sup> Sr	4.9E-02 $\pm$ 1.0E-01	U
	<sup>234</sup> U	3.2E-01 $\pm$ 7.7E-02			<sup>234</sup> U	1.7E-01 $\pm$ 4.8E-02	
	<sup>235</sup> U	2.9E-02 $\pm$ 1.9E-02			<sup>235</sup> U	1.3E-02 $\pm$ 1.1E-02	U
	<sup>238</sup> U	2.9E-01 $\pm$ 7.0E-02			<sup>238</sup> U	1.8E-01 $\pm$ 4.9E-02	
	<sup>65</sup> Zn	-5.4E-03 $\pm$ 1.5E-02	U		<sup>65</sup> Zn	-4.0E-03 $\pm$ 1.5E-02	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.

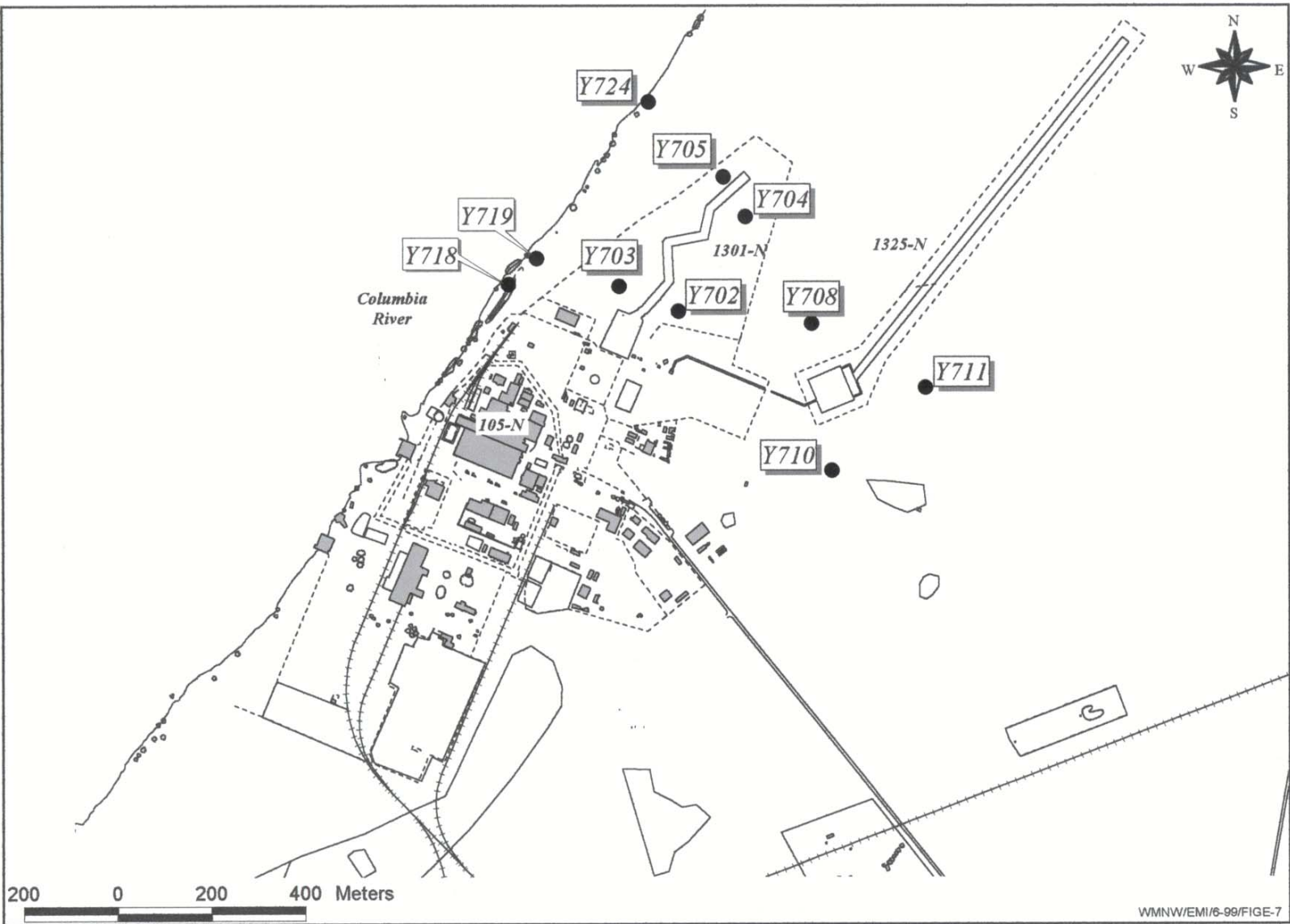


Figure 3-10. 2001 Vegetation Sampling Locations, 100 N Area.

Figure 3-11. 2001 Vegetation Sampling Locations, 200 East Area.

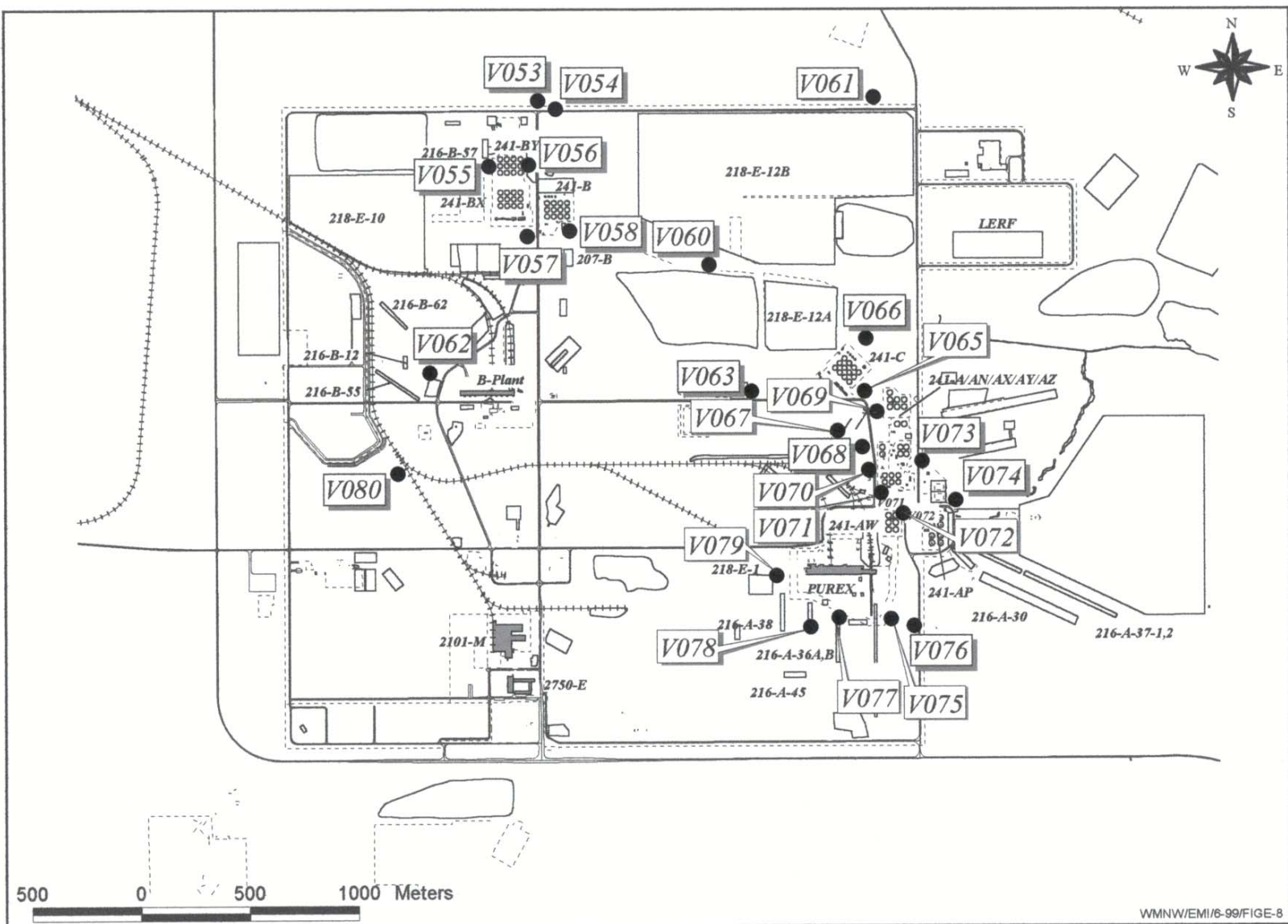
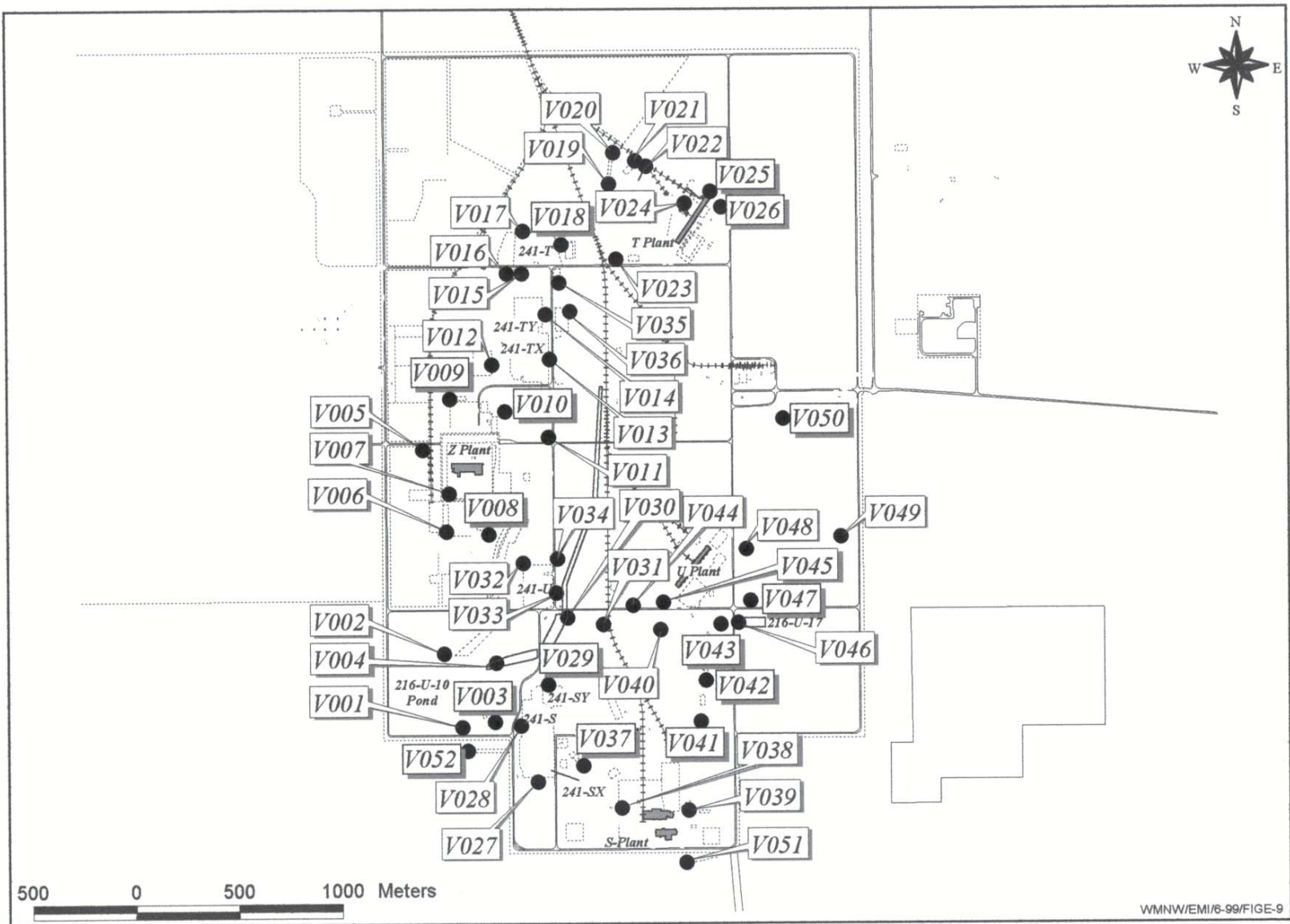


Figure 3-12. 2001 Vegetation Sampling Locations, 200 West Area.





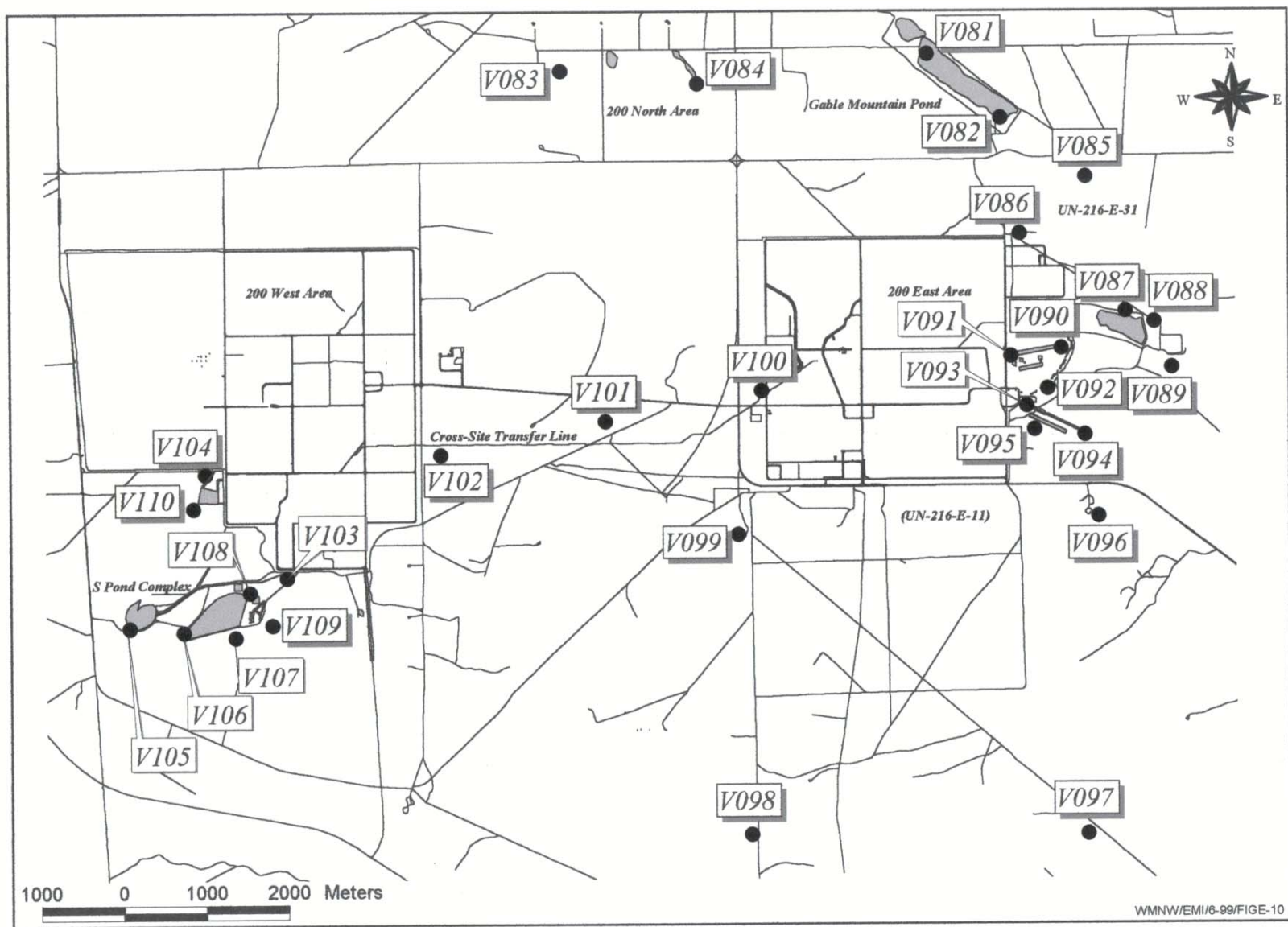


Figure 3-13. 2001 Vegetation Sampling Locations, 600 Area.

Figure 3-14. 2001 Vegetation Sampling Locations, 300 Area.

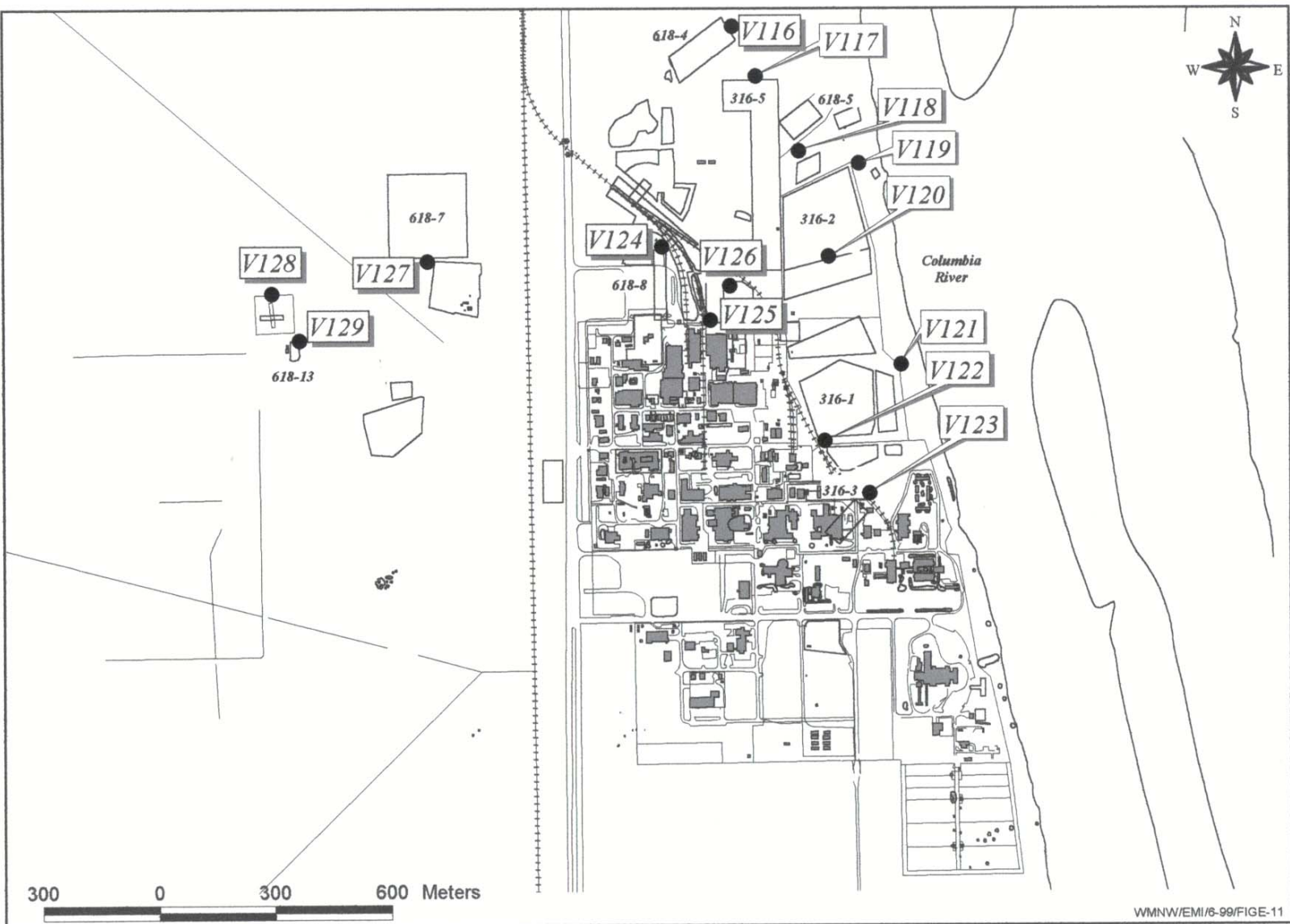


Figure 3-15. 2001 Vegetation Sampling Locations, 400 Area.

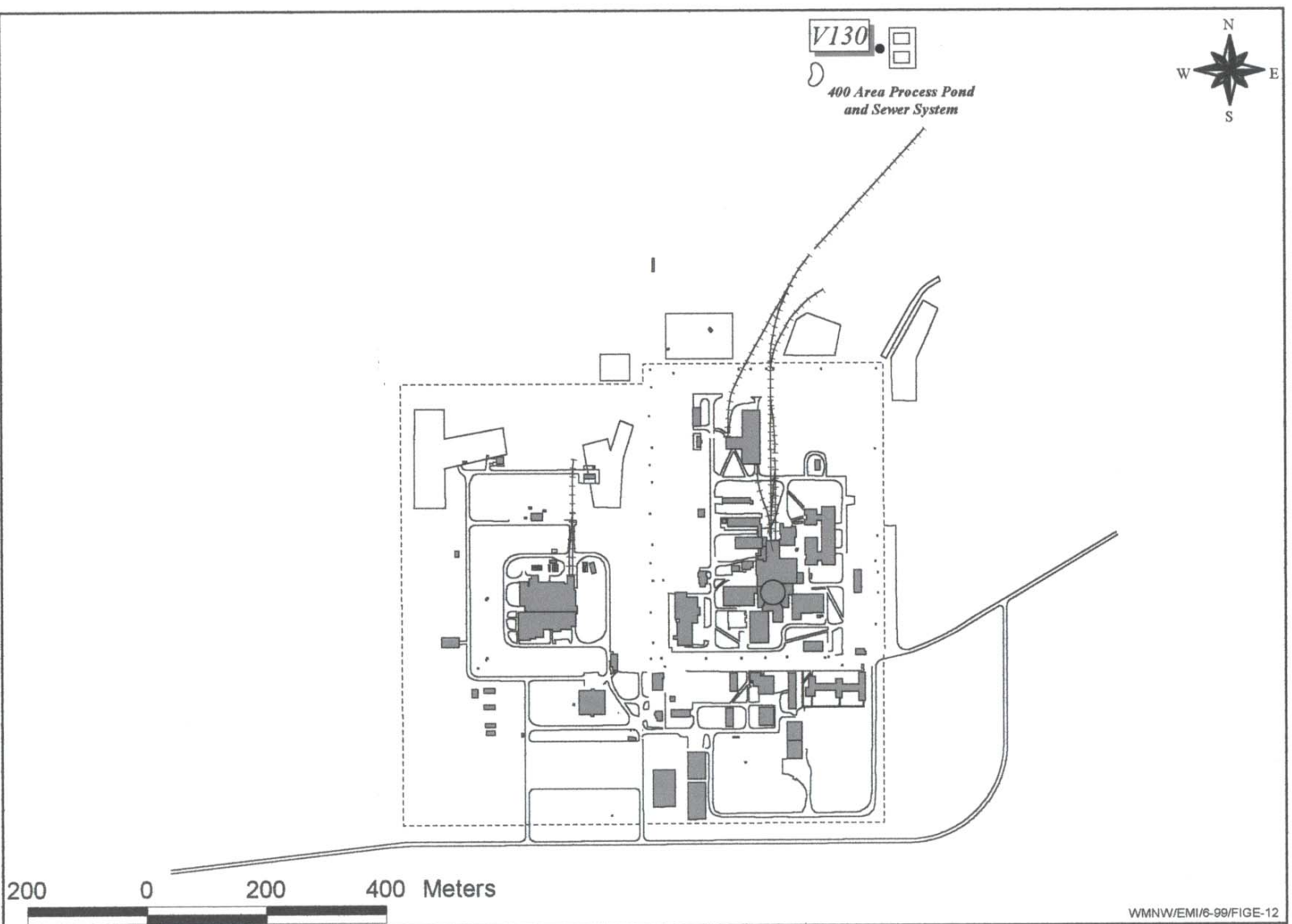


Table 3-4. Average Radionuclide Concentrations (pCi/g  $\pm$  2SD<sup>a</sup>)  
in Hanford Vegetation, 1996 through 2001.

100 N Area						
Year	<sup>60</sup> Co	<sup>90</sup> Sr	<sup>137</sup> Cs	<sup>234</sup> U	<sup>238</sup> U	<sup>239,240</sup> Pu
1996	6.0E+00 $\pm$ 2.0E+01	2.5E+02 $\pm$ 1.4E+03	1.3E+03 $\pm$ 7.0E+03	2.6E-02 $\pm$ 3.2E-02	2.2E-02 $\pm$ 1.7E-01	Not Detected
1997	4.2E-01 $\pm$ 5.0E-02	3.6E+00 $\pm$ 1.4E+01	1.6E-01 $\pm$ 1.9E-01	1.3E-02 $\pm$ 2.9E-03	9.7E-03 $\pm$ 4.7E-03	Not Detected
1998	6.2E-01 $\pm$ 1.5E+00	1.2E+01 $\pm$ 3.2E+01	3.8E+01 $\pm$ 1.3E+02	1.4E-02 $\pm$ 6.0E-03	8.7E-03 $\pm$ 4.4E-03	4.2E-03 $\pm$ 4.0E-03
1999	6.1E-01 $\pm$ 1.6E+00	9.1E+01 $\pm$ 3.0E+02	2.5E+02 $\pm$ 7.2E+02	2.8E-02 $\pm$ 1.0E-03	2.1E-02 $\pm$ 7.0E-03	2.2E-02 $\pm$ 2.0E-02
2000	4.8E-02 $\pm$ 3.2E-02	5.7E+00 $\pm$ 1.9E+01	2.0E-01 $\pm$ NA <sup>b</sup>	3.3E-02 $\pm$ 2.7E-02	2.4E-02 $\pm$ 1.8E-02	9.1E-03 $\pm$ NA <sup>b</sup>
2001	8.9E-01 $\pm$ 3.0E+00	3.5E+00 $\pm$ 9.0E+00	3.8E-01 $\pm$ 4.4E-01	9.8E-03 $\pm$ 2.4E-03	9.2E-03 $\pm$ 2.9E-03	2.4E-02 $\pm$ 4.0E-02
1301-N Liquid waste Disposal Facility (100 N Area)						
Year	<sup>60</sup> Co	<sup>90</sup> Sr	<sup>137</sup> Cs	<sup>234</sup> U	<sup>238</sup> U	<sup>239,240</sup> Pu
1996	7.9E+00 $\pm$ 2.2E+01	7.5E+02 $\pm$ 2.2E+03	2.7E+03 $\pm$ 9.2E+03	5.2E-02 $\pm$ NA <sup>(b)</sup>	Not Detected	Not Detected
1997	4.2E-01 $\pm$ NA <sup>b</sup>	4.9E-01 $\pm$ NA <sup>b</sup>	1.4E-01 $\pm$ 8.0E-02	1.1E-02 $\pm$ 6.6E-03	8.2E-03 $\pm$ 3.4E-03	Not Detected
1998	5.3E-01 $\pm$ 9.2E-01	1.4E+01 $\pm$ 3.8E+01	5.0E+01 $\pm$ 1.4E+02	1.0E-02 $\pm$ 1.2E-02	4.1E-03 $\pm$ 4.4E-03	7.1E-03 $\pm$ NA <sup>b</sup>
1999	9.9E-01 $\pm$ 1.7E+00	2.0E+02 $\pm$ 3.4E+02	5.1E+02 $\pm$ 7.2E+02	1.7E-02 $\pm$ 3.2E-02	1.4E-02 $\pm$ 1.1E-02	1.7E-02 $\pm$ 8.5E-03
2000	Not Detected	9.0E-02 $\pm$ 1.9E-02	2.0E-01 $\pm$ NA <sup>b</sup>	6.5E-02 $\pm$ 1.1E-01	4.5E-02 $\pm$ 5.6E-02	Not Detected
2001	1.7E-01 $\pm$ 1.7E-01	3.4E+00 $\pm$ 9.2E+00	2.6E-01 $\pm$ 2.4E-01	9.6E-03 $\pm$ 5.4E-02	5.0E-03 $\pm$ NA <sup>b</sup>	Not Detected
N Springs Shoreline (100 N Area)						
Year	<sup>60</sup> Co	<sup>90</sup> Sr	<sup>137</sup> Cs	<sup>234</sup> U	<sup>238</sup> U	<sup>239,240</sup> Pu
1996	Not Detected	2.4E+00 $\pm$ 6.0E+00	1.5E-01 $\pm$ NA <sup>b</sup>	Not Detected	5.7E-02 $\pm$ NA <sup>b</sup>	Not Detected
1997	Not Detected	6.2E+00 $\pm$ 1.7E+01	1.8E-01 $\pm$ 2.4E-01	1.4E-02 $\pm$ 1.2E-02	1.3E-02 $\pm$ 1.9E-02	Not Detected
1998	6.8E-02 $\pm$ NA <sup>b</sup>	2.1E+01 $\pm$ 2.6E+01	Not Detected	1.9E-02 $\pm$ 2.4E-02	1.3E-02 $\pm$ 1.7E-02	2.8E-03 $\pm$ NA <sup>b</sup>
1999	Not Detected	9.8E-01 $\pm$ 1.1E+00	4.2E-01 $\pm$ 7.0E-01	4.2E-02 $\pm$ 1.3E-02	3.4E-02 $\pm$ 1.3E-02	Not Detected
2000	Not Detected	9.4E+00 $\pm$ 2.2E+01	Not Detected	2.3E-02 $\pm$ 5.2E-03	1.6E-02 $\pm$ 1.0E-03	9.1E-03 $\pm$ NA <sup>b</sup>
2001	5.7E-02 $\pm$ NA <sup>b</sup>	4.7E+00 $\pm$ 9.2E+00	Not Detected	7.6E-03 $\pm$ 1.4E-03	8.6E-03 $\pm$ NA <sup>b</sup>	7.8E-03 $\pm$ NA <sup>b</sup>
200/600 Areas						
Year	<sup>60</sup> Co	<sup>90</sup> Sr	<sup>137</sup> Cs	<sup>234</sup> U	<sup>238</sup> U	<sup>239,240</sup> Pu
1996	1.7E-01 $\pm$ 2.0E+01	3.7E-01 $\pm$ 1.3E+00	2.0E-01 $\pm$ 2.0E-01	5.0E-03 $\pm$ 1.0E-03	5.0E-03 $\pm$ 1.0E-03	8.0E-03 $\pm$ 3.0E-02
1997	Not Detected	2.9E+00 $\pm$ 1.3E+01	1.3E-01 $\pm$ 2.6E-01	1.5E-02 $\pm$ 2.4E-03	1.1E-02 $\pm$ 2.1E-03	6.6E-03 $\pm$ 3.8E-03
1998	Not Detected	3.3E-01 $\pm$ 6.0E-01	2.1E-01 $\pm$ 2.6E-01	1.6E-02 $\pm$ 3.0E-03	9.7E-03 $\pm$ 1.3E-03	1.8E-02 $\pm$ 3.0E-02
1999	Not Detected	7.9E-01 $\pm$ 2.4E+00	1.3E-01 $\pm$ 2.0E-01	3.3E-02 $\pm$ 6.0E-03	2.3E-02 $\pm$ 4.0E-03	1.4E-02 $\pm$ 2.0E-02
2000	Not Detected	1.3E+00 $\pm$ 4.0E+00	1.6E-01 $\pm$ 2.6E-01	2.0E-02 $\pm$ 3.0E-02	1.4E-02 $\pm$ 2.0E-03	3.3E-02 $\pm$ 1.1E-01
2001	Not Detected	1.0E+00 $\pm$ 3.0E+00	1.7E-01 $\pm$ 3.0E-01	1.9E-02 $\pm$ 2.8E-03	1.8E-02 $\pm$ 2.6E-03	2.1E-02 $\pm$ 4.0E-02
300/400 Areas						
Year	<sup>60</sup> Co	<sup>90</sup> Sr	<sup>137</sup> Cs	<sup>234</sup> U	<sup>238</sup> U	<sup>239,240</sup> Pu
1996	7.1E-03 $\pm$ 3.0E-02	6.3E-02 $\pm$ 1.0E-01	6.0E-02 $\pm$ 4.0E-02	4.9E-02 $\pm$ 3.9E-02	4.7E-02 $\pm$ 3.8E-02	1.0E-03 $\pm$ 1.0E-03
1997	Not Detected	6.6E-01 $\pm$ 6.8E-01	Not Detected	6.9E-02 $\pm$ 4.8E-02	6.2E-02 $\pm$ 4.5E-02	4.4E-04 $\pm$ NA <sup>b</sup>
1998	Not Detected	1.0E-01 $\pm$ NA <sup>b</sup>	Not Detected	4.6E-02 $\pm$ 3.3E-02	4.4E-02 $\pm$ 3.6E-02	1.0E-02 $\pm$ 7.0E-03
1999	Not Detected	4.5E-01 $\pm$ 2.6E-01	Not Detected	9.4E-02 $\pm$ 5.3E-02	8.9E-01 $\pm$ 5.9E-02	1.0E-02 $\pm$ 1.0E-02
2000	Not Detected	2.1E-01 $\pm$ 6.0E-02	7.0E-02 $\pm$ NA <sup>b</sup>	1.8E-02 $\pm$ 1.9E-02	1.7E-02 $\pm$ 1.9E-02	1.0E-02 $\pm$ 5.0E-03
2001	Not Detected	2.6E-01 $\pm$ 3.8E-01	Not Detected	9.8E-02 $\pm$ 8.0E-02	1.1E-01 $\pm$ 8.8E-02	1.0E-02 $\pm$ 3.0E-03

a - 2SD = 2 Standard Deviation.

b - NA = Not Applicable: Result represents a single value above detection limits.

Table 3-5. 2001 Vegetation Sampling Results (pCi/g  $\pm$  total analytical uncertainty).

Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
Y702 (100-N)	<sup>144</sup> Ce	-5.3E-02 $\pm$ 1.4E-01	U	Y703 (100-N)	<sup>144</sup> Ce	-9.6E-02 $\pm$ 3.6E-01	U
	<sup>60</sup> Co	8.3E-02 $\pm$ 2.7E-02			<sup>60</sup> Co	2.5E-01 $\pm$ 7.8E-02	
	<sup>134</sup> Cs	1.9E-02 $\pm$ 2.1E-02	U		<sup>134</sup> Cs	3.6E-03 $\pm$ 3.6E-02	U
	<sup>137</sup> Cs	1.4E-01 $\pm$ 4.3E-02			<sup>137</sup> Cs	2.3E-01 $\pm$ 8.0E-02	
	<sup>152</sup> Eu	2.0E-02 $\pm$ 5.6E-02	U		<sup>152</sup> Eu	-3.3E-02 $\pm$ 1.6E-01	U
	<sup>154</sup> Eu	-2.0E-02 $\pm$ 6.2E-02	U		<sup>154</sup> Eu	-2.0E-02 $\pm$ 1.3E-01	U
	<sup>155</sup> Eu	2.9E-02 $\pm$ 7.0E-02	U		<sup>155</sup> Eu	-1.0E-01 $\pm$ 1.8E-01	U
	<sup>238</sup> Pu	7.7E-03 $\pm$ 1.5E-02	U		<sup>238</sup> Pu	-2.3E-02 $\pm$ 2.3E-02	U
	<sup>239,240</sup> Pu	3.8E-03 $\pm$ 3.8E-03	U		<sup>239,240</sup> Pu	4.9E-03 $\pm$ 6.4E-03	U
	<sup>103</sup> Ru	4.8E-03 $\pm$ 2.1E-02	U		<sup>103</sup> Ru	-1.1E-02 $\pm$ 4.7E-02	U
	<sup>106</sup> Ru	-3.3E-02 $\pm$ 1.9E-01	U		<sup>106</sup> Ru	-2.8E-01 $\pm$ 3.9E-01	U
	<sup>125</sup> Sb	6.0E-03 $\pm$ 5.5E-02	U		<sup>125</sup> Sb	-1.2E-01 $\pm$ 1.3E-01	U
	<sup>113</sup> Sn	-1.3E-02 $\pm$ 2.6E-02	U		<sup>113</sup> Sn	2.7E-03 $\pm$ 2.7E-02	U
	<sup>90</sup> Sr	9.6E-02 $\pm$ 8.7E-02			<sup>90</sup> Sr	9.9E+00 $\pm$ 1.5E+00	
	<sup>234</sup> U	2.7E-03 $\pm$ 4.1E-03	U		<sup>234</sup> U	1.2E-02 $\pm$ 7.4E-03	
	<sup>235</sup> U	2.9E-03 $\pm$ 3.5E-03	U		<sup>235</sup> U	2.0E-03 $\pm$ 2.8E-03	U
	<sup>238</sup> U	3.6E-03 $\pm$ 3.6E-03	U		<sup>238</sup> U	3.6E-03 $\pm$ 3.6E-03	U
	<sup>65</sup> Zn	4.1E-02 $\pm$ 4.9E-02	U		<sup>65</sup> Zn	-1.3E-01 $\pm$ 1.3E-01	U
Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
Y704 (100-N)	<sup>144</sup> Ce	9.9E-02 $\pm$ 2.4E-01	U	Y705 (100-N)	<sup>144</sup> Ce	9.4E-02 $\pm$ 2.8E-01	U
	<sup>60</sup> Co	8.6E-03 $\pm$ 4.1E-02	U		<sup>60</sup> Co	2.0E-02 $\pm$ 4.2E-02	U
	<sup>134</sup> Cs	-2.1E-02 $\pm$ 3.8E-02	U		<sup>134</sup> Cs	-2.5E-02 $\pm$ 4.0E-02	U
	<sup>137</sup> Cs	4.2E-01 $\pm$ 1.0E-01			<sup>137</sup> Cs	2.2E-02 $\pm$ 4.6E-02	U
	<sup>152</sup> Eu	-2.0E-02 $\pm$ 1.2E-01	U		<sup>152</sup> Eu	-3.1E-02 $\pm$ 1.1E-01	U
	<sup>154</sup> Eu	3.8E-02 $\pm$ 1.2E-01	U		<sup>154</sup> Eu	-1.1E-03 $\pm$ 1.1E-02	U
	<sup>155</sup> Eu	-2.7E-02 $\pm$ 1.2E-01	U		<sup>155</sup> Eu	5.9E-02 $\pm$ 1.4E-01	U
	<sup>238</sup> Pu	1.7E-02 $\pm$ 1.9E-02	U		<sup>238</sup> Pu	-4.3E-03 $\pm$ 8.2E-03	U
	<sup>239,240</sup> Pu	6.5E-03 $\pm$ 7.8E-03	U		<sup>239,240</sup> Pu	8.7E-04 $\pm$ 8.7E-03	U
	<sup>103</sup> Ru	-1.2E-02 $\pm$ 3.4E-02	U		<sup>103</sup> Ru	-7.7E-03 $\pm$ 4.2E-02	U
	<sup>106</sup> Ru	2.3E-02 $\pm$ 2.3E-01	U		<sup>106</sup> Ru	-2.6E-01 $\pm$ 3.6E-01	U
	<sup>125</sup> Sb	2.3E-03 $\pm$ 2.3E-02	U		<sup>125</sup> Sb	-2.2E-02 $\pm$ 1.1E-01	U
	<sup>113</sup> Sn	-2.1E-02 $\pm$ 4.2E-02	U		<sup>113</sup> Sn	1.9E-02 $\pm$ 4.7E-02	U
	<sup>90</sup> Sr	5.5E-03 $\pm$ 5.5E-02	U		<sup>90</sup> Sr	1.6E-01 $\pm$ 1.1E-01	
	<sup>234</sup> U	1.1E-02 $\pm$ 6.9E-03			<sup>234</sup> U	5.9E-03 $\pm$ 4.6E-03	
	<sup>235</sup> U	3.3E-03 $\pm$ 4.0E-03	U		<sup>235</sup> U	9.2E-04 $\pm$ 3.2E-03	U
	<sup>238</sup> U	5.0E-03 $\pm$ 4.5E-03			<sup>238</sup> U	3.4E-03 $\pm$ 3.4E-03	U
	<sup>65</sup> Zn	6.1E-02 $\pm$ 8.5E-02	U		<sup>65</sup> Zn	2.5E-02 $\pm$ 8.5E-02	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.

Table 3-5. 2001 Vegetation Sampling Results (pCi/g  $\pm$  total analytical uncertainty). (cont)

Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
Y708 (100-N)	<sup>144</sup> Ce	-8.6E-02 $\pm$ 2.6E-01	U	Y711 (100-N)	<sup>144</sup> Ce	-9.2E-02 $\pm$ 2.5E-01	U
	<sup>60</sup> Co	2.6E-01 $\pm$ 7.3E-02			<sup>60</sup> Co	3.8E+00 $\pm$ 3.3E-01	
	<sup>134</sup> Cs	-5.4E-03 $\pm$ 5.3E-02	U		<sup>134</sup> Cs	1.5E-02 $\pm$ 5.2E-02	U
	<sup>137</sup> Cs	8.5E-02 $\pm$ 6.0E-02	U		<sup>137</sup> Cs	7.1E-01 $\pm$ 1.6E-01	
	<sup>152</sup> Eu	-5.3E-02 $\pm$ 1.4E-01	U		<sup>152</sup> Eu	-5.6E-02 $\pm$ 1.3E-01	U
	<sup>154</sup> Eu	-7.6E-03 $\pm$ 7.6E-02	U		<sup>154</sup> Eu	3.2E-02 $\pm$ 1.3E-01	U
	<sup>155</sup> Eu	-9.4E-03 $\pm$ 9.4E-02	U		<sup>155</sup> Eu	8.8E-02 $\pm$ 1.3E-01	U
	<sup>238</sup> Pu	1.8E-02 $\pm$ 1.5E-02	U		<sup>238</sup> Pu	9.8E-03 $\pm$ 1.5E-02	U
	<sup>239,240</sup> Pu	1.0E-02 $\pm$ 6.8E-03			<sup>239,240</sup> Pu	5.5E-02 $\pm$ 1.8E-02	
	<sup>103</sup> Ru	-2.8E-02 $\pm$ 4.8E-02	U		<sup>103</sup> Ru	-1.2E-02 $\pm$ 5.2E-02	U
	<sup>106</sup> Ru	-3.7E-02 $\pm$ 3.7E-01	U		<sup>106</sup> Ru	8.2E-02 $\pm$ 4.6E-01	U
	<sup>125</sup> Sb	1.2E-01 $\pm$ 1.3E-01	U		<sup>125</sup> Sb	2.3E-02 $\pm$ 1.1E-01	U
	<sup>113</sup> Sn	2.4E-02 $\pm$ 5.5E-02	U		<sup>113</sup> Sn	8.2E-03 $\pm$ 6.1E-02	U
	<sup>90</sup> Sr	1.0E-01 $\pm$ 1.1E-01	U		<sup>90</sup> Sr	2.3E-01 $\pm$ 1.2E-01	
	<sup>234</sup> U	1.6E-02 $\pm$ 8.5E-03			<sup>234</sup> U	8.7E-03 $\pm$ 5.5E-03	
	<sup>235</sup> U	7.7E-03 $\pm$ 7.3E-03	U		<sup>235</sup> U	8.7E-04 $\pm$ 1.7E-03	U
	<sup>238</sup> U	1.3E-02 $\pm$ 7.1E-03			<sup>238</sup> U	1.0E-02 $\pm$ 5.9E-03	
	<sup>65</sup> Zn	5.3E-02 $\pm$ 1.3E-01	U		<sup>65</sup> Zn	2.7E-02 $\pm$ 1.2E-01	U
Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
Y718 (N Springs Shoreline)	<sup>144</sup> Ce	2.3E-02 $\pm$ 2.0E-01	U	Y719 (N Springs Shoreline)	<sup>144</sup> Ce	-2.7E-01 $\pm$ 3.0E-01	U
	<sup>60</sup> Co	5.7E-02 $\pm$ 4.4E-02			<sup>60</sup> Co	-1.3E-04 $\pm$ 1.3E-03	U
	<sup>134</sup> Cs	-9.7E-03 $\pm$ 3.1E-02	U		<sup>134</sup> Cs	-5.1E-02 $\pm$ 5.1E-02	U
	<sup>137</sup> Cs	1.4E-03 $\pm$ 1.4E-02	U		<sup>137</sup> Cs	4.8E-02 $\pm$ 4.1E-02	U
	<sup>152</sup> Eu	5.5E-03 $\pm$ 5.5E-02	U		<sup>152</sup> Eu	-5.8E-02 $\pm$ 1.3E-01	U
	<sup>154</sup> Eu	-4.1E-02 $\pm$ 9.4E-02	U		<sup>154</sup> Eu	-5.2E-02 $\pm$ 1.2E-01	U
	<sup>155</sup> Eu	-4.3E-02 $\pm$ 1.0E-01	U		<sup>155</sup> Eu	-7.3E-02 $\pm$ 1.8E-01	U
	<sup>238</sup> Pu	8.6E-03 $\pm$ 1.5E-02	U		<sup>238</sup> Pu	2.6E-03 $\pm$ 9.1E-03	U
	<sup>239,240</sup> Pu	3.8E-03 $\pm$ 3.8E-03	U		<sup>239,240</sup> Pu	7.8E-03 $\pm$ 5.4E-03	
	<sup>103</sup> Ru	-6.7E-03 $\pm$ 3.2E-02	U		<sup>103</sup> Ru	-2.8E-02 $\pm$ 4.8E-02	U
	<sup>106</sup> Ru	5.8E-02 $\pm$ 2.8E-01	U		<sup>106</sup> Ru	-2.8E-01 $\pm$ 3.9E-01	U
	<sup>125</sup> Sb	1.8E-02 $\pm$ 7.9E-02	U		<sup>125</sup> Sb	6.4E-02 $\pm$ 1.2E-01	U
	<sup>113</sup> Sn	8.7E-03 $\pm$ 3.9E-02	U		<sup>113</sup> Sn	7.2E-02 $\pm$ 5.6E-02	U
	<sup>90</sup> Sr	2.9E+00 $\pm$ 4.4E-01			<sup>90</sup> Sr	1.1E+01 $\pm$ 1.6E+00	
	<sup>234</sup> U	6.0E-03 $\pm$ 5.3E-03	U		<sup>234</sup> U	8.3E-03 $\pm$ 5.2E-03	
	<sup>235</sup> U	5.6E-03 $\pm$ 4.7E-03			<sup>235</sup> U	8.3E-04 $\pm$ 3.7E-03	U
	<sup>238</sup> U	8.6E-03 $\pm$ 5.7E-03			<sup>238</sup> U	2.3E-03 $\pm$ 2.8E-03	U
	<sup>65</sup> Zn	-5.3E-02 $\pm$ 7.9E-02	U		<sup>65</sup> Zn	2.9E-03 $\pm$ 2.9E-02	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.

Table 3-5. 2001 Vegetation Sampling Results (pCi/g  $\pm$  total analytical uncertainty). (cont)

Location	Isotope	Result $\pm$ Uncertainty	RQ*
Y724 (N Springs Shoreline)	<sup>144</sup> Ce	2.6E-02 $\pm$ 2.6E-01	U
	<sup>60</sup> Co	-1.0E-03 $\pm$ 1.0E-02	U
	<sup>134</sup> Cs	8.1E-02 $\pm$ 4.7E-02	U
	<sup>137</sup> Cs	2.2E-02 $\pm$ 5.3E-02	U
	<sup>152</sup> Eu	-1.0E-01 $\pm$ 1.4E-01	U
	<sup>154</sup> Eu	-9.4E-02 $\pm$ 1.4E-01	U
	<sup>155</sup> Eu	-2.0E-02 $\pm$ 1.7E-01	U
	<sup>238</sup> Pu	-9.0E-04 $\pm$ 9.0E-03	U
	<sup>239,240</sup> Pu	8.9E-04 $\pm$ 1.8E-03	U
	<sup>103</sup> Ru	9.8E-03 $\pm$ 5.2E-02	U
	<sup>106</sup> Ru	1.2E-01 $\pm$ 4.2E-01	U
	<sup>125</sup> Sb	4.6E-02 $\pm$ 1.1E-01	U
	<sup>113</sup> Sn	-2.3E-02 $\pm$ 6.0E-02	U
	<sup>90</sup> Sr	1.6E-01 $\pm$ 9.6E-02	
	<sup>234</sup> U	6.9E-03 $\pm$ 5.6E-03	
	<sup>235</sup> U	1.9E-03 $\pm$ 2.7E-03	U
	<sup>238</sup> U	1.7E-03 $\pm$ 3.4E-03	U
	<sup>65</sup> Zn	-5.7E-02 $\pm$ 1.0E-01	U
Location	Isotope	Result $\pm$ Uncertainty	RQ*
V001 (200 West)	<sup>144</sup> Ce	-1.2E-01 $\pm$ 3.4E-01	U
	<sup>60</sup> Co	-8.7E-03 $\pm$ 3.6E-02	U
	<sup>134</sup> Cs	9.1E-03 $\pm$ 4.4E-02	U
	<sup>137</sup> Cs	-1.1E-04 $\pm$ 1.1E-03	U
	<sup>152</sup> Eu	7.9E-02 $\pm$ 1.3E-01	U
	<sup>154</sup> Eu	3.0E-02 $\pm$ 1.2E-01	U
	<sup>155</sup> Eu	1.0E-01 $\pm$ 1.6E-01	U
	<sup>238</sup> Pu	6.2E-03 $\pm$ 1.2E-02	U
	<sup>239,240</sup> Pu	2.0E-02 $\pm$ 9.4E-03	
	<sup>103</sup> Ru	-3.7E-02 $\pm$ 4.4E-02	U
	<sup>106</sup> Ru	-2.9E-02 $\pm$ 2.9E-01	U
	<sup>125</sup> Sb	7.9E-02 $\pm$ 1.2E-01	U
	<sup>113</sup> Sn	4.6E-02 $\pm$ 5.5E-02	U
	<sup>90</sup> Sr	1.5E-01 $\pm$ 1.1E-01	
	<sup>234</sup> U	2.5E-02 $\pm$ 1.0E-02	
	<sup>235</sup> U	7.7E-03 $\pm$ 5.9E-03	
	<sup>238</sup> U	2.0E-02 $\pm$ 9.0E-03	
	<sup>65</sup> Zn	-1.4E-01 $\pm$ 1.4E-01	U
Location	Isotope	Result $\pm$ Uncertainty	RQ*
V003 (200 West)	<sup>144</sup> Ce	-7.7E-02 $\pm$ 4.0E-01	U
	<sup>60</sup> Co	1.5E-02 $\pm$ 6.0E-02	U
	<sup>134</sup> Cs	-2.9E-02 $\pm$ 5.8E-02	U
	<sup>137</sup> Cs	1.2E-01 $\pm$ 9.4E-02	
	<sup>152</sup> Eu	-9.0E-02 $\pm$ 1.9E-01	U
	<sup>154</sup> Eu	2.0E-01 $\pm$ 2.0E-01	U
	<sup>155</sup> Eu	1.5E-01 $\pm$ 2.4E-01	U
	<sup>238</sup> Pu	-2.6E-02 $\pm$ 2.6E-02	U
	<sup>239,240</sup> Pu	2.8E-02 $\pm$ 1.1E-02	
	<sup>103</sup> Ru	4.2E-02 $\pm$ 5.9E-02	U
	<sup>106</sup> Ru	-3.1E-01 $\pm$ 5.6E-01	U
	<sup>125</sup> Sb	5.9E-02 $\pm$ 1.7E-01	U
	<sup>113</sup> Sn	4.1E-02 $\pm$ 7.0E-02	U
	<sup>90</sup> Sr	2.8E-02 $\pm$ 8.7E-02	U
	<sup>234</sup> U	2.9E-02 $\pm$ 1.2E-02	
	<sup>235</sup> U	4.2E-03 $\pm$ 5.9E-03	U
	<sup>238</sup> U	9.5E-03 $\pm$ 7.3E-03	
	<sup>65</sup> Zn	1.2E-01 $\pm$ 1.3E-01	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.

Table 3-5. 2001 Vegetation Sampling Results (pCi/g  $\pm$  total analytical uncertainty). (cont)

Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
V007 (200 West)	<sup>144</sup> Ce	1.2E-01 $\pm$ 4.6E-01	U	V009 (200 West)	<sup>144</sup> Ce	-1.4E-01 $\pm$ 3.4E-01	U
	<sup>60</sup> Co	-4.9E-02 $\pm$ 7.3E-02	U		<sup>60</sup> Co	-2.0E-02 $\pm$ 4.8E-02	U
	<sup>134</sup> Cs	5.9E-02 $\pm$ 7.1E-02	U		<sup>134</sup> Cs	1.6E-02 $\pm$ 5.3E-02	U
	<sup>137</sup> Cs	1.4E-01 $\pm$ 1.0E-01			<sup>137</sup> Cs	8.3E-02 $\pm$ 6.5E-02	
	<sup>152</sup> Eu	-9.1E-02 $\pm$ 1.9E-01	U		<sup>152</sup> Eu	-4.9E-02 $\pm$ 1.4E-01	U
	<sup>154</sup> Eu	2.5E-02 $\pm$ 2.0E-01	U		<sup>154</sup> Eu	-3.0E-02 $\pm$ 1.5E-01	U
	<sup>155</sup> Eu	2.3E-01 $\pm$ 2.5E-01	U		<sup>155</sup> Eu	1.1E-01 $\pm$ 1.8E-01	U
	<sup>238</sup> Pu	-3.0E-03 $\pm$ 1.3E-02	U		<sup>238</sup> Pu	1.2E-02 $\pm$ 1.4E-02	U
	<sup>239,240</sup> Pu	1.2E-02 $\pm$ 8.3E-03			<sup>239,240</sup> Pu	3.5E-02 $\pm$ 1.3E-02	
	<sup>103</sup> Ru	-1.3E-02 $\pm$ 7.3E-02	U		<sup>103</sup> Ru	-2.7E-02 $\pm$ 4.6E-02	U
	<sup>106</sup> Ru	-4.1E-01 $\pm$ 7.4E-01	U		<sup>106</sup> Ru	1.6E-03 $\pm$ 1.6E-02	U
	<sup>125</sup> Sb	1.3E-01 $\pm$ 1.6E-01	U		<sup>125</sup> Sb	3.5E-03 $\pm$ 3.5E-02	U
	<sup>113</sup> Sn	-3.7E-02 $\pm$ 7.8E-02	U		<sup>113</sup> Sn	1.1E-02 $\pm$ 6.5E-02	U
	<sup>90</sup> Sr	-8.2E-03 $\pm$ 8.2E-02	U		<sup>90</sup> Sr	2.0E-01 $\pm$ 1.0E-01	
	<sup>234</sup> U	2.8E-02 $\pm$ 1.2E-02			<sup>234</sup> U	2.3E-02 $\pm$ 9.9E-03	
	<sup>235</sup> U	3.9E-03 $\pm$ 4.7E-03	U		<sup>235</sup> U	9.6E-04 $\pm$ 1.9E-03	U
	<sup>238</sup> U	2.3E-02 $\pm$ 1.1E-02			<sup>238</sup> U	2.4E-02 $\pm$ 1.1E-02	
	<sup>65</sup> Zn	-1.7E-02 $\pm$ 1.7E-01	U		<sup>65</sup> Zn	-1.2E-01 $\pm$ 1.2E-01	U
Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
V011 (200 West)	<sup>144</sup> Ce	1.3E-01 $\pm$ 2.2E-01	U	V015 (200 West)	<sup>144</sup> Ce	-1.5E-01 $\pm$ 5.6E-01	U
	<sup>60</sup> Co	-5.5E-03 $\pm$ 2.6E-02	U		<sup>60</sup> Co	-2.5E-02 $\pm$ 7.5E-02	U
	<sup>134</sup> Cs	-2.7E-02 $\pm$ 3.5E-02	U		<sup>134</sup> Cs	-4.3E-02 $\pm$ 7.7E-02	U
	<sup>137</sup> Cs	9.6E-02 $\pm$ 6.0E-02			<sup>137</sup> Cs	8.4E-02 $\pm$ 1.0E-01	U
	<sup>152</sup> Eu	-5.6E-02 $\pm$ 1.0E-01	U		<sup>152</sup> Eu	6.6E-02 $\pm$ 2.6E-01	U
	<sup>154</sup> Eu	-3.7E-02 $\pm$ 1.0E-01	U		<sup>154</sup> Eu	-1.4E-01 $\pm$ 2.5E-01	U
	<sup>155</sup> Eu	7.8E-03 $\pm$ 7.8E-02	U		<sup>155</sup> Eu	-1.8E-01 $\pm$ 2.9E-01	U
	<sup>238</sup> Pu	-7.3E-03 $\pm$ 1.5E-02	U		<sup>238</sup> Pu	-7.6E-03 $\pm$ 1.5E-02	U
	<sup>239,240</sup> Pu	8.2E-03 $\pm$ 6.7E-03	U		<sup>239,240</sup> Pu	7.6E-03 $\pm$ 7.2E-03	U
	<sup>103</sup> Ru	-1.4E-02 $\pm$ 3.2E-02	U		<sup>103</sup> Ru	-8.2E-03 $\pm$ 8.2E-02	U
	<sup>106</sup> Ru	1.1E-01 $\pm$ 3.1E-01	U		<sup>106</sup> Ru	3.0E-01 $\pm$ 7.5E-01	U
	<sup>125</sup> Sb	3.4E-02 $\pm$ 9.2E-02	U		<sup>125</sup> Sb	-7.5E-02 $\pm$ 2.1E-01	U
	<sup>113</sup> Sn	5.4E-03 $\pm$ 4.4E-02	U		<sup>113</sup> Sn	-1.1E-02 $\pm$ 1.0E-01	U
	<sup>90</sup> Sr	3.0E-02 $\pm$ 9.9E-02	U		<sup>90</sup> Sr	-2.4E-02 $\pm$ 9.6E-02	U
	<sup>234</sup> U	7.8E-03 $\pm$ 5.7E-03			<sup>234</sup> U	3.7E-02 $\pm$ 1.4E-02	
	<sup>235</sup> U	1.1E-03 $\pm$ 2.2E-03	U		<sup>235</sup> U	5.3E-03 $\pm$ 5.8E-03	U
	<sup>238</sup> U	1.5E-02 $\pm$ 8.2E-03			<sup>238</sup> U	3.0E-02 $\pm$ 1.2E-02	
	<sup>65</sup> Zn	-1.1E-01 $\pm$ 1.1E-01	U		<sup>65</sup> Zn	-1.6E-01 $\pm$ 2.1E-01	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.



Table 3-5. 2001 Vegetation Sampling Results (pCi/g  $\pm$  total analytical uncertainty). (cont)

Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
V017 (200 West)	<sup>144</sup> Ce	-3.5E-01 $\pm$ 3.5E-01	U	V019 (200 West)	<sup>144</sup> Ce	-4.2E-02 $\pm$ 3.6E-01	U
	<sup>60</sup> Co	2.8E-02 $\pm$ 6.7E-02	U		<sup>60</sup> Co	-8.7E-03 $\pm$ 4.5E-02	U
	<sup>134</sup> Cs	-1.5E-02 $\pm$ 6.3E-02	U		<sup>134</sup> Cs	1.3E-02 $\pm$ 4.9E-02	U
	<sup>137</sup> Cs	1.1E-01 $\pm$ 6.5E-02	U		<sup>137</sup> Cs	1.4E-01 $\pm$ 7.7E-02	
	<sup>152</sup> Eu	8.3E-02 $\pm$ 1.5E-01	U		<sup>152</sup> Eu	1.0E-01 $\pm$ 1.9E-01	U
	<sup>154</sup> Eu	2.9E-02 $\pm$ 1.7E-01	U		<sup>154</sup> Eu	4.6E-02 $\pm$ 1.6E-01	U
	<sup>155</sup> Eu	4.5E-02 $\pm$ 1.8E-01	U		<sup>155</sup> Eu	1.9E-02 $\pm$ 1.9E-01	U
	<sup>238</sup> Pu	6.5E-03 $\pm$ 1.4E-02	U		<sup>238</sup> Pu	8.9E-03 $\pm$ 1.2E-02	U
	<sup>239,240</sup> Pu	1.9E-02 $\pm$ 1.0E-02			<sup>239,240</sup> Pu	4.0E-03 $\pm$ 4.0E-03	U
	<sup>103</sup> Ru	2.0E-02 $\pm$ 5.6E-02	U		<sup>103</sup> Ru	5.8E-02 $\pm$ 5.3E-02	U
	<sup>106</sup> Ru	-4.4E-01 $\pm$ 4.8E-01	U		<sup>106</sup> Ru	3.8E-01 $\pm$ 4.9E-01	U
	<sup>125</sup> Sb	6.5E-02 $\pm$ 1.2E-01	U		<sup>125</sup> Sb	1.3E-01 $\pm$ 1.4E-01	U
	<sup>113</sup> Sn	-9.3E-02 $\pm$ 9.3E-02	U		<sup>113</sup> Sn	-8.3E-03 $\pm$ 6.6E-02	U
	<sup>90</sup> Sr	5.7E-02 $\pm$ 8.5E-02	U		<sup>90</sup> Sr	-4.0E-03 $\pm$ 4.0E-02	U
	<sup>234</sup> U	2.7E-02 $\pm$ 1.2E-02			<sup>234</sup> U	2.8E-02 $\pm$ 1.2E-02	
	<sup>235</sup> U	4.5E-03 $\pm$ 4.5E-03	U		<sup>235</sup> U	3.9E-03 $\pm$ 5.5E-03	U
	<sup>238</sup> U	1.9E-02 $\pm$ 9.7E-03			<sup>238</sup> U	2.8E-02 $\pm$ 1.2E-02	
	<sup>65</sup> Zn	2.1E-02 $\pm$ 1.6E-01	U		<sup>65</sup> Zn	-1.5E-01 $\pm$ 1.5E-01	U
Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
V021 (200 West)	<sup>144</sup> Ce	3.8E-02 $\pm$ 2.7E-01	U	V023 (200 West)	<sup>144</sup> Ce	8.9E-02 $\pm$ 5.0E-01	U
	<sup>60</sup> Co	1.7E-02 $\pm$ 3.7E-02	U		<sup>60</sup> Co	-2.1E-02 $\pm$ 7.3E-02	U
	<sup>134</sup> Cs	5.0E-02 $\pm$ 4.1E-02	U		<sup>134</sup> Cs	4.9E-02 $\pm$ 6.9E-02	U
	<sup>137</sup> Cs	7.5E-03 $\pm$ 4.4E-02	U		<sup>137</sup> Cs	7.2E-02 $\pm$ 8.6E-02	U
	<sup>152</sup> Eu	-5.5E-02 $\pm$ 1.3E-01	U		<sup>152</sup> Eu	7.8E-02 $\pm$ 2.3E-01	U
	<sup>154</sup> Eu	4.1E-02 $\pm$ 1.2E-01	U		<sup>154</sup> Eu	-1.3E-01 $\pm$ 2.2E-01	U
	<sup>155</sup> Eu	4.0E-02 $\pm$ 1.4E-01	U		<sup>155</sup> Eu	-5.6E-02 $\pm$ 2.7E-01	U
	<sup>238</sup> Pu	9.1E-04 $\pm$ 9.1E-03	U		<sup>238</sup> Pu	5.9E-03 $\pm$ 1.3E-02	U
	<sup>239,240</sup> Pu	1.0E-01 $\pm$ 2.7E-02			<sup>239,240</sup> Pu	4.9E-03 $\pm$ 6.4E-03	U
	<sup>103</sup> Ru	1.5E-02 $\pm$ 3.7E-02	U		<sup>103</sup> Ru	-6.6E-02 $\pm$ 6.6E-02	U
	<sup>106</sup> Ru	2.7E-01 $\pm$ 3.5E-01	U		<sup>106</sup> Ru	3.7E-02 $\pm$ 3.7E-01	U
	<sup>125</sup> Sb	-2.3E-02 $\pm$ 1.1E-01	U		<sup>125</sup> Sb	2.1E-01 $\pm$ 2.3E-01	U
	<sup>113</sup> Sn	3.5E-02 $\pm$ 4.9E-02	U		<sup>113</sup> Sn	1.1E-01 $\pm$ 9.6E-02	U
	<sup>90</sup> Sr	6.4E-01 $\pm$ 1.6E-01			<sup>90</sup> Sr	8.1E-02 $\pm$ 1.1E-01	U
	<sup>234</sup> U	1.2E-02 $\pm$ 7.3E-03			<sup>234</sup> U	2.5E-02 $\pm$ 1.1E-02	
	<sup>235</sup> U	1.1E-03 $\pm$ 4.9E-03	U		<sup>235</sup> U	4.1E-03 $\pm$ 4.1E-03	U
	<sup>238</sup> U	7.2E-03 $\pm$ 5.6E-03			<sup>238</sup> U	2.1E-02 $\pm$ 9.9E-03	
	<sup>65</sup> Zn	1.5E-02 $\pm$ 9.9E-02	U		<sup>65</sup> Zn	-6.0E-04 $\pm$ 6.0E-03	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.

Table 3-5. 2001 Vegetation Sampling Results (pCi/g  $\pm$  total analytical uncertainty). (cont)

Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
V025 (200 West)	<sup>144</sup> Ce	3.5E-01 $\pm$ 4.2E-01	U	V027 (200 West)	<sup>144</sup> Ce	2.0E-01 $\pm$ 4.6E-01	U
	<sup>60</sup> Co	-5.0E-02 $\pm$ 6.0E-02	U		<sup>60</sup> Co	2.9E-02 $\pm$ 7.5E-02	U
	<sup>134</sup> Cs	-2.7E-02 $\pm$ 5.9E-02	U		<sup>134</sup> Cs	-7.1E-02 $\pm$ 9.2E-02	U
	<sup>137</sup> Cs	1.7E-01 $\pm$ 1.0E-01			<sup>137</sup> Cs	2.0E-01 $\pm$ 1.1E-01	
	<sup>152</sup> Eu	-9.2E-02 $\pm$ 1.8E-01	U		<sup>152</sup> Eu	3.5E-02 $\pm$ 2.2E-01	U
	<sup>154</sup> Eu	2.0E-02 $\pm$ 2.0E-01	U		<sup>154</sup> Eu	-2.2E-02 $\pm$ 2.2E-01	U
	<sup>155</sup> Eu	-1.2E-02 $\pm$ 1.2E-01	U		<sup>155</sup> Eu	-1.2E-01 $\pm$ 2.4E-01	U
	<sup>238</sup> Pu	-1.2E-03 $\pm$ 1.2E-02	U		<sup>238</sup> Pu	3.2E-03 $\pm$ 2.0E-02	U
	<sup>239,240</sup> Pu	4.8E-03 $\pm$ 8.2E-03	U		<sup>239,240</sup> Pu	3.7E-02 $\pm$ 1.5E-02	
	<sup>103</sup> Ru	-4.0E-02 $\pm$ 6.4E-02	U		<sup>103</sup> Ru	5.7E-02 $\pm$ 7.4E-02	U
	<sup>106</sup> Ru	-7.0E-02 $\pm$ 5.1E-01	U		<sup>106</sup> Ru	4.0E-01 $\pm$ 6.0E-01	U
	<sup>125</sup> Sb	7.3E-02 $\pm$ 1.8E-01	U		<sup>125</sup> Sb	-9.3E-02 $\pm$ 2.0E-01	U
	<sup>113</sup> Sn	-8.6E-02 $\pm$ 8.6E-02	U		<sup>113</sup> Sn	-1.6E-03 $\pm$ 1.6E-02	U
	<sup>90</sup> Sr	4.8E+00 $\pm$ 7.2E-01			<sup>90</sup> Sr	1.0E-01 $\pm$ 9.5E-02	U
	<sup>234</sup> U	1.9E-02 $\pm$ 1.0E-02			<sup>234</sup> U	1.5E-02 $\pm$ 7.9E-03	
	<sup>235</sup> U	1.2E-03 $\pm$ 2.4E-03	U		<sup>235</sup> U	4.5E-03 $\pm$ 4.1E-03	
	<sup>238</sup> U	7.6E-03 $\pm$ 6.7E-03	U		<sup>238</sup> U	1.8E-02 $\pm$ 8.5E-03	
	<sup>65</sup> Zn	7.4E-02 $\pm$ 1.6E-01	U		<sup>65</sup> Zn	1.3E-01 $\pm$ 1.9E-01	U
Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
V029 (200 West)	<sup>144</sup> Ce	4.2E-02 $\pm$ 3.3E-01	U	V031 (200 West)	<sup>144</sup> Ce	1.0E-01 $\pm$ 3.8E-01	U
	<sup>60</sup> Co	1.2E-02 $\pm$ 5.9E-02	U		<sup>60</sup> Co	2.9E-03 $\pm$ 2.9E-02	U
	<sup>134</sup> Cs	4.0E-02 $\pm$ 4.8E-02	U		<sup>134</sup> Cs	-2.9E-02 $\pm$ 4.9E-02	U
	<sup>137</sup> Cs	2.2E-01 $\pm$ 8.8E-02			<sup>137</sup> Cs	8.2E-02 $\pm$ 6.0E-02	U
	<sup>152</sup> Eu	4.3E-02 $\pm$ 1.6E-01	U		<sup>152</sup> Eu	-1.1E-01 $\pm$ 1.9E-01	U
	<sup>154</sup> Eu	7.5E-02 $\pm$ 2.1E-01	U		<sup>154</sup> Eu	2.2E-02 $\pm$ 1.8E-01	U
	<sup>155</sup> Eu	-3.5E-02 $\pm$ 1.9E-01	U		<sup>155</sup> Eu	2.0E-02 $\pm$ 2.0E-01	U
	<sup>238</sup> Pu	-8.0E-03 $\pm$ 1.7E-02	U		<sup>238</sup> Pu	2.0E-02 $\pm$ 1.6E-02	U
	<sup>239,240</sup> Pu	1.4E-02 $\pm$ 9.4E-03			<sup>239,240</sup> Pu	1.5E-02 $\pm$ 9.1E-03	
	<sup>103</sup> Ru	-6.8E-04 $\pm$ 6.8E-03	U		<sup>103</sup> Ru	-6.1E-03 $\pm$ 5.2E-02	U
	<sup>106</sup> Ru	3.2E-01 $\pm$ 4.8E-01	U		<sup>106</sup> Ru	-1.4E-02 $\pm$ 1.4E-01	U
	<sup>125</sup> Sb	-2.8E-02 $\pm$ 1.5E-01	U		<sup>125</sup> Sb	-6.1E-02 $\pm$ 1.4E-01	U
	<sup>113</sup> Sn	-1.1E-02 $\pm$ 6.6E-02	U		<sup>113</sup> Sn	-3.7E-02 $\pm$ 6.7E-02	U
	<sup>90</sup> Sr	7.1E-02 $\pm$ 9.9E-02	U		<sup>90</sup> Sr	1.8E-01 $\pm$ 1.1E-01	
	<sup>234</sup> U	3.5E-02 $\pm$ 1.3E-02			<sup>234</sup> U	2.5E-02 $\pm$ 1.1E-02	
	<sup>235</sup> U	8.6E-03 $\pm$ 5.9E-03			<sup>235</sup> U	3.2E-03 $\pm$ 4.8E-03	U
	<sup>238</sup> U	4.8E-02 $\pm$ 1.6E-02			<sup>238</sup> U	1.7E-02 $\pm$ 9.3E-03	
	<sup>65</sup> Zn	-2.6E-02 $\pm$ 1.4E-01	U		<sup>65</sup> Zn	9.4E-02 $\pm$ 1.2E-01	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.

Table 3-5. 2001 Vegetation Sampling Results (pCi/g  $\pm$  total analytical uncertainty). (cont)

Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
V035 (200 West)	<sup>144</sup> Ce	-1.8E-01 $\pm$ 2.0E-01	U	V039 (200 West)	<sup>144</sup> Ce	-2.6E-01 $\pm$ 6.0E-01	U
	<sup>60</sup> Co	-1.6E-02 $\pm$ 2.9E-02	U		<sup>60</sup> Co	-1.1E-02 $\pm$ 6.7E-02	U
	<sup>134</sup> Cs	-4.5E-03 $\pm$ 2.8E-02	U		<sup>134</sup> Cs	-4.7E-02 $\pm$ 9.4E-02	U
	<sup>137</sup> Cs	8.6E-02 $\pm$ 4.1E-02			<sup>137</sup> Cs	1.2E-01 $\pm$ 1.0E-01	U
	<sup>152</sup> Eu	-3.4E-02 $\pm$ 9.2E-02	U		<sup>152</sup> Eu	1.4E-02 $\pm$ 1.4E-01	U
	<sup>154</sup> Eu	-1.4E-02 $\pm$ 9.4E-02	U		<sup>154</sup> Eu	-2.0E-01 $\pm$ 2.4E-01	U
	<sup>155</sup> Eu	2.1E-03 $\pm$ 2.1E-02	U		<sup>155</sup> Eu	-2.2E-01 $\pm$ 3.1E-01	U
	<sup>238</sup> Pu	4.5E-03 $\pm$ 1.1E-02	U		<sup>238</sup> Pu	-1.9E-03 $\pm$ 9.3E-03	U
	<sup>239,240</sup> Pu	2.7E-03 $\pm$ 4.1E-03	U		<sup>239,240</sup> Pu	1.3E-02 $\pm$ 8.7E-03	
	<sup>103</sup> Ru	5.3E-03 $\pm$ 3.0E-02	U		<sup>103</sup> Ru	1.6E-02 $\pm$ 7.5E-02	U
	<sup>106</sup> Ru	5.1E-02 $\pm$ 2.7E-01	U		<sup>106</sup> Ru	4.4E-02 $\pm$ 4.4E-01	U
	<sup>125</sup> Sb	3.1E-02 $\pm$ 8.1E-02	U		<sup>125</sup> Sb	9.6E-02 $\pm$ 2.2E-01	U
	<sup>113</sup> Sn	2.4E-04 $\pm$ 2.4E-03	U		<sup>113</sup> Sn	-1.3E-02 $\pm$ 1.1E-01	U
	<sup>90</sup> Sr	2.5E-01 $\pm$ 1.0E-01			<sup>90</sup> Sr	6.4E-01 $\pm$ 1.3E-01	
	<sup>234</sup> U	2.1E-02 $\pm$ 9.9E-03			<sup>234</sup> U	1.1E-02 $\pm$ 7.6E-03	
	<sup>235</sup> U	4.6E-03 $\pm$ 6.0E-03	U		<sup>235</sup> U	6.9E-03 $\pm$ 5.4E-03	
	<sup>238</sup> U	2.6E-02 $\pm$ 1.1E-02			<sup>238</sup> U	1.5E-02 $\pm$ 7.8E-03	
	<sup>65</sup> Zn	1.5E-02 $\pm$ 7.5E-02	U		<sup>65</sup> Zn	2.7E-01 $\pm$ 1.7E-01	U
Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
V041 (200 West)	<sup>144</sup> Ce	3.7E-02 $\pm$ 2.4E-01	U	V043 (200 West)	<sup>144</sup> Ce	-6.0E-03 $\pm$ 6.0E-02	U
	<sup>60</sup> Co	-1.4E-02 $\pm$ 3.2E-02	U		<sup>60</sup> Co	-2.1E-02 $\pm$ 3.4E-02	U
	<sup>134</sup> Cs	-5.8E-02 $\pm$ 5.8E-02	U		<sup>134</sup> Cs	2.9E-03 $\pm$ 2.9E-02	U
	<sup>137</sup> Cs	1.0E-01 $\pm$ 7.4E-02			<sup>137</sup> Cs	1.0E-01 $\pm$ 4.8E-02	
	<sup>152</sup> Eu	8.1E-04 $\pm$ 8.1E-03	U		<sup>152</sup> Eu	-2.6E-02 $\pm$ 9.6E-02	U
	<sup>154</sup> Eu	-7.0E-03 $\pm$ 7.0E-02	U		<sup>154</sup> Eu	-4.6E-02 $\pm$ 9.2E-02	U
	<sup>155</sup> Eu	4.3E-02 $\pm$ 1.2E-01	U		<sup>155</sup> Eu	1.8E-02 $\pm$ 1.0E-01	U
	<sup>238</sup> Pu	4.7E-03 $\pm$ 1.3E-02	U		<sup>238</sup> Pu	-1.8E-03 $\pm$ 1.1E-02	U
	<sup>239,240</sup> Pu	2.6E-02 $\pm$ 1.1E-02			<sup>239,240</sup> Pu	1.9E-02 $\pm$ 9.1E-03	
	<sup>103</sup> Ru	-5.3E-03 $\pm$ 3.3E-02	U		<sup>103</sup> Ru	2.8E-02 $\pm$ 3.1E-02	U
	<sup>106</sup> Ru	-1.0E-01 $\pm$ 3.1E-01	U		<sup>106</sup> Ru	-2.0E-01 $\pm$ 3.0E-01	U
	<sup>125</sup> Sb	1.3E-01 $\pm$ 9.7E-02	U		<sup>125</sup> Sb	1.2E-02 $\pm$ 8.4E-02	U
	<sup>113</sup> Sn	-8.0E-03 $\pm$ 4.4E-02	U		<sup>113</sup> Sn	3.6E-02 $\pm$ 4.0E-02	U
	<sup>90</sup> Sr	-3.7E-02 $\pm$ 9.3E-02	U		<sup>90</sup> Sr	-1.2E-01 $\pm$ 1.2E-01	U
	<sup>234</sup> U	4.8E-03 $\pm$ 6.2E-03	U		<sup>234</sup> U	2.7E-02 $\pm$ 1.1E-02	
	<sup>235</sup> U	5.2E-03 $\pm$ 4.7E-03			<sup>235</sup> U	1.7E-03 $\pm$ 2.4E-03	U
	<sup>238</sup> U	1.6E-02 $\pm$ 8.3E-03			<sup>238</sup> U	1.3E-02 $\pm$ 6.8E-03	
	<sup>65</sup> Zn	-1.3E-01 $\pm$ 1.3E-01	U		<sup>65</sup> Zn	-1.9E-01 $\pm$ 1.9E-01	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.

Table 3-5. 2001 Vegetation Sampling Results (pCi/g  $\pm$  total analytical uncertainty). (cont)

Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
V045 (200 West)	<sup>144</sup> Ce	-3.7E-02 $\pm$ 3.0E-01	U	V047 (200 West)	<sup>144</sup> Ce	-1.4E-02 $\pm$ 1.4E-01	U
	<sup>60</sup> Co	1.5E-02 $\pm$ 3.7E-02	U		<sup>60</sup> Co	1.9E-02 $\pm$ 2.8E-02	U
	<sup>134</sup> Cs	2.4E-02 $\pm$ 4.1E-02	U		<sup>134</sup> Cs	-5.3E-03 $\pm$ 2.8E-02	U
	<sup>137</sup> Cs	1.2E-01 $\pm$ 5.4E-02			<sup>137</sup> Cs	4.6E-02 $\pm$ 4.5E-02	U
	<sup>152</sup> Eu	-5.9E-02 $\pm$ 1.3E-01	U		<sup>152</sup> Eu	5.1E-02 $\pm$ 9.2E-02	U
	<sup>154</sup> Eu	5.9E-02 $\pm$ 1.4E-01	U		<sup>154</sup> Eu	-6.3E-02 $\pm$ 9.4E-02	U
	<sup>155</sup> Eu	-7.8E-02 $\pm$ 1.5E-01	U		<sup>155</sup> Eu	4.3E-02 $\pm$ 9.9E-02	U
	<sup>238</sup> Pu	-4.1E-03 $\pm$ 1.1E-02	U		<sup>238</sup> Pu	4.7E-03 $\pm$ 1.2E-02	U
	<sup>239,240</sup> Pu	1.9E-02 $\pm$ 9.5E-03			<sup>239,240</sup> Pu	1.3E-02 $\pm$ 7.4E-03	
	<sup>103</sup> Ru	-2.5E-03 $\pm$ 2.5E-02	U		<sup>103</sup> Ru	8.2E-03 $\pm$ 2.8E-02	U
	<sup>106</sup> Ru	4.7E-01 $\pm$ 4.2E-01	U		<sup>106</sup> Ru	1.1E-01 $\pm$ 2.5E-01	U
	<sup>125</sup> Sb	9.7E-02 $\pm$ 1.2E-01	U		<sup>125</sup> Sb	-9.0E-02 $\pm$ 9.0E-02	U
	<sup>113</sup> Sn	2.0E-02 $\pm$ 5.4E-02	U		<sup>113</sup> Sn	-2.1E-02 $\pm$ 4.0E-02	U
	<sup>90</sup> Sr	1.3E-01 $\pm$ 1.2E-01	U		<sup>90</sup> Sr	-8.5E-02 $\pm$ 1.0E-01	U
	<sup>234</sup> U	2.6E-02 $\pm$ 1.1E-02			<sup>234</sup> U	2.3E-02 $\pm$ 1.2E-02	
	<sup>235</sup> U	2.0E-03 $\pm$ 4.0E-03	U		<sup>235</sup> U	-1.2E-03 $\pm$ 5.4E-03	U
	<sup>238</sup> U	1.1E-02 $\pm$ 7.1E-03			<sup>238</sup> U	2.1E-02 $\pm$ 1.1E-02	
	<sup>65</sup> Zn	8.5E-02 $\pm$ 1.0E-01	U		<sup>65</sup> Zn	5.8E-03 $\pm$ 5.8E-02	U
Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
V049 (200 West)	<sup>144</sup> Ce	-6.9E-02 $\pm$ 1.4E-01	U	V051 (200 West)	<sup>144</sup> Ce	-1.9E-01 $\pm$ 2.3E-01	U
	<sup>60</sup> Co	7.9E-04 $\pm$ 7.9E-03	U		<sup>60</sup> Co	4.4E-03 $\pm$ 3.0E-02	U
	<sup>134</sup> Cs	1.5E-02 $\pm$ 1.9E-02	U		<sup>134</sup> Cs	-4.5E-03 $\pm$ 3.4E-02	U
	<sup>137</sup> Cs	8.6E-02 $\pm$ 4.0E-02			<sup>137</sup> Cs	9.5E-02 $\pm$ 6.6E-02	
	<sup>152</sup> Eu	2.7E-02 $\pm$ 5.9E-02	U		<sup>152</sup> Eu	5.6E-02 $\pm$ 1.0E-01	U
	<sup>154</sup> Eu	-8.9E-03 $\pm$ 7.1E-02	U		<sup>154</sup> Eu	4.1E-02 $\pm$ 1.0E-01	U
	<sup>155</sup> Eu	-2.2E-03 $\pm$ 2.2E-02	U		<sup>155</sup> Eu	1.9E-03 $\pm$ 1.9E-02	U
	<sup>238</sup> Pu	-1.6E-02 $\pm$ 1.6E-02	U		<sup>238</sup> Pu	-5.0E-03 $\pm$ 1.3E-02	U
	<sup>239,240</sup> Pu	1.9E-02 $\pm$ 9.1E-03			<sup>239,240</sup> Pu	1.7E-02 $\pm$ 9.7E-03	
	<sup>103</sup> Ru	9.4E-03 $\pm$ 2.0E-02	U		<sup>103</sup> Ru	-4.4E-02 $\pm$ 4.4E-02	U
	<sup>106</sup> Ru	-1.0E-01 $\pm$ 1.9E-01	U		<sup>106</sup> Ru	-2.4E-01 $\pm$ 3.4E-01	U
	<sup>125</sup> Sb	-5.5E-03 $\pm$ 5.5E-02	U		<sup>125</sup> Sb	-8.3E-03 $\pm$ 8.3E-02	U
	<sup>113</sup> Sn	2.0E-04 $\pm$ 2.0E-03	U		<sup>113</sup> Sn	1.1E-02 $\pm$ 4.2E-02	U
	<sup>90</sup> Sr	-4.4E-02 $\pm$ 1.0E-01	U		<sup>90</sup> Sr	-1.8E-01 $\pm$ 1.8E-01	U
	<sup>234</sup> U	2.0E-02 $\pm$ 9.8E-03			<sup>234</sup> U	1.2E-02 $\pm$ 9.0E-03	
	<sup>235</sup> U	5.8E-03 $\pm$ 4.9E-03			<sup>235</sup> U	1.9E-03 $\pm$ 3.8E-03	U
	<sup>238</sup> U	2.5E-02 $\pm$ 1.0E-02			<sup>238</sup> U	1.5E-02 $\pm$ 7.6E-03	
	<sup>65</sup> Zn	-2.0E-03 $\pm$ 2.0E-02	U		<sup>65</sup> Zn	-1.2E-01 $\pm$ 1.2E-01	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.

Table 3-5. 2001 Vegetation Sampling Results (pCi/g  $\pm$  total analytical uncertainty). (cont)

Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
V053 (200 East)	<sup>144</sup> Ce	2.9E-02 $\pm$ 2.1E-01	U	V055 (200 East)	<sup>144</sup> Ce	-3.3E-01 $\pm$ 3.3E-01	U
	<sup>60</sup> Co	1.5E-02 $\pm$ 3.3E-02	U		<sup>60</sup> Co	6.5E-04 $\pm$ 6.5E-03	U
	<sup>134</sup> Cs	1.8E-02 $\pm$ 3.1E-02	U		<sup>134</sup> Cs	4.0E-02 $\pm$ 6.0E-02	U
	<sup>137</sup> Cs	9.4E-02 $\pm$ 4.1E-02			<sup>137</sup> Cs	1.2E-01 $\pm$ 8.3E-02	
	<sup>152</sup> Eu	-7.7E-02 $\pm$ 9.2E-02	U		<sup>152</sup> Eu	5.4E-02 $\pm$ 1.7E-01	U
	<sup>154</sup> Eu	-1.7E-02 $\pm$ 9.7E-02	U		<sup>154</sup> Eu	8.7E-02 $\pm$ 1.7E-01	U
	<sup>155</sup> Eu	4.6E-02 $\pm$ 1.1E-01	U		<sup>155</sup> Eu	-9.4E-03 $\pm$ 9.4E-02	U
	<sup>238</sup> Pu	-4.9E-03 $\pm$ 1.1E-02	U		<sup>238</sup> Pu	-2.8E-03 $\pm$ 1.0E-02	U
	<sup>239,240</sup> Pu	2.0E-03 $\pm$ 5.6E-03	U		<sup>239,240</sup> Pu	-9.4E-04 $\pm$ 5.0E-03	U
	<sup>103</sup> Ru	-3.0E-03 $\pm$ 2.9E-02	U		<sup>103</sup> Ru	-4.1E-03 $\pm$ 4.1E-02	U
	<sup>106</sup> Ru	3.0E-01 $\pm$ 2.8E-01	U		<sup>106</sup> Ru	-5.1E-01 $\pm$ 5.1E-01	U
	<sup>125</sup> Sb	4.2E-03 $\pm$ 4.2E-02	U		<sup>125</sup> Sb	-4.2E-02 $\pm$ 1.3E-01	U
	<sup>113</sup> Sn	1.0E-02 $\pm$ 3.8E-02	U		<sup>113</sup> Sn	2.4E-02 $\pm$ 6.7E-02	U
	<sup>90</sup> Sr	1.3E-01 $\pm$ 1.0E-01			<sup>90</sup> Sr	1.1E-02 $\pm$ 8.2E-02	U
	<sup>234</sup> U	8.8E-03 $\pm$ 8.4E-03	U		<sup>234</sup> U	1.2E-02 $\pm$ 6.6E-03	
	<sup>235</sup> U	3.9E-03 $\pm$ 4.7E-03	U		<sup>235</sup> U	2.7E-03 $\pm$ 4.1E-03	U
	<sup>238</sup> U	2.0E-02 $\pm$ 9.2E-03			<sup>238</sup> U	1.1E-02 $\pm$ 6.5E-03	
	<sup>65</sup> Zn	6.6E-03 $\pm$ 6.6E-02	U		<sup>65</sup> Zn	9.3E-02 $\pm$ 1.2E-01	U
Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
V057 (200 East)	<sup>144</sup> Ce	-2.9E-01 $\pm$ 7.2E-01	U	V059 (200 East)	<sup>144</sup> Ce	2.5E-01 $\pm$ 7.0E-01	U
	<sup>60</sup> Co	-2.9E-02 $\pm$ 1.0E-01	U		<sup>60</sup> Co	4.2E-03 $\pm$ 4.2E-02	U
	<sup>134</sup> Cs	-1.6E-02 $\pm$ 9.6E-02	U		<sup>134</sup> Cs	1.5E-02 $\pm$ 1.1E-01	U
	<sup>137</sup> Cs	2.1E-01 $\pm$ 1.7E-01			<sup>137</sup> Cs	7.7E-02 $\pm$ 1.1E-01	U
	<sup>152</sup> Eu	2.1E-01 $\pm$ 2.9E-01	U		<sup>152</sup> Eu	-3.3E-02 $\pm$ 3.3E-01	U
	<sup>154</sup> Eu	-3.1E-02 $\pm$ 3.1E-01	U		<sup>154</sup> Eu	-8.4E-02 $\pm$ 2.5E-01	U
	<sup>155</sup> Eu	-2.6E-02 $\pm$ 2.6E-01	U		<sup>155</sup> Eu	4.5E-02 $\pm$ 3.9E-01	U
	<sup>238</sup> Pu	1.4E-02 $\pm$ 1.5E-02	U		<sup>238</sup> Pu	8.4E-03 $\pm$ 1.3E-02	U
	<sup>239,240</sup> Pu	3.9E-03 $\pm$ 5.5E-03	U		<sup>239,240</sup> Pu	8.4E-04 $\pm$ 8.4E-04	U
	<sup>103</sup> Ru	1.1E-01 $\pm$ 1.0E-01	U		<sup>103</sup> Ru	2.7E-02 $\pm$ 9.2E-02	U
	<sup>106</sup> Ru	6.0E-01 $\pm$ 9.6E-01	U		<sup>106</sup> Ru	-3.1E-01 $\pm$ 8.4E-01	U
	<sup>125</sup> Sb	-5.5E-02 $\pm$ 2.7E-01	U		<sup>125</sup> Sb	-6.8E-02 $\pm$ 2.7E-01	U
	<sup>113</sup> Sn	9.9E-02 $\pm$ 1.3E-01	U		<sup>113</sup> Sn	-1.1E-01 $\pm$ 1.2E-01	U
	<sup>90</sup> Sr	1.9E-01 $\pm$ 9.7E-02			<sup>90</sup> Sr	2.6E-01 $\pm$ 1.2E-01	
	<sup>234</sup> U	1.2E-02 $\pm$ 8.4E-03			<sup>234</sup> U	7.6E-03 $\pm$ 5.2E-03	
	<sup>235</sup> U	3.9E-03 $\pm$ 3.9E-03	U		<sup>235</sup> U	5.6E-03 $\pm$ 4.7E-03	
	<sup>238</sup> U	9.0E-03 $\pm$ 6.5E-03			<sup>238</sup> U	3.4E-03 $\pm$ 3.4E-03	U
	<sup>65</sup> Zn	-1.7E-01 $\pm$ 2.4E-01	U		<sup>65</sup> Zn	-8.7E-02 $\pm$ 2.3E-01	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.

Table 3-5. 2001 Vegetation Sampling Results (pCi/g  $\pm$  total analytical uncertainty). (cont)

Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
V061 (200 East)	<sup>144</sup> Ce	-1.8E-01 $\pm$ 3.1E-01	U	V063 (200 East)	<sup>144</sup> Ce	1.4E-01 $\pm$ 5.2E-01	U
	<sup>60</sup> Co	3.3E-02 $\pm$ 5.9E-02	U		<sup>60</sup> Co	-5.1E-02 $\pm$ 1.0E-01	U
	<sup>134</sup> Cs	-4.1E-02 $\pm$ 5.3E-02	U		<sup>134</sup> Cs	-1.3E-02 $\pm$ 1.2E-01	U
	<sup>137</sup> Cs	3.4E-02 $\pm$ 6.1E-02	U		<sup>137</sup> Cs	8.0E-02 $\pm$ 1.0E-01	U
	<sup>152</sup> Eu	9.2E-03 $\pm$ 9.2E-02	U		<sup>152</sup> Eu	2.2E-01 $\pm$ 2.9E-01	U
	<sup>154</sup> Eu	-8.8E-02 $\pm$ 1.8E-01	U		<sup>154</sup> Eu	7.0E-02 $\pm$ 3.4E-01	U
	<sup>155</sup> Eu	-9.9E-02 $\pm$ 1.6E-01	U		<sup>155</sup> Eu	8.8E-02 $\pm$ 3.2E-01	U
	<sup>238</sup> Pu	3.6E-03 $\pm$ 1.0E-02	U		<sup>238</sup> Pu	-7.2E-03 $\pm$ 1.8E-02	U
	<sup>239,240</sup> Pu	6.3E-03 $\pm$ 5.5E-03	U		<sup>239,240</sup> Pu	7.2E-03 $\pm$ 5.6E-03	
	<sup>103</sup> Ru	-1.1E-02 $\pm$ 4.8E-02	U		<sup>103</sup> Ru	-3.5E-02 $\pm$ 7.7E-02	U
	<sup>106</sup> Ru	3.5E-01 $\pm$ 4.5E-01	U		<sup>106</sup> Ru	2.3E-01 $\pm$ 8.1E-01	U
	<sup>125</sup> Sb	-7.2E-03 $\pm$ 7.2E-02	U		<sup>125</sup> Sb	-1.3E-01 $\pm$ 2.3E-01	U
	<sup>113</sup> Sn	2.5E-02 $\pm$ 5.8E-02	U		<sup>113</sup> Sn	-1.9E-02 $\pm$ 1.1E-01	U
	<sup>90</sup> Sr	3.2E-01 $\pm$ 1.3E-01			<sup>90</sup> Sr	4.6E+00 $\pm$ 6.9E-01	
	<sup>234</sup> U	1.9E-02 $\pm$ 8.9E-03			<sup>234</sup> U	1.1E-02 $\pm$ 9.6E-03	U
	<sup>235</sup> U	1.9E-03 $\pm$ 2.7E-03	U		<sup>235</sup> U	1.2E-03 $\pm$ 4.2E-03	U
	<sup>238</sup> U	2.3E-02 $\pm$ 9.9E-03			<sup>238</sup> U	1.3E-02 $\pm$ 7.9E-03	
	<sup>65</sup> Zn	-9.0E-02 $\pm$ 1.4E-01	U		<sup>65</sup> Zn	-5.0E-01 $\pm$ 5.0E-01	U
Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
V065 (200 East)	<sup>144</sup> Ce	-2.2E-01 $\pm$ 1.6E+00	U	V067 (200 East)	<sup>144</sup> Ce	-2.7E-01 $\pm$ 4.9E-01	U
	<sup>60</sup> Co	9.8E-02 $\pm$ 2.4E-01	U		<sup>60</sup> Co	-4.5E-02 $\pm$ 1.1E-01	U
	<sup>134</sup> Cs	-5.1E-02 $\pm$ 2.4E-01	U		<sup>134</sup> Cs	-2.8E-02 $\pm$ 1.1E-01	U
	<sup>137</sup> Cs	8.0E-01 $\pm$ 3.0E-01			<sup>137</sup> Cs	-8.0E-03 $\pm$ 8.0E-02	U
	<sup>152</sup> Eu	-5.8E-01 $\pm$ 7.0E-01	U		<sup>152</sup> Eu	-3.6E-01 $\pm$ 3.6E-01	U
	<sup>154</sup> Eu	-9.1E-01 $\pm$ 9.1E-01	U		<sup>154</sup> Eu	-1.0E-01 $\pm$ 3.3E-01	U
	<sup>155</sup> Eu	5.3E-01 $\pm$ 8.5E-01	U		<sup>155</sup> Eu	-1.8E-01 $\pm$ 2.5E-01	U
	<sup>238</sup> Pu	3.2E-03 $\pm$ 1.8E-02	U		<sup>238</sup> Pu	1.0E-03 $\pm$ 2.0E-03	U
	<sup>239,240</sup> Pu	5.3E-03 $\pm$ 6.4E-03	U		<sup>239,240</sup> Pu	9.1E-03 $\pm$ 6.2E-03	
	<sup>103</sup> Ru	6.0E-03 $\pm$ 6.0E-02	U		<sup>103</sup> Ru	-3.1E-02 $\pm$ 8.1E-02	U
	<sup>106</sup> Ru	1.1E+00 $\pm$ 2.0E+00	U		<sup>106</sup> Ru	5.4E-01 $\pm$ 7.6E-01	U
	<sup>125</sup> Sb	-5.2E-01 $\pm$ 5.7E-01	U		<sup>125</sup> Sb	-6.9E-02 $\pm$ 2.1E-01	U
	<sup>113</sup> Sn	2.3E-01 $\pm$ 2.8E-01	U		<sup>113</sup> Sn	-3.4E-02 $\pm$ 1.0E-01	U
	<sup>90</sup> Sr	4.1E+00 $\pm$ 4.9E-01			<sup>90</sup> Sr	2.6E+00 $\pm$ 5.2E-01	
	<sup>234</sup> U	1.1E-02 $\pm$ 1.0E-02	U		<sup>234</sup> U	1.4E-02 $\pm$ 1.1E-02	
	<sup>235</sup> U	3.2E-03 $\pm$ 4.8E-03	U		<sup>235</sup> U	-3.0E-03 $\pm$ 4.2E-03	U
	<sup>238</sup> U	2.4E-02 $\pm$ 1.1E-02			<sup>238</sup> U	1.4E-02 $\pm$ 9.2E-03	
	<sup>65</sup> Zn	-3.2E-01 $\pm$ 5.8E-01	U		<sup>65</sup> Zn	-1.1E-01 $\pm$ 2.4E-01	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.

Table 3-5. 2001 Vegetation Sampling Results (pCi/g  $\pm$  total analytical uncertainty). (cont)

Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
V075 (200 East)	<sup>144</sup> Ce	-4.5E-01 $\pm$ 4.9E-01	U	V077 (200 East)	<sup>144</sup> Ce	-1.5E-01 $\pm$ 4.7E-01	U
	<sup>60</sup> Co	3.2E-02 $\pm$ 7.4E-02	U		<sup>60</sup> Co	-2.4E-02 $\pm$ 1.2E-01	U
	<sup>134</sup> Cs	-9.1E-02 $\pm$ 9.1E-02	U		<sup>134</sup> Cs	2.9E-02 $\pm$ 9.6E-02	U
	<sup>137</sup> Cs	1.5E-02 $\pm$ 7.9E-02	U		<sup>137</sup> Cs	2.2E-02 $\pm$ 9.7E-02	U
	<sup>152</sup> Eu	-2.7E-01 $\pm$ 2.7E-01	U		<sup>152</sup> Eu	-2.1E-02 $\pm$ 2.1E-01	U
	<sup>154</sup> Eu	1.6E-01 $\pm$ 2.2E-01	U		<sup>154</sup> Eu	-1.5E-02 $\pm$ 1.5E-01	U
	<sup>155</sup> Eu	-2.5E-01 $\pm$ 3.0E-01	U		<sup>155</sup> Eu	-1.2E-01 $\pm$ 2.6E-01	U
	<sup>238</sup> Pu	1.1E-02 $\pm$ 1.3E-02	U		<sup>238</sup> Pu	1.0E-02 $\pm$ 1.6E-02	U
	<sup>239,240</sup> Pu	3.9E-03 $\pm$ 3.5E-03			<sup>239,240</sup> Pu	3.8E-03 $\pm$ 5.7E-03	U
	<sup>103</sup> Ru	5.8E-02 $\pm$ 7.0E-02	U		<sup>103</sup> Ru	1.6E-02 $\pm$ 8.0E-02	U
	<sup>106</sup> Ru	4.0E-01 $\pm$ 7.2E-01	U		<sup>106</sup> Ru	-4.2E-01 $\pm$ 8.4E-01	U
	<sup>125</sup> Sb	1.0E-01 $\pm$ 1.9E-01	U		<sup>125</sup> Sb	-2.1E-01 $\pm$ 2.1E-01	U
	<sup>113</sup> Sn	1.1E-02 $\pm$ 9.3E-02	U		<sup>113</sup> Sn	1.2E-02 $\pm$ 9.7E-02	U
	<sup>90</sup> Sr	6.7E-02 $\pm$ 9.4E-02	U		<sup>90</sup> Sr	7.1E-01 $\pm$ 1.4E-01	
	<sup>234</sup> U	1.7E-02 $\pm$ 8.5E-03			<sup>234</sup> U	1.5E-02 $\pm$ 1.0E-02	
	<sup>235</sup> U	3.4E-03 $\pm$ 3.4E-03	U		<sup>235</sup> U	1.1E-03 $\pm$ 1.1E-02	U
	<sup>238</sup> U	4.6E-03 $\pm$ 4.4E-03	U		<sup>238</sup> U	1.3E-02 $\pm$ 7.9E-03	
	<sup>65</sup> Zn	8.4E-02 $\pm$ 1.8E-01	U		<sup>65</sup> Zn	4.3E-02 $\pm$ 2.6E-01	U
Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
V079 (200 East)	<sup>144</sup> Ce	8.9E-02 $\pm$ 3.9E-01	U	V081 (600 Area)	<sup>144</sup> Ce	-4.2E-01 $\pm$ 7.1E-01	U
	<sup>60</sup> Co	7.7E-02 $\pm$ 7.0E-02	U		<sup>60</sup> Co	4.9E-02 $\pm$ 1.2E-01	U
	<sup>134</sup> Cs	-2.5E-02 $\pm$ 6.5E-02	U		<sup>134</sup> Cs	1.7E-02 $\pm$ 1.2E-01	U
	<sup>137</sup> Cs	8.6E-02 $\pm$ 6.2E-02	U		<sup>137</sup> Cs	-1.6E-03 $\pm$ 1.6E-02	U
	<sup>152</sup> Eu	-3.7E-02 $\pm$ 1.8E-01	U		<sup>152</sup> Eu	-1.4E-01 $\pm$ 3.8E-01	U
	<sup>154</sup> Eu	-1.5E-01 $\pm$ 2.7E-01	U		<sup>154</sup> Eu	1.5E-01 $\pm$ 2.7E-01	U
	<sup>155</sup> Eu	-1.5E-01 $\pm$ 2.1E-01	U		<sup>155</sup> Eu	-3.5E-02 $\pm$ 3.5E-01	U
	<sup>238</sup> Pu	2.0E-03 $\pm$ 1.5E-02	U		<sup>238</sup> Pu	1.7E-02 $\pm$ 1.5E-02	U
	<sup>239,240</sup> Pu	2.0E-03 $\pm$ 4.0E-03	U		<sup>239,240</sup> Pu	4.5E-03 $\pm$ 7.6E-03	U
	<sup>103</sup> Ru	-7.5E-03 $\pm$ 5.6E-02	U		<sup>103</sup> Ru	-2.6E-02 $\pm$ 9.6E-02	U
	<sup>106</sup> Ru	-2.4E-01 $\pm$ 5.8E-01	U		<sup>106</sup> Ru	-5.7E-01 $\pm$ 9.7E-01	U
	<sup>125</sup> Sb	9.4E-02 $\pm$ 1.7E-01	U		<sup>125</sup> Sb	1.5E-01 $\pm$ 2.7E-01	U
	<sup>113</sup> Sn	1.1E-02 $\pm$ 7.8E-02	U		<sup>113</sup> Sn	-1.5E-02 $\pm$ 1.4E-01	U
	<sup>90</sup> Sr	8.0E-02 $\pm$ 9.6E-02	U		<sup>90</sup> Sr	8.8E-02 $\pm$ 1.1E-01	U
	<sup>234</sup> U	9.8E-03 $\pm$ 7.1E-03			<sup>234</sup> U	9.3E-03 $\pm$ 6.7E-03	
	<sup>235</sup> U	9.8E-04 $\pm$ 9.8E-03	U		<sup>235</sup> U	4.0E-03 $\pm$ 4.8E-03	U
	<sup>238</sup> U	5.9E-03 $\pm$ 6.5E-03	U		<sup>238</sup> U	3.7E-03 $\pm$ 4.4E-03	U
	<sup>65</sup> Zn	-1.5E-02 $\pm$ 1.5E-01	U		<sup>65</sup> Zn	-9.6E-02 $\pm$ 2.8E-01	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.

Table 3-5. 2001 Vegetation Sampling Results (pCi/g  $\pm$  total analytical uncertainty). (cont)

Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
V083 (600 Area)	<sup>144</sup> Ce	-6.6E-02 $\pm$ 4.0E-01	U	V085 (600 Area)	<sup>144</sup> Ce	5.1E-02 $\pm$ 4.0E-01	U
	<sup>60</sup> Co	-4.3E-02 $\pm$ 5.2E-02	U		<sup>60</sup> Co	-1.5E-02 $\pm$ 6.3E-02	U
	<sup>134</sup> Cs	6.5E-02 $\pm$ 6.5E-02	U		<sup>134</sup> Cs	3.7E-02 $\pm$ 7.0E-02	U
	<sup>137</sup> Cs	6.6E-02 $\pm$ 5.3E-02	U		<sup>137</sup> Cs	5.8E-02 $\pm$ 7.0E-02	U
	<sup>152</sup> Eu	3.3E-02 $\pm$ 1.9E-01	U		<sup>152</sup> Eu	-7.1E-02 $\pm$ 2.0E-01	U
	<sup>154</sup> Eu	-5.0E-02 $\pm$ 1.9E-01	U		<sup>154</sup> Eu	2.7E-02 $\pm$ 2.0E-01	U
	<sup>155</sup> Eu	-7.4E-02 $\pm$ 2.2E-01	U		<sup>155</sup> Eu	1.2E-01 $\pm$ 2.2E-01	U
	<sup>238</sup> Pu	-2.9E-03 $\pm$ 1.3E-02	U		<sup>238</sup> Pu	3.1E-03 $\pm$ 1.4E-02	U
	<sup>239,240</sup> Pu	5.8E-03 $\pm$ 4.9E-03			<sup>239,240</sup> Pu	3.1E-03 $\pm$ 4.7E-03	U
	<sup>103</sup> Ru	5.7E-03 $\pm$ 5.2E-02	U		<sup>103</sup> Ru	1.6E-01 $\pm$ 1.3E-01	U
	<sup>106</sup> Ru	-1.7E-01 $\pm$ 5.3E-01	U		<sup>106</sup> Ru	-1.6E-01 $\pm$ 6.1E-01	U
	<sup>125</sup> Sb	-1.1E-02 $\pm$ 1.1E-01	U		<sup>125</sup> Sb	-3.8E-02 $\pm$ 1.6E-01	U
	<sup>113</sup> Sn	5.4E-03 $\pm$ 5.4E-02	U		<sup>113</sup> Sn	5.0E-02 $\pm$ 8.0E-02	U
	<sup>90</sup> Sr	-6.9E-03 $\pm$ 6.9E-02	U		<sup>90</sup> Sr	1.6E-01 $\pm$ 1.1E-01	
	<sup>234</sup> U	9.4E-03 $\pm$ 5.9E-03			<sup>234</sup> U	9.1E-03 $\pm$ 6.0E-03	
	<sup>235</sup> U	7.5E-03 $\pm$ 5.5E-03			<sup>235</sup> U	6.0E-03 $\pm$ 5.8E-03	U
	<sup>238</sup> U	1.3E-02 $\pm$ 7.1E-03			<sup>238</sup> U	3.6E-03 $\pm$ 4.3E-03	U
	<sup>65</sup> Zn	-6.7E-02 $\pm$ 1.5E-01	U		<sup>65</sup> Zn	-1.3E-01 $\pm$ 1.9E-01	U
Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
V087 (600 Area)	<sup>144</sup> Ce	4.8E-01 $\pm$ 6.7E-01	U	V089 (600 Area)	<sup>144</sup> Ce	1.9E-01 $\pm$ 5.3E-01	U
	<sup>60</sup> Co	7.6E-03 $\pm$ 7.6E-02	U		<sup>60</sup> Co	2.0E-02 $\pm$ 6.0E-02	U
	<sup>134</sup> Cs	5.7E-03 $\pm$ 5.7E-02	U		<sup>134</sup> Cs	2.4E-02 $\pm$ 7.9E-02	U
	<sup>137</sup> Cs	-2.9E-02 $\pm$ 1.5E-01	U		<sup>137</sup> Cs	7.3E-02 $\pm$ 8.8E-02	U
	<sup>152</sup> Eu	5.6E-02 $\pm$ 3.5E-01	U		<sup>152</sup> Eu	-1.5E-01 $\pm$ 2.7E-01	U
	<sup>154</sup> Eu	-1.1E-01 $\pm$ 3.3E-01	U		<sup>154</sup> Eu	-2.5E-03 $\pm$ 2.5E-02	U
	<sup>155</sup> Eu	-1.6E-01 $\pm$ 3.5E-01	U		<sup>155</sup> Eu	-5.1E-02 $\pm$ 2.8E-01	U
	<sup>238</sup> Pu	-3.7E-03 $\pm$ 9.6E-03	U		<sup>238</sup> Pu	9.7E-04 $\pm$ 9.7E-03	U
	<sup>239,240</sup> Pu	9.2E-04 $\pm$ 9.2E-03	U		<sup>239,240</sup> Pu	2.9E-03 $\pm$ 3.5E-03	U
	<sup>103</sup> Ru	-4.6E-02 $\pm$ 1.0E-01	U		<sup>103</sup> Ru	2.3E-02 $\pm$ 6.7E-02	U
	<sup>106</sup> Ru	-7.3E-01 $\pm$ 1.1E+00	U		<sup>106</sup> Ru	6.8E-02 $\pm$ 6.1E-01	U
	<sup>125</sup> Sb	1.0E-01 $\pm$ 3.0E-01	U		<sup>125</sup> Sb	3.0E-02 $\pm$ 1.9E-01	U
	<sup>113</sup> Sn	-4.1E-02 $\pm$ 1.4E-01	U		<sup>113</sup> Sn	1.2E-01 $\pm$ 9.7E-02	U
	<sup>90</sup> Sr	1.8E-01 $\pm$ 1.3E-01			<sup>90</sup> Sr	9.5E-02 $\pm$ 1.0E-01	U
	<sup>234</sup> U	6.0E-03 $\pm$ 5.3E-03	U		<sup>234</sup> U	1.7E-02 $\pm$ 9.0E-03	
	<sup>235</sup> U	8.5E-04 $\pm$ 8.5E-03	U		<sup>235</sup> U	6.2E-03 $\pm$ 6.0E-03	U
	<sup>238</sup> U	7.7E-03 $\pm$ 6.3E-03	U		<sup>238</sup> U	1.1E-02 $\pm$ 8.0E-03	
	<sup>65</sup> Zn	3.1E-02 $\pm$ 3.0E-01	U		<sup>65</sup> Zn	-4.0E-02 $\pm$ 1.8E-01	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.



Table 3-5. 2001 Vegetation Sampling Results (pCi/g  $\pm$  total analytical uncertainty). (cont)

Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
V091 (600 Area)	<sup>144</sup> Ce	1.5E-01 $\pm$ 1.8E-01	U	V093 (600 Area)	<sup>144</sup> Ce	-4.1E-02 $\pm$ 3.2E-01	U
	<sup>60</sup> Co	-6.7E-03 $\pm$ 2.3E-02	U		<sup>60</sup> Co	1.1E-02 $\pm$ 4.6E-02	U
	<sup>134</sup> Cs	9.1E-04 $\pm$ 9.1E-03	U		<sup>134</sup> Cs	-3.5E-02 $\pm$ 4.9E-02	U
	<sup>137</sup> Cs	2.5E-01 $\pm$ 5.5E-02			<sup>137</sup> Cs	-1.5E-02 $\pm$ 4.9E-02	U
	<sup>152</sup> Eu	5.4E-02 $\pm$ 7.6E-02	U		<sup>152</sup> Eu	1.3E-02 $\pm$ 1.3E-01	U
	<sup>154</sup> Eu	1.8E-02 $\pm$ 7.7E-02	U		<sup>154</sup> Eu	6.1E-02 $\pm$ 1.2E-01	U
	<sup>155</sup> Eu	3.9E-02 $\pm$ 8.6E-02	U		<sup>155</sup> Eu	4.8E-02 $\pm$ 1.6E-01	U
	<sup>238</sup> Pu	1.9E-03 $\pm$ 1.5E-02	U		<sup>238</sup> Pu	-2.2E-02 $\pm$ 2.2E-02	U
	<sup>239,240</sup> Pu	1.9E-03 $\pm$ 4.7E-03	U		<sup>239,240</sup> Pu	1.9E-03 $\pm$ 4.7E-03	U
	<sup>103</sup> Ru	-1.5E-02 $\pm$ 2.4E-02	U		<sup>103</sup> Ru	1.1E-02 $\pm$ 4.9E-02	U
	<sup>106</sup> Ru	-1.3E-01 $\pm$ 2.3E-01	U		<sup>106</sup> Ru	7.3E-04 $\pm$ 7.3E-03	U
	<sup>125</sup> Sb	5.3E-02 $\pm$ 6.9E-02	U		<sup>125</sup> Sb	1.1E-01 $\pm$ 1.3E-01	U
	<sup>113</sup> Sn	2.2E-02 $\pm$ 3.3E-02	U		<sup>113</sup> Sn	-5.0E-02 $\pm$ 6.5E-02	U
	<sup>90</sup> Sr	2.2E-01 $\pm$ 1.1E-01			<sup>90</sup> Sr	1.7E-01 $\pm$ 1.2E-01	
	<sup>234</sup> U	1.6E-02 $\pm$ 9.6E-03			<sup>234</sup> U	5.0E-03 $\pm$ 4.2E-03	
	<sup>235</sup> U	2.9E-03 $\pm$ 5.2E-03	U		<sup>235</sup> U	8.3E-04 $\pm$ 8.3E-03	U
	<sup>238</sup> U	2.4E-02 $\pm$ 1.1E-02			<sup>238</sup> U	5.8E-03 $\pm$ 4.5E-03	
	<sup>65</sup> Zn	-1.4E-01 $\pm$ 1.4E-01	U		<sup>65</sup> Zn	-3.1E-01 $\pm$ 3.1E-01	U
Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
V095 (600 Area)	<sup>144</sup> Ce	9.1E-02 $\pm$ 1.5E-01	U	V097 (600 Area)	<sup>144</sup> Ce	-1.4E-02 $\pm$ 4.2E-02	U
	<sup>60</sup> Co	1.7E-02 $\pm$ 2.2E-02	U		<sup>60</sup> Co	-8.4E-04 $\pm$ 8.4E-03	U
	<sup>134</sup> Cs	-6.3E-03 $\pm$ 2.1E-02	U		<sup>134</sup> Cs	-2.8E-04 $\pm$ 2.8E-03	U
	<sup>137</sup> Cs	3.7E-02 $\pm$ 2.5E-02	U		<sup>137</sup> Cs	1.3E-02 $\pm$ 1.1E-02	U
	<sup>152</sup> Eu	-2.2E-02 $\pm$ 6.4E-02	U		<sup>152</sup> Eu	-2.6E-02 $\pm$ 2.6E-02	U
	<sup>154</sup> Eu	-2.2E-02 $\pm$ 8.4E-02	U		<sup>154</sup> Eu	-1.8E-03 $\pm$ 1.8E-02	U
	<sup>155</sup> Eu	6.0E-02 $\pm$ 7.8E-02	U		<sup>155</sup> Eu	-4.0E-03 $\pm$ 2.1E-02	U
	<sup>238</sup> Pu	3.7E-03 $\pm$ 1.1E-02	U		<sup>238</sup> Pu	-1.1E-03 $\pm$ 1.1E-02	U
	<sup>239,240</sup> Pu	1.0E-02 $\pm$ 6.3E-03			<sup>239,240</sup> Pu	7.4E-03 $\pm$ 5.8E-03	
	<sup>103</sup> Ru	1.0E-03 $\pm$ 1.0E-02	U		<sup>103</sup> Ru	-1.1E-02 $\pm$ 1.1E-02	U
	<sup>106</sup> Ru	-2.3E-01 $\pm$ 2.3E-01	U		<sup>106</sup> Ru	3.0E-02 $\pm$ 9.0E-02	U
	<sup>125</sup> Sb	9.2E-04 $\pm$ 9.2E-03	U		<sup>125</sup> Sb	-2.1E-02 $\pm$ 2.3E-02	U
	<sup>113</sup> Sn	-1.2E-03 $\pm$ 1.2E-02	U		<sup>113</sup> Sn	1.1E-02 $\pm$ 9.8E-03	U
	<sup>90</sup> Sr	2.0E-01 $\pm$ 1.1E-01			<sup>90</sup> Sr	1.9E-02 $\pm$ 9.3E-02	U
	<sup>234</sup> U	1.7E-02 $\pm$ 9.0E-03			<sup>234</sup> U	2.7E-02 $\pm$ 1.2E-02	
	<sup>235</sup> U	6.2E-03 $\pm$ 7.4E-03	U		<sup>235</sup> U	2.1E-03 $\pm$ 2.9E-03	U
	<sup>238</sup> U	6.6E-03 $\pm$ 5.1E-03			<sup>238</sup> U	2.1E-02 $\pm$ 9.9E-03	
	<sup>65</sup> Zn	-9.3E-02 $\pm$ 9.3E-02	U		<sup>65</sup> Zn	-1.7E-02 $\pm$ 2.4E-02	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.

Table 3-5. 2001 Vegetation Sampling Results (pCi/g  $\pm$  total analytical uncertainty). (cont)

Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
V099 (600 Area)	<sup>144</sup> Ce	3.9E-02 $\pm$ 3.1E-01	U	V101 (600 Area)	<sup>144</sup> Ce	-3.2E-02 $\pm$ 2.4E-01	U
	<sup>60</sup> Co	-1.2E-02 $\pm$ 4.0E-02	U		<sup>60</sup> Co	4.2E-02 $\pm$ 3.8E-02	U
	<sup>134</sup> Cs	-1.6E-03 $\pm$ 1.6E-02	U		<sup>134</sup> Cs	-1.3E-02 $\pm$ 4.2E-02	U
	<sup>137</sup> Cs	1.2E-01 $\pm$ 7.3E-02			<sup>137</sup> Cs	9.0E-03 $\pm$ 4.0E-02	U
	<sup>152</sup> Eu	-5.7E-02 $\pm$ 1.4E-01	U		<sup>152</sup> Eu	-5.0E-03 $\pm$ 5.0E-02	U
	<sup>154</sup> Eu	-6.6E-02 $\pm$ 1.5E-01	U		<sup>154</sup> Eu	-1.7E-02 $\pm$ 1.1E-01	U
	<sup>155</sup> Eu	-6.0E-02 $\pm$ 1.7E-01	U		<sup>155</sup> Eu	3.1E-02 $\pm$ 1.3E-01	U
	<sup>238</sup> Pu	-2.7E-03 $\pm$ 9.7E-03	U		<sup>238</sup> Pu	4.8E-03 $\pm$ 1.4E-02	U
	<sup>239,240</sup> Pu	3.6E-03 $\pm$ 3.6E-03	U		<sup>239,240</sup> Pu	8.7E-03 $\pm$ 6.6E-03	
	<sup>103</sup> Ru	2.1E-02 $\pm$ 4.2E-02	U		<sup>103</sup> Ru	2.5E-02 $\pm$ 4.0E-02	U
	<sup>106</sup> Ru	-3.7E-02 $\pm$ 3.7E-01	U		<sup>106</sup> Ru	-1.0E-02 $\pm$ 1.0E-01	U
	<sup>125</sup> Sb	-3.1E-02 $\pm$ 1.1E-01	U		<sup>125</sup> Sb	7.5E-02 $\pm$ 9.8E-02	U
	<sup>113</sup> Sn	-4.8E-02 $\pm$ 5.8E-02	U		<sup>113</sup> Sn	6.2E-03 $\pm$ 4.4E-02	U
	<sup>90</sup> Sr	2.0E+00 $\pm$ 3.0E-01			<sup>90</sup> Sr	1.1E-01 $\pm$ 1.0E-01	U
	<sup>234</sup> U	2.2E-02 $\pm$ 1.1E-02			<sup>234</sup> U	1.4E-02 $\pm$ 7.7E-03	
	<sup>235</sup> U	4.9E-03 $\pm$ 4.5E-03			<sup>235</sup> U	5.2E-03 $\pm$ 4.7E-03	
	<sup>238</sup> U	2.3E-02 $\pm$ 1.1E-02			<sup>238</sup> U	1.4E-02 $\pm$ 7.7E-03	
	<sup>65</sup> Zn	-1.4E-01 $\pm$ 1.4E-01	U		<sup>65</sup> Zn	6.6E-02 $\pm$ 9.2E-02	U
Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
V103 (600 Area)	<sup>144</sup> Ce	-2.7E-02 $\pm$ 2.7E-01	U	V105 (600 Area)	<sup>144</sup> Ce	8.3E-02 $\pm$ 5.4E-01	U
	<sup>60</sup> Co	1.7E-02 $\pm$ 4.4E-02	U		<sup>60</sup> Co	5.9E-02 $\pm$ 9.4E-02	U
	<sup>134</sup> Cs	6.4E-02 $\pm$ 7.0E-02	U		<sup>134</sup> Cs	1.9E-02 $\pm$ 9.7E-02	U
	<sup>137</sup> Cs	1.0E-01 $\pm$ 6.0E-02	U		<sup>137</sup> Cs	1.9E-02 $\pm$ 9.9E-02	U
	<sup>152</sup> Eu	-1.7E-01 $\pm$ 1.7E-01	U		<sup>152</sup> Eu	8.2E-03 $\pm$ 8.2E-02	U
	<sup>154</sup> Eu	-9.4E-02 $\pm$ 1.4E-01	U		<sup>154</sup> Eu	8.7E-03 $\pm$ 8.7E-02	U
	<sup>155</sup> Eu	4.7E-02 $\pm$ 1.9E-01	U		<sup>155</sup> Eu	6.9E-03 $\pm$ 6.9E-02	U
	<sup>238</sup> Pu	-4.8E-03 $\pm$ 1.3E-02	U		<sup>238</sup> Pu	6.9E-03 $\pm$ 1.2E-02	U
	<sup>239,240</sup> Pu	3.1E-02 $\pm$ 1.2E-02			<sup>239,240</sup> Pu	4.4E-02 $\pm$ 1.5E-02	
	<sup>103</sup> Ru	1.5E-02 $\pm$ 5.5E-02	U		<sup>103</sup> Ru	-1.7E-03 $\pm$ 1.7E-02	U
	<sup>106</sup> Ru	-2.3E-01 $\pm$ 5.1E-01	U		<sup>106</sup> Ru	-8.5E-01 $\pm$ 8.5E-01	U
	<sup>125</sup> Sb	4.6E-02 $\pm$ 1.5E-01	U		<sup>125</sup> Sb	-8.4E-03 $\pm$ 8.4E-02	U
	<sup>113</sup> Sn	4.8E-02 $\pm$ 6.7E-02	U		<sup>113</sup> Sn	5.6E-02 $\pm$ 1.1E-01	U
	<sup>90</sup> Sr	-1.4E-01 $\pm$ 1.4E-01	U		<sup>90</sup> Sr	5.0E-01 $\pm$ 1.3E-01	
	<sup>234</sup> U	1.6E-02 $\pm$ 8.5E-03			<sup>234</sup> U	1.1E-02 $\pm$ 6.7E-03	
	<sup>235</sup> U	1.1E-03 $\pm$ 3.8E-03	U		<sup>235</sup> U	2.0E-03 $\pm$ 4.0E-03	U
	<sup>238</sup> U	9.8E-03 $\pm$ 6.5E-03			<sup>238</sup> U	8.3E-03 $\pm$ 6.8E-03	U
	<sup>65</sup> Zn	-9.4E-02 $\pm$ 1.3E-01	U		<sup>65</sup> Zn	-7.5E-02 $\pm$ 4.1E-01	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.

Table 3-5. 2001 Vegetation Sampling Results (pCi/g  $\pm$  total analytical uncertainty). (cont)

Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
V109 (600 Area)	<sup>144</sup> Ce	1.4E-01 $\pm$ 4.2E-01	U	V111 (Duplicate of V007)	<sup>144</sup> Ce	-1.6E-01 $\pm$ 4.6E-01	U
	<sup>60</sup> Co	2.9E-02 $\pm$ 5.8E-02	U		<sup>60</sup> Co	6.1E-02 $\pm$ 5.6E-02	U
	<sup>134</sup> Cs	3.0E-02 $\pm$ 5.1E-02	U		<sup>134</sup> Cs	6.4E-02 $\pm$ 6.3E-02	U
	<sup>137</sup> Cs	1.0E-01 $\pm$ 6.8E-02	U		<sup>137</sup> Cs	1.4E-01 $\pm$ 6.4E-02	
	<sup>152</sup> Eu	1.5E-03 $\pm$ 1.5E-02	U		<sup>152</sup> Eu	-2.0E-01 $\pm$ 2.2E-01	U
	<sup>154</sup> Eu	-7.5E-02 $\pm$ 1.7E-01	U		<sup>154</sup> Eu	8.3E-02 $\pm$ 2.1E-01	U
	<sup>155</sup> Eu	1.6E-01 $\pm$ 2.2E-01	U		<sup>155</sup> Eu	-1.5E-01 $\pm$ 2.5E-01	U
	<sup>238</sup> Pu	3.7E-03 $\pm$ 1.2E-02	U		<sup>238</sup> Pu	1.5E-02 $\pm$ 1.4E-02	U
	<sup>239,240</sup> Pu	1.4E-02 $\pm$ 7.7E-03			<sup>239,240</sup> Pu	1.2E-02 $\pm$ 7.1E-03	
	<sup>103</sup> Ru	1.4E-02 $\pm$ 5.3E-02	U		<sup>103</sup> Ru	-3.6E-04 $\pm$ 3.6E-03	U
	<sup>106</sup> Ru	-2.6E-01 $\pm$ 4.9E-01	U		<sup>106</sup> Ru	-1.5E-02 $\pm$ 1.5E-01	U
	<sup>125</sup> Sb	9.2E-02 $\pm$ 1.6E-01	U		<sup>125</sup> Sb	-5.9E-02 $\pm$ 1.7E-01	U
	<sup>113</sup> Sn	-3.0E-02 $\pm$ 7.2E-02	U		<sup>113</sup> Sn	4.8E-02 $\pm$ 8.2E-02	U
	<sup>90</sup> Sr	-4.9E-02 $\pm$ 8.3E-02	U		<sup>90</sup> Sr	3.4E-02 $\pm$ 9.5E-02	U
	<sup>234</sup> U	2.6E-02 $\pm$ 1.1E-02			<sup>234</sup> U	5.4E-02 $\pm$ 1.7E-02	
	<sup>235</sup> U	8.2E-03 $\pm$ 6.6E-03			<sup>235</sup> U	2.6E-03 $\pm$ 6.8E-03	U
	<sup>238</sup> U	2.2E-02 $\pm$ 1.0E-02			<sup>238</sup> U	3.4E-02 $\pm$ 1.3E-02	
	<sup>65</sup> Zn	-2.2E-01 $\pm$ 2.2E-01	U		<sup>65</sup> Zn	-4.8E-02 $\pm$ 1.5E-01	U
Location	Isotope	Result $\pm$ Uncertainty	RQ*				
V113 (Duplicate of V083)	<sup>144</sup> Ce	6.7E-04 $\pm$ 6.7E-03	U				
	<sup>60</sup> Co	2.6E-03 $\pm$ 2.6E-02	U				
	<sup>134</sup> Cs	-3.4E-02 $\pm$ 4.4E-02	U				
	<sup>137</sup> Cs	1.3E-02 $\pm$ 4.2E-02	U				
	<sup>152</sup> Eu	5.5E-02 $\pm$ 1.3E-01	U				
	<sup>154</sup> Eu	-2.0E-02 $\pm$ 1.2E-01	U				
	<sup>155</sup> Eu	-2.0E-02 $\pm$ 1.6E-01	U				
	<sup>238</sup> Pu	2.7E-03 $\pm$ 1.0E-02	U				
	<sup>239,240</sup> Pu	3.6E-03 $\pm$ 5.0E-03	U				
	<sup>103</sup> Ru	2.8E-03 $\pm$ 2.8E-02	U				
	<sup>106</sup> Ru	-2.3E-01 $\pm$ 3.7E-01	U				
	<sup>125</sup> Sb	-2.9E-02 $\pm$ 1.0E-01	U				
	<sup>113</sup> Sn	3.3E-02 $\pm$ 4.9E-02	U				
	<sup>90</sup> Sr	1.2E-01 $\pm$ 9.6E-02					
	<sup>234</sup> U	1.0E-02 $\pm$ 6.5E-03					
	<sup>235</sup> U	2.8E-03 $\pm$ 3.4E-03	U				
	<sup>238</sup> U	1.0E-02 $\pm$ 6.1E-03					
	<sup>65</sup> Zn	-3.5E-02 $\pm$ 1.0E-01	U				

---

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.

Table 3-5. 2001 Vegetation Sampling Results (pCi/g  $\pm$  total analytical uncertainty). (cont)

Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
V116 (300 Area)	<sup>144</sup> Ce	1.1E-01 $\pm$ 1.4E-01	U	V117 (300 Area)	<sup>144</sup> Ce	1.3E-01 $\pm$ 2.2E-01	U
	<sup>60</sup> Co	2.9E-03 $\pm$ 1.9E-02	U		<sup>60</sup> Co	4.1E-03 $\pm$ 3.0E-02	U
	<sup>134</sup> Cs	-1.0E-02 $\pm$ 2.0E-02	U		<sup>134</sup> Cs	2.8E-03 $\pm$ 2.8E-02	U
	<sup>137</sup> Cs	1.4E-02 $\pm$ 2.1E-02	U		<sup>137</sup> Cs	1.2E-03 $\pm$ 1.2E-02	U
	<sup>152</sup> Eu	4.3E-02 $\pm$ 6.0E-02	U		<sup>152</sup> Eu	-2.6E-02 $\pm$ 9.9E-02	U
	<sup>154</sup> Eu	-3.5E-02 $\pm$ 6.3E-02	U		<sup>154</sup> Eu	-1.4E-02 $\pm$ 9.2E-02	U
	<sup>155</sup> Eu	3.2E-03 $\pm$ 3.2E-02	U		<sup>155</sup> Eu	-2.8E-04 $\pm$ 2.8E-03	U
	<sup>238</sup> Pu	-4.2E-03 $\pm$ 1.3E-02	U		<sup>238</sup> Pu	1.0E-02 $\pm$ 1.2E-02	U
	<sup>239,240</sup> Pu	3.1E-03 $\pm$ 3.7E-03	U		<sup>239,240</sup> Pu	7.4E-03 $\pm$ 5.4E-03	
	<sup>103</sup> Ru	-8.9E-03 $\pm$ 2.1E-02	U		<sup>103</sup> Ru	6.6E-03 $\pm$ 3.4E-02	U
	<sup>106</sup> Ru	5.7E-02 $\pm$ 2.2E-01	U		<sup>106</sup> Ru	1.2E-01 $\pm$ 3.0E-01	U
	<sup>125</sup> Sb	9.3E-03 $\pm$ 5.5E-02	U		<sup>125</sup> Sb	3.1E-02 $\pm$ 8.7E-02	U
	<sup>113</sup> Sn	-2.7E-02 $\pm$ 2.7E-02	U		<sup>113</sup> Sn	-1.0E-02 $\pm$ 4.0E-02	U
	<sup>90</sup> Sr	3.6E-01 $\pm$ 1.4E-01			<sup>90</sup> Sr	1.1E-01 $\pm$ 1.0E-01	
	<sup>234</sup> U	3.4E-02 $\pm$ 1.3E-02			<sup>234</sup> U	2.4E-02 $\pm$ 1.0E-02	
	<sup>235</sup> U	3.9E-03 $\pm$ 4.7E-03	U		<sup>235</sup> U	4.5E-03 $\pm$ 4.1E-03	
	<sup>238</sup> U	4.5E-02 $\pm$ 1.5E-02			<sup>238</sup> U	2.1E-02 $\pm$ 9.2E-03	
	<sup>65</sup> Zn	-1.9E-02 $\pm$ 5.1E-02	U		<sup>65</sup> Zn	7.7E-03 $\pm$ 7.7E-02	U
Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
V118 (300 Area)	<sup>144</sup> Ce	4.7E-02 $\pm$ 1.5E-01	U	V119 (300 Area)	<sup>144</sup> Ce	-7.8E-02 $\pm$ 1.4E-01	U
	<sup>60</sup> Co	3.1E-03 $\pm$ 2.3E-02	U		<sup>60</sup> Co	9.4E-03 $\pm$ 1.8E-02	U
	<sup>134</sup> Cs	3.0E-02 $\pm$ 2.6E-02	U		<sup>134</sup> Cs	2.2E-03 $\pm$ 1.9E-02	U
	<sup>137</sup> Cs	1.7E-02 $\pm$ 2.6E-02	U		<sup>137</sup> Cs	2.1E-02 $\pm$ 2.0E-02	U
	<sup>152</sup> Eu	6.2E-03 $\pm$ 6.2E-02	U		<sup>152</sup> Eu	-1.3E-02 $\pm$ 6.4E-02	U
	<sup>154</sup> Eu	-6.9E-02 $\pm$ 6.9E-02	U		<sup>154</sup> Eu	-2.1E-02 $\pm$ 5.7E-02	U
	<sup>155</sup> Eu	-3.5E-02 $\pm$ 7.0E-02	U		<sup>155</sup> Eu	-1.1E-02 $\pm$ 6.7E-02	U
	<sup>238</sup> Pu	-4.7E-03 $\pm$ 1.3E-02	U		<sup>238</sup> Pu	1.1E-03 $\pm$ 1.1E-02	U
	<sup>239,240</sup> Pu	5.6E-03 $\pm$ 4.7E-03			<sup>239,240</sup> Pu	1.0E-03 $\pm$ 1.0E-02	U
	<sup>103</sup> Ru	-7.5E-03 $\pm$ 2.7E-02	U		<sup>103</sup> Ru	-1.5E-03 $\pm$ 1.5E-02	U
	<sup>106</sup> Ru	5.4E-02 $\pm$ 2.4E-01	U		<sup>106</sup> Ru	7.7E-03 $\pm$ 7.7E-02	U
	<sup>125</sup> Sb	-5.0E-02 $\pm$ 7.0E-02	U		<sup>125</sup> Sb	-3.6E-02 $\pm$ 5.0E-02	U
	<sup>113</sup> Sn	-5.0E-02 $\pm$ 5.0E-02	U		<sup>113</sup> Sn	-1.3E-03 $\pm$ 1.3E-02	U
	<sup>90</sup> Sr	1.8E-01 $\pm$ 1.1E-01			<sup>90</sup> Sr	1.4E-01 $\pm$ 9.8E-02	
	<sup>234</sup> U	9.0E-02 $\pm$ 2.5E-02			<sup>234</sup> U	5.4E-01 $\pm$ 1.1E-01	
	<sup>235</sup> U	8.4E-03 $\pm$ 6.1E-03			<sup>235</sup> U	2.4E-02 $\pm$ 1.1E-02	
	<sup>238</sup> U	8.0E-02 $\pm$ 2.3E-02			<sup>238</sup> U	4.9E-01 $\pm$ 9.8E-02	
	<sup>65</sup> Zn	6.7E-02 $\pm$ 5.5E-02	U		<sup>65</sup> Zn	-7.9E-02 $\pm$ 7.9E-02	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.

Table 3-5. 2001 Vegetation Sampling Results (pCi/g  $\pm$  total analytical uncertainty). (cont)

Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
V120 (300 Area)	<sup>144</sup> Ce	6.0E-02 $\pm$ 1.9E-01	U	V121 (300 Area)	<sup>144</sup> Ce	-8.5E-02 $\pm$ 1.4E-01	U
	<sup>60</sup> Co	-1.1E-02 $\pm$ 2.5E-02	U		<sup>60</sup> Co	1.3E-02 $\pm$ 2.2E-02	U
	<sup>134</sup> Cs	8.0E-03 $\pm$ 2.6E-02	U		<sup>134</sup> Cs	2.6E-02 $\pm$ 2.5E-02	U
	<sup>137</sup> Cs	-2.4E-04 $\pm$ 2.4E-03	U		<sup>137</sup> Cs	-4.4E-03 $\pm$ 2.4E-02	U
	<sup>152</sup> Eu	1.5E-02 $\pm$ 8.5E-02	U		<sup>152</sup> Eu	-1.9E-02 $\pm$ 7.8E-02	U
	<sup>154</sup> Eu	6.2E-02 $\pm$ 7.4E-02	U		<sup>154</sup> Eu	-2.8E-02 $\pm$ 7.8E-02	U
	<sup>155</sup> Eu	3.7E-02 $\pm$ 9.3E-02	U		<sup>155</sup> Eu	-4.8E-02 $\pm$ 8.2E-02	U
	<sup>238</sup> Pu	3.8E-03 $\pm$ 9.5E-03	U		<sup>238</sup> Pu	1.4E-02 $\pm$ 1.7E-02	U
	<sup>239,240</sup> Pu	1.9E-03 $\pm$ 3.8E-03	U		<sup>239,240</sup> Pu	3.0E-03 $\pm$ 4.5E-03	U
	<sup>103</sup> Ru	1.3E-02 $\pm$ 3.1E-02	U		<sup>103</sup> Ru	5.2E-03 $\pm$ 2.3E-02	U
	<sup>106</sup> Ru	-3.5E-01 $\pm$ 3.5E-01	U		<sup>106</sup> Ru	-4.4E-02 $\pm$ 2.1E-01	U
	<sup>125</sup> Sb	2.6E-02 $\pm$ 7.3E-02	U		<sup>125</sup> Sb	8.2E-03 $\pm$ 5.9E-02	U
	<sup>113</sup> Sn	4.4E-03 $\pm$ 3.6E-02	U		<sup>113</sup> Sn	8.8E-03 $\pm$ 2.8E-02	U
	<sup>90</sup> Sr	2.9E-01 $\pm$ 1.2E-01			<sup>90</sup> Sr	2.8E-01 $\pm$ 1.3E-01	
	<sup>234</sup> U	5.4E-01 $\pm$ 1.1E-01			<sup>234</sup> U	8.2E-02 $\pm$ 2.4E-02	
	<sup>235</sup> U	3.3E-02 $\pm$ 1.3E-02			<sup>235</sup> U	1.5E-02 $\pm$ 8.5E-03	
	<sup>238</sup> U	5.7E-01 $\pm$ 1.1E-01			<sup>238</sup> U	5.2E-02 $\pm$ 1.8E-02	
	<sup>65</sup> Zn	3.0E-02 $\pm$ 7.2E-02	U		<sup>65</sup> Zn	-1.5E-01 $\pm$ 1.5E-01	U
Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
V123 (300 Area)	<sup>144</sup> Ce	9.5E-02 $\pm$ 1.8E-01	U	V124 (300 Area)	<sup>144</sup> Ce	-1.5E-01 $\pm$ 1.5E-01	U
	<sup>60</sup> Co	-2.6E-03 $\pm$ 2.6E-02	U		<sup>60</sup> Co	-1.3E-02 $\pm$ 2.2E-02	U
	<sup>134</sup> Cs	-1.9E-02 $\pm$ 3.2E-02	U		<sup>134</sup> Cs	8.6E-03 $\pm$ 2.2E-02	U
	<sup>137</sup> Cs	-2.2E-03 $\pm$ 2.2E-02	U		<sup>137</sup> Cs	3.3E-02 $\pm$ 2.2E-02	U
	<sup>152</sup> Eu	4.1E-02 $\pm$ 7.4E-02	U		<sup>152</sup> Eu	-2.5E-02 $\pm$ 6.3E-02	U
	<sup>154</sup> Eu	-3.2E-02 $\pm$ 1.0E-01	U		<sup>154</sup> Eu	-5.9E-02 $\pm$ 5.9E-02	U
	<sup>155</sup> Eu	3.7E-02 $\pm$ 8.1E-02	U		<sup>155</sup> Eu	-5.0E-02 $\pm$ 8.0E-02	U
	<sup>238</sup> Pu	8.8E-04 $\pm$ 8.8E-03	U		<sup>238</sup> Pu	6.9E-03 $\pm$ 1.4E-02	U
	<sup>239,240</sup> Pu	2.7E-03 $\pm$ 3.2E-03	U		<sup>239,240</sup> Pu	3.0E-03 $\pm$ 3.6E-03	U
	<sup>103</sup> Ru	1.6E-02 $\pm$ 2.9E-02	U		<sup>103</sup> Ru	-9.2E-03 $\pm$ 2.1E-02	U
	<sup>106</sup> Ru	-1.9E-01 $\pm$ 2.7E-01	U		<sup>106</sup> Ru	1.6E-02 $\pm$ 1.6E-01	U
	<sup>125</sup> Sb	-5.3E-02 $\pm$ 6.4E-02	U		<sup>125</sup> Sb	1.3E-02 $\pm$ 5.5E-02	U
	<sup>113</sup> Sn	6.0E-04 $\pm$ 6.0E-03	U		<sup>113</sup> Sn	-9.6E-03 $\pm$ 2.7E-02	U
	<sup>90</sup> Sr	4.3E-02 $\pm$ 1.0E-01	U		<sup>90</sup> Sr	1.8E-01 $\pm$ 1.1E-01	
	<sup>234</sup> U	1.2E-02 $\pm$ 7.6E-03			<sup>234</sup> U	2.6E-02 $\pm$ 1.3E-02	
	<sup>235</sup> U	2.5E-03 $\pm$ 3.5E-03	U		<sup>235</sup> U	3.7E-03 $\pm$ 4.4E-03	U
	<sup>238</sup> U	7.9E-03 $\pm$ 7.0E-03	U		<sup>238</sup> U	1.4E-02 $\pm$ 9.1E-03	
	<sup>65</sup> Zn	3.2E-02 $\pm$ 8.0E-02	U		<sup>65</sup> Zn	-7.8E-02 $\pm$ 7.8E-02	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.

Table 3-5. 2001 Vegetation Sampling Results (pCi/g  $\pm$  total analytical uncertainty). (cont)

Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
V125 (300 Area)	<sup>144</sup> Ce	8.5E-03 $\pm$ 8.5E-02	U	V126 (300 Area)	<sup>144</sup> Ce	1.7E-02 $\pm$ 1.6E-01	U
	<sup>60</sup> Co	2.8E-03 $\pm$ 1.4E-02	U		<sup>60</sup> Co	-2.6E-02 $\pm$ 2.6E-02	U
	<sup>134</sup> Cs	-9.4E-03 $\pm$ 1.5E-02	U		<sup>134</sup> Cs	-2.5E-02 $\pm$ 2.7E-02	U
	<sup>137</sup> Cs	9.3E-03 $\pm$ 1.7E-02	U		<sup>137</sup> Cs	-2.2E-02 $\pm$ 2.6E-02	U
	<sup>152</sup> Eu	-1.3E-02 $\pm$ 4.4E-02	U		<sup>152</sup> Eu	8.1E-02 $\pm$ 6.7E-02	U
	<sup>154</sup> Eu	-2.5E-02 $\pm$ 4.5E-02	U		<sup>154</sup> Eu	-1.9E-03 $\pm$ 1.9E-02	U
	<sup>155</sup> Eu	-2.4E-02 $\pm$ 5.0E-02	U		<sup>155</sup> Eu	5.3E-02 $\pm$ 8.5E-02	U
	<sup>238</sup> Pu	6.9E-03 $\pm$ 4.3E-02	U		<sup>238</sup> Pu	1.0E-03 $\pm$ 1.0E-02	U
	<sup>239,240</sup> Pu	3.5E-03 $\pm$ 3.5E-02	U		<sup>239,240</sup> Pu	4.0E-03 $\pm$ 4.0E-03	U
	<sup>103</sup> Ru	8.1E-03 $\pm$ 1.6E-02	U		<sup>103</sup> Ru	1.5E-03 $\pm$ 1.5E-02	U
	<sup>106</sup> Ru	1.7E-01 $\pm$ 2.0E-01	U		<sup>106</sup> Ru	9.3E-02 $\pm$ 2.4E-01	U
	<sup>125</sup> Sb	4.3E-02 $\pm$ 4.7E-02	U		<sup>125</sup> Sb	1.7E-02 $\pm$ 6.5E-02	U
	<sup>113</sup> Sn	5.8E-03 $\pm$ 2.2E-02	U		<sup>113</sup> Sn	5.1E-03 $\pm$ 3.8E-02	U
	<sup>90</sup> Sr	1.7E-01 $\pm$ 9.3E-02			<sup>90</sup> Sr	1.7E-01 $\pm$ 1.1E-01	
	<sup>234</sup> U	2.0E-02 $\pm$ 1.0E-02			<sup>234</sup> U	2.6E-02 $\pm$ 1.3E-02	
	<sup>235</sup> U	3.8E-03 $\pm$ 6.5E-03	U		<sup>235</sup> U	5.4E-03 $\pm$ 5.4E-03	U
	<sup>238</sup> U	1.7E-02 $\pm$ 8.7E-03			<sup>238</sup> U	2.1E-02 $\pm$ 1.2E-02	
	<sup>65</sup> Zn	2.4E-02 $\pm$ 3.8E-02	U		<sup>65</sup> Zn	7.6E-02 $\pm$ 5.4E-02	U
Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
V127 (300 Area)	<sup>144</sup> Ce	-1.2E-01 $\pm$ 1.6E-01	U	V128 (300 Area)	<sup>144</sup> Ce	5.1E-02 $\pm$ 1.0E-01	U
	<sup>60</sup> Co	-1.1E-02 $\pm$ 3.2E-02	U		<sup>60</sup> Co	-4.8E-03 $\pm$ 1.4E-02	U
	<sup>134</sup> Cs	-1.5E-02 $\pm$ 3.1E-02	U		<sup>134</sup> Cs	9.9E-03 $\pm$ 1.6E-02	U
	<sup>137</sup> Cs	4.6E-02 $\pm$ 3.2E-02	U		<sup>137</sup> Cs	7.9E-03 $\pm$ 1.7E-02	U
	<sup>152</sup> Eu	-5.2E-02 $\pm$ 8.8E-02	U		<sup>152</sup> Eu	-4.1E-02 $\pm$ 4.9E-02	U
	<sup>154</sup> Eu	-8.8E-02 $\pm$ 1.1E-01	U		<sup>154</sup> Eu	-3.4E-02 $\pm$ 5.1E-02	U
	<sup>155</sup> Eu	-6.7E-02 $\pm$ 8.7E-02	U		<sup>155</sup> Eu	2.1E-03 $\pm$ 2.1E-02	U
	<sup>238</sup> Pu	9.0E-04 $\pm$ 9.0E-03	U		<sup>238</sup> Pu	-8.6E-04 $\pm$ 8.6E-03	U
	<sup>239,240</sup> Pu	9.3E-04 $\pm$ 9.3E-03	U		<sup>239,240</sup> Pu	3.4E-03 $\pm$ 4.1E-03	U
	<sup>103</sup> Ru	-1.6E-02 $\pm$ 2.7E-02	U		<sup>103</sup> Ru	4.2E-03 $\pm$ 1.7E-02	U
	<sup>106</sup> Ru	-4.9E-02 $\pm$ 2.4E-01	U		<sup>106</sup> Ru	6.1E-02 $\pm$ 1.4E-01	U
	<sup>125</sup> Sb	1.3E-02 $\pm$ 6.8E-02	U		<sup>125</sup> Sb	-4.8E-02 $\pm$ 4.8E-02	U
	<sup>113</sup> Sn	-5.3E-03 $\pm$ 3.1E-02	U		<sup>113</sup> Sn	1.7E-02 $\pm$ 2.0E-02	U
	<sup>90</sup> Sr	8.1E-01 $\pm$ 1.6E-01			<sup>90</sup> Sr	4.8E-02 $\pm$ 1.2E-01	U
	<sup>234</sup> U	3.8E-02 $\pm$ 1.3E-02			<sup>234</sup> U	1.8E-02 $\pm$ 8.6E-03	
	<sup>235</sup> U	4.7E-03 $\pm$ 4.3E-03			<sup>235</sup> U	9.1E-04 $\pm$ 4.8E-03	U
	<sup>238</sup> U	3.4E-02 $\pm$ 1.3E-02			<sup>238</sup> U	1.5E-02 $\pm$ 7.6E-03	
	<sup>65</sup> Zn	2.9E-02 $\pm$ 8.1E-02	U		<sup>65</sup> Zn	5.1E-03 $\pm$ 3.9E-02	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.

Table 3-5. 2001 Vegetation Sampling Results (pCi/g  $\pm$  total analytical uncertainty). (cont)

Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
V129 (300 Area)	<sup>144</sup> Ce	-8.2E-02 $\pm$ 1.3E-01	U	V130 (400 Area)	<sup>144</sup> Ce	-3.1E-02 $\pm$ 1.3E-01	U
	<sup>60</sup> Co	2.5E-03 $\pm$ 2.0E-02	U		<sup>60</sup> Co	-7.6E-04 $\pm$ 7.6E-03	U
	<sup>134</sup> Cs	2.4E-03 $\pm$ 2.0E-02	U		<sup>134</sup> Cs	-8.4E-03 $\pm$ 2.1E-02	U
	<sup>137</sup> Cs	8.8E-03 $\pm$ 2.0E-02	U		<sup>137</sup> Cs	8.8E-03 $\pm$ 2.0E-02	U
	<sup>152</sup> Eu	-1.7E-03 $\pm$ 1.7E-02	U		<sup>152</sup> Eu	-1.1E-01 $\pm$ 1.1E-01	U
	<sup>154</sup> Eu	9.0E-04 $\pm$ 9.0E-03	U		<sup>154</sup> Eu	-4.8E-02 $\pm$ 5.8E-02	U
	<sup>155</sup> Eu	3.2E-02 $\pm$ 7.0E-02	U		<sup>155</sup> Eu	-3.6E-02 $\pm$ 7.6E-02	U
	<sup>238</sup> Pu	8.6E-04 $\pm$ 8.6E-03	U		<sup>238</sup> Pu	-3.4E-03 $\pm$ 1.3E-02	U
	<sup>239,240</sup> Pu	4.3E-03 $\pm$ 3.9E-03			<sup>239,240</sup> Pu	8.5E-04 $\pm$ 8.5E-03	U
	<sup>103</sup> Ru	1.2E-02 $\pm$ 2.2E-02	U		<sup>103</sup> Ru	-9.9E-03 $\pm$ 2.1E-02	U
	<sup>106</sup> Ru	-1.6E-01 $\pm$ 1.9E-01	U		<sup>106</sup> Ru	9.4E-02 $\pm$ 1.7E-01	U
	<sup>125</sup> Sb	2.9E-02 $\pm$ 5.2E-02	U		<sup>125</sup> Sb	2.5E-02 $\pm$ 5.2E-02	U
	<sup>113</sup> Sn	-6.0E-03 $\pm$ 2.3E-02	U		<sup>113</sup> Sn	3.1E-04 $\pm$ 3.1E-03	U
	<sup>90</sup> Sr	5.6E-02 $\pm$ 9.0E-02	U		<sup>90</sup> Sr	1.4E-01 $\pm$ 1.0E-01	
	<sup>234</sup> U	1.2E-02 $\pm$ 6.8E-03			<sup>234</sup> U	8.6E-03 $\pm$ 6.3E-03	
	<sup>235</sup> U	2.9E-03 $\pm$ 3.5E-03	U		<sup>235</sup> U	4.3E-03 $\pm$ 3.9E-03	
	<sup>238</sup> U	1.1E-02 $\pm$ 6.5E-03			<sup>238</sup> U	3.9E-03 $\pm$ 3.5E-03	
	<sup>65</sup> Zn	2.7E-02 $\pm$ 5.7E-02	U		<sup>65</sup> Zn	1.6E-02 $\pm$ 5.1E-02	U
Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
V131 (Duplicate of V116)	<sup>144</sup> Ce	5.7E-02 $\pm$ 1.5E-01	U	V132 (Duplicate of V123)	<sup>144</sup> Ce	7.1E-03 $\pm$ 7.1E-02	U
	<sup>60</sup> Co	1.1E-02 $\pm$ 1.9E-02	U		<sup>60</sup> Co	-4.0E-02 $\pm$ 4.0E-02	U
	<sup>134</sup> Cs	-2.5E-02 $\pm$ 2.5E-02	U		<sup>134</sup> Cs	7.9E-05 $\pm$ 7.9E-04	U
	<sup>137</sup> Cs	1.3E-02 $\pm$ 2.0E-02	U		<sup>137</sup> Cs	-1.7E-02 $\pm$ 3.1E-02	U
	<sup>152</sup> Eu	3.9E-02 $\pm$ 6.2E-02	U		<sup>152</sup> Eu	-2.6E-02 $\pm$ 8.3E-02	U
	<sup>154</sup> Eu	5.9E-04 $\pm$ 5.9E-03	U		<sup>154</sup> Eu	-4.2E-02 $\pm$ 1.1E-01	U
	<sup>155</sup> Eu	2.9E-02 $\pm$ 7.5E-02	U		<sup>155</sup> Eu	1.1E-02 $\pm$ 8.5E-02	U
	<sup>238</sup> Pu	3.7E-03 $\pm$ 1.2E-02	U		<sup>238</sup> Pu	2.0E-03 $\pm$ 1.1E-02	U
	<sup>239,240</sup> Pu	9.3E-04 $\pm$ 9.3E-03	U		<sup>239,240</sup> Pu	2.9E-03 $\pm$ 4.4E-03	U
	<sup>103</sup> Ru	-8.9E-03 $\pm$ 2.1E-02	U		<sup>103</sup> Ru	1.7E-02 $\pm$ 2.9E-02	U
	<sup>106</sup> Ru	-1.5E-01 $\pm$ 1.8E-01	U		<sup>106</sup> Ru	-2.3E-01 $\pm$ 2.8E-01	U
	<sup>125</sup> Sb	1.2E-02 $\pm$ 5.3E-02	U		<sup>125</sup> Sb	3.3E-02 $\pm$ 6.9E-02	U
	<sup>113</sup> Sn	-1.3E-02 $\pm$ 2.6E-02	U		<sup>113</sup> Sn	-4.0E-02 $\pm$ 4.0E-02	U
	<sup>90</sup> Sr	-5.0E-02 $\pm$ 1.0E-01	U		<sup>90</sup> Sr	2.4E-02 $\pm$ 9.6E-02	U
	<sup>234</sup> U	4.3E-02 $\pm$ 1.5E-02			<sup>234</sup> U	1.7E-02 $\pm$ 9.5E-03	
	<sup>235</sup> U	4.2E-03 $\pm$ 4.2E-03	U		<sup>235</sup> U	3.5E-03 $\pm$ 5.2E-03	U
	<sup>238</sup> U	6.2E-02 $\pm$ 2.0E-02			<sup>238</sup> U	6.5E-03 $\pm$ 6.2E-03	U
	<sup>65</sup> Zn	3.3E-02 $\pm$ 5.3E-02	U		<sup>65</sup> Zn	6.8E-02 $\pm$ 8.8E-02	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.

Table 3-5. 2001 Vegetation Sampling Results (pCi/g  $\pm$  total analytical uncertainty). (cont)

Location	Isotope	Result $\pm$ Uncertainty	RQ*
V138 (Duplicate of V118)	<sup>144</sup> Ce	-5.9E-03 $\pm$ 5.9E-02	U
	<sup>60</sup> Co	-7.3E-03 $\pm$ 2.1E-02	U
	<sup>134</sup> Cs	-4.5E-03 $\pm$ 2.3E-02	U
	<sup>137</sup> Cs	-2.9E-02 $\pm$ 2.9E-02	U
	<sup>152</sup> Eu	-2.5E-02 $\pm$ 6.5E-02	U
	<sup>154</sup> Eu	4.1E-02 $\pm$ 7.4E-02	U
	<sup>155</sup> Eu	-8.2E-02 $\pm$ 8.2E-02	U
	<sup>238</sup> Pu	9.2E-04 $\pm$ 9.2E-03	U
	<sup>239,240</sup> Pu	9.2E-04 $\pm$ 3.2E-03	U
	<sup>103</sup> Ru	-2.1E-03 $\pm$ 2.1E-02	U
	<sup>106</sup> Ru	-4.1E-03 $\pm$ 4.1E-02	U
	<sup>125</sup> Sb	-4.1E-02 $\pm$ 5.7E-02	U
	<sup>113</sup> Sn	-2.1E-02 $\pm$ 2.9E-02	U
	<sup>90</sup> Sr	-7.6E-02 $\pm$ 8.4E-02	U
	<sup>234</sup> U	1.4E-01 $\pm$ 3.5E-02	
	<sup>235</sup> U	5.9E-03 $\pm$ 5.0E-03	
	<sup>238</sup> U	1.4E-01 $\pm$ 3.4E-02	
	<sup>65</sup> Zn	4.3E-03 $\pm$ 4.3E-02	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.



This page intentionally left blank.

## 4.0 EXTERNAL RADIATION

External radiation fields were monitored near facilities and waste handling, storage, and disposal sites to measure and assess the impacts of operations. TLDs were used at numerous fixed locations to gather dose rate information over extended periods of time, typically three months.

In 2001, there were 133 TLD locations collecting external radiation information. At 6 of these locations, the dosimeter results showed a decrease in external radiation from 2000 levels. At one of the locations (212-R in the 200-North area), there was a 20% increase in radiation detected. At the remaining locations there was no discernable change in the external radiation levels.

The number of TLD locations and a comparison summary between the 2001 and 2000 TLD results for each of the operational areas is provided in Table 4-1.

Table 4-1. Thermoluminescent Dosimeter Results (mrem/yr)<sup>a</sup> for 2000 and 2001.

Area	Number of Locations, 2001	2000		2001		% Change <sup>a</sup>
		Maximum	Mean	Maximum	Mean	
100-B/C	5	87	84	94	88	5%
100-F	5	88	85	87	83	-2%
100-H	3	90	88	95	71	-19%
100-K	11	390	120	419	125	4%
100-N	14	4700	1100	991	319	-71%
200/600	66	300	106	317	114	7%
212-R	1	2500	2000	2800	2400	20%
300 TEDF <sup>b</sup>	6	85	83	90	85	2%
300	8	180	100	172	106	6%
400	7	81	80	84	82	3%
CVDF <sup>c</sup>	4	81	75	81	78	4%
ERDF <sup>d</sup>	3	93	89	111	93	4%

a - Numbers indicate a decrease (-) or increase from the 2000 mean.

b - TEDF = 300 Area Treated Effluent Disposal Facility.

c - CVDF = Cold Vacuum Drying Facility.

d - ERDF = Environmental Restoration Disposal Facility.

Significant observations from external radiation level monitoring in 2001 included:

**100-H Area.** Remedial action activities by the ERC were completed in 2001 and the dosimeters were removed in September.

**100-N Area.** The average annual dose rate in the 100-N Area during 2001 was approximately 71% lower than that measured in 2000. The 2001 results indicate that direct radiation levels

continue to be highest near the 1325-N LWDF. While the results for this facility were noticeably higher than those for other 100-N Area TLD locations, they were approximately 6 times lower than dose rate levels measured at these locations in 2000. This reduction was directly attributable to the source-term removal activities at the 1325-N by the ERC.

**212-R.** One TLD was placed at the 212-R Railroad Car Disposition Area in 200 North Area. This dosimeter was placed in close proximity to a radiation area erected to provide an administrative barrier in a 1 mrem/hr radiation field. The normalized dose rate averaged 2,400 mrem/year during 2001, an increase of 20% compared to levels measured in 2000 (the TLD was not returned to the laboratory for analysis at the end of the fourth quarter of 2001 and was presumed to be lost in the field). Dose rates measured at this location exceeded the DOE annual external dose limit to members of the public (100 mrem/year); however, no member of the public, or a Hanford worker would conceivably spend an entire year at 212-R.

Maps illustrating TLD locations in 2001 are provided in Figures 4-1 through 4-13. Individual TLD results for 2001 are provided in Tables 4-2 through 4-14.

Figure 4-1. 2001 Thermoluminescent Dosimeter Locations, 100-B,C Area.

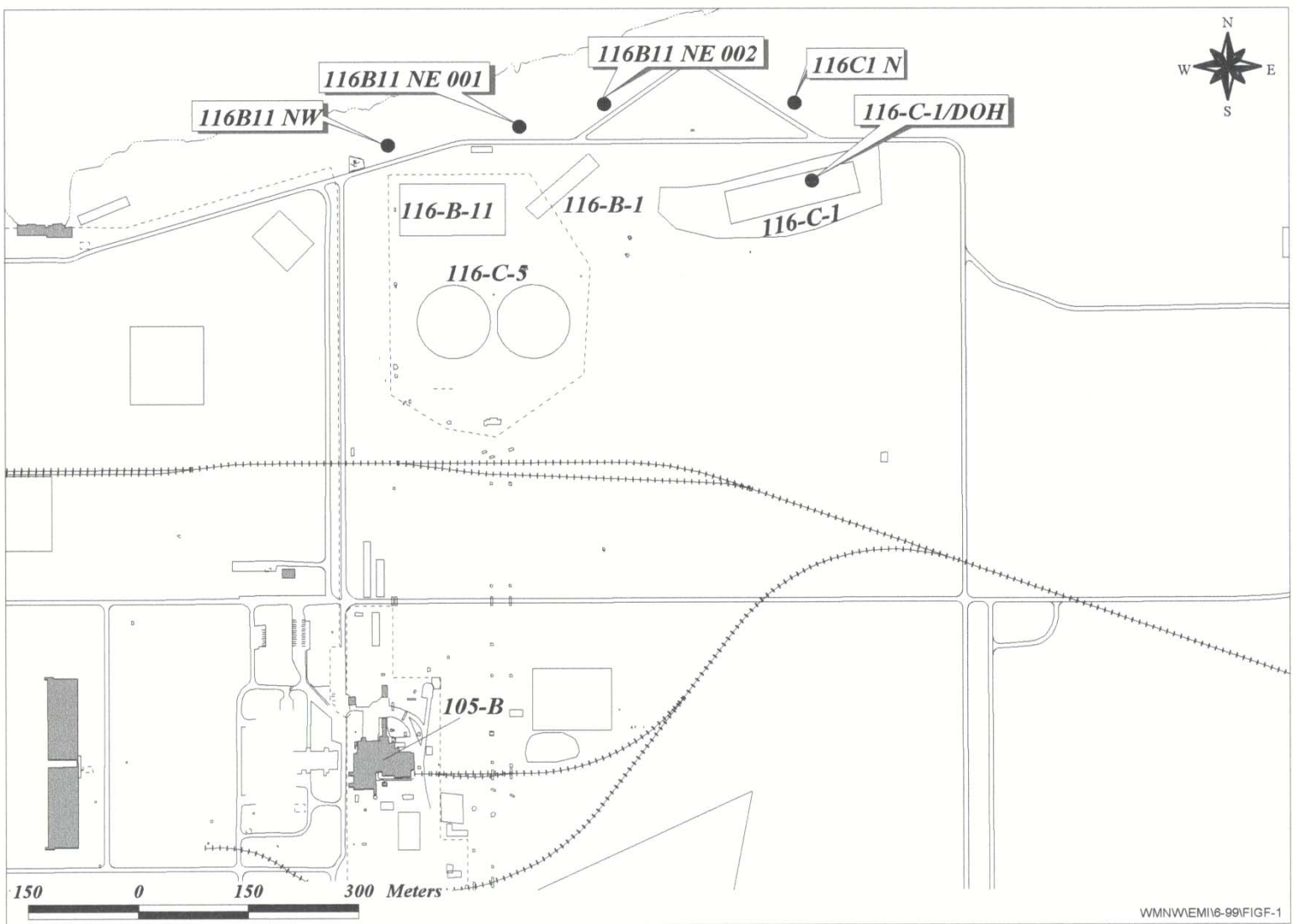


Figure 4-2. 2001 Thermoluminescent Dosimeter Locations, 100-F Area.

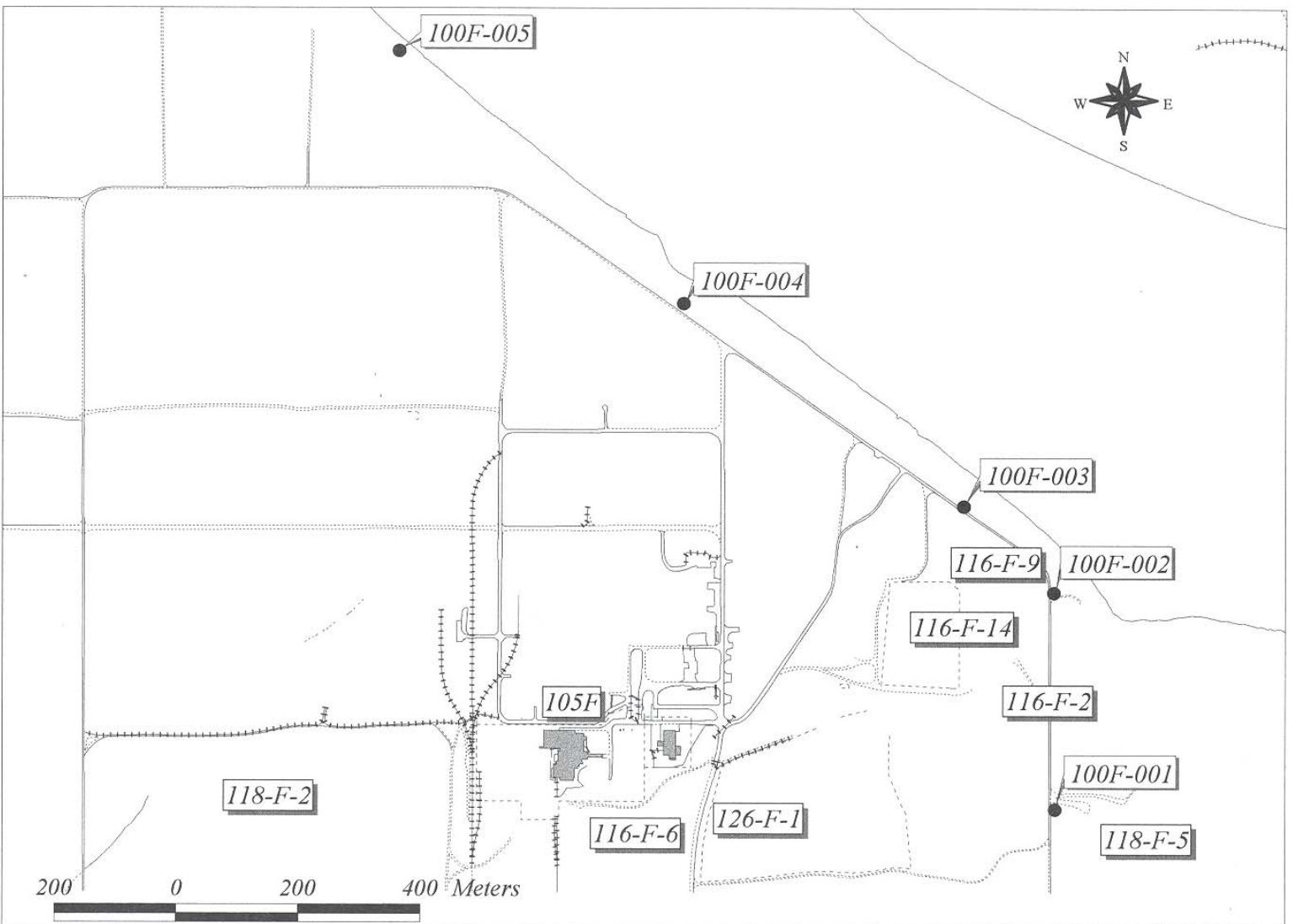


Figure 4-3. 2001 Thermoluminescent Dosimeter Locations, 100-H Area.

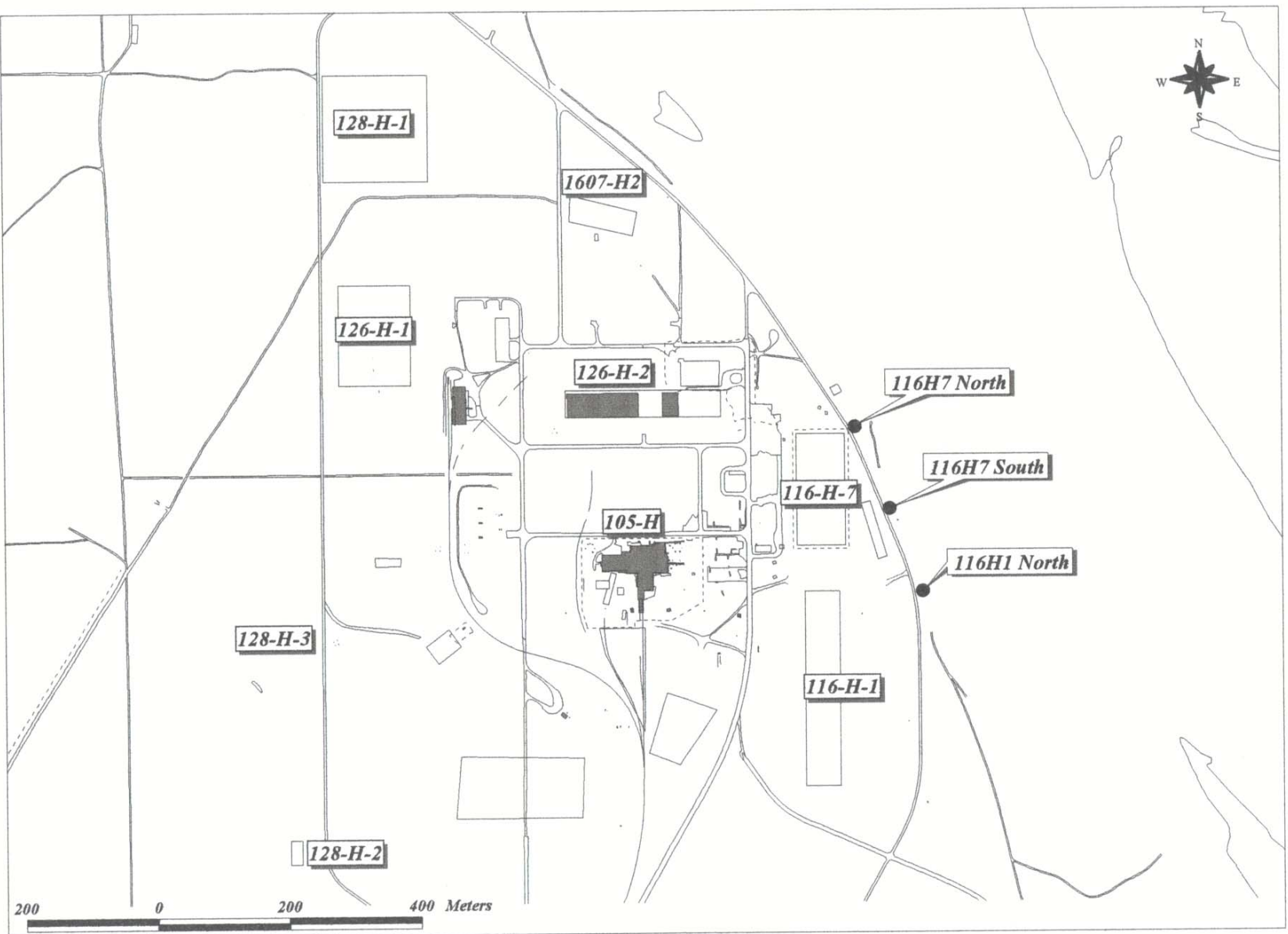


Figure 4-4. 2001 Thermoluminescent Dosimeter Locations,  
100-K Area and Cold Vacuum Drying Facility.

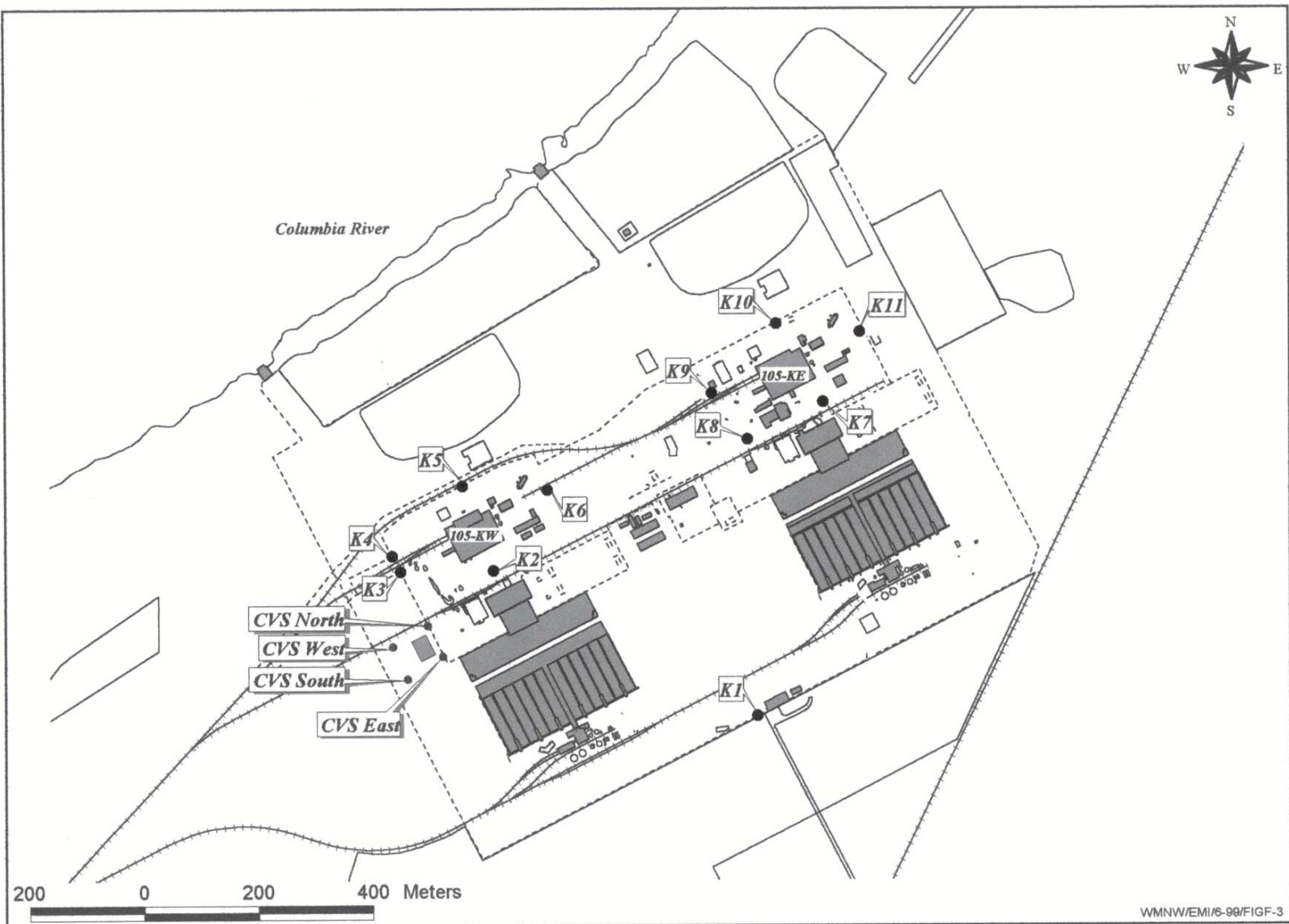
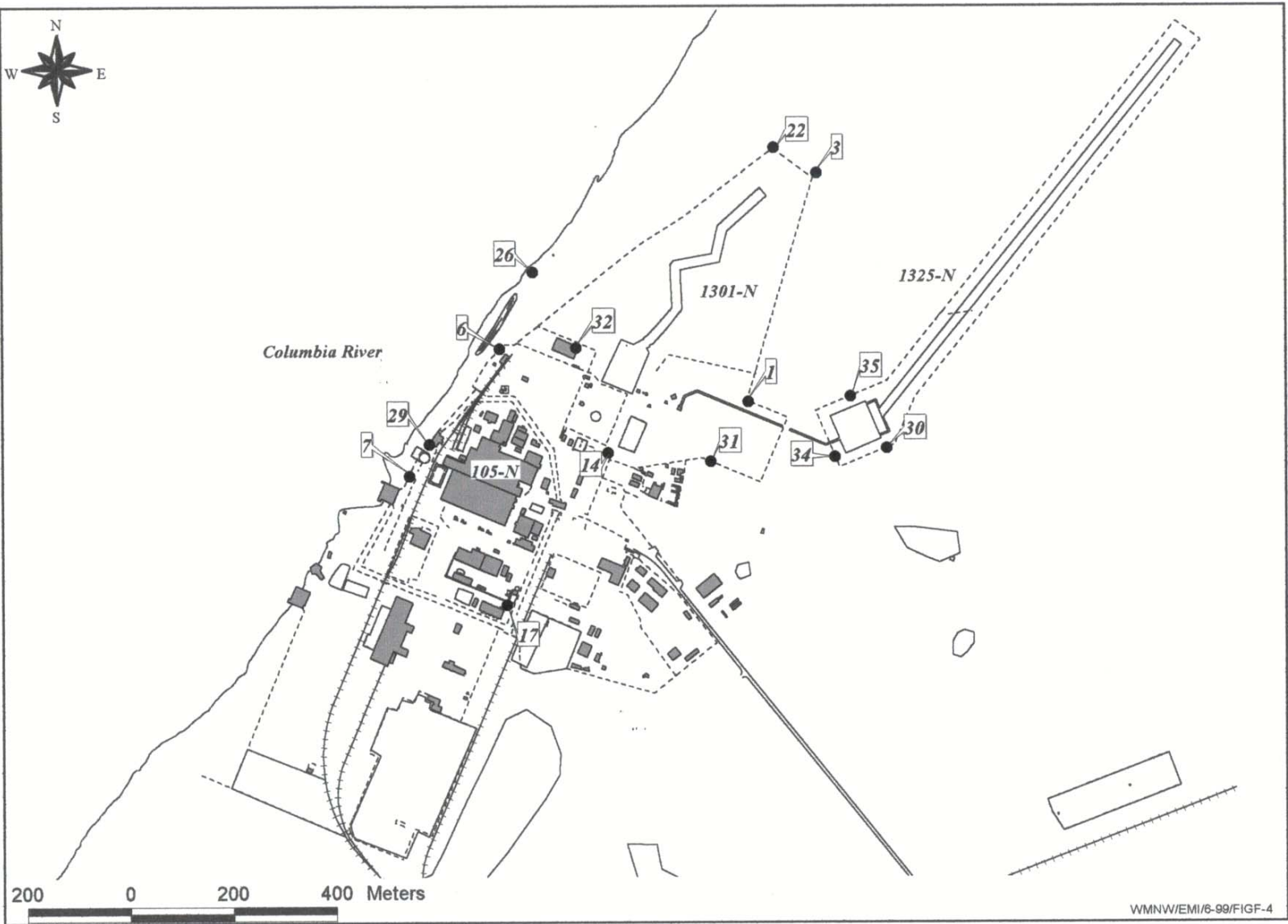


Figure 4-5. 2001 Thermoluminescent Dosimeter Locations, 100-N Area.





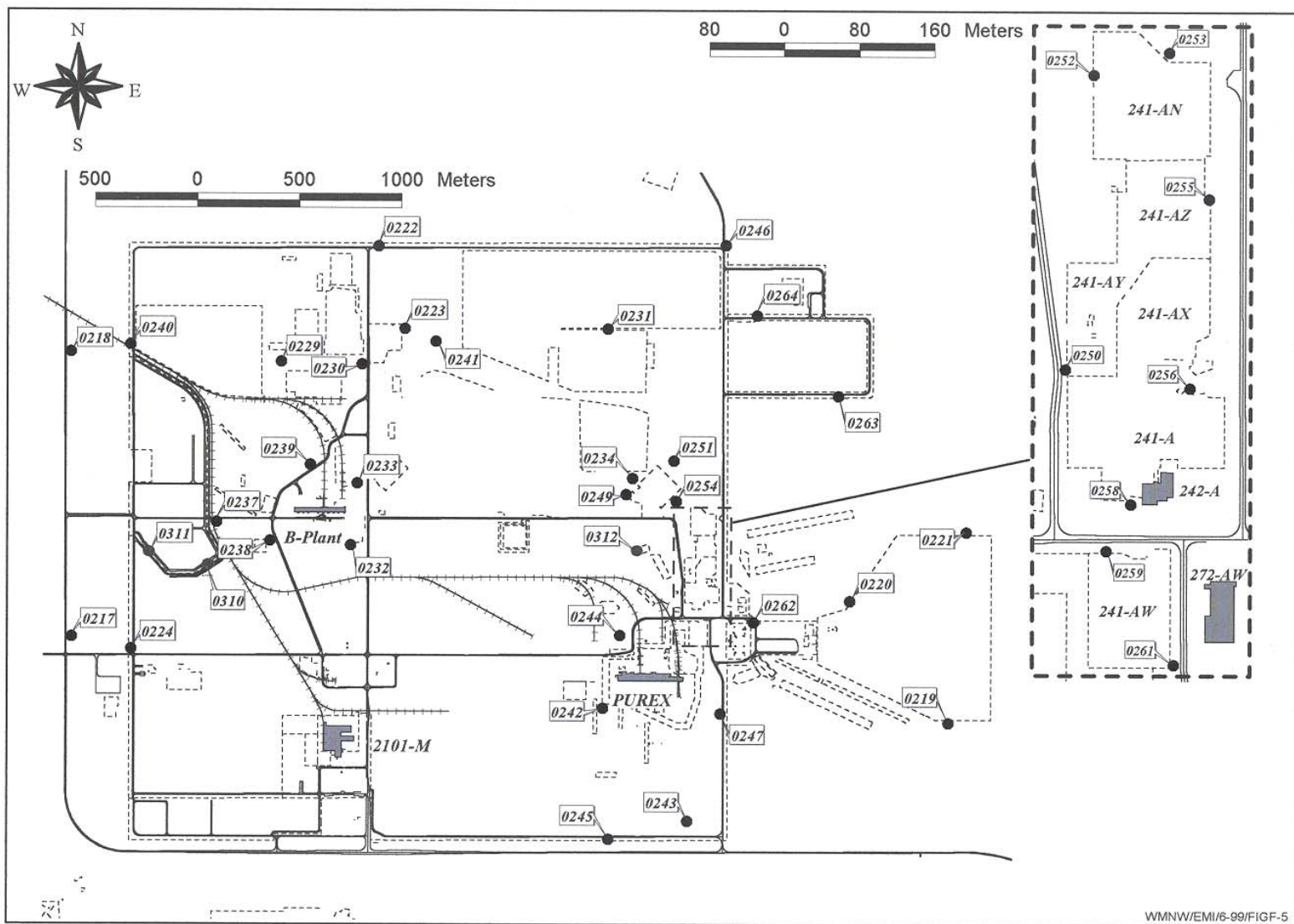


Figure 4-6. 2001 Thermoluminescent Dosimeter Locations, 200 East Area.

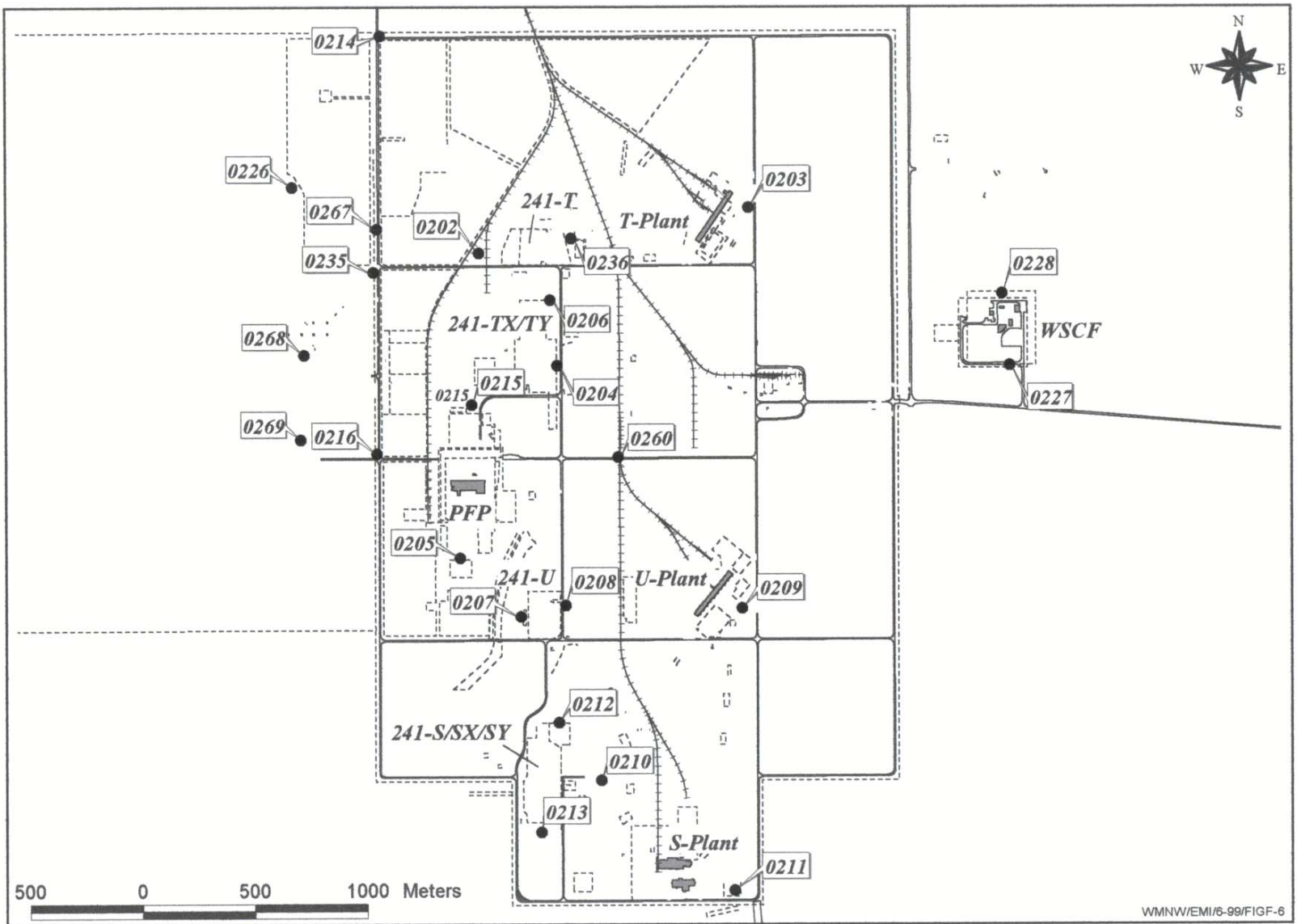


Figure 4-7. 2001 Thermoluminescent Dosimeter Locations, 200 West Area.

Figure 4-8. 2001 Thermoluminescent Dosimeter Locations, 212-R.



Figure 4-9. 2001 Thermoluminescent Dosimeter Locations, 300 Area  
Treated Effluent Disposal Facility and 300 Area.

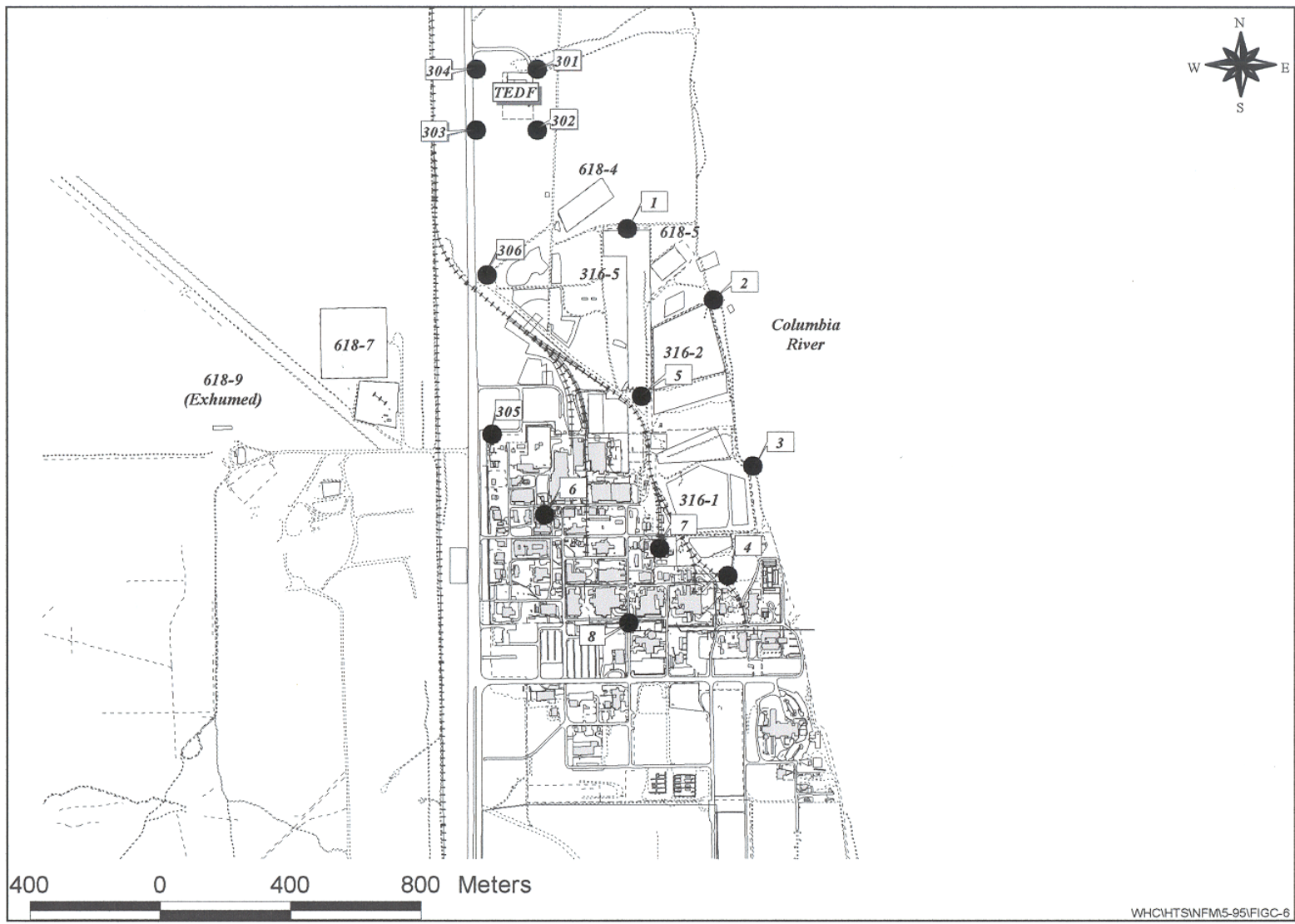


Figure 4-10. 2001 Thermoluminescent Dosimeter Locations, 400 Area.

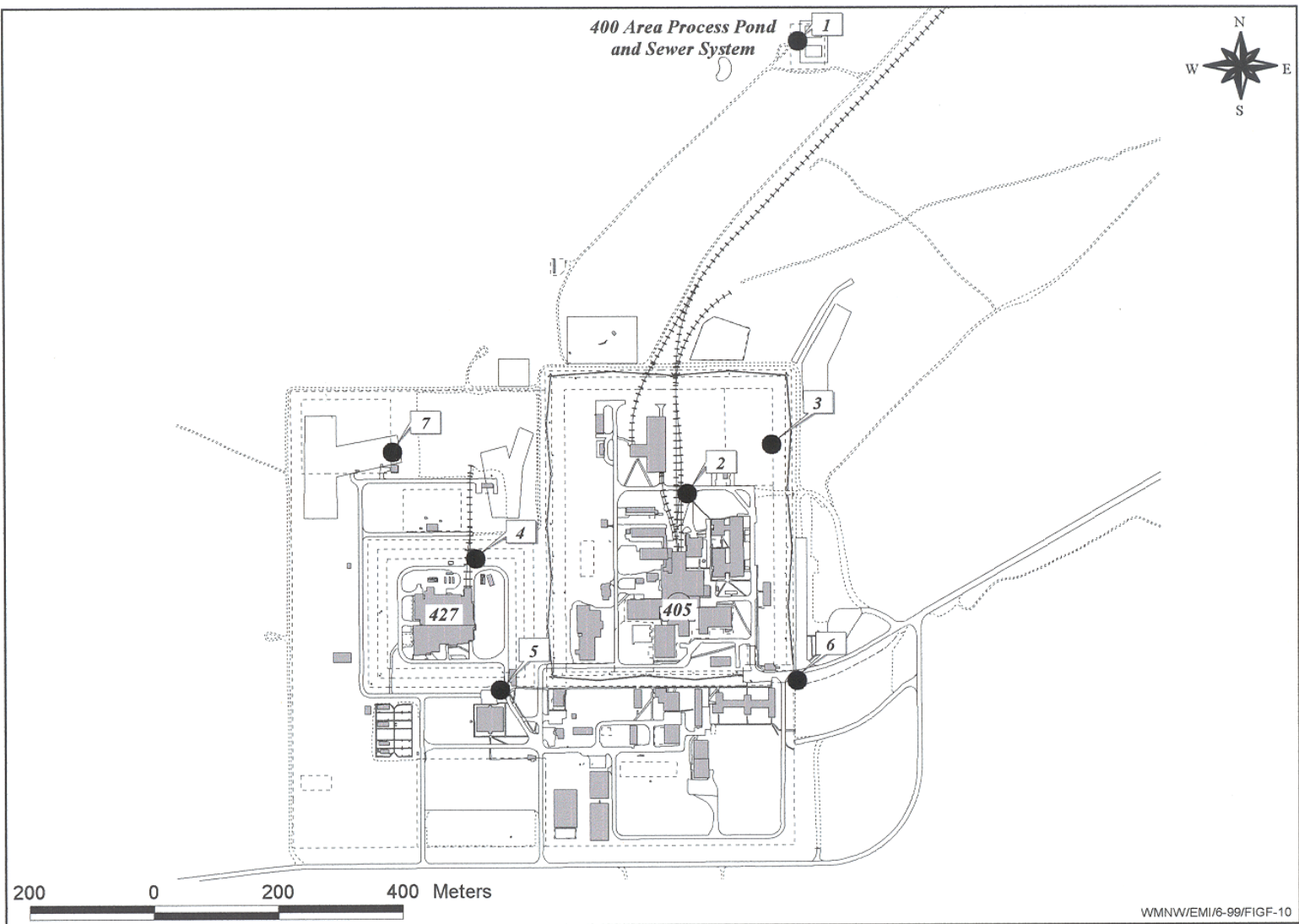


Figure 4-11. 2001 Thermoluminescent Dosimeter Locations,  
Environmental Restoration Disposal Facility.

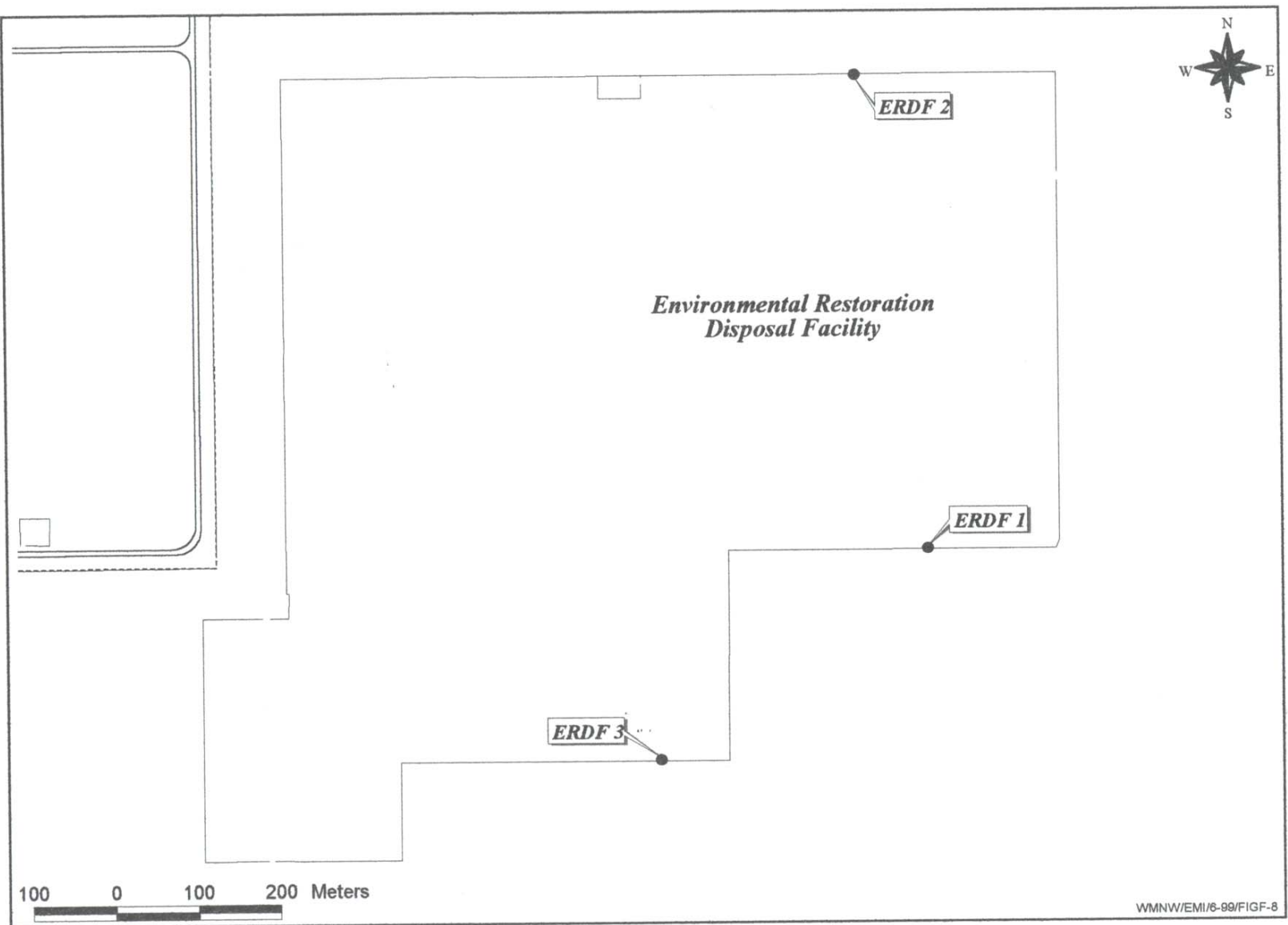


Table 4-2. 2001 Thermoluminescent Dosimeter Results, 100-B,C Area.

1st Qtr '01					
TLD ID	Site Description	mrem/hr	mrem/day	mrem/qtr	Days in Field
10	116-B-11 NE 001	0.01	0.26	22.4	86
11	116-B-11 NE 002	0.01	0.25	21.7	86
12	116-B-11 NW	0.01	0.25	21.2	86
13	116-C-1 N	0.01	0.25	21.3	86
14	116-C-1/DOH	0.01	0.22	19.3	86

2nd Qtr '01					
TLD ID	Site Description	mrem/hr	mrem/day	mrem/qtr	Days in Field
10	116-B-11 NE 001	0.01	0.25	25.8	104
11	116-B-11 NE 002	0.01	0.23	23.8	104
12	116-B-11 NW	0.01	0.24	24.4	104
13	116-C-1 N	0.01	0.23	24.1	104
14	116-C-1/DOH	0.01	0.22	23.0	104

3rd Qtr '01					
TLD ID	Site Description	mrem/hr	mrem/day	mrem/qtr	Days in Field
10	116-B-11 NE 001	0.01	0.25	25.2	100
11	116-B-11 NE 002	0.01	0.24	23.6	100
12	116-B-11 NW	0.01	0.23	22.5	100
13	116-C-1 N	0.01	0.22	22.2	100
14	116-C-1/DOH	0.01	0.22	21.9	100

4th Qtr '01					
TLD ID	Site Description	mrem/hr	mrem/day	mrem/qtr	Days in Field
10	116-B-11 NE 001	0.01	0.26	20.9	81
11	116-B-11 NE 002	0.01	0.24	19.7	81
12	116-B-11 NW	0.01	0.24	19.6	81
13	116-C-1 N	0.01	0.24	19.2	81
14	116-C-1/DOH	0.01	0.24	19.7	81

Annual Average $\pm$ 2 Standard Deviation (2SD)					
TLD ID	Site Description	mrem/hr $\pm$ 2SD	mrem/day $\pm$ 2SD	mrem/yr $\pm$ 2SD	
10	116-B-11 NE 001	0.011 $\pm$ 0.0005	0.24 $\pm$ 0.01	94 $\pm$ 5	
11	116-B-11 NE 002	0.010 $\pm$ 0.001	0.23 $\pm$ 0.03	89 $\pm$ 4	
12	116-B-11 NW	0.010 $\pm$ 0.001	0.25 $\pm$ 0.02	88 $\pm$ 4	
13	116-C-1 N	0.010 $\pm$ 0.001	0.25 $\pm$ 0.02	87 $\pm$ 4	
14	116-C-1/DOH	0.010 $\pm$ 0.001	0.25 $\pm$ 0.01	84 $\pm$ 4	

Table 4-3. 2001 Thermoluminescent Dosimeter Results, 100-F Area.

1st Qtr '01					
TLD ID	Site Description	mrem/hr	mrem/day	mrem/qtr	Days in Field
1	F-001	0.01	0.23	19.9	85
2	F-002	0.01	0.23	19.8	85
3	F-003	0.01	0.23	19.4	85
4	F-004	0.01	0.23	19.3	85
5	F-005	0.01	0.25	21.3	85
2nd Qtr '01					
TLD ID	Site Description	mrem/hr	mrem/day	mrem/qtr	Days in Field
1	F-001	0.01	0.23	23.4	104
2	F-002	0.01	0.23	23.5	104
3	F-003	0.01	0.22	23.3	104
4	F-004	0.01	0.21	22.2	104
5	F-005	0.01	0.24	24.7	104
3rd Qtr '01					
TLD ID	Site Description	mrem/hr	mrem/day	mrem/qtr	Days in Field
1	F-001	0.01	0.22	22.4	100
2	F-002	0.01	0.22	22.4	100
3	F-003	0.01	0.23	23.3	100
4	F-004	0.01	0.21	21.4	100
5	F-005	0.01	0.25	25.4	100
4th Qtr '01					
TLD ID	Site Description	mrem/hr	mrem/day	mrem/qtr	Days in Field
1	F-001	0.01	0.25	20.0	81
2	F-002	0.01	0.26	21.1	81
3	F-003	0.01	0.25	20.3	81
4	F-004	0.01	0.25	20.0	81
5	F-005	NR	NR	NR	NR
Annual Average $\pm$ 2 Standard Deviation (2SD)					
TLD ID	Site Description	mrem/hr $\pm$ 2SD	mrem/day $\pm$ 2SD	mrem/yr $\pm$ 2SD	
1	F-001	0.010 $\pm$ 0.001	0.23 $\pm$ 0.02	86 $\pm$ 3	
2	F-002	0.010 $\pm$ 0.001	0.24 $\pm$ 0.03	87 $\pm$ 3	
3	F-003	0.010 $\pm$ 0.001	0.23 $\pm$ 0.02	86 $\pm$ 4	
4	F-004	0.010 $\pm$ 0.001	0.25 $\pm$ 0.02	83 $\pm$ 1	
5	F-005	0.010 $\pm$ 0.001	0.25 $\pm$ 0.02	71 $\pm$ 4	

NR = Not returned to the laboratory for analysis.



Table 4-4. 2001 Thermoluminescent Dosimeter Results, 100-H Area.<sup>a</sup>

1st Qtr '01					
TLD ID	Site Description	mrem/hr	mrem/day	mrem/qtr	Days in Field
1	116H7 NORTH	0.010	0.24	20.6	85
2	116H7 SOUTH	0.010	0.23	19.6	85
3	116H1 NORTH	0.010	0.24	20.1	85
2nd Qtr '01					
TLD ID	Site Description	mrem/hr	mrem/day	mrem/qtr	Days in Field
1	116H7 NORTH	0.010	0.23	23.8	104
2	116H7 SOUTH	0.010	0.23	24.3	104
3	116H1 NORTH	0.009	0.23	23.7	104
3rd Qtr '01					
TLD ID	Site Description	mrem/hr	mrem/day	mrem/qtr	Days in Field
1	116H7 NORTH	0.010	0.25	25.2	100
2	116H7 SOUTH	0.011	0.27	27.0	100
3	116H1 NORTH	0.011	0.28	27.6	100
Annual Average $\pm$ 2 Standard Deviation (2SD)					
TLD ID	Site Description	mrem/hr $\pm$ 2SD	mrem/day $\pm$ 2SD	mrem/yr $\pm$ 2SD	
1	116H7 NORTH	0.01 $\pm$ 0.001	0.24 $\pm$ 0.02	70 $\pm$ 5	
2	116H7 SOUTH	0.01 $\pm$ 0.002	0.24 $\pm$ 0.04	71 $\pm$ 7	
3	116H1 NORTH	0.01 $\pm$ 0.002	0.25 $\pm$ 0.05	71 $\pm$ 7	

a - Remedial action activities were completed and dosimeter monitoring concluded in September 2001.

Table 4-5. 2001 Thermoluminescent Dosimeter Results, 100-K Area.

1st Qtr '01					
TLD ID	Site Description	mrem/hr	mrem/day	mrem/qtr	Days in Field
1	100-K SOUTH GATE	0.01	0.20	17.5	86
2	105-KW S	0.01	0.22	18.8	86
3	105-KW SW	0.01	0.23	20.2	86
4	105-KW NW	0.01	0.22	18.6	86
5	105-KW N	0.01	0.24	20.3	86
6	105-KW E	0.01	0.22	18.7	86
7	105-KE S	0.01	0.23	19.5	86
8	105-KE SW	0.05	1.09	93.5	86
9	105-KE NW	0.01	0.26	22.0	86
10	105-KE N	0.02	0.49	42.2	86
11	105-KE E	0.01	0.24	21.0	86

2nd Qtr '01					
TLD ID	Site Description	mrem/hr	mrem/day	mrem/qtr	Days in Field
1	100-K SOUTH GATE	0.01	0.20	20.7	104
2	105-KW S	0.01	0.22	22.7	104
3	105-KW SW	0.01	0.22	22.7	104
4	105-KW NW	0.01	0.23	23.4	104
5	105-KW N	0.01	0.25	26.2	104
6	105-KW E	0.01	0.22	22.5	104
7	105-KE S	0.01	0.23	24.3	104
8	105-KE SW	0.05	1.09	113.7	104
9	105-KE NW	0.01	0.26	26.8	104
10	105-KE N	0.02	0.49	50.5	104
11	105-KE E	0.01	0.23	23.9	104

3rd Qtr '01					
TLD ID	Site Description	mrem/hr	mrem/day	mrem/qtr	Days in Field
1	100-K SOUTH GATE	0.01	0.20	20.1	100
2	105-KW S	0.01	0.22	22.2	100
3	105-KW SW	0.01	0.21	21.1	100
4	105-KW NW	0.01	0.22	21.6	100
5	105-KW N	0.01	0.26	25.6	100
6	105-KW E	0.01	0.22	21.6	100
7	105-KE S	0.01	0.24	23.6	100
8	105-KE SW	0.05	1.12	112.4	100
9	105-KE NW	0.01	0.27	27.2	100
10	105-KE N	0.02	0.48	48.1	100
11	105-KE E	0.01	0.23	22.5	100

Table 4-5. 2001 Thermoluminescent Dosimeter Results, 100-K Area. (cont)

4th Qtr '01					
TLD ID	Site Description	mrem/hr	mrem/day	mrem/qtr	Days in Field
1	100-K SOUTH GATE	0.01	0.21	17.4	81
2	105-KW S	0.01	0.22	18.0	81
3	105-KW SW	0.01	0.24	19.1	81
4	105-KW NW	0.01	0.23	18.4	81
5	105-KW N	0.01	0.27	21.9	81
6	105-KW E	0.01	0.23	18.3	81
7	105-KE S	0.01	0.30	24.3	81
8	105-KE SW	0.05	1.22	99.2	81
9	105-KE NW	0.01	0.28	23.1	81
10	105-KE N	0.02	0.50	40.6	81
11	105-KE E	0.01	0.26	20.8	81

Annual Average $\pm$ 2 Standard Deviation (2SD)				
TLD ID	Site Description	mrem/hr $\pm$ 2SD	mrem/day $\pm$ 2SD	mrem/yr $\pm$ 2SD
1	100-K SOUTH GATE	0.009 $\pm$ 0.001	0.24 $\pm$ 0.012	76 $\pm$ 3
2	105-KW S	0.009 $\pm$ 0.0002	0.23 $\pm$ 0.031	82 $\pm$ 5
3	105-KW SW	0.009 $\pm$ 0.001	0.25 $\pm$ 0.015	83 $\pm$ 3
4	105-KW NW	0.009 $\pm$ 0.0005	0.25 $\pm$ 0.023	82 $\pm$ 5
5	105-KW N	0.011 $\pm$ 0.001	0.25 $\pm$ 0.014	94 $\pm$ 6
6	105-KW E	0.009 $\pm$ 0.003	0.30 $\pm$ 0.025	81 $\pm$ 5
7	105-KE S	0.010 $\pm$ 0.003	0.31 $\pm$ 0.025	92 $\pm$ 5
8	105-KE SW	0.047 $\pm$ 0.005	1.13 $\pm$ 0.125	419 $\pm$ 20
9	105-KE NW	0.011 $\pm$ 0.001	0.25 $\pm$ 0.031	99 $\pm$ 5
10	105-KE N	0.020 $\pm$ 0.001	0.32 $\pm$ 0.043	181 $\pm$ 9
11	105-KE E	0.010 $\pm$ 0.001	0.25 $\pm$ 0.027	88 $\pm$ 3

Table 4-6. 2001 Thermoluminescent Dosimeter Results, 100-N Area.

1st Qtr '01					
TLD ID	Site Description	mrem/hr	mrem/day	mrem/qtr	Days in Field
1	1301-N E FENCELINE	0.04	0.89	75.7	85
3	1301-N NE	0.03	0.65	55.8	86
6	1314 FENCE	0.02	0.41	35.1	86
7	1908 N FENCE	0.03	0.68	58.3	86
14	MO-536 FENCELINE	0.03	0.62	53.0	86
17	163-N WASTE PAD	0.01	0.23	19.5	86
22	1301-N W	0.03	0.66	57.1	86
26	N-SPRINGS	0.02	0.41	35.1	86
29	107-N SOUTH	0.03	0.81	69.9	86
30	1325-N EAST	0.05	1.27	108.3	85
31	1301-N FENCELINE	0.02	0.48	40.4	85
32	1723-N NE	0.02	0.52	43.8	85
34	1325-N SW	0.11	2.56	217.6	85
35	1325-N NW	0.07	1.60	135.7	85

2nd Qtr '01					
TLD ID	Site Description	mrem/hr	mrem/day	mrem/qtr	Days in Field
1	1301-N E FENCELINE	0.04	0.85	88.0	104
3	1301-N NE	0.03	0.64	66.6	104
6	1314 FENCE	0.02	0.41	42.1	104
7	1908 N FENCE	0.03	0.64	66.3	104
14	MO-536 FENCELINE	0.03	0.62	64.1	104
17	163-N WASTE PAD	0.01	0.21	21.9	104
22	1301-N W	0.03	0.75	78.2	104
26	N-SPRINGS	0.02	0.40	41.9	104
29	107-N SOUTH	0.02	0.57	59.5	104
30	1325-N EAST	0.06	1.46	151.3	104
31	1301-N FENCELINE	0.02	0.45	46.7	104
32	1723-N NE	0.02	0.56	57.7	104
34	1325-N SW	0.11	2.64	274.4	104
35	1325-N NW	0.08	1.98	205.4	104

3rd Qtr '01					
TLD ID	Site Description	mrem/hr	mrem/day	mrem/qtr	Days in Field
1	1301-N E FENCELINE	0.03	0.77	76.8	100
3	1301-N NE	0.02	0.55	54.8	100
6	1314 FENCE	0.02	0.39	39.1	100
7	1908 N FENCE	0.02	0.56	56.1	100
14	MO-536 FENCELINE	0.02	0.54	54.2	100
17	163-N WASTE PAD	0.01	0.20	19.8	100
22	1301-N W	0.03	0.66	66.0	100
26	N-SPRINGS	0.01	0.36	35.9	100
29	107-N SOUTH	0.03	0.81	81.0	100
30	1325-N EAST	0.06	1.36	136.3	100
31	1301-N FENCELINE	0.02	0.42	41.6	100
32	1723-N NE	0.02	0.48	47.5	100
34	1325-N SW	0.09	2.27	227.1	100
35	1325-N NW	0.05	1.29	128.9	100

Table 4-6. 2001 Thermoluminescent Dosimeter Results, 100-N Area. (cont)

4th Qtr '01					
TLD ID	Site Description	mrem/hr	mrem/day	mrem/qtr	Days in Field
1	1301-N E FENCELINE	0.04	0.93	75.5	81
3	1301-N NE	0.03	0.63	50.8	81
6	1314 FENCE	0.02	0.47	38.1	81
7	1908 N FENCE	0.03	0.76	61.5	81
14	MO-536 FENCELINE	0.03	0.73	59.3	81
17	163-N WASTE PAD	0.01	0.25	20.4	81
22	1301-N W	0.03	0.70	56.7	81
26	N-SPRINGS	0.02	0.49	39.9	81
29	107-N SOUTH	0.02	0.48	38.7	81
30	1325-N EAST	0.10	2.49	201.7	81
31	1301-N FENCELINE	0.02	0.52	42.0	81
32	1723-N NE	0.02	0.59	47.6	81
34	1325-N SW	0.14	3.36	271.9	81
35	1325-N NW	0.06	1.53	123.6	81

Annual Average $\pm$ 2 Standard Deviation (2SD)				
TLD ID	Site Description	mrem/hr $\pm$ 2SD	mrem/day $\pm$ 2SD	mrem/yr $\pm$ 2SD
1	1301-N E FENCELINE	0.04 $\pm$ 0.006	0.86 $\pm$ 0.14	316 $\pm$ 12
3	1301-N NE	0.03 $\pm$ 0.004	0.62 $\pm$ 0.09	228 $\pm$ 14
6	1314 FENCE	0.02 $\pm$ 0.012	0.47 $\pm$ 0.29	172 $\pm$ 18
7	1908 N FENCE	0.03 $\pm$ 0.014	0.61 $\pm$ 0.33	224 $\pm$ 25
14	MO-536 FENCELINE	0.03 $\pm$ 0.007	0.63 $\pm$ 0.16	231 $\pm$ 10
17	163-N WASTE PAD	0.01 $\pm$ 0.004	0.22 $\pm$ 0.09	82 $\pm$ 20
22	1301-N W	0.03 $\pm$ 0.004	0.69 $\pm$ 0.09	258 $\pm$ 20
26	N-SPRINGS	0.02 $\pm$ 0.005	0.42 $\pm$ 0.11	153 $\pm$ 6
29	107-N SOUTH	0.03 $\pm$ 0.014	0.67 $\pm$ 0.34	249 $\pm$ 36
30	1325-N EAST	0.07 $\pm$ 0.040	1.62 $\pm$ 0.96	598 $\pm$ 78
31	1301-N FENCELINE	0.02 $\pm$ 0.004	0.46 $\pm$ 0.09	171 $\pm$ 6
32	1723-N NE	0.02 $\pm$ 0.002	0.53 $\pm$ 0.04	197 $\pm$ 17
34	1325-N SW	0.11 $\pm$ 0.005	2.71 $\pm$ 0.12	991 $\pm$ 12
35	1325-N NW	0.07 $\pm$ 0.016	1.60 $\pm$ 0.39	594 $\pm$ 61

Table 4-7. 2001 Thermoluminescent Dosimeter Results, 200 East Area.

TLD ID	Site Description	1st Qtr '01			Days in Field
		mrem/hr	mrem/day	mrem/qtr	
217	HWVP SOUTHWEST	0.01	0.24	24.3	100
218	HWVP NORTHWEST	0.01	0.22	22.0	100
219	218-E-16 (GROUT) SOUTH	0.01	0.25	24.6	100
220	218-E-16 (GROUT) NORTHWEST	0.01	0.25	25.4	100
221	218-E-16 (GROUT) NORTH	0.01	0.25	25.0	100
222	241-BX/BY NORTH	0.01	0.29	29.2	100
223	241-B EAST	0.01	0.31	30.8	100
224	HWVP SOUTHWEST (GATE 814)	0.01	0.22	22.1	100
229	218-E-10 EAST	0.01	0.25	24.8	100
230	241-BX SOUTH	0.01	0.31	30.9	100
231	218-E-12	0.01	0.26	25.5	100
232	221-B SOUTHEAST	0.01	0.34	33.9	100
233	221-B NORTHEAST	0.01	0.24	23.8	100
234	241-C WEST	0.01	0.28	28.2	100
237	HWVP EAST	0.01	0.21	21.1	100
238	221-B SOUTHWEST	0.01	0.23	22.9	100
239	221-B NORTH	0.01	0.24	23.6	100
240	HWVP NORTHEAST	0.01	0.21	21.1	100
241	216-B-63	0.01	0.25	25.1	100
242	202-A SOUTHWEST	0.01	0.25	24.5	100
243	202-A SOUTH	0.01	0.23	22.9	100
244	202-A NORTHWEST	0.01	0.26	25.5	100
245	200E SOUTH	0.01	0.24	23.5	100
246	200E NORTHEAST	0.01	0.25	24.7	100
247	202-A SOUTHEAST	0.01	0.23	22.9	100
249	241-C SOUTHWEST	0.01	0.28	27.9	100
250	241-AY WEST	0.02	0.55	55.1	100
251	241-C NORTH	0.01	0.36	35.8	100
252	241-AN WEST	0.02	0.39	39.3	100
253	241-AN NORTH	0.01	0.31	31.3	100
254	241-C SOUTHEAST	0.02	0.38	38.0	100
255	241-AZ EAST	0.04	0.94	93.8	100
256	241-AX EAST	0.02	0.48	47.9	100
258	241-A SOUTH	0.03	0.77	77.3	100
259	241-AW NORTHWEST	0.01	0.30	30.0	100
261	241-AW SOUTHWEST	0.03	0.78	78.0	100
262	241-AP NORTHEAST	0.01	0.33	32.9	100
263	LERF SOUTHEAST	0.01	0.23	22.5	100
264	LERF NORTHWEST	0.01	0.24	23.5	100
310	CSB EAST	0.01	0.22	22.3	100
311	CSB WEST	0.01	0.23	22.5	100
312	244-A LS	0.01	0.26	26.4	100

Table 4-7. 2001 Thermoluminescent Dosimeter Results, 200 East Area. (cont)

TLD ID	Site Description	2nd Qtr '01			Days in Field
		mrem/hr	mrem/day	mrem/qtr	
217	HWVP SOUTHWEST	0.01	0.23	20.9	90
218	HWVP NORTHWEST	0.01	0.21	19.2	90
219	218-E-16 (GROUT) SOUTH	0.01	0.24	22.0	90
220	218-E-16 (GROUT) NORTHWEST	0.01	0.26	23.6	90
221	218-E-16 (GROUT) NORTH	0.01	0.24	21.7	90
222	241-BX/BY NORTH	0.01	0.31	27.2	89
223	241-B EAST	0.01	0.30	26.8	89
224	HWVP SOUTHWEST (GATE 814)	0.01	0.23	20.0	89
229	218-E-10 EAST	0.01	0.25	22.2	90
230	241-BX SOUTH	0.01	0.32	28.8	90
231	218-E-12	0.01	0.24	21.7	90
232	221-B SOUTHEAST	0.01	0.35	31.0	90
233	221-B NORTHEAST	0.01	0.25	22.8	90
234	241-C WEST	0.01	0.29	25.7	90
237	HWVP EAST	0.01	0.23	20.2	89
238	221-B SOUTHWEST	0.01	0.25	22.5	90
239	221-B NORTH	0.01	0.24	21.3	90
240	HWVP NORTHEAST	0.01	0.22	19.1	89
241	216-B-63	0.01	0.25	22.5	90
242	202-A SOUTHWEST	0.01	0.23	20.5	90
243	202-A SOUTH	0.01	0.22	19.5	90
244	202-A NORTHWEST	0.01	0.24	21.5	90
245	200E SOUTH	0.01	0.23	20.3	90
246	200E NORTHEAST	0.01	0.23	20.7	90
247	202-A SOUTHEAST	0.01	0.24	21.2	90
249	241-C SOUTHWEST	0.01	0.28	24.7	90
250	241-AY WEST	0.02	0.56	49.9	90
251	241-C NORTH	0.01	0.36	32.0	90
252	241-AN WEST	0.01	0.27	24.6	90
253	241-AN NORTH	0.01	0.36	32.3	90
254	241-C SOUTHEAST	0.02	0.39	34.6	90
255	241-AZ EAST	0.06	1.53	137.3	90
256	241-AX EAST	0.02	0.46	41.3	90
258	241-A SOUTH	0.03	0.82	74.2	90
259	241-AW NORTHWEST	0.01	0.34	30.2	90
261	241-AW SOUTHWEST	0.01	0.27	24.2	90
262	241-AP NORTHEAST	0.01	0.22	19.9	90
263	LERF SOUTHEAST	0.01	0.25	22.0	90
264	LERF NORTHWEST	0.01	0.22	20.0	90
310	CSB EAST	0.01	0.21	18.3	89
311	CSB WEST	0.01	0.20	18.2	89
312	244-A LS	0.01	0.25	22.6	89

Table 4-7. 2001 Thermoluminescent Dosimeter Results, 200 East Area. (cont)

TLD ID	Site Description	3rd Qtr '01			Days in Field
		mrem/hr	mrem/day	mrem/qtr	
217	HWVP SOUTHWEST	0.01	0.23	21.3	92
218	HWVP NORTHWEST	0.01	0.22	20.4	92
219	218-E-16 (GROUT) SOUTH	0.01	0.24	21.9	92
220	218-E-16 (GROUT) NORTHWEST	0.01	0.24	21.8	92
221	218-E-16 (GROUT) NORTH	0.01	0.24	22.1	92
222	241-BX/BY NORTH	0.01	0.30	27.8	93
223	241-B EAST	0.01	0.30	27.8	93
224	HWVP SOUTHWEST (GATE 814)	0.01	0.23	21.3	93
229	218-E-10 EAST	0.01	0.25	22.6	92
230	241-BX SOUTH	0.01	0.30	27.4	92
231	218-E-12	0.01	0.24	22.3	92
232	221-B SOUTHEAST	0.01	0.34	31.3	92
233	221-B NORTHEAST	0.01	0.24	22.0	92
234	241-C WEST	0.01	0.27	25.0	92
237	HWVP EAST	0.01	0.21	19.9	93
238	221-B SOUTHWEST	0.01	0.24	21.7	92
239	221-B NORTH	0.01	0.24	22.1	92
240	HWVP NORTHEAST	0.01	0.21	19.3	93
241	216-B-63	0.01	0.25	22.8	92
242	202-A SOUTHWEST	0.01	0.25	22.7	92
243	202-A SOUTH	0.01	0.22	20.4	92
244	202-A NORTHWEST	0.01	0.23	21.0	92
245	200E SOUTH	0.01	0.24	22.3	92
246	200E NORTHEAST	0.01	0.22	20.4	92
247	202-A SOUTHEAST	0.01	0.23	21.0	92
249	241-C SOUTHWEST	0.01	0.29	26.7	92
250	241-AY WEST	0.02	0.54	49.7	92
251	241-C NORTH	0.01	0.34	31.5	92
252	241-AN WEST	0.01	0.27	24.7	92
253	241-AN NORTH	0.01	0.34	30.9	92
254	241-C SOUTHEAST	0.02	0.37	34.4	92
255	241-AZ EAST	0.06	1.44	132.3	92
256	241-AX EAST	0.02	0.47	42.8	92
258	241-A SOUTH	0.03	0.79	72.9	92
259	241-AW NORTHWEST	0.01	0.29	26.6	92
261	241-AW SOUTHWEST	0.01	0.26	23.8	92
262	241-AP NORTHEAST	0.01	0.29	26.8	92
263	LERF SOUTHEAST	0.01	0.24	22.1	92
264	LERF NORTHWEST	0.01	0.22	20.5	92
310	CSB EAST	0.01	0.22	20.2	93
311	CSB WEST	0.01	0.20	18.4	93
312	244-A LS	0.01	0.25	23.5	93



Table 4-7. 2001 Thermoluminescent Dosimeter Results, 200 East Area. (cont)

TLD ID	Site Description	4th Qtr '01			Days in Field
		mrem/hr	mrem/day	mrem/qtr	
217	HWVP SOUTHWEST	0.01	0.24	21.7	90
218	HWVP NORTHWEST	0.01	0.25	22.3	90
219	218-E-16 (GROUT) SOUTH	0.01	0.26	23.1	90
220	218-E-16 (GROUT) NORTHWEST	0.01	0.26	23.4	90
221	218-E-16 (GROUT) NORTH	0.01	0.25	22.8	90
222	241-BX/BY NORTH	0.01	0.32	28.9	90
223	241-B EAST	0.01	0.33	29.3	90
224	HWVP SOUTHWEST (GATE 814)	0.01	0.24	21.8	90
229	218-E-10 EAST	0.01	0.28	25.0	90
230	241-BX SOUTH	0.01	0.35	31.3	90
231	218-E-12	0.01	0.27	24.3	90
232	221-B SOUTHEAST	0.02	0.38	34.3	90
233	221-B NORTHEAST	0.01	0.26	23.1	90
234	241-C WEST	0.01	0.29	26.5	90
237	HWVP EAST	0.01	0.22	20.0	90
238	221-B SOUTHWEST	0.01	0.26	23.0	90
239	221-B NORTH	0.01	0.26	23.3	90
240	HWVP NORTHEAST	0.01	0.23	20.5	90
241	216-B-63	0.01	0.25	22.7	90
242	202-A SOUTHWEST	0.01	0.24	21.9	90
243	202-A SOUTH	0.01	0.23	21.1	90
244	202-A NORTHWEST	0.01	0.24	21.4	90
245	200E SOUTH	0.01	0.27	24.2	90
246	200E NORTHEAST	0.01	0.24	21.8	90
247	202-A SOUTHEAST	0.01	0.24	21.7	90
249	241-C SOUTHWEST	0.01	0.30	27.0	90
250	241-AY WEST	0.02	0.59	52.7	90
251	241-C NORTH	0.02	0.39	35.3	90
252	241-AN WEST	0.01	0.32	28.4	90
253	241-AN NORTH	0.02	0.59	53.0	90
254	241-C SOUTHEAST	0.02	0.40	36.1	90
255	241-AZ EAST	0.02	0.55	49.8	90
256	241-AX EAST	0.02	0.51	45.6	90
258	241-A SOUTH	0.03	0.80	71.7	90
259	241-AW NORTHWEST	0.04	0.86	77.4	90
261	241-AW SOUTHWEST	0.01	0.32	28.6	90
262	241-AP NORTHEAST	0.01	0.17	15.1	90
263	LERF SOUTHEAST	0.01	0.26	23.6	90
264	LERF NORTHWEST	0.01	0.25	22.7	90
310	CSB EAST	0.01	0.23	20.6	90
311	CSB WEST	0.01	0.23	20.5	90
312	244-A LS	NR	NR	NR	NR

Table 4-7. 2001 Thermoluminescent Dosimeter Results, 200 East Area. (cont)

TLD ID	Site Description	Annual Average $\pm$ 2 Standard Deviation (2SD)		
		mrem/hr $\pm$ 2SD	mrem/day $\pm$ 2SD	mrem/yr $\pm$ 2SD
217	HWVP SOUTHWEST	0.01 $\pm$ 0.0005	0.24 $\pm$ 0.01	88 $\pm$ 3
218	HWVP NORTHWEST	0.01 $\pm$ 0.0013	0.23 $\pm$ 0.03	84 $\pm$ 3
219	218-E-16 (GROUT) SOUTH	0.01 $\pm$ 0.0006	0.25 $\pm$ 0.02	92 $\pm$ 2
220	218-E-16 (GROUT) NORTHWEST	0.01 $\pm$ 0.0009	0.25 $\pm$ 0.02	94 $\pm$ 3
221	218-E-16 (GROUT) NORTH	0.01 $\pm$ 0.0006	0.25 $\pm$ 0.01	92 $\pm$ 3
222	241-BX/BY NORTH	0.01 $\pm$ 0.0010	0.30 $\pm$ 0.02	113 $\pm$ 3
223	241-B EAST	0.01 $\pm$ 0.0010	0.31 $\pm$ 0.02	115 $\pm$ 3
224	HWVP SOUTHWEST (GATE 814)	0.01 $\pm$ 0.0008	0.23 $\pm$ 0.02	85 $\pm$ 2
229	218-E-10 EAST	0.01 $\pm$ 0.0013	0.25 $\pm$ 0.03	95 $\pm$ 3
230	241-BX SOUTH	0.01 $\pm$ 0.0018	0.32 $\pm$ 0.04	118 $\pm$ 4
231	218-E-12	0.01 $\pm$ 0.0011	0.25 $\pm$ 0.03	94 $\pm$ 4
232	221-B SOUTHEAST	0.01 $\pm$ 0.0017	0.35 $\pm$ 0.04	131 $\pm$ 3
233	221-B NORTHEAST	0.01 $\pm$ 0.0008	0.25 $\pm$ 0.02	92 $\pm$ 1
234	241-C WEST	0.01 $\pm$ 0.0008	0.28 $\pm$ 0.02	105 $\pm$ 3
237	HWVP EAST	0.01 $\pm$ 0.0005	0.22 $\pm$ 0.04	81 $\pm$ 1
238	221-B SOUTHWEST	0.01 $\pm$ 0.0010	0.24 $\pm$ 0.02	90 $\pm$ 2
239	221-B NORTH	0.01 $\pm$ 0.0009	0.24 $\pm$ 0.04	90 $\pm$ 2
240	HWVP NORTHEAST	0.01 $\pm$ 0.0011	0.22 $\pm$ 0.04	80 $\pm$ 2
241	216-B-63	0.01 $\pm$ 0.0001	0.24 $\pm$ 0.02	93 $\pm$ 2
242	202-A SOUTHWEST	0.01 $\pm$ 0.0007	0.24 $\pm$ 0.03	90 $\pm$ 3
243	202-A SOUTH	0.01 $\pm$ 0.0007	0.23 $\pm$ 0.01	84 $\pm$ 3
244	202-A NORTHWEST	0.01 $\pm$ 0.0009	0.24 $\pm$ 0.03	89 $\pm$ 4
245	200E SOUTH	0.01 $\pm$ 0.0016	0.24 $\pm$ 0.03	90 $\pm$ 3
246	200E NORTHEAST	0.01 $\pm$ 0.0005	0.24 $\pm$ 0.02	88 $\pm$ 4
247	202-A SOUTHEAST	0.01 $\pm$ 0.0005	0.24 $\pm$ 0.04	87 $\pm$ 2
249	241-C SOUTHWEST	0.01 $\pm$ 0.0010	0.36 $\pm$ 0.26	106 $\pm$ 3
250	241-AY WEST	0.02 $\pm$ 0.0016	0.51 $\pm$ 0.21	207 $\pm$ 5
251	241-C NORTH	0.02 $\pm$ 0.0018	0.34 $\pm$ 0.10	135 $\pm$ 9
252	241-AN WEST	0.01 $\pm$ 0.0106	0.33 $\pm$ 0.25	117 $\pm$ 22
253	241-AN NORTH	0.02 $\pm$ 0.0106	0.41 $\pm$ 0.25	147 $\pm$ 22
254	241-C SOUTHEAST	0.02 $\pm$ 0.0010	0.67 $\pm$ 1.14	143 $\pm$ 3
255	241-AZ EAST	0.05 $\pm$ 0.0378	0.85 $\pm$ 0.89	413 $\pm$ 81
256	241-AX EAST	0.02 $\pm$ 0.0176	0.57 $\pm$ 0.34	178 $\pm$ 6
258	241-A SOUTH	0.03 $\pm$ 0.0018	0.67 $\pm$ 0.45	296 $\pm$ 5
259	241-AW NORTHWEST	0.02 $\pm$ 0.0230	0.42 $\pm$ 0.59	164 $\pm$ 49
261	241-AW SOUTHWEST	0.02 $\pm$ 0.0208	0.41 $\pm$ 0.50	155 $\pm$ 53
262	241-AP NORTHEAST	0.01 $\pm$ 0.0060	0.25 $\pm$ 0.14	95 $\pm$ 16
263	LERF SOUTHEAST	0.01 $\pm$ 0.0013	0.24 $\pm$ 0.03	90 $\pm$ 1
264	LERF NORTHWEST	0.01 $\pm$ 0.0012	0.23 $\pm$ 0.03	87 $\pm$ 3
310	CSB EAST	0.01 $\pm$ 0.0008	0.22 $\pm$ 0.02	81 $\pm$ 3
311	CSB WEST	0.01 $\pm$ 0.0012	0.21 $\pm$ 0.03	80 $\pm$ 4
312	244-A LS	0.01 $\pm$ 0.0005	0.26 $\pm$ 0.01	73 $\pm$ 4

---

NR = Not returned to the laboratory for analysis.

Table 4-8. 2001 Thermoluminescent Dosimeter Results, 200 West Area.

TLD ID	Site Description	1st Qtr '01			Days in Field
		mrem/hr	mrem/day	mrem/qtr	
202	218-W-2A	0.01	0.25	24.9	101
203	221-T EAST	0.01	0.33	33.7	101
204	241-TX EAST	0.02	0.37	36.9	101
205	216-Z-20	0.01	0.24	23.8	101
206	241-TX NORTH	0.01	0.28	28.5	101
207	241-U-WEST	0.01	0.30	30.0	101
208	241-U-EAST	0.01	0.25	25.7	101
209	221-U SOUTHEAST	0.01	0.24	24.3	101
210	241-SY	0.01	0.27	27.1	101
211	202-S SOUTHWEST	0.01	0.29	29.5	101
212	241-SY NORTH	0.01	0.35	35.0	101
213	241-S SOUTH	0.02	0.52	52.4	101
214	200W NORTHWEST	0.01	0.23	22.7	101
215	234-5Z NORTH	0.01	0.24	24.2	101
216	234-5Z SOUTH	0.01	0.26	25.8	101
226	218-W-5 WEST	0.01	0.26	25.8	101
227	WSCF SOUTH	0.01	0.23	22.8	101
228	WSCF NORTH	0.01	0.23	23.7	101
235	218-W-5 SOUTH	0.01	0.29	28.8	101
236	241-T EAST	0.01	0.27	27.6	101
260	234-5Z EAST	0.01	0.22	22.4	101
267	SWOC-NE	0.01	0.24	24.2	101
268	SWOC-W	0.02	0.40	40.7	101
269	SWOC-SW	0.01	0.30	29.7	101

TLD ID	Site Description	2nd Qtr '01			Days in Field
		mrem/hr	mrem/day	mrem/qtr	
202	218-W-2A	0.01	0.25	21.9	89
203	221-T EAST	0.01	0.33	29.3	89
204	241-TX EAST	0.02	0.37	32.9	89
205	216-Z-20	0.01	0.23	20.2	89
206	241-TX NORTH	0.01	0.30	26.7	89
207	241-U-WEST	0.01	0.32	28.1	89
208	241-U-EAST	0.01	0.26	23.5	89
209	221-U SOUTHEAST	0.01	0.23	20.8	89
210	241-SY	0.01	0.26	22.9	89
211	202-S SOUTHWEST	0.01	0.29	26.2	89
212	241-SY NORTH	0.01	0.34	30.6	89
213	241-S SOUTH	0.02	0.50	44.8	89
214	200W NORTHWEST	0.01	0.22	19.3	89
215	234-5Z NORTH	0.01	0.23	20.2	89
216	234-5Z SOUTH	0.01	0.25	21.8	89
226	218-W-5 WEST	0.01	0.27	23.7	89
227	WSCF SOUTH	0.01	0.23	20.3	89
228	WSCF NORTH	0.01	0.24	21.0	89
235	218-W-5 SOUTH	0.01	0.30	26.5	89
236	241-T EAST	0.01	0.27	24.0	89
260	234-5Z EAST	0.01	0.21	19.1	89
267	SWOC-NE	0.01	0.24	21.2	89
268	SWOC-W	0.02	0.42	37.5	89
269	SWOC-SW	0.01	0.30	26.6	89

Table 4-8. 2001 Thermoluminescent Dosimeter Results, 200 West Area. (cont)

3rd Qtr '01					
TLD ID	Site Description	mrem/hr	mrem/day	mrem/qtr	Days in Field
202	218-W-2A	0.01	0.25	23.3	93
203	221-T EAST	0.01	0.32	29.8	93
204	241-TX EAST	0.01	0.35	32.1	93
205	216-Z-20	0.01	0.23	21.1	93
206	241-TX NORTH	0.01	0.28	26.1	93
207	241-U-WEST	0.01	0.28	26.4	93
208	241-U-EAST	0.01	0.26	23.7	93
209	221-U SOUTHEAST	0.01	0.23	21.7	93
210	241-SY	0.01	0.26	24.1	93
211	202-S SOUTHWEST	0.01	0.27	25.4	93
212	241-SY NORTH	0.01	0.35	32.5	93
213	241-S SOUTH	0.02	0.46	42.9	93
214	200W NORTHWEST	0.01	0.22	20.7	93
215	234-5Z NORTH	0.01	0.23	21.7	93
216	234-5Z SOUTH	0.01	0.24	22.2	93
226	218-W-5 WEST	0.01	0.25	22.9	93
227	WSCF SOUTH	0.01	0.22	20.4	93
228	WSCF NORTH	0.01	0.22	20.9	93
235	218-W-5 SOUTH	0.01	0.29	26.7	93
236	241-T EAST	0.01	0.25	23.5	93
260	234-5Z EAST	0.01	0.20	18.7	93
267	SWOC-NE	0.01	0.24	22.0	93
268	SWOC-W	0.02	0.46	43.1	93
269	SWOC-SW	0.01	0.29	27.3	93

4th Qtr '01					
TLD ID	Site Description	mrem/hr	mrem/day	mrem/qtr	Days in Field
202	218-W-2A	0.01	0.27	24.1	90
203	221-T EAST	0.01	0.35	31.3	90
204	241-TX EAST	0.02	0.40	35.6	90
205	216-Z-20	0.01	0.24	22.0	90
206	241-TX NORTH	0.01	0.31	28.0	90
207	241-U-WEST	0.01	0.30	26.6	90
208	241-U-EAST	0.01	0.31	28.0	90
209	221-U SOUTHEAST	0.01	0.25	22.7	90
210	241-SY	0.01	0.30	26.6	90
211	202-S SOUTHWEST	0.01	0.29	25.8	90
212	241-SY NORTH	0.02	0.38	33.8	90
213	241-S SOUTH	0.02	0.51	46.0	90
214	200W NORTHWEST	0.01	0.24	21.9	90
215	234-5Z NORTH	0.01	0.27	24.2	90
216	234-5Z SOUTH	0.01	0.26	23.0	90
226	218-W-5 WEST	0.01	0.29	26.1	90
227	WSCF SOUTH	0.01	0.23	20.7	90
228	WSCF NORTH	0.01	0.24	21.6	90
235	218-W-5 SOUTH	0.01	0.32	28.5	90
236	241-T EAST	0.01	0.29	25.9	90
260	234-5Z EAST	0.01	0.23	20.3	90
267	SWOC-NE	0.01	0.25	22.9	90
268	SWOC-W	0.02	0.60	53.7	90
269	SWOC-SW	0.01	0.31	28.2	90

Table 4-8. 2001 Thermoluminescent Dosimeter Results, 200 West Area. (cont)

TLD ID	Site Description	Annual Average $\pm$ 2 Standard Deviation (2SD)			
		mrem/hr $\pm$ 2SD	mrem/day $\pm$ 2SD	mrem/yr $\pm$ 2SD	
202	218-W-2A	0.01 $\pm$ 0.001	0.25 $\pm$ 0.021	94 $\pm$ 3	
203	221-T EAST	0.01 $\pm$ 0.001	0.33 $\pm$ 0.023	124 $\pm$ 4	
204	241-TX EAST	0.02 $\pm$ 0.002	0.37 $\pm$ 0.041	137 $\pm$ 5	
205	216-Z-20	0.01 $\pm$ 0.001	0.23 $\pm$ 0.017	87 $\pm$ 3	
206	241-TX NORTH	0.01 $\pm$ 0.001	0.29 $\pm$ 0.030	109 $\pm$ 2	
207	241-U-WEST	0.01 $\pm$ 0.002	0.30 $\pm$ 0.054	111 $\pm$ 4	
208	241-U-EAST	0.01 $\pm$ 0.002	0.27 $\pm$ 0.054	101 $\pm$ 4	
209	221-U SOUTHEAST	0.01 $\pm$ 0.001	0.24 $\pm$ 0.018	89 $\pm$ 3	
210	241-SY	0.01 $\pm$ 0.001	0.27 $\pm$ 0.034	101 $\pm$ 4	
211	202-S SOUTHWEST	0.02 $\pm$ 0.001	0.29 $\pm$ 0.019	107 $\pm$ 4	
212	241-SY NORTH	0.01 $\pm$ 0.001	0.35 $\pm$ 0.029	132 $\pm$ 4	
213	241-S SOUTH	0.02 $\pm$ 0.002	0.50 $\pm$ 0.052	186 $\pm$ 8	
214	200W NORTHWEST	0.01 $\pm$ 0.001	0.23 $\pm$ 0.024	85 $\pm$ 3	
215	234-5Z NORTH	0.01 $\pm$ 0.002	0.24 $\pm$ 0.036	90 $\pm$ 4	
216	234-5Z SOUTH	0.01 $\pm$ 0.001	0.25 $\pm$ 0.017	93 $\pm$ 4	
226	218-W-5 WEST	0.01 $\pm$ 0.002	0.26 $\pm$ 0.038	98 $\pm$ 2	
227	WSCF SOUTH	0.01 $\pm$ 0.0004	0.23 $\pm$ 0.009	84 $\pm$ 2	
228	WSCF NORTH	0.01 $\pm$ 0.001	0.23 $\pm$ 0.014	87 $\pm$ 3	
235	218-W-5 SOUTH	0.01 $\pm$ 0.001	0.30 $\pm$ 0.028	110 $\pm$ 2	
236	241-T EAST	0.01 $\pm$ 0.001	0.27 $\pm$ 0.028	101 $\pm$ 4	
260	234-5Z EAST	0.01 $\pm$ 0.001	0.22 $\pm$ 0.022	80 $\pm$ 3	
267	SWOC-NE	0.01 $\pm$ 0.001	0.24 $\pm$ 0.016	90 $\pm$ 3	
268	SWOC-W	0.02 $\pm$ 0.007	0.47 $\pm$ 0.175	175 $\pm$ 14	
269	SWOC-SW	0.01 $\pm$ 0.001	0.30 $\pm$ 0.019	112 $\pm$ 3	

Table 4-9. 2001 Thermoluminescent Dosimeter Results, 212-R.

1st Qtr '01					
TLD ID	Site Description	mrem/hr	mrem/day	mrem/qtr	Days in Field
313	212-R RR	0.29	7.0	696	100
2nd Qtr '01					
TLD ID	Site Description	mrem/hr	mrem/day	mrem/qtr	Days in Field
313	212-R RR	0.27	6.5	583	90
3rd Qtr '01					
TLD ID	Site Description	mrem/hr	mrem/day	mrem/qtr	Days in Field
313	212-R RR	0.24	5.8	531	92
4th Qtr '01					
TLD ID	Site Description	mrem/hr	mrem/day	mrem/qtr	Days in Field
313	212-R RR	NR	NR	NR	NR
Annual Average $\pm$ 2 Standard Deviation (2SD)					
TLD ID	Site Description	mrem/hr $\pm$ 2SD	mrem/day $\pm$ 2SD	mrem/yr $\pm$ 2SD	
313	212-R RR	0.27 $\pm$ 0.05	6.4 $\pm$ 1.2	2400 $\pm$ 169	

NR = Not returned to the laboratory for analysis.

Table 4-10. 2001 Thermoluminescent Dosimeter Results, 300 Area  
Treated Effluent Disposal Facility.

1st Qtr '01					
TLD ID	Site Description	mrem/hr	mrem/day	mrem/qtr	Days in Field
401	NE PERIM TEDF (301)	0.01	0.24	20.5	87
402	SE PERIM TEDF (302)	0.01	0.23	19.7	87
403	SW PERIM TEDF (303)	0.01	0.25	21.6	87
404	NW PERIM TEDF (304)	0.01	0.23	19.6	87
405	TEDF IN-LINE 1(305)	0.01	0.23	20.4	87
406	TEDF IN-LINE 2(306)	0.01	0.23	20.0	87

2nd Qtr '01					
TLD ID	Site Description	mrem/hr	mrem/day	mrem/qtr	Days in Field
401	NE PERIM TEDF (301)	0.01	0.22	21.7	98
402	SE PERIM TEDF (302)	0.01	0.22	21.3	98
403	SW PERIM TEDF (303)	0.01	0.25	24.2	98
404	NW PERIM TEDF (304)	0.01	0.21	20.7	98
405	TEDF IN-LINE 1(305)	0.01	0.22	21.3	98
406	TEDF IN-LINE 2(306)	0.01	0.22	21.8	98

3rd Qtr '01					
TLD ID	Site Description	mrem/hr	mrem/day	mrem/qtr	Days in Field
401	NE PERIM TEDF (301)	0.01	0.24	25.5	105
402	SE PERIM TEDF (302)	0.01	0.23	24.2	105
403	SW PERIM TEDF (303)	0.01	0.24	25.2	105
404	NW PERIM TEDF (304)	0.01	0.23	24.1	105
405	TEDF IN-LINE 1(305)	0.01	0.22	23.5	105
406	TEDF IN-LINE 2(306)	0.01	0.22	23.6	105

4th Qtr '01					
TLD ID	Site Description	mrem/hr	mrem/day	mrem/qtr	Days in Field
401	NE PERIM TEDF (301)	0.01	0.24	18.6	77
402	SE PERIM TEDF (302)	0.01	0.25	19.0	77
403	SW PERIM TEDF (303)	0.01	0.25	19.3	77
404	NW PERIM TEDF (304)	0.01	0.26	19.7	77
405	TEDF IN-LINE 1(305)	0.01	0.22	17.0	77
406	TEDF IN-LINE 2(306)	0.01	0.25	19.2	77

Annual Average $\pm$ 2 Standard Deviation (2SD)					
TLD ID	Site Description	mrem/hr $\pm$ 2SD	mrem/day $\pm$ 2SD	mrem/yr $\pm$ 2SD	
401	NE PERIM TEDF (301)	0.01 $\pm$ 0.001	0.24 $\pm$ 0.020	86 $\pm$ 6	
402	SE PERIM TEDF (302)	0.01 $\pm$ 0.001	0.23 $\pm$ 0.024	84 $\pm$ 5	
403	SW PERIM TEDF (303)	0.01 $\pm$ 0.0004	0.25 $\pm$ 0.009	90 $\pm$ 5	
404	NW PERIM TEDF (304)	0.01 $\pm$ 0.002	0.23 $\pm$ 0.037	84 $\pm$ 4	
405	TEDF IN-LINE 1(305)	0.01 $\pm$ 0.001	0.22 $\pm$ 0.015	82 $\pm$ 5	
406	TEDF IN-LINE 2(306)	0.01 $\pm$ 0.001	0.23 $\pm$ 0.024	85 $\pm$ 4	

Table 4-11. 2001 Thermoluminescent Dosimeter Results, 300 Area.

1st Qtr '01					
TLD ID	Site Description	mrem/hr	mrem/day	mrem/qtr	Days in Field
1	PROCESS TRENCH (N)	0.01	0.21	18.2	87
2	NORTH PROCESS POND	0.01	0.23	20.1	87
3	SOUTH PROCESS POND	0.01	0.24	20.8	87
4	316-3 TRENCH	0.02	0.42	36.1	87
5	PROCESS TRENCH (S)	0.01	0.23	19.9	87
6	303-K MIXED TSDF	0.01	0.27	23.8	87
7	340 GATE 40	0.02	0.37	32.2	87
8	3701-U GATE	0.01	0.32	27.5	87

2nd Qtr '01					
TLD ID	Site Description	mrem/hr	mrem/day	mrem/qtr	Days in Field
1	PROCESS TRENCH (N)	0.01	0.25	24.2	98
2	NORTH PROCESS POND	0.01	0.24	23.1	98
3	SOUTH PROCESS POND	0.01	0.22	21.2	98
4	316-3 TRENCH	0.02	0.43	41.6	98
5	PROCESS TRENCH (S)	0.01	0.23	22.1	98
6	303-K MIXED TSDF	0.01	0.27	26.2	98
7	340 GATE 40	0.02	0.37	35.8	98
8	3701-U GATE	0.01	0.30	29.2	98

3rd Qtr '01					
TLD ID	Site Description	mrem/hr	mrem/day	mrem/qtr	Days in Field
1	PROCESS TRENCH (N)	0.01	0.22	23.3	105
2	NORTH PROCESS POND	0.01	0.24	25.5	105
3	SOUTH PROCESS POND	0.01	0.23	24.3	105
4	316-3 TRENCH	0.02	0.53	55.5	105
5	PROCESS TRENCH (S)	0.01	0.24	25.0	105
6	303-K MIXED TSDF	0.01	0.27	28.0	105
7	340 GATE 40	0.02	0.41	43.0	105
8	3701-U GATE	0.01	0.29	30.7	105

4th Qtr '01					
TLD ID	Site Description	mrem/hr	mrem/day	mrem/qtr	Days in Field
1	PROCESS TRENCH (N)	0.01	0.25	18.8	77
2	NORTH PROCESS POND	0.01	0.24	18.5	77
3	SOUTH PROCESS POND	0.01	0.25	19.0	77
4	316-3 TRENCH	0.02	0.50	38.2	77
5	PROCESS TRENCH (S)	0.01	0.25	19.0	77
6	303-K MIXED TSDF	NR	NR	NR	NR
7	340 GATE 40	0.02	0.43	32.8	77
8	3701-U GATE	0.01	0.29	22.3	77

Annual Average $\pm$ 2 Standard Deviation (2SD)					
TLD ID	Site Description	mrem/hr $\pm$ 2SD	mrem/day $\pm$ 2SD	mrem/yr $\pm$ 2SD	
1	PROCESS TRENCH (N)	0.01 $\pm$ 0.002	0.23 $\pm$ 0.036	85 $\pm$ 6	
2	NORTH PROCESS POND	0.01 $\pm$ 0.0004	0.24 $\pm$ 0.011	87 $\pm$ 6	
3	SOUTH PROCESS POND	0.01 $\pm$ 0.001	0.23 $\pm$ 0.026	85 $\pm$ 4	
4	316-3 TRENCH	0.02 $\pm$ 0.005	0.47 $\pm$ 0.110	172 $\pm$ 17	
5	PROCESS TRENCH (S)	0.01 $\pm$ 0.001	0.23 $\pm$ 0.019	86 $\pm$ 5	
6	303-K MIXED TSDF	0.01 $\pm$ 0.002	0.27 $\pm$ 0.059	78 $\pm$ 10	
7	340 GATE 40	0.02 $\pm$ 0.002	0.39 $\pm$ 0.059	144 $\pm$ 10	
8	3701-U GATE	0.01 $\pm$ 0.001	0.30 $\pm$ 0.024	110 $\pm$ 7	

NR = Not returned to the laboratory for analysis.



Table 4-12. 2001 Thermoluminescent Dosimeter Results, 400 Area.

1st Qtr '01					
TLD ID	Site Description	mrem/hr	mrem/day	mrem/qtr	Days in Field
9	PROCESS PONDS	0.01	0.22	18.7	87
10	4717 NORTH END	0.01	0.23	19.7	87
11	CASK LAYDOWN PAD	0.01	0.24	21.0	87
12	427 NORTH END	0.01	0.23	20.1	87
13	FMEF MAIN GATE	0.01	0.24	20.9	87
14	FFTF MAIN GATE	0.01	0.22	19.4	87
15	4843 SODIUM TSDF	0.01	0.24	20.5	87

2nd Qtr '01					
TLD ID	Site Description	mrem/hr	mrem/day	mrem/qtr	Days in Field
9	PROCESS PONDS	0.01	0.23	22.1	98
10	4717 NORTH END	0.01	0.21	20.7	98
11	CASK LAYDOWN PAD	0.01	0.22	21.2	98
12	427 NORTH END	0.01	0.21	20.8	98
13	FMEF MAIN GATE	0.01	0.21	20.7	98
14	FFTF MAIN GATE	0.01	0.22	21.7	98
15	4843 SODIUM TSDF	0.01	0.21	20.6	98

3rd Qtr '01					
TLD ID	Site Description	mrem/hr	mrem/day	mrem/qtr	Days in Field
9	PROCESS PONDS	0.01	0.22	23.4	105
10	4717 NORTH END	0.01	0.21	21.7	105
11	CASK LAYDOWN PAD	0.01	0.22	23.2	105
12	427 NORTH END	0.01	0.22	22.8	105
13	FMEF MAIN GATE	0.01	0.21	22.2	105
14	FFTF MAIN GATE	0.01	0.22	23.1	105
15	4843 SODIUM TSDF	0.01	0.22	22.8	105

4th Qtr '01					
TLD ID	Site Description	mrem/hr	mrem/day	mrem/qtr	Days in Field
9	PROCESS PONDS	0.01	0.24	18.8	77
10	4717 NORTH END	0.01	0.23	17.4	77
11	CASK LAYDOWN PAD	0.01	0.24	18.4	77
12	427 NORTH END	0.01	0.22	17.1	77
13	FMEF MAIN GATE	0.01	0.23	17.3	77
14	FFTF MAIN GATE	0.01	0.23	17.8	77
15	4843 SODIUM TSDF	0.01	0.23	17.9	77

Annual Average $\pm$ 2 Standard Deviation (2SD)					
TLD ID	Site Description	mrem/hr $\pm$ 2SD	mrem/day $\pm$ 2SD	mrem/yr $\pm$ 2SD	
9	PROCESS PONDS	0.01 $\pm$ 0.001	0.23 $\pm$ 0.024	83 $\pm$ 5	
10	4717 NORTH END	0.01 $\pm$ 0.001	0.22 $\pm$ 0.021	80 $\pm$ 4	
11	CASK LAYDOWN PAD	0.01 $\pm$ 0.001	0.23 $\pm$ 0.025	84 $\pm$ 4	
12	427 NORTH END	0.01 $\pm$ 0.001	0.22 $\pm$ 0.015	81 $\pm$ 5	
13	FMEF MAIN GATE	0.01 $\pm$ 0.001	0.22 $\pm$ 0.028	81 $\pm$ 4	
14	FFTF MAIN GATE	0.01 $\pm$ 0.001	0.22 $\pm$ 0.024	82 $\pm$ 4	
15	4843 SODIUM TSDF	0.01 $\pm$ 0.001	0.22 $\pm$ 0.024	82 $\pm$ 4	

Table 4-13. 2001 Thermoluminescent Dosimeter Results, Cold Vacuum Storage Facility.

1st Quarter '01					
TLD ID	Site Description	mrem/hr	mrem/day	mrem/qtr	Days in Field
12	CVS NORTH	0.01	0.21	17.9	85
13	CVS EAST	0.01	0.22	18.8	86
14	CVS SOUTH	0.01	0.21	18.4	86
15	CVS WEST	0.01	0.20	17.6	86

2nd Quarter '01					
TLD ID	Site Description	mrem/hr	mrem/day	mrem/qtr	Days in Field
12	CVS NORTH	0.01	0.19	20.2	104
13	CVS EAST	0.01	0.22	22.6	104
14	CVS SOUTH	0.01	0.20	20.6	104
15	CVS WEST	0.01	0.21	21.5	104

3rd Quarter '01					
TLD ID	Site Description	mrem/hr	mrem/day	mrem/qtr	Days in Field
12	CVS NORTH	0.01	0.20	19.8	100
13	CVS EAST	0.01	0.22	22.4	100
14	CVS SOUTH	0.01	0.21	21.3	100
15	CVS WEST	0.01	0.21	21.1	100

4th Qtr '01					
TLD ID	Site Description	mrem/hr	mrem/day	mrem/qtr	Days in Field
12	CVS NORTH	0.01	0.22	17.6	81
13	CVS EAST	0.01	0.22	17.7	81
14	CVS SOUTH	0.01	0.21	17.1	81
15	CVS WEST	0.01	0.22	17.8	81

Annual Average $\pm$ 2 Standard Deviation (2SD)					
TLD ID	Site Description	mrem/hr $\pm$ 2SD	mrem/day $\pm$ 2SD	mrem/yr $\pm$ 2SD	
12	CVS NORTH	0.01 $\pm$ 0.001	0.20 $\pm$ 0.021	75 $\pm$ 3	
13	CVS EAST	0.01 $\pm$ 0.0002	0.22 $\pm$ 0.006	81 $\pm$ 5	
14	CVS SOUTH	0.01 $\pm$ 0.001	0.21 $\pm$ 0.014	78 $\pm$ 4	
15	CVS WEST	0.01 $\pm$ 0.001	0.21 $\pm$ 0.013	78 $\pm$ 4	

Table 4-14. 2001 Thermoluminescent Dosimeter Results,  
Environmental Restoration Disposal Facility.

1st Qtr '01					
TLD ID	Site Description	mrem/hr	mrem/day	mrem/qtr	Days in Field
1	ERDF-1	0.01	0.23	20.4	90
2	ERDF-2	0.01	0.27	23.8	90
3	ERDF-3	0.01	0.30	27.1	90

2nd Qtr '01					
TLD ID	Site Description	mrem/hr	mrem/day	mrem/qtr	Days in Field
1	ERDF-1	0.01	0.20	22.7	112
2	ERDF-2	0.01	0.24	26.9	112
3	ERDF-3	0.01	0.26	28.9	112

3rd Qtr '01					
TLD ID	Site Description	mrem/hr	mrem/day	mrem/qtr	Days in Field
1	ERDF-1	0.01	0.26	21.7	85
2	ERDF-2	0.01	0.29	24.6	85
3	ERDF-3	0.01	0.30	25.9	85

4th Qtr '01					
TLD ID	Site Description	mrem/hr	mrem/day	mrem/qtr	Days in Field
1	ERDF-1	NR	NR	NR	NR
2	ERDF-2	0.01	0.28	27.0	97
3	ERDF-3	0.01	0.30	28.9	97

Annual Average $\pm$ 2 Standard Deviation (2SD)					
TLD ID	Site Description	mrem/hr $\pm$ 2SD	mrem/day $\pm$ 2SD	mrem/yr $\pm$ 2SD	
1	ERDF-1	0.01 $\pm$ 0.002	0.23 $\pm$ 0.053	65 $\pm$ 2	
2	ERDF-2	0.01 $\pm$ 0.002	0.27 $\pm$ 0.042	102 $\pm$ 3	
3	ERDF-3	0.01 $\pm$ 0.002	0.29 $\pm$ 0.042	111 $\pm$ 3	

NR = Not returned to the laboratory for analysis.

## **5.0 100-N RIVERBANK SPRINGS MONITORING**

In 2001, water samples were taken only at the riverbank springs in the 100 N Area. All radiological analyses were performed onsite at the WSCF. Analyses for riverbank springs water included tritium, strontium-90, and gamma-emitting radionuclides. Sampling locations are illustrated in Figure 5-1.

Riverbank springs and/or shoreline seepage wells along the 100-N Area shoreline are sampled annually to verify that the reported radionuclide releases to the Columbia River are conservative (i.e., not underreported). In the past, radioactive effluent streams sent to the 1301-N and 1325-N LWDFs in the 100-N Area contributed to the release of radionuclides to the Columbia River through their migration with the groundwater. Radionuclides from these facilities enter the Columbia River along the riverbank region commonly called N Springs.

The amount of radionuclides entering the river at these springs is calculated based on analyses of samples routinely collected from monitoring well 199-N-46, located near the shoreline. To calculate these releases, conservatively high radionuclide activities in samples collected from well 199-N-46 are multiplied by the estimated groundwater discharged into the river. The estimated groundwater flow rate used to calculate 2001 releases from the springs was 43 L/min (11 gal/min). The results of the annual riverbank spring samples can then be compared to the activities measured in well 199-N-46 to ensure that activities in the well reflect the highest activities of radionuclides in the groundwater. Additional discussion of the release calculations may be found in HNF-EP-0527-11.

In October 2001, 10 samples were collected from the 13 shoreline wells. Three wells were dry and could not be sampled. The shoreline seepage well samples were collected using a bailer, carefully lowered into each well water column to avoid sediment suspension, and a 4-L (1-gal) sample was obtained. The sampling methods are discussed in more detail in DFSNW-OEM-001.

In 2001, the levels of strontium-90 detected in samples from riverbank springs were highest in N Springs wells Y302, Y303 (near well 199-N-46), and Y311 (downstream of well 199-N-46). Strontium-90 concentrations did not exceed the DOE DCG value at any well. Tritium and gamma-emitting radionuclide concentrations were below analytical detection limits in 2001. The 2001 data results from riverbank springs sampling are summarized in Table 5-1. Historical tritium and strontium-90 sampling results are provided in Tables 5-2 and 5-3.

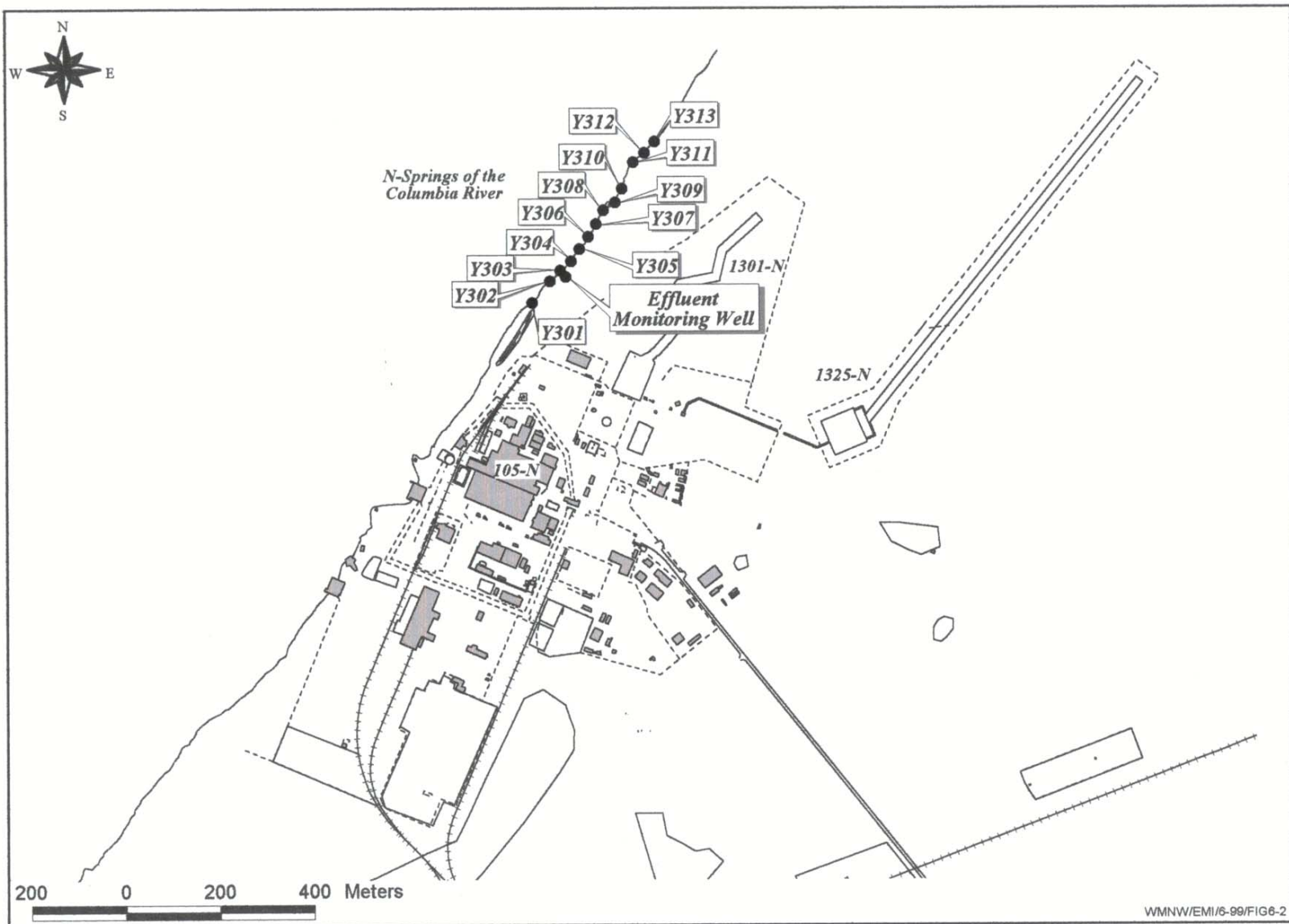


Figure 5-1. 100-N Area Shoreline Seepage Well Locations.

Table 5-1. 2001 Radiological Results for N-Springs Water Samples  
(pCi/L  $\pm$  total analytical uncertainty).

Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
Y301	<sup>144</sup> Ce	2.9E+01 $\pm$ 8.0E+01	U	Y302	<sup>144</sup> Ce	2.3E+01 $\pm$ 6.0E+01	U
	<sup>60</sup> Co	7.6E+00 $\pm$ 5.4E+00	U		<sup>60</sup> Co	2.8E+00 $\pm$ 3.9E+00	U
	<sup>134</sup> Cs	4.2E-01 $\pm$ 4.2E+00	U		<sup>134</sup> Cs	-1.4E+00 $\pm$ 4.2E+00	U
	<sup>137</sup> Cs	2.1E+00 $\pm$ 5.7E+00	U		<sup>137</sup> Cs	-1.0E+00 $\pm$ 4.2E+00	U
	<sup>152</sup> Eu	-1.3E+00 $\pm$ 1.3E+01	U		<sup>152</sup> Eu	-6.1E+00 $\pm$ 1.4E+01	U
	<sup>154</sup> Eu	-9.3E+00 $\pm$ 1.5E+01	U		<sup>154</sup> Eu	9.3E-02 $\pm$ 9.3E-01	U
	<sup>155</sup> Eu	-5.8E+00 $\pm$ 2.2E+01	U		<sup>155</sup> Eu	-2.8E+00 $\pm$ 1.5E+01	U
	<sup>3</sup> H	9.9E-01 $\pm$ 8.9E-01	U		<sup>3</sup> H	8.1E+01 $\pm$ 6.5E+01	U
	<sup>103</sup> Ru	-4.1E+00 $\pm$ 6.0E+00	U		<sup>103</sup> Ru	-1.8E+00 $\pm$ 5.0E+00	U
	<sup>106</sup> Ru	-3.7E+01 $\pm$ 5.2E+01	U		<sup>106</sup> Ru	-4.8E-01 $\pm$ 4.8E+00	U
	<sup>125</sup> Sb	8.8E+00 $\pm$ 1.6E+01	U		<sup>125</sup> Sb	1.1E+01 $\pm$ 1.4E+01	U
	<sup>113</sup> Sn	2.2E+00 $\pm$ 7.5E+00	U		<sup>113</sup> Sn	-3.7E+00 $\pm$ 5.9E+00	U
	<sup>90</sup> Sr	4.3E+00 $\pm$ 8.6E-01	U		<sup>90</sup> Sr	1.9E+01 $\pm$ 2.8E+00	U
	<sup>65</sup> Zn	7.7E+00 $\pm$ 1.3E+01	U		<sup>65</sup> Zn	7.9E+00 $\pm$ 9.0E+00	U
Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
Y303	<sup>144</sup> Ce	-2.9E+01 $\pm$ 6.0E+01	U	Y305	<sup>144</sup> Ce	-7.0E+01 $\pm$ 9.6E+01	U
	<sup>60</sup> Co	3.6E+00 $\pm$ 4.2E+00	U		<sup>60</sup> Co	-1.1E+00 $\pm$ 8.8E+00	U
	<sup>134</sup> Cs	2.7E+00 $\pm$ 4.3E+00	U		<sup>134</sup> Cs	-5.6E-01 $\pm$ 5.6E+00	U
	<sup>137</sup> Cs	-2.4E+00 $\pm$ 4.4E+00	U		<sup>137</sup> Cs	-3.6E+00 $\pm$ 6.7E+00	U
	<sup>152</sup> Eu	-5.6E+00 $\pm$ 1.4E+01	U		<sup>152</sup> Eu	-1.0E+01 $\pm$ 2.0E+01	U
	<sup>154</sup> Eu	-1.5E+00 $\pm$ 1.1E+01	U		<sup>154</sup> Eu	4.4E+00 $\pm$ 1.6E+01	U
	<sup>155</sup> Eu	-6.8E+00 $\pm$ 1.5E+01	U		<sup>155</sup> Eu	-9.3E+00 $\pm$ 2.6E+01	U
	<sup>3</sup> H	9.6E+01 $\pm$ 6.7E+01	U		<sup>3</sup> H	5.9E+01 $\pm$ 6.2E+01	U
	<sup>103</sup> Ru	-3.3E+00 $\pm$ 4.7E+00	U		<sup>103</sup> Ru	-2.1E+00 $\pm$ 7.1E+00	U
	<sup>106</sup> Ru	5.5E+00 $\pm$ 3.9E+01	U		<sup>106</sup> Ru	7.0E+01 $\pm$ 6.3E+01	U
	<sup>125</sup> Sb	1.1E+00 $\pm$ 1.1E+01	U		<sup>125</sup> Sb	-2.4E+00 $\pm$ 1.7E+01	U
	<sup>113</sup> Sn	-2.2E+00 $\pm$ 5.8E+00	U		<sup>113</sup> Sn	4.8E+00 $\pm$ 8.6E+00	U
	<sup>90</sup> Sr	4.5E+01 $\pm$ 6.8E+00	U		<sup>90</sup> Sr	9.6E+00 $\pm$ 1.9E+00	U
	<sup>65</sup> Zn	2.4E+00 $\pm$ 9.1E+00	U		<sup>65</sup> Zn	-2.6E-01 $\pm$ 2.6E+00	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.

Table 5-1. 2001 Radiological Results for N-Springs Water Samples  
(pCi/L  $\pm$  total analytical uncertainty). (cont)

Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
Y306	<sup>144</sup> Ce	1.6E+01 $\pm$ 7.4E+01	U	Y307	<sup>144</sup> Ce	6.3E+01 $\pm$ 6.0E+01	U
	<sup>60</sup> Co	-5.9E-01 $\pm$ 5.4E+00	U		<sup>60</sup> Co	3.0E+00 $\pm$ 4.9E+00	U
	<sup>134</sup> Cs	2.5E+00 $\pm$ 6.2E+00	U		<sup>134</sup> Cs	2.3E+00 $\pm$ 5.4E+00	U
	<sup>137</sup> Cs	3.8E+00 $\pm$ 5.5E+00	U		<sup>137</sup> Cs	-3.6E-01 $\pm$ 3.6E+00	U
	<sup>152</sup> Eu	6.0E+00 $\pm$ 1.6E+01	U		<sup>152</sup> Eu	-1.6E+01 $\pm$ 1.6E+01	U
	<sup>154</sup> Eu	-7.9E+00 $\pm$ 1.5E+01	U		<sup>154</sup> Eu	5.6E+00 $\pm$ 1.4E+01	U
	<sup>155</sup> Eu	2.1E+01 $\pm$ 1.9E+01	U		<sup>155</sup> Eu	-9.0E-01 $\pm$ 9.0E+00	U
	<sup>3</sup> H	5.0E+01 $\pm$ 6.5E+01	U		<sup>3</sup> H	9.7E+01 $\pm$ 9.9E+01	U
	<sup>103</sup> Ru	-1.0E+00 $\pm$ 5.9E+00	U		<sup>103</sup> Ru	-1.4E+00 $\pm$ 5.3E+00	U
	<sup>106</sup> Ru	2.2E+01 $\pm$ 5.3E+01	U		<sup>106</sup> Ru	7.0E+00 $\pm$ 4.9E+01	U
	<sup>125</sup> Sb	-1.1E+00 $\pm$ 1.1E+01	U		<sup>125</sup> Sb	3.6E+00 $\pm$ 1.3E+01	U
	<sup>113</sup> Sn	-1.0E+00 $\pm$ 6.9E+00	U		<sup>113</sup> Sn	-1.6E+00 $\pm$ 6.0E+00	U
	<sup>90</sup> Sr	3.3E+00 $\pm$ 8.2E-01			<sup>90</sup> Sr	3.4E+00 $\pm$ 8.5E-01	
	<sup>65</sup> Zn	-6.4E+00 $\pm$ 1.2E+01	U		<sup>65</sup> Zn	-5.1E+00 $\pm$ 1.0E+01	U
Location	Isotope	Result $\pm$ Uncertainty	RQ*	Location	Isotope	Result $\pm$ Uncertainty	RQ*
Y309	<sup>144</sup> Ce	-4.0E+01 $\pm$ 8.0E+01	U	Y310	<sup>144</sup> Ce	4.0E+01 $\pm$ 5.9E+01	U
	<sup>60</sup> Co	-2.3E+00 $\pm$ 4.8E+00	U		<sup>60</sup> Co	-2.8E-01 $\pm$ 2.8E+00	U
	<sup>134</sup> Cs	-2.7E+00 $\pm$ 5.9E+00	U		<sup>134</sup> Cs	2.8E+00 $\pm$ 4.0E+00	U
	<sup>137</sup> Cs	9.0E-01 $\pm$ 6.2E+00	U		<sup>137</sup> Cs	-6.8E-01 $\pm$ 4.6E+00	U
	<sup>152</sup> Eu	-2.1E+01 $\pm$ 2.1E+01	U		<sup>152</sup> Eu	2.7E+00 $\pm$ 1.4E+01	U
	<sup>154</sup> Eu	-7.8E+00 $\pm$ 1.4E+01	U		<sup>154</sup> Eu	1.2E+01 $\pm$ 1.3E+01	U
	<sup>155</sup> Eu	-7.8E+00 $\pm$ 2.5E+01	U		<sup>155</sup> Eu	-6.5E+00 $\pm$ 1.4E+01	U
	<sup>3</sup> H	1.9E+02 $\pm$ 1.1E+02	U		<sup>3</sup> H	8.8E+01 $\pm$ 9.7E+01	U
	<sup>103</sup> Ru	-1.6E+00 $\pm$ 6.0E+00	U		<sup>103</sup> Ru	5.0E+00 $\pm$ 4.9E+00	U
	<sup>106</sup> Ru	1.8E+01 $\pm$ 4.9E+01	U		<sup>106</sup> Ru	1.3E+01 $\pm$ 3.8E+01	U
	<sup>125</sup> Sb	8.7E+00 $\pm$ 1.5E+01	U		<sup>125</sup> Sb	4.5E+00 $\pm$ 1.3E+01	U
	<sup>113</sup> Sn	3.1E+00 $\pm$ 7.5E+00	U		<sup>113</sup> Sn	-1.5E+00 $\pm$ 5.9E+00	U
	<sup>90</sup> Sr	2.5E+00 $\pm$ 7.5E-01			<sup>90</sup> Sr	2.8E+00 $\pm$ 8.4E-01	
	<sup>65</sup> Zn	5.9E-01 $\pm$ 5.9E+00	U		<sup>65</sup> Zn	3.4E+00 $\pm$ 9.6E+00	U

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.

Table 5-1. 2001 Radiological Results for N-Springs Water Samples  
(pCi/L  $\pm$  total analytical uncertainty). (cont)

Location	Isotope	Result ± Uncertainty	RQ*	Location	Isotope	Result ± Uncertainty	RQ*
Y311	<sup>144</sup> Ce	-5.0E+01 ± 5.5E+01	U	Y312	<sup>144</sup> Ce	-5.4E+00 ± 5.4E+01	U
	<sup>60</sup> Co	-3.1E+00 ± 4.3E+00	U		<sup>60</sup> Co	-1.6E+00 ± 4.1E+00	U
	<sup>134</sup> Cs	3.0E+00 ± 4.0E+00	U		<sup>134</sup> Cs	2.4E-02 ± 2.4E-01	U
	<sup>137</sup> Cs	-3.2E+00 ± 4.4E+00	U		<sup>137</sup> Cs	1.7E+00 ± 4.1E+00	U
	<sup>152</sup> Eu	-5.2E+00 ± 1.3E+01	U		<sup>152</sup> Eu	-5.6E+00 ± 1.3E+01	U
	<sup>154</sup> Eu	-5.1E+00 ± 1.3E+01	U		<sup>154</sup> Eu	-1.1E+01 ± 1.1E+01	U
	<sup>155</sup> Eu	1.5E+01 ± 1.4E+01	U		<sup>155</sup> Eu	-6.7E+00 ± 1.6E+01	U
	<sup>3</sup> H	5.3E+01 ± 8.5E+01	U		<sup>3</sup> H	9.9E-01 ± 2.4E+00	U
	<sup>103</sup> Ru	-2.8E+00 ± 4.5E+00	U		<sup>103</sup> Ru	-4.5E+00 ± 5.5E+00	U
	<sup>106</sup> Ru	9.4E+00 ± 3.8E+01	U		<sup>106</sup> Ru	3.1E+01 ± 3.7E+01	U
	<sup>125</sup> Sb	-1.6E+00 ± 1.3E+01	U		<sup>125</sup> Sb	7.0E-01 ± 7.0E+00	U
	<sup>113</sup> Sn	1.6E+00 ± 5.9E+00	U		<sup>113</sup> Sn	6.8E-01 ± 5.9E+00	U
	<sup>90</sup> Sr	3.4E+01 ± 5.1E+00	U		<sup>90</sup> Sr	6.0E+00 ± 1.2E+00	U
	<sup>65</sup> Zn	-2.4E+01 ± 2.4E+01	U		<sup>65</sup> Zn	-1.3E+01 ± 1.3E+01	U
2001 N-Springs Averages							
	Isotope	Average ± 2SD <sup>a</sup>	RQ*				
	<sup>144</sup> Ce	-2.3E+00 ± 8.7E+01	U				
	<sup>60</sup> Co	8.0E-01 ± 6.7E+00	U				
	<sup>134</sup> Cs	9.1E-01 ± 4.1E+00	U				
	<sup>137</sup> Cs	-2.7E-01 ± 4.8E+00	U				
	<sup>152</sup> Eu	-6.2E+00 ± 1.6E+01	U				
	<sup>154</sup> Eu	-2.1E+00 ± 1.5E+01	U				
	<sup>155</sup> Eu	-1.1E+00 ± 2.1E+01	U				
	<sup>3</sup> H	7.2E+01 ± 1.1E+02	U				
	<sup>103</sup> Ru	-1.8E+00 ± 5.3E+00	U				
	<sup>106</sup> Ru	1.4E+01 ± 5.4E+01	U				
	<sup>125</sup> Sb	3.3E+00 ± 9.6E+00	U				
	<sup>113</sup> Sn	2.4E-01 ± 5.3E+00	U				
	<sup>90</sup> Sr	1.4E+01 ± 3.0E+01	U				
	<sup>65</sup> Zn	-2.7E+00 ± 2.0E+01	U				

RQ = Result Qualifier. U = The analyte was analyzed for but not detected.



Table 5-2. Historical N-Springs Shoreline Tritium Concentrations  
(pCi/L  $\pm$  overall analytical uncertainty).

Year	Effluent						
	Y301	Y302	monitoring well	Y303	Y304	Y305	Y306
1987	6.8E+04	7.6E+04	9.5E+04	9.2E+04	9.4E+04	8.8E+04	7.9E+04
1988	5.7E+03	2.8E+04	7.5E+04	6.9E+04	7.4E+04	NS	NS
1989	2.5E+04	2.8E+04	3.9E+04	3.6E+04	5.0E+04	NS	6.8E+04
1990	2.9E+04	3.2E+04	3.8E+04	3.6E+04	NS	NS	3.4E+03
1991	2.2E+02	8.4E+01	3.7E+04	2.6E+03	3.4E+04	NS	4.0E+02
1992	7.2E+02	NS	5.0E+04	9.5E-01	NS	NS	1.5E+02
1993	2.8E+02	1.3E+02	2.7E+04 $\pm$ 2.1E+03	1.4E+02	5.6E+02	1.0E+02	1.8E+02
1994	NS	4.0E+01 $\pm$ 1.9E+02	2.6E+04 $\pm$ 2.1E+03	4.0E+01	NS	NS	1.2E+02 $\pm$ 2.0E+02
1995	NS	NS	5.2E+03	-1.2E+01 $\pm$ 1.2E+02	NS	NS	-4.4E+01 $\pm$ 1.5E+02
1996	2.5E+02	8.5E+02 $\pm$ 2.5E+02	2.0E+04 $\pm$ 1.6E+03	1.6E+04 $\pm$ 1.3E+03	4.2E+03 $\pm$ 5.0E+02	1.6E+02 $\pm$ 2.2E+02	2.2E+02 $\pm$ 2.1E+02
1997	-4.3E+01 $\pm$ 5.6E+01	3.6E+01 $\pm$ 3.2E+01	1.6E+04 $\pm$ 1.3E+03	3.0E+03 $\pm$ 6.0E+02	-6.3E+02 $\pm$ 1.1E+03	-5.7E+01 $\pm$ 9.1E+01	-1.1E+02 $\pm$ 5.4E+02
1998	NS	4.6E+02 $\pm$ 2.1E+02	1.6E+04 $\pm$ 5.1E+03	1.4E+02 $\pm$ 3.6E+01	NS	3.7E+02 $\pm$ 2.6E+02	4.3E+02 $\pm$ 2.2E+02
1999	9.7E+01 $\pm$ 7.4E+01	1.0E+02 $\pm$ 7.0E+01	1.3E+02 $\pm$ 7.9E+01	1.9E+02 $\pm$ 9.7E+01	NS	4.7E+01 $\pm$ 4.7E+01	3.6E+00 $\pm$ 7.6E+00
2000	1.3E+03 $\pm$ 3.3E+02	2.8E+02 $\pm$ 1.5E+02	7.0E+03 $\pm$ 3.1E+03	2.8E+02 $\pm$ 1.5E+02	2.8E+02 $\pm$ 1.4E+02	2.0E+02 $\pm$ 1.4E+02	2.0E+02 $\pm$ 1.4E+02
2001	9.9E-01 $\pm$ 8.9E-01	9.9E-01 $\pm$ 7.9E-01	5.0E+03 $\pm$ 5.1E+02	9.6E+01 $\pm$ 6.7E+01	NS	5.9E+01 $\pm$ 6.2E+01	5.0E+01 $\pm$ 6.5E+01

Year	Y307	Y308	Y309	Y310	Y311	Y312	Y313
1987	7.3E+04	4.6E+04	7.5E+04	4.0E+03	5.8E+04	2.1E+04	1.3E+03
1988	1.1E+04	3.0E+04	1.0E+04	NS	2.9E+04	1.9E+04	3.0E+03
1989	NS	7.7E+04	7.0E+04	3.5E+04	4.2E+04	NS	NS
1990	NS	1.4E+04	3.5E+03	9.7E+03	3.8E+04	2.0E+04	NS
1991	8.1E+02	2.1E+03	6.5E+03	7.9E+02	7.1E+02	2.4E+03	9.3E+00
1992	NS	NS	3.0E+02	4.3E+02	6.5E+02	1.7E+02	NS
1993	NS	NS	NS	NS	NS	NS	NS
1994	8.5E+01 $\pm$ 1.9E+02	1.3E+02 $\pm$ 2.0E+02	8.4E+01 $\pm$ 1.9E+02	4.0E+02 $\pm$ 2.1E+02	4.5E+02 $\pm$ 2.1E+02	2.9E+02 $\pm$ 2.0E+02	NS
1995	-2.1E+00 $\pm$ 2.1E+01	-2.3E+01 $\pm$ 1.4E+02	-3.1E+01 $\pm$ 1.4E+02	-1.2E+01 $\pm$ 1.2E+02	3.2E+02 $\pm$ 1.6E+02	5.0E+02 $\pm$ 1.8E+02	NS
1996	1.9E+02 $\pm$ 2.1E+02	2.4E+02 $\pm$ 2.1E+02	NS	NS	2.2E+02 $\pm$ 2.1E+02	NS	NS
1997	-1.4E+02 $\pm$ 1.4E+03	-1.2E+02 $\pm$ 8.2E+02	-6.4E+01 $\pm$ 1.0E+02	-1.1E+02 $\pm$ 5.4E+02	2.6E+01 $\pm$ 2.1E+01	NS	NS
1998	3.5E+02 $\pm$ 2.6E+02	NS	3.5E+02 $\pm$ 2.7E+02	3.0E+02 $\pm$ 2.1E+02	5.6E+02 $\pm$ 2.5E+02	6.2E+02 $\pm$ 2.5E+02	5.2E+02 $\pm$ 2.6E+02
1999	2.7E+02 $\pm$ 1.1E+02	1.1E+02 $\pm$ 8.8E+01	NS	1.3E+02 $\pm$ 8.5E+01	1.8E+02 $\pm$ 9.9E+01	1.5E+02 $\pm$ 9.8E+01	NS
2000	3.0E+02 $\pm$ 1.5E+02	2.4E+02 $\pm$ 1.4E+02	1.9E+02 $\pm$ 1.3E+02	2.4E+02 $\pm$ 1.4E+02	4.0E+02 $\pm$ 1.6E+02	3.7E+02 $\pm$ 1.7E+02	2.5E+02 $\pm$ 1.4E+02
2001	9.7E+01 $\pm$ 9.9E+01	NS	1.9E+02 $\pm$ 1.1E+02	8.8E+01 $\pm$ 9.7E+01	5.3E+01 $\pm$ 8.5E+01	9.9E-01 $\pm$ 2.4E+00	NS

NS - Not sampled.

Table 5-3. Historical N-Springs Shoreline Strontium-90 Concentrations  
(pCi/L  $\pm$  overall analytical uncertainty).

Year	Effluent						
	Y301	Y302	monitoring well	Y303	Y304	Y305	Y306
1987	1.7E+03	2.7E+03	6.1E+03	8.3E+03	4.1E+03	9.5E+02	7.2E+02
1988	8.7E+02	3.0E+03	7.9E+03	9.1E+03	3.5E+03	NS	NS
1989	9.8E+02	2.1E+03	6.5E+03	5.4E+03	3.8E+03	NS	8.9E+02
1990	2.4E+03	2.9E+03	4.9E+03	7.1E+03	NS	NS	1.5E+02
1991	1.6E+01	2.4E+01	6.9E+03	1.4E+03	3.2E+03	NS	8.6E+01
1992	NS	NS	6.3E+03	1.5E+02	NS	NS	9.6E+00
1993	1.2E+01	8.3E+01	7.4E+03 $\pm$ 1.3E+03	1.2E+02	4.1E+03	4.1E+01	1.3E+01
1994	NS	1.1E+02 $\pm$ 2.6E+01	6.6E+03 $\pm$ 1.4E+03	1.2E+02	NS	NS	6.4E+00 $\pm$ 1.7E+00
1995	NS	NS	5.7E+03 $\pm$ 1.4E+03	3.0E+02 $\pm$ 5.1E+01	NS	NS	7.0E+00 $\pm$ 1.4E+00
1996	5.8E+01	2.6E+02 $\pm$ 6.5E+01	1.4E+04 $\pm$ 4.1E+03	5.8E+03 $\pm$ 1.6E+03	9.5E+02 $\pm$ 2.6E+02	3.7E+01 $\pm$ 1.0E+01	1.6E+01 $\pm$ 4.2E+00
1997	3.1E+01 $\pm$ 4.7E+00	2.0E+02 $\pm$ 2.8E+01	1.0E+04 $\pm$ 3.5E+03	3.2E+03 $\pm$ 3.8E+02	1.7E+02 $\pm$ 2.2E+01	2.6E+01 $\pm$ 4.7E+00	3.1E+00 $\pm$ 1.6E+00
1998	NS	1.1E+02 $\pm$ 1.3E+01	1.4E+04 $\pm$ 2.1E+03	1.9E+03 $\pm$ 2.3E+02	NS	1.7E+01 $\pm$ 2.6E+00	7.7E+00 $\pm$ 1.5E+00
1999	7.1E+00 $\pm$ 1.4E+00	4.9E+01 $\pm$ 7.4E+00	3.2E+03 $\pm$ 4.8E+02	1.3E+03 $\pm$ 2.0E+02	NS	3.0E+01 $\pm$ 4.5E+00	8.1E+00 $\pm$ 1.6E+00
2000	8.3E+00 $\pm$ 1.7E+00	1.1E+01 $\pm$ 1.6E+00	1.3E+04 $\pm$ 4.0E+03	1.3E+02 $\pm$ 2.6E+01	1.8E+02 $\pm$ 2.7E+01	7.1E+00 $\pm$ 1.4E+00	4.0E+00 $\pm$ 1.0E+00
2001	4.3E+00 $\pm$ 8.6E-01	1.9E+01 $\pm$ 2.8E+00	9.7E+03 $\pm$ 2.2E+03	4.5E+01 $\pm$ 6.8E+00	NS	9.6E+00 $\pm$ 1.9E+00	3.3E+00 $\pm$ 8.2E-01

Year	Y307	Y308	Y309	Y310	Y311	Y312	Y313
1987	1.3E+01	4.2E+01	2.4E+02	5.7E+01	6.6E+02	5.8E+01	5.0E+01
1988	1.5E+01	3.2E+01	4.1E+01	NS	3.4E+02	4.0E+01	5.8E+01
1989	NS	7.8E+01	2.9E+02	1.6E+02	9.5E+02	NS	NS
1990	NS	9.0E+01	4.4E+01	3.1E+01	5.8E+02	5.4E+01	NS
1991	1.4E+01	2.8E+01	1.0E+02	1.5E+01	4.0E+02	8.9E+00	8.1E+00
1992	NS	NS	8.1E+00	6.7E+00	1.1E+02	7.1E+00	NS
1993	NS	NS	NS	NS	NS	NS	NS
1994	3.8E+00 $\pm$ 8.7E-01	1.2E+01 $\pm$ 2.5E+00	3.4E+00 $\pm$ 9.2E-01	3.8E+00 $\pm$ 1.0E+00	5.1E+01 $\pm$ 1.1E+01	1.8E+01 $\pm$ 4.3E+00	NS
1995	3.8E+00 $\pm$ 8.0E-01	1.4E+01 $\pm$ 2.7E+00	5.5E+00 $\pm$ 1.2E+00	7.0E+00 $\pm$ 1.4E+00	7.1E+01 $\pm$ 1.3E+01	1.9E+01 $\pm$ 3.6E+00	NS
1996	6.5E+00 $\pm$ 1.8E+00	2.2E+01 $\pm$ 5.7E+00	NS	NS	1.7E+02 $\pm$ 4.9E+01	NS	NS
1997	3.6E-01 $\pm$ 1.9E+00	1.1E+01 $\pm$ 2.2E+00	5.6E+00 $\pm$ 1.7E+00	7.6E-01 $\pm$ 2.0E+00	1.5E+02 $\pm$ 2.0E+01	NS	NS
1998	1.5E+01 $\pm$ 2.3E+00	NS	5.1E+00 $\pm$ 1.0E+00	2.9E+00 $\pm$ 8.7E-01	1.1E+02 $\pm$ 1.4E+01	1.8E+01 $\pm$ 2.3E+00	3.6E+00 $\pm$ 1.1E+00
1999	1.9E+00 $\pm$ 7.6E-01	2.5E+00 $\pm$ 7.5E-01	NS	4.0E+00 $\pm$ 8.8E-01	4.3E+01 $\pm$ 6.5E+00	9.2E+00 $\pm$ 1.5E+00	NS
2000	3.3E+00 $\pm$ 8.2E-01	4.5E+00 $\pm$ 1.1E+00	2.2E+00 $\pm$ 6.6E-01	7.0E-01 $\pm$ 5.6E-01	4.8E+01 $\pm$ 1.2E+01	3.8E+00 $\pm$ 7.6E-01	2.0E-01 $\pm$ 4.4E-01
2001	3.4E+00 $\pm$ 8.5E-01	NS	2.5E+00 $\pm$ 7.5E-01	2.8E+00 $\pm$ 8.4E-01	3.4E+01 $\pm$ 5.1E+00	6.0E+00 $\pm$ 1.2E+00	NS

NS - Not sampled.

This page intentionally left blank.

## **6.0 RADIOLOGICAL SURVEYS**

In 2001, there were approximately 8,990 acres (3,638 ha) of posted outdoor contamination areas and 1,650 acres (668 ha) of posted underground radioactive materials areas at the Hanford Site. Survey locations are illustrated in Figures 6-1 through 6-10. These areas were typically associated with cribs, trenches, burial grounds, tank farms, and covered ponds and ditches.

The posted contamination areas vary in number and size between years because of an ongoing effort to clean, stabilize, and remediate areas of known contamination. During this time, new areas of contamination are also being identified. Approximately 14.4 acres (5.9 ha) were reclassified from contamination/soil contamination areas to underground radioactive materials areas. An increase to the Hanford Site Contamination Area Sites of 24.5 acres (9.9 ha) was due mainly to the resurvey and mapping of existing waste site boundaries using GPS/HGIS. During 2001, four Contaminated Sites totaling 0.5 acres (0.2 ha) were added to the 200 West Area total and nine Contaminated Area Sites totaling less than 1.0 acre (0.4 ha) were added to the 200 East Area totals.

It was estimated that the external dose rate at 80% of the identified outdoor contamination areas was estimated at less than 1 mrem/h, although direct dose rate readings from isolated radioactive specks (a diameter less than 0.6 cm [0.25 in.]) could have been considerably higher. Contamination levels of this magnitude did not significantly add to dose rates for the public or Hanford Site workers in 2001.

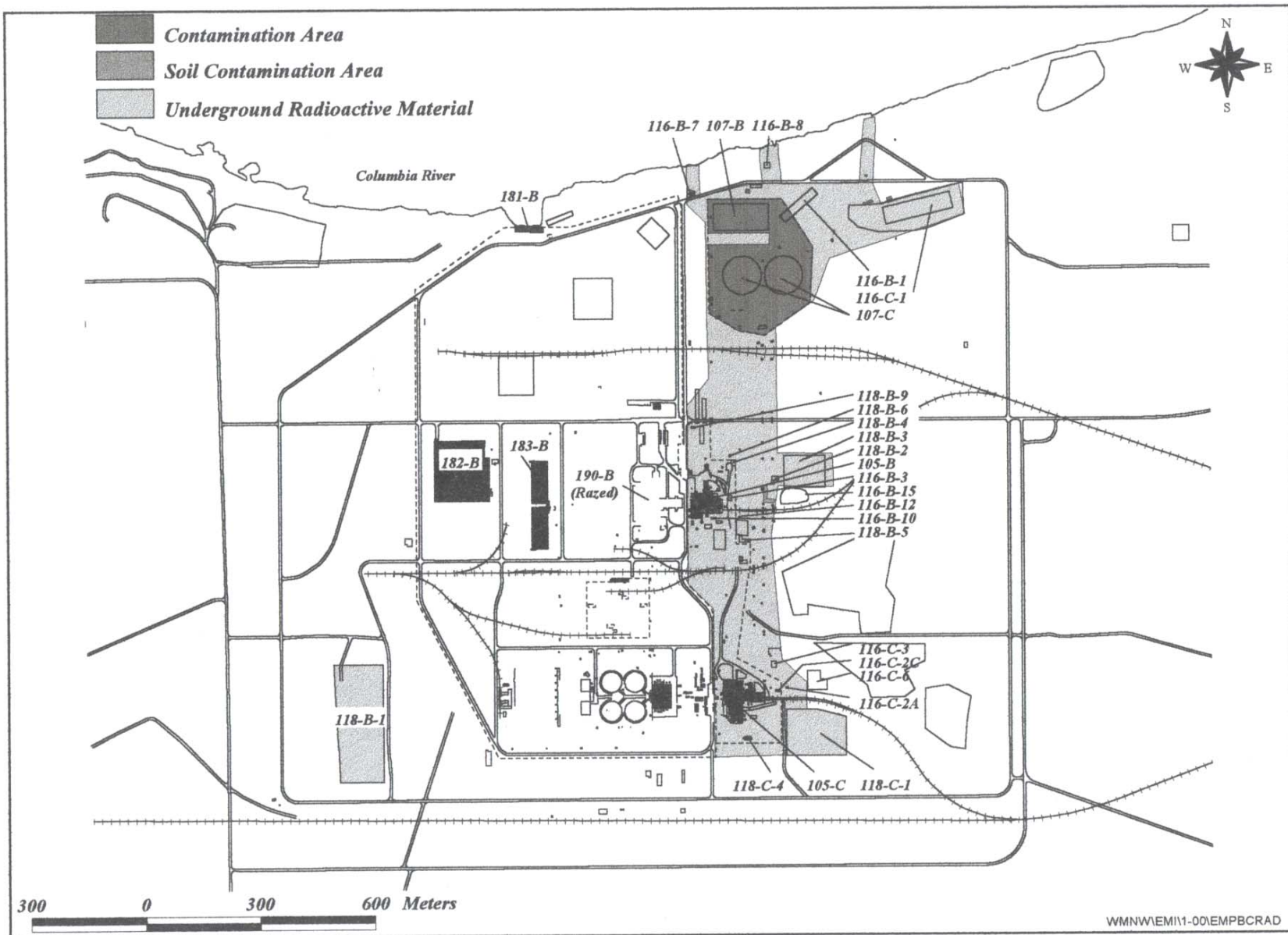


Figure 6-1. 2001 Radiological Survey Locations, 100-B/C Area

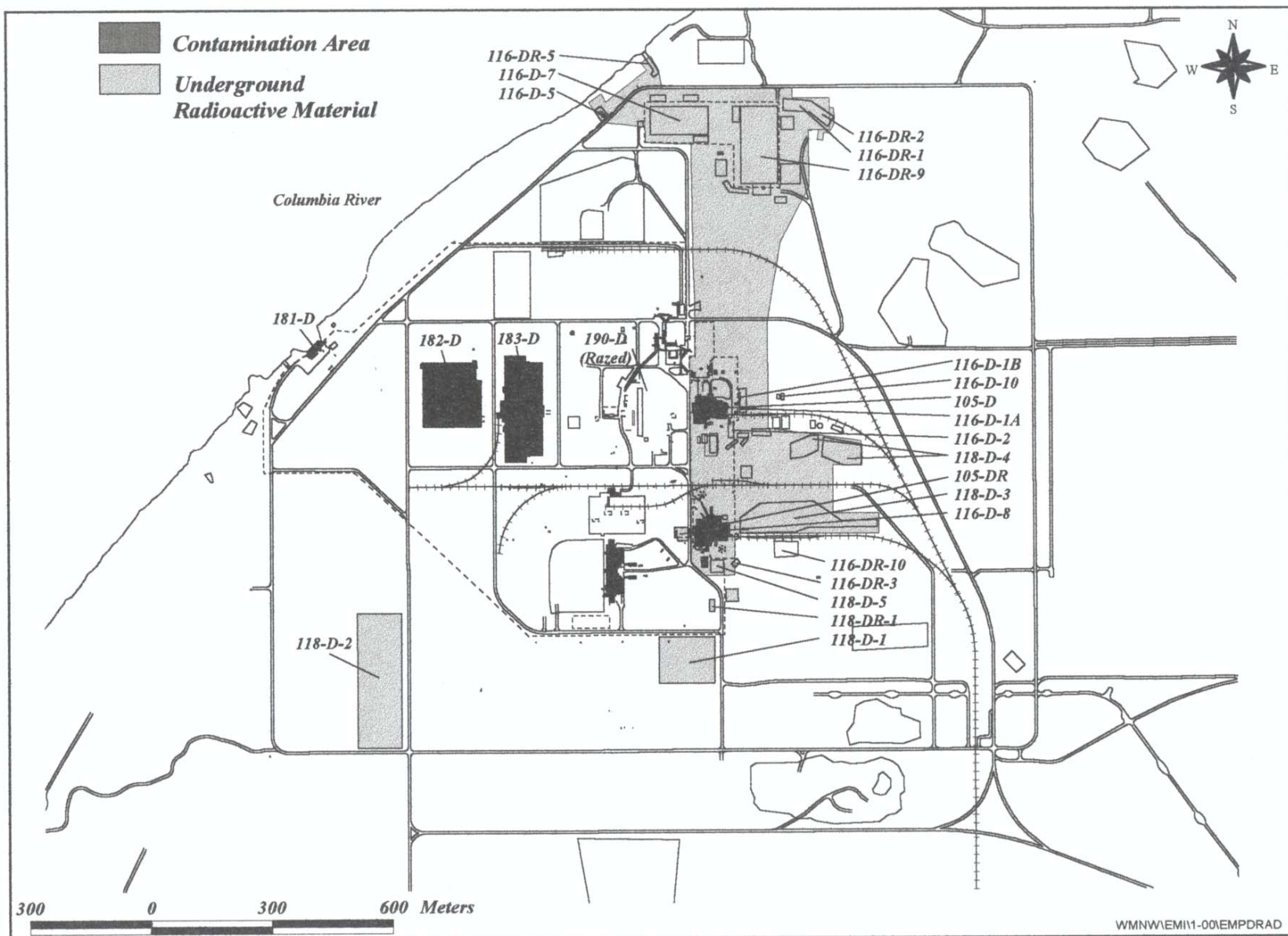


Figure 6-2. 2001 Radiological Survey Locations, 100-D/DR Area

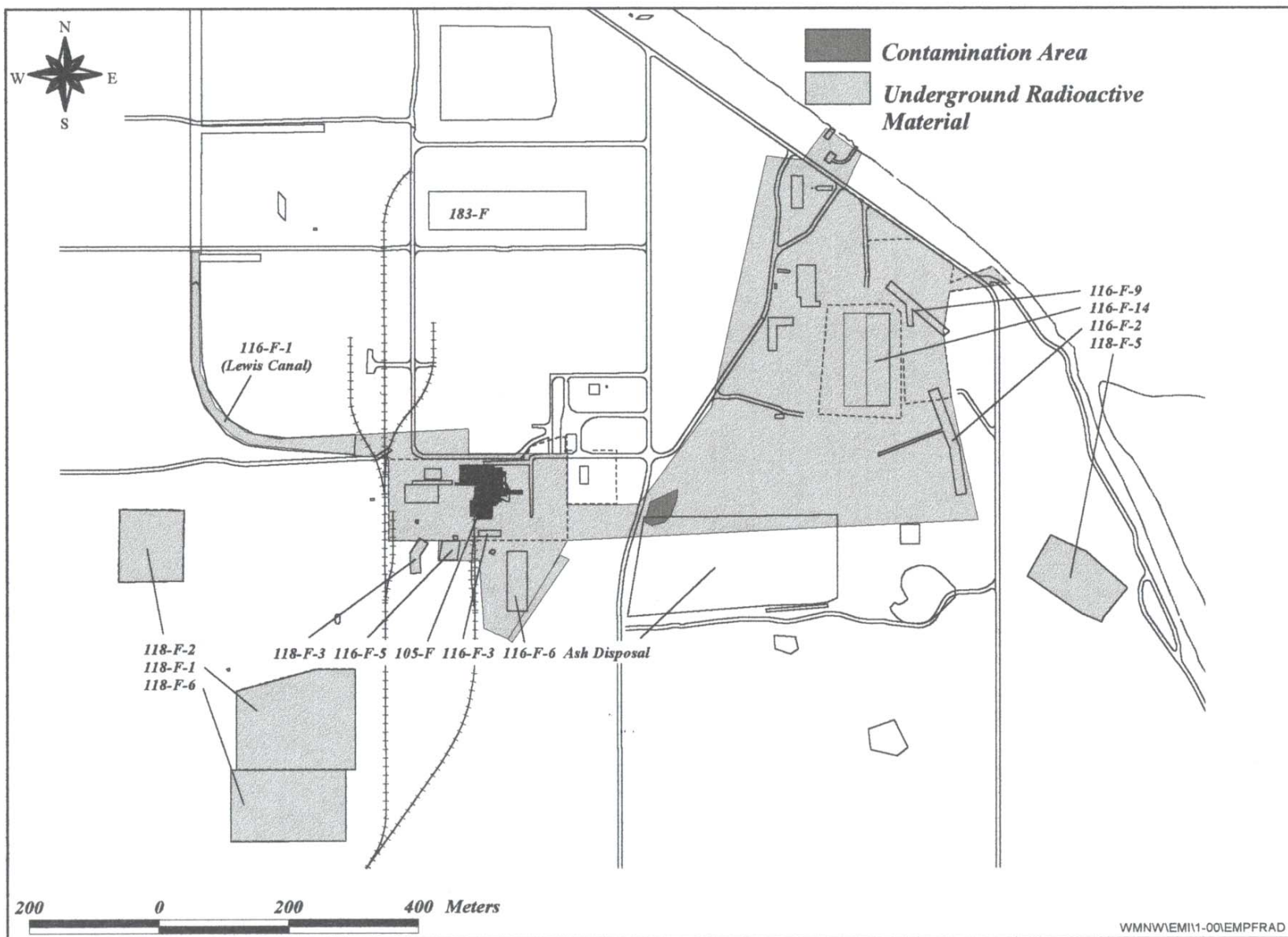


Figure 6-3. 2001 Radiological Survey Locations, 100-F Area



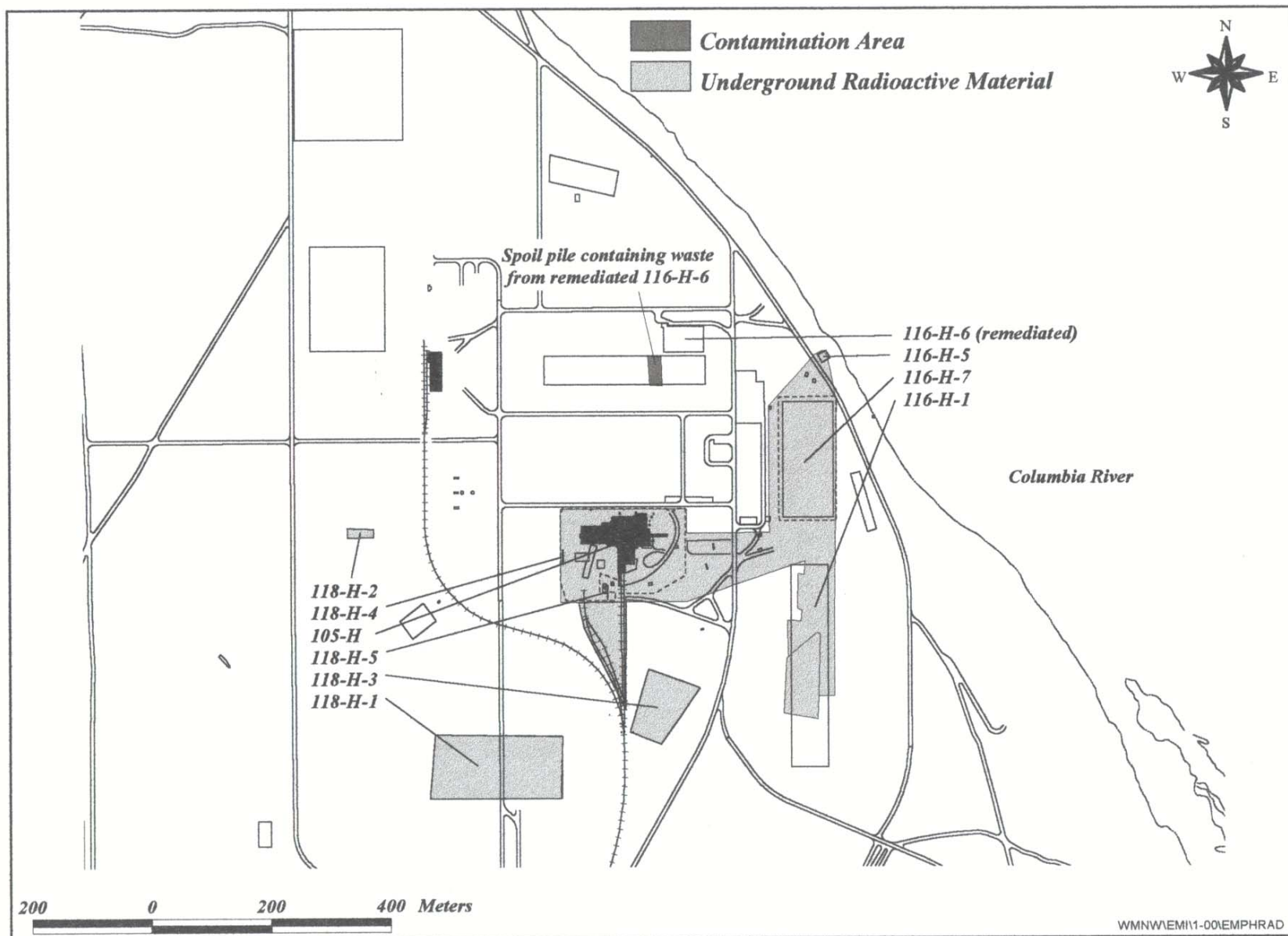


Figure 6-4. 2001 Radiological Survey Locations, 100-H Area



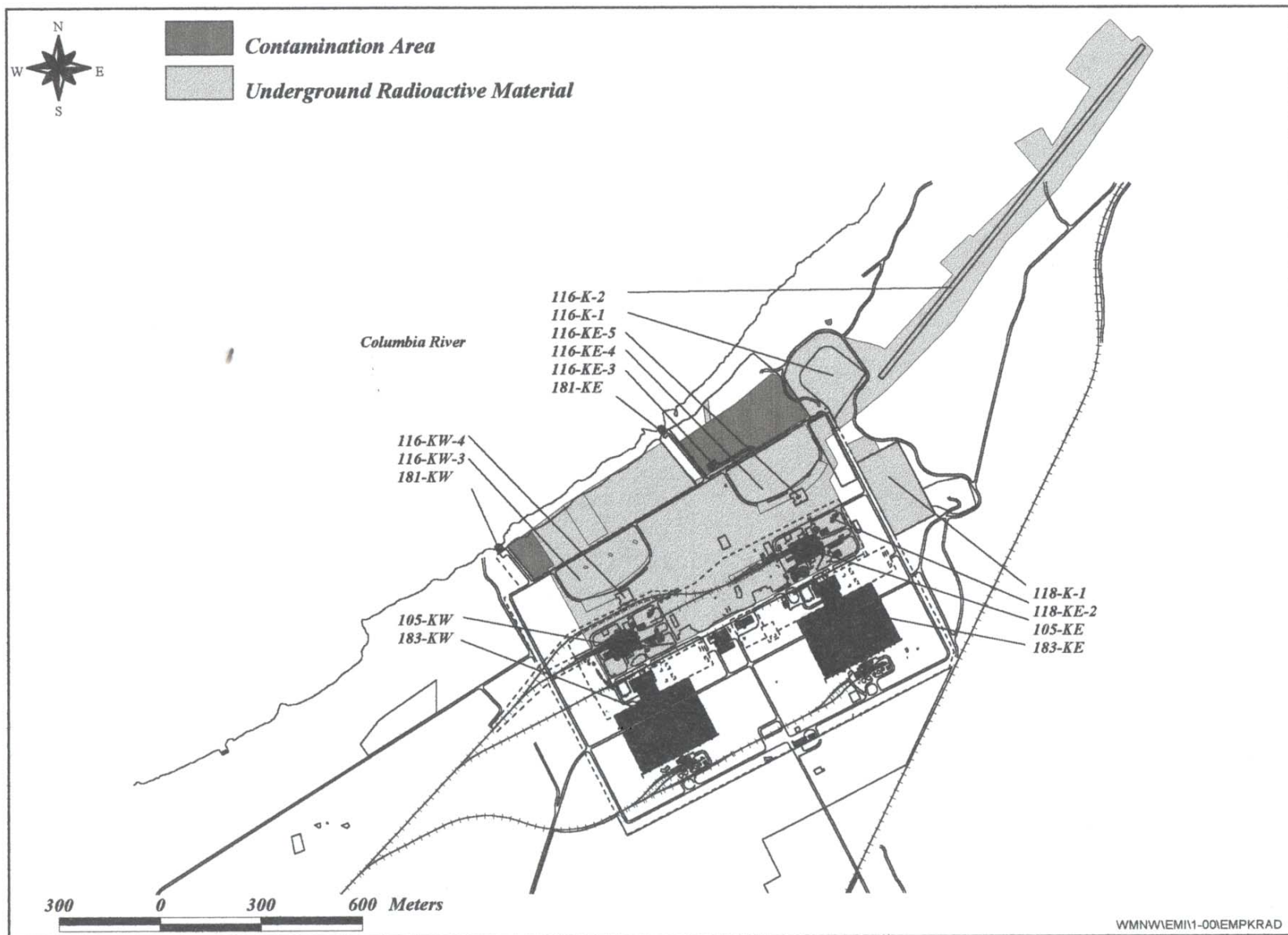


Figure 6-5. 2001 Radiological Survey Locations, 100-K Area

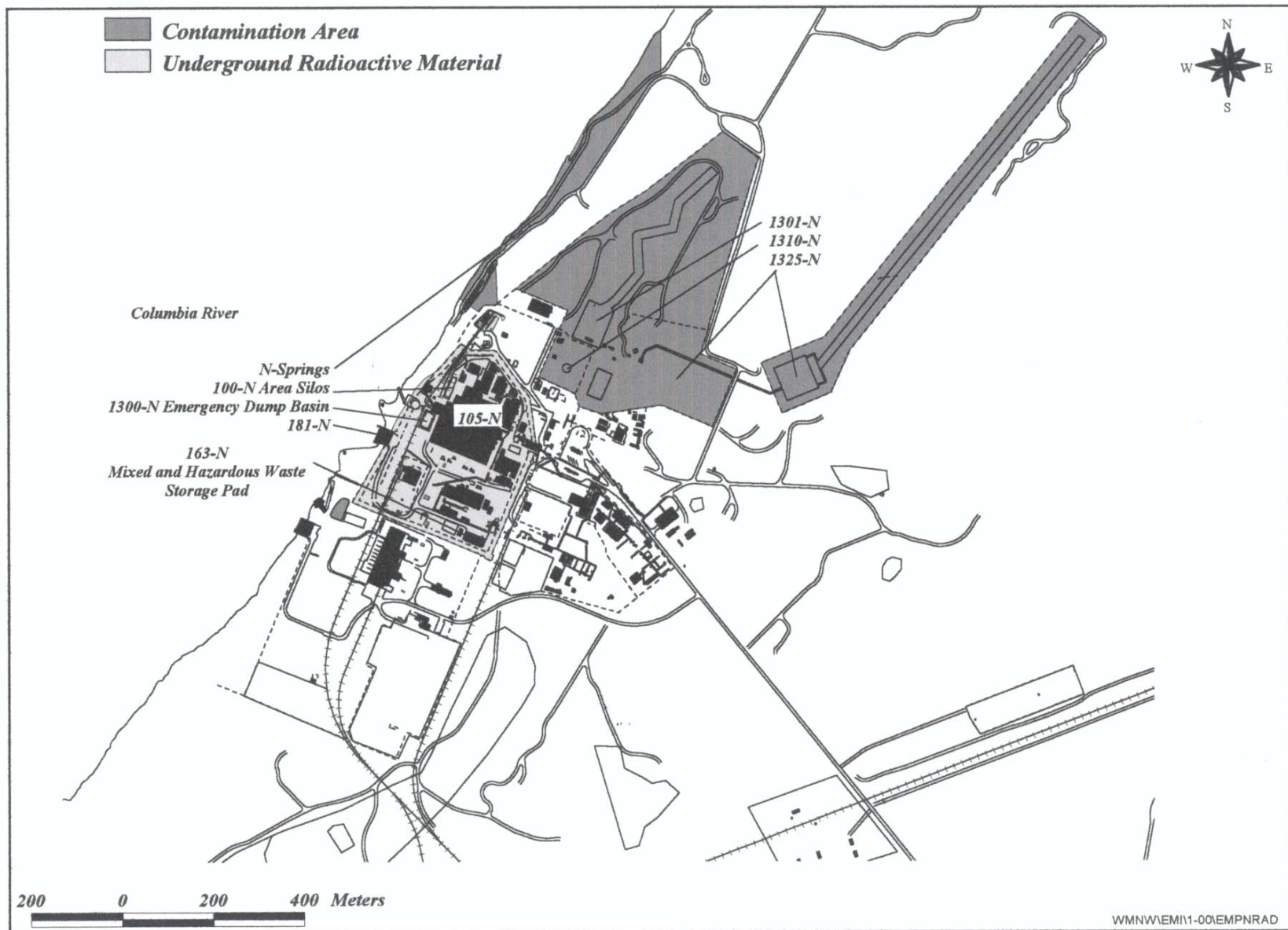


Figure 6-6. 2001 Radiological Survey Locations, 100-N Area

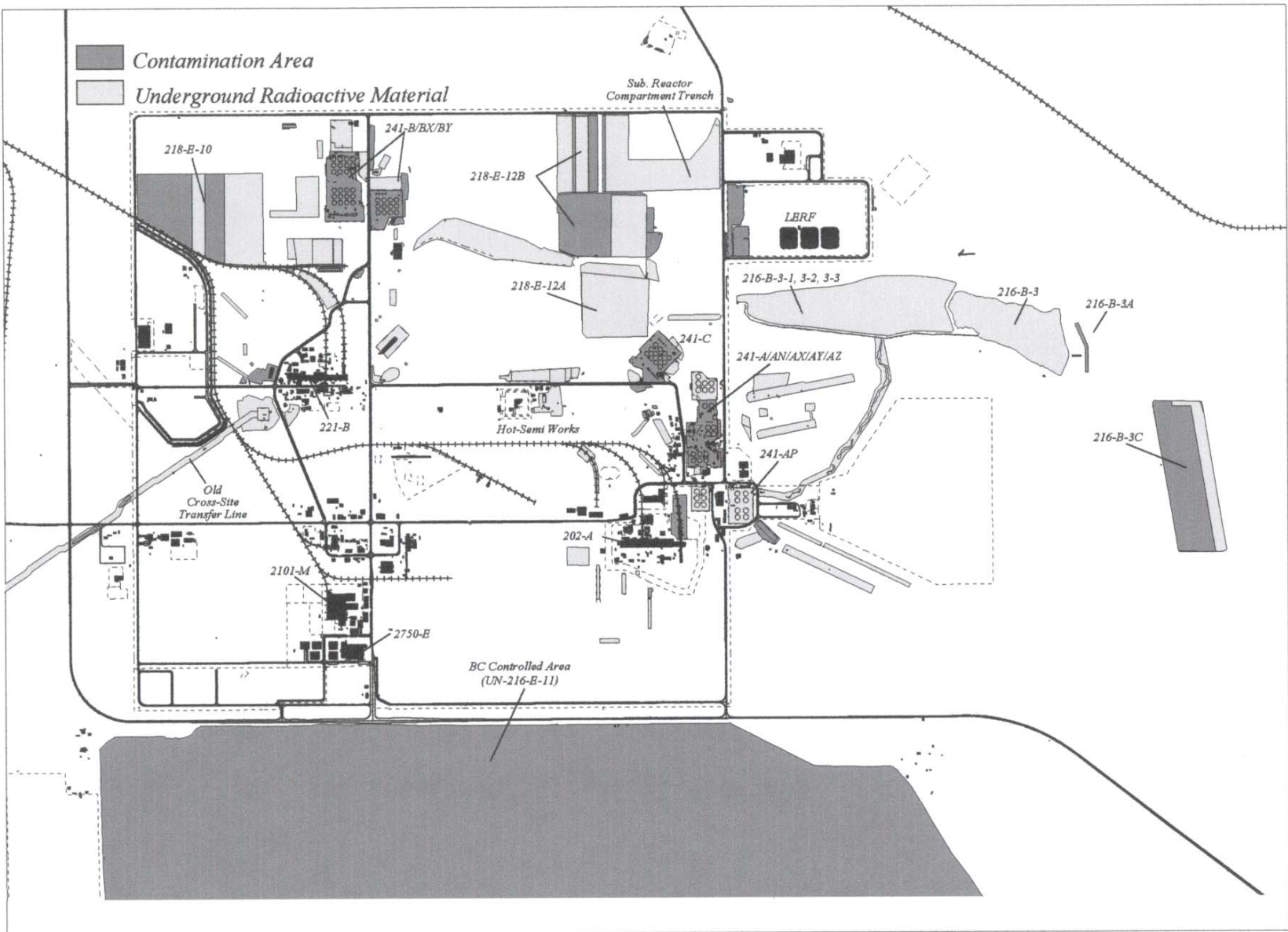


Figure 6-7. 2001 Radiological Survey Locations, 200 East Area

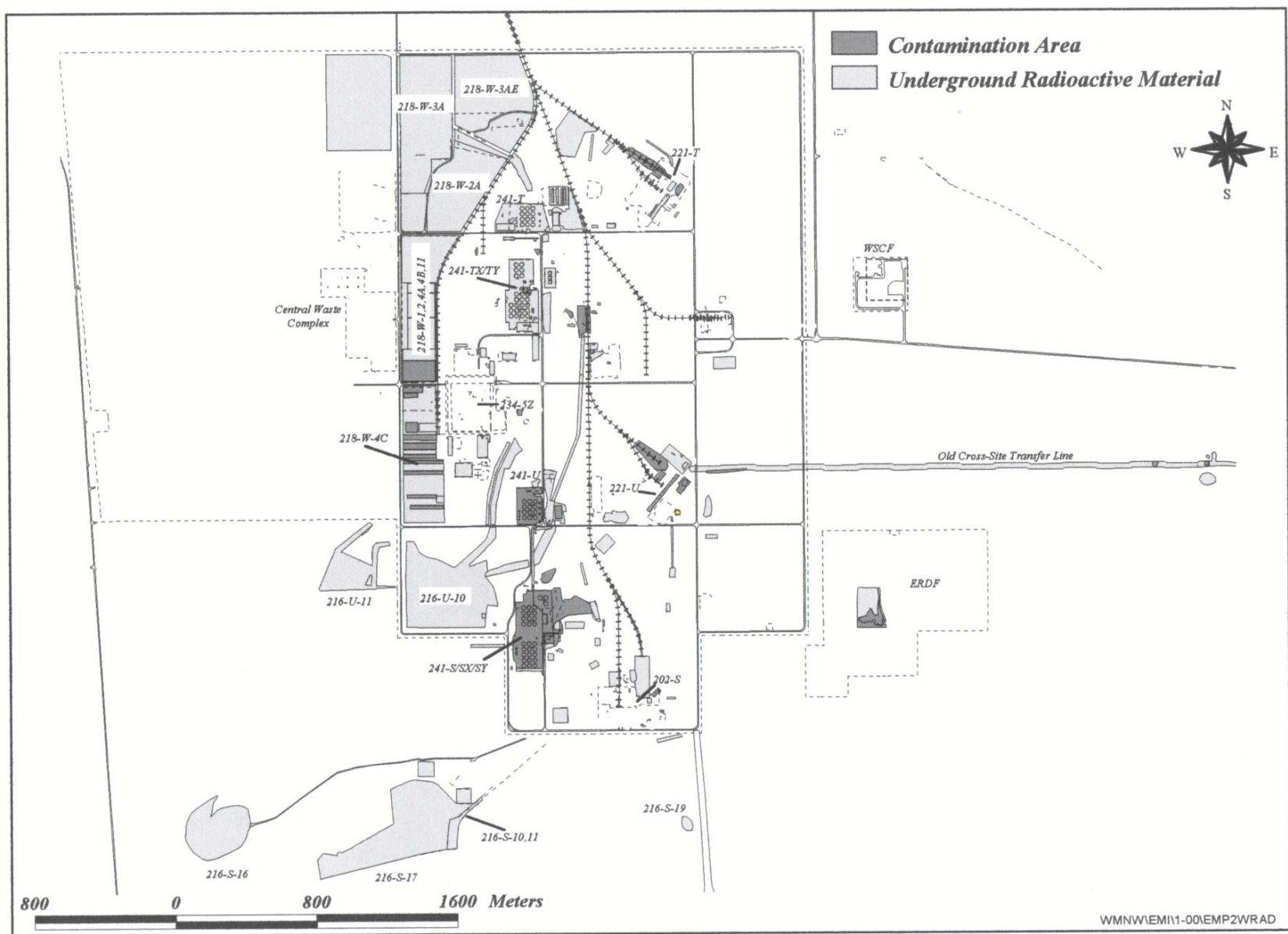


Figure 6-8. 2001 Radiological Survey Locations, 200 West Area



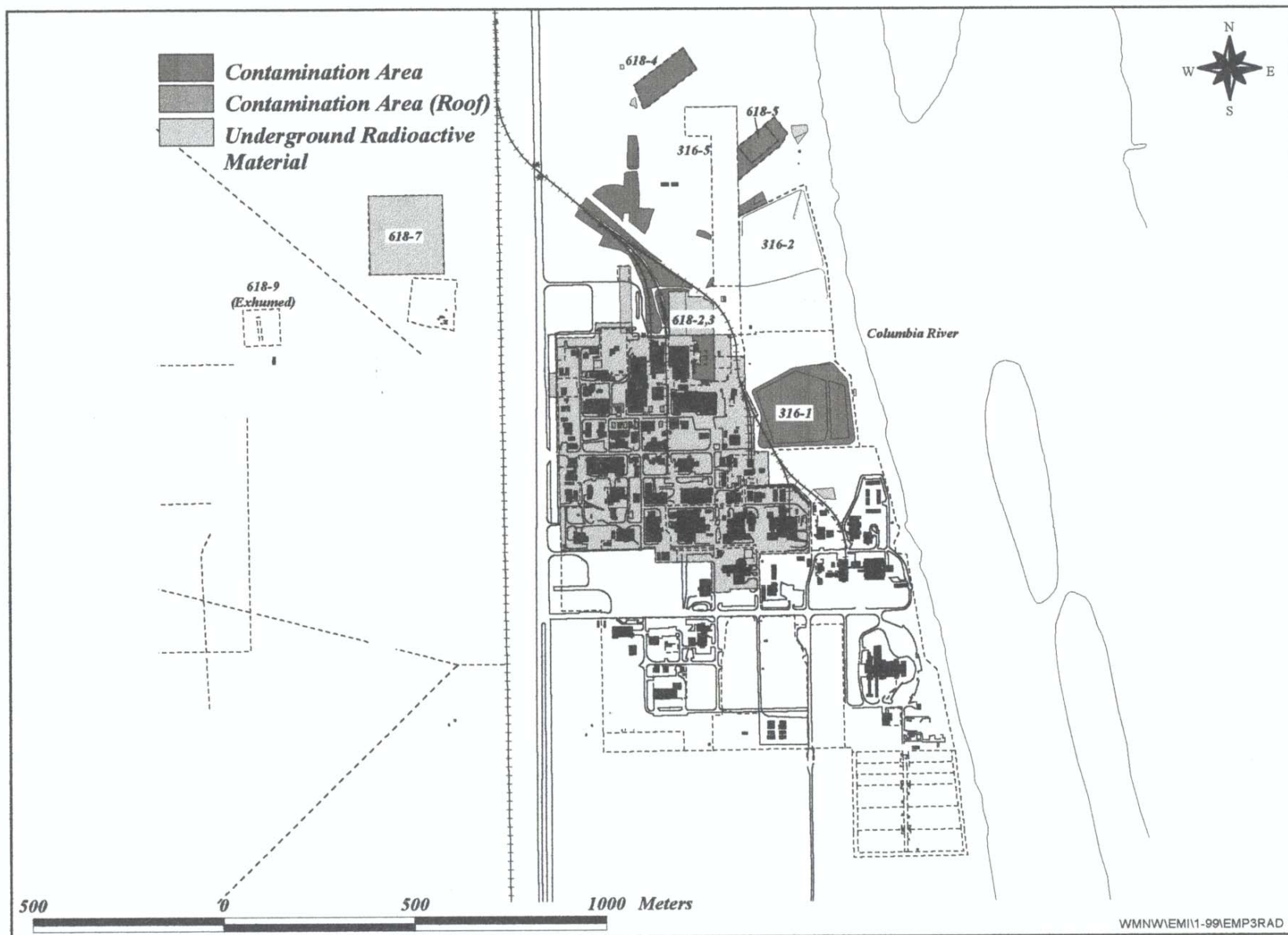
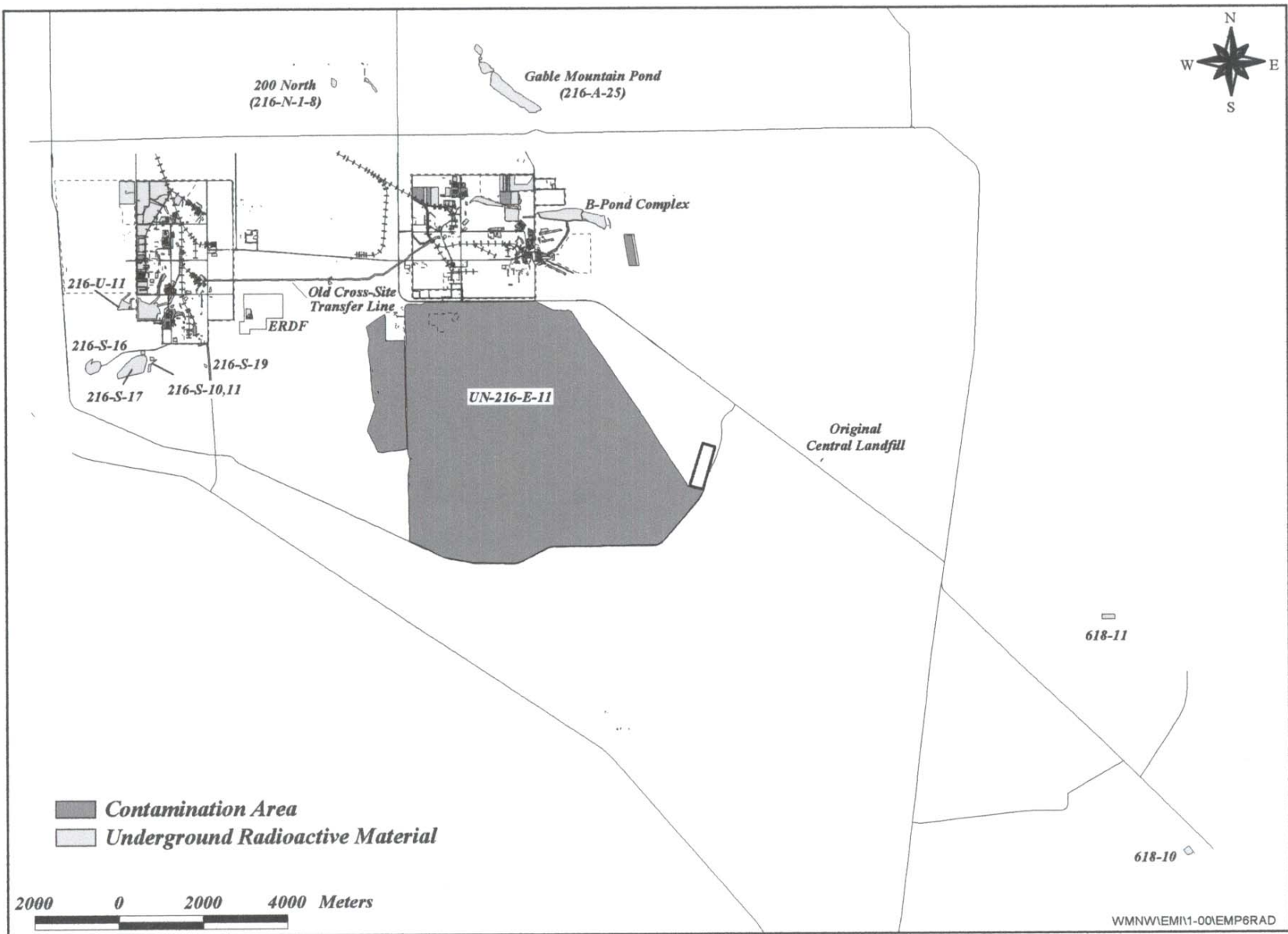


Figure 6-9. 2001 Radiological Survey Locations, 300 Area

Figure 6-10. 2001 Radiological Survey Locations, 600 Area



This page intentionally left blank.

## **7.0 INVESTIGATIVE SAMPLING**

Examples of investigative samples collected in 2001 included: vegetation, animals, and animal feces. Investigative samples were collected where known or suspected radioactive contamination was present, or to verify radiological conditions at project sites. In 2001, 5 samples were analyzed for radionuclides at the 222-S Laboratory. Analytical results are provided in Table 7-1. Another 63 contaminated environmental samples were reported and disposed without isotopic analyses (although field instrument readings were recorded) during clean-up operations. These results are provided in Table 7-2.

### **Soil**

In 2001, there were 20 instances of radiological contamination in which soil was identified as the carrier of contamination. Of these, 10 were identified only as specks, or soil specks. Often, specks observed under high magnification are found to be small pieces of decomposed vegetation, most often tumbleweeds. External radioactivity levels ranged from slightly above background (approximately 12,000 disintegration's per minute [dpm]/100 cm<sup>2</sup>) to greater than 1 million dpm/100 cm<sup>2</sup>. Contaminated areas were radiologically posted or cleaned up. The number of contamination incidents, the range of radiation dose rate levels, and radionuclide concentrations observed in 2001 were generally within historical ranges.

### **Vegetation**

In 2001, there were 31 instances in which vegetation was identified as the carrier of radiological contamination. None of the vegetation samples were submitted to the laboratory for radioisotopic analysis. Eight contaminated vegetation instances had field readings in excess of one million dpm. The radioactivity levels and range of radionuclide concentrations were all within historical ranges.

The reduced number of incidents in 2001 (31) appears to be reflective of improvements in the deep-rooted weed prevention program. Nevertheless, contaminated tumbleweeds that grew in recent years continue to be identified by radiological surveys. It is expected that as contaminated vegetation from past years is identified and cleaned up, subsequent years will show the results of program improvements.

### **Animals**

Animals were collected either as part of an integrated pest management program or as a result of radiological surveys finding contaminated wildlife-related material (e.g., feces, nests, etc.). Animals were collected directly from or near facilities in an effort to monitor and track effectiveness of preventive measures designed to deter animal intrusion.



In 2001, 10 instances of contaminated animals or animal-related contamination were identified; 5 were submitted to the laboratory for analysis. The highest radionuclide concentrations in 2001 were observed in mouse feces collected in the 200 West Area. The numbers of animals found to be contaminated with radioactivity, the radioactivity levels, and the range of radionuclide concentrations were within historical ranges.

### **Special Characterization Sampling**

Special characterization projects were conducted in 2001 to ascertain the radiological, and in some cases, potential hazardous chemical status of site-specific operations and included the project listed below.

- A preoperational monitoring plan (RPP-6877) was developed in support of the Waste Vitrification initiative. As part of this plan, a preoperational, environmental survey was initiated in 2001 on the proposed location for the Remote-Handled Immobilized Low-Activity Waste Disposal Facility in the 200 East Area. Tasks completed in 2001 included radiological and Ground Penetrating Radar (GPR) surveys and surface and subsurface soil sampling at three locations near the 200 East Area powerhouse ash disposal pile. Following the completion of all tasks outlined in the monitoring plan, the obtained data will be published in a final report. The scheduled publication date for this report is 2004.

Table 7-1. Investigative Sample Results, 2001.

Sample				Isotope	Result <sup>a</sup> (pCi/g) <sup>b</sup> ± Analytical Uncertainty
Number	Matrix	Location	Date	<sup>60</sup> Co	<2.9E+03
6890	Mouse Feces	241-ER-151	02/07/01	<sup>89,90</sup> Sr	1.1E+07 ± 5.4E-01
				<sup>134</sup> Cs	< 4.8E+03
				<sup>137</sup> Cs	5.1E+06 ± 5.3E-01
				<sup>152</sup> Eu	< 1.1E+04
				<sup>154</sup> Eu	< 9.4E+03
				<sup>155</sup> Eu	< 1.4E+04
				Total U <sup>c</sup>	3.1E+01 ± 3.1E+01
				<sup>238</sup> Pu	5.2E+03 ± 5.9E+00
				<sup>239,240</sup> Pu	2.0E+04 ± 3.2E+00
				Sample	
Number	Matrix	Location	Date	<sup>60</sup> Co	< 3.0E+03
6891	Mouse Feces	200-West 241-TX-155	02/08/01	<sup>89,90</sup> Sr	1.1E+06 ± 4.5E+01
				<sup>134</sup> Cs	< 2.9E+03
				<sup>137</sup> Cs	2.0E+06 ± 7.2E-01
				<sup>152</sup> Eu	< 9.4E+03
				<sup>154</sup> Eu	6.6E+04 ± 6.4E+00
				<sup>155</sup> Eu	4.3E+04 ± 1.7E+01
				Total U <sup>c</sup>	< 8.6E+01
				<sup>238</sup> Pu	3.8E+04 ± 2.1E+00
				<sup>239,240</sup> Pu	4.3E+05 ± 1.4E+00
				Sample	
Number	Matrix	Location	Date	<sup>60</sup> Co	< 9.1E+00
6892	Bug Parts	200-East 242-B/BL Evaporator	05/14/01	<sup>89,90</sup> Sr	6.2E+02 ± 4.1E+00
				<sup>134</sup> Cs	< 8.0E+00
				<sup>137</sup> Cs	4.0E+02 ± 4.3E+00
				<sup>152</sup> Eu	< 1.6E+01
				<sup>154</sup> Eu	< 2.9E+01
				<sup>155</sup> Eu	< 7.0E+04
				Total U <sup>c</sup>	< 4.0E-02
				<sup>238</sup> Pu	9.5E+00 ± 1.0E+02
				<sup>239,240</sup> Pu	9.5E+00 ± 1.0E+02

Table 7-1. Investigative Sample Results, 2001. (cont)

Sample					Isotope	Result <sup>a</sup> (pCi/g) <sup>b</sup> ±	Analytical Uncertainty
Number	Matrix	Location	Date		<sup>60</sup> Co	< 1.6E+02	
6893	Bird Feces	MO-503 241-AY/AZ Construction Trailers	05/21/01		<sup>89,90</sup> Sr	1.9E+06 ±	3.0E-01
					<sup>134</sup> Cs	< 1.8E+02	
					<sup>137</sup> Cs	4.4E+04 ±	1.0E+03
					<sup>152</sup> Eu	< 5.2E+02	
					<sup>154</sup> Eu	< 5.0E+02	
					<sup>155</sup> Eu	< 6.9E+02	
					Total U <sup>c</sup>	< 3.6E-01	
					<sup>238</sup> Pu	5.2E+02 ±	1.0E+02
					<sup>239,240</sup> Pu	5.2E+02 ±	1.0E+02
Sample				Isotope	Result <sup>a</sup> (pCi/g) <sup>b</sup> ±	Analytical Uncertainty	
Number	Matrix	Location	Date		<sup>60</sup> Co	< 2.2E+01	
6894	Bat	105-KE Basin	09/11/01		<sup>89,90</sup> Sr	1.2E+03 ±	2.7E+00
					<sup>134</sup> Cs	< 6.2E+01	
					<sup>137</sup> Cs	7.3E+04 ±	5.4E-01
					<sup>152</sup> Eu	< 3.6E+01	
					<sup>154</sup> Eu	< 9.0E+01	
					<sup>155</sup> Eu	< 1.9E+02	
					Total U <sup>c</sup>	< 4.3E-01	
					<sup>238</sup> Pu	1.4E+02 ±	2.4E+00
					<sup>239,240</sup> Pu	9.6E+02 ±	1.5E+00

a - A "<" symbol indicates that the analyte was analyzed for but not detected. Uncertainty values were not reported by the laboratory for these results.

b - To convert to international metric system units (SI), multiply pCi/g by 0.03704 to obtain Bq/g.

c - Total uranium concentrations are reported by the laboratory in units of ug/g. These results have been converted to pCi/g using a specific activity of 9.6E+05 pCi/g for total uranium.

Table 7-2. Investigative Samples Not Analyzed, 2001.

DATE	SAMPLE MATRIX	LOCATION	FIELD READING <sup>a</sup>
			(Beta/Gamma)
01/08/01	Tumbleweeds	218-E-12B Burial Ground	4,800,000dpm/100cm <sup>2</sup>
01/09/01	Tumbleweeds	218-E-12B Burial Ground	5,400,000dpm/100cm <sup>2</sup>
01/10/01	Tumbleweeds	218-E-12B Burial Ground	1,800,000dpm/100cm <sup>2</sup>
01/11/01	Tumbleweeds	218-E-12B Burial Ground	>6,000,000dpm/100cm <sup>2</sup>
01/12/01	Tumbleweeds	218-E-12B Burial Ground	>6,000,000dpm/100cm <sup>2</sup>
02/05/01	Metal Stand	Proposed WIDS Site North of Gable Mountain	100,000dpm/100cm <sup>2</sup>
02/05/01	Soil and Rocks	ERDF	81,900dpm/100cm <sup>2</sup>
02/07/01	Tumbleweed Fragments	NE Corner of 200-W Exterior Fence	400,000dpm/100cm <sup>2</sup>
02/07/01	Rabbit Brush	241-TX-155 Diversion Box	24,000dpm/100cm <sup>2</sup>
02/07/01	Pit Cover	241-EW-151 Vent Station	300,000dpm/100cm <sup>2</sup>
02/08/01	Speck	241-B Tank Farm Fence Line	100,000dpm/100cm <sup>2</sup>
02/08/01	Rabbit Brush	241-TX-151/241-TX-155	144,000dpm/100cm <sup>2</sup>
02/20/01	Tumbleweeds	241-ER-151 Diversion Box	24,000dpm/100cm <sup>2</sup>
02/20/01	Soil and Rocks	241-ER-151 Diversion Box	1,794,000dpm/100cm <sup>2</sup>
02/20/01	Tumbleweeds	X-Site Transfer Line (Inside 200-E)	36,000dpm/100cm <sup>2</sup>
02/22/01	Tumbleweed Fragment	291-T Stack area	81,000dpm/100cm <sup>2</sup>
02/26/01	Tumbleweed Fragments	North of U-Plant Rail Spur	114,000dpm/100cm <sup>2</sup>
02/28/01	Ant Mound	North of 241-S Tank Farm	19,000dpm/100cm <sup>2</sup>
03/11/00	Tumbleweeds	West and Northwest of 242-C Diversion Box	40,000dpm/100cm <sup>2</sup>
03/12/01	Spots	Inside MO-863	70,000dpm/100cm <sup>2</sup>
03/13/01	Starling	327 Building Canyon	1,000dpm/pa
04/11/01	Soil and Rocks	Over transfer line @ 200-W-78	234,000dpm/100cm <sup>2</sup>
04/17/01	Tumbleweed	West side 241-BX/BY Tank Farm	20,000dpm/100cm <sup>2</sup>
05/15/01	Tumbleweed Fragments	West fence line of 241-ER-151	200,000dpm/100cm <sup>2</sup>
05/21/01	Tumbleweed Fragments	241-BY Tank Farm	30,000dpm/100cm <sup>2</sup>
05/23/01	Tumbleweed Fragments	241-B Tank Farm	150,000dpm/100cm <sup>2</sup>
05/23/01	Asphalt/Soil/Rocks	241-TX Tank Farm	1,600,000dpm/100cm <sup>2</sup>
05/30/01	Plastic	ERDF	125,250dpm/100cm <sup>2</sup>
06/01/01	Grass	T-5 Transfer Line NW of 241-TX-152	59,000dpm/100cm <sup>2</sup>
06/06/01	Tumbleweeds/Rabbit brush	Northeast side of the 241-B-154 diversion box	300,000dpm/100cm <sup>2</sup>
06/06/01	Tumbleweeds	North side of the 242-B Evaporator	12,000dpm/100cm <sup>2</sup>
06/07/01	Specks	outside 241-C Tank Farm	550,000dpm/100cm <sup>2</sup>
06/20/01	Fixed Contamination	105-K Turco Pit	20,000dpm/100cm <sup>2</sup>
06/21/01	Fixed Contamination	3902-A Water Tower	22,500dpm/100cm <sup>2</sup>
06/25/01	Tumbleweeds	URM Pipeline north of 221-B	36,000dpm/100cm <sup>2</sup>
07/02/01	Bird Carcass	241-AY-702	1,000dpm/100cm <sup>2</sup>
07/03/01	Specks	241-U Tank Farm	>100,000dpm/100cm <sup>2</sup>
07/13/01	Concrete	241-U Tank Farm	249,000dpm/100cm <sup>2</sup>
07/13/01	Tumbleweeds	UPR-200-W-160	6,000dpm/100cm <sup>2</sup>
07/25/01	Soil	241-TX-152/155	31,000dpm/100cm <sup>2</sup>
07/25/01	Soil	384 Powerhouse Bunker Tank	20,000dpm/100cm <sup>2</sup>
07/27/01	Mouse Nest	609-D Fire Training Tower	120,000dpm/100cm <sup>2</sup>
08/06/01	Soil	B-Plant Lay Down Yard	80,000dpm/100cm <sup>2</sup>
08/08/01	Specks	North & East side of 241-C Tank Farm	125,000dpm/100cm <sup>2</sup>
08/14/01	Speck	241-ER-151 Diversion Box	200,000dpm/100cm <sup>2</sup>
08/15/01	Tumbleweed Fragments & Wire Fencing	100 Yds. north of 241-C Tank Farm	11,500dpm/100cm <sup>2</sup>
08/29/01	Gravel	RMA adjacent to 2101-HV	500,000dpm/100cm <sup>2</sup>

Table 7-2. Investigative Samples Not Analyzed, 2001. (cont)

DATE	SAMPLE MATRIX	LOCATION	FIELD READING <sup>a</sup>
			(Beta/Gamma)
09/05/01	Vegetation	Between 241-B Tank Farm & 244-B Evaporator	>1,000,000dpm/100cm <sup>2</sup>
09/17/01	Soil	200-E-115	4000dpm/100cm <sup>2</sup>
10/01/01	Tumbleweed Fragments & Soil	URM pipeline west of 202-A by 241-SX/SY	1,200,000dpm/100cm <sup>2</sup>
10/02/01	Painters trousers	241-AW Buffer Area	30,000dpm/100cm <sup>2</sup>
10/06/01	Vegetation fragments	241-C Tank Farm Perimeter	>1,000,000dpm/100cm <sup>2</sup>
10/16/01	Speck	North side of 241-ER-151	120,000dpm/100cm <sup>2</sup>
10/16/01	Speck	324 Building Basement	200,000dpm/100cm <sup>2</sup>
10/09/01	Tumbleweeds	Northeast of 241-BY	36,000dpm/100cm <sup>2</sup>
10/09/01	Tumbleweeds	Northeast of 216-B-8	36,000dpm/100cm <sup>2</sup>
10/25/01	Tumbleweeds	UPR-200-W-161 (UN-216-W-35)	40,000dpm/100cm <sup>2</sup>
11/02/01	Ant/Termite Mounds	218-E-12A Burial Ground	100,000dpm/100cm <sup>2</sup>
11/05/01	Tumbleweed Fragment	241-SX	>1,000,000dpm/100cm <sup>2</sup>
11/07/01	Speck	MO-738 @ 218-W-4C Burial Ground	200,000dpm/100cm <sup>2</sup>
11/13/01	Speck	241-ER-151 Diversion Box	850,000dpm/100cm <sup>2</sup>
11/30/01	Speck	241-S-151 Diversion Box	29,850dpm/100cm <sup>2</sup>
12/12/01	Soil	ERDF RMA/RMSA Area	200,000dpm/100cm <sup>2</sup>
12/12/01	Speck	216-B-59 Basin	85,000dpm/100cm <sup>2</sup>
12/17/01	Speck	241-ER-151 Diversion Box	>1,000,000dpm/100cm <sup>2</sup>
12/31/01	Tumbleweed Fragment	241-ER-151 Diversion Box	500,000dpm/100cm <sup>2</sup>

a - all alpha field readings were below field instrument detection capabilities.

Field monitoring results are typically of two types: alpha and beta/gamma.

Alpha values are obtained through the use of a portable alpha meter (PAM). PAM readings are displayed as counts per minute and are then converted to disintegrations per minute using an individual instrument's efficiency factor that is determined during the instrument's routine calibration.

Beta/gamma values are obtained through the use of a Geiger-Müller (GM) detector. GM readings are expressed as disintegrations per minute (dpm) per probe area and the geometry of the source is not considered; or as millirad per hour (mrads/h) when an ion chamber is used. To obtain beta/gamma field instrument readings expressed as dpm/100cm<sup>2</sup>, the measured background radioactivity is subtracted from the GM reading (in counts per minute) and converted to dpm by multiplying x 10 (an average conversion), and further converted to dpm per 100 cm<sup>2</sup> by multiplying x 6 (approximate number of probe areas in 100 cm<sup>2</sup>).

## 8.0 NOXIOUS WEED CONTROL PROGRAM

Nine plant species are on a high priority list for control at the Hanford Site. These species are listed below, with a summary of the 2001 control activities. Major populations of noxious weeds on the Hanford Site are illustrated in Figure 8-1.

**Yellow Starthistle** (*Centaurea solstitialis*). Yellow starthistle represents the most rapidly expanding weed infestation in the Western United States. Hanford is at a critical point in the infestation cycle. Over 3,000 acres have been heavily infested, and a large seed bank has been established in the soil. Many additional acres have scattered starthistle infestation. Applications of aerial herbicides in 1998 and 1999 have continued to be effective, dramatically reducing the acreage of yellow starthistle infestation requiring treatment in 2001. Efforts to control yellow starthistle in 2001 included spot treatment of widely scattered individuals throughout the known areas of infestation. Small populations or individuals outside the areas of identified infestation were treated with herbicide as they were located.

**Rush Skeletonweed** (*Chondrilla juncea*). Rush skeletonweed is widely scattered over approximately 11,000 acres on the Hanford Site. Areas of dense rush skeletonweed infestation have largely been eliminated. Nevertheless, considerable skeletonweed remains as scattered individuals. In 2001, control of rush skeletonweed concentrated on the area between Route 4S and the Columbia River from the 300 Area to Energy Northwest. As in most years, some populations were highly affected by the bio-controls, and flowering was eliminated. Other populations were less affected, and some were not significantly impacted by the bio-control agents. Substantial areas of known rush skeletonweed infestation were burned during the June 2000 range fire. Reduction of competition from other vegetation species that were burned in the fire enhanced skeletonweed repopulation. Burned areas were monitored closely during 2001 and resurgent plants controlled with herbicide.

**Babysbreath** (*Gypsophila paniculata*). Efforts to control babysbreath over the last three years have been moderately successful and control measures were not implemented in 2001. The invasion of babysbreath onto the Hanford Site is relatively small, and control by attrition is the practical alternative.

**Dalmatian Toadflax** (*Linaria genistifolia ssp. Dalmatica*). Dalmatian toadflax populations near Energy Northwest facilities were treated aerially in 2000. The population includes approximately 10 acres of infestation in several locations throughout approximately 100 total acres. The population was monitored in 2001 and treated as individuals were found.

**Spotted Knapweed** (*Centaurea maculosa*). In 2000, the largest population of spotted knapweed on the Hanford Site was treated aerially. The population was monitored in 2001 and treated as individuals were found. Monitoring continues at five known locations of spotted knapweed infestation.

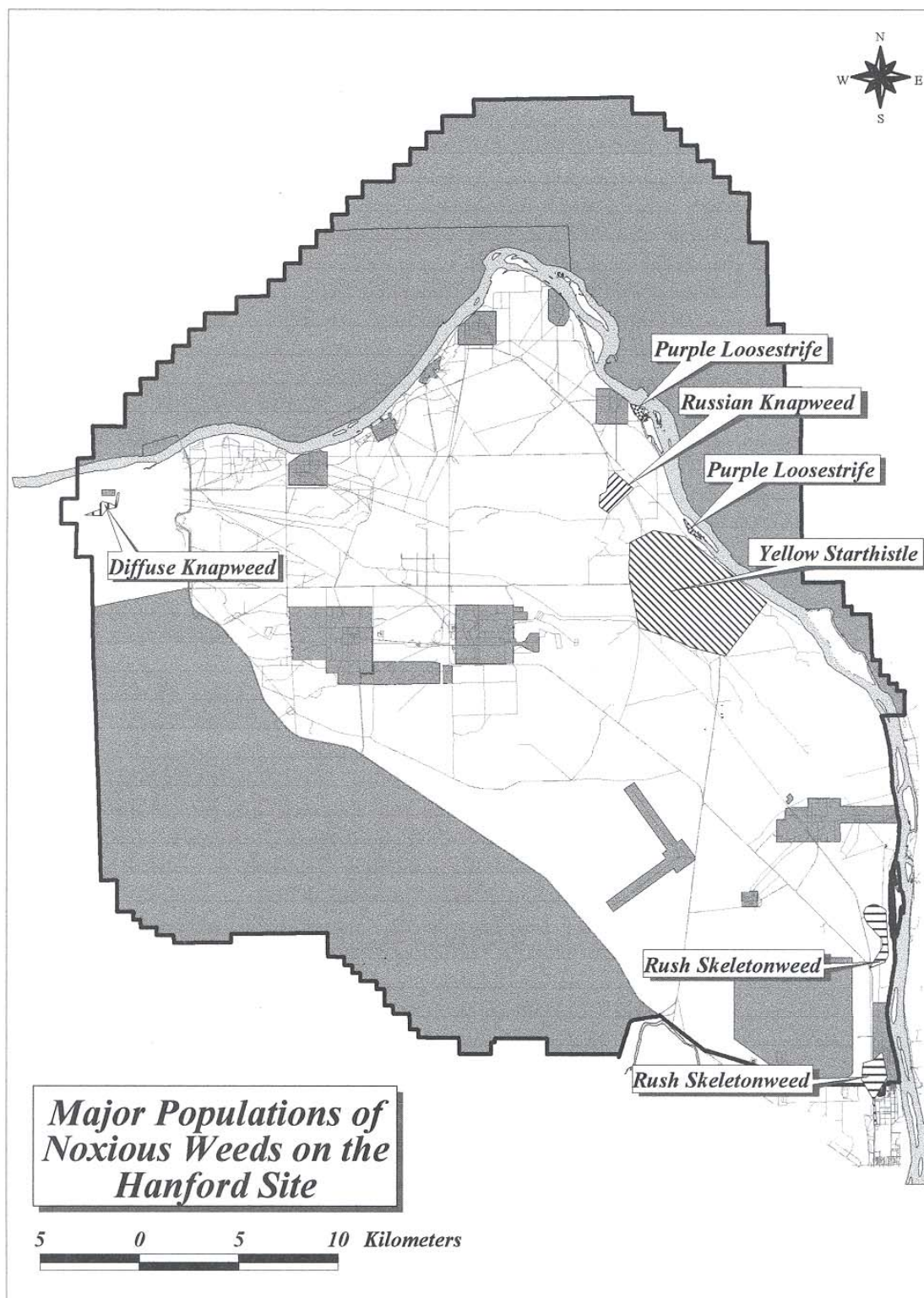
**Diffuse Knapweed** (*Centaurea diffusa*). Diffuse knapweed has become established in several locations on the Hanford Site, and is rapidly invading and expanding in many areas. Areas of invasion near the 100 Areas were treated for control of diffuse knapweed.

**Russian Knapweed** (*Acroptilon repens*). Biological controls for Russian knapweed are limited, and success in the arid climate of Hanford has been poor. Chemicals and techniques are being developed that promise to be effective with this difficult to control species. Several test applications were made in 2001.

**Saltcedar** (*Tamarix spp.*). Several individual plants of saltcedar are found on the Hanford Site, generally south and west of the Columbia River. Most are remaining from ornamental plantings around homes in the early part of this century, and a few populations are the result of natural seed dispersal. Individuals remaining alive in 2001 were treated.

**Purple Loosestrife** (*Lythrum salicaria*). Purple loosestrife was not treated in 2001.

Figure 8-1. Major Populations of Noxious Weeds, 2001.





This page intentionally left blank.

## **9.0 QUALITY ASSURANCE**

Quality assurance (QA) may be defined as the actions necessary to provide confidence that an item, process, or program meets or exceeds that user's requirements and expectations. The near-facility environmental monitoring QA program consists of procedures and guides to demonstrate that environmental monitoring techniques and analyses are performed within established limits of acceptance. This is documented in the *Near-Facility Environmental Monitoring Quality Assurance Project Plan* (McKinney 2001).

Written operating procedures are an integral part of near-facility environmental monitoring QA. Procedures for field operations are provided in an internal Federal Services, *Operational Environmental Monitoring* manual (DFSNW-OEM-001). This section briefly describes the essential components of the near-facility environmental monitoring QA program.

### **DOCUMENTATION**

Record keeping is a vital part of any environmental monitoring program. Maintenance of environmental data is important from a QA standpoint, from a regulatory standpoint, and for trend analyses and optimization of environmental monitoring procedures. Each phase of near-facility environmental monitoring is documented. This documentation includes environmental sample logbooks, quarterly reports, annual reports, and occurrence reports.

### **SAMPLE REPLICATION**

Replicate sampling and subsequent analyses are the primary means of assessing sample variability. Duplicate samples of air, water, soil, sediment, and vegetation are collected.

### **DATA ANALYSIS**

Environmental data are reviewed to determine compliance with applicable federal and company guides. The data are analyzed both graphically and by standard statistical tests to determine trends and impacts on the environment. Newly acquired data are compared with historical data and natural background levels. Routine environmental data are stored on both magnetic media (i.e., in a computer environment) and hard-copy printouts.

### **TRAINING**

To ensure quality and consistency in sample collection and handling, all personnel performing such work received formal training. All radiological control technicians are required to complete a certification program. In addition, those radiological control technicians assigned to environmental monitoring receive special classroom orientation and on-the-job training by

experienced personnel. Federal Services Environmental Monitoring and Investigations personnel, in addition to their formal training received while obtaining professional degrees, have received training in courses taught through Washington State University, the Harvard School of Public Health, and various other institutions.

## **SAMPLE FREQUENCY**

1. Ambient air sample filters are collected biweekly.
2. Radiological surveys of roads are performed quarterly, bimonthly, or annually.
3. The TLDs are exchanged quarterly.
4. Radiological surveys of waste sites are performed quarterly, semiannually, or annually depending on the operating status, condition, and history of the site.
5. Soil, vegetation, and surface water samples are collected annually.

## **ANALYTICAL PROCEDURES**

Three laboratories provided analytical support to the near-facility environmental monitoring: PNNL, the WSCF, and the 222-S Analytical Laboratory. Samples are analyzed in accordance with prescribed procedures and quality control guides that are described briefly in the following paragraphs.

### **Pacific Northwest National Laboratory Radiation Standards and Engineering**

**Thermoluminescent Dosimeters.** External radiation levels are measured using TLDs. The Hanford Site uses the Harshaw 8807 dosimeter and the Harshaw 8800 reader. The TLDs are calibrated, packaged, and read by the PNNL Radiation Calibration Laboratory, Radiation Standards and Engineering Department. All TLD work is performed in accordance with formal, written procedures.

### **222-S and Waste Sampling and Characterization Facility Analytical Laboratories**

The 222-S and WSCF laboratories also provide analytical support to near-facility environmental monitoring. The WSCF is used for the samples containing typical environmental levels of radioactivity. The 222-S Laboratory is normally used for samples containing higher than normal environmental levels of radioactivity. Formal, written laboratory procedures are used in analyzing samples.

## 10.0 GLOSSARY

**Accessible Soils** - Hanford soils that are not behind security fences must meet a 10-mrem/yr effective dose equivalent limit from Hanford Site operations to the most exposed member of the public.

**As Low As Reasonably Achievable (ALARA)** - The implementation of ALARA is described in HNF-PRO-1620, *ALARA Program Scope*. This concept applies to maintaining releases at or below prescribed regulatory limits.

**Average Soil Contamination** - Contamination generally dispersed through the soil. Numerically, the radioactivity content averaged over a suitable mass of soil.

**Background Radiation** - Refers to regional levels of radioactivity produced by sources other than those of specific interest (e.g., the nuclear activities at the Hanford Site).

**Becquerel (Bq)** - The standard international unit of radioactivity. One Becquerel is one disintegration per second or:  $Bq = 2.7 \times 10^{-11} \text{ Ci}$

**Biological Transport** - Means of biological transport may include one or more of the following processes:

- Movement of subsurface radioactivity to the surface by physiological vegetative processes.
- Dispersion of such vegetation by the wind.
- Contaminated urine and feces deposited by animals that have gained access to and ingested radioactive materials.
- Contaminated animals themselves that have ingested radioactive materials directly or ingested other contaminated animals or plants.
- Physical displacement of radioactive materials by burrowing animals.
- Nests built using contaminated materials.

**Biota** - The plant and animal life of a specific region.

**Burial Ground** - A land area specifically designated to receive contaminated solid or solidified liquid waste packages and equipment. The contaminated articles are usually placed in trenches and covered with overburden.

**Byproduct** - A material that is not one of the primary products of a production process and is not solely or separately produced by the production process. Examples are process residues such as slag or distillation column bottoms. The term does not include a coproduct that is produced for the general public's use and is ordinarily used in the form in which it is produced by the process.

**Calibration** - Determining the deviation of an instrument from a standard traceable to the National Bureau of Standards or other recognized agency and reporting the deviations and/or eliminating them by adjustment.

**Chemical Processing** - Chemical treatment of material to separate desired components selectively. At the Hanford Site, plutonium, uranium, and fission products were chemically separated from irradiated fuels.

**Committed Dose Equivalent** - The predicted total dose equivalent to a tissue or organ over a 50-year period after a known intake of a radionuclide into the body. It does not include contributions from external dose. Committed dose equivalent is expressed in units of rem (or sievert).

**Committed Effective Dose Equivalent** - The sum of the committed dose equivalents to various tissues in the body, each multiplied by the appropriate weighing factor. Committed effective dose equivalent is expressed in units of rem (or sievert).

**Composite Sample** - A number of random samples initially collected from a waste and combined into a single sample; this sample is analyzed for the contaminants of concern.

***Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)*** - Commonly known as "Superfund," CERCLA was enacted to respond to uncontrolled releases of hazardous substances to the environment, primarily at inactive sites that were not adequately addressed by the *Resource Conservation and Recovery Act of 1976 (RCRA)*. CERCLA also applies to actively managed facilities and any onshore or offshore facility.

**Controlled Area** - An area where access is controlled to protect individuals from exposure to radiation and/or radioactive materials.

**Contamination Area** - Any area where contamination levels are greater than the values specified in Chapter 2, Table 2-2, *PHMC Radiological Control Manual*, HNF-5173 but less than or equal to 100 times those values.

**Crib** - An underground structure designed to receive liquid waste that percolates into the soil directly or percolates into the soil after having traveled through a connected tile field.

**Decommissioning** - Actions taken to reduce the potential health and safety impacts of DOE-controlled contaminated facilities. Actions could include stabilizing, reducing, or removing radioactivity or demolishing the contaminated facilities.

**Decontamination** - The removal of radioactive or hazardous contamination from facilities, equipment, or soils by washing, heating, chemical or electrochemical treating, mechanical cleaning, or other techniques.

**Derived Concentration Guide for Public Exposure (DCG-Public)** – The concentration of a radionuclide in air or water that, under conditions of continuous exposure for one year by one exposure mode (e.g., ingestion of water, submersion in air, or inhalation of air), would result in an effective dose equivalent (EDE) equal to the annual dose limit applicable to the group exposed. For exposure of the public, the DCG is the radionuclide concentration in air or water that would result in an EDE of 100 mrem (1 mSv) to a person having the characteristics of the reference manual.

**Diffuse Source** - A source or sources of radioactive or chemical contaminants released into the environment that do not have a defined point or origin of release (a nonpoint source). Such sources are also known as area sources.

**Disposal Facility** - Any facility or part of a facility where hazardous and/or radioactive waste is intentionally placed or where any land or water wastes will remain after closure.

**Ditch** - An open surface site for transport of liquid wastes to a pond or trench structure designed for percolation.

**Ecology** - The Washington State Department of Ecology.

**Effective Dose Equivalent** - The summation of the products of the dose equivalent received by specified tissues of the body and a tissue-specific weighing factor. This sum is a risk-equivalent value and can be used to estimate the health-effects risk of the exposed individual. The tissue-specific weighing factor represents the fraction of the total health risk resulting from uniform whole-body irradiation that would be contributed by that particular tissue. The EDE includes the committed EDE from internal deposition of radionuclides and the EDE caused by penetrating radiation from sources outside the body. EDE is expressed in units of rem (or sievert).

**Effluent** - An airborne or liquid discharge from a facility after all engineered waste treatment and effluent controls have been performed. The term includes onsite discharges to the atmosphere, lagoons, ponds, cribs, injection wells, French drains, or ditches. The term does not include solid waste stored or removed for disposal or waste that is contained in retention basins or tanks before treatment and/or disposal.

**Emissions Unit** - Regarding air pollutant emissions, any part of a stationary source that emits or would have the potential to emit any pollutant subject to regulation.

**Environmental Monitoring Plan (EMP)** - A two-part document prepared for each site, facility, or process that uses, generates, releases, or manages significant pollutants or hazardous materials.

**Environmental Sites Database (ESD)** - A database of environmental sites that is administered by the ERC.

**External Radiation** – Radiation originating from a source outside the body.

**Facility** - A processing plant, tank farm, shop, laboratory, powerhouse, or laundry. Including all contiguous land and structures, other appurtenances, and improvements on land used for recycling, reusing, reclaiming, transferring, storing, and treating of dangerous waste (including treatment, storage, and disposal sites as well as groundwater wells). (40 CFR 264, "Standards for Owners and Operators of Hazardous Waste Treatment Storage and Disposal Facilities," and WAC 173-303-040.)

**Facility-Specific Environmental Monitoring** - Routine environmental monitoring of all environmental media (air, biota, etc.) around facility parameters.

**Field Blank** - Aliquots of analyte-free water or solvents brought to the field in sealed containers and transported to the laboratory with the sample container. Field blanks include trip blanks and equipment blanks.

**Field Duplicate** - Field duplicates are collected at specified frequencies and are used to document precision. The field duplicate precision depends on the variance of waste composition, sampling techniques, and analytical technique.

**Fugitive Emissions** - Material that is generated incidental to an operation, process, or activity and that is released or dispersed into the open air. Fugitive emissions occur via pathways that do not allow routine measurement at the point of release.

**Grab Sample** - A single sample removed from a sample medium over a short time interval.

**Groundwater** - Water that exists below the water table, also referred to as the zone of saturation. However, the capillary fringe directly above can be completely saturated if the sediment is fine enough. To avoid this ambiguous term, the use of phreatic water, which is water that enters freely into wells under both confined and unconfined conditions is suggested. Phreatic water is a term originally applied only to water that occurs in the upper part of the zone of saturation under water table conditions (unconfined groundwater or well water), but has come to be applied to all water in the zone of saturation, thus making it an exact synonym of groundwater. Above the water table is the vadose zone, where water pressures are less than atmospheric pressure. This zone still contains water, but the water is held to the soil particles or other groundwater material by capillary force. Thus, while this water still can move within the vadose zone, it cannot move out of the zone into a well or other place is exposed to atmospheric pressure. The dividing line between water in the vadose zone and phreatic water is the atmospheric pressure between the two, with the pressure of vadose water being below atmospheric pressure and that of phreatic water (i.e., groundwater) above atmospheric pressure.

**High-Efficiency Particulate Air (HEPA) Filter** - To qualify as a HEPA filter, a filter must achieve an efficiency of 99.97% under laboratory conditions and 99.95% after installation for the removal of airborne particulates greater than  $3 \times 10^{-5}$  cm (0.3 microns).

**High-Level Nuclear Waste** - Spent nuclear fuel or radioactive waste resulting directly from the dissolution and reprocessing of spent nuclear fuel. Secondary waste streams resulting from the dissolution and reprocessing of spent nuclear fuel are not considered high-level waste.

**Immobile Radionuclides** - All those radionuclides that are sorbed onto Hanford Site soils and usually would not migrate through the vadose zone or the groundwater below the future control zone.

**Inaccessible Soils** - Areas from which the general public is excluded (by fences, posting, patrols, or distance), but that are still subject to meteorological effects, are subject to a 10-mrem/yr operational EDE limit.

**Inactive Crib** - A crib that has been designated as permanently out of service.

**Inactive Radioactive Waste Site** - Any waste site that is no longer needed for current operational programs and that is not currently an active waste disposal site.

**Inactive Waste Sites** - Inactive waste sites include units such as burial grounds, unplanned release sites, cribs, ditches, ponds, trenches, and basins, abandoned storage areas, drains, single-shell tank piping, transfer pits, and jumper boxes.

**Less Than Detectable** - An analytical term for a concentration in a sample that is lower than the minimum detection capabilities of that analytical equipment or process.

**Low-Level Waste** - Any gaseous, liquid, or solid radioactive waste not classified as high-level waste, transuranic waste, or spent nuclear fuel, as defined by DOE Order 435.1, *Radioactive Waste Management*.

**Maximum Contaminant Level (MCL)** - The drinking water standards specified in 40 CFR 141, "National Primary Drinking Water Regulations." See Appendix C, "Maximum Contaminant Levels."

**Mean** - Average value of a series of measurements.

**Minimum Detection Limit** - Smallest amount or concentration of a radionuclide or nonradioactive element that can be reliably detected in a sample.

**Mixed Waste** - Dangerous waste that also contains enough radioactivity to be classified as radioactive waste.

**Monitoring System** - Instrumentation that provides measurement of an airborne or liquid waste stream parameters. The system includes a detector and associated readout components. A continuous monitoring system measures the stream parameters on a near-real-time basis or as specified in applicable Environmental Protection Agency regulations, 40 CFR 52, "Approval and Promulgation of Implementation Plans," Appendix E; 40 CFR 51, "Requirements for Preparation, Adoption, and Submittal of Implementation Plans," Appendix P, or as defined in



applicable American National Standards Institute standards. A radiation monitoring system is a system in which radiation or radioactivity is the measured parameter. An integrating monitoring system totals the instantaneously measured parameter over some time period. A sampling system does not measure or read out an instantaneous stream parameter.

**Near Facility Environmental Monitoring** - The collection and analysis of samples of air, water, soil, biota, and other media near nuclear facilities on DOE sites and their environs and the measurement of external radiation to demonstrate compliance with applicable standards and assess radiation exposures to employees and members of the public, and the near-field environment.

**Nonroutine Activities** - Any actions on a large-scale (>5 acres), including stabilization, soil removal, fixative or sealant application, other surface treatments, or other activities that could affect future remediation activities in an inactive waste site.

**Not Detected** - A reporting term which describes any or all of the following: the overall analytical error was greater than the radionuclide concentration itself; or, after allowing for the subtraction of the background level of the radionuclide, the resulting concentration was less than zero; or, no radio analytical peak was detected during the analysis.

**Operations** - In this report, this term loosely refers to Fluor Project Hanford activities including chemical processing, waste management, and decommissioning.

**Pesticide** - As defined in 40 CFR 162, the term pesticide covers all pest-control chemicals such as herbicides, rodenticides, and insecticides.

**Plutonium Processing and Handling Facility** - Any facility constructed primarily to process plutonium (including plutonium-238) and that handles in-process plutonium.

**Plutonium Storage Facility** - Any facility constructed to store strategic (category I) quantities of plutonium.

**Point Source** - A single defined point (origin) of an airborne release, such as a vent or stack.

**Pond** - A surface impoundment used to contain or percolate low-level liquid radioactive waste, mixed waste, or hazardous waste.

**Quality Assurance** - A process designed to maintain the quality of the results of a program within established limits of acceptance.

**Radiation Survey** - Evaluation of an area or object with portable instruments to identify radioactive materials and radiation fields present.

**Radioactive Byproduct** - Any radioactive material (except special nuclear material) yielded in or made radioactive by exposure to the radiation incident to the process of producing or using special nuclear material (*Atomic Energy Act of 1954*, as amended). The nonradioactive hazardous component of the waste material will be subject to regulation under the RCRA.

**Radioactive Liquid Effluent** - A liquid effluent that has a reasonable potential for containing radioactive materials in quantities such that the annual average concentration is equal to or greater than the MCL.

**Radiological Control Area** - An area where access is controlled to protect individuals from exposure to radiation and/or radioactive materials. Radiological control areas include, but are not limited to, areas posted as Radiation Area, Surface Contamination, and Underground Radioactive Materials, to describe the radiological condition of the area within.

**Radiological Posting** - Information in the form of signs and barriers to inform people of radiological conditions that warrant avoidance or special precautions for entry.

**Representative Sample** - The average stream parameter being measured occurs in the sample in the same average proportion that it occurs in the environmental discharge.

**Retired Waste Site** - A waste site that is isolated and no longer available to receive waste in any form.

**Routine Activities** - Any actions on a small-scale (<5 acres), including radioactive hot-spot removal, vegetation removal, fencing, posting, herbicide spraying, stabilization, or immediate spill response) in an inactive waste site. In general, these routine actions shall not interfere with RCRA/CERCLA response or site investigations.

**Sampling System** - Instrumentation and equipment that remove a part of a liquid or airborne waste stream for subsequent quantitative determination of stream parameters. The system generally employs such devices as filters, other sample collection media, or effluent traps of some kind. A continuous sampling system removes a part of the stream continuously except during sample change, maintenance, repair, or other necessary outages. A grab sampling system removes an instantaneous part of the stream or removes a part of the stream over a time period.

**Sediment Column** - The sediment beneath a crib. It can mean either all the sediment beneath the bottom of the crib extending to the water table or all sediment beneath a crib contaminated by radioactive materials.

**Site** - The location of a significant event, a prehistoric or historic occupation or activity, or a building or structure (whether standing, ruined, or vanished) where the location itself maintains historical or archeological value, regardless of the value of any existing structure.

**Soil at depth** - Soil below 36 in.

**Soil Contamination** - Contaminated soil not releasable in accordance with DOE Order 5400.5.

**Solid Waste** - Any discarded material that is not excluded by WAC 173-303-017(2) or that is not excluded by a variance granted under WAC 173-303-017(5). Materials are solid waste if they are: (1) abandoned by being disposed of, burned, or incinerated, or (2) accumulated, stored, or treated (but not recycled) before (or in lieu of) being abandoned by being disposed of, burned, or incinerated. In addition, a solid waste includes any material considered to be inherently waste-like.

**Speck Contamination** - Single grains of soil, rust particles, feces, or pieces of vegetation.

**Spot Contamination** - A spot or quantity of contamination less than 1 cm<sup>3</sup> in volume, or areal contamination less than 15 cm<sup>2</sup> in area.

**Stabilization** - The process of covering surface contaminated areas with clean backfill or topsoil.

**Standard** - A specified set of rules or conditions concerned with the classification of components; delineation of procedures; definition of terms; designation of materials, performance, design, or operations; or measurements of quality in describing materials, products, systems, services, or practices. A standard is more general than a procedure or specification and more specific than a criterion.

**Standard Deviation** – A measure of the range of values about the mean.

**Standard Error of the Mean** - A measure of the uncertainty in the estimated mean of averaged values.

**Surface Soil** - Soil from 0 in. to 2 in. deep.

**Surplus Facilities** - Surplus facilities include all facilities that have been accepted into a decommissioning program.

**Survey** - A method to detect the release, disposal, or presence of radioactive materials or hazardous substances under a specific set of conditions to determine actual or potential hazards. Such an evaluation may include, but is not limited to, tests, physical examinations, and measurements of radiation or concentrations of materials.

**Suspect Waste Site** - A site, believed to have been previously unknown or undocumented, that, because of characteristics present at the site or historical information about the site, is suspected of containing waste (i.e., non-dangerous, hazardous, dangerous, mixed, and radioactive).

**Tank Farm** - An area of large underground tanks designed to store up to 1 Mgal each of high-level liquid waste.

**Thermoluminescent Dosimeter** - A chip or series of chips used for measuring external gamma radiation. It consists of a material capable of absorbing energy imparted by ionizing radiation, then emitting light as a result of thermal stimulation. A measure of that light is proportional to the radioactivity absorbed.

**Topsoil** - The soil used as a plant growth medium at the surface to a depth of 30 cm as measured at the restabilization site. Topsoil is added soil to support the stabilization of a retired disposal facility with the objective of controlling erosion, establishing the growth of perennial grasses, and preventing the growth of deep-rooted vegetation.

**Total Analytical Uncertainty** - All analytical measurements include some degree of uncertainty as a consequence of a series of unavoidable and unintentional inaccuracies related to the collection and analysis of samples. Examples of these inaccuracies can include errors associated with reading and recording results, sample handling and processing, instrument calibrations, numerical rounding, and randomness of radioactive decay. The total analytical uncertainty value implies that approximately 95% of the time a recount or reanalysis of the sample would give a value somewhere in the range between the initial reported value plus or minus the total analytical uncertainty.

**Transuranic (TRU) Radionuclide** - Any radionuclide having an atomic number greater than 92 (DOE Order 435.1).

**Transuranic Waste** - Without regard to source or form, radioactive waste that at the end of institutional control periods is contaminated with alpha-emitting transuranium radionuclides with half-lives greater than 20 years and concentrations greater than 100 nCi/g (3700 Bq/g). The Waste Isolation Pilot Plant, high-level waste, and spent nuclear fuel as defined by DOE Order 435.1 are specifically excluded from this definition.

**Trip Blank** - A type of field blank used to accompany sample containers to and from the field and to detect contamination or cross-contamination that occurs during sample handling and transportation.

**Uncontaminated Soil** - A soil or a land area that requires no controls or restrictions in any way for radiation protection purposes and/or meets the contamination limit specifications.

**Underground Radioactive Material** - A radiological posting status where subsurface radioactivity is present but where surface contamination does not exceed the soil standards.

**Unity Rule** - If more than one radionuclide is present, the sum of the fractions represented by each radionuclide concentration divided by its respective limiting concentration (ACV) shall not exceed unity. This rule could also apply to parameters other than radionuclide concentration.

**Unplanned Release Site** - An area that was contaminated by an unplanned release of radioactive contamination, making it a radiological control area.

**Unrestricted Release** - Values below which unrestricted release of soils will occur will be defined in an applicable record of decision.

**U.S. Environmental Protection Agency (EPA)** - The federal agency chartered with carrying out and monitoring the environmental regulations.

**Waste Information Data System (WIDS)** - A database that identifies waste management units on the Hanford Site. It is a subset of the ESD.

**Waste Management** - The activity involved with storing, disposing of, shipping, handling, and monitoring all radioactive waste.

**Waste Sites** - Any facility used for the planned disposal of hazardous, radioactive, toxic, or nonradioactive/nontoxic waste.

**Water Table** - The upper boundary of an unconfined aquifer below which saturated groundwater occurs.

**Table 10-1. Radionuclide Nomenclature.**

<b>Radionuclide</b>	<b>Symbol</b>	<b>Half-Life</b>	<b>Radionuclide</b>	<b>Symbol</b>	<b>Half-Life</b>
Tritium	<sup>3</sup> H	12.3 yr	Cesium-134	<sup>134</sup> Cs	2.1 yr
Beryllium-7	<sup>7</sup> Be	53.28 d	Cesium-137	<sup>137</sup> Cs	30.3 yr
Carbon-14	<sup>14</sup> C	5.72E+03 yr	Cerium-141	<sup>141</sup> Ce	32.5d
Sodium-22	<sup>22</sup> Na	2.6 yr	Cerium-144	<sup>144</sup> Ce	284.6 d
Potassium-40	<sup>40</sup> K	1.26 E+09 yr	Promethium-147	<sup>147</sup> Pm	13.4 min
Argon-41	<sup>41</sup> Ar	1.8 h	Europium-152	<sup>152</sup> Eu	13.5 yr
Chromium-51	<sup>51</sup> Cr	27.7 d	Europium-154	<sup>154</sup> Eu	8.6 yr
Manganese-54	<sup>54</sup> Mn	312 d	Europium-155	<sup>155</sup> Eu	4.7 yr
Cobalt-58	<sup>58</sup> Co	71 d	Thallium-208	<sup>208</sup> Tl	3.1 min
Iron-59	<sup>59</sup> Fe	45 d	Bismuth-212	<sup>212</sup> Bi	60.6 min
Cobalt-60	<sup>60</sup> Co	5.3 yr	Lead-212	<sup>212</sup> Pb	10.6 h
Nickel-63	<sup>63</sup> Ni	100 yr	Polonium-212	<sup>212</sup> Po	0.3 x 10 <sup>-6</sup> s
Zinc-65	<sup>65</sup> Zn	243.8 d	Polonium-216	<sup>216</sup> Po	0.15 s
Krypton-85	<sup>85</sup> Kr	10.7 yr	Radon-220	<sup>220</sup> Rn	55.6 s
Strontium-89	<sup>89</sup> Sr	50.5 d	Radium-226	<sup>226</sup> Ra	1.60 E+03 yr
Strontium-90	<sup>90</sup> Sr	29.1 yr	Radium-228	<sup>228</sup> Ra	5.75 yr
Niobium-95	<sup>95</sup> Nb	35.0 d	Thorium-232	<sup>232</sup> Th	1.40 E+10 yr
Zirconium-95	<sup>95</sup> Zr	64.0 d	Uranium Total	U or Uranium	4.50 E+09 yr
Technetium-99	<sup>99</sup> Tc	2.12 E+05 yr	Uranium-234	<sup>234</sup> U	2.40 E+05 yr
Ruthenium-103	<sup>103</sup> Ru	39.4 d	Uranium-235	<sup>235</sup> U	7.00 E+08 yr
Ruthenium-106	<sup>106</sup> Ru	1.0 yr	Uranium-236	<sup>236</sup> U	2.30 E+07 yr
Tin-113	<sup>113</sup> Sn	115 d	Uranium-238	<sup>238</sup> U	4.50 E+09 yr
Antimony-124	<sup>124</sup> Sb	60 d	Plutonium-238	<sup>238</sup> Pu	87.7 yr
Antimony-125	<sup>125</sup> Sb	2.7 yr	Plutonium-239/240	<sup>239,240</sup> Pu	2.40 E+04 yr
Iodine-129	<sup>129</sup> I	1.7 E+07 yr	Plutonium-241	<sup>241</sup> Pu	14.4 yr
Iodine-131	<sup>131</sup> I	8.0 d	Americium-241	<sup>241</sup> Am	433 yr
Barium-133	<sup>133</sup> Ba	10.53 yr			

This page intentionally left blank.

## 11.0 STANDARDS

Table 11-1. U.S. Department of Energy Derived Concentration Guides.<sup>a</sup>

Radionuclide	DCG		Radionuclide	DCG	
	Air (pCi/m <sup>3</sup> )	Liquid (pCi/L)		Air (pCi/m <sup>3</sup> )	Liquid (pCi/L)
<sup>3</sup> H	1.0E+05	2.0E+06	<sup>147</sup> Pm	3.0E+02	1.0E+05
<sup>14</sup> C	6.0E+03	7.0E+04	<sup>152</sup> Eu	5.0E+01	2.0E+04
<sup>40</sup> K	9.0E+02	7.0E+03	<sup>154</sup> Eu	5.0E+01	2.0E+04
<sup>41</sup> Ar	1.0E+04	0.0E+00	<sup>155</sup> Eu	3.0E+02	1.0E+05
<sup>51</sup> Cr	6.0E+04	1.0E+06	<sup>208</sup> Tl	5.0E+03	0.0E+00
<sup>54</sup> Mn	2.0E+03	5.0E+04	<sup>212</sup> Bi	6.0E+02	1.0E+05
<sup>59</sup> Fe	8.0E+02	2.0E+04	<sup>214</sup> Bi	2.0E+03	6.0E+05
<sup>58</sup> Co	2.0E+03	4.0E+04	<sup>212</sup> Pb	8.0E+01	3.0E+03
<sup>60</sup> Co	8.0E+01	5.0E+03	<sup>214</sup> Pb	2.0E+03	2.0E+05
<sup>65</sup> Zn	6.0E+02	9.0E+03	<sup>212</sup> Po	1.0E+00	8.0E+01
<sup>85</sup> Kr	3.0E+06	0.0E+00	<sup>216</sup> Po	1.0E+00	8.0E+01
<sup>89</sup> Sr	3.0E+02	2.0E+04	<sup>220</sup> Rn	3.0E+03	0.0E+00
<sup>90</sup> Sr	9.0E+00	1.0E+03	<sup>224</sup> Ra	4.0E+00	4.0E+02
<sup>95</sup> Zr	6.0E+02	4.0E+04	<sup>226</sup> Ra	1.0E+00	1.0E+02
<sup>95</sup> Nb	3.0E+03	6.0E+04	<sup>228</sup> Ac	4.0E+01	6.0E+04
<sup>99</sup> Tc	2.0E+03	1.0E+05	<sup>232</sup> Th	7.0E-03	5.0E+01
<sup>103</sup> Ru	2.0E+03	5.0E+04	Total U	1.0E-01	6.0E+02
<sup>106</sup> Ru	3.0E+01	6.0E+03	<sup>234</sup> U	9.0E-02	5.0E+02
<sup>113</sup> Sn	1.0E+03	5.0E+04	<sup>235</sup> U	1.0E-01	6.0E+02
<sup>124</sup> Sb	6.0E+02	1.0E+04	<sup>236</sup> U	1.0E-01	5.0E+02
<sup>125</sup> Sb	1.0E+03	5.0E+04	<sup>238</sup> U	1.0E-01	6.0E+02
<sup>129</sup> I	7.0E+01	5.0E+02	<sup>238</sup> Pu	3.0E-02	4.0E+01
<sup>131</sup> I	4.0E+02	3.0E+03	<sup>239,240</sup> Pu	2.0E-02	3.0E+01
<sup>134</sup> Cs	2.0E+02	2.0E+03	<sup>241</sup> Pu	1.0E+00	2.0E+03
<sup>137</sup> Cs	4.0E+02	3.0E+03	<sup>241</sup> Am	2.0E-02	3.0E+01
<sup>141</sup> Ce	1.0E+03	5.0E+04	Total Alpha	2.0E-02	3.0E+01
<sup>144</sup> Ce	3.0E+01	7.0E+03	Total Beta	9.0E+00	1.0E+03

a – From DOE Order 5400.5.



Table 11-2. EPA Concentration Levels for Environmental Compliance.<sup>a</sup>  
(Radionuclide Concentrations (pCi/m<sup>3</sup>) in Air)

Radionuclide	Concentration	Radionuclide	Concentration
<sup>3</sup> H	1.5E+03	<sup>137</sup> Cs	1.9E-02
<sup>14</sup> C	1.0E+01	<sup>141</sup> Ce	6.3E+00
<sup>40</sup> K	2.7E-02	<sup>144</sup> Ce	6.2E-01
<sup>41</sup> Ar	1.7E+03	<sup>147</sup> Pm	1.1E+01
<sup>51</sup> Cr	3.1E+01	<sup>152</sup> Eu	2.0E-02
<sup>54</sup> Mn	2.8E-01	<sup>154</sup> Eu	2.3E-02
<sup>59</sup> Fe	6.7E-01	<sup>155</sup> Eu	5.9E-01
<sup>58</sup> Co	6.7E-01	<sup>212</sup> Bi	5.6E+01
<sup>60</sup> Co	1.7E-02	<sup>214</sup> Bi	1.4E+02
<sup>65</sup> Zn	9.1E-02	<sup>212</sup> Pb	6.3E+00
<sup>85</sup> Kr	1.0E+06	<sup>214</sup> Pb	1.2E+02
<sup>89</sup> Sr	1.8E+00	<sup>224</sup> Ra	1.5E-01
<sup>90</sup> Sr	1.9E-02	<sup>226</sup> Ra	3.3E-03
<sup>95</sup> Zr	6.7E-01	<sup>228</sup> Ac	3.7E+00
<sup>95</sup> Nb	2.2E+00	<sup>232</sup> Th	6.2E-04
<sup>99</sup> Tc	1.4E-01	<sup>234</sup> U	7.7E-03
<sup>103</sup> Ru	2.6E+00	<sup>235</sup> U	7.1E-03
<sup>106</sup> Ru	3.4E-01	<sup>236</sup> U	7.7E-03
<sup>113</sup> Sn	1.4E+00	<sup>238</sup> U	8.3E-03
<sup>124</sup> Sb	5.3E-01	<sup>238</sup> Pu	2.1E-03
<sup>125</sup> Sb	1.6E-01	<sup>239/240</sup> Pu	2.0E-03
<sup>129</sup> I	9.1E-03	<sup>241</sup> Pu	1.0E-01
<sup>131</sup> I	2.1E-01	<sup>241</sup> Am	1.9E-03
<sup>134</sup> Cs	2.7E-02		

a - from 40 CFR 61, Subpart I, Appendix E, Table 2

Table 11-3. Inaccessible Soil Concentrations (pCi/g).

Radionuclide	100 BDKN	100 F, H	200 W	200 E	300 Area	400 Area
<sup>3</sup> H	1.4 E+08	7.4 E+07	3.7 E+08	2.0 E+08	9.5 E+06	1.4 E+07
<sup>14</sup> C	6.2 E+05	6.2 E+05	6.2 E+05	6.2 E+05	6.2 E+05	6.2 E+05
<sup>55</sup> Fe	9.7 E+06	9.7 E+06	3.6 E+10	1.9 E+10	1.0 E+07	1.4 E+09
<sup>58</sup> Co	9.8 E+06	9.8 E+06	8.1 E+09	4.3 E+09	1.2 E+07	3.1 E+08
<sup>60</sup> Co	9.9 E+05	9.9 E+05	5.7 E+08	3.0 E+08	1.0 E+06	9.9 E+06
<sup>63</sup> Ni	1.5 E+08	1.5 E+08	6.9 E+09	6.9 E+09	1.5 E+08	2.2 E+08
<sup>90</sup> Sr*	8.3 E+05	8.3 E+05	2.2 E+08	1.2 E+08	8.3 E+05	8.4 E+06
<sup>99</sup> Tc	1.3 E+07	1.3 E+07	1.3 E+07	1.3 E+07	1.3 E+07	1.3 E+07
<sup>106</sup> Ru*	2.0 E+07	2.0 E+07	5.7 E+08	3.0 E+08	1.5 E+07	2.2 E+07
<sup>125</sup> Sb*	9.1 E+06	9.1 E+06	5.7 E+09	3.0 E+09	9.2 E+06	1.1 E+08
<sup>129</sup> I	2.8 E+05	2.8 E+05	2.8 E+05	2.8 E+05	2.2 E+05	2.8 E+05
<sup>134</sup> Cs	1.7 E+04	1.7 E+04	2.5 E+08	1.4 E+08	2.4 E+04	9.7 E+06
<sup>137</sup> Ce*	1.7 E+04	1.7 E+04	3.5 E+08	1.8 E+08	1.7 E+04	1.3 E+07
<sup>144</sup> Cs*	1.4 E+06	1.4 E+06	7.4 E+08	4.0 E+08	1.9 E+06	2.8 E+07
<sup>147</sup> Pm	3.4 E+07	3.4 E+07	7.4 E+09	4.0 E+09	3.5 E+07	2.8 E+08
<sup>152</sup> Eu	4.5 E+06	4.5 E+06	1.2 E+09	6.2 E+08	4.6 E+06	4.5 E+07
<sup>154</sup> Eu	3.3 E+06	3.3 E+06	8.8 E+08	4.7 E+08	3.3 E+06	3.4 E+07
<sup>155</sup> Eu	2.3 E+07	2.3 E+07	6.9 E+09	3.7 E+09	2.4 E+07	2.6 E+08
<sup>226</sup> Ra*	1.3 E+05	1.3 E+05	2.1 E+05	2.1 E+05	1.3 E+05	1.4 E+05
<sup>227</sup> Ac*	2.4 E+03	2.4 E+03	5.4 E+04	2.9 E+04	1.4 E+03	2.1 E+03
<sup>232</sup> Th*	2.0 E+04	2.0 E+04	2.0 E+04	2.0 E+04	4.7 E+03	7.1 E+03
<sup>232</sup> U*	5.5 E+04	5.5 E+04	1.4 E+05	1.4 E+05	9.9 E+03	1.5 E+04
<sup>233</sup> U	4.5 E+05	4.5 E+05	4.5 E+05	4.5 E+05	6.7 E+04	1.0 E+05
<sup>234</sup> U	4.6 E+05	4.6 E+05	4.6 E+05	4.6 E+05	6.9 E+04	1.0 E+05
<sup>235</sup> U*	4.9 E+05	4.9 E+05	4.9 E+05	4.9 E+05	7.3 E+04	1.1 E+05
<sup>236</sup> U	4.9 E+05	4.9 E+05	4.9 E+05	4.9 E+05	7.1 E+04	1.1 E+05
<sup>238</sup> U*	4.7 E+05	4.7 E+05	4.7 E+05	4.7 E+05	7.7 E+04	1.2 E+05
<sup>237</sup> Np*	8.9 E+02	8.9 E+02	8.9 E+02	8.9 E+02	8.9 E+02	8.9 E+02
<sup>238</sup> Pu	1.3 E+04	1.3 E+04	8.8 E+05	4.7 E+05	1.3 E+04	3.4 E+04
<sup>239</sup> Pu	1.2 E+04	1.2 E+04	1.2 E+04	1.2 E+04	1.2 E+04	1.2 E+04
<sup>240</sup> Pu	1.2 E+04	1.2 E+04	1.4 E+04	1.4 E+04	1.2 E+04	1.2 E+04
<sup>241</sup> Pu	6.1 E+05	6.1 E+05	4.2 E+07	2.2 E+07	6.1 E+05	1.2 E+06
<sup>241</sup> Am	2.5 E+04	2.5 E+04	7.4 E+05	4.0 E+05	1.9 E+04	2.8 E+04

Note: Asterisks mark nuclides with progeny that are assumed to be present in equilibrium amounts. However, <sup>234</sup>U was not included in the <sup>238</sup>U limits. For supporting references see WHC-SD-EN-TI-070.

Table 11-4. Accessible Soil Concentrations (pCi/g).

Radionuclide	100 BDKN	100 F, H	200 W	200 E	300 Area	400 Area
<sup>3</sup> H	1.4 E+08	7.4 E+07	3.7 E+08	2.0 E+08	9.5 E+06	1.4 E+07
<sup>14</sup> C	6.2 E+05	6.2 E+05	6.2 E+05	6.2 E+05	6.2 E+05	6.2 E+05
<sup>55</sup> Fe	5.3 E+05	5.3 E+05	5.3 E+05	5.3 E+05	5.3 E+05	5.3 E+05
<sup>58</sup> Co	1.8 E+01	1.8 E+01	1.8 E+01	1.8 E+01	1.8 E+01	1.8 E+01
<sup>60</sup> Co	7.1 E+00	7.1 E+00	7.1 E+00	7.1 E+00	7.1 E+00	7.1 E+00
<sup>63</sup> Ni	2.5 E+07	2.5 E+07	2.5 E+07	2.5 E+07	2.5 E+07	2.5 E+07
<sup>90</sup> Sr*	2.8 E+03	2.8 E+03	2.8 E+03	2.8 E+03	2.8 E+03	2.8 E+03
<sup>99</sup> Tc	1.0 E+06	1.0 E+06	1.0 E+06	1.0 E+06	1.0 E+06	1.0 E+06
<sup>106</sup> Ru*	7.7 E+01	7.7 E+01	7.7 E+01	7.7 E+01	7.7 E+01	7.7 E+01
<sup>125</sup> Sb*	3.7 E+01	3.7 E+01	3.7 E+01	3.7 E+01	3.7 E+01	3.7 E+01
<sup>129</sup> I	1.0 E+04	1.0 E+04	1.0 E+04	1.0 E+04	1.0 E+04	1.0 E+04
<sup>134</sup> Cs	1.0 E+01	1.0 E+01	1.0 E+01	1.0 E+01	1.0 E+01	1.0 E+01
<sup>137</sup> Cs*	3.0 E+01	3.0 E+01	3.0 E+01	3.0 E+01	3.0 E+01	3.0 E+01
<sup>144</sup> Ce*	3.3 E+02	3.3 E+02	3.3 E+02	3.3 E+02	3.3 E+02	3.3 E+02
<sup>147</sup> Pm	1.1 E+06	1.1 E+06	1.1 E+06	1.1 E+06	1.1 E+06	1.1 E+06
<sup>152</sup> Eu	1.5 E+01	1.5 E+01	1.5 E+01	1.5 E+01	1.5 E+01	1.5 E+01
<sup>154</sup> Eu	1.4 E+01	1.4 E+01	1.4 E+01	1.4 E+01	1.4 E+01	1.4 E+01
<sup>155</sup> Eu	6.3 E+02	6.3 E+02	6.3 E+02	6.3 E+02	6.3 E+02	6.3 E+02
<sup>226</sup> Ra*	1.0 E+01	1.0 E+01	1.0 E+01	1.0 E+01	1.0 E+01	1.0 E+01
<sup>227</sup> Ac*	1.0 E+01	1.0 E+01	1.0 E+01	1.0 E+01	1.0 E+01	1.0 E+01
<sup>232</sup> Th*	5.9 E+00	5.9 E+00	5.9 E+00	5.9 E+00	5.9 E+00	5.9 E+00
<sup>232</sup> U*	1.0 E+01	1.0 E+01	1.0 E+01	1.0 E+01	1.0 E+01	1.0 E+01
<sup>233</sup> U	6.3 E+02	6.3 E+02	6.3 E+02	6.3 E+02	6.3 E+02	6.3 E+02
<sup>234</sup> U	6.3 E+02	6.3 E+02	6.3 E+02	6.3 E+02	6.3 E+02	6.3 E+02
<sup>235</sup> U*	1.7 E+02	1.7 E+02	1.7 E+02	1.7 E+02	1.7 E+02	1.7 E+02
<sup>236</sup> U	6.7 E+02	6.7 E+02	6.7 E+02	6.7 E+02	6.7 E+02	6.7 E+02
<sup>238</sup> U*	3.7 E+02	3.7 E+02	3.7 E+02	3.7 E+02	3.7 E+02	3.7 E+02
<sup>237</sup> Np*	4.8 E+01	4.8 E+01	4.8 E+01	4.8 E+01	4.8 E+01	4.8 E+01
<sup>238</sup> Pu	2.1 E+02	2.1 E+02	2.1 E+02	2.1 E+02	2.1 E+02	2.1 E+02
<sup>239</sup> Pu	1.9 E+02	1.9 E+02	1.9 E+02	1.9 E+02	1.9 E+02	1.9 E+02
<sup>240</sup> Pu	1.9 E+02	1.9 E+02	1.9 E+02	1.9 E+02	1.9 E+02	1.9 E+02
<sup>241</sup> Pu	1.0 E+04	1.0 E+04	1.0 E+04	1.0 E+04	1.0 E+04	1.0 E+04
<sup>241</sup> Am	1.8 E+02	1.8 E+02	1.8 E+02	1.8 E+02	1.8 E+02	1.8 E+02

Note: Asterisks mark nuclides with progeny that are assumed to be present in equilibrium amounts. However, <sup>234</sup>U was not included in the <sup>238</sup>U limits. For supporting references see WHC-SD-EN-TI-070.

## 12.0 DATA SUMMARY METHODS

Measuring any physical quantity has some degree of inherent uncertainty. This uncertainty results from the combination of all possible inaccuracies in the measurements process, including such factors as the reading of the result, the calibration of the measuring device, and numerical rounding errors.

In this report, individual radioactive measurements are accompanied by a plus or minus ( $\pm$ ) value, which represents the total propagated analytical uncertainty (or 2-sigma counting error). The two-sigma counting error gives information on what the measurement might be if the same sample were counted again under identical conditions. The two-sigma counting error implies that approximately 95% of the time, a recount of the same sample would give a value within plus or minus the two-sigma counting error at the value reported.

Values in the tables that are less than the minimum detectable activity indicate that the reported result might have come from a sample with no radioactivity. Such values are considered below the detection limits of the measuring instrument. Also note that each radioactive measurement must have the random background radioactivity of the measuring instrument subtracted; therefore, negative results are possible, especially when the sample has very little radioactivity.

Reported averages also are accompanied by a plus or minus ( $\pm$ ) value, which represents two standard deviations from the mean. If the data fluctuate randomly, this is a measure of the uncertainty in the estimated average of the data because of this randomness.

Where averages of averages are reported, the plus or minus ( $\pm$ ) value represents two standard errors of the mean.

The mean,  $\bar{X}$ , is computed as:

$$\bar{X} = \frac{1}{n} \sum_{i=1}^n X_i$$

where  $X_i$  is the  $i$ th measurement and  $n$  is the number of measurements.

The standard error of the mean was computed as:

$$SE = \sqrt{\frac{S^2}{n}}$$

where  $S^2$ , the variance of the  $n$  measurements, was computed as:

$$S_M^2 = \frac{1}{n-1} \sum_{i=1}^n (X_i - \bar{X})^2$$

This estimator,  $S^2$ , includes the variance among the samples and the counting variance. The estimated  $S^2$  occasionally may be less than the average counting variance.

### 13.0 REFERENCES

- 10 CFR 835, "Occupational Radiation Protection," *Code of Federal Regulations*, as amended.
- 40 CFR 51, "Requirements for Preparation, Adoption, and Submittal of Implementation Plans," *Code of Federal Regulations*, as amended.
- 40 CFR 52, "Approval and Promulgation of Implementation Plans," *Code of Federal Regulations*, as amended.
- 40 CFR 61, Subpart H, "National Emissions Standards for Hazardous Air Pollutants," *Code of Federal Regulations*, as amended.
- 40 CFR 141, "National Primary Drinking Water Regulations," *Code of Federal Regulations*, as amended.
- 40 CFR 162, "State Registration of Pesticide Products," *Code of Federal Regulations*, as amended.
- Comprehensive Environmental Response, Compensation, and Liability Act of 1980*,  
42 USC 9601, et seq.
- Diediker, L. P., 2002, *Environmental Releases for Calendar Year 2001*, HNF-EP-0527-11, Fluor Daniel Hanford, Inc., Richland, Washington.
- DFSNW-OEM-001, 2000, *Operational Environmental Monitoring*, Duratek Federal Services, Inc., Richland, Washington.
- DOE, 2001, *Radioactive Waste Management*, DOE Order 435.1, U.S. Department of Energy, Washington, D.C.
- DOE 1993, *Radiation Protection of the Public and the Environment*, DOE 5400.5, U.S. Department of Energy, Washington, D.C.
- DOE, 1990, *General Environmental Protection Program*, DOE 5400.1, U.S. Department of Energy, Washington, D.C.
- Hartman, M. J., L. F. Morasch, and W. D. Webber, 2002, *Hanford Site Groundwater Monitoring for Fiscal Year 2001*, PNNL-13788, Pacific Northwest National Laboratory, Richland, Washington.
- HNF-PRO-1620, *ALARA Program Scope*, Fluor Hanford, Richland, Washington.
- HNF-PRO-3679, *Effluent and Environmental Monitoring*, Fluor Hanford, Richland, Washington.

HNF-5173, *PHMC Radiological Control Manual*, Fluor Hanford, Richland, Washington.

Horton, D. G., S. P. Reidel, Yi-Ju Chien, and R. M. Mitchell, 2000, *Remote-Handled Immobilized Low-Activity Waste Disposal Facility Preoperational Monitoring Plan*, RPP-6877, Pacific Northwest National Laboratory and Waste Management Federal Services, Inc., Northwest Operations for CH2MHill Hanford Group, Inc., Richland, Washington.

McKinney, S. M., 2001, *Near-Facility Environmental Monitoring QA Project Plan*, HNF-EP-0538-6, Waste Management Technical Services, Richland, Washington.

PNNL, 2002, *Hanford Site Environmental Report for Calendar Year 2001*, PNNL-13910, Pacific Northwest National Laboratory, Richland, Washington.

*Resource Conservation and Recovery Act of 1976*, 42 USC 6901, et seq.

RL, 1999, *Groundwater/Vadose Zone Integration Project, Management Plan*, DOE/RL-98-56, U.S. Department of Energy, Richland Operations Office, Richland, Washington.

WAC 173-303, “Dangerous Waste Regulations,” *Washington Administrative Code*, as amended.

WAC 246-247, “Radiation Protection—Air Emissions,” *Washington Administrative Code*, as amended.

## DISTRIBUTION

Number of copies\*

### OFFSITE

P	<u>Confederated Tribes of the Umatilla Indian Reservation</u> P.O. Box 638 Pendleton, OR 97801  Chief Raymond Burke
P	<u>Energy Northwest</u> P.O. Box 968 Richland, WA 99352  J. E. McDonald <span style="float: right;">MD 1020</span>
P	<u>Nez Perce Tribe</u> Environmental Restoration and Waste Management P.O. Box 365 Lapwai, ID 83540  Mr. Patrick Sobotta
P	<u>U.S. Department of Interior</u> Fish and Wildlife Service Fish and Wildlife Enhancement Moses Lake, Field Office P.O. Box 1157 Moses Lake, WA 98837  L. Block
P	<u>U.S. Department of Interior</u> Fish and Wildlife Service Columbia National Wildlife Refuge P.O. Box Drawer F Othello, WA 99344  D. Goeke
P	<u>U.S. Ecology, Inc.</u> P.O. Box 638 Richland, WA 99352  A. Palmer

\* P = Paper Copy  
CD = CD-ROM



# **DISTRIBUTION (cont)**

Number of copies

## **OFFSITE**

2P	<u>U.S. Environmental Protection Agency, Region 10</u> 1200 Sixth Avenue Seattle, WA 98081	
	J. M. Leitch	OAQ-107
	R. W. Poeton	OAQ-107
11P	<u>Washington State Department of Health</u> Air Emissions and Defense Waste Section Division of Radiation Protection P.O. Box 47827 Bldg. 5 Airdustrial Olympia, WA 98504-7827	
	L. Albin	
	R. S. Acselrod	
	A. W. Conklin	
	J. C. Berkey	
	R. A. Danielson	
	J. L. Erickson	
	R. E. Jacquish	
	S. Green-Langford	
	P. J. Martell	
	D. McBaugh	
	J. W. Schmidt	
P	<u>Yakima Nation</u> Environmental Restoration/Waste Management Program P. O. Box 151 Toppenish, WA 98948	
	R. Jim	

**DISTRIBUTION (cont)**

Number of copies

**ONSITE**

7	<u>U.S. Department of Energy, Richland Operations Office</u>	
	E. M. Bowers (P, CD)	A2-15
	E. B. Dagan (CD)	A5-15
	P. F. Dunigan, Jr. (P)	A5-58
	J. B. Hall (P)	A2-15
	R. D. Hildebrand (CD)	A5-13
	P. J. Krupin (CD)	A5-15
	H. M. Rodriguez (CD)	A4-29
	D. C. Ward (CD)	A2-15
	Public Reading Room (4P)	H2-53
5	<u>Bechtel Hanford, Inc.</u>	
	J. G. April (CD)	L6-06
	O. L. Bostic (CD)	H4-20
	B. L. Curn (CD)	H4-20
	J. W. Donnelly (P)	H0-02
	R. G. Egge (CD)	X5-50
	B. G. Erlandson (CD)	H4-20
	J. D. Fancher (P)	X5-60
	K. R. Fecht (CD)	H0-02
	K. A. Gano (CD)	H0-23
	W. M. Hayward (P)	X5-50
	J. S. Hill (CD)	H4-20
	R. P. Henckel (CD)	X9-08
	R. J. Landon (CD)	H0-02
	R. R. Nielsen (CD)	X9-08
	S. G. Weiss (CD)	H0-20
	J. G. Woolard (P)	H0-02
	Environmental Resource Center (P)	H0-09

# **DISTRIBUTION (cont)**

Number of copies

## **ONSITE**

1	<u>CH2M Hill Hanford Group, Inc.</u>	
	C. J. Kemp (CD)	R1-51
	J. J. Luke (CD)	R1-51
	J. F. Ollero (P)	H0-02
	W. E. Ross (CD)	S7-20
21	<u>Fluor Hanford</u>	
	L. E. Borneman (CD)	T6-16
	M. W. Bowman (CD)	S6-72
	H. C. Boynton (P)	T4-52
	R. C. Brunke (CD)	N1-26
	S. L. Bump (CD)	L1-08
	A. K. Dasgupta (CD)	S3-28
	L. P. Diediker (12P)	N1-24
	B. J. Dixon (CD)	R3-32
	D. L. Dyekman (CD)	N1-24
	R. E. Elder (CD)	S8-06
	R. H. Engelmann (CD)	N1-25
	C. J. Grando (CD)	R3-32
	R. H. Gurske (CD)	H8-73
	J. S. Hunacek (CD)	X3-79
	A. R. Johnson (5P)	H5-26
	D. L. Johnson (CD)	L1-05
	D. A. Marsh (CD)	R3-32
	W. L. Osborne (P)	T7-05
	J. K. Perry (CD)	L1-04
	S. M. Price (CD)	H8-67
	J. R. Prilucik (CD)	T6-12
	D. E. Rasmussen (CD)	L1-04
	L. W. Roberts (CD)	T4-56
	D. J. Rokkan (P, CD)	N1-24
	J. O. Skolrud (CD)	N1-24
	J. C. Sonnichsen (P)	N1-25
	R. W. Szelmezcza (CD)	S6-72
	D. J. Watson (CD)	X3-79
	M. T. York (CD)	T3-06

**DISTRIBUTION (cont)**

Number of copies

**ONSITE**

2	<u>Lockheed Martin Services, Inc.</u>  Central Files (P) Document Processing Center (P) J. N. Diven (CD)	B1-07  H6-08 G3-28
5	<u>Pacific Northwest National Laboratory</u>  E. J. Antonio (CD) L. L. Cadwell (CD) C. J. Chou (P) R. L. Dirkes (P) R. W. Hanf (P) D. G. Horton (CD) V. G. Johnson (CD) S. P. Luttrell (CD) G. W. Patton (CD) T. M. Poston (CD) S. P. Reidel (CD) K. Rhoads (CD) H. T. Tilden (CD) J. P. Schmidt (CD) Technical Library (2P)	K3-54 K6-85 K6-81 K6-75 K6-75 K6-81 K6-96 K6-96 K6-75 K6-75 K6-81 K3-54 K3-75 K8-46 P8-55
2	<u>Washington State Department of Ecology</u>  R. J. Julian (P) P. R. Staats (P)	B5-18 B5-18
22	<u>Duratek Federal Services, Inc., Northwest Operations</u>  J. J. Dorian (P, CD) L. M. Hay (P) B. M. Markes (CD) S. M. McKinney (P, 9CD) R. M. Mitchell (4P, 1CD) D. J. Moak (CD) C. J. Perkins (15P, 10CD) R. C. Roos (CD)	H1-11 H1-11 H1-11 H1-11 H1-11 H1-11 H1-11 L4-19