
HANFORD SITE

ENVIRONMENTAL SURVEILLANCE DATA REPORT

for Calendar Year 2008



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The cover photo shows swards of exotic purple mustard (*Chorispora tenella*) and the remains of last year's Russian thistle (*Salsola tragus*) that dominate swales in the Cold Creek Valley burned by past wildfires. At higher elevations on Rattlesnake Ridge, native perennial bunchgrasses persist after being burned and present green slopes during the spring and early summer. Photo is courtesy of S Butner, Pacific Northwest National Laboratory, Richland, Washington. The cover design is by SB Colson, Pacific Northwest National Laboratory, Richland, Washington.



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Hanford Site Near-Facility Environmental Monitoring Data Report For Calendar Year 2008

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LIST OF TERMS

Bq	Becquerel
CERCLA	<i>Comprehensive Environmental Response, Compensation, and Liability Act of 1980</i>
CFR	<i>Code of Federal Regulations</i>
CSB	Canister Storage Building
CVDF	Cold Vacuum Drying Facility
D&D	decontamination and decommissioning
DCG	derived concentration guides
DCRT	double-contained receiver tank
DOE	U.S. Department of Energy
dpm	disintegrations per minute
EDE	effective dose equivalent
EDP (code)	environmental data point (identification number indicating sample location)
ERDF	Environmental Restoration Disposal Facility
FH	Fluor Hanford, Inc.
FSWO	EnergySolutions Federal Services, Inc., Western Operations
GEA	gamma energy analysis
IDF	Integrated Disposal Facility
LERF	Liquid Effluent Retention Facility
LLBG	low-level burial ground
mrem/yr	millirems/year
NFM	Near-facility monitoring
PFP	Plutonium Finishing Plant
PHMC	Project Hanford Management Contract
PNNL	Pacific Northwest National Laboratory
PUREX	Plutonium-Uranium Extraction
QA	quality assurance
RCC	River Corridor Closure
RCRA	<i>Resource Conservation and Recovery Act of 1976</i>
RMA	radioactive material area
RPP	River Protection Project
TEDF	Treated Effluent Disposal Facility
TLD	thermoluminescent dosimeter
WAC	<i>Washington Administrative Code</i>
WDOH	Washington State Department of Health
WSCF	Waste Sampling and Characterization Facility

CONTENTS

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

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) and the Canister Storage Building (CSB); inactive nuclear facilities such as N Reactor and the Plutonium-Uranium Extraction (PUREX) Facility; 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 program implements applicable portions of U.S. Department of Energy (DOE) Orders 435.1 (DOE 2001), 450.1A (DOE 2008), and 5400.5 (DOE 1993); DOE Manual 231.1-1A (DOE 2007), *Environment, Safety, and Health Reporting Manual; Washington Administrative Code* (WAC) 246-247; Title 40, *Code of Federal Regulations* (CFR) Part 61 (40 CFR 61), Subpart H; and 10 CFR 835.

Several types of environmental media are sampled near facilities to monitor waste management and environmental restoration activities, and to evaluate the effectiveness of effluent treatment and control practices. Routine sampling and monitoring includes ambient air, soil, vegetation, and external radiation. The parameters typically monitored are radionuclide concentrations and radiation fields. Sampling methods are discussed in detail in the *EnergySolutions Federal Services, Inc., Western Operations (FSWO) Manual FSWO-OEM-001, Operational Environmental Monitoring* (FSWO 2008) and Fluor Hanford, Inc. (FH) EP-DI-611, *Environmental Protection Desk Instruction Near-Facility Environmental Monitoring*, (FH 2008).

Samples are collected from known or expected effluent pathways. These pathways are generally downwind of potential or actual airborne releases and down gradient of past liquid discharges. Table 1-1 shows the type and location of routine near-facility monitoring (NFM) samples collected in 2008.

Table 1-1. Near-Facility Routine Environmental Monitoring Samples and Locations, 2008.

Sample Type	Number of Sample Locations	Operational Area										
		100-B/C	100-D	100-F	100-H	100-K	100-N	200 East	200 West	300/400	600	ERDF ^(a)
Air	92	3	4	5	4	10	3	21	24	7	8	3
Soil	85	3	4	5	4	0	0	14	25	14	15	1
Vegetation	66	0	0	0	0	0	3	12	24	13	14	0
External Radiation	124	4	0	0	0	18	6	43	25	25	0	3

(a) Environmental Restoration Disposal Facility in the 200 West area.

This Appendix contains brief discussions, specific sampling location information, and complete analytical data results for the various near-facility environmental monitoring efforts for 2008. Detailed discussions and summarized analytical results are provided in PNNL-18427, *Hanford Site Environmental Report for Calendar Year 2008* (PNNL 2009a)

1.1 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 River Corridor Closure (RCC) Project managed facilities' performance and are used to demonstrate compliance with environmental protection criteria.

In 2008, air radioactivity was sampled by a network of continuously operating samplers at 92 locations. Location-specific maps and monitoring results are provided in Section 2.0, "Ambient Air Monitoring."

1.2 SOIL SAMPLING

Soil samples were collected on or adjacent to waste disposal units and from locations downwind and near or within the boundaries of the operating facilities. Soil 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 or intrusion by animals.

Radiological analyses of soil 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, "Soil Monitoring."

1.3 VEGETATION SAMPLING

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. Vegetation samples were collected to detect potential migration of facility effluents. Migration of radionuclides into vegetation can occur primarily as the result of absorption by the roots growing on or near underground and surface water disposal units.

Radiological analyses of 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 4.0, “Vegetation Monitoring.”

1.4 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 (TLD) 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 5.0, “External Radiation.”

1.5 RADIOLOGICAL SURVEYS

Waste disposal sites and the surrounding terrain are surveyed to detect and characterize radioactive surface contamination. Routine radiological surveys are conducted across the surfaces of underground radioactive material areas and along the perimeters of contamination areas. Locations include cribs, trenches, retention basins, ponds, ditches, solid waste disposal sites, unplanned release sites, tank farm perimeters, stabilized waste disposal sites, roads, and firebreaks in and around the Site operational areas. A discussion and survey location maps are provided in Section 6.0, “Radiological Surveys.”

In 2008, the Hanford Site had approximately 3,583 ha (8,853 acres) of posted outdoor surface contamination, and 584 ha (1,443 acres) 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.

1.6 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. Complete results and general discussion of special characterization samples analyzed in 2008, are provided in Section 7.0, "Investigative Sampling."

2.0 AMBIENT AIR MONITORING

Air samplers are located primarily at or near (within approximately 500 m [1,600 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 Pacific Northwest National Laboratory (PNNL) meteorology stations, which are strategically positioned in and around the Hanford Site.

A network of continuously operating samplers at 92 NFM locations sampled radioactivity in air during 2008. Some air sampling stations provided monitoring for more than one project (Table 2-1). Data from several PNNL ambient air monitoring stations were utilized in 2008 to provide additional air monitoring information for several RCC remediation projects. The RCC projects and the associated PNNL stations are listed in Table 2-2. The 2008 PNNL air monitoring results can be found in PNNL-18427, Appendix 1.

Near-facility air monitoring location maps are provided in Figures 2-1 through 2-12. Historical air sampling results for selected radionuclides for the 100-K, 100-N, 200, and 300 Areas are represented in graph form in Figures 2-13 through 2-24.

A summary of near-facility ambient air sampling results collected during 2008 is presented in Table 2-3. The 2008 composited, sampler-specific monitoring results are provided in Table 2-4. Additional discussion of the 2008 air sampling results can be found in Section 10.2 of PNNL-18427.

The Hanford Site Air Operating Permit (Federal Facility License FF-01) requires regulatory notification for composite (isotopic) air sample results that exceed 10% of the U.S. Environmental Protection Agency's Table 2 (40 CFR 61, Appendix E, Table 2) values. During 2008, the following notifications were submitted to the Washington State Department of Health (WDOH):

- NFM sampling station N165 (200 West Area)
 - Plutonium-239/240 and Americium-241, first-half of 2008
 - Plutonium-239/240, second-half of 2008

One suspected source of the elevated plutonium results is the nearby, retired 216-ZP-1C crib/trench. This facility received liquid waste from the PFP until 1995. In November 2002, the building that had provided electrical service to N165 was demolished and the station was relocated to the present location. Historical plutonium-239/240 results observed at monitoring station N165 are included in Figure 2-22.

- NFM sampling station N977 (200 East Area, southeast of PUREX)
 - Plutonium-239/240, first-half of 2008

No facility/project activity was determined to be a probable cause of this elevated result. Review of the biweekly air sample results obtained during the composite period revealed that there were no statistically elevated total alpha/beta results during the period.

- NFM sampling station N570 (600 Area, BC Controlled Area remediation project)
 - Cesium-137, second-half of 2008

Field remediation activity at this known, contaminated site was the suspected cause of this elevated result.

- NFM sampling stations at 100-K East
 - N401, Plutonium-239/240 and Americium-241, second-half of 2008
 - N402, Plutonium-239/240 and Americium-241, second-half of 2008
 - N403, Cesium-137, Plutonium-239/240 and Americium-241, second-half of 2008
 - N404, Plutonium-239/240 and Americium-241, second-half of 2008

A radiological contamination event that occurred in July during decontamination and decommissioning (D&D) activities was the probable cause of these elevated results.

Near-facility environmental air samplers operate at a flow rate of 0.057 m³/min (2 ft³/min), drawing a sample through a 47 mm (2-inch), open-faced filter about 2 m (6 feet) 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.

Depending on project/facility requirements, 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.

All air sampling results are compared to DOE derived concentration guides (DCG) and/or U.S. Environmental Protection Agency concentration levels and are also statistically evaluated. To help assess the impact of Site operations, monitoring results are compared to the results obtained from the distant communities of Yakima and Sunnyside as reported by the PNNL Site Environmental Surveillance Program, and to data acquired from collocated sampling locations managed by Near-Facility Monitoring, PNNL, and WDOH. Collocated sampling results are used for comparability and precision of data.

Table 2-1. Near-Facility Air Sampling Locations and Analyses, 2008.

Site	Number of Samplers	EDP Code ^(a)	Analyses	
			Bi-weekly	Composite ^(b)
100-B/C Area Field Remediation project ^c	3	N466, N496, N497	Gross α , β	GEA, Sr-90, Pu-iso, U-iso
100-D Area Field Remediation project ^c	4	N467, N468, N514, N515	Gross α , β	GEA, Sr-90, Pu-iso, U-iso, Am-241
100-F Area Field Remediation project ^c	5	N519, N520, N521, N552, N553	Gross α , β	GEA, Sr-90, Pu-iso, U-iso
100-H Area Field Remediation project ^c	4	N508, N509, N510, N574	Gross α , β	GEA, Sr-90, Pu-iso, U-iso
100-K Spent Nuclear Fuels	8	N401, N402, N403 ^d , N404, N476, N477, N478, N479	Gross α , β	GEA, Sr-90, Pu-iso, U-iso Pu-241, Am-241
118-K-1 Field Remediation project ^c	3	N403, N534, N535	Gross α , β	GEA, Sr-90, Pu-iso, U-iso
100-N Area D4 project	3	N102, N103, N106	Gross α , β	GEA, Sr-90, Pu-iso, U-iso, Am-241
100-IU2/6 Field Remediation ^c	2	N565, N566	Gross α , β	GEA, Sr-90, Pu-iso, U-iso, Am-241
200 East Area	17	N019, N158, N498, N499, N957, N967, N968, N969, N970, N972, N973, N976, N977, N978, N984 ^d , N985, N999	Gross α , β	GEA, Sr-90, Pu-iso, U-iso
BC Controlled Area ^c	7	N957, N569, N570, N571, N572, N573, N978	Gross α , β	GEA, Sr-90, Pu-iso, U-iso Pu-241, Am-241
Canister Storage Building (200 East Area)	2	N480, N481	Gross α , β	GEA, Sr-90, Pu-iso, U-iso Pu-241, Am-241
Integrated Disposal Facility (200 East Area)	2	N532, N559 ^d	Gross α , β	GEA, Sr-90, Pu-iso, U-iso
200 West Area	23	N155, N161, N165, N168, N200, N304, N433, N441, N442, N449, N456, N457, N554, N555, N956, N963, N964, N965, N966, N974, N975, N987, N994	Gross α , β	GEA, Sr-90, Pu-iso, U-iso
200-UW-1 Decontamination & Demolition project (200 West Area)	4	N168, N550, N956, N963	Gross α , β	GEA, Sr-90, Pu-iso, U-iso
300 Area Decontamination & Demolition project ^c	1	N557	Gross α , β	GEA, Sr-90, Pu-iso, U-iso
300-FF-2 Field Remediation project (300 Area) ^c	6	N130, N527, N537, N538, N539, N540	Gross α , β	GEA, Sr-90, Pu-iso, U-iso
Environmental Restoration Disposal Facility ^c	4	N482 ^d , N517, N518, N963	Gross α , β	GEA, Sr-90, Pu-iso, U-iso
600 Area (WYE Barricade)	1	N981 ^e	Gross α , β	GEA, Sr-90, Pu-iso, U-iso

(a) EDP Code = Sampler location code. See PNNL-18427, APP 2.

(b) GEA = Gamma energy analysis; Pu-iso = isotopic plutonium-238 and plutonium-239/240; U-iso = isotopic uranium-234, uranium-235, and uranium-238.

(c) PNNL air sampling station(s) provide supplemental air monitoring data. See Table 2-2 for a listing of locations.

(d) Collocated sampling location with Washington State Department of Health.

(e) Collocated sampling location with Washington State Department of Health and PNNL.

Table 2-2. PNNL Supplemental Air Sampling Locations^a, 2008.

Site	Sampling Location
100-B/C Field Remediation project	100 B, 100 B SE, Yakima Barricade
100-D Area Field Remediation project	Yakima Barricade
100-F Field Remediation project	WYE Barricade, Yakima Barricade
100-H Field Remediation project	Yakima Barricade
118-K-1 Field Remediation project	E 100 K
100-IU2/6 Field Remediation	100-F Met Tower, Hanford Townsite
BC Controlled Area	200 ESE
300 Area Decontamination & Demolition project	300 NE, 300 South Gate, 300 Trench, 300 Water Intake, 300 South West
300-FF-2 Field Remediation project	300 NE, 300 Trench, 300 Water Intake
Environmental Restoration Disposal Facility	200 W SE

^a Maps showing specific locations are available in PNNL-18427.

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

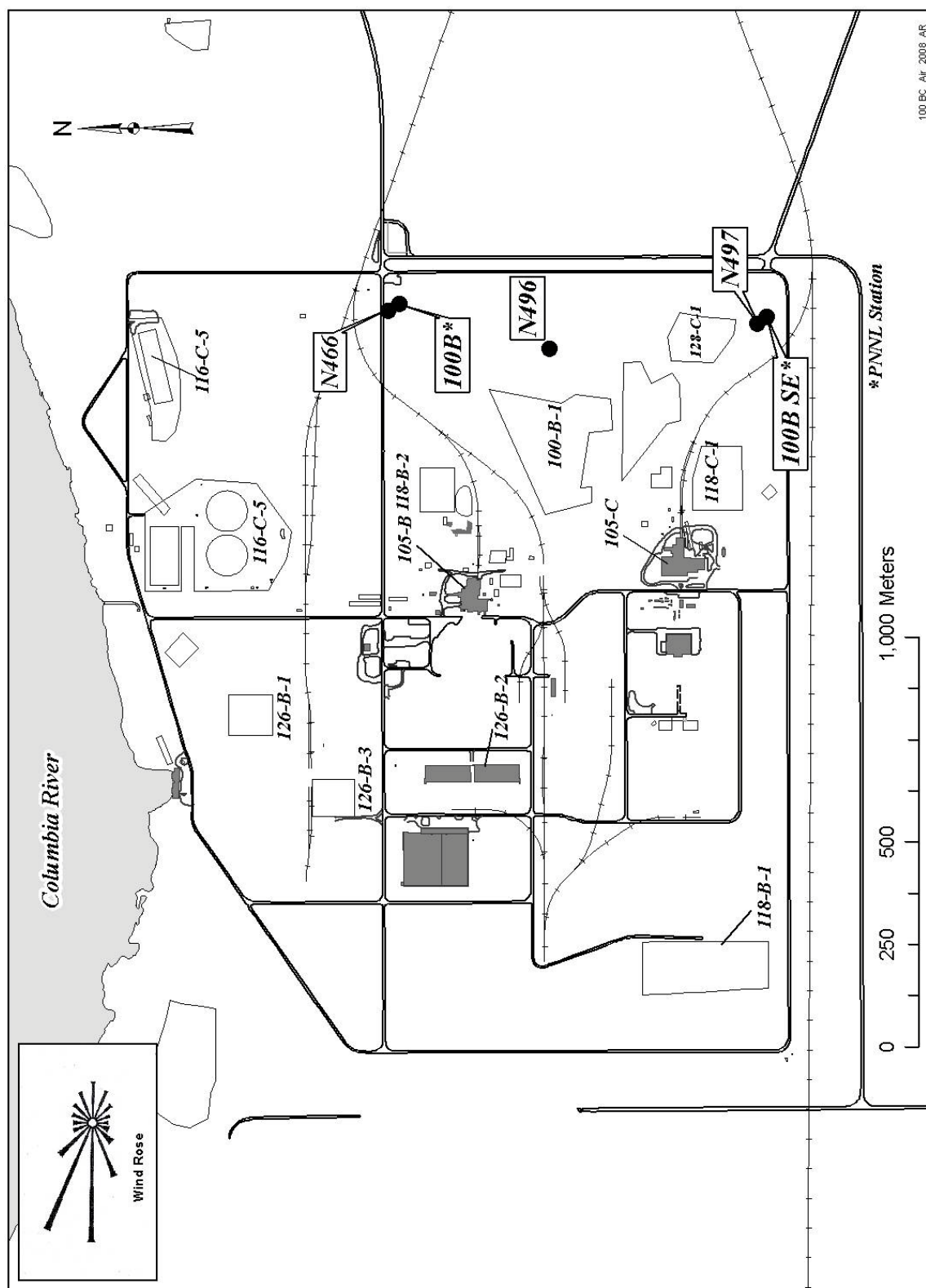


Figure 2-2. 100-D Area Air Sampler Locations.

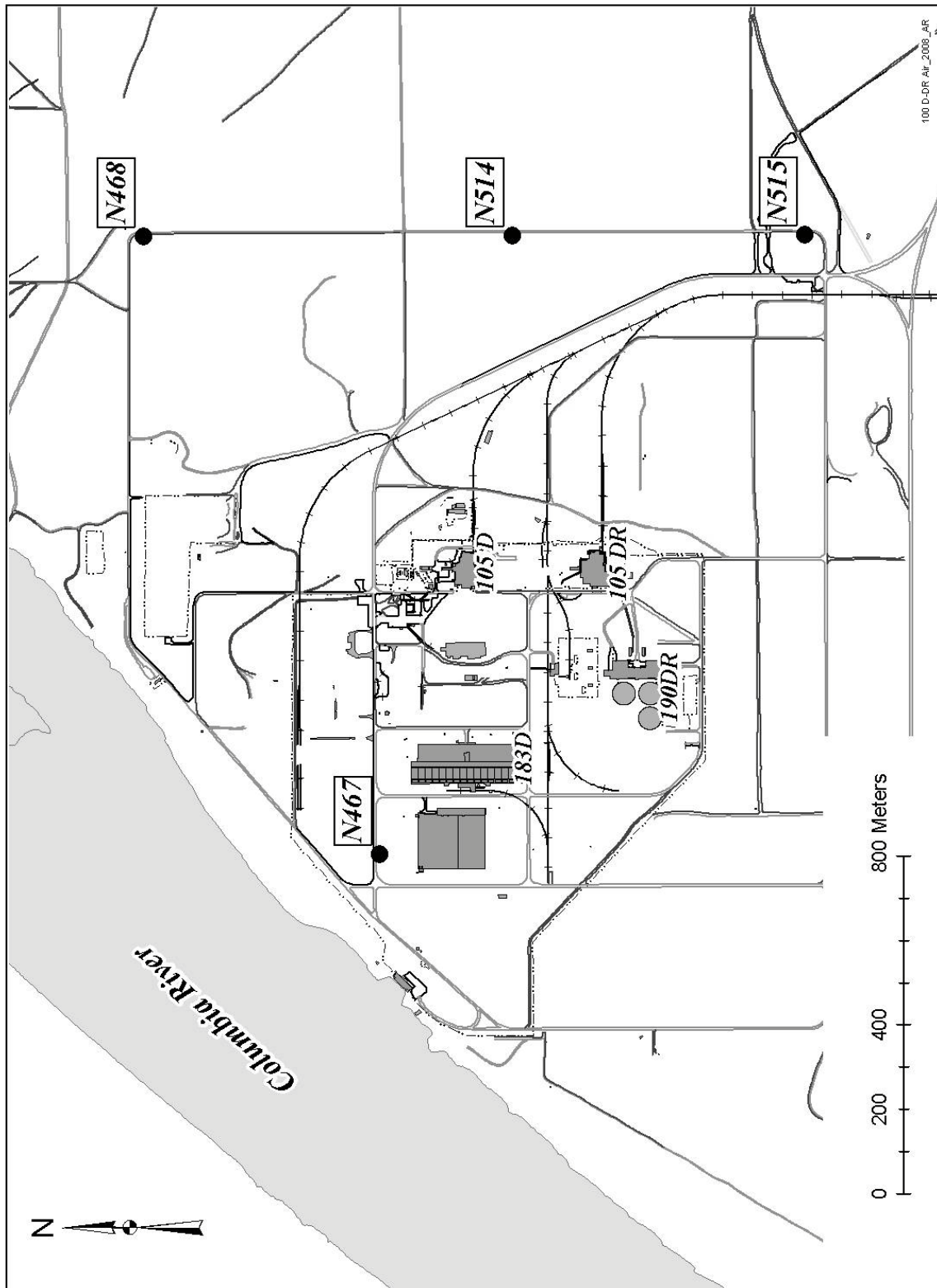


Figure 2-3. 100-F Area Air Sampler Locations.

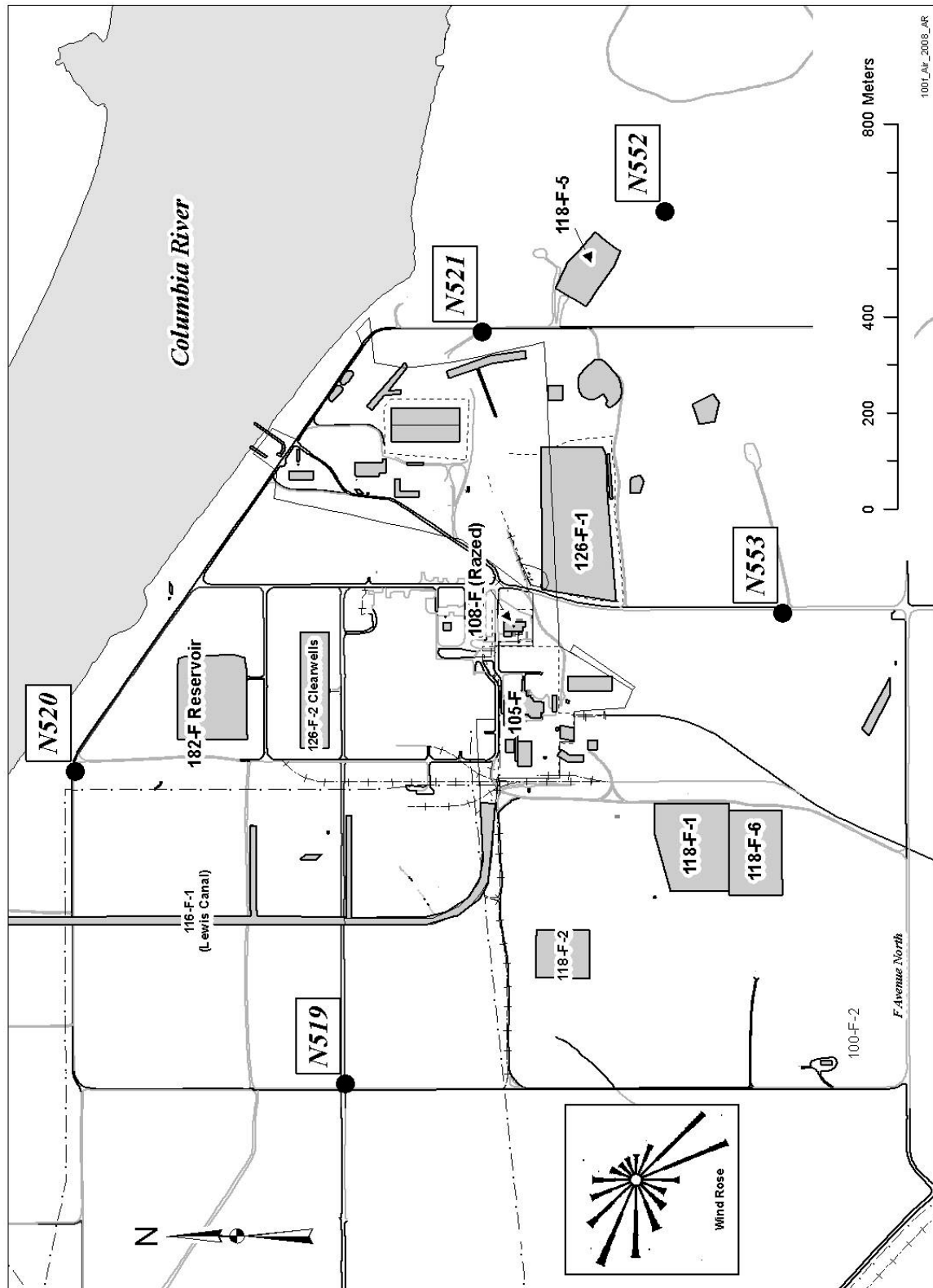


Figure 2-4. 100-H Area Air Sampler Locations.

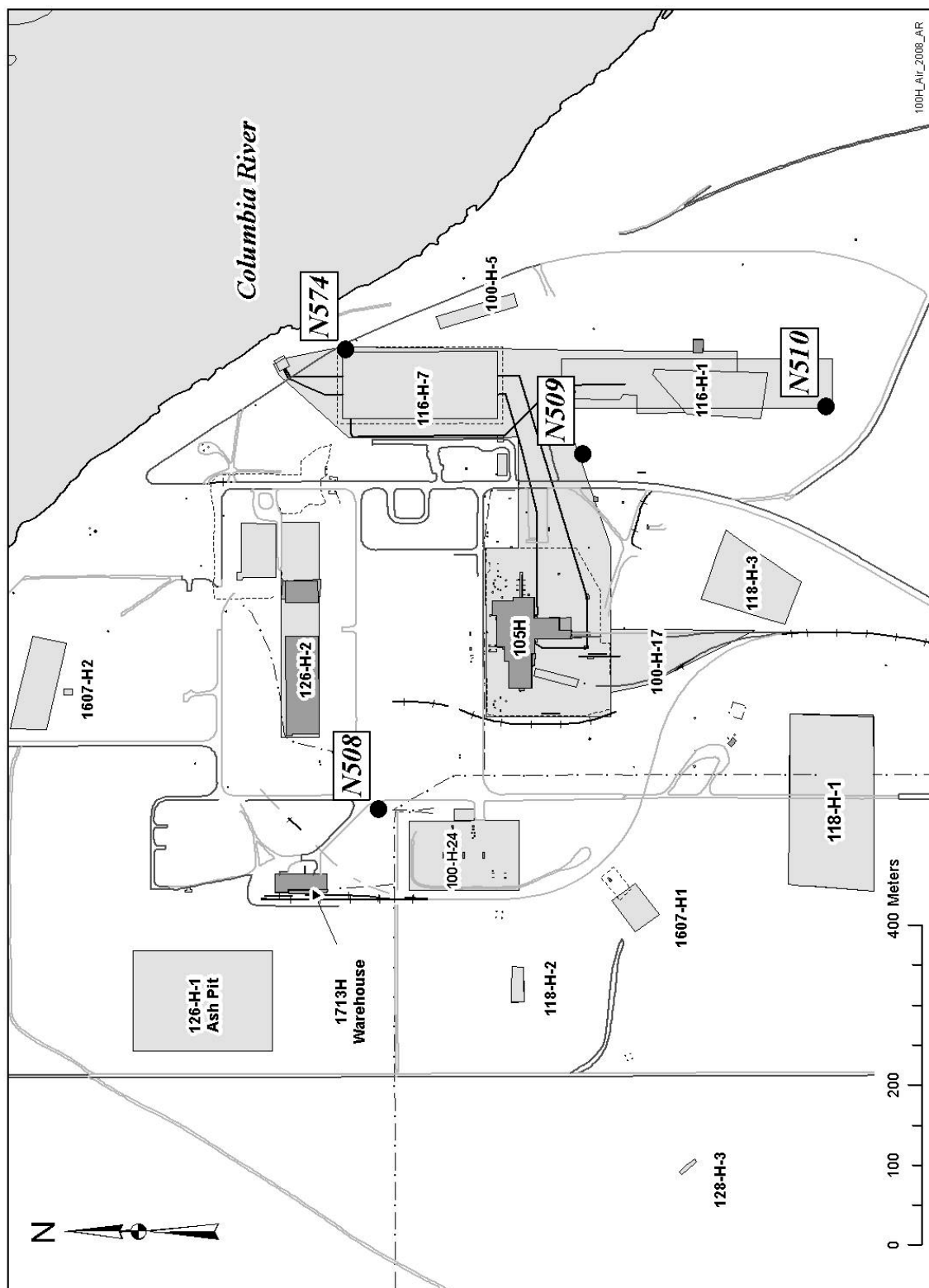


Figure 2-5. 100-K Area Air Sampler Locations.

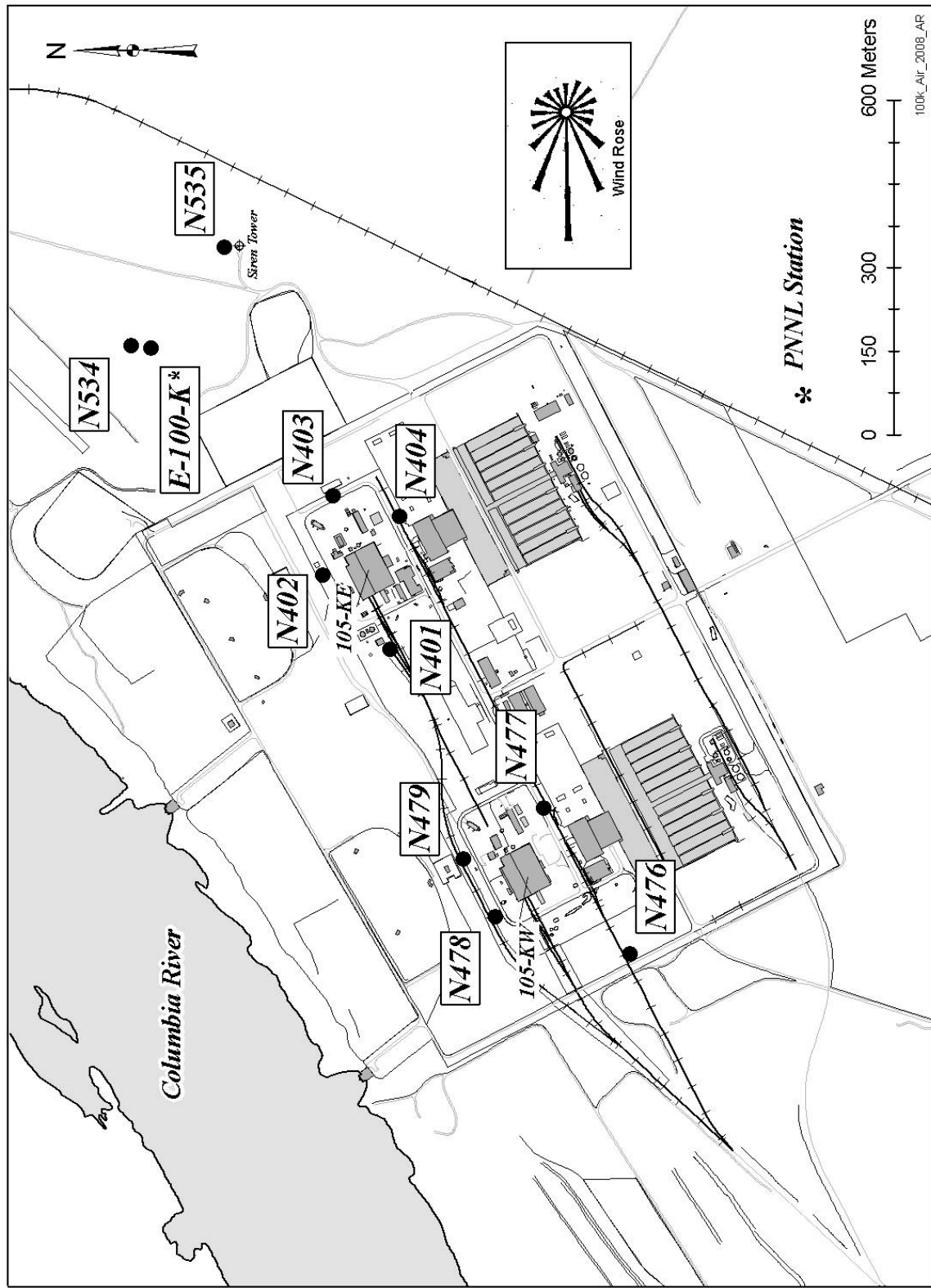


Figure 2-6. 100-N Air Sampler Locations.

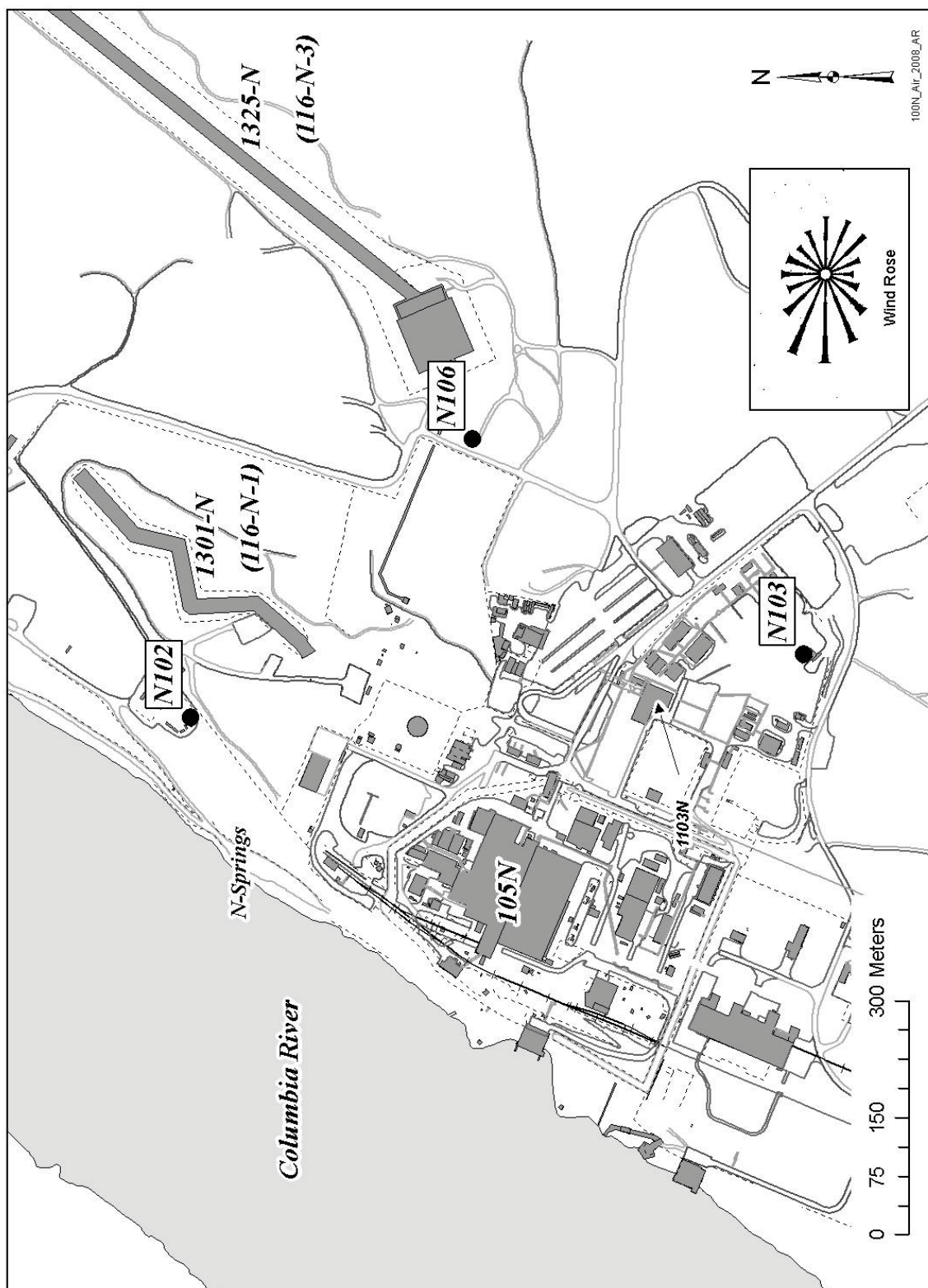


Figure 2-7. 100-IU2/6 Air Sampler Locations.

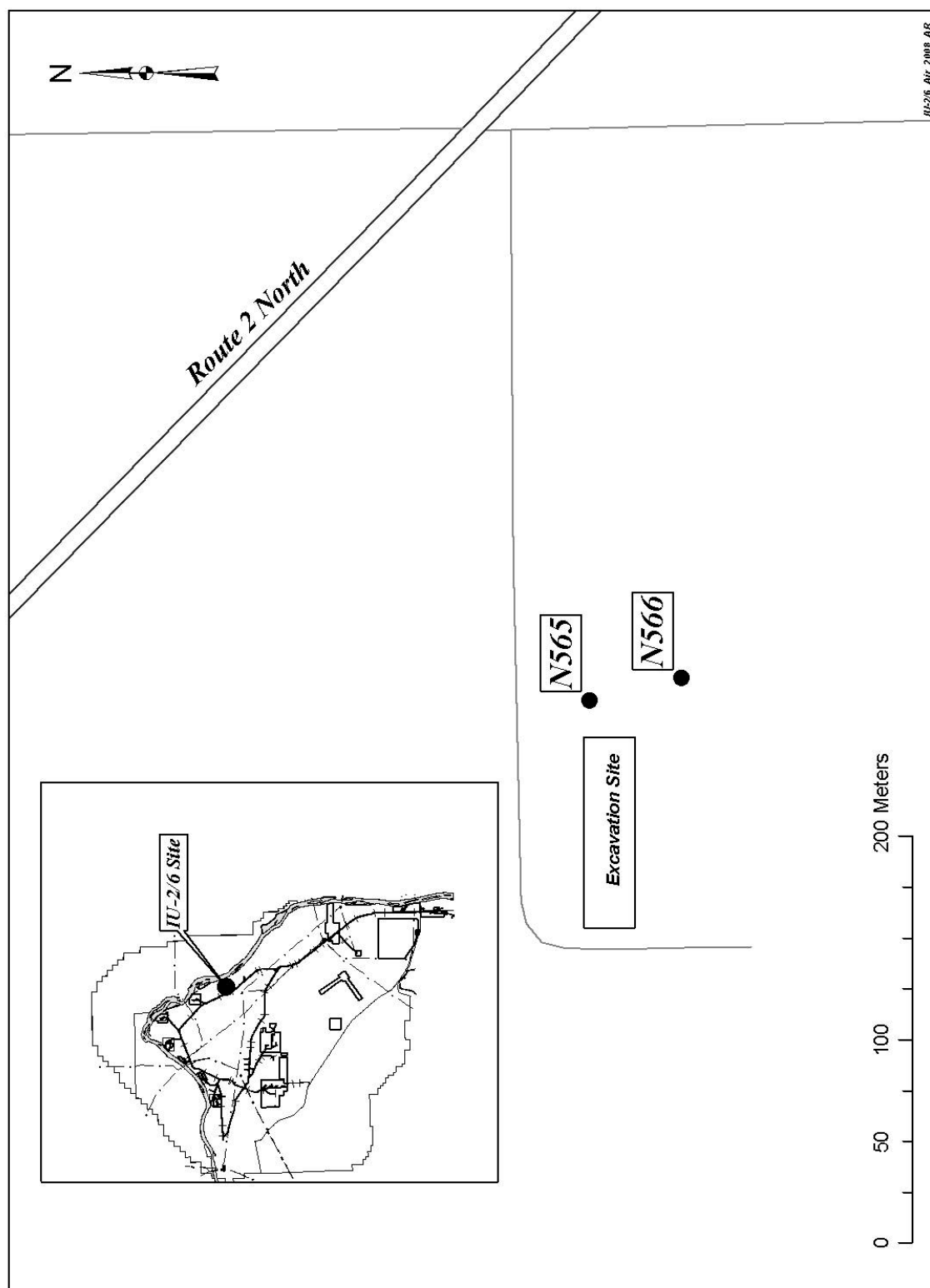


Figure 2-8. 200 East Air Sampler Locations.

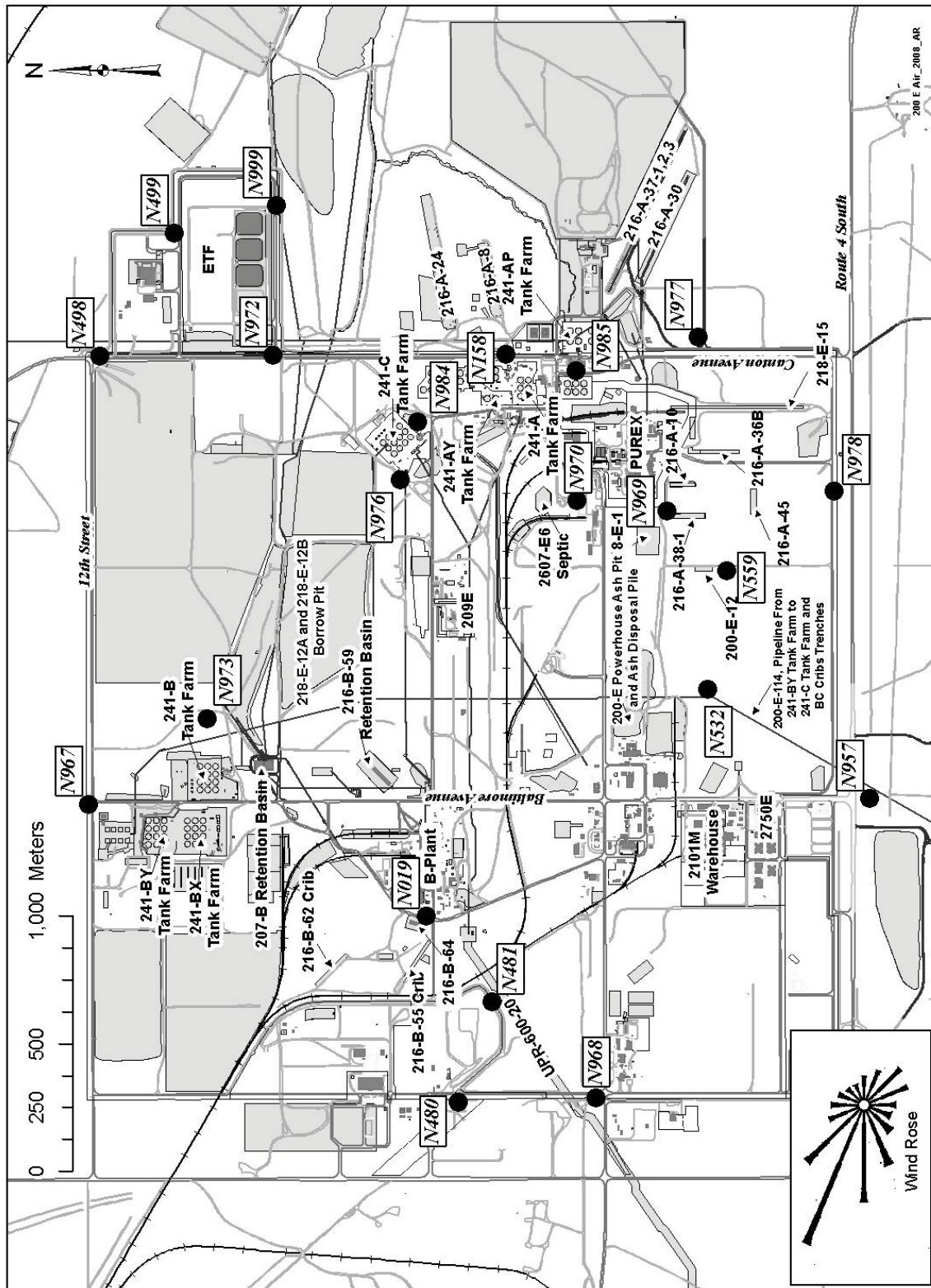


Figure 2-9. BC Controlled Area Air Sampler Locations.

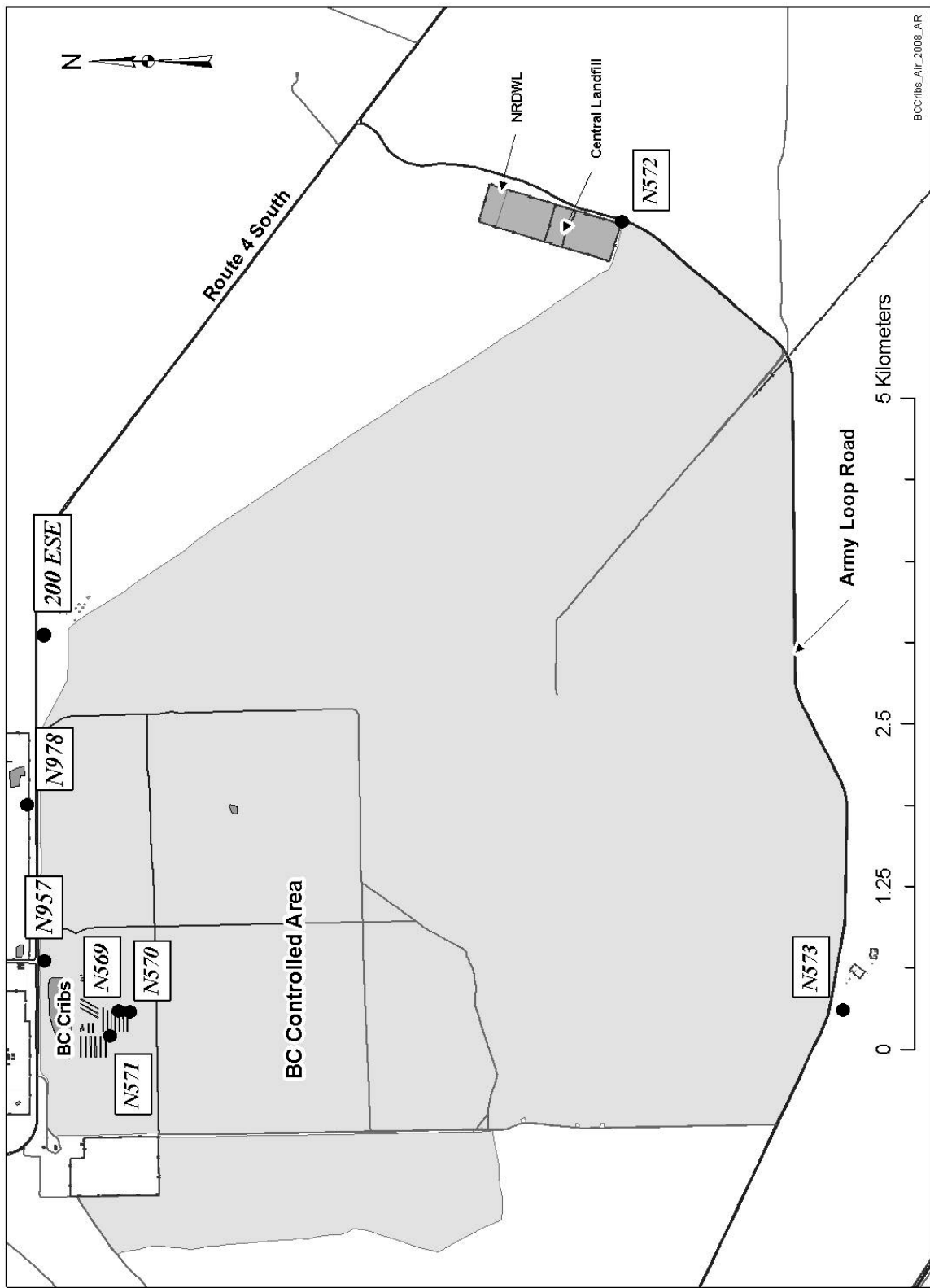


Figure 2-10. 200 West Area Air Sampler Locations.

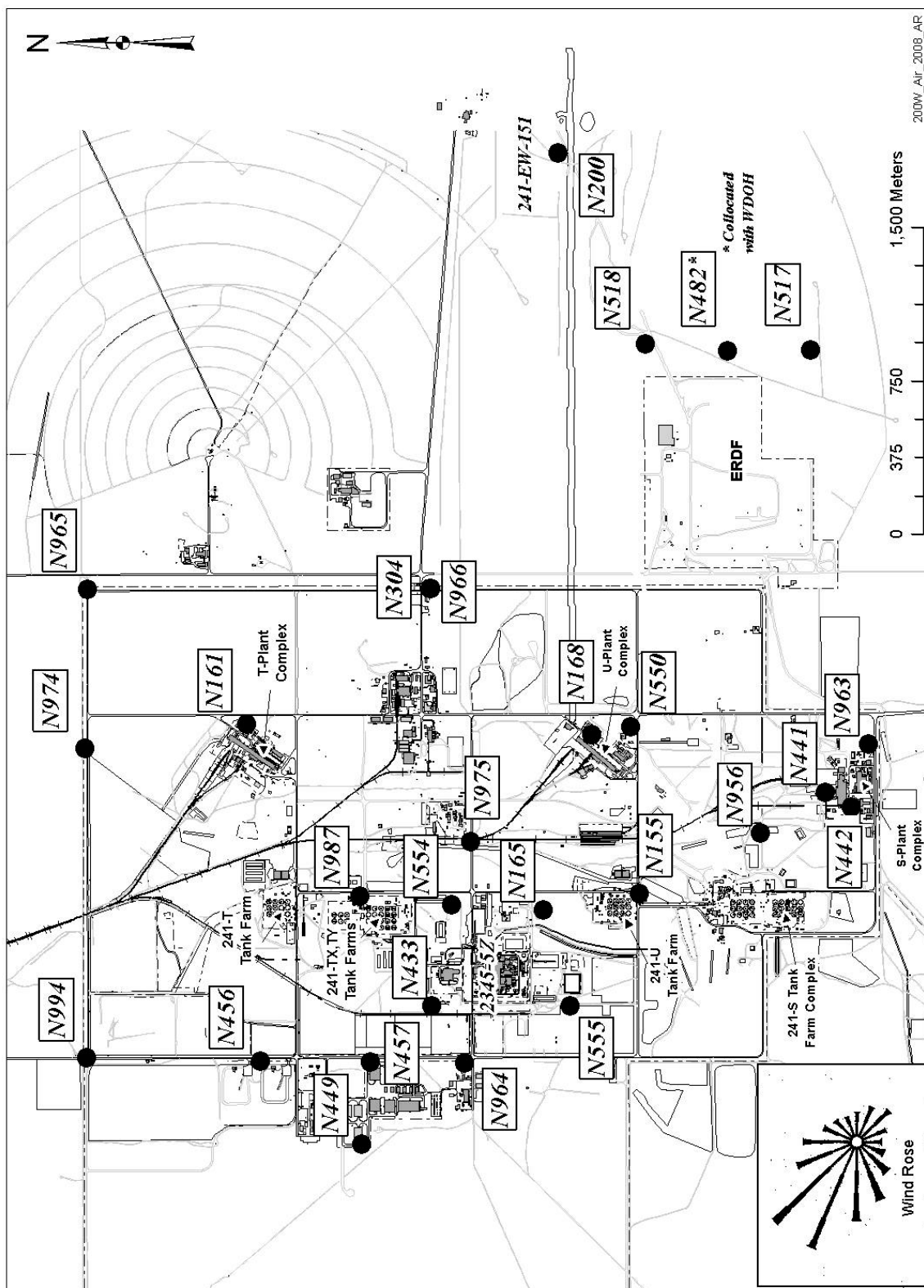


Figure 2-11. 300 Area Air Sampler Locations.



Figure 2-12. 600 Area Air Sampler Location.

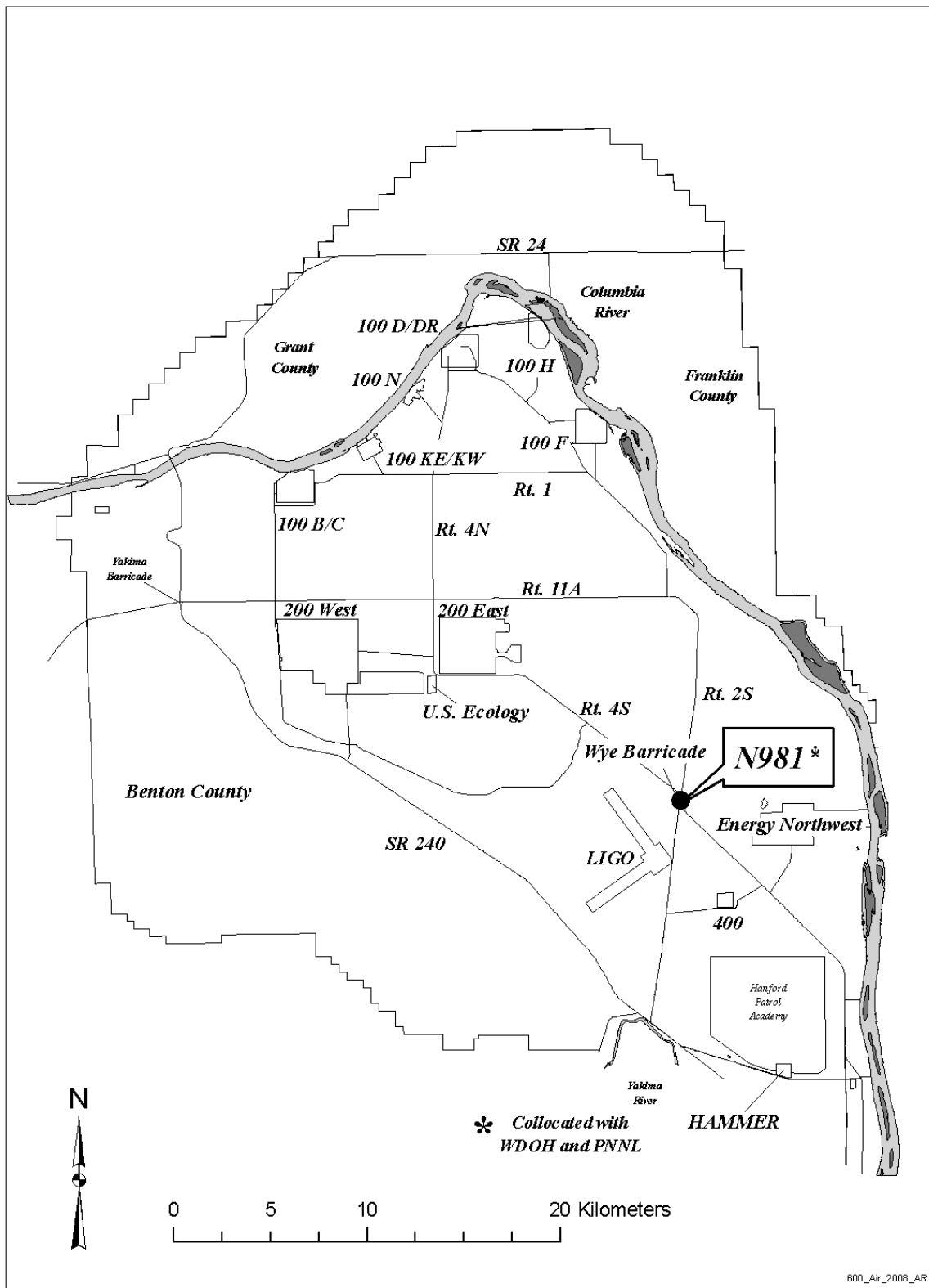


Figure 2-13. Annual Average Strontium-90 Concentrations in Air, 100-K Area.

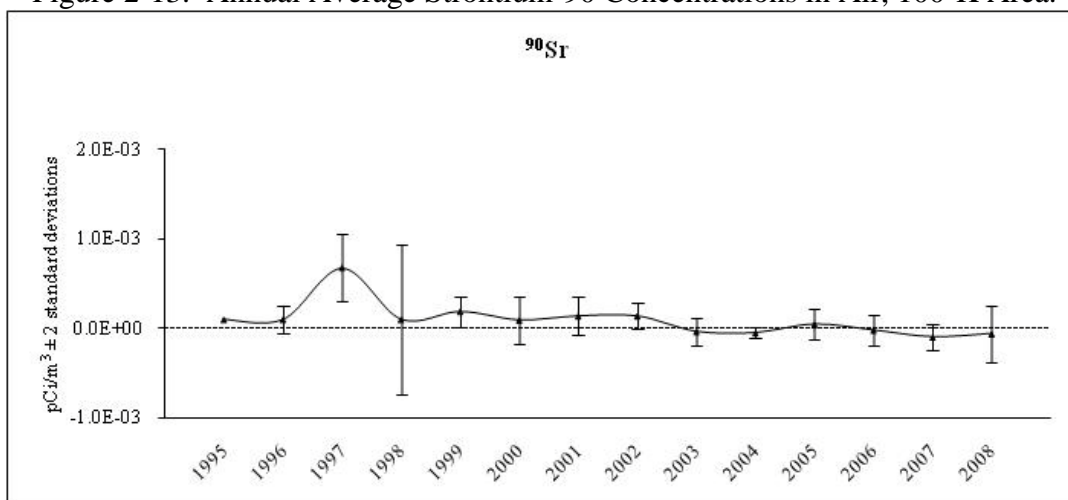


Figure 2-14. Annual Average Cesium-137 Concentrations in Air, 100-K Area.

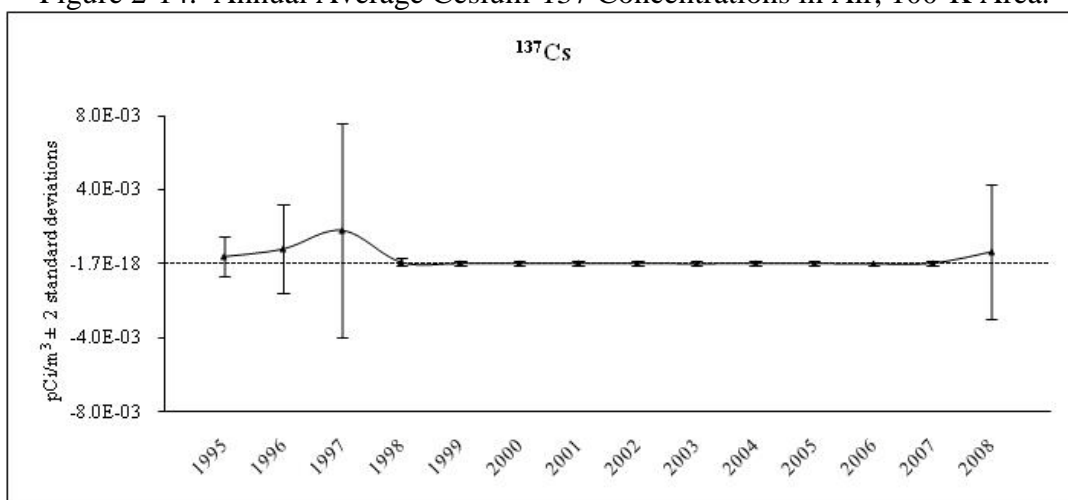


Figure 2-15. Annual Average Plutonium-239/240 Concentrations in Air, 100-K Area.

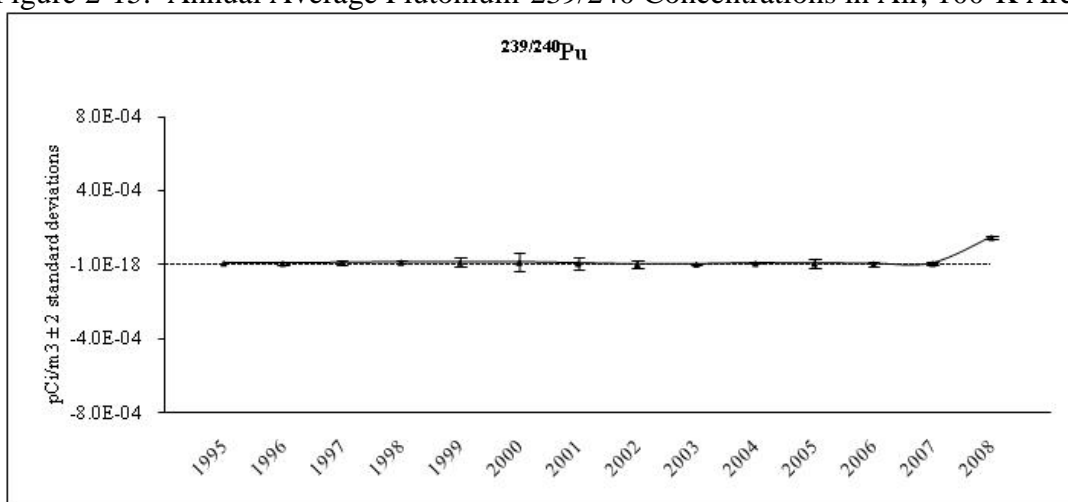


Figure 2-16. Annual Average Americium-241 Concentrations in Air, 100-K Area.

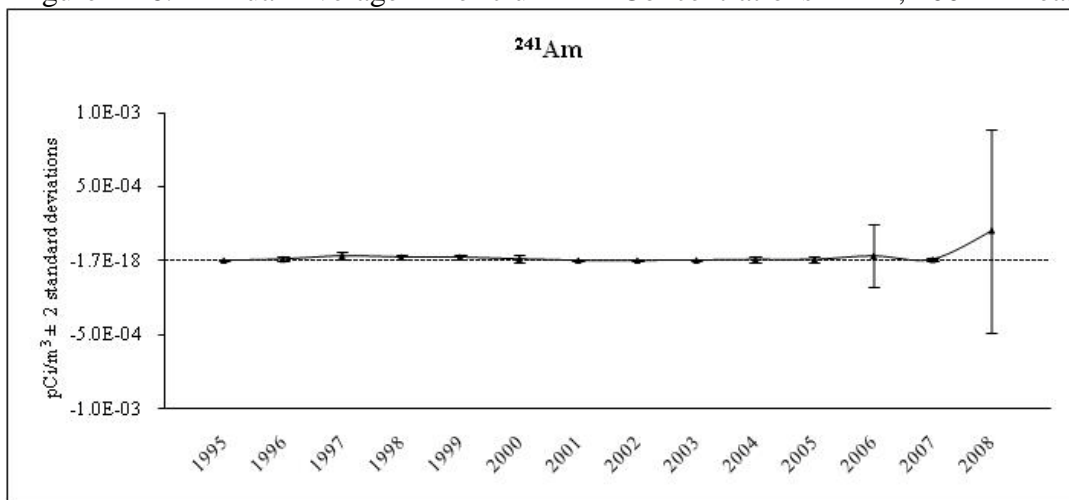


Figure 2-17. Annual Average Strontium-90 Concentrations in Air, 100-N.

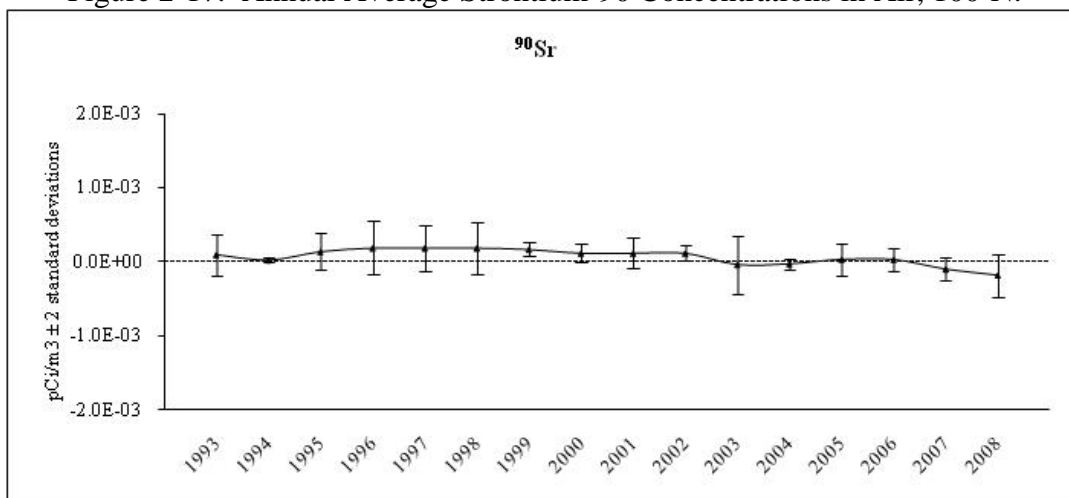


Figure 2-18. Annual Average Cesium-137 Concentrations in Air, 100-N.

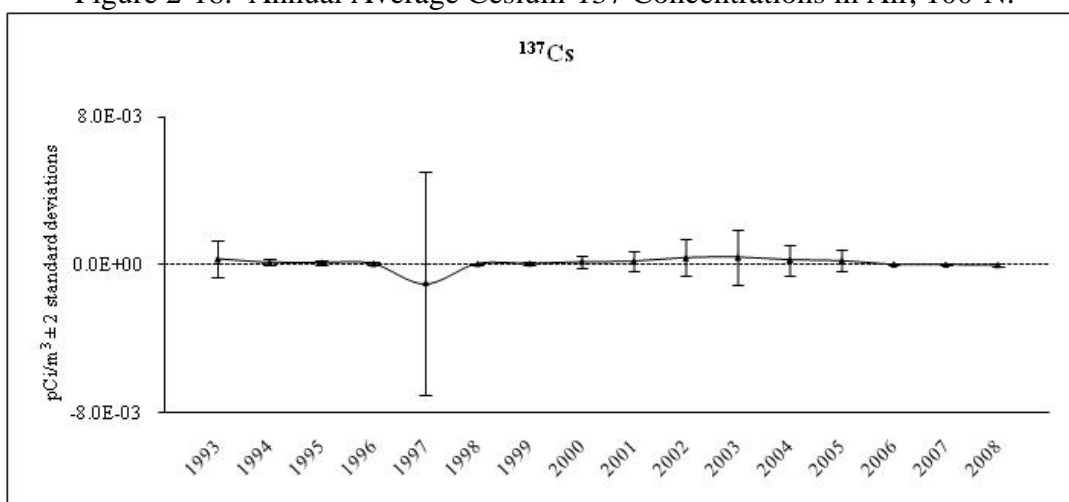


Figure 2-19. Annual Average Plutonium-239/240 Concentrations in Air, 100-N Area.

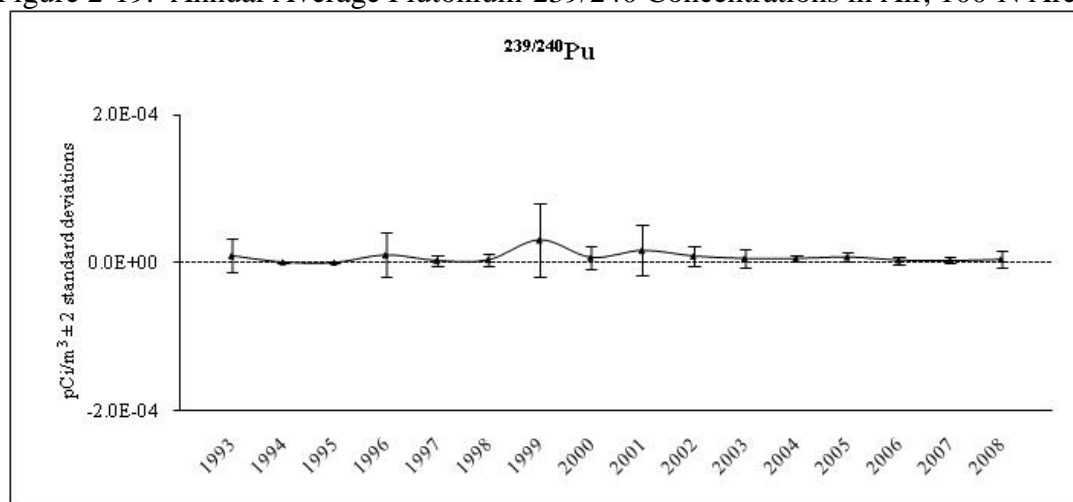


Figure 2-20. Annual Average Strontium-90 Concentrations in Air, 200 Areas.

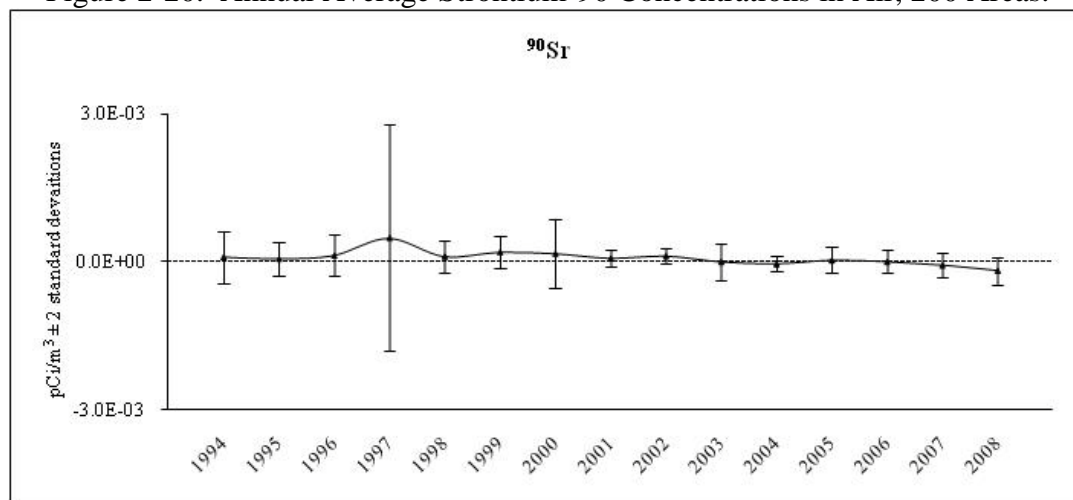


Figure 2-21. Annual Average Cesium-137 Concentrations in Air, 200 Areas.

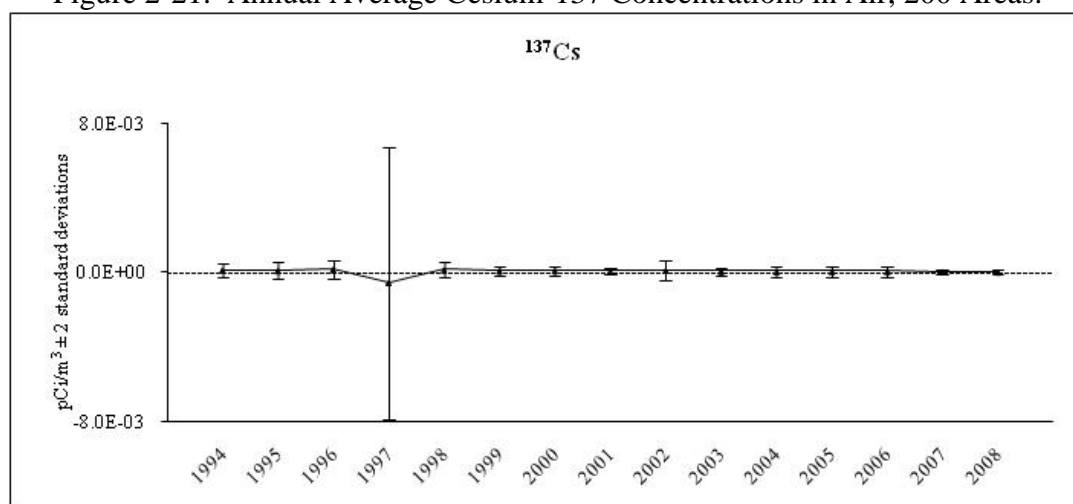


Figure 2-22. Annual Average Plutonium-239/240 Concentrations in Air, 200 Areas and N165.

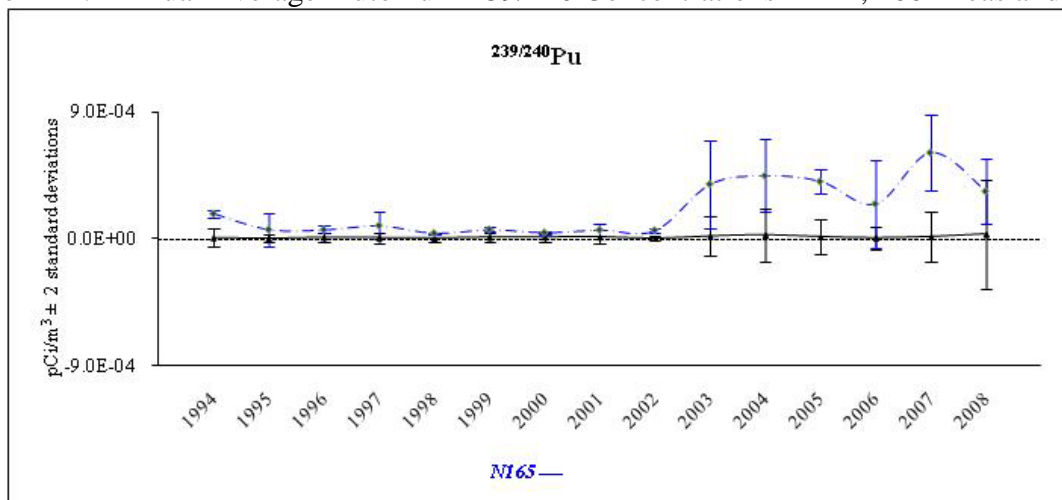


Figure 2-23. Annual Average Uranium-234 Concentrations in Air, 300 Area.

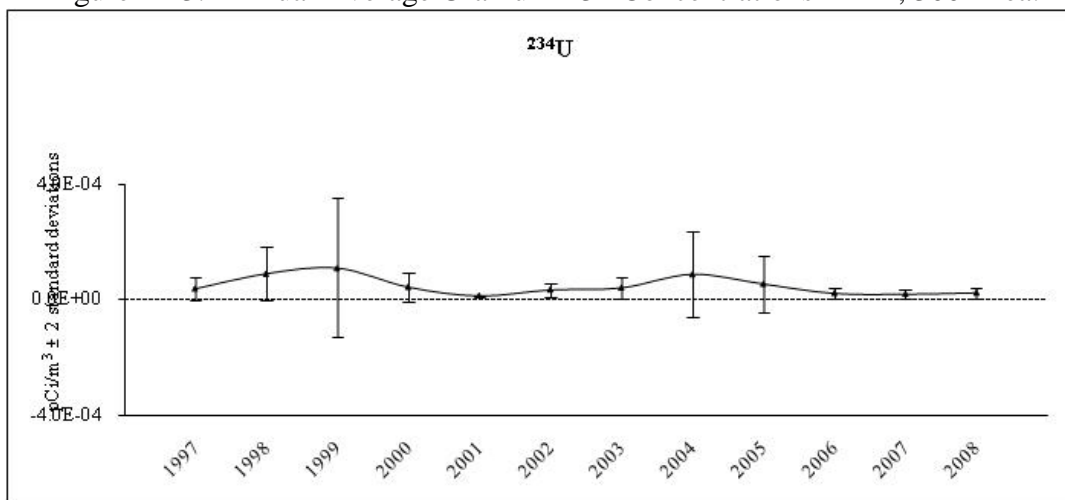


Figure 2-24. Annual Average Uranium-238 Concentrations in Air, 300 Area.

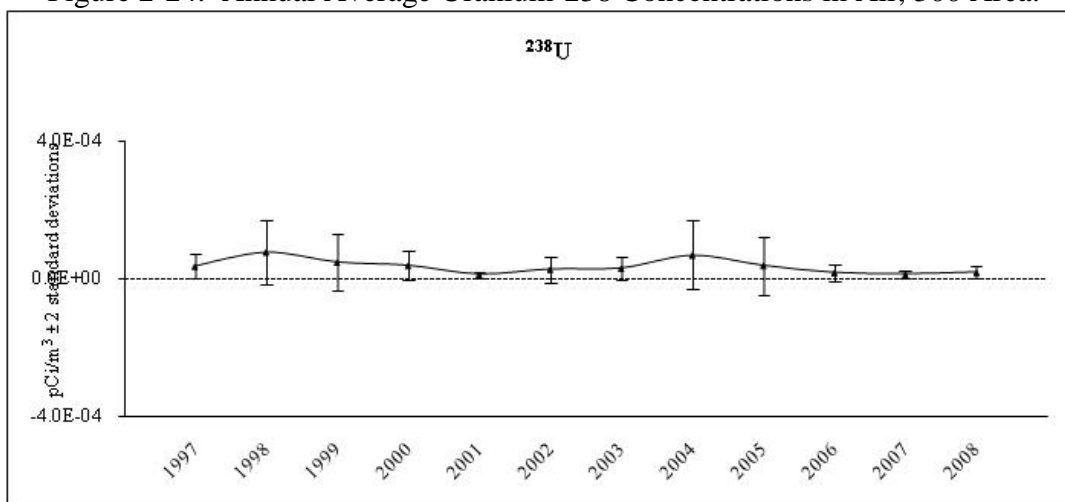


Table 2-3. Summary of Near-Facility Ambient Air Sampling Results (pCi/m³), 2008.

Isotope	Number of		Mean ^a	Maximum ^b	Location	Sampler
	Samples	Detects				
²⁴¹ Am	44	29	8.5E-05 ± 4.6E-04	1.2E-03 ± 4.4E-04	100-K East	N403
⁶⁰ Co	168	0	-1.0E-06 ± 1.3E-04	2.9E-04 ± 6.1E-04	100-B/C Area	N466
¹³⁴ Cs	168	0	5.9E-06 ± 1.0E-04	2.1E-04 ± 3.0E-04	100-IU2/6	N565
¹³⁷ Cs	168	12	9.7E-05 ± 1.2E-03	7.4E-03 ± 2.5E-03	100-K East	N403
¹⁵² Eu	168	0	4.5E-06 ± 2.7E-04	1.0E-03 ± 1.4E-03	100-B/C Area	N466
¹⁵⁴ Eu	168	1	-9.4E-06 ± 3.0E-04	4.0E-04 ± 3.6E-04	200 East Area	N999
¹⁵⁵ Eu	168	0	-4.8E-06 ± 1.9E-04	2.6E-04 ± 1.9E-04	200 East Area	N478
²³⁸ Pu	167	9	4.4E-06 ± 4.2E-05	1.9E-04 ± 6.8E-05	200 East Area	N977
^{239/240} Pu	168	35	3.3E-05 ± 3.4E-04	1.8E-03 ± 6.5E-04	200 East Area	N977
²⁴¹ Pu	28	5	9.1E-04 ± 3.0E-03	5.8E-03 ± 1.8E-03	100-K East	N403
¹⁰³ Ru	11	0	-3.5E-05 ± 9.5E-05	1.3E-05 ± 6.0E-05	200 East Area	N984
¹⁰⁶ Ru	168	0	-2.3E-05 ± 8.7E-04	1.8E-03 ± 3.3E-03	100-B/C Area	N496
¹²⁵ Sb	168	0	2.9E-06 ± 2.1E-04	3.2E-04 ± 2.8E-04	200 West Area	N456
¹¹³ Sn	11	0	1.0E-05 ± 8.4E-05	6.9E-05 ± 6.6E-05	200 East Area	N158
⁹⁰ Sr	158	5	-1.8E-04 ± 4.7E-04	7.8E-04 ± 3.0E-04	BC Controlled Area	N570
²³⁴ U	168	163	1.7E-05 ± 2.0E-05	6.1E-05 ± 3.7E-05	100-B/C Area	N466
²³⁵ U	168	41	3.3E-06 ± 4.8E-06	1.4E-05 ± 1.2E-05	100-IU2/6	N565
²³⁸ U	168	151	1.2E-05 ± 1.5E-05	5.6E-05 ± 3.6E-05	100-B/C Area	N466
⁶⁵ Zn	10	0	-3.8E-05 ± 2.3E-04	1.4E-04 ± 1.8E-04	200 West Area	N457
gross α	2020	1842	1.3E-03 ± 1.7E-03	1.5E-02 ± 3.9E-03	100-K East	N404
gross β	2020	2017	1.9E-02 ± 2.6E-02	2.2E-01 ± 3.9E-02	100-K East	N402

^a ± 2 standard deviations

^b ± total analytical uncertainty

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 1 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N466 (100-B/C)	12/31/07	01/14/08	gross α	8.4E-04 ± 5.6E-04	N466	12/31/07 to 02/01/08	⁶⁰ Co	2.9E-04 ± 6.1E-04	U
	12/31/07	01/14/08	gross β	8.7E-03 ± 1.3E-03			¹³⁴ Cs	1.9E-04 ± 6.4E-04	U
	01/14/08	01/29/08	gross α	1.8E-03 ± 6.3E-04			¹³⁷ Cs	9.0E-07 ± 9.0E-06	U
	01/14/08	01/29/08	gross β	3.3E-02 ± 3.3E-03			¹⁵² Eu	1.0E-03 ± 1.4E-03	U
	01/29/08	02/01/08	gross α	1.4E-03 ± 2.0E-03			¹⁵⁴ Eu	-6.2E-04 ± 1.7E-03	U
	01/29/08	02/01/08	gross β	3.0E-03 ± 2.0E-03			¹⁵⁵ Eu	-3.8E-05 ± 3.8E-04	U
							²³⁸ Pu	2.7E-05 ± 5.5E-05	U
							^{239/240} Pu	-9.0E-06 ± 1.8E-05	U
							¹⁰⁶ Ru	-2.8E-04 ± 2.8E-03	U
							¹²⁵ Sb	-1.2E-04 ± 1.2E-03	U
							⁹⁰ Sr	-2.1E-03 ± 2.1E-03	U
							²³⁴ U	6.1E-05 ± 3.7E-05	
							²³⁵ U	1.4E-05 ± 2.2E-05	U
							²³⁸ U	5.6E-05 ± 3.6E-05	
N496 (100-B/C)	12/31/07	01/14/08	gross α	8.4E-04 ± 5.6E-04	N496	12/31/07 to 02/01/08	⁶⁰ Co	6.7E-06 ± 6.7E-05	U
	12/31/07	01/14/08	gross β	1.3E-02 ± 1.7E-03			¹³⁴ Cs	4.2E-05 ± 3.6E-04	U
	01/14/08	01/29/08	gross α	1.6E-03 ± 5.9E-04			¹³⁷ Cs	-4.9E-05 ± 3.4E-04	U
	01/14/08	01/29/08	gross β	3.7E-02 ± 3.6E-03			¹⁵² Eu	-1.1E-04 ± 7.9E-04	U
	01/29/08	02/01/08	gross α	2.7E-04 ± 1.4E-03			¹⁵⁴ Eu	-3.0E-04 ± 1.2E-03	U
	01/29/08	02/01/08	gross β	4.7E-03 ± 2.2E-03			¹⁵⁵ Eu	-4.3E-05 ± 4.3E-04	U
							²³⁸ Pu	4.0E-06 ± 2.9E-05	U
							^{239/240} Pu	7.9E-06 ± 1.1E-05	U
							¹⁰⁶ Ru	1.8E-03 ± 3.3E-03	U
							¹²⁵ Sb	-2.1E-04 ± 7.5E-04	U
							⁹⁰ Sr	-7.5E-04 ± 7.6E-04	U
							²³⁴ U	5.6E-05 ± 3.5E-05	
							²³⁵ U	4.0E-06 ± 8.1E-07	U
							²³⁸ U	2.8E-05 ± 2.6E-05	U
N497 (100-B/C)	12/31/07	01/14/08	gross α	5.2E-04 ± 4.8E-04	N497	12/31/07 to 02/01/08	⁶⁰ Co	-3.2E-04 ± 5.2E-04	U
	12/31/07	01/14/08	gross β	6.3E-03 ± 1.1E-03			¹³⁴ Cs	-1.6E-04 ± 3.9E-04	U
	01/14/08	01/29/08	gross α	1.5E-03 ± 5.6E-04			¹³⁷ Cs	2.8E-04 ± 3.6E-04	U
	01/14/08	01/29/08	gross β	3.8E-02 ± 3.6E-03			¹⁵² Eu	2.2E-04 ± 8.5E-04	U
	01/29/08	02/01/08	gross α	-2.9E-04 ± 1.1E-03			¹⁵⁴ Eu	-3.1E-04 ± 1.3E-03	U
	01/29/08	02/01/08	gross β	1.1E-03 ± 1.9E-03			¹⁵⁵ Eu	-2.0E-04 ± 8.3E-04	U
							²³⁸ Pu	3.1E-05 ± 4.5E-05	U
							^{239/240} Pu	2.4E-05 ± 1.9E-05	
							¹⁰⁶ Ru	-1.4E-03 ± 3.6E-03	U
							¹²⁵ Sb	-1.9E-04 ± 8.4E-04	U
							⁹⁰ Sr	-8.6E-04 ± 8.8E-04	U
							²³⁴ U	5.9E-05 ± 3.6E-05	
							²³⁵ U	8.6E-06 ± 1.2E-05	U
							²³⁸ U	7.8E-06 ± 1.1E-05	U

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 2 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N467 (100-D)	01/02/08	01/15/08	gross α	3.0E-04 ± 4.2E-04	N467	01/02/08 to 07/01/08	²⁴¹ Am	3.3E-06 ± 3.7E-06	U
	01/02/08	01/15/08	gross β	7.2E-03 ± 1.2E-03			⁶⁰ Co	-9.3E-05 ± 9.6E-05	U
	01/15/08	01/30/08	gross α	2.5E-03 ± 7.3E-04			¹³⁴ Cs	3.6E-05 ± 7.3E-05	U
	01/15/08	01/30/08	gross β	3.4E-02 ± 3.3E-03			¹³⁷ Cs	-2.5E-05 ± 6.9E-05	U
	01/30/08	02/13/08	gross α	1.6E-04 ± 3.5E-04			¹⁵² Eu	4.8E-05 ± 1.7E-04	U
	01/30/08	02/13/08	gross β	4.4E-03 ± 9.3E-04			¹⁵⁴ Eu	-8.7E-05 ± 2.3E-04	U
	02/13/08	02/27/08	gross α	1.3E-03 ± 5.6E-04			¹⁵⁵ Eu	-5.1E-05 ± 1.9E-04	U
	02/13/08	02/27/08	gross β	3.5E-02 ± 3.5E-03			²³⁸ Pu	-1.1E-06 ± 7.4E-06	U
	02/27/08	03/12/08	gross α	7.3E-04 ± 5.4E-04			^{239/240} Pu	1.1E-06 ± 1.1E-05	U
	02/27/08	03/12/08	gross β	1.6E-02 ± 2.0E-03			¹⁰⁶ Ru	-9.9E-06 ± 9.9E-05	U
	03/12/08	03/26/08	gross α	1.0E-03 ± 6.2E-04			¹²⁵ Sb	2.1E-05 ± 1.6E-04	U
	03/12/08	03/26/08	gross β	1.0E-02 ± 1.5E-03			⁹⁰ Sr	7.0E-06 ± 7.0E-05	U
	03/26/08	04/08/08	gross α	6.6E-04 ± 5.4E-04			²³⁴ U	1.0E-05 ± 7.2E-06	
	03/26/08	04/08/08	gross β	8.7E-03 ± 1.4E-03			²³⁵ U	2.2E-06 ± 3.4E-06	U
	04/08/08	04/23/08	gross α	9.1E-04 ± 5.7E-04			²³⁸ U	1.2E-05 ± 7.7E-06	
	04/08/08	04/23/08	gross β	1.1E-02 ± 1.5E-03	N467	07/01/08 to 12/30/08	²⁴¹ Am	5.6E-06 ± 4.9E-06	U
	04/23/08	05/07/08	gross α	1.2E-03 ± 5.1E-04			⁶⁰ Co	3.7E-05 ± 8.8E-05	U
	04/23/08	05/07/08	gross β	1.9E-02 ± 2.2E-03			¹³⁴ Cs	5.6E-06 ± 5.6E-05	U
	05/07/08	05/20/08	gross α	1.8E-03 ± 6.6E-04			¹³⁷ Cs	6.5E-05 ± 7.0E-05	U
	05/07/08	05/20/08	gross β	9.2E-03 ± 1.4E-03			¹⁵² Eu	-3.3E-05 ± 1.8E-04	U
	05/20/08	06/04/08	gross α	7.3E-04 ± 5.0E-04			¹⁵⁴ Eu	1.6E-04 ± 2.6E-04	U
	05/20/08	06/04/08	gross β	1.2E-02 ± 1.6E-03			¹⁵⁵ Eu	1.5E-04 ± 1.8E-04	U
	06/04/08	06/17/08	gross α	2.9E-04 ± 4.9E-04			²³⁸ Pu	-7.6E-07 ± 7.7E-06	U
	06/04/08	06/17/08	gross β	1.2E-02 ± 1.7E-03			^{239/240} Pu	1.5E-06 ± 3.8E-06	U
	06/17/08	07/01/08	gross α	1.1E-03 ± 5.2E-04			¹⁰⁶ Ru	6.9E-04 ± 6.9E-04	U
	06/17/08	07/01/08	gross β	1.5E-02 ± 2.0E-03			¹²⁵ Sb	-2.8E-05 ± 1.6E-04	U
	07/01/08	07/15/08	gross α	9.9E-04 ± 7.0E-04			⁹⁰ Sr	-1.0E-04 ± 1.0E-04	U
	07/01/08	07/15/08	gross β	1.5E-02 ± 1.9E-03			²³⁴ U	1.5E-05 ± 8.4E-06	
	07/15/08	07/29/08	gross α	9.4E-04 ± 5.9E-04			²³⁵ U	3.7E-06 ± 3.5E-06	
	07/15/08	07/29/08	gross β	1.8E-02 ± 2.2E-03			²³⁸ U	1.0E-05 ± 6.4E-06	
	07/29/08	08/12/08	gross α	6.8E-04 ± 5.1E-04					
	07/29/08	08/12/08	gross β	1.7E-02 ± 2.1E-03					
	08/12/08	08/26/08	gross α	6.8E-04 ± 5.1E-04					
	08/12/08	08/26/08	gross β	1.6E-02 ± 2.0E-03					
	08/26/08	09/09/08	gross α	7.1E-04 ± 5.3E-04					
	08/26/08	09/09/08	gross β	1.5E-02 ± 2.0E-03					
	09/09/08	09/23/08	gross α	1.7E-03 ± 6.4E-04					
	09/09/08	09/23/08	gross β	2.6E-02 ± 2.9E-03					
	09/23/08	10/08/08	gross α	1.1E-03 ± 4.8E-04					
	09/23/08	10/08/08	gross β	2.7E-02 ± 2.8E-03					
	10/08/08	10/21/08	gross α	7.5E-04 ± 5.6E-04					
	10/08/08	10/21/08	gross β	2.4E-02 ± 2.7E-03					
	10/21/08	11/04/08	gross α	2.3E-03 ± 7.3E-04					
	10/21/08	11/04/08	gross β	4.8E-02 ± 4.5E-03					
	11/04/08	11/18/08	gross α	2.0E-03 ± 7.1E-04					
	11/04/08	11/18/08	gross β	2.6E-02 ± 2.9E-03					
	11/18/08	12/02/08	gross α	9.5E-04 ± 6.2E-04					
	11/18/08	12/02/08	gross β	4.1E-02 ± 4.0E-03					
	12/02/08	12/16/08	gross α	5.3E-04 ± 4.8E-04					
	12/02/08	12/16/08	gross β	2.6E-02 ± 2.8E-03					
	12/16/08	12/30/08	gross α	1.8E-03 ± 6.4E-04					
	12/16/08	12/30/08	gross β	3.3E-02 ± 3.2E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 3 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N468 (100-D)	01/02/08	01/15/08	gross α	9.1E-04 ± 6.1E-04	N468	01/02/08 to 07/01/08	²⁴¹ Am	5.8E-06 ± 4.8E-06	
	01/02/08	01/15/08	gross β	7.3E-03 ± 1.3E-03			⁶⁰ Co	3.4E-05 ± 8.0E-05	U
	01/15/08	01/30/08	gross α	1.5E-03 ± 5.6E-04			¹³⁴ Cs	-1.3E-05 ± 6.8E-05	U
	01/15/08	01/30/08	gross β	3.5E-02 ± 3.4E-03			¹³⁷ Cs	3.6E-05 ± 5.7E-05	U
	01/30/08	02/13/08	gross α	2.7E-04 ± 3.9E-04			¹⁵² Eu	3.2E-06 ± 3.2E-05	U
	01/30/08	02/13/08	gross β	3.8E-03 ± 8.5E-04			¹⁵⁴ Eu	7.0E-05 ± 1.9E-04	U
	02/13/08	02/27/08	gross α	7.5E-04 ± 5.5E-04			¹⁵⁵ Eu	-2.6E-06 ± 2.6E-05	U
	02/13/08	02/27/08	gross β	2.9E-02 ± 3.0E-03			²³⁸ Pu	5.2E-06 ± 9.2E-06	U
	02/27/08	03/12/08	gross α	9.6E-04 ± 5.9E-04			^{239/240} Pu	3.0E-06 ± 4.8E-06	U
	02/27/08	03/12/08	gross β	1.2E-02 ± 1.6E-03			¹⁰⁶ Ru	-4.0E-04 ± 5.3E-04	U
	03/12/08	03/26/08	gross α	8.6E-04 ± 5.8E-04			¹²⁵ Sb	-3.2E-05 ± 1.3E-04	U
	03/12/08	03/26/08	gross β	8.5E-03 ± 1.3E-03			⁹⁰ Sr	-9.7E-05 ± 1.0E-04	U
	03/26/08	04/08/08	gross α	4.1E-04 ± 4.6E-04			²³⁴ U	9.7E-06 ± 6.4E-06	
	03/26/08	04/08/08	gross β	6.7E-03 ± 1.2E-03			²³⁵ U	7.6E-07 ± 2.6E-06	U
	04/08/08	04/23/08	gross α	8.7E-04 ± 5.4E-04			²³⁸ U	7.7E-06 ± 5.5E-06	
	04/08/08	04/23/08	gross β	1.2E-02 ± 1.6E-03	N468	07/01/08 to 12/30/08	²⁴¹ Am	4.6E-06 ± 4.1E-06	U
	04/23/08	05/07/08	gross α	9.9E-04 ± 4.7E-04			⁶⁰ Co	5.5E-06 ± 5.6E-05	U
	04/23/08	05/07/08	gross β	1.9E-02 ± 2.3E-03			¹³⁴ Cs	-2.2E-05 ± 6.9E-05	U
	05/07/08	05/20/08	gross α	1.1E-03 ± 5.2E-04			¹³⁷ Cs	5.1E-05 ± 6.2E-05	U
	05/07/08	05/20/08	gross β	9.2E-03 ± 1.4E-03			¹⁵² Eu	-1.5E-05 ± 1.5E-04	U
	05/20/08	06/04/08	gross α	1.2E-03 ± 5.0E-04			¹⁵⁴ Eu	8.5E-05 ± 2.0E-04	U
	05/20/08	06/04/08	gross β	1.1E-02 ± 1.5E-03			¹⁵⁵ Eu	-4.1E-05 ± 1.4E-04	U
	06/04/08	06/17/08	gross α	8.0E-04 ± 6.2E-04			²³⁸ Pu	-1.9E-06 ± 9.9E-06	U
	06/04/08	06/17/08	gross β	8.8E-03 ± 1.4E-03			^{239/240} Pu	1.3E-06 ± 1.9E-06	U
	06/17/08	07/01/08	gross α	7.2E-04 ± 5.4E-04			¹⁰⁶ Ru	-2.3E-04 ± 5.8E-04	U
	06/17/08	07/01/08	gross β	1.5E-02 ± 1.9E-03			¹²⁵ Sb	-6.7E-05 ± 1.5E-04	U
	07/01/08	07/15/08	gross α	1.4E-03 ± 6.2E-04			⁹⁰ Sr	-4.1E-05 ± 4.3E-05	U
	07/01/08	07/15/08	gross β	1.4E-02 ± 1.8E-03			²³⁴ U	1.3E-05 ± 8.2E-06	
	07/15/08	07/29/08	gross α	8.9E-04 ± 5.6E-04			²³⁵ U	2.7E-06 ± 2.9E-06	
	07/15/08	07/29/08	gross β	1.2E-02 ± 1.7E-03			²³⁸ U	8.7E-06 ± 5.7E-06	
	07/29/08	08/12/08	gross α	7.8E-04 ± 5.4E-04					
	07/29/08	08/12/08	gross β	1.6E-02 ± 2.0E-03					
	08/12/08	08/26/08	gross α	5.5E-04 ± 4.6E-04					
	08/12/08	08/26/08	gross β	1.6E-02 ± 2.0E-03					
	08/26/08	09/09/08	gross α	6.9E-04 ± 5.2E-04					
	08/26/08	09/09/08	gross β	1.1E-02 ± 1.6E-03					
	09/09/08	09/23/08	gross α	1.7E-03 ± 6.2E-04					
	09/09/08	09/23/08	gross β	2.9E-02 ± 3.0E-03					
	09/23/08	10/08/08	gross α	1.5E-03 ± 5.6E-04					
	09/23/08	10/08/08	gross β	2.4E-02 ± 2.6E-03					
	10/08/08	10/21/08	gross α	1.3E-03 ± 5.6E-04					
	10/08/08	10/21/08	gross β	2.3E-02 ± 2.6E-03					
	10/21/08	11/04/08	gross α	2.9E-03 ± 8.2E-04					
	10/21/08	11/04/08	gross β	4.9E-02 ± 4.6E-03					
	11/04/08	11/18/08	gross α	2.7E-03 ± 7.8E-04					
	11/04/08	11/18/08	gross β	2.6E-02 ± 2.8E-03					
	11/18/08	12/02/08	gross α	1.4E-03 ± 5.6E-04					
	11/18/08	12/02/08	gross β	3.2E-02 ± 3.2E-03					
	12/02/08	12/16/08	gross α	1.4E-03 ± 5.8E-04					
	12/02/08	12/16/08	gross β	2.4E-02 ± 2.6E-03					
	12/16/08	12/30/08	gross α	2.3E-03 ± 7.2E-04					
	12/16/08	12/30/08	gross β	2.5E-02 ± 2.7E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 4 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N514 (100-D)	01/02/08	01/15/08	gross α	7.4E-04 ± 5.5E-04	N514	01/02/08 to 07/01/08	²⁴¹ Am	6.4E-06 ± 5.5E-06	U
	01/02/08	01/15/08	gross β	8.2E-03 ± 1.3E-03			⁶⁰ Co	-9.2E-05 ± 1.4E-04	U
	01/15/08	01/30/08	gross α	1.8E-03 ± 6.3E-04			¹³⁴ Cs	7.7E-05 ± 1.1E-04	U
	01/15/08	01/30/08	gross β	3.4E-02 ± 3.3E-03			¹³⁷ Cs	2.8E-06 ± 2.8E-05	U
	01/30/08	02/13/08	gross α	1.7E-04 ± 3.5E-04			¹⁵² Eu	-5.9E-05 ± 2.3E-04	U
	01/30/08	02/13/08	gross β	3.3E-03 ± 7.9E-04			¹⁵⁴ Eu	-6.2E-05 ± 3.7E-04	U
	02/13/08	02/27/08	gross α	1.6E-03 ± 6.1E-04			¹⁵⁵ Eu	-2.9E-05 ± 2.0E-04	U
	02/13/08	02/27/08	gross β	3.2E-02 ± 3.2E-03			²³⁸ Pu	2.7E-06 ± 1.5E-05	U
	02/27/08	03/12/08	gross α	7.3E-04 ± 5.4E-04			^{239/240} Pu	4.5E-06 ± 6.6E-06	U
	02/27/08	03/12/08	gross β	1.3E-02 ± 1.8E-03			¹⁰⁶ Ru	1.2E-04 ± 8.0E-04	U
	03/12/08	03/26/08	gross α	7.6E-04 ± 5.6E-04			¹²⁵ Sb	2.0E-04 ± 2.5E-04	U
	03/12/08	03/26/08	gross β	1.0E-02 ± 1.5E-03			⁹⁰ Sr	-1.9E-04 ± 2.0E-04	U
	03/26/08	04/08/08	gross α	3.0E-04 ± 4.3E-04			²³⁴ U	1.7E-05 ± 9.5E-06	
	03/26/08	04/08/08	gross β	7.4E-03 ± 1.3E-03			²³⁵ U	3.0E-06 ± 3.2E-06	
	04/08/08	04/23/08	gross α	1.1E-03 ± 5.0E-04			²³⁸ U	6.2E-06 ± 4.8E-06	
	04/08/08	04/23/08	gross β	1.1E-02 ± 1.5E-03	N514	07/01/08 to 12/30/08	²⁴¹ Am	6.2E-06 ± 4.6E-06	
	04/23/08	05/07/08	gross α	1.9E-03 ± 6.7E-04			⁶⁰ Co	2.8E-05 ± 8.4E-05	U
	04/23/08	05/07/08	gross β	1.5E-02 ± 1.9E-03			¹³⁴ Cs	-1.3E-05 ± 7.5E-05	U
	05/07/08	05/20/08	gross α	1.3E-03 ± 5.7E-04			¹³⁷ Cs	-1.9E-05 ± 6.2E-05	U
	05/07/08	05/20/08	gross β	1.2E-02 ± 1.6E-03			¹⁵² Eu	4.4E-06 ± 4.4E-05	U
	05/20/08	06/04/08	gross α	1.4E-03 ± 5.5E-04			¹⁵⁴ Eu	1.8E-04 ± 2.3E-04	U
	05/20/08	06/04/08	gross β	1.1E-02 ± 1.5E-03			¹⁵⁵ Eu	2.9E-06 ± 2.9E-05	U
	06/04/08	06/17/08	gross α	3.1E-04 ± 4.2E-04			²³⁸ Pu	6.7E-07 ± 6.7E-06	U
	06/04/08	06/17/08	gross β	8.1E-03 ± 1.3E-03			^{239/240} Pu	2.0E-06 ± 2.4E-06	
	06/17/08	07/01/08	gross α	1.5E-03 ± 6.1E-04			¹⁰⁶ Ru	6.2E-05 ± 5.8E-04	U
	06/17/08	07/01/08	gross β	1.6E-02 ± 2.0E-03			¹²⁵ Sb	9.9E-06 ± 9.9E-05	U
	07/01/08	07/15/08	gross α	1.5E-03 ± 6.0E-04			⁹⁰ Sr	-4.3E-04 ± 4.5E-04	U
	07/01/08	07/15/08	gross β	1.4E-02 ± 1.8E-03			²³⁴ U	1.2E-05 ± 7.6E-06	
	07/15/08	07/29/08	gross α	1.9E-03 ± 6.5E-04			²³⁵ U	1.5E-06 ± 2.2E-06	U
	07/15/08	07/29/08	gross β	1.6E-02 ± 1.9E-03			²³⁸ U	1.0E-05 ± 6.5E-06	
	07/29/08	08/12/08	gross α	5.3E-04 ± 4.8E-04					
	07/29/08	08/12/08	gross β	1.3E-02 ± 1.8E-03					
	08/12/08	08/26/08	gross α	7.4E-04 ± 5.3E-04					
	08/12/08	08/26/08	gross β	1.2E-02 ± 1.6E-03					
	08/26/08	09/09/08	gross α	8.7E-04 ± 5.7E-04					
	08/26/08	09/09/08	gross β	1.1E-02 ± 1.5E-03					
	09/09/08	09/23/08	gross α	6.3E-04 ± 5.0E-04					
	09/09/08	09/23/08	gross β	2.4E-02 ± 2.6E-03					
	09/23/08	10/08/08	gross α	1.3E-03 ± 5.5E-04					
	09/23/08	10/08/08	gross β	1.9E-02 ± 2.2E-03					
	10/08/08	10/21/08	gross α	1.2E-03 ± 5.5E-04					
	10/08/08	10/21/08	gross β	1.9E-02 ± 2.2E-03					
	10/21/08	11/04/08	gross α	3.1E-03 ± 8.5E-04					
	10/21/08	11/04/08	gross β	4.3E-02 ± 4.1E-03					
	11/04/08	11/18/08	gross α	1.6E-03 ± 6.4E-04					
	11/04/08	11/18/08	gross β	2.5E-02 ± 2.7E-03					
	11/18/08	12/02/08	gross α	1.5E-03 ± 5.8E-04					
	11/18/08	12/02/08	gross β	3.7E-02 ± 3.7E-03					
	12/02/08	12/16/08	gross α	1.7E-03 ± 6.3E-04					
	12/02/08	12/16/08	gross β	2.3E-02 ± 2.6E-03					
	12/16/08	12/30/08	gross α	1.5E-03 ± 6.0E-04					
	12/16/08	12/30/08	gross β	2.7E-02 ± 2.8E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 5 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N515 (100-D)	01/02/08	01/15/08	gross α	5.2E-04 ± 5.0E-04	N515	01/02/08 to 07/01/08	²⁴¹ Am	5.6E-06 ± 4.1E-06	
	01/02/08	01/15/08	gross β	9.9E-03 ± 1.5E-03			⁶⁰ Co	7.8E-05 ± 8.6E-05	U
	01/15/08	01/30/08	gross α	2.0E-03 ± 6.6E-04			¹³⁴ Cs	-9.9E-06 ± 7.7E-05	U
	01/15/08	01/30/08	gross β	4.4E-02 ± 4.0E-03			¹³⁷ Cs	-2.1E-05 ± 6.3E-05	U
	01/30/08	02/13/08	gross α	3.9E-04 ± 4.4E-04			¹⁵² Eu	-2.1E-06 ± 2.1E-05	U
	01/30/08	02/13/08	gross β	4.2E-03 ± 8.9E-04			¹⁵⁴ Eu	1.5E-04 ± 2.1E-04	U
	02/13/08	02/27/08	gross α	2.1E-03 ± 6.9E-04			¹⁵⁵ Eu	-5.6E-06 ± 5.7E-05	U
	02/13/08	02/27/08	gross β	3.5E-02 ± 3.5E-03			²³⁸ Pu	-1.2E-05 ± 1.3E-05	U
	02/27/08	03/12/08	gross α	6.0E-04 ± 5.0E-04			^{239/240} Pu	7.6E-07 ± 4.0E-06	U
	02/27/08	03/12/08	gross β	1.3E-02 ± 1.7E-03			¹⁰⁶ Ru	-2.1E-04 ± 5.6E-04	U
	03/12/08	03/26/08	gross α	6.1E-04 ± 5.0E-04			¹²⁵ Sb	5.3E-05 ± 1.4E-04	U
	03/12/08	03/26/08	gross β	9.4E-03 ± 1.4E-03			⁹⁰ Sr	-2.8E-04 ± 2.9E-04	U
	03/26/08	04/08/08	gross α	7.8E-04 ± 5.8E-04			²³⁴ U	1.5E-05 ± 8.9E-06	
	03/26/08	04/08/08	gross β	6.4E-03 ± 1.2E-03			²³⁵ U	2.8E-06 ± 3.6E-06	U
	04/08/08	04/23/08	gross α	3.6E-04 ± 4.1E-04			²³⁸ U	7.0E-06 ± 5.0E-06	
	04/08/08	04/23/08	gross β	1.2E-02 ± 1.6E-03	N515	07/01/08 to 12/30/08	²⁴¹ Am	6.9E-06 ± 5.0E-06	
	04/23/08	05/07/08	gross α	7.0E-04 ± 5.2E-04			⁶⁰ Co	1.8E-06 ± 1.8E-05	U
	04/23/08	05/07/08	gross β	1.7E-02 ± 2.1E-03			¹³⁴ Cs	2.2E-05 ± 6.6E-05	U
	05/07/08	05/20/08	gross α	9.2E-04 ± 6.1E-04			¹³⁷ Cs	-1.1E-05 ± 5.9E-05	U
	05/07/08	05/20/08	gross β	1.2E-02 ± 1.7E-03			¹⁵² Eu	-9.0E-05 ± 1.5E-04	U
	05/20/08	06/04/08	gross α	7.8E-04 ± 5.1E-04			¹⁵⁴ Eu	9.5E-05 ± 2.2E-04	U
	05/20/08	06/04/08	gross β	1.2E-02 ± 1.6E-03			¹⁵⁵ Eu	-3.7E-06 ± 3.7E-05	U
	06/04/08	06/17/08	gross α	6.4E-04 ± 5.1E-04			²³⁸ Pu	-2.0E-05 ± 2.1E-05	U
	06/04/08	06/17/08	gross β	9.0E-03 ± 1.4E-03			^{239/240} Pu	6.7E-07 ± 3.0E-06	U
	06/17/08	07/01/08	gross α	1.6E-03 ± 6.2E-04			¹⁰⁶ Ru	-5.6E-04 ± 5.9E-04	U
	06/17/08	07/01/08	gross β	1.2E-02 ± 1.7E-03			¹²⁵ Sb	-4.9E-05 ± 1.3E-04	U
	07/01/08	07/15/08	gross α	1.5E-03 ± 5.9E-04			⁹⁰ Sr	-9.7E-05 ± 1.0E-04	U
	07/01/08	07/15/08	gross β	1.2E-02 ± 1.6E-03			²³⁴ U	1.6E-05 ± 9.3E-06	
	07/15/08	07/29/08	gross α	1.2E-03 ± 5.1E-04			²³⁵ U	2.1E-06 ± 2.6E-06	
	07/15/08	07/29/08	gross β	1.2E-02 ± 1.6E-03			²³⁸ U	7.1E-06 ± 5.0E-06	
	07/29/08	08/12/08	gross α	1.0E-03 ± 4.8E-04					
	07/29/08	08/12/08	gross β	1.5E-02 ± 1.8E-03					
	08/12/08	08/26/08	gross α	1.0E-03 ± 4.8E-04					
	08/12/08	08/26/08	gross β	1.3E-02 ± 1.7E-03					
	08/26/08	09/09/08	gross α	8.6E-04 ± 5.7E-04					
	08/26/08	09/09/08	gross β	1.2E-02 ± 1.6E-03					
	09/09/08	09/23/08	gross α	2.0E-03 ± 6.7E-04					
	09/09/08	09/23/08	gross β	2.3E-02 ± 2.5E-03					
	09/23/08	10/08/08	gross α	1.6E-03 ± 5.8E-04					
	09/23/08	10/08/08	gross β	2.2E-02 ± 2.3E-03					
	10/08/08	10/21/08	gross α	4.3E-04 ± 4.6E-04					
	10/08/08	10/21/08	gross β	2.0E-02 ± 2.3E-03					
	10/21/08	11/04/08	gross α	2.4E-03 ± 7.5E-04					
	10/21/08	11/04/08	gross β	4.3E-02 ± 4.0E-03					
	11/04/08	11/18/08	gross α	1.4E-03 ± 5.7E-04					
	11/04/08	11/18/08	gross β	2.1E-02 ± 2.4E-03					
	11/18/08	12/02/08	gross α	1.8E-03 ± 6.4E-04					
	11/18/08	12/02/08	gross β	3.9E-02 ± 3.8E-03					
	12/02/08	12/16/08	gross α	2.0E-03 ± 6.8E-04					
	12/02/08	12/16/08	gross β	2.6E-02 ± 2.8E-03					
	12/16/08	12/30/08	gross α	1.7E-03 ± 6.3E-04					
	12/16/08	12/30/08	gross β	2.6E-02 ± 2.8E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 6 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N519 (100-F)	01/02/08	01/15/08	gross α	5.2E-04 ± 5.0E-04	N519	01/02/08 to 04/08/08	⁶⁰ Co	-4.3E-05 ± 1.2E-04	U
	01/02/08	01/15/08	gross β	9.4E-03 ± 1.5E-03			¹³⁴ Cs	2.8E-05 ± 1.3E-04	U
	01/15/08	01/30/08	gross α	1.2E-03 ± 5.1E-04			¹³⁷ Cs	-3.4E-05 ± 1.0E-04	U
	01/15/08	01/30/08	gross β	3.8E-02 ± 3.7E-03			¹⁵² Eu	5.1E-05 ± 2.5E-04	U
	01/30/08	02/13/08	gross α	2.8E-04 ± 4.0E-04			¹⁵⁴ Eu	1.7E-04 ± 3.2E-04	U
	01/30/08	02/13/08	gross β	4.1E-03 ± 8.8E-04			¹⁵⁵ Eu	4.2E-05 ± 2.7E-04	U
	02/13/08	02/27/08	gross α	2.1E-03 ± 6.9E-04			²³⁸ Pu	1.1E-06 ± 1.1E-06	U
	02/13/08	02/27/08	gross β	2.4E-02 ± 2.6E-03			^{239/240} Pu	1.1E-06 ± 2.2E-06	U
	02/27/08	03/12/08	gross α	6.2E-04 ± 5.1E-04			¹⁰⁶ Ru	7.6E-04 ± 9.7E-04	U
	02/27/08	03/12/08	gross β	1.4E-02 ± 1.9E-03			¹²⁵ Sb	-2.2E-04 ± 2.5E-04	U
	03/12/08	03/26/08	gross α	1.5E-03 ± 6.0E-04			⁹⁰ Sr	1.6E-05 ± 1.6E-04	U
	03/12/08	03/26/08	gross β	1.0E-02 ± 1.5E-03			²³⁴ U	8.4E-06 ± 9.2E-06	U
	03/26/08	04/08/08	gross α	1.0E-03 ± 6.4E-04			²³⁵ U	7.9E-06 ± 7.0E-06	
	03/26/08	04/08/08	gross β	7.8E-03 ± 1.3E-03			²³⁸ U	3.6E-06 ± 4.4E-06	
N520 (100-F)	01/02/08	01/15/08	gross α	4.2E-04 ± 4.7E-04	N520	01/02/08 to 04/08/08	⁶⁰ Co	-1.0E-04 ± 2.5E-04	U
	01/02/08	01/15/08	gross β	7.9E-03 ± 1.3E-03			¹³⁴ Cs	2.6E-05 ± 1.9E-04	U
	01/15/08	01/30/08	gross α	2.0E-03 ± 6.6E-04			¹³⁷ Cs	-4.7E-05 ± 1.7E-04	U
	01/15/08	01/30/08	gross β	4.1E-02 ± 3.8E-03			¹⁵² Eu	-1.1E-04 ± 5.1E-04	U
	01/30/08	02/13/08	gross α	5.2E-04 ± 4.8E-04			¹⁵⁴ Eu	-3.0E-04 ± 6.1E-04	U
	01/30/08	02/13/08	gross β	3.8E-03 ± 8.5E-04			¹⁵⁵ Eu	-3.3E-05 ± 3.3E-04	U
	02/13/08	02/27/08	gross α	9.5E-04 ± 5.9E-04			²³⁸ Pu	2.5E-06 ± 5.0E-06	U
	02/13/08	02/27/08	gross β	3.3E-02 ± 3.3E-03			^{239/240} Pu	-2.5E-06 ± 3.6E-06	U
	02/27/08	03/12/08	gross α	8.4E-04 ± 5.7E-04			¹⁰⁶ Ru	9.3E-05 ± 9.3E-04	U
	02/27/08	03/12/08	gross β	1.3E-02 ± 1.7E-03			¹²⁵ Sb	-1.7E-04 ± 4.4E-04	U
	03/12/08	03/26/08	gross α	6.2E-04 ± 5.2E-04			⁹⁰ Sr	-2.8E-04 ± 2.9E-04	U
	03/12/08	03/26/08	gross β	8.8E-03 ± 1.4E-03			²³⁴ U	2.0E-05 ± 1.5E-05	
	03/26/08	04/08/08	gross α	7.8E-04 ± 5.8E-04			²³⁵ U	8.2E-06 ± 7.3E-06	
	03/26/08	04/08/08	gross β	6.4E-03 ± 1.2E-03			²³⁸ U	1.4E-05 ± 9.5E-06	
N521 (100-F)	01/02/08	01/15/08	gross α	4.1E-04 ± 4.6E-04	N521	01/02/08 to 04/08/08	⁶⁰ Co	2.4E-05 ± 1.4E-04	U
	01/02/08	01/15/08	gross β	9.1E-03 ± 1.4E-03			¹³⁴ Cs	-6.5E-05 ± 1.3E-04	U
	01/15/08	01/30/08	gross α	1.7E-03 ± 6.1E-04			¹³⁷ Cs	-7.2E-05 ± 1.2E-04	U
	01/15/08	01/30/08	gross β	3.8E-02 ± 3.6E-03			¹⁵² Eu	9.4E-05 ± 2.8E-04	U
	01/30/08	02/13/08	gross α	4.0E-04 ± 4.5E-04			¹⁵⁴ Eu	1.3E-05 ± 1.3E-04	U
	01/30/08	02/13/08	gross β	3.6E-03 ± 8.3E-04			¹⁵⁵ Eu	1.0E-04 ± 3.0E-04	U
	02/13/08	02/27/08	gross α	1.7E-03 ± 6.3E-04			²³⁸ Pu	2.3E-06 ± 5.8E-06	U
	02/13/08	02/27/08	gross β	3.1E-02 ± 3.1E-03			^{239/240} Pu	-1.2E-06 ± 2.3E-06	U
	02/27/08	03/12/08	gross α	1.2E-03 ± 5.3E-04			¹⁰⁶ Ru	2.1E-04 ± 1.0E-03	U
	02/27/08	03/12/08	gross β	1.4E-02 ± 1.8E-03			¹²⁵ Sb	1.2E-04 ± 2.5E-04	U
	03/12/08	03/26/08	gross α	4.0E-04 ± 4.5E-04			⁹⁰ Sr	-2.1E-04 ± 2.2E-04	U
	03/12/08	03/26/08	gross β	1.2E-02 ± 1.7E-03			²³⁴ U	1.2E-05 ± 1.1E-05	U
	03/26/08	04/08/08	gross α	1.7E-03 ± 6.6E-04			²³⁵ U	4.0E-06 ± 4.9E-06	
	03/26/08	04/08/08	gross β	6.8E-03 ± 1.2E-03			²³⁸ U	3.7E-06 ± 5.7E-06	U
N552 (100-F)	01/02/08	01/15/08	gross α	3.0E-04 ± 4.3E-04	N552	01/02/08 to 04/08/08	⁶⁰ Co	-5.0E-05 ± 1.2E-04	U
	01/02/08	01/15/08	gross β	8.3E-03 ± 1.4E-03			¹³⁴ Cs	1.2E-04 ± 1.2E-04	U
	01/15/08	01/30/08	gross α	2.6E-03 ± 7.6E-04			¹³⁷ Cs	-7.7E-06 ± 7.7E-05	U
	01/15/08	01/30/08	gross β	4.3E-02 ± 4.5E-03			¹⁵² Eu	-1.5E-04 ± 2.5E-04	U
	01/30/08	02/13/08	gross α	1.6E-04 ± 3.5E-04			¹⁵⁴ Eu	1.5E-04 ± 3.4E-04	U
	01/30/08	02/13/08	gross β	5.7E-03 ± 1.1E-03			¹⁵⁵ Eu	-4.9E-05 ± 2.9E-04	U
	02/13/08	02/27/08	gross α	1.6E-03 ± 6.2E-04			²³⁸ Pu	2.6E-06 ± 1.8E-05	U
	02/13/08	02/27/08	gross β	2.8E-02 ± 3.2E-03			^{239/240} Pu	-1.3E-06 ± 5.9E-06	U
	02/27/08	03/12/08	gross α	5.3E-04 ± 5.0E-04			¹⁰⁶ Ru	1.8E-04 ± 1.0E-03	U
	02/27/08	03/12/08	gross β	1.1E-02 ± 1.7E-03			¹²⁵ Sb	-2.2E-04 ± 2.4E-04	U
	03/12/08	03/26/08	gross α	5.1E-04 ± 4.8E-04			⁹⁰ Sr	-4.0E-04 ± 4.1E-04	U
	03/12/08	03/26/08	gross β	8.5E-03 ± 1.4E-03			²³⁴ U	1.9E-05 ± 1.3E-05	
	03/26/08	04/08/08	gross α	8.0E-04 ± 5.9E-04			²³⁵ U	1.4E-06 ± 2.9E-06	U
	03/26/08	04/08/08	gross β	6.8E-03 ± 1.3E-03			²³⁸ U	1.3E-05 ± 9.3E-06	

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 7 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N553 (100-F)	01/02/08	01/15/08	gross α	4.3E-04 ± 4.8E-04	N553	01/02/08 to 04/08/08	⁶⁰ Co	1.0E-04 ± 1.9E-04	U
	01/02/08	01/15/08	gross β	8.8E-03 ± 1.5E-03			¹³⁴ Cs	-1.1E-05 ± 1.1E-04	U
	01/15/08	01/30/08	gross α	1.4E-03 ± 5.4E-04			¹³⁷ Cs	-5.7E-05 ± 2.0E-04	U
	01/15/08	01/30/08	gross β	3.4E-02 ± 3.7E-03			¹⁵² Eu	1.2E-05 ± 1.2E-04	U
	01/30/08	02/13/08	gross α	1.6E-04 ± 3.4E-04			¹⁵⁴ Eu	-7.1E-05 ± 5.4E-04	U
	01/30/08	02/13/08	gross β	5.4E-03 ± 1.1E-03			¹⁵⁵ Eu	1.8E-04 ± 3.5E-04	U
	02/13/08	02/27/08	gross α	2.2E-03 ± 7.2E-04			²³⁸ Pu	-3.0E-06 ± 1.8E-05	U
	02/13/08	02/27/08	gross β	2.7E-02 ± 3.2E-03			^{239/240} Pu	1.5E-06 ± 5.2E-06	U
	02/27/08	03/12/08	gross α	5.2E-04 ± 4.9E-04			¹⁰⁶ Ru	1.7E-03 ± 1.7E-03	U
	02/27/08	03/12/08	gross β	1.0E-02 ± 1.6E-03			¹²⁵ Sb	2.6E-04 ± 4.5E-04	U
	03/12/08	03/26/08	gross α	1.2E-03 ± 5.5E-04			⁹⁰ Sr	-2.6E-04 ± 2.7E-04	U
	03/12/08	03/26/08	gross β	8.3E-03 ± 1.4E-03			²³⁴ U	1.1E-05 ± 9.9E-06	U
	03/26/08	04/08/08	gross α	1.3E-03 ± 5.7E-04			²³⁵ U	4.1E-06 ± 6.3E-06	U
	03/26/08	04/08/08	gross β	9.4E-03 ± 1.5E-03			²³⁸ U	1.3E-05 ± 9.8E-06	
N508 (100-H)	07/02/08	07/15/08	gross α	2.0E-03 ± 7.1E-04	N508	07/02/08 to 12/30/08	⁶⁰ Co	5.0E-05 ± 7.9E-05	U
	07/02/08	07/15/08	gross β	1.4E-02 ± 1.9E-03			¹³⁴ Cs	2.3E-05 ± 7.2E-05	U
	07/15/08	07/29/08	gross α	1.6E-03 ± 9.6E-04			¹³⁷ Cs	-3.0E-06 ± 3.0E-05	U
	07/15/08	07/29/08	gross β	9.9E-03 ± 1.8E-03			¹⁵² Eu	-1.3E-05 ± 1.3E-04	U
	07/29/08	08/12/08	gross α	5.6E-04 ± 5.1E-04			¹⁵⁴ Eu	1.7E-04 ± 2.1E-04	U
	07/29/08	08/12/08	gross β	1.6E-02 ± 2.0E-03			¹⁵⁵ Eu	-6.8E-06 ± 6.8E-05	U
	08/12/08	08/26/08	gross α	9.9E-04 ± 6.1E-04			²³⁸ Pu	-4.2E-06 ± 1.5E-05	U
	08/12/08	08/26/08	gross β	1.2E-02 ± 1.7E-03			^{239/240} Pu	-8.5E-07 ± 4.5E-06	U
	08/26/08	09/09/08	gross α	1.8E-03 ± 7.8E-04			¹⁰⁶ Ru	8.5E-05 ± 5.9E-04	U
	08/26/08	09/09/08	gross β	1.3E-02 ± 2.0E-03			¹²⁵ Sb	-2.8E-05 ± 1.4E-04	U
	09/09/08	09/23/08	gross α	9.8E-04 ± 6.0E-04			⁹⁰ Sr	-2.3E-04 ± 2.4E-04	
	09/09/08	09/23/08	gross β	2.6E-02 ± 2.8E-03			²³⁴ U	1.9E-05 ± 1.2E-05	
	09/23/08	10/08/08	gross α	1.9E-03 ± 6.4E-04			²³⁵ U	2.9E-06 ± 5.2E-06	U
	09/23/08	10/08/08	gross β	2.6E-02 ± 2.7E-03			²³⁸ U	1.3E-05 ± 8.9E-06	
	10/08/08	10/21/08	gross α	1.4E-03 ± 5.8E-04					
	10/08/08	10/21/08	gross β	2.0E-02 ± 2.4E-03					
	10/21/08	11/04/08	gross α	1.9E-03 ± 6.7E-04					
	10/21/08	11/04/08	gross β	4.2E-02 ± 4.0E-03					
	11/04/08	11/18/08	gross α	1.2E-03 ± 5.4E-04					
	11/04/08	11/18/08	gross β	2.1E-02 ± 2.4E-03					
	11/18/08	12/02/08	gross α	1.5E-03 ± 6.1E-04					
	11/18/08	12/02/08	gross β	3.7E-02 ± 3.7E-03					
	12/02/08	12/16/08	gross α	1.2E-03 ± 5.2E-04					
	12/02/08	12/16/08	gross β	2.7E-02 ± 2.8E-03					
	12/16/08	12/30/08	gross α	2.1E-03 ± 7.0E-04					
	12/16/08	12/30/08	gross β	3.1E-02 ± 3.2E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 8 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N509 (100-H)	07/02/08	07/15/08	gross α	1.9E-03 ± 6.8E-04	N509	07/02/08 to 12/30/08	⁶⁰ Co	-8.9E-07 ± 8.9E-06	U
	07/02/08	07/15/08	gross β	1.4E-02 ± 1.9E-03			¹³⁴ Cs	2.4E-06 ± 2.4E-05	U
	07/15/08	07/29/08	gross α	1.4E-03 ± 9.0E-04			¹³⁷ Cs	-1.4E-05 ± 6.1E-05	U
	07/15/08	07/29/08	gross β	1.5E-02 ± 2.3E-03			¹⁵² Eu	-7.8E-05 ± 1.6E-04	U
	07/29/08	08/12/08	gross α	5.0E-04 ± 4.6E-04			¹⁵⁴ Eu	3.7E-05 ± 2.1E-04	U
	07/29/08	08/12/08	gross β	1.6E-02 ± 1.9E-03			¹⁵⁵ Eu	1.7E-05 ± 1.7E-04	U
	08/12/08	08/26/08	gross α	5.3E-04 ± 4.9E-04			²³⁸ Pu	-3.6E-06 ± 1.1E-05	U
	08/12/08	08/26/08	gross β	1.5E-02 ± 1.9E-03			^{239/240} Pu	7.3E-07 ± 3.3E-06	U
	08/26/08	09/09/08	gross α	9.2E-04 ± 7.4E-04			¹⁰⁶ Ru	-1.3E-04 ± 5.3E-04	U
	08/26/08	09/09/08	gross β	1.6E-02 ± 2.3E-03			¹²⁵ Sb	7.1E-05 ± 1.4E-04	U
	09/09/08	09/23/08	gross α	1.5E-03 ± 5.8E-04			⁹⁰ Sr	-2.8E-04 ± 2.9E-04	U
	09/09/08	09/23/08	gross β	2.3E-02 ± 2.5E-03			²³⁴ U	2.2E-05 ± 1.2E-05	
	09/23/08	10/08/08	gross α	1.3E-03 ± 5.3E-04			²³⁵ U	2.9E-06 ± 3.5E-06	U
	09/23/08	10/08/08	gross β	2.4E-02 ± 2.6E-03			²³⁸ U	1.6E-05 ± 9.7E-06	
	10/08/08	10/21/08	gross α	1.5E-03 ± 6.0E-04					
	10/08/08	10/21/08	gross β	1.8E-02 ± 2.2E-03					
	10/21/08	11/04/08	gross α	2.0E-03 ± 6.7E-04					
	10/21/08	11/04/08	gross β	4.3E-02 ± 4.0E-03					
	11/04/08	11/18/08	gross α	1.8E-03 ± 6.4E-04					
	11/04/08	11/18/08	gross β	2.1E-02 ± 2.4E-03					
	11/18/08	12/02/08	gross α	1.4E-03 ± 5.5E-04					
	11/18/08	12/02/08	gross β	3.9E-02 ± 3.8E-03					
	12/02/08	12/16/08	gross α	1.3E-03 ± 5.5E-04					
	12/02/08	12/16/08	gross β	2.4E-02 ± 2.6E-03					
	12/16/08	12/30/08	gross α	1.2E-03 ± 5.4E-04					
	12/16/08	12/30/08	gross β	2.8E-02 ± 2.9E-03					
N510 (100-H)	07/02/08	07/15/08	gross α	1.2E-03 ± 5.7E-04	N510	07/02/08 to 12/30/08	⁶⁰ Co	1.1E-05 ± 8.6E-05	U
	07/02/08	07/15/08	gross β	1.2E-02 ± 1.7E-03			¹³⁴ Cs	-3.2E-06 ± 3.2E-05	U
	07/15/08	07/29/08	gross α	1.6E-03 ± 9.5E-04			¹³⁷ Cs	-3.8E-05 ± 6.8E-05	U
	07/15/08	07/29/08	gross β	1.2E-02 ± 2.0E-03			¹⁵² Eu	-8.2E-05 ± 1.7E-04	U
	07/29/08	08/12/08	gross α	7.2E-04 ± 5.2E-04			¹⁵⁴ Eu	-1.6E-04 ± 2.4E-04	U
	07/29/08	08/12/08	gross β	1.4E-02 ± 1.8E-03			¹⁵⁵ Eu	1.1E-04 ± 1.9E-04	U
	08/12/08	08/26/08	gross α	1.3E-03 ± 5.6E-04			²³⁸ Pu	-8.4E-07 ± 8.4E-06	U
	08/12/08	08/26/08	gross β	1.6E-02 ± 2.0E-03			^{239/240} Pu	-8.4E-07 ± 8.4E-06	U
	08/26/08	09/09/08	gross α	1.2E-03 ± 8.8E-04			¹⁰⁶ Ru	4.1E-04 ± 5.9E-04	U
	08/26/08	09/09/08	gross β	1.2E-02 ± 2.0E-03			¹²⁵ Sb	6.6E-05 ± 1.6E-04	U
	09/09/08	09/23/08	gross α	2.2E-03 ± 7.1E-04			⁹⁰ Sr	-2.1E-04 ± 2.1E-04	U
	09/09/08	09/23/08	gross β	2.4E-02 ± 2.6E-03			²³⁴ U	4.0E-05 ± 2.1E-05	
	09/23/08	10/08/08	gross α	1.1E-03 ± 4.9E-04			²³⁵ U	1.4E-06 ± 4.9E-06	U
	09/23/08	10/08/08	gross β	2.3E-02 ± 2.5E-03			²³⁸ U	2.4E-05 ± 1.5E-05	
	10/08/08	10/21/08	gross α	9.0E-04 ± 5.9E-04					
	10/08/08	10/21/08	gross β	1.9E-02 ± 2.2E-03					
	10/21/08	11/04/08	gross α	2.4E-03 ± 7.5E-04					
	10/21/08	11/04/08	gross β	4.4E-02 ± 4.1E-03					
	11/04/08	11/18/08	gross α	9.9E-04 ± 6.0E-04					
	11/04/08	11/18/08	gross β	2.2E-02 ± 2.5E-03					
	11/18/08	12/02/08	gross α	1.7E-03 ± 7.0E-04					
	11/18/08	12/02/08	gross β	5.1E-02 ± 4.9E-03					
	12/02/08	12/16/08	gross α	1.1E-03 ± 4.9E-04					
	12/02/08	12/16/08	gross β	2.6E-02 ± 2.7E-03					
	12/16/08	12/30/08	gross α	2.1E-03 ± 6.9E-04					
	12/16/08	12/30/08	gross β	2.7E-02 ± 2.8E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 9 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N574	10/08/08	10/21/08	gross α	1.8E-03 ± 6.7E-04	N574	10/08/08 to 12/30/08	⁶⁰ Co	1.5E-04 ± 2.0E-04	U
(100-H)	10/08/08	10/21/08	gross β	2.1E-02 ± 2.7E-03			¹³⁴ Cs	-1.0E-04 ± 1.4E-04	U
	10/21/08	11/04/08	gross α	2.8E-03 ± 8.1E-04			¹³⁷ Cs	-3.5E-05 ± 1.3E-04	U
	10/21/08	11/04/08	gross β	4.8E-02 ± 5.1E-03			¹⁵² Eu	-2.2E-04 ± 3.2E-04	U
	11/04/08	11/18/08	gross α	1.5E-03 ± 5.8E-04			¹⁵⁴ Eu	-1.8E-04 ± 4.7E-04	U
	11/04/08	11/18/08	gross β	2.4E-02 ± 2.9E-03			¹⁵⁵ Eu	3.9E-05 ± 2.8E-04	U
	11/18/08	12/02/08	gross α	1.4E-03 ± 5.8E-04			²³⁸ Pu	-1.5E-06 ± 1.5E-05	U
	11/18/08	12/02/08	gross β	3.9E-02 ± 4.2E-03			^{239/240} Pu	-7.8E-06 ± 8.7E-06	U
	12/02/08	12/16/08	gross α	2.1E-03 ± 7.0E-04			¹⁰⁶ Ru	-6.4E-05 ± 6.5E-04	U
	12/02/08	12/16/08	gross β	2.9E-02 ± 3.3E-03			¹²⁵ Sb	-1.2E-04 ± 2.8E-04	U
	12/16/08	12/30/08	gross α	1.8E-03 ± 6.4E-04			⁹⁰ Sr	-2.9E-04 ± 3.0E-04	U
	12/16/08	12/30/08	gross β	3.2E-02 ± 3.6E-03			²³⁴ U	2.7E-05 ± 1.9E-05	
							²³⁵ U	2.3E-06 ± 7.9E-06	U
							²³⁸ U	2.1E-05 ± 1.6E-05	

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 10 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N401 (100-K)	01/02/08	01/15/08	gross α	1.4E-03 ± 5.8E-04	N401	01/02/08 to 07/01/08	²⁴¹ Am	1.2E-05 ± 6.8E-06	
	01/02/08	01/15/08	gross β	9.6E-03 ± 1.5E-03			⁶⁰ Co	3.2E-05 ± 1.4E-04	U
	01/15/08	01/30/08	gross α	2.2E-03 ± 7.0E-04			¹³⁴ Cs	9.0E-05 ± 1.1E-04	U
	01/15/08	01/30/08	gross β	3.4E-02 ± 3.3E-03			¹³⁷ Cs	-1.5E-05 ± 9.4E-05	U
	01/30/08	02/13/08	gross α	3.9E-04 ± 4.4E-04			¹⁵² Eu	3.1E-05 ± 2.3E-04	U
	01/30/08	02/13/08	gross β	3.8E-03 ± 8.5E-04			¹⁵⁴ Eu	7.8E-05 ± 3.4E-04	U
	02/13/08	02/27/08	gross α	1.4E-03 ± 5.7E-04			¹⁵⁵ Eu	-8.3E-05 ± 1.8E-04	U
	02/13/08	02/27/08	gross β	3.4E-02 ± 3.4E-03			²³⁸ Pu	1.4E-06 ± 1.4E-06	U
	02/27/08	03/11/08	gross α	5.5E-04 ± 5.2E-04			^{239/240} Pu	2.7E-06 ± 4.0E-06	U
	02/27/08	03/11/08	gross β	1.3E-02 ± 1.7E-03			²⁴¹ Pu	2.7E-04 ± 5.5E-04	U
	03/11/08	04/08/08	gross α	9.3E-04 ± 3.3E-04			¹⁰⁶ Ru	-5.0E-04 ± 8.9E-04	U
	03/11/08	04/08/08	gross β	7.3E-03 ± 9.4E-04			¹²⁵ Sb	1.4E-04 ± 2.4E-04	U
	04/08/08	04/21/08	gross α	5.4E-04 ± 5.1E-04			⁹⁰ Sr	-7.7E-05 ± 8.0E-05	U
	04/08/08	04/21/08	gross β	1.3E-02 ± 1.8E-03			²³⁴ U	2.4E-05 ± 1.2E-05	
	04/21/08	05/07/08	gross α	1.0E-03 ± 4.5E-04			²³⁵ U	5.1E-06 ± 4.3E-06	
	04/21/08	05/07/08	gross β	1.4E-02 ± 1.7E-03			²³⁸ U	2.7E-05 ± 1.4E-05	
	05/07/08	05/20/08	gross α	6.5E-04 ± 5.3E-04	N401	07/01/08 to 12/30/08	²⁴¹ Am	4.8E-04 ± 1.7E-04	
	05/07/08	05/20/08	gross β	1.1E-02 ± 1.6E-03			⁶⁰ Co	3.4E-05 ± 7.8E-05	U
	05/20/08	06/03/08	gross α	9.4E-04 ± 5.7E-04			¹³⁴ Cs	4.0E-05 ± 6.3E-05	U
	05/20/08	06/03/08	gross β	1.1E-02 ± 1.6E-03			¹³⁷ Cs	3.6E-04 ± 1.8E-04	
	06/03/08	06/17/08	gross α	4.9E-04 ± 4.6E-04			¹⁵² Eu	9.1E-05 ± 1.5E-04	U
	06/03/08	06/17/08	gross β	8.1E-03 ± 1.3E-03			¹⁵⁴ Eu	1.9E-05 ± 1.9E-04	U
	06/17/08	07/01/08	gross α	1.4E-03 ± 5.6E-04			¹⁵⁵ Eu	3.0E-05 ± 1.3E-04	U
	06/17/08	07/01/08	gross β	9.3E-03 ± 1.4E-03			²³⁸ Pu	6.8E-05 ± 4.0E-05	
	07/01/08	07/15/08	gross α	1.6E-03 ± 6.5E-04			^{239/240} Pu	3.0E-04 ± 1.2E-04	
	07/01/08	07/15/08	gross β	1.3E-02 ± 1.7E-03			²⁴¹ Pu	2.6E-03 ± 1.2E-03	
	07/15/08	07/18/08	gross α	5.7E-03 ± 2.4E-03			¹⁰⁶ Ru	-3.4E-04 ± 5.7E-04	U
	07/15/08	07/18/08	gross β	1.8E-02 ± 3.8E-03			¹²⁵ Sb	5.7E-05 ± 1.5E-04	U
	07/18/08	07/29/08	gross α	7.9E-04 ± 6.3E-04			⁹⁰ Sr	-8.4E-05 ± 8.7E-05	U
	07/18/08	07/29/08	gross β	1.0E-02 ± 1.6E-03			²³⁴ U	1.4E-05 ± 9.1E-06	
	07/29/08	08/12/08	gross α	3.2E-03 ± 8.6E-04			²³⁵ U	8.6E-07 ± 1.8E-06	U
	07/29/08	08/12/08	gross β	1.2E-02 ± 1.6E-03			²³⁸ U	1.6E-06 ± 3.9E-06	U
	08/12/08	08/26/08	gross α	3.9E-03 ± 9.5E-04					
	08/12/08	08/26/08	gross β	1.6E-02 ± 2.0E-03					
	08/26/08	09/09/08	gross α	1.7E-03 ± 6.6E-04					
	08/26/08	09/09/08	gross β	1.4E-02 ± 1.9E-03					
	09/09/08	09/23/08	gross α	1.6E-03 ± 5.9E-04					
	09/09/08	09/23/08	gross β	2.7E-02 ± 2.8E-03					
	09/23/08	10/09/08	gross α	2.1E-03 ± 6.4E-04					
	09/23/08	10/09/08	gross β	2.2E-02 ± 2.4E-03					
	10/09/08	10/21/08	gross α	1.5E-03 ± 6.2E-04					
	10/09/08	10/21/08	gross β	1.6E-02 ± 2.0E-03					
	10/21/08	11/04/08	gross α	3.4E-03 ± 8.9E-04					
	10/21/08	11/04/08	gross β	4.1E-02 ± 3.8E-03					
	11/04/08	11/18/08	gross α	1.1E-03 ± 5.0E-04					
	11/04/08	11/18/08	gross β	2.1E-02 ± 2.4E-03					
	11/18/08	12/02/08	gross α	1.5E-03 ± 6.0E-04					
	11/18/08	12/02/08	gross β	3.4E-02 ± 3.4E-03					
	12/02/08	12/16/08	gross α	1.4E-03 ± 5.7E-04					
	12/02/08	12/16/08	gross β	2.4E-02 ± 2.6E-03					
	12/16/08	12/30/08	gross α	9.4E-04 ± 5.8E-04					
	12/16/08	12/30/08	gross β	3.3E-02 ± 3.3E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 11 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N402 (100-K)	01/02/08	01/15/08	gross α	1.0E-03 ± 6.2E-04	N402	01/02/08 to 07/01/08	²⁴¹ Am	3.8E-05 ± 1.7E-05	
	01/02/08	01/15/08	gross β	9.5E-03 ± 1.5E-03			⁶⁰ Co	2.2E-05 ± 9.0E-05	U
	01/15/08	01/30/08	gross α	1.6E-03 ± 5.9E-04			¹³⁴ Cs	-2.7E-05 ± 7.1E-05	U
	01/15/08	01/30/08	gross β	3.5E-02 ± 3.4E-03			¹³⁷ Cs	1.2E-04 ± 9.0E-05	U
	01/30/08	02/13/08	gross α	5.0E-04 ± 4.7E-04			¹⁵² Eu	2.2E-05 ± 1.6E-04	U
	01/30/08	02/13/08	gross β	4.2E-03 ± 9.0E-04			¹⁵⁴ Eu	-6.4E-05 ± 2.1E-04	U
	02/13/08	02/27/08	gross α	4.5E-03 ± 1.3E-03			¹⁵⁵ Eu	9.8E-05 ± 1.8E-04	U
	02/13/08	02/27/08	gross β	4.7E-02 ± 5.0E-03			²³⁸ Pu	3.6E-05 ± 2.8E-05	
	02/27/08	03/11/08	gross α	5.5E-04 ± 5.2E-04			^{239/240} Pu	3.0E-05 ± 1.8E-05	
	02/27/08	03/11/08	gross β	1.4E-02 ± 1.9E-03			²⁴¹ Pu	5.5E-04 ± 6.8E-04	U
	03/11/08	03/26/08	gross α	1.9E-03 ± 6.4E-04			¹⁰⁶ Ru	-4.2E-04 ± 6.5E-04	U
	03/11/08	03/26/08	gross β	1.6E-02 ± 1.9E-03			¹²⁵ Sb	7.3E-05 ± 1.5E-04	U
	03/26/08	04/08/08	gross α	5.1E-03 ± 1.1E-02			⁹⁰ Sr	2.9E-04 ± 1.7E-04	
	03/26/08	04/08/08	gross β	2.2E-01 ± 3.9E-02			²³⁴ U	9.7E-06 ± 7.1E-06	
	04/08/08	04/23/08	gross α	9.7E-04 ± 4.5E-04			²³⁵ U	4.1E-06 ± 3.9E-06	
	04/08/08	04/23/08	gross β	1.1E-02 ± 1.5E-03			²³⁸ U	7.5E-06 ± 5.9E-06	
	04/23/08	05/07/08	gross α	1.7E-03 ± 6.1E-04					
	04/23/08	05/07/08	gross β	1.5E-02 ± 1.9E-03	N402	07/01/08 to 12/30/08	²⁴¹ Am	4.9E-04 ± 1.8E-04	
	05/07/08	05/20/08	gross α	1.2E-03 ± 5.5E-04			⁶⁰ Co	3.2E-06 ± 3.2E-05	U
	05/07/08	05/20/08	gross β	1.0E-02 ± 1.6E-03			¹³⁴ Cs	2.2E-05 ± 6.6E-05	U
	05/20/08	06/03/08	gross α	5.0E-04 ± 4.6E-04			¹³⁷ Cs	4.4E-04 ± 2.0E-04	
	05/20/08	06/03/08	gross β	9.4E-03 ± 1.4E-03			¹⁵² Eu	9.1E-05 ± 1.6E-04	U
	06/03/08	06/17/08	gross α	3.8E-04 ± 4.3E-04			¹⁵⁴ Eu	2.4E-04 ± 2.4E-04	U
	06/03/08	06/17/08	gross β	8.7E-03 ± 1.4E-03			¹⁵⁵ Eu	5.6E-05 ± 1.6E-04	U
	06/17/08	07/01/08	gross α	1.4E-03 ± 5.7E-04			²³⁸ Pu	6.1E-05 ± 4.1E-05	
	06/17/08	07/01/08	gross β	1.7E-02 ± 2.0E-03			^{239/240} Pu	3.6E-04 ± 1.4E-04	
	07/01/08	07/15/08	gross α	2.2E-03 ± 7.7E-04			²⁴¹ Pu	4.0E-03 ± 1.6E-03	
	07/01/08	07/15/08	gross β	1.6E-02 ± 2.0E-03			¹⁰⁶ Ru	-1.3E-04 ± 5.8E-04	U
	07/15/08	07/18/08	gross α	1.8E-03 ± 1.9E-03			¹²⁵ Sb	5.2E-05 ± 1.6E-04	U
	07/15/08	07/18/08	gross β	1.5E-02 ± 3.6E-03			⁹⁰ Sr	2.1E-04 ± 1.7E-04	U
	07/18/08	07/29/08	gross α	1.6E-03 ± 6.8E-04			²³⁴ U	2.1E-05 ± 1.1E-05	
	07/18/08	07/29/08	gross β	1.6E-02 ± 2.1E-03			²³⁵ U	4.3E-06 ± 4.4E-06	U
	07/29/08	08/12/08	gross α	5.5E-03 ± 1.2E-03			²³⁸ U	9.9E-06 ± 6.4E-06	
	07/29/08	08/12/08	gross β	1.5E-02 ± 1.9E-03					
	08/12/08	08/26/08	gross α	2.2E-03 ± 7.0E-04					
	08/12/08	08/26/08	gross β	1.6E-02 ± 1.9E-03					
	08/26/08	09/09/08	gross α	3.3E-03 ± 8.7E-04					
	08/26/08	09/09/08	gross β	1.3E-02 ± 1.7E-03					
	09/09/08	09/23/08	gross α	1.4E-03 ± 5.5E-04					
	09/09/08	09/23/08	gross β	2.5E-02 ± 2.7E-03					
	09/23/08	10/09/08	gross α	2.4E-03 ± 6.8E-04					
	09/23/08	10/09/08	gross β	2.5E-02 ± 2.6E-03					
	10/09/08	10/21/08	gross α	1.8E-03 ± 6.9E-04					
	10/09/08	10/21/08	gross β	1.7E-02 ± 2.2E-03					
	10/21/08	11/04/08	gross α	1.8E-03 ± 6.3E-04					
	10/21/08	11/04/08	gross β	4.3E-02 ± 4.0E-03					
	11/04/08	11/18/08	gross α	2.0E-03 ± 6.9E-04					
	11/04/08	11/18/08	gross β	2.3E-02 ± 2.5E-03					
	11/18/08	12/02/08	gross α	1.1E-03 ± 5.2E-04					
	11/18/08	12/02/08	gross β	3.7E-02 ± 3.6E-03					
	12/02/08	12/16/08	gross α	1.7E-03 ± 6.3E-04					
	12/02/08	12/16/08	gross β	2.7E-02 ± 2.9E-03					
	12/16/08	12/30/08	gross α	1.5E-03 ± 6.0E-04					
	12/16/08	12/30/08	gross β	3.4E-02 ± 3.4E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 12 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N403 (100-K)	01/02/08	01/15/08	gross α	4.1E-04 ± 4.6E-04	N403	01/02/08 to 07/01/08	²⁴¹ Am	9.1E-06 ± 5.8E-06	
	01/02/08	01/15/08	gross β	1.1E-02 ± 1.6E-03			⁶⁰ Co	-2.1E-05 ± 8.2E-05	U
	01/15/08	01/30/08	gross α	1.6E-03 ± 6.0E-04			¹³⁴ Cs	-5.1E-05 ± 8.3E-05	U
	01/15/08	01/30/08	gross β	3.5E-02 ± 3.4E-03			¹³⁷ Cs	3.5E-05 ± 6.9E-05	U
	01/30/08	02/13/08	gross α	7.3E-04 ± 5.3E-04			¹⁵² Eu	-1.2E-04 ± 1.7E-04	U
	01/30/08	02/13/08	gross β	4.8E-03 ± 9.6E-04			¹⁵⁴ Eu	7.4E-05 ± 2.3E-04	U
	02/13/08	02/27/08	gross α	1.7E-03 ± 6.5E-04			¹⁵⁵ Eu	-9.5E-07 ± 9.5E-06	U
	02/13/08	02/27/08	gross β	3.2E-02 ± 3.3E-03			²³⁸ Pu	6.5E-06 ± 2.0E-05	U
	02/27/08	03/11/08	gross α	1.4E-03 ± 6.0E-04			^{239/240} Pu	3.3E-06 ± 8.1E-06	U
	02/27/08	03/11/08	gross β	1.4E-02 ± 1.9E-03			²⁴¹ Pu	5.2E-04 ± 6.7E-04	U
	03/11/08	03/25/08	gross α	8.6E-04 ± 5.8E-04			¹⁰⁶ Ru	2.1E-04 ± 6.5E-04	U
	03/11/08	03/25/08	gross β	3.7E-02 ± 3.6E-03			¹²⁵ Sb	-3.4E-05 ± 1.5E-04	U
	03/25/08	04/07/08	gross α	1.0E-03 ± 6.3E-04			⁹⁰ Sr	-1.6E-04 ± 1.6E-04	U
	03/25/08	04/07/08	gross β	7.0E-03 ± 1.2E-03			²³⁴ U	1.3E-05 ± 7.5E-06	
	04/07/08	04/21/08	gross α	4.0E-04 ± 4.5E-04			²³⁵ U	3.5E-06 ± 3.9E-06	U
	04/07/08	04/21/08	gross β	1.1E-02 ± 1.6E-03			²³⁸ U	1.1E-05 ± 6.9E-06	
	04/21/08	05/07/08	gross α	1.5E-03 ± 5.6E-04	N403	07/01/08 to 12/30/08	²⁴¹ Am	1.2E-03 ± 4.4E-04	
	04/21/08	05/07/08	gross β	1.4E-02 ± 1.7E-03			⁶⁰ Co	2.3E-06 ± 2.3E-05	U
	05/07/08	05/20/08	gross α	1.3E-03 ± 5.8E-04			¹³⁴ Cs	2.2E-05 ± 7.0E-05	U
	05/07/08	05/20/08	gross β	1.0E-02 ± 1.5E-03			¹³⁷ Cs	7.4E-03 ± 2.5E-03	
	05/20/08	06/03/08	gross α	1.5E-03 ± 5.8E-04			¹⁵² Eu	5.7E-06 ± 5.7E-05	U
	05/20/08	06/03/08	gross β	1.0E-02 ± 1.5E-03			¹⁵⁴ Eu	4.9E-05 ± 2.3E-04	U
	06/03/08	06/17/08	gross α	2.7E-04 ± 4.0E-04			¹⁵⁵ Eu	1.0E-04 ± 1.9E-04	U
	06/03/08	06/17/08	gross β	7.6E-03 ± 1.3E-03			²³⁸ Pu	1.1E-04 ± 5.6E-05	
	06/17/08	07/01/08	gross α	6.6E-04 ± 5.3E-04			^{239/240} Pu	9.4E-04 ± 3.6E-04	
	06/17/08	07/01/08	gross β	1.3E-02 ± 1.7E-03			²⁴¹ Pu	5.8E-03 ± 1.8E-03	
	07/01/08	07/15/08	gross α	2.3E-03 ± 8.1E-04			¹⁰⁶ Ru	-8.0E-04 ± 8.3E-04	U
	07/01/08	07/15/08	gross β	1.3E-02 ± 1.8E-03			¹²⁵ Sb	4.6E-05 ± 1.9E-04	U
	07/15/08	07/18/08	gross α	9.4E-03 ± 4.3E-03			⁹⁰ Sr	1.4E-04 ± 1.4E-04	
	07/15/08	07/18/08	gross β	1.9E-02 ± 5.5E-03			²³⁴ U	1.5E-05 ± 9.4E-06	
	07/18/08	07/29/08	gross α	3.4E-03 ± 9.8E-04			²³⁵ U	3.7E-06 ± 3.6E-06	
	07/18/08	07/29/08	gross β	1.8E-02 ± 2.3E-03			²³⁸ U	2.4E-05 ± 1.2E-05	
	07/29/08	08/12/08	gross α	4.2E-03 ± 1.0E-03					
	07/29/08	08/12/08	gross β	1.2E-01 ± 9.3E-03					
	08/12/08	08/26/08	gross α	6.6E-03 ± 1.3E-03					
	08/12/08	08/26/08	gross β	2.3E-02 ± 2.5E-03					
	08/26/08	09/09/08	gross α	5.2E-03 ± 1.1E-03					
	08/26/08	09/09/08	gross β	1.6E-02 ± 2.0E-03					
	09/09/08	09/23/08	gross α	7.4E-04 ± 5.3E-04					
	09/09/08	09/23/08	gross β	1.3E-02 ± 1.7E-03					
	09/23/08	10/09/08	gross α	1.7E-03 ± 5.7E-04					
	09/23/08	10/09/08	gross β	2.2E-02 ± 2.4E-03					
	10/09/08	10/21/08	gross α	5.9E-04 ± 5.4E-04					
	10/09/08	10/21/08	gross β	2.2E-02 ± 2.6E-03					
	10/21/08	11/04/08	gross α	1.9E-03 ± 6.5E-04					
	10/21/08	11/04/08	gross β	3.7E-02 ± 3.6E-03					
	11/04/08	11/18/08	gross α	2.2E-03 ± 7.3E-04					
	11/04/08	11/18/08	gross β	2.2E-02 ± 2.4E-03					
	11/18/08	12/02/08	gross α	1.5E-03 ± 6.1E-04					
	11/18/08	12/02/08	gross β	3.3E-02 ± 3.3E-03					
	12/02/08	12/16/08	gross α	1.5E-03 ± 6.1E-04					
	12/02/08	12/16/08	gross β	2.4E-02 ± 2.7E-03					
	12/16/08	12/30/08	gross α	2.9E-03 ± 8.3E-04					
	12/16/08	12/30/08	gross β	4.0E-02 ± 3.8E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 13 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N404 (100-K)	01/02/08	01/15/08	gross α	7.6E-04 ± 5.6E-04	N404	01/02/08 to 07/01/08	²⁴¹ Am	4.3E-06 ± 4.0E-06	U
	01/02/08	01/15/08	gross β	9.5E-03 ± 1.5E-03			⁶⁰ Co	8.1E-05 ± 8.2E-05	U
	01/15/08	01/30/08	gross α	2.6E-03 ± 8.0E-04			¹³⁴ Cs	2.7E-05 ± 6.8E-05	U
	01/15/08	01/30/08	gross β	3.4E-02 ± 3.4E-03			¹³⁷ Cs	5.7E-06 ± 5.7E-05	U
	01/30/08	02/13/08	gross α	7.3E-04 ± 5.3E-04			¹⁵² Eu	-9.7E-05 ± 1.3E-04	U
	01/30/08	02/13/08	gross β	4.7E-03 ± 9.5E-04			¹⁵⁴ Eu	5.6E-05 ± 2.1E-04	U
	02/13/08	02/27/08	gross α	2.1E-03 ± 7.8E-04			¹⁵⁵ Eu	-4.0E-05 ± 1.4E-04	U
	02/13/08	02/27/08	gross β	4.3E-02 ± 4.2E-03			²³⁸ Pu	-1.7E-06 ± 1.7E-05	U
	02/27/08	03/11/08	gross α	1.1E-03 ± 6.6E-04			^{239/240} Pu	1.3E-05 ± 1.1E-05	
	02/27/08	03/11/08	gross β	1.5E-02 ± 1.9E-03			²⁴¹ Pu	3.7E-05 ± 3.7E-04	U
	03/11/08	03/25/08	gross α	7.6E-04 ± 5.6E-04			¹⁰⁶ Ru	8.8E-05 ± 5.3E-04	U
	03/11/08	03/25/08	gross β	1.2E-02 ± 1.7E-03			¹²⁵ Sb	-1.0E-04 ± 1.4E-04	U
	03/25/08	04/07/08	gross α	9.2E-04 ± 6.2E-04			⁹⁰ Sr	8.9E-06 ± 8.9E-05	U
	03/25/08	04/07/08	gross β	1.0E-02 ± 1.6E-03			²³⁴ U	1.0E-05 ± 8.0E-06	
	04/07/08	04/21/08	gross α	1.3E-03 ± 5.6E-04			²³⁵ U	3.7E-06 ± 4.2E-06	U
	04/07/08	04/21/08	gross β	8.7E-03 ± 1.4E-03			²³⁸ U	9.5E-06 ± 6.8E-06	
	04/21/08	05/07/08	gross α	1.7E-03 ± 5.9E-04	N404	07/01/08 to 12/30/08	²⁴¹ Am	7.2E-04 ± 2.5E-04	
	04/21/08	05/07/08	gross β	1.9E-02 ± 2.2E-03			⁶⁰ Co	5.1E-05 ± 1.2E-04	U
	05/07/08	05/20/08	gross α	1.3E-03 ± 6.0E-04			¹³⁴ Cs	2.0E-05 ± 1.3E-04	U
	05/07/08	05/20/08	gross β	1.1E-02 ± 1.7E-03			¹³⁷ Cs	1.9E-03 ± 7.1E-04	
	05/20/08	06/03/08	gross α	1.9E-03 ± 6.7E-04			¹⁵² Eu	-9.4E-05 ± 2.6E-04	U
	05/20/08	06/03/08	gross β	1.1E-02 ± 1.5E-03			¹⁵⁴ Eu	-1.5E-04 ± 3.5E-04	U
	06/03/08	06/17/08	gross α	8.6E-04 ± 5.8E-04			¹⁵⁵ Eu	-2.1E-04 ± 2.2E-04	U
	06/03/08	06/17/08	gross β	8.5E-03 ± 1.4E-03			²³⁸ Pu	8.4E-05 ± 4.6E-05	
	06/17/08	07/01/08	gross α	7.0E-04 ± 5.6E-04			^{239/240} Pu	5.7E-04 ± 2.2E-04	
	06/17/08	07/01/08	gross β	1.3E-02 ± 1.8E-03			²⁴¹ Pu	4.3E-03 ± 1.5E-03	
	07/01/08	07/15/08	gross α	3.3E-03 ± 1.0E-03			¹⁰⁶ Ru	7.3E-05 ± 7.3E-04	U
	07/01/08	07/15/08	gross β	2.3E-02 ± 2.7E-03			¹²⁵ Sb	-9.4E-06 ± 9.4E-05	U
	07/15/08	07/18/08	gross α	1.5E-02 ± 3.9E-03			⁹⁰ Sr	-2.2E-04 ± 2.2E-04	U
	07/15/08	07/18/08	gross β	4.0E-02 ± 6.1E-03			²³⁴ U	1.7E-05 ± 1.0E-05	
	07/18/08	07/29/08	gross α	1.7E-03 ± 7.2E-04			²³⁵ U	1.8E-06 ± 4.4E-06	U
	07/18/08	07/29/08	gross β	1.2E-02 ± 1.8E-03			²³⁸ U	9.8E-06 ± 7.1E-06	
	07/29/08	08/12/08	gross α	6.8E-04 ± 5.5E-04					
	07/29/08	08/12/08	gross β	7.0E-03 ± 1.2E-03					
	08/12/08	08/26/08	gross α	2.7E-03 ± 8.3E-04					
	08/12/08	08/26/08	gross β	1.5E-02 ± 2.0E-03					
	08/26/08	09/09/08	gross α	1.7E-03 ± 6.3E-04					
	08/26/08	09/09/08	gross β	1.5E-02 ± 1.9E-03					
	09/09/08	09/23/08	gross α	7.7E-03 ± 1.5E-03					
	09/09/08	09/23/08	gross β	5.5E-02 ± 5.0E-03					
	09/23/08	10/09/08	gross α	1.9E-03 ± 6.2E-04					
	09/23/08	10/09/08	gross β	2.1E-02 ± 2.4E-03					
	10/09/08	10/21/08	gross α	7.3E-04 ± 5.9E-04					
	10/09/08	10/21/08	gross β	2.1E-02 ± 2.5E-03					
	10/21/08	11/04/08	gross α	2.8E-03 ± 8.2E-04					
	10/21/08	11/04/08	gross β	3.9E-02 ± 3.8E-03					
	11/04/08	11/18/08	gross α	1.4E-03 ± 6.0E-04					
	11/04/08	11/18/08	gross β	3.0E-02 ± 3.2E-03					
	11/18/08	12/02/08	gross α	1.6E-03 ± 6.7E-04					
	11/18/08	12/02/08	gross β	3.7E-02 ± 3.7E-03					
	12/02/08	12/16/08	gross α	1.2E-03 ± 5.4E-04					
	12/02/08	12/16/08	gross β	2.6E-02 ± 2.9E-03					
	12/16/08	12/30/08	gross α	1.1E-03 ± 4.9E-04					
	12/16/08	12/30/08	gross β	3.1E-02 ± 3.1E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 14 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N476 (100-K)	01/02/08	01/15/08	gross α	1.2E-03 ± 5.4E-04	N476	01/02/08 to 07/01/08	²⁴¹ Am	1.3E-05 ± 9.0E-06	
	01/02/08	01/15/08	gross β	9.8E-03 ± 1.5E-03			⁶⁰ Co	9.3E-05 ± 7.1E-05	U
	01/15/08	01/30/08	gross α	2.9E-03 ± 8.3E-04			¹³⁴ Cs	1.1E-04 ± 7.7E-05	U
	01/15/08	01/30/08	gross β	3.6E-02 ± 3.6E-03			¹³⁷ Cs	1.2E-05 ± 5.5E-05	U
	01/30/08	02/13/08	gross α	3.9E-04 ± 4.4E-04			¹⁵² Eu	-5.8E-05 ± 1.3E-04	U
	01/30/08	02/13/08	gross β	5.4E-03 ± 1.0E-03			¹⁵⁴ Eu	7.1E-06 ± 7.2E-05	U
	02/13/08	02/27/08	gross α	1.4E-03 ± 6.1E-04			¹⁵⁵ Eu	8.5E-05 ± 1.7E-04	U
	02/13/08	02/27/08	gross β	3.3E-02 ± 3.3E-03			²³⁸ Pu	1.2E-05 ± 2.8E-05	U
	02/27/08	03/11/08	gross α	9.6E-04 ± 6.0E-04			^{239/240} Pu	3.4E-06 ± 9.7E-06	U
	02/27/08	03/11/08	gross β	1.3E-02 ± 1.7E-03			²⁴¹ Pu	1.7E-04 ± 7.6E-04	U
	03/11/08	03/25/08	gross α	1.7E-04 ± 3.5E-04			¹⁰⁶ Ru	-2.2E-04 ± 5.3E-04	U
	03/11/08	03/25/08	gross β	6.9E-03 ± 1.2E-03			¹²⁵ Sb	8.5E-05 ± 1.4E-04	U
	03/25/08	04/07/08	gross α	9.5E-04 ± 5.9E-04			⁹⁰ Sr	-1.7E-04 ± 1.7E-04	U
	03/25/08	04/07/08	gross β	8.0E-03 ± 1.3E-03			²³⁴ U	1.6E-05 ± 9.2E-06	
	04/07/08	04/21/08	gross α	7.4E-04 ± 5.5E-04			²³⁵ U	3.3E-06 ± 3.5E-06	
	04/07/08	04/21/08	gross β	9.5E-03 ± 1.5E-03			²³⁸ U	1.0E-05 ± 6.8E-06	
	04/21/08	05/07/08	gross α	1.4E-03 ± 5.3E-04	N476	07/01/08 to 12/30/08	²⁴¹ Am	2.2E-05 ± 1.1E-05	
	04/21/08	05/07/08	gross β	1.4E-02 ± 1.8E-03			⁶⁰ Co	-5.5E-06 ± 5.5E-05	U
	05/07/08	05/20/08	gross α	6.2E-04 ± 5.7E-04			¹³⁴ Cs	3.8E-05 ± 7.0E-05	U
	05/07/08	05/20/08	gross β	1.0E-02 ± 1.6E-03			¹³⁷ Cs	-3.5E-05 ± 5.7E-05	U
	05/20/08	06/03/08	gross α	6.9E-04 ± 5.2E-04			¹⁵² Eu	3.3E-05 ± 1.6E-04	U
	05/20/08	06/03/08	gross β	1.4E-02 ± 1.9E-03			¹⁵⁴ Eu	-6.6E-05 ± 2.1E-04	U
	06/03/08	06/17/08	gross α	1.5E-03 ± 6.4E-04			¹⁵⁵ Eu	1.5E-04 ± 1.7E-04	U
	06/03/08	06/17/08	gross β	7.5E-03 ± 1.2E-03			²³⁸ Pu	6.1E-06 ± 2.6E-05	U
	06/17/08	07/01/08	gross α	1.3E-03 ± 5.7E-04			^{239/240} Pu	9.1E-06 ± 1.0E-05	U
	06/17/08	07/01/08	gross β	1.7E-02 ± 2.2E-03			²⁴¹ Pu	7.4E-05 ± 7.4E-04	U
	07/01/08	07/15/08	gross α	1.8E-03 ± 7.3E-04			¹⁰⁶ Ru	-2.6E-04 ± 5.4E-04	U
	07/01/08	07/15/08	gross β	1.5E-02 ± 1.9E-03			¹²⁵ Sb	-5.5E-05 ± 1.4E-04	U
	07/15/08	07/29/08	gross α	1.9E-03 ± 6.7E-04			⁹⁰ Sr	-4.1E-05 ± 4.2E-05	U
	07/15/08	07/29/08	gross β	1.6E-02 ± 2.1E-03			²³⁴ U	1.5E-05 ± 9.1E-06	
	07/29/08	08/12/08	gross α	8.5E-04 ± 5.8E-04			²³⁵ U	5.3E-06 ± 4.8E-06	
	07/29/08	08/12/08	gross β	1.5E-02 ± 2.0E-03			²³⁸ U	1.6E-05 ± 9.4E-06	
	08/12/08	08/26/08	gross α	1.9E-03 ± 6.6E-04					
	08/12/08	08/26/08	gross β	1.4E-02 ± 1.9E-03					
	08/26/08	09/09/08	gross α	1.0E-03 ± 5.0E-04					
	08/26/08	09/09/08	gross β	1.2E-02 ± 1.7E-03					
	09/09/08	09/23/08	gross α	2.2E-03 ± 7.3E-04					
	09/09/08	09/23/08	gross β	2.9E-02 ± 3.1E-03					
	09/23/08	10/08/08	gross α	1.6E-03 ± 5.8E-04					
	09/23/08	10/08/08	gross β	2.2E-02 ± 2.5E-03					
	10/08/08	10/21/08	gross α	1.2E-03 ± 5.5E-04					
	10/08/08	10/21/08	gross β	1.0E-02 ± 1.6E-03					
	10/21/08	11/04/08	gross α	2.9E-03 ± 8.5E-04					
	10/21/08	11/04/08	gross β	4.5E-02 ± 4.3E-03					
	11/04/08	11/18/08	gross α	5.3E-04 ± 5.1E-04					
	11/04/08	11/18/08	gross β	2.0E-02 ± 2.5E-03					
	11/18/08	12/02/08	gross α	1.4E-03 ± 6.0E-04					
	11/18/08	12/02/08	gross β	3.6E-02 ± 3.6E-03					
	12/02/08	12/16/08	gross α	1.4E-03 ± 5.8E-04					
	12/02/08	12/16/08	gross β	2.3E-02 ± 2.6E-03					
	12/16/08	12/30/08	gross α	1.8E-03 ± 6.4E-04					
	12/16/08	12/30/08	gross β	3.5E-02 ± 3.4E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 15 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N477 (100-K)	01/02/08	01/15/08	gross α	8.1E-04 ± 5.9E-04	N477	01/02/08 to 07/01/08	²⁴¹ Am	1.1E-05 ± 8.2E-06	
	01/02/08	01/15/08	gross β	8.2E-03 ± 1.4E-03			⁶⁰ Co	4.1E-05 ± 8.5E-05	U
	01/15/08	01/30/08	gross α	1.9E-03 ± 6.8E-04			¹³⁴ Cs	5.1E-06 ± 5.1E-05	U
	01/15/08	01/30/08	gross β	3.4E-02 ± 3.4E-03			¹³⁷ Cs	-2.3E-05 ± 6.5E-05	U
	01/30/08	02/13/08	gross α	5.0E-04 ± 4.7E-04			¹⁵² Eu	1.8E-04 ± 1.6E-04	U
	01/30/08	02/13/08	gross β	4.7E-03 ± 9.7E-04			¹⁵⁴ Eu	-1.3E-04 ± 2.1E-04	U
	02/13/08	02/27/08	gross α	1.5E-03 ± 5.6E-04			¹⁵⁵ Eu	-8.9E-06 ± 8.9E-05	U
	02/13/08	02/27/08	gross β	3.9E-02 ± 3.7E-03			²³⁸ Pu	-6.4E-06 ± 3.6E-05	U
	02/27/08	03/11/08	gross α	7.8E-04 ± 5.8E-04			^{239/240} Pu	1.3E-05 ± 1.2E-05	
	02/27/08	03/11/08	gross β	1.5E-02 ± 2.0E-03			²⁴¹ Pu	7.6E-04 ± 1.0E-03	U
	03/11/08	03/25/08	gross α	1.3E-03 ± 8.8E-04			¹⁰⁶ Ru	-8.4E-05 ± 6.1E-04	U
	03/11/08	03/25/08	gross β	1.4E-02 ± 2.2E-03			¹²⁵ Sb	7.2E-05 ± 1.6E-04	U
	03/25/08	04/07/08	gross α	1.7E-03 ± 8.0E-04			⁹⁰ Sr	-2.3E-04 ± 2.4E-04	U
	03/25/08	04/07/08	gross β	1.2E-02 ± 2.0E-03			²³⁴ U	1.2E-05 ± 8.3E-06	
	04/07/08	04/21/08	gross α	9.5E-04 ± 5.9E-04			²³⁵ U	8.3E-07 ± 2.5E-06	U
	04/07/08	04/21/08	gross β	1.0E-02 ± 1.5E-03			²³⁸ U	6.4E-06 ± 5.6E-06	
	04/21/08	05/07/08	gross α	1.4E-03 ± 5.5E-04	N477	07/01/08 to 12/30/08	²⁴¹ Am	3.3E-05 ± 1.6E-05	
	04/21/08	05/07/08	gross β	1.8E-02 ± 2.2E-03			⁶⁰ Co	5.2E-06 ± 5.2E-05	U
	05/07/08	05/20/08	gross α	1.5E-03 ± 6.7E-04			¹³⁴ Cs	-5.4E-05 ± 1.3E-04	U
	05/07/08	05/20/08	gross β	9.8E-03 ± 1.6E-03			¹³⁷ Cs	1.3E-04 ± 1.0E-04	U
	05/20/08	06/03/08	gross α	2.9E-03 ± 8.1E-04			¹⁵² Eu	6.4E-05 ± 2.4E-04	U
	05/20/08	06/03/08	gross β	1.5E-02 ± 1.9E-03			¹⁵⁴ Eu	-1.4E-05 ± 1.4E-04	U
	06/03/08	06/17/08	gross α	1.5E-04 ± 4.0E-04			¹⁵⁵ Eu	1.9E-04 ± 2.0E-04	U
	06/03/08	06/17/08	gross β	7.0E-03 ± 1.2E-03			²³⁸ Pu	-8.0E-06 ± 2.5E-05	U
	06/17/08	07/01/08	gross α	2.3E-03 ± 7.3E-04			^{239/240} Pu	1.6E-05 ± 1.2E-05	
	06/17/08	07/01/08	gross β	1.4E-02 ± 1.9E-03			²⁴¹ Pu	2.8E-04 ± 6.5E-04	U
	07/01/08	07/15/08	gross α	1.7E-03 ± 6.9E-04			¹⁰⁶ Ru	5.4E-04 ± 8.5E-04	U
	07/01/08	07/15/08	gross β	4.5E-02 ± 4.2E-03			¹²⁵ Sb	-3.9E-05 ± 2.4E-04	U
	07/15/08	07/29/08	gross α	1.5E-03 ± 5.8E-04			⁹⁰ Sr	-7.8E-05 ± 8.1E-05	U
	07/15/08	07/29/08	gross β	1.3E-02 ± 1.8E-03			²³⁴ U	1.8E-05 ± 1.0E-05	
	07/29/08	08/12/08	gross α	1.6E-03 ± 6.0E-04			²³⁵ U	4.6E-06 ± 4.2E-06	
	07/29/08	08/12/08	gross β	1.6E-02 ± 2.0E-03			²³⁸ U	8.5E-06 ± 5.9E-06	
	08/12/08	08/26/08	gross α	1.3E-03 ± 5.4E-04					
	08/12/08	08/26/08	gross β	1.3E-02 ± 1.8E-03					
	08/26/08	09/09/08	gross α	1.5E-03 ± 5.8E-04					
	08/26/08	09/09/08	gross β	1.3E-02 ± 1.8E-03					
	09/09/08	09/23/08	gross α	1.6E-03 ± 6.0E-04					
	09/09/08	09/23/08	gross β	2.6E-02 ± 2.8E-03					
	09/23/08	10/09/08	gross α	8.7E-04 ± 4.1E-04					
	09/23/08	10/09/08	gross β	2.3E-02 ± 2.5E-03					
	10/09/08	10/21/08	gross α	1.4E-03 ± 6.0E-04					
	10/09/08	10/21/08	gross β	1.9E-02 ± 2.4E-03					
	10/21/08	11/04/08	gross α	3.5E-03 ± 9.1E-04					
	10/21/08	11/04/08	gross β	4.4E-02 ± 4.2E-03					
	11/04/08	11/18/08	gross α	9.6E-04 ± 6.1E-04					
	11/04/08	11/18/08	gross β	2.6E-02 ± 2.8E-03					
	11/18/08	12/02/08	gross α	1.4E-03 ± 5.8E-04					
	11/18/08	12/02/08	gross β	3.9E-02 ± 3.8E-03					
	12/02/08	12/16/08	gross α	1.6E-03 ± 6.1E-04					
	12/02/08	12/16/08	gross β	2.3E-02 ± 2.5E-03					
	12/16/08	12/30/08	gross α	1.6E-03 ± 5.9E-04					
	12/16/08	12/30/08	gross β	4.4E-02 ± 4.0E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 16 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N478 (100-K)	01/02/08	01/15/08	gross α	1.4E-03 ± 5.9E-04	N478	01/02/08 to 07/01/08	²⁴¹ Am	8.3E-06 ± 5.7E-06	
	01/02/08	01/15/08	gross β	9.1E-03 ± 1.4E-03			⁶⁰ Co	-1.2E-05 ± 9.7E-05	U
	01/15/08	01/30/08	gross α	2.7E-03 ± 7.6E-04			¹³⁴ Cs	1.3E-04 ± 1.2E-04	U
	01/15/08	01/30/08	gross β	3.8E-02 ± 3.6E-03			¹³⁷ Cs	1.4E-05 ± 1.0E-04	U
	01/30/08	02/13/08	gross α	7.1E-04 ± 5.2E-04			¹⁵² Eu	-1.1E-04 ± 2.5E-04	U
	01/30/08	02/13/08	gross β	4.3E-03 ± 9.1E-04			¹⁵⁴ Eu	-2.5E-06 ± 2.5E-05	U
	02/13/08	02/27/08	gross α	8.6E-04 ± 5.8E-04			¹⁵⁵ Eu	3.9E-05 ± 1.9E-04	U
	02/13/08	02/27/08	gross β	3.2E-02 ± 3.3E-03			²³⁸ Pu	8.4E-06 ± 3.9E-05	U
	02/27/08	03/11/08	gross α	1.4E-03 ± 5.8E-04			^{239/240} Pu	2.3E-05 ± 1.8E-05	
	02/27/08	03/11/08	gross β	1.3E-02 ± 1.8E-03			²⁴¹ Pu	3.0E-04 ± 9.2E-04	U
	03/11/08	03/26/08	gross α	3.8E-04 ± 4.2E-04			¹⁰⁶ Ru	6.6E-04 ± 1.1E-03	U
	03/11/08	03/26/08	gross β	7.5E-03 ± 1.2E-03			¹²⁵ Sb	1.4E-04 ± 2.5E-04	U
	03/26/08	04/08/08	gross α	9.0E-04 ± 6.1E-04			⁹⁰ Sr	-1.7E-04 ± 1.8E-04	U
	03/26/08	04/08/08	gross β	7.0E-03 ± 1.2E-03			²³⁴ U	1.3E-05 ± 7.7E-06	
	04/08/08	04/21/08	gross α	1.7E-03 ± 6.5E-04			²³⁵ U	2.3E-06 ± 2.8E-06	
	04/08/08	04/21/08	gross β	9.3E-03 ± 1.5E-03			²³⁸ U	7.7E-06 ± 5.8E-06	
	04/21/08	05/07/08	gross α	1.1E-03 ± 4.7E-04					
	04/21/08	05/07/08	gross β	1.5E-02 ± 1.9E-03	N478	07/01/08 to 12/30/08	²⁴¹ Am	3.1E-05 ± 1.5E-05	
	05/07/08	05/20/08	gross α	2.1E-03 ± 7.3E-04			⁶⁰ Co	-3.8E-05 ± 8.8E-05	U
	05/07/08	05/20/08	gross β	1.1E-02 ± 1.6E-03			¹³⁴ Cs	-2.4E-05 ± 7.2E-05	U
	05/20/08	06/03/08	gross α	1.4E-03 ± 5.5E-04			¹³⁷ Cs	3.6E-05 ± 6.4E-05	U
	05/20/08	06/03/08	gross β	1.2E-02 ± 1.7E-03			¹⁵² Eu	3.1E-05 ± 1.8E-04	U
	06/03/08	06/17/08	gross α	9.2E-04 ± 6.4E-04			¹⁵⁴ Eu	2.2E-04 ± 2.4E-04	U
	06/03/08	06/17/08	gross β	1.1E-02 ± 1.5E-03			¹⁵⁵ Eu	2.6E-04 ± 1.9E-04	U
	06/17/08	07/01/08	gross α	1.6E-03 ± 6.1E-04			²³⁸ Pu	-1.8E-05 ± 2.5E-05	U
	06/17/08	07/01/08	gross β	1.4E-02 ± 1.9E-03			^{239/240} Pu	1.2E-05 ± 1.2E-05	U
	07/01/08	07/15/08	gross α	1.3E-03 ± 6.1E-04			²⁴¹ Pu	7.2E-06 ± 7.2E-05	U
	07/01/08	07/15/08	gross β	1.5E-02 ± 1.9E-03			¹⁰⁶ Ru	-2.0E-04 ± 5.8E-04	U
	07/15/08	07/29/08	gross α	1.2E-03 ± 5.2E-04			¹²⁵ Sb	3.4E-05 ± 1.5E-04	U
	07/15/08	07/29/08	gross β	1.5E-02 ± 2.0E-03			⁹⁰ Sr	-2.2E-04 ± 2.2E-04	U
	07/29/08	08/12/08	gross α	8.1E-04 ± 5.5E-04			²³⁴ U	1.6E-05 ± 9.1E-06	
	07/29/08	08/12/08	gross β	1.6E-02 ± 2.1E-03			²³⁵ U	2.5E-06 ± 3.0E-06	
	08/12/08	08/26/08	gross α	1.0E-03 ± 4.8E-04			²³⁸ U	1.2E-05 ± 7.4E-06	
	08/12/08	08/26/08	gross β	1.5E-02 ± 1.9E-03					
	08/26/08	09/09/08	gross α	8.2E-04 ± 5.6E-04					
	08/26/08	09/09/08	gross β	1.3E-02 ± 1.8E-03					
	09/09/08	09/23/08	gross α	1.8E-03 ± 6.4E-04					
	09/09/08	09/23/08	gross β	2.5E-02 ± 2.8E-03					
	09/23/08	10/09/08	gross α	1.2E-03 ± 5.0E-04					
	09/23/08	10/09/08	gross β	2.2E-02 ± 2.5E-03					
	10/09/08	10/21/08	gross α	1.3E-03 ± 5.8E-04					
	10/09/08	10/21/08	gross β	2.0E-02 ± 2.4E-03					
	10/21/08	11/04/08	gross α	4.1E-03 ± 1.0E-03					
	10/21/08	11/04/08	gross β	4.8E-02 ± 4.5E-03					
	11/04/08	11/18/08	gross α	1.1E-03 ± 5.3E-04					
	11/04/08	11/18/08	gross β	2.6E-02 ± 2.9E-03					
	11/18/08	12/02/08	gross α	2.0E-03 ± 7.1E-04					
	11/18/08	12/02/08	gross β	3.7E-02 ± 3.6E-03					
	12/02/08	12/16/08	gross α	1.7E-03 ± 6.3E-04					
	12/02/08	12/16/08	gross β	2.4E-02 ± 2.6E-03					
	12/16/08	12/30/08	gross α	1.2E-03 ± 5.2E-04					
	12/16/08	12/30/08	gross β	4.3E-02 ± 4.0E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 17 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N479 (100-K)	01/02/08	01/15/08	gross α	1.0E-03 ± 6.4E-04	N479	01/02/08 to 07/01/08	²⁴¹ Am	8.5E-06 ± 5.6E-06	
	01/02/08	01/15/08	gross β	1.1E-02 ± 1.6E-03			⁶⁰ Co	1.0E-05 ± 8.4E-05	U
	01/15/08	01/30/08	gross α	1.5E-03 ± 5.7E-04			¹³⁴ Cs	-4.5E-05 ± 7.9E-05	U
	01/15/08	01/30/08	gross β	3.8E-02 ± 3.6E-03			¹³⁷ Cs	-3.8E-05 ± 7.4E-05	U
	01/30/08	02/13/08	gross α	1.8E-04 ± 3.9E-04			¹⁵² Eu	4.2E-05 ± 1.6E-04	U
	01/30/08	02/13/08	gross β	6.7E-03 ± 1.2E-03			¹⁵⁴ Eu	1.5E-04 ± 2.6E-04	U
	02/13/08	02/27/08	gross α	2.1E-03 ± 7.8E-04			¹⁵⁵ Eu	-2.1E-04 ± 2.2E-04	U
	02/13/08	02/27/08	gross β	4.3E-02 ± 4.2E-03			²³⁸ Pu	-1.3E-05 ± 3.3E-05	U
	02/27/08	03/11/08	gross α	1.4E-03 ± 5.8E-04			^{239/240} Pu	5.7E-06 ± 1.0E-05	U
	02/27/08	03/11/08	gross β	1.3E-02 ± 1.8E-03			²⁴¹ Pu	1.3E-04 ± 4.3E-04	U
	03/11/08	03/26/08	gross α	8.2E-04 ± 5.5E-04			¹⁰⁶ Ru	4.4E-04 ± 6.4E-04	U
	03/11/08	03/26/08	gross β	9.7E-03 ± 1.4E-03			¹²⁵ Sb	1.9E-05 ± 1.5E-04	U
	03/26/08	04/08/08	gross α	1.0E-03 ± 6.2E-04			⁹⁰ Sr	-3.8E-05 ± 3.9E-05	U
	03/26/08	04/08/08	gross β	8.5E-03 ± 1.4E-03			²³⁴ U	1.4E-05 ± 8.5E-06	
	04/08/08	04/21/08	gross α	8.8E-04 ± 6.0E-04			²³⁵ U	2.3E-06 ± 2.7E-06	
	04/08/08	04/21/08	gross β	1.2E-02 ± 1.7E-03			²³⁸ U	8.3E-06 ± 5.7E-06	
	04/21/08	05/07/08	gross α	1.3E-03 ± 5.0E-04					
	04/21/08	05/07/08	gross β	1.7E-02 ± 2.0E-03	N479	07/01/08 to 12/30/08	²⁴¹ Am	3.9E-05 ± 1.7E-05	
	05/07/08	05/20/08	gross α	9.3E-04 ± 6.1E-04			⁶⁰ Co	1.8E-05 ± 9.0E-05	U
	05/07/08	05/20/08	gross β	1.1E-02 ± 1.6E-03			¹³⁴ Cs	-4.0E-06 ± 4.0E-05	U
	05/20/08	06/03/08	gross α	1.9E-03 ± 7.1E-04			¹³⁷ Cs	1.6E-05 ± 7.1E-05	U
	05/20/08	06/03/08	gross β	1.7E-02 ± 2.2E-03			¹⁵² Eu	1.5E-05 ± 1.5E-04	U
	06/03/08	06/17/08	gross α	1.5E-03 ± 6.2E-04			¹⁵⁴ Eu	2.1E-04 ± 2.5E-04	U
	06/03/08	06/17/08	gross β	9.6E-03 ± 1.4E-03			¹⁵⁵ Eu	7.2E-05 ± 1.7E-04	U
	06/17/08	07/01/08	gross α	9.4E-04 ± 5.9E-04			²³⁸ Pu	1.2E-05 ± 2.0E-05	U
	06/17/08	07/01/08	gross β	1.6E-02 ± 2.1E-03			^{239/240} Pu	2.6E-05 ± 1.6E-05	
	07/01/08	07/15/08	gross α	2.9E-03 ± 1.1E-03			²⁴¹ Pu	5.1E-04 ± 7.3E-04	U
	07/01/08	07/15/08	gross β	2.5E-02 ± 3.0E-03			¹⁰⁶ Ru	-6.1E-04 ± 6.7E-04	U
	07/15/08	07/29/08	gross α	1.2E-03 ± 5.2E-04			¹²⁵ Sb	-4.7E-05 ± 1.5E-04	U
	07/15/08	07/29/08	gross β	1.4E-02 ± 1.9E-03			⁹⁰ Sr	-1.5E-04 ± 1.5E-04	U
	07/29/08	08/12/08	gross α	6.8E-04 ± 5.1E-04			²³⁴ U	8.3E-06 ± 6.3E-06	
	07/29/08	08/12/08	gross β	1.5E-02 ± 2.0E-03			²³⁵ U	3.3E-06 ± 3.5E-06	
	08/12/08	08/26/08	gross α	1.1E-03 ± 5.0E-04			²³⁸ U	7.5E-06 ± 6.0E-06	
	08/12/08	08/26/08	gross β	1.6E-02 ± 2.1E-03					
	08/26/08	09/09/08	gross α	3.7E-04 ± 4.3E-04					
	08/26/08	09/09/08	gross β	1.3E-02 ± 1.8E-03					
	09/09/08	09/23/08	gross α	2.3E-03 ± 7.1E-04					
	09/09/08	09/23/08	gross β	2.5E-02 ± 2.7E-03					
	09/23/08	10/09/08	gross α	2.0E-03 ± 6.2E-04					
	09/23/08	10/09/08	gross β	2.4E-02 ± 2.6E-03					
	10/09/08	10/21/08	gross α	1.0E-03 ± 6.6E-04					
	10/09/08	10/21/08	gross β	2.0E-02 ± 2.5E-03					
	10/21/08	11/04/08	gross α	3.0E-03 ± 8.3E-04					
	10/21/08	11/04/08	gross β	5.4E-02 ± 4.9E-03					
	11/04/08	11/18/08	gross α	1.2E-03 ± 5.3E-04					
	11/04/08	11/18/08	gross β	2.6E-02 ± 2.8E-03					
	11/18/08	12/02/08	gross α	1.1E-03 ± 5.1E-04					
	11/18/08	12/02/08	gross β	3.5E-02 ± 3.5E-03					
	12/02/08	12/16/08	gross α	1.2E-03 ± 5.1E-04					
	12/02/08	12/16/08	gross β	2.3E-02 ± 2.5E-03					
	12/16/08	12/30/08	gross α	2.1E-03 ± 7.0E-04					
	12/16/08	12/30/08	gross β	5.1E-02 ± 4.6E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 18 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N534 (100-K)	01/02/08	01/15/08	gross α	1.7E-04 ± 3.6E-04	N534	01/02/08 to 06/17/08	⁶⁰ Co	-3.0E-06 ± 3.0E-05	U
	01/02/08	01/15/08	gross β	7.2E-03 ± 1.3E-03			¹³⁴ Cs	-1.1E-05 ± 7.1E-05	U
	01/15/08	01/30/08	gross α	2.2E-03 ± 7.1E-04			¹³⁷ Cs	-3.3E-05 ± 6.1E-05	U
	01/15/08	01/30/08	gross β	3.6E-02 ± 3.9E-03			¹⁵² Eu	-7.1E-05 ± 1.3E-04	U
	01/30/08	02/13/08	gross α	4.0E-04 ± 4.4E-04			¹⁵⁴ Eu	-2.5E-06 ± 2.5E-05	U
	01/30/08	02/13/08	gross β	3.4E-03 ± 8.2E-04			¹⁵⁵ Eu	2.0E-05 ± 1.4E-04	U
	02/13/08	02/27/08	gross α	2.7E-03 ± 7.9E-04			²³⁸ Pu	-6.0E-06 ± 9.0E-06	U
	02/13/08	02/27/08	gross β	3.1E-02 ± 3.5E-03			^{239/240} Pu	1.5E-06 ± 3.1E-06	U
	02/27/08	03/11/08	gross α	1.1E-03 ± 5.3E-04			¹⁰⁶ Ru	-4.9E-04 ± 5.5E-04	U
	02/27/08	03/11/08	gross β	9.3E-03 ± 1.5E-03			¹²⁵ Sb	-3.7E-05 ± 1.3E-04	U
	03/11/08	03/25/08	gross α	1.2E-03 ± 5.3E-04			⁹⁰ Sr	-2.1E-04 ± 2.2E-04	U
	03/11/08	03/25/08	gross β	1.1E-02 ± 1.7E-03			²³⁴ U	1.2E-05 ± 7.9E-06	
	03/25/08	04/07/08	gross α	6.6E-04 ± 5.4E-04			²³⁵ U	1.6E-06 ± 2.4E-06	U
	03/25/08	04/07/08	gross β	8.9E-03 ± 1.5E-03			²³⁸ U	4.4E-06 ± 4.5E-06	U
	04/07/08	04/21/08	gross α	9.5E-04 ± 5.9E-04					
	04/07/08	04/21/08	gross β	9.5E-03 ± 1.5E-03					
	04/21/08	05/07/08	gross α	1.2E-03 ± 4.9E-04					
	04/21/08	05/07/08	gross β	1.3E-02 ± 1.8E-03					
	05/07/08	05/20/08	gross α	1.5E-03 ± 6.2E-04					
	05/07/08	05/20/08	gross β	9.9E-03 ± 1.6E-03					
	05/20/08	06/04/08	gross α	8.0E-04 ± 5.3E-04					
	05/20/08	06/04/08	gross β	1.2E-02 ± 1.7E-03					
	06/04/08	06/17/08	gross α	4.3E-04 ± 4.7E-04					
	06/04/08	06/17/08	gross β	8.5E-03 ± 1.4E-03					
N535 (100-K)	01/02/08	01/15/08	gross α	5.2E-04 ± 5.0E-04	N535	01/02/08 to 06/17/08	⁶⁰ Co	1.0E-07 ± 1.0E-06	U
	01/02/08	01/15/08	gross β	9.4E-03 ± 1.5E-03			¹³⁴ Cs	-9.9E-07 ± 9.9E-06	U
	01/15/08	01/30/08	gross α	1.3E-03 ± 5.3E-04			¹³⁷ Cs	1.3E-04 ± 9.3E-05	
	01/15/08	01/30/08	gross β	3.0E-02 ± 3.3E-03			¹⁵² Eu	4.6E-07 ± 4.8E-07	U
	01/30/08	02/13/08	gross α	4.0E-04 ± 4.4E-04			¹⁵⁴ Eu	-2.7E-04 ± 2.8E-04	U
	01/30/08	02/13/08	gross β	4.5E-03 ± 9.6E-04			¹⁵⁵ Eu	-3.4E-05 ± 1.6E-04	U
	02/13/08	02/27/08	gross α	1.9E-03 ± 6.6E-04			²³⁸ Pu	1.0E-05 ± 1.5E-05	U
	02/13/08	02/27/08	gross β	3.4E-02 ± 3.8E-03			^{239/240} Pu	5.9E-06 ± 6.9E-06	U
	02/27/08	03/11/08	gross α	7.5E-04 ± 5.6E-04			¹⁰⁶ Ru	-3.5E-04 ± 5.9E-04	U
	02/27/08	03/11/08	gross β	1.2E-02 ± 1.8E-03			¹²⁵ Sb	-2.4E-05 ± 1.4E-04	U
	03/11/08	03/25/08	gross α	5.0E-04 ± 4.7E-04			⁹⁰ Sr	-1.7E-04 ± 1.7E-04	U
	03/11/08	03/25/08	gross β	1.0E-02 ± 1.6E-03			²³⁴ U	1.3E-05 ± 7.9E-06	
	03/25/08	04/07/08	gross α	5.2E-04 ± 5.0E-04			²³⁵ U	7.1E-07 ± 2.2E-06	U
	03/25/08	04/07/08	gross β	5.9E-03 ± 1.2E-03			²³⁸ U	9.9E-06 ± 6.8E-06	
	04/07/08	04/21/08	gross α	1.6E-03 ± 6.0E-04					
	04/07/08	04/21/08	gross β	8.8E-03 ± 1.4E-03					
	04/21/08	05/07/08	gross α	1.3E-03 ± 5.1E-04					
	04/21/08	05/07/08	gross β	1.3E-02 ± 1.8E-03					
	05/07/08	05/20/08	gross α	8.0E-04 ± 5.8E-04					
	05/07/08	05/20/08	gross β	8.6E-03 ± 1.4E-03					
	05/20/08	06/04/08	gross α	8.8E-04 ± 5.4E-04					
	05/20/08	06/04/08	gross β	9.3E-03 ± 1.4E-03					
	06/04/08	06/17/08	gross α	5.5E-04 ± 5.1E-04					
	06/04/08	06/17/08	gross β	6.8E-03 ± 1.3E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 19 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N102	01/02/08	01/15/08	gross α	8.8E-04 ± 5.9E-04	N102	01/02/08 to 07/01/08	²⁴¹ Am	7.6E-06 ± 5.5E-06	
(100-N)	01/02/08	01/15/08	gross β	8.9E-03 ± 1.5E-03			⁶⁰ Co	5.1E-05 ± 8.9E-05	U
	01/15/08	01/30/08	gross α	2.0E-03 ± 6.7E-04			¹³⁴ Cs	-1.8E-05 ± 7.2E-05	U
	01/15/08	01/30/08	gross β	3.3E-02 ± 3.7E-03			¹³⁷ Cs	4.9E-05 ± 7.1E-05	U
	01/30/08	02/13/08	gross α	5.3E-04 ± 5.0E-04			¹⁵² Eu	-1.2E-04 ± 1.7E-04	U
	01/30/08	02/13/08	gross β	4.2E-03 ± 9.4E-04			¹⁵⁴ Eu	1.8E-04 ± 2.3E-04	U
	02/13/08	02/27/08	gross α	2.2E-03 ± 7.6E-04			¹⁵⁵ Eu	5.3E-05 ± 1.6E-04	U
	02/13/08	02/27/08	gross β	3.6E-02 ± 4.1E-03			²³⁸ Pu	5.0E-06 ± 1.5E-05	U
	02/27/08	03/12/08	gross α	6.4E-04 ± 5.2E-04			^{239/240} Pu	3.0E-06 ± 3.6E-06	
	02/27/08	03/12/08	gross β	1.2E-02 ± 1.8E-03			¹⁰⁶ Ru	3.4E-04 ± 7.0E-04	U
	03/12/08	03/26/08	gross α	8.5E-04 ± 5.8E-04			¹²⁵ Sb	-4.9E-05 ± 1.5E-04	U
	03/12/08	03/26/08	gross β	1.2E-02 ± 1.8E-03			⁹⁰ Sr	-1.3E-04 ± 1.4E-04	U
	03/26/08	04/08/08	gross α	2.2E-03 ± 7.5E-04			²³⁴ U	1.6E-05 ± 9.2E-06	
	03/26/08	04/08/08	gross β	1.1E-02 ± 1.7E-03			²³⁵ U	3.9E-06 ± 3.8E-06	
	04/08/08	04/23/08	gross α	1.1E-03 ± 4.9E-04			²³⁸ U	1.1E-05 ± 7.9E-06	
	04/08/08	04/23/08	gross β	1.0E-02 ± 1.6E-03					
	04/23/08	05/07/08	gross α	1.5E-03 ± 5.8E-04	N102	07/01/08 to 12/30/08	²⁴¹ Am	5.5E-07 ± 5.5E-06	U
	04/23/08	05/07/08	gross β	1.5E-02 ± 2.0E-03			⁶⁰ Co	-2.1E-05 ± 7.1E-05	U
	05/07/08	05/20/08	gross α	1.7E-04 ± 3.8E-04			¹³⁴ Cs	1.8E-05 ± 6.5E-05	U
	05/07/08	05/20/08	gross β	9.3E-03 ± 1.5E-03			¹³⁷ Cs	-4.6E-05 ± 6.5E-05	U
	05/20/08	06/04/08	gross α	1.1E-03 ± 4.8E-04			¹⁵² Eu	-5.7E-05 ± 1.5E-04	U
	05/20/08	06/04/08	gross β	1.2E-02 ± 1.7E-03			¹⁵⁴ Eu	1.2E-04 ± 2.2E-04	U
	06/04/08	06/17/08	gross α	5.4E-04 ± 5.1E-04			¹⁵⁵ Eu	-7.5E-05 ± 1.4E-04	U
	06/04/08	06/17/08	gross β	7.7E-03 ± 1.4E-03			²³⁸ Pu	1.1E-05 ± 1.1E-05	U
	06/17/08	07/01/08	gross α	1.2E-03 ± 9.9E-04			^{239/240} Pu	2.2E-06 ± 2.6E-06	
	06/17/08	07/01/08	gross β	9.2E-03 ± 1.9E-03			¹⁰⁶ Ru	-5.1E-04 ± 5.7E-04	U
	07/01/08	07/15/08	gross α	9.4E-04 ± 6.1E-04			¹²⁵ Sb	2.0E-05 ± 1.3E-04	U
	07/01/08	07/15/08	gross β	1.1E-02 ± 1.6E-03			⁹⁰ Sr	-1.3E-04 ± 1.4E-04	U
	07/15/08	07/29/08	gross α	1.3E-03 ± 5.6E-04			²³⁴ U	1.6E-05 ± 9.2E-06	
	07/15/08	07/29/08	gross β	1.3E-02 ± 1.9E-03			²³⁵ U	3.9E-06 ± 3.8E-06	
	07/29/08	08/12/08	gross α	7.2E-04 ± 5.2E-04			²³⁸ U	1.2E-05 ± 7.2E-06	
	07/29/08	08/12/08	gross β	1.3E-02 ± 1.8E-03					
	08/12/08	08/26/08	gross α	9.6E-04 ± 5.9E-04					
	08/12/08	08/26/08	gross β	1.2E-02 ± 1.7E-03					
	08/26/08	09/09/08	gross α	1.1E-03 ± 6.8E-04					
	08/26/08	09/09/08	gross β	1.5E-02 ± 2.2E-03					
	09/09/08	09/23/08	gross α	1.8E-03 ± 6.9E-04					
	09/09/08	09/23/08	gross β	2.6E-02 ± 3.1E-03					
	09/23/08	10/08/08	gross α	1.7E-03 ± 6.0E-04					
	09/23/08	10/08/08	gross β	2.5E-02 ± 3.0E-03					
	10/08/08	10/21/08	gross α	1.0E-03 ± 6.3E-04					
	10/08/08	10/21/08	gross β	1.8E-02 ± 2.4E-03					
	10/21/08	11/04/08	gross α	3.3E-03 ± 9.0E-04					
	10/21/08	11/04/08	gross β	4.1E-02 ± 4.4E-03					
	11/04/08	11/18/08	gross α	1.8E-03 ± 6.4E-04					
	11/04/08	11/18/08	gross β	2.3E-02 ± 2.8E-03					
	11/18/08	12/02/08	gross α	2.0E-03 ± 7.0E-04					
	11/18/08	12/02/08	gross β	3.5E-02 ± 3.9E-03					
	12/02/08	12/16/08	gross α	8.4E-04 ± 5.6E-04					
	12/02/08	12/16/08	gross β	2.0E-02 ± 2.5E-03					
	12/16/08	12/30/08	gross α	1.2E-03 ± 5.5E-04					
	12/16/08	12/30/08	gross β	3.6E-02 ± 4.0E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 20 of 82)

N103 (100-N)	01/02/08	01/15/08	gross α	9.8E-04 ± 6.1E-04	N103	01/02/08 to 07/01/08	²⁴¹ Am	7.7E-06 ± 5.1E-06	
	01/02/08	01/15/08	gross β	1.1E-02 ± 1.6E-03			⁶⁰ Co	-3.0E-05 ± 7.3E-05	U
	01/15/08	01/30/08	gross α	1.6E-03 ± 6.0E-04			¹³⁴ Cs	-4.4E-05 ± 5.9E-05	U
	01/15/08	01/30/08	gross β	3.1E-02 ± 3.1E-03			¹³⁷ Cs	-7.3E-06 ± 5.4E-05	U
	01/30/08	02/13/08	gross α	2.9E-04 ± 4.1E-04			¹⁵² Eu	-4.3E-05 ± 1.3E-04	U
	01/30/08	02/13/08	gross β	3.6E-03 ± 8.3E-04			¹⁵⁴ Eu	9.5E-05 ± 1.9E-04	U
	02/13/08	02/27/08	gross α	1.3E-03 ± 5.6E-04			¹⁵⁵ Eu	4.3E-05 ± 1.3E-04	U
	02/13/08	02/27/08	gross β	3.1E-02 ± 3.1E-03			²³⁸ Pu	2.0E-06 ± 1.2E-05	U
	02/27/08	03/12/08	gross α	6.2E-04 ± 5.1E-04			^{239/240} Pu	2.0E-06 ± 4.0E-06	U
	02/27/08	03/12/08	gross β	9.9E-03 ± 1.4E-03			¹⁰⁶ Ru	-1.2E-04 ± 5.4E-04	U
	03/12/08	03/26/08	gross α	8.8E-04 ± 5.9E-04			¹²⁵ Sb	1.2E-04 ± 1.3E-04	U
	03/12/08	03/26/08	gross β	8.8E-03 ± 1.4E-03			⁹⁰ Sr	-2.3E-04 ± 2.4E-04	U
	03/26/08	04/08/08	gross α	6.6E-04 ± 5.4E-04			²³⁴ U	6.9E-06 ± 5.8E-06	
	03/26/08	04/08/08	gross β	9.7E-03 ± 1.5E-03			²³⁵ U	5.3E-06 ± 4.5E-06	
	04/08/08	04/23/08	gross α	1.3E-03 ± 5.7E-04			²³⁸ U	1.2E-05 ± 7.5E-06	
	04/08/08	04/23/08	gross β	1.2E-02 ± 1.7E-03	N103	07/01/08 to 12/30/08	²⁴¹ Am	5.2E-06 ± 5.4E-06	U
	04/23/08	05/07/08	gross α	3.2E-03 ± 8.6E-04			⁶⁰ Co	-3.0E-05 ± 6.7E-05	U
	04/23/08	05/07/08	gross β	1.8E-02 ± 2.1E-03			¹³⁴ Cs	2.9E-06 ± 2.9E-05	U
	05/07/08	05/20/08	gross α	9.0E-04 ± 6.1E-04			¹³⁷ Cs	2.9E-06 ± 2.9E-05	U
	05/07/08	05/20/08	gross β	1.4E-02 ± 1.9E-03			¹⁵² Eu	1.4E-04 ± 1.6E-04	U
	05/20/08	06/04/08	gross α	8.8E-04 ± 5.4E-04			¹⁵⁴ Eu	-1.6E-04 ± 2.0E-04	U
	05/20/08	06/04/08	gross β	1.3E-02 ± 1.6E-03			¹⁵⁵ Eu	2.4E-05 ± 1.7E-04	U
	06/04/08	06/17/08	gross α	5.1E-04 ± 4.8E-04			²³⁸ Pu	-5.6E-06 ± 1.4E-05	U
	06/04/08	06/17/08	gross β	8.1E-03 ± 1.3E-03			^{239/240} Pu	1.8E-05 ± 1.1E-05	
	06/17/08	07/01/08	gross α	9.9E-04 ± 6.1E-04			¹⁰⁶ Ru	-2.7E-05 ± 2.7E-04	U
	06/17/08	07/01/08	gross β	1.4E-02 ± 1.8E-03			¹²⁵ Sb	1.1E-04 ± 1.3E-04	U
	07/01/08	07/15/08	gross α	8.0E-04 ± 6.2E-04			⁹⁰ Sr	-4.7E-04 ± 4.9E-04	U
	07/01/08	07/15/08	gross β	1.3E-02 ± 1.8E-03			²³⁴ U	1.7E-05 ± 1.0E-05	
	07/15/08	07/29/08	gross α	1.2E-03 ± 5.2E-04			²³⁵ U	5.2E-06 ± 4.6E-06	
	07/15/08	07/29/08	gross β	1.3E-02 ± 1.7E-03			²³⁸ U	8.6E-06 ± 6.5E-06	
	07/29/08	08/12/08	gross α	6.1E-04 ± 4.9E-04					
	07/29/08	08/12/08	gross β	1.3E-02 ± 1.7E-03					
	08/12/08	08/26/08	gross α	9.6E-04 ± 5.9E-04					
	08/12/08	08/26/08	gross β	1.2E-02 ± 1.6E-03					
	08/26/08	09/09/08	gross α	6.5E-04 ± 5.2E-04					
	08/26/08	09/09/08	gross β	1.2E-02 ± 1.6E-03					
	09/09/08	09/23/08	gross α	1.2E-03 ± 8.0E-04					
	09/09/08	09/23/08	gross β	3.6E-02 ± 3.8E-03					
	09/23/08	10/08/08	gross α	1.7E-03 ± 5.9E-04					
	09/23/08	10/08/08	gross β	2.8E-02 ± 2.9E-03					
	10/08/08	10/21/08	gross α	1.8E-03 ± 7.2E-04					
	10/08/08	10/21/08	gross β	1.9E-02 ± 2.4E-03					
	10/21/08	11/04/08	gross α	2.7E-03 ± 8.0E-04					
	10/21/08	11/04/08	gross β	3.9E-02 ± 3.7E-03					
	11/04/08	11/18/08	gross α	2.4E-03 ± 7.7E-04					
	11/04/08	11/18/08	gross β	2.3E-02 ± 2.6E-03					
	11/18/08	12/02/08	gross α	2.2E-03 ± 7.5E-04					
	11/18/08	12/02/08	gross β	3.0E-02 ± 3.1E-03					
	12/02/08	12/16/08	gross α	1.3E-03 ± 5.6E-04					
	12/02/08	12/16/08	gross β	2.1E-02 ± 2.4E-03					
	12/16/08	12/30/08	gross α	2.3E-03 ± 7.4E-04					
	12/16/08	12/30/08	gross β	3.1E-02 ± 3.2E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 21 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N106	01/02/08	01/15/08	gross α	7.4E-04 ± 5.5E-04	N106	01/02/08 to 07/01/08	²⁴¹ Am	4.9E-06 ± 4.1E-06	
(100-N)	01/02/08	01/15/08	gross β	7.6E-03 ± 1.3E-03			⁶⁰ Co	7.2E-06 ± 6.3E-05	U
	01/15/08	01/30/08	gross α	2.4E-03 ± 7.3E-04			¹³⁴ Cs	6.7E-06 ± 6.2E-05	U
	01/15/08	01/30/08	gross β	3.1E-02 ± 3.1E-03			¹³⁷ Cs	-3.0E-05 ± 5.6E-05	U
	01/30/08	02/13/08	gross α	4.0E-04 ± 4.5E-04			¹⁵² Eu	5.2E-05 ± 1.4E-04	U
	01/30/08	02/13/08	gross β	2.9E-03 ± 7.5E-04			¹⁵⁴ Eu	-2.6E-05 ± 1.9E-04	U
	02/13/08	02/27/08	gross α	1.9E-03 ± 6.4E-04			¹⁵⁵ Eu	-4.7E-05 ± 1.5E-04	U
	02/13/08	02/27/08	gross β	2.9E-02 ± 3.0E-03			²³⁸ Pu	7.9E-06 ± 1.1E-05	U
	02/27/08	03/12/08	gross α	1.6E-03 ± 6.1E-04			^{239/240} Pu	3.2E-06 ± 4.6E-06	U
	02/27/08	03/12/08	gross β	1.0E-02 ± 1.5E-03			¹⁰⁶ Ru	3.1E-04 ± 5.2E-04	U
	03/12/08	03/26/08	gross α	1.2E-03 ± 5.4E-04			¹²⁵ Sb	-5.2E-05 ± 1.2E-04	U
	03/12/08	03/26/08	gross β	9.2E-03 ± 1.4E-03			⁹⁰ Sr	-9.8E-05 ± 1.0E-04	U
	03/26/08	04/08/08	gross α	6.6E-04 ± 5.4E-04			²³⁴ U	1.0E-05 ± 6.4E-06	
	03/26/08	04/08/08	gross β	6.1E-03 ± 1.1E-03			²³⁵ U	3.5E-06 ± 4.0E-06	U
	04/08/08	04/23/08	gross α	8.9E-04 ± 5.5E-04			²³⁸ U	9.1E-06 ± 6.3E-06	
	04/08/08	04/23/08	gross β	9.7E-03 ± 1.4E-03					
	04/23/08	05/07/08	gross α	1.7E-03 ± 6.1E-04	N106	07/01/08 to 12/30/08	²⁴¹ Am	4.9E-06 ± 4.3E-06	U
	04/23/08	05/07/08	gross β	1.4E-02 ± 1.8E-03			⁶⁰ Co	-7.8E-05 ± 1.1E-04	U
	05/07/08	05/20/08	gross α	1.0E-03 ± 6.2E-04			¹³⁴ Cs	6.7E-05 ± 1.0E-04	U
	05/07/08	05/20/08	gross β	1.1E-02 ± 1.6E-03			¹³⁷ Cs	1.2E-05 ± 9.0E-05	U
	05/20/08	06/04/08	gross α	1.1E-03 ± 4.7E-04			¹⁵² Eu	-4.2E-05 ± 2.4E-04	U
	05/20/08	06/04/08	gross β	1.0E-02 ± 1.4E-03			¹⁵⁴ Eu	3.0E-04 ± 3.4E-04	U
	06/04/08	06/17/08	gross α	5.2E-04 ± 5.0E-04			¹⁵⁵ Eu	-5.5E-05 ± 1.8E-04	U
	06/04/08	06/17/08	gross β	6.7E-03 ± 1.2E-03			²³⁸ Pu	-7.0E-07 ± 7.0E-06	U
	06/17/08	07/01/08	gross α	1.4E-03 ± 5.8E-04			^{239/240} Pu	2.1E-06 ± 3.8E-06	U
	06/17/08	07/01/08	gross β	1.2E-02 ± 1.6E-03			¹⁰⁶ Ru	5.1E-04 ± 8.3E-04	U
	07/01/08	07/15/08	gross α	1.5E-03 ± 6.3E-04			¹²⁵ Sb	-4.0E-05 ± 2.3E-04	U
	07/01/08	07/15/08	gross β	1.4E-02 ± 1.8E-03			⁹⁰ Sr	-1.9E-05 ± 2.0E-05	U
	07/15/08	07/29/08	gross α	7.2E-04 ± 5.2E-04			²³⁴ U	1.7E-05 ± 9.5E-06	
	07/15/08	07/29/08	gross β	1.1E-02 ± 1.5E-03			²³⁵ U	6.0E-06 ± 4.8E-06	
	07/29/08	08/12/08	gross α	1.9E-03 ± 6.5E-04			²³⁸ U	1.6E-05 ± 9.0E-06	
	07/29/08	08/12/08	gross β	1.3E-02 ± 1.7E-03					
	08/12/08	08/26/08	gross α	6.3E-04 ± 5.0E-04					
	08/12/08	08/26/08	gross β	1.3E-02 ± 1.7E-03					
	08/26/08	09/09/08	gross α	5.2E-04 ± 4.7E-04					
	08/26/08	09/09/08	gross β	1.0E-02 ± 1.5E-03					
	09/09/08	09/23/08	gross α	1.4E-03 ± 5.7E-04					
	09/09/08	09/23/08	gross β	2.4E-02 ± 2.6E-03					
	09/23/08	10/08/08	gross α	1.5E-03 ± 5.6E-04					
	09/23/08	10/08/08	gross β	2.3E-02 ± 2.6E-03					
	10/08/08	10/21/08	gross α	1.7E-03 ± 6.4E-04					
	10/08/08	10/21/08	gross β	2.0E-02 ± 2.3E-03					
	10/21/08	11/04/08	gross α	2.5E-03 ± 7.7E-04					
	10/21/08	11/04/08	gross β	4.0E-02 ± 3.8E-03					
	11/04/08	11/18/08	gross α	1.6E-03 ± 6.1E-04					
	11/04/08	11/18/08	gross β	2.3E-02 ± 2.6E-03					
	11/18/08	12/02/08	gross α	2.6E-03 ± 7.9E-04					
	11/18/08	12/02/08	gross β	2.8E-02 ± 2.9E-03					
	12/02/08	12/16/08	gross α	1.3E-03 ± 5.6E-04					
	12/02/08	12/16/08	gross β	2.9E-02 ± 3.0E-03					
	12/16/08	12/30/08	gross α	2.0E-03 ± 6.9E-04					
	12/16/08	12/30/08	gross β	3.2E-02 ± 3.2E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 22 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N565 (100-IU2/6)	01/24/08	02/13/08	gross α	7.8E-04 ± 3.7E-04	N565	01/24/08 to 04/02/08	²⁴¹ Am	9.3E-06 ± 1.0E-05	U
	01/24/08	02/13/08	gross β	1.8E-02 ± 2.2E-03			⁶⁰ Co	1.2E-04 ± 2.6E-04	U
	02/13/08	02/27/08	gross α	1.2E-03 ± 5.2E-04			¹³⁴ Cs	2.1E-04 ± 3.0E-04	U
	02/13/08	02/27/08	gross β	2.5E-02 ± 2.9E-03			¹³⁷ Cs	-1.6E-04 ± 2.7E-04	U
	02/27/08	03/12/08	gross α	1.2E-03 ± 5.4E-04			¹⁵² Eu	1.9E-04 ± 6.3E-04	U
	02/27/08	03/12/08	gross β	1.1E-02 ± 1.7E-03			¹⁵⁴ Eu	-4.6E-04 ± 8.0E-04	U
	03/12/08	03/26/08	gross α	7.5E-04 ± 5.5E-04			¹⁵⁵ Eu	1.0E-04 ± 4.7E-04	U
	03/12/08	03/26/08	gross β	8.3E-03 ± 1.4E-03			²³⁸ Pu	8.0E-06 ± 2.3E-05	U
	03/26/08	04/02/08	gross α	9.3E-04 ± 8.8E-04			^{239/240} Pu	4.0E-06 ± 5.8E-06	U
	03/26/08	04/02/08	gross β	7.2E-03 ± 1.7E-03			¹⁰⁶ Ru	1.1E-04 ± 1.1E-03	U
N566 (100-IU2/6)	01/24/08	02/13/08	gross α	1.6E-03 ± 5.1E-04	N566	01/24/08 to 04/02/08	¹²⁵ Sb	-2.1E-04 ± 6.3E-04	U
	01/24/08	02/13/08	gross β	1.9E-02 ± 2.2E-03			⁹⁰ Sr	-6.1E-04 ± 6.3E-04	U
	02/13/08	02/27/08	gross α	1.2E-03 ± 5.2E-04			²³⁴ U	6.5E-06 ± 1.3E-05	U
	02/13/08	02/27/08	gross β	2.4E-02 ± 2.9E-03			²³⁵ U	1.4E-05 ± 1.2E-05	U
	02/27/08	03/12/08	gross α	1.2E-03 ± 5.4E-04			²³⁸ U	6.5E-06 ± 9.5E-06	U
	02/27/08	03/12/08	gross β	1.0E-02 ± 1.6E-03			²⁴¹ Am	1.6E-05 ± 1.2E-05	
	03/12/08	03/26/08	gross α	9.8E-04 ± 6.1E-04			⁶⁰ Co	1.7E-05 ± 1.7E-04	U
	03/12/08	03/26/08	gross β	7.5E-03 ± 1.3E-03			¹³⁴ Cs	-2.5E-05 ± 1.9E-04	U
	03/26/08	04/02/08	gross α	3.0E-04 ± 6.5E-04			¹³⁷ Cs	6.9E-05 ± 1.6E-04	U
	03/26/08	04/02/08	gross β	9.7E-03 ± 2.0E-03			¹⁵² Eu	-1.1E-04 ± 4.0E-04	U
							¹⁵⁴ Eu	-6.1E-05 ± 5.0E-04	U
							¹⁵⁵ Eu	1.7E-04 ± 4.0E-04	U
							²³⁸ Pu	-2.3E-06 ± 2.3E-05	U
							^{239/240} Pu	2.3E-06 ± 4.7E-06	U
							¹⁰⁶ Ru	1.1E-03 ± 1.6E-03	U
							¹²⁵ Sb	2.9E-04 ± 3.6E-04	U
							⁹⁰ Sr	-4.8E-04 ± 4.9E-04	U
							²³⁴ U	2.4E-05 ± 1.5E-05	
							²³⁵ U	7.4E-06 ± 7.8E-06	
							²³⁸ U	1.7E-05 ± 1.2E-05	

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 23 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N019 (200-E)	12/31/07	01/14/08	gross α	1.1E-03 ± 5.0E-04	N019	12/31/07 to 06/30/08	⁶⁰ Co	-5.4E-05 ± 9.9E-05	U
	12/31/07	01/14/08	gross β	7.6E-03 ± 1.2E-03			¹³⁴ Cs	-4.2E-06 ± 4.2E-05	U
	01/14/08	01/29/08	gross α	1.7E-03 ± 6.1E-04			¹³⁷ Cs	1.9E-05 ± 7.3E-05	U
	01/14/08	01/29/08	gross β	3.2E-02 ± 3.2E-03			¹⁵² Eu	2.2E-05 ± 1.5E-04	U
	01/29/08	02/12/08	gross α	5.7E-05 ± 3.0E-04			¹⁵⁴ Eu	8.8E-05 ± 1.9E-04	U
	01/29/08	02/12/08	gross β	4.7E-03 ± 9.6E-04			¹⁵⁵ Eu	-1.1E-04 ± 1.7E-04	U
	02/12/08	02/25/08	gross α	7.8E-04 ± 5.7E-04			²³⁸ Pu	-4.6E-06 ± 9.1E-06	U
	02/12/08	02/25/08	gross β	2.9E-02 ± 3.1E-03			^{239/240} Pu	6.6E-07 ± 6.6E-06	U
	02/25/08	03/11/08	gross α	1.0E-03 ± 4.8E-04			¹⁰⁶ Ru	-2.4E-04 ± 5.8E-04	U
	02/25/08	03/11/08	gross β	1.5E-02 ± 1.9E-03			¹²⁵ Sb	-6.0E-05 ± 1.4E-04	U
	03/11/08	03/25/08	gross α	1.3E-03 ± 5.5E-04			⁹⁰ Sr	-2.3E-04 ± 2.4E-04	U
	03/11/08	03/25/08	gross β	9.9E-03 ± 1.5E-03			²³⁴ U	1.3E-05 ± 8.8E-06	
	03/25/08	04/07/08	gross α	1.4E-03 ± 5.9E-04			²³⁵ U	6.8E-06 ± 5.2E-06	
	03/25/08	04/07/08	gross β	1.3E-02 ± 1.8E-03			²³⁸ U	8.9E-06 ± 6.0E-06	
	04/07/08	04/21/08	gross α	1.5E-03 ± 5.9E-04					
	04/07/08	04/21/08	gross β	1.0E-02 ± 1.5E-03	N019	06/30/08 to 12/30/08	⁶⁰ Co	-6.4E-05 ± 1.3E-04	U
	04/21/08	05/06/08	gross α	1.7E-03 ± 6.0E-04			¹³⁴ Cs	6.0E-05 ± 1.1E-04	U
	04/21/08	05/06/08	gross β	1.6E-02 ± 1.9E-03			¹³⁷ Cs	1.6E-04 ± 1.7E-04	U
	05/06/08	05/19/08	gross α	4.2E-04 ± 4.7E-04			¹⁵² Eu	-9.2E-05 ± 2.6E-04	U
	05/06/08	05/19/08	gross β	1.2E-02 ± 1.7E-03			¹⁵⁴ Eu	8.0E-05 ± 3.6E-04	U
	05/19/08	06/02/08	gross α	1.2E-03 ± 5.1E-04			¹⁵⁵ Eu	2.0E-05 ± 2.0E-04	U
	05/19/08	06/02/08	gross β	1.4E-02 ± 1.8E-03			²³⁸ Pu	8.2E-06 ± 2.2E-05	U
	06/02/08	06/16/08	gross α	9.7E-04 ± 6.0E-04			^{239/240} Pu	4.1E-06 ± 6.3E-06	U
	06/02/08	06/16/08	gross β	8.2E-03 ± 1.3E-03			¹⁰⁶ Ru	5.7E-04 ± 9.4E-04	U
	06/16/08	06/30/08	gross α	1.6E-03 ± 6.0E-04			¹²⁵ Sb	-1.1E-04 ± 2.3E-04	U
	06/16/08	06/30/08	gross β	1.5E-02 ± 1.9E-03			⁹⁰ Sr	-4.1E-04 ± 4.2E-04	U
	06/30/08	07/14/08	gross α	2.4E-03 ± 8.3E-04			²³⁴ U	3.2E-05 ± 1.7E-05	
	06/30/08	07/14/08	gross β	1.6E-02 ± 2.0E-03			²³⁵ U	3.6E-06 ± 6.4E-06	U
	07/14/08	07/28/08	gross α	1.1E-03 ± 5.0E-04			²³⁸ U	6.6E-06 ± 5.9E-06	
	07/14/08	07/28/08	gross β	1.3E-02 ± 1.7E-03					
	07/28/08	08/11/08	gross α	7.4E-04 ± 5.3E-04					
	07/28/08	08/11/08	gross β	1.5E-02 ± 1.9E-03					
	08/11/08	08/25/08	gross α	7.2E-04 ± 5.2E-04					
	08/11/08	08/25/08	gross β	1.3E-02 ± 1.7E-03					
	08/25/08	09/08/08	gross α	1.2E-03 ± 5.2E-04					
	08/25/08	09/08/08	gross β	1.3E-02 ± 1.7E-03					
	09/08/08	09/22/08	gross α	4.8E-03 ± 1.5E-03					
	09/08/08	09/22/08	gross β	2.5E-02 ± 3.3E-03					
	11/17/08	12/01/08	gross α	1.4E-03 ± 6.0E-04					
	11/17/08	12/01/08	gross β	2.6E-02 ± 2.8E-03					
	12/01/08	12/15/08	gross α	1.5E-03 ± 6.0E-04					
	12/01/08	12/15/08	gross β	1.4E-02 ± 1.9E-03					
	12/15/08	12/30/08	gross α	1.8E-03 ± 6.5E-04					
	12/15/08	12/30/08	gross β	2.9E-02 ± 3.0E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 24 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N158 (200-E)	12/31/07	01/14/08	gross α	1.2E-03 ± 5.2E-04	N158	12/31/07 to 06/30/08	⁶⁰ Co	-1.1E-04 ± 1.1E-04	U
	12/31/07	01/14/08	gross β	9.6E-03 ± 1.4E-03			¹³⁴ Cs	6.9E-05 ± 8.2E-05	U
	01/14/08	01/29/08	gross α	1.0E-03 ± 4.9E-04			¹³⁷ Cs	1.2E-04 ± 1.3E-04	
	01/14/08	01/29/08	gross β	4.0E-02 ± 3.8E-03			¹⁵² Eu	2.8E-05 ± 1.6E-04	U
	01/29/08	02/12/08	gross α	4.0E-04 ± 4.5E-04			¹⁵⁴ Eu	1.2E-04 ± 2.2E-04	U
	01/29/08	02/12/08	gross β	6.6E-03 ± 1.2E-03			¹⁵⁵ Eu	-8.2E-07 ± 8.2E-06	U
	02/12/08	02/25/08	gross α	1.1E-03 ± 5.4E-04			²³⁸ Pu	8.2E-06 ± 1.4E-05	U
	02/12/08	02/25/08	gross β	2.8E-02 ± 3.0E-03			^{239/240} Pu	7.4E-07 ± 2.1E-06	U
	02/25/08	03/11/08	gross α	1.0E-03 ± 4.8E-04			¹⁰⁶ Ru	6.0E-05 ± 6.0E-04	U
	02/25/08	03/11/08	gross β	1.4E-02 ± 1.8E-03			¹²⁵ Sb	-1.3E-04 ± 1.6E-04	U
	03/11/08	03/25/08	gross α	7.4E-04 ± 5.5E-04			⁹⁰ Sr	-2.1E-04 ± 2.1E-04	U
	03/11/08	03/25/08	gross β	6.9E-03 ± 1.2E-03			²³⁴ U	8.1E-06 ± 5.6E-06	
	03/25/08	04/07/08	gross α	9.5E-04 ± 6.4E-04			²³⁵ U	3.0E-06 ± 4.3E-06	U
	03/25/08	04/07/08	gross β	9.4E-03 ± 1.5E-03			²³⁸ U	7.4E-06 ± 5.6E-06	
	04/07/08	04/21/08	gross α	7.6E-04 ± 5.6E-04					
	04/07/08	04/21/08	gross β	9.7E-03 ± 1.5E-03	N158	06/30/08 to 12/30/08	⁶⁰ Co	4.3E-06 ± 4.3E-05	U
	04/21/08	05/06/08	gross α	1.3E-03 ± 5.3E-04			¹³⁴ Cs	5.9E-06 ± 5.9E-05	U
	04/21/08	05/06/08	gross β	1.3E-02 ± 1.6E-03			¹³⁷ Cs	8.2E-05 ± 7.3E-05	U
	05/06/08	05/19/08	gross α	8.2E-04 ± 6.1E-04			¹⁵² Eu	3.9E-05 ± 1.6E-04	U
	05/06/08	05/19/08	gross β	1.1E-02 ± 1.6E-03			¹⁵⁴ Eu	1.7E-05 ± 1.7E-04	U
	05/19/08	06/02/08	gross α	8.8E-04 ± 5.8E-04			¹⁵⁵ Eu	6.6E-05 ± 1.4E-04	U
	05/19/08	06/02/08	gross β	1.0E-02 ± 1.5E-03			²³⁸ Pu	1.0E-05 ± 1.4E-05	U
	06/02/08	06/16/08	gross α	1.2E-03 ± 5.5E-04			^{239/240} Pu	3.5E-06 ± 4.4E-06	U
	06/02/08	06/16/08	gross β	8.1E-03 ± 1.3E-03			¹⁰³ Ru	1.2E-05 ± 5.8E-05	U
	06/16/08	06/30/08	gross α	5.9E-04 ± 6.3E-04			¹⁰⁶ Ru	-6.3E-04 ± 6.5E-04	U
	06/16/08	06/30/08	gross β	1.1E-02 ± 1.8E-03			¹²⁵ Sb	-4.1E-05 ± 1.4E-04	U
	06/30/08	07/14/08	gross α	1.4E-03 ± 9.0E-04			¹¹³ Sn	6.9E-05 ± 6.6E-05	U
	06/30/08	07/14/08	gross β	1.2E-02 ± 1.9E-03			⁹⁰ Sr	-1.0E-04 ± 1.1E-04	U
	07/14/08	07/28/08	gross α	7.6E-04 ± 5.5E-04			²³⁴ U	1.7E-05 ± 1.0E-05	
	07/14/08	07/28/08	gross β	1.4E-02 ± 1.8E-03			²³⁵ U	3.9E-06 ± 3.8E-06	
	07/28/08	08/11/08	gross α	8.8E-04 ± 5.8E-04			²³⁸ U	7.1E-06 ± 5.6E-06	
	07/28/08	08/11/08	gross β	1.4E-02 ± 1.9E-03			⁶⁵ Zn	1.1E-04 ± 1.6E-04	U
	08/11/08	08/25/08	gross α	7.5E-04 ± 6.0E-04					
	08/11/08	08/25/08	gross β	1.3E-02 ± 1.9E-03					
	08/25/08	09/08/08	gross α	4.0E-04 ± 4.4E-04					
	08/25/08	09/08/08	gross β	1.0E-02 ± 1.5E-03					
	09/08/08	09/22/08	gross α	1.9E-03 ± 6.5E-04					
	09/08/08	09/22/08	gross β	2.5E-02 ± 2.7E-03					
	09/22/08	10/07/08	gross α	2.2E-03 ± 6.8E-04					
	09/22/08	10/07/08	gross β	2.8E-02 ± 2.9E-03					
	10/07/08	10/20/08	gross α	1.0E-03 ± 6.3E-04					
	10/07/08	10/20/08	gross β	1.8E-02 ± 2.2E-03					
	10/20/08	11/03/08	gross α	2.8E-03 ± 8.3E-04					
	10/20/08	11/03/08	gross β	4.3E-02 ± 4.1E-03					
	11/03/08	11/17/08	gross α	1.1E-03 ± 5.0E-04					
	11/03/08	11/17/08	gross β	1.8E-02 ± 2.1E-03					
	11/17/08	12/01/08	gross α	2.8E-03 ± 8.9E-04					
	11/17/08	12/01/08	gross β	3.6E-02 ± 3.7E-03					
	12/01/08	12/15/08	gross α	1.9E-03 ± 6.7E-04					
	12/01/08	12/15/08	gross β	2.3E-02 ± 2.5E-03					
	12/15/08	12/30/08	gross α	1.3E-03 ± 5.4E-04					
	12/15/08	12/30/08	gross β	2.9E-02 ± 3.0E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 25 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N480 (200-E)	12/31/07	01/14/08	gross α	1.2E-03 ± 5.4E-04	N480	12/31/07 to 06/30/08	²⁴¹ Am	1.0E-05 ± 6.1E-06	
	12/31/07	01/14/08	gross β	7.2E-03 ± 1.2E-03			⁶⁰ Co	-2.4E-05 ± 7.5E-05	U
	01/14/08	01/29/08	gross α	1.1E-03 ± 4.9E-04			¹³⁴ Cs	2.9E-05 ± 6.5E-05	U
	01/14/08	01/29/08	gross β	3.6E-02 ± 3.5E-03			¹³⁷ Cs	-1.3E-05 ± 5.3E-05	U
	01/29/08	02/12/08	gross α	2.7E-04 ± 4.0E-04			¹⁵² Eu	8.9E-05 ± 1.2E-04	U
	01/29/08	02/12/08	gross β	4.1E-03 ± 9.0E-04			¹⁵⁴ Eu	-1.2E-04 ± 2.0E-04	U
	02/12/08	02/25/08	gross α	1.2E-03 ± 5.5E-04			¹⁵⁵ Eu	2.6E-06 ± 2.6E-05	U
	02/12/08	02/25/08	gross β	3.2E-02 ± 3.3E-03			²³⁸ Pu	-1.8E-06 ± 1.8E-05	U
	02/25/08	03/11/08	gross α	6.8E-04 ± 5.0E-04			^{239/240} Pu	1.8E-06 ± 9.4E-06	U
	02/25/08	03/11/08	gross β	1.5E-02 ± 1.9E-03			²⁴¹ Pu	7.7E-04 ± 8.4E-04	U
	03/11/08	03/25/08	gross α	8.6E-04 ± 5.8E-04			¹⁰⁶ Ru	-3.8E-05 ± 3.8E-04	U
	03/11/08	03/25/08	gross β	7.5E-03 ± 1.2E-03			¹²⁵ Sb	3.6E-05 ± 1.4E-04	U
	03/25/08	04/07/08	gross α	4.2E-04 ± 4.7E-04			⁹⁰ Sr	-6.8E-06 ± 7.0E-06	U
	03/25/08	04/07/08	gross β	7.4E-03 ± 1.3E-03			²³⁴ U	1.4E-05 ± 8.1E-06	
	04/07/08	04/21/08	gross α	7.2E-04 ± 5.3E-04			²³⁵ U	7.0E-07 ± 4.2E-06	U
	04/07/08	04/21/08	gross β	1.1E-02 ± 1.6E-03			²³⁸ U	4.5E-06 ± 4.2E-06	U
	04/21/08	05/06/08	gross α	1.6E-03 ± 5.7E-04	N480	06/30/08 to 12/30/08	²⁴¹ Am	9.7E-06 ± 6.8E-06	
	04/21/08	05/06/08	gross β	1.8E-02 ± 2.1E-03			⁶⁰ Co	-1.4E-05 ± 9.1E-05	U
	05/06/08	05/19/08	gross α	1.2E-03 ± 5.5E-04			¹³⁴ Cs	2.6E-05 ± 6.7E-05	U
	05/06/08	05/19/08	gross β	1.0E-02 ± 1.5E-03			¹³⁷ Cs	-6.5E-06 ± 6.5E-05	U
	05/19/08	06/02/08	gross α	9.1E-04 ± 5.8E-04			¹⁵² Eu	1.8E-05 ± 1.4E-04	U
	05/19/08	06/02/08	gross β	1.5E-02 ± 1.9E-03			¹⁵⁴ Eu	-2.0E-05 ± 2.0E-04	U
	06/02/08	06/16/08	gross α	6.3E-04 ± 5.5E-04			¹⁵⁵ Eu	-1.2E-04 ± 1.5E-04	U
	06/02/08	06/16/08	gross β	7.0E-03 ± 1.2E-03			²³⁸ Pu	6.8E-06 ± 1.8E-05	U
	06/16/08	06/30/08	gross α	9.4E-04 ± 5.9E-04			^{239/240} Pu	4.1E-06 ± 4.9E-06	
	06/16/08	06/30/08	gross β	1.3E-02 ± 1.8E-03			²⁴¹ Pu	1.5E-04 ± 6.5E-04	U
	06/30/08	07/14/08	gross α	1.9E-03 ± 7.2E-04			¹⁰⁶ Ru	-3.2E-04 ± 5.8E-04	U
	06/30/08	07/14/08	gross β	1.6E-02 ± 2.0E-03			¹²⁵ Sb	1.6E-05 ± 1.4E-04	U
	07/14/08	07/28/08	gross α	2.1E-03 ± 6.8E-04			⁹⁰ Sr	-3.0E-04 ± 3.1E-04	
	07/14/08	07/28/08	gross β	4.6E-02 ± 4.3E-03			²³⁴ U	1.4E-05 ± 8.1E-06	
	07/28/08	08/11/08	gross α	1.4E-03 ± 5.5E-04			²³⁵ U	4.9E-06 ± 4.2E-06	
	07/28/08	08/11/08	gross β	1.7E-02 ± 2.1E-03			²³⁸ U	1.1E-05 ± 6.8E-06	
	08/11/08	08/25/08	gross α	6.8E-04 ± 5.1E-04					
	08/11/08	08/25/08	gross β	1.3E-02 ± 1.8E-03					
	08/25/08	09/08/08	gross α	1.1E-03 ± 5.0E-04					
	08/25/08	09/08/08	gross β	1.0E-02 ± 1.5E-03					
	09/08/08	09/22/08	gross α	1.2E-03 ± 8.3E-04					
	09/08/08	09/22/08	gross β	2.4E-02 ± 3.0E-03					
	09/22/08	10/07/08	gross α	1.4E-03 ± 5.4E-04					
	09/22/08	10/07/08	gross β	2.4E-02 ± 2.6E-03					
	10/07/08	10/20/08	gross α	1.1E-03 ± 5.2E-04					
	10/07/08	10/20/08	gross β	1.9E-02 ± 2.3E-03					
	10/20/08	11/03/08	gross α	2.7E-03 ± 7.8E-04					
	10/20/08	11/03/08	gross β	4.3E-02 ± 4.1E-03					
	11/03/08	11/17/08	gross α	1.9E-03 ± 6.6E-04					
	11/03/08	11/17/08	gross β	1.7E-02 ± 2.1E-03					
	11/17/08	12/01/08	gross α	2.7E-03 ± 8.3E-04					
	11/17/08	12/01/08	gross β	4.1E-02 ± 3.9E-03					
	12/01/08	12/15/08	gross α	9.5E-04 ± 5.9E-04					
	12/01/08	12/15/08	gross β	1.9E-02 ± 2.2E-03					
	12/15/08	12/30/08	gross α	1.8E-03 ± 6.2E-04					
	12/15/08	12/30/08	gross β	3.9E-02 ± 3.7E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 26 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N481 (200-E)	12/31/07	01/14/08	gross α	1.2E-03 ± 5.2E-04	N481	12/31/07 to 06/30/08	²⁴¹ Am	8.0E-06 ± 6.3E-06	
	12/31/07	01/14/08	gross β	8.0E-03 ± 1.3E-03			⁶⁰ Co	8.4E-06 ± 5.7E-05	U
	01/14/08	01/29/08	gross α	1.6E-03 ± 5.8E-04			¹³⁴ Cs	-7.7E-06 ± 6.2E-05	U
	01/14/08	01/29/08	gross β	3.4E-02 ± 3.3E-03			¹³⁷ Cs	4.0E-05 ± 6.0E-05	U
	01/29/08	02/12/08	gross α	7.2E-04 ± 5.3E-04			¹⁵² Eu	-5.3E-05 ± 1.3E-04	U
	01/29/08	02/12/08	gross β	4.3E-03 ± 9.2E-04			¹⁵⁴ Eu	1.5E-05 ± 1.5E-04	U
	02/12/08	02/25/08	gross α	1.5E-03 ± 6.3E-04			¹⁵⁵ Eu	-4.6E-05 ± 1.5E-04	U
	02/12/08	02/25/08	gross β	2.9E-02 ± 3.1E-03			²³⁸ Pu	6.0E-06 ± 2.6E-05	U
	02/25/08	03/11/08	gross α	2.4E-03 ± 7.2E-04			^{239/240} Pu	3.0E-06 ± 9.6E-06	U
	02/25/08	03/11/08	gross β	1.4E-02 ± 1.8E-03			²⁴¹ Pu	3.7E-04 ± 6.2E-04	U
	03/11/08	03/25/08	gross α	5.3E-04 ± 5.0E-04			¹⁰⁶ Ru	-1.4E-05 ± 1.4E-04	U
	03/11/08	03/25/08	gross β	8.2E-03 ± 1.3E-03			¹²⁵ Sb	5.0E-05 ± 1.2E-04	U
	03/25/08	04/07/08	gross α	1.1E-03 ± 5.4E-04			⁹⁰ Sr	-3.3E-04 ± 3.4E-04	U
	03/25/08	04/07/08	gross β	6.9E-03 ± 1.2E-03			²³⁴ U	1.0E-05 ± 7.0E-06	
	04/07/08	04/21/08	gross α	2.8E-04 ± 4.1E-04			²³⁵ U	4.7E-06 ± 4.3E-06	
	04/07/08	04/21/08	gross β	8.4E-03 ± 1.4E-03			²³⁸ U	1.0E-05 ± 6.6E-06	
	04/21/08	05/06/08	gross α	9.3E-04 ± 4.4E-04	N481	06/30/08 to 12/30/08	²⁴¹ Am	2.1E-06 ± 1.1E-05	U
	04/21/08	05/06/08	gross β	1.6E-02 ± 2.0E-03			⁶⁰ Co	2.8E-05 ± 6.3E-05	U
	05/06/08	05/19/08	gross α	9.7E-04 ± 6.4E-04			¹³⁴ Cs	2.7E-05 ± 6.2E-05	U
	05/06/08	05/19/08	gross β	1.1E-02 ± 1.6E-03			¹³⁷ Cs	-2.2E-05 ± 5.9E-05	U
	05/19/08	06/02/08	gross α	9.8E-04 ± 4.6E-04			¹⁵² Eu	-5.9E-06 ± 5.9E-05	U
	05/19/08	06/02/08	gross β	1.2E-02 ± 1.7E-03			¹⁵⁴ Eu	-1.4E-04 ± 1.9E-04	U
	06/02/08	06/16/08	gross α	5.4E-04 ± 5.5E-04			¹⁵⁵ Eu	7.7E-05 ± 1.9E-04	U
	06/02/08	06/16/08	gross β	8.0E-03 ± 1.3E-03			²³⁸ Pu	-2.8E-05 ± 3.9E-05	U
	06/16/08	06/30/08	gross α	1.0E-03 ± 5.0E-04			^{239/240} Pu	-1.8E-06 ± 6.4E-06	U
	06/16/08	06/30/08	gross β	1.5E-02 ± 2.0E-03			²⁴¹ Pu	-5.3E-04 ± 5.5E-04	U
	06/30/08	07/14/08	gross α	2.0E-03 ± 7.4E-04			¹⁰⁶ Ru	-9.5E-05 ± 5.4E-04	U
	06/30/08	07/14/08	gross β	1.4E-02 ± 1.8E-03			¹²⁵ Sb	-1.2E-04 ± 1.3E-04	U
	07/14/08	07/28/08	gross α	1.2E-03 ± 5.4E-04			⁹⁰ Sr	-1.5E-04 ± 1.5E-03	U
	07/14/08	07/28/08	gross β	1.7E-02 ± 2.2E-03			²³⁴ U	1.5E-05 ± 8.7E-06	
	07/28/08	08/11/08	gross α	6.9E-04 ± 5.2E-04			²³⁵ U	-7.4E-07 ± 7.4E-06	U
	07/28/08	08/11/08	gross β	1.8E-02 ± 2.2E-03			²³⁸ U	1.5E-05 ± 9.0E-06	
	08/11/08	08/25/08	gross α	1.6E-03 ± 6.1E-04					
	08/11/08	08/25/08	gross β	1.8E-02 ± 2.2E-03					
	08/25/08	09/08/08	gross α	7.0E-04 ± 5.2E-04					
	08/25/08	09/08/08	gross β	1.2E-02 ± 1.7E-03					
	09/08/08	09/22/08	gross α	1.9E-03 ± 6.6E-04					
	09/08/08	09/22/08	gross β	2.7E-02 ± 2.9E-03					
	09/22/08	10/07/08	gross α	1.9E-03 ± 6.3E-04					
	09/22/08	10/07/08	gross β	2.5E-02 ± 2.7E-03					
	10/07/08	10/20/08	gross α	9.9E-04 ± 6.2E-04					
	10/07/08	10/20/08	gross β	2.2E-02 ± 2.5E-03					
	10/20/08	11/03/08	gross α	2.6E-03 ± 7.6E-04					
	10/20/08	11/03/08	gross β	4.7E-02 ± 4.4E-03					
	11/03/08	11/17/08	gross α	9.1E-04 ± 5.8E-04					
	11/03/08	11/17/08	gross β	1.8E-02 ± 2.2E-03					
	11/17/08	12/01/08	gross α	1.9E-03 ± 6.9E-04					
	11/17/08	12/01/08	gross β	4.1E-02 ± 4.0E-03					
	12/01/08	12/15/08	gross α	1.4E-03 ± 5.6E-04					
	12/01/08	12/15/08	gross β	2.0E-02 ± 2.3E-03					
	12/15/08	12/30/08	gross α	1.7E-03 ± 6.1E-04					
	12/15/08	12/30/08	gross β	4.5E-02 ± 4.1E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 27 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N498 (200-E)	12/31/07	01/14/08	gross α	7.1E-04 ± 5.2E-04	N498	12/31/07 to 06/30/08	⁶⁰ Co	-2.9E-05 ± 7.0E-05	U
	12/31/07	01/14/08	gross β	1.0E-02 ± 1.5E-03			¹³⁴ Cs	6.8E-05 ± 6.8E-05	U
	01/14/08	01/29/08	gross α	2.1E-03 ± 6.7E-04			¹³⁷ Cs	1.1E-05 ± 5.7E-05	U
	01/14/08	01/29/08	gross β	3.5E-02 ± 3.4E-03			¹⁵² Eu	3.9E-05 ± 1.3E-04	U
	01/29/08	02/12/08	gross α	3.8E-04 ± 4.3E-04			¹⁵⁴ Eu	3.3E-05 ± 2.0E-04	U
	01/29/08	02/12/08	gross β	4.0E-03 ± 8.8E-04			¹⁵⁵ Eu	-6.7E-05 ± 1.2E-04	U
	02/12/08	02/25/08	gross α	1.4E-03 ± 6.0E-04			²³⁸ Pu	1.3E-05 ± 1.0E-05	
	02/12/08	02/25/08	gross β	2.7E-02 ± 2.9E-03			^{239/240} Pu	-6.3E-07 ± 2.2E-06	U
	02/25/08	03/11/08	gross α	1.3E-03 ± 5.3E-04			¹⁰³ Ru	-4.8E-06 ± 4.8E-05	U
	02/25/08	03/11/08	gross β	1.5E-02 ± 1.8E-03			¹⁰⁶ Ru	7.0E-05 ± 5.0E-04	U
	03/11/08	03/25/08	gross α	2.9E-04 ± 4.1E-04			¹²⁵ Sb	-9.9E-05 ± 1.4E-04	U
	03/11/08	03/25/08	gross β	8.6E-03 ± 1.3E-03			¹¹³ Sn	-4.6E-05 ± 6.1E-05	U
	03/25/08	04/07/08	gross α	7.8E-04 ± 5.8E-04			⁹⁰ Sr	-1.7E-04 ± 1.8E-04	U
	03/25/08	04/07/08	gross β	8.6E-03 ± 1.4E-03			²³⁴ U	1.1E-05 ± 7.2E-06	
	04/07/08	04/21/08	gross α	7.2E-04 ± 5.3E-04			²³⁵ U	3.6E-06 ± 3.5E-06	
	04/07/08	04/21/08	gross β	1.0E-02 ± 1.5E-03			²³⁸ U	6.6E-07 ± 2.3E-06	U
	04/21/08	05/06/08	gross α	1.5E-03 ± 5.7E-04			⁶⁵ Zn	-9.2E-05 ± 1.5E-04	U
	04/21/08	05/06/08	gross β	1.4E-02 ± 1.8E-03					
	05/06/08	05/19/08	gross α	9.2E-04 ± 6.1E-04	N498	06/30/08 to 12/30/08	⁶⁰ Co	-1.8E-05 ± 7.5E-05	U
	05/06/08	05/19/08	gross β	9.3E-03 ± 1.4E-03			¹³⁴ Cs	-2.3E-05 ± 6.7E-05	U
	05/19/08	06/02/08	gross α	1.1E-03 ± 5.0E-04			¹³⁷ Cs	5.5E-05 ± 6.7E-05	U
	05/19/08	06/02/08	gross β	1.4E-02 ± 1.9E-03			¹⁵² Eu	1.4E-04 ± 1.7E-04	U
	06/02/08	06/16/08	gross α	6.4E-04 ± 5.2E-04			¹⁵⁴ Eu	6.8E-05 ± 2.0E-04	U
	06/02/08	06/16/08	gross β	9.3E-03 ± 1.4E-03			¹⁵⁵ Eu	-1.7E-05 ± 1.7E-04	U
	06/16/08	06/30/08	gross α	1.1E-03 ± 5.3E-04			²³⁸ Pu	-9.5E-07 ± 9.5E-06	U
	06/16/08	06/30/08	gross β	1.4E-02 ± 1.8E-03			^{239/240} Pu	-9.5E-07 ± 4.2E-06	U
	06/30/08	07/14/08	gross α	4.2E-04 ± 5.2E-04			¹⁰⁶ Ru	2.3E-04 ± 5.7E-04	U
	06/30/08	07/14/08	gross β	1.8E-02 ± 2.2E-03			¹²⁵ Sb	-1.3E-06 ± 1.3E-05	U
	07/14/08	07/28/08	gross α	1.1E-03 ± 5.1E-04			⁹⁰ Sr	-1.1E-04 ± 1.1E-04	U
	07/14/08	07/28/08	gross β	1.3E-02 ± 1.8E-03			²³⁴ U	1.5E-05 ± 8.1E-06	
	07/28/08	08/11/08	gross α	1.4E-03 ± 5.9E-04			²³⁵ U	2.2E-06 ± 2.6E-06	
	07/28/08	08/11/08	gross β	1.5E-02 ± 2.0E-03			²³⁸ U	8.8E-06 ± 5.5E-06	
	08/11/08	08/25/08	gross α	1.3E-03 ± 5.6E-04					
	08/11/08	08/25/08	gross β	1.3E-02 ± 1.8E-03					
	08/25/08	09/08/08	gross α	4.5E-04 ± 4.4E-04					
	08/25/08	09/08/08	gross β	1.0E-02 ± 1.5E-03					
	09/08/08	09/22/08	gross α	1.2E-03 ± 5.2E-04					
	09/08/08	09/22/08	gross β	2.6E-02 ± 2.8E-03					
	09/22/08	10/07/08	gross α	1.3E-03 ± 5.2E-04					
	09/22/08	10/07/08	gross β	2.3E-02 ± 2.5E-03					
	10/07/08	10/20/08	gross α	1.8E-03 ± 6.5E-04					
	10/07/08	10/20/08	gross β	2.0E-02 ± 2.4E-03					
	10/20/08	11/03/08	gross α	2.6E-03 ± 7.6E-04					
	10/20/08	11/03/08	gross β	4.4E-02 ± 4.2E-03					
	11/03/08	11/17/08	gross α	6.9E-04 ± 5.2E-04					
	11/03/08	11/17/08	gross β	1.8E-02 ± 2.2E-03					
	11/17/08	12/01/08	gross α	2.7E-03 ± 8.1E-04					
	11/17/08	12/01/08	gross β	5.2E-02 ± 4.9E-03					
	12/01/08	12/15/08	gross α	1.6E-03 ± 6.1E-04					
	12/01/08	12/15/08	gross β	2.0E-02 ± 2.3E-03					
	12/15/08	12/30/08	gross α	1.4E-03 ± 5.6E-04					
	12/15/08	12/30/08	gross β	4.0E-02 ± 3.7E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 28 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N499 (200-E)	12/31/07	01/14/08	gross α	4.9E-04 ± 4.6E-04	N499	12/31/07 to 06/30/08	⁶⁰ Co	-1.9E-05 ± 6.0E-05	U
	12/31/07	01/14/08	gross β	1.1E-02 ± 1.6E-03			¹³⁴ Cs	3.5E-05 ± 6.1E-05	U
	01/14/08	01/29/08	gross α	1.7E-03 ± 6.1E-04			¹³⁷ Cs	-2.3E-05 ± 5.5E-05	U
	01/14/08	01/29/08	gross β	3.0E-02 ± 3.0E-03			¹⁵² Eu	9.2E-05 ± 1.3E-04	U
	01/29/08	02/12/08	gross α	-6.1E-05 ± 2.0E-04			¹⁵⁴ Eu	4.0E-05 ± 1.8E-04	U
	01/29/08	02/12/08	gross β	3.8E-03 ± 8.5E-04			¹⁵⁵ Eu	-9.0E-05 ± 1.6E-04	U
	02/12/08	02/25/08	gross α	1.7E-03 ± 6.5E-04			²³⁸ Pu	-3.1E-06 ± 3.9E-06	U
	02/12/08	02/25/08	gross β	3.2E-02 ± 3.3E-03			^{239/240} Pu	6.2E-07 ± 1.3E-06	U
	02/25/08	03/11/08	gross α	5.7E-04 ± 4.7E-04			¹⁰³ Ru	-4.0E-06 ± 4.0E-05	U
	02/25/08	03/11/08	gross β	1.4E-02 ± 1.8E-03			¹⁰⁶ Ru	4.6E-04 ± 5.2E-04	U
	03/11/08	03/25/08	gross α	2.9E-04 ± 4.1E-04			¹²⁵ Sb	-8.1E-07 ± 8.1E-06	U
	03/11/08	03/25/08	gross β	7.1E-03 ± 1.2E-03			¹¹³ Sn	1.6E-05 ± 5.6E-05	U
	03/25/08	04/07/08	gross α	1.0E-03 ± 6.3E-04			⁹⁰ Sr	-2.2E-04 ± 2.3E-04	U
	03/25/08	04/07/08	gross β	8.3E-03 ± 1.4E-03			²³⁴ U	1.5E-05 ± 9.2E-06	
	04/07/08	04/21/08	gross α	9.5E-04 ± 5.9E-04			²³⁵ U	6.6E-07 ± 6.9E-07	U
	04/07/08	04/21/08	gross β	1.0E-02 ± 1.5E-03			²³⁸ U	1.1E-05 ± 7.5E-06	
	04/21/08	05/06/08	gross α	1.9E-03 ± 6.4E-04			⁶⁵ Zn	-1.2E-04 ± 1.5E-04	U
	04/21/08	05/06/08	gross β	1.3E-02 ± 1.7E-03					
	05/06/08	05/19/08	gross α	4.4E-04 ± 4.7E-04	N499	06/30/08 to 12/30/08	⁶⁰ Co	9.3E-05 ± 1.1E-04	U
	05/06/08	05/19/08	gross β	1.0E-02 ± 1.5E-03			¹³⁴ Cs	2.9E-05 ± 7.9E-05	U
	05/19/08	06/02/08	gross α	7.2E-04 ± 5.2E-04			¹³⁷ Cs	5.2E-05 ± 7.0E-05	U
	05/19/08	06/02/08	gross β	1.0E-02 ± 1.5E-03			¹⁵² Eu	3.3E-05 ± 1.7E-04	U
	06/02/08	06/16/08	gross α	7.2E-04 ± 5.2E-04			¹⁵⁴ Eu	1.1E-04 ± 2.5E-04	U
	06/02/08	06/16/08	gross β	7.0E-03 ± 1.2E-03			¹⁵⁵ Eu	-5.2E-05 ± 1.6E-04	U
	06/16/08	06/30/08	gross α	1.2E-03 ± 5.2E-04			²³⁸ Pu	-2.8E-06 ± 1.1E-05	U
	06/16/08	06/30/08	gross β	1.4E-02 ± 1.8E-03			^{239/240} Pu	-6.9E-07 ± 6.9E-06	U
	06/30/08	07/14/08	gross α	1.4E-03 ± 5.5E-04			¹⁰⁶ Ru	1.6E-04 ± 6.0E-04	U
	06/30/08	07/14/08	gross β	1.3E-02 ± 1.7E-03			¹²⁵ Sb	-1.7E-05 ± 1.6E-04	U
	07/14/08	07/28/08	gross α	1.6E-03 ± 6.0E-04			⁹⁰ Sr	-2.4E-04 ± 2.5E-04	
	07/14/08	07/28/08	gross β	1.7E-02 ± 2.1E-03			²³⁴ U	1.2E-05 ± 8.0E-06	
	07/28/08	08/11/08	gross α	1.4E-03 ± 5.6E-04			²³⁵ U	1.9E-06 ± 2.8E-06	U
	07/28/08	08/11/08	gross β	9.9E-03 ± 1.5E-03			²³⁸ U	1.4E-05 ± 8.8E-06	
	08/11/08	08/25/08	gross α	1.7E-03 ± 6.2E-04					
	08/11/08	08/25/08	gross β	1.6E-02 ± 1.9E-03					
	08/25/08	09/08/08	gross α	8.3E-04 ± 5.5E-04					
	08/25/08	09/08/08	gross β	8.6E-03 ± 1.3E-03					
	09/08/08	09/22/08	gross α	1.8E-03 ± 6.3E-04					
	09/08/08	09/22/08	gross β	2.5E-02 ± 2.6E-03					
	09/22/08	10/07/08	gross α	1.4E-03 ± 5.4E-04					
	09/22/08	10/07/08	gross β	2.2E-02 ± 2.4E-03					
	10/07/08	10/20/08	gross α	9.7E-04 ± 6.1E-04					
	10/07/08	10/20/08	gross β	1.8E-02 ± 2.2E-03					
	10/20/08	11/03/08	gross α	2.3E-03 ± 7.3E-04					
	10/20/08	11/03/08	gross β	4.5E-02 ± 4.2E-03					
	11/03/08	11/17/08	gross α	4.9E-04 ± 4.5E-04					
	11/03/08	11/17/08	gross β	8.4E-03 ± 1.3E-03					
	11/17/08	12/01/08	gross α	1.7E-03 ± 6.3E-04					
	11/17/08	12/01/08	gross β	4.6E-02 ± 4.4E-03					
	12/01/08	12/15/08	gross α	1.1E-03 ± 5.1E-04					
	12/01/08	12/15/08	gross β	2.2E-02 ± 2.4E-03					
	12/15/08	12/30/08	gross α	1.3E-03 ± 5.4E-04					
	12/15/08	12/30/08	gross β	4.1E-02 ± 3.8E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 29 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N532 (200-E)	01/02/08	01/16/08	gross α	9.5E-04 ± 5.9E-04	N532	01/02/08 to 07/02/08	⁶⁰ Co	-5.2E-05 ± 8.3E-05	U
	01/02/08	01/16/08	gross β	9.5E-03 ± 1.5E-03			¹³⁴ Cs	-3.4E-05 ± 7.3E-05	U
	01/16/08	01/30/08	gross α	1.4E-03 ± 5.7E-04			¹³⁷ Cs	-5.5E-06 ± 5.5E-05	U
	01/16/08	01/30/08	gross β	4.0E-02 ± 4.3E-03			¹⁵² Eu	-4.3E-05 ± 1.5E-04	U
	01/30/08	02/13/08	gross α	6.2E-04 ± 5.1E-04			¹⁵⁴ Eu	-6.6E-05 ± 2.3E-04	U
	01/30/08	02/13/08	gross β	4.8E-03 ± 9.9E-04			¹⁵⁵ Eu	-4.5E-05 ± 1.6E-04	U
	02/13/08	02/27/08	gross α	1.1E-03 ± 6.8E-04			²³⁸ Pu	-7.2E-07 ± 7.2E-06	U
	02/13/08	02/27/08	gross β	3.3E-02 ± 3.8E-03			^{239/240} Pu	4.3E-06 ± 4.8E-06	U
	02/27/08	03/12/08	gross α	9.5E-04 ± 5.9E-04			¹⁰⁶ Ru	1.8E-04 ± 5.9E-04	U
	02/27/08	03/12/08	gross β	9.9E-03 ± 1.5E-03			¹²⁵ Sb	1.1E-04 ± 1.5E-04	U
	03/12/08	03/26/08	gross α	3.0E-04 ± 4.3E-04			⁹⁰ Sr	-1.9E-04 ± 2.0E-04	U
	03/12/08	03/26/08	gross β	1.0E-02 ± 1.6E-03			²³⁴ U	4.7E-06 ± 5.1E-06	U
	03/26/08	04/09/08	gross α	3.7E-04 ± 4.2E-04			²³⁵ U	2.9E-06 ± 3.1E-06	
	03/26/08	04/09/08	gross β	6.5E-03 ± 1.2E-03			²³⁸ U	5.3E-06 ± 4.7E-06	
	04/09/08	04/23/08	gross α	1.1E-03 ± 5.1E-04					
	04/09/08	04/23/08	gross β	1.0E-02 ± 1.6E-03	N532	07/02/08 to 12/30/08	⁶⁰ Co	-8.1E-06 ± 7.8E-05	U
	04/23/08	05/07/08	gross α	7.0E-04 ± 5.2E-04			¹³⁴ Cs	-7.2E-05 ± 7.9E-05	U
	04/23/08	05/07/08	gross β	1.9E-02 ± 2.4E-03			¹³⁷ Cs	1.1E-05 ± 6.3E-05	U
	05/07/08	05/21/08	gross α	1.5E-03 ± 5.8E-04			¹⁵² Eu	-2.6E-05 ± 1.8E-04	U
	05/07/08	05/21/08	gross β	1.2E-02 ± 1.7E-03			¹⁵⁴ Eu	-1.4E-04 ± 2.5E-04	U
	05/21/08	06/04/08	gross α	2.8E-04 ± 3.9E-04			¹⁵⁵ Eu	-3.9E-05 ± 1.8E-04	U
	05/21/08	06/04/08	gross β	8.3E-03 ± 1.4E-03			²³⁸ Pu	1.0E-05 ± 1.1E-05	U
	06/04/08	06/18/08	gross α	8.3E-04 ± 5.5E-04			^{239/240} Pu	7.9E-07 ± 8.2E-07	U
	06/04/08	06/18/08	gross β	7.1E-03 ± 1.2E-03			¹⁰⁶ Ru	1.2E-04 ± 6.4E-04	U
	06/18/08	07/02/08	gross α	1.0E-03 ± 5.0E-04			¹²⁵ Sb	3.4E-05 ± 1.5E-04	U
	06/18/08	07/02/08	gross β	1.2E-02 ± 1.8E-03			⁹⁰ Sr	-9.3E-05 ± 9.7E-05	U
	07/02/08	07/16/08	gross α	1.8E-03 ± 6.4E-04			²³⁴ U	1.2E-05 ± 8.1E-06	
	07/02/08	07/16/08	gross β	1.4E-02 ± 1.9E-03			²³⁵ U	4.2E-06 ± 4.1E-06	
	07/16/08	07/30/08	gross α	6.1E-04 ± 4.9E-04			²³⁸ U	6.2E-06 ± 5.4E-06	
	07/16/08	07/30/08	gross β	1.1E-02 ± 1.6E-03					
	07/30/08	08/13/08	gross α	1.2E-03 ± 5.1E-04					
	07/30/08	08/13/08	gross β	1.4E-02 ± 1.9E-03					
	08/13/08	08/27/08	gross α	1.0E-03 ± 4.9E-04					
	08/13/08	08/27/08	gross β	1.1E-02 ± 1.6E-03					
	08/27/08	09/10/08	gross α	7.2E-04 ± 5.2E-04					
	08/27/08	09/10/08	gross β	1.0E-02 ± 1.6E-03					
	09/10/08	09/24/08	gross α	1.2E-03 ± 5.1E-04					
	09/10/08	09/24/08	gross β	2.4E-02 ± 2.8E-03					
	09/24/08	10/08/08	gross α	2.3E-03 ± 7.3E-04					
	09/24/08	10/08/08	gross β	2.2E-02 ± 2.6E-03					
	10/08/08	10/22/08	gross α	6.2E-04 ± 5.0E-04					
	10/08/08	10/22/08	gross β	1.6E-02 ± 2.1E-03					
	10/22/08	11/05/08	gross α	2.1E-03 ± 7.0E-04					
	10/22/08	11/05/08	gross β	4.0E-02 ± 4.2E-03					
	11/05/08	11/18/08	gross α	7.7E-04 ± 5.5E-04					
	11/05/08	11/18/08	gross β	2.3E-02 ± 2.8E-03					
	11/18/08	12/03/08	gross α	1.6E-03 ± 1.0E-03					
	11/18/08	12/03/08	gross β	2.9E-02 ± 3.9E-03					
	12/03/08	12/17/08	gross α	9.8E-04 ± 6.1E-04					
	12/03/08	12/17/08	gross β	1.9E-02 ± 2.5E-03					
	12/17/08	12/30/08	gross α	2.2E-03 ± 7.5E-04					
	12/17/08	12/30/08	gross β	4.1E-02 ± 4.4E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 30 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N559 (200-E)	01/02/08	01/16/08	gross α	8.4E-04 ± 5.6E-04	N559	01/02/08 to 07/02/08	⁶⁰ Co	2.9E-05 ± 7.0E-05	U
	01/02/08	01/16/08	gross β	8.1E-03 ± 1.4E-03			¹³⁴ Cs	-5.9E-05 ± 6.6E-05	U
	01/16/08	01/30/08	gross α	2.2E-03 ± 7.2E-04			¹³⁷ Cs	1.6E-05 ± 5.8E-05	U
	01/16/08	01/30/08	gross β	3.6E-02 ± 4.0E-03			¹⁵² Eu	6.5E-05 ± 1.4E-04	U
	01/30/08	02/13/08	gross α	1.6E-04 ± 3.4E-04			¹⁵⁴ Eu	5.9E-05 ± 1.8E-04	U
	01/30/08	02/13/08	gross β	3.0E-03 ± 7.7E-04			¹⁵⁵ Eu	-4.4E-05 ± 1.6E-04	U
	02/13/08	02/27/08	gross α	1.2E-03 ± 5.4E-04			²³⁸ Pu	-5.9E-06 ± 1.1E-05	U
	02/13/08	02/27/08	gross β	3.1E-02 ± 3.5E-03			^{239/240} Pu	1.7E-06 ± 2.4E-06	U
	02/27/08	03/12/08	gross α	5.1E-04 ± 4.8E-04			¹⁰⁶ Ru	-2.4E-05 ± 2.4E-04	U
	02/27/08	03/12/08	gross β	1.2E-02 ± 1.7E-03			¹²⁵ Sb	-7.9E-05 ± 1.4E-04	U
	03/12/08	03/26/08	gross α	8.4E-04 ± 5.6E-04			⁹⁰ Sr	9.0E-05 ± 1.9E-04	U
	03/12/08	03/26/08	gross β	9.6E-03 ± 1.5E-03			²³⁴ U	1.4E-05 ± 9.0E-06	
	03/26/08	04/09/08	gross α	6.0E-04 ± 4.9E-04			²³⁵ U	3.7E-06 ± 3.6E-06	
	03/26/08	04/09/08	gross β	5.8E-03 ± 1.1E-03			²³⁸ U	8.8E-06 ± 5.9E-06	
	04/09/08	04/23/08	gross α	1.5E-03 ± 5.8E-04					
	04/09/08	04/23/08	gross β	9.6E-03 ± 1.5E-03	N559	07/02/08 to 12/30/08	⁶⁰ Co	-5.0E-06 ± 5.0E-05	U
	04/23/08	05/07/08	gross α	1.4E-03 ± 5.9E-04			¹³⁴ Cs	1.9E-05 ± 1.0E-04	U
	04/23/08	05/07/08	gross β	1.5E-02 ± 2.0E-03			¹³⁷ Cs	-3.2E-05 ± 9.6E-05	U
	05/07/08	05/21/08	gross α	1.3E-03 ± 5.5E-04			¹⁵² Eu	-3.0E-04 ± 3.2E-04	U
	05/07/08	05/21/08	gross β	1.2E-02 ± 1.7E-03			¹⁵⁴ Eu	5.5E-05 ± 3.2E-04	U
	05/21/08	06/04/08	gross α	8.9E-04 ± 5.6E-04			¹⁵⁵ Eu	1.1E-06 ± 1.1E-05	U
	05/21/08	06/04/08	gross β	1.4E-02 ± 2.0E-03			²³⁸ Pu	6.5E-07 ± 6.5E-06	U
	06/04/08	06/18/08	gross α	9.5E-04 ± 5.9E-04			^{239/240} Pu	6.5E-07 ± 3.2E-06	U
	06/04/08	06/18/08	gross β	9.1E-03 ± 1.5E-03			¹⁰⁶ Ru	2.7E-05 ± 2.7E-04	U
	06/18/08	07/02/08	gross α	8.0E-04 ± 6.2E-04			¹²⁵ Sb	-1.0E-04 ± 2.4E-04	U
	06/18/08	07/02/08	gross β	1.5E-02 ± 2.0E-03			⁹⁰ Sr	-4.6E-04 ± 4.8E-04	U
	07/02/08	07/16/08	gross α	1.4E-03 ± 6.1E-04			²³⁴ U	1.7E-05 ± 9.4E-06	
	07/02/08	07/16/08	gross β	1.3E-02 ± 1.9E-03			²³⁵ U	2.1E-06 ± 2.5E-06	
	07/16/08	07/30/08	gross α	1.2E-03 ± 5.2E-04			²³⁸ U	7.6E-06 ± 5.2E-06	
	07/16/08	07/30/08	gross β	1.4E-02 ± 2.0E-03					
	07/30/08	08/13/08	gross α	1.0E-03 ± 4.8E-04					
	07/30/08	08/13/08	gross β	1.7E-02 ± 2.3E-03					
	08/13/08	08/27/08	gross α	1.0E-03 ± 4.8E-04					
	08/13/08	08/27/08	gross β	1.5E-02 ± 2.1E-03					
	08/27/08	09/10/08	gross α	1.6E-03 ± 6.1E-04					
	08/27/08	09/10/08	gross β	1.4E-02 ± 2.0E-03					
	09/10/08	09/24/08	gross α	1.5E-03 ± 5.9E-04					
	09/10/08	09/24/08	gross β	2.7E-02 ± 3.2E-03					
	09/24/08	10/08/08	gross α	1.4E-03 ± 5.7E-04					
	09/24/08	10/08/08	gross β	2.7E-02 ± 3.1E-03					
	10/08/08	10/22/08	gross α	2.0E-03 ± 6.7E-04					
	10/08/08	10/22/08	gross β	1.8E-02 ± 2.4E-03					
	10/22/08	11/05/08	gross α	2.7E-03 ± 7.9E-04					
	10/22/08	11/05/08	gross β	4.2E-02 ± 4.5E-03					
	11/05/08	11/18/08	gross α	1.5E-03 ± 6.0E-04					
	11/05/08	11/18/08	gross β	2.3E-02 ± 2.8E-03					
	11/18/08	12/03/08	gross α	1.4E-03 ± 5.6E-04					
	11/18/08	12/03/08	gross β	3.3E-02 ± 3.6E-03					
	12/03/08	12/17/08	gross α	1.4E-03 ± 5.6E-04					
	12/03/08	12/17/08	gross β	2.1E-02 ± 2.5E-03					
	12/17/08	12/30/08	gross α	1.5E-03 ± 6.0E-04					
	12/17/08	12/30/08	gross β	3.0E-02 ± 3.4E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 31 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N957 (200-E)	12/31/07	01/14/08	gross α	1.2E-03 ± 5.7E-04	N957	12/31/07 to 06/30/08	⁶⁰ Co	-1.6E-04 ± 1.6E-04	U
	12/31/07	01/14/08	gross β	7.3E-03 ± 1.3E-03			¹³⁴ Cs	6.6E-05 ± 1.1E-04	U
	01/14/08	01/29/08	gross α	1.7E-03 ± 6.1E-04			¹³⁷ Cs	-6.0E-05 ± 1.0E-04	U
	01/14/08	01/29/08	gross β	3.0E-02 ± 3.0E-03			¹⁵² Eu	1.8E-05 ± 1.8E-04	U
	01/29/08	02/12/08	gross α	6.1E-04 ± 5.0E-04			¹⁵⁴ Eu	-5.5E-05 ± 3.5E-04	U
	01/29/08	02/12/08	gross β	4.4E-03 ± 9.3E-04			¹⁵⁵ Eu	-5.2E-05 ± 1.8E-04	U
	02/12/08	02/25/08	gross α	2.0E-03 ± 7.2E-04			²³⁸ Pu	5.7E-07 ± 5.7E-06	
	02/12/08	02/25/08	gross β	3.1E-02 ± 3.2E-03			^{239/240} Pu	-5.7E-07 ± 1.2E-06	U
	02/25/08	03/11/08	gross α	1.0E-03 ± 4.9E-04			¹⁰⁶ Ru	-5.2E-04 ± 9.3E-04	U
	02/25/08	03/11/08	gross β	1.4E-02 ± 1.8E-03			¹²⁵ Sb	-2.8E-05 ± 2.4E-04	U
	03/11/08	03/25/08	gross α	5.3E-04 ± 5.0E-04			⁹⁰ Sr	-1.4E-04 ± 1.5E-04	U
	03/11/08	03/25/08	gross β	7.8E-03 ± 1.3E-03			²³⁴ U	1.1E-05 ± 6.7E-06	
	03/25/08	04/07/08	gross α	8.0E-04 ± 5.9E-04			²³⁵ U	7.3E-07 ± 3.3E-06	U
	03/25/08	04/07/08	gross β	8.8E-03 ± 1.4E-03			²³⁸ U	8.0E-06 ± 5.8E-06	
	04/07/08	04/21/08	gross α	1.3E-03 ± 5.6E-04					
	04/07/08	04/21/08	gross β	1.0E-02 ± 1.5E-03	N957	06/30/08 to 12/30/08	⁶⁰ Co	9.1E-05 ± 5.7E-05	U
	04/21/08	05/07/08	gross α	1.2E-03 ± 4.9E-04			¹³⁴ Cs	2.9E-06 ± 2.9E-05	U
	04/21/08	05/07/08	gross β	1.4E-02 ± 1.8E-03			¹³⁷ Cs	-5.8E-05 ± 6.7E-05	U
	05/07/08	05/19/08	gross α	9.4E-04 ± 6.5E-04			¹⁵² Eu	-5.6E-05 ± 1.5E-04	U
	05/07/08	05/19/08	gross β	1.5E-02 ± 2.1E-03			¹⁵⁴ Eu	3.8E-05 ± 2.3E-04	U
	05/19/08	06/02/08	gross α	7.9E-04 ± 5.4E-04			¹⁵⁵ Eu	-6.2E-05 ± 1.6E-04	U
	05/19/08	06/02/08	gross β	8.8E-03 ± 1.4E-03			²³⁸ Pu	1.1E-05 ± 1.1E-05	U
	06/02/08	06/16/08	gross α	8.0E-04 ± 5.4E-04			^{239/240} Pu	-1.6E-06 ± 3.2E-06	U
	06/02/08	06/16/08	gross β	7.6E-03 ± 1.2E-03			¹⁰⁶ Ru	2.6E-04 ± 5.9E-04	U
	06/16/08	06/30/08	gross α	1.4E-03 ± 6.2E-04			¹²⁵ Sb	-2.5E-05 ± 1.4E-04	U
	06/16/08	06/30/08	gross β	1.5E-02 ± 1.9E-03			⁹⁰ Sr	-2.4E-04 ± 2.5E-04	U
	06/30/08	07/11/08	gross α	2.2E-03 ± 8.7E-04			²³⁴ U	1.0E-05 ± 7.5E-06	
	06/30/08	07/11/08	gross β	1.4E-02 ± 2.0E-03			²³⁵ U	1.4E-06 ± 2.1E-06	U
	07/11/08	07/28/08	gross α	1.3E-03 ± 4.9E-04			²³⁸ U	2.0E-06 ± 2.4E-06	
	07/11/08	07/28/08	gross β	1.5E-02 ± 1.9E-03					
	07/28/08	08/11/08	gross α	1.5E-03 ± 5.9E-04					
	07/28/08	08/11/08	gross β	1.1E-02 ± 1.6E-03					
	08/11/08	08/25/08	gross α	1.0E-03 ± 4.8E-04					
	08/11/08	08/25/08	gross β	1.4E-02 ± 1.9E-03					
	08/25/08	09/08/08	gross α	1.1E-03 ± 4.9E-04					
	08/25/08	09/08/08	gross β	1.2E-02 ± 1.7E-03					
	09/08/08	09/22/08	gross α	1.5E-03 ± 5.8E-04					
	09/08/08	09/22/08	gross β	2.5E-02 ± 2.7E-03					
	09/22/08	10/07/08	gross α	1.1E-03 ± 4.7E-04					
	09/22/08	10/07/08	gross β	1.9E-02 ± 2.2E-03					
	10/07/08	10/20/08	gross α	2.2E-03 ± 7.4E-04					
	10/07/08	10/20/08	gross β	1.9E-02 ± 2.3E-03					
	10/20/08	11/03/08	gross α	2.0E-03 ± 6.8E-04					
	10/20/08	11/03/08	gross β	4.3E-02 ± 4.1E-03					
	11/03/08	11/17/08	gross α	8.1E-04 ± 5.5E-04					
	11/03/08	11/17/08	gross β	1.9E-02 ± 2.3E-03					
	11/17/08	12/01/08	gross α	2.0E-03 ± 7.0E-04					
	11/17/08	12/01/08	gross β	3.7E-02 ± 3.6E-03					
	12/01/08	12/15/08	gross α	1.2E-03 ± 5.2E-04					
	12/01/08	12/15/08	gross β	1.8E-02 ± 2.1E-03					
	12/15/08	12/30/08	gross α	1.5E-03 ± 5.7E-04					
	12/15/08	12/30/08	gross β	3.5E-02 ± 3.4E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 32 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N967 (200-E)	12/31/07	01/14/08	gross α	7.5E-04 ± 5.5E-04	N967	12/31/07 to 06/30/08	⁶⁰ Co	-1.0E-04 ± 1.4E-04	U
	12/31/07	01/14/08	gross β	1.1E-02 ± 1.6E-03			¹³⁴ Cs	-3.7E-05 ± 9.8E-05	U
	01/14/08	01/29/08	gross α	1.6E-03 ± 5.9E-04			¹³⁷ Cs	6.6E-06 ± 6.6E-05	U
	01/14/08	01/29/08	gross β	3.0E-02 ± 3.0E-03			¹⁵² Eu	-1.2E-04 ± 2.4E-04	U
	01/29/08	02/12/08	gross α	5.0E-05 ± 2.9E-04			¹⁵⁴ Eu	1.0E-04 ± 3.2E-04	U
	01/29/08	02/12/08	gross β	5.0E-03 ± 1.0E-03			¹⁵⁵ Eu	-1.2E-04 ± 1.9E-04	U
	02/12/08	02/25/08	gross α	9.3E-04 ± 6.2E-04			²³⁸ Pu	-5.6E-07 ± 3.0E-06	U
	02/12/08	02/25/08	gross β	2.8E-02 ± 3.0E-03			^{239/240} Pu	5.6E-07 ± 1.1E-06	U
	02/25/08	03/11/08	gross α	1.6E-03 ± 6.0E-04			¹⁰⁶ Ru	-1.4E-04 ± 8.5E-04	U
	02/25/08	03/11/08	gross β	1.6E-02 ± 1.9E-03			¹²⁵ Sb	3.9E-05 ± 2.3E-04	U
	03/11/08	03/25/08	gross α	3.0E-04 ± 4.3E-04			⁹⁰ Sr	9.3E-05 ± 1.5E-04	U
	03/11/08	03/25/08	gross β	9.2E-03 ± 1.4E-03			²³⁴ U	9.2E-06 ± 6.3E-06	
	03/25/08	04/07/08	gross α	8.3E-04 ± 6.1E-04			²³⁵ U	1.4E-06 ± 2.1E-06	U
	03/25/08	04/07/08	gross β	9.0E-03 ± 1.4E-03			²³⁸ U	9.2E-06 ± 6.0E-06	
	04/07/08	04/21/08	gross α	1.6E-03 ± 6.1E-04	N967	06/30/08 to 12/30/08	⁶⁰ Co	-4.2E-05 ± 7.5E-05	U
	04/07/08	04/21/08	gross β	1.2E-02 ± 1.6E-03			¹³⁴ Cs	-2.0E-05 ± 6.3E-05	U
	04/21/08	05/06/08	gross α	1.4E-03 ± 5.6E-04			¹³⁷ Cs	-3.5E-05 ± 6.2E-05	U
	04/21/08	05/06/08	gross β	1.4E-02 ± 1.8E-03			¹⁵² Eu	-1.3E-04 ± 1.5E-04	U
	05/06/08	05/19/08	gross α	7.7E-04 ± 5.8E-04			¹⁵⁴ Eu	2.6E-04 ± 2.3E-04	U
	05/06/08	05/19/08	gross β	1.4E-02 ± 1.9E-03			¹⁵⁵ Eu	4.9E-06 ± 4.9E-05	U
	05/19/08	06/02/08	gross α	1.5E-03 ± 5.8E-04			²³⁸ Pu	9.8E-06 ± 1.4E-05	U
	05/19/08	06/02/08	gross β	1.3E-02 ± 1.8E-03			^{239/240} Pu	8.2E-07 ± 2.9E-06	U
	06/02/08	06/16/08	gross α	8.8E-04 ± 5.9E-04			¹⁰⁶ Ru	-9.9E-06 ± 9.9E-05	U
	06/02/08	06/16/08	gross β	8.2E-03 ± 1.3E-03			¹²⁵ Sb	-3.6E-05 ± 1.5E-04	U
	06/16/08	06/30/08	gross α	9.9E-04 ± 7.0E-04			⁹⁰ Sr	-4.2E-04 ± 4.4E-04	U
	06/16/08	06/30/08	gross β	1.3E-02 ± 1.8E-03			²³⁴ U	9.9E-06 ± 6.6E-06	
	06/30/08	07/14/08	gross α	1.9E-03 ± 7.5E-04			²³⁵ U	2.2E-06 ± 3.3E-06	U
	06/30/08	07/14/08	gross β	1.4E-02 ± 1.9E-03			²³⁸ U	5.9E-06 ± 4.9E-06	
	07/14/08	07/28/08	gross α	2.4E-03 ± 7.8E-04					
	07/14/08	07/28/08	gross β	1.5E-02 ± 2.0E-03					
	07/28/08	08/11/08	gross α	6.9E-04 ± 5.2E-04					
	07/28/08	08/11/08	gross β	1.1E-02 ± 1.6E-03					
	08/11/08	08/25/08	gross α	1.2E-03 ± 5.4E-04					
	08/11/08	08/25/08	gross β	1.3E-02 ± 1.8E-03					
	08/25/08	09/08/08	gross α	4.8E-04 ± 4.6E-04					
	08/25/08	09/08/08	gross β	1.1E-02 ± 1.6E-03					
	09/08/08	09/22/08	gross α	1.2E-03 ± 5.4E-04					
	09/08/08	09/22/08	gross β	2.9E-02 ± 3.1E-03					
	09/22/08	10/07/08	gross α	1.9E-03 ± 6.4E-04					
	09/22/08	10/07/08	gross β	2.0E-02 ± 2.3E-03					
	10/07/08	10/20/08	gross α	1.2E-03 ± 5.5E-04					
	10/07/08	10/20/08	gross β	1.8E-02 ± 2.2E-03					
	10/20/08	11/03/08	gross α	2.5E-03 ± 7.5E-04					
	10/20/08	11/03/08	gross β	4.9E-02 ± 4.6E-03					
	11/03/08	11/17/08	gross α	1.1E-03 ± 5.3E-04					
	11/03/08	11/17/08	gross β	1.7E-02 ± 2.2E-03					
	11/17/08	12/01/08	gross α	1.3E-03 ± 5.8E-04					
	11/17/08	12/01/08	gross β	3.5E-02 ± 3.5E-03					
	12/01/08	12/15/08	gross α	2.1E-03 ± 7.0E-04					
	12/01/08	12/15/08	gross β	2.6E-02 ± 2.8E-03					
	12/15/08	12/30/08	gross α	2.0E-03 ± 6.7E-04					
	12/15/08	12/30/08	gross β	3.9E-02 ± 3.7E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 33 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N968 (200-E)	12/31/07	01/14/08	gross α	6.0E-04 ± 4.9E-04	N968	12/31/07 to 06/30/08	⁶⁰ Co	-1.0E-05 ± 6.9E-05	U
	12/31/07	01/14/08	gross β	8.8E-03 ± 1.4E-03			¹³⁴ Cs	8.0E-06 ± 6.7E-05	U
	01/14/08	01/29/08	gross α	1.2E-03 ± 5.2E-04			¹³⁷ Cs	-3.4E-05 ± 5.9E-05	U
	01/14/08	01/29/08	gross β	3.2E-02 ± 3.1E-03			¹⁵² Eu	-1.8E-05 ± 1.4E-04	U
	01/29/08	02/12/08	gross α	6.2E-04 ± 5.0E-04			¹⁵⁴ Eu	-1.3E-04 ± 1.7E-04	U
	01/29/08	02/12/08	gross β	3.5E-03 ± 8.1E-04			¹⁵⁵ Eu	-2.5E-06 ± 2.5E-05	U
	02/12/08	02/25/08	gross α	1.0E-03 ± 6.5E-04			²³⁸ Pu	5.4E-07 ± 2.4E-06	U
	02/12/08	02/25/08	gross β	2.8E-02 ± 3.0E-03			^{239/240} Pu	2.2E-06 ± 2.3E-06	
	02/25/08	03/11/08	gross α	1.3E-03 ± 5.3E-04			¹⁰⁶ Ru	-2.1E-04 ± 5.1E-04	U
	02/25/08	03/11/08	gross β	1.5E-02 ± 1.8E-03			¹²⁵ Sb	8.5E-05 ± 1.4E-04	U
	03/11/08	03/25/08	gross α	3.9E-04 ± 4.4E-04			⁹⁰ Sr	-2.0E-04 ± 2.0E-04	U
	03/11/08	03/25/08	gross β	7.1E-03 ± 1.2E-03			²³⁴ U	9.6E-06 ± 7.2E-06	
	03/25/08	04/07/08	gross α	9.3E-04 ± 6.2E-04			²³⁵ U	2.8E-06 ± 3.0E-06	
	03/25/08	04/07/08	gross β	7.6E-03 ± 1.3E-03			²³⁸ U	9.6E-06 ± 6.2E-06	
	04/07/08	04/21/08	gross α	1.3E-03 ± 5.5E-04					
	04/07/08	04/21/08	gross β	8.4E-03 ± 1.3E-03	N968	06/30/08 to 12/30/08	⁶⁰ Co	-3.7E-05 ± 6.5E-05	U
	04/21/08	05/06/08	gross α	1.2E-03 ± 5.2E-04			¹³⁴ Cs	4.7E-05 ± 6.1E-05	U
	04/21/08	05/06/08	gross β	1.1E-02 ± 1.5E-03			¹³⁷ Cs	1.9E-05 ± 5.7E-05	U
	05/06/08	05/19/08	gross α	1.5E-03 ± 6.0E-04			¹⁵² Eu	-1.3E-05 ± 1.3E-04	U
	05/06/08	05/19/08	gross β	1.2E-02 ± 1.8E-03			¹⁵⁴ Eu	-5.7E-06 ± 5.7E-05	U
	05/19/08	06/02/08	gross α	8.1E-04 ± 5.5E-04			¹⁵⁵ Eu	1.3E-04 ± 1.6E-04	U
	05/19/08	06/02/08	gross β	1.2E-02 ± 1.7E-03			²³⁸ Pu	-1.6E-06 ± 1.1E-05	U
	06/02/08	06/16/08	gross α	6.3E-04 ± 5.2E-04			^{239/240} Pu	3.2E-06 ± 4.0E-06	U
	06/02/08	06/16/08	gross β	8.2E-03 ± 1.3E-03			¹⁰⁶ Ru	-3.6E-04 ± 5.1E-04	U
	06/16/08	06/30/08	gross α	1.7E-03 ± 6.7E-04			¹²⁵ Sb	1.1E-05 ± 1.1E-04	U
	06/16/08	06/30/08	gross β	1.1E-02 ± 1.6E-03			⁹⁰ Sr	-1.4E-04 ± 1.5E-04	U
	06/30/08	07/14/08	gross α	1.8E-03 ± 7.0E-04			²³⁴ U	1.7E-05 ± 9.4E-06	
	06/30/08	07/14/08	gross β	1.4E-02 ± 1.8E-03			²³⁵ U	2.2E-06 ± 2.6E-06	
	07/14/08	07/28/08	gross α	1.5E-03 ± 5.8E-04			²³⁸ U	1.2E-05 ± 7.2E-06	
	07/14/08	07/28/08	gross β	1.7E-02 ± 2.1E-03					
	07/28/08	08/11/08	gross α	6.9E-04 ± 5.2E-04					
	07/28/08	08/11/08	gross β	1.1E-02 ± 1.6E-03					
	08/11/08	08/25/08	gross α	1.4E-03 ± 5.7E-04					
	08/11/08	08/25/08	gross β	1.2E-02 ± 1.6E-03					
	08/25/08	09/08/08	gross α	7.4E-04 ± 5.3E-04					
	08/25/08	09/08/08	gross β	9.4E-03 ± 1.4E-03					
	09/08/08	09/22/08	gross α	9.7E-04 ± 5.9E-04					
	09/08/08	09/22/08	gross β	2.3E-02 ± 2.6E-03					
	09/22/08	10/07/08	gross α	1.2E-03 ± 5.0E-04					
	09/22/08	10/07/08	gross β	2.1E-02 ± 2.3E-03					
	10/07/08	10/20/08	gross α	2.1E-03 ± 7.3E-04					
	10/07/08	10/20/08	gross β	1.6E-02 ± 2.1E-03					
	10/20/08	11/03/08	gross α	3.0E-03 ± 8.3E-04					
	10/20/08	11/03/08	gross β	4.1E-02 ± 4.0E-03					
	11/03/08	11/17/08	gross α	1.1E-03 ± 5.1E-04					
	11/03/08	11/17/08	gross β	1.9E-02 ± 2.3E-03					
	11/17/08	12/01/08	gross α	2.5E-03 ± 7.7E-04					
	11/17/08	12/01/08	gross β	3.2E-02 ± 3.2E-03					
	12/01/08	12/15/08	gross α	2.0E-03 ± 6.7E-04					
	12/01/08	12/15/08	gross β	2.2E-02 ± 2.4E-03					
	12/15/08	12/30/08	gross α	1.8E-03 ± 6.2E-04					
	12/15/08	12/30/08	gross β	3.7E-02 ± 3.5E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 34 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N969 (200-E)	12/31/07	01/14/08	gross α	8.1E-04 ± 5.5E-04	N969	12/31/07 to 06/30/08	⁶⁰ Co	-9.9E-06 ± 8.8E-05	U
	12/31/07	01/14/08	gross β	7.3E-03 ± 1.2E-03			¹³⁴ Cs	-3.3E-06 ± 3.3E-05	U
	01/14/08	01/29/08	gross α	1.0E-03 ± 4.9E-04			¹³⁷ Cs	-9.0E-07 ± 9.0E-06	U
	01/14/08	01/29/08	gross β	3.2E-02 ± 3.2E-03			¹⁵² Eu	5.9E-05 ± 1.8E-04	U
	01/29/08	02/12/08	gross α	8.6E-04 ± 5.8E-04			¹⁵⁴ Eu	-3.2E-04 ± 3.3E-04	U
	01/29/08	02/12/08	gross β	4.2E-03 ± 9.0E-04			¹⁵⁵ Eu	-1.2E-04 ± 1.7E-04	U
	02/12/08	02/25/08	gross α	1.5E-03 ± 5.9E-04			²³⁸ Pu	1.1E-06 ± 2.7E-06	U
	02/12/08	02/25/08	gross β	1.9E-02 ± 2.2E-03			^{239/240} Pu	5.4E-07 ± 1.9E-06	U
	02/25/08	03/11/08	gross α	9.4E-04 ± 4.4E-04			¹⁰⁶ Ru	8.9E-05 ± 6.3E-04	U
	02/25/08	03/11/08	gross β	1.8E-02 ± 2.1E-03			¹²⁵ Sb	9.3E-06 ± 9.3E-05	U
	03/11/08	03/25/08	gross α	1.1E-03 ± 5.0E-04			⁹⁰ Sr	-9.0E-06 ± 9.4E-06	U
	03/11/08	03/25/08	gross β	1.0E-02 ± 1.5E-03			²³⁴ U	1.0E-05 ± 6.7E-06	
	03/25/08	04/07/08	gross α	9.3E-04 ± 6.2E-04			²³⁵ U	1.5E-06 ± 3.1E-06	U
	03/25/08	04/07/08	gross β	7.9E-03 ± 1.3E-03			²³⁸ U	6.9E-06 ± 5.1E-06	
	04/07/08	04/21/08	gross α	1.1E-03 ± 5.0E-04	N969	06/30/08 to 12/30/08	⁶⁰ Co	1.5E-05 ± 7.8E-05	U
	04/07/08	04/21/08	gross β	1.0E-02 ± 1.5E-03			¹³⁴ Cs	2.4E-05 ± 6.3E-05	U
	04/21/08	05/07/08	gross α	1.8E-03 ± 6.1E-04			¹³⁷ Cs	5.1E-05 ± 6.3E-05	U
	04/21/08	05/07/08	gross β	1.7E-02 ± 2.0E-03			¹⁵² Eu	-8.3E-05 ± 1.5E-04	U
	05/07/08	05/19/08	gross α	1.1E-03 ± 6.9E-04			¹⁵⁴ Eu	7.1E-05 ± 2.1E-04	U
	05/07/08	05/19/08	gross β	1.2E-02 ± 1.8E-03			¹⁵⁵ Eu	2.4E-05 ± 1.7E-04	U
	05/19/08	06/02/08	gross α	9.5E-04 ± 5.9E-04			²³⁸ Pu	2.4E-06 ± 1.5E-05	U
	05/19/08	06/02/08	gross β	1.1E-02 ± 1.6E-03			^{239/240} Pu	4.9E-06 ± 5.2E-06	
	06/02/08	06/16/08	gross α	2.3E-03 ± 9.7E-04			¹⁰⁶ Ru	-6.1E-05 ± 5.3E-04	U
	06/02/08	06/16/08	gross β	1.5E-02 ± 2.2E-03			¹²⁵ Sb	3.5E-05 ± 1.4E-04	U
	06/16/08	06/30/08	gross α	1.2E-03 ± 5.7E-04			⁹⁰ Sr	-8.4E-05 ± 8.7E-05	U
	06/16/08	06/30/08	gross β	1.2E-02 ± 1.6E-03			²³⁴ U	1.3E-05 ± 8.1E-06	
	06/30/08	07/14/08	gross α	6.4E-04 ± 5.2E-04			²³⁵ U	2.9E-06 ± 3.0E-06	
	06/30/08	07/14/08	gross β	1.2E-02 ± 1.6E-03			²³⁸ U	7.8E-06 ± 5.7E-06	
	07/14/08	07/28/08	gross α	1.3E-03 ± 5.5E-04					
	07/14/08	07/28/08	gross β	1.3E-02 ± 1.7E-03					
	07/28/08	08/11/08	gross α	7.4E-04 ± 5.3E-04					
	07/28/08	08/11/08	gross β	1.4E-02 ± 1.8E-03					
	08/11/08	08/25/08	gross α	1.2E-03 ± 5.2E-04					
	08/11/08	08/25/08	gross β	1.3E-02 ± 1.7E-03					
	08/25/08	09/08/08	gross α	4.0E-04 ± 4.4E-04					
	08/25/08	09/08/08	gross β	1.1E-02 ± 1.6E-03					
	09/08/08	09/22/08	gross α	1.5E-03 ± 5.9E-04					
	09/08/08	09/22/08	gross β	2.6E-02 ± 2.8E-03					
	09/22/08	10/07/08	gross α	1.5E-03 ± 5.6E-04					
	09/22/08	10/07/08	gross β	2.2E-02 ± 2.5E-03					
	10/07/08	10/20/08	gross α	8.1E-04 ± 6.0E-04					
	10/07/08	10/20/08	gross β	1.6E-02 ± 2.1E-03					
	10/20/08	11/03/08	gross α	4.0E-03 ± 9.8E-04					
	10/20/08	11/03/08	gross β	4.2E-02 ± 4.0E-03					
	11/03/08	11/17/08	gross α	1.3E-03 ± 5.4E-04					
	11/03/08	11/17/08	gross β	1.9E-02 ± 2.2E-03					
	11/17/08	12/01/08	gross α	2.3E-03 ± 7.4E-04					
	11/17/08	12/01/08	gross β	3.6E-02 ± 3.5E-03					
	12/01/08	12/15/08	gross α	1.7E-03 ± 6.3E-04					
	12/01/08	12/15/08	gross β	2.0E-02 ± 2.3E-03					
	12/15/08	12/30/08	gross α	2.3E-03 ± 7.0E-04					
	12/15/08	12/30/08	gross β	3.9E-02 ± 3.7E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 35 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N970 (200-E)	12/31/07	01/14/08	gross α	9.5E-04 ± 5.9E-04	N970	12/31/07 to 06/30/08	⁶⁰ Co	-2.3E-05 ± 6.6E-05	U
	12/31/07	01/14/08	gross β	7.2E-03 ± 1.2E-03			¹³⁴ Cs	4.0E-05 ± 6.0E-05	U
	01/14/08	01/29/08	gross α	2.2E-03 ± 7.0E-04			¹³⁷ Cs	1.1E-05 ± 5.7E-05	U
	01/14/08	01/29/08	gross β	3.7E-02 ± 3.5E-03			¹⁵² Eu	-3.9E-05 ± 1.4E-04	U
	01/29/08	02/12/08	gross α	3.9E-04 ± 4.4E-04			¹⁵⁴ Eu	1.9E-05 ± 1.7E-04	U
	01/29/08	02/12/08	gross β	2.7E-03 ± 7.1E-04			¹⁵⁵ Eu	1.0E-04 ± 1.3E-04	U
	02/12/08	02/25/08	gross α	2.3E-03 ± 7.5E-04			²³⁸ Pu	5.3E-07 ± 5.5E-07	U
	02/12/08	02/25/08	gross β	3.2E-02 ± 3.3E-03			^{239/240} Pu	5.3E-07 ± 1.9E-06	U
	02/25/08	03/11/08	gross α	6.6E-04 ± 4.9E-04			¹⁰⁶ Ru	-2.0E-04 ± 5.2E-04	U
	02/25/08	03/11/08	gross β	1.4E-02 ± 1.8E-03			¹²⁵ Sb	-3.0E-05 ± 1.3E-04	U
	03/11/08	03/25/08	gross α	5.0E-04 ± 4.7E-04			⁹⁰ Sr	-1.5E-04 ± 1.6E-04	U
	03/11/08	03/25/08	gross β	1.2E-02 ± 1.7E-03			²³⁴ U	7.3E-06 ± 6.1E-06	
	03/25/08	04/07/08	gross α	9.3E-04 ± 6.2E-04			²³⁵ U	1.5E-06 ± 2.1E-06	U
	03/25/08	04/07/08	gross β	7.1E-03 ± 1.2E-03			²³⁸ U	6.6E-06 ± 4.9E-06	
	04/07/08	04/21/08	gross α	9.8E-04 ± 6.1E-04	N970	06/30/08 to 12/30/08	⁶⁰ Co	-3.4E-05 ± 8.8E-05	U
	04/07/08	04/21/08	gross β	1.0E-02 ± 1.5E-03			¹³⁴ Cs	2.8E-05 ± 6.3E-05	U
	04/21/08	05/07/08	gross α	1.2E-03 ± 4.9E-04			¹³⁷ Cs	1.8E-05 ± 5.8E-05	U
	04/21/08	05/07/08	gross β	1.0E-02 ± 1.4E-03			¹⁵² Eu	-4.4E-05 ± 1.5E-04	U
	05/07/08	05/19/08	gross α	1.8E-04 ± 4.0E-04			¹⁵⁴ Eu	-7.1E-05 ± 2.1E-04	U
	05/07/08	05/19/08	gross β	1.0E-02 ± 1.6E-03			¹⁵⁵ Eu	5.4E-05 ± 1.4E-04	U
	05/19/08	06/02/08	gross α	8.2E-04 ± 5.5E-04			²³⁸ Pu	-6.5E-07 ± 6.5E-06	U
	05/19/08	06/02/08	gross β	7.4E-03 ± 1.2E-03			^{239/240} Pu	6.5E-07 ± 3.2E-06	U
	06/02/08	06/16/08	gross α	8.0E-04 ± 6.2E-04			¹⁰⁶ Ru	1.6E-04 ± 4.9E-04	U
	06/02/08	06/16/08	gross β	8.5E-03 ± 1.3E-03			¹²⁵ Sb	-3.9E-05 ± 1.3E-04	U
	06/16/08	06/30/08	gross α	1.2E-03 ± 5.8E-04			⁹⁰ Sr	-6.9E-05 ± 7.2E-05	U
	06/16/08	06/30/08	gross β	1.2E-02 ± 1.6E-03			²³⁴ U	1.2E-05 ± 7.9E-06	
	06/30/08	07/14/08	gross α	2.2E-03 ± 7.3E-04			²³⁵ U	4.3E-06 ± 3.9E-06	
	06/30/08	07/14/08	gross β	1.5E-02 ± 1.9E-03			²³⁸ U	1.1E-05 ± 6.9E-06	
	07/14/08	07/28/08	gross α	1.6E-03 ± 6.0E-04					
	07/14/08	07/28/08	gross β	1.1E-02 ± 1.5E-03					
	07/28/08	08/11/08	gross α	1.1E-03 ± 5.0E-04					
	07/28/08	08/11/08	gross β	1.3E-02 ± 1.7E-03					
	08/11/08	08/25/08	gross α	1.6E-03 ± 5.9E-04					
	08/11/08	08/25/08	gross β	1.0E-02 ± 1.5E-03					
	08/25/08	09/08/08	gross α	7.2E-04 ± 5.2E-04					
	08/25/08	09/08/08	gross β	1.3E-02 ± 1.7E-03					
	09/08/08	09/22/08	gross α	8.5E-04 ± 5.6E-04					
	09/08/08	09/22/08	gross β	2.6E-02 ± 2.8E-03					
	09/22/08	10/07/08	gross α	1.4E-03 ± 5.4E-04					
	09/22/08	10/07/08	gross β	2.4E-02 ± 2.7E-03					
	10/07/08	10/20/08	gross α	9.4E-04 ± 6.3E-04					
	10/07/08	10/20/08	gross β	6.8E-03 ± 1.2E-03					
	10/20/08	11/03/08	gross α	3.6E-03 ± 9.2E-04					
	10/20/08	11/03/08	gross β	4.0E-02 ± 3.8E-03					
	11/03/08	11/17/08	gross α	2.7E-03 ± 8.0E-04					
	11/03/08	11/17/08	gross β	1.7E-02 ± 2.0E-03					
	11/17/08	12/01/08	gross α	1.8E-03 ± 6.8E-04					
	11/17/08	12/01/08	gross β	4.3E-02 ± 4.1E-03					
	12/01/08	12/15/08	gross α	1.9E-03 ± 6.7E-04					
	12/01/08	12/15/08	gross β	1.5E-02 ± 1.9E-03					
	12/15/08	12/30/08	gross α	1.9E-03 ± 6.5E-04					
	12/15/08	12/30/08	gross β	4.0E-02 ± 3.7E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 36 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N972 (200-E)	12/31/07	01/14/08	gross α	1.2E-03 ± 5.2E-04	N972	12/31/07 to 06/30/08	⁶⁰ Co	-6.9E-06 ± 6.5E-05	U
	12/31/07	01/14/08	gross β	1.1E-02 ± 1.6E-03			¹³⁴ Cs	5.2E-05 ± 6.5E-05	U
	01/14/08	01/29/08	gross α	1.8E-03 ± 6.3E-04			¹³⁷ Cs	8.4E-05 ± 8.1E-05	U
	01/14/08	01/29/08	gross β	3.4E-02 ± 3.3E-03			¹⁵² Eu	-5.4E-05 ± 1.5E-04	U
	01/29/08	02/12/08	gross α	1.7E-04 ± 3.5E-04			¹⁵⁴ Eu	-6.8E-05 ± 2.0E-04	U
	01/29/08	02/12/08	gross β	3.3E-03 ± 7.8E-04			¹⁵⁵ Eu	7.8E-05 ± 1.6E-04	U
	02/12/08	02/25/08	gross α	1.5E-03 ± 6.1E-04			²³⁸ Pu	-5.2E-07 ± 5.0E-06	U
	02/12/08	02/25/08	gross β	3.0E-02 ± 3.1E-03			^{239/240} Pu	5.2E-07 ± 1.0E-06	U
	02/25/08	03/11/08	gross α	6.8E-04 ± 5.0E-04			¹⁰⁶ Ru	-1.5E-04 ± 5.4E-04	U
	02/25/08	03/11/08	gross β	1.5E-02 ± 1.9E-03			¹²⁵ Sb	-4.6E-06 ± 4.6E-05	U
	03/11/08	03/25/08	gross α	8.3E-04 ± 5.6E-04			⁹⁰ Sr	-6.4E-05 ± 6.6E-05	U
	03/11/08	03/25/08	gross β	8.9E-03 ± 1.4E-03			²³⁴ U	8.1E-06 ± 6.2E-06	
	03/25/08	04/07/08	gross α	6.8E-04 ± 5.6E-04			²³⁵ U	-7.4E-07 ± 3.3E-06	U
	03/25/08	04/07/08	gross β	9.2E-03 ± 1.4E-03			²³⁸ U	1.0E-05 ± 6.6E-06	
	04/07/08	04/21/08	gross α	5.2E-04 ± 4.9E-04	N972	06/30/08 to 12/30/08	⁶⁰ Co	3.7E-05 ± 6.4E-05	U
	04/07/08	04/21/08	gross β	1.0E-02 ± 1.5E-03			¹³⁴ Cs	2.2E-05 ± 6.1E-05	U
	04/21/08	05/06/08	gross α	7.8E-04 ± 5.2E-04			¹³⁷ Cs	3.7E-05 ± 5.3E-05	U
	04/21/08	05/06/08	gross β	1.4E-02 ± 1.8E-03			¹⁵² Eu	-1.5E-04 ± 1.6E-04	U
	05/06/08	05/19/08	gross α	1.4E-03 ± 5.9E-04			¹⁵⁴ Eu	2.7E-05 ± 1.6E-04	U
	05/06/08	05/19/08	gross β	1.1E-02 ± 1.7E-03			¹⁵⁵ Eu	1.0E-04 ± 1.6E-04	U
	05/19/08	06/02/08	gross α	6.1E-04 ± 5.1E-04			²³⁸ Pu	-4.9E-06 ± 8.7E-06	U
	05/19/08	06/02/08	gross β	1.2E-02 ± 1.6E-03			^{239/240} Pu	3.5E-06 ± 3.4E-06	
	06/02/08	06/16/08	gross α	6.4E-04 ± 5.6E-04			¹⁰⁶ Ru	-8.1E-05 ± 4.8E-04	U
	06/02/08	06/16/08	gross β	7.2E-03 ± 1.2E-03			¹²⁵ Sb	-6.6E-05 ± 1.3E-04	U
	06/16/08	06/30/08	gross α	1.3E-03 ± 6.0E-04			⁹⁰ Sr	-5.5E-05 ± 5.7E-05	U
	06/16/08	06/30/08	gross β	1.5E-02 ± 1.9E-03			²³⁴ U	8.8E-06 ± 6.0E-06	
	06/30/08	07/14/08	gross α	1.4E-03 ± 5.6E-04			²³⁵ U	2.7E-06 ± 2.9E-06	
	06/30/08	07/14/08	gross β	1.5E-02 ± 1.9E-03			²³⁸ U	1.6E-05 ± 8.5E-06	
	07/14/08	07/28/08	gross α	1.2E-03 ± 5.2E-04					
	07/14/08	07/28/08	gross β	1.3E-02 ± 1.7E-03					
	07/28/08	08/11/08	gross α	1.3E-03 ± 5.5E-04					
	07/28/08	08/11/08	gross β	1.3E-02 ± 1.7E-03					
	08/11/08	08/25/08	gross α	1.1E-03 ± 5.0E-04					
	08/11/08	08/25/08	gross β	1.5E-02 ± 1.9E-03					
	08/25/08	09/08/08	gross α	1.8E-04 ± 3.4E-04					
	08/25/08	09/08/08	gross β	1.0E-02 ± 1.5E-03					
	09/08/08	09/22/08	gross α	1.8E-03 ± 6.3E-04					
	09/08/08	09/22/08	gross β	2.3E-02 ± 2.5E-03					
	09/22/08	10/07/08	gross α	1.8E-03 ± 6.1E-04					
	09/22/08	10/07/08	gross β	2.3E-02 ± 2.5E-03					
	10/07/08	10/20/08	gross α	8.1E-04 ± 6.0E-04					
	10/07/08	10/20/08	gross β	1.5E-02 ± 1.9E-03					
	10/20/08	11/03/08	gross α	2.8E-03 ± 8.3E-04					
	10/20/08	11/03/08	gross β	4.1E-02 ± 3.9E-03					
	11/03/08	11/17/08	gross α	5.2E-04 ± 4.8E-04					
	11/03/08	11/17/08	gross β	1.5E-02 ± 1.9E-03					
	11/17/08	12/01/08	gross α	1.6E-03 ± 6.1E-04					
	11/17/08	12/01/08	gross β	4.1E-02 ± 3.9E-03					
	12/01/08	12/15/08	gross α	1.9E-03 ± 6.7E-04					
	12/01/08	12/15/08	gross β	2.0E-02 ± 2.3E-03					
	12/15/08	12/30/08	gross α	2.3E-03 ± 7.4E-04					
	12/15/08	12/30/08	gross β	4.2E-02 ± 3.9E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 37 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N973 (200-E)	12/31/07	01/14/08	gross α	1.1E-03 ± 5.1E-04	N973	12/31/07 to 06/30/08	⁶⁰ Co	-1.3E-04 ± 1.3E-04	U
	12/31/07	01/14/08	gross β	9.9E-03 ± 1.5E-03			¹³⁴ Cs	-3.5E-05 ± 1.2E-04	U
	01/14/08	01/29/08	gross α	1.9E-03 ± 6.6E-04			¹³⁷ Cs	-9.5E-05 ± 1.0E-04	U
	01/14/08	01/29/08	gross β	3.7E-02 ± 3.5E-03			¹⁵² Eu	3.7E-05 ± 2.4E-04	U
	01/29/08	02/12/08	gross α	3.9E-04 ± 4.4E-04			¹⁵⁴ Eu	-1.5E-04 ± 3.7E-04	U
	01/29/08	02/12/08	gross β	5.6E-03 ± 1.0E-03			¹⁵⁵ Eu	-8.8E-05 ± 1.8E-04	U
	02/12/08	02/25/08	gross α	6.6E-04 ± 5.4E-04			^{239/240} Pu	-1.0E-06 ± 1.5E-06	U
	02/12/08	02/25/08	gross β	3.0E-02 ± 3.2E-03			¹⁰⁶ Ru	-2.8E-04 ± 9.0E-04	U
	02/25/08	03/11/08	gross α	4.7E-04 ± 4.4E-04			¹²⁵ Sb	1.1E-04 ± 2.3E-04	U
	02/25/08	03/11/08	gross β	1.8E-02 ± 2.1E-03			⁹⁰ Sr	-2.3E-05 ± 2.3E-05	U
	03/11/08	03/25/08	gross α	6.1E-04 ± 5.0E-04			²³⁴ U	8.6E-06 ± 6.1E-06	
	03/11/08	03/25/08	gross β	8.6E-03 ± 1.4E-03			²³⁵ U	7.2E-07 ± 1.5E-06	U
	03/25/08	04/07/08	gross α	1.2E-03 ± 5.5E-04			²³⁸ U	7.9E-06 ± 5.7E-06	
	03/25/08	04/07/08	gross β	7.9E-03 ± 1.3E-03	N973	06/30/08 to 12/30/08	⁶⁰ Co	-5.5E-05 ± 1.0E-04	U
	04/07/08	04/21/08	gross α	8.6E-04 ± 5.8E-04			¹³⁴ Cs	-5.0E-06 ± 5.0E-05	U
	04/07/08	04/21/08	gross β	1.0E-02 ± 1.5E-03			¹³⁷ Cs	-2.0E-05 ± 1.0E-04	U
	04/21/08	05/06/08	gross α	1.7E-03 ± 6.1E-04			¹⁵² Eu	-2.7E-04 ± 2.8E-04	U
	04/21/08	05/06/08	gross β	1.5E-02 ± 1.9E-03			¹⁵⁴ Eu	-1.3E-04 ± 3.0E-04	U
	05/06/08	05/19/08	gross α	9.3E-04 ± 6.2E-04			¹⁵⁵ Eu	-1.0E-04 ± 1.9E-04	U
	05/06/08	05/19/08	gross β	1.1E-02 ± 1.7E-03			²³⁸ Pu	1.7E-06 ± 1.1E-05	U
	05/19/08	06/02/08	gross α	8.4E-04 ± 5.7E-04			^{239/240} Pu	8.4E-07 ± 1.7E-06	U
	05/19/08	06/02/08	gross β	9.9E-03 ± 1.5E-03			¹⁰⁶ Ru	-7.4E-04 ± 8.9E-04	U
	06/02/08	06/16/08	gross α	9.4E-04 ± 6.6E-04			¹²⁵ Sb	2.5E-05 ± 2.5E-04	U
	06/02/08	06/16/08	gross β	7.2E-03 ± 1.2E-03			⁹⁰ Sr	-2.7E-05 ± 2.8E-05	U
	06/16/08	06/30/08	gross α	1.8E-03 ± 7.1E-04			²³⁴ U	1.1E-05 ± 8.2E-06	
	06/16/08	06/30/08	gross β	1.5E-02 ± 1.9E-03			²³⁵ U	2.4E-06 ± 4.3E-06	U
	06/30/08	07/14/08	gross α	1.8E-03 ± 6.8E-04			²³⁸ U	9.5E-06 ± 6.7E-06	
	06/30/08	07/14/08	gross β	1.3E-02 ± 1.8E-03					
	07/14/08	07/28/08	gross α	1.1E-03 ± 5.0E-04					
	07/14/08	07/28/08	gross β	1.4E-02 ± 1.8E-03					
	07/28/08	08/11/08	gross α	1.0E-03 ± 4.8E-04					
	07/28/08	08/11/08	gross β	1.4E-02 ± 1.8E-03					
	08/11/08	08/25/08	gross α	8.5E-04 ± 5.6E-04					
	08/11/08	08/25/08	gross β	1.0E-02 ± 1.5E-03					
	08/25/08	09/08/08	gross α	6.3E-04 ± 5.0E-04					
	08/25/08	09/08/08	gross β	1.1E-02 ± 1.5E-03					
	09/08/08	09/22/08	gross α	1.5E-03 ± 6.2E-04					
	09/08/08	09/22/08	gross β	2.6E-02 ± 2.9E-03					
	09/22/08	10/07/08	gross α	1.6E-03 ± 5.8E-04					
	09/22/08	10/07/08	gross β	2.1E-02 ± 2.4E-03					
	10/07/08	10/20/08	gross α	3.1E-04 ± 4.4E-04					
	10/07/08	10/20/08	gross β	1.5E-02 ± 2.0E-03					
	10/20/08	11/03/08	gross α	2.9E-03 ± 8.7E-04					
	10/20/08	11/03/08	gross β	3.9E-02 ± 3.8E-03					
	11/03/08	11/17/08	gross α	1.4E-03 ± 5.9E-04					
	11/03/08	11/17/08	gross β	2.0E-02 ± 2.3E-03					
	11/17/08	12/01/08	gross α	1.4E-03 ± 6.4E-04					
	11/17/08	12/01/08	gross β	4.2E-02 ± 4.1E-03					
	12/01/08	12/15/08	gross α	1.8E-03 ± 6.6E-04					
	12/01/08	12/15/08	gross β	2.2E-02 ± 2.5E-03					
	12/15/08	12/30/08	gross α	2.6E-03 ± 7.8E-04					
	12/15/08	12/30/08	gross β	3.6E-02 ± 3.5E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 38 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N976 (200-E)	12/31/07	01/14/08	gross α	9.5E-04 ± 5.9E-04	N976	12/31/07 to 06/30/08	⁶⁰ Co	2.4E-06 ± 2.4E-05	U
	12/31/07	01/14/08	gross β	1.4E-02 ± 1.8E-03			¹³⁴ Cs	-6.2E-05 ± 6.6E-05	U
	01/14/08	01/29/08	gross α	1.4E-03 ± 5.3E-04			¹³⁷ Cs	5.1E-05 ± 6.7E-05	U
	01/14/08	01/29/08	gross β	2.5E-02 ± 2.6E-03			¹⁵² Eu	-5.7E-05 ± 1.3E-04	U
	01/29/08	02/12/08	gross α	4.1E-04 ± 4.6E-04			¹⁵⁴ Eu	-2.9E-05 ± 1.7E-04	U
	01/29/08	02/12/08	gross β	3.0E-03 ± 7.7E-04			¹⁵⁵ Eu	-1.2E-04 ± 1.6E-04	U
	02/12/08	02/25/08	gross α	1.4E-03 ± 5.7E-04			²³⁸ Pu	-5.6E-07 ± 3.0E-06	U
	02/12/08	02/25/08	gross β	3.0E-02 ± 3.1E-03			^{239/240} Pu	5.6E-07 ± 1.1E-06	U
	02/25/08	03/11/08	gross α	1.5E-03 ± 6.0E-04			¹⁰⁶ Ru	-2.7E-04 ± 5.7E-04	U
	02/25/08	03/11/08	gross β	1.4E-02 ± 1.9E-03			¹²⁵ Sb	-3.3E-06 ± 3.3E-05	U
	03/11/08	03/25/08	gross α	7.6E-04 ± 5.6E-04			⁹⁰ Sr	3.2E-05 ± 1.4E-04	U
	03/11/08	03/25/08	gross β	7.7E-03 ± 1.3E-03			²³⁴ U	1.9E-05 ± 1.0E-05	
	03/25/08	04/07/08	gross α	4.1E-04 ± 4.6E-04			²³⁵ U	2.2E-06 ± 2.6E-06	
	03/25/08	04/07/08	gross β	6.7E-03 ± 1.2E-03			²³⁸ U	8.0E-06 ± 5.5E-06	
	04/07/08	04/21/08	gross α	4.5E-04 ± 5.0E-04					
	04/07/08	04/21/08	gross β	7.9E-03 ± 1.3E-03	N976	06/30/08 to 12/30/08	⁶⁰ Co	-1.3E-05 ± 7.8E-05	U
	04/21/08	05/06/08	gross α	1.1E-03 ± 4.7E-04			¹³⁴ Cs	-1.6E-05 ± 7.2E-05	U
	04/21/08	05/06/08	gross β	1.2E-02 ± 1.6E-03			¹³⁷ Cs	2.0E-04 ± 1.3E-04	
	05/06/08	05/19/08	gross α	1.3E-03 ± 5.6E-04			¹⁵² Eu	3.1E-06 ± 3.1E-05	U
	05/06/08	05/19/08	gross β	1.0E-02 ± 1.6E-03			¹⁵⁴ Eu	-1.5E-06 ± 1.5E-05	U
	05/19/08	06/02/08	gross α	7.9E-04 ± 5.8E-04			¹⁵⁵ Eu	1.1E-05 ± 1.1E-04	U
	05/19/08	06/02/08	gross β	7.7E-03 ± 1.3E-03			²³⁸ Pu	-3.6E-06 ± 1.2E-05	U
	06/02/08	06/16/08	gross α	1.4E-03 ± 6.3E-04			^{239/240} Pu	1.5E-06 ± 3.6E-06	U
	06/02/08	06/16/08	gross β	9.3E-03 ± 1.4E-03			¹⁰⁶ Ru	-3.3E-04 ± 5.6E-04	U
	06/16/08	06/30/08	gross α	8.7E-04 ± 6.8E-04			¹²⁵ Sb	2.7E-05 ± 1.4E-04	U
	06/16/08	06/30/08	gross β	6.7E-03 ± 1.2E-03			⁹⁰ Sr	-5.9E-05 ± 6.1E-05	U
	06/30/08	07/14/08	gross α	5.6E-04 ± 5.1E-04			²³⁴ U	1.3E-05 ± 8.2E-06	
	06/30/08	07/14/08	gross β	1.2E-02 ± 1.7E-03			²³⁵ U	2.3E-06 ± 3.5E-06	U
	07/14/08	07/28/08	gross α	1.2E-03 ± 5.4E-04			²³⁸ U	1.3E-05 ± 8.2E-06	
	07/14/08	07/28/08	gross β	1.3E-02 ± 1.7E-03					
	07/28/08	08/11/08	gross α	1.3E-03 ± 5.7E-04					
	07/28/08	08/11/08	gross β	1.2E-02 ± 1.6E-03					
	08/11/08	08/25/08	gross α	9.0E-04 ± 5.9E-04					
	08/11/08	08/25/08	gross β	1.2E-02 ± 1.7E-03					
	08/25/08	09/08/08	gross α	9.7E-04 ± 5.9E-04					
	08/25/08	09/08/08	gross β	6.2E-03 ± 1.1E-03					
	09/08/08	09/22/08	gross α	4.4E-04 ± 4.7E-04					
	09/08/08	09/22/08	gross β	1.6E-02 ± 2.0E-03					
	09/22/08	10/07/08	gross α	1.3E-03 ± 5.4E-04					
	09/22/08	10/07/08	gross β	2.5E-02 ± 2.7E-03					
	10/07/08	10/20/08	gross α	1.7E-03 ± 6.6E-04					
	10/07/08	10/20/08	gross β	2.0E-02 ± 2.4E-03					
	10/20/08	11/03/08	gross α	1.9E-03 ± 7.0E-04					
	10/20/08	11/03/08	gross β	3.8E-02 ± 3.7E-03					
	11/03/08	11/17/08	gross α	7.5E-04 ± 5.5E-04					
	11/03/08	11/17/08	gross β	1.4E-02 ± 1.8E-03					
	11/17/08	12/01/08	gross α	2.5E-03 ± 7.9E-04					
	11/17/08	12/01/08	gross β	3.7E-02 ± 3.7E-03					
	12/01/08	12/15/08	gross α	9.7E-04 ± 6.0E-04					
	12/01/08	12/15/08	gross β	2.2E-02 ± 2.5E-03					
	12/15/08	12/30/08	gross α	2.8E-03 ± 7.9E-04					
	12/15/08	12/30/08	gross β	3.5E-02 ± 3.4E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 39 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N977 (200-E)	12/31/07	01/14/08	gross α	9.3E-04 ± 5.7E-04	N977	12/31/07 to 06/30/08	⁶⁰ Co	1.4E-04 ± 1.7E-04	U
	12/31/07	01/14/08	gross β	7.5E-03 ± 1.2E-03			¹³⁴ Cs	2.8E-05 ± 1.1E-04	U
	01/14/08	01/29/08	gross α	2.0E-03 ± 6.7E-04			¹³⁷ Cs	1.5E-05 ± 9.9E-05	U
	01/14/08	01/29/08	gross β	3.3E-02 ± 3.3E-03			¹⁵² Eu	-1.0E-04 ± 2.4E-04	U
	01/29/08	02/12/08	gross α	2.9E-04 ± 4.1E-04			¹⁵⁴ Eu	-5.9E-05 ± 3.5E-04	U
	01/29/08	02/12/08	gross β	3.8E-03 ± 8.5E-04			¹⁵⁵ Eu	-1.2E-04 ± 1.9E-04	U
	02/12/08	02/25/08	gross α	1.5E-03 ± 6.1E-04			²³⁸ Pu	1.9E-04 ± 6.8E-05	
	02/12/08	02/25/08	gross β	3.1E-02 ± 3.2E-03			^{239/240} Pu	1.8E-03 ± 6.5E-04	
	02/25/08	03/11/08	gross α	1.7E-03 ± 6.1E-04			¹⁰⁶ Ru	-6.3E-04 ± 8.5E-04	U
	02/25/08	03/11/08	gross β	1.4E-02 ± 1.8E-03			¹²⁵ Sb	-8.4E-05 ± 2.4E-04	U
	03/11/08	03/25/08	gross α	1.6E-04 ± 3.5E-04			⁹⁰ Sr	2.1E-04 ± 1.5E-04	
	03/11/08	03/25/08	gross β	7.5E-03 ± 1.2E-03			²³⁴ U	8.2E-06 ± 6.0E-06	
	03/25/08	04/07/08	gross α	5.6E-04 ± 5.2E-04			²³⁵ U	2.1E-06 ± 2.5E-06	
	03/25/08	04/07/08	gross β	7.6E-03 ± 1.3E-03			²³⁸ U	1.0E-05 ± 6.3E-06	
	04/07/08	04/21/08	gross α	8.6E-04 ± 5.8E-04					
	04/07/08	04/21/08	gross β	1.1E-02 ± 1.6E-03	N977	06/30/08 to 12/30/08	⁶⁰ Co	1.6E-05 ± 6.4E-05	U
	04/21/08	05/07/08	gross α	1.0E-03 ± 4.6E-04			¹³⁴ Cs	1.1E-05 ± 5.9E-05	U
	04/21/08	05/07/08	gross β	1.4E-02 ± 1.8E-03			¹³⁷ Cs	-2.8E-05 ± 6.3E-05	U
	05/07/08	05/19/08	gross α	9.4E-04 ± 6.3E-04			¹⁵² Eu	3.8E-05 ± 1.6E-04	U
	05/07/08	05/19/08	gross β	1.3E-02 ± 1.8E-03			¹⁵⁴ Eu	-1.6E-04 ± 1.9E-04	U
	05/19/08	06/02/08	gross α	9.5E-04 ± 5.9E-04			¹⁵⁵ Eu	1.4E-05 ± 1.4E-04	U
	05/19/08	06/02/08	gross β	1.0E-02 ± 1.5E-03			²³⁸ Pu	-3.7E-06 ± 1.4E-05	U
	06/02/08	06/16/08	gross α	1.8E-03 ± 7.0E-04			^{239/240} Pu	1.5E-06 ± 3.1E-06	U
	06/02/08	06/16/08	gross β	9.1E-03 ± 1.4E-03			¹⁰⁶ Ru	1.8E-04 ± 5.2E-04	U
	06/16/08	06/30/08	gross α	9.1E-04 ± 6.4E-04			¹²⁵ Sb	2.1E-05 ± 1.2E-04	U
	06/16/08	06/30/08	gross β	1.2E-02 ± 1.6E-03			⁹⁰ Sr	-1.3E-04 ± 1.3E-04	U
	06/30/08	07/14/08	gross α	1.1E-03 ± 5.1E-04			²³⁴ U	1.0E-05 ± 6.8E-06	
	06/30/08	07/14/08	gross β	1.4E-02 ± 1.8E-03			²³⁵ U	1.5E-06 ± 2.2E-06	U
	07/14/08	07/28/08	gross α	8.5E-04 ± 5.6E-04			²³⁸ U	9.5E-06 ± 6.2E-06	
	07/14/08	07/28/08	gross β	1.2E-02 ± 1.7E-03					
	07/28/08	08/11/08	gross α	1.2E-03 ± 5.4E-04					
	07/28/08	08/11/08	gross β	1.7E-02 ± 2.1E-03					
	08/11/08	08/25/08	gross α	8.5E-04 ± 5.6E-04					
	08/11/08	08/25/08	gross β	1.4E-02 ± 1.8E-03					
	08/25/08	09/08/08	gross α	7.4E-04 ± 5.3E-04					
	08/25/08	09/08/08	gross β	8.0E-03 ± 1.3E-03					
	09/08/08	09/22/08	gross α	1.9E-03 ± 6.5E-04					
	09/08/08	09/22/08	gross β	2.9E-02 ± 3.0E-03					
	09/22/08	10/07/08	gross α	1.5E-03 ± 5.6E-04					
	09/22/08	10/07/08	gross β	2.4E-02 ± 2.6E-03					
	10/07/08	10/20/08	gross α	1.4E-03 ± 5.9E-04					
	10/07/08	10/20/08	gross β	1.6E-02 ± 2.1E-03					
	10/20/08	11/03/08	gross α	3.5E-03 ± 9.2E-04					
	10/20/08	11/03/08	gross β	3.5E-02 ± 3.4E-03					
	11/03/08	11/17/08	gross α	1.2E-03 ± 5.4E-04					
	11/03/08	11/17/08	gross β	1.6E-02 ± 2.0E-03					
	11/17/08	12/01/08	gross α	1.3E-03 ± 5.7E-04					
	11/17/08	12/01/08	gross β	4.0E-02 ± 3.9E-03					
	12/01/08	12/15/08	gross α	1.8E-03 ± 6.6E-04					
	12/01/08	12/15/08	gross β	1.8E-02 ± 2.2E-03					
	12/15/08	12/30/08	gross α	2.1E-03 ± 6.9E-04					
	12/15/08	12/30/08	gross β	3.6E-02 ± 3.5E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 40 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N978 (200-E)	12/31/07	01/14/08	gross α	2.1E-03 ± 6.9E-04	N978	12/31/07 to 06/30/08	⁶⁰ Co	7.6E-05 ± 8.1E-05	U
	12/31/07	01/14/08	gross β	6.4E-03 ± 1.1E-03			¹³⁴ Cs	-1.8E-05 ± 7.5E-05	U
	01/14/08	01/29/08	gross α	1.4E-03 ± 5.7E-04			¹³⁷ Cs	6.0E-06 ± 6.0E-05	U
	01/14/08	01/29/08	gross β	2.9E-02 ± 2.9E-03			¹⁵² Eu	-9.6E-06 ± 9.6E-05	U
	01/29/08	02/12/08	gross α	6.2E-04 ± 5.0E-04			¹⁵⁴ Eu	-2.2E-04 ± 2.3E-04	U
	01/29/08	02/12/08	gross β	4.2E-03 ± 8.9E-04			¹⁵⁵ Eu	-1.2E-04 ± 1.6E-04	U
	02/12/08	02/25/08	gross α	1.7E-03 ± 6.6E-04			²³⁸ Pu	1.5E-06 ± 2.8E-06	U
	02/12/08	02/25/08	gross β	3.0E-02 ± 3.1E-03			^{239/240} Pu	1.0E-06 ± 2.1E-06	U
	02/25/08	03/11/08	gross α	1.5E-03 ± 5.8E-04			¹⁰⁶ Ru	-2.7E-04 ± 6.6E-04	U
	02/25/08	03/11/08	gross β	1.7E-02 ± 2.0E-03			¹²⁵ Sb	1.2E-05 ± 1.2E-04	U
	03/11/08	03/25/08	gross α	5.0E-04 ± 4.8E-04			⁹⁰ Sr	-2.6E-04 ± 2.7E-04	U
	03/11/08	03/25/08	gross β	1.0E-02 ± 1.5E-03			²³⁴ U	1.2E-05 ± 7.1E-06	
	03/25/08	04/07/08	gross α	1.9E-03 ± 7.0E-04			²³⁵ U	7.5E-07 ± 2.6E-06	U
	03/25/08	04/07/08	gross β	8.4E-03 ± 1.4E-03			²³⁸ U	6.8E-06 ± 5.0E-06	
	04/07/08	04/21/08	gross α	7.5E-04 ± 5.5E-04	N978	06/30/08 to 12/30/08	⁶⁰ Co	-2.6E-05 ± 1.1E-04	U
	04/07/08	04/21/08	gross β	8.4E-03 ± 1.3E-03				-1.9E-05 ± 1.2E-04	U
	04/21/08	05/07/08	gross α	1.7E-03 ± 6.0E-04				7.1E-06 ± 7.1E-05	U
	04/21/08	05/07/08	gross β	1.4E-02 ± 1.8E-03				1.4E-04 ± 2.9E-04	U
	05/07/08	05/19/08	gross α	1.1E-03 ± 6.9E-04				-7.3E-05 ± 3.0E-04	U
	05/07/08	05/19/08	gross β	1.1E-02 ± 1.7E-03				-1.2E-04 ± 2.0E-04	U
	05/19/08	06/02/08	gross α	6.1E-04 ± 5.1E-04				-1.3E-05 ± 1.3E-05	U
	05/19/08	06/02/08	gross β	1.0E-02 ± 1.5E-03				-1.5E-06 ± 3.0E-06	U
	06/02/08	06/16/08	gross α	5.4E-04 ± 5.5E-04				5.7E-04 ± 9.0E-04	U
	06/02/08	06/16/08	gross β	7.3E-03 ± 1.2E-03				2.2E-04 ± 2.6E-04	U
	06/16/08	06/30/08	gross α	1.5E-03 ± 6.4E-04				-1.8E-04 ± 1.9E-04	U
	06/16/08	06/30/08	gross β	1.6E-02 ± 2.0E-03				1.5E-05 ± 8.6E-06	
	06/30/08	07/14/08	gross α	2.1E-03 ± 7.1E-04				3.5E-06 ± 3.4E-06	
	06/30/08	07/14/08	gross β	1.1E-02 ± 1.6E-03				7.7E-06 ± 5.6E-06	
	07/14/08	07/28/08	gross α	1.2E-03 ± 5.2E-04					
	07/14/08	07/28/08	gross β	1.2E-02 ± 1.6E-03					
	07/28/08	08/11/08	gross α	1.1E-03 ± 5.0E-04					
	07/28/08	08/11/08	gross β	1.3E-02 ± 1.7E-03					
	08/11/08	08/25/08	gross α	7.4E-04 ± 5.3E-04					
	08/11/08	08/25/08	gross β	1.2E-02 ± 1.6E-03					
	08/25/08	09/08/08	gross α	2.9E-04 ± 4.1E-04					
	08/25/08	09/08/08	gross β	1.1E-02 ± 1.5E-03					
	09/08/08	09/22/08	gross α	2.1E-03 ± 6.9E-04					
	09/08/08	09/22/08	gross β	2.3E-02 ± 2.5E-03					
	09/22/08	10/07/08	gross α	1.5E-03 ± 5.6E-04					
	09/22/08	10/07/08	gross β	2.3E-02 ± 2.6E-03					
	10/07/08	10/20/08	gross α	6.7E-04 ± 5.5E-04					
	10/07/08	10/20/08	gross β	1.5E-02 ± 2.0E-03					
	10/20/08	11/03/08	gross α	2.6E-03 ± 8.2E-04					
	10/20/08	11/03/08	gross β	3.9E-02 ± 3.8E-03					
	11/03/08	11/17/08	gross α	1.4E-03 ± 5.8E-04					
	11/03/08	11/17/08	gross β	1.4E-02 ± 1.8E-03					
	11/17/08	12/01/08	gross α	1.9E-03 ± 6.8E-04					
	11/17/08	12/01/08	gross β	3.3E-02 ± 3.4E-03					
	12/01/08	12/15/08	gross α	1.1E-03 ± 5.1E-04					
	12/01/08	12/15/08	gross β	1.4E-02 ± 1.8E-03					
	12/15/08	12/30/08	gross α	2.6E-03 ± 8.9E-04					
	12/15/08	12/30/08	gross β	5.1E-02 ± 4.8E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 41 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N984 (200-E)	12/31/07	01/14/08	gross α	9.3E-04 ± 5.7E-04	N984	12/31/07 to 06/30/08	⁶⁰ Co	-5.7E-05 ± 6.9E-05	U
	12/31/07	01/14/08	gross β	9.8E-03 ± 1.5E-03			¹³⁴ Cs	5.5E-05 ± 6.4E-05	U
	01/14/08	01/29/08	gross α	2.0E-03 ± 6.7E-04			¹³⁷ Cs	1.5E-04 ± 9.7E-05	
	01/14/08	01/29/08	gross β	3.1E-02 ± 3.1E-03			¹⁵² Eu	7.4E-06 ± 7.4E-05	U
	01/29/08	02/12/08	gross α	2.8E-04 ± 4.0E-04			¹⁵⁴ Eu	1.2E-04 ± 1.9E-04	U
	01/29/08	02/12/08	gross β	3.6E-03 ± 8.2E-04			¹⁵⁵ Eu	-2.8E-05 ± 1.5E-04	U
	02/12/08	02/25/08	gross α	2.6E-03 ± 8.1E-04			²³⁸ Pu	1.8E-05 ± 1.4E-05	U
	02/12/08	02/25/08	gross β	2.7E-02 ± 2.9E-03			^{239/240} Pu	2.3E-06 ± 4.8E-06	U
	02/25/08	03/11/08	gross α	1.4E-03 ± 5.4E-04			¹⁰³ Ru	1.3E-05 ± 6.0E-05	U
	02/25/08	03/11/08	gross β	1.6E-02 ± 1.9E-03			¹⁰⁶ Ru	-1.3E-04 ± 5.3E-04	U
	03/11/08	03/25/08	gross α	5.0E-04 ± 4.7E-04			¹²⁵ Sb	4.6E-05 ± 1.3E-04	U
	03/11/08	03/25/08	gross β	9.8E-03 ± 1.5E-03			¹¹³ Sn	5.2E-05 ± 6.7E-05	U
	03/25/08	04/07/08	gross α	6.7E-04 ± 5.4E-04			⁹⁰ Sr	-1.3E-04 ± 1.3E-04	U
	03/25/08	04/07/08	gross β	7.1E-03 ± 1.2E-03			²³⁴ U	2.0E-05 ± 1.1E-05	
	04/07/08	04/21/08	gross α	1.1E-03 ± 5.1E-04			²³⁵ U	4.7E-06 ± 4.3E-06	
	04/07/08	04/21/08	gross β	8.6E-03 ± 1.3E-03			²³⁸ U	2.0E-05 ± 1.1E-05	
	04/21/08	05/06/08	gross α	5.7E-04 ± 4.7E-04			⁶⁵ Zn	-1.0E-04 ± 1.3E-04	U
	04/21/08	05/06/08	gross β	1.5E-02 ± 1.9E-03					
	05/06/08	05/19/08	gross α	6.6E-04 ± 5.4E-04	N984	06/30/08 to 12/30/08	⁶⁰ Co	1.8E-05 ± 7.5E-05	U
	05/06/08	05/19/08	gross β	1.4E-02 ± 1.9E-03			¹³⁴ Cs	8.5E-06 ± 6.8E-05	U
	05/19/08	06/02/08	gross α	9.5E-04 ± 5.9E-04			¹³⁷ Cs	1.6E-04 ± 1.1E-04	
	05/19/08	06/02/08	gross β	1.2E-02 ± 1.7E-03			¹⁵² Eu	-6.1E-05 ± 1.6E-04	U
	06/02/08	06/16/08	gross α	1.2E-03 ± 5.7E-04			¹⁵⁴ Eu	9.1E-06 ± 9.1E-05	U
	06/02/08	06/16/08	gross β	1.1E-02 ± 1.6E-03			¹⁵⁵ Eu	5.1E-05 ± 1.6E-04	U
	06/16/08	06/30/08	gross α	2.1E-03 ± 7.7E-04			²³⁸ Pu	-7.0E-07 ± 7.0E-06	U
	06/16/08	06/30/08	gross β	1.4E-02 ± 1.8E-03			^{239/240} Pu	2.8E-06 ± 3.0E-06	
	06/30/08	07/14/08	gross α	1.5E-03 ± 6.0E-04			¹⁰³ Ru	-3.9E-05 ± 6.4E-05	U
	06/30/08	07/14/08	gross β	1.3E-02 ± 1.7E-03			¹⁰⁶ Ru	4.5E-04 ± 5.9E-04	U
	07/14/08	07/28/08	gross α	2.2E-03 ± 7.1E-04			¹²⁵ Sb	-7.6E-05 ± 1.4E-04	U
	07/14/08	07/28/08	gross β	1.1E-02 ± 1.5E-03			¹¹³ Sn	3.6E-06 ± 3.6E-05	U
	07/28/08	08/11/08	gross α	7.4E-04 ± 5.3E-04			⁹⁰ Sr	-2.3E-04 ± 2.4E-04	U
	07/28/08	08/11/08	gross β	1.7E-02 ± 2.1E-03			²³⁴ U	1.3E-05 ± 7.8E-06	
	08/11/08	08/25/08	gross α	8.5E-04 ± 5.6E-04			²³⁵ U	2.9E-06 ± 3.0E-06	
	08/11/08	08/25/08	gross β	1.3E-02 ± 1.7E-03			²³⁸ U	1.5E-05 ± 8.3E-06	
	08/25/08	09/08/08	gross α	9.4E-04 ± 5.8E-04			⁶⁵ Zn	2.4E-06 ± 2.4E-05	U
	08/25/08	09/08/08	gross β	1.0E-02 ± 1.5E-03					
	09/08/08	09/22/08	gross α	8.5E-04 ± 5.6E-04					
	09/08/08	09/22/08	gross β	2.5E-02 ± 2.7E-03					
	09/22/08	10/07/08	gross α	1.4E-03 ± 5.3E-04					
	09/22/08	10/07/08	gross β	2.7E-02 ± 2.8E-03					
	10/10/08	10/20/08	gross α	1.2E-03 ± 8.0E-04					
	10/10/08	10/20/08	gross β	1.9E-02 ± 2.5E-03					
	10/20/08	11/03/08	gross α	2.9E-03 ± 8.2E-04					
	10/20/08	11/03/08	gross β	4.0E-02 ± 3.8E-03					
	11/03/08	11/17/08	gross α	1.4E-03 ± 5.9E-04					
	11/03/08	11/17/08	gross β	1.6E-02 ± 2.0E-03					
	11/17/08	12/01/08	gross α	1.9E-03 ± 7.1E-04					
	11/17/08	12/01/08	gross β	4.1E-02 ± 3.9E-03					
	12/01/08	12/15/08	gross α	1.8E-03 ± 6.6E-04					
	12/01/08	12/15/08	gross β	2.2E-02 ± 2.4E-03					
	12/15/08	12/30/08	gross α	1.6E-03 ± 6.0E-04					
	12/15/08	12/30/08	gross β	3.5E-02 ± 3.4E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 42 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N985 (200-E)	12/31/07	01/14/08	gross α	1.3E-03 ± 5.3E-04	N985	12/31/07 to 06/30/08	⁶⁰ Co	8.3E-05 ± 8.5E-05	U
	12/31/07	01/14/08	gross β	9.7E-03 ± 1.4E-03			¹³⁴ Cs	-4.9E-05 ± 7.9E-05	U
	01/14/08	01/29/08	gross α	1.7E-03 ± 6.4E-04			¹³⁷ Cs	4.4E-06 ± 4.4E-05	U
	01/14/08	01/29/08	gross β	2.9E-02 ± 3.0E-03			¹⁵² Eu	3.1E-05 ± 1.8E-04	U
	01/29/08	02/12/08	gross α	5.7E-05 ± 3.0E-04			¹⁵⁴ Eu	3.3E-05 ± 2.0E-04	U
	01/29/08	02/12/08	gross β	2.8E-03 ± 7.4E-04			¹⁵⁵ Eu	-6.6E-06 ± 6.6E-05	U
	02/12/08	02/25/08	gross α	9.0E-04 ± 6.1E-04			²³⁸ Pu	8.6E-07 ± 8.6E-06	U
	02/12/08	02/25/08	gross β	3.1E-02 ± 3.2E-03			^{239/240} Pu	-8.5E-07 ± 2.9E-06	U
	02/25/08	03/11/08	gross α	1.4E-03 ± 5.5E-04			¹⁰⁶ Ru	5.7E-05 ± 5.7E-04	U
	02/25/08	03/11/08	gross β	1.3E-02 ± 1.7E-03			¹²⁵ Sb	2.3E-05 ± 1.6E-04	U
	03/11/08	03/25/08	gross α	1.3E-03 ± 5.6E-04			⁹⁰ Sr	-1.9E-04 ± 2.0E-04	U
	03/11/08	03/25/08	gross β	1.5E-02 ± 1.9E-03			²³⁴ U	7.5E-06 ± 5.9E-06	
	03/25/08	04/07/08	gross α	5.6E-04 ± 5.2E-04			²³⁵ U	2.4E-06 ± 3.0E-06	
	03/25/08	04/07/08	gross β	1.7E-02 ± 2.1E-03			²³⁸ U	1.7E-05 ± 9.6E-06	
	04/07/08	04/21/08	gross α	1.4E-03 ± 5.8E-04	N985	06/30/08 to 12/30/08	⁶⁰ Co	-3.5E-05 ± 7.9E-05	U
	04/07/08	04/21/08	gross β	1.1E-02 ± 1.6E-03			¹³⁴ Cs	9.7E-06 ± 8.0E-05	U
	04/21/08	05/06/08	gross α	1.8E-03 ± 6.2E-04			¹³⁷ Cs	4.9E-05 ± 7.3E-05	U
	04/21/08	05/06/08	gross β	1.6E-02 ± 1.9E-03			¹⁵² Eu	-5.9E-05 ± 1.7E-04	U
	05/06/08	05/19/08	gross α	1.3E-03 ± 5.8E-04			¹⁵⁴ Eu	8.7E-05 ± 2.0E-04	U
	05/06/08	05/19/08	gross β	1.4E-02 ± 1.9E-03			¹⁵⁵ Eu	-1.1E-04 ± 1.6E-04	U
	05/19/08	06/02/08	gross α	1.3E-03 ± 5.6E-04			²³⁸ Pu	-9.1E-07 ± 9.1E-06	U
	05/19/08	06/02/08	gross β	1.0E-02 ± 1.5E-03			^{239/240} Pu	9.1E-07 ± 4.8E-06	U
	06/02/08	06/16/08	gross α	1.4E-03 ± 6.3E-04			¹⁰³ Ru	-3.4E-05 ± 6.2E-05	U
	06/02/08	06/16/08	gross β	7.6E-03 ± 1.3E-03			¹⁰⁶ Ru	3.7E-04 ± 5.8E-04	U
	06/16/08	06/30/08	gross α	1.6E-03 ± 6.9E-04			¹²⁵ Sb	-8.6E-06 ± 8.6E-05	U
	06/16/08	06/30/08	gross β	1.2E-02 ± 1.7E-03			¹¹³ Sn	1.7E-05 ± 6.7E-05	U
	06/30/08	07/14/08	gross α	1.3E-03 ± 5.6E-04			⁹⁰ Sr	-3.7E-04 ± 3.8E-04	U
	06/30/08	07/14/08	gross β	1.2E-02 ± 1.6E-03			²³⁴ U	1.9E-05 ± 1.0E-05	
	07/14/08	07/28/08	gross α	1.5E-03 ± 6.0E-04			²³⁵ U	2.3E-06 ± 3.5E-06	U
	07/14/08	07/28/08	gross β	1.5E-02 ± 1.9E-03			²³⁸ U	1.3E-05 ± 8.1E-06	
	07/28/08	08/11/08	gross α	1.8E-03 ± 6.7E-04			⁶⁵ Zn	-2.1E-04 ± 2.2E-04	U
	07/28/08	08/11/08	gross β	1.3E-02 ± 1.7E-03					
	08/11/08	08/25/08	gross α	1.2E-03 ± 9.8E-04					
	08/11/08	08/25/08	gross β	2.2E-02 ± 3.1E-03					
	08/25/08	09/08/08	gross α	5.0E-04 ± 6.7E-04					
	08/25/08	09/08/08	gross β	1.3E-02 ± 2.1E-03					
	09/08/08	09/22/08	gross α	1.4E-03 ± 5.6E-04					
	09/08/08	09/22/08	gross β	2.4E-02 ± 2.6E-03					
	09/22/08	10/07/08	gross α	1.8E-03 ± 6.1E-04					
	09/22/08	10/07/08	gross β	2.5E-02 ± 2.7E-03					
	10/07/08	10/20/08	gross α	1.2E-03 ± 5.4E-04					
	10/07/08	10/20/08	gross β	1.8E-02 ± 2.1E-03					
	10/20/08	11/03/08	gross α	1.2E-03 ± 5.4E-04					
	10/20/08	11/03/08	gross β	4.0E-02 ± 3.9E-03					
	11/03/08	11/17/08	gross α	1.2E-03 ± 5.4E-04					
	11/03/08	11/17/08	gross β	1.5E-02 ± 1.9E-03					
	11/17/08	12/01/08	gross α	2.1E-03 ± 7.3E-04					
	11/17/08	12/01/08	gross β	4.1E-02 ± 4.0E-03					
	12/01/08	12/15/08	gross α	2.1E-03 ± 7.1E-04					
	12/01/08	12/15/08	gross β	2.1E-02 ± 2.4E-03					
	12/15/08	12/30/08	gross α	1.5E-03 ± 5.7E-04					
	12/15/08	12/30/08	gross β	3.9E-02 ± 3.6E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 43 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N999 (200-E)	12/31/07	01/14/08	gross α	9.5E-04 ± 5.9E-04	N999	12/31/07 to 06/30/08	⁶⁰ Co	6.4E-05 ± 9.0E-05	U
	12/31/07	01/14/08	gross β	1.4E-02 ± 1.8E-03			¹³⁴ Cs	3.3E-06 ± 3.3E-05	U
	01/14/08	01/29/08	gross α	1.1E-03 ± 4.9E-04			¹³⁷ Cs	4.6E-05 ± 1.1E-04	U
	01/14/08	01/29/08	gross β	3.2E-02 ± 3.2E-03			¹⁵² Eu	-2.1E-05 ± 2.1E-04	U
	01/29/08	02/12/08	gross α	6.3E-04 ± 5.2E-04			¹⁵⁴ Eu	-3.0E-05 ± 3.0E-04	U
	01/29/08	02/12/08	gross β	3.4E-03 ± 8.1E-04			¹⁵⁵ Eu	-1.1E-04 ± 1.9E-04	U
	02/12/08	02/25/08	gross α	7.6E-04 ± 5.6E-04			²³⁸ Pu	-1.4E-06 ± 9.2E-06	U
	02/12/08	02/25/08	gross β	2.8E-02 ± 3.0E-03			^{239/240} Pu	1.4E-06 ± 2.8E-06	U
	02/25/08	03/11/08	gross α	1.8E-03 ± 6.3E-04			¹⁰⁶ Ru	-4.4E-04 ± 9.3E-04	U
	02/25/08	03/11/08	gross β	1.3E-02 ± 1.7E-03			¹²⁵ Sb	-6.8E-05 ± 2.5E-04	U
	03/11/08	03/25/08	gross α	8.3E-04 ± 5.6E-04			⁹⁰ Sr	-2.5E-04 ± 2.6E-04	U
	03/11/08	03/25/08	gross β	8.6E-03 ± 1.4E-03			²³⁴ U	1.1E-05 ± 7.4E-06	
	03/25/08	04/07/08	gross α	8.1E-04 ± 5.9E-04			²³⁵ U	3.2E-06 ± 3.4E-06	
	03/25/08	04/07/08	gross β	7.6E-03 ± 1.3E-03			²³⁸ U	8.8E-06 ± 6.1E-06	
	04/07/08	04/21/08	gross α	8.9E-04 ± 5.9E-04	N999	06/30/08 to 12/30/08	⁶⁰ Co	5.0E-05 ± 6.6E-05	U
	04/07/08	04/21/08	gross β	8.9E-03 ± 1.4E-03			¹³⁴ Cs	1.6E-06 ± 1.7E-05	U
	04/21/08	05/06/08	gross α	2.0E-03 ± 6.8E-04			¹³⁷ Cs	2.6E-05 ± 5.8E-05	U
	04/21/08	05/06/08	gross β	1.6E-02 ± 2.0E-03			¹⁵² Eu	-4.3E-05 ± 1.5E-04	U
	05/06/08	05/19/08	gross α	1.5E-03 ± 6.9E-04			¹⁵⁴ Eu	4.0E-04 ± 3.6E-04	
	05/06/08	05/19/08	gross β	1.2E-02 ± 1.8E-03			¹⁵⁵ Eu	6.5E-05 ± 1.6E-04	U
	05/19/08	06/02/08	gross α	1.8E-03 ± 6.7E-04			²³⁸ Pu	-1.3E-05 ± 1.6E-05	U
	05/19/08	06/02/08	gross β	1.4E-02 ± 1.9E-03			^{239/240} Pu	-1.1E-06 ± 3.7E-06	U
	06/02/08	06/16/08	gross α	9.9E-04 ± 7.7E-04			¹⁰⁶ Ru	4.3E-04 ± 5.3E-04	U
	06/02/08	06/16/08	gross β	8.5E-03 ± 1.5E-03			¹²⁵ Sb	-5.5E-05 ± 1.3E-04	U
	06/16/08	06/30/08	gross α	1.7E-03 ± 6.6E-04			⁹⁰ Sr	-1.8E-04 ± 1.9E-04	U
	06/16/08	06/30/08	gross β	1.3E-02 ± 1.7E-03			²³⁴ U	1.5E-05 ± 8.7E-06	
	06/30/08	07/14/08	gross α	9.6E-04 ± 6.9E-04			²³⁵ U	1.6E-06 ± 2.3E-06	U
	06/30/08	07/14/08	gross β	1.1E-02 ± 1.7E-03			²³⁸ U	8.6E-06 ± 6.6E-06	
	07/14/08	07/28/08	gross α	7.2E-04 ± 5.2E-04					
	07/14/08	07/28/08	gross β	1.2E-02 ± 1.6E-03					
	07/28/08	08/11/08	gross α	8.3E-04 ± 5.5E-04					
	07/28/08	08/11/08	gross β	1.0E-02 ± 1.5E-03					
	08/11/08	08/25/08	gross α	5.0E-04 ± 4.6E-04					
	08/11/08	08/25/08	gross β	1.2E-02 ± 1.6E-03					
	08/25/08	09/08/08	gross α	9.4E-04 ± 5.8E-04					
	08/25/08	09/08/08	gross β	9.8E-03 ± 1.4E-03					
	09/08/08	09/22/08	gross α	1.4E-03 ± 5.6E-04					
	09/08/08	09/22/08	gross β	2.7E-02 ± 2.8E-03					
	09/22/08	10/07/08	gross α	2.1E-03 ± 6.6E-04					
	09/22/08	10/07/08	gross β	2.2E-02 ± 2.5E-03					
	10/07/08	10/20/08	gross α	1.1E-03 ± 6.6E-04					
	10/07/08	10/20/08	gross β	1.8E-02 ± 2.2E-03					
	10/20/08	11/03/08	gross α	1.7E-03 ± 6.3E-04					
	10/20/08	11/03/08	gross β	4.2E-02 ± 4.0E-03					
	11/03/08	11/17/08	gross α	1.2E-03 ± 5.4E-04					
	11/03/08	11/17/08	gross β	1.8E-02 ± 2.1E-03					
	11/17/08	12/01/08	gross α	3.5E-04 ± 6.8E-04					
	11/17/08	12/01/08	gross β	1.1E-02 ± 2.1E-03					
	12/01/08	12/15/08	gross α	2.2E-03 ± 1.0E-03					
	12/01/08	12/15/08	gross β	4.1E-02 ± 4.7E-03					
	12/15/08	12/30/08	gross α	2.1E-03 ± 6.7E-04					
	12/15/08	12/30/08	gross β	3.6E-02 ± 3.5E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 44 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N569 (BC CA)	04/25/08	05/08/08	gross α	1.3E-03 ± 5.9E-04	N569	04/25/08 to 07/01/08	²⁴¹ Am	2.1E-05 ± 1.5E-05	
	04/25/08	05/08/08	gross β	1.3E-02 ± 2.0E-03			⁶⁰ Co	-1.2E-04 ± 2.3E-04	U
	05/08/08	05/20/08	gross α	1.3E-03 ± 5.8E-04			¹³⁴ Cs	-7.5E-05 ± 2.2E-04	U
	05/08/08	05/20/08	gross β	9.5E-03 ± 1.6E-03			¹³⁷ Cs	1.2E-05 ± 1.2E-04	U
	05/20/08	06/04/08	gross α	1.1E-03 ± 4.9E-04			¹⁵² Eu	1.1E-04 ± 4.4E-04	U
	05/20/08	06/04/08	gross β	1.1E-02 ± 1.6E-03			¹⁵⁴ Eu	-3.4E-04 ± 6.3E-04	U
	06/04/08	06/17/08	gross α	1.4E-03 ± 6.1E-04			¹⁵⁵ Eu	2.6E-04 ± 5.1E-04	U
	06/04/08	06/17/08	gross β	8.0E-03 ± 1.4E-03			²³⁸ Pu	-2.3E-05 ± 4.9E-05	U
	06/17/08	07/01/08	gross α	1.1E-03 ± 7.1E-04			^{239/240} Pu	1.4E-05 ± 1.6E-05	
	06/17/08	07/01/08	gross β	1.5E-02 ± 2.1E-03			²⁴¹ Pu	8.5E-04 ± 1.9E-03	U
	07/01/08	07/11/08	gross α	1.8E-03 ± 8.8E-04			¹⁰⁶ Ru	-4.7E-04 ± 1.9E-03	U
	07/01/08	07/11/08	gross β	1.8E-02 ± 2.6E-03			¹²⁵ Sb	-1.4E-04 ± 4.1E-04	U
	07/11/08	07/30/08	gross α	1.3E-03 ± 4.7E-04			⁹⁰ Sr	-6.9E-06 ± 7.1E-06	U
	07/11/08	07/30/08	gross β	1.8E-02 ± 2.2E-03			²³⁴ U	3.8E-05 ± 2.2E-05	
	07/30/08	08/12/08	gross α	4.5E-04 ± 1.1E-03			²³⁵ U	4.4E-06 ± 6.4E-06	U
	07/30/08	08/12/08	gross β	8.8E-03 ± 2.4E-03			²³⁸ U	2.2E-05 ± 1.5E-05	
	08/12/08	08/26/08	gross α	1.7E-03 ± 7.8E-04					
	08/12/08	08/26/08	gross β	1.5E-02 ± 2.4E-03		N569	²⁴¹ Am	8.1E-06 ± 1.6E-05	U
	08/26/08	09/09/08	gross α	4.9E-04 ± 4.7E-04			⁶⁰ Co	5.9E-05 ± 1.9E-04	U
	08/26/08	09/09/08	gross β	1.4E-02 ± 2.0E-03			¹³⁴ Cs	-6.9E-05 ± 2.0E-04	U
	09/09/08	09/23/08	gross α	6.3E-04 ± 5.3E-04			¹³⁷ Cs	5.7E-04 ± 2.9E-04	U
	09/09/08	09/23/08	gross β	2.8E-02 ± 3.3E-03			¹⁵² Eu	1.5E-04 ± 4.9E-04	U
	09/23/08	10/08/08	gross α	1.5E-03 ± 6.0E-04			¹⁵⁴ Eu	2.0E-04 ± 6.0E-04	U
	09/23/08	10/08/08	gross β	1.5E-02 ± 2.0E-03			¹⁵⁵ Eu	-1.7E-05 ± 1.7E-04	U
	10/08/08	10/21/08	gross α	1.1E-03 ± 6.7E-04			²³⁸ Pu	-1.3E-05 ± 5.4E-05	U
	10/08/08	10/21/08	gross β	1.8E-02 ± 2.5E-03			^{239/240} Pu	3.2E-06 ± 3.2E-05	U
	10/21/08	10/23/08	gross α	1.0E-03 ± 2.3E-03			²⁴¹ Pu	-4.0E-04 ± 4.1E-04	U
	10/21/08	10/23/08	gross β	1.8E-02 ± 5.2E-03			¹⁰⁶ Ru	-1.1E-04 ± 1.1E-03	U
							¹²⁵ Sb	3.1E-04 ± 4.6E-04	U
							⁹⁰ Sr	3.5E-04 ± 3.0E-04	
							²³⁴ U	3.1E-05 ± 1.7E-05	
							²³⁵ U	2.9E-06 ± 4.3E-06	U
							²³⁸ U	1.7E-05 ± 1.2E-05	

BC CA = BC Controlled Area

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 45 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N570	04/25/08	05/08/08	gross α	1.2E-03 ± 7.7E-04	N570	04/25/08 to 07/01/08	²⁴¹ Am	2.4E-05 ± 2.7E-05	U
(BC CA)	04/25/08	05/08/08	gross β	1.3E-02 ± 2.1E-03			⁶⁰ Co	-4.2E-05 ± 2.5E-04	U
	05/08/08	05/20/08	gross α	1.3E-03 ± 6.2E-04			¹³⁴ Cs	2.4E-05 ± 2.0E-04	U
	05/08/08	05/20/08	gross β	7.4E-03 ± 1.5E-03			¹³⁷ Cs	1.1E-04 ± 1.9E-04	U
	05/20/08	06/04/08	gross α	1.6E-03 ± 6.8E-04			¹⁵² Eu	5.0E-05 ± 3.9E-04	U
	05/20/08	06/04/08	gross β	9.0E-03 ± 1.6E-03			¹⁵⁴ Eu	1.6E-04 ± 5.8E-04	U
	06/04/08	06/17/08	gross α	6.1E-04 ± 5.8E-04			¹⁵⁵ Eu	-1.7E-05 ± 1.7E-04	U
	06/04/08	06/17/08	gross β	8.5E-03 ± 1.5E-03			²³⁸ Pu	2.7E-05 ± 7.6E-05	U
	06/17/08	07/01/08	gross α	1.0E-03 ± 7.2E-04			^{239/240} Pu	-4.7E-06 ± 1.6E-05	U
	06/17/08	07/01/08	gross β	4.3E-02 ± 4.7E-03			²⁴¹ Pu	1.2E-03 ± 2.1E-03	U
	07/01/08	07/11/08	gross α	2.3E-03 ± 1.0E-03			¹⁰⁶ Ru	3.6E-04 ± 1.7E-03	U
	07/01/08	07/11/08	gross β	5.0E-02 ± 5.7E-03			¹²⁵ Sb	3.2E-05 ± 3.2E-04	U
	07/11/08	07/30/08	gross α	1.4E-03 ± 5.1E-04			⁹⁰ Sr	1.3E-04 ± 3.8E-04	U
	07/11/08	07/30/08	gross β	3.4E-02 ± 3.7E-03			²³⁴ U	3.2E-05 ± 2.0E-05	
	07/30/08	08/12/08	gross α	1.1E-03 ± 5.1E-04			²³⁵ U	2.1E-06 ± 6.6E-06	U
	07/30/08	08/12/08	gross β	1.5E-02 ± 2.1E-03			²³⁸ U	1.3E-05 ± 1.3E-05	U
	08/12/08	08/26/08	gross α	6.1E-04 ± 7.1E-04					
	08/12/08	08/26/08	gross β	1.5E-02 ± 2.5E-03	N570	07/01/08 to 10/23/08	²⁴¹ Am	9.3E-06 ± 9.3E-05	
	08/26/08	09/09/08	gross α	7.8E-04 ± 5.4E-04			⁶⁰ Co	-6.7E-05 ± 1.4E-04	U
	08/26/08	09/09/08	gross β	6.9E-03 ± 1.3E-03			¹³⁴ Cs	2.4E-05 ± 1.2E-04	U
	09/09/08	09/23/08	gross α	1.6E-03 ± 6.0E-04			¹³⁷ Cs	2.5E-03 ± 8.1E-04	
	09/09/08	09/23/08	gross β	2.4E-02 ± 3.0E-03			¹⁵² Eu	-2.5E-04 ± 2.8E-04	U
	09/23/08	10/08/08	gross α	8.2E-04 ± 5.4E-04			¹⁵⁴ Eu	3.3E-04 ± 3.8E-04	U
	09/23/08	10/08/08	gross β	2.2E-02 ± 2.6E-03			¹⁵⁵ Eu	-1.1E-04 ± 2.9E-04	U
	10/08/08	10/21/08	gross α	1.9E-03 ± 6.9E-04			²³⁸ Pu	4.8E-06 ± 4.2E-05	U
	10/08/08	10/21/08	gross β	2.0E-02 ± 2.6E-03			^{239/240} Pu	-2.4E-06 ± 1.1E-05	U
	10/21/08	10/23/08	gross α	4.7E-03 ± 3.6E-03			²⁴¹ Pu	-5.8E-04 ± 6.0E-04	U
	10/21/08	10/23/08	gross β	1.3E-02 ± 4.5E-03			¹⁰⁶ Ru	-2.9E-04 ± 9.2E-04	U
							¹²⁵ Sb	5.2E-05 ± 2.5E-04	U
							⁹⁰ Sr	7.8E-04 ± 3.0E-04	
							²³⁴ U	3.2E-05 ± 1.7E-05	
							²³⁵ U	4.9E-06 ± 5.2E-06	
							²³⁸ U	1.5E-05 ± 9.6E-06	

BC CA = BC Controlled Area

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 46 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N571 (BC CA)	04/26/08	05/08/08	gross α	1.4E-03 ± 6.7E-04	N571	04/26/08 to 07/01/08	²⁴¹ Am	3.0E-05 ± 1.9E-05	
	04/26/08	05/08/08	gross β	1.0E-02 ± 1.8E-03			⁶⁰ Co	1.1E-04 ± 1.8E-04	U
	05/08/08	05/20/08	gross α	1.7E-03 ± 7.2E-04			¹³⁴ Cs	-8.4E-05 ± 2.0E-04	U
	05/08/08	05/20/08	gross β	9.7E-03 ± 1.7E-03			¹³⁷ Cs	-2.8E-05 ± 1.7E-04	U
	05/20/08	06/04/08	gross α	7.2E-04 ± 5.4E-04			¹⁵² Eu	-6.7E-05 ± 3.9E-04	U
	05/20/08	06/04/08	gross β	6.5E-03 ± 1.3E-03			¹⁵⁴ Eu	-2.4E-04 ± 5.4E-04	U
	06/04/08	06/17/08	gross α	4.5E-04 ± 5.1E-04			¹⁵⁵ Eu	-1.4E-05 ± 1.4E-04	U
	06/04/08	06/17/08	gross β	8.2E-03 ± 1.5E-03			²³⁸ Pu	5.6E-05 ± 9.4E-05	U
	06/17/08	07/01/08	gross α	9.0E-04 ± 6.3E-04			^{239/240} Pu	1.0E-05 ± 2.1E-05	U
	06/17/08	07/01/08	gross β	1.0E-02 ± 1.6E-03			²⁴¹ Pu	-1.3E-04 ± 1.3E-03	U
	07/01/08	07/11/08	gross α	7.6E-04 ± 7.7E-04			¹⁰⁶ Ru	9.9E-04 ± 1.6E-03	U
	07/01/08	07/11/08	gross β	1.3E-02 ± 2.1E-03			¹²⁵ Sb	1.1E-04 ± 4.0E-04	U
	07/11/08	07/30/08	gross α	3.2E-03 ± 1.1E-03			⁹⁰ Sr	-3.8E-04 ± 3.8E-04	U
	07/11/08	07/30/08	gross β	2.8E-02 ± 3.9E-03			²³⁴ U	3.9E-05 ± 2.7E-05	
	07/30/08	08/12/08	gross α	9.2E-04 ± 6.3E-04			²³⁵ U	9.5E-06 ± 1.2E-05	U
	07/30/08	08/12/08	gross β	1.6E-02 ± 2.3E-03			²³⁸ U	1.5E-05 ± 1.5E-05	U
	08/12/08	08/26/08	gross α	7.2E-04 ± 5.4E-04					
	08/12/08	08/26/08	gross β	1.5E-02 ± 2.1E-03		N571	²⁴¹ Am	4.1E-06 ± 1.7E-05	U
	08/26/08	09/09/08	gross α	5.2E-04 ± 5.0E-04			⁶⁰ Co	1.9E-05 ± 1.9E-04	U
	08/26/08	09/09/08	gross β	1.0E-02 ± 1.7E-03			¹³⁴ Cs	-1.7E-04 ± 2.4E-04	U
	09/09/08	09/23/08	gross α	1.2E-03 ± 5.3E-04			¹³⁷ Cs	3.4E-05 ± 1.9E-04	U
	09/09/08	09/23/08	gross β	2.0E-02 ± 2.6E-03			¹⁵² Eu	9.7E-05 ± 4.3E-04	U
	09/23/08	10/08/08	gross α	1.2E-03 ± 5.2E-04			¹⁵⁴ Eu	4.0E-04 ± 4.9E-04	U
	09/23/08	10/08/08	gross β	2.1E-02 ± 2.6E-03			¹⁵⁵ Eu	1.1E-04 ± 3.4E-04	U
	10/08/08	10/21/08	gross α	1.6E-03 ± 6.6E-04			²³⁸ Pu	-1.3E-05 ± 4.8E-05	U
	10/08/08	10/21/08	gross β	1.8E-02 ± 2.5E-03			^{239/240} Pu	7.9E-06 ± 1.2E-05	U
	10/21/08	10/23/08	gross α	2.6E-03 ± 3.0E-03			²⁴¹ Pu	7.9E-04 ± 1.7E-03	U
	10/21/08	10/23/08	gross β	1.6E-02 ± 5.0E-03			¹⁰⁶ Ru	-3.8E-04 ± 1.6E-03	U
							¹²⁵ Sb	1.4E-05 ± 1.4E-04	U
							⁹⁰ Sr	8.8E-05 ± 2.7E-04	U
							²³⁴ U	2.8E-05 ± 1.7E-05	
							²³⁵ U	2.8E-06 ± 5.8E-06	U
							²³⁸ U	1.6E-05 ± 1.1E-05	
N572 (BC CA)	07/21/08	07/29/08	gross α	1.1E-03 ± 9.0E-04	N572	07/21/08 to 11/04/08	⁶⁰ Co	-1.5E-06 ± 1.5E-05	U
	07/21/08	07/29/08	gross β	1.3E-02 ± 2.4E-03			¹³⁴ Cs	5.9E-05 ± 1.0E-04	U
	07/29/08	08/12/08	gross α	5.2E-04 ± 5.0E-04			¹³⁷ Cs	3.3E-05 ± 9.7E-05	U
	07/29/08	08/12/08	gross β	1.3E-02 ± 1.9E-03			¹⁵² Eu	-1.6E-05 ± 1.6E-04	U
	08/12/08	08/26/08	gross α	9.7E-04 ± 6.1E-04			¹⁵⁴ Eu	-1.2E-05 ± 1.2E-04	U
	08/12/08	08/26/08	gross β	1.2E-02 ± 1.8E-03			¹⁵⁵ Eu	-2.3E-05 ± 2.3E-04	U
	08/26/08	09/09/08	gross α	7.1E-04 ± 5.3E-04			²³⁸ Pu	-1.4E-05 ± 2.1E-05	U
	08/26/08	09/09/08	gross β	1.1E-02 ± 1.7E-03			^{239/240} Pu	1.4E-06 ± 6.3E-06	U
	09/09/08	09/23/08	gross α	2.4E-03 ± 7.6E-04			¹⁰⁶ Ru	-5.3E-04 ± 8.7E-04	U
	09/09/08	09/23/08	gross β	3.2E-02 ± 3.6E-03			¹²⁵ Sb	2.9E-05 ± 2.1E-04	U
	09/23/08	10/08/08	gross α	1.5E-03 ± 5.7E-04			⁹⁰ Sr	8.9E-06 ± 8.9E-05	U
	09/23/08	10/08/08	gross β	2.3E-02 ± 2.7E-03			²³⁴ U	2.4E-05 ± 1.4E-05	
	10/08/08	10/21/08	gross α	1.3E-03 ± 5.7E-04			²³⁵ U	2.8E-06 ± 4.0E-06	U
	10/08/08	10/21/08	gross β	2.1E-02 ± 2.7E-03			²³⁸ U	1.5E-05 ± 1.1E-05	
	10/21/08	11/04/08	gross α	3.2E-03 ± 9.8E-04					
	10/21/08	11/04/08	gross β	4.4E-02 ± 5.0E-03					

BC CA = BC Controlled Area

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 47 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N573	07/21/08	07/29/08	gross α	4.7E-04 ± 7.1E-04	N573	07/21/08 to 11/04/08	⁶⁰ Co	-5.5E-05 ± 1.3E-04	U
(BC CA)	07/21/08	07/29/08	gross β	1.7E-02 ± 2.8E-03			¹³⁴ Cs	1.3E-04 ± 1.4E-04	U
	07/29/08	08/12/08	gross α	1.4E-03 ± 5.6E-04			¹³⁷ Cs	-7.6E-05 ± 1.1E-04	U
	07/29/08	08/12/08	gross β	1.5E-02 ± 2.1E-03			¹⁵² Eu	-1.1E-04 ± 2.9E-04	U
	08/12/08	08/26/08	gross α	1.1E-03 ± 5.2E-04			¹⁵⁴ Eu	6.2E-05 ± 4.1E-04	U
	08/12/08	08/26/08	gross β	1.6E-02 ± 2.2E-03			¹⁵⁵ Eu	1.5E-05 ± 1.5E-04	U
	08/26/08	09/09/08	gross α	5.8E-04 ± 4.9E-04			²³⁸ Pu	9.9E-06 ± 2.3E-05	U
	08/26/08	09/09/08	gross β	1.4E-02 ± 2.0E-03			^{239/240} Pu	4.2E-06 ± 6.5E-06	U
	09/09/08	09/23/08	gross α	1.9E-03 ± 6.8E-04			¹⁰⁶ Ru	-2.2E-04 ± 9.9E-04	U
	09/09/08	09/23/08	gross β	2.9E-02 ± 3.4E-03			¹²⁵ Sb	2.6E-05 ± 2.4E-04	U
	09/23/08	10/08/08	gross α	2.0E-03 ± 6.7E-04			⁹⁰ Sr	-2.5E-04 ± 2.5E-04	U
	09/23/08	10/08/08	gross β	2.1E-02 ± 2.6E-03			²³⁴ U	1.5E-05 ± 1.1E-05	
	10/08/08	10/21/08	gross α	1.8E-03 ± 6.7E-04			²³⁵ U	5.5E-06 ± 6.9E-06	U
	10/08/08	10/21/08	gross β	2.5E-02 ± 3.1E-03			²³⁸ U	1.5E-05 ± 1.0E-05	
	10/21/08	11/04/08	gross α	2.8E-03 ± 8.3E-04					
	10/21/08	11/04/08	gross β	4.3E-02 ± 4.6E-03					

BC CA = BC Controlled Area

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 48 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N155 (200-W)	12/31/07	01/14/08	gross α	8.1E-04 ± 5.5E-04	N155	12/31/07 to 06/30/08	⁶⁰ Co	-5.6E-05 ± 7.7E-05	U
	12/31/07	01/14/08	gross β	8.7E-03 ± 1.4E-03			¹³⁴ Cs	-3.0E-05 ± 7.3E-05	U
	01/14/08	01/29/08	gross α	8.5E-04 ± 5.7E-04			¹³⁷ Cs	1.1E-05 ± 6.8E-05	U
	01/14/08	01/29/08	gross β	2.0E-02 ± 2.3E-03			¹⁵² Eu	8.5E-05 ± 1.6E-04	U
	01/29/08	02/12/08	gross α	1.8E-04 ± 3.7E-04			¹⁵⁴ Eu	-5.7E-05 ± 2.2E-04	U
	01/29/08	02/12/08	gross β	4.3E-03 ± 9.3E-04			¹⁵⁵ Eu	1.4E-05 ± 1.4E-04	U
	02/12/08	02/25/08	gross α	1.4E-03 ± 5.7E-04			²³⁸ Pu	4.9E-06 ± 9.3E-06	U
	02/12/08	02/25/08	gross β	2.8E-02 ± 2.9E-03			^{239/240} Pu	1.1E-05 ± 6.9E-06	U
	02/25/08	03/11/08	gross α	7.0E-04 ± 5.1E-04			¹⁰⁶ Ru	2.0E-05 ± 2.0E-04	U
	02/25/08	03/11/08	gross β	1.8E-02 ± 2.1E-03			¹²⁵ Sb	-7.1E-05 ± 1.3E-04	U
	03/11/08	03/25/08	gross α	3.9E-04 ± 4.4E-04			⁹⁰ Sr	-1.6E-04 ± 1.6E-04	U
	03/11/08	03/25/08	gross β	7.7E-03 ± 1.3E-03			²³⁴ U	9.1E-06 ± 7.0E-06	U
	03/25/08	04/07/08	gross α	3.0E-04 ± 4.3E-04			²³⁵ U	1.5E-06 ± 2.2E-06	U
	03/25/08	04/07/08	gross β	7.0E-03 ± 1.2E-03			²³⁸ U	9.8E-06 ± 6.4E-06	
	04/07/08	04/21/08	gross α	8.6E-04 ± 5.8E-04	N155	06/30/08 to 12/29/08	⁶⁰ Co	-2.8E-07 ± 2.8E-06	U
	04/07/08	04/21/08	gross β	1.0E-02 ± 1.5E-03			¹³⁴ Cs	-2.1E-05 ± 7.8E-05	U
	04/21/08	05/06/08	gross α	5.9E-04 ± 4.7E-04			¹³⁷ Cs	1.0E-04 ± 9.0E-05	U
	04/21/08	05/06/08	gross β	1.3E-02 ± 1.6E-03			¹⁵² Eu	3.4E-05 ± 1.7E-04	U
	05/06/08	05/19/08	gross α	1.6E-03 ± 6.4E-04			¹⁵⁴ Eu	-2.1E-04 ± 2.4E-04	U
	05/06/08	05/19/08	gross β	1.2E-02 ± 1.7E-03			¹⁵⁵ Eu	3.3E-05 ± 1.7E-04	U
	05/19/08	06/02/08	gross α	7.4E-04 ± 5.3E-04			²³⁸ Pu	6.2E-06 ± 1.1E-05	U
	05/19/08	06/02/08	gross β	8.2E-03 ± 1.3E-03			^{239/240} Pu	3.9E-06 ± 4.4E-06	U
	06/02/08	06/16/08	gross α	5.1E-04 ± 4.9E-04			¹⁰⁶ Ru	-3.8E-04 ± 5.7E-04	U
	06/02/08	06/16/08	gross β	8.2E-03 ± 1.3E-03			¹²⁵ Sb	1.7E-04 ± 1.6E-04	U
	06/16/08	06/30/08	gross α	1.4E-03 ± 5.8E-04			⁹⁰ Sr	-1.2E-04 ± 1.3E-04	U
	06/16/08	06/30/08	gross β	1.2E-02 ± 1.6E-03			²³⁴ U	1.2E-05 ± 8.2E-06	
	06/30/08	07/14/08	gross α	1.5E-03 ± 6.6E-04			²³⁵ U	3.7E-06 ± 4.2E-06	U
	06/30/08	07/14/08	gross β	1.6E-02 ± 2.0E-03			²³⁸ U	1.6E-05 ± 8.9E-06	
	07/14/08	07/28/08	gross α	7.4E-04 ± 5.3E-04					
	07/14/08	07/28/08	gross β	1.4E-02 ± 1.8E-03					
	07/28/08	08/11/08	gross α	7.2E-04 ± 5.2E-04					
	07/28/08	08/11/08	gross β	1.2E-02 ± 1.6E-03					
	08/11/08	08/25/08	gross α	8.3E-04 ± 5.5E-04					
	08/11/08	08/25/08	gross β	1.2E-02 ± 1.6E-03					
	08/25/08	09/08/08	gross α	5.2E-04 ± 4.7E-04					
	08/25/08	09/08/08	gross β	1.0E-02 ± 1.5E-03					
	09/08/08	09/22/08	gross α	1.2E-03 ± 5.2E-04					
	09/08/08	09/22/08	gross β	2.3E-02 ± 2.5E-03					
	09/22/08	10/07/08	gross α	1.3E-03 ± 5.2E-04					
	09/22/08	10/07/08	gross β	2.6E-02 ± 2.7E-03					
	10/07/08	10/20/08	gross α	1.5E-03 ± 6.0E-04					
	10/07/08	10/20/08	gross β	1.8E-02 ± 2.2E-03					
	10/20/08	11/03/08	gross α	1.5E-03 ± 6.0E-04					
	10/20/08	11/03/08	gross β	3.8E-02 ± 3.7E-03					
	11/03/08	11/17/08	gross α	1.9E-03 ± 6.8E-04					
	11/03/08	11/17/08	gross β	1.6E-02 ± 2.0E-03					
	11/17/08	12/01/08	gross α	1.6E-03 ± 6.5E-04					
	11/17/08	12/01/08	gross β	3.7E-02 ± 3.7E-03					
	12/01/08	12/15/08	gross α	1.6E-03 ± 6.1E-04					
	12/01/08	12/15/08	gross β	1.8E-02 ± 2.1E-03					
	12/15/08	12/29/08	gross α	1.5E-03 ± 5.9E-04					
	12/15/08	12/29/08	gross β	3.9E-02 ± 3.7E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 49 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N161 (200-W)	12/31/07	01/16/08	gross α	7.1E-04 ± 4.8E-04	N161	12/31/07 to 06/30/08	⁶⁰ Co	6.9E-05 ± 6.6E-05	U
	12/31/07	01/16/08	gross β	1.1E-02 ± 1.5E-03			¹³⁴ Cs	-8.8E-06 ± 6.7E-05	U
	01/16/08	01/29/08	gross α	3.0E-03 ± 8.9E-04			¹³⁷ Cs	1.6E-06 ± 1.6E-05	U
	01/16/08	01/29/08	gross β	3.6E-02 ± 3.6E-03			¹⁵² Eu	1.0E-04 ± 1.4E-04	U
	01/29/08	02/12/08	gross α	2.8E-04 ± 4.0E-04			¹⁵⁴ Eu	3.6E-05 ± 2.0E-04	U
	01/29/08	02/12/08	gross β	3.9E-03 ± 8.6E-04			¹⁵⁵ Eu	6.6E-05 ± 1.3E-04	U
	02/12/08	02/25/08	gross α	2.0E-03 ± 7.1E-04			²³⁸ Pu	-3.8E-06 ± 1.1E-05	U
	02/12/08	02/25/08	gross β	2.6E-02 ± 2.9E-03			^{239/240} Pu	4.5E-06 ± 4.2E-06	U
	02/25/08	03/11/08	gross α	1.0E-03 ± 4.7E-04			¹⁰⁶ Ru	1.3E-04 ± 5.0E-04	U
	02/25/08	03/11/08	gross β	1.6E-02 ± 1.9E-03			¹²⁵ Sb	-8.1E-05 ± 1.4E-04	U
	03/11/08	03/25/08	gross α	5.0E-04 ± 4.7E-04			⁹⁰ Sr	-2.5E-04 ± 2.6E-04	
	03/11/08	03/25/08	gross β	8.6E-03 ± 1.4E-03			²³⁴ U	1.4E-05 ± 8.2E-06	
	03/25/08	04/07/08	gross α	4.2E-04 ± 4.7E-04			²³⁵ U	1.4E-06 ± 2.9E-06	U
	03/25/08	04/07/08	gross β	7.4E-03 ± 1.3E-03			²³⁸ U	9.8E-06 ± 6.5E-06	
	04/07/08	04/21/08	gross α	1.5E-03 ± 5.9E-04	N161	06/30/08 to 12/29/08	⁶⁰ Co	-5.0E-06 ± 5.0E-05	U
	04/07/08	04/21/08	gross β	8.1E-03 ± 1.3E-03			¹³⁴ Cs	1.8E-06 ± 1.8E-05	U
	04/21/08	05/05/08	gross α	2.1E-03 ± 6.8E-04			¹³⁷ Cs	4.4E-05 ± 6.7E-05	U
	04/21/08	05/05/08	gross β	1.4E-02 ± 1.8E-03			¹⁵² Eu	6.9E-05 ± 1.6E-04	U
	05/05/08	05/19/08	gross α	1.1E-03 ± 5.0E-04			¹⁵⁴ Eu	-3.5E-05 ± 2.0E-04	U
	05/05/08	05/19/08	gross β	1.2E-02 ± 1.6E-03			¹⁵⁵ Eu	-1.2E-04 ± 1.9E-04	U
	05/19/08	06/02/08	gross α	1.4E-03 ± 6.5E-04			²³⁸ Pu	8.4E-06 ± 1.2E-05	U
	05/19/08	06/02/08	gross β	1.4E-02 ± 2.0E-03			^{239/240} Pu	4.2E-06 ± 5.8E-06	U
	06/02/08	06/16/08	gross α	7.4E-04 ± 5.5E-04			¹⁰³ Ru	-3.4E-05 ± 5.7E-05	U
	06/02/08	06/16/08	gross β	7.4E-03 ± 1.3E-03			¹⁰⁶ Ru	-4.0E-04 ± 5.6E-04	U
	06/16/08	06/30/08	gross α	1.4E-03 ± 5.8E-04			¹²⁵ Sb	1.3E-04 ± 1.5E-04	U
	06/16/08	06/30/08	gross β	1.2E-02 ± 1.6E-03			¹¹³ Sn	3.2E-06 ± 3.2E-05	U
	06/30/08	07/14/08	gross α	1.1E-03 ± 7.1E-04			⁹⁰ Sr	-4.0E-05 ± 4.1E-05	U
	06/30/08	07/14/08	gross β	1.3E-02 ± 1.8E-03			²³⁴ U	2.1E-05 ± 1.1E-05	
	07/14/08	07/28/08	gross α	1.1E-03 ± 5.0E-04			²³⁵ U	5.1E-06 ± 4.6E-06	
	07/14/08	07/28/08	gross β	1.5E-02 ± 1.9E-03			²³⁸ U	1.1E-05 ± 7.4E-06	
	07/28/08	08/11/08	gross α	1.0E-03 ± 6.7E-04			⁶⁵ Zn	3.4E-05 ± 1.5E-04	U
	07/28/08	08/11/08	gross β	1.4E-02 ± 1.9E-03					
	08/11/08	08/25/08	gross α	7.5E-04 ± 8.1E-04					
	08/11/08	08/25/08	gross β	3.1E-02 ± 3.7E-03					
	08/25/08	09/08/08	gross α	5.1E-04 ± 4.6E-04					
	08/25/08	09/08/08	gross β	1.0E-02 ± 1.5E-03					
	09/08/08	09/22/08	gross α	1.2E-03 ± 7.1E-04					
	09/08/08	09/22/08	gross β	2.5E-02 ± 2.9E-03					
	09/22/08	10/07/08	gross α	1.9E-03 ± 7.1E-04					
	09/22/08	10/07/08	gross β	2.9E-02 ± 3.2E-03					
	10/07/08	10/20/08	gross α	2.2E-03 ± 1.3E-03					
	10/07/08	10/20/08	gross β	3.6E-02 ± 4.4E-03					
	10/20/08	11/03/08	gross α	2.6E-03 ± 7.8E-04					
	10/20/08	11/03/08	gross β	3.6E-02 ± 3.5E-03					
	11/03/08	11/17/08	gross α	1.4E-03 ± 5.7E-04					
	11/03/08	11/17/08	gross β	1.6E-02 ± 2.0E-03					
	11/17/08	12/01/08	gross α	1.3E-03 ± 5.8E-04					
	11/17/08	12/01/08	gross β	3.2E-02 ± 3.3E-03					
	12/01/08	12/15/08	gross α	1.8E-03 ± 6.7E-04					
	12/01/08	12/15/08	gross β	1.9E-02 ± 2.3E-03					
	12/15/08	12/29/08	gross α	1.4E-03 ± 5.7E-04					
	12/15/08	12/29/08	gross β	4.0E-02 ± 3.8E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 50 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N165 (200-W)	12/31/07	01/14/08	gross α	1.3E-03 ± 5.4E-04	N165	12/31/07 to 06/30/08	²⁴¹ Am	3.1E-04 ± 1.1E-04	
	12/31/07	01/14/08	gross β	9.5E-03 ± 1.4E-03			⁶⁰ Co	-6.3E-06 ± 6.3E-05	U
	01/14/08	01/29/08	gross α	1.9E-03 ± 7.6E-04			¹³⁴ Cs	-5.0E-05 ± 8.8E-05	U
	01/14/08	01/29/08	gross β	3.6E-02 ± 3.7E-03			¹³⁷ Cs	-1.4E-05 ± 8.8E-05	U
	01/29/08	02/12/08	gross α	5.5E-04 ± 5.1E-04			¹⁵² Eu	1.4E-04 ± 2.2E-04	U
	01/29/08	02/12/08	gross β	4.5E-03 ± 9.6E-04			¹⁵⁴ Eu	-5.5E-05 ± 2.7E-04	U
	02/12/08	02/25/08	gross α	2.7E-03 ± 8.7E-04			¹⁵⁵ Eu	1.2E-04 ± 2.3E-04	U
	02/12/08	02/25/08	gross β	3.1E-02 ± 3.3E-03			²³⁸ Pu	-1.0E-05 ± 2.4E-05	U
	02/25/08	03/11/08	gross α	1.2E-03 ± 5.3E-04			^{239/240} Pu	4.6E-04 ± 1.8E-04	
	02/25/08	03/11/08	gross β	1.5E-02 ± 1.9E-03			²⁴¹ Pu	1.1E-03 ± 6.6E-04	
	03/11/08	03/25/08	gross α	1.2E-03 ± 7.3E-04			¹⁰⁶ Ru	-7.0E-04 ± 8.0E-04	U
	03/11/08	03/25/08	gross β	8.7E-03 ± 1.5E-03			¹²⁵ Sb	-1.4E-04 ± 2.0E-04	U
	03/25/08	04/07/08	gross α	1.0E-03 ± 6.7E-04			⁹⁰ Sr	-2.1E-04 ± 2.1E-04	U
	03/25/08	04/07/08	gross β	9.3E-03 ± 1.5E-03			²³⁴ U	1.4E-05 ± 8.7E-06	
	04/07/08	04/21/08	gross α	1.4E-03 ± 5.9E-04			²³⁵ U	1.6E-06 ± 3.2E-06	U
	04/07/08	04/21/08	gross β	1.2E-02 ± 1.6E-03			²³⁸ U	1.1E-05 ± 6.8E-06	
	04/21/08	05/05/08	gross α	1.2E-03 ± 5.3E-04			²⁴¹ Am	2.4E-05 ± 2.0E-05	U
	04/21/08	05/05/08	gross β	1.5E-02 ± 1.9E-03					
	05/05/08	05/19/08	gross α	2.8E-03 ± 8.4E-04	N165	06/30/08 to 12/29/08	⁶⁰ Co	-1.1E-04 ± 2.1E-04	U
	05/05/08	05/19/08	gross β	1.2E-02 ± 1.7E-03			¹³⁴ Cs	2.7E-05 ± 2.3E-04	U
	05/19/08	06/02/08	gross α	3.2E-03 ± 8.8E-04			¹³⁷ Cs	-1.4E-04 ± 2.0E-04	U
	05/19/08	06/02/08	gross β	9.8E-03 ± 1.5E-03			¹⁵² Eu	6.9E-04 ± 5.9E-04	U
	06/02/08	06/16/08	gross α	1.5E-03 ± 6.1E-04			¹⁵⁴ Eu	-1.8E-04 ± 6.0E-04	U
	06/02/08	06/16/08	gross β	8.5E-03 ± 1.4E-03			¹⁵⁵ Eu	-6.6E-05 ± 3.8E-04	U
	06/16/08	06/30/08	gross α	1.9E-03 ± 6.8E-04			²³⁸ Pu	-1.2E-05 ± 5.1E-05	U
	06/16/08	06/30/08	gross β	1.2E-02 ± 1.7E-03			^{239/240} Pu	2.2E-04 ± 9.3E-05	
	06/30/08	07/14/08	gross α	1.2E-02 ± 4.6E-03			²⁴¹ Pu	1.7E-03 ± 1.5E-03	U
	06/30/08	07/14/08	gross β	5.8E-02 ± 8.8E-03			¹⁰³ Ru	-1.7E-04 ± 1.9E-04	U
	08/20/08	08/25/08	gross α	8.0E-04 ± 1.1E-03			¹⁰⁶ Ru	8.9E-04 ± 1.7E-03	U
	08/20/08	08/25/08	gross β	2.3E-02 ± 3.6E-03			¹²⁵ Sb	-3.7E-04 ± 5.6E-04	U
	08/25/08	09/08/08	gross α	1.7E-03 ± 1.4E-03			¹¹³ Sn	6.4E-05 ± 2.7E-04	U
	08/25/08	09/08/08	gross β	1.3E-02 ± 2.6E-03			⁹⁰ Sr	-2.2E-04 ± 2.2E-04	U
	09/08/08	09/22/08	gross α	7.0E-03 ± 4.3E-03			²³⁴ U	1.4E-05 ± 1.1E-05	
	09/08/08	09/22/08	gross β	1.2E-01 ± 1.5E-02			²³⁵ U	1.1E-05 ± 8.8E-06	
	09/22/08	10/07/08	gross α	6.4E-03 ± 4.4E-03			²³⁸ U	1.5E-05 ± 1.1E-05	
	09/22/08	10/07/08	gross β	1.7E-01 ± 2.0E-02			⁶⁵ Zn	5.4E-05 ± 4.9E-04	U
	10/07/08	10/20/08	gross α	1.9E-03 ± 8.6E-04					
	10/07/08	10/20/08	gross β	3.1E-02 ± 3.7E-03					
	10/20/08	11/03/08	gross α	3.7E-03 ± 1.1E-03					
	10/20/08	11/03/08	gross β	5.2E-02 ± 5.1E-03					
	11/03/08	11/17/08	gross α	1.2E-03 ± 5.1E-04					
	11/03/08	11/17/08	gross β	1.8E-02 ± 2.1E-03					
	11/17/08	12/01/08	gross α	1.0E-03 ± 6.8E-04					
	11/17/08	12/01/08	gross β	4.4E-02 ± 4.2E-03					
	12/01/08	12/15/08	gross α	1.3E-03 ± 5.5E-04					
	12/01/08	12/15/08	gross β	2.4E-02 ± 2.6E-03					
	12/15/08	12/29/08	gross α	2.2E-03 ± 7.2E-04					
	12/15/08	12/29/08	gross β	4.6E-02 ± 4.2E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 51 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N168 (200-W)	12/31/07	01/14/08	gross α	9.3E-04 ± 5.7E-04	N168	12/31/07 to 06/30/08	⁶⁰ Co	-8.0E-05 ± 9.7E-05	U
	12/31/07	01/14/08	gross β	8.8E-03 ± 1.4E-03			¹³⁴ Cs	-1.0E-05 ± 8.8E-05	U
	01/14/08	01/29/08	gross α	1.2E-03 ± 5.2E-04			¹³⁷ Cs	4.6E-05 ± 8.1E-05	U
	01/14/08	01/29/08	gross β	3.2E-02 ± 3.2E-03			¹⁵² Eu	-1.0E-05 ± 1.0E-04	U
	01/29/08	02/12/08	gross α	-5.9E-05 ± 2.2E-04			¹⁵⁴ Eu	6.0E-05 ± 2.8E-04	U
	01/29/08	02/12/08	gross β	3.7E-03 ± 8.5E-04			¹⁵⁵ Eu	2.2E-04 ± 1.9E-04	U
	02/12/08	02/25/08	gross α	1.7E-03 ± 6.6E-04			²³⁸ Pu	8.4E-06 ± 1.4E-05	U
	02/12/08	02/25/08	gross β	3.2E-02 ± 3.3E-03			^{239/240} Pu	5.8E-06 ± 5.9E-06	U
	02/25/08	03/11/08	gross α	5.0E-04 ± 7.2E-04			¹⁰³ Ru	-4.6E-05 ± 9.4E-05	U
	02/25/08	03/11/08	gross β	1.8E-02 ± 2.6E-03			¹⁰⁶ Ru	1.7E-04 ± 7.4E-04	U
	03/11/08	03/25/08	gross α	1.7E-04 ± 9.9E-04			¹²⁵ Sb	1.1E-04 ± 1.8E-04	U
	03/11/08	03/25/08	gross β	6.9E-03 ± 2.2E-03			¹¹³ Sn	2.2E-05 ± 9.2E-05	U
	03/25/08	04/07/08	gross α	2.9E-04 ± 4.2E-04			⁹⁰ Sr	-2.8E-04 ± 2.9E-04	U
	03/25/08	04/07/08	gross β	9.3E-03 ± 1.5E-03			²³⁴ U	1.6E-05 ± 1.1E-05	
	04/07/08	04/21/08	gross α	1.5E-03 ± 5.9E-04			²³⁵ U	2.7E-06 ± 3.2E-06	
	04/07/08	04/21/08	gross β	1.1E-02 ± 1.5E-03			²³⁸ U	1.2E-05 ± 8.4E-06	
	04/21/08	05/06/08	gross α	1.4E-03 ± 5.5E-04	N168	06/30/08 to 12/29/08	⁶⁰ Co	4.6E-06 ± 4.6E-05	U
	04/21/08	05/06/08	gross β	1.3E-02 ± 1.7E-03			¹³⁴ Cs	6.3E-05 ± 8.1E-05	U
	05/06/08	05/19/08	gross α	1.2E-03 ± 5.4E-04			¹³⁷ Cs	-2.1E-05 ± 6.7E-05	U
	05/06/08	05/19/08	gross β	1.0E-02 ± 1.5E-03			¹⁵² Eu	-5.4E-06 ± 5.4E-05	U
	05/19/08	06/02/08	gross α	1.8E-03 ± 6.5E-04			¹⁵⁴ Eu	6.1E-05 ± 2.3E-04	U
	05/19/08	06/02/08	gross β	9.9E-03 ± 1.5E-03			¹⁵⁵ Eu	-4.8E-05 ± 1.8E-04	U
	06/02/08	06/16/08	gross α	8.9E-04 ± 6.0E-04			²³⁸ Pu	1.7E-06 ± 1.4E-05	U
	06/02/08	06/16/08	gross β	8.3E-03 ± 1.4E-03			^{239/240} Pu	1.7E-06 ± 4.9E-06	U
	06/16/08	06/30/08	gross α	9.6E-04 ± 6.3E-04			¹⁰³ Ru	-2.2E-05 ± 6.1E-05	U
	06/16/08	06/30/08	gross β	1.1E-02 ± 1.6E-03			¹⁰⁶ Ru	5.8E-05 ± 5.8E-04	U
	06/30/08	07/14/08	gross α	1.7E-03 ± 7.6E-04			¹²⁵ Sb	5.2E-05 ± 1.6E-04	U
	06/30/08	07/14/08	gross β	4.5E-02 ± 4.3E-03			¹¹³ Sn	-7.5E-05 ± 7.8E-05	U
	07/14/08	07/28/08	gross α	3.2E-03 ± 2.0E-03			⁹⁰ Sr	-2.6E-04 ± 2.7E-04	U
	07/14/08	07/28/08	gross β	2.6E-02 ± 4.2E-03			²³⁴ U	2.3E-05 ± 1.2E-05	
	07/28/08	08/11/08	gross α	1.3E-03 ± 5.3E-04			²³⁵ U	7.2E-06 ± 5.5E-06	
	07/28/08	08/11/08	gross β	1.6E-02 ± 2.0E-03			²³⁸ U	1.2E-05 ± 7.9E-06	
	08/11/08	08/25/08	gross α	9.8E-04 ± 6.0E-04			⁶⁵ Zn	-1.9E-04 ± 2.0E-04	U
	08/11/08	08/25/08	gross β	1.3E-02 ± 1.8E-03					
	08/25/08	09/08/08	gross α	4.0E-04 ± 4.4E-04					
	08/25/08	09/08/08	gross β	1.0E-02 ± 1.5E-03					
	09/08/08	09/22/08	gross α	1.8E-03 ± 6.4E-04					
	09/08/08	09/22/08	gross β	2.4E-02 ± 2.6E-03					
	09/22/08	10/07/08	gross α	1.9E-03 ± 6.3E-04					
	09/22/08	10/07/08	gross β	2.3E-02 ± 2.5E-03					
	10/07/08	10/20/08	gross α	9.2E-04 ± 6.1E-04					
	10/07/08	10/20/08	gross β	1.7E-02 ± 2.1E-03					
	10/20/08	11/03/08	gross α	2.8E-03 ± 8.2E-04					
	10/20/08	11/03/08	gross β	3.9E-02 ± 3.8E-03					
	11/03/08	11/17/08	gross α	1.2E-03 ± 5.4E-04					
	11/03/08	11/17/08	gross β	1.5E-02 ± 1.9E-03					
	11/17/08	12/01/08	gross α	2.1E-03 ± 7.3E-04					
	11/17/08	12/01/08	gross β	3.8E-02 ± 3.8E-03					
	12/01/08	12/15/08	gross α	2.2E-03 ± 7.3E-04					
	12/01/08	12/15/08	gross β	2.2E-02 ± 2.5E-03					
	12/15/08	12/29/08	gross α	1.5E-03 ± 6.0E-04					
	12/15/08	12/29/08	gross β	3.8E-02 ± 3.6E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 52 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N200	01/02/08	01/15/08	gross α	1.6E-03 ± 6.4E-04	N200	01/02/08 to 07/01/08	⁶⁰ Co	5.6E-05 ± 6.5E-05	U
(200-W)	01/02/08	01/15/08	gross β	8.2E-03 ± 1.4E-03			¹³⁴ Cs	-8.1E-06 ± 5.5E-05	U
	01/15/08	01/30/08	gross α	1.7E-03 ± 6.1E-04			¹³⁷ Cs	5.7E-05 ± 6.0E-05	U
	01/15/08	01/30/08	gross β	2.9E-02 ± 2.9E-03			¹⁵² Eu	1.2E-05 ± 1.2E-04	U
	01/30/08	02/13/08	gross α	5.6E-05 ± 3.0E-04			¹⁵⁴ Eu	4.2E-05 ± 1.9E-04	U
	01/30/08	02/13/08	gross β	4.9E-03 ± 9.8E-04			¹⁵⁵ Eu	4.5E-05 ± 1.3E-04	U
	02/13/08	02/27/08	gross α	1.6E-03 ± 6.2E-04			²³⁸ Pu	1.4E-06 ± 9.8E-06	U
	02/13/08	02/27/08	gross β	2.9E-02 ± 3.0E-03			^{239/240} Pu	7.1E-07 ± 7.3E-07	U
	02/27/08	03/12/08	gross α	7.4E-04 ± 5.4E-04			¹⁰⁶ Ru	-1.7E-04 ± 5.0E-04	U
	02/27/08	03/12/08	gross β	9.4E-03 ± 1.4E-03			¹²⁵ Sb	5.6E-05 ± 1.3E-04	U
	03/12/08	03/26/08	gross α	2.7E-04 ± 4.0E-04			⁹⁰ Sr	-1.5E-04 ± 1.5E-04	U
	03/12/08	03/26/08	gross β	7.8E-03 ± 1.3E-03			²³⁴ U	1.8E-05 ± 1.0E-05	
	03/26/08	04/08/08	gross α	4.2E-04 ± 4.7E-04			²³⁵ U	6.6E-07 ± 6.6E-06	U
	03/26/08	04/08/08	gross β	5.9E-03 ± 1.1E-03			²³⁸ U	1.3E-05 ± 7.6E-06	
	04/08/08	04/23/08	gross α	1.6E-03 ± 5.8E-04					
	04/08/08	04/23/08	gross β	9.6E-03 ± 1.4E-03	N200	07/01/08 to 12/31/08	⁶⁰ Co	6.7E-05 ± 1.3E-04	U
	04/23/08	05/08/08	gross α	1.5E-03 ± 5.7E-04			¹³⁴ Cs	-1.7E-04 ± 1.8E-04	U
	04/23/08	05/08/08	gross β	1.5E-02 ± 1.8E-03			¹³⁷ Cs	3.5E-05 ± 1.2E-04	U
	05/08/08	05/20/08	gross α	9.7E-04 ± 6.5E-04			¹⁵² Eu	-4.2E-05 ± 2.9E-04	U
	05/08/08	05/20/08	gross β	1.1E-02 ± 1.7E-03			¹⁵⁴ Eu	3.4E-05 ± 3.4E-04	U
	05/20/08	06/04/08	gross α	3.7E-04 ± 4.0E-04			¹⁵⁵ Eu	-1.2E-04 ± 2.6E-04	U
	05/20/08	06/04/08	gross β	8.6E-03 ± 1.3E-03			²³⁸ Pu	1.7E-06 ± 1.7E-05	U
	06/04/08	06/17/08	gross α	5.3E-05 ± 3.2E-04			^{239/240} Pu	5.1E-06 ± 6.1E-06	
	06/04/08	06/17/08	gross β	5.3E-03 ± 1.1E-03			¹⁰⁶ Ru	1.3E-04 ± 1.1E-03	U
	06/17/08	07/01/08	gross α	4.2E-04 ± 4.5E-04			¹²⁵ Sb	-3.9E-05 ± 2.4E-04	U
	06/17/08	07/01/08	gross β	1.2E-02 ± 1.6E-03			⁹⁰ Sr	-1.9E-04 ± 2.0E-04	U
	07/01/08	07/15/08	gross α	1.6E-03 ± 6.5E-04			²³⁴ U	2.4E-05 ± 1.4E-05	
	07/01/08	07/15/08	gross β	1.3E-02 ± 1.7E-03			²³⁵ U	4.3E-06 ± 7.7E-06	U
	07/15/08	07/30/08	gross α	1.3E-03 ± 5.4E-04			²³⁸ U	6.5E-06 ± 6.3E-06	
	07/15/08	07/30/08	gross β	1.2E-02 ± 1.6E-03					
	07/30/08	08/12/08	gross α	2.0E-03 ± 6.9E-04					
	07/30/08	08/12/08	gross β	8.6E-03 ± 1.4E-03					
	08/12/08	08/26/08	gross α	8.1E-04 ± 5.4E-04					
	08/12/08	08/26/08	gross β	1.1E-02 ± 1.5E-03					
	08/26/08	09/09/08	gross α	2.9E-04 ± 3.9E-04					
	08/26/08	09/09/08	gross β	1.2E-02 ± 1.6E-03					
	09/09/08	09/23/08	gross α	1.3E-03 ± 5.5E-04					
	09/09/08	09/23/08	gross β	2.4E-02 ± 2.6E-03					
	09/23/08	10/08/08	gross α	2.4E-03 ± 5.6E-03					
	09/23/08	10/08/08	gross β	2.7E-02 ± 9.8E-03					
	12/02/08	12/16/08	gross α	4.7E-04 ± 9.8E-04					
	12/02/08	12/16/08	gross β	1.3E-03 ± 1.2E-03					
	12/16/08	12/31/08	gross α	1.2E-03 ± 5.2E-04					
	12/16/08	12/31/08	gross β	3.4E-02 ± 3.3E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 53 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N304 (200-W)	12/31/07	01/14/08	gross α	7.2E-04 ± 5.3E-04	N304	12/31/07 to 06/30/08	⁶⁰ Co	2.3E-05 ± 7.1E-05	U
	12/31/07	01/14/08	gross β	1.0E-02 ± 1.5E-03			¹³⁴ Cs	-6.0E-06 ± 6.0E-05	U
	01/14/08	01/29/08	gross α	1.6E-03 ± 5.9E-04			¹³⁷ Cs	2.1E-05 ± 5.3E-05	U
	01/14/08	01/29/08	gross β	2.9E-02 ± 3.0E-03			¹⁵² Eu	7.6E-05 ± 1.3E-04	U
	01/29/08	02/12/08	gross α	1.7E-04 ± 3.6E-04			¹⁵⁴ Eu	3.5E-05 ± 1.9E-04	U
	01/29/08	02/12/08	gross β	3.4E-03 ± 8.1E-04			¹⁵⁵ Eu	-1.1E-04 ± 1.5E-04	U
	02/12/08	02/25/08	gross α	1.9E-03 ± 6.9E-04			²³⁸ Pu	7.3E-06 ± 1.0E-05	U
	02/12/08	02/25/08	gross β	2.7E-02 ± 2.9E-03			^{239/240} Pu	1.2E-05 ± 8.0E-06	
	02/25/08	03/11/08	gross α	1.0E-03 ± 4.8E-04			¹⁰⁶ Ru	3.5E-04 ± 4.4E-04	U
	02/25/08	03/11/08	gross β	1.6E-02 ± 1.9E-03			¹²⁵ Sb	-8.1E-06 ± 8.1E-05	U
	03/11/08	03/25/08	gross α	4.9E-04 ± 4.6E-04			⁹⁰ Sr	9.7E-05 ± 1.6E-04	U
	03/11/08	03/25/08	gross β	8.1E-03 ± 1.3E-03			²³⁴ U	7.1E-06 ± 5.6E-06	
	03/25/08	04/07/08	gross α	4.2E-04 ± 4.7E-04			²³⁵ U	3.9E-06 ± 3.7E-06	
	03/25/08	04/07/08	gross β	8.5E-03 ± 1.4E-03			²³⁸ U	1.3E-05 ± 8.0E-06	
	04/07/08	04/21/08	gross α	1.4E-03 ± 5.5E-04	N304	06/30/08 to 12/29/08	⁶⁰ Co	-4.9E-05 ± 6.8E-05	U
	04/07/08	04/21/08	gross β	8.7E-03 ± 1.4E-03			¹³⁴ Cs	7.4E-06 ± 6.7E-05	U
	04/21/08	05/06/08	gross α	1.2E-03 ± 4.9E-04			¹³⁷ Cs	2.4E-05 ± 6.1E-05	U
	04/21/08	05/06/08	gross β	1.5E-02 ± 1.8E-03			¹⁵² Eu	5.6E-07 ± 5.6E-06	U
	05/06/08	05/19/08	gross α	1.0E-03 ± 6.2E-04			¹⁵⁴ Eu	1.3E-04 ± 1.8E-04	U
	05/06/08	05/19/08	gross β	8.8E-03 ± 1.4E-03			¹⁵⁵ Eu	3.2E-05 ± 1.9E-04	U
	05/19/08	06/02/08	gross α	1.0E-03 ± 4.8E-04			²³⁸ Pu	-1.5E-06 ± 1.1E-05	U
	05/19/08	06/02/08	gross β	1.2E-02 ± 1.7E-03			^{239/240} Pu	1.5E-06 ± 3.8E-06	U
	06/02/08	06/16/08	gross α	3.8E-04 ± 4.3E-04			¹⁰⁶ Ru	-1.5E-04 ± 5.5E-04	U
	06/02/08	06/16/08	gross β	4.4E-03 ± 9.3E-04			¹²⁵ Sb	3.6E-05 ± 1.4E-04	U
	06/16/08	06/30/08	gross α	1.7E-03 ± 6.2E-04			⁹⁰ Sr	-1.3E-04 ± 1.3E-04	U
	06/16/08	06/30/08	gross β	1.3E-02 ± 1.7E-03			²³⁴ U	9.7E-06 ± 6.9E-06	
	06/30/08	07/14/08	gross α	1.9E-03 ± 7.2E-04			²³⁵ U	1.5E-06 ± 2.2E-06	U
	06/30/08	07/14/08	gross β	1.9E-02 ± 2.2E-03			²³⁸ U	1.4E-05 ± 8.0E-06	
	07/14/08	07/28/08	gross α	8.5E-04 ± 5.6E-04					
	07/14/08	07/28/08	gross β	1.3E-02 ± 1.7E-03					
	07/28/08	08/11/08	gross α	1.0E-03 ± 4.8E-04					
	07/28/08	08/11/08	gross β	1.4E-02 ± 1.8E-03					
	08/11/08	08/25/08	gross α	1.1E-03 ± 5.0E-04					
	08/11/08	08/25/08	gross β	1.3E-02 ± 1.7E-03					
	08/25/08	09/08/08	gross α	9.4E-04 ± 5.8E-04					
	08/25/08	09/08/08	gross β	1.1E-02 ± 1.5E-03					
	09/08/08	09/22/08	gross α	1.5E-03 ± 5.9E-04					
	09/08/08	09/22/08	gross β	2.3E-02 ± 2.5E-03					
	09/22/08	10/07/08	gross α	1.7E-03 ± 6.0E-04					
	09/22/08	10/07/08	gross β	2.4E-02 ± 2.6E-03					
	10/07/08	10/20/08	gross α	1.5E-03 ± 6.2E-04					
	10/07/08	10/20/08	gross β	1.9E-02 ± 2.3E-03					
	10/20/08	11/03/08	gross α	2.6E-03 ± 7.8E-04					
	10/20/08	11/03/08	gross β	4.1E-02 ± 3.9E-03					
	11/03/08	11/17/08	gross α	1.4E-03 ± 5.7E-04					
	11/03/08	11/17/08	gross β	1.6E-02 ± 2.0E-03					
	11/17/08	12/01/08	gross α	1.5E-03 ± 6.1E-04					
	11/17/08	12/01/08	gross β	3.5E-02 ± 3.5E-03					
	12/01/08	12/15/08	gross α	2.0E-03 ± 6.9E-04					
	12/01/08	12/15/08	gross β	2.3E-02 ± 2.6E-03					
	12/15/08	12/29/08	gross α	2.8E-03 ± 8.1E-04					
	12/15/08	12/29/08	gross β	3.6E-02 ± 3.5E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 54 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N433 (200-W)	12/31/07	01/14/08	gross α	1.2E-03 ± 7.3E-04	N433	12/31/07 to 06/30/08	⁶⁰ Co	-8.4E-06 ± 6.1E-05	U
	12/31/07	01/14/08	gross β	1.5E-02 ± 2.1E-03			¹³⁴ Cs	3.0E-05 ± 7.9E-05	U
	01/14/08	01/29/08	gross α	1.6E-03 ± 6.3E-04			¹³⁷ Cs	8.3E-06 ± 6.1E-05	U
	01/14/08	01/29/08	gross β	3.2E-02 ± 3.3E-03			¹⁵² Eu	-3.7E-05 ± 1.4E-04	U
	01/29/08	02/12/08	gross α	1.8E-04 ± 3.7E-04			¹⁵⁴ Eu	4.0E-05 ± 2.0E-04	U
	01/29/08	02/12/08	gross β	4.0E-03 ± 9.0E-04			¹⁵⁵ Eu	-7.2E-05 ± 1.8E-04	U
	02/12/08	02/25/08	gross α	2.1E-03 ± 7.8E-04			²³⁸ Pu	-3.2E-06 ± 1.0E-05	U
	02/12/08	02/25/08	gross β	4.0E-02 ± 4.0E-03			^{239/240} Pu	7.1E-05 ± 3.0E-05	
	02/25/08	03/11/08	gross α	8.3E-04 ± 5.6E-04			¹⁰⁶ Ru	3.7E-04 ± 5.5E-04	U
	02/25/08	03/11/08	gross β	1.4E-02 ± 1.8E-03			¹²⁵ Sb	-2.7E-05 ± 1.5E-04	U
	03/11/08	03/25/08	gross α	5.6E-04 ± 5.3E-04			⁹⁰ Sr	-2.2E-04 ± 2.3E-04	U
	03/11/08	03/25/08	gross β	9.2E-03 ± 1.5E-03			²³⁴ U	1.9E-05 ± 1.1E-05	
	03/25/08	04/07/08	gross α	4.5E-04 ± 5.1E-04			²³⁵ U	3.5E-06 ± 3.7E-06	
	03/25/08	04/07/08	gross β	7.1E-03 ± 1.3E-03			²³⁸ U	7.1E-06 ± 6.3E-06	U
	04/07/08	04/21/08	gross α	9.1E-04 ± 6.1E-04	N433	06/30/08 to 12/29/08	⁶⁰ Co	-8.4E-05 ± 8.7E-05	U
	04/07/08	04/21/08	gross β	1.1E-02 ± 1.6E-03			¹³⁴ Cs	3.9E-05 ± 7.7E-05	U
	04/21/08	05/05/08	gross α	1.7E-03 ± 6.3E-04			¹³⁷ Cs	1.8E-04 ± 1.2E-04	
	04/21/08	05/05/08	gross β	1.3E-02 ± 1.8E-03			¹⁵² Eu	-6.5E-06 ± 6.5E-05	U
	05/05/08	05/19/08	gross α	1.3E-03 ± 5.9E-04			¹⁵⁴ Eu	6.5E-05 ± 2.3E-04	U
	05/05/08	05/19/08	gross β	1.1E-02 ± 1.7E-03			¹⁵⁵ Eu	1.7E-04 ± 2.0E-04	U
	05/19/08	06/02/08	gross α	2.4E-03 ± 8.0E-04			²³⁸ Pu	-6.8E-06 ± 1.4E-05	U
	05/19/08	06/02/08	gross β	1.6E-02 ± 2.1E-03			^{239/240} Pu	1.1E-05 ± 8.7E-06	
	06/02/08	06/16/08	gross α	9.3E-04 ± 7.2E-04			¹⁰⁶ Ru	-4.1E-04 ± 6.2E-04	U
	06/02/08	06/16/08	gross β	1.2E-02 ± 1.8E-03			¹²⁵ Sb	4.1E-05 ± 1.5E-04	U
	06/16/08	06/30/08	gross α	2.2E-03 ± 7.7E-04			⁹⁰ Sr	-1.3E-04 ± 1.3E-04	U
	06/16/08	06/30/08	gross β	1.4E-02 ± 2.0E-03			²³⁴ U	1.5E-05 ± 8.9E-06	
	06/30/08	07/14/08	gross α	1.4E-03 ± 6.7E-04			²³⁵ U	6.3E-06 ± 5.0E-06	
	06/30/08	07/14/08	gross β	1.6E-02 ± 2.1E-03			²³⁸ U	8.6E-06 ± 6.2E-06	
	07/14/08	07/28/08	gross α	1.0E-03 ± 6.4E-04					
	07/14/08	07/28/08	gross β	1.8E-02 ± 2.2E-03					
	07/28/08	08/11/08	gross α	1.1E-03 ± 5.0E-04					
	07/28/08	08/11/08	gross β	1.2E-02 ± 1.6E-03					
	08/11/08	08/25/08	gross α	1.9E-03 ± 7.3E-04					
	08/11/08	08/25/08	gross β	2.0E-02 ± 2.5E-03					
	08/25/08	09/08/08	gross α	1.8E-03 ± 6.7E-04					
	08/25/08	09/08/08	gross β	1.4E-02 ± 1.9E-03					
	09/08/08	09/22/08	gross α	3.7E-03 ± 9.7E-04					
	09/08/08	09/22/08	gross β	3.4E-02 ± 3.5E-03					
	09/22/08	10/07/08	gross α	2.5E-03 ± 7.3E-04					
	09/22/08	10/07/08	gross β	2.6E-02 ± 2.8E-03					
	10/07/08	10/20/08	gross α	1.3E-03 ± 5.8E-04					
	10/07/08	10/20/08	gross β	1.6E-02 ± 2.1E-03					
	10/20/08	11/03/08	gross α	2.0E-03 ± 7.1E-04					
	10/20/08	11/03/08	gross β	3.6E-02 ± 3.6E-03					
	11/03/08	11/17/08	gross α	1.3E-03 ± 5.6E-04					
	11/03/08	11/17/08	gross β	1.5E-02 ± 2.0E-03					
	11/17/08	12/01/08	gross α	3.0E-03 ± 9.0E-04					
	11/17/08	12/01/08	gross β	4.3E-02 ± 4.1E-03					
	12/01/08	12/15/08	gross α	1.2E-03 ± 5.5E-04					
	12/01/08	12/15/08	gross β	2.3E-02 ± 2.6E-03					
	12/15/08	12/29/08	gross α	2.2E-03 ± 7.1E-04					
	12/15/08	12/29/08	gross β	3.7E-02 ± 3.6E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 55 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N441 (200-W)	12/31/07	01/14/08	gross α	8.8E-04 ± 5.9E-04	N441	12/31/07 to 06/30/08	⁶⁰ Co	-1.1E-04 ± 1.5E-04	U
	12/31/07	01/14/08	gross β	7.3E-03 ± 1.2E-03			¹³⁴ Cs	-5.2E-05 ± 1.1E-04	U
	01/14/08	01/29/08	gross α	1.5E-03 ± 6.0E-04			¹³⁷ Cs	1.6E-05 ± 1.0E-04	U
	01/14/08	01/29/08	gross β	3.3E-02 ± 3.3E-03			¹⁵² Eu	1.0E-04 ± 2.3E-04	U
	01/29/08	02/12/08	gross α	5.0E-04 ± 4.7E-04			¹⁵⁴ Eu	-2.2E-04 ± 3.6E-04	U
	01/29/08	02/12/08	gross β	3.4E-03 ± 8.2E-04			¹⁵⁵ Eu	1.3E-04 ± 1.9E-04	U
	02/12/08	02/25/08	gross α	2.8E-03 ± 8.5E-04			²³⁸ Pu	-3.2E-06 ± 1.1E-05	U
	02/12/08	02/25/08	gross β	2.8E-02 ± 3.0E-03			^{239/240} Pu	4.7E-06 ± 4.2E-06	
	02/25/08	03/11/08	gross α	8.9E-04 ± 5.5E-04			¹⁰⁶ Ru	-1.3E-04 ± 8.9E-04	U
	02/25/08	03/11/08	gross β	1.5E-02 ± 1.9E-03			¹²⁵ Sb	6.2E-05 ± 2.3E-04	U
	03/11/08	03/25/08	gross α	1.1E-03 ± 5.1E-04			⁹⁰ Sr	-2.9E-04 ± 3.0E-04	U
	03/11/08	03/25/08	gross β	7.3E-03 ± 1.2E-03			²³⁴ U	1.5E-05 ± 8.7E-06	
	03/25/08	04/07/08	gross α	6.4E-04 ± 5.3E-04			²³⁵ U	8.1E-07 ± 1.7E-06	U
	03/25/08	04/07/08	gross β	7.6E-03 ± 1.3E-03			²³⁸ U	1.1E-05 ± 7.7E-06	
	04/07/08	04/21/08	gross α	9.5E-04 ± 5.9E-04	N441	06/30/08 to 12/29/08	⁶⁰ Co	4.2E-05 ± 9.0E-05	U
	04/07/08	04/21/08	gross β	1.2E-02 ± 1.7E-03			¹³⁴ Cs	3.6E-05 ± 7.8E-05	U
	04/21/08	05/06/08	gross α	2.3E-03 ± 7.0E-04			¹³⁷ Cs	6.0E-05 ± 7.3E-05	U
	04/21/08	05/06/08	gross β	1.8E-02 ± 2.1E-03			¹⁵² Eu	1.3E-04 ± 1.7E-04	U
	05/06/08	05/19/08	gross α	1.6E-03 ± 6.1E-04			¹⁵⁴ Eu	-4.7E-05 ± 2.7E-04	U
	05/06/08	05/19/08	gross β	1.4E-02 ± 1.8E-03			¹⁵⁵ Eu	-6.6E-05 ± 1.7E-04	U
	05/19/08	06/02/08	gross α	6.9E-04 ± 5.2E-04			²³⁸ Pu	-4.6E-06 ± 1.2E-05	U
	05/19/08	06/02/08	gross β	1.4E-02 ± 1.9E-03			^{239/240} Pu	2.0E-05 ± 1.1E-05	
	06/02/08	06/16/08	gross α	6.6E-04 ± 5.8E-04			¹⁰⁶ Ru	-2.3E-04 ± 6.7E-04	U
	06/02/08	06/16/08	gross β	7.5E-03 ± 1.2E-03			¹²⁵ Sb	-4.3E-05 ± 1.5E-04	U
	06/16/08	06/30/08	gross α	1.6E-03 ± 6.0E-04			⁹⁰ Sr	2.7E-05 ± 1.3E-04	U
	06/16/08	06/30/08	gross β	1.4E-02 ± 1.9E-03			²³⁴ U	1.1E-05 ± 7.0E-06	
	06/30/08	07/14/08	gross α	1.4E-03 ± 6.2E-04			²³⁵ U	4.4E-06 ± 4.5E-06	U
	06/30/08	07/14/08	gross β	1.4E-02 ± 1.8E-03			²³⁸ U	1.0E-05 ± 7.0E-06	
	07/14/08	07/28/08	gross α	1.8E-03 ± 6.4E-04					
	07/14/08	07/28/08	gross β	1.7E-02 ± 2.1E-03					
	07/28/08	08/11/08	gross α	3.0E-03 ± 8.4E-04					
	07/28/08	08/11/08	gross β	1.9E-02 ± 2.3E-03					
	08/11/08	08/25/08	gross α	1.3E-03 ± 5.4E-04					
	08/11/08	08/25/08	gross β	1.7E-02 ± 2.2E-03					
	08/25/08	09/08/08	gross α	1.8E-03 ± 6.4E-04					
	08/25/08	09/08/08	gross β	1.3E-02 ± 1.8E-03					
	09/08/08	09/22/08	gross α	1.9E-03 ± 6.5E-04					
	09/08/08	09/22/08	gross β	2.7E-02 ± 2.9E-03					
	09/22/08	10/07/08	gross α	1.9E-03 ± 6.5E-04					
	09/22/08	10/07/08	gross β	2.3E-02 ± 2.6E-03					
	10/07/08	10/20/08	gross α	8.0E-04 ± 5.8E-04					
	10/07/08	10/20/08	gross β	1.7E-02 ± 2.1E-03					
	10/20/08	11/03/08	gross α	2.7E-03 ± 8.0E-04					
	10/20/08	11/03/08	gross β	3.8E-02 ± 3.6E-03					
	11/03/08	11/17/08	gross α	1.1E-03 ± 4.9E-04					
	11/03/08	11/17/08	gross β	1.6E-02 ± 2.0E-03					
	11/17/08	12/01/08	gross α	2.0E-03 ± 6.9E-04					
	11/17/08	12/01/08	gross β	3.7E-02 ± 3.6E-03					
	12/01/08	12/15/08	gross α	1.1E-03 ± 5.2E-04					
	12/01/08	12/15/08	gross β	2.5E-02 ± 2.7E-03					
	12/15/08	12/29/08	gross α	1.1E-03 ± 6.5E-04					
	12/15/08	12/29/08	gross β	4.9E-02 ± 4.5E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 56 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N442 (200-W)	12/31/07	01/14/08	gross α	1.4E-03 ± 5.8E-04	N442	12/31/07 to 06/30/08	⁶⁰ Co	-1.3E-05 ± 7.1E-05	U
	12/31/07	01/14/08	gross β	1.0E-02 ± 1.5E-03			¹³⁴ Cs	4.6E-05 ± 7.2E-05	U
	01/14/08	01/29/08	gross α	8.7E-04 ± 5.4E-04			¹³⁷ Cs	9.7E-05 ± 7.5E-05	U
	01/14/08	01/29/08	gross β	3.0E-02 ± 3.0E-03			¹⁵² Eu	1.1E-05 ± 1.1E-04	U
	01/29/08	02/12/08	gross α	1.1E-03 ± 5.1E-04			¹⁵⁴ Eu	-9.8E-05 ± 2.3E-04	U
	01/29/08	02/12/08	gross β	4.6E-03 ± 9.5E-04			¹⁵⁵ Eu	-4.8E-05 ± 1.7E-04	U
	02/12/08	02/25/08	gross α	2.2E-03 ± 7.4E-04			²³⁸ Pu	2.3E-06 ± 1.0E-05	U
	02/12/08	02/25/08	gross β	3.0E-02 ± 3.1E-03			^{239/240} Pu	3.8E-06 ± 4.3E-06	U
	02/25/08	03/11/08	gross α	1.7E-03 ± 6.0E-04			¹⁰⁶ Ru	-1.2E-04 ± 5.6E-04	U
	02/25/08	03/11/08	gross β	1.8E-02 ± 2.1E-03			¹²⁵ Sb	2.7E-06 ± 2.7E-05	U
	03/11/08	03/25/08	gross α	8.6E-04 ± 5.8E-04			⁹⁰ Sr	-3.4E-04 ± 3.6E-04	U
	03/11/08	03/25/08	gross β	1.0E-02 ± 1.5E-03			²³⁴ U	1.0E-05 ± 6.5E-06	
	03/25/08	04/07/08	gross α	4.2E-04 ± 4.7E-04			²³⁵ U	2.1E-06 ± 2.6E-06	
	03/25/08	04/07/08	gross β	8.2E-03 ± 1.4E-03			²³⁸ U	5.8E-06 ± 4.4E-06	
	04/07/08	04/21/08	gross α	9.5E-04 ± 5.9E-04	N442	06/30/08 to 12/29/08	⁶⁰ Co	-1.4E-05 ± 6.5E-05	U
	04/07/08	04/21/08	gross β	1.0E-02 ± 1.5E-03			¹³⁴ Cs	3.3E-05 ± 6.2E-05	U
	04/21/08	05/06/08	gross α	1.6E-03 ± 5.8E-04			¹³⁷ Cs	1.3E-04 ± 1.2E-04	
	04/21/08	05/06/08	gross β	1.8E-02 ± 2.2E-03			¹⁵² Eu	7.5E-05 ± 1.4E-04	U
	05/06/08	05/19/08	gross α	1.0E-03 ± 6.3E-04			¹⁵⁴ Eu	-1.9E-05 ± 1.9E-04	U
	05/06/08	05/19/08	gross β	9.4E-03 ± 1.4E-03			¹⁵⁵ Eu	6.1E-05 ± 1.7E-04	U
	05/19/08	06/02/08	gross α	2.8E-03 ± 8.0E-04			²³⁸ Pu	-2.0E-06 ± 1.0E-05	U
	05/19/08	06/02/08	gross β	1.4E-02 ± 1.9E-03			^{239/240} Pu	2.4E-05 ± 1.2E-05	
	06/02/08	06/16/08	gross α	1.3E-03 ± 6.0E-04			¹⁰⁶ Ru	-1.7E-04 ± 5.0E-04	U
	06/02/08	06/16/08	gross β	8.3E-03 ± 1.3E-03			¹²⁵ Sb	1.6E-06 ± 1.6E-05	U
	06/16/08	06/30/08	gross α	1.7E-03 ± 6.3E-04			⁹⁰ Sr	-1.3E-04 ± 1.3E-04	U
	06/16/08	06/30/08	gross β	1.5E-02 ± 2.0E-03			²³⁴ U	1.4E-05 ± 8.4E-06	
	06/30/08	07/14/08	gross α	1.6E-03 ± 6.8E-04			²³⁵ U	5.8E-06 ± 4.6E-06	
	06/30/08	07/14/08	gross β	1.6E-02 ± 2.0E-03			²³⁸ U	1.2E-05 ± 7.2E-06	
	07/14/08	07/28/08	gross α	2.4E-03 ± 7.8E-04					
	07/14/08	07/28/08	gross β	1.6E-02 ± 2.1E-03					
	07/28/08	08/11/08	gross α	1.2E-03 ± 5.2E-04					
	07/28/08	08/11/08	gross β	1.2E-02 ± 1.7E-03					
	08/11/08	08/25/08	gross α	6.8E-04 ± 5.1E-04					
	08/11/08	08/25/08	gross β	1.5E-02 ± 1.9E-03					
	08/25/08	09/08/08	gross α	4.6E-04 ± 4.5E-04					
	08/25/08	09/08/08	gross β	1.4E-02 ± 1.8E-03					
	09/08/08	09/22/08	gross α	2.4E-03 ± 7.4E-04					
	09/08/08	09/22/08	gross β	3.2E-02 ± 3.3E-03					
	09/22/08	10/07/08	gross α	1.3E-03 ± 5.2E-04					
	09/22/08	10/07/08	gross β	2.6E-02 ± 2.8E-03					
	10/07/08	10/20/08	gross α	2.1E-03 ± 7.1E-04					
	10/07/08	10/20/08	gross β	2.7E-02 ± 3.0E-03					
	10/20/08	11/03/08	gross α	3.1E-03 ± 8.4E-04					
	10/20/08	11/03/08	gross β	5.0E-02 ± 4.6E-03					
	11/03/08	11/17/08	gross α	1.1E-03 ± 5.0E-04					
	11/03/08	11/17/08	gross β	2.2E-02 ± 2.5E-03					
	11/17/08	12/01/08	gross α	1.2E-03 ± 5.5E-04					
	11/17/08	12/01/08	gross β	4.2E-02 ± 4.0E-03					
	12/01/08	12/15/08	gross α	1.6E-03 ± 5.9E-04					
	12/01/08	12/15/08	gross β	2.3E-02 ± 2.5E-03					
	12/15/08	12/29/08	gross α	2.7E-03 ± 7.7E-04					
	12/15/08	12/29/08	gross β	4.2E-02 ± 3.9E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 57 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N449 (200-W)	12/31/07	01/14/08	gross α	7.7E-04 ± 5.6E-04	N449	12/31/07 to 06/30/08	⁶⁰ Co	-1.9E-05 ± 8.3E-05	U
	12/31/07	01/14/08	gross β	9.0E-03 ± 1.4E-03			¹³⁴ Cs	-4.8E-05 ± 8.4E-05	U
	01/14/08	01/29/08	gross α	2.1E-03 ± 6.8E-04			¹³⁷ Cs	-9.4E-06 ± 7.2E-05	U
	01/14/08	01/29/08	gross β	2.6E-02 ± 2.7E-03			¹⁵² Eu	-6.1E-06 ± 6.1E-05	U
	01/29/08	02/12/08	gross α	1.1E-03 ± 5.0E-04			¹⁵⁴ Eu	1.8E-05 ± 1.8E-04	U
	01/29/08	02/12/08	gross β	3.9E-03 ± 8.7E-04			¹⁵⁵ Eu	-8.0E-05 ± 1.8E-04	U
	02/12/08	02/25/08	gross α	9.5E-04 ± 6.4E-04			²³⁸ Pu	-7.4E-07 ± 7.4E-06	U
	02/12/08	02/25/08	gross β	2.8E-02 ± 3.0E-03			^{239/240} Pu	1.5E-06 ± 2.2E-06	U
	02/25/08	03/11/08	gross α	7.4E-04 ± 5.4E-04			¹⁰⁶ Ru	1.0E-03 ± 7.6E-04	U
	02/25/08	03/11/08	gross β	1.3E-02 ± 1.7E-03			¹²⁵ Sb	6.7E-05 ± 1.6E-04	U
	03/11/08	03/25/08	gross α	1.2E-03 ± 5.4E-04			⁹⁰ Sr	-2.5E-04 ± 2.6E-04	U
	03/11/08	03/25/08	gross β	7.7E-03 ± 1.3E-03			²³⁴ U	1.8E-05 ± 9.7E-06	
	03/25/08	04/07/08	gross α	8.4E-04 ± 6.2E-04			²³⁵ U	2.3E-06 ± 2.8E-06	
	03/25/08	04/07/08	gross β	8.2E-03 ± 1.4E-03			²³⁸ U	7.7E-06 ± 5.5E-06	
	04/07/08	04/21/08	gross α	1.6E-03 ± 6.2E-04					
	04/07/08	04/21/08	gross β	1.2E-02 ± 1.7E-03	N449	06/30/08 to 12/29/08	⁶⁰ Co	4.5E-05 ± 8.0E-05	U
	04/21/08	05/06/08	gross α	1.5E-03 ± 5.8E-04			¹³⁴ Cs	1.6E-05 ± 6.8E-05	U
	04/21/08	05/06/08	gross β	1.4E-02 ± 1.9E-03			¹³⁷ Cs	2.6E-05 ± 6.4E-05	U
	05/06/08	05/19/08	gross α	3.5E-04 ± 4.7E-04			¹⁵² Eu	-1.2E-04 ± 1.6E-04	U
	05/06/08	05/19/08	gross β	9.7E-03 ± 1.5E-03			¹⁵⁴ Eu	1.7E-04 ± 2.4E-04	U
	05/19/08	06/02/08	gross α	1.1E-03 ± 5.1E-04			¹⁵⁵ Eu	1.7E-05 ± 1.4E-04	U
	05/19/08	06/02/08	gross β	1.4E-02 ± 1.9E-03			²³⁸ Pu	-3.2E-06 ± 1.5E-05	U
	06/02/08	06/16/08	gross α	1.4E-03 ± 6.5E-04			^{239/240} Pu	1.6E-06 ± 2.4E-06	U
	06/02/08	06/16/08	gross β	7.9E-03 ± 1.3E-03			¹⁰⁶ Ru	-6.2E-04 ± 6.4E-04	U
	06/16/08	06/30/08	gross α	1.3E-03 ± 5.7E-04			¹²⁵ Sb	1.2E-04 ± 1.5E-04	U
	06/16/08	06/30/08	gross β	1.5E-02 ± 2.0E-03			⁹⁰ Sr	-3.3E-04 ± 3.5E-04	U
	06/30/08	07/14/08	gross α	2.6E-03 ± 8.8E-04			²³⁴ U	1.4E-05 ± 8.4E-06	
	06/30/08	07/14/08	gross β	1.1E-02 ± 1.6E-03			²³⁵ U	5.2E-06 ± 4.9E-06	U
	07/14/08	07/28/08	gross α	1.6E-03 ± 6.4E-04			²³⁸ U	1.1E-05 ± 7.1E-06	
	07/14/08	07/28/08	gross β	1.6E-02 ± 2.1E-03					
	07/28/08	08/11/08	gross α	1.6E-03 ± 6.2E-04					
	07/28/08	08/11/08	gross β	2.0E-02 ± 2.4E-03					
	08/11/08	08/25/08	gross α	1.3E-03 ± 5.6E-04					
	08/11/08	08/25/08	gross β	1.5E-02 ± 2.0E-03					
	08/25/08	09/08/08	gross α	7.0E-04 ± 5.2E-04					
	08/25/08	09/08/08	gross β	1.2E-02 ± 1.7E-03					
	09/08/08	09/22/08	gross α	2.5E-03 ± 7.9E-04					
	09/08/08	09/22/08	gross β	3.2E-02 ± 3.4E-03					
	09/22/08	10/07/08	gross α	1.8E-03 ± 6.3E-04					
	09/22/08	10/07/08	gross β	2.4E-02 ± 2.7E-03					
	10/07/08	10/20/08	gross α	1.9E-03 ± 6.9E-04					
	10/07/08	10/20/08	gross β	2.3E-02 ± 2.7E-03					
	10/20/08	11/03/08	gross α	3.3E-03 ± 8.9E-04					
	10/20/08	11/03/08	gross β	3.9E-02 ± 3.9E-03					
	11/03/08	11/17/08	gross α	1.2E-03 ± 5.4E-04					
	11/03/08	11/17/08	gross β	1.8E-02 ± 2.2E-03					
	11/17/08	12/01/08	gross α	1.6E-03 ± 6.1E-04					
	11/17/08	12/01/08	gross β	3.1E-02 ± 3.1E-03					
	12/01/08	12/15/08	gross α	1.1E-03 ± 5.1E-04					
	12/01/08	12/15/08	gross β	2.2E-02 ± 2.5E-03					
	12/15/08	12/29/08	gross α	1.9E-03 ± 6.8E-04					
	12/15/08	12/29/08	gross β	4.7E-02 ± 4.4E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 58 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N456 (200-W)	12/31/07	01/14/08	gross α	1.5E-03 ± 5.9E-04	N456	12/31/07 to 06/30/08	⁶⁰ Co	-9.1E-06 ± 8.9E-05	U
	12/31/07	01/14/08	gross β	9.5E-03 ± 1.4E-03			¹³⁴ Cs	1.9E-05 ± 8.3E-05	U
	01/14/08	01/29/08	gross α	1.9E-03 ± 6.4E-04			¹³⁷ Cs	8.3E-06 ± 7.6E-05	U
	01/14/08	01/29/08	gross β	3.4E-02 ± 3.4E-03			¹⁵² Eu	7.0E-05 ± 1.8E-04	U
	01/29/08	02/12/08	gross α	3.9E-04 ± 4.4E-04			¹⁵⁴ Eu	1.2E-05 ± 1.2E-04	U
	01/29/08	02/12/08	gross β	3.9E-03 ± 8.7E-04			¹⁵⁵ Eu	-3.0E-05 ± 2.0E-04	U
	02/12/08	02/25/08	gross α	1.2E-03 ± 5.5E-04			²³⁸ Pu	3.3E-06 ± 1.4E-05	U
	02/12/08	02/25/08	gross β	2.7E-02 ± 2.9E-03			^{239/240} Pu	3.3E-06 ± 5.8E-06	U
	02/25/08	03/11/08	gross α	1.1E-03 ± 4.9E-04			¹⁰⁶ Ru	-3.4E-04 ± 7.5E-04	U
	02/25/08	03/11/08	gross β	1.6E-02 ± 2.0E-03			¹²⁵ Sb	7.3E-06 ± 7.3E-05	U
	03/11/08	03/25/08	gross α	1.0E-03 ± 6.2E-04			⁹⁰ Sr	-2.3E-04 ± 2.4E-04	U
	03/11/08	03/25/08	gross β	9.4E-03 ± 1.4E-03			²³⁴ U	1.2E-05 ± 7.6E-06	
	03/25/08	04/07/08	gross α	4.3E-04 ± 4.8E-04			²³⁵ U	2.4E-06 ± 2.9E-06	
	03/25/08	04/07/08	gross β	7.2E-03 ± 1.3E-03			²³⁸ U	8.8E-06 ± 6.0E-06	
	04/07/08	04/21/08	gross α	7.4E-04 ± 5.5E-04	N456	06/30/08 to 12/29/08	⁶⁰ Co	1.1E-04 ± 1.3E-04	U
	04/07/08	04/21/08	gross β	1.0E-02 ± 1.5E-03			¹³⁴ Cs	-1.9E-05 ± 1.1E-04	U
	04/21/08	05/05/08	gross α	1.2E-03 ± 9.8E-04			¹³⁷ Cs	9.3E-05 ± 1.1E-04	U
	04/21/08	05/05/08	gross β	7.3E-03 ± 1.7E-03			¹⁵² Eu	5.8E-05 ± 2.7E-04	U
	05/05/08	05/19/08	gross α	-2.2E-04 ± 1.0E-03			¹⁵⁴ Eu	-5.6E-05 ± 3.4E-04	U
	05/05/08	05/19/08	gross β	7.1E-04 ± 1.7E-03			¹⁵⁵ Eu	1.6E-04 ± 2.0E-04	U
	05/19/08	06/02/08	gross α	1.5E-03 ± 6.9E-04			²³⁸ Pu	-1.5E-06 ± 1.2E-05	U
	05/19/08	06/02/08	gross β	1.5E-02 ± 2.2E-03			^{239/240} Pu	2.3E-06 ± 2.8E-06	
	06/02/08	06/16/08	gross α	9.1E-04 ± 6.4E-04			¹⁰⁶ Ru	-2.1E-04 ± 8.6E-04	U
	06/02/08	06/16/08	gross β	6.6E-03 ± 1.2E-03			¹²⁵ Sb	3.2E-04 ± 2.8E-04	U
	06/16/08	06/30/08	gross α	1.4E-03 ± 5.7E-04			⁹⁰ Sr	-4.0E-04 ± 4.2E-04	U
	06/16/08	06/30/08	gross β	4.6E-02 ± 4.3E-03			²³⁴ U	1.6E-05 ± 9.2E-06	
	06/30/08	07/14/08	gross α	1.2E-03 ± 6.0E-04			²³⁵ U	3.9E-06 ± 4.8E-06	U
	06/30/08	07/14/08	gross β	1.2E-02 ± 1.7E-03			²³⁸ U	1.2E-05 ± 7.4E-06	
	07/14/08	07/28/08	gross α	2.3E-03 ± 7.3E-04					
	07/14/08	07/28/08	gross β	1.5E-02 ± 2.0E-03					
	07/28/08	08/11/08	gross α	8.9E-04 ± 5.6E-04					
	07/28/08	08/11/08	gross β	1.7E-02 ± 2.1E-03					
	08/11/08	08/25/08	gross α	2.6E-04 ± 3.9E-04					
	08/11/08	08/25/08	gross β	1.2E-02 ± 1.7E-03					
	08/25/08	09/08/08	gross α	7.0E-04 ± 5.2E-04					
	08/25/08	09/08/08	gross β	1.0E-02 ± 1.6E-03					
	09/08/08	09/22/08	gross α	1.5E-03 ± 5.8E-04					
	09/08/08	09/22/08	gross β	3.0E-02 ± 3.2E-03					
	09/22/08	10/07/08	gross α	1.2E-03 ± 5.0E-04					
	09/22/08	10/07/08	gross β	2.5E-02 ± 2.7E-03					
	10/07/08	10/20/08	gross α	1.6E-03 ± 6.2E-04					
	10/07/08	10/20/08	gross β	2.1E-02 ± 2.5E-03					
	10/20/08	11/03/08	gross α	1.1E-03 ± 5.1E-04					
	10/20/08	11/03/08	gross β	4.3E-02 ± 4.1E-03					
	11/03/08	11/17/08	gross α	4.2E-03 ± 1.5E-03					
	11/03/08	11/17/08	gross β	4.8E-02 ± 5.7E-03					
	11/17/08	12/01/08	gross α	1.5E-03 ± 6.1E-04					
	11/17/08	12/01/08	gross β	3.8E-02 ± 3.7E-03					
	12/01/08	12/15/08	gross α	1.2E-03 ± 5.2E-04					
	12/01/08	12/15/08	gross β	2.5E-02 ± 2.7E-03					
	12/15/08	12/29/08	gross α	2.7E-03 ± 8.0E-04					
	12/15/08	12/29/08	gross β	4.7E-02 ± 4.3E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 59 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N457 (200-W)	12/31/07	01/14/08	gross α	1.1E-03 ± 5.0E-04	N457	12/31/07 to 06/30/08	⁶⁰ Co	1.0E-05 ± 8.7E-05	U
	12/31/07	01/14/08	gross β	8.0E-03 ± 1.3E-03			¹³⁴ Cs	-6.1E-05 ± 6.6E-05	U
	01/14/08	01/29/08	gross α	1.7E-03 ± 6.1E-04			¹³⁷ Cs	-1.1E-06 ± 1.1E-05	U
	01/14/08	01/29/08	gross β	2.9E-02 ± 3.0E-03			¹⁵² Eu	5.2E-06 ± 5.2E-05	U
	01/29/08	02/12/08	gross α	2.7E-04 ± 3.9E-04			¹⁵⁴ Eu	3.3E-05 ± 2.1E-04	U
	01/29/08	02/12/08	gross β	3.4E-03 ± 8.2E-04			¹⁵⁵ Eu	3.0E-05 ± 1.2E-04	U
	02/12/08	02/25/08	gross α	1.5E-03 ± 6.3E-04			²³⁸ Pu	-9.6E-06 ± 1.4E-05	U
	02/12/08	02/25/08	gross β	2.6E-02 ± 2.8E-03			^{239/240} Pu	4.0E-06 ± 5.5E-06	U
	02/25/08	03/11/08	gross α	9.9E-04 ± 4.7E-04			¹⁰³ Ru	-5.7E-05 ± 8.7E-05	U
	02/25/08	03/11/08	gross β	1.7E-02 ± 2.0E-03			¹⁰⁶ Ru	4.0E-04 ± 5.3E-04	U
	03/11/08	03/25/08	gross α	2.9E-04 ± 4.2E-04			¹²⁵ Sb	7.1E-05 ± 1.3E-04	U
	03/11/08	03/25/08	gross β	7.7E-03 ± 1.3E-03			¹¹³ Sn	-1.2E-05 ± 7.0E-05	U
	03/25/08	04/07/08	gross α	1.0E-03 ± 6.3E-04			⁹⁰ Sr	-1.3E-04 ± 1.4E-04	U
	03/25/08	04/07/08	gross β	1.1E-02 ± 1.6E-03			²³⁴ U	2.0E-05 ± 1.0E-05	
	04/07/08	04/21/08	gross α	3.9E-04 ± 4.4E-04			²³⁵ U	7.5E-07 ± 3.3E-06	U
	04/07/08	04/21/08	gross β	9.4E-03 ± 1.4E-03			²³⁸ U	1.1E-05 ± 7.1E-06	
	04/21/08	05/05/08	gross α	1.1E-03 ± 4.9E-04			⁶⁵ Zn	1.4E-04 ± 1.8E-04	U
	04/21/08	05/05/08	gross β	1.6E-02 ± 2.0E-03					
	05/05/08	05/19/08	gross α	7.7E-04 ± 5.5E-04	N457	06/30/08 to 12/29/08	⁶⁰ Co	1.8E-05 ± 7.7E-05	U
	05/05/08	05/19/08	gross β	1.2E-02 ± 1.6E-03			¹³⁴ Cs	-1.1E-05 ± 7.6E-05	U
	05/19/08	06/02/08	gross α	9.1E-04 ± 5.8E-04			¹³⁷ Cs	1.8E-05 ± 6.9E-05	U
	05/19/08	06/02/08	gross β	1.3E-02 ± 1.8E-03			¹⁵² Eu	-1.5E-04 ± 2.1E-04	U
	06/02/08	06/16/08	gross α	2.7E-04 ± 4.5E-04			¹⁵⁴ Eu	-2.9E-06 ± 2.9E-05	U
	06/02/08	06/16/08	gross β	9.3E-03 ± 1.4E-03			¹⁵⁵ Eu	-4.2E-05 ± 1.8E-04	U
	06/16/08	06/30/08	gross α	1.7E-03 ± 6.2E-04			²³⁸ Pu	-3.6E-06 ± 1.2E-05	U
	06/16/08	06/30/08	gross β	1.4E-02 ± 1.9E-03			^{239/240} Pu	5.0E-06 ± 5.5E-06	U
	06/30/08	07/14/08	gross α	1.1E-03 ± 7.1E-04			¹⁰⁶ Ru	-2.4E-04 ± 5.8E-04	U
	06/30/08	07/14/08	gross β	1.5E-02 ± 1.9E-03			¹²⁵ Sb	6.6E-05 ± 1.6E-04	U
	07/14/08	07/28/08	gross α	1.1E-03 ± 5.3E-04			⁹⁰ Sr	-2.6E-04 ± 2.7E-04	U
	07/14/08	07/28/08	gross β	1.8E-02 ± 2.3E-03			²³⁴ U	1.4E-05 ± 8.6E-06	
	07/28/08	08/11/08	gross α	1.2E-03 ± 5.3E-04			²³⁵ U	2.3E-06 ± 2.8E-06	
	07/28/08	08/11/08	gross β	1.2E-02 ± 1.7E-03			²³⁸ U	1.1E-05 ± 7.1E-06	
	08/11/08	08/25/08	gross α	4.7E-04 ± 4.6E-04					
	08/11/08	08/25/08	gross β	1.3E-02 ± 1.8E-03					
	08/25/08	09/08/08	gross α	8.1E-04 ± 5.5E-04					
	08/25/08	09/08/08	gross β	1.0E-02 ± 1.5E-03					
	09/08/08	09/22/08	gross α	1.4E-03 ± 5.5E-04					
	09/08/08	09/22/08	gross β	2.6E-02 ± 2.8E-03					
	09/22/08	10/07/08	gross α	1.8E-03 ± 6.1E-04					
	09/22/08	10/07/08	gross β	2.4E-02 ± 2.6E-03					
	10/07/08	10/20/08	gross α	1.6E-03 ± 6.2E-04					
	10/07/08	10/20/08	gross β	2.4E-02 ± 2.8E-03					
	10/20/08	11/03/08	gross α	2.5E-03 ± 7.7E-04					
	10/20/08	11/03/08	gross β	4.7E-02 ± 4.4E-03					
	11/03/08	11/17/08	gross α	7.9E-05 ± 6.0E-04					
	11/03/08	11/17/08	gross β	2.0E-02 ± 3.1E-03					
	11/17/08	12/01/08	gross α	1.8E-03 ± 6.6E-04					
	11/17/08	12/01/08	gross β	3.4E-02 ± 3.4E-03					
	12/01/08	12/15/08	gross α	1.2E-03 ± 5.2E-04					
	12/01/08	12/15/08	gross β	3.1E-02 ± 3.1E-03					
	12/15/08	12/29/08	gross α	2.0E-03 ± 6.7E-04					
	12/15/08	12/29/08	gross β	4.5E-02 ± 4.2E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 60 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N550 (200-W)	12/31/07	01/14/08	gross α	9.8E-04 ± 6.1E-04	N550	12/31/07 to 06/30/08	⁶⁰ Co	2.9E-05 ± 7.1E-05	U
	12/31/07	01/14/08	gross β	8.6E-03 ± 1.4E-03			¹³⁴ Cs	2.9E-05 ± 6.6E-05	U
	01/14/08	01/29/08	gross α	2.0E-03 ± 6.7E-04			¹³⁷ Cs	2.7E-05 ± 6.2E-05	U
	01/14/08	01/29/08	gross β	3.2E-02 ± 3.6E-03			¹⁵² Eu	-1.2E-04 ± 1.3E-04	U
	01/29/08	02/12/08	gross α	7.5E-04 ± 5.5E-04			¹⁵⁴ Eu	9.2E-05 ± 2.3E-04	U
	01/29/08	02/12/08	gross β	4.0E-03 ± 9.1E-04			¹⁵⁵ Eu	-9.7E-06 ± 9.7E-05	U
	02/12/08	02/25/08	gross α	1.4E-03 ± 5.9E-04			²³⁸ Pu	1.0E-05 ± 1.2E-05	U
	02/12/08	02/25/08	gross β	3.2E-02 ± 3.7E-03			^{239/240} Pu	6.5E-06 ± 6.1E-06	U
	02/25/08	03/11/08	gross α	9.7E-04 ± 6.0E-04			¹⁰⁶ Ru	1.0E-04 ± 5.1E-04	U
	02/25/08	03/11/08	gross β	1.3E-02 ± 1.9E-03			¹²⁵ Sb	-5.1E-05 ± 1.4E-04	U
	03/11/08	03/25/08	gross α	5.0E-04 ± 4.7E-04			⁹⁰ Sr	-1.0E-04 ± 1.0E-04	U
	03/11/08	03/25/08	gross β	9.8E-03 ± 1.5E-03			²³⁴ U	2.4E-05 ± 1.3E-05	
	03/25/08	04/07/08	gross α	1.0E-03 ± 6.3E-04			²³⁵ U	5.2E-06 ± 4.4E-06	
	03/25/08	04/07/08	gross β	8.5E-03 ± 1.5E-03			²³⁸ U	2.3E-05 ± 1.2E-05	
	04/07/08	04/21/08	gross α	1.1E-03 ± 5.0E-04	N550	06/30/08 to 12/29/08	⁶⁰ Co	7.4E-06 ± 7.4E-05	U
	04/07/08	04/21/08	gross β	8.4E-03 ± 1.4E-03			¹³⁴ Cs	4.1E-05 ± 7.2E-05	U
	04/21/08	05/06/08	gross α	1.7E-03 ± 6.2E-04			¹³⁷ Cs	-7.2E-06 ± 6.3E-05	U
	04/21/08	05/06/08	gross β	1.2E-02 ± 1.7E-03			¹⁵² Eu	-1.1E-04 ± 1.5E-04	U
	05/06/08	05/19/08	gross α	1.4E-03 ± 6.0E-04			¹⁵⁴ Eu	1.1E-04 ± 2.2E-04	U
	05/06/08	05/19/08	gross β	1.2E-02 ± 1.8E-03			¹⁵⁵ Eu	-8.7E-05 ± 1.4E-04	U
	05/19/08	06/02/08	gross α	5.2E-04 ± 4.7E-04			²³⁸ Pu	1.5E-06 ± 9.3E-06	U
	05/19/08	06/02/08	gross β	9.6E-03 ± 1.5E-03			^{239/240} Pu	2.2E-06 ± 3.4E-06	U
	06/02/08	06/16/08	gross α	7.6E-04 ± 5.5E-04			¹⁰⁶ Ru	-1.7E-04 ± 5.3E-04	U
	06/02/08	06/16/08	gross β	6.1E-03 ± 1.1E-03			¹²⁵ Sb	-1.2E-04 ± 1.5E-04	U
	06/16/08	06/30/08	gross α	1.2E-03 ± 5.5E-04			⁹⁰ Sr	-2.4E-04 ± 2.5E-04	U
	06/16/08	06/30/08	gross β	1.2E-02 ± 1.8E-03			²³⁴ U	2.2E-05 ± 1.1E-05	
	06/30/08	07/14/08	gross α	1.7E-03 ± 6.3E-04			²³⁵ U	7.4E-07 ± 2.6E-06	U
	06/30/08	07/14/08	gross β	1.4E-02 ± 2.0E-03			²³⁸ U	2.0E-05 ± 1.1E-05	
	07/14/08	07/28/08	gross α	1.3E-03 ± 5.6E-04					
	07/14/08	07/28/08	gross β	1.5E-02 ± 2.0E-03					
	07/28/08	08/11/08	gross α	1.1E-03 ± 5.1E-04					
	07/28/08	08/11/08	gross β	1.2E-02 ± 1.8E-03					
	08/11/08	08/25/08	gross α	7.4E-04 ± 5.3E-04					
	08/11/08	08/25/08	gross β	1.2E-02 ± 1.8E-03					
	08/25/08	09/08/08	gross α	6.1E-04 ± 4.9E-04					
	08/25/08	09/08/08	gross β	8.8E-03 ± 1.4E-03					
	09/08/08	09/22/08	gross α	1.2E-03 ± 5.2E-04					
	09/08/08	09/22/08	gross β	2.4E-02 ± 2.8E-03					
	09/22/08	10/07/08	gross α	1.3E-03 ± 5.4E-04					
	09/22/08	10/07/08	gross β	2.0E-02 ± 2.4E-03					
	10/07/08	10/20/08	gross α	9.2E-04 ± 6.1E-04					
	10/07/08	10/20/08	gross β	1.9E-02 ± 2.4E-03					
	10/20/08	11/03/08	gross α	2.0E-03 ± 7.0E-04					
	10/20/08	11/03/08	gross β	3.8E-02 ± 4.2E-03					
	11/03/08	11/17/08	gross α	1.2E-03 ± 5.4E-04					
	11/03/08	11/17/08	gross β	1.7E-02 ± 2.2E-03					
	11/17/08	12/01/08	gross α	1.8E-03 ± 6.9E-04					
	11/17/08	12/01/08	gross β	3.7E-02 ± 4.2E-03					
	12/01/08	12/15/08	gross α	1.9E-03 ± 6.6E-04					
	12/01/08	12/15/08	gross β	1.9E-02 ± 2.4E-03					
	12/15/08	12/29/08	gross α	2.3E-03 ± 7.3E-04					
	12/15/08	12/29/08	gross β	4.1E-02 ± 4.4E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 61 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N554 (200-W)	12/31/07	01/14/08	gross α	5.2E-04 ± 4.9E-04	N554	12/31/07 to 06/30/08	⁶⁰ Co	4.5E-05 ± 7.9E-05	U
	12/31/07	01/14/08	gross β	9.6E-03 ± 1.5E-03			¹³⁴ Cs	-6.1E-05 ± 7.4E-05	U
	01/14/08	01/29/08	gross α	8.9E-04 ± 5.5E-04			¹³⁷ Cs	6.2E-05 ± 6.9E-05	U
	01/14/08	01/29/08	gross β	3.6E-02 ± 3.9E-03			¹⁵² Eu	-4.2E-05 ± 1.6E-04	U
	01/29/08	02/12/08	gross α	3.9E-04 ± 4.4E-04			¹⁵⁴ Eu	-5.0E-05 ± 1.9E-04	U
	01/29/08	02/12/08	gross β	2.5E-03 ± 7.2E-04			¹⁵⁵ Eu	-6.5E-05 ± 1.7E-04	U
	02/12/08	02/25/08	gross α	2.1E-03 ± 7.5E-04			²³⁸ Pu	-2.0E-06 ± 5.6E-06	U
	02/12/08	02/25/08	gross β	3.1E-02 ± 3.6E-03			^{239/240} Pu	6.8E-07 ± 3.0E-06	U
	02/25/08	03/11/08	gross α	7.0E-04 ± 5.1E-04			¹⁰⁶ Ru	4.7E-05 ± 4.7E-04	U
	02/25/08	03/11/08	gross β	1.2E-02 ± 1.7E-03			¹²⁵ Sb	1.1E-04 ± 1.6E-04	U
	03/11/08	03/25/08	gross α	7.7E-04 ± 5.6E-04			⁹⁰ Sr	-9.3E-05 ± 9.7E-05	U
	03/11/08	03/25/08	gross β	9.7E-03 ± 1.5E-03			²³⁴ U	9.3E-06 ± 6.8E-06	
	03/25/08	04/07/08	gross α	9.0E-04 ± 6.1E-04			²³⁵ U	1.6E-06 ± 3.2E-06	U
	03/25/08	04/07/08	gross β	7.3E-03 ± 1.3E-03			²³⁸ U	1.4E-05 ± 8.8E-06	
	04/07/08	04/21/08	gross α	8.4E-04 ± 5.6E-04	N554	06/30/08 to 12/29/08	⁶⁰ Co	-8.2E-05 ± 8.6E-05	U
	04/07/08	04/21/08	gross β	1.1E-02 ± 1.6E-03			¹³⁴ Cs	1.6E-06 ± 1.6E-05	U
	04/21/08	05/05/08	gross α	7.4E-04 ± 5.4E-04			¹³⁷ Cs	4.4E-05 ± 6.4E-05	U
	04/21/08	05/05/08	gross β	1.1E-02 ± 1.6E-03			¹⁵² Eu	6.5E-05 ± 1.5E-04	U
	05/05/08	05/19/08	gross α	1.4E-03 ± 5.7E-04			¹⁵⁴ Eu	-1.3E-04 ± 2.4E-04	U
	05/05/08	05/19/08	gross β	1.4E-02 ± 1.9E-03			¹⁵⁵ Eu	-1.4E-04 ± 1.6E-04	U
	05/19/08	06/02/08	gross α	1.2E-03 ± 5.3E-04			²³⁸ Pu	8.4E-07 ± 8.5E-06	U
	05/19/08	06/02/08	gross β	1.2E-02 ± 1.7E-03			^{239/240} Pu	2.5E-06 ± 3.0E-06	
	06/02/08	06/16/08	gross α	1.2E-03 ± 5.6E-04			¹⁰⁶ Ru	1.0E-04 ± 5.9E-04	U
	06/02/08	06/16/08	gross β	6.8E-03 ± 1.3E-03			¹²⁵ Sb	1.0E-04 ± 1.6E-04	U
	06/16/08	06/30/08	gross α	1.2E-03 ± 5.4E-04			⁹⁰ Sr	-4.1E-04 ± 4.3E-04	U
	06/16/08	06/30/08	gross β	1.5E-02 ± 2.1E-03			²³⁴ U	1.0E-05 ± 7.6E-06	
	06/30/08	07/14/08	gross α	2.7E-03 ± 1.1E-03			²³⁵ U	7.3E-07 ± 7.3E-06	U
	06/30/08	07/14/08	gross β	1.6E-02 ± 2.7E-03			²³⁸ U	1.2E-05 ± 7.6E-06	
	07/14/08	07/28/08	gross α	6.4E-04 ± 8.6E-04					
	07/14/08	07/28/08	gross β	2.3E-02 ± 3.5E-03					
	07/28/08	08/11/08	gross α	7.4E-04 ± 5.3E-04					
	07/28/08	08/11/08	gross β	1.4E-02 ± 1.9E-03					
	08/11/08	08/25/08	gross α	1.1E-03 ± 5.1E-04					
	08/11/08	08/25/08	gross β	1.1E-02 ± 1.7E-03					
	08/25/08	09/08/08	gross α	4.2E-04 ± 4.5E-04					
	08/25/08	09/08/08	gross β	1.1E-02 ± 1.6E-03					
	09/08/08	09/22/08	gross α	6.2E-04 ± 5.0E-04					
	09/08/08	09/22/08	gross β	2.2E-02 ± 2.7E-03					
	09/22/08	10/07/08	gross α	1.4E-03 ± 5.6E-04					
	09/22/08	10/07/08	gross β	2.1E-02 ± 2.6E-03					
	10/07/08	10/20/08	gross α	1.3E-03 ± 5.7E-04					
	10/07/08	10/20/08	gross β	1.5E-02 ± 2.1E-03					
	10/20/08	11/03/08	gross α	1.4E-03 ± 5.7E-04					
	10/20/08	11/03/08	gross β	3.8E-02 ± 4.1E-03					
	11/03/08	11/17/08	gross α	1.3E-03 ± 5.5E-04					
	11/03/08	11/17/08	gross β	1.7E-02 ± 2.3E-03					
	11/17/08	12/01/08	gross α	1.6E-03 ± 6.5E-04					
	11/17/08	12/01/08	gross β	4.0E-02 ± 4.4E-03					
	12/01/08	12/15/08	gross α	1.9E-03 ± 6.6E-04					
	12/01/08	12/15/08	gross β	2.3E-02 ± 2.8E-03					
	12/15/08	12/29/08	gross α	2.7E-03 ± 8.1E-04					
	12/15/08	12/29/08	gross β	5.2E-02 ± 5.4E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 62 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N555 (200-W)	12/31/07	01/14/08	gross α	3.8E-04 ± 4.3E-04	N555	12/31/07 to 06/30/08	⁶⁰ Co	-5.0E-05 ± 8.9E-05	U
	12/31/07	01/14/08	gross β	8.1E-03 ± 1.3E-03			¹³⁴ Cs	4.7E-05 ± 7.2E-05	U
	01/14/08	01/29/08	gross α	1.8E-03 ± 6.4E-04			¹³⁷ Cs	1.2E-05 ± 7.0E-05	U
	01/14/08	01/29/08	gross β	3.5E-02 ± 3.8E-03			¹⁵² Eu	2.9E-05 ± 1.7E-04	U
	01/29/08	02/12/08	gross α	5.0E-04 ± 4.7E-04			¹⁵⁴ Eu	-6.3E-05 ± 2.3E-04	U
	01/29/08	02/12/08	gross β	3.7E-03 ± 8.8E-04			¹⁵⁵ Eu	-1.8E-04 ± 2.0E-04	U
	02/12/08	02/25/08	gross α	1.2E-03 ± 5.7E-04			²³⁸ Pu	-1.8E-06 ± 1.2E-05	U
	02/12/08	02/25/08	gross β	3.0E-02 ± 3.5E-03			^{239/240} Pu	4.6E-06 ± 5.8E-06	U
	02/25/08	03/11/08	gross α	1.0E-03 ± 4.8E-04			¹⁰⁶ Ru	3.7E-04 ± 7.1E-04	U
	02/25/08	03/11/08	gross β	1.4E-02 ± 1.9E-03			¹²⁵ Sb	4.3E-05 ± 1.6E-04	U
	03/11/08	03/25/08	gross α	1.0E-03 ± 6.2E-04			⁹⁰ Sr	-3.2E-04 ± 3.3E-04	U
	03/11/08	03/25/08	gross β	8.0E-03 ± 1.4E-03			²³⁴ U	1.2E-05 ± 7.5E-06	
	03/25/08	04/07/08	gross α	1.2E-03 ± 5.4E-04			²³⁵ U	2.3E-06 ± 2.8E-06	
	03/25/08	04/07/08	gross β	8.0E-03 ± 1.4E-03			²³⁸ U	5.6E-06 ± 4.4E-06	
	04/07/08	04/21/08	gross α	9.7E-04 ± 6.1E-04					
	04/07/08	04/21/08	gross β	9.9E-03 ± 1.6E-03	N555	06/30/08 to 12/29/08	⁶⁰ Co	7.4E-05 ± 7.3E-05	U
	04/21/08	05/06/08	gross α	1.2E-03 ± 5.3E-04			¹³⁴ Cs	-8.2E-07 ± 8.2E-06	U
	04/21/08	05/06/08	gross β	1.2E-02 ± 1.7E-03			¹³⁷ Cs	-1.3E-05 ± 6.0E-05	U
	05/06/08	05/19/08	gross α	1.2E-03 ± 5.5E-04			¹⁵² Eu	-6.9E-05 ± 1.4E-04	U
	05/06/08	05/19/08	gross β	1.0E-02 ± 1.7E-03			¹⁵⁴ Eu	-8.1E-06 ± 8.1E-05	U
	05/19/08	06/02/08	gross α	1.0E-03 ± 5.0E-04			¹⁵⁵ Eu	-7.6E-05 ± 1.6E-04	U
	05/19/08	06/02/08	gross β	1.2E-02 ± 1.8E-03			²³⁸ Pu	1.2E-06 ± 4.0E-06	U
	06/02/08	06/16/08	gross α	6.3E-04 ± 5.2E-04			^{239/240} Pu	5.0E-06 ± 3.9E-06	
	06/02/08	06/16/08	gross β	6.9E-03 ± 1.2E-03			¹⁰⁶ Ru	-1.7E-04 ± 5.1E-04	U
	06/16/08	06/30/08	gross α	2.4E-03 ± 8.5E-04			¹²⁵ Sb	4.6E-05 ± 1.4E-04	U
	06/16/08	06/30/08	gross β	1.5E-02 ± 2.2E-03			⁹⁰ Sr	-2.7E-04 ± 2.8E-04	U
	06/30/08	07/14/08	gross α	8.9E-04 ± 6.3E-04			²³⁴ U	1.2E-05 ± 7.3E-06	
	06/30/08	07/14/08	gross β	1.2E-02 ± 1.7E-03			²³⁵ U	4.4E-06 ± 4.0E-06	
	07/14/08	07/28/08	gross α	2.2E-03 ± 7.2E-04			²³⁸ U	1.2E-05 ± 7.1E-06	
	07/14/08	07/28/08	gross β	1.4E-02 ± 1.9E-03					
	07/28/08	08/11/08	gross α	9.4E-04 ± 5.8E-04					
	07/28/08	08/11/08	gross β	1.2E-02 ± 1.8E-03					
	08/11/08	08/25/08	gross α	2.1E-03 ± 7.0E-04					
	08/11/08	08/25/08	gross β	1.9E-02 ± 2.5E-03					
	08/25/08	09/08/08	gross α	4.8E-04 ± 5.6E-04					
	08/25/08	09/08/08	gross β	9.9E-03 ± 1.8E-03					
	09/08/08	09/22/08	gross α	2.1E-03 ± 6.8E-04					
	09/08/08	09/22/08	gross β	2.5E-02 ± 3.0E-03					
	09/22/08	10/07/08	gross α	1.3E-03 ± 5.4E-04					
	09/22/08	10/07/08	gross β	2.2E-02 ± 2.6E-03					
	10/07/08	10/20/08	gross α	1.7E-03 ± 6.5E-04					
	10/07/08	10/20/08	gross β	1.6E-02 ± 2.2E-03					
	10/20/08	11/03/08	gross α	2.7E-03 ± 7.9E-04					
	10/20/08	11/03/08	gross β	4.2E-02 ± 4.6E-03					
	11/03/08	11/17/08	gross α	1.9E-03 ± 6.6E-04					
	11/03/08	11/17/08	gross β	2.1E-02 ± 2.6E-03					
	11/17/08	12/01/08	gross α	2.1E-03 ± 7.3E-04					
	11/17/08	12/01/08	gross β	3.3E-02 ± 3.7E-03					
	12/01/08	12/15/08	gross α	8.3E-04 ± 5.5E-04					
	12/01/08	12/15/08	gross β	1.8E-02 ± 2.3E-03					
	12/15/08	12/29/08	gross α	3.8E-03 ± 1.3E-03					
	12/15/08	12/29/08	gross β	9.2E-02 ± 9.7E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 63 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N956 (200-W)	12/31/07	01/14/08	gross α	1.1E-03 ± 5.1E-04	N956	12/31/07 to 06/30/08	⁶⁰ Co	2.2E-05 ± 6.8E-05	U
	12/31/07	01/14/08	gross β	9.5E-03 ± 1.4E-03			¹³⁴ Cs	4.4E-05 ± 6.3E-05	U
	01/14/08	01/29/08	gross α	1.5E-03 ± 5.9E-04			¹³⁷ Cs	1.3E-05 ± 5.9E-05	U
	01/14/08	01/29/08	gross β	3.2E-02 ± 3.3E-03			¹⁵² Eu	-4.4E-05 ± 1.4E-04	U
	01/29/08	02/12/08	gross α	6.0E-04 ± 4.9E-04			¹⁵⁴ Eu	1.3E-04 ± 2.0E-04	U
	01/29/08	02/12/08	gross β	3.8E-03 ± 8.5E-04			¹⁵⁵ Eu	3.6E-07 ± 3.6E-06	U
	02/12/08	02/25/08	gross α	1.4E-03 ± 6.1E-04			²³⁸ Pu	-7.8E-07 ± 3.5E-06	U
	02/12/08	02/25/08	gross β	3.3E-02 ± 3.4E-03			^{239/240} Pu	5.5E-06 ± 5.0E-06	U
	02/25/08	03/11/08	gross α	1.9E-03 ± 7.0E-04			¹⁰⁶ Ru	-7.5E-07 ± 7.5E-06	U
	02/25/08	03/11/08	gross β	1.3E-02 ± 1.8E-03			¹²⁵ Sb	-9.9E-05 ± 1.3E-04	U
	03/11/08	03/25/08	gross α	8.3E-04 ± 6.1E-04			⁹⁰ Sr	-7.3E-05 ± 7.5E-05	U
	03/11/08	03/25/08	gross β	9.4E-03 ± 1.5E-03			²³⁴ U	1.5E-05 ± 8.7E-06	
	03/25/08	04/07/08	gross α	9.5E-04 ± 5.9E-04			²³⁵ U	7.0E-07 ± 7.2E-07	U
	03/25/08	04/07/08	gross β	9.4E-03 ± 1.4E-03			²³⁸ U	9.7E-06 ± 6.3E-06	
	04/07/08	04/21/08	gross α	9.8E-04 ± 6.1E-04	N956	06/30/08 to 12/29/08	⁶⁰ Co	1.1E-05 ± 1.0E-04	U
	04/07/08	04/21/08	gross β	1.2E-02 ± 1.7E-03			¹³⁴ Cs	4.0E-05 ± 1.2E-04	U
	04/21/08	05/06/08	gross α	2.6E-03 ± 7.7E-04			¹³⁷ Cs	1.2E-04 ± 1.3E-04	U
	04/21/08	05/06/08	gross β	1.0E-02 ± 1.5E-03			¹⁵² Eu	1.7E-04 ± 3.0E-04	U
	05/06/08	05/19/08	gross α	1.2E-03 ± 5.6E-04			¹⁵⁴ Eu	-2.0E-04 ± 3.7E-04	U
	05/06/08	05/19/08	gross β	1.2E-02 ± 1.8E-03			¹⁵⁵ Eu	-4.3E-05 ± 2.1E-04	U
	05/19/08	06/02/08	gross α	1.6E-03 ± 6.0E-04			²³⁸ Pu	1.2E-05 ± 1.1E-05	U
	05/19/08	06/02/08	gross β	1.1E-02 ± 1.6E-03			^{239/240} Pu	9.1E-05 ± 3.8E-05	
	06/02/08	06/16/08	gross α	4.0E-04 ± 4.5E-04			¹⁰⁶ Ru	1.4E-04 ± 9.9E-04	U
	06/02/08	06/16/08	gross β	6.7E-03 ± 1.2E-03			¹²⁵ Sb	-1.4E-05 ± 1.4E-04	U
	06/16/08	06/30/08	gross α	1.3E-03 ± 6.1E-04			⁹⁰ Sr	-5.1E-04 ± 5.3E-04	U
	06/16/08	06/30/08	gross β	1.5E-02 ± 1.9E-03			²³⁴ U	1.3E-05 ± 8.6E-06	
	06/30/08	07/14/08	gross α	5.4E-04 ± 5.5E-04			²³⁵ U	3.5E-06 ± 3.7E-06	
	06/30/08	07/14/08	gross β	1.5E-02 ± 1.9E-03			²³⁸ U	1.1E-05 ± 7.6E-06	
	07/14/08	07/28/08	gross α	1.8E-03 ± 6.4E-04					
	07/14/08	07/28/08	gross β	1.9E-02 ± 2.3E-03					
	07/28/08	08/11/08	gross α	6.0E-04 ± 5.1E-04					
	07/28/08	08/11/08	gross β	1.6E-02 ± 2.1E-03					
	08/11/08	08/25/08	gross α	9.4E-04 ± 5.9E-04					
	08/11/08	08/25/08	gross β	1.6E-02 ± 2.0E-03					
	08/25/08	09/08/08	gross α	4.8E-04 ± 4.6E-04					
	08/25/08	09/08/08	gross β	1.2E-02 ± 1.7E-03					
	09/08/08	09/22/08	gross α	1.7E-03 ± 6.3E-04					
	09/08/08	09/22/08	gross β	2.8E-02 ± 3.0E-03					
	09/22/08	10/07/08	gross α	2.0E-03 ± 6.6E-04					
	09/22/08	10/07/08	gross β	2.0E-02 ± 2.3E-03					
	10/07/08	10/20/08	gross α	1.6E-03 ± 6.5E-04					
	10/07/08	10/20/08	gross β	2.0E-02 ± 2.4E-03					
	10/20/08	11/03/08	gross α	2.0E-03 ± 4.6E-03					
	10/20/08	11/03/08	gross β	1.9E-02 ± 7.6E-03					
	11/03/08	11/17/08	gross α	8.8E-04 ± 1.0E-03					
	11/03/08	11/17/08	gross β	2.4E-02 ± 3.6E-03					
	11/17/08	12/01/08	gross α	1.7E-03 ± 6.6E-04					
	11/17/08	12/01/08	gross β	3.7E-02 ± 3.6E-03					
	12/01/08	12/15/08	gross α	2.1E-03 ± 6.9E-04					
	12/01/08	12/15/08	gross β	1.6E-02 ± 2.0E-03					
	12/15/08	12/29/08	gross α	1.2E-03 ± 5.0E-04					
	12/15/08	12/29/08	gross β	3.5E-02 ± 3.4E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 64 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N963 (200-W)	12/31/07	01/14/08	gross α	5.2E-04 ± 4.8E-04	N963	12/31/07 to 06/30/08	⁶⁰ Co	2.5E-05 ± 7.7E-05	U
	12/31/07	01/14/08	gross β	1.0E-02 ± 1.5E-03			¹³⁴ Cs	-6.1E-06 ± 6.1E-05	U
	01/14/08	01/29/08	gross α	1.6E-03 ± 5.8E-04			¹³⁷ Cs	-1.0E-05 ± 6.3E-05	U
	01/14/08	01/29/08	gross β	3.0E-02 ± 3.0E-03			¹⁵² Eu	-4.6E-05 ± 1.5E-04	U
	01/29/08	02/12/08	gross α	4.9E-04 ± 4.6E-04			¹⁵⁴ Eu	-1.3E-04 ± 2.1E-04	U
	01/29/08	02/12/08	gross β	4.3E-03 ± 9.1E-04			¹⁵⁵ Eu	-1.6E-04 ± 1.8E-04	U
	02/12/08	02/25/08	gross α	1.3E-03 ± 5.8E-04			²³⁸ Pu	2.8E-06 ± 6.0E-06	U
	02/12/08	02/25/08	gross β	2.6E-02 ± 2.9E-03			^{239/240} Pu	3.3E-06 ± 2.9E-06	
	02/25/08	03/11/08	gross α	1.6E-03 ± 5.9E-04			¹⁰⁶ Ru	5.3E-05 ± 5.3E-04	U
	02/25/08	03/11/08	gross β	1.3E-02 ± 1.7E-03			¹²⁵ Sb	8.4E-06 ± 8.4E-05	U
	03/11/08	03/25/08	gross α	5.2E-04 ± 4.8E-04			⁹⁰ Sr	-7.7E-05 ± 8.0E-05	U
	03/11/08	03/25/08	gross β	6.9E-03 ± 1.2E-03			²³⁴ U	8.7E-06 ± 6.4E-06	
	03/25/08	04/07/08	gross α	1.3E-03 ± 5.6E-04			²³⁵ U	2.2E-06 ± 2.7E-06	
	03/25/08	04/07/08	gross β	6.3E-03 ± 1.2E-03			²³⁸ U	9.4E-06 ± 6.1E-06	
	04/07/08	04/21/08	gross α	1.5E-03 ± 5.9E-04					
	04/07/08	04/21/08	gross β	1.1E-02 ± 1.6E-03	N963	06/30/08 to 12/29/08	⁶⁰ Co	5.1E-05 ± 8.7E-05	U
	04/21/08	05/06/08	gross α	2.1E-03 ± 6.7E-04			¹³⁴ Cs	1.4E-05 ± 8.1E-05	U
	04/21/08	05/06/08	gross β	1.4E-02 ± 1.8E-03			¹³⁷ Cs	8.1E-05 ± 6.9E-05	U
	05/06/08	05/19/08	gross α	5.1E-04 ± 4.9E-04			¹⁵² Eu	9.8E-06 ± 9.8E-05	U
	05/06/08	05/19/08	gross β	1.4E-02 ± 1.9E-03			¹⁵⁴ Eu	-7.5E-05 ± 2.1E-04	U
	05/19/08	06/02/08	gross α	1.1E-03 ± 5.1E-04			¹⁵⁵ Eu	-2.4E-05 ± 1.6E-04	U
	05/19/08	06/02/08	gross β	1.2E-02 ± 1.7E-03			²³⁸ Pu	2.9E-06 ± 4.3E-06	U
	06/02/08	06/16/08	gross α	9.5E-04 ± 5.9E-04			^{239/240} Pu	5.7E-07 ± 3.0E-06	U
	06/02/08	06/16/08	gross β	6.8E-03 ± 1.2E-03			¹⁰⁶ Ru	1.1E-04 ± 6.0E-04	U
	06/16/08	06/30/08	gross α	1.6E-03 ± 6.5E-04			¹²⁵ Sb	4.7E-05 ± 1.5E-04	U
	06/16/08	06/30/08	gross β	1.4E-02 ± 1.8E-03			⁹⁰ Sr	-2.3E-04 ± 2.4E-04	U
	06/30/08	07/14/08	gross α	1.3E-03 ± 5.8E-04			²³⁴ U	1.2E-05 ± 7.4E-06	
	06/30/08	07/14/08	gross β	4.5E-02 ± 4.2E-03			²³⁵ U	3.0E-06 ± 3.2E-06	
	07/14/08	07/28/08	gross α	1.4E-03 ± 5.6E-04			²³⁸ U	6.2E-06 ± 4.8E-06	
	07/14/08	07/28/08	gross β	1.8E-02 ± 2.1E-03					
	07/28/08	08/11/08	gross α	1.0E-03 ± 4.7E-04					
	07/28/08	08/11/08	gross β	1.2E-02 ± 1.7E-03					
	08/11/08	08/25/08	gross α	2.3E-03 ± 7.1E-04					
	08/11/08	08/25/08	gross β	1.6E-02 ± 2.0E-03					
	08/25/08	09/08/08	gross α	2.5E-04 ± 3.8E-04					
	08/25/08	09/08/08	gross β	1.1E-02 ± 1.6E-03					
	09/08/08	09/22/08	gross α	2.1E-03 ± 6.7E-04					
	09/08/08	09/22/08	gross β	3.0E-02 ± 3.1E-03					
	09/22/08	10/07/08	gross α	1.9E-03 ± 6.5E-04					
	09/22/08	10/07/08	gross β	2.1E-02 ± 2.3E-03					
	10/07/08	10/20/08	gross α	1.7E-03 ± 6.5E-04					
	10/07/08	10/20/08	gross β	2.1E-02 ± 2.5E-03					
	10/20/08	11/03/08	gross α	2.8E-03 ± 8.0E-04					
	10/20/08	11/03/08	gross β	4.9E-02 ± 4.5E-03					
	11/03/08	11/17/08	gross α	1.2E-03 ± 5.2E-04					
	11/03/08	11/17/08	gross β	2.0E-02 ± 2.3E-03					
	11/17/08	12/01/08	gross α	2.0E-03 ± 6.9E-04					
	11/17/08	12/01/08	gross β	4.0E-02 ± 3.8E-03					
	12/01/08	12/15/08	gross α	8.7E-04 ± 5.7E-04					
	12/01/08	12/15/08	gross β	2.0E-02 ± 2.3E-03					
	12/15/08	12/29/08	gross α	2.2E-03 ± 7.0E-04					
	12/15/08	12/29/08	gross β	4.9E-02 ± 4.4E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 65 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N964 (200-W)	12/31/07	01/14/08	gross α	1.2E-03 ± 5.2E-04	N964	12/31/07 to 06/30/08	⁶⁰ Co	1.1E-05 ± 7.5E-05	U
	12/31/07	01/14/08	gross β	9.2E-03 ± 1.4E-03			¹³⁴ Cs	1.3E-06 ± 1.3E-05	U
	01/14/08	01/29/08	gross α	1.2E-03 ± 5.1E-04			¹³⁷ Cs	1.4E-05 ± 6.9E-05	U
	01/14/08	01/29/08	gross β	2.8E-02 ± 2.9E-03			¹⁵² Eu	-2.4E-06 ± 2.4E-05	U
	01/29/08	02/12/08	gross α	6.1E-04 ± 5.1E-04			¹⁵⁴ Eu	3.6E-05 ± 2.3E-04	U
	01/29/08	02/12/08	gross β	3.5E-03 ± 8.4E-04			¹⁵⁵ Eu	-1.5E-05 ± 1.6E-04	U
	02/12/08	02/25/08	gross α	1.5E-03 ± 6.3E-04			²³⁸ Pu	-5.1E-07 ± 3.1E-06	U
	02/12/08	02/25/08	gross β	2.8E-02 ± 3.0E-03			^{239/240} Pu	5.1E-07 ± 5.3E-07	U
	02/25/08	03/11/08	gross α	7.0E-04 ± 5.1E-04			¹⁰⁶ Ru	3.1E-04 ± 6.4E-04	U
	02/25/08	03/11/08	gross β	1.5E-02 ± 1.9E-03			¹²⁵ Sb	1.1E-04 ± 1.7E-04	U
	03/11/08	03/25/08	gross α	8.6E-04 ± 5.8E-04			⁹⁰ Sr	-1.3E-04 ± 1.4E-04	U
	03/11/08	03/25/08	gross β	8.8E-03 ± 1.4E-03			²³⁴ U	1.2E-05 ± 7.4E-06	
	03/25/08	04/07/08	gross α	1.0E-03 ± 6.3E-04			²³⁵ U	1.4E-06 ± 2.1E-06	U
	03/25/08	04/07/08	gross β	5.4E-03 ± 1.1E-03			²³⁸ U	7.2E-06 ± 5.2E-06	
	04/07/08	04/21/08	gross α	1.2E-03 ± 5.2E-04			⁶⁰ Co	-3.7E-05 ± 7.5E-05	U
	04/07/08	04/21/08	gross β	9.3E-03 ± 1.4E-03	N964	06/30/08 to 12/29/08	¹³⁴ Cs	-2.4E-05 ± 6.2E-05	U
	04/21/08	05/05/08	gross α	1.7E-03 ± 6.2E-04			¹³⁷ Cs	1.8E-05 ± 5.8E-05	U
	04/21/08	05/05/08	gross β	1.4E-02 ± 1.8E-03			¹⁵² Eu	-5.1E-05 ± 1.5E-04	U
	05/05/08	05/19/08	gross α	1.5E-03 ± 5.8E-04			¹⁵⁴ Eu	-2.1E-04 ± 2.1E-04	U
	05/05/08	05/19/08	gross β	1.1E-02 ± 1.6E-03			¹⁵⁵ Eu	2.8E-05 ± 1.3E-04	U
	05/19/08	06/02/08	gross α	8.9E-04 ± 5.6E-04			²³⁸ Pu	3.7E-06 ± 7.0E-06	U
	05/19/08	06/02/08	gross β	1.3E-02 ± 1.8E-03			^{239/240} Pu	3.1E-06 ± 2.9E-06	
	06/02/08	06/16/08	gross α	1.0E-03 ± 7.1E-04			¹⁰⁶ Ru	1.9E-04 ± 5.5E-04	U
	06/02/08	06/16/08	gross β	9.0E-03 ± 1.5E-03			¹²⁵ Sb	-8.1E-05 ± 1.4E-04	U
	06/16/08	06/30/08	gross α	1.4E-03 ± 6.2E-04			⁹⁰ Sr	-3.0E-04 ± 3.2E-04	U
	06/16/08	06/30/08	gross β	1.3E-02 ± 1.7E-03			²³⁴ U	1.3E-05 ± 8.6E-06	
	06/30/08	07/14/08	gross α	9.1E-04 ± 6.4E-04			²³⁵ U	2.3E-06 ± 4.1E-06	U
	06/30/08	07/14/08	gross β	1.3E-02 ± 1.7E-03			²³⁸ U	1.6E-05 ± 9.3E-06	
	07/14/08	07/28/08	gross α	8.1E-04 ± 5.5E-04					
	07/14/08	07/28/08	gross β	1.1E-02 ± 1.6E-03					
	07/28/08	08/11/08	gross α	1.1E-03 ± 7.0E-04					
	07/28/08	08/11/08	gross β	1.8E-02 ± 2.3E-03					
	08/11/08	08/25/08	gross α	4.4E-04 ± 4.3E-04					
	08/11/08	08/25/08	gross β	1.3E-02 ± 1.8E-03					
	08/25/08	09/08/08	gross α	7.0E-04 ± 5.2E-04					
	08/25/08	09/08/08	gross β	8.3E-03 ± 1.4E-03					
	09/08/08	09/22/08	gross α	5.8E-04 ± 4.9E-04					
	09/08/08	09/22/08	gross β	2.8E-02 ± 3.0E-03					
	09/22/08	10/07/08	gross α	1.7E-03 ± 6.1E-04					
	09/22/08	10/07/08	gross β	2.1E-02 ± 2.3E-03					
	10/07/08	10/20/08	gross α	2.2E-03 ± 7.3E-04					
	10/07/08	10/20/08	gross β	1.9E-02 ± 2.3E-03					
	10/20/08	11/03/08	gross α	2.6E-03 ± 7.6E-04					
	10/20/08	11/03/08	gross β	4.2E-02 ± 4.0E-03					
	11/03/08	11/17/08	gross α	2.9E-03 ± 8.2E-04					
	11/03/08	11/17/08	gross β	1.7E-02 ± 2.1E-03					
	11/17/08	12/01/08	gross α	1.8E-03 ± 6.7E-04					
	11/17/08	12/01/08	gross β	3.4E-02 ± 3.4E-03					
	12/01/08	12/15/08	gross α	2.1E-03 ± 6.9E-04					
	12/01/08	12/15/08	gross β	2.1E-02 ± 2.4E-03					
	12/15/08	12/29/08	gross α	2.1E-03 ± 6.9E-04					
	12/15/08	12/29/08	gross β	4.3E-02 ± 4.0E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 66 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N965 (200-W)	12/31/07	01/14/08	gross α	2.6E-03 ± 7.9E-04	N965	12/31/07 to 06/30/08	⁶⁰ Co	1.9E-05 ± 7.2E-05	U
	12/31/07	01/14/08	gross β	6.9E-03 ± 1.2E-03			¹³⁴ Cs	1.1E-05 ± 5.8E-05	U
	01/14/08	01/29/08	gross α	1.9E-03 ± 6.3E-04			¹³⁷ Cs	-2.9E-05 ± 5.7E-05	U
	01/14/08	01/29/08	gross β	3.1E-02 ± 3.1E-03			¹⁵² Eu	4.5E-05 ± 1.2E-04	U
	01/29/08	02/12/08	gross α	3.8E-04 ± 4.3E-04			¹⁵⁴ Eu	-5.7E-05 ± 1.9E-04	U
	01/29/08	02/12/08	gross β	5.8E-03 ± 1.1E-03			¹⁵⁵ Eu	-1.5E-05 ± 1.3E-04	U
	02/12/08	02/25/08	gross α	1.7E-03 ± 6.5E-04			²³⁸ Pu	1.7E-06 ± 3.4E-06	U
	02/12/08	02/25/08	gross β	3.0E-02 ± 3.1E-03			^{239/240} Pu	5.0E-06 ± 4.4E-06	U
	02/25/08	03/11/08	gross α	8.1E-04 ± 5.4E-04			¹⁰⁶ Ru	-4.1E-04 ± 5.2E-04	U
	02/25/08	03/11/08	gross β	1.7E-02 ± 2.0E-03			¹²⁵ Sb	1.8E-05 ± 1.3E-04	U
	03/11/08	03/25/08	gross α	7.5E-04 ± 5.5E-04			⁹⁰ Sr	-3.4E-05 ± 3.6E-05	U
	03/11/08	03/25/08	gross β	7.2E-03 ± 1.2E-03			²³⁴ U	7.1E-06 ± 5.7E-06	
	03/25/08	04/07/08	gross α	9.0E-04 ± 6.1E-04			²³⁵ U	2.1E-06 ± 3.2E-06	U
	03/25/08	04/07/08	gross β	8.0E-03 ± 1.3E-03			²³⁸ U	1.4E-05 ± 8.0E-06	
	04/07/08	04/21/08	gross α	1.3E-03 ± 5.5E-04	N965	06/30/08 to 12/29/08	⁶⁰ Co	-1.6E-05 ± 7.3E-05	U
	04/07/08	04/21/08	gross β	1.1E-02 ± 1.5E-03			¹³⁴ Cs	-1.8E-05 ± 5.9E-05	U
	04/21/08	05/05/08	gross α	1.5E-03 ± 6.0E-04			¹³⁷ Cs	5.1E-05 ± 6.5E-05	U
	04/21/08	05/05/08	gross β	1.3E-02 ± 1.8E-03			¹⁵² Eu	3.3E-05 ± 1.4E-04	U
	05/05/08	05/19/08	gross α	6.1E-04 ± 5.1E-04			¹⁵⁴ Eu	-8.4E-05 ± 2.0E-04	U
	05/05/08	05/19/08	gross β	1.2E-02 ± 1.7E-03			¹⁵⁵ Eu	-1.0E-04 ± 1.8E-04	U
	05/19/08	06/02/08	gross α	1.4E-03 ± 5.6E-04			²³⁸ Pu	9.7E-07 ± 9.7E-06	U
	05/19/08	06/02/08	gross β	1.3E-02 ± 1.8E-03			^{239/240} Pu	9.8E-07 ± 5.2E-06	U
	06/02/08	06/16/08	gross α	7.2E-04 ± 5.3E-04			¹⁰⁶ Ru	-2.7E-04 ± 5.1E-04	U
	06/02/08	06/16/08	gross β	7.2E-03 ± 1.2E-03			¹²⁵ Sb	4.3E-05 ± 1.5E-04	U
	06/16/08	06/30/08	gross α	2.1E-03 ± 7.5E-04			⁹⁰ Sr	-5.3E-04 ± 5.5E-04	U
	06/16/08	06/30/08	gross β	1.5E-02 ± 1.9E-03			²³⁴ U	1.5E-05 ± 8.8E-06	
	06/30/08	07/14/08	gross α	2.0E-03 ± 7.4E-04			²³⁵ U	3.3E-06 ± 3.5E-06	
	06/30/08	07/14/08	gross β	1.9E-02 ± 2.2E-03			²³⁸ U	6.9E-06 ± 5.6E-06	
	07/14/08	07/28/08	gross α	1.9E-03 ± 6.6E-04					
	07/14/08	07/28/08	gross β	1.7E-02 ± 2.1E-03					
	07/28/08	08/11/08	gross α	1.8E-03 ± 6.9E-04					
	07/28/08	08/11/08	gross β	1.8E-02 ± 2.4E-03					
	08/11/08	08/25/08	gross α	2.0E-03 ± 6.7E-04					
	08/11/08	08/25/08	gross β	1.7E-02 ± 2.1E-03					
	08/25/08	09/08/08	gross α	6.6E-04 ± 5.0E-04					
	08/25/08	09/08/08	gross β	1.0E-02 ± 1.5E-03					
	09/08/08	09/22/08	gross α	2.0E-03 ± 6.7E-04					
	09/08/08	09/22/08	gross β	2.7E-02 ± 2.9E-03					
	09/22/08	10/07/08	gross α	9.8E-04 ± 4.5E-04					
	09/22/08	10/07/08	gross β	1.3E-02 ± 1.7E-03					
	10/14/08	10/20/08	gross α	2.4E-03 ± 1.1E-03					
	10/14/08	10/20/08	gross β	2.4E-02 ± 3.4E-03					
	10/20/08	11/03/08	gross α	3.9E-03 ± 9.4E-04					
	10/20/08	11/03/08	gross β	4.4E-02 ± 4.2E-03					
	11/03/08	11/17/08	gross α	7.3E-04 ± 5.5E-04					
	11/03/08	11/17/08	gross β	1.9E-02 ± 2.3E-03					
	11/17/08	12/01/08	gross α	1.2E-03 ± 5.5E-04					
	11/17/08	12/01/08	gross β	3.6E-02 ± 3.6E-03					
	12/01/08	12/15/08	gross α	3.2E-03 ± 1.2E-03					
	12/01/08	12/15/08	gross β	3.4E-02 ± 4.1E-03					
	12/15/08	12/29/08	gross α	5.0E-03 ± 1.5E-03					
	12/15/08	12/29/08	gross β	9.8E-02 ± 9.0E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 67 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N966 (200-W)	12/31/07	01/14/08	gross α	4.0E-04 ± 4.5E-04	N966	12/31/07 to 06/30/08	⁶⁰ Co	-6.3E-06 ± 6.2E-05	U
	12/31/07	01/14/08	gross β	8.9E-03 ± 1.4E-03			¹³⁴ Cs	-1.5E-05 ± 6.2E-05	U
	01/14/08	01/29/08	gross α	1.7E-03 ± 6.1E-04			¹³⁷ Cs	2.4E-07 ± 2.4E-06	U
	01/14/08	01/29/08	gross β	3.1E-02 ± 3.1E-03			¹⁵² Eu	7.9E-05 ± 1.4E-04	U
	01/29/08	02/12/08	gross α	4.0E-04 ± 4.5E-04			¹⁵⁴ Eu	-2.0E-05 ± 1.6E-04	U
	01/29/08	02/12/08	gross β	5.3E-03 ± 1.0E-03			¹⁵⁵ Eu	-6.6E-05 ± 1.6E-04	U
	02/12/08	02/25/08	gross α	1.5E-03 ± 6.3E-04			²³⁸ Pu	4.1E-06 ± 3.8E-06	U
	02/12/08	02/25/08	gross β	3.4E-02 ± 3.5E-03			^{239/240} Pu	5.3E-06 ± 4.0E-06	
	02/25/08	03/11/08	gross α	1.2E-03 ± 5.2E-04			¹⁰⁶ Ru	-5.4E-04 ± 5.6E-04	U
	02/25/08	03/11/08	gross β	1.7E-02 ± 2.0E-03			¹²⁵ Sb	2.3E-05 ± 1.2E-04	U
	03/11/08	03/25/08	gross α	9.8E-04 ± 6.0E-04			⁹⁰ Sr	7.0E-05 ± 1.5E-04	U
	03/11/08	03/25/08	gross β	8.8E-03 ± 1.4E-03			²³⁴ U	1.3E-05 ± 8.1E-06	
	03/25/08	04/07/08	gross α	1.0E-03 ± 6.3E-04			²³⁵ U	1.5E-06 ± 3.1E-06	U
	03/25/08	04/07/08	gross β	1.1E-02 ± 1.6E-03			²³⁸ U	9.7E-06 ± 7.0E-06	
	04/07/08	04/21/08	gross α	1.6E-03 ± 6.1E-04	N966	06/30/08 to 12/29/08	⁶⁰ Co	2.7E-05 ± 8.7E-05	U
	04/07/08	04/21/08	gross β	1.1E-02 ± 1.6E-03			¹³⁴ Cs	4.8E-05 ± 7.9E-05	U
	04/21/08	05/06/08	gross α	1.2E-03 ± 5.1E-04			¹³⁷ Cs	-5.4E-05 ± 6.6E-05	U
	04/21/08	05/06/08	gross β	1.4E-02 ± 1.8E-03			¹⁵² Eu	1.1E-04 ± 1.7E-04	U
	05/06/08	05/19/08	gross α	5.1E-04 ± 5.0E-04			¹⁵⁴ Eu	1.3E-04 ± 2.4E-04	U
	05/06/08	05/19/08	gross β	1.2E-02 ± 1.8E-03			¹⁵⁵ Eu	2.8E-05 ± 1.6E-04	U
	05/19/08	06/02/08	gross α	6.9E-04 ± 5.2E-04			²³⁸ Pu	8.3E-07 ± 8.3E-06	U
	05/19/08	06/02/08	gross β	1.2E-02 ± 1.7E-03			^{239/240} Pu	1.6E-06 ± 4.1E-06	U
	06/02/08	06/16/08	gross α	9.5E-04 ± 5.9E-04			¹⁰⁶ Ru	2.3E-05 ± 2.3E-04	U
	06/02/08	06/16/08	gross β	8.6E-03 ± 1.4E-03			¹²⁵ Sb	1.0E-04 ± 1.5E-04	U
	06/16/08	06/30/08	gross α	1.4E-03 ± 6.3E-04			⁹⁰ Sr	-3.2E-04 ± 3.3E-04	U
	06/16/08	06/30/08	gross β	1.3E-02 ± 1.7E-03			²³⁴ U	6.2E-06 ± 5.1E-06	
	06/30/08	07/14/08	gross α	1.1E-03 ± 6.9E-04			²³⁵ U	3.0E-06 ± 3.8E-06	U
	06/30/08	07/14/08	gross β	1.3E-02 ± 1.8E-03			²³⁸ U	1.0E-05 ± 6.6E-06	
	07/14/08	07/28/08	gross α	1.4E-03 ± 5.6E-04					
	07/14/08	07/28/08	gross β	1.5E-02 ± 2.0E-03					
	07/28/08	08/11/08	gross α	1.6E-03 ± 6.0E-04					
	07/28/08	08/11/08	gross β	1.6E-02 ± 2.0E-03					
	08/11/08	08/25/08	gross α	1.1E-03 ± 5.1E-04					
	08/11/08	08/25/08	gross β	1.6E-02 ± 2.0E-03					
	08/25/08	09/08/08	gross α	4.8E-04 ± 4.6E-04					
	08/25/08	09/08/08	gross β	1.2E-02 ± 1.7E-03					
	09/08/08	09/22/08	gross α	1.1E-03 ± 5.1E-04					
	09/08/08	09/22/08	gross β	2.8E-02 ± 3.0E-03					
	09/22/08	10/07/08	gross α	1.2E-03 ± 5.3E-04					
	09/22/08	10/07/08	gross β	2.3E-02 ± 2.5E-03					
	10/07/08	10/20/08	gross α	1.3E-03 ± 5.8E-04					
	10/07/08	10/20/08	gross β	2.0E-02 ± 2.3E-03					
	10/20/08	11/03/08	gross α	2.5E-03 ± 7.5E-04					
	10/20/08	11/03/08	gross β	5.0E-02 ± 4.6E-03					
	11/03/08	11/17/08	gross α	1.5E-03 ± 6.1E-04					
	11/03/08	11/17/08	gross β	2.0E-02 ± 2.4E-03					
	11/17/08	12/01/08	gross α	1.4E-03 ± 6.0E-04					
	11/17/08	12/01/08	gross β	4.2E-02 ± 4.1E-03					
	12/01/08	12/15/08	gross α	1.4E-03 ± 5.7E-04					
	12/01/08	12/15/08	gross β	2.2E-02 ± 2.4E-03					
	12/15/08	12/29/08	gross α	1.9E-03 ± 6.6E-04					
	12/15/08	12/29/08	gross β	3.7E-02 ± 3.6E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 68 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N974 (200-W)	12/31/07	01/14/08	gross α	5.3E-04 ± 5.0E-04	N974	12/31/07 to 06/30/08	⁶⁰ Co	-4.9E-05 ± 8.6E-05	U
	12/31/07	01/14/08	gross β	1.0E-02 ± 1.5E-03			¹³⁴ Cs	5.0E-05 ± 7.8E-05	U
	01/14/08	01/29/08	gross α	5.4E-04 ± 5.0E-04			¹³⁷ Cs	-2.9E-07 ± 2.9E-06	U
	01/14/08	01/29/08	gross β	3.7E-02 ± 3.6E-03			¹⁵² Eu	-3.1E-05 ± 1.8E-04	U
	01/29/08	02/12/08	gross α	7.3E-04 ± 5.4E-04			¹⁵⁴ Eu	-8.2E-05 ± 2.6E-04	U
	01/29/08	02/12/08	gross β	6.4E-03 ± 1.1E-03			¹⁵⁵ Eu	-1.8E-04 ± 1.9E-04	U
	02/12/08	02/25/08	gross α	1.3E-03 ± 5.9E-04			²³⁸ Pu	2.0E-06 ± 4.1E-06	U
	02/12/08	02/25/08	gross β	2.8E-02 ± 3.1E-03			^{239/240} Pu	6.8E-06 ± 5.6E-06	
	02/25/08	03/11/08	gross α	6.9E-04 ± 5.1E-04			¹⁰⁶ Ru	1.5E-04 ± 6.7E-04	U
	02/25/08	03/11/08	gross β	1.6E-02 ± 2.0E-03			¹²⁵ Sb	1.3E-04 ± 1.6E-04	U
	03/11/08	03/25/08	gross α	1.2E-03 ± 5.5E-04			⁹⁰ Sr	-1.7E-04 ± 1.7E-04	U
	03/11/08	03/25/08	gross β	8.8E-03 ± 1.4E-03			²³⁴ U	9.4E-06 ± 6.7E-06	
	03/25/08	04/07/08	gross α	1.4E-03 ± 6.4E-04			²³⁵ U	3.7E-06 ± 3.5E-06	
	03/25/08	04/07/08	gross β	7.9E-03 ± 1.4E-03			²³⁸ U	8.7E-06 ± 6.4E-06	
	04/07/08	04/21/08	gross α	9.3E-04 ± 6.3E-04	N974	06/30/08 to 12/29/08	⁶⁰ Co	5.1E-05 ± 7.8E-05	U
	04/07/08	04/21/08	gross β	8.5E-03 ± 1.4E-03			¹³⁴ Cs	-5.1E-06 ± 5.1E-05	U
	04/21/08	05/05/08	gross α	1.2E-03 ± 5.4E-04			¹³⁷ Cs	-3.4E-05 ± 6.6E-05	U
	04/21/08	05/05/08	gross β	1.5E-02 ± 1.9E-03			¹⁵² Eu	-9.6E-05 ± 1.6E-04	U
	05/05/08	05/19/08	gross α	1.4E-03 ± 6.3E-04			¹⁵⁴ Eu	-3.5E-05 ± 2.3E-04	U
	05/05/08	05/19/08	gross β	1.2E-02 ± 1.8E-03			¹⁵⁵ Eu	-7.5E-06 ± 7.5E-05	U
	05/19/08	06/02/08	gross α	2.1E-03 ± 7.5E-04			²³⁸ Pu	8.7E-06 ± 1.4E-05	U
	05/19/08	06/02/08	gross β	1.3E-02 ± 1.8E-03			^{239/240} Pu	4.4E-06 ± 4.9E-06	U
	06/02/08	06/16/08	gross α	8.8E-04 ± 6.8E-04			¹⁰⁶ Ru	3.4E-04 ± 6.0E-04	U
	06/02/08	06/16/08	gross β	8.1E-03 ± 1.4E-03			¹²⁵ Sb	4.9E-05 ± 1.6E-04	U
	06/16/08	06/30/08	gross α	5.9E-04 ± 6.0E-04			⁹⁰ Sr	-3.1E-04 ± 3.2E-04	U
	06/16/08	06/30/08	gross β	1.1E-02 ± 1.6E-03			²³⁴ U	9.9E-06 ± 7.0E-06	
	06/30/08	07/14/08	gross α	9.5E-04 ± 6.2E-04			²³⁵ U	3.4E-06 ± 3.6E-06	
	06/30/08	07/14/08	gross β	1.5E-02 ± 2.0E-03			²³⁸ U	4.6E-06 ± 4.7E-06	U
	07/14/08	07/28/08	gross α	1.0E-03 ± 6.2E-04					
	07/14/08	07/28/08	gross β	1.6E-02 ± 2.0E-03					
	07/28/08	08/11/08	gross α	1.9E-03 ± 6.7E-04					
	07/28/08	08/11/08	gross β	7.6E-03 ± 1.3E-03					
	08/11/08	08/25/08	gross α	8.5E-04 ± 5.6E-04					
	08/11/08	08/25/08	gross β	1.2E-02 ± 1.6E-03					
	08/25/08	09/08/08	gross α	6.8E-04 ± 5.5E-04					
	08/25/08	09/08/08	gross β	1.3E-02 ± 1.7E-03					
	09/08/08	09/22/08	gross α	1.2E-03 ± 5.5E-04					
	09/08/08	09/22/08	gross β	2.9E-02 ± 3.0E-03					
	09/22/08	10/07/08	gross α	2.0E-03 ± 6.5E-04					
	09/22/08	10/07/08	gross β	2.4E-02 ± 2.7E-03					
	10/07/08	10/20/08	gross α	1.4E-03 ± 6.0E-04					
	10/07/08	10/20/08	gross β	1.7E-02 ± 2.1E-03					
	10/20/08	11/03/08	gross α	1.7E-03 ± 6.6E-04					
	10/20/08	11/03/08	gross β	4.0E-02 ± 3.9E-03					
	11/03/08	11/17/08	gross α	1.7E-03 ± 6.6E-04					
	11/03/08	11/17/08	gross β	1.6E-02 ± 2.0E-03					
	11/17/08	12/01/08	gross α	2.2E-03 ± 7.7E-04					
	11/17/08	12/01/08	gross β	3.9E-02 ± 3.8E-03					
	12/01/08	12/15/08	gross α	1.4E-03 ± 6.0E-04					
	12/01/08	12/15/08	gross β	2.8E-02 ± 3.0E-03					
	12/15/08	12/29/08	gross α	1.8E-03 ± 6.8E-04					
	12/15/08	12/29/08	gross β	4.4E-02 ± 4.2E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 69 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N975 (200-W)	12/31/07	01/14/08	gross α	1.3E-03 ± 5.3E-04	N975	12/31/07 to 06/30/08	⁶⁰ Co	-2.0E-05 ± 6.6E-05	U
	12/31/07	01/14/08	gross β	9.2E-03 ± 1.4E-03			¹³⁴ Cs	-1.7E-05 ± 6.4E-05	U
	01/14/08	01/29/08	gross α	8.7E-04 ± 5.8E-04			¹³⁷ Cs	-2.3E-05 ± 5.8E-05	U
	01/14/08	01/29/08	gross β	3.1E-02 ± 3.2E-03			¹⁵² Eu	1.3E-05 ± 1.3E-04	U
	01/29/08	02/12/08	gross α	4.0E-04 ± 4.5E-04			¹⁵⁴ Eu	-1.1E-04 ± 2.2E-04	U
	01/29/08	02/12/08	gross β	3.3E-03 ± 7.9E-04			¹⁵⁵ Eu	-1.1E-06 ± 1.1E-05	U
	02/12/08	02/25/08	gross α	1.6E-03 ± 6.4E-04			²³⁸ Pu	-5.6E-07 ± 1.1E-06	U
	02/12/08	02/25/08	gross β	2.8E-02 ± 3.0E-03			^{239/240} Pu	1.9E-05 ± 9.2E-06	
	02/25/08	03/11/08	gross α	8.2E-04 ± 5.6E-04			¹⁰⁶ Ru	6.6E-05 ± 4.9E-04	U
	02/25/08	03/11/08	gross β	1.6E-02 ± 2.0E-03			¹²⁵ Sb	2.2E-04 ± 2.6E-04	U
	03/11/08	03/25/08	gross α	2.8E-04 ± 4.1E-04			⁹⁰ Sr	3.9E-05 ± 1.6E-04	U
	03/11/08	03/25/08	gross β	6.1E-03 ± 1.1E-03			²³⁴ U	1.3E-05 ± 7.8E-06	
	03/25/08	04/07/08	gross α	8.3E-04 ± 6.1E-04			²³⁵ U	7.1E-07 ± 2.1E-07	U
	03/25/08	04/07/08	gross β	6.2E-03 ± 1.2E-03			²³⁸ U	9.9E-06 ± 6.8E-06	
	04/07/08	04/21/08	gross α	7.9E-04 ± 5.8E-04	N975	06/30/08 to 12/29/08	⁶⁰ Co	5.6E-05 ± 9.2E-05	U
	04/07/08	04/21/08	gross β	9.3E-03 ± 1.4E-03			¹³⁴ Cs	3.3E-05 ± 7.8E-05	U
	04/21/08	05/05/08	gross α	2.0E-03 ± 6.8E-04			¹³⁷ Cs	-4.6E-05 ± 6.9E-05	U
	04/21/08	05/05/08	gross β	1.4E-02 ± 1.9E-03			¹⁵² Eu	-1.2E-04 ± 1.8E-04	U
	05/05/08	05/19/08	gross α	7.9E-04 ± 5.9E-04			¹⁵⁴ Eu	2.0E-05 ± 2.0E-04	U
	05/05/08	05/19/08	gross β	1.0E-02 ± 1.6E-03			¹⁵⁵ Eu	1.8E-04 ± 2.1E-04	U
	05/19/08	06/02/08	gross α	9.8E-04 ± 6.1E-04			²³⁸ Pu	-2.9E-06 ± 1.1E-05	U
	05/19/08	06/02/08	gross β	9.6E-03 ± 1.5E-03			^{239/240} Pu	1.2E-05 ± 7.7E-06	
	06/02/08	06/16/08	gross α	1.4E-03 ± 6.3E-04			¹⁰⁶ Ru	-9.7E-05 ± 6.9E-04	U
	06/02/08	06/16/08	gross β	9.6E-03 ± 1.5E-03			¹²⁵ Sb	-9.2E-06 ± 9.2E-05	U
	06/16/08	06/30/08	gross α	1.2E-03 ± 6.0E-04			⁹⁰ Sr	-2.1E-04 ± 2.2E-04	U
	06/16/08	06/30/08	gross β	1.2E-02 ± 1.7E-03			²³⁴ U	1.4E-05 ± 8.4E-06	
	06/30/08	07/14/08	gross α	1.1E-03 ± 6.6E-04			²³⁵ U	5.4E-06 ± 5.1E-06	U
	06/30/08	07/14/08	gross β	1.3E-02 ± 1.8E-03			²³⁸ U	1.5E-05 ± 8.6E-06	
	07/14/08	07/28/08	gross α	1.1E-03 ± 5.1E-04					
	07/14/08	07/28/08	gross β	1.3E-02 ± 1.7E-03					
	07/28/08	08/11/08	gross α	7.6E-04 ± 5.5E-04					
	07/28/08	08/11/08	gross β	1.4E-02 ± 1.8E-03					
	08/11/08	08/25/08	gross α	1.3E-03 ± 5.6E-04					
	08/11/08	08/25/08	gross β	1.4E-02 ± 1.8E-03					
	08/25/08	09/08/08	gross α	7.4E-04 ± 5.3E-04					
	08/25/08	09/08/08	gross β	1.1E-02 ± 1.5E-03					
	09/08/08	09/22/08	gross α	1.2E-03 ± 5.3E-04					
	09/08/08	09/22/08	gross β	2.5E-02 ± 2.7E-03					
	09/22/08	10/07/08	gross α	1.4E-03 ± 5.4E-04					
	09/22/08	10/07/08	gross β	2.4E-02 ± 2.6E-03					
	10/07/08	10/20/08	gross α	1.1E-03 ± 6.6E-04					
	10/07/08	10/20/08	gross β	1.9E-02 ± 2.3E-03					
	10/20/08	11/03/08	gross α	3.5E-03 ± 9.2E-04					
	10/20/08	11/03/08	gross β	3.8E-02 ± 3.7E-03					
	11/03/08	11/17/08	gross α	1.7E-03 ± 6.5E-04					
	11/03/08	11/17/08	gross β	1.7E-02 ± 2.0E-03					
	11/17/08	12/01/08	gross α	2.2E-03 ± 7.5E-04					
	11/17/08	12/01/08	gross β	3.6E-02 ± 3.6E-03					
	12/01/08	12/15/08	gross α	1.9E-03 ± 6.7E-04					
	12/01/08	12/15/08	gross β	1.8E-02 ± 2.1E-03					
	12/15/08	12/29/08	gross α	2.7E-03 ± 8.0E-04					
	12/15/08	12/29/08	gross β	4.1E-02 ± 3.9E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 70 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N987 (200-W)	12/31/07	01/14/08	gross α	1.7E-03 ± 6.4E-04	N987	12/31/07 to 06/30/08	⁶⁰ Co	-6.1E-05 ± 1.4E-04	U
	12/31/07	01/14/08	gross β	9.1E-03 ± 1.4E-03			¹³⁴ Cs	-3.0E-05 ± 1.1E-04	U
	01/14/08	01/29/08	gross α	2.1E-03 ± 7.2E-04			¹³⁷ Cs	8.5E-05 ± 1.1E-04	U
	01/14/08	01/29/08	gross β	3.4E-02 ± 3.4E-03			¹⁵² Eu	1.8E-04 ± 2.5E-04	U
	01/29/08	02/12/08	gross α	5.2E-04 ± 4.9E-04			¹⁵⁴ Eu	-1.3E-04 ± 3.7E-04	U
	01/29/08	02/12/08	gross β	4.6E-03 ± 9.5E-04			¹⁵⁵ Eu	-9.1E-07 ± 9.1E-06	U
	02/12/08	02/25/08	gross α	2.3E-03 ± 7.9E-04			²³⁸ Pu	2.0E-05 ± 1.5E-05	
	02/12/08	02/25/08	gross β	2.9E-02 ± 3.1E-03			^{239/240} Pu	1.5E-05 ± 8.5E-06	
	02/25/08	03/11/08	gross α	8.0E-04 ± 5.4E-04			¹⁰⁶ Ru	-2.4E-04 ± 9.5E-04	U
	02/25/08	03/11/08	gross β	1.6E-02 ± 1.9E-03			¹²⁵ Sb	3.8E-05 ± 2.4E-04	U
	03/11/08	03/25/08	gross α	5.3E-04 ± 5.0E-04			⁹⁰ Sr	-2.8E-04 ± 2.9E-04	U
	03/11/08	03/25/08	gross β	3.8E-02 ± 3.7E-03			²³⁴ U	1.0E-05 ± 7.2E-06	
	03/25/08	04/07/08	gross α	1.1E-03 ± 6.7E-04			²³⁵ U	7.9E-06 ± 6.2E-06	
	03/25/08	04/07/08	gross β	8.4E-03 ± 1.4E-03			²³⁸ U	5.1E-06 ± 4.8E-06	U
	04/07/08	04/21/08	gross α	1.2E-03 ± 5.5E-04	N987	06/30/08 to 12/29/08	⁶⁰ Co	8.3E-05 ± 8.2E-05	U
	04/07/08	04/21/08	gross β	9.5E-03 ± 1.4E-03			¹³⁴ Cs	-9.7E-06 ± 7.5E-05	U
	04/21/08	05/05/08	gross α	1.4E-03 ± 5.6E-04			¹³⁷ Cs	7.1E-05 ± 7.0E-05	U
	04/21/08	05/05/08	gross β	1.4E-02 ± 1.8E-03			¹⁵² Eu	-1.1E-04 ± 1.7E-04	U
	05/05/08	05/19/08	gross α	6.9E-04 ± 5.7E-04			¹⁵⁴ Eu	1.8E-04 ± 2.1E-04	U
	05/05/08	05/19/08	gross β	6.4E-03 ± 1.2E-03			¹⁵⁵ Eu	2.7E-06 ± 2.7E-05	U
	05/19/08	06/02/08	gross α	3.0E-04 ± 4.3E-04			²³⁸ Pu	2.3E-06 ± 9.3E-06	U
	05/19/08	06/02/08	gross β	9.7E-03 ± 1.5E-03			^{239/240} Pu	7.8E-07 ± 3.5E-06	U
	06/02/08	06/16/08	gross α	1.1E-03 ± 7.1E-04			¹⁰⁶ Ru	3.4E-04 ± 6.6E-04	U
	06/02/08	06/16/08	gross β	8.1E-03 ± 1.3E-03			¹²⁵ Sb	5.6E-05 ± 1.6E-04	U
	06/16/08	06/30/08	gross α	8.3E-04 ± 6.4E-04			⁹⁰ Sr	-1.3E-04 ± 1.4E-04	U
	06/16/08	06/30/08	gross β	1.2E-02 ± 1.6E-03			²³⁴ U	2.2E-05 ± 1.2E-05	
	06/30/08	07/14/08	gross α	1.3E-03 ± 5.6E-04			²³⁵ U	4.6E-06 ± 4.1E-06	
	06/30/08	07/14/08	gross β	1.1E-02 ± 1.6E-03			²³⁸ U	2.1E-05 ± 1.1E-05	
	07/14/08	07/28/08	gross α	1.0E-03 ± 6.2E-04					
	07/14/08	07/28/08	gross β	1.3E-02 ± 1.8E-03					
	07/28/08	08/11/08	gross α	7.8E-04 ± 5.6E-04					
	07/28/08	08/11/08	gross β	1.3E-02 ± 1.8E-03					
	08/11/08	08/25/08	gross α	1.3E-03 ± 6.1E-04					
	08/11/08	08/25/08	gross β	1.3E-02 ± 1.9E-03					
	08/25/08	09/08/08	gross α	1.4E-03 ± 5.5E-04					
	08/25/08	09/08/08	gross β	7.8E-03 ± 1.2E-03					
	09/08/08	09/22/08	gross α	1.2E-03 ± 5.5E-04					
	09/08/08	09/22/08	gross β	2.3E-02 ± 2.6E-03					
	09/22/08	10/07/08	gross α	1.1E-03 ± 4.9E-04					
	09/22/08	10/07/08	gross β	2.8E-02 ± 3.0E-03					
	10/07/08	10/20/08	gross α	1.1E-03 ± 6.9E-04					
	10/07/08	10/20/08	gross β	1.6E-02 ± 2.1E-03					
	10/20/08	11/03/08	gross α	3.3E-03 ± 9.2E-04					
	10/20/08	11/03/08	gross β	4.0E-02 ± 3.8E-03					
	11/03/08	11/17/08	gross α	7.7E-04 ± 5.6E-04					
	11/03/08	11/17/08	gross β	1.5E-02 ± 1.9E-03					
	11/17/08	12/01/08	gross α	1.9E-03 ± 6.8E-04					
	11/17/08	12/01/08	gross β	3.4E-02 ± 3.4E-03					
	12/01/08	12/15/08	gross α	1.9E-03 ± 6.9E-04					
	12/01/08	12/15/08	gross β	2.3E-02 ± 2.6E-03					
	12/15/08	12/29/08	gross α	1.7E-03 ± 6.2E-04					
	12/15/08	12/29/08	gross β	3.6E-02 ± 3.5E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 71 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N994 (200-W)	12/31/07	01/14/08	gross α	8.8E-04 ± 5.9E-04	N994	12/31/07 to 06/30/08	⁶⁰ Co	-4.8E-05 ± 8.0E-05	U
	12/31/07	01/14/08	gross β	6.6E-03 ± 1.2E-03			¹³⁴ Cs	-6.0E-05 ± 7.5E-05	U
	01/14/08	01/29/08	gross α	1.6E-03 ± 6.0E-04			¹³⁷ Cs	4.6E-05 ± 6.4E-05	U
	01/14/08	01/29/08	gross β	3.2E-02 ± 3.2E-03			¹⁵² Eu	-9.7E-06 ± 9.7E-05	U
	01/29/08	02/12/08	gross α	1.7E-04 ± 3.6E-04			¹⁵⁴ Eu	2.0E-05 ± 2.0E-04	U
	01/29/08	02/12/08	gross β	2.9E-03 ± 7.5E-04			¹⁵⁵ Eu	5.5E-06 ± 5.5E-05	U
	02/12/08	02/25/08	gross α	9.5E-04 ± 6.4E-04			²³⁸ Pu	-3.5E-06 ± 8.4E-06	U
	02/12/08	02/25/08	gross β	3.0E-02 ± 3.2E-03			^{239/240} Pu	1.0E-05 ± 7.0E-06	
	02/25/08	03/11/08	gross α	9.4E-04 ± 5.8E-04			¹⁰⁶ Ru	5.8E-05 ± 5.4E-04	U
	02/25/08	03/11/08	gross β	1.2E-02 ± 1.7E-03			¹²⁵ Sb	-1.9E-05 ± 1.5E-04	U
	03/11/08	03/25/08	gross α	5.1E-04 ± 4.9E-04			⁹⁰ Sr	-2.5E-04 ± 2.6E-04	U
	03/11/08	03/25/08	gross β	5.5E-03 ± 1.1E-03			²³⁴ U	1.0E-05 ± 7.1E-06	
	03/25/08	04/07/08	gross α	1.3E-03 ± 5.9E-04			²³⁵ U	2.3E-06 ± 3.6E-06	U
	03/25/08	04/07/08	gross β	5.8E-03 ± 1.1E-03			²³⁸ U	2.8E-06 ± 4.2E-06	U
	04/07/08	04/21/08	gross α	5.3E-04 ± 5.0E-04	N994	06/30/08 to 12/29/08	⁶⁰ Co	-3.8E-05 ± 8.2E-05	U
	04/07/08	04/21/08	gross β	8.4E-03 ± 1.3E-03			¹³⁴ Cs	-9.4E-06 ± 7.1E-05	U
	04/21/08	05/05/08	gross α	1.6E-03 ± 6.2E-04			¹³⁷ Cs	4.9E-05 ± 6.7E-05	U
	04/21/08	05/05/08	gross β	1.2E-02 ± 1.7E-03			¹⁵² Eu	5.5E-05 ± 1.6E-04	U
	05/05/08	05/19/08	gross α	1.2E-03 ± 5.6E-04			¹⁵⁴ Eu	-2.4E-04 ± 2.5E-04	U
	05/05/08	05/19/08	gross β	1.1E-02 ± 1.6E-03			¹⁵⁵ Eu	4.1E-05 ± 1.6E-04	U
	05/19/08	06/02/08	gross α	8.4E-04 ± 5.6E-04			²³⁸ Pu	2.3E-06 ± 8.9E-06	U
	05/19/08	06/02/08	gross β	1.1E-02 ± 1.6E-03			^{239/240} Pu	-7.5E-07 ± 2.6E-06	U
	06/02/08	06/16/08	gross α	1.2E-03 ± 5.8E-04			¹⁰⁶ Ru	-7.7E-05 ± 5.7E-04	U
	06/02/08	06/16/08	gross β	8.9E-03 ± 1.4E-03			¹²⁵ Sb	-2.6E-05 ± 1.4E-04	U
	06/16/08	06/30/08	gross α	8.3E-04 ± 6.4E-04			⁹⁰ Sr	-3.1E-04 ± 3.2E-04	U
	06/16/08	06/30/08	gross β	1.3E-02 ± 1.7E-03			²³⁴ U	1.8E-05 ± 9.8E-06	
	06/30/08	07/14/08	gross α	1.7E-03 ± 6.4E-04			²³⁵ U	3.1E-06 ± 4.5E-06	U
	06/30/08	07/14/08	gross β	1.2E-02 ± 1.6E-03			²³⁸ U	8.4E-06 ± 6.0E-06	
	07/14/08	07/28/08	gross α	8.5E-04 ± 5.6E-04					
	07/14/08	07/28/08	gross β	1.3E-02 ± 1.7E-03					
	07/28/08	08/11/08	gross α	8.8E-04 ± 5.8E-04					
	07/28/08	08/11/08	gross β	1.3E-02 ± 1.7E-03					
	08/11/08	08/25/08	gross α	8.5E-04 ± 5.6E-04					
	08/11/08	08/25/08	gross β	1.1E-02 ± 1.5E-03					
	08/25/08	09/08/08	gross α	7.2E-04 ± 5.2E-04					
	08/25/08	09/08/08	gross β	8.7E-03 ± 1.3E-03					
	09/08/08	09/22/08	gross α	9.5E-04 ± 5.9E-04					
	09/08/08	09/22/08	gross β	2.6E-02 ± 2.8E-03					
	09/22/08	10/07/08	gross α	2.7E-03 ± 1.1E-03					
	09/22/08	10/07/08	gross β	3.6E-02 ± 4.2E-03					
	10/14/08	10/20/08	gross α	1.4E-03 ± 1.2E-03					
	10/14/08	10/20/08	gross β	2.3E-02 ± 3.4E-03					
	10/20/08	11/03/08	gross α	3.2E-03 ± 8.7E-04					
	10/20/08	11/03/08	gross β	3.9E-02 ± 3.8E-03					
	11/03/08	11/17/08	gross α	3.6E-04 ± 7.5E-04					
	11/03/08	11/17/08	gross β	1.4E-02 ± 2.5E-03					
	11/17/08	12/01/08	gross α	1.9E-03 ± 6.7E-04					
	11/17/08	12/01/08	gross β	3.4E-02 ± 3.4E-03					
	12/01/08	12/15/08	gross α	2.0E-03 ± 6.8E-04					
	12/01/08	12/15/08	gross β	2.2E-02 ± 2.5E-03					
	12/15/08	12/29/08	gross α	1.5E-03 ± 5.9E-04					
	12/15/08	12/29/08	gross β	3.6E-02 ± 3.5E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 72 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N557 (300 Area)	01/02/08	01/15/08	gross α	4.2E-04 ± 4.7E-04	N557	01/02/08 to 03/26/08	⁶⁰ Co	-1.9E-05 ± 1.3E-04	U
	01/02/08	01/15/08	gross β	8.1E-03 ± 1.4E-03			¹³⁴ Cs	4.3E-05 ± 1.4E-04	U
	01/15/08	01/30/08	gross α	1.5E-03 ± 5.6E-04			¹³⁷ Cs	-5.2E-06 ± 5.2E-05	U
	01/15/08	01/30/08	gross β	3.3E-02 ± 3.7E-03			¹⁵² Eu	-7.7E-05 ± 3.0E-04	U
	01/30/08	02/13/08	gross α	1.6E-04 ± 3.4E-04			¹⁵⁴ Eu	-2.0E-04 ± 4.3E-04	U
	01/30/08	02/13/08	gross β	3.2E-03 ± 8.0E-04			¹⁵⁵ Eu	-1.8E-04 ± 3.4E-04	U
	02/13/08	02/27/08	gross α	1.9E-03 ± 6.9E-04			²³⁸ Pu	-2.6E-06 ± 9.0E-06	U
	02/13/08	02/27/08	gross β	3.6E-02 ± 4.0E-03			^{239/240} Pu	3.1E-05 ± 2.0E-05	
	02/27/08	03/12/08	gross α	7.3E-04 ± 5.4E-04			¹⁰⁶ Ru	-1.0E-03 ± 1.2E-03	U
	02/27/08	03/12/08	gross β	1.2E-02 ± 1.8E-03			¹²⁵ Sb	1.1E-04 ± 2.9E-04	U
	03/12/08	03/26/08	gross α	7.5E-04 ± 5.5E-04			⁹⁰ Sr	8.4E-05 ± 3.0E-04	U
	03/12/08	03/26/08	gross β	1.0E-02 ± 1.6E-03			²³⁴ U	1.7E-05 ± 1.3E-05	
	03/26/08	04/08/08	gross α	1.0E-03 ± 6.3E-04			²³⁵ U	1.8E-06 ± 3.7E-06	U
	03/26/08	04/08/08	gross β	8.0E-03 ± 1.4E-03			²³⁸ U	6.6E-06 ± 8.4E-06	U
	04/08/08	04/23/08	gross α	1.2E-03 ± 5.2E-04					
	04/08/08	04/23/08	gross β	1.1E-02 ± 1.6E-03	N557	03/26/08 to 07/02/08	⁶⁰ Co	8.3E-05 ± 1.5E-04	U
	04/23/08	05/08/08	gross α	1.1E-03 ± 5.1E-04			¹³⁴ Cs	-1.4E-05 ± 1.3E-04	U
	04/23/08	05/08/08	gross β	1.8E-02 ± 2.3E-03			¹³⁷ Cs	-1.1E-05 ± 1.1E-04	U
	05/08/08	05/20/08	gross α	4.7E-04 ± 5.5E-04			¹⁵² Eu	8.7E-05 ± 2.9E-04	U
	05/08/08	05/20/08	gross β	1.3E-02 ± 2.0E-03			¹⁵⁴ Eu	3.0E-04 ± 3.5E-04	U
	05/20/08	06/03/08	gross α	1.0E-03 ± 4.8E-04			¹⁵⁵ Eu	-9.0E-05 ± 3.2E-04	U
	05/20/08	06/03/08	gross β	1.1E-02 ± 1.7E-03			²³⁸ Pu	1.8E-05 ± 1.1E-05	
	06/03/08	06/23/08	gross α	1.3E-03 ± 4.9E-04			^{239/240} Pu	1.2E-06 ± 2.4E-06	U
	06/03/08	06/23/08	gross β	9.5E-03 ± 1.3E-03			¹⁰⁶ Ru	-1.1E-04 ± 1.0E-03	U
	06/23/08	07/02/08	gross α	2.0E-03 ± 9.6E-04			¹²⁵ Sb	1.9E-04 ± 3.0E-04	U
	06/23/08	07/02/08	gross β	1.7E-02 ± 2.6E-03			⁹⁰ Sr	-1.2E-04 ± 1.3E-04	U
	07/02/08	07/16/08	gross α	1.5E-03 ± 6.8E-04			²³⁴ U	1.4E-05 ± 8.9E-06	
	07/02/08	07/16/08	gross β	1.4E-02 ± 2.0E-03			²³⁵ U	1.2E-06 ± 2.5E-06	
	07/16/08	07/30/08	gross α	1.0E-03 ± 4.9E-04			²³⁸ U	1.3E-05 ± 8.5E-06	
	07/16/08	07/30/08	gross β	1.4E-02 ± 2.0E-03	N557	07/02/08 to 09/23/08	⁶⁰ Co	-3.5E-05 ± 2.0E-04	U
	07/30/08	08/13/08	gross α	1.2E-03 ± 5.4E-04			¹³⁴ Cs	6.8E-05 ± 1.7E-04	U
	07/30/08	08/13/08	gross β	1.4E-02 ± 2.0E-03			¹³⁷ Cs	-1.5E-05 ± 1.5E-04	U
	08/13/08	08/25/08	gross α	1.9E-03 ± 7.2E-04			¹⁵² Eu	3.3E-04 ± 3.9E-04	U
	08/13/08	08/25/08	gross β	1.7E-02 ± 2.5E-03			¹⁵⁴ Eu	7.7E-05 ± 4.9E-04	U
	08/25/08	09/09/08	gross α	7.8E-04 ± 5.4E-04			¹⁵⁵ Eu	2.6E-04 ± 3.9E-04	U
	08/25/08	09/09/08	gross β	1.5E-02 ± 2.1E-03			²³⁸ Pu	-1.1E-05 ± 2.1E-05	
	09/09/08	09/23/08	gross α	1.1E-03 ± 5.1E-04			^{239/240} Pu	3.6E-06 ± 7.3E-06	
	09/09/08	09/23/08	gross β	3.0E-02 ± 3.5E-03			¹⁰⁶ Ru	-5.1E-04 ± 1.4E-03	U
	09/23/08	10/08/08	gross α	6.0E-04 ± 4.8E-04			¹²⁵ Sb	-2.1E-04 ± 4.0E-04	U
	09/23/08	10/08/08	gross β	2.0E-02 ± 2.5E-03			⁹⁰ Sr	-1.1E-04 ± 1.1E-04	U
	10/08/08	10/21/08	gross α	1.4E-03 ± 6.1E-04			²³⁴ U	3.0E-05 ± 1.7E-05	
	10/08/08	10/21/08	gross β	1.6E-02 ± 2.2E-03			²³⁵ U	-1.6E-06 ± 3.3E-06	U
	10/21/08	11/04/08	gross α	2.8E-03 ± 8.3E-04			²³⁸ U	1.8E-05 ± 1.3E-05	
	10/21/08	11/04/08	gross β	4.4E-02 ± 4.8E-03	N557	09/23/08 to 12/31/08	⁶⁰ Co	-7.3E-05 ± 1.8E-04	U
	11/04/08	11/18/08	gross α	1.3E-03 ± 6.1E-04			¹³⁴ Cs	1.4E-05 ± 1.4E-04	U
	11/04/08	11/18/08	gross β	2.8E-02 ± 3.4E-03			¹³⁷ Cs	-4.0E-05 ± 1.3E-04	U
	11/18/08	12/02/08	gross α	2.3E-03 ± 8.5E-04			¹⁵² Eu	4.3E-05 ± 3.3E-04	U
	11/18/08	12/02/08	gross β	4.1E-02 ± 4.6E-03			¹⁵⁴ Eu	-3.0E-04 ± 4.8E-04	U
	12/02/08	12/16/08	gross α	7.8E-04 ± 5.6E-04			¹⁵⁵ Eu	-3.9E-04 ± 4.0E-04	U
	12/02/08	12/16/08	gross β	1.7E-02 ± 2.2E-03			²³⁸ Pu	-1.2E-05 ± 2.0E-05	U
	12/16/08	12/31/08	gross α	2.3E-03 ± 7.5E-04			^{239/240} Pu	1.4E-06 ± 4.8E-06	U
	12/16/08	12/31/08	gross β	4.4E-02 ± 4.7E-03			¹⁰⁶ Ru	3.5E-04 ± 1.2E-03	U
							¹²⁵ Sb	-7.3E-05 ± 3.1E-04	U
							⁹⁰ Sr	-2.0E-04 ± 2.0E-04	U
							²³⁴ U	2.2E-05 ± 1.4E-05	
							²³⁵ U	2.9E-06 ± 4.3E-06	U
							²³⁸ U	1.1E-05 ± 9.3E-06	

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 73 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N527 (300 Area)	01/02/08	01/15/08	gross α	5.1E-04 ± 4.9E-04	N527	01/02/08 to 07/01/08	⁶⁰ Co	-8.1E-05 ± 1.1E-04	U
	01/02/08	01/15/08	gross β	1.1E-02 ± 1.6E-03			¹³⁴ Cs	-3.0E-05 ± 7.3E-05	U
	01/15/08	01/30/08	gross α	2.2E-03 ± 6.8E-04			¹³⁷ Cs	-8.8E-06 ± 6.1E-05	U
	01/15/08	01/30/08	gross β	3.4E-02 ± 3.3E-03			¹⁵² Eu	-6.4E-06 ± 6.4E-05	U
	01/30/08	02/13/08	gross α	3.8E-04 ± 4.3E-04			¹⁵⁴ Eu	2.2E-04 ± 2.6E-04	U
	01/30/08	02/13/08	gross β	3.5E-03 ± 8.0E-04			¹⁵⁵ Eu	-2.3E-05 ± 1.5E-04	U
	02/13/08	02/27/08	gross α	1.4E-03 ± 5.7E-04			²³⁸ Pu	6.2E-07 ± 6.2E-06	U
	02/13/08	02/27/08	gross β	3.3E-02 ± 3.3E-03			^{239/240} Pu	-1.2E-06 ± 1.8E-06	U
	02/27/08	03/12/08	gross α	8.2E-04 ± 5.5E-04			¹⁰⁶ Ru	-5.6E-04 ± 6.8E-04	U
	02/27/08	03/12/08	gross β	9.8E-03 ± 1.5E-03			¹²⁵ Sb	-6.7E-05 ± 1.6E-04	U
	03/12/08	03/26/08	gross α	4.9E-04 ± 4.6E-04			²³⁴ U	1.3E-05 ± 7.9E-06	
	03/12/08	03/26/08	gross β	8.8E-03 ± 1.4E-03			²³⁵ U	3.6E-06 ± 3.5E-06	
	03/26/08	04/08/08	gross α	7.6E-04 ± 5.6E-04			²³⁸ U	1.2E-05 ± 7.5E-06	
	03/26/08	04/08/08	gross β	8.4E-03 ± 1.4E-03	N527	07/01/08 to 12/31/08	⁶⁰ Co	-7.2E-05 ± 7.9E-05	U
	04/08/08	04/23/08	gross α	6.6E-04 ± 4.9E-04			¹³⁴ Cs	-2.8E-05 ± 7.0E-05	U
	04/08/08	04/23/08	gross β	1.1E-02 ± 1.5E-03			¹³⁷ Cs	7.6E-06 ± 6.0E-05	U
	04/23/08	05/08/08	gross α	1.3E-03 ± 5.2E-04			¹⁵² Eu	1.8E-05 ± 1.5E-04	U
	04/23/08	05/08/08	gross β	1.4E-02 ± 1.8E-03			¹⁵⁴ Eu	-6.6E-05 ± 2.5E-04	U
	05/08/08	05/20/08	gross α	4.6E-04 ± 5.0E-04			¹⁵⁵ Eu	9.3E-05 ± 1.7E-04	U
	05/08/08	05/20/08	gross β	1.3E-02 ± 1.8E-03			²³⁸ Pu	4.4E-06 ± 1.1E-05	U
	05/20/08	06/03/08	gross α	1.1E-03 ± 4.9E-04			^{239/240} Pu	1.5E-06 ± 3.0E-06	U
	05/20/08	06/03/08	gross β	9.6E-03 ± 1.4E-03			¹⁰⁶ Ru	-2.5E-04 ± 5.4E-04	U
	06/03/08	06/17/08	gross α	6.2E-04 ± 5.0E-04			¹²⁵ Sb	-6.0E-05 ± 1.4E-04	U
	06/03/08	06/17/08	gross β	6.6E-03 ± 1.1E-03			²³⁴ U	2.1E-05 ± 1.2E-05	
	06/17/08	07/01/08	gross α	6.3E-04 ± 5.2E-04			²³⁵ U	7.6E-07 ± 7.7E-06	U
	06/17/08	07/01/08	gross β	1.2E-02 ± 1.7E-03			²³⁸ U	2.3E-05 ± 1.2E-05	
	07/01/08	07/15/08	gross α	9.5E-04 ± 5.8E-04					
	07/01/08	07/15/08	gross β	1.2E-02 ± 1.7E-03					
	07/15/08	07/29/08	gross α	6.1E-04 ± 4.9E-04					
	07/15/08	07/29/08	gross β	1.2E-02 ± 1.6E-03					
	07/29/08	08/12/08	gross α	7.4E-04 ± 5.3E-04					
	07/29/08	08/12/08	gross β	1.4E-02 ± 1.8E-03					
	08/12/08	08/25/08	gross α	9.3E-04 ± 6.1E-04					
	08/12/08	08/25/08	gross β	1.4E-02 ± 1.9E-03					
	08/25/08	09/09/08	gross α	9.8E-04 ± 4.5E-04					
	08/25/08	09/09/08	gross β	1.1E-02 ± 1.5E-03					
	09/09/08	09/23/08	gross α	1.0E-03 ± 6.4E-04					
	09/09/08	09/23/08	gross β	2.0E-02 ± 2.3E-03					
	09/23/08	10/08/08	gross α	1.1E-03 ± 4.7E-04					
	09/23/08	10/08/08	gross β	2.2E-02 ± 2.4E-03					
	10/08/08	10/21/08	gross α	1.6E-03 ± 6.2E-04					
	10/08/08	10/21/08	gross β	1.8E-02 ± 2.2E-03					
	10/21/08	11/04/08	gross α	2.7E-03 ± 7.8E-04					
	10/21/08	11/04/08	gross β	4.1E-02 ± 3.9E-03					
	11/04/08	11/18/08	gross α	6.3E-04 ± 5.0E-04					
	11/04/08	11/18/08	gross β	2.1E-02 ± 2.3E-03					
	11/18/08	12/02/08	gross α	1.2E-03 ± 5.2E-04					
	11/18/08	12/02/08	gross β	4.4E-02 ± 4.2E-03					
	12/02/08	12/16/08	gross α	1.7E-03 ± 6.4E-04					
	12/02/08	12/16/08	gross β	2.2E-02 ± 2.5E-03					
	12/16/08	12/31/08	gross α	2.3E-03 ± 7.0E-04					
	12/16/08	12/31/08	gross β	3.8E-02 ± 3.6E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 74 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N537 (300 Area)	01/02/08	01/15/08	gross α	1.0E-03 ± 6.2E-04	N537	01/02/08 to 07/01/08	⁶⁰ Co	3.1E-05 ± 9.4E-05	U
	01/02/08	01/15/08	gross β	9.6E-03 ± 1.6E-03			¹³⁴ Cs	-3.2E-05 ± 1.1E-04	U
	01/15/08	01/30/08	gross α	1.6E-03 ± 6.0E-04			¹³⁷ Cs	-4.4E-05 ± 1.0E-04	U
	01/15/08	01/30/08	gross β	3.8E-02 ± 4.1E-03			¹⁵² Eu	4.5E-05 ± 2.5E-04	U
	01/30/08	02/13/08	gross α	1.7E-04 ± 3.6E-04			¹⁵⁴ Eu	9.9E-06 ± 9.9E-05	U
	01/30/08	02/13/08	gross β	2.6E-03 ± 7.2E-04			¹⁵⁵ Eu	2.3E-04 ± 2.7E-04	U
	02/13/08	02/27/08	gross α	1.5E-03 ± 6.0E-04			²³⁸ Pu	4.5E-06 ± 1.4E-05	U
	02/13/08	02/27/08	gross β	3.2E-02 ± 3.6E-03			^{239/240} Pu	7.5E-07 ± 1.5E-06	U
	02/27/08	03/12/08	gross α	1.4E-03 ± 5.8E-04			¹⁰⁶ Ru	-4.3E-04 ± 9.9E-04	U
	02/27/08	03/12/08	gross β	1.3E-02 ± 1.8E-03			¹²⁵ Sb	2.3E-04 ± 2.5E-04	U
	03/12/08	03/26/08	gross α	1.8E-03 ± 6.5E-04	N537	07/01/08 to 12/31/08	²³⁴ U	1.1E-05 ± 7.5E-06	U
	03/12/08	03/26/08	gross β	8.9E-03 ± 1.4E-03			²³⁵ U	6.8E-07 ± 7.0E-07	U
	03/26/08	04/08/08	gross α	4.3E-04 ± 4.8E-04			²³⁸ U	8.8E-06 ± 6.8E-06	
	03/26/08	04/08/08	gross β	6.8E-03 ± 1.3E-03			⁶⁰ Co	-1.0E-05 ± 7.1E-05	U
	04/08/08	04/23/08	gross α	6.9E-04 ± 5.1E-04			¹³⁴ Cs	1.2E-05 ± 6.9E-05	U
	04/08/08	04/23/08	gross β	1.0E-02 ± 1.6E-03			¹³⁷ Cs	-5.7E-07 ± 5.7E-06	U
	04/23/08	05/08/08	gross α	1.5E-03 ± 6.5E-04			¹⁵² Eu	-4.0E-05 ± 1.6E-04	U
	04/23/08	05/08/08	gross β	1.5E-02 ± 2.2E-03			¹⁵⁴ Eu	-1.6E-04 ± 2.2E-04	U
	05/08/08	05/20/08	gross α	1.3E-03 ± 5.9E-04			¹⁵⁵ Eu	6.1E-05 ± 1.5E-04	U
	05/08/08	05/20/08	gross β	1.1E-02 ± 1.8E-03			²³⁸ Pu	-3.9E-06 ± 1.3E-05	U
	05/20/08	06/03/08	gross α	9.4E-04 ± 5.8E-04			^{239/240} Pu	3.9E-06 ± 4.4E-06	U
	05/20/08	06/03/08	gross β	9.5E-03 ± 1.5E-03			¹⁰⁶ Ru	1.6E-04 ± 5.4E-04	U
	06/03/08	06/17/08	gross α	9.5E-04 ± 5.9E-04			¹²⁵ Sb	1.3E-05 ± 1.3E-04	U
	06/03/08	06/17/08	gross β	7.9E-03 ± 1.3E-03			²³⁴ U	2.8E-05 ± 1.5E-05	
	06/17/08	07/01/08	gross α	1.5E-03 ± 6.1E-04			²³⁵ U	7.1E-06 ± 6.0E-06	
	06/17/08	07/01/08	gross β	1.4E-02 ± 2.0E-03			²³⁸ U	1.5E-05 ± 9.2E-06	
	07/01/08	07/15/08	gross α	7.5E-04 ± 5.5E-04					
	07/01/08	07/15/08	gross β	1.1E-02 ± 1.6E-03					
	07/15/08	07/29/08	gross α	7.4E-04 ± 5.4E-04					
	07/15/08	07/29/08	gross β	1.2E-02 ± 1.8E-03					
	07/29/08	08/12/08	gross α	7.4E-04 ± 5.3E-04					
	07/29/08	08/12/08	gross β	1.3E-02 ± 1.8E-03					
	08/12/08	08/25/08	gross α	1.3E-03 ± 5.6E-04					
	08/12/08	08/25/08	gross β	1.5E-02 ± 2.1E-03					
	08/25/08	09/09/08	gross α	6.8E-04 ± 4.9E-04					
	08/25/08	09/09/08	gross β	1.2E-02 ± 1.7E-03					
	09/09/08	09/23/08	gross α	6.3E-04 ± 5.0E-04					
	09/09/08	09/23/08	gross β	2.9E-02 ± 3.3E-03					
	09/23/08	10/08/08	gross α	1.2E-03 ± 5.1E-04					
	09/23/08	10/08/08	gross β	2.2E-02 ± 2.6E-03					
	10/08/08	10/21/08	gross α	1.5E-03 ± 6.2E-04					
	10/08/08	10/21/08	gross β	1.9E-02 ± 2.4E-03					
	10/21/08	11/04/08	gross α	1.9E-03 ± 6.8E-04					
	10/21/08	11/04/08	gross β	4.4E-02 ± 4.7E-03					
	11/04/08	11/18/08	gross α	1.4E-03 ± 5.9E-04					
	11/04/08	11/18/08	gross β	2.0E-02 ± 2.5E-03					
	11/18/08	12/02/08	gross α	2.3E-03 ± 7.6E-04					
	11/18/08	12/02/08	gross β	4.7E-02 ± 5.1E-03					
	12/02/08	12/16/08	gross α	1.3E-03 ± 5.7E-04					
	12/02/08	12/16/08	gross β	2.7E-02 ± 3.1E-03					
	12/16/08	12/31/08	gross α	1.8E-03 ± 6.6E-04					
	12/16/08	12/31/08	gross β	4.1E-02 ± 4.4E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 75 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N538 (300 Area)	01/02/08	01/15/08	gross α	8.8E-04 ± 5.9E-04	N538	01/02/08 to 07/01/08	⁶⁰ Co	2.6E-05 ± 7.9E-05	U
	01/02/08	01/15/08	gross β	1.2E-02 ± 1.8E-03			¹³⁴ Cs	4.0E-05 ± 7.4E-05	U
	01/15/08	01/30/08	gross α	1.2E-03 ± 5.0E-04			¹³⁷ Cs	1.1E-06 ± 1.1E-06	U
	01/15/08	01/30/08	gross β	3.4E-02 ± 3.7E-03			¹⁵² Eu	-8.4E-05 ± 1.6E-04	U
	01/30/08	02/13/08	gross α	-5.9E-05 ± 2.1E-04			¹⁵⁴ Eu	1.2E-04 ± 2.0E-04	U
	01/30/08	02/13/08	gross β	4.0E-03 ± 9.0E-04			¹⁵⁵ Eu	-1.8E-05 ± 1.7E-04	U
	02/13/08	02/27/08	gross α	2.1E-03 ± 7.2E-04			²³⁸ Pu	-3.4E-06 ± 1.5E-05	U
	02/13/08	02/27/08	gross β	2.7E-02 ± 3.2E-03			^{239/240} Pu	8.5E-07 ± 4.5E-06	U
	02/27/08	03/12/08	gross α	1.3E-03 ± 5.6E-04			¹⁰⁶ Ru	6.1E-04 ± 6.6E-04	U
	02/27/08	03/12/08	gross β	1.1E-02 ± 1.7E-03			¹²⁵ Sb	1.2E-04 ± 1.4E-04	U
	03/12/08	03/26/08	gross α	9.3E-04 ± 5.8E-04			²³⁴ U	3.3E-05 ± 1.6E-05	
	03/12/08	03/26/08	gross β	8.2E-03 ± 1.4E-03			²³⁵ U	-7.3E-07 ± 3.3E-06	U
	03/26/08	04/08/08	gross α	8.3E-04 ± 6.1E-04			²³⁸ U	2.0E-05 ± 1.0E-05	
	03/26/08	04/08/08	gross β	8.3E-03 ± 1.5E-03					
	04/08/08	04/23/08	gross α	9.2E-04 ± 5.7E-04	N538	07/01/08 to 12/31/08	⁶⁰ Co	1.3E-05 ± 7.0E-05	U
	04/08/08	04/23/08	gross β	1.2E-02 ± 1.7E-03			¹³⁴ Cs	1.2E-05 ± 6.0E-05	U
	04/23/08	05/08/08	gross α	1.4E-03 ± 6.0E-04			¹³⁷ Cs	1.0E-04 ± 7.7E-05	U
	04/23/08	05/08/08	gross β	1.7E-02 ± 2.3E-03			¹⁵² Eu	-6.6E-05 ± 1.4E-04	U
	05/08/08	05/20/08	gross α	8.1E-04 ± 5.9E-04			¹⁵⁴ Eu	3.7E-05 ± 1.9E-04	U
	05/08/08	05/20/08	gross β	7.3E-03 ± 1.3E-03			¹⁵⁵ Eu	-3.7E-05 ± 1.6E-04	U
	05/20/08	06/03/08	gross α	6.3E-04 ± 5.1E-04			²³⁸ Pu	7.7E-06 ± 1.1E-05	U
	05/20/08	06/03/08	gross β	9.1E-03 ± 1.4E-03			^{239/240} Pu	1.5E-06 ± 2.3E-06	U
	06/03/08	06/17/08	gross α	1.2E-03 ± 5.4E-04			¹⁰⁶ Ru	-6.3E-04 ± 6.6E-04	U
	06/03/08	06/17/08	gross β	1.1E-02 ± 1.7E-03			¹²⁵ Sb	1.4E-04 ± 1.4E-04	U
	06/17/08	07/01/08	gross α	1.5E-03 ± 6.1E-04			²³⁴ U	3.2E-05 ± 1.7E-05	
	06/17/08	07/01/08	gross β	1.4E-02 ± 1.9E-03			²³⁵ U	1.0E-06 ± 2.1E-06	U
	07/01/08	07/15/08	gross α	1.5E-03 ± 6.0E-04			²³⁸ U	3.6E-05 ± 1.8E-05	
	07/01/08	07/15/08	gross β	1.4E-02 ± 1.9E-03					
	07/15/08	07/29/08	gross α	1.5E-03 ± 6.2E-04					
	07/15/08	07/29/08	gross β	1.5E-02 ± 2.1E-03					
	07/29/08	08/12/08	gross α	8.5E-04 ± 5.6E-04					
	07/29/08	08/12/08	gross β	1.3E-02 ± 1.8E-03					
	08/12/08	08/25/08	gross α	1.3E-03 ± 5.9E-04					
	08/12/08	08/25/08	gross β	1.5E-02 ± 2.1E-03					
	08/25/08	09/09/08	gross α	1.1E-03 ± 4.9E-04					
	08/25/08	09/09/08	gross β	9.7E-03 ± 1.5E-03					
	09/09/08	09/23/08	gross α	1.9E-03 ± 6.7E-04					
	09/09/08	09/23/08	gross β	2.4E-02 ± 2.9E-03					
	09/23/08	10/08/08	gross α	1.7E-03 ± 6.1E-04					
	09/23/08	10/08/08	gross β	2.0E-02 ± 2.5E-03					
	10/08/08	10/21/08	gross α	1.2E-03 ± 5.5E-04					
	10/08/08	10/21/08	gross β	1.9E-02 ± 2.5E-03					
	10/21/08	11/04/08	gross α	3.0E-03 ± 8.5E-04					
	10/21/08	11/04/08	gross β	4.1E-02 ± 4.4E-03					
	11/04/08	11/18/08	gross α	1.1E-03 ± 5.3E-04					
	11/04/08	11/18/08	gross β	2.2E-02 ± 2.7E-03					
	11/18/08	12/02/08	gross α	1.9E-03 ± 6.9E-04					
	11/18/08	12/02/08	gross β	4.6E-02 ± 5.0E-03					
	12/02/08	12/16/08	gross α	1.7E-03 ± 6.3E-04					
	12/02/08	12/16/08	gross β	2.3E-02 ± 2.8E-03					
	12/16/08	12/31/08	gross α	1.3E-03 ± 5.5E-04					
	12/16/08	12/31/08	gross β	3.8E-02 ± 4.1E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 76 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N539 (300 Area)	01/02/08	01/15/08	gross α	1.1E-03 ± 5.4E-04	N539	01/02/08 to 07/01/08	⁶⁰ Co	-9.5E-05 ± 1.4E-04	U
	01/02/08	01/15/08	gross β	1.6E-02 ± 2.2E-03			¹³⁴ Cs	8.8E-06 ± 8.8E-05	U
	01/15/08	01/30/08	gross α	1.9E-03 ± 6.5E-04			¹³⁷ Cs	5.8E-05 ± 1.1E-04	U
	01/15/08	01/30/08	gross β	3.6E-02 ± 3.9E-03			¹⁵² Eu	-3.2E-05 ± 2.9E-04	U
	01/30/08	02/13/08	gross α	2.9E-04 ± 4.1E-04			¹⁵⁴ Eu	-7.9E-05 ± 3.2E-04	U
	01/30/08	02/13/08	gross β	2.1E-03 ± 6.4E-04			¹⁵⁵ Eu	-3.8E-05 ± 2.0E-04	U
	02/13/08	02/27/08	gross α	2.4E-03 ± 7.6E-04			²³⁸ Pu	8.7E-06 ± 1.3E-05	U
	02/13/08	02/27/08	gross β	3.0E-02 ± 3.4E-03			^{239/240} Pu	2.4E-06 ± 4.3E-06	U
	02/27/08	03/12/08	gross α	1.2E-03 ± 5.3E-04			¹⁰⁶ Ru	8.2E-04 ± 9.9E-04	U
	02/27/08	03/12/08	gross β	1.3E-02 ± 1.9E-03			¹²⁵ Sb	-3.5E-05 ± 2.6E-04	U
	03/12/08	03/26/08	gross α	1.1E-03 ± 5.3E-04	N539	07/01/08 to 12/31/08	²³⁴ U	2.1E-05 ± 1.1E-05	
	03/12/08	03/26/08	gross β	1.5E-02 ± 2.1E-03			²³⁵ U	1.5E-06 ± 2.2E-06	U
	03/26/08	04/08/08	gross α	1.2E-03 ± 7.8E-04			²³⁸ U	1.9E-05 ± 1.0E-05	
	03/26/08	04/08/08	gross β	8.5E-03 ± 1.6E-03			⁶⁰ Co	7.1E-05 ± 1.0E-04	U
	04/08/08	04/23/08	gross α	1.6E-03 ± 6.3E-04			¹³⁴ Cs	1.3E-04 ± 1.2E-04	U
	04/08/08	04/23/08	gross β	1.0E-02 ± 1.6E-03			¹³⁷ Cs	1.9E-05 ± 1.1E-04	U
	04/23/08	05/08/08	gross α	1.5E-03 ± 6.1E-04			¹⁵² Eu	-1.1E-04 ± 2.7E-04	U
	04/23/08	05/08/08	gross β	1.6E-02 ± 2.1E-03			¹⁵⁴ Eu	-6.8E-05 ± 3.4E-04	U
	05/08/08	05/20/08	gross α	1.2E-03 ± 7.2E-04			¹⁵⁵ Eu	2.4E-05 ± 2.0E-04	U
	05/08/08	05/20/08	gross β	1.2E-02 ± 1.9E-03			²³⁸ Pu	4.7E-06 ± 1.2E-05	U
	05/20/08	06/03/08	gross α	6.5E-04 ± 5.2E-04			^{239/240} Pu	7.5E-07 ± 2.2E-06	U
	05/20/08	06/03/08	gross β	1.1E-02 ± 1.7E-03			¹⁰⁶ Ru	3.4E-04 ± 9.4E-04	U
	06/03/08	06/17/08	gross α	5.5E-04 ± 5.1E-04			¹²⁵ Sb	-1.4E-04 ± 2.5E-04	U
	06/03/08	06/17/08	gross β	7.2E-03 ± 1.3E-03			²³⁴ U	4.7E-05 ± 2.1E-05	
	06/17/08	07/01/08	gross α	1.1E-03 ± 6.6E-04			²³⁵ U	7.8E-06 ± 5.7E-06	
	06/17/08	07/01/08	gross β	1.0E-02 ± 1.6E-03			²³⁸ U	3.8E-05 ± 1.8E-05	
	07/01/08	07/15/08	gross α	1.4E-03 ± 6.1E-04					
	07/01/08	07/15/08	gross β	1.5E-02 ± 2.1E-03					
	07/15/08	07/29/08	gross α	1.0E-03 ± 6.2E-04					
	07/15/08	07/29/08	gross β	1.3E-02 ± 1.9E-03					
	07/29/08	08/12/08	gross α	8.0E-04 ± 5.8E-04					
	07/29/08	08/12/08	gross β	1.4E-02 ± 1.9E-03					
	08/12/08	08/25/08	gross α	1.3E-03 ± 5.9E-04					
	08/12/08	08/25/08	gross β	1.6E-02 ± 2.3E-03					
	08/25/08	09/09/08	gross α	6.0E-04 ± 4.8E-04					
	08/25/08	09/09/08	gross β	1.3E-02 ± 1.8E-03					
	09/09/08	09/23/08	gross α	1.4E-03 ± 5.8E-04					
	09/09/08	09/23/08	gross β	2.9E-02 ± 3.4E-03					
	09/23/08	10/08/08	gross α	1.4E-03 ± 5.5E-04					
	09/23/08	10/08/08	gross β	2.1E-02 ± 2.5E-03					
	10/08/08	10/21/08	gross α	7.2E-04 ± 5.8E-04					
	10/08/08	10/21/08	gross β	1.7E-02 ± 2.3E-03					
	10/21/08	11/04/08	gross α	1.8E-03 ± 6.5E-04					
	10/21/08	11/04/08	gross β	4.3E-02 ± 4.6E-03					
	11/04/08	11/18/08	gross α	2.4E-03 ± 8.0E-04					
	11/04/08	11/18/08	gross β	2.1E-02 ± 2.7E-03					
	11/18/08	12/02/08	gross α	1.3E-03 ± 6.3E-04					
	11/18/08	12/02/08	gross β	5.3E-02 ± 5.8E-03					
	12/02/08	12/16/08	gross α	1.4E-03 ± 5.9E-04					
	12/02/08	12/16/08	gross β	2.3E-02 ± 2.8E-03					
	12/16/08	12/31/08	gross α	1.7E-03 ± 6.4E-04					
	12/16/08	12/31/08	gross β	4.4E-02 ± 4.7E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 77 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N540 (300 Area)	01/02/08	01/15/08	gross α	9.1E-04 ± 6.1E-04	N540	01/02/08 to 07/01/08	⁶⁰ Co	1.6E-05 ± 8.1E-05	U
	01/02/08	01/15/08	gross β	1.2E-02 ± 1.8E-03			¹³⁴ Cs	-2.3E-06 ± 2.3E-05	U
	01/15/08	01/30/08	gross α	1.3E-03 ± 5.2E-04			¹³⁷ Cs	-1.8E-05 ± 6.7E-05	U
	01/15/08	01/30/08	gross β	3.8E-02 ± 4.1E-03			¹⁵² Eu	-6.2E-05 ± 1.7E-04	U
	01/30/08	02/13/08	gross α	1.7E-04 ± 3.5E-04			¹⁵⁴ Eu	-1.1E-04 ± 2.1E-04	U
	01/30/08	02/13/08	gross β	4.0E-03 ± 8.9E-04			¹⁵⁵ Eu	-4.8E-05 ± 1.9E-04	U
	02/13/08	02/27/08	gross α	1.5E-03 ± 6.0E-04			²³⁸ Pu	-1.7E-06 ± 1.4E-05	U
	02/13/08	02/27/08	gross β	3.4E-02 ± 3.7E-03			^{239/240} Pu	4.3E-06 ± 4.9E-06	U
	02/27/08	03/12/08	gross α	1.1E-03 ± 5.1E-04			¹⁰⁶ Ru	-8.6E-04 ± 8.9E-04	U
	02/27/08	03/12/08	gross β	1.4E-02 ± 1.9E-03			¹²⁵ Sb	-1.3E-04 ± 1.6E-04	U
	03/12/08	03/26/08	gross α	5.0E-04 ± 4.7E-04			²³⁴ U	1.7E-05 ± 9.6E-06	
	03/12/08	03/26/08	gross β	4.3E-02 ± 4.6E-03			²³⁵ U	2.3E-06 ± 2.7E-06	
	03/26/08	04/08/08	gross α	1.0E-03 ± 6.3E-04			²³⁸ U	8.3E-06 ± 6.4E-06	
	03/26/08	04/08/08	gross β	7.2E-03 ± 1.3E-03	N540	07/01/08 to 12/31/08	⁶⁰ Co	5.0E-05 ± 7.1E-05	U
	04/08/08	04/23/08	gross α	8.0E-04 ± 5.4E-04			¹³⁴ Cs	2.4E-05 ± 7.0E-05	U
	04/08/08	04/23/08	gross β	9.8E-03 ± 1.5E-03			¹³⁷ Cs	5.3E-05 ± 6.6E-05	U
	04/23/08	05/08/08	gross α	1.5E-03 ± 5.8E-04			¹⁵² Eu	-3.2E-05 ± 1.7E-04	U
	04/23/08	05/08/08	gross β	1.4E-02 ± 1.9E-03			¹⁵⁴ Eu	-7.0E-06 ± 7.0E-05	U
	05/08/08	05/20/08	gross α	6.0E-04 ± 5.5E-04			¹⁵⁵ Eu	7.3E-05 ± 1.7E-04	U
	05/08/08	05/20/08	gross β	1.1E-02 ± 1.7E-03			²³⁸ Pu	4.3E-06 ± 1.2E-05	U
	05/20/08	06/03/08	gross α	9.4E-04 ± 5.8E-04			^{239/240} Pu	3.5E-06 ± 4.4E-06	U
	05/20/08	06/03/08	gross β	1.3E-02 ± 1.8E-03			¹⁰⁶ Ru	-1.9E-04 ± 6.0E-04	U
	06/03/08	06/17/08	gross α	7.2E-04 ± 5.2E-04			¹²⁵ Sb	9.6E-05 ± 1.5E-04	U
	06/03/08	06/17/08	gross β	5.7E-03 ± 1.1E-03			²³⁴ U	2.5E-05 ± 1.3E-05	
	06/17/08	07/01/08	gross α	7.3E-04 ± 5.4E-04			²³⁵ U	2.2E-06 ± 3.4E-06	U
	06/17/08	07/01/08	gross β	1.3E-02 ± 1.8E-03			²³⁸ U	1.6E-05 ± 8.8E-06	
	07/01/08	07/15/08	gross α	1.1E-03 ± 4.9E-04					
	07/01/08	07/15/08	gross β	1.1E-02 ± 1.7E-03					
	07/15/08	07/29/08	gross α	1.1E-03 ± 5.0E-04					
	07/15/08	07/29/08	gross β	1.1E-02 ± 1.7E-03					
	07/29/08	08/12/08	gross α	4.0E-04 ± 4.4E-04					
	07/29/08	08/12/08	gross β	1.6E-02 ± 2.1E-03					
	08/12/08	08/25/08	gross α	5.6E-04 ± 5.2E-04					
	08/12/08	08/25/08	gross β	1.5E-02 ± 2.0E-03					
	08/25/08	09/09/08	gross α	1.2E-03 ± 5.1E-04					
	08/25/08	09/09/08	gross β	1.1E-02 ± 1.6E-03					
	09/09/08	09/23/08	gross α	1.1E-03 ± 5.0E-04					
	09/09/08	09/23/08	gross β	2.6E-02 ± 3.0E-03					
	09/23/08	10/08/08	gross α	1.1E-03 ± 4.9E-04					
	09/23/08	10/08/08	gross β	2.2E-02 ± 2.7E-03					
	10/08/08	10/21/08	gross α	1.4E-03 ± 5.8E-04					
	10/08/08	10/21/08	gross β	1.9E-02 ± 2.4E-03					
	10/21/08	11/04/08	gross α	2.6E-03 ± 7.8E-04					
	10/21/08	11/04/08	gross β	4.2E-02 ± 4.5E-03					
	11/04/08	11/18/08	gross α	1.1E-03 ± 5.1E-04					
	11/04/08	11/18/08	gross β	1.9E-02 ± 2.4E-03					
	11/18/08	12/02/08	gross α	2.2E-03 ± 7.6E-04					
	11/18/08	12/02/08	gross β	4.5E-02 ± 4.9E-03					
	12/02/08	12/16/08	gross α	1.6E-03 ± 6.5E-04					
	12/02/08	12/16/08	gross β	2.6E-02 ± 3.1E-03					
	12/16/08	12/31/08	gross α	2.3E-03 ± 7.5E-04					
	12/16/08	12/31/08	gross β	4.5E-02 ± 4.8E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 78 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N130 (300 Area)	01/02/08	01/15/08	gross α	4.1E-04 ± 4.6E-04	N130	01/02/08 to 07/01/08	⁶⁰ Co	-1.9E-05 ± 1.3E-04	U
	01/02/08	01/15/08	gross β	9.9E-03 ± 1.5E-03			¹³⁴ Cs	-4.8E-05 ± 1.1E-04	U
	01/15/08	01/30/08	gross α	1.1E-03 ± 4.9E-04			¹³⁷ Cs	-2.3E-05 ± 9.5E-05	U
	01/15/08	01/30/08	gross β	3.3E-02 ± 3.3E-03			¹⁵² Eu	1.7E-04 ± 2.5E-04	U
	01/30/08	02/13/08	gross α	3.9E-04 ± 4.4E-04			¹⁵⁴ Eu	-1.4E-04 ± 3.7E-04	U
	01/30/08	02/13/08	gross β	3.1E-03 ± 7.6E-04			¹⁵⁵ Eu	-1.4E-05 ± 1.4E-04	U
	02/13/08	02/27/08	gross α	2.2E-03 ± 7.1E-04			²³⁸ Pu	4.8E-06 ± 8.1E-06	U
	02/13/08	02/27/08	gross β	3.1E-02 ± 3.1E-03			^{239/240} Pu	2.1E-06 ± 4.7E-06	U
	02/27/08	03/12/08	gross α	7.5E-04 ± 5.5E-04			¹⁰⁶ Ru	9.1E-05 ± 8.8E-04	U
	02/27/08	03/12/08	gross β	1.0E-02 ± 1.5E-03			¹²⁵ Sb	-2.8E-04 ± 2.9E-04	U
	03/12/08	03/26/08	gross α	5.0E-04 ± 4.7E-04			⁹⁰ Sr	-2.0E-04 ± 2.1E-04	U
	03/12/08	03/26/08	gross β	9.9E-03 ± 1.5E-03			²³⁴ U	2.2E-05 ± 1.1E-05	
	03/26/08	04/08/08	gross α	5.4E-04 ± 5.1E-04			²³⁵ U	1.5E-06 ± 3.0E-06	U
	03/26/08	04/08/08	gross β	5.4E-03 ± 1.1E-03			²³⁸ U	1.6E-05 ± 8.9E-06	
	04/08/08	04/23/08	gross α	1.1E-03 ± 4.9E-04	N130	07/01/08 to 12/31/08	⁶⁰ Co	-1.6E-05 ± 7.8E-05	U
	04/08/08	04/23/08	gross β	8.5E-03 ± 1.3E-03			¹³⁴ Cs	4.2E-05 ± 7.0E-05	U
	04/23/08	05/08/08	gross α	9.0E-04 ± 5.5E-04			¹³⁷ Cs	3.2E-06 ± 3.2E-05	U
	04/23/08	05/08/08	gross β	1.5E-02 ± 1.9E-03			¹⁵² Eu	1.2E-05 ± 1.2E-04	U
	05/08/08	05/20/08	gross α	1.7E-03 ± 6.6E-04			¹⁵⁴ Eu	1.3E-04 ± 2.1E-04	U
	05/08/08	05/20/08	gross β	8.6E-03 ± 1.4E-03			¹⁵⁵ Eu	-1.4E-04 ± 1.7E-04	U
	05/20/08	06/03/08	gross α	7.2E-04 ± 5.2E-04			²³⁸ Pu	6.0E-06 ± 1.1E-05	U
	05/20/08	06/03/08	gross β	9.8E-03 ± 1.4E-03			^{239/240} Pu	7.8E-07 ± 3.0E-06	U
	06/03/08	06/17/08	gross α	1.0E-03 ± 4.8E-04			¹⁰⁶ Ru	3.3E-04 ± 5.4E-04	U
	06/03/08	06/17/08	gross β	8.9E-03 ± 1.4E-03			¹²⁵ Sb	-1.3E-04 ± 1.5E-04	U
	06/17/08	07/01/08	gross α	1.3E-03 ± 5.5E-04			⁹⁰ Sr	-2.5E-04 ± 2.6E-04	
	06/17/08	07/01/08	gross β	1.3E-02 ± 1.7E-03			²³⁴ U	1.9E-05 ± 9.8E-06	
	07/01/08	07/15/08	gross α	9.1E-04 ± 6.4E-04			²³⁵ U	3.5E-06 ± 3.4E-06	
	07/01/08	07/15/08	gross β	1.3E-02 ± 1.7E-03			²³⁸ U	1.5E-05 ± 8.5E-06	
	07/15/08	07/29/08	gross α	8.3E-04 ± 5.5E-04					
	07/15/08	07/29/08	gross β	1.4E-02 ± 1.8E-03					
	07/29/08	08/12/08	gross α	1.1E-03 ± 5.0E-04					
	07/29/08	08/12/08	gross β	1.6E-02 ± 1.9E-03					
	08/12/08	08/25/08	gross α	4.4E-04 ± 4.7E-04					
	08/12/08	08/25/08	gross β	1.3E-02 ± 1.8E-03					
	08/25/08	09/09/08	gross α	1.0E-03 ± 4.6E-04					
	08/25/08	09/09/08	gross β	1.1E-02 ± 1.5E-03					
	09/09/08	09/23/08	gross α	1.7E-03 ± 6.3E-04					
	09/09/08	09/23/08	gross β	2.6E-02 ± 2.7E-03					
	09/23/08	10/08/08	gross α	2.3E-03 ± 6.9E-04					
	09/23/08	10/08/08	gross β	2.2E-02 ± 2.5E-03					
	10/08/08	10/21/08	gross α	1.6E-03 ± 6.2E-04					
	10/08/08	10/21/08	gross β	1.8E-02 ± 2.2E-03					
	10/21/08	11/04/08	gross α	2.2E-03 ± 7.1E-04					
	10/21/08	11/04/08	gross β	3.9E-02 ± 3.8E-03					
	11/04/08	11/18/08	gross α	1.6E-03 ± 6.0E-04					
	11/04/08	11/18/08	gross β	2.1E-02 ± 2.4E-03					
	11/18/08	12/02/08	gross α	1.5E-03 ± 6.2E-04					
	11/18/08	12/02/08	gross β	3.7E-02 ± 3.7E-03					
	12/02/08	12/16/08	gross α	1.7E-03 ± 6.3E-04					
	12/02/08	12/16/08	gross β	2.7E-02 ± 2.9E-03					
	12/16/08	12/31/08	gross α	1.6E-03 ± 6.2E-04					
	12/16/08	12/31/08	gross β	3.6E-02 ± 3.5E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 79 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N482 (ERDF)	01/03/08	01/15/08	gross α	1.6E-03 ± 6.5E-04	N482	01/03/08 to 07/01/08	⁶⁰ Co	-6.4E-05 ± 1.4E-04	U
	01/03/08	01/15/08	gross β	5.4E-03 ± 1.1E-03			¹³⁴ Cs	1.5E-05 ± 1.1E-04	U
	01/15/08	01/30/08	gross α	1.7E-03 ± 6.1E-04			¹³⁷ Cs	-6.6E-05 ± 1.1E-04	U
	01/15/08	01/30/08	gross β	2.0E-02 ± 2.3E-03			¹⁵² Eu	3.0E-05 ± 2.5E-04	U
	01/30/08	02/14/08	gross α	7.2E-04 ± 5.3E-04			¹⁵⁴ Eu	-1.1E-04 ± 4.4E-04	U
	01/30/08	02/14/08	gross β	3.3E-03 ± 8.1E-04			¹⁵⁵ Eu	2.4E-05 ± 2.3E-04	U
	02/14/08	02/28/08	gross α	8.6E-04 ± 5.8E-04			²³⁸ Pu	-1.2E-05 ± 1.1E-05	U
	02/14/08	02/28/08	gross β	2.8E-02 ± 3.0E-03			^{239/240} Pu	4.3E-06 ± 4.8E-06	U
	02/28/08	03/12/08	gross α	9.9E-04 ± 6.7E-04			¹⁰⁶ Ru	-6.6E-04 ± 1.0E-03	U
	02/28/08	03/12/08	gross β	7.8E-03 ± 1.4E-03			¹²⁵ Sb	-9.6E-05 ± 2.5E-04	U
	03/12/08	03/26/08	gross α	4.6E-04 ± 5.1E-04			⁹⁰ Sr	-2.3E-05 ± 2.4E-05	U
	03/12/08	03/26/08	gross β	7.7E-03 ± 1.3E-03			²³⁴ U	4.0E-05 ± 1.8E-05	
	03/26/08	04/08/08	gross α	8.9E-04 ± 6.6E-04			²³⁵ U	2.3E-06 ± 2.8E-06	
	03/26/08	04/08/08	gross β	7.2E-03 ± 1.3E-03			²³⁸ U	3.7E-05 ± 1.7E-05	
	04/08/08	04/23/08	gross α	1.3E-03 ± 5.8E-04	N482	07/01/08 to 12/31/08	⁶⁰ Co	7.1E-05 ± 1.1E-04	U
	04/08/08	04/23/08	gross β	8.4E-03 ± 1.4E-03			¹³⁴ Cs	-8.7E-06 ± 8.7E-05	U
	04/23/08	05/08/08	gross α	1.3E-03 ± 6.1E-04			¹³⁷ Cs	9.4E-05 ± 1.2E-04	U
	04/23/08	05/08/08	gross β	8.1E-03 ± 1.4E-03			¹⁵² Eu	2.0E-04 ± 2.9E-04	U
	05/08/08	05/20/08	gross α	8.6E-04 ± 6.9E-04			¹⁵⁴ Eu	-5.0E-05 ± 3.3E-04	U
	05/08/08	05/20/08	gross β	9.9E-03 ± 1.6E-03			¹⁵⁵ Eu	4.2E-05 ± 1.9E-04	U
	05/20/08	06/05/08	gross α	1.0E-03 ± 6.6E-04			²³⁸ Pu	-3.2E-06 ± 1.4E-05	U
	05/20/08	06/05/08	gross β	7.3E-03 ± 1.3E-03			^{239/240} Pu	1.6E-06 ± 3.2E-06	U
	06/05/08	06/18/08	gross α	5.5E-04 ± 6.8E-04			¹⁰⁶ Ru	-2.2E-04 ± 8.6E-04	U
	06/05/08	06/18/08	gross β	5.6E-03 ± 1.2E-03			¹²⁵ Sb	-1.2E-04 ± 2.6E-04	U
	06/18/08	07/01/08	gross α	8.4E-04 ± 6.3E-04			⁹⁰ Sr	9.0E-06 ± 9.0E-05	
	06/18/08	07/01/08	gross β	1.3E-02 ± 1.9E-03			²³⁴ U	3.2E-05 ± 1.5E-05	
	07/01/08	07/16/08	gross α	1.5E-03 ± 6.7E-04			²³⁵ U	3.9E-06 ± 4.4E-06	U
	07/01/08	07/16/08	gross β	1.0E-02 ± 1.5E-03			²³⁸ U	2.4E-05 ± 1.2E-05	
	07/16/08	07/30/08	gross α	1.1E-03 ± 5.4E-04					
	07/16/08	07/30/08	gross β	1.9E-02 ± 2.3E-03					
	07/30/08	08/13/08	gross α	6.7E-04 ± 5.7E-04					
	07/30/08	08/13/08	gross β	1.4E-02 ± 2.0E-03					
	08/13/08	08/26/08	gross α	6.0E-04 ± 5.8E-04					
	08/13/08	08/26/08	gross β	1.2E-02 ± 1.9E-03					
	08/26/08	09/09/08	gross α	1.0E-03 ± 5.0E-04					
	08/26/08	09/09/08	gross β	9.4E-03 ± 1.5E-03					
	09/09/08	09/23/08	gross α	9.3E-04 ± 5.9E-04					
	09/09/08	09/23/08	gross β	2.1E-02 ± 2.5E-03					
	09/23/08	10/08/08	gross α	8.1E-04 ± 5.5E-04					
	09/23/08	10/08/08	gross β	1.8E-02 ± 2.2E-03					
	10/08/08	10/21/08	gross α	1.6E-03 ± 6.4E-04					
	10/08/08	10/21/08	gross β	1.9E-02 ± 2.4E-03					
	10/21/08	11/04/08	gross α	3.0E-03 ± 8.3E-04					
	10/21/08	11/04/08	gross β	4.3E-02 ± 4.1E-03					
	11/04/08	11/18/08	gross α	1.9E-03 ± 6.7E-04					
	11/04/08	11/18/08	gross β	2.5E-02 ± 2.8E-03					
	11/18/08	12/02/08	gross α	7.8E-04 ± 5.6E-04					
	11/18/08	12/02/08	gross β	3.1E-02 ± 3.2E-03					
	12/02/08	12/16/08	gross α	1.4E-03 ± 5.8E-04					
	12/02/08	12/16/08	gross β	1.7E-02 ± 2.1E-03					
	12/16/08	12/31/08	gross α	1.3E-03 ± 5.3E-04					
	12/16/08	12/31/08	gross β	3.5E-02 ± 3.4E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 80 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N517 (ERDF)	01/03/08	01/15/08	gross α	5.6E-04 ± 5.3E-04	N517	01/03/08 to 07/01/08	⁶⁰ Co	-4.4E-05 ± 1.2E-04	U
	01/03/08	01/15/08	gross β	6.9E-03 ± 1.3E-03			¹³⁴ Cs	-2.1E-05 ± 9.6E-05	U
	01/15/08	01/30/08	gross α	1.4E-03 ± 5.7E-04			¹³⁷ Cs	1.5E-04 ± 1.1E-04	U
	01/15/08	01/30/08	gross β	2.6E-02 ± 2.7E-03			¹⁵² Eu	1.1E-04 ± 2.3E-04	U
	01/30/08	02/14/08	gross α	6.4E-04 ± 7.1E-04			¹⁵⁴ Eu	1.3E-04 ± 3.1E-04	U
	01/30/08	02/14/08	gross β	4.5E-03 ± 1.2E-03			¹⁵⁵ Eu	8.0E-05 ± 2.1E-04	U
	02/14/08	02/28/08	gross α	1.2E-03 ± 5.5E-04			²³⁸ Pu	7.6E-07 ± 3.4E-06	U
	02/14/08	02/28/08	gross β	3.0E-02 ± 3.1E-03			^{239/240} Pu	6.8E-06 ± 5.5E-06	
	02/28/08	03/12/08	gross α	1.0E-03 ± 7.1E-04			¹⁰⁶ Ru	-2.0E-04 ± 8.6E-04	U
	02/28/08	03/12/08	gross β	8.0E-03 ± 1.4E-03			¹²⁵ Sb	-1.2E-04 ± 2.0E-04	U
	03/12/08	03/26/08	gross α	1.6E-03 ± 6.7E-04			⁹⁰ Sr	-2.1E-04 ± 2.1E-04	U
	03/12/08	03/26/08	gross β	5.4E-03 ± 1.1E-03			²³⁴ U	4.9E-05 ± 2.2E-05	
	03/26/08	04/08/08	gross α	1.1E-03 ± 7.4E-04			²³⁵ U	1.0E-05 ± 7.4E-06	
	03/26/08	04/08/08	gross β	7.2E-03 ± 1.4E-03			²³⁸ U	2.5E-05 ± 1.3E-05	
	04/08/08	04/23/08	gross α	1.2E-03 ± 5.9E-04					
	04/08/08	04/23/08	gross β	5.8E-03 ± 1.2E-03	N517	07/01/08 to 12/31/08	⁶⁰ Co	1.3E-05 ± 5.9E-05	U
	04/23/08	05/08/08	gross α	9.4E-04 ± 7.0E-04			¹³⁴ Cs	1.3E-05 ± 6.4E-05	U
	04/23/08	05/08/08	gross β	5.6E-03 ± 1.2E-03			¹³⁷ Cs	1.1E-04 ± 8.6E-05	
	05/08/08	05/20/08	gross α	7.4E-04 ± 1.0E-03			¹⁵² Eu	-1.3E-04 ± 1.5E-04	U
	05/08/08	05/20/08	gross β	1.1E-02 ± 2.3E-03			¹⁵⁴ Eu	-1.1E-04 ± 1.9E-04	U
	05/20/08	06/05/08	gross α	-5.4E-05 ± 2.6E-04			¹⁵⁵ Eu	-7.7E-05 ± 1.6E-04	U
	05/20/08	06/05/08	gross β	8.0E-03 ± 1.4E-03			²³⁸ Pu	-2.3E-06 ± 1.1E-05	U
	06/05/08	06/18/08	gross α	8.5E-04 ± 9.2E-04			^{239/240} Pu	3.9E-06 ± 5.3E-06	U
	06/05/08	06/18/08	gross β	4.7E-04 ± 7.8E-04			¹⁰⁶ Ru	-1.9E-04 ± 5.1E-04	U
	06/18/08	07/01/08	gross α	3.5E-04 ± 7.6E-04			¹²⁵ Sb	-1.5E-05 ± 1.4E-04	U
	06/18/08	07/01/08	gross β	1.6E-02 ± 2.7E-03			⁹⁰ Sr	-1.4E-04 ± 1.5E-04	U
	07/01/08	07/16/08	gross α	1.3E-03 ± 5.6E-04			²³⁴ U	2.4E-05 ± 1.4E-05	
	07/01/08	07/16/08	gross β	1.1E-02 ± 1.6E-03			²³⁵ U	5.1E-06 ± 5.8E-06	U
	07/16/08	07/30/08	gross α	6.4E-04 ± 5.2E-04			²³⁸ U	3.4E-05 ± 1.7E-05	
	07/16/08	07/30/08	gross β	1.2E-02 ± 1.7E-03					
	07/30/08	08/13/08	gross α	5.8E-04 ± 5.3E-04					
	07/30/08	08/13/08	gross β	7.0E-03 ± 1.2E-03					
	08/13/08	08/26/08	gross α	6.7E-04 ± 6.1E-04					
	08/13/08	08/26/08	gross β	1.1E-02 ± 1.7E-03					
	08/26/08	09/09/08	gross α	3.2E-04 ± 4.3E-04					
	08/26/08	09/09/08	gross β	5.3E-03 ± 1.1E-03					
	09/09/08	09/23/08	gross α	9.2E-04 ± 6.1E-04					
	09/09/08	09/23/08	gross β	1.4E-02 ± 1.9E-03					
	09/23/08	10/08/08	gross α	3.0E-04 ± 4.0E-04					
	09/23/08	10/08/08	gross β	1.2E-02 ± 1.6E-03					
	10/08/08	10/21/08	gross α	7.4E-04 ± 5.9E-04					
	10/08/08	10/21/08	gross β	1.2E-02 ± 1.7E-03					
	10/21/08	11/04/08	gross α	1.3E-03 ± 5.3E-04					
	10/21/08	11/04/08	gross β	3.7E-02 ± 3.5E-03					
	11/04/08	11/18/08	gross α	4.4E-04 ± 4.7E-04					
	11/04/08	11/18/08	gross β	1.8E-02 ± 2.2E-03					
	11/18/08	12/02/08	gross α	1.8E-03 ± 6.4E-04					
	11/18/08	12/02/08	gross β	3.1E-02 ± 3.2E-03					
	12/02/08	12/16/08	gross α	7.3E-04 ± 5.4E-04					
	12/02/08	12/16/08	gross β	1.6E-02 ± 2.0E-03					
	12/16/08	12/31/08	gross α	1.5E-03 ± 5.7E-04					
	12/16/08	12/31/08	gross β	3.6E-02 ± 3.4E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 81 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N518 (ERDF)	01/03/08	01/15/08	gross α	3.1E-04 ± 4.4E-04	N518	01/03/08 to 07/01/08	⁶⁰ Co	-2.1E-05 ± 6.9E-05	U
	01/03/08	01/15/08	gross β	7.1E-03 ± 1.3E-03			¹³⁴ Cs	3.6E-06 ± 3.6E-05	U
	01/15/08	01/30/08	gross α	2.2E-03 ± 7.0E-04			¹³⁷ Cs	3.7E-07 ± 3.7E-06	U
	01/15/08	01/30/08	gross β	3.2E-02 ± 3.2E-03			¹⁵² Eu	-1.4E-04 ± 1.5E-04	U
	01/30/08	02/14/08	gross α	4.2E-04 ± 5.9E-04			¹⁵⁴ Eu	1.6E-06 ± 1.6E-05	U
	01/30/08	02/14/08	gross β	4.5E-03 ± 1.1E-03			¹⁵⁵ Eu	-2.8E-05 ± 1.3E-04	U
	02/14/08	02/28/08	gross α	8.1E-04 ± 5.5E-04			²³⁸ Pu	6.1E-07 ± 1.2E-06	U
	02/14/08	02/28/08	gross β	2.9E-02 ± 3.0E-03			^{239/240} Pu	1.2E-06 ± 1.8E-06	U
	02/28/08	03/12/08	gross α	8.9E-04 ± 6.0E-04			¹⁰⁶ Ru	-8.1E-05 ± 5.5E-04	U
	02/28/08	03/12/08	gross β	1.0E-02 ± 1.5E-03			¹²⁵ Sb	-6.3E-05 ± 1.3E-04	U
	03/12/08	03/26/08	gross α	6.3E-04 ± 5.2E-04			⁹⁰ Sr	-1.7E-04 ± 1.8E-04	U
	03/12/08	03/26/08	gross β	5.4E-03 ± 1.1E-03			²³⁴ U	2.0E-05 ± 1.1E-05	
	03/26/08	04/08/08	gross α	9.0E-04 ± 6.1E-04			²³⁵ U	5.4E-06 ± 5.5E-06	U
	03/26/08	04/08/08	gross β	5.8E-03 ± 1.1E-03			²³⁸ U	1.9E-05 ± 1.1E-05	
	04/08/08	04/23/08	gross α	8.9E-04 ± 5.5E-04	N518	07/01/08 to 12/31/08	⁶⁰ Co	-2.5E-05 ± 9.6E-05	U
	04/08/08	04/23/08	gross β	9.9E-03 ± 1.4E-03			¹³⁴ Cs	-5.4E-05 ± 1.0E-04	U
	04/23/08	05/08/08	gross α	7.8E-04 ± 5.3E-04			¹³⁷ Cs	6.3E-05 ± 1.0E-04	U
	04/23/08	05/08/08	gross β	6.8E-03 ± 1.1E-03			¹⁵² Eu	-7.6E-05 ± 2.3E-04	U
	05/08/08	05/20/08	gross α	9.9E-04 ± 6.5E-04			¹⁵⁴ Eu	-1.9E-05 ± 2.0E-04	U
	05/08/08	05/20/08	gross β	6.1E-03 ± 1.2E-03			¹⁵⁵ Eu	-2.8E-06 ± 2.8E-05	U
	05/20/08	06/05/08	gross α	4.5E-04 ± 4.1E-04			²³⁸ Pu	-2.9E-06 ± 1.5E-05	U
	05/20/08	06/05/08	gross β	8.4E-03 ± 1.3E-03			^{239/240} Pu	2.9E-06 ± 3.1E-06	
	06/05/08	06/18/08	gross α	5.6E-04 ± 5.1E-04			¹⁰⁶ Ru	-3.0E-04 ± 9.1E-04	U
	06/05/08	06/18/08	gross β	2.8E-03 ± 7.6E-04			¹²⁵ Sb	2.0E-05 ± 2.0E-04	U
	06/18/08	07/01/08	gross α	4.6E-04 ± 5.2E-04			⁹⁰ Sr	-1.7E-04 ± 1.7E-04	U
	06/18/08	07/01/08	gross β	9.7E-03 ± 1.6E-03			²³⁴ U	5.4E-05 ± 3.0E-05	
	07/01/08	07/16/08	gross α	1.1E-03 ± 4.9E-04			²³⁵ U	8.4E-06 ± 9.0E-06	
	07/01/08	07/16/08	gross β	1.1E-02 ± 1.5E-03			²³⁸ U	3.5E-05 ± 2.1E-05	
	07/16/08	07/30/08	gross α	7.4E-04 ± 5.3E-04					
	07/16/08	07/30/08	gross β	1.3E-02 ± 1.7E-03					
	07/30/08	08/13/08	gross α	6.8E-04 ± 5.5E-04					
	07/30/08	08/13/08	gross β	1.3E-02 ± 1.7E-03					
	08/13/08	08/26/08	gross α	1.6E-03 ± 6.1E-04					
	08/13/08	08/26/08	gross β	1.2E-02 ± 1.7E-03					
	08/26/08	09/09/08	gross α	3.9E-04 ± 4.2E-04					
	08/26/08	09/09/08	gross β	1.0E-02 ± 1.5E-03					
	09/09/08	09/23/08	gross α	1.3E-03 ± 5.3E-04					
	09/09/08	09/23/08	gross β	2.1E-02 ± 2.4E-03					
	09/23/08	10/08/08	gross α	5.8E-04 ± 4.7E-04					
	09/23/08	10/08/08	gross β	1.8E-02 ± 2.0E-03					
	10/08/08	10/21/08	gross α	1.3E-03 ± 5.5E-04					
	10/08/08	10/21/08	gross β	1.4E-02 ± 1.8E-03					
	10/21/08	11/04/08	gross α	2.5E-03 ± 7.7E-04					
	10/21/08	11/04/08	gross β	3.7E-02 ± 3.6E-03					
	11/04/08	11/18/08	gross α	2.8E-04 ± 3.9E-04					
	11/04/08	11/18/08	gross β	1.8E-02 ± 2.1E-03					
	11/18/08	12/02/08	gross α	2.2E-03 ± 6.9E-04					
	11/18/08	12/02/08	gross β	3.3E-02 ± 3.3E-03					
	12/02/08	12/16/08	gross α	1.2E-03 ± 5.2E-04					
	12/02/08	12/16/08	gross β	2.1E-02 ± 2.4E-03					
	12/16/08	12/31/08	gross α	2.4E-03 ± 7.2E-04					
	12/16/08	12/31/08	gross β	4.2E-02 ± 3.9E-03					

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

Table 2-4. Near-Facility Air Sampling Results, 2008 (pCi/m³ ± total analytical uncertainty).
(Sheet 82 of 82)

Location	Sample On	Sample Off	Isotope	Result ± Uncertainty	Location	Composite Period	Isotope	Result ± Uncertainty	RQ*
N981 (600 Area)	01/02/08	01/15/08	gross α	1.0E-03 ± 6.2E-04	N981	01/02/08 to 07/01/08	⁶⁰ Co	3.7E-05 ± 6.9E-05	U
	01/02/08	01/15/08	gross β	9.3E-03 ± 1.4E-03			¹³⁴ Cs	1.7E-05 ± 6.3E-05	U
	01/15/08	01/30/08	gross α	1.6E-03 ± 5.9E-04			¹³⁷ Cs	-1.2E-05 ± 5.7E-05	U
	01/15/08	01/30/08	gross β	3.3E-02 ± 3.2E-03			¹⁵² Eu	-1.6E-04 ± 1.6E-04	U
	01/30/08	02/13/08	gross α	5.2E-04 ± 4.8E-04			¹⁵⁴ Eu	4.1E-05 ± 2.2E-04	U
	01/30/08	02/13/08	gross β	4.6E-03 ± 9.5E-04			¹⁵⁵ Eu	6.1E-05 ± 1.3E-04	U
	02/13/08	02/27/08	gross α	3.0E-03 ± 8.3E-04			²³⁸ Pu	2.8E-06 ± 4.4E-06	U
	02/13/08	02/27/08	gross β	3.2E-02 ± 3.3E-03			^{239/240} Pu	5.5E-07 ± 1.9E-06	U
	02/27/08	03/12/08	gross α	6.2E-04 ± 5.1E-04			¹⁰⁶ Ru	4.6E-04 ± 6.1E-04	U
	02/27/08	03/12/08	gross β	1.0E-02 ± 1.5E-03			¹²⁵ Sb	-2.1E-05 ± 1.4E-04	U
	03/12/08	03/26/08	gross α	1.2E-03 ± 5.2E-04			⁹⁰ Sr	-1.4E-04 ± 1.5E-04	U
	03/12/08	03/26/08	gross β	8.5E-03 ± 1.3E-03			²³⁴ U	7.5E-06 ± 6.3E-06	
	03/26/08	04/08/08	gross α	9.3E-04 ± 6.2E-04			²³⁵ U	6.8E-07 ± 2.0E-07	U
	03/26/08	04/08/08	gross β	8.2E-03 ± 1.3E-03			²³⁸ U	1.3E-05 ± 7.7E-06	
	04/08/08	04/23/08	gross α	1.4E-03 ± 5.7E-04					
	04/08/08	04/23/08	gross β	1.0E-02 ± 1.5E-03	N981	07/01/08 to 12/31/08	⁶⁰ Co	-1.1E-05 ± 8.6E-05	U
	04/23/08	05/08/08	gross α	1.9E-03 ± 6.5E-04			¹³⁴ Cs	2.3E-05 ± 7.4E-05	U
	04/23/08	05/08/08	gross β	1.6E-02 ± 2.0E-03			¹³⁷ Cs	1.2E-05 ± 7.0E-05	U
	05/08/08	05/20/08	gross α	9.0E-04 ± 6.7E-04			¹⁵² Eu	-7.4E-05 ± 1.8E-04	U
	05/08/08	05/20/08	gross β	1.7E-02 ± 2.3E-03			¹⁵⁴ Eu	-1.2E-04 ± 2.7E-04	U
	05/20/08	06/03/08	gross α	6.2E-04 ± 5.1E-04			¹⁵⁵ Eu	-4.0E-05 ± 1.7E-04	U
	05/20/08	06/03/08	gross β	1.1E-02 ± 1.6E-03			²³⁸ Pu	1.1E-05 ± 1.0E-05	U
	06/03/08	06/17/08	gross α	1.8E-03 ± 7.4E-04			^{239/240} Pu	2.0E-06 ± 3.0E-06	U
	06/03/08	06/17/08	gross β	9.5E-03 ± 1.5E-03			¹⁰⁶ Ru	-2.6E-04 ± 6.1E-04	U
	06/17/08	07/01/08	gross α	2.4E-03 ± 8.6E-04			¹²⁵ Sb	-7.8E-05 ± 1.6E-04	U
	06/17/08	07/01/08	gross β	1.9E-02 ± 2.3E-03			⁹⁰ Sr	-1.4E-04 ± 1.4E-04	U
	07/01/08	07/15/08	gross α	1.4E-03 ± 6.0E-04			²³⁴ U	2.0E-05 ± 1.1E-05	
	07/01/08	07/15/08	gross β	1.7E-02 ± 2.1E-03			²³⁵ U	5.7E-06 ± 4.6E-06	
	07/15/08	07/29/08	gross α	7.6E-04 ± 5.5E-04			²³⁸ U	8.5E-06 ± 5.7E-06	
	07/15/08	07/29/08	gross β	1.5E-02 ± 1.9E-03					
	07/29/08	08/12/08	gross α	1.3E-03 ± 5.7E-04					
	07/29/08	08/12/08	gross β	1.6E-02 ± 2.1E-03					
	08/12/08	08/25/08	gross α	8.1E-04 ± 5.8E-04					
	08/12/08	08/25/08	gross β	1.4E-02 ± 1.9E-03					
	08/25/08	09/09/08	gross α	3.8E-04 ± 4.1E-04					
	08/25/08	09/09/08	gross β	1.1E-02 ± 1.5E-03					
	09/09/08	09/23/08	gross α	1.7E-03 ± 6.3E-04					
	09/09/08	09/23/08	gross β	2.8E-02 ± 2.9E-03					
	09/23/08	10/08/08	gross α	1.7E-03 ± 5.9E-04					
	09/23/08	10/08/08	gross β	2.5E-02 ± 2.7E-03					
	10/08/08	10/21/08	gross α	2.2E-03 ± 7.7E-04					
	10/08/08	10/21/08	gross β	1.9E-02 ± 2.3E-03					
	10/21/08	11/04/08	gross α	3.3E-03 ± 9.2E-04					
	10/21/08	11/04/08	gross β	4.1E-02 ± 3.9E-03					
	11/04/08	11/18/08	gross α	1.6E-03 ± 6.5E-04					
	11/04/08	11/18/08	gross β	1.9E-02 ± 2.3E-03					
	11/18/08	12/02/08	gross α	2.4E-03 ± 7.7E-04					
	11/18/08	12/02/08	gross β	3.0E-02 ± 3.2E-03					
	12/02/08	12/16/08	gross α	2.3E-03 ± 7.7E-04					
	12/02/08	12/16/08	gross β	2.0E-02 ± 2.3E-03					
	12/16/08	12/31/08	gross α	1.5E-03 ± 5.8E-04					
	12/16/08	12/31/08	gross β	2.6E-02 ± 2.7E-03					

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

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3.0 SOIL MONITORING

The radionuclide content of soil was measured to evaluate long-term trends in environmental accumulation of radioactivity in the 100, 200/600, and 300/400 Areas. Soil samples were collected on or near facilities that store, handle, or dispose of radioactive waste. The number of soil samples collected in 2008 and their locations are shown in Table 3-1.

Table 3-1. Soil Samples Collected during 2008.

Number of Samples	Operational Area									
	100-B/C	100-D	100-F	100-H	200-West ^a	200-East ^a	600 ^{a,b}	300 ^a	400	ERDF ^c
95	3	4	5	4	27	15	18	17	1	1

^a Number of samples includes one or more Replicate Samples.

^b Includes soil sample at 100-IU2/6.

^c Environmental Restoration Disposal Facility in the 200 West Area.

Soil sampling locations are illustrated in Figures 3-1 through 3-10. Radionuclide analyses indicated that strontium-90, cesium-137, plutonium-239/240, and uranium were detectable in soil samples in 2008. Historically, the predominant radionuclides observed in soil samples were activation and fission products in the 100 Areas, fission products in the 200 Areas, and uranium in the 300 Area.

A summary of near-facility soil sampling results for selected radionuclides collected during 2008 is presented in Table 3-2. Historical soil sampling results for the 100, 200/600, and 300/400 Areas are displayed in Table 3-3. The 2008 soil sampling results for all areas are provided in Table 3-4.

Additional discussion of the 2008 soil sampling results can be found in Section 10.9.1 of PNNL-18427.

Figure 3-1. 2008 Soil Sampling Locations, 100-B/C Area.

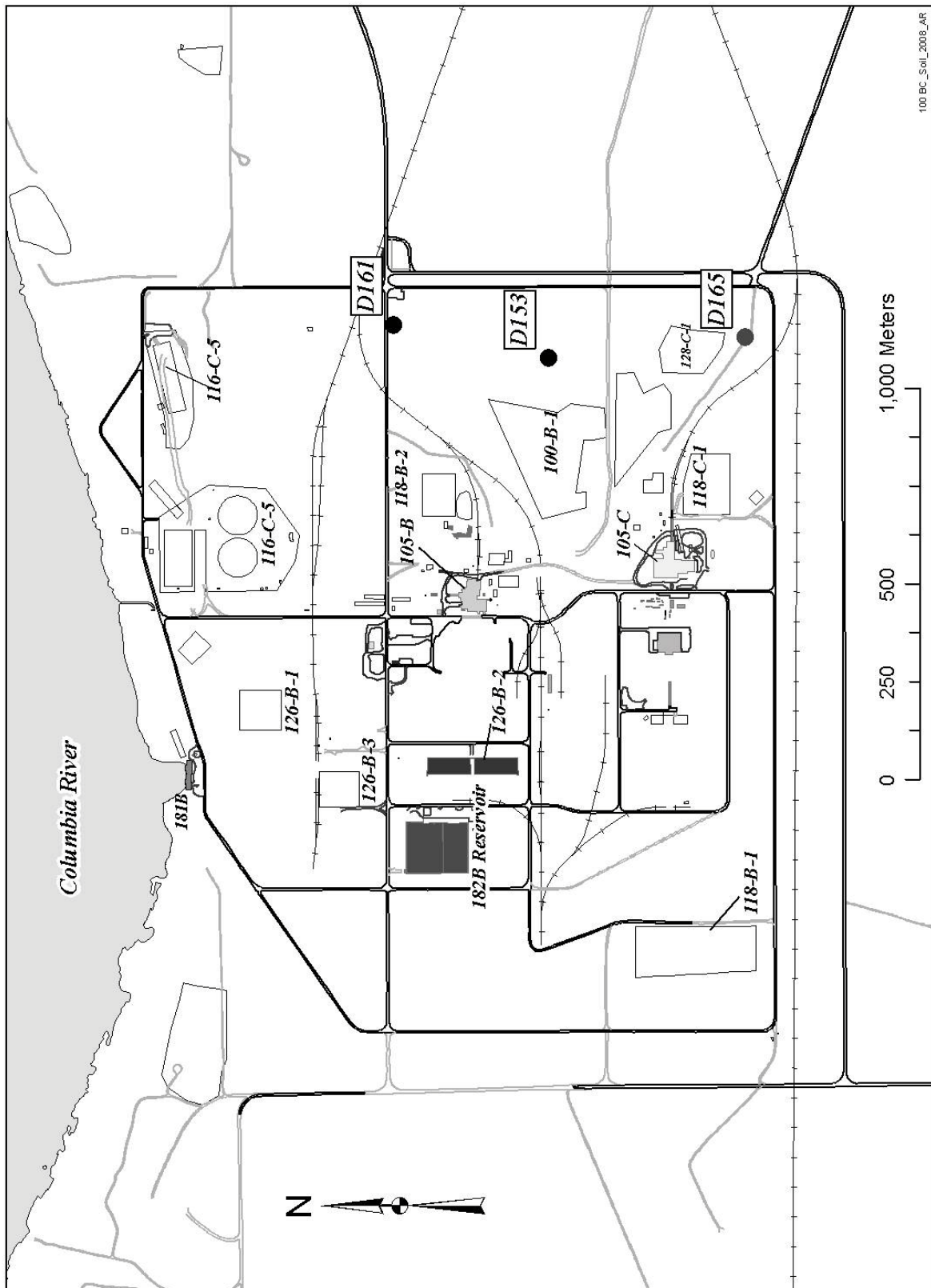


Figure 3-2. 2008 Soil Sampling Locations, 100-D Area.

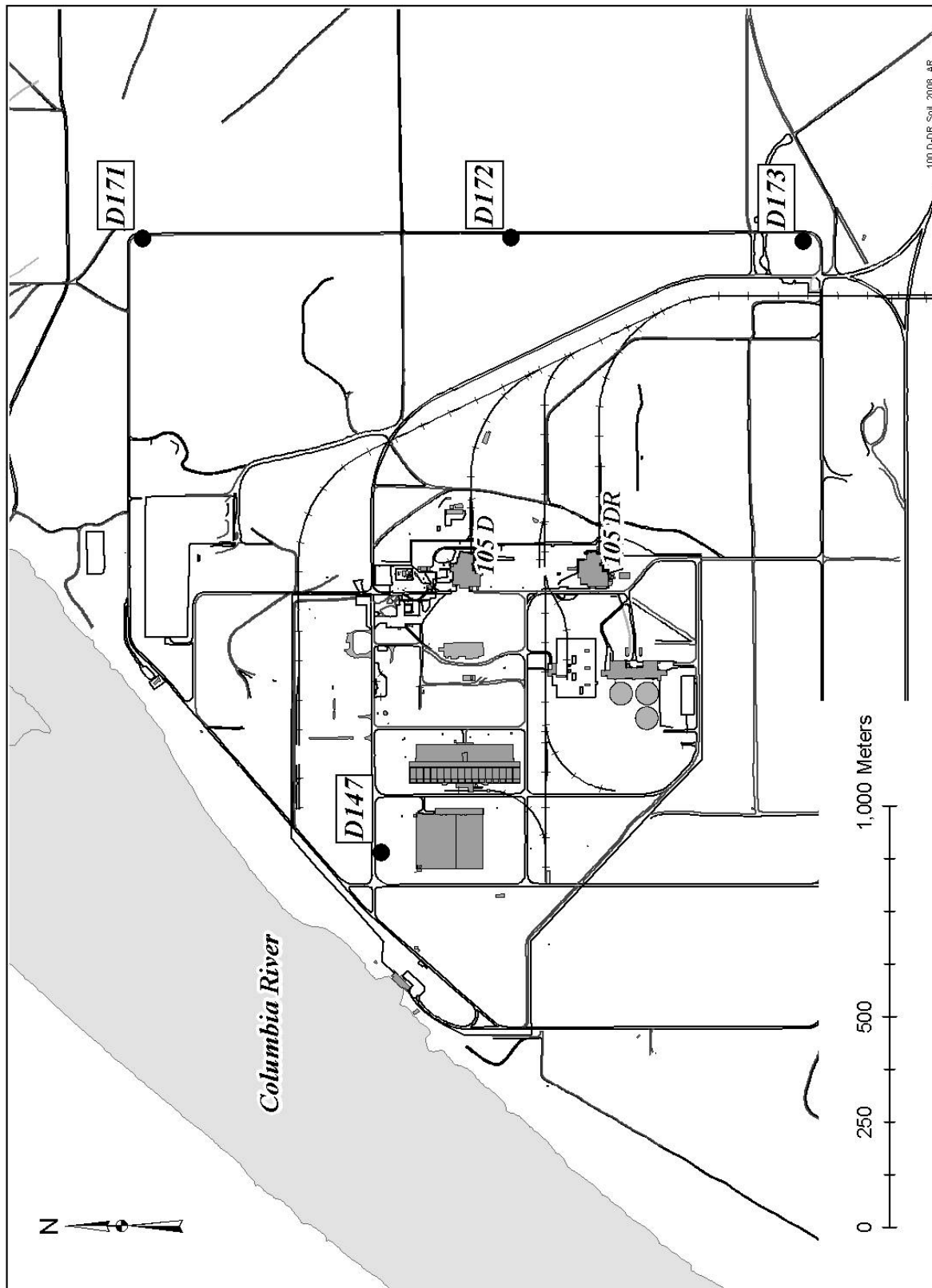


Figure 3-3. 2008 Soil Sampling Locations, 100-F Area.

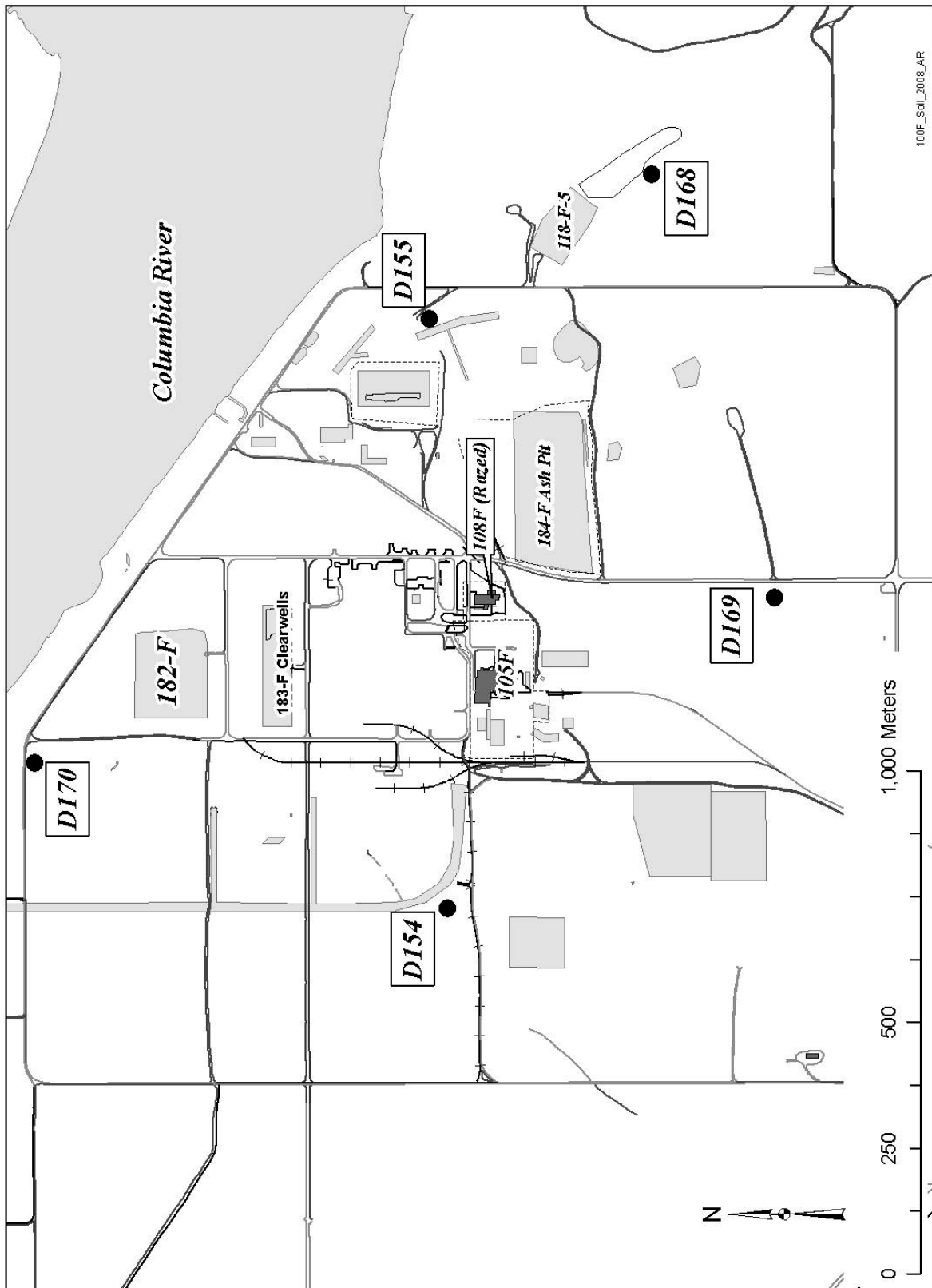
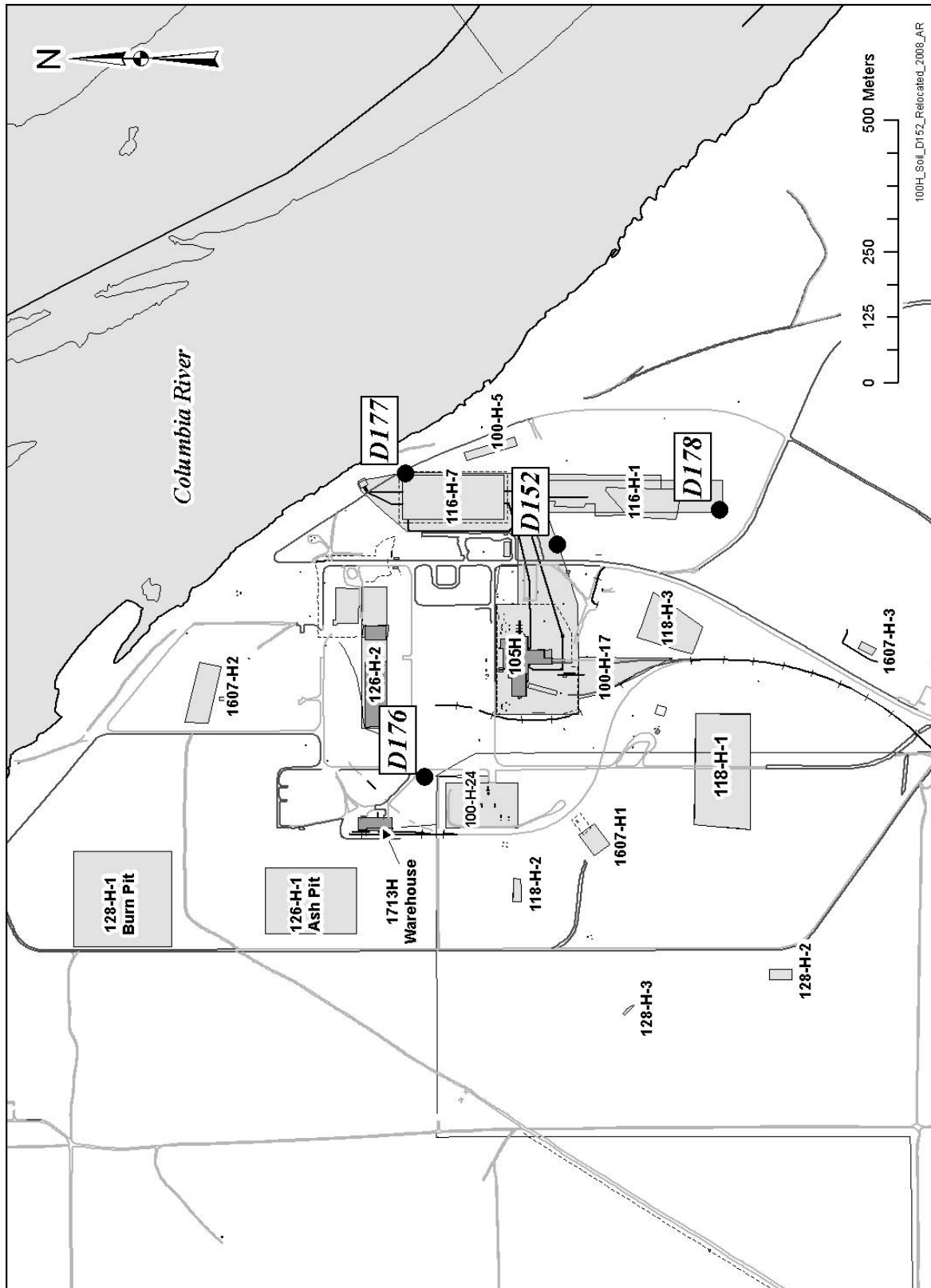


Figure 3-4. 2008 Soil Sampling Locations, 100-H Area.



[illegible]

Figure 3-6. 2008 Soil Sampling Locations, 200 West Area.

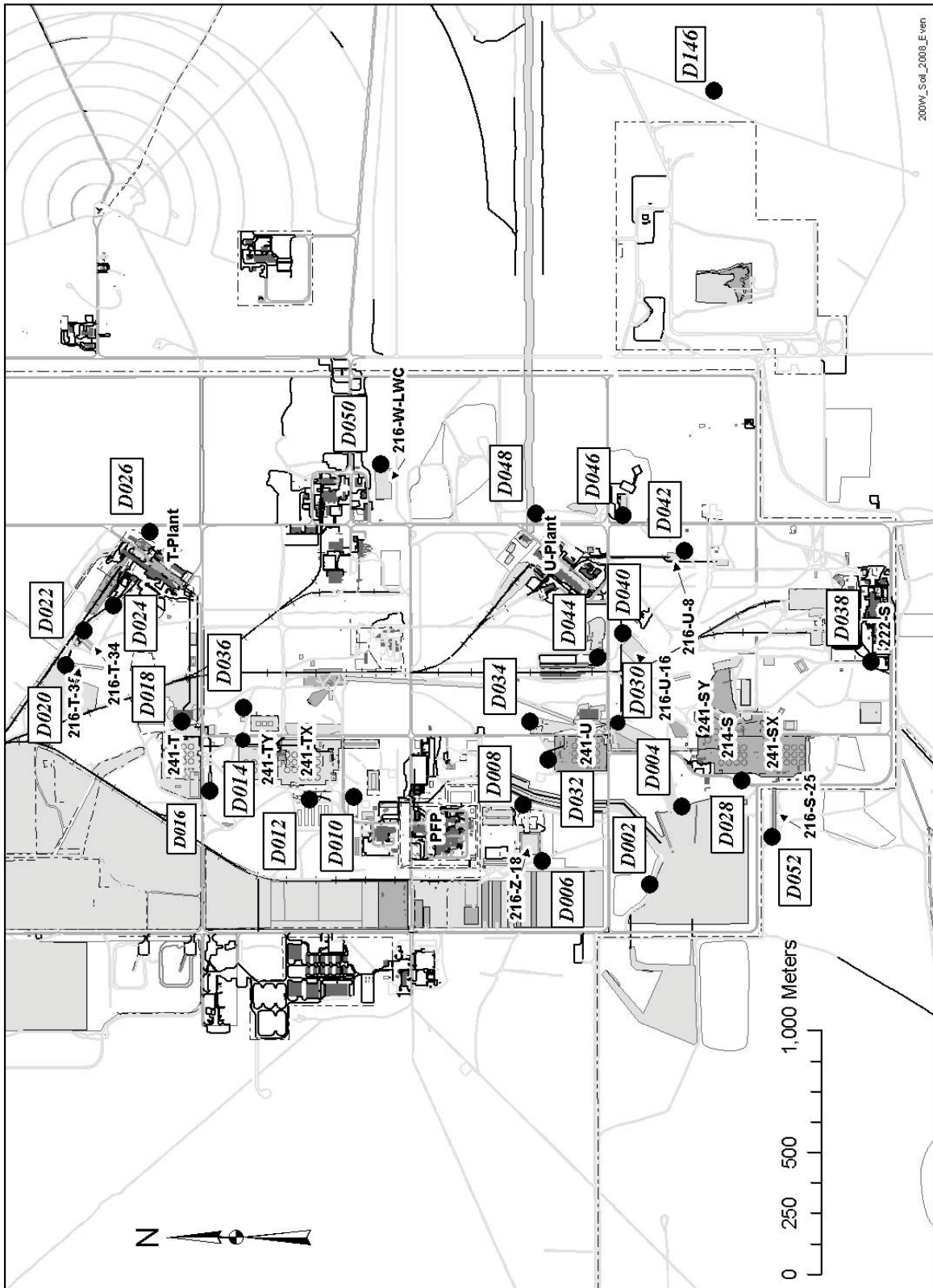


Figure 3-7. 2008 Soil Sampling Locations, 300 Area.

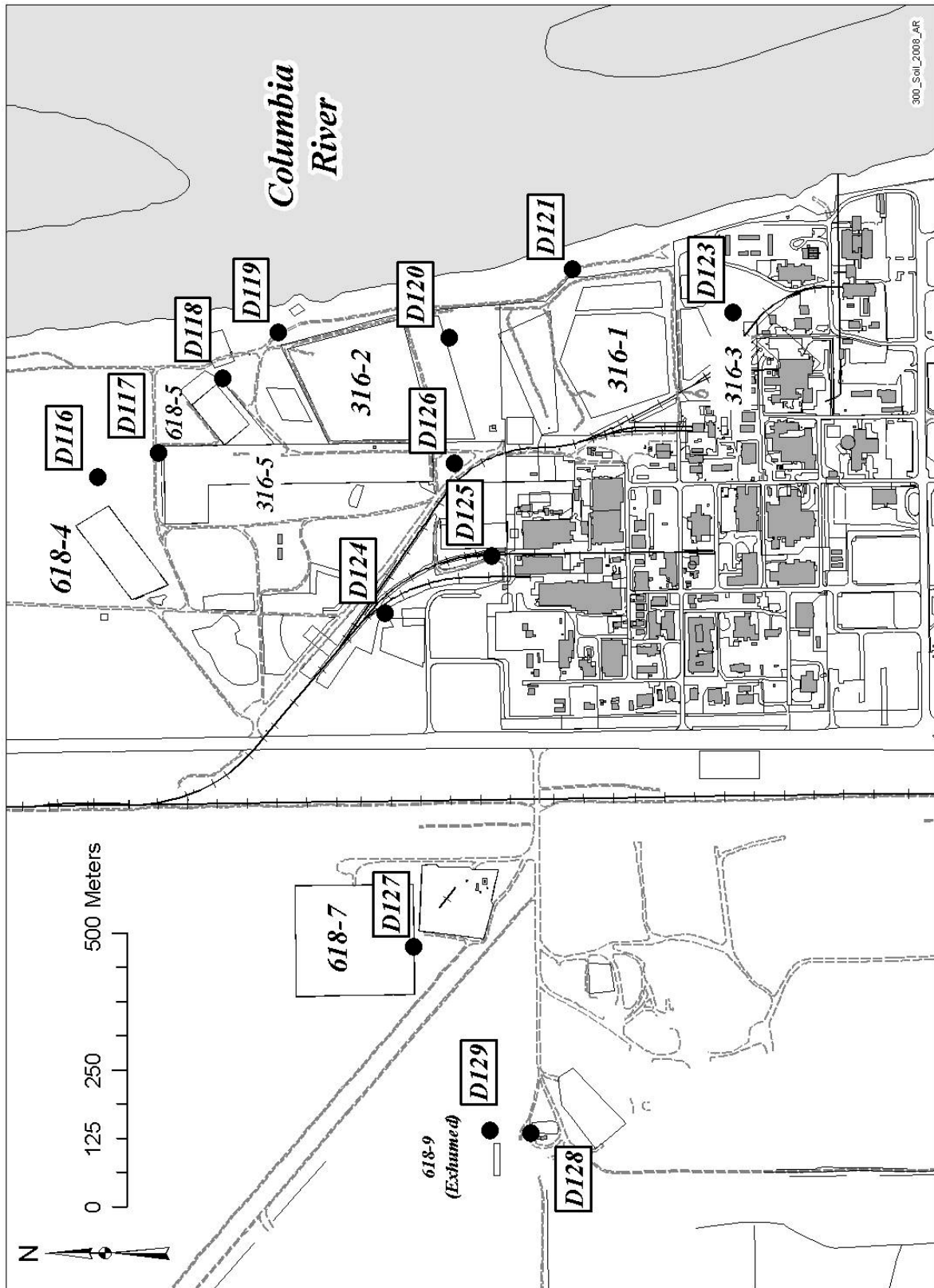


Figure 3-8. 2008 Soil Sampling Locations, 400 Area.

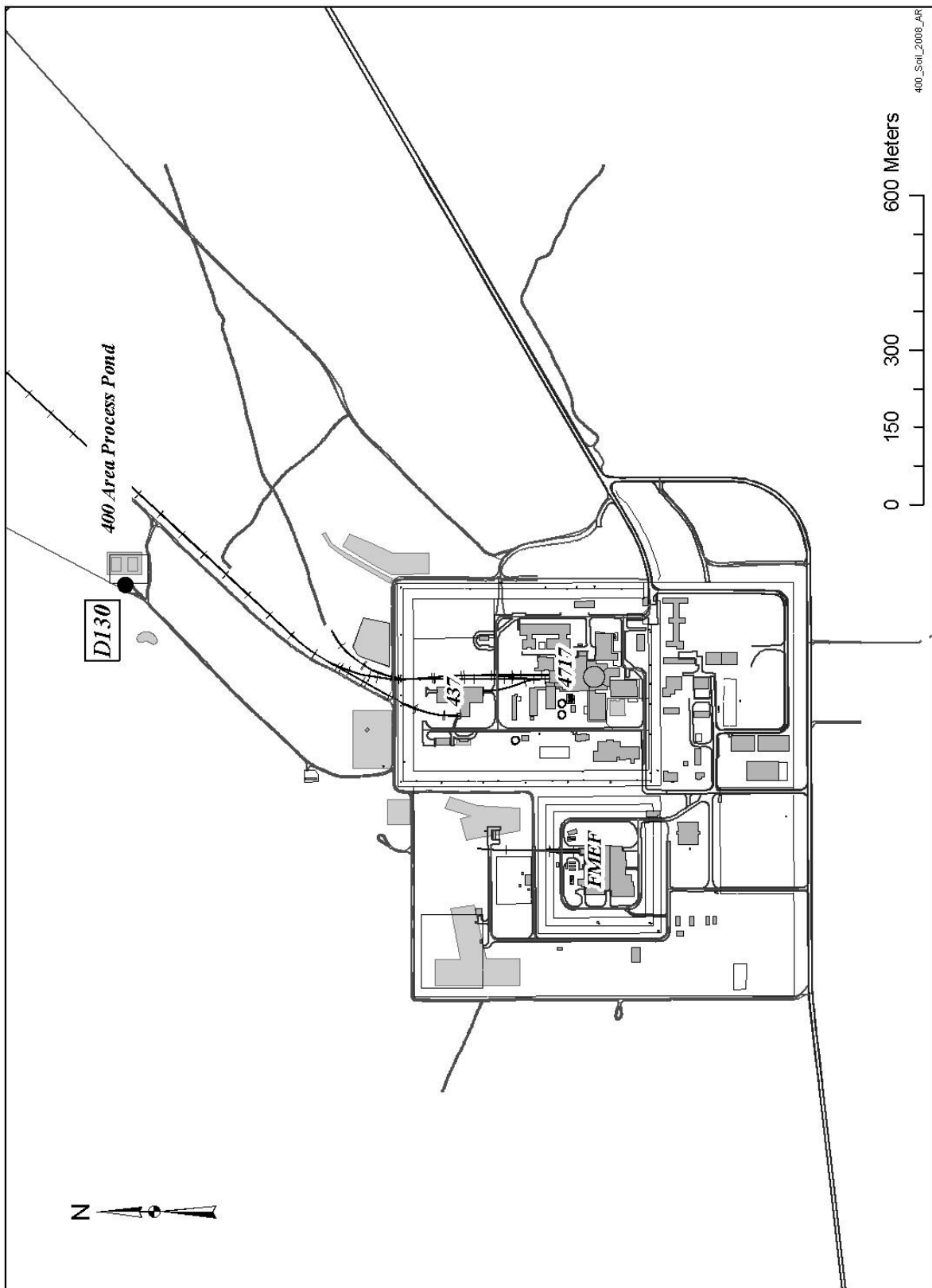


Figure 3-9. 2008 Soil Sampling Locations, 600 Area.

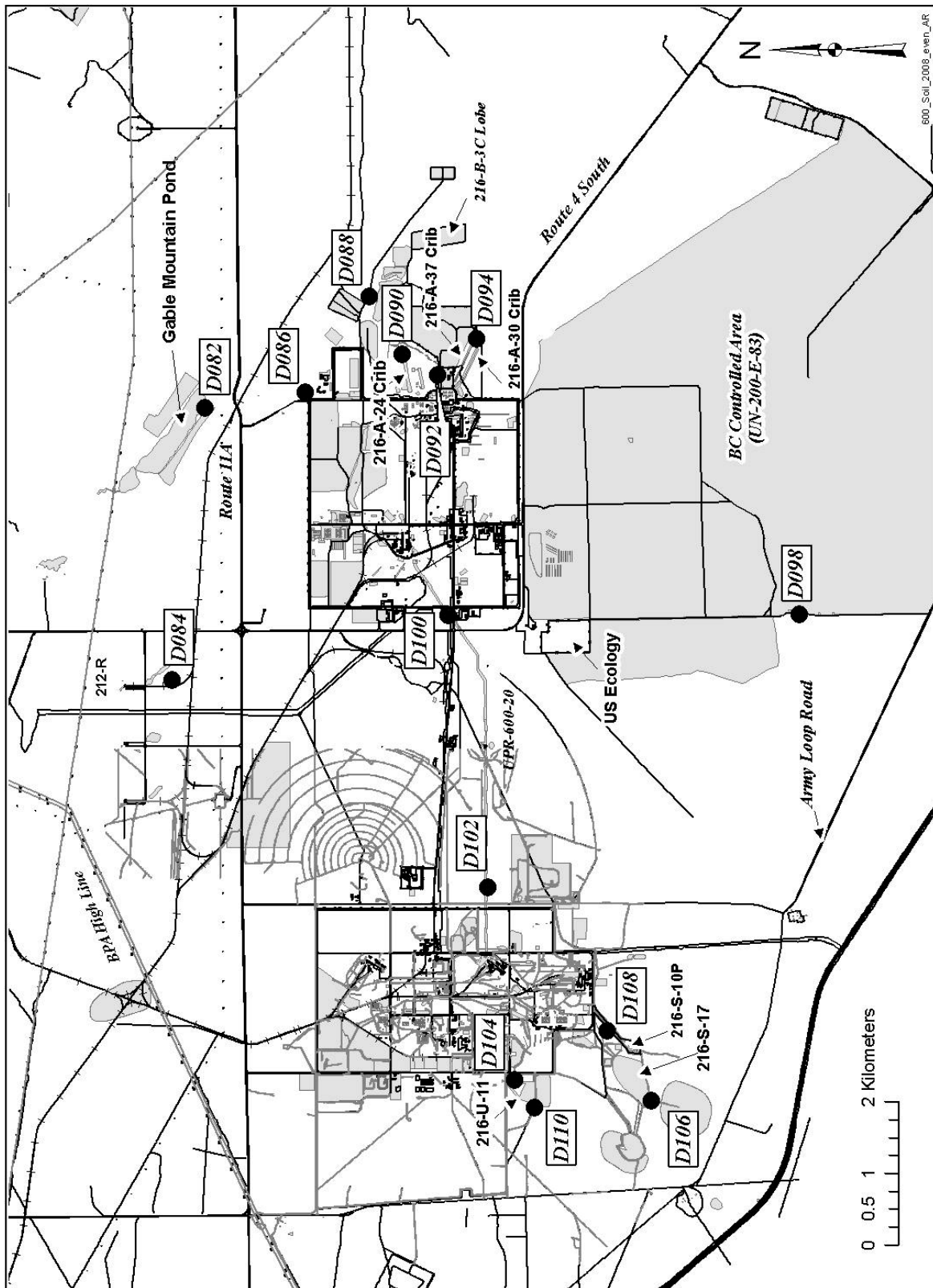


Figure 3-10. 2008 Soil Sampling Location, 100-IU2/6.

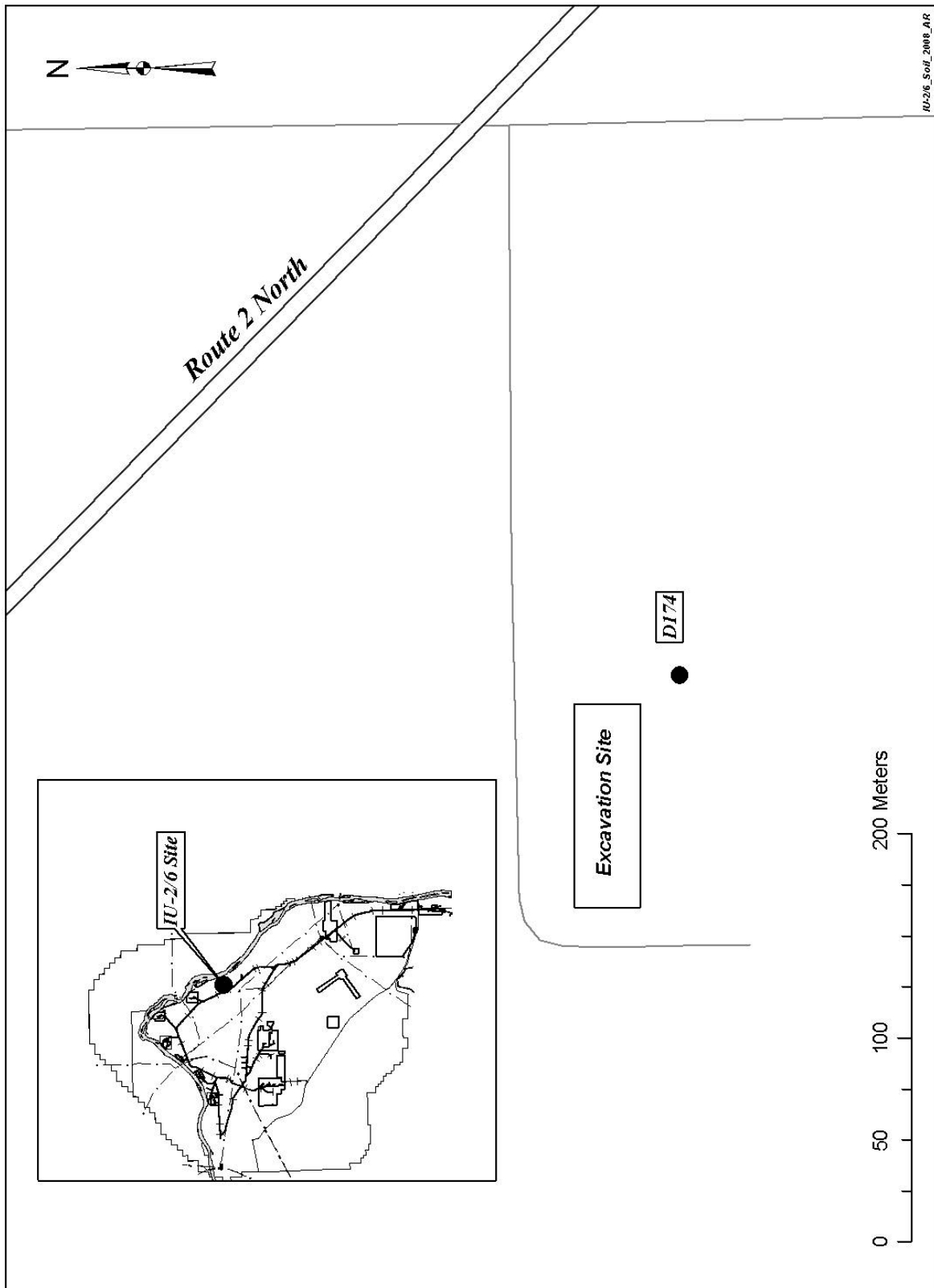


Table 3-2. Summary of Near-Facility Soil Sampling Results (pCi/g)^a for Selected Radionuclides, 2008.

Isotope	Number of		Average ^c	Maximum ^d	Location	
	Samples ^b	Detects			Area	Site ID
¹⁴⁴ Ce	95	0	1.5E-01 ± 2.7E+00	1.3E+01 ± 8.7E+01 ^e	600 Area	D174
⁶⁰ Co	95	1	-1.4E-02 ± 2.6E-01	1.3E-02 ± 9.6E-03 ^e	100-F	D155
¹³⁴ Cs	95	89	3.4E-01 ± 5.9E+00	2.9E+01 ± 9.9E+00	600 Area	D174
¹³⁷ Cs	95	90	1.7E+00 ± 1.9E+01	9.4E+01 ± 1.7E+01	600 Area	D174
¹⁵² Eu	95	4	-7.5E-02 ± 1.5E+00	1.7E-01 ± 3.1E-02	100-F	D155
¹⁵⁴ Eu	95	0	-1.4E-01 ± 2.6E+00	3.9E-02 ± 2.9E-02 ^e	200 West	D052
¹⁵⁵ Eu	95	24	1.8E-01 ± 2.7E+00	1.4E+01 ± 2.1E+01 ^e	600 Area	D174
²³⁸ Pu	95	7	9.0E-03 ± 6.7E-02	2.1E-01 ± 5.9E-02	200 West	D028
^{239/240} Pu	95	36	8.4E-02 ± 5.9E-01	2.4E+00 ± 6.2E-01	200 West	D008
¹⁰³ Ru	95	0	1.9E-02 ± 3.6E-01	1.8E+00 ± 4.4E+00 ^e	600 Area	D174
¹⁰⁶ Ru	95	0	1.8E-01 ± 3.5E+00	1.7E+01 ± 3.6E+01 ^e	600 Area	D174
¹²⁵ Sb	95	0	-3.9E-02 ± 8.0E-01	3.4E-02 ± 3.4E-02 ^e	100-D	D171
¹¹³ Sn	95	0	-3.9E-02 ± 6.9E-01	1.7E-02 ± 1.8E-02 ^e	100-F	D170
⁹⁰ Sr	95	3	-3.2E-01 ± 7.8E-01	1.2E+00 ± 5.0E-01	600 Area	D094
²³⁴ U	95	95	2.4E-01 ± 6.1E-01	2.2E+00 ± 5.9E-01	300 Area	D126
²³⁵ U	95	57	1.9E-02 ± 5.2E-02	2.5E-01 ± 8.0E-02	300 Area	D126
²³⁸ U	95	95	2.2E-01 ± 5.3E-01	1.6E+00 ± 4.3E-01	300 Area	D119
⁶⁵ Zn	95	11	8.9E-02 ± 1.6E+00	7.6E+00 ± 1.2E+01 ^e	600 Area	D174

^a 1 pCi = 0.037 Bq.

^b Includes replicate samples and/or multiple samples collected at some locations

^c Average ± two standard deviations

^d Maximum ± analytical uncertainty

^e Maximum value reported is a non detect

Table 3-3. Average Radionuclide Concentrations (pCi/g)^a in Hanford Soils, 1998 through 2008.

<u>100 Areas</u>						
Year	⁶⁰ Co	⁹⁰ Sr	¹³⁷ Cs	²³⁴ U	²³⁸ U	^{239,240} Pu
1998	4.9E+00 ± 7.7E+00	1.2E+00 ± 1.1E+00	3.1E+00 ± 4.1E+00	2.1E-01 ± 6.0E-02	1.7E-01 ± 3.0E-02	1.5E-01 ± 1.3E-01
1999	1.6E+00 ± 2.1E+00	2.0E+00 ± 2.0E+00	8.4E-01 ± 8.1E-01	2.2E-01 ± 3.0E-02	2.0E-01 ± 3.0E-02	2.9E-02 ± 2.3E-02
2000	3.1E+00 ± 3.0E+00	8.4E-01 ± 4.5E-01	2.5E+00 ± 2.3E+00	2.2E-01 ± 8.7E-02	2.2E-01 ± 3.2E-02	5.8E-02 ± 3.3E-02
2001	4.0E-01 ± 3.4E-01	4.8E-01 ± 3.0E-01	3.9E-01 ± 1.6E-01	2.4E-01 ± 3.6E-02	2.5E-01 ± 2.7E-02	3.1E-02 ± 2.0E-02
2002	3.0E-01 ± 1.1E+00	1.5E-01 ± 4.7E-01	2.6E-01 ± 5.1E-01	1.3E-01 ± 4.7E-02	1.1E-01 ± 3.9E-02	6.1E-03 ± 6.1E-03
2003	1.8E-01 ± 2.1E-02	-8.2E-02 ± 2.4E-01	2.1E-01 ± 3.6E-02	1.4E-01 ± 4.8E-02	1.5E-01 ± 5.1E-02	1.8E-03 ± 6.3E-03
2004	3.9E-01 ± 2.0E+00	-1.3E-01 ± 5.7E-01	3.8E-01 ± 1.1E+00	1.3E-01 ± 5.9E-02	1.4E-01 ± 6.4E-02	1.1E-01 ± 6.0E-01
2005	3.5E-02 ± 1.8E-01	-4.3E-02 ± 6.1E-01	3.2E-01 ± 1.2E+00	1.3E-01 ± 6.5E-02	1.3E-01 ± 5.8E-02	1.1E-02 ± 4.3E-02
2006	7.3E-01 ± 6.8E+00	Not Detected	7.0E+00 ± 6.0E+01	1.3E-01 ± 9.5E-02	1.3E-01 ± 8.6E-02	1.1E-02 ± 2.0E-02
2007	No Soil Samples Collected in 100 Areas During 2007					
2008	Not Detected	-3.7E-01 ± 8.4E-01	2.0E-01 ± 4.0E-01	1.5E-01 ± 9.4E-02	1.2E-01 ± 7.9E-02	Not Detected
<u>200/600 Areas</u>						
Year	⁶⁰ Co	⁹⁰ Sr	¹³⁷ Cs	²³⁴ U	²³⁸ U	^{239,240} Pu
1998	1.9E-02 ± 6.0E-03	5.0E-01 ± 1.4E-01	1.1E+00 ± 4.0E-01	1.9E-01 ± 1.0E-02	1.9E-01 ± 1.0E-02	1.3E-01 ± 1.0E-02
1999	Not Detected	1.1E+00 ± 5.0E-01	1.4E+00 ± 5.0E-01	2.3E-01 ± 2.0E-02	2.2E-01 ± 2.0E-02	1.0E-01 ± 5.0E-02
2000	6.0E-03 ± 6.0E-03	1.1E+00 ± 2.0E-01	1.4E+00 ± 5.0E-01	2.3E-01 ± 3.0E-02	2.3E-01 ± 3.0E-02	4.1E-01 ± 4.2E-01
2001	Not Detected	5.5E-01 ± 2.3E-01	1.5E+00 ± 5.4E-01	2.2E-01 ± 1.4E-02	2.2E-01 ± 1.4E-02	1.3E-01 ± 6.2E-02
2002	Not Detected	2.7E-01 ± 6.6E-01	1.4E+00 ± 4.3E+00	1.7E-01 ± 1.0E-01	1.7E-01 ± 1.1E-01	1.2E-01 ± 7.2E-01
2003	2.4E-03 ± 1.3E-02	8.4E-02 ± 6.3E-01	1.8E+00 ± 6.3E-01	1.6E-01 ± 9.6E-02	1.7E-01 ± 1.0E-01	9.3E-02 ± 5.0E-01
2004	8.1E-04 ± 1.1E-02	1.3E-01 ± 7.8E-01	2.8E+00 ± 1.7E+01	1.7E-01 ± 1.9E-01	1.7E-01 ± 1.5E-01	3.5E-01 ± 3.2E+00
2005	Not Detected	2.7E-02 ± 5.4E-01	1.5E+00 ± 5.1E+00	1.6E-01 ± 9.6E-02	1.5E-01 ± 8.8E-02	8.0E-02 ± 4.6E-01
2006	Not Detected	2.6E-01 ± 2.1E+00	1.3E+00 ± 4.3E+00	1.7E-01 ± 2.3E-01	1.7E-01 ± 2.2E-01	9.3E-02 ± 5.2E-01
2007	Not Detected	1.5E+00 ± 1.5E+01	1.4E+00 ± 4.7E+00	1.6E-01 ± 1.1E-01	1.6E-01 ± 1.3E-01	1.8E-01 ± 1.6E+00
2008	2.2E-04 ± 8.5E-03	-3.7E-01 ± 8.1E-01	1.0E+00 ± 3.9E+00	1.6E-01 ± 7.4E-02	1.6E-01 ± 7.1E-02	1.3E-01 ± 7.3E-01
<u>300/400 Areas</u>						
Year	⁶⁰ Co	⁹⁰ Sr	¹³⁷ Cs	²³⁴ U	²³⁸ U	^{239,240} Pu
1998	Not Detected	2.4E-01 ± 1.2E-01	9.0E-02 ± 8.0E-02	8.5E-01 ± 9.8E-01	8.2E-01 ± 9.8E-01	4.5E-02 ± 5.7E-02
1999	Not Detected	8.7E-01 ± 1.9E-01	9.0E-02 ± 3.0E-02	7.5E-01 ± 5.4E-01	7.1E-01 ± 5.3E-01	4.0E-02 ± 2.0E-02
2000	Not Detected	5.9E-01 ± 1.8E-01	1.4E-01 ± 6.0E-02	5.4E+00 ± 5.6E+00	5.4E+00 ± 5.7E+00	1.7E-01 ± 8.0E-02
2001	Not Detected	Not Detected	5.0E-02 ± 2.1E-02	9.4E-01 ± 7.1E-01	9.5E-01 ± 7.3E-01	4.1E-02 ± 2.6E-02
2002	Not Detected	2.8E-02 ± 2.9E-02	7.4E-02 ± 1.3E-01	1.5E+00 ± 6.4E+00	1.5E+00 ± 6.4E+00	2.4E-02 ± 9.9E-02
2003	Not Detected	5.6E-02 ± 7.3E-02	8.1E-02 ± 1.4E-01	1.3E+00 ± 5.1E+00	1.3E+00 ± 5.2E+00	7.5E-02 ± 3.8E-01
2004	Not Detected	Not Detected	9.2E-02 ± 1.4E-01	9.6E-01 ± 2.9E+00	9.7E-01 ± 3.0E+00	2.8E-02 ± 6.7E-02
2005	Not Detected	Not Detected	5.0E-02 ± 1.1E-01	5.6E-01 ± 1.6E+00	5.6E-01 ± 1.6E+00	1.4E-02 ± 3.5E-02
2006	Not Detected	6.5E-02 ± 5.6E-01	9.4E-02 ± 1.4E-01	1.2E+00 ± 3.3E+00	1.2E+00 ± 3.4E+00	1.8E-02 ± 4.9E-02
2007	Not Detected	Not Detected	9.1E-02 ± 2.1E-02	8.2E-01 ± 2.2E+00	8.0E-01 ± 2.2E+00	1.7E-02 ± 4.6E-02
2008	Not Detected	-1.4E-01 ± 5.5E-01	3.8E-02 ± 8.6E-02	5.5E-01 ± 1.2E+00	5.2E-01 ± 1.0E+00	8.2E-03 ± 1.6E-02

^a ± 2 standard deviations

Table 3-4. 2008 Soil Sampling Results (pCi/g \pm total analytical uncertainty). (Sheet 1 of 24)

Location	Isotope	Result \pm Error	RQ*	Location	Isotope	Result \pm Error	RQ*
D153 (100-B/C)	¹⁴⁴ Ce	-7.6E-02 \pm 1.3E-01	U	D161 (100-B/C)	¹⁴⁴ Ce	8.3E-03 \pm 8.3E-02	U
	⁶⁰ Co	-5.5E-03 \pm 8.3E-03	U		⁶⁰ Co	4.4E-03 \pm 7.8E-03	U
	¹³⁴ Cs	3.1E-02 \pm 1.2E-02	U		¹³⁴ Cs	3.5E-02 \pm 1.2E-02	U
	¹³⁷ Cs	2.9E-01 \pm 5.1E-02			¹³⁷ Cs	8.2E-02 \pm 1.9E-02	
	¹⁵² Eu	6.3E-03 \pm 2.7E-02	U		¹⁵² Eu	3.7E-02 \pm 2.1E-02	U
	¹⁵⁴ Eu	-4.5E-02 \pm 4.5E-02	U		¹⁵⁴ Eu	-5.2E-03 \pm 2.6E-02	U
	¹⁵⁵ Eu	4.0E-02 \pm 4.2E-02	U		¹⁵⁵ Eu	6.4E-02 \pm 4.2E-02	U
	²³⁸ Pu	2.0E-03 \pm 2.0E-02	U		²³⁸ Pu	-4.2E-03 \pm 3.5E-02	U
	^{239/240} Pu	1.2E-02 \pm 1.3E-02	U		^{239/240} Pu	4.2E-03 \pm 1.0E-02	U
	¹⁰³ Ru	-4.9E-03 \pm 7.6E-03	U		¹⁰³ Ru	5.6E-03 \pm 7.3E-03	U
	¹⁰⁶ Ru	-1.9E-02 \pm 7.3E-02	U		¹⁰⁶ Ru	2.3E-02 \pm 6.9E-02	U
	¹²⁵ Sb	1.2E-02 \pm 2.1E-02	U		¹²⁵ Sb	-5.8E-03 \pm 2.1E-02	U
	¹¹³ Sn	-2.9E-03 \pm 9.9E-03	U		¹¹³ Sn	5.0E-03 \pm 9.5E-03	U
	⁹⁰ Sr	-4.5E-01 \pm 4.5E-01	U		⁹⁰ Sr	3.4E-01 \pm 4.1E-01	U
	²³⁴ U	1.7E-01 \pm 5.9E-02			²³⁴ U	1.7E-01 \pm 5.9E-02	
	²³⁵ U	1.5E-02 \pm 1.3E-02			²³⁵ U	1.9E-02 \pm 1.4E-02	
	²³⁸ U	1.4E-01 \pm 5.0E-02			²³⁸ U	1.8E-01 \pm 6.1E-02	
	⁶⁵ Zn	2.8E-02 \pm 2.4E-02	U		⁶⁵ Zn	2.0E-02 \pm 2.2E-02	U
D165 (100-B/C)	¹⁴⁴ Ce	6.6E-03 \pm 6.6E-02	U	D147 (100-D)	¹⁴⁴ Ce	-2.2E-02 \pm 8.7E-02	U
	⁶⁰ Co	-6.8E-04 \pm 6.8E-03	U		⁶⁰ Co	-2.7E-03 \pm 4.6E-03	U
	¹³⁴ Cs	3.9E-02 \pm 1.3E-02	U		¹³⁴ Cs	2.4E-02 \pm 7.2E-03	
	¹³⁷ Cs	1.2E-01 \pm 2.4E-02			¹³⁷ Cs	1.9E-01 \pm 3.1E-02	
	¹⁵² Eu	-1.0E-02 \pm 2.5E-02	U		¹⁵² Eu	2.7E-02 \pm 1.8E-02	
	¹⁵⁴ Eu	4.2E-03 \pm 2.1E-02	U		¹⁵⁴ Eu	-2.0E-02 \pm 2.0E-02	U
	¹⁵⁵ Eu	4.0E-02 \pm 3.5E-02	U		¹⁵⁵ Eu	6.8E-03 \pm 2.1E-02	U
	²³⁸ Pu	-2.8E-02 \pm 3.1E-02	U		²³⁸ Pu	4.3E-03 \pm 3.5E-02	U
	^{239/240} Pu	2.0E-03 \pm 9.0E-03	U		^{239/240} Pu	1.3E-02 \pm 1.3E-02	U
	¹⁰³ Ru	6.8E-04 \pm 6.3E-03	U		¹⁰³ Ru	2.1E-03 \pm 5.8E-03	U
	¹⁰⁶ Ru	-1.0E-02 \pm 6.1E-02	U		¹⁰⁶ Ru	4.7E-03 \pm 4.2E-02	U
	¹²⁵ Sb	-8.9E-03 \pm 1.9E-02	U		¹²⁵ Sb	4.2E-03 \pm 1.4E-02	U
	¹¹³ Sn	-1.4E-02 \pm 1.4E-02	U		¹¹³ Sn	-2.4E-03 \pm 6.8E-03	U
	⁹⁰ Sr	-3.9E-01 \pm 3.9E-01	U		⁹⁰ Sr	-1.2E-01 \pm 4.0E-01	U
	²³⁴ U	1.3E-01 \pm 4.7E-02			²³⁴ U	1.6E-01 \pm 5.9E-02	
	²³⁵ U	2.1E-02 \pm 1.4E-02			²³⁵ U	5.6E-03 \pm 1.8E-02	U
	²³⁸ U	1.0E-01 \pm 3.8E-02			²³⁸ U	1.4E-01 \pm 5.3E-02	
	⁶⁵ Zn	-5.5E-04 \pm 5.5E-03	U		⁶⁵ Zn	-7.4E-03 \pm 1.3E-02	U

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

Table 3-4. 2008 Soil Sampling Results (pCi/g \pm total analytical uncertainty). (Sheet 2 of 24)

Location	Isotope	Result \pm Error	RQ*	Location	Isotope	Result \pm Error	RQ*
D171 (100-D)	¹⁴⁴ Ce	7.3E-02 \pm 2.0E-01	U	D172 (100-D)	¹⁴⁴ Ce	-1.5E-02 \pm 1.5E-01	U
	⁶⁰ Co	-3.4E-03 \pm 1.1E-02	U		⁶⁰ Co	-1.3E-03 \pm 8.2E-03	U
	¹³⁴ Cs	2.4E-02 \pm 1.9E-02	U		¹³⁴ Cs	3.6E-02 \pm 1.5E-02	
	¹³⁷ Cs	4.4E-01 \pm 7.2E-02			¹³⁷ Cs	1.4E-01 \pm 3.0E-02	
	¹⁵² Eu	6.2E-02 \pm 5.1E-02			¹⁵² Eu	-1.5E-02 \pm 3.2E-02	U
	¹⁵⁴ Eu	-2.8E-02 \pm 4.3E-02	U		¹⁵⁴ Eu	-3.1E-02 \pm 3.1E-02	U
	¹⁵⁵ Eu	4.0E-02 \pm 4.8E-02	U		¹⁵⁵ Eu	-2.4E-05 \pm 2.4E-04	U
	²³⁸ Pu	-6.4E-03 \pm 3.2E-02	U		²³⁸ Pu	1.7E-02 \pm 3.2E-02	U
	^{239/240} Pu	6.4E-03 \pm 1.1E-02	U		^{239/240} Pu	8.3E-03 \pm 1.2E-02	U
	¹⁰³ Ru	5.4E-03 \pm 1.5E-02	U		¹⁰³ Ru	2.2E-03 \pm 9.3E-03	U
	¹⁰⁶ Ru	2.8E-02 \pm 1.1E-01	U		¹⁰⁶ Ru	4.0E-02 \pm 7.3E-02	U
	¹²⁵ Sb	3.4E-02 \pm 3.4E-02	U		¹²⁵ Sb	1.9E-02 \pm 2.6E-02	U
	¹¹³ Sn	1.6E-02 \pm 1.9E-02	U		¹¹³ Sn	-7.1E-03 \pm 1.1E-02	U
	⁹⁰ Sr	1.1E-02 \pm 1.1E-01	U		⁹⁰ Sr	-4.7E-01 \pm 4.7E-01	U
	²³⁴ U	1.5E-01 \pm 5.6E-02			²³⁴ U	1.2E-01 \pm 4.6E-02	
	²³⁵ U	1.5E-02 \pm 1.4E-02			²³⁵ U	1.3E-02 \pm 1.2E-02	
	²³⁸ U	1.2E-01 \pm 4.8E-02			²³⁸ U	1.2E-01 \pm 4.6E-02	
	⁶⁵ Zn	1.8E-03 \pm 1.8E-02	U		⁶⁵ Zn	6.3E-03 \pm 2.2E-02	U
D173 (100-D)	¹⁴⁴ Ce	1.0E-02 \pm 1.0E-01	U	D154 (100-F)	¹⁴⁴ Ce	2.1E-02 \pm 2.0E-01	U
	⁶⁰ Co	-1.0E-03 \pm 5.5E-03	U		⁶⁰ Co	-4.3E-03 \pm 9.1E-03	U
	¹³⁴ Cs	3.4E-02 \pm 1.2E-02			¹³⁴ Cs	5.7E-02 \pm 1.9E-02	
	¹³⁷ Cs	6.3E-02 \pm 1.3E-02			¹³⁷ Cs	1.3E-01 \pm 3.3E-02	
	¹⁵² Eu	3.8E-03 \pm 2.2E-02	U		¹⁵² Eu	-1.2E-02 \pm 4.4E-02	U
	¹⁵⁴ Eu	-2.0E-04 \pm 2.0E-03	U		¹⁵⁴ Eu	-2.4E-02 \pm 2.7E-02	U
	¹⁵⁵ Eu	4.0E-02 \pm 3.6E-02	U		¹⁵⁵ Eu	8.9E-02 \pm 6.4E-02	
	²³⁸ Pu	-2.3E-02 \pm 3.4E-02	U		²³⁸ Pu	-1.1E-02 \pm 4.8E-02	U
	^{239/240} Pu	4.2E-03 \pm 6.0E-03	U		^{239/240} Pu	5.6E-03 \pm 1.1E-02	U
	¹⁰³ Ru	-3.8E-03 \pm 6.1E-03	U		¹⁰³ Ru	7.1E-03 \pm 9.6E-03	U
	¹⁰⁶ Ru	5.2E-02 \pm 4.9E-02	U		¹⁰⁶ Ru	-7.6E-04 \pm 7.6E-03	U
	¹²⁵ Sb	-2.3E-03 \pm 1.6E-02	U		¹²⁵ Sb	-1.4E-02 \pm 2.8E-02	U
	¹¹³ Sn	-2.6E-03 \pm 7.6E-03	U		¹¹³ Sn	-1.2E-03 \pm 1.2E-02	U
	⁹⁰ Sr	-4.7E-01 \pm 4.7E-01	U		⁹⁰ Sr	-1.9E-01 \pm 3.9E-01	U
	²³⁴ U	1.1E-01 \pm 4.4E-02			²³⁴ U	3.1E-01 \pm 8.1E-02	
	²³⁵ U	1.2E-02 \pm 1.1E-02			²³⁵ U	2.2E-03 \pm 4.4E-03	U
	²³⁸ U	8.8E-02 \pm 3.7E-02			²³⁸ U	2.0E-01 \pm 5.8E-02	
	⁶⁵ Zn	5.6E-03 \pm 1.3E-02	U		⁶⁵ Zn	-5.6E-03 \pm 2.4E-02	U

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

Table 3-4. 2008 Soil Sampling Results (pCi/g \pm total analytical uncertainty). (Sheet 3 of 24)

Location	Isotope	Result \pm Error	RQ*	Location	Isotope	Result \pm Error	RQ*
D155 (100-F)	¹⁴⁴ Ce	-9.4E-02 \pm 1.8E-01	U	D168 (100-F)	¹⁴⁴ Ce	2.1E-02 \pm 1.2E-01	U
	⁶⁰ Co	1.3E-02 \pm 9.6E-03	U		⁶⁰ Co	-2.5E-03 \pm 7.0E-03	U
	¹³⁴ Cs	4.1E-02 \pm 1.5E-02			¹³⁴ Cs	3.1E-02 \pm 1.2E-02	
	¹³⁷ Cs	3.2E-01 \pm 6.1E-02			¹³⁷ Cs	6.7E-02 \pm 1.9E-02	
	¹⁵² Eu	1.7E-01 \pm 3.1E-02			¹⁵² Eu	1.8E-02 \pm 2.4E-02	U
	¹⁵⁴ Eu	2.8E-02 \pm 3.3E-02	U		¹⁵⁴ Eu	1.9E-02 \pm 2.6E-02	U
	¹⁵⁵ Eu	4.7E-02 \pm 4.7E-02	U		¹⁵⁵ Eu	3.0E-02 \pm 3.0E-02	U
	²³⁸ Pu	1.8E-03 \pm 1.8E-02	U		²³⁸ Pu	2.4E-02 \pm 4.2E-02	U
	^{239/240} Pu	8.9E-03 \pm 9.7E-03	U		^{239/240} Pu	2.2E-03 \pm 1.5E-02	U
	¹⁰³ Ru	-4.4E-03 \pm 8.5E-03	U		¹⁰³ Ru	-6.6E-04 \pm 6.3E-03	U
	¹⁰⁶ Ru	-3.4E-02 \pm 7.9E-02	U		¹⁰⁶ Ru	-5.6E-02 \pm 6.3E-02	U
	¹²⁵ Sb	-1.1E-02 \pm 2.4E-02	U		¹²⁵ Sb	-6.5E-04 \pm 6.5E-03	U
	¹¹³ Sn	-5.0E-03 \pm 1.1E-02	U		¹¹³ Sn	-1.6E-03 \pm 8.8E-03	U
	⁹⁰ Sr	-2.8E-01 \pm 4.1E-01	U		⁹⁰ Sr	-7.6E-01 \pm 7.6E-01	U
	²³⁴ U	1.1E-01 \pm 3.6E-02			²³⁴ U	1.4E-01 \pm 4.3E-02	
	²³⁵ U	1.0E-02 \pm 9.2E-03			²³⁵ U	1.1E-02 \pm 1.0E-02	
	²³⁸ U	7.0E-02 \pm 2.7E-02			²³⁸ U	1.1E-01 \pm 3.7E-02	
	⁶⁵ Zn	6.5E-02 \pm 3.6E-02			⁶⁵ Zn	1.2E-03 \pm 1.2E-02	U
D169 (100-F)	¹⁴⁴ Ce	-2.9E-03 \pm 2.9E-02	U	D170 (100-F)	¹⁴⁴ Ce	3.4E-03 \pm 3.4E-02	U
	⁶⁰ Co	-2.7E-03 \pm 7.6E-03	U		⁶⁰ Co	-1.4E-02 \pm 1.4E-02	U
	¹³⁴ Cs	2.9E-02 \pm 1.1E-02			¹³⁴ Cs	5.5E-02 \pm 2.3E-02	
	¹³⁷ Cs	4.5E-02 \pm 1.4E-02			¹³⁷ Cs	4.8E-02 \pm 2.1E-02	
	¹⁵² Eu	-1.6E-02 \pm 2.2E-02	U		¹⁵² Eu	-2.6E-02 \pm 4.9E-02	U
	¹⁵⁴ Eu	1.8E-02 \pm 2.8E-02	U		¹⁵⁴ Eu	-2.8E-02 \pm 4.1E-02	U
	¹⁵⁵ Eu	5.3E-02 \pm 3.6E-02			¹⁵⁵ Eu	6.1E-02 \pm 5.3E-02	U
	²³⁸ Pu	8.1E-03 \pm 3.0E-02	U		²³⁸ Pu	-2.8E-02 \pm 3.8E-02	U
	^{239/240} Pu	8.1E-03 \pm 1.0E-02	U		^{239/240} Pu	2.4E-03 \pm 2.4E-02	U
	¹⁰³ Ru	2.1E-03 \pm 6.5E-03	U		¹⁰³ Ru	-6.8E-03 \pm 1.2E-02	U
	¹⁰⁶ Ru	-1.0E-02 \pm 6.2E-02	U		¹⁰⁶ Ru	1.1E-01 \pm 1.2E-01	U
	¹²⁵ Sb	-6.9E-03 \pm 1.8E-02	U		¹²⁵ Sb	-4.9E-03 \pm 3.5E-02	U
	¹¹³ Sn	-4.6E-03 \pm 8.6E-03	U		¹¹³ Sn	1.7E-02 \pm 1.8E-02	U
	⁹⁰ Sr	1.8E-01 \pm 3.9E-01	U		⁹⁰ Sr	1.4E-01 \pm 4.3E-01	U
	²³⁴ U	1.0E-01 \pm 3.7E-02			²³⁴ U	1.5E-01 \pm 4.7E-02	
	²³⁵ U	1.3E-02 \pm 1.0E-02			²³⁵ U	4.8E-03 \pm 6.9E-03	U
	²³⁸ U	8.6E-02 \pm 3.3E-02			²³⁸ U	1.0E-01 \pm 3.5E-02	
	⁶⁵ Zn	7.6E-03 \pm 2.1E-02	U		⁶⁵ Zn	-1.1E-03 \pm 1.1E-02	U

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

Table 3-4. 2008 Soil Sampling Results (pCi/g \pm total analytical uncertainty). (Sheet 4 of 24)

Location	Isotope	Result \pm Error	RQ*	Location	Isotope	Result \pm Error	RQ*
D152 (100-H)	¹⁴⁴ Ce	-1.8E-02 \pm 1.2E-01	U	D176 (100-H)	¹⁴⁴ Ce	6.4E-02 \pm 1.7E-01	U
	⁶⁰ Co	4.4E-03 \pm 5.9E-03	U		⁶⁰ Co	6.5E-04 \pm 6.5E-03	U
	¹³⁴ Cs	2.0E-02 \pm 9.8E-03			¹³⁴ Cs	2.8E-02 \pm 1.3E-02	
	¹³⁷ Cs	3.7E-01 \pm 6.1E-02			¹³⁷ Cs	7.9E-01 \pm 1.4E-01	
	¹⁵² Eu	7.7E-02 \pm 2.9E-02			¹⁵² Eu	1.2E-02 \pm 3.6E-02	U
	¹⁵⁴ Eu	2.5E-02 \pm 2.2E-02	U		¹⁵⁴ Eu	-8.3E-03 \pm 2.7E-02	U
	¹⁵⁵ Eu	9.8E-03 \pm 2.8E-02	U		¹⁵⁵ Eu	4.3E-02 \pm 4.7E-02	U
	²³⁸ Pu	2.0E-03 \pm 2.0E-02	U		²³⁸ Pu	-4.4E-03 \pm 3.4E-02	U
	^{239/240} Pu	1.0E-02 \pm 1.2E-02	U		^{239/240} Pu	2.9E-02 \pm 2.3E-02	U
	¹⁰³ Ru	1.7E-03 \pm 5.9E-03	U		¹⁰³ Ru	-2.4E-03 \pm 9.3E-03	U
	¹⁰⁶ Ru	3.6E-02 \pm 5.0E-02	U		¹⁰⁶ Ru	1.8E-02 \pm 7.2E-02	U
	¹²⁵ Sb	1.1E-02 \pm 1.8E-02	U		¹²⁵ Sb	1.7E-02 \pm 2.4E-02	U
	¹¹³ Sn	-4.8E-03 \pm 8.0E-03	U		¹¹³ Sn	1.2E-03 \pm 1.1E-02	U
	⁹⁰ Sr	-4.6E-01 \pm 4.7E-01	U		⁹⁰ Sr	-6.7E-01 \pm 6.7E-01	U
	²³⁴ U	1.4E-01 \pm 4.9E-02			²³⁴ U	1.2E-01 \pm 4.3E-02	
	²³⁵ U	8.0E-03 \pm 1.2E-02	U		²³⁵ U	4.4E-03 \pm 8.9E-03	U
	²³⁸ U	1.2E-01 \pm 4.3E-02			²³⁸ U	1.2E-01 \pm 4.4E-02	
	⁶⁵ Zn	-3.2E-02 \pm 3.2E-02	U		⁶⁵ Zn	-5.3E-03 \pm 2.1E-02	U
D177 (100-H)	¹⁴⁴ Ce	1.1E-01 \pm 1.3E-01	U	D178 (100-H)	¹⁴⁴ Ce	-2.6E-02 \pm 1.1E-01	U
	⁶⁰ Co	-2.0E-03 \pm 8.3E-03	U		⁶⁰ Co	1.6E-03 \pm 7.3E-03	U
	¹³⁴ Cs	2.1E-02 \pm 1.1E-02			¹³⁴ Cs	3.4E-02 \pm 1.0E-02	
	¹³⁷ Cs	2.1E-02 \pm 1.3E-02			¹³⁷ Cs	3.8E-02 \pm 1.2E-02	
	¹⁵² Eu	6.3E-03 \pm 2.8E-02	U		¹⁵² Eu	1.5E-02 \pm 2.1E-02	U
	¹⁵⁴ Eu	-1.5E-02 \pm 3.0E-02	U		¹⁵⁴ Eu	-3.6E-03 \pm 2.4E-02	U
	¹⁵⁵ Eu	4.4E-02 \pm 4.0E-02	U		¹⁵⁵ Eu	2.0E-02 \pm 2.8E-02	U
	²³⁸ Pu	-3.0E-02 \pm 3.2E-02	U		²³⁸ Pu	1.0E-02 \pm 2.6E-02	U
	^{239/240} Pu	1.1E-02 \pm 1.2E-02	U		^{239/240} Pu	6.0E-03 \pm 7.1E-03	
	¹⁰³ Ru	-3.8E-03 \pm 8.1E-03	U		¹⁰³ Ru	1.1E-02 \pm 7.7E-03	U
	¹⁰⁶ Ru	-2.3E-02 \pm 7.0E-02	U		¹⁰⁶ Ru	-3.6E-02 \pm 6.1E-02	U
	¹²⁵ Sb	1.4E-02 \pm 2.0E-02	U		¹²⁵ Sb	5.4E-03 \pm 1.8E-02	U
	¹¹³ Sn	-5.0E-03 \pm 1.0E-02	U		¹¹³ Sn	-1.1E-02 \pm 1.1E-02	U
	⁹⁰ Sr	-9.7E-01 \pm 9.7E-01	U		⁹⁰ Sr	-1.3E+00 \pm 1.3E+00	U
	²³⁴ U	1.2E-01 \pm 4.3E-02			²³⁴ U	1.5E-01 \pm 5.1E-02	
	²³⁵ U	1.4E-02 \pm 1.1E-02			²³⁵ U	2.2E-02 \pm 1.5E-02	
	²³⁸ U	9.6E-02 \pm 3.6E-02			²³⁸ U	2.1E-01 \pm 6.7E-02	
	⁶⁵ Zn	3.5E-02 \pm 2.3E-02	U		⁶⁵ Zn	4.4E-03 \pm 3.2E-02	U

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

Table 3-4. 2008 Soil Sampling Results (pCi/g \pm total analytical uncertainty). (Sheet 5 of 24)

Location	Isotope	Result \pm Error	RQ*	Location	Isotope	Result \pm Error	RQ*
D002 (200-W)	¹⁴⁴ Ce	-1.2E-01 \pm 1.6E-01	U	D004 (200-W)	¹⁴⁴ Ce	5.4E-03 \pm 5.4E-02	U
	⁶⁰ Co	-7.3E-03 \pm 8.2E-03	U		⁶⁰ Co	-1.9E-03 \pm 8.7E-03	U
	¹³⁴ Cs	2.7E-02 \pm 1.1E-02			¹³⁴ Cs	4.7E-02 \pm 1.7E-02	
	¹³⁷ Cs	1.1E-01 \pm 2.2E-02			¹³⁷ Cs	3.5E+00 \pm 5.6E-01	
	¹⁵² Eu	-3.9E-02 \pm 3.9E-02	U		¹⁵² Eu	-1.4E-02 \pm 3.1E-02	U
	¹⁵⁴ Eu	-3.0E-02 \pm 3.0E-02	U		¹⁵⁴ Eu	-3.4E-03 \pm 2.8E-02	U
	¹⁵⁵ Eu	2.2E-02 \pm 3.6E-02	U		¹⁵⁵ Eu	3.3E-02 \pm 3.7E-02	U
	²³⁸ Pu	4.2E-02 \pm 3.6E-02	U		²³⁸ Pu	-1.9E-02 \pm 5.2E-02	U
	^{239/240} Pu	2.5E-02 \pm 1.8E-02			^{239/240} Pu	1.3E-02 \pm 2.3E-02	U
	¹⁰³ Ru	4.1E-04 \pm 4.1E-03	U		¹⁰³ Ru	1.2E-02 \pm 1.5E-02	U
	¹⁰⁶ Ru	-4.1E-03 \pm 4.1E-02	U		¹⁰⁶ Ru	-5.1E-02 \pm 8.5E-02	U
	¹²⁵ Sb	-5.7E-03 \pm 2.2E-02	U		¹²⁵ Sb	-3.8E-03 \pm 3.0E-02	U
	¹¹³ Sn	-3.8E-04 \pm 3.7E-03	U		¹¹³ Sn	-1.9E-03 \pm 1.5E-02	U
	⁹⁰ Sr	-5.2E-01 \pm 5.2E-01	U		⁹⁰ Sr	-3.5E-01 \pm 4.2E-01	U
	²³⁴ U	1.8E-01 \pm 6.7E-02			²³⁴ U	1.2E-01 \pm 4.8E-02	
	²³⁵ U	1.3E-02 \pm 1.6E-02	U		²³⁵ U	1.2E-02 \pm 1.2E-02	
	²³⁸ U	1.7E-01 \pm 6.3E-02			²³⁸ U	1.4E-01 \pm 5.3E-02	
	⁶⁵ Zn	3.3E-02 \pm 2.4E-02	U		⁶⁵ Zn	-7.7E-04 \pm 7.7E-03	U
D006 (200-W)	¹⁴⁴ Ce	-4.0E-02 \pm 1.3E-01	U	D008 (200-W)	¹⁴⁴ Ce	-1.5E-02 \pm 1.5E-01	U
	⁶⁰ Co	2.3E-03 \pm 5.4E-03	U		⁶⁰ Co	1.6E-03 \pm 7.0E-03	U
	¹³⁴ Cs	3.5E-02 \pm 1.5E-02			¹³⁴ Cs	2.2E-02 \pm 1.6E-02	
	¹³⁷ Cs	8.8E-02 \pm 1.9E-02			¹³⁷ Cs	1.7E-01 \pm 3.5E-02	
	¹⁵² Eu	-2.6E-02 \pm 2.6E-02	U		¹⁵² Eu	-1.6E-02 \pm 3.3E-02	U
	¹⁵⁴ Eu	-3.0E-03 \pm 2.1E-02	U		¹⁵⁴ Eu	-7.7E-03 \pm 2.7E-02	U
	¹⁵⁵ Eu	5.9E-02 \pm 4.1E-02			¹⁵⁵ Eu	4.3E-02 \pm 3.7E-02	U
	²³⁸ Pu	2.2E-03 \pm 1.6E-02	U		²³⁸ Pu	4.6E-02 \pm 3.5E-02	U
	^{239/240} Pu	1.3E-02 \pm 1.1E-02			^{239/240} Pu	2.4E+00 \pm 6.2E-01	
	¹⁰³ Ru	-3.8E-03 \pm 8.1E-03	U		¹⁰³ Ru	1.5E-03 \pm 9.6E-03	U
	¹⁰⁶ Ru	1.8E-02 \pm 5.4E-02	U		¹⁰⁶ Ru	-1.8E-02 \pm 6.5E-02	U
	¹²⁵ Sb	-7.8E-03 \pm 1.7E-02	U		¹²⁵ Sb	2.3E-03 \pm 2.0E-02	U
	¹¹³ Sn	2.9E-03 \pm 8.5E-03	U		¹¹³ Sn	-6.5E-03 \pm 1.1E-02	U
	⁹⁰ Sr	-5.6E-01 \pm 5.6E-01	U		⁹⁰ Sr	-5.9E-01 \pm 5.9E-01	U
	²³⁴ U	1.5E-01 \pm 5.3E-02			²³⁴ U	1.0E-01 \pm 4.2E-02	
	²³⁵ U	7.1E-03 \pm 8.4E-03			²³⁵ U	1.1E-02 \pm 1.1E-02	
	²³⁸ U	1.5E-01 \pm 5.3E-02			²³⁸ U	1.1E-01 \pm 4.4E-02	
	⁶⁵ Zn	-1.1E-02 \pm 1.6E-02	U		⁶⁵ Zn	1.0E-02 \pm 2.0E-02	U

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

Table 3-4. 2008 Soil Sampling Results (pCi/g \pm total analytical uncertainty). (Sheet 6 of 24)

Location	Isotope	Result \pm Error	RQ*	Location	Isotope	Result \pm Error	RQ*
D010 (200-W)	¹⁴⁴ Ce	9.2E-02 \pm 2.2E-01	U	D012 (200-W)	¹⁴⁴ Ce	8.7E-03 \pm 8.7E-02	U
	⁶⁰ Co	-3.6E-03 \pm 1.2E-02	U		⁶⁰ Co	8.2E-03 \pm 6.9E-03	U
	¹³⁴ Cs	4.9E-02 \pm 2.6E-02			¹³⁴ Cs	4.1E-02 \pm 1.6E-02	
	¹³⁷ Cs	2.3E+00 \pm 3.5E-01			¹³⁷ Cs	2.2E+00 \pm 3.5E-01	
	¹⁵² Eu	-2.6E-02 \pm 5.6E-02	U		¹⁵² Eu	-8.7E-03 \pm 2.8E-02	U
	¹⁵⁴ Eu	3.7E-03 \pm 3.7E-02	U		¹⁵⁴ Eu	7.3E-03 \pm 2.2E-02	U
	¹⁵⁵ Eu	6.0E-02 \pm 4.9E-02	U		¹⁵⁵ Eu	6.4E-02 \pm 4.7E-02	
	²³⁸ Pu	1.1E-02 \pm 4.0E-02	U		²³⁸ Pu	-2.0E-02 \pm 5.4E-02	U
	^{239/240} Pu	8.4E-01 \pm 2.4E-01			^{239/240} Pu	4.2E-02 \pm 3.3E-02	U
	¹⁰³ Ru	-1.8E-02 \pm 2.0E-02	U		¹⁰³ Ru	2.9E-03 \pm 1.2E-02	U
	¹⁰⁶ Ru	2.0E-02 \pm 1.2E-01	U		¹⁰⁶ Ru	-1.9E-04 \pm 1.9E-03	U
	¹²⁵ Sb	-1.9E-02 \pm 4.2E-02	U		¹²⁵ Sb	-1.1E-02 \pm 2.6E-02	U
	¹¹³ Sn	-6.6E-03 \pm 2.1E-02	U		¹¹³ Sn	-9.5E-03 \pm 1.3E-02	U
	⁹⁰ Sr	-6.1E-01 \pm 6.1E-01	U		⁹⁰ Sr	-4.3E-01 \pm 4.3E-01	U
	²³⁴ U	1.1E-01 \pm 5.1E-02			²³⁴ U	1.2E-01 \pm 5.2E-02	
	²³⁵ U	7.2E-03 \pm 1.0E-02	U		²³⁵ U	3.2E-02 \pm 2.3E-02	
	²³⁸ U	1.2E-01 \pm 5.3E-02			²³⁸ U	1.7E-01 \pm 6.5E-02	
	⁶⁵ Zn	-2.7E-02 \pm 3.4E-02	U		⁶⁵ Zn	-2.4E-03 \pm 2.0E-02	U
D014 (200-W)	¹⁴⁴ Ce	2.6E-02 \pm 1.3E-01	U	D016 (200-W)	¹⁴⁴ Ce	7.5E-02 \pm 1.5E-01	U
	⁶⁰ Co	-2.6E-03 \pm 6.4E-03	U		⁶⁰ Co	3.1E-06 \pm 3.1E-05	U
	¹³⁴ Cs	3.6E-02 \pm 1.2E-02			¹³⁴ Cs	3.1E-02 \pm 1.1E-02	
	¹³⁷ Cs	4.2E-02 \pm 1.3E-02			¹³⁷ Cs	4.3E-01 \pm 8.1E-02	
	¹⁵² Eu	6.9E-03 \pm 2.3E-02	U		¹⁵² Eu	2.3E-02 \pm 3.9E-02	U
	¹⁵⁴ Eu	3.9E-03 \pm 2.3E-02	U		¹⁵⁴ Eu	4.3E-03 \pm 2.6E-02	U
	¹⁵⁵ Eu	6.3E-03 \pm 3.1E-02	U		¹⁵⁵ Eu	3.2E-02 \pm 3.5E-02	U
	²³⁸ Pu	1.2E-02 \pm 3.3E-02	U		²³⁸ Pu	2.3E-02 \pm 2.7E-02	U
	^{239/240} Pu	-5.9E-03 \pm 1.1E-02	U		^{239/240} Pu	9.2E-03 \pm 1.3E-02	U
	¹⁰³ Ru	2.2E-03 \pm 8.5E-03	U		¹⁰³ Ru	-4.3E-03 \pm 9.9E-03	U
	¹⁰⁶ Ru	8.3E-02 \pm 5.9E-02	U		¹⁰⁶ Ru	3.8E-03 \pm 3.8E-02	U
	¹²⁵ Sb	7.5E-03 \pm 1.7E-02	U		¹²⁵ Sb	-9.2E-03 \pm 2.0E-02	U
	¹¹³ Sn	-4.9E-03 \pm 9.0E-03	U		¹¹³ Sn	-8.5E-03 \pm 1.1E-02	U
	⁹⁰ Sr	-3.5E-01 \pm 3.9E-01	U		⁹⁰ Sr	3.7E-01 \pm 4.5E-01	U
	²³⁴ U	1.5E-01 \pm 5.1E-02			²³⁴ U	1.3E-01 \pm 4.9E-02	
	²³⁵ U	1.7E-02 \pm 1.4E-02			²³⁵ U	-2.6E-03 \pm 2.6E-03	U
	²³⁸ U	1.4E-01 \pm 4.9E-02			²³⁸ U	1.3E-01 \pm 4.9E-02	
	⁶⁵ Zn	-7.4E-04 \pm 7.4E-03	U		⁶⁵ Zn	2.4E-02 \pm 2.0E-02	U

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

Table 3-4. 2008 Soil Sampling Results (pCi/g \pm total analytical uncertainty). (Sheet 7 of 24)

Location	Isotope	Result \pm Error	RQ*	Location	Isotope	Result \pm Error	RQ*
D018 (200-W)	¹⁴⁴ Ce	1.1E-01 \pm 1.9E-01	U	D020 (200-W)	¹⁴⁴ Ce	7.0E-02 \pm 1.7E-01	U
	⁶⁰ Co	-1.3E-04 \pm 1.3E-03	U		⁶⁰ Co	8.1E-03 \pm 9.3E-03	U
	¹³⁴ Cs	3.1E-02 \pm 2.1E-02			¹³⁴ Cs	4.2E-02 \pm 1.3E-02	
	¹³⁷ Cs	4.2E-01 \pm 6.9E-02			¹³⁷ Cs	3.4E-01 \pm 6.7E-02	
	¹⁵² Eu	-1.1E-02 \pm 4.3E-02	U		¹⁵² Eu	9.2E-03 \pm 4.8E-02	U
	¹⁵⁴ Eu	-1.2E-02 \pm 3.4E-02	U		¹⁵⁴ Eu	1.2E-02 \pm 3.1E-02	U
	¹⁵⁵ Eu	4.5E-02 \pm 5.2E-02	U		¹⁵⁵ Eu	2.8E-02 \pm 4.2E-02	U
	²³⁸ Pu	-4.4E-03 \pm 3.1E-02	U		²³⁸ Pu	1.7E-03 \pm 5.9E-03	U
	^{239/240} Pu	6.7E-03 \pm 7.9E-03			^{239/240} Pu	1.9E-02 \pm 1.2E-02	
	¹⁰³ Ru	4.7E-03 \pm 1.6E-02	U		¹⁰³ Ru	-1.1E-03 \pm 1.0E-02	U
	¹⁰⁶ Ru	3.9E-02 \pm 1.0E-01	U		¹⁰⁶ Ru	2.1E-02 \pm 7.6E-02	U
	¹²⁵ Sb	2.9E-03 \pm 2.9E-02	U		¹²⁵ Sb	1.2E-02 \pm 2.4E-02	U
	¹¹³ Sn	-1.2E-02 \pm 1.6E-02	U		¹¹³ Sn	3.8E-03 \pm 1.2E-02	U
	⁹⁰ Sr	-4.2E-01 \pm 4.2E-01	U		⁹⁰ Sr	-6.8E-01 \pm 6.8E-01	U
	²³⁴ U	1.3E-01 \pm 4.8E-02			²³⁴ U	1.3E-01 \pm 4.7E-02	
	²³⁵ U	-2.4E-03 \pm 4.8E-03	U		²³⁵ U	4.2E-03 \pm 1.0E-02	U
	²³⁸ U	1.2E-01 \pm 4.6E-02			²³⁸ U	1.2E-01 \pm 4.3E-02	
	⁶⁵ Zn	1.9E-02 \pm 3.1E-02	U		⁶⁵ Zn	1.3E-02 \pm 2.4E-02	U
D022 (200-W)	¹⁴⁴ Ce	-3.6E-03 \pm 3.6E-02	U	D024 (200-W)	¹⁴⁴ Ce	-1.6E-01 \pm 1.6E-01	U
	⁶⁰ Co	9.1E-03 \pm 5.1E-03			⁶⁰ Co	-1.6E-03 \pm 8.5E-03	U
	¹³⁴ Cs	1.6E-02 \pm 4.8E-03			¹³⁴ Cs	5.5E-02 \pm 1.8E-02	
	¹³⁷ Cs	7.3E-01 \pm 1.2E-01			¹³⁷ Cs	5.4E-01 \pm 9.1E-02	
	¹⁵² Eu	-5.9E-03 \pm 1.0E-02	U		¹⁵² Eu	-1.3E-02 \pm 2.7E-02	U
	¹⁵⁴ Eu	-8.9E-03 \pm 1.2E-02	U		¹⁵⁴ Eu	-4.6E-03 \pm 3.0E-02	U
	¹⁵⁵ Eu	2.0E-02 \pm 1.5E-02			¹⁵⁵ Eu	5.8E-02 \pm 3.4E-02	U
	²³⁸ Pu	-1.1E-02 \pm 4.2E-02	U		²³⁸ Pu	1.8E-02 \pm 3.9E-02	U
	^{239/240} Pu	5.2E-02 \pm 2.8E-02			^{239/240} Pu	5.8E-02 \pm 2.7E-02	
	¹⁰³ Ru	-1.2E-03 \pm 4.2E-03	U		¹⁰³ Ru	-4.1E-03 \pm 1.1E-02	U
	¹⁰⁶ Ru	1.6E-02 \pm 2.9E-02	U		¹⁰⁶ Ru	-9.4E-02 \pm 9.4E-02	U
	¹²⁵ Sb	3.7E-04 \pm 3.7E-03	U		¹²⁵ Sb	1.6E-02 \pm 2.4E-02	U
	¹¹³ Sn	-2.3E-03 \pm 4.3E-03	U		¹¹³ Sn	-2.1E-02 \pm 2.1E-02	U
	⁹⁰ Sr	-1.7E-01 \pm 4.2E-01	U		⁹⁰ Sr	-6.9E-01 \pm 6.9E-01	U
	²³⁴ U	2.3E-01 \pm 7.6E-02			²³⁴ U	1.7E-01 \pm 5.8E-02	
	²³⁵ U	2.1E-02 \pm 1.6E-02			²³⁵ U	1.2E-02 \pm 1.1E-02	
	²³⁸ U	1.4E-01 \pm 5.0E-02			²³⁸ U	1.6E-01 \pm 5.4E-02	
	⁶⁵ Zn	1.9E-02 \pm 9.5E-03			⁶⁵ Zn	2.6E-03 \pm 2.5E-02	U

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

Table 3-4. 2008 Soil Sampling Results (pCi/g \pm total analytical uncertainty). (Sheet 8 of 24)

Location	Isotope	Result \pm Error	RQ*	Location	Isotope	Result \pm Error	RQ*
D026 (200-W)	¹⁴⁴ Ce	1.9E-03 \pm 1.9E-02	U	D028 (200-W)	¹⁴⁴ Ce	1.3E-03 \pm 1.3E-02	U
	⁶⁰ Co	-2.8E-03 \pm 7.0E-03	U		⁶⁰ Co	-4.4E-03 \pm 5.6E-03	U
	¹³⁴ Cs	4.9E-02 \pm 1.5E-02			¹³⁴ Cs	3.2E-02 \pm 1.1E-02	
	¹³⁷ Cs	2.0E+00 \pm 3.5E-01			¹³⁷ Cs	3.4E-01 \pm 5.6E-02	
	¹⁵² Eu	-2.8E-02 \pm 3.2E-02	U		¹⁵² Eu	-1.4E-02 \pm 2.0E-02	U
	¹⁵⁴ Eu	-2.1E-02 \pm 2.2E-02	U		¹⁵⁴ Eu	-1.5E-02 \pm 2.0E-02	U
	¹⁵⁵ Eu	1.7E-02 \pm 3.9E-02	U		¹⁵⁵ Eu	3.8E-02 \pm 3.9E-02	U
	²³⁸ Pu	1.4E-02 \pm 4.2E-02	U		²³⁸ Pu	2.1E-01 \pm 5.9E-02	
	^{239/240} Pu	6.2E-01 \pm 1.7E-01			^{239/240} Pu	1.0E+00 \pm 2.3E-01	
	¹⁰³ Ru	1.5E-03 \pm 9.4E-03	U		¹⁰³ Ru	1.1E-03 \pm 6.8E-03	U
	¹⁰⁶ Ru	-2.0E-02 \pm 7.0E-02	U		¹⁰⁶ Ru	-3.4E-02 \pm 5.2E-02	U
	¹²⁵ Sb	8.7E-03 \pm 2.5E-02	U		¹²⁵ Sb	6.7E-03 \pm 1.7E-02	U
	¹¹³ Sn	-4.2E-04 \pm 4.2E-03	U		¹¹³ Sn	-5.0E-03 \pm 8.2E-03	U
	⁹⁰ Sr	1.5E-01 \pm 4.5E-01	U		⁹⁰ Sr	-5.2E-02 \pm 4.4E-01	U
	²³⁴ U	1.8E-01 \pm 6.1E-02			²³⁴ U	1.4E-01 \pm 5.0E-02	
	²³⁵ U	9.7E-03 \pm 1.0E-02			²³⁵ U	4.7E-03 \pm 9.5E-03	U
	²³⁸ U	1.6E-01 \pm 5.6E-02			²³⁸ U	1.1E-01 \pm 4.3E-02	
	⁶⁵ Zn	-1.9E-02 \pm 1.9E-02	U		⁶⁵ Zn	7.8E-03 \pm 1.5E-02	U
D030 (200-W)	¹⁴⁴ Ce	1.8E-01 \pm 2.3E-01	U	D032 (200-W)	¹⁴⁴ Ce	-1.5E-02 \pm 1.2E-01	U
	⁶⁰ Co	3.5E-03 \pm 1.3E-02	U		⁶⁰ Co	3.3E-03 \pm 5.8E-03	U
	¹³⁴ Cs	4.1E-02 \pm 1.9E-02			¹³⁴ Cs	3.7E-02 \pm 1.2E-02	
	¹³⁷ Cs	4.1E-01 \pm 6.8E-02			¹³⁷ Cs	6.3E-01 \pm 1.0E-01	
	¹⁵² Eu	-2.6E-02 \pm 5.6E-02	U		¹⁵² Eu	1.0E-02 \pm 2.2E-02	U
	¹⁵⁴ Eu	-2.9E-02 \pm 4.4E-02	U		¹⁵⁴ Eu	-6.3E-03 \pm 1.9E-02	U
	¹⁵⁵ Eu	6.0E-02 \pm 5.9E-02	U		¹⁵⁵ Eu	3.2E-02 \pm 2.8E-02	U
	²³⁸ Pu	1.8E-03 \pm 1.8E-03	U		²³⁸ Pu	3.8E-02 \pm 1.8E-02	
	^{239/240} Pu	2.1E-02 \pm 1.3E-02			^{239/240} Pu	1.7E-01 \pm 4.9E-02	
	¹⁰³ Ru	6.4E-03 \pm 1.7E-02	U		¹⁰³ Ru	3.1E-03 \pm 7.2E-03	U
	¹⁰⁶ Ru	1.3E-01 \pm 1.3E-01	U		¹⁰⁶ Ru	-1.5E-02 \pm 5.4E-02	U
	¹²⁵ Sb	5.8E-03 \pm 4.0E-02	U		¹²⁵ Sb	-8.4E-03 \pm 1.8E-02	U
	¹¹³ Sn	6.3E-03 \pm 1.9E-02	U		¹¹³ Sn	-1.3E-02 \pm 1.3E-02	U
	⁹⁰ Sr	-2.1E-01 \pm 4.1E-01	U		⁹⁰ Sr	-7.9E-01 \pm 7.9E-01	U
	²³⁴ U	1.3E-01 \pm 4.7E-02			²³⁴ U	1.3E-01 \pm 4.9E-02	
	²³⁵ U	1.1E-02 \pm 1.0E-02			²³⁵ U	1.6E-02 \pm 1.6E-02	U
	²³⁸ U	1.7E-01 \pm 5.8E-02			²³⁸ U	1.3E-01 \pm 4.9E-02	
	⁶⁵ Zn	3.2E-02 \pm 3.6E-02	U		⁶⁵ Zn	2.3E-03 \pm 2.3E-02	U

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

Table 3-4. 2008 Soil Sampling Results (pCi/g \pm total analytical uncertainty). (Sheet 9 of 24)

Location	Isotope	Result \pm Error	RQ*	Location	Isotope	Result \pm Error	RQ*
D034 (200-W)	¹⁴⁴ Ce	-3.2E-02 \pm 1.6E-01	U	D038 (200-W)	¹⁴⁴ Ce	-1.4E-01 \pm 1.7E-01	U
	⁶⁰ Co	-4.8E-04 \pm 4.8E-03	U		⁶⁰ Co	-3.6E-03 \pm 8.3E-03	U
	¹³⁴ Cs	3.1E-02 \pm 1.2E-02			¹³⁴ Cs	4.5E-02 \pm 1.5E-02	
	¹³⁷ Cs	1.9E+00 \pm 3.1E-01			¹³⁷ Cs	3.7E-01 \pm 6.9E-02	
	¹⁵² Eu	-2.4E-02 \pm 3.3E-02	U		¹⁵² Eu	7.4E-03 \pm 3.9E-02	U
	¹⁵⁴ Eu	5.5E-04 \pm 5.5E-03	U		¹⁵⁴ Eu	-1.2E-02 \pm 3.2E-02	U
	¹⁵⁵ Eu	9.6E-02 \pm 5.6E-02			¹⁵⁵ Eu	2.3E-02 \pm 4.3E-02	U
	²³⁸ Pu	7.8E-02 \pm 3.1E-02			²³⁸ Pu	2.6E-02 \pm 2.7E-02	U
	^{239/240} Pu	8.1E-01 \pm 1.9E-01			^{239/240} Pu	4.0E-02 \pm 2.1E-02	
	¹⁰³ Ru	-2.7E-03 \pm 1.0E-02	U		¹⁰³ Ru	4.4E-03 \pm 9.1E-03	U
	¹⁰⁶ Ru	2.7E-02 \pm 7.9E-02	U		¹⁰⁶ Ru	2.3E-03 \pm 2.3E-02	U
	¹²⁵ Sb	-1.3E-02 \pm 2.7E-02	U		¹²⁵ Sb	-6.8E-03 \pm 2.7E-02	U
	¹¹³ Sn	-1.2E-02 \pm 1.2E-02	U		¹¹³ Sn	-1.4E-02 \pm 1.2E-02	U
	⁹⁰ Sr	-1.0E+00 \pm 1.0E+00	U		⁹⁰ Sr	-5.2E-01 \pm 5.2E-01	U
	²³⁴ U	1.3E-01 \pm 4.7E-02			²³⁴ U	1.6E-01 \pm 5.6E-02	
	²³⁵ U	1.3E-02 \pm 1.1E-02			²³⁵ U	9.8E-03 \pm 1.0E-02	
	²³⁸ U	1.1E-01 \pm 4.3E-02			²³⁸ U	1.7E-01 \pm 5.9E-02	
	⁶⁵ Zn	3.2E-02 \pm 2.3E-02	U		⁶⁵ Zn	1.4E-02 \pm 2.4E-02	U
D040 (200-W)	¹⁴⁴ Ce	7.1E-02 \pm 2.1E-01	U	D042 (200-W)	¹⁴⁴ Ce	-6.5E-02 \pm 1.6E-01	U
	⁶⁰ Co	2.3E-03 \pm 1.2E-02	U		⁶⁰ Co	5.5E-03 \pm 9.1E-03	U
	¹³⁴ Cs	4.9E-02 \pm 2.5E-02			¹³⁴ Cs	5.0E-02 \pm 1.4E-02	
	¹³⁷ Cs	1.1E+00 \pm 1.7E-01			¹³⁷ Cs	3.0E-01 \pm 5.5E-02	
	¹⁵² Eu	7.4E-03 \pm 5.6E-02	U		¹⁵² Eu	1.5E-02 \pm 4.3E-02	U
	¹⁵⁴ Eu	3.3E-05 \pm 3.3E-04	U		¹⁵⁴ Eu	-3.5E-03 \pm 2.9E-02	U
	¹⁵⁵ Eu	1.0E-01 \pm 6.4E-02			¹⁵⁵ Eu	1.5E-02 \pm 3.8E-02	U
	²³⁸ Pu	1.2E-02 \pm 1.2E-02	U		²³⁸ Pu	1.5E-01 \pm 6.5E-02	
	^{239/240} Pu	5.9E-02 \pm 2.5E-02			^{239/240} Pu	5.2E-01 \pm 1.5E-01	
	¹⁰³ Ru	2.2E-03 \pm 1.5E-02	U		¹⁰³ Ru	-1.8E-03 \pm 9.5E-03	U
	¹⁰⁶ Ru	4.6E-02 \pm 1.2E-01	U		¹⁰⁶ Ru	1.6E-03 \pm 1.6E-02	U
	¹²⁵ Sb	7.5E-03 \pm 3.7E-02	U		¹²⁵ Sb	-1.4E-02 \pm 2.4E-02	U
	¹¹³ Sn	-1.1E-02 \pm 1.7E-02	U		¹¹³ Sn	-2.9E-03 \pm 1.1E-02	U
	⁹⁰ Sr	-5.0E-01 \pm 5.0E-01	U		⁹⁰ Sr	-5.6E-01 \pm 5.6E-01	U
	²³⁴ U	1.5E-01 \pm 5.6E-02			²³⁴ U	1.4E-01 \pm 5.3E-02	
	²³⁵ U	2.4E-02 \pm 1.9E-02			²³⁵ U	1.1E-02 \pm 1.1E-02	
	²³⁸ U	1.4E-01 \pm 5.3E-02			²³⁸ U	1.8E-01 \pm 6.3E-02	
	⁶⁵ Zn	6.3E-03 \pm 3.2E-02	U		⁶⁵ Zn	6.4E-02 \pm 2.6E-02	

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

Table 3-4. 2008 Soil Sampling Results (pCi/g \pm total analytical uncertainty). (Sheet 10 of 24)

Location	Isotope	Result \pm Error	RQ*	Location	Isotope	Result \pm Error	RQ*
D044 (200-W)	¹⁴⁴ Ce	3.7E-02 \pm 2.3E-01	U	D046 (200-W)	¹⁴⁴ Ce	-2.7E-02 \pm 1.8E-01	U
	⁶⁰ Co	1.1E-02 \pm 9.6E-03	U		⁶⁰ Co	-9.8E-04 \pm 9.8E-03	U
	¹³⁴ Cs	4.4E-02 \pm 1.5E-02			¹³⁴ Cs	4.9E-02 \pm 1.4E-02	
	¹³⁷ Cs	5.8E+00 \pm 1.0E+00			¹³⁷ Cs	3.1E-01 \pm 5.7E-02	
	¹⁵² Eu	4.7E-02 \pm 6.9E-02	U		¹⁵² Eu	-2.7E-03 \pm 2.7E-02	U
	¹⁵⁴ Eu	-1.4E-02 \pm 3.6E-02	U		¹⁵⁴ Eu	-7.3E-03 \pm 2.9E-02	U
	¹⁵⁵ Eu	5.6E-02 \pm 6.8E-02	U		¹⁵⁵ Eu	9.8E-02 \pm 5.7E-02	
	²³⁸ Pu	1.8E-03 \pm 9.5E-03	U		²³⁸ Pu	-2.3E-03 \pm 2.3E-02	U
	^{239/240} Pu	1.4E-01 \pm 4.3E-02			^{239/240} Pu	2.3E-02 \pm 1.6E-02	
	¹⁰³ Ru	5.1E-03 \pm 1.5E-02	U		¹⁰³ Ru	-5.6E-03 \pm 9.6E-03	U
	¹⁰⁶ Ru	2.3E-02 \pm 1.1E-01	U		¹⁰⁶ Ru	1.9E-02 \pm 7.9E-02	U
	¹²⁵ Sb	-2.1E-02 \pm 4.0E-02	U		¹²⁵ Sb	-1.1E-03 \pm 1.1E-02	U
	¹¹³ Sn	-1.7E-02 \pm 2.0E-02	U		¹¹³ Sn	-4.7E-04 \pm 4.7E-03	U
	⁹⁰ Sr	3.0E-01 \pm 4.5E-01	U		⁹⁰ Sr	-1.0E+00 \pm 1.0E+00	U
	²³⁴ U	1.8E-01 \pm 6.3E-02			²³⁴ U	1.8E-01 \pm 6.1E-02	
	²³⁵ U	8.0E-03 \pm 9.4E-03			²³⁵ U	1.1E-02 \pm 1.0E-02	
	²³⁸ U	1.8E-01 \pm 6.3E-02			²³⁸ U	1.4E-01 \pm 5.0E-02	
	⁶⁵ Zn	3.2E-02 \pm 2.7E-02	U		⁶⁵ Zn	-1.9E-02 \pm 2.2E-02	U
D048 (200-W)	¹⁴⁴ Ce	1.0E-01 \pm 1.3E-01	U	D050 (200-W)	¹⁴⁴ Ce	1.3E-01 \pm 2.3E-01	U
	⁶⁰ Co	1.7E-03 \pm 6.1E-03	U		⁶⁰ Co	4.8E-03 \pm 1.3E-02	U
	¹³⁴ Cs	2.7E-02 \pm 1.0E-02			¹³⁴ Cs	6.2E-02 \pm 2.3E-02	
	¹³⁷ Cs	9.4E-01 \pm 1.5E-01			¹³⁷ Cs	1.0E-01 \pm 3.3E-02	
	¹⁵² Eu	-2.1E-03 \pm 2.1E-02	U		¹⁵² Eu	2.3E-02 \pm 5.5E-02	U
	¹⁵⁴ Eu	-6.4E-04 \pm 6.4E-03	U		¹⁵⁴ Eu	-1.2E-02 \pm 4.3E-02	U
	¹⁵⁵ Eu	6.4E-02 \pm 4.3E-02			¹⁵⁵ Eu	7.2E-02 \pm 5.9E-02	U
	²³⁸ Pu	-4.6E-03 \pm 2.6E-02	U		²³⁸ Pu	3.6E-03 \pm 1.1E-02	U
	^{239/240} Pu	1.9E-02 \pm 1.4E-02			^{239/240} Pu	9.0E-03 \pm 9.7E-03	U
	¹⁰³ Ru	-7.6E-03 \pm 8.2E-03	U		¹⁰³ Ru	1.2E-02 \pm 1.6E-02	U
	¹⁰⁶ Ru	-1.9E-02 \pm 6.1E-02	U		¹⁰⁶ Ru	-3.8E-02 \pm 1.3E-01	U
	¹²⁵ Sb	1.4E-02 \pm 2.1E-02	U		¹²⁵ Sb	1.4E-02 \pm 3.9E-02	U
	¹¹³ Sn	-5.6E-04 \pm 5.6E-03	U		¹¹³ Sn	-7.2E-03 \pm 1.9E-02	U
	⁹⁰ Sr	-4.9E-01 \pm 4.9E-01	U		⁹⁰ Sr	-3.6E-01 \pm 4.8E-01	U
	²³⁴ U	2.2E-01 \pm 7.0E-02			²³⁴ U	1.4E-01 \pm 5.2E-02	
	²³⁵ U	1.9E-02 \pm 1.3E-02			²³⁵ U	1.6E-02 \pm 1.6E-02	U
	²³⁸ U	1.8E-01 \pm 5.9E-02			²³⁸ U	1.2E-01 \pm 4.7E-02	
	⁶⁵ Zn	1.2E-03 \pm 1.2E-02	U		⁶⁵ Zn	1.3E-02 \pm 3.7E-02	U

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

Table 3-4. 2008 Soil Sampling Results (pCi/g \pm total analytical uncertainty). (Sheet 11 of 24)

Location	Isotope	Result \pm Error	RQ*	Location	Isotope	Result \pm Error	RQ*
D052 (200-W)	¹⁴⁴ Ce	-1.3E-01 \pm 1.5E-01	U	D141 (Replicate of D018 200-W)	¹⁴⁴ Ce	-5.7E-03 \pm 5.7E-02	U
	⁶⁰ Co	5.2E-03 \pm 8.0E-03	U		⁶⁰ Co	-2.4E-03 \pm 6.3E-03	U
	¹³⁴ Cs	5.2E-02 \pm 1.7E-02			¹³⁴ Cs	3.0E-02 \pm 1.3E-02	
	¹³⁷ Cs	2.6E+00 \pm 4.3E-01			¹³⁷ Cs	4.2E-01 \pm 6.8E-02	
	¹⁵² Eu	7.2E-03 \pm 2.8E-02	U		¹⁵² Eu	-1.3E-02 \pm 2.4E-02	U
	¹⁵⁴ Eu	3.9E-02 \pm 2.9E-02	U		¹⁵⁴ Eu	3.7E-03 \pm 2.3E-02	U
	¹⁵⁵ Eu	8.7E-02 \pm 4.8E-02			¹⁵⁵ Eu	5.0E-02 \pm 3.5E-02	
	²³⁸ Pu	2.7E-02 \pm 2.9E-02	U		²³⁸ Pu	-1.8E-03 \pm 1.8E-02	U
	^{239/240} Pu	1.3E-01 \pm 4.7E-02			^{239/240} Pu	1.1E-02 \pm 1.3E-02	U
	¹⁰³ Ru	-9.2E-04 \pm 9.2E-03	U		¹⁰³ Ru	3.8E-03 \pm 7.5E-03	U
	¹⁰⁶ Ru	-1.6E-02 \pm 7.7E-02	U		¹⁰⁶ Ru	-3.8E-04 \pm 3.8E-03	U
	¹²⁵ Sb	1.5E-02 \pm 2.7E-02	U		¹²⁵ Sb	2.3E-02 \pm 2.0E-02	U
	¹¹³ Sn	4.4E-03 \pm 1.3E-02	U		¹¹³ Sn	-7.8E-03 \pm 9.2E-03	U
	⁹⁰ Sr	-7.0E-01 \pm 7.0E-01	U		⁹⁰ Sr	-5.9E-01 \pm 5.9E-01	U
	²³⁴ U	1.9E-01 \pm 6.3E-02			²³⁴ U	1.1E-01 \pm 4.2E-02	
	²³⁵ U	2.1E-02 \pm 1.4E-02			²³⁵ U	1.1E-02 \pm 1.0E-02	
	²³⁸ U	1.6E-01 \pm 5.4E-02			²³⁸ U	9.3E-02 \pm 3.7E-02	
	⁶⁵ Zn	1.2E-02 \pm 2.1E-02	U		⁶⁵ Zn	1.1E-04 \pm 1.1E-03	U
D142 (Replicate of D028 200-W)	¹⁴⁴ Ce	-5.5E-02 \pm 1.1E-01	U	D054 (200-E)	¹⁴⁴ Ce	9.4E-02 \pm 1.6E-01	U
	⁶⁰ Co	7.7E-03 \pm 7.6E-03	U		⁶⁰ Co	-7.2E-04 \pm 6.6E-03	U
	¹³⁴ Cs	3.6E-02 \pm 1.2E-02			¹³⁴ Cs	5.0E-02 \pm 1.4E-02	
	¹³⁷ Cs	3.7E-01 \pm 6.2E-02			¹³⁷ Cs	5.8E-01 \pm 1.0E-01	
	¹⁵² Eu	-1.2E-02 \pm 1.9E-02	U		¹⁵² Eu	1.2E-02 \pm 2.8E-02	U
	¹⁵⁴ Eu	-1.0E-02 \pm 2.3E-02	U		¹⁵⁴ Eu	-2.7E-02 \pm 2.7E-02	U
	¹⁵⁵ Eu	3.0E-02 \pm 3.2E-02	U		¹⁵⁵ Eu	8.2E-03 \pm 3.8E-02	U
	²³⁸ Pu	1.5E-02 \pm 3.0E-02	U		²³⁸ Pu	6.0E-03 \pm 1.7E-02	U
	^{239/240} Pu	1.5E-02 \pm 1.5E-02	U		^{239/240} Pu	4.0E-03 \pm 1.1E-02	U
	¹⁰³ Ru	2.4E-03 \pm 7.2E-03	U		¹⁰³ Ru	-3.3E-04 \pm 3.3E-03	U
	¹⁰⁶ Ru	6.1E-03 \pm 5.9E-02	U		¹⁰⁶ Ru	3.3E-02 \pm 6.7E-02	U
	¹²⁵ Sb	-1.8E-03 \pm 1.8E-02	U		¹²⁵ Sb	1.1E-02 \pm 2.1E-02	U
	¹¹³ Sn	-1.0E-02 \pm 8.6E-03	U		¹¹³ Sn	-1.2E-03 \pm 1.0E-02	U
	⁹⁰ Sr	-7.4E-01 \pm 7.4E-01	U		⁹⁰ Sr	-6.0E-01 \pm 6.0E-01	U
	²³⁴ U	1.2E-01 \pm 4.3E-02			²³⁴ U	1.4E-01 \pm 4.9E-02	
	²³⁵ U	1.3E-02 \pm 1.3E-02	U		²³⁵ U	1.0E-02 \pm 9.3E-03	
	²³⁸ U	9.2E-02 \pm 3.6E-02			²³⁸ U	1.4E-01 \pm 4.9E-02	
	⁶⁵ Zn	2.2E-02 \pm 1.9E-02	U		⁶⁵ Zn	-1.6E-03 \pm 1.6E-02	U

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

Table 3-4. 2008 Soil Sampling Results (pCi/g \pm total analytical uncertainty). (Sheet 12 of 24)

Location	Isotope	Result \pm Error	RQ*	Location	Isotope	Result \pm Error	RQ*
D056 (200-E)	¹⁴⁴ Ce	6.0E-02 \pm 1.9E-01	U	D058 (200-E)	¹⁴⁴ Ce	7.7E-02 \pm 1.8E-01	U
	⁶⁰ Co	4.1E-03 \pm 9.8E-03	U		⁶⁰ Co	-3.5E-03 \pm 6.9E-03	U
	¹³⁴ Cs	3.8E-02 \pm 2.0E-02			¹³⁴ Cs	3.4E-02 \pm 1.1E-02	
	¹³⁷ Cs	1.6E+00 \pm 2.4E-01			¹³⁷ Cs	4.9E+00 \pm 8.9E-01	
	¹⁵² Eu	-9.6E-03 \pm 6.0E-02	U		¹⁵² Eu	1.3E-02 \pm 4.8E-02	U
	¹⁵⁴ Eu	-1.5E-03 \pm 1.5E-02	U		¹⁵⁴ Eu	-1.9E-02 \pm 2.3E-02	U
	¹⁵⁵ Eu	5.2E-02 \pm 4.2E-02	U		¹⁵⁵ Eu	1.9E-02 \pm 4.3E-02	U
	²³⁸ Pu	4.2E-03 \pm 2.2E-02	U		²³⁸ Pu	-1.2E-02 \pm 1.6E-02	U
	^{239/240} Pu	6.3E-03 \pm 7.4E-03			^{239/240} Pu	1.8E-02 \pm 1.3E-02	
	¹⁰³ Ru	-1.2E-02 \pm 1.5E-02	U		¹⁰³ Ru	-4.4E-03 \pm 1.3E-02	U
	¹⁰⁶ Ru	-4.5E-02 \pm 1.0E-01	U		¹⁰⁶ Ru	-2.6E-02 \pm 8.2E-02	U
	¹²⁵ Sb	-4.0E-04 \pm 4.0E-03	U		¹²⁵ Sb	-1.3E-02 \pm 3.2E-02	U
	¹¹³ Sn	-1.2E-02 \pm 1.7E-02	U		¹¹³ Sn	8.7E-03 \pm 1.6E-02	U
	⁹⁰ Sr	-9.4E-01 \pm 9.4E-01	U		⁹⁰ Sr	-4.2E-01 \pm 4.2E-01	U
	²³⁴ U	1.7E-01 \pm 5.9E-02			²³⁴ U	1.4E-01 \pm 4.9E-02	
	²³⁵ U	2.1E-02 \pm 1.5E-02			²³⁵ U	1.1E-02 \pm 1.0E-02	
	²³⁸ U	2.3E-01 \pm 7.4E-02			²³⁸ U	1.4E-01 \pm 4.9E-02	
	⁶⁵ Zn	5.4E-03 \pm 2.7E-02	U		⁶⁵ Zn	2.8E-02 \pm 2.0E-02	U
D060 (200-E)	¹⁴⁴ Ce	4.4E-02 \pm 2.1E-01	U	D062 (200-E)	¹⁴⁴ Ce	4.5E-02 \pm 1.3E-01	U
	⁶⁰ Co	6.6E-03 \pm 1.1E-02	U		⁶⁰ Co	8.8E-04 \pm 5.9E-03	U
	¹³⁴ Cs	5.0E-02 \pm 2.0E-02			¹³⁴ Cs	3.9E-02 \pm 1.2E-02	
	¹³⁷ Cs	4.8E-01 \pm 7.7E-02			¹³⁷ Cs	1.1E+00 \pm 1.8E-01	
	¹⁵² Eu	-1.5E-03 \pm 1.5E-02	U		¹⁵² Eu	2.2E-03 \pm 2.2E-02	U
	¹⁵⁴ Eu	-1.1E-02 \pm 3.9E-02	U		¹⁵⁴ Eu	-1.9E-02 \pm 2.0E-02	U
	¹⁵⁵ Eu	1.0E-01 \pm 5.2E-02			¹⁵⁵ Eu	5.5E-02 \pm 3.6E-02	
	²³⁸ Pu	2.4E-03 \pm 2.4E-02	U		²³⁸ Pu	2.3E-03 \pm 4.0E-03	U
	^{239/240} Pu	2.3E-03 \pm 2.3E-02	U		^{239/240} Pu	6.9E-03 \pm 1.2E-02	U
	¹⁰³ Ru	1.0E-02 \pm 1.7E-02	U		¹⁰³ Ru	-5.1E-03 \pm 1.1E-02	U
	¹⁰⁶ Ru	-2.6E-03 \pm 2.6E-02	U		¹⁰⁶ Ru	8.7E-03 \pm 5.9E-02	U
	¹²⁵ Sb	6.4E-03 \pm 3.5E-02	U		¹²⁵ Sb	-1.4E-03 \pm 1.4E-02	U
	¹¹³ Sn	-8.3E-03 \pm 1.8E-02	U		¹¹³ Sn	-1.5E-02 \pm 1.5E-02	U
	⁹⁰ Sr	-4.8E-01 \pm 4.8E-01	U		⁹⁰ Sr	-4.4E-01 \pm 4.4E-01	U
	²³⁴ U	1.9E-01 \pm 6.5E-02			²³⁴ U	2.0E-01 \pm 6.6E-02	
	²³⁵ U	1.4E-02 \pm 1.4E-02	U		²³⁵ U	1.4E-02 \pm 1.2E-02	
	²³⁸ U	1.7E-01 \pm 5.8E-02			²³⁸ U	1.8E-01 \pm 6.1E-02	
	⁶⁵ Zn	-1.4E-02 \pm 3.2E-02	U		⁶⁵ Zn	-6.9E-03 \pm 1.7E-02	U

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

Table 3-4. 2008 Soil Sampling Results (pCi/g \pm total analytical uncertainty). (Sheet 13 of 24)

Location	Isotope	Result \pm Error	RQ*	Location	Isotope	Result \pm Error	RQ*
D064 (200-E)	¹⁴⁴ Ce	7.2E-03 \pm 7.2E-02	U	D066 (200-E)	¹⁴⁴ Ce	2.7E-02 \pm 1.8E-01	U
	⁶⁰ Co	-1.6E-03 \pm 7.9E-03	U		⁶⁰ Co	2.4E-03 \pm 6.5E-03	U
	¹³⁴ Cs	4.7E-02 \pm 1.8E-02			¹³⁴ Cs	3.1E-02 \pm 9.0E-03	
	¹³⁷ Cs	6.2E-01 \pm 1.0E-01			¹³⁷ Cs	1.4E+01 \pm 2.2E+00	
	¹⁵² Eu	-4.7E-03 \pm 2.3E-02	U		¹⁵² Eu	1.5E-02 \pm 3.8E-02	U
	¹⁵⁴ Eu	-6.2E-03 \pm 3.0E-02	U		¹⁵⁴ Eu	-1.2E-04 \pm 1.2E-03	U
	¹⁵⁵ Eu	6.2E-02 \pm 4.8E-02			¹⁵⁵ Eu	-6.2E-03 \pm 4.1E-02	U
	²³⁸ Pu	-3.3E-02 \pm 4.7E-02	U		²³⁸ Pu	1.6E-02 \pm 3.6E-02	U
	^{239/240} Pu	2.6E-03 \pm 9.0E-03	U		^{239/240} Pu	1.9E-02 \pm 1.7E-02	U
	¹⁰³ Ru	-1.7E-03 \pm 9.6E-03	U		¹⁰³ Ru	8.0E-03 \pm 1.8E-02	U
	¹⁰⁶ Ru	2.4E-02 \pm 6.8E-02	U		¹⁰⁶ Ru	3.3E-02 \pm 9.6E-02	U
	¹²⁵ Sb	1.0E-02 \pm 2.2E-02	U		¹²⁵ Sb	1.4E-02 \pm 4.0E-02	U
	¹¹³ Sn	-5.7E-03 \pm 1.1E-02	U		¹¹³ Sn	5.0E-04 \pm 5.0E-03	U
	⁹⁰ Sr	-5.5E-01 \pm 5.5E-01	U		⁹⁰ Sr	1.4E-01 \pm 4.8E-01	U
	²³⁴ U	1.9E-01 \pm 6.5E-02			²³⁴ U	1.4E-01 \pm 5.0E-02	
	²³⁵ U	1.6E-02 \pm 1.3E-02			²³⁵ U	1.9E-02 \pm 1.4E-02	
	²³⁸ U	1.7E-01 \pm 5.8E-02			²³⁸ U	1.6E-01 \pm 5.6E-02	
	⁶⁵ Zn	2.6E-02 \pm 2.2E-02	U		⁶⁵ Zn	2.4E-02 \pm 1.8E-02	U
D068 (200-E)	¹⁴⁴ Ce	3.7E-02 \pm 1.5E-01	U	D070 (200-E)	¹⁴⁴ Ce	-8.3E-02 \pm 1.1E-01	U
	⁶⁰ Co	6.8E-04 \pm 5.9E-03	U		⁶⁰ Co	-1.6E-03 \pm 5.1E-03	U
	¹³⁴ Cs	3.6E-02 \pm 1.2E-02			¹³⁴ Cs	3.2E-02 \pm 8.3E-03	
	¹³⁷ Cs	1.1E-01 \pm 2.2E-02			¹³⁷ Cs	3.7E-02 \pm 1.1E-02	
	¹⁵² Eu	-9.5E-04 \pm 9.5E-03	U		¹⁵² Eu	1.2E-02 \pm 1.9E-02	U
	¹⁵⁴ Eu	-1.4E-04 \pm 1.4E-03	U		¹⁵⁴ Eu	3.8E-03 \pm 1.9E-02	U
	¹⁵⁵ Eu	4.6E-02 \pm 3.2E-02	U		¹⁵⁵ Eu	2.6E-02 \pm 2.7E-02	U
	²³⁸ Pu	-8.5E-03 \pm 2.2E-02	U		²³⁸ Pu	-2.1E-03 \pm 2.1E-03	U
	^{239/240} Pu	2.1E-03 \pm 4.2E-03	U		^{239/240} Pu	4.2E-03 \pm 1.2E-02	U
	¹⁰³ Ru	3.8E-03 \pm 8.4E-03	U		¹⁰³ Ru	-4.4E-03 \pm 7.0E-03	U
	¹⁰⁶ Ru	1.4E-02 \pm 5.7E-02	U		¹⁰⁶ Ru	-3.6E-02 \pm 4.7E-02	U
	¹²⁵ Sb	-9.8E-04 \pm 9.8E-03	U		¹²⁵ Sb	4.4E-03 \pm 1.5E-02	U
	¹¹³ Sn	2.1E-03 \pm 1.0E-02	U		¹¹³ Sn	-6.1E-03 \pm 7.8E-03	U
	⁹⁰ Sr	4.8E-01 \pm 4.7E-01			⁹⁰ Sr	-1.1E-01 \pm 4.3E-01	U
	²³⁴ U	1.8E-01 \pm 6.5E-02			²³⁴ U	1.5E-01 \pm 5.4E-02	
	²³⁵ U	1.8E-02 \pm 2.0E-02	U		²³⁵ U	1.8E-02 \pm 1.6E-02	U
	²³⁸ U	2.0E-01 \pm 7.0E-02			²³⁸ U	1.5E-01 \pm 5.4E-02	
	⁶⁵ Zn	-7.6E-03 \pm 1.7E-02	U		⁶⁵ Zn	4.5E-04 \pm 4.5E-03	U

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

Table 3-4. 2008 Soil Sampling Results (pCi/g \pm total analytical uncertainty). (Sheet 14 of 24)

Location	Isotope	Result \pm Error	RQ*	Location	Isotope	Result \pm Error	RQ*
D072 (200-E)	¹⁴⁴ Ce	7.0E-03 \pm 7.0E-02	U	D074 (200-E)	¹⁴⁴ Ce	-7.0E-03 \pm 7.0E-02	U
	⁶⁰ Co	5.7E-04 \pm 5.7E-03	U		⁶⁰ Co	-2.1E-03 \pm 7.2E-03	U
	¹³⁴ Cs	2.6E-02 \pm 1.3E-02			¹³⁴ Cs	2.9E-02 \pm 1.0E-02	
	¹³⁷ Cs	9.2E-02 \pm 2.3E-02			¹³⁷ Cs	1.4E-01 \pm 2.9E-02	
	¹⁵² Eu	1.7E-02 \pm 4.5E-02	U		¹⁵² Eu	1.3E-02 \pm 3.8E-02	U
	¹⁵⁴ Eu	-9.9E-03 \pm 2.8E-02	U		¹⁵⁴ Eu	1.4E-02 \pm 2.8E-02	U
	¹⁵⁵ Eu	3.9E-02 \pm 3.5E-02	U		¹⁵⁵ Eu	3.5E-02 \pm 3.6E-02	U
	²³⁸ Pu	7.9E-03 \pm 1.7E-02	U		²³⁸ Pu	1.2E-01 \pm 5.5E-02	
	^{239/240} Pu	2.0E-03 \pm 2.0E-02	U		^{239/240} Pu	1.3E-02 \pm 1.1E-02	
	¹⁰³ Ru	1.1E-02 \pm 1.2E-02	U		¹⁰³ Ru	-3.3E-04 \pm 3.3E-03	U
	¹⁰⁶ Ru	2.2E-03 \pm 2.2E-02	U		¹⁰⁶ Ru	-3.3E-03 \pm 3.3E-02	U
	¹²⁵ Sb	-1.5E-02 \pm 2.6E-02	U		¹²⁵ Sb	1.7E-02 \pm 1.9E-02	U
	¹¹³ Sn	8.0E-04 \pm 8.0E-03	U		¹¹³ Sn	-8.2E-03 \pm 1.0E-02	U
	⁹⁰ Sr	4.0E-01 \pm 4.3E-01	U		⁹⁰ Sr	-6.6E-01 \pm 6.6E-01	U
	²³⁴ U	1.7E-01 \pm 6.1E-02			²³⁴ U	1.4E-01 \pm 5.3E-02	
	²³⁵ U	1.6E-02 \pm 1.4E-02			²³⁵ U	5.9E-03 \pm 8.5E-03	U
	²³⁸ U	1.5E-01 \pm 5.4E-02			²³⁸ U	1.8E-01 \pm 6.3E-02	
	⁶⁵ Zn	-2.4E-03 \pm 2.4E-02	U		⁶⁵ Zn	2.5E-02 \pm 2.0E-02	U
D076 (200-E)	¹⁴⁴ Ce	3.5E-02 \pm 1.6E-01	U	D078 (200-E)	¹⁴⁴ Ce	-1.8E-01 \pm 1.8E-01	U
	⁶⁰ Co	-2.0E-04 \pm 2.0E-03	U		⁶⁰ Co	-2.2E-03 \pm 7.4E-03	U
	¹³⁴ Cs	4.0E-02 \pm 1.4E-02			¹³⁴ Cs	4.7E-02 \pm 1.6E-02	
	¹³⁷ Cs	5.4E-02 \pm 1.7E-02			¹³⁷ Cs	2.2E-01 \pm 3.8E-02	
	¹⁵² Eu	-9.4E-03 \pm 3.1E-02	U		¹⁵² Eu	-9.5E-03 \pm 2.5E-02	U
	¹⁵⁴ Eu	-1.1E-02 \pm 2.7E-02	U		¹⁵⁴ Eu	-2.9E-02 \pm 2.9E-02	U
	¹⁵⁵ Eu	1.5E-02 \pm 3.6E-02	U		¹⁵⁵ Eu	4.5E-02 \pm 4.5E-02	U
	²³⁸ Pu	-1.7E-02 \pm 3.6E-02	U		²³⁸ Pu	-4.0E-03 \pm 2.6E-02	U
	^{239/240} Pu	2.1E-03 \pm 2.1E-03	U		^{239/240} Pu	8.0E-03 \pm 1.3E-02	U
	¹⁰³ Ru	-2.9E-03 \pm 1.0E-02	U		¹⁰³ Ru	3.8E-03 \pm 9.0E-03	U
	¹⁰⁶ Ru	-4.9E-02 \pm 7.4E-02	U		¹⁰⁶ Ru	2.1E-03 \pm 2.1E-02	U
	¹²⁵ Sb	-6.5E-04 \pm 6.5E-03	U		¹²⁵ Sb	1.6E-02 \pm 2.0E-02	U
	¹¹³ Sn	-6.1E-03 \pm 1.1E-02	U		¹¹³ Sn	-1.1E-02 \pm 1.1E-02	U
	⁹⁰ Sr	-8.4E-01 \pm 8.4E-01	U		⁹⁰ Sr	-7.1E-01 \pm 7.1E-01	U
	²³⁴ U	2.4E-01 \pm 8.2E-02			²³⁴ U	1.4E-01 \pm 5.2E-02	
	²³⁵ U	5.6E-03 \pm 1.4E-02	U		²³⁵ U	1.5E-02 \pm 1.3E-02	
	²³⁸ U	2.4E-01 \pm 7.9E-02			²³⁸ U	1.5E-01 \pm 5.4E-02	
	⁶⁵ Zn	5.0E-02 \pm 2.4E-02			⁶⁵ Zn	8.0E-03 \pm 3.3E-02	U

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

Table 3-4. 2008 Soil Sampling Results (pCi/g \pm total analytical uncertainty). (Sheet 15 of 24)

Location	Isotope	Result \pm Error	RQ*	Location	Isotope	Result \pm Error	RQ*
D080 (200-E)	¹⁴⁴ Ce	2.7E-02 \pm 1.7E-01	U	D112 (Replicate of D072 200-E)	¹⁴⁴ Ce	1.5E-02 \pm 1.0E-01	U
	⁶⁰ Co	-1.1E-03 \pm 7.1E-03	U		⁶⁰ Co	-2.8E-03 \pm 5.1E-03	U
	¹³⁴ Cs	4.3E-02 \pm 1.8E-02			¹³⁴ Cs	2.5E-02 \pm 1.0E-02	
	¹³⁷ Cs	3.5E-01 \pm 6.3E-02			¹³⁷ Cs	8.2E-02 \pm 1.8E-02	
	¹⁵² Eu	5.8E-03 \pm 4.0E-02	U		¹⁵² Eu	1.6E-02 \pm 1.8E-02	U
	¹⁵⁴ Eu	-1.0E-02 \pm 2.4E-02	U		¹⁵⁴ Eu	-1.7E-03 \pm 1.7E-02	U
	¹⁵⁵ Eu	4.9E-02 \pm 4.3E-02	U		¹⁵⁵ Eu	7.1E-02 \pm 4.2E-02	
	²³⁸ Pu	8.0E-03 \pm 2.6E-02	U		²³⁸ Pu	2.2E-03 \pm 2.1E-02	U
	^{239/240} Pu	2.6E-02 \pm 1.8E-02			^{239/240} Pu	4.4E-03 \pm 6.3E-03	U
	¹⁰³ Ru	-4.5E-03 \pm 9.8E-03	U		¹⁰³ Ru	-3.4E-03 \pm 6.5E-03	U
	¹⁰⁶ Ru	-3.6E-02 \pm 7.1E-02	U		¹⁰⁶ Ru	2.9E-02 \pm 5.1E-02	U
	¹²⁵ Sb	1.9E-02 \pm 2.2E-02	U		¹²⁵ Sb	4.5E-03 \pm 1.5E-02	U
	¹¹³ Sn	-4.8E-03 \pm 1.1E-02	U		¹¹³ Sn	-2.0E-03 \pm 7.6E-03	U
	⁹⁰ Sr	-9.4E-01 \pm 9.4E-01	U		⁹⁰ Sr	9.0E-02 \pm 4.4E-01	U
	²³⁴ U	2.2E-01 \pm 7.5E-02			²³⁴ U	1.1E-01 \pm 4.2E-02	
	²³⁵ U	1.4E-02 \pm 1.5E-02	U		²³⁵ U	1.1E-02 \pm 1.0E-02	
	²³⁸ U	2.0E-01 \pm 6.8E-02			²³⁸ U	1.3E-01 \pm 4.7E-02	
	⁶⁵ Zn	2.3E-03 \pm 1.9E-02	U		⁶⁵ Zn	-2.2E-03 \pm 1.4E-02	U
D082 (600 Area)	¹⁴⁴ Ce	6.5E-02 \pm 1.4E-01	U	D084 (600 Area)	¹⁴⁴ Ce	-6.3E-02 \pm 1.4E-01	U
	⁶⁰ Co	-1.8E-03 \pm 6.7E-03	U		⁶⁰ Co	5.9E-04 \pm 5.9E-03	U
	¹³⁴ Cs	2.8E-02 \pm 9.5E-03			¹³⁴ Cs	3.5E-02 \pm 1.3E-02	
	¹³⁷ Cs	6.6E-02 \pm 1.7E-02			¹³⁷ Cs	7.7E-01 \pm 1.2E-01	
	¹⁵² Eu	-1.1E-02 \pm 2.9E-02	U		¹⁵² Eu	-3.6E-03 \pm 2.6E-02	U
	¹⁵⁴ Eu	-6.0E-03 \pm 2.4E-02	U		¹⁵⁴ Eu	-2.2E-02 \pm 2.4E-02	U
	¹⁵⁵ Eu	1.9E-02 \pm 3.7E-02	U		¹⁵⁵ Eu	3.2E-02 \pm 3.6E-02	U
	²³⁸ Pu	2.6E-02 \pm 2.4E-02	U		²³⁸ Pu	9.5E-03 \pm 1.6E-02	U
	^{239/240} Pu	6.6E-03 \pm 1.2E-02	U		^{239/240} Pu	4.0E-02 \pm 2.0E-02	
	¹⁰³ Ru	1.3E-03 \pm 8.3E-03	U		¹⁰³ Ru	1.0E-02 \pm 1.0E-02	U
	¹⁰⁶ Ru	-6.6E-02 \pm 6.6E-02	U		¹⁰⁶ Ru	2.2E-02 \pm 6.1E-02	U
	¹²⁵ Sb	7.3E-03 \pm 1.9E-02	U		¹²⁵ Sb	7.7E-03 \pm 2.1E-02	U
	¹¹³ Sn	-7.2E-03 \pm 1.0E-02	U		¹¹³ Sn	3.0E-03 \pm 1.1E-02	U
	⁹⁰ Sr	-6.8E-01 \pm 6.8E-01	U		⁹⁰ Sr	-3.5E-01 \pm 4.1E-01	U
	²³⁴ U	1.9E-01 \pm 6.3E-02			²³⁴ U	1.6E-01 \pm 5.4E-02	
	²³⁵ U	1.6E-02 \pm 1.3E-02			²³⁵ U	2.0E-02 \pm 1.4E-02	
	²³⁸ U	1.4E-01 \pm 5.0E-02			²³⁸ U	1.9E-01 \pm 6.3E-02	
	⁶⁵ Zn	2.1E-02 \pm 1.9E-02	U		⁶⁵ Zn	-2.9E-03 \pm 1.9E-02	U

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

Table 3-4. 2008 Soil Sampling Results (pCi/g \pm total analytical uncertainty). (Sheet 16 of 24)

Location	Isotope	Result \pm Error	RQ*	Location	Isotope	Result \pm Error	RQ*
D086 (600 Area)	¹⁴⁴ Ce	3.4E-02 \pm 1.7E-01	U	D088 (600 Area)	¹⁴⁴ Ce	8.7E-02 \pm 1.4E-01	U
	⁶⁰ Co	-4.8E-03 \pm 8.2E-03	U		⁶⁰ Co	-1.3E-03 \pm 6.1E-03	U
	¹³⁴ Cs	3.9E-02 \pm 1.3E-02			¹³⁴ Cs	3.7E-02 \pm 1.2E-02	
	¹³⁷ Cs	1.4E+00 \pm 2.3E-01			¹³⁷ Cs	2.4E-01 \pm 4.4E-02	
	¹⁵² Eu	-2.9E-03 \pm 2.9E-02	U		¹⁵² Eu	-8.4E-03 \pm 2.5E-02	U
	¹⁵⁴ Eu	-3.5E-02 \pm 3.5E-02	U		¹⁵⁴ Eu	-9.2E-03 \pm 2.2E-02	U
	¹⁵⁵ Eu	3.3E-02 \pm 4.1E-02	U		¹⁵⁵ Eu	4.1E-02 \pm 4.3E-02	U
	²³⁸ Pu	1.0E-02 \pm 1.8E-02	U		²³⁸ Pu	4.2E-03 \pm 2.3E-02	U
	^{239/240} Pu	2.3E-02 \pm 1.7E-02			^{239/240} Pu	2.1E-03 \pm 2.1E-03	U
	¹⁰³ Ru	1.3E-02 \pm 1.3E-02	U		¹⁰³ Ru	-3.7E-03 \pm 7.9E-03	U
	¹⁰⁶ Ru	1.0E-03 \pm 1.0E-02	U		¹⁰⁶ Ru	2.5E-02 \pm 5.7E-02	U
	¹²⁵ Sb	2.2E-02 \pm 2.6E-02	U		¹²⁵ Sb	-1.4E-02 \pm 1.8E-02	U
	¹¹³ Sn	-1.7E-02 \pm 1.7E-02	U		¹¹³ Sn	-8.6E-03 \pm 9.1E-03	U
	⁹⁰ Sr	-2.0E-01 \pm 3.9E-01	U		⁹⁰ Sr	-2.9E-01 \pm 4.4E-01	U
	²³⁴ U	1.6E-01 \pm 5.8E-02			²³⁴ U	1.8E-01 \pm 6.1E-02	
	²³⁵ U	2.6E-02 \pm 1.7E-02			²³⁵ U	1.9E-02 \pm 1.5E-02	
	²³⁸ U	1.4E-01 \pm 5.2E-02			²³⁸ U	2.1E-01 \pm 6.7E-02	
	⁶⁵ Zn	4.7E-02 \pm 2.5E-02			⁶⁵ Zn	-7.1E-03 \pm 1.6E-02	U
D090 (600 Area)	¹⁴⁴ Ce	3.0E-04 \pm 3.0E-03	U	D092 (600 Area)	¹⁴⁴ Ce	5.2E-02 \pm 1.7E-01	U
	⁶⁰ Co	-2.6E-03 \pm 5.9E-03	U		⁶⁰ Co	3.4E-03 \pm 9.3E-03	U
	¹³⁴ Cs	3.8E-02 \pm 1.2E-02			¹³⁴ Cs	5.8E-02 \pm 2.1E-02	
	¹³⁷ Cs	8.4E-01 \pm 1.3E-01			¹³⁷ Cs	9.9E-01 \pm 1.5E-01	
	¹⁵² Eu	-4.8E-03 \pm 2.4E-02	U		¹⁵² Eu	-1.3E-02 \pm 4.7E-02	U
	¹⁵⁴ Eu	-2.3E-02 \pm 2.3E-02	U		¹⁵⁴ Eu	-2.3E-02 \pm 3.1E-02	U
	¹⁵⁵ Eu	1.2E-03 \pm 1.2E-02	U		¹⁵⁵ Eu	5.2E-02 \pm 3.9E-02	U
	²³⁸ Pu	1.5E-02 \pm 2.4E-02	U		²³⁸ Pu	-1.1E-02 \pm 2.5E-02	U
	^{239/240} Pu	2.6E-02 \pm 1.7E-02			^{239/240} Pu	1.5E-02 \pm 1.5E-02	U
	¹⁰³ Ru	-2.3E-03 \pm 8.6E-03	U		¹⁰³ Ru	-2.4E-03 \pm 1.4E-02	U
	¹⁰⁶ Ru	6.0E-02 \pm 5.8E-02	U		¹⁰⁶ Ru	-3.1E-02 \pm 9.3E-02	U
	¹²⁵ Sb	5.6E-04 \pm 5.6E-03	U		¹²⁵ Sb	1.9E-02 \pm 3.1E-02	U
	¹¹³ Sn	-6.0E-03 \pm 9.8E-03	U		¹¹³ Sn	-8.1E-03 \pm 1.5E-02	U
	⁹⁰ Sr	-2.9E-01 \pm 4.5E-01	U		⁹⁰ Sr	-2.8E-01 \pm 4.2E-01	U
	²³⁴ U	2.2E-01 \pm 7.0E-02			²³⁴ U	1.9E-01 \pm 6.1E-02	
	²³⁵ U	1.3E-02 \pm 1.1E-02			²³⁵ U	2.7E-02 \pm 1.6E-02	
	²³⁸ U	1.7E-01 \pm 5.8E-02			²³⁸ U	1.8E-01 \pm 5.8E-02	
	⁶⁵ Zn	-1.6E-02 \pm 1.8E-02	U		⁶⁵ Zn	-4.0E-03 \pm 2.6E-02	U

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

Table 3-4. 2008 Soil Sampling Results (pCi/g \pm total analytical uncertainty). (Sheet 17 of 24)

Location	Isotope	Result \pm Error	RQ*	Location	Isotope	Result \pm Error	RQ*
D094 (600 Area)	¹⁴⁴ Ce	-1.7E-01 \pm 1.7E-01	U	D098 (600 Area)	¹⁴⁴ Ce	-1.1E-02 \pm 1.1E-01	U
	⁶⁰ Co	-5.0E-03 \pm 7.3E-03	U		⁶⁰ Co	-5.9E-03 \pm 7.5E-03	U
	¹³⁴ Cs	2.6E-02 \pm 1.2E-02			¹³⁴ Cs	4.8E-02 \pm 1.5E-02	
	¹³⁷ Cs	1.7E+00 \pm 2.7E-01			¹³⁷ Cs	2.7E-01 \pm 4.7E-02	
	¹⁵² Eu	-1.3E-03 \pm 1.3E-02	U		¹⁵² Eu	-1.7E-02 \pm 2.2E-02	U
	¹⁵⁴ Eu	-7.3E-03 \pm 2.0E-02	U		¹⁵⁴ Eu	-1.7E-03 \pm 1.7E-02	U
	¹⁵⁵ Eu	4.5E-02 \pm 4.0E-02	U		¹⁵⁵ Eu	5.4E-02 \pm 3.9E-02	
	²³⁸ Pu	8.2E-03 \pm 1.1E-02	U		²³⁸ Pu	7.8E-03 \pm 2.1E-02	U
	^{239/240} Pu	3.1E-02 \pm 1.6E-02			^{239/240} Pu	7.8E-03 \pm 1.1E-02	U
	¹⁰³ Ru	-6.9E-03 \pm 9.6E-03	U		¹⁰³ Ru	6.9E-04 \pm 6.9E-03	U
	¹⁰⁶ Ru	-3.1E-02 \pm 6.1E-02	U		¹⁰⁶ Ru	1.1E-02 \pm 6.6E-02	U
	¹²⁵ Sb	-6.5E-03 \pm 2.2E-02	U		¹²⁵ Sb	-2.4E-03 \pm 1.9E-02	U
	¹¹³ Sn	1.1E-03 \pm 1.1E-02	U		¹¹³ Sn	-2.5E-04 \pm 2.5E-03	U
	⁹⁰ Sr	1.2E+00 \pm 5.0E-01			⁹⁰ Sr	-4.6E-01 \pm 4.6E-01	U
	²³⁴ U	2.0E-01 \pm 6.6E-02			²³⁴ U	1.8E-01 \pm 6.1E-02	
	²³⁵ U	1.3E-02 \pm 1.4E-02	U		²³⁵ U	2.0E-02 \pm 1.5E-02	
	²³⁸ U	2.1E-01 \pm 6.7E-02			²³⁸ U	1.8E-01 \pm 6.1E-02	
	⁶⁵ Zn	-8.2E-03 \pm 1.8E-02	U		⁶⁵ Zn	-2.5E-03 \pm 2.0E-02	U
D100 (600 Area)	¹⁴⁴ Ce	1.1E-01 \pm 1.4E-01	U	D102 (600 Area)	¹⁴⁴ Ce	4.5E-03 \pm 4.5E-02	U
	⁶⁰ Co	-4.1E-03 \pm 7.5E-03	U		⁶⁰ Co	-7.7E-03 \pm 7.7E-03	U
	¹³⁴ Cs	3.9E-02 \pm 1.3E-02			¹³⁴ Cs	4.6E-02 \pm 1.5E-02	
	¹³⁷ Cs	2.7E-03 \pm 9.1E-03	U		¹³⁷ Cs	4.0E-01 \pm 6.7E-02	
	¹⁵² Eu	-2.1E-02 \pm 2.8E-02	U		¹⁵² Eu	1.6E-03 \pm 1.6E-02	U
	¹⁵⁴ Eu	-3.4E-02 \pm 3.4E-02	U		¹⁵⁴ Eu	-1.3E-02 \pm 2.4E-02	U
	¹⁵⁵ Eu	5.4E-02 \pm 4.4E-02	U		¹⁵⁵ Eu	7.3E-02 \pm 4.4E-02	
	²³⁸ Pu	1.5E-02 \pm 2.0E-02	U		²³⁸ Pu	1.7E-03 \pm 1.7E-03	U
	^{239/240} Pu	1.8E-03 \pm 3.6E-03	U		^{239/240} Pu	3.3E-02 \pm 1.7E-02	
	¹⁰³ Ru	-1.4E-03 \pm 8.0E-03	U		¹⁰³ Ru	2.4E-03 \pm 7.8E-03	U
	¹⁰⁶ Ru	5.2E-02 \pm 6.8E-02	U		¹⁰⁶ Ru	-1.2E-02 \pm 6.3E-02	U
	¹²⁵ Sb	-7.1E-03 \pm 2.0E-02	U		¹²⁵ Sb	-1.8E-02 \pm 2.0E-02	U
	¹¹³ Sn	-6.8E-03 \pm 9.8E-03	U		¹¹³ Sn	-3.0E-03 \pm 9.4E-03	U
	⁹⁰ Sr	-1.9E-01 \pm 4.0E-01	U		⁹⁰ Sr	-3.8E-01 \pm 4.2E-01	U
	²³⁴ U	1.9E-01 \pm 6.3E-02			²³⁴ U	1.5E-01 \pm 5.3E-02	
	²³⁵ U	1.3E-02 \pm 1.4E-02	U		²³⁵ U	1.3E-02 \pm 1.3E-02	U
	²³⁸ U	1.9E-01 \pm 6.3E-02			²³⁸ U	1.5E-01 \pm 5.3E-02	
	⁶⁵ Zn	4.3E-02 \pm 2.1E-02			⁶⁵ Zn	1.6E-02 \pm 2.0E-02	U

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

Table 3-4. 2008 Soil Sampling Results (pCi/g \pm total analytical uncertainty). (Sheet 18 of 24)

Location	Isotope	Result \pm Error	RQ*	Location	Isotope	Result \pm Error	RQ*
D104 (600 Area)	¹⁴⁴ Ce	5.5E-02 \pm 1.4E-01	U	D106 (600 Area)	¹⁴⁴ Ce	9.0E-03 \pm 9.0E-02	U
	⁶⁰ Co	1.9E-03 \pm 6.3E-03	U		⁶⁰ Co	2.1E-03 \pm 6.2E-03	U
	¹³⁴ Cs	3.5E-02 \pm 1.0E-02			¹³⁴ Cs	3.5E-02 \pm 9.8E-03	
	¹³⁷ Cs	8.2E-01 \pm 1.4E-01			¹³⁷ Cs	4.0E-02 \pm 1.1E-02	
	¹⁵² Eu	-3.1E-02 \pm 3.1E-02	U		¹⁵² Eu	-1.2E-02 \pm 2.0E-02	U
	¹⁵⁴ Eu	-4.8E-04 \pm 4.8E-03	U		¹⁵⁴ Eu	-7.4E-03 \pm 2.4E-02	U
	¹⁵⁵ Eu	2.5E-02 \pm 4.2E-02	U		¹⁵⁵ Eu	6.4E-02 \pm 3.4E-02	
	²³⁸ Pu	2.5E-02 \pm 1.7E-02			²³⁸ Pu	2.6E-02 \pm 2.9E-02	U
	^{239/240} Pu	2.2E-02 \pm 1.6E-02			^{239/240} Pu	9.2E-02 \pm 3.7E-02	
	¹⁰³ Ru	4.4E-04 \pm 4.4E-03	U		¹⁰³ Ru	-4.3E-03 \pm 6.5E-03	U
	¹⁰⁶ Ru	1.0E-02 \pm 5.9E-02	U		¹⁰⁶ Ru	5.3E-02 \pm 5.2E-02	U
	¹²⁵ Sb	-9.2E-03 \pm 1.9E-02	U		¹²⁵ Sb	8.6E-03 \pm 1.6E-02	U
	¹¹³ Sn	1.3E-03 \pm 9.5E-03	U		¹¹³ Sn	-2.9E-03 \pm 7.9E-03	U
	⁹⁰ Sr	4.3E-02 \pm 4.0E-01	U		⁹⁰ Sr	8.0E-02 \pm 4.0E-01	U
	²³⁴ U	1.5E-01 \pm 5.4E-02			²³⁴ U	2.1E-01 \pm 7.1E-02	
	²³⁵ U	1.6E-02 \pm 1.3E-02			²³⁵ U	2.0E-02 \pm 1.5E-02	
	²³⁸ U	1.3E-01 \pm 4.8E-02			²³⁸ U	1.9E-01 \pm 6.5E-02	
	⁶⁵ Zn	-3.3E-03 \pm 1.6E-02	U		⁶⁵ Zn	2.9E-02 \pm 1.7E-02	
D108 (600 Area)	¹⁴⁴ Ce	4.5E-02 \pm 1.4E-01	U	D110 (600 Area)	¹⁴⁴ Ce	2.5E-02 \pm 1.4E-01	U
	⁶⁰ Co	-2.2E-03 \pm 6.2E-03	U		⁶⁰ Co	-3.6E-03 \pm 6.7E-03	U
	¹³⁴ Cs	3.6E-02 \pm 1.6E-02			¹³⁴ Cs	3.7E-02 \pm 1.5E-02	
	¹³⁷ Cs	2.7E-01 \pm 4.8E-02			¹³⁷ Cs	1.2E-01 \pm 2.6E-02	
	¹⁵² Eu	1.6E-02 \pm 1.9E-02	U		¹⁵² Eu	1.0E-03 \pm 1.0E-02	U
	¹⁵⁴ Eu	1.1E-02 \pm 2.4E-02	U		¹⁵⁴ Eu	-2.6E-03 \pm 2.5E-02	U
	¹⁵⁵ Eu	5.2E-02 \pm 4.2E-02	U		¹⁵⁵ Eu	4.6E-02 \pm 3.7E-02	U
	²³⁸ Pu	3.6E-03 \pm 1.1E-02	U		²³⁸ Pu	1.9E-02 \pm 2.8E-02	U
	^{239/240} Pu	1.4E-01 \pm 4.3E-02			^{239/240} Pu	2.1E-03 \pm 2.1E-03	U
	¹⁰³ Ru	3.8E-03 \pm 7.5E-03	U		¹⁰³ Ru	-1.4E-03 \pm 7.7E-03	U
	¹⁰⁶ Ru	1.8E-02 \pm 6.1E-02	U		¹⁰⁶ Ru	-3.8E-02 \pm 6.1E-02	U
	¹²⁵ Sb	2.7E-03 \pm 1.9E-02	U		¹²⁵ Sb	4.8E-03 \pm 1.8E-02	U
	¹¹³ Sn	-5.1E-03 \pm 9.2E-03	U		¹¹³ Sn	4.9E-04 \pm 4.9E-03	U
	⁹⁰ Sr	-6.8E-02 \pm 4.0E-01	U		⁹⁰ Sr	7.8E-02 \pm 4.1E-01	U
	²³⁴ U	1.4E-01 \pm 5.0E-02			²³⁴ U	2.7E-01 \pm 8.4E-02	
	²³⁵ U	1.6E-02 \pm 1.4E-02	U		²³⁵ U	1.8E-02 \pm 1.6E-02	U
	²³⁸ U	1.1E-01 \pm 4.2E-02			²³⁸ U	2.6E-01 \pm 8.1E-02	
	⁶⁵ Zn	-6.4E-06 \pm 6.4E-05	U		⁶⁵ Zn	2.1E-02 \pm 1.9E-02	U

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

Table 3-4. 2008 Soil Sampling Results (pCi/g \pm total analytical uncertainty). (Sheet 19 of 24)

Location	Isotope	Result \pm Error	RQ*	Location	Isotope	Result \pm Error	RQ*
D174 (100-IU2/6, 600 Area) 2/29/2008	²⁴¹ Am	2.0E-02 \pm 2.4E-02	U	D174 (100-IU2/6, 600 Area) 3/28/2008	²⁴¹ Am	3.8E-02 \pm 3.5E-02	U
	¹⁴⁴ Ce	2.4E-01 \pm 1.8E-01	U		¹⁴⁴ Ce	1.4E-01 \pm 1.4E-01	U
	⁶⁰ Co	5.0E-05 \pm 5.0E-04	U		⁶⁰ Co	-5.7E-03 \pm 7.9E-03	U
	¹³⁴ Cs	6.1E-02 \pm 2.0E-02	U		¹³⁴ Cs	4.4E-02 \pm 1.8E-02	
	¹³⁷ Cs	3.6E-02 \pm 1.6E-02			¹³⁷ Cs	1.5E-02 \pm 1.2E-02	
	¹⁵² Eu	-8.9E-03 \pm 3.3E-02	U		¹⁵² Eu	-4.6E-03 \pm 2.7E-02	U
	¹⁵⁴ Eu	-2.6E-02 \pm 3.0E-02	U		¹⁵⁴ Eu	-2.7E-02 \pm 2.7E-02	U
	¹⁵⁵ Eu	5.8E-02 \pm 5.0E-02	U		¹⁵⁵ Eu	4.3E-02 \pm 4.2E-02	U
	²³⁸ Pu	-1.5E-02 \pm 3.9E-02	U		²³⁸ Pu	-3.3E-02 \pm 4.2E-02	U
	^{239/240} Pu	8.5E-03 \pm 8.8E-03			^{239/240} Pu	1.0E-02 \pm 1.0E-02	
	¹⁰³ Ru	6.3E-04 \pm 6.3E-03	U		¹⁰³ Ru	-1.1E-03 \pm 8.2E-03	U
	¹⁰⁶ Ru	-8.5E-03 \pm 8.0E-02	U		¹⁰⁶ Ru	1.4E-02 \pm 6.8E-02	U
	¹²⁵ Sb	4.7E-03 \pm 2.2E-02	U		¹²⁵ Sb	2.6E-03 \pm 2.0E-02	U
	¹¹³ Sn	-4.9E-03 \pm 1.0E-02	U		¹¹³ Sn	-3.2E-03 \pm 9.5E-03	U
	⁹⁰ Sr	-4.0E-01 \pm 4.0E-01	U		⁹⁰ Sr	-5.0E-01 \pm 5.0E-01	U
	²³⁴ U	2.6E-01 \pm 8.3E-02			²³⁴ U	2.7E-01 \pm 8.9E-02	
	²³⁵ U	3.9E-02 \pm 2.3E-02			²³⁵ U	3.3E-02 \pm 2.2E-02	
	²³⁸ U	2.0E-01 \pm 6.8E-02			²³⁸ U	2.6E-01 \pm 8.8E-02	
	⁶⁵ Zn	4.6E-03 \pm 2.4E-02	U		⁶⁵ Zn	3.9E-02 \pm 2.2E-02	
D174 (100-IU2/6, 600 Area) 4/30/2008	²⁴¹ Am	1.6E-02 \pm 1.3E-02	U	D114 (Replicate of D092 600 Area)	¹⁴⁴ Ce	5.6E-03 \pm 5.6E-02	U
	¹⁴⁴ Ce	1.3E+01 \pm 8.7E+01	U		⁶⁰ Co	-4.0E-03 \pm 7.7E-03	U
	⁶⁰ Co	-1.3E+00 \pm 4.1E+00	U		¹³⁴ Cs	3.4E-02 \pm 1.1E-02	
	¹³⁴ Cs	2.9E+01 \pm 9.9E+00			¹³⁷ Cs	1.7E+00 \pm 2.9E-01	
	¹³⁷ Cs	9.4E+01 \pm 1.7E+01			¹⁵² Eu	-2.2E-03 \pm 2.2E-02	U
	¹⁵² Eu	-7.2E+00 \pm 1.6E+01	U		¹⁵⁴ Eu	-5.1E-03 \pm 2.5E-02	U
	¹⁵⁴ Eu	-1.2E+01 \pm 1.3E+01	U		¹⁵⁵ Eu	5.8E-02 \pm 4.4E-02	U
	¹⁵⁵ Eu	1.4E+01 \pm 2.1E+01	U		²³⁸ Pu	2.5E-02 \pm 3.0E-02	U
	²³⁸ Pu	2.2E-03 \pm 2.2E-02	U		^{239/240} Pu	5.4E-02 \pm 2.6E-02	
	^{239/240} Pu	8.7E-03 \pm 1.1E-02	U		¹⁰³ Ru	-9.5E-03 \pm 9.7E-03	U
	¹⁰³ Ru	1.8E+00 \pm 4.4E+00	U		¹⁰⁶ Ru	-1.3E-02 \pm 7.5E-02	U
	¹⁰⁶ Ru	1.7E+01 \pm 3.6E+01	U		¹²⁵ Sb	2.9E-03 \pm 2.4E-02	U
	¹²⁵ Sb	-3.9E+00 \pm 1.2E+01	U		¹¹³ Sn	-8.0E-03 \pm 1.1E-02	U
	¹¹³ Sn	-3.4E+00 \pm 5.8E+00	U		⁹⁰ Sr	-5.5E-01 \pm 5.5E-01	U
	⁹⁰ Sr	-9.5E-02 \pm 4.3E-01	U		²³⁴ U	2.3E-01 \pm 7.6E-02	
	²³⁴ U	2.7E-01 \pm 8.6E-02			²³⁵ U	1.3E-02 \pm 1.2E-02	
	²³⁵ U	1.9E-02 \pm 1.7E-02	U		²³⁸ U	2.0E-01 \pm 6.8E-02	
	²³⁸ U	2.4E-01 \pm 7.9E-02			⁶⁵ Zn	4.1E-02 \pm 2.2E-02	
	⁶⁵ Zn	7.6E+00 \pm 1.2E+01	U				

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

Table 3-4. 2008 Soil Sampling Results (pCi/g \pm total analytical uncertainty). (Sheet 20 of 24)

Location	Isotope	Result \pm Error	RQ*	Location	Isotope	Result \pm Error	RQ*
D116 (300 Area)	¹⁴⁴ Ce	4.3E-02 \pm 1.1E-01	U	D117 (300 Area)	¹⁴⁴ Ce	-5.8E-02 \pm 1.1E-01	U
	⁶⁰ Co	-2.0E-03 \pm 5.5E-03	U		⁶⁰ Co	-3.1E-03 \pm 5.8E-03	U
	¹³⁴ Cs	3.0E-02 \pm 8.1E-03			¹³⁴ Cs	3.2E-02 \pm 1.2E-02	
	¹³⁷ Cs	-1.5E-03 \pm 5.8E-03	U		¹³⁷ Cs	1.4E-02 \pm 8.4E-03	
	¹⁵² Eu	7.8E-03 \pm 1.9E-02	U		¹⁵² Eu	-1.7E-03 \pm 1.7E-02	U
	¹⁵⁴ Eu	-1.7E-02 \pm 1.7E-02	U		¹⁵⁴ Eu	-6.5E-03 \pm 1.9E-02	U
	¹⁵⁵ Eu	2.3E-02 \pm 2.8E-02	U		¹⁵⁵ Eu	5.8E-03 \pm 2.8E-02	U
	²³⁸ Pu	-2.7E-02 \pm 4.0E-02	U		²³⁸ Pu	2.4E-03 \pm 2.4E-02	U
	^{239/240} Pu	5.5E-03 \pm 7.9E-03	U		^{239/240} Pu	4.9E-03 \pm 7.1E-03	U
	¹⁰³ Ru	6.4E-04 \pm 6.4E-03	U		¹⁰³ Ru	5.1E-03 \pm 7.0E-03	U
	¹⁰⁶ Ru	-1.1E-02 \pm 4.7E-02	U		¹⁰⁶ Ru	-3.5E-02 \pm 5.0E-02	U
	¹²⁵ Sb	4.7E-03 \pm 1.6E-02	U		¹²⁵ Sb	1.3E-02 \pm 1.6E-02	U
	¹¹³ Sn	-1.7E-03 \pm 7.7E-03	U		¹¹³ Sn	-3.0E-03 \pm 8.0E-03	U
	⁹⁰ Sr	-3.2E-01 \pm 4.4E-01	U		⁹⁰ Sr	-5.0E-01 \pm 5.0E-01	U
	²³⁴ U	1.8E-01 \pm 6.1E-02			²³⁴ U	6.3E-01 \pm 1.8E-01	
	²³⁵ U	1.6E-02 \pm 1.3E-02			²³⁵ U	3.6E-02 \pm 2.2E-02	
	²³⁸ U	2.3E-01 \pm 7.4E-02			²³⁸ U	6.6E-01 \pm 1.8E-01	
	⁶⁵ Zn	-1.6E-02 \pm 1.6E-02	U		⁶⁵ Zn	-1.1E-02 \pm 1.7E-02	U
D118 (300 Area)	¹⁴⁴ Ce	6.8E-02 \pm 1.3E-01	U	D119 (300 Area)	¹⁴⁴ Ce	1.6E-02 \pm 1.1E-01	U
	⁶⁰ Co	6.0E-04 \pm 6.0E-03	U		⁶⁰ Co	8.7E-04 \pm 6.5E-03	U
	¹³⁴ Cs	2.1E-02 \pm 1.2E-02			¹³⁴ Cs	1.4E-02 \pm 8.7E-03	
	¹³⁷ Cs	1.1E-02 \pm 9.1E-03	U		¹³⁷ Cs	8.3E-03 \pm 6.7E-03	U
	¹⁵² Eu	-3.1E-02 \pm 3.5E-02	U		¹⁵² Eu	8.0E-03 \pm 2.2E-02	U
	¹⁵⁴ Eu	-1.5E-03 \pm 1.5E-02	U		¹⁵⁴ Eu	3.3E-03 \pm 2.3E-02	U
	¹⁵⁵ Eu	3.2E-02 \pm 3.4E-02	U		¹⁵⁵ Eu	5.7E-02 \pm 3.7E-02	
	²³⁸ Pu	2.5E-03 \pm 2.5E-02	U		²³⁸ Pu	-1.5E-02 \pm 5.3E-02	U
	^{239/240} Pu	-4.9E-03 \pm 7.1E-03	U		^{239/240} Pu	1.8E-02 \pm 1.5E-02	
	¹⁰³ Ru	2.5E-03 \pm 7.2E-03	U		¹⁰³ Ru	-3.8E-03 \pm 6.7E-03	U
	¹⁰⁶ Ru	-1.3E-02 \pm 5.8E-02	U		¹⁰⁶ Ru	-2.4E-02 \pm 5.7E-02	U
	¹²⁵ Sb	-8.1E-04 \pm 8.1E-03	U		¹²⁵ Sb	-5.4E-03 \pm 1.7E-02	U
	¹¹³ Sn	1.8E-03 \pm 8.6E-03	U		¹¹³ Sn	-2.8E-03 \pm 7.8E-03	U
	⁹⁰ Sr	-1.1E-01 \pm 4.4E-01	U		⁹⁰ Sr	1.4E-01 \pm 4.8E-01	U
	²³⁴ U	2.2E-01 \pm 7.3E-02			²³⁴ U	1.6E+00 \pm 4.3E-01	
	²³⁵ U	2.2E-02 \pm 1.6E-02			²³⁵ U	5.6E-02 \pm 2.7E-02	
	²³⁸ U	2.7E-01 \pm 8.6E-02			²³⁸ U	1.6E+00 \pm 4.3E-01	
	⁶⁵ Zn	-6.0E-04 \pm 6.0E-03	U		⁶⁵ Zn	3.6E-02 \pm 1.8E-02	

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

Table 3-4. 2008 Soil Sampling Results (pCi/g \pm total analytical uncertainty). (Sheet 21 of 24)

Location	Isotope	Result \pm Error	RQ*	Location	Isotope	Result \pm Error	RQ*
D120 (300 Area)	¹⁴⁴ Ce	-6.1E-02 \pm 1.0E-01	U	D121 (300 Area)	¹⁴⁴ Ce	4.5E-02 \pm 1.3E-01	U
	⁶⁰ Co	-7.6E-03 \pm 7.6E-03	U		⁶⁰ Co	-1.1E-03 \pm 5.9E-03	U
	¹³⁴ Cs	3.3E-02 \pm 1.2E-02			¹³⁴ Cs	3.4E-02 \pm 1.2E-02	
	¹³⁷ Cs	1.4E-02 \pm 9.8E-03			¹³⁷ Cs	1.8E-02 \pm 1.0E-02	
	¹⁵² Eu	5.6E-03 \pm 2.1E-02	U		¹⁵² Eu	-1.3E-02 \pm 2.2E-02	U
	¹⁵⁴ Eu	-1.5E-02 \pm 2.4E-02	U		¹⁵⁴ Eu	6.6E-03 \pm 2.1E-02	U
	¹⁵⁵ Eu	5.8E-02 \pm 3.7E-02			¹⁵⁵ Eu	7.6E-03 \pm 3.1E-02	U
	²³⁸ Pu	2.4E-02 \pm 3.0E-02	U		²³⁸ Pu	-4.5E-03 \pm 2.9E-02	U
	^{239/240} Pu	2.3E-02 \pm 1.6E-02			^{239/240} Pu	2.2E-03 \pm 2.2E-03	U
	¹⁰³ Ru	7.5E-04 \pm 7.4E-03	U		¹⁰³ Ru	-2.7E-03 \pm 6.6E-03	U
	¹⁰⁶ Ru	-2.2E-02 \pm 5.8E-02	U		¹⁰⁶ Ru	-1.7E-02 \pm 5.2E-02	U
	¹²⁵ Sb	1.8E-02 \pm 1.8E-02	U		¹²⁵ Sb	1.5E-03 \pm 1.5E-02	U
	¹¹³ Sn	1.1E-03 \pm 8.6E-03	U		¹¹³ Sn	-5.8E-04 \pm 5.8E-03	U
	⁹⁰ Sr	-4.8E-01 \pm 4.8E-01	U		⁹⁰ Sr	-2.7E-01 \pm 3.9E-01	U
	²³⁴ U	3.3E-01 \pm 9.9E-02			²³⁴ U	2.6E-01 \pm 8.3E-02	
	²³⁵ U	3.2E-02 \pm 2.0E-02			²³⁵ U	1.7E-02 \pm 1.5E-02	U
	²³⁸ U	3.3E-01 \pm 9.9E-02			²³⁸ U	2.3E-01 \pm 7.6E-02	
	⁶⁵ Zn	1.8E-02 \pm 1.9E-02	U		⁶⁵ Zn	-6.9E-03 \pm 1.6E-02	U
D123 (300 Area)	¹⁴⁴ Ce	1.0E-02 \pm 1.0E-01	U	D124 (300 Area)	¹⁴⁴ Ce	-3.2E-01 \pm 3.2E-01	U
	⁶⁰ Co	5.7E-03 \pm 5.5E-03	U		⁶⁰ Co	3.5E-03 \pm 1.0E-02	U
	¹³⁴ Cs	2.7E-02 \pm 9.6E-03			¹³⁴ Cs	3.9E-02 \pm 1.8E-02	
	¹³⁷ Cs	3.0E-02 \pm 1.2E-02			¹³⁷ Cs	5.9E-02 \pm 1.9E-02	
	¹⁵² Eu	-9.0E-04 \pm 9.0E-03	U		¹⁵² Eu	-1.7E-02 \pm 4.0E-02	U
	¹⁵⁴ Eu	1.4E-03 \pm 1.4E-02	U		¹⁵⁴ Eu	1.5E-02 \pm 3.4E-02	U
	¹⁵⁵ Eu	4.6E-03 \pm 2.6E-02	U		¹⁵⁵ Eu	6.2E-02 \pm 4.7E-02	
	²³⁸ Pu	-4.9E-03 \pm 2.4E-02	U		²³⁸ Pu	-1.6E-02 \pm 3.1E-02	U
	^{239/240} Pu	4.9E-03 \pm 7.1E-03	U		^{239/240} Pu	1.6E-02 \pm 1.2E-02	
	¹⁰³ Ru	5.7E-03 \pm 6.7E-03	U		¹⁰³ Ru	-5.0E-03 \pm 1.2E-02	U
	¹⁰⁶ Ru	-2.8E-02 \pm 4.9E-02	U		¹⁰⁶ Ru	-2.2E-02 \pm 9.8E-02	U
	¹²⁵ Sb	7.2E-03 \pm 1.5E-02	U		¹²⁵ Sb	-1.3E-03 \pm 1.3E-02	U
	¹¹³ Sn	-4.5E-03 \pm 7.5E-03	U		¹¹³ Sn	3.5E-04 \pm 3.5E-03	U
	⁹⁰ Sr	-2.0E-01 \pm 3.9E-01	U		⁹⁰ Sr	3.1E-01 \pm 4.5E-01	U
	²³⁴ U	1.5E-01 \pm 5.4E-02			²³⁴ U	2.2E-01 \pm 7.3E-02	
	²³⁵ U	1.2E-02 \pm 1.1E-02			²³⁵ U	1.6E-02 \pm 1.4E-02	U
	²³⁸ U	1.5E-01 \pm 5.3E-02			²³⁸ U	2.7E-01 \pm 8.4E-02	
	⁶⁵ Zn	-5.4E-03 \pm 1.6E-02	U		⁶⁵ Zn	1.9E-04 \pm 1.9E-03	U

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

Table 3-4. 2008 Soil Sampling Results (pCi/g \pm total analytical uncertainty). (Sheet 22 of 24)

Location	Isotope	Result \pm Error	RQ*	Location	Isotope	Result \pm Error	RQ*
D125 (300 Area)	¹⁴⁴ Ce	-3.5E-02 \pm 1.3E-01	U	D126 (300 Area)	¹⁴⁴ Ce	-7.8E-03 \pm 7.8E-02	U
	⁶⁰ Co	-2.8E-03 \pm 7.3E-03	U		⁶⁰ Co	3.3E-04 \pm 3.3E-03	U
	¹³⁴ Cs	3.8E-02 \pm 1.5E-02			¹³⁴ Cs	3.3E-02 \pm 1.5E-02	
	¹³⁷ Cs	7.4E-02 \pm 1.8E-02			¹³⁷ Cs	4.4E-02 \pm 1.5E-02	
	¹⁵² Eu	-2.5E-02 \pm 2.8E-02	U		¹⁵² Eu	-8.7E-03 \pm 2.7E-02	U
	¹⁵⁴ Eu	8.9E-03 \pm 2.3E-02	U		¹⁵⁴ Eu	-3.1E-02 \pm 3.1E-02	U
	¹⁵⁵ Eu	5.2E-02 \pm 3.2E-02	U		¹⁵⁵ Eu	7.3E-02 \pm 5.1E-02	
	²³⁸ Pu	-8.3E-03 \pm 3.6E-02	U		²³⁸ Pu	1.7E-03 \pm 1.3E-02	U
	^{239/240} Pu	2.1E-03 \pm 2.1E-03	U		^{239/240} Pu	2.5E-02 \pm 1.4E-02	
	¹⁰³ Ru	-9.8E-03 \pm 9.8E-03	U		¹⁰³ Ru	-3.9E-03 \pm 8.3E-03	U
	¹⁰⁶ Ru	4.3E-02 \pm 6.4E-02	U		¹⁰⁶ Ru	-9.2E-03 \pm 7.3E-02	U
	¹²⁵ Sb	4.5E-03 \pm 1.9E-02	U		¹²⁵ Sb	-8.6E-03 \pm 2.3E-02	U
	¹¹³ Sn	5.4E-03 \pm 9.3E-03	U		¹¹³ Sn	3.3E-03 \pm 1.0E-02	U
	⁹⁰ Sr	-2.2E-02 \pm 2.2E-01	U		⁹⁰ Sr	-4.6E-01 \pm 4.6E-01	U
	²³⁴ U	6.1E-01 \pm 1.7E-01			²³⁴ U	2.2E+00 \pm 5.9E-01	
	²³⁵ U	4.2E-02 \pm 2.3E-02			²³⁵ U	2.5E-01 \pm 8.0E-02	
	²³⁸ U	5.9E-01 \pm 1.7E-01			²³⁸ U	1.6E+00 \pm 4.3E-01	
	⁶⁵ Zn	-1.0E-03 \pm 1.0E-02	U		⁶⁵ Zn	5.2E-02 \pm 2.3E-02	
D127 (300 Area)	¹⁴⁴ Ce	-5.2E-02 \pm 1.0E-01	U	D128 (300 Area)	¹⁴⁴ Ce	1.2E-01 \pm 1.4E-01	U
	⁶⁰ Co	-6.0E-04 \pm 6.0E-03	U		⁶⁰ Co	-5.2E-04 \pm 5.2E-03	U
	¹³⁴ Cs	3.4E-02 \pm 1.5E-02			¹³⁴ Cs	4.1E-02 \pm 1.2E-02	
	¹³⁷ Cs	1.9E-01 \pm 3.4E-02			¹³⁷ Cs	8.9E-02 \pm 1.9E-02	
	¹⁵² Eu	1.1E-02 \pm 2.1E-02	U		¹⁵² Eu	9.0E-03 \pm 2.6E-02	U
	¹⁵⁴ Eu	-2.7E-02 \pm 2.7E-02	U		¹⁵⁴ Eu	-2.0E-02 \pm 2.1E-02	U
	¹⁵⁵ Eu	5.9E-02 \pm 3.6E-02			¹⁵⁵ Eu	4.5E-02 \pm 4.1E-02	U
	²³⁸ Pu	2.7E-02 \pm 1.9E-02			²³⁸ Pu	1.6E-03 \pm 8.5E-03	U
	^{239/240} Pu	9.0E-03 \pm 9.3E-03			^{239/240} Pu	9.8E-03 \pm 8.4E-03	
	¹⁰³ Ru	5.5E-04 \pm 5.5E-03	U		¹⁰³ Ru	-3.3E-03 \pm 7.2E-03	U
	¹⁰⁶ Ru	2.4E-02 \pm 5.6E-02	U		¹⁰⁶ Ru	1.9E-02 \pm 6.0E-02	U
	¹²⁵ Sb	-1.4E-02 \pm 1.8E-02	U		¹²⁵ Sb	1.1E-02 \pm 1.8E-02	U
	¹¹³ Sn	3.6E-05 \pm 3.6E-04	U		¹¹³ Sn	-4.8E-03 \pm 9.1E-03	U
	⁹⁰ Sr	6.0E-01 \pm 4.6E-01			⁹⁰ Sr	1.0E-02 \pm 1.0E-01	U
	²³⁴ U	2.4E-01 \pm 7.9E-02			²³⁴ U	2.6E-01 \pm 8.1E-02	
	²³⁵ U	1.1E-02 \pm 1.4E-02	U		²³⁵ U	2.5E-02 \pm 1.8E-02	
	²³⁸ U	2.5E-01 \pm 8.2E-02			²³⁸ U	2.7E-01 \pm 8.4E-02	
	⁶⁵ Zn	1.3E-02 \pm 1.8E-02	U		⁶⁵ Zn	-1.0E-03 \pm 1.0E-02	U

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

Table 3-4. 2008 Soil Sampling Results (pCi/g \pm total analytical uncertainty). (Sheet 23 of 24)

Location	Isotope	Result \pm Error	RQ*	Location	Isotope	Result \pm Error	RQ*
D129	¹⁴⁴ Ce	1.5E-01 \pm 1.3E-01	U	D131	¹⁴⁴ Ce	-1.5E-02 \pm 1.1E-01	U
(300 Area)	⁶⁰ Co	3.1E-03 \pm 6.7E-03	U	(Replicate	⁶⁰ Co	-3.4E-03 \pm 5.4E-03	U
	¹³⁴ Cs	3.7E-02 \pm 1.4E-02		of D119	¹³⁴ Cs	2.6E-02 \pm 1.0E-02	
	¹³⁷ Cs	2.8E-02 \pm 1.3E-02		300 Area)	¹³⁷ Cs	1.8E-02 \pm 6.6E-03	
	¹⁵² Eu	-1.5E-02 \pm 2.5E-02	U		¹⁵² Eu	-2.4E-03 \pm 1.9E-02	U
	¹⁵⁴ Eu	-1.7E-02 \pm 3.4E-02	U		¹⁵⁴ Eu	9.8E-04 \pm 9.8E-03	U
	¹⁵⁵ Eu	3.1E-02 \pm 3.0E-02	U		¹⁵⁵ Eu	6.6E-02 \pm 3.7E-02	
	²³⁸ Pu	-1.1E-02 \pm 3.4E-02	U		²³⁸ Pu	1.0E-02 \pm 3.1E-02	U
	^{239/240} Pu	2.1E-03 \pm 2.1E-02	U		^{239/240} Pu	2.0E-03 \pm 1.1E-02	U
	¹⁰³ Ru	3.1E-04 \pm 3.1E-03	U		¹⁰³ Ru	-7.8E-03 \pm 7.8E-03	U
	¹⁰⁶ Ru	6.5E-03 \pm 5.6E-02	U		¹⁰⁶ Ru	2.1E-02 \pm 4.7E-02	U
	¹²⁵ Sb	-1.9E-03 \pm 1.7E-02	U		¹²⁵ Sb	-6.7E-03 \pm 1.5E-02	U
	¹¹³ Sn	-6.9E-03 \pm 8.8E-03	U		¹¹³ Sn	-6.6E-03 \pm 7.6E-03	U
	⁹⁰ Sr	-1.8E-01 \pm 4.1E-01	U		⁹⁰ Sr	4.0E-03 \pm 4.0E-02	U
	²³⁴ U	2.7E-01 \pm 8.4E-02			²³⁴ U	1.7E+00 \pm 4.4E-01	
	²³⁵ U	8.1E-03 \pm 8.3E-03			²³⁵ U	7.5E-02 \pm 3.1E-02	
	²³⁸ U	2.8E-01 \pm 8.7E-02			²³⁸ U	1.6E+00 \pm 4.2E-01	
	⁶⁵ Zn	-3.1E-03 \pm 1.8E-02	U		⁶⁵ Zn	-1.6E-02 \pm 1.6E-02	U
D132	¹⁴⁴ Ce	4.7E-02 \pm 1.0E-01	U	D139	¹⁴⁴ Ce	-5.0E-02 \pm 1.2E-01	U
(Replicate	⁶⁰ Co	1.9E-03 \pm 7.0E-03	U	(Replicate	⁶⁰ Co	1.2E-03 \pm 5.0E-03	U
of D120	¹³⁴ Cs	2.4E-02 \pm 9.8E-03		of D118	¹³⁴ Cs	2.1E-02 \pm 8.1E-03	
300 Area)	¹³⁷ Cs	1.8E-02 \pm 9.4E-03		300 Area)	¹³⁷ Cs	1.6E-02 \pm 7.4E-03	
	¹⁵² Eu	4.4E-03 \pm 2.0E-02	U		¹⁵² Eu	-1.2E-02 \pm 2.2E-02	U
	¹⁵⁴ Eu	1.1E-02 \pm 2.3E-02	U		¹⁵⁴ Eu	-3.7E-03 \pm 1.7E-02	U
	¹⁵⁵ Eu	3.7E-02 \pm 2.7E-02	U		¹⁵⁵ Eu	3.3E-03 \pm 2.8E-02	U
	²³⁸ Pu	-2.2E-03 \pm 2.2E-02	U		²³⁸ Pu	3.5E-02 \pm 3.8E-02	U
	^{239/240} Pu	1.1E-02 \pm 1.2E-02	U		^{239/240} Pu	1.4E-02 \pm 1.5E-02	U
	¹⁰³ Ru	3.5E-03 \pm 6.1E-03	U		¹⁰³ Ru	2.3E-03 \pm 5.2E-03	U
	¹⁰⁶ Ru	-2.8E-02 \pm 5.6E-02	U		¹⁰⁶ Ru	-1.2E-02 \pm 4.8E-02	U
	¹²⁵ Sb	1.8E-02 \pm 1.7E-02	U		¹²⁵ Sb	-6.4E-03 \pm 1.5E-02	U
	¹¹³ Sn	-2.9E-03 \pm 8.1E-03	U		¹¹³ Sn	-5.0E-03 \pm 6.9E-03	U
	⁹⁰ Sr	-1.7E-01 \pm 4.0E-01	U		⁹⁰ Sr	-4.0E-01 \pm 4.0E-01	U
	²³⁴ U	3.2E-01 \pm 9.9E-02			²³⁴ U	3.5E-01 \pm 1.0E-01	
	²³⁵ U	2.6E-02 \pm 1.7E-02			²³⁵ U	2.1E-02 \pm 1.6E-02	
	²³⁸ U	3.1E-01 \pm 9.6E-02			²³⁸ U	3.3E-01 \pm 9.9E-02	
	⁶⁵ Zn	-7.5E-04 \pm 7.5E-03	U		⁶⁵ Zn	-1.7E-03 \pm 1.4E-02	U

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

Table 3-4. 2008 Soil Sampling Results (pCi/g \pm total analytical uncertainty). (Sheet 24 of 24)

Location	Isotope	Result \pm Error	RQ*	Location	Isotope	Result \pm Error	RQ*
D140 (Replicate of D123 300 Area)	¹⁴⁴ Ce	1.4E-01 \pm 1.7E-01	U	D130 (400 Area)	¹⁴⁴ Ce	-5.3E-02 \pm 1.1E-01	U
	⁶⁰ Co	-2.0E-03 \pm 1.1E-02	U		⁶⁰ Co	2.4E-03 \pm 5.7E-03	U
	¹³⁴ Cs	2.0E-02 \pm 1.8E-02	U		¹³⁴ Cs	3.3E-02 \pm 1.1E-02	
	¹³⁷ Cs	3.0E-02 \pm 1.5E-02			¹³⁷ Cs	2.0E-02 \pm 1.1E-02	
	¹⁵² Eu	-1.8E-02 \pm 4.2E-02	U		¹⁵² Eu	1.6E-02 \pm 2.0E-02	U
	¹⁵⁴ Eu	-1.3E-02 \pm 3.5E-02	U		¹⁵⁴ Eu	-2.1E-02 \pm 2.1E-02	U
	¹⁵⁵ Eu	-9.7E-03 \pm 4.2E-02	U		¹⁵⁵ Eu	2.0E-02 \pm 2.7E-02	U
	²³⁸ Pu	4.8E-03 \pm 3.7E-02	U		²³⁸ Pu	-2.6E-02 \pm 3.7E-02	U
	^{239/240} Pu	-2.4E-03 \pm 1.1E-02	U		^{239/240} Pu	4.7E-03 \pm 9.5E-03	U
	¹⁰³ Ru	1.7E-03 \pm 1.1E-02	U		¹⁰³ Ru	-4.3E-03 \pm 5.6E-03	U
	¹⁰⁶ Ru	2.1E-02 \pm 9.7E-02	U		¹⁰⁶ Ru	-3.7E-02 \pm 4.7E-02	U
	¹²⁵ Sb	-4.4E-03 \pm 2.9E-02	U		¹²⁵ Sb	-9.0E-03 \pm 1.6E-02	U
	¹¹³ Sn	-3.5E-03 \pm 1.4E-02	U		¹¹³ Sn	-7.6E-03 \pm 7.7E-03	U
	⁹⁰ Sr	-2.2E-01 \pm 4.2E-01	U		⁹⁰ Sr	-2.7E-01 \pm 4.2E-01	U
	²³⁴ U	2.1E-01 \pm 6.9E-02			²³⁴ U	2.2E-01 \pm 7.3E-02	
	²³⁵ U	2.7E-02 \pm 1.7E-02			²³⁵ U	2.9E-02 \pm 1.8E-02	
	²³⁸ U	1.5E-01 \pm 5.3E-02			²³⁸ U	2.1E-01 \pm 6.9E-02	
	⁶⁵ Zn	-4.1E-03 \pm 2.8E-02	U		⁶⁵ Zn	-1.9E-03 \pm 1.6E-02	U
D146 (ERDF, 200-W)	¹⁴⁴ Ce	4.9E-02 \pm 1.5E-01	U				
	⁶⁰ Co	3.8E-03 \pm 8.1E-03	U				
	¹³⁴ Cs	3.5E-02 \pm 1.1E-02					
	¹³⁷ Cs	8.3E-03 \pm 9.8E-03	U				
	¹⁵² Eu	-1.3E-02 \pm 3.3E-02	U				
	¹⁵⁴ Eu	1.6E-02 \pm 3.0E-02	U				
	¹⁵⁵ Eu	6.0E-02 \pm 5.1E-02	U				
	²³⁸ Pu	2.7E-02 \pm 3.3E-02	U				
	^{239/240} Pu	8.3E-03 \pm 1.0E-02	U				
	¹⁰³ Ru	2.3E-03 \pm 8.4E-03	U				
	¹⁰⁶ Ru	-3.9E-02 \pm 7.2E-02	U				
	¹²⁵ Sb	-9.1E-03 \pm 2.1E-02	U				
	¹¹³ Sn	-1.6E-03 \pm 1.1E-02	U				
	⁹⁰ Sr	-6.3E-01 \pm 6.3E-01	U				
	²³⁴ U	1.3E-01 \pm 4.7E-02					
	²³⁵ U	4.5E-03 \pm 9.1E-03	U				
	²³⁸ U	1.7E-01 \pm 5.8E-02					
	⁶⁵ Zn	4.8E-04 \pm 4.8E-03	U				

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

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4.0 VEGETATION MONITORING

The radionuclide content of vegetation was measured to evaluate long-term trends in environmental accumulation of radioactivity in the 100, 200/600, and 300/400 Areas. Vegetation samples were collected on or near facilities that store, handle, or dispose of radioactive waste. The number of vegetation samples collected in 2008 and their locations are shown in Table 4-1.

Table 4-1. Number and Locations of Vegetation Samples Collected Near Hanford Facilities and Operations in 2008.

Number of Samples	Operational Area					
	100-N	200-East	200-West ^a	300 ^a	400	600 ^a
71	3	12	25	15	1	15

^a Number of samples includes one or more Replicate Samples.

Vegetation sampling locations are illustrated in Figures 4-1 through 4-6. Radionuclide analyses indicated that strontium-90, cesium-137, plutonium-238, plutonium-239/240, and uranium were detectable vegetation samples in 2008. Historically, the predominant radionuclides observed in vegetation samples were activation and fission products in the 100 Areas, fission products in the 200 Areas, and uranium in the 300 Area.

A summary of near-facility vegetation sampling results for selected radionuclides collected during 2008 is presented in Table 4-2. Historical vegetation sampling results for the 100-N, 200/600, and 300/400 Areas are displayed in Table 4-3. The 2008 vegetation sampling results for all areas are provided in Table 4-4.

Strontium-90 vegetation samples for this report period showed a frequent occurrence of negative (i.e., less than zero) concentrations. This was primarily due to changes in laboratory background correction calculations that were implemented during 2003. Both historical and current values are within accepted statistical ranges as evidenced by laboratory quality assurance (QA) and performance evaluation programs.

Additional discussion of the 2008 vegetation results can be found in Section 10.10.2 of PNNL-18427.

Figure 4-1. 2008 Vegetation Sampling Locations, 100 N Area.

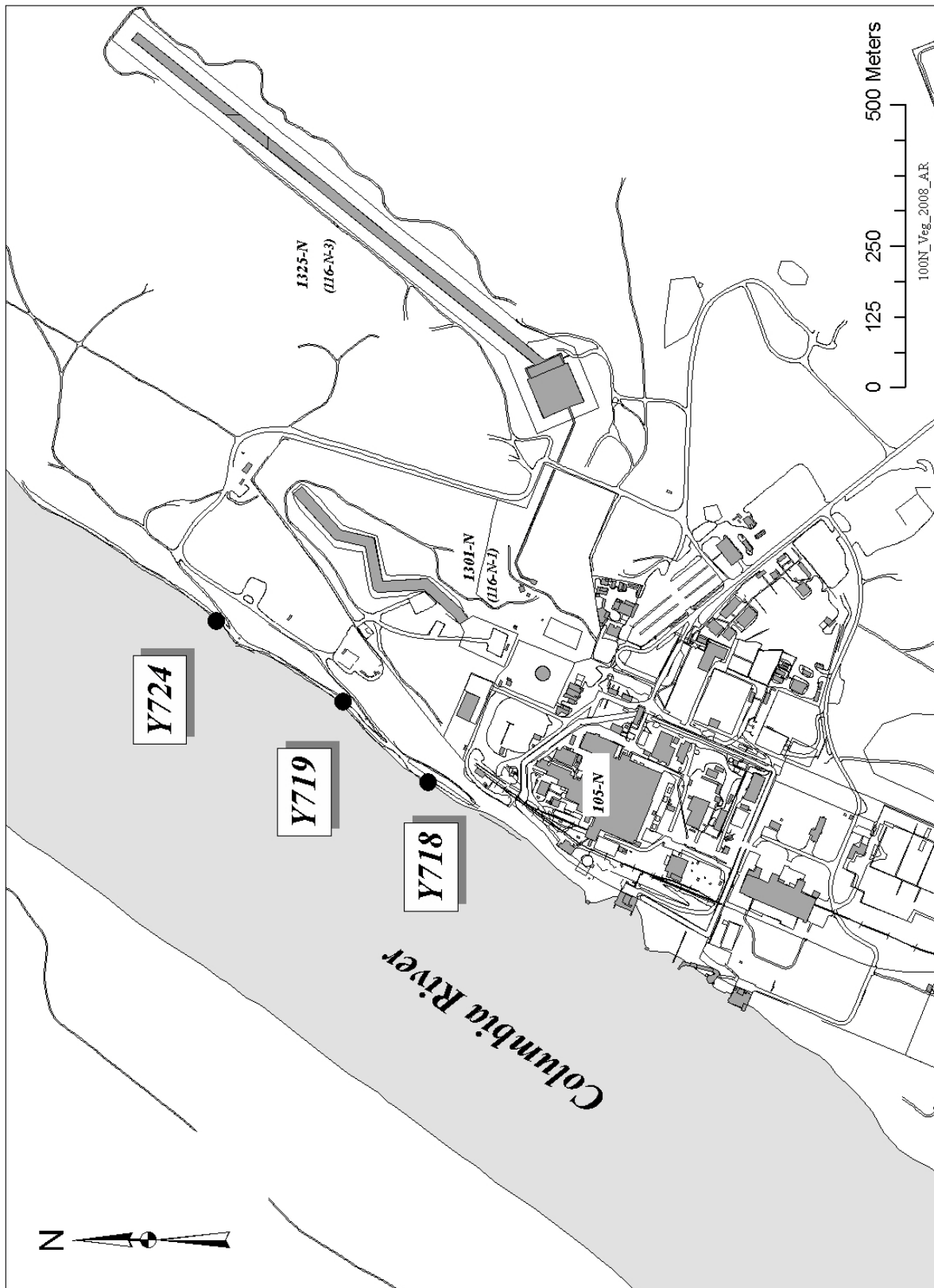


Figure 4-2. 2008 Vegetation Sampling Locations, 200 East Area.

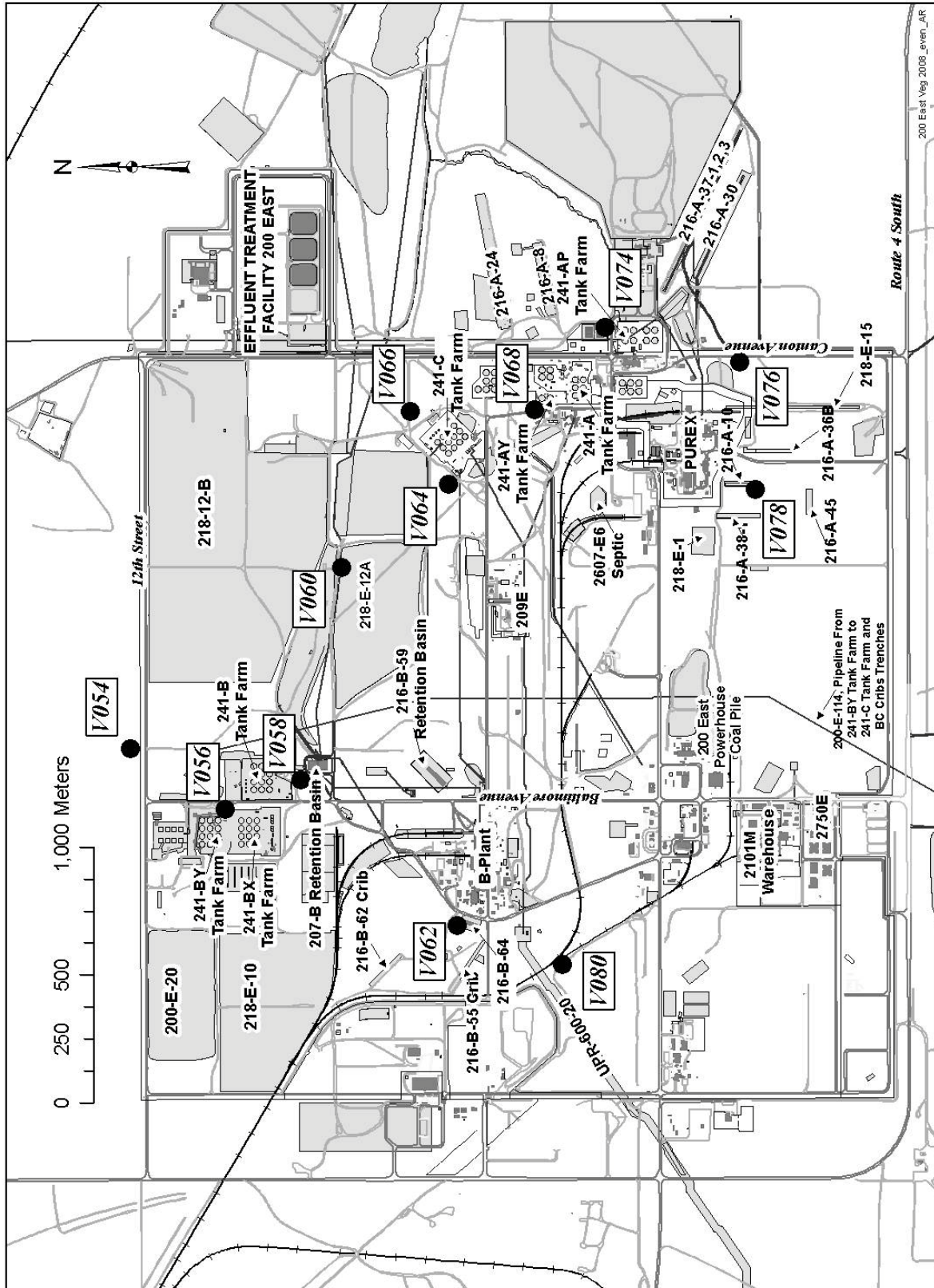


Figure 4-4. 2008 Vegetation Sampling Locations, 300 Area.

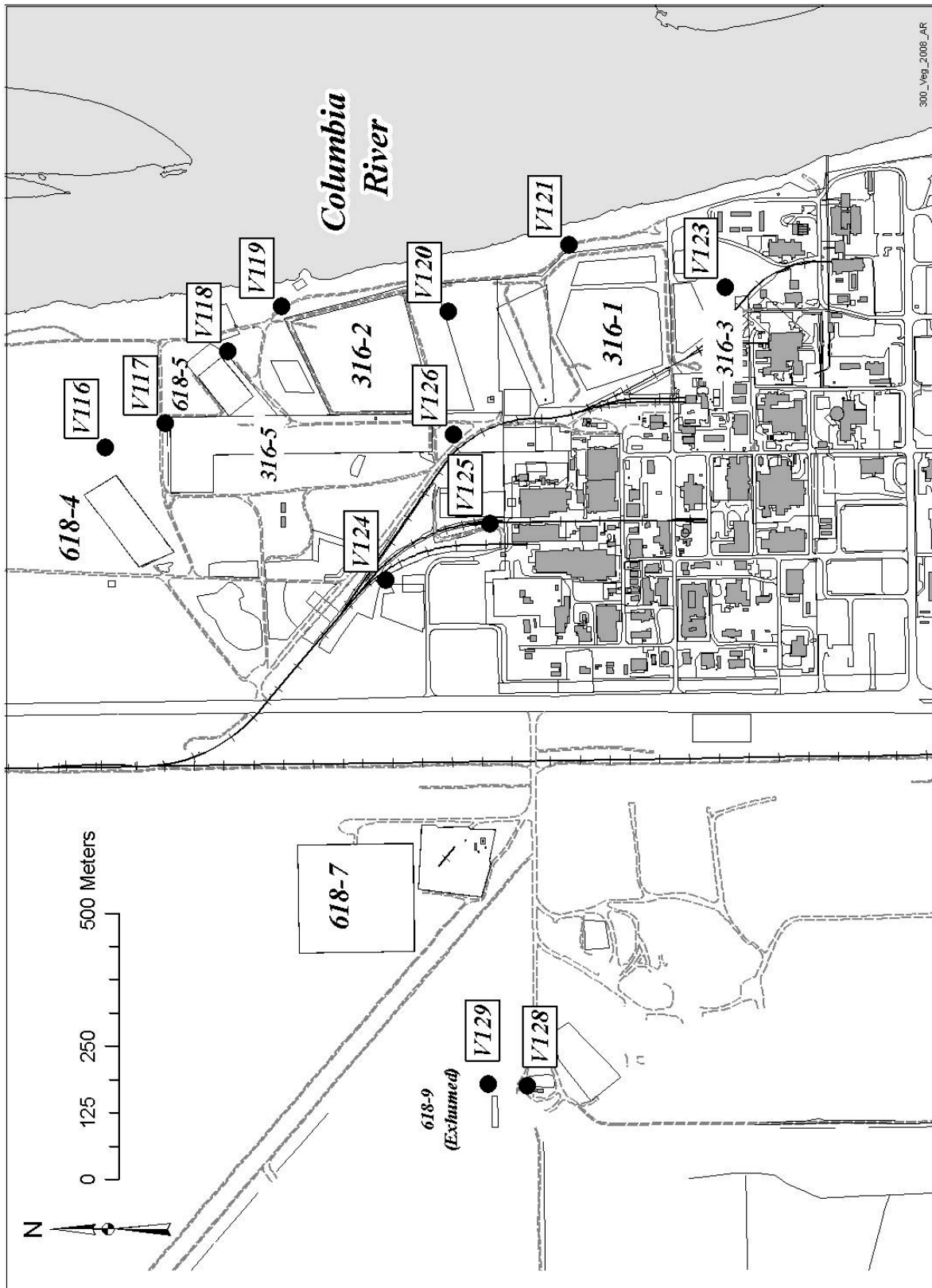


Figure 4-5. 2008 Vegetation Sampling Locations, 400 Area

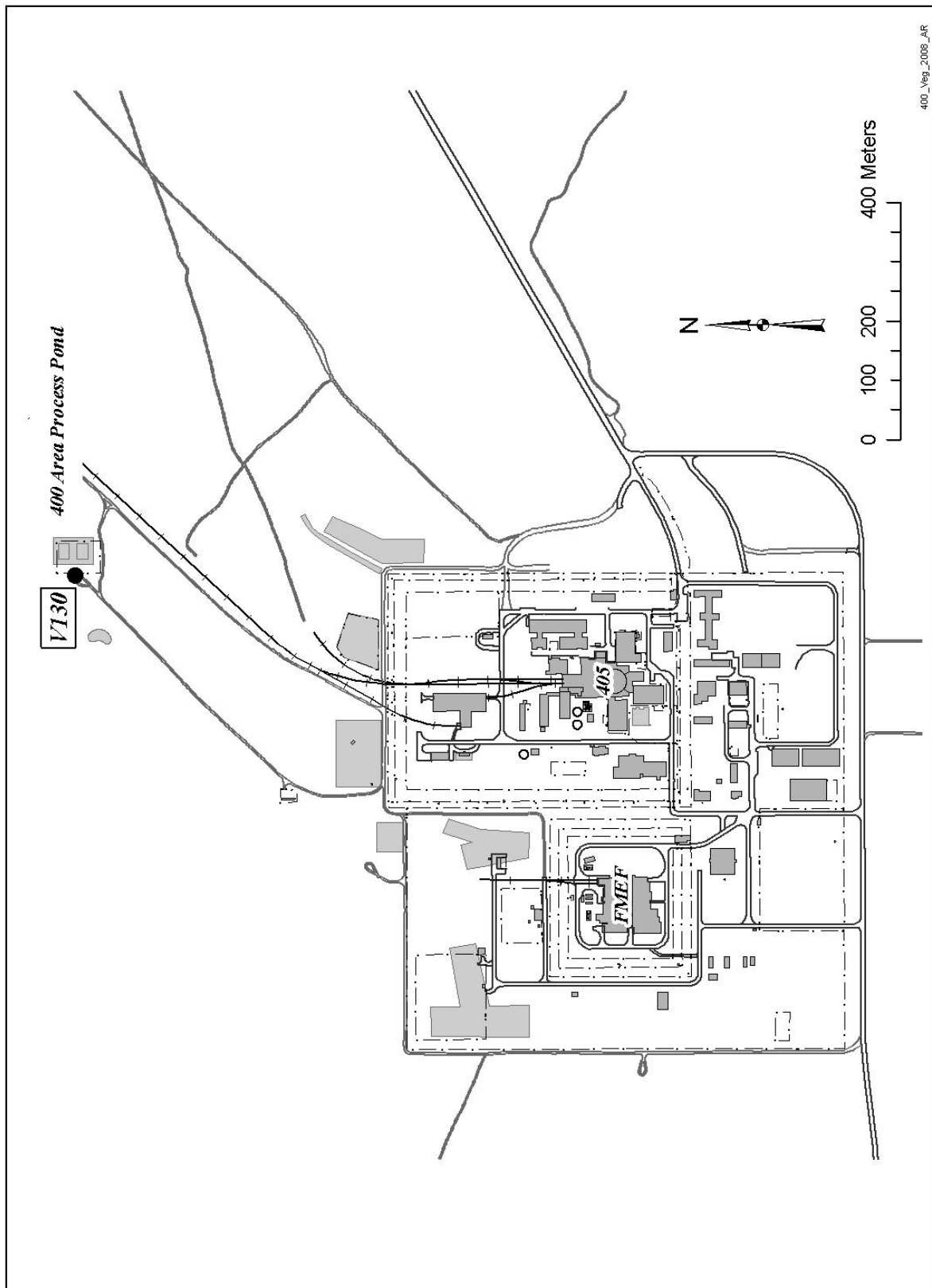


Figure 4-6. 2008 Vegetation Sampling Locations, 600 Area.

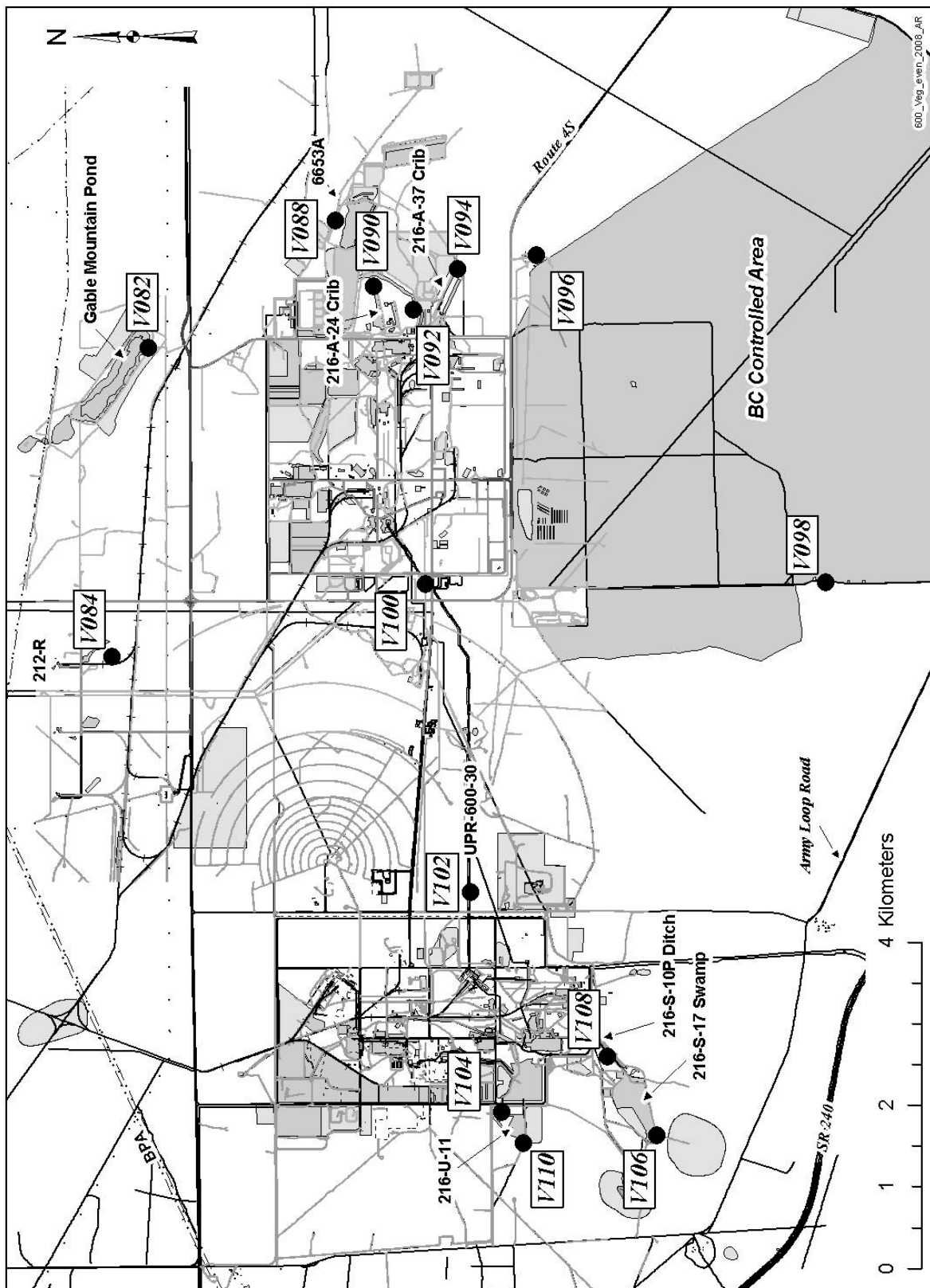


Table 4-2. Summary of Near-Facility Vegetation Sampling Results (pCi/g)^a for Selected Radionuclides, 2008.

Isotope	Number of		Average ^c	Maximum ^d	Location	
	Samples ^b	Detects			Area	Site
¹⁴⁴ Ce	71	0	-8.8E-02 ± 6.8E-01	6.4E-01 ± 5.0E-01 ^e	200 West	V038
⁶⁰ Co	71	0	-8.9E-03 ± 7.3E-02	1.1E-01 ± 9.5E-02 ^e	200 West	V026
¹³⁴ Cs	71	0	8.2E-03 ± 6.6E-02	1.4E-01 ± 2.5E-01 ^e	600 Area	V110
¹³⁷ Cs	71	12	3.6E-02 ± 1.2E-01	2.2E-01 ± 1.1E-01	200 West	V042
¹⁵² Eu	71	1	-8.8E-04 ± 1.8E-01	3.7E-01 ± 3.4E-01	200 East	V076
¹⁵⁴ Eu	71	0	-3.8E-02 ± 3.1E-01	2.1E-01 ± 1.2E-01 ^e	200 East	V060
¹⁵⁵ Eu	71	0	-3.9E-03 ± 2.2E-01	2.7E-01 ± 2.2E-01 ^e	200 West	V042
²³⁸ Pu	71	6	3.7E-03 ± 3.4E-02	8.7E-02 ± 4.7E-02	300 Area	V120
^{239/240} Pu	71	17	1.4E-02 ± 9.5E-02	3.6E-01 ± 9.7E-02	200 West	V034
¹⁰³ Ru	71	0	-7.7E-03 ± 9.2E-02	1.2E-01 ± 1.2E-01 ^e	600 Area	V082
¹⁰⁶ Ru	71	0	-4.9E-02 ± 9.4E-01	1.1E+00 ± 8.9E-01 ^e	300 Area	V128
¹²⁵ Sb	71	0	-5.5E-03 ± 1.8E-01	2.0E-01 ± 2.0E-01 ^e	200 East	V054
¹¹³ Sn	71	0	-9.3E-03 ± 6.5E-02	7.3E-02 ± 7.0E-02 ^e	300 Area	V138
⁹⁰ Sr	71	3	-1.5E-01 ± 6.9E-01	6.5E-01 ± 2.6E-01	200 East	V058
²³⁴ U	71	66	1.7E-02 ± 1.6E-02	4.8E-02 ± 1.8E-02	300 Area	V119
²³⁵ U	71	20	3.7E-03 ± 4.5E-03	1.0E-02 ± 7.5E-03	100-N	Y718
²³⁸ U	71	59	1.2E-02 ± 1.8E-02	5.5E-02 ± 2.0E-02	100-N	V119
⁶⁵ Zn	71	1	-3.3E-02 ± 3.6E-01	7.1E-01 ± 2.3E-01	100-N	V118

^a 1 pCi = 0.037 Bq.

^b Includes replicate samples

^c Average ± two standard deviations

^d Maximum ± analytical uncertainty

^e Maximum value reported is a non detect

Table 4-3. Average Radionuclide Concentrations (pCi/g)^a in Hanford Vegetation, 1998 through 2008.

<u>100-N Area</u>						
Year	⁶⁰ Co	⁹⁰ Sr	¹³⁷ Cs	²³⁴ U	²³⁸ U	^{239,240} Pu
1998	6.2E-01 ± 6.5E-01	1.2E+01 ± 6.0E+00	3.8E+01 ± 6.5E+01	1.4E-02 ± 6.0E-03	8.7E-03 ± 4.4E-03	4.2E-03 ± 2.3E-03
1999	6.1E-01 ± 5.9E-01	9.1E+01 ± 1.0E+02	2.5E+02 ± 2.5E+02	2.8E-02 ± 1.0E-03	2.1E-02 ± 7.0E-03	2.2E-02 ± 1.0E-02
2000	4.8E-02 ± 3.2E-02	5.7E+00 ± 8.7E+00	2.0E-01 ± 1.2E-01	3.3E-02 ± 2.7E-02	2.4E-02 ± 1.8E-02	9.1E-03 ± 8.3E-03
2001	8.9E-01 ± 1.3E+00	3.5E+00 ± 3.4E+00	3.8E-01 ± 2.2E-01	9.8E-03 ± 2.4E-03	9.2E-03 ± 2.9E-03	2.4E-02 ± 2.5E-02
2002	3.7E-03 ± 3.7E-02	5.4E+00 ± 1.8E+01	2.4E-03 ± 8.4E-03	9.8E-03 ± 4.5E-03	5.1E-03 ± 2.9E-03	1.9E-03 ± 5.3E-03
2003	6.6E-02 ± 6.8E-02	1.4E+01 ± 4.5E+01	1.5E-01 ± 1.5E-01	6.8E-03 ± 2.1E-03	4.6E-03 ± 2.9E-03	-2.8E-04 ± 7.0E-03
2004	1.5E-02 ± 1.8E-01	1.1E+01 ± 5.1E+01	4.5E-02 ± 8.7E-02	9.3E-03 ± 7.8E-03	4.8E-03 ± 2.7E-03	Not Detected
2005	Not Detected	5.4E+00 ± 1.9E+01	Not Detected	5.0E-03 ± 2.3E-03	5.8E-03 ± 3.6E-03	Not Detected
2006	Not Detected	2.8E+00 ± 7.4E+00	Not Detected	1.2E-02 ± 1.3E-02	7.7E-03 ± 9.9E-03	Not Detected
2007	Not Detected	Not Detected	Not Detected	1.6E-02 ± 2.5E-03	6.2E-03 ± 8.3E-03	Not Detected
2008	Not Detected	Not Detected	Not Detected	7.2E-03 ± 4.7E-03	8.1E-03 ± 1.9E-03	Not Detected

<u>200/600 Areas</u>						
Year	⁶⁰ Co	⁹⁰ Sr	¹³⁷ Cs	²³⁴ U	²³⁸ U	^{239,240} Pu
1998	Not Detected	3.3E-01 ± 1.3E-01	2.1E-01 ± 9.0E-02	1.6E-02 ± 3.0E-03	9.7E-03 ± 1.3E-03	1.8E-02 ± 8.0E-03
1999	Not Detected	7.9E-01 ± 3.8E-01	1.3E-01 ± 4.0E-02	3.3E-02 ± 6.0E-03	2.3E-02 ± 4.0E-03	1.4E-02 ± 4.0E-03
2000	Not Detected	1.3E+00 ± 8.0E-01	1.6E-01 ± 6.0E-02	2.0E-02 ± 3.0E-02	1.4E-02 ± 2.0E-03	3.3E-02 ± 2.8E-02
2001	Not Detected	1.0E+00 ± 6.2E-01	1.7E-01 ± 6.5E-02	1.9E-02 ± 2.8E-03	1.8E-02 ± 2.6E-03	2.1E-02 ± 7.1E-03
2002	3.2E-04 ± 1.8E-03	3.2E-01 ± 1.1E+00	8.9E-02 ± 4.2E-01	1.6E-02 ± 1.6E-02	1.4E-02 ± 1.5E-02	8.8E-03 ± 2.4E-02
2003	1.6E-02 ± 2.1E-01	1.5E+00 ± 1.0E+01	2.7E-01 ± 2.0E+00	1.0E-02 ± 9.7E-03	8.4E-03 ± 9.0E-03	2.7E-03 ± 7.9E-02
2004	Not Detected	2.2E-01 ± 8.8E+00	4.2E-02 ± 1.4E-01	9.7E-03 ± 1.0E-02	8.2E-03 ± 9.3E-03	2.9E-03 ± 1.0E-02
2005	Not Detected	1.4E-01 ± 1.1E+00	3.0E-02 ± 1.3E-01	1.1E-02 ± 9.5E-03	8.9E-03 ± 9.7E-03	2.6E-03 ± 6.6E-03
2006	Not Detected	3.2E-01 ± 1.1E+00	5.7E-02 ± 5.0E-01	1.6E-02 ± 1.6E-02	1.4E-02 ± 1.5E-02	8.8E-03 ± 2.4E-02
2007	Not Detected	-1.0E-01 ± 3.4E-01	3.4E-02 ± 3.8E-01	1.4E-02 ± 1.3E-02	1.2E-02 ± 1.4E-02	3.2E-03 ± 1.1E-02
2008	Not Detected	-1.8E-01 ± 7.8E-01	4.6E-02 ± 1.3E-01	1.6E-02 ± 1.0E-02	1.0E-02 ± 1.1E-02	1.8E-02 ± 1.1E-01

<u>300/400 Areas</u>						
Year	⁶⁰ Co	⁹⁰ Sr	¹³⁷ Cs	²³⁴ U	²³⁸ U	^{239,240} Pu
1998	Not Detected	1.0E-01 ± 6.0E-02	Not Detected	4.6E-02 ± 3.3E-02	4.4E-02 ± 3.6E-02	8.4E-03 ± 4.5E-03
1999	Not Detected	4.5E-01 ± 7.0E-02	Not Detected	9.4E-02 ± 5.3E-02	8.9E-01 ± 5.9E-02	7.1E-03 ± 3.2E-03
2000	Not Detected	2.1E-01 ± 3.0E-02	Not Detected	1.8E-02 ± 1.9E-02	1.7E-02 ± 1.9E-02	9.1E-03 ± 2.4E-03
2001	Not Detected	2.6E-01 ± 1.1E-01	Not Detected	9.8E-02 ± 8.0E-02	1.1E-01 ± 8.8E-02	5.8E-03 ± 1.5E-03
2002	Not Detected	2.1E-01 ± 4.7E-01	1.1E-02 ± 7.9E-02	3.2E-02 ± 5.5E-02	2.9E-02 ± 5.8E-02	-3.6E-04 ± 7.2E-04
2003	5.0E-03 ± 3.8E-02	-8.2E-02 ± 2.0E-01	-9.4E-03 ± 4.4E-02	4.3E-02 ± 1.1E-01	3.6E-02 ± 1.9E-01	1.7E-03 ± 1.7E-02
2004	Not Detected	Not Detected	Not Detected	3.3E-01 ± 8.8E-02	2.5E-02 ± 7.3E-02	Not Detected
2005	Not Detected	Not Detected	Not Detected	3.0E-02 ± 6.7E-02	2.4E-02 ± 5.9E-02	3.8E-03 ± 8.9E-03
2006	Not Detected	Not Detected	Not Detected	4.2E-02 ± 1.1E-01	3.6E-02 ± 1.0E-01	2.8E-03 ± 6.6E-03
2007	Not Detected	Not Detected	Not Detected	2.3E-02 ± 2.6E-02	1.9E-02 ± 2.6E-02	Not Detected
2008	Not Detected	Not Detected	Not Detected	2.4E-02 ± 2.1E-02	1.9E-02 ± 2.9E-02	2.3E-03 ± 7.7E-03

(a) ± 2 standard deviations

Table 4-4. 2008 Vegetation Sampling Results (pCi/g \pm total analytical uncertainty).
(Sheet 1 of 18)

Location	Isotope	Result \pm Error	RQ*	Location	Isotope	Result \pm Error	RQ*
Y718 (N Springs Shoreline)	¹⁴⁴ Ce	-1.4E-01 \pm 5.3E-01	U	Y719 (N Springs Shoreline)	¹⁴⁴ Ce	1.0E-01 \pm 4.5E-01	U
	⁶⁰ Co	-5.1E-02 \pm 5.1E-02	U		⁶⁰ Co	3.0E-02 \pm 3.6E-02	U
	¹³⁴ Cs	2.1E-02 \pm 4.1E-02	U		¹³⁴ Cs	3.6E-03 \pm 3.6E-02	U
	¹³⁷ Cs	-4.5E-02 \pm 4.5E-02	U		¹³⁷ Cs	-7.7E-03 \pm 3.9E-02	U
	¹⁵² Eu	-1.3E-02 \pm 1.2E-01	U		¹⁵² Eu	-5.5E-02 \pm 1.0E-01	U
	¹⁵⁴ Eu	-3.0E-02 \pm 1.4E-01	U		¹⁵⁴ Eu	-1.3E-01 \pm 1.3E-01	U
	¹⁵⁵ Eu	2.8E-02 \pm 1.2E-01	U		¹⁵⁵ Eu	1.6E-02 \pm 1.0E-01	U
	²³⁸ Pu	1.7E-03 \pm 2.4E-03	U		²³⁸ Pu	-1.8E-03 \pm 3.6E-03	U
	^{239/240} Pu	8.7E-04 \pm 1.7E-03	U		^{239/240} Pu	9.2E-04 \pm 9.2E-03	U
	¹⁰³ Ru	-1.5E-02 \pm 4.8E-02	U		¹⁰³ Ru	-2.9E-02 \pm 4.7E-02	U
	¹⁰⁶ Ru	3.2E-01 \pm 3.6E-01	U		¹⁰⁶ Ru	-8.1E-02 \pm 3.2E-01	U
	¹²⁵ Sb	-6.6E-02 \pm 1.3E-01	U		¹²⁵ Sb	-8.1E-02 \pm 1.1E-01	U
	¹¹³ Sn	-4.5E-02 \pm 5.7E-02	U		¹¹³ Sn	-4.3E-02 \pm 4.8E-02	U
	⁹⁰ Sr	4.0E-03 \pm 4.0E-02	U		⁹⁰ Sr	4.1E-01 \pm 2.3E-01	
	²³⁴ U	4.3E-03 \pm 6.3E-03	U		²³⁴ U	7.2E-03 \pm 7.0E-03	U
	²³⁵ U	1.0E-02 \pm 7.5E-03			²³⁵ U	4.9E-03 \pm 4.6E-03	
	²³⁸ U	8.5E-03 \pm 5.8E-03			²³⁸ U	9.0E-03 \pm 6.1E-03	
	⁶⁵ Zn	6.0E-02 \pm 1.0E-01	U		⁶⁵ Zn	-2.2E-01 \pm 2.2E-01	U
Y724 (N Springs Shoreline)	¹⁴⁴ Ce	1.5E-01 \pm 5.2E-01	U	V002 (200-W)	¹⁴⁴ Ce	2.9E-01 \pm 9.9E-01	U
	⁶⁰ Co	8.6E-03 \pm 4.2E-02	U		⁶⁰ Co	-5.2E-03 \pm 5.2E-02	U
	¹³⁴ Cs	2.6E-03 \pm 2.6E-02	U		¹³⁴ Cs	4.8E-02 \pm 9.0E-02	U
	¹³⁷ Cs	-7.1E-03 \pm 4.2E-02	U		¹³⁷ Cs	2.8E-02 \pm 9.3E-02	U
	¹⁵² Eu	-2.5E-02 \pm 1.2E-01	U		¹⁵² Eu	5.4E-02 \pm 2.5E-01	U
	¹⁵⁴ Eu	5.2E-03 \pm 5.2E-02	U		¹⁵⁴ Eu	-1.8E-01 \pm 2.4E-01	U
	¹⁵⁵ Eu	-2.1E-02 \pm 1.2E-01	U		¹⁵⁵ Eu	-4.0E-02 \pm 2.5E-01	U
	²³⁸ Pu	2.3E-03 \pm 3.5E-03	U		²³⁸ Pu	-5.5E-03 \pm 7.3E-03	U
	^{239/240} Pu	-7.8E-04 \pm 2.7E-03	U		^{239/240} Pu	7.9E-04 \pm 3.5E-03	U
	¹⁰³ Ru	1.7E-02 \pm 5.2E-02	U		¹⁰³ Ru	5.6E-04 \pm 5.6E-03	U
	¹⁰⁶ Ru	6.6E-02 \pm 3.6E-01	U		¹⁰⁶ Ru	4.8E-01 \pm 8.2E-01	U
	¹²⁵ Sb	-7.8E-02 \pm 1.3E-01	U		¹²⁵ Sb	-1.3E-01 \pm 2.7E-01	U
	¹¹³ Sn	4.0E-02 \pm 5.4E-02	U		¹¹³ Sn	-1.0E-02 \pm 1.0E-01	U
	⁹⁰ Sr	-2.1E-01 \pm 2.2E-01	U		⁹⁰ Sr	2.0E-03 \pm 2.0E-02	U
	²³⁴ U	1.0E-02 \pm 7.1E-03			²³⁴ U	1.1E-02 \pm 8.2E-03	
	²³⁵ U	2.8E-03 \pm 3.3E-03			²³⁵ U	9.6E-04 \pm 3.3E-03	U
	²³⁸ U	6.8E-03 \pm 5.1E-03			²³⁸ U	4.4E-03 \pm 4.8E-03	U
	⁶⁵ Zn	8.3E-04 \pm 8.3E-03	U		⁶⁵ Zn	-1.7E-01 \pm 1.9E-01	U

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

Table 4-4. 2008 Vegetation Sampling Results (pCi/g \pm total analytical uncertainty).
(Sheet 2 of 18)

Location	Isotope	Result \pm Error	RQ*	Location	Isotope	Result \pm Error	RQ*
V004 (200-W)	¹⁴⁴ Ce	2.3E-01 \pm 3.3E-01	U	V006 (200-W)	¹⁴⁴ Ce	1.2E-01 \pm 4.7E-01	U
	⁶⁰ Co	4.2E-03 \pm 2.4E-02	U		⁶⁰ Co	-7.5E-03 \pm 3.8E-02	U
	¹³⁴ Cs	1.4E-02 \pm 2.5E-02	U		¹³⁴ Cs	5.3E-03 \pm 4.0E-02	U
	¹³⁷ Cs	6.7E-02 \pm 3.9E-02			¹³⁷ Cs	-6.2E-03 \pm 4.0E-02	U
	¹⁵² Eu	-5.8E-02 \pm 6.9E-02	U		¹⁵² Eu	-8.2E-02 \pm 1.1E-01	U
	¹⁵⁴ Eu	1.2E-02 \pm 7.4E-02	U		¹⁵⁴ Eu	-5.9E-02 \pm 1.0E-01	U
	¹⁵⁵ Eu	4.1E-02 \pm 7.4E-02	U		¹⁵⁵ Eu	-1.7E-02 \pm 1.1E-01	U
	²³⁸ Pu	5.5E-03 \pm 5.9E-03	U		²³⁸ Pu	3.1E-03 \pm 4.7E-03	U
	^{239/240} Pu	6.6E-03 \pm 6.4E-03	U		^{239/240} Pu	2.1E-03 \pm 3.0E-03	U
	¹⁰³ Ru	2.2E-02 \pm 2.7E-02	U		¹⁰³ Ru	-4.3E-03 \pm 4.3E-02	U
	¹⁰⁶ Ru	-2.0E-01 \pm 2.2E-01	U		¹⁰⁶ Ru	-1.8E-01 \pm 3.7E-01	U
	¹²⁵ Sb	3.5E-02 \pm 7.9E-02	U		¹²⁵ Sb	5.4E-03 \pm 5.4E-02	U
	¹¹³ Sn	-1.1E-02 \pm 3.3E-02	U		¹¹³ Sn	3.7E-02 \pm 5.1E-02	U
	⁹⁰ Sr	-5.1E-02 \pm 2.3E-01	U		⁹⁰ Sr	-4.2E-01 \pm 4.2E-01	U
	²³⁴ U	1.1E-02 \pm 7.4E-03			²³⁴ U	9.0E-03 \pm 7.6E-03	U
	²³⁵ U	-9.8E-08 \pm 9.8E-07	U		²³⁵ U	3.3E-03 \pm 3.9E-03	
	²³⁸ U	9.9E-03 \pm 6.5E-03			²³⁸ U	1.4E-02 \pm 8.3E-03	
	⁶⁵ Zn	-1.2E-01 \pm 1.2E-01	U		⁶⁵ Zn	-1.9E-01 \pm 1.9E-01	U
V008 (200-W)	¹⁴⁴ Ce	-5.7E-02 \pm 5.7E-01	U	V010 (200-W)	¹⁴⁴ Ce	-4.2E-01 \pm 5.3E-01	U
	⁶⁰ Co	1.4E-02 \pm 5.7E-02	U		⁶⁰ Co	4.6E-03 \pm 4.5E-02	U
	¹³⁴ Cs	-2.3E-02 \pm 5.6E-02	U		¹³⁴ Cs	2.8E-02 \pm 5.6E-02	U
	¹³⁷ Cs	2.7E-02 \pm 6.1E-02	U		¹³⁷ Cs	2.0E-02 \pm 5.5E-02	U
	¹⁵² Eu	1.6E-01 \pm 1.6E-01	U		¹⁵² Eu	-6.1E-03 \pm 6.1E-02	U
	¹⁵⁴ Eu	-1.0E-01 \pm 1.8E-01	U		¹⁵⁴ Eu	-1.6E-02 \pm 1.6E-01	U
	¹⁵⁵ Eu	5.6E-02 \pm 1.7E-01	U		¹⁵⁵ Eu	-8.2E-02 \pm 1.4E-01	U
	²³⁸ Pu	8.1E-04 \pm 8.1E-04	U		²³⁸ Pu	1.9E-02 \pm 9.3E-03	
	^{239/240} Pu	1.9E-02 \pm 9.1E-03			^{239/240} Pu	1.8E-01 \pm 4.7E-02	
	¹⁰³ Ru	-3.1E-02 \pm 6.6E-02	U		¹⁰³ Ru	-1.3E-02 \pm 5.5E-02	U
	¹⁰⁶ Ru	-1.4E-01 \pm 5.1E-01	U		¹⁰⁶ Ru	-2.9E-01 \pm 4.9E-01	U
	¹²⁵ Sb	-9.3E-02 \pm 1.9E-01	U		¹²⁵ Sb	6.9E-02 \pm 1.4E-01	U
	¹¹³ Sn	2.1E-02 \pm 7.5E-02	U		¹¹³ Sn	1.9E-02 \pm 6.2E-02	U
	⁹⁰ Sr	-2.3E-01 \pm 2.3E-01	U		⁹⁰ Sr	-2.6E-01 \pm 2.6E-01	U
	²³⁴ U	7.0E-03 \pm 5.8E-03			²³⁴ U	7.8E-03 \pm 5.5E-03	
	²³⁵ U	8.6E-03 \pm 6.1E-03			²³⁵ U	9.4E-04 \pm 1.9E-03	U
	²³⁸ U	3.5E-03 \pm 3.6E-03			²³⁸ U	2.3E-02 \pm 1.1E-02	
	⁶⁵ Zn	-1.5E-01 \pm 1.5E-01	U		⁶⁵ Zn	-1.8E-01 \pm 1.8E+00	U

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

Table 4-4. 2008 Vegetation Sampling Results (pCi/g \pm total analytical uncertainty).
(Sheet 3 of 18)

Location	Isotope	Result \pm Error	RQ*	Location	Isotope	Result \pm Error	RQ*
V012 (200-W)	¹⁴⁴ Ce	-1.5E-02 \pm 1.5E-01	U	V016 (200-W)	¹⁴⁴ Ce	5.4E-01 \pm 9.0E-01	U
	⁶⁰ Co	8.4E-04 \pm 8.4E-03	U		⁶⁰ Co	-5.7E-02 \pm 7.5E-02	U
	¹³⁴ Cs	6.8E-03 \pm 4.0E-02	U		¹³⁴ Cs	-1.9E-02 \pm 8.7E-02	U
	¹³⁷ Cs	8.4E-02 \pm 4.7E-02			¹³⁷ Cs	1.4E-01 \pm 1.2E-01	
	¹⁵² Eu	3.7E-03 \pm 3.7E-02	U		¹⁵² Eu	-8.9E-03 \pm 8.9E-02	U
	¹⁵⁴ Eu	-1.2E-02 \pm 1.1E-01	U		¹⁵⁴ Eu	-5.6E-02 \pm 2.5E-01	U
	¹⁵⁵ Eu	-3.3E-02 \pm 9.5E-02	U		¹⁵⁵ Eu	-7.4E-02 \pm 2.1E-01	U
	²³⁸ Pu	2.9E-03 \pm 6.4E-03	U		²³⁸ Pu	1.5E-02 \pm 9.3E-03	
	^{239/240} Pu	2.4E-02 \pm 1.1E-02			^{239/240} Pu	9.2E-04 \pm 3.2E-03	U
	¹⁰³ Ru	1.5E-02 \pm 4.3E-02	U		¹⁰³ Ru	-3.9E-02 \pm 9.1E-02	U
	¹⁰⁶ Ru	-8.1E-02 \pm 3.2E-01	U		¹⁰⁶ Ru	-8.5E-01 \pm 8.5E-01	U
	¹²⁵ Sb	6.5E-02 \pm 8.5E-02	U		¹²⁵ Sb	1.4E-01 \pm 2.2E-01	U
	¹¹³ Sn	2.5E-03 \pm 2.5E-02	U		¹¹³ Sn	-6.6E-02 \pm 1.0E-01	U
	⁹⁰ Sr	-2.5E-01 \pm 2.5E-01	U		⁹⁰ Sr	-6.2E-01 \pm 6.2E-01	U
	²³⁴ U	1.3E-02 \pm 7.7E-03			²³⁴ U	1.4E-02 \pm 9.2E-03	
	²³⁵ U	8.3E-04 \pm 8.3E-04	U		²³⁵ U	4.2E-03 \pm 6.0E-03	U
	²³⁸ U	9.9E-03 \pm 6.6E-03			²³⁸ U	1.9E-02 \pm 1.0E-02	
	⁶⁵ Zn	3.0E-02 \pm 9.8E-02	U		⁶⁵ Zn	-4.7E-01 \pm 4.7E-01	U
V018 (200-W)	¹⁴⁴ Ce	-2.4E-01 \pm 5.4E-01	U	V020 (200-W)	¹⁴⁴ Ce	-2.0E-01 \pm 9.8E-01	U
	⁶⁰ Co	6.7E-03 \pm 5.7E-02	U		⁶⁰ Co	1.1E-02 \pm 8.4E-02	U
	¹³⁴ Cs	-1.5E-03 \pm 1.5E-02	U		¹³⁴ Cs	-4.6E-02 \pm 1.0E-01	U
	¹³⁷ Cs	1.9E-01 \pm 8.2E-02			¹³⁷ Cs	8.3E-02 \pm 8.6E-02	U
	¹⁵² Eu	8.5E-02 \pm 1.5E-01	U		¹⁵² Eu	3.1E-02 \pm 2.4E-01	U
	¹⁵⁴ Eu	-4.8E-02 \pm 1.7E-01	U		¹⁵⁴ Eu	-1.6E-01 \pm 2.5E-01	U
	¹⁵⁵ Eu	-2.2E-02 \pm 1.4E-01	U		¹⁵⁵ Eu	-1.3E-01 \pm 2.5E-01	U
	²³⁸ Pu	5.1E-03 \pm 6.5E-03	U		²³⁸ Pu	2.7E-03 \pm 4.8E-03	U
	^{239/240} Pu	8.6E-04 \pm 8.6E-03	U		^{239/240} Pu	8.9E-04 \pm 1.8E-03	U
	¹⁰³ Ru	2.9E-02 \pm 5.8E-02	U		¹⁰³ Ru	-3.2E-02 \pm 8.5E-02	U
	¹⁰⁶ Ru	2.3E-02 \pm 2.3E-01	U		¹⁰⁶ Ru	4.3E-01 \pm 8.2E-01	U
	¹²⁵ Sb	-1.6E-02 \pm 1.4E-01	U		¹²⁵ Sb	-1.5E-02 \pm 1.5E-01	U
	¹¹³ Sn	-4.1E-04 \pm 4.1E-03	U		¹¹³ Sn	-1.4E-02 \pm 9.7E-02	U
	⁹⁰ Sr	-3.0E-01 \pm 3.0E-01	U		⁹⁰ Sr	-3.9E-01 \pm 3.9E-01	U
	²³⁴ U	2.9E-02 \pm 1.3E-02			²³⁴ U	1.2E-02 \pm 8.6E-03	
	²³⁵ U	3.8E-03 \pm 3.9E-03			²³⁵ U	2.9E-03 \pm 3.4E-03	
	²³⁸ U	1.5E-02 \pm 8.2E-03			²³⁸ U	8.9E-03 \pm 6.6E-03	
	⁶⁵ Zn	-2.8E-01 \pm 2.8E-01	U		⁶⁵ Zn	-4.3E-01 \pm 4.3E-01	U

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

Table 4-4. 2008 Vegetation Sampling Results (pCi/g \pm total analytical uncertainty).
(Sheet 4 of 18)

Location	Isotope	Result \pm Error	RQ*	Location	Isotope	Result \pm Error	RQ*
V022 (200-W)	¹⁴⁴ Ce	-9.8E-02 \pm 5.9E-01	U	V024 (200-W)	¹⁴⁴ Ce	-2.2E-01 \pm 5.2E-01	U
	⁶⁰ Co	-1.6E-02 \pm 5.7E-02	U		⁶⁰ Co	-2.7E-03 \pm 2.7E-02	U
	¹³⁴ Cs	4.9E-02 \pm 6.0E-02	U		¹³⁴ Cs	2.4E-02 \pm 5.0E-02	U
	¹³⁷ Cs	5.3E-02 \pm 5.7E-02	U		¹³⁷ Cs	-7.3E-03 \pm 4.5E-02	U
	¹⁵² Eu	9.0E-02 \pm 1.4E-01	U		¹⁵² Eu	-7.4E-02 \pm 1.3E-01	U
	¹⁵⁴ Eu	5.6E-03 \pm 5.6E-02	U		¹⁵⁴ Eu	-7.1E-03 \pm 7.1E-02	U
	¹⁵⁵ Eu	1.0E-01 \pm 1.6E-01	U		¹⁵⁵ Eu	-1.6E-01 \pm 1.6E-01	U
	²³⁸ Pu	1.0E-03 \pm 4.5E-03	U		²³⁸ Pu	-9.8E-04 \pm 9.8E-03	U
	^{239/240} Pu	3.0E-03 \pm 3.5E-03			^{239/240} Pu	5.9E-03 \pm 5.8E-03	U
	¹⁰³ Ru	-1.2E-02 \pm 5.6E-02	U		¹⁰³ Ru	1.1E-03 \pm 1.1E-02	U
	¹⁰⁶ Ru	-1.9E-01 \pm 5.1E-01	U		¹⁰⁶ Ru	6.8E-01 \pm 8.3E-01	U
	¹²⁵ Sb	1.4E-01 \pm 1.3E-01	U		¹²⁵ Sb	-7.7E-02 \pm 1.1E-01	U
	¹¹³ Sn	1.7E-03 \pm 1.7E-02	U		¹¹³ Sn	1.1E-02 \pm 5.8E-02	U
	⁹⁰ Sr	-4.3E-01 \pm 4.3E-01	U		⁹⁰ Sr	-2.2E-01 \pm 2.2E-01	U
	²³⁴ U	1.4E-02 \pm 8.8E-03			²³⁴ U	1.3E-02 \pm 7.9E-03	
	²³⁵ U	5.1E-03 \pm 4.7E-03			²³⁵ U	2.7E-03 \pm 3.2E-03	
	²³⁸ U	1.5E-02 \pm 9.1E-03			²³⁸ U	1.2E-02 \pm 7.0E-03	
	⁶⁵ Zn	-3.6E-02 \pm 1.3E-01	U		⁶⁵ Zn	3.4E-02 \pm 1.0E-01	U
V026 (200-W)	¹⁴⁴ Ce	-6.0E-01 \pm 1.0E+00	U	V030 (200-W)	¹⁴⁴ Ce	-1.4E+00 \pm 1.5E+00	U
	⁶⁰ Co	1.1E-01 \pm 9.5E-02	U		⁶⁰ Co	-6.5E-02 \pm 1.3E-01	U
	¹³⁴ Cs	-5.1E-02 \pm 1.0E-01	U		¹³⁴ Cs	4.4E-02 \pm 1.5E-01	U
	¹³⁷ Cs	5.1E-02 \pm 9.7E-02	U		¹³⁷ Cs	1.3E-01 \pm 1.5E-01	U
	¹⁵² Eu	-9.6E-02 \pm 3.0E-01	U		¹⁵² Eu	1.6E-01 \pm 4.5E-01	U
	¹⁵⁴ Eu	-1.0E-01 \pm 2.8E-01	U		¹⁵⁴ Eu	-2.4E-01 \pm 3.9E-01	U
	¹⁵⁵ Eu	-2.9E-02 \pm 2.4E-01	U		¹⁵⁵ Eu	-5.7E-01 \pm 5.7E-01	U
	²³⁸ Pu	4.8E-03 \pm 1.5E-02	U		²³⁸ Pu	1.9E-03 \pm 8.9E-03	U
	^{239/240} Pu	1.6E-02 \pm 9.6E-03			^{239/240} Pu	5.7E-03 \pm 4.8E-03	
	¹⁰³ Ru	-1.5E-02 \pm 1.0E-01	U		¹⁰³ Ru	-1.1E-01 \pm 1.5E-01	U
	¹⁰⁶ Ru	-5.8E-01 \pm 8.8E-01	U		¹⁰⁶ Ru	2.7E-01 \pm 1.3E+00	U
	¹²⁵ Sb	6.8E-02 \pm 2.5E-01	U		¹²⁵ Sb	-1.0E-01 \pm 3.9E-01	U
	¹¹³ Sn	1.9E-02 \pm 1.2E-01	U		¹¹³ Sn	-5.0E-02 \pm 1.8E-01	U
	⁹⁰ Sr	-2.1E-01 \pm 2.1E-01	U		⁹⁰ Sr	-6.3E-01 \pm 6.3E-01	U
	²³⁴ U	1.3E-02 \pm 7.8E-03			²³⁴ U	1.5E-02 \pm 8.5E-03	
	²³⁵ U	2.6E-03 \pm 3.1E-03			²³⁵ U	1.9E-03 \pm 3.8E-03	U
	²³⁸ U	1.1E-02 \pm 6.5E-03			²³⁸ U	6.1E-03 \pm 6.0E-03	U
	⁶⁵ Zn	1.3E-01 \pm 2.1E-01	U		⁶⁵ Zn	-3.2E-02 \pm 3.2E-01	U

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

Table 4-4. 2008 Vegetation Sampling Results (pCi/g \pm total analytical uncertainty).
(Sheet 5 of 18)

Location	Isotope	Result \pm Error	RQ*	Location	Isotope	Result \pm Error	RQ*
V032 (200-W)	¹⁴⁴ Ce	-8.4E-02 \pm 5.8E-01	U	V034 (200-W)	¹⁴⁴ Ce	5.0E-01 \pm 5.4E-01	U
	⁶⁰ Co	-8.0E-02 \pm 8.2E-02	U		⁶⁰ Co	-1.5E-02 \pm 5.4E-02	U
	¹³⁴ Cs	-2.4E-02 \pm 5.6E-02	U		¹³⁴ Cs	-1.2E-02 \pm 5.4E-02	U
	¹³⁷ Cs	2.9E-02 \pm 5.5E-02	U		¹³⁷ Cs	1.3E-02 \pm 5.0E-02	U
	¹⁵² Eu	-5.1E-02 \pm 1.6E-01	U		¹⁵² Eu	3.9E-02 \pm 1.4E-01	U
	¹⁵⁴ Eu	1.7E-01 \pm 1.7E-01	U		¹⁵⁴ Eu	-4.8E-02 \pm 1.5E-01	U
	¹⁵⁵ Eu	7.4E-02 \pm 1.5E-01	U		¹⁵⁵ Eu	-6.8E-02 \pm 1.4E-01	U
	²³⁸ Pu	8.0E-03 \pm 2.1E-02	U		²³⁸ Pu	1.8E-02 \pm 1.7E-02	U
	^{239/240} Pu	9.2E-03 \pm 9.5E-03	U		^{239/240} Pu	3.6E-01 \pm 9.7E-02	U
	¹⁰³ Ru	2.0E-02 \pm 5.4E-02	U		¹⁰³ Ru	-2.9E-02 \pm 5.1E-02	U
	¹⁰⁶ Ru	-9.4E-04 \pm 9.4E-03	U		¹⁰⁶ Ru	-2.2E-01 \pm 4.8E-01	U
	¹²⁵ Sb	-8.9E-02 \pm 1.3E-01	U		¹²⁵ Sb	7.8E-02 \pm 1.2E-01	U
	¹¹³ Sn	-6.3E-02 \pm 6.5E-02	U		¹¹³ Sn	1.1E-02 \pm 5.8E-02	U
	⁹⁰ Sr	-7.8E-02 \pm 1.8E-01	U		⁹⁰ Sr	-2.4E+00 \pm 2.4E+00	U
	²³⁴ U	1.7E-02 \pm 9.2E-03			²³⁴ U	1.4E-02 \pm 7.7E-03	
	²³⁵ U	3.0E-03 \pm 3.5E-03			²³⁵ U	5.3E-03 \pm 4.6E-03	
	²³⁸ U	9.3E-03 \pm 6.9E-03			²³⁸ U	1.0E-02 \pm 6.1E-03	
	⁶⁵ Zn	-5.0E-02 \pm 1.1E-01	U		⁶⁵ Zn	1.4E-01 \pm 1.3E-01	U
V036 (200-W)	¹⁴⁴ Ce	-2.0E-01 \pm 5.1E-01	U	V038 (200-W)	¹⁴⁴ Ce	6.4E-01 \pm 5.0E-01	U
	⁶⁰ Co	-1.1E-03 \pm 1.1E-02	U		⁶⁰ Co	-1.3E-03 \pm 1.3E-02	U
	¹³⁴ Cs	1.7E-02 \pm 5.4E-02	U		¹³⁴ Cs	-1.3E-04 \pm 1.3E-03	U
	¹³⁷ Cs	1.9E-01 \pm 1.1E-01			¹³⁷ Cs	1.3E-01 \pm 6.9E-02	
	¹⁵² Eu	-3.6E-02 \pm 1.3E-01	U		¹⁵² Eu	6.2E-02 \pm 1.3E-01	U
	¹⁵⁴ Eu	-4.0E-02 \pm 1.6E-01	U		¹⁵⁴ Eu	-1.2E-01 \pm 1.3E-01	U
	¹⁵⁵ Eu	-1.0E-02 \pm 1.0E-01	U		¹⁵⁵ Eu	-1.1E-01 \pm 1.5E-01	U
	²³⁸ Pu	3.8E-03 \pm 1.7E-02	U		²³⁸ Pu	1.0E-03 \pm 1.0E-02	U
	^{239/240} Pu	4.2E-02 \pm 1.6E-02			^{239/240} Pu	6.3E-03 \pm 6.2E-03	U
	¹⁰³ Ru	-1.5E-02 \pm 5.2E-02	U		¹⁰³ Ru	7.1E-02 \pm 5.1E-02	U
	¹⁰⁶ Ru	7.8E-02 \pm 4.5E-01	U		¹⁰⁶ Ru	6.2E-02 \pm 4.6E-01	U
	¹²⁵ Sb	-1.2E-01 \pm 1.2E-01	U		¹²⁵ Sb	8.1E-02 \pm 1.3E-01	U
	¹¹³ Sn	1.7E-02 \pm 5.9E-02	U		¹¹³ Sn	2.1E-02 \pm 5.7E-02	U
	⁹⁰ Sr	1.2E-01 \pm 2.5E-01	U		⁹⁰ Sr	-5.2E-02 \pm 2.0E-01	U
	²³⁴ U	1.8E-02 \pm 9.5E-03			²³⁴ U	2.0E-02 \pm 1.0E-02	
	²³⁵ U	9.6E-04 \pm 1.9E-03	U		²³⁵ U	3.8E-03 \pm 5.5E-03	U
	²³⁸ U	1.6E-02 \pm 9.0E-03			²³⁸ U	1.1E-02 \pm 7.1E-03	
	⁶⁵ Zn	3.6E-03 \pm 3.6E-02	U		⁶⁵ Zn	-7.5E-02 \pm 1.0E-01	U

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

Table 4-4. 2008 Vegetation Sampling Results (pCi/g \pm total analytical uncertainty).
(Sheet 6 of 18)

Location	Isotope	Result \pm Error	RQ*	Location	Isotope	Result \pm Error	RQ*
V040	¹⁴⁴ Ce	1.8E-01 \pm 4.7E-01	U	V042	¹⁴⁴ Ce	3.8E-01 \pm 1.1E+00	U
(200-W)	⁶⁰ Co	8.6E-03 \pm 3.6E-02	U	(200-W)	⁶⁰ Co	-2.0E-02 \pm 9.9E-02	U
	¹³⁴ Cs	-5.8E-04 \pm 5.8E-03	U		¹³⁴ Cs	-2.7E-02 \pm 1.1E-01	U
	¹³⁷ Cs	1.0E-01 \pm 4.4E-02			¹³⁷ Cs	2.2E-01 \pm 1.1E-01	
	¹⁵² Eu	-1.6E-02 \pm 1.1E-01	U		¹⁵² Eu	-3.1E-02 \pm 2.8E-01	U
	¹⁵⁴ Eu	-2.4E-02 \pm 1.2E-01	U		¹⁵⁴ Eu	8.5E-02 \pm 2.8E-01	U
	¹⁵⁵ Eu	-2.4E-02 \pm 1.1E-01	U		¹⁵⁵ Eu	2.7E-01 \pm 2.2E-01	U
	²³⁸ Pu	2.1E-03 \pm 1.8E-02	U		²³⁸ Pu	-3.0E-03 \pm 1.8E-02	U
	^{239/240} Pu	3.0E-02 \pm 1.4E-02			^{239/240} Pu	1.4E-02 \pm 8.3E-03	
	¹⁰³ Ru	-3.0E-02 \pm 4.0E-02	U		¹⁰³ Ru	7.8E-04 \pm 7.8E-03	U
	¹⁰⁶ Ru	5.2E-02 \pm 3.5E-01	U		¹⁰⁶ Ru	4.7E-01 \pm 8.9E-01	U
	¹²⁵ Sb	7.3E-02 \pm 1.0E-01	U		¹²⁵ Sb	6.0E-02 \pm 2.7E-01	U
	¹¹³ Sn	1.3E-02 \pm 4.7E-02	U		¹¹³ Sn	-4.6E-02 \pm 1.3E-01	U
	⁹⁰ Sr	-4.6E-02 \pm 2.1E-01	U		⁹⁰ Sr	-9.5E-02 \pm 1.9E-01	U
	²³⁴ U	1.7E-02 \pm 8.8E-03			²³⁴ U	1.6E-02 \pm 8.8E-03	
	²³⁵ U	7.4E-03 \pm 5.5E-03			²³⁵ U	2.8E-03 \pm 3.3E-03	
	²³⁸ U	1.5E-02 \pm 8.1E-03			²³⁸ U	2.2E-02 \pm 1.1E-02	
	⁶⁵ Zn	2.5E-02 \pm 9.9E-02	U		⁶⁵ Zn	-2.5E-01 \pm 2.5E-01	U
V044	¹⁴⁴ Ce	6.5E-02 \pm 4.7E-01	U	V046	¹⁴⁴ Ce	5.6E-02 \pm 5.6E-01	U
(200-W)	⁶⁰ Co	1.3E-02 \pm 3.8E-02	U	(200-W)	⁶⁰ Co	-5.7E-02 \pm 5.7E-02	U
	¹³⁴ Cs	2.1E-02 \pm 3.9E-02	U		¹³⁴ Cs	4.1E-02 \pm 6.7E-02	U
	¹³⁷ Cs	5.6E-02 \pm 5.8E-02	U		¹³⁷ Cs	7.0E-02 \pm 7.1E-02	U
	¹⁵² Eu	5.9E-02 \pm 1.1E-01	U		¹⁵² Eu	1.5E-02 \pm 1.5E-01	U
	¹⁵⁴ Eu	-4.4E-02 \pm 1.1E-01	U		¹⁵⁴ Eu	1.7E-01 \pm 1.7E-01	U
	¹⁵⁵ Eu	1.8E-01 \pm 1.5E-01	U		¹⁵⁵ Eu	4.4E-02 \pm 1.5E-01	U
	²³⁸ Pu	-7.2E-03 \pm 1.2E-02	U		²³⁸ Pu	-1.1E-02 \pm 1.9E-02	U
	^{239/240} Pu	2.5E-02 \pm 1.2E-02			^{239/240} Pu	6.0E-03 \pm 6.5E-03	U
	¹⁰³ Ru	-7.6E-03 \pm 4.0E-02	U		¹⁰³ Ru	1.5E-02 \pm 5.5E-02	U
	¹⁰⁶ Ru	1.6E-01 \pm 3.7E-01	U		¹⁰⁶ Ru	3.4E-01 \pm 5.0E-01	U
	¹²⁵ Sb	-1.0E-02 \pm 1.0E-01	U		¹²⁵ Sb	-2.0E-02 \pm 1.3E-01	U
	¹¹³ Sn	-1.2E-02 \pm 4.9E-02	U		¹¹³ Sn	-1.8E-03 \pm 1.8E-02	U
	⁹⁰ Sr	-1.8E-01 \pm 2.0E-01	U		⁹⁰ Sr	-1.3E-01 \pm 1.8E-01	U
	²³⁴ U	1.4E-02 \pm 7.8E-03			²³⁴ U	2.3E-02 \pm 1.1E-02	
	²³⁵ U	8.3E-03 \pm 5.6E-03			²³⁵ U	3.7E-03 \pm 4.6E-03	U
	²³⁸ U	1.3E-02 \pm 7.8E-03			²³⁸ U	1.5E-02 \pm 8.4E-03	
	⁶⁵ Zn	-2.1E-01 \pm 2.1E-01	U		⁶⁵ Zn	-1.2E-01 \pm 1.3E-01	U

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

Table 4-4. 2008 Vegetation Sampling Results (pCi/g \pm total analytical uncertainty).
(Sheet 7 of 18)

Location	Isotope	Result \pm Error	RQ*	Location	Isotope	Result \pm Error	RQ*
V048 (200-W)	¹⁴⁴ Ce	-8.3E-02 \pm 4.4E-01	U	V050 (200-W)	¹⁴⁴ Ce	-2.9E-01 \pm 1.0E+00	U
	⁶⁰ Co	-8.0E-03 \pm 5.2E-02	U		⁶⁰ Co	-6.8E-03 \pm 6.8E-02	U
	¹³⁴ Cs	3.4E-02 \pm 4.7E-02	U		¹³⁴ Cs	-3.2E-04 \pm 3.2E-03	U
	¹³⁷ Cs	1.4E-02 \pm 5.0E-02	U		¹³⁷ Cs	-8.5E-02 \pm 8.6E-02	U
	¹⁵² Eu	4.3E-03 \pm 4.3E-02	U		¹⁵² Eu	2.8E-02 \pm 2.3E-01	U
	¹⁵⁴ Eu	-4.9E-02 \pm 1.5E-01	U		¹⁵⁴ Eu	-1.8E-01 \pm 2.2E-01	U
	¹⁵⁵ Eu	6.1E-02 \pm 1.2E-01	U		¹⁵⁵ Eu	-1.7E-02 \pm 1.7E-01	U
	²³⁸ Pu	-3.6E-03 \pm 9.6E-03	U		²³⁸ Pu	1.0E-03 \pm 1.0E-02	U
	^{239/240} Pu	8.2E-03 \pm 6.9E-03	U		^{239/240} Pu	1.0E-03 \pm 1.0E-02	U
	¹⁰³ Ru	-1.7E-02 \pm 4.6E-02	U		¹⁰³ Ru	-5.1E-02 \pm 8.2E-02	U
	¹⁰⁶ Ru	-3.4E-01 \pm 4.1E-01	U		¹⁰⁶ Ru	-1.4E-01 \pm 7.2E-01	U
	¹²⁵ Sb	-1.5E-02 \pm 1.1E-01	U		¹²⁵ Sb	3.5E-02 \pm 2.2E-01	U
	¹¹³ Sn	-8.5E-03 \pm 5.5E-02	U		¹¹³ Sn	-1.9E-02 \pm 1.0E-01	U
	⁹⁰ Sr	-1.2E-01 \pm 2.0E-01	U		⁹⁰ Sr	-1.6E-01 \pm 2.2E-01	U
	²³⁴ U	2.1E-02 \pm 9.7E-03			²³⁴ U	2.1E-02 \pm 1.2E-02	
	²³⁵ U	8.7E-04 \pm 3.0E-03	U		²³⁵ U	8.4E-03 \pm 7.0E-03	
	²³⁸ U	1.0E-02 \pm 7.2E-03			²³⁸ U	3.8E-03 \pm 3.9E-03	
	⁶⁵ Zn	-1.7E-01 \pm 1.7E-01	U		⁶⁵ Zn	-5.2E-02 \pm 2.1E-01	U
V052 (200-W)	¹⁴⁴ Ce	-5.7E-01 \pm 1.0E+00	U	V112 (Replicate of V032, 200-W)	¹⁴⁴ Ce	-9.4E-02 \pm 6.0E-01	U
	⁶⁰ Co	-5.4E-02 \pm 8.9E-02	U		⁶⁰ Co	1.7E-02 \pm 5.7E-02	U
	¹³⁴ Cs	3.7E-02 \pm 1.0E-01	U		¹³⁴ Cs	-2.2E-02 \pm 6.7E-02	U
	¹³⁷ Cs	-3.8E-03 \pm 3.8E-02	U		¹³⁷ Cs	-2.8E-02 \pm 5.9E-02	U
	¹⁵² Eu	-2.5E-01 \pm 2.7E-01	U		¹⁵² Eu	4.4E-02 \pm 1.6E-01	U
	¹⁵⁴ Eu	-5.7E-02 \pm 2.8E-01	U		¹⁵⁴ Eu	-9.7E-02 \pm 1.5E-01	U
	¹⁵⁵ Eu	-2.0E-01 \pm 2.4E-01	U		¹⁵⁵ Eu	4.3E-02 \pm 1.6E-01	U
	²³⁸ Pu	-5.6E-03 \pm 1.1E-02	U		²³⁸ Pu	-3.7E-03 \pm 1.2E-02	U
	^{239/240} Pu	5.6E-03 \pm 4.8E-03			^{239/240} Pu	9.1E-03 \pm 6.7E-03	
	¹⁰³ Ru	6.3E-02 \pm 9.3E-02	U		¹⁰³ Ru	3.0E-02 \pm 4.9E-02	U
	¹⁰⁶ Ru	3.0E-01 \pm 8.3E-01	U		¹⁰⁶ Ru	-2.5E-02 \pm 2.5E-01	U
	¹²⁵ Sb	-2.0E-01 \pm 2.5E-01	U		¹²⁵ Sb	-2.7E-02 \pm 1.3E-01	U
	¹¹³ Sn	5.5E-03 \pm 5.4E-02	U		¹¹³ Sn	-9.0E-03 \pm 6.5E-02	U
	⁹⁰ Sr	-8.2E-02 \pm 1.9E-01	U		⁹⁰ Sr	-5.5E-02 \pm 1.9E-01	U
	²³⁴ U	2.3E-02 \pm 1.1E-02			²³⁴ U	1.5E-02 \pm 8.4E-03	
	²³⁵ U	4.6E-03 \pm 4.3E-03			²³⁵ U	-1.9E-03 \pm 3.8E-03	U
	²³⁸ U	9.3E-03 \pm 6.5E-03			²³⁸ U	6.9E-03 \pm 5.7E-03	
	⁶⁵ Zn	1.2E-01 \pm 2.1E-01	U		⁶⁵ Zn	-1.7E-01 \pm 1.7E-01	U

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

Table 4-4. 2008 Vegetation Sampling Results (pCi/g \pm total analytical uncertainty).
(Sheet 8 of 18)

Location	Isotope	Result \pm Error	RQ*	Location	Isotope	Result \pm Error	RQ*
V054 (200-E)	¹⁴⁴ Ce	-1.8E-01 \pm 7.9E-01	U	V056 (200-E)	¹⁴⁴ Ce	7.5E-02 \pm 5.9E-01	U
	⁶⁰ Co	4.3E-02 \pm 8.3E-02	U		⁶⁰ Co	-5.7E-03 \pm 4.9E-02	U
	¹³⁴ Cs	-6.3E-03 \pm 6.3E-02	U		¹³⁴ Cs	-2.2E-02 \pm 5.3E-02	U
	¹³⁷ Cs	-3.4E-03 \pm 3.4E-02	U		¹³⁷ Cs	1.2E-01 \pm 1.1E-01	
	¹⁵² Eu	-4.2E-02 \pm 2.0E-01	U		¹⁵² Eu	-1.1E-01 \pm 1.5E-01	U
	¹⁵⁴ Eu	5.3E-02 \pm 2.4E-01	U		¹⁵⁴ Eu	-6.2E-02 \pm 1.4E-01	U
	¹⁵⁵ Eu	-1.0E-01 \pm 2.0E-01	U		¹⁵⁵ Eu	-2.8E-02 \pm 1.6E-01	U
	²³⁸ Pu	1.2E-02 \pm 2.2E-02	U		²³⁸ Pu	-4.8E-03 \pm 2.2E-02	U
	^{239/240} Pu	1.5E-03 \pm 6.7E-03	U		^{239/240} Pu	-1.6E-03 \pm 7.2E-03	U
	¹⁰³ Ru	-4.5E-02 \pm 8.8E-02	U		¹⁰³ Ru	4.7E-04 \pm 4.7E-03	U
	¹⁰⁶ Ru	-4.9E-01 \pm 7.3E-01	U		¹⁰⁶ Ru	-2.9E-01 \pm 5.4E-01	U
	¹²⁵ Sb	2.0E-01 \pm 2.0E-01	U		¹²⁵ Sb	-3.7E-02 \pm 1.3E-01	U
	¹¹³ Sn	-1.2E-02 \pm 9.7E-02	U		¹¹³ Sn	1.4E-02 \pm 6.4E-02	U
	⁹⁰ Sr	-2.9E-01 \pm 2.9E-01	U		⁹⁰ Sr	2.7E-01 \pm 2.3E-01	
	²³⁴ U	1.7E-02 \pm 8.7E-03			²³⁴ U	1.5E-02 \pm 7.3E-03	
	²³⁵ U	2.6E-03 \pm 3.9E-03	U		²³⁵ U	2.7E-03 \pm 3.2E-03	
	²³⁸ U	1.3E-02 \pm 7.3E-03			²³⁸ U	5.8E-03 \pm 5.2E-03	U
	⁶⁵ Zn	6.9E-03 \pm 6.9E-02	U		⁶⁵ Zn	-1.8E-02 \pm 1.1E-01	U
V058 (200-E)	¹⁴⁴ Ce	-5.2E-01 \pm 5.2E-01	U	V060 (200-E)	¹⁴⁴ Ce	1.8E-01 \pm 8.1E-01	U
	⁶⁰ Co	-1.6E-02 \pm 3.4E-02	U		⁶⁰ Co	-3.4E-02 \pm 5.7E-02	U
	¹³⁴ Cs	3.1E-02 \pm 3.9E-02	U		¹³⁴ Cs	1.3E-02 \pm 6.8E-02	U
	¹³⁷ Cs	4.7E-02 \pm 4.1E-02	U		¹³⁷ Cs	-3.3E-03 \pm 3.3E-02	U
	¹⁵² Eu	-3.6E-02 \pm 1.0E-01	U		¹⁵² Eu	-4.1E-02 \pm 1.9E-01	U
	¹⁵⁴ Eu	3.5E-02 \pm 1.1E-01	U		¹⁵⁴ Eu	2.1E-01 \pm 1.2E-01	U
	¹⁵⁵ Eu	9.9E-02 \pm 1.0E-01	U		¹⁵⁵ Eu	6.2E-02 \pm 1.8E-01	U
	²³⁸ Pu	-2.1E-02 \pm 3.2E-02	U		²³⁸ Pu	1.6E-02 \pm 1.8E-02	U
	^{239/240} Pu	1.9E-03 \pm 6.6E-03	U		^{239/240} Pu	1.0E-03 \pm 1.0E-03	U
	¹⁰³ Ru	-6.9E-04 \pm 6.9E-03	U		¹⁰³ Ru	9.3E-03 \pm 7.3E-02	U
	¹⁰⁶ Ru	9.0E-02 \pm 3.1E-01	U		¹⁰⁶ Ru	-4.2E-01 \pm 5.9E-01	U
	¹²⁵ Sb	-1.9E-02 \pm 9.4E-02	U		¹²⁵ Sb	-3.0E-02 \pm 1.9E-01	U
	¹¹³ Sn	-5.4E-03 \pm 4.6E-02	U		¹¹³ Sn	-1.1E-02 \pm 8.8E-02	U
	⁹⁰ Sr	6.5E-01 \pm 2.6E-01			⁹⁰ Sr	-3.9E-01 \pm 3.9E-01	U
	²³⁴ U	9.9E-03 \pm 6.9E-03			²³⁴ U	1.5E-02 \pm 7.5E-03	
	²³⁵ U	8.3E-04 \pm 8.3E-04	U		²³⁵ U	3.7E-03 \pm 3.8E-03	
	²³⁸ U	8.2E-03 \pm 5.5E-03			²³⁸ U	4.5E-03 \pm 3.8E-03	
	⁶⁵ Zn	-2.1E-01 \pm 2.1E-01	U		⁶⁵ Zn	2.0E-02 \pm 2.0E-01	U

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

Table 4-4. 2008 Vegetation Sampling Results (pCi/g \pm total analytical uncertainty).
(Sheet 9 of 18)

Location	Isotope	Result \pm Error	RQ*	Location	Isotope	Result \pm Error	RQ*
V062 (200-E)	¹⁴⁴ Ce	-2.0E-01 \pm 6.8E-01	U	V064 (200-E)	¹⁴⁴ Ce	-5.0E-01 \pm 7.6E-01	U
	⁶⁰ Co	1.8E-02 \pm 6.5E-02	U		⁶⁰ Co	-7.2E-02 \pm 7.7E-02	U
	¹³⁴ Cs	5.5E-02 \pm 7.8E-02	U		¹³⁴ Cs	5.4E-03 \pm 5.4E-02	U
	¹³⁷ Cs	-9.3E-03 \pm 5.7E-02	U		¹³⁷ Cs	4.5E-02 \pm 7.1E-02	U
	¹⁵² Eu	6.6E-02 \pm 1.8E-01	U		¹⁵² Eu	6.6E-02 \pm 1.9E-01	U
	¹⁵⁴ Eu	2.0E-01 \pm 1.9E-01	U		¹⁵⁴ Eu	-1.5E-01 \pm 2.2E-01	U
	¹⁵⁵ Eu	1.2E-01 \pm 1.7E-01	U		¹⁵⁵ Eu	1.0E-01 \pm 2.0E-01	U
	²³⁸ Pu	-2.2E-03 \pm 1.5E-02	U		²³⁸ Pu	-8.7E-04 \pm 8.7E-03	U
	^{239/240} Pu	2.3E-04 \pm 2.3E-03	U		^{239/240} Pu	8.7E-04 \pm 8.7E-03	U
	¹⁰³ Ru	-7.9E-03 \pm 6.6E-02	U		¹⁰³ Ru	2.2E-02 \pm 7.3E-02	U
	¹⁰⁶ Ru	2.2E-01 \pm 5.9E-01	U		¹⁰⁶ Ru	1.8E-01 \pm 6.6E-01	U
	¹²⁵ Sb	-1.4E-02 \pm 1.4E-01	U		¹²⁵ Sb	-3.5E-02 \pm 1.7E-01	U
	¹¹³ Sn	3.6E-02 \pm 6.6E-02	U		¹¹³ Sn	7.7E-03 \pm 7.7E-02	U
	⁹⁰ Sr	-9.0E-02 \pm 2.1E-01	U		⁹⁰ Sr	-1.7E-01 \pm 2.4E-01	U
	²³⁴ U	7.2E-03 \pm 5.6E-03			²³⁴ U	1.9E-02 \pm 1.2E-02	
	²³⁵ U	4.4E-03 \pm 4.1E-03			²³⁵ U	4.3E-03 \pm 4.4E-03	
	²³⁸ U	9.7E-03 \pm 6.5E-03			²³⁸ U	1.1E-02 \pm 8.2E-03	
	⁶⁵ Zn	9.4E-02 \pm 1.6E-01	U		⁶⁵ Zn	7.9E-02 \pm 1.8E-01	U
V066 (200-E)	¹⁴⁴ Ce	-3.2E-01 \pm 5.6E-01	U	V068 (200-E)	¹⁴⁴ Ce	4.2E-01 \pm 5.5E-01	U
	⁶⁰ Co	-2.0E-02 \pm 6.1E-02	U		⁶⁰ Co	7.9E-03 \pm 4.6E-02	U
	¹³⁴ Cs	-3.6E-02 \pm 5.9E-02	U		¹³⁴ Cs	-3.0E-02 \pm 4.9E-02	U
	¹³⁷ Cs	9.6E-02 \pm 7.9E-02	U		¹³⁷ Cs	1.2E-02 \pm 4.9E-02	U
	¹⁵² Eu	-6.5E-02 \pm 1.4E-01	U		¹⁵² Eu	2.4E-02 \pm 1.4E-01	U
	¹⁵⁴ Eu	3.5E-03 \pm 3.5E-02	U		¹⁵⁴ Eu	-3.8E-02 \pm 1.3E-01	U
	¹⁵⁵ Eu	4.6E-02 \pm 1.4E-01	U		¹⁵⁵ Eu	-1.4E-02 \pm 1.4E-01	U
	²³⁸ Pu	5.4E-03 \pm 1.5E-02	U		²³⁸ Pu	1.2E-02 \pm 1.0E-02	U
	^{239/240} Pu	5.9E-02 \pm 2.2E-02			^{239/240} Pu	8.4E-04 \pm 1.7E-03	U
	¹⁰³ Ru	3.5E-03 \pm 3.5E-02	U		¹⁰³ Ru	-4.8E-02 \pm 5.2E-02	U
	¹⁰⁶ Ru	-1.0E+00 \pm 1.0E+00	U		¹⁰⁶ Ru	-1.4E-01 \pm 4.6E-01	U
	¹²⁵ Sb	-1.0E-01 \pm 1.4E-01	U		¹²⁵ Sb	1.5E-02 \pm 1.2E-01	U
	¹¹³ Sn	5.3E-02 \pm 6.6E-02	U		¹¹³ Sn	-4.5E-02 \pm 6.0E-02	U
	⁹⁰ Sr	-2.3E-01 \pm 2.3E-01	U		⁹⁰ Sr	-1.0E-01 \pm 2.3E-01	U
	²³⁴ U	1.4E-02 \pm 8.1E-03			²³⁴ U	1.6E-02 \pm 9.1E-03	
	²³⁵ U	3.0E-03 \pm 3.5E-03			²³⁵ U	4.5E-03 \pm 4.2E-03	
	²³⁸ U	1.8E-02 \pm 9.5E-03			²³⁸ U	1.2E-02 \pm 7.0E-03	
	⁶⁵ Zn	9.7E-02 \pm 1.4E-01	U		⁶⁵ Zn	7.9E-02 \pm 1.7E-01	U

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

Table 4-4. 2008 Vegetation Sampling Results (pCi/g \pm total analytical uncertainty).
(Sheet 10 of 18)

Location	Isotope	Result \pm Error	RQ*	Location	Isotope	Result \pm Error	RQ*
V074 (200-E)	¹⁴⁴ Ce	-2.5E-01 \pm 5.0E-01	U	V076 (200-E)	¹⁴⁴ Ce	-1.1E-01 \pm 8.3E-01	U
	⁶⁰ Co	-5.2E-03 \pm 3.9E-02	U		⁶⁰ Co	5.2E-02 \pm 7.4E-02	U
	¹³⁴ Cs	-7.3E-03 \pm 4.0E-02	U		¹³⁴ Cs	1.1E-02 \pm 8.3E-02	U
	¹³⁷ Cs	8.0E-02 \pm 6.5E-02			¹³⁷ Cs	-3.0E-02 \pm 8.1E-02	U
	¹⁵² Eu	5.0E-03 \pm 5.0E-02	U		¹⁵² Eu	3.7E-01 \pm 3.4E-01	
	¹⁵⁴ Eu	5.0E-02 \pm 1.2E-01	U		¹⁵⁴ Eu	-4.9E-02 \pm 2.2E-01	U
	¹⁵⁵ Eu	4.4E-02 \pm 1.2E-01	U		¹⁵⁵ Eu	6.7E-02 \pm 1.9E-01	U
	²³⁸ Pu	-7.7E-04 \pm 3.4E-03	U		²³⁸ Pu	5.0E-03 \pm 4.2E-03	
	^{239/240} Pu	7.7E-04 \pm 7.7E-03	U		^{239/240} Pu	8.3E-04 \pm 8.3E-03	U
	¹⁰³ Ru	1.0E-02 \pm 4.5E-02	U		¹⁰³ Ru	4.7E-02 \pm 8.6E-02	U
	¹⁰⁶ Ru	4.9E-02 \pm 3.6E-01	U		¹⁰⁶ Ru	1.0E-01 \pm 7.0E-01	U
	¹²⁵ Sb	6.8E-02 \pm 1.1E-01	U		¹²⁵ Sb	-1.4E-01 \pm 2.0E-01	U
	¹¹³ Sn	3.0E-03 \pm 3.0E-02	U		¹¹³ Sn	-4.6E-02 \pm 9.3E-02	U
	⁹⁰ Sr	1.2E-01 \pm 2.3E-01	U		⁹⁰ Sr	-2.6E-01 \pm 2.6E-01	U
	²³⁴ U	1.6E-02 \pm 8.6E-03			²³⁴ U	1.1E-02 \pm 6.9E-03	
	²³⁵ U	1.9E-03 \pm 3.8E-03	U		²³⁵ U	9.9E-04 \pm 2.0E-03	U
	²³⁸ U	6.1E-03 \pm 5.5E-03	U		²³⁸ U	4.5E-03 \pm 4.9E-03	U
	⁶⁵ Zn	-2.0E-01 \pm 2.0E-01	U		⁶⁵ Zn	5.4E-02 \pm 1.8E-01	U
V078 (200-E)	¹⁴⁴ Ce	2.2E-02 \pm 2.2E-01	U	V080 (200-E)	¹⁴⁴ Ce	4.4E-01 \pm 6.6E-01	U
	⁶⁰ Co	2.9E-02 \pm 5.1E-02	U		⁶⁰ Co	-3.3E-02 \pm 6.0E-02	U
	¹³⁴ Cs	2.7E-02 \pm 5.6E-02	U		¹³⁴ Cs	-2.6E-02 \pm 6.3E-02	U
	¹³⁷ Cs	-2.0E-02 \pm 5.4E-02	U		¹³⁷ Cs	-1.8E-02 \pm 6.0E-02	U
	¹⁵² Eu	4.6E-02 \pm 1.4E-01	U		¹⁵² Eu	-8.4E-02 \pm 1.7E-01	U
	¹⁵⁴ Eu	5.5E-02 \pm 1.5E-01	U		¹⁵⁴ Eu	-2.4E-02 \pm 1.8E-01	U
	¹⁵⁵ Eu	1.6E-02 \pm 1.5E-01	U		¹⁵⁵ Eu	-2.0E-01 \pm 2.0E-01	U
	²³⁸ Pu	1.6E-03 \pm 3.2E-03	U		²³⁸ Pu	3.5E-02 \pm 1.4E-02	
	^{239/240} Pu	2.3E-03 \pm 2.7E-03			^{239/240} Pu	-7.8E-04 \pm 2.7E-03	U
	¹⁰³ Ru	2.8E-02 \pm 5.6E-02	U		¹⁰³ Ru	4.5E-02 \pm 6.6E-02	U
	¹⁰⁶ Ru	9.8E-02 \pm 5.7E-01	U		¹⁰⁶ Ru	5.4E-02 \pm 5.4E-01	U
	¹²⁵ Sb	-2.1E-02 \pm 1.3E-01	U		¹²⁵ Sb	4.7E-02 \pm 1.6E-01	U
	¹¹³ Sn	5.5E-03 \pm 5.5E-02	U		¹¹³ Sn	-2.4E-02 \pm 7.1E-02	U
	⁹⁰ Sr	1.2E-01 \pm 2.0E-01	U		⁹⁰ Sr	-1.1E-01 \pm 5.8E-01	U
	²³⁴ U	1.1E-02 \pm 7.9E-03			²³⁴ U	1.4E-02 \pm 9.0E-03	
	²³⁵ U	3.8E-03 \pm 3.9E-03			²³⁵ U	3.8E-03 \pm 3.9E-03	
	²³⁸ U	8.8E-03 \pm 6.0E-03			²³⁸ U	1.4E-02 \pm 9.7E-03	
	⁶⁵ Zn	-1.3E-02 \pm 1.2E-01	U		⁶⁵ Zn	1.4E-01 \pm 1.4E-01	U

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

Table 4-4. 2008 Vegetation Sampling Results (pCi/g \pm total analytical uncertainty).
(Sheet 11 of 18)

Location	Isotope	Result \pm Error	RQ*	Location	Isotope	Result \pm Error	RQ*
V082 (600 Area)	¹⁴⁴ Ce	4.2E-01 \pm 1.0E+00	U	V084 (600 Area)	¹⁴⁴ Ce	-4.4E-02 \pm 4.4E-01	U
	⁶⁰ Co	2.0E-02 \pm 1.0E-01	U		⁶⁰ Co	-1.3E-02 \pm 5.4E-02	U
	¹³⁴ Cs	-4.9E-02 \pm 1.0E-01	U		¹³⁴ Cs	3.8E-02 \pm 5.6E-02	U
	¹³⁷ Cs	2.3E-02 \pm 1.0E-01	U		¹³⁷ Cs	1.8E-01 \pm 6.5E-02	U
	¹⁵² Eu	-1.6E-02 \pm 1.6E-01	U		¹⁵² Eu	-5.3E-02 \pm 1.5E-01	U
	¹⁵⁴ Eu	6.4E-02 \pm 2.9E-01	U		¹⁵⁴ Eu	-7.9E-02 \pm 1.5E-01	U
	¹⁵⁵ Eu	1.5E-01 \pm 2.6E-01	U		¹⁵⁵ Eu	-6.2E-03 \pm 6.2E-02	U
	²³⁸ Pu	6.2E-03 \pm 1.1E-02	U		²³⁸ Pu	8.9E-04 \pm 8.9E-03	U
	^{239/240} Pu	1.0E-03 \pm 1.0E-02	U		^{239/240} Pu	8.9E-04 \pm 4.7E-03	U
	¹⁰³ Ru	1.2E-01 \pm 1.2E-01	U		¹⁰³ Ru	-2.2E-02 \pm 6.8E-02	U
	¹⁰⁶ Ru	-3.0E-01 \pm 9.2E-01	U		¹⁰⁶ Ru	-3.6E-01 \pm 5.0E-01	U
	¹²⁵ Sb	-1.8E-02 \pm 1.8E-01	U		¹²⁵ Sb	-1.1E-01 \pm 1.4E-01	U
	¹¹³ Sn	-1.5E-02 \pm 1.4E-01	U		¹¹³ Sn	-5.7E-02 \pm 6.9E-02	U
	⁹⁰ Sr	-1.7E-01 \pm 1.9E-01	U		⁹⁰ Sr	1.6E-02 \pm 1.6E-01	U
	²³⁴ U	9.9E-03 \pm 6.9E-03	U		²³⁴ U	1.3E-02 \pm 8.6E-03	U
	²³⁵ U	2.0E-03 \pm 4.0E-03	U		²³⁵ U	3.5E-03 \pm 3.6E-03	U
	²³⁸ U	7.2E-03 \pm 5.4E-03	U		²³⁸ U	8.1E-03 \pm 5.5E-03	U
	⁶⁵ Zn	1.8E-02 \pm 1.8E-01	U		⁶⁵ Zn	-8.4E-02 \pm 1.2E-01	U
V088 (600 Area)	¹⁴⁴ Ce	6.2E-02 \pm 4.3E-01	U	V090 (600 Area)	¹⁴⁴ Ce	-1.2E-01 \pm 6.8E-01	U
	⁶⁰ Co	8.9E-03 \pm 3.0E-02	U		⁶⁰ Co	-3.7E-02 \pm 5.1E-02	U
	¹³⁴ Cs	8.4E-03 \pm 3.3E-02	U		¹³⁴ Cs	-9.9E-03 \pm 5.4E-02	U
	¹³⁷ Cs	1.5E-02 \pm 3.2E-02	U		¹³⁷ Cs	7.4E-02 \pm 9.2E-02	U
	¹⁵² Eu	-2.6E-02 \pm 8.9E-02	U		¹⁵² Eu	1.2E-01 \pm 1.5E-01	U
	¹⁵⁴ Eu	-1.2E-02 \pm 8.3E-02	U		¹⁵⁴ Eu	1.5E-02 \pm 1.5E-01	U
	¹⁵⁵ Eu	7.1E-02 \pm 9.2E-02	U		¹⁵⁵ Eu	-7.0E-02 \pm 1.6E-01	U
	²³⁸ Pu	3.6E-03 \pm 1.8E-02	U		²³⁸ Pu	-1.1E-02 \pm 1.8E-02	U
	^{239/240} Pu	3.6E-03 \pm 6.4E-03	U		^{239/240} Pu	1.1E-03 \pm 1.1E-02	U
	¹⁰³ Ru	4.7E-03 \pm 4.7E-02	U		¹⁰³ Ru	5.3E-03 \pm 5.3E-02	U
	¹⁰⁶ Ru	2.0E-01 \pm 3.3E-01	U		¹⁰⁶ Ru	3.6E-02 \pm 3.6E-01	U
	¹²⁵ Sb	2.7E-02 \pm 8.6E-02	U		¹²⁵ Sb	8.2E-02 \pm 1.5E-01	U
	¹¹³ Sn	-2.3E-02 \pm 6.0E-02	U		¹¹³ Sn	-3.9E-02 \pm 7.5E-02	U
	⁹⁰ Sr	-1.7E-01 \pm 2.0E-01	U		⁹⁰ Sr	-1.1E-01 \pm 2.0E-01	U
	²³⁴ U	1.3E-02 \pm 8.3E-03	U		²³⁴ U	1.7E-02 \pm 8.7E-03	U
	²³⁵ U	2.8E-03 \pm 3.3E-03	U		²³⁵ U	2.6E-03 \pm 3.1E-03	U
	²³⁸ U	1.5E-02 \pm 8.1E-03	U		²³⁸ U	7.8E-03 \pm 5.3E-03	U
	⁶⁵ Zn	7.5E-02 \pm 8.7E-02	U		⁶⁵ Zn	-1.1E-02 \pm 1.1E-01	U

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

Table 4-4. 2008 Vegetation Sampling Results (pCi/g \pm total analytical uncertainty).
(Sheet 12 of 18)

Location	Isotope	Result \pm Error	RQ*	Location	Isotope	Result \pm Error	RQ*
V092 (600 Area)	¹⁴⁴ Ce	2.9E-01 \pm 4.6E-01	U	V094 (600 Area)	¹⁴⁴ Ce	-2.5E-01 \pm 5.6E-01	U
	⁶⁰ Co	-3.7E-02 \pm 4.1E-02	U		⁶⁰ Co	2.6E-03 \pm 2.6E-02	U
	¹³⁴ Cs	5.7E-02 \pm 5.4E-02	U		¹³⁴ Cs	2.3E-02 \pm 4.7E-02	U
	¹³⁷ Cs	1.7E-01 \pm 8.2E-02			¹³⁷ Cs	-1.1E-02 \pm 4.7E-02	U
	¹⁵² Eu	-2.2E-02 \pm 1.1E-01	U		¹⁵² Eu	3.4E-02 \pm 1.2E-01	U
	¹⁵⁴ Eu	6.5E-02 \pm 1.2E-01	U		¹⁵⁴ Eu	6.2E-02 \pm 1.4E-01	U
	¹⁵⁵ Eu	-3.4E-02 \pm 1.2E-01	U		¹⁵⁵ Eu	-3.0E-02 \pm 1.5E-01	U
	²³⁸ Pu	-1.7E-02 \pm 2.0E-02	U		²³⁸ Pu	5.3E-03 \pm 1.2E-02	U
	^{239/240} Pu	3.6E-02 \pm 1.6E-02			^{239/240} Pu	1.1E-03 \pm 1.1E-02	U
	¹⁰³ Ru	-4.0E-02 \pm 5.1E-02	U		¹⁰³ Ru	-1.1E-02 \pm 5.7E-02	U
	¹⁰⁶ Ru	1.0E-01 \pm 3.9E-01	U		¹⁰⁶ Ru	-2.2E-01 \pm 4.4E-01	U
	¹²⁵ Sb	-4.6E-02 \pm 1.0E-01	U		¹²⁵ Sb	-7.6E-02 \pm 1.2E-01	U
	¹¹³ Sn	-1.2E-02 \pm 4.9E-02	U		¹¹³ Sn	-1.7E-03 \pm 1.7E-02	U
	⁹⁰ Sr	1.5E-01 \pm 2.2E-01	U		⁹⁰ Sr	5.5E-02 \pm 2.1E-01	U
	²³⁴ U	2.5E-02 \pm 1.2E-02			²³⁴ U	1.4E-02 \pm 8.7E-03	
	²³⁵ U	6.7E-03 \pm 5.4E-03			²³⁵ U	3.5E-03 \pm 3.6E-03	
	²³⁸ U	1.4E-02 \pm 8.3E-03			²³⁸ U	8.8E-03 \pm 5.8E-03	
	⁶⁵ Zn	1.2E-01 \pm 1.0E-01	U		⁶⁵ Zn	-7.4E-02 \pm 1.0E-01	U
V096 (600 Area)	¹⁴⁴ Ce	-3.2E-01 \pm 7.0E-01	U	V098 (600 Area)	¹⁴⁴ Ce	2.9E-02 \pm 2.9E-01	U
	⁶⁰ Co	1.1E-02 \pm 5.6E-02	U		⁶⁰ Co	3.5E-03 \pm 2.9E-02	U
	¹³⁴ Cs	-2.6E-02 \pm 6.0E-02	U		¹³⁴ Cs	1.9E-02 \pm 3.2E-02	U
	¹³⁷ Cs	-1.0E-02 \pm 5.6E-02	U		¹³⁷ Cs	9.2E-03 \pm 3.1E-02	U
	¹⁵² Eu	7.7E-02 \pm 1.5E-01	U		¹⁵² Eu	-1.8E-02 \pm 9.3E-02	U
	¹⁵⁴ Eu	1.4E-02 \pm 1.4E-01	U		¹⁵⁴ Eu	-1.6E-02 \pm 8.9E-02	U
	¹⁵⁵ Eu	-9.3E-02 \pm 1.7E-01	U		¹⁵⁵ Eu	-5.9E-02 \pm 9.0E-02	U
	²³⁸ Pu	1.0E-03 \pm 1.0E-02	U		²³⁸ Pu	1.1E-02 \pm 1.6E-02	U
	^{239/240} Pu	2.0E-03 \pm 4.0E-03	U		^{239/240} Pu	1.5E-02 \pm 8.8E-03	
	¹⁰³ Ru	6.8E-02 \pm 7.2E-02	U		¹⁰³ Ru	-2.2E-03 \pm 2.2E-02	U
	¹⁰⁶ Ru	2.4E-01 \pm 5.4E-01	U		¹⁰⁶ Ru	-1.8E-01 \pm 2.9E-01	U
	¹²⁵ Sb	-5.4E-02 \pm 1.4E-01	U		¹²⁵ Sb	7.0E-02 \pm 8.1E-02	U
	¹¹³ Sn	6.2E-02 \pm 7.2E-02	U		¹¹³ Sn	-4.5E-03 \pm 4.5E-02	U
	⁹⁰ Sr	3.7E-02 \pm 2.1E-01	U		⁹⁰ Sr	-8.0E-02 \pm 2.1E-01	U
	²³⁴ U	1.4E-02 \pm 8.1E-03			²³⁴ U	1.2E-02 \pm 7.9E-03	
	²³⁵ U	4.9E-03 \pm 4.6E-03			²³⁵ U	7.1E-03 \pm 5.3E-03	
	²³⁸ U	4.5E-03 \pm 6.1E-03	U		²³⁸ U	4.9E-03 \pm 5.3E-03	U
	⁶⁵ Zn	-1.4E-01 \pm 1.4E-01	U		⁶⁵ Zn	4.0E-02 \pm 8.2E-02	U

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

Table 4-4. 2008 Vegetation Sampling Results (pCi/g \pm total analytical uncertainty).
(Sheet 13 of 18)

Location	Isotope	Result \pm Error	RQ*	Location	Isotope	Result \pm Error	RQ*
V100 (600 Area)	¹⁴⁴ Ce	-2.4E-01 \pm 5.3E-01	U	V102 (600 Area)	¹⁴⁴ Ce	-1.6E-01 \pm 4.4E-01	U
	⁶⁰ Co	-3.0E-02 \pm 3.9E-02	U		⁶⁰ Co	-3.2E-02 \pm 4.5E-02	U
	¹³⁴ Cs	1.0E-02 \pm 4.4E-02	U		¹³⁴ Cs	2.6E-02 \pm 5.1E-02	U
	¹³⁷ Cs	-3.5E-03 \pm 3.5E-02	U		¹³⁷ Cs	4.7E-02 \pm 4.5E-02	U
	¹⁵² Eu	-8.2E-02 \pm 1.2E-01	U		¹⁵² Eu	-1.4E-01 \pm 1.4E-01	U
	¹⁵⁴ Eu	-7.8E-02 \pm 1.3E-01	U		¹⁵⁴ Eu	1.1E-02 \pm 1.1E-01	U
	¹⁵⁵ Eu	-5.4E-02 \pm 1.1E-01	U		¹⁵⁵ Eu	-1.9E-02 \pm 1.1E-01	U
	²³⁸ Pu	-4.1E-03 \pm 1.9E-02	U		²³⁸ Pu	1.1E-02 \pm 1.2E-02	U
	^{239/240} Pu	4.1E-03 \pm 4.2E-03			^{239/240} Pu	6.8E-03 \pm 5.4E-03	
	¹⁰³ Ru	-5.0E-02 \pm 5.7E-02	U		¹⁰³ Ru	-4.8E-02 \pm 5.2E-02	U
	¹⁰⁶ Ru	1.8E-01 \pm 3.5E-01	U		¹⁰⁶ Ru	1.3E-01 \pm 3.7E-01	U
	¹²⁵ Sb	-5.0E-02 \pm 1.1E-01	U		¹²⁵ Sb	6.2E-02 \pm 9.9E-02	U
	¹¹³ Sn	-2.4E-02 \pm 5.6E-02	U		¹¹³ Sn	-6.8E-03 \pm 4.9E-02	U
	⁹⁰ Sr	-8.1E-01 \pm 8.1E-01	U		⁹⁰ Sr	-3.3E-01 \pm 4.1E-01	U
	²³⁴ U	1.6E-02 \pm 9.6E-03			²³⁴ U	2.7E-02 \pm 1.2E-02	
	²³⁵ U	5.6E-03 \pm 4.8E-03			²³⁵ U	8.5E-03 \pm 6.0E-03	
	²³⁸ U	8.6E-03 \pm 6.8E-03			²³⁸ U	1.9E-02 \pm 9.7E-03	
	⁶⁵ Zn	6.9E-02 \pm 1.0E-01	U		⁶⁵ Zn	-3.3E-02 \pm 1.1E-01	U
V104 (600 Area)	¹⁴⁴ Ce	3.8E-02 \pm 3.8E-01	U	V106 (600 Area)	¹⁴⁴ Ce	-1.3E-01 \pm 1.1E+00	U
	⁶⁰ Co	-2.8E-02 \pm 4.1E-02	U		⁶⁰ Co	5.3E-02 \pm 1.0E-01	U
	¹³⁴ Cs	1.7E-02 \pm 4.2E-02	U		¹³⁴ Cs	-2.1E-02 \pm 1.4E-01	U
	¹³⁷ Cs	2.3E-02 \pm 4.2E-02	U		¹³⁷ Cs	1.9E-02 \pm 9.4E-02	U
	¹⁵² Eu	8.4E-02 \pm 1.0E-01	U		¹⁵² Eu	1.4E-01 \pm 2.6E-01	U
	¹⁵⁴ Eu	1.1E-01 \pm 1.2E-01	U		¹⁵⁴ Eu	-1.1E-01 \pm 3.0E-01	U
	¹⁵⁵ Eu	-2.7E-02 \pm 9.7E-02	U		¹⁵⁵ Eu	2.2E-02 \pm 2.2E-01	U
	²³⁸ Pu	1.0E-02 \pm 1.2E-02	U		²³⁸ Pu	-1.1E-02 \pm 1.5E-02	U
	^{239/240} Pu	1.0E-03 \pm 3.5E-03	U		^{239/240} Pu	9.2E-04 \pm 9.2E-03	U
	¹⁰³ Ru	-7.8E-03 \pm 5.0E-02	U		¹⁰³ Ru	-3.5E-02 \pm 1.3E-01	U
	¹⁰⁶ Ru	-1.7E-02 \pm 1.7E-01	U		¹⁰⁶ Ru	-4.1E-01 \pm 9.8E-01	U
	¹²⁵ Sb	6.1E-02 \pm 9.4E-02	U		¹²⁵ Sb	8.7E-02 \pm 2.5E-01	U
	¹¹³ Sn	3.6E-02 \pm 4.8E-02	U		¹¹³ Sn	-9.2E-02 \pm 1.2E-01	U
	⁹⁰ Sr	-5.2E-02 \pm 2.0E-01	U		⁹⁰ Sr	1.4E-01 \pm 2.6E-01	U
	²³⁴ U	3.0E-02 \pm 1.3E-02			²³⁴ U	1.6E-02 \pm 8.5E-03	
	²³⁵ U	4.8E-03 \pm 4.5E-03			²³⁵ U	1.9E-03 \pm 3.8E-03	U
	²³⁸ U	1.6E-02 \pm 8.6E-03			²³⁸ U	6.0E-03 \pm 5.4E-03	U
	⁶⁵ Zn	-5.3E-02 \pm 9.4E-02	U		⁶⁵ Zn	1.6E-01 \pm 2.3E-01	U

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

Table 4-4. 2008 Vegetation Sampling Results (pCi/g \pm total analytical uncertainty).
(Sheet 14 of 18)

Location	Isotope	Result \pm Error	RQ*	Location	Isotope	Result \pm Error	RQ*
V108 (600 Area)	¹⁴⁴ Ce	-2.9E-01 \pm 4.8E-01	U	V110 (600 Area)	¹⁴⁴ Ce	-4.0E-02 \pm 4.0E-01	U
	⁶⁰ Co	-5.8E-03 \pm 5.0E-02	U		⁶⁰ Co	5.1E-02 \pm 1.9E-01	U
	¹³⁴ Cs	5.7E-02 \pm 4.9E-02	U		¹³⁴ Cs	1.4E-01 \pm 2.5E-01	U
	¹³⁷ Cs	6.6E-02 \pm 5.4E-02	U		¹³⁷ Cs	-1.1E-01 \pm 2.1E-01	U
	¹⁵² Eu	4.0E-02 \pm 1.2E-01	U		¹⁵² Eu	-1.8E-01 \pm 6.2E-01	U
	¹⁵⁴ Eu	-1.6E-02 \pm 1.3E-01	U		¹⁵⁴ Eu	-1.1E+00 \pm 1.1E+00	U
	¹⁵⁵ Eu	-7.0E-02 \pm 1.3E-01	U		¹⁵⁵ Eu	1.9E-02 \pm 1.9E-01	U
	²³⁸ Pu	-1.3E-02 \pm 1.9E-02	U		²³⁸ Pu	1.2E-02 \pm 9.8E-03	U
	^{239/240} Pu	1.1E-03 \pm 4.9E-03	U		^{239/240} Pu	9.8E-04 \pm 3.4E-03	U
	¹⁰³ Ru	8.8E-05 \pm 8.8E-04	U		¹⁰³ Ru	-2.2E-01 \pm 3.1E-01	U
	¹⁰⁶ Ru	2.5E-02 \pm 2.5E-01	U		¹⁰⁶ Ru	-2.8E+00 \pm 2.8E+00	U
	¹²⁵ Sb	1.4E-03 \pm 1.4E-02	U		¹²⁵ Sb	-3.2E-01 \pm 5.6E-01	U
	¹¹³ Sn	-3.0E-02 \pm 5.9E-02	U		¹¹³ Sn	-5.8E-03 \pm 5.8E-02	U
	⁹⁰ Sr	1.6E-01 \pm 2.9E-01	U		⁹⁰ Sr	-3.5E-02 \pm 1.8E-01	U
	²³⁴ U	1.9E-02 \pm 9.7E-03			²³⁴ U	1.8E-02 \pm 1.0E-02	
	²³⁵ U	1.9E-03 \pm 2.7E-03	U		²³⁵ U	4.6E-03 \pm 4.3E-03	
	²³⁸ U	1.2E-02 \pm 7.6E-03			²³⁸ U	5.1E-03 \pm 4.4E-03	
	⁶⁵ Zn	7.1E-02 \pm 1.1E-01	U		⁶⁵ Zn	-6.5E-01 \pm 6.5E-01	U
V114 (600 Area)	¹⁴⁴ Ce	-2.8E-01 \pm 4.0E-01	U	V116 (300 Area)	¹⁴⁴ Ce	-6.0E-01 \pm 6.6E-01	U
	⁶⁰ Co	-3.0E-02 \pm 4.1E-02	U		⁶⁰ Co	1.4E-03 \pm 1.4E-02	U
	¹³⁴ Cs	-8.2E-03 \pm 4.0E-02	U		¹³⁴ Cs	-2.0E-02 \pm 7.2E-02	U
	¹³⁷ Cs	5.2E-02 \pm 6.6E-02	U		¹³⁷ Cs	6.3E-02 \pm 6.3E-02	U
	¹⁵² Eu	2.8E-02 \pm 9.3E-02	U		¹⁵² Eu	-4.5E-02 \pm 1.9E-01	U
	¹⁵⁴ Eu	7.4E-02 \pm 1.1E-01	U		¹⁵⁴ Eu	-9.9E-02 \pm 1.8E-01	U
	¹⁵⁵ Eu	-3.7E-02 \pm 1.0E-01	U		¹⁵⁵ Eu	-2.3E-02 \pm 1.8E-01	U
	²³⁸ Pu	6.0E-03 \pm 2.0E-02	U		²³⁸ Pu	3.4E-03 \pm 3.0E-02	U
	^{239/240} Pu	3.6E-03 \pm 5.4E-03	U		^{239/240} Pu	-6.8E-03 \pm 1.4E-02	U
	¹⁰³ Ru	1.1E-02 \pm 5.0E-02	U		¹⁰³ Ru	1.0E-02 \pm 5.9E-02	U
	¹⁰⁶ Ru	-3.6E-01 \pm 3.7E-01	U		¹⁰⁶ Ru	2.3E-01 \pm 5.1E-01	U
	¹²⁵ Sb	9.8E-02 \pm 9.1E-02	U		¹²⁵ Sb	6.5E-02 \pm 1.5E-01	U
	¹¹³ Sn	1.4E-02 \pm 4.5E-02	U		¹¹³ Sn	-4.5E-03 \pm 4.5E-02	U
	⁹⁰ Sr	-1.8E-01 \pm 2.0E-01	U		⁹⁰ Sr	-2.7E-01 \pm 2.7E-01	U
	²³⁴ U	1.9E-02 \pm 1.9E-02	U		²³⁴ U	9.3E-03 \pm 7.8E-03	U
	²³⁵ U	2.9E-03 \pm 5.9E-03	U		²³⁵ U	9.3E-04 \pm 0.0E+00	U
	²³⁸ U	-8.0E-03 \pm 1.4E-02	U		²³⁸ U	1.1E-02 \pm 6.9E-03	
	⁶⁵ Zn	6.5E-02 \pm 9.8E-02	U		⁶⁵ Zn	2.0E-01 \pm 1.5E-01	U

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

Table 4-4. 2008 Vegetation Sampling Results (pCi/g \pm total analytical uncertainty).
(Sheet 15 of 18)

Location	Isotope	Result \pm Error	RQ*	Location	Isotope	Result \pm Error	RQ*
V117 (300 Area)	¹⁴⁴ Ce	-3.2E-01 \pm 1.1E+00	U	V118 (300 Area)	¹⁴⁴ Ce	-3.4E-01 \pm 8.9E-01	U
	⁶⁰ Co	-1.0E-01 \pm 1.1E-01	U		⁶⁰ Co	-5.9E-02 \pm 7.9E-02	U
	¹³⁴ Cs	6.4E-02 \pm 1.1E-01	U		¹³⁴ Cs	4.3E-03 \pm 4.3E-02	U
	¹³⁷ Cs	1.8E-02 \pm 1.2E-01	U		¹³⁷ Cs	3.1E-02 \pm 9.1E-02	U
	¹⁵² Eu	4.2E-02 \pm 2.7E-01	U		¹⁵² Eu	8.3E-03 \pm 8.3E-02	U
	¹⁵⁴ Eu	-1.9E-01 \pm 2.9E-01	U		¹⁵⁴ Eu	-2.5E-01 \pm 2.5E-01	U
	¹⁵⁵ Eu	1.7E-01 \pm 2.6E-01	U		¹⁵⁵ Eu	-5.8E-02 \pm 2.2E-01	U
	²³⁸ Pu	8.1E-02 \pm 5.8E-02			²³⁸ Pu	-1.2E-02 \pm 4.8E-02	U
	^{239/240} Pu	4.3E-03 \pm 4.3E-02	U		^{239/240} Pu	6.1E-03 \pm 6.1E-02	U
	¹⁰³ Ru	-1.2E-01 \pm 1.2E-01	U		¹⁰³ Ru	-1.7E-02 \pm 8.2E-02	U
	¹⁰⁶ Ru	-6.9E-01 \pm 9.0E-01	U		¹⁰⁶ Ru	1.7E-01 \pm 7.0E-01	U
	¹²⁵ Sb	-1.4E-01 \pm 2.7E-01	U		¹²⁵ Sb	-8.0E-02 \pm 2.0E-01	U
	¹¹³ Sn	-1.2E-01 \pm 1.2E-01	U		¹¹³ Sn	-3.7E-02 \pm 9.5E-02	U
	⁹⁰ Sr	-1.2E-01 \pm 1.8E-01	U		⁹⁰ Sr	-1.3E-01 \pm 1.8E-01	U
	²³⁴ U	1.9E-02 \pm 1.0E-02			²³⁴ U	3.1E-02 \pm 1.4E-02	
	²³⁵ U	2.8E-03 \pm 4.2E-03	U		²³⁵ U	9.8E-04 \pm 5.2E-03	U
	²³⁸ U	1.6E-02 \pm 8.5E-03			²³⁸ U	1.6E-02 \pm 8.6E-03	
	⁶⁵ Zn	1.7E-01 \pm 2.7E-01	U		⁶⁵ Zn	7.1E-01 \pm 2.3E-01	
V119 (300 Area)	¹⁴⁴ Ce	-2.9E-02 \pm 2.9E-01	U	V120 (300 Area)	¹⁴⁴ Ce	4.5E-02 \pm 4.5E-01	U
	⁶⁰ Co	-7.2E-02 \pm 1.2E-01	U		⁶⁰ Co	-2.3E-02 \pm 4.1E-02	U
	¹³⁴ Cs	-4.3E-02 \pm 1.2E-01	U		¹³⁴ Cs	1.9E-02 \pm 4.8E-02	U
	¹³⁷ Cs	6.0E-02 \pm 1.2E-01	U		¹³⁷ Cs	-2.4E-02 \pm 4.7E-02	U
	¹⁵² Eu	9.1E-02 \pm 3.3E-01	U		¹⁵² Eu	9.4E-02 \pm 1.3E-01	U
	¹⁵⁴ Eu	-4.7E-02 \pm 3.4E-01	U		¹⁵⁴ Eu	3.4E-02 \pm 1.3E-01	U
	¹⁵⁵ Eu	9.7E-02 \pm 2.8E-01	U		¹⁵⁵ Eu	2.8E-02 \pm 1.3E-01	U
	²³⁸ Pu	4.3E-03 \pm 4.3E-02	U		²³⁸ Pu	8.7E-02 \pm 4.7E-02	
	^{239/240} Pu	4.3E-03 \pm 4.3E-02	U		^{239/240} Pu	5.5E-03 \pm 1.1E-02	U
	¹⁰³ Ru	-7.5E-02 \pm 1.3E-01	U		¹⁰³ Ru	-1.9E-02 \pm 5.1E-02	U
	¹⁰⁶ Ru	-4.8E-01 \pm 1.1E+00	U		¹⁰⁶ Ru	-1.9E-02 \pm 1.9E-01	U
	¹²⁵ Sb	1.4E-02 \pm 1.4E-01	U		¹²⁵ Sb	5.6E-02 \pm 1.2E-01	U
	¹¹³ Sn	-1.2E-02 \pm 1.2E-01	U		¹¹³ Sn	-5.0E-03 \pm 5.0E-02	U
	⁹⁰ Sr	-2.4E-01 \pm 2.4E-01	U		⁹⁰ Sr	-5.2E-02 \pm 1.8E-01	U
	²³⁴ U	4.8E-02 \pm 1.8E-02			²³⁴ U	3.5E-02 \pm 1.4E-02	
	²³⁵ U	5.8E-03 \pm 5.7E-03	U		²³⁵ U	9.0E-04 \pm 3.1E-03	U
	²³⁸ U	5.5E-02 \pm 2.0E-02			²³⁸ U	4.4E-02 \pm 1.7E-02	
	⁶⁵ Zn	-4.1E-03 \pm 4.1E-02	U		⁶⁵ Zn	-3.8E-03 \pm 3.8E-02	U

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

Table 4-4. 2008 Vegetation Sampling Results (pCi/g \pm total analytical uncertainty).
(Sheet 16 of 18)

Location	Isotope	Result \pm Error	RQ*	Location	Isotope	Result \pm Error	RQ*
V121 (300 Area)	¹⁴⁴ Ce	3.8E-01 \pm 1.1E+00	U	V123 (300 Area)	¹⁴⁴ Ce	8.2E-02 \pm 4.1E-01	U
	⁶⁰ Co	-8.2E-02 \pm 1.0E-01	U		⁶⁰ Co	-1.5E-02 \pm 4.5E-02	U
	¹³⁴ Cs	3.5E-02 \pm 1.1E-01	U		¹³⁴ Cs	7.6E-03 \pm 4.2E-02	U
	¹³⁷ Cs	4.4E-02 \pm 1.2E-01	U		¹³⁷ Cs	7.5E-04 \pm 7.5E-03	U
	¹⁵² Eu	-1.7E-01 \pm 3.0E-01	U		¹⁵² Eu	1.6E-02 \pm 1.1E-01	U
	¹⁵⁴ Eu	1.2E-01 \pm 3.0E-01	U		¹⁵⁴ Eu	-7.6E-03 \pm 7.6E-02	U
	¹⁵⁵ Eu	1.2E-01 \pm 2.6E-01	U		¹⁵⁵ Eu	1.5E-02 \pm 1.0E-01	U
	²³⁸ Pu	-3.8E-02 \pm 4.8E-02	U		²³⁸ Pu	-1.7E-03 \pm 8.7E-03	U
	^{239/240} Pu	9.4E-03 \pm 1.6E-02	U		^{239/240} Pu	4.2E-03 \pm 3.9E-03	U
	¹⁰³ Ru	-7.5E-02 \pm 1.2E-01	U		¹⁰³ Ru	-1.1E-02 \pm 4.1E-02	U
	¹⁰⁶ Ru	3.8E-01 \pm 1.0E+00	U		¹⁰⁶ Ru	-4.5E-02 \pm 3.9E-01	U
	¹²⁵ Sb	-3.0E-03 \pm 3.0E-02	U		¹²⁵ Sb	1.2E-02 \pm 1.0E-01	U
	¹¹³ Sn	-3.4E-04 \pm 3.4E-03	U		¹¹³ Sn	-1.9E-02 \pm 5.0E-02	U
	⁹⁰ Sr	-1.3E-01 \pm 1.8E-01	U		⁹⁰ Sr	-1.5E-01 \pm 1.8E-01	U
	²³⁴ U	1.8E-02 \pm 1.1E-02			²³⁴ U	1.9E-02 \pm 9.5E-03	
	²³⁵ U	4.1E-03 \pm 5.1E-03	U		²³⁵ U	4.4E-03 \pm 4.1E-03	
	²³⁸ U	1.8E-02 \pm 9.9E-03			²³⁸ U	9.7E-03 \pm 6.1E-03	
	⁶⁵ Zn	1.1E-01 \pm 2.5E-01	U		⁶⁵ Zn	8.8E-02 \pm 9.9E-02	U
V124 (300 Area)	¹⁴⁴ Ce	2.1E-01 \pm 4.4E-01	U	V125 (300 Area)	¹⁴⁴ Ce	-5.6E-01 \pm 7.4E-01	U
	⁶⁰ Co	-7.7E-03 \pm 4.8E-02	U		⁶⁰ Co	-1.9E-02 \pm 6.2E-02	U
	¹³⁴ Cs	1.0E-02 \pm 4.4E-02	U		¹³⁴ Cs	3.8E-02 \pm 6.6E-02	U
	¹³⁷ Cs	-7.9E-03 \pm 4.2E-02	U		¹³⁷ Cs	1.3E-02 \pm 6.3E-02	U
	¹⁵² Eu	-5.9E-02 \pm 1.1E-01	U		¹⁵² Eu	-1.6E-02 \pm 1.6E-01	U
	¹⁵⁴ Eu	2.9E-03 \pm 2.9E-02	U		¹⁵⁴ Eu	-4.7E-02 \pm 1.8E-01	U
	¹⁵⁵ Eu	8.7E-02 \pm 1.1E-01	U		¹⁵⁵ Eu	-6.3E-02 \pm 1.9E-01	U
	²³⁸ Pu	-7.3E-03 \pm 1.6E-02	U		²³⁸ Pu	1.1E-02 \pm 4.2E-02	U
	^{239/240} Pu	1.5E-03 \pm 3.0E-03	U		^{239/240} Pu	3.5E-03 \pm 7.1E-03	U
	¹⁰³ Ru	-1.4E-03 \pm 1.4E-02	U		¹⁰³ Ru	-2.4E-03 \pm 2.4E-02	U
	¹⁰⁶ Ru	2.1E-01 \pm 3.8E-01	U		¹⁰⁶ Ru	6.2E-02 \pm 5.6E-01	U
	¹²⁵ Sb	1.4E-02 \pm 1.0E-01	U		¹²⁵ Sb	1.4E-01 \pm 1.6E-01	U
	¹¹³ Sn	-4.0E-02 \pm 5.1E-02	U		¹¹³ Sn	-4.2E-03 \pm 4.2E-02	U
	⁹⁰ Sr	-2.0E-01 \pm 2.0E-01	U		⁹⁰ Sr	-1.2E-01 \pm 1.8E-01	U
	²³⁴ U	2.8E-02 \pm 1.2E-02			²³⁴ U	2.3E-02 \pm 1.1E-02	
	²³⁵ U	6.7E-03 \pm 5.4E-03			²³⁵ U	5.4E-03 \pm 5.9E-03	U
	²³⁸ U	1.1E-02 \pm 6.9E-03			²³⁸ U	1.5E-02 \pm 8.7E-03	
	⁶⁵ Zn	-1.7E-01 \pm 1.7E-01	U		⁶⁵ Zn	-2.9E-02 \pm 1.5E-01	U

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

Table 4-4. 2008 Vegetation Sampling Results (pCi/g \pm total analytical uncertainty).
(Sheet 17 of 18)

Location	Isotope	Result \pm Error	RQ*	Location	Isotope	Result \pm Error	RQ*
V126	¹⁴⁴ Ce	-1.2E-02 \pm 1.2E-01	U	V128	¹⁴⁴ Ce	-9.8E-01 \pm 1.0E+00	U
(300 Area)	⁶⁰ Co	-1.0E-02 \pm 4.6E-02	U	(300 Area)	⁶⁰ Co	-4.5E-02 \pm 8.7E-02	U
	¹³⁴ Cs	-3.8E-02 \pm 4.8E-02	U		¹³⁴ Cs	5.3E-02 \pm 1.0E-01	U
	¹³⁷ Cs	-1.0E-02 \pm 5.5E-02	U		¹³⁷ Cs	1.6E-02 \pm 9.8E-02	U
	¹⁵² Eu	-7.3E-02 \pm 1.3E-01	U		¹⁵² Eu	-9.3E-03 \pm 9.3E-02	U
	¹⁵⁴ Eu	4.0E-02 \pm 1.3E-01	U		¹⁵⁴ Eu	-7.8E-02 \pm 2.6E-01	U
	¹⁵⁵ Eu	6.2E-03 \pm 6.2E-02	U		¹⁵⁵ Eu	1.0E-03 \pm 1.0E-02	U
	²³⁸ Pu	6.7E-03 \pm 1.0E-02	U		²³⁸ Pu	-4.6E-03 \pm 1.1E-02	U
	^{239/240} Pu	9.6E-04 \pm 1.9E-03	U		^{239/240} Pu	-2.8E-03 \pm 5.0E-03	U
	¹⁰³ Ru	-1.4E-02 \pm 5.0E-02	U		¹⁰³ Ru	6.1E-02 \pm 1.1E-01	U
	¹⁰⁶ Ru	4.0E-01 \pm 4.3E-01	U		¹⁰⁶ Ru	1.1E+00 \pm 8.9E-01	U
	¹²⁵ Sb	1.0E-01 \pm 1.3E-01	U		¹²⁵ Sb	-8.6E-02 \pm 2.7E-01	U
	¹¹³ Sn	4.5E-03 \pm 4.5E-02	U		¹¹³ Sn	-4.2E-02 \pm 1.2E-01	U
	⁹⁰ Sr	1.7E-01 \pm 2.0E-01	U		⁹⁰ Sr	-1.2E-01 \pm 1.9E-01	U
	²³⁴ U	4.4E-02 \pm 1.8E-02			²³⁴ U	1.3E-02 \pm 7.9E-03	
	²³⁵ U	4.0E-03 \pm 4.1E-03			²³⁵ U	2.9E-03 \pm 4.4E-03	U
	²³⁸ U	4.2E-02 \pm 1.6E-02			²³⁸ U	7.9E-03 \pm 6.2E-03	
	⁶⁵ Zn	-1.1E-01 \pm 1.3E-01	U		⁶⁵ Zn	2.5E-01 \pm 2.2E-01	U
V129	¹⁴⁴ Ce	-1.7E-01 \pm 6.5E-01	U	V131	¹⁴⁴ Ce	-3.1E-01 \pm 4.3E-01	U
(300 Area)	⁶⁰ Co	7.5E-02 \pm 5.8E-02	U	(Replicate of	⁶⁰ Co	-1.0E-02 \pm 3.3E-02	U
	¹³⁴ Cs	2.5E-02 \pm 6.8E-02	U	V116,	¹³⁴ Cs	1.0E-02 \pm 5.3E-02	U
	¹³⁷ Cs	-2.6E-03 \pm 2.6E-02	U	300 Area)	¹³⁷ Cs	-2.1E-02 \pm 3.3E-02	U
	¹⁵² Eu	-2.1E-02 \pm 1.7E-01	U		¹⁵² Eu	-7.0E-02 \pm 9.9E-02	U
	¹⁵⁴ Eu	-8.9E-02 \pm 1.7E-01	U		¹⁵⁴ Eu	-2.2E-02 \pm 1.0E-01	U
	¹⁵⁵ Eu	1.7E-01 \pm 1.6E-01	U		¹⁵⁵ Eu	-4.4E-02 \pm 1.1E-01	U
	²³⁸ Pu	-4.5E-03 \pm 1.3E-02	U		²³⁸ Pu	2.1E-03 \pm 1.7E-02	U
	^{239/240} Pu	9.0E-04 \pm 3.1E-03	U		^{239/240} Pu	5.2E-03 \pm 7.0E-03	U
	¹⁰³ Ru	-1.9E-03 \pm 1.9E-02	U		¹⁰³ Ru	-1.9E-02 \pm 3.7E-02	U
	¹⁰⁶ Ru	-1.2E-01 \pm 5.3E-01	U		¹⁰⁶ Ru	1.4E-01 \pm 3.2E-01	U
	¹²⁵ Sb	1.5E-01 \pm 1.4E-01	U		¹²⁵ Sb	-7.8E-02 \pm 8.8E-02	U
	¹¹³ Sn	-3.8E-02 \pm 6.7E-02	U		¹¹³ Sn	-2.9E-02 \pm 4.1E-02	U
	⁹⁰ Sr	-1.7E-01 \pm 1.9E-01	U		⁹⁰ Sr	-2.2E-02 \pm 1.9E-01	U
	²³⁴ U	2.2E-02 \pm 1.0E-02			²³⁴ U	1.0E-02 \pm 7.9E-03	
	²³⁵ U	6.6E-03 \pm 6.5E-03	U		²³⁵ U	1.0E-03 \pm 2.0E-03	U
	²³⁸ U	1.1E-02 \pm 7.1E-03			²³⁸ U	3.7E-03 \pm 5.9E-03	U
	⁶⁵ Zn	-2.9E-01 \pm 2.9E-01	U		⁶⁵ Zn	-2.6E-02 \pm 7.9E-02	U

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

Table 4-4. 2008 Vegetation Sampling Results (pCi/g \pm total analytical uncertainty).
(Sheet 18 of 18)

Location	Isotope	Result \pm Error	RQ*	Location	Isotope	Result \pm Error	RQ*
V132 (Replicate of V123, 300 Area)	¹⁴⁴ Ce	2.2E-01 \pm 5.1E-01	U	V138	¹⁴⁴ Ce	-4.6E-01 \pm 6.5E-01	U
	⁶⁰ Co	2.5E-02 \pm 4.1E-02	U	(Replicate of	⁶⁰ Co	2.3E-02 \pm 6.2E-02	U
	¹³⁴ Cs	1.4E-02 \pm 4.4E-02	U	V118,	¹³⁴ Cs	-7.2E-02 \pm 7.2E-02	U
	¹³⁷ Cs	2.7E-03 \pm 2.7E-02	U	300 Area)	¹³⁷ Cs	1.5E-02 \pm 5.8E-02	U
	¹⁵² Eu	4.5E-02 \pm 1.2E-01	U		¹⁵² Eu	-1.1E-01 \pm 1.6E-01	U
	¹⁵⁴ Eu	2.9E-02 \pm 1.2E-01	U		¹⁵⁴ Eu	-1.5E-01 \pm 1.7E-01	U
	¹⁵⁵ Eu	2.5E-02 \pm 1.4E-01	U		¹⁵⁵ Eu	-6.4E-02 \pm 1.6E-01	U
	²³⁸ Pu	9.9E-04 \pm 9.9E-03	U		²³⁸ Pu	-8.7E-04 \pm 8.7E-03	U
	^{239/240} Pu	9.9E-04 \pm 9.9E-03	U		^{239/240} Pu	-2.6E-03 \pm 4.6E-03	U
	¹⁰³ Ru	8.7E-03 \pm 4.4E-02	U		¹⁰³ Ru	3.4E-02 \pm 6.3E-02	U
	¹⁰⁶ Ru	1.2E-01 \pm 4.0E-01	U		¹⁰⁶ Ru	-1.2E-01 \pm 5.6E-01	U
	¹²⁵ Sb	2.6E-02 \pm 1.2E-01	U		¹²⁵ Sb	-7.0E-02 \pm 1.4E-01	U
	¹¹³ Sn	-6.9E-03 \pm 5.5E-02	U		¹¹³ Sn	7.3E-02 \pm 7.0E-02	U
	⁹⁰ Sr	-1.1E-01 \pm 1.9E-01	U		⁹⁰ Sr	3.0E-02 \pm 2.8E-02	U
	²³⁴ U	2.0E-02 \pm 1.1E-02			²³⁴ U	1.9E-02 \pm 9.3E-03	
	²³⁵ U	3.0E-03 \pm 5.3E-03	U		²³⁵ U	3.6E-03 \pm 4.5E-03	U
	²³⁸ U	1.3E-02 \pm 7.7E-03			²³⁸ U	1.8E-02 \pm 9.2E-03	
	⁶⁵ Zn	-4.8E-02 \pm 1.2E-01	U		⁶⁵ Zn	2.6E-03 \pm 2.6E-02	U
V130 (400 Area)	¹⁴⁴ Ce	3.5E-02 \pm 3.5E-01	U				
	⁶⁰ Co	4.9E-03 \pm 4.0E-02	U				
	¹³⁴ Cs	1.3E-02 \pm 4.0E-02	U				
	¹³⁷ Cs	5.8E-04 \pm 5.8E-03	U				
	¹⁵² Eu	1.6E-02 \pm 9.1E-02	U				
	¹⁵⁴ Eu	8.2E-02 \pm 1.2E-01	U				
	¹⁵⁵ Eu	-1.6E-02 \pm 9.5E-02	U				
	²³⁸ Pu	8.3E-03 \pm 1.7E-02	U				
	^{239/240} Pu	2.8E-03 \pm 4.2E-03	U				
	¹⁰³ Ru	1.9E-02 \pm 3.6E-02	U				
	¹⁰⁶ Ru	7.1E-02 \pm 3.3E-01	U				
	¹²⁵ Sb	1.2E-02 \pm 8.5E-02	U				
	¹¹³ Sn	2.4E-02 \pm 4.3E-02	U				
	⁹⁰ Sr	1.0E-02 \pm 1.0E-01	U				
	²³⁴ U	2.0E-02 \pm 1.0E-02					
	²³⁵ U	3.9E-03 \pm 4.9E-03	U				
	²³⁸ U	8.1E-03 \pm 6.3E-03					
	⁶⁵ Zn	-7.9E-02 \pm 8.8E-02	U				

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

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5.0 EXTERNAL RADIATION

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

In 2008, there were 124 TLD locations collecting external radiation information. The number of TLD locations in each operational area and a summary table comparing the 2007 and 2008 TLD results are provided in Table 5-1. Additional discussion of external radiation monitoring conducted near facilities and operations during 2008 can be found in Section 10.13 of PNNL-18427 (PNNL 2009a).

Table 5-1. Thermoluminescent Dosimeter Results (mrem/yr) for 2007 and 2008.

Operational Area	Number of Dosimeters	2007		2008		% Change ^c
		Maximum ^a	Mean ^b	Maximum ^a	Mean ^b	
100-BC	4	89 ± 12	85 ± 7	83 ± 3	79 ± 6	-6%
100-K	14	590 ± 15	206 ± 273	574 ± 42	192 ± 255	-6%
100-N	6	142 ± 153	102 ± 48	106 ± 9	88 ± 25	-13%
200-East	42	305 ± 148	110 ± 95	280 ± 37	103 ± 80	-5%
200-West	24	241 ± 287	110 ± 77	259 ± 135	105 ± 77	-3%
200-North (212-R) ^d	1	1,700 ± 268	1,700 ± 81	1,663 ± 250	1,647 ± 26	-2%
300 Area	8	109 ± 6	87 ± 20	103 ± 7	83 ± 17	-3%
300 TEDF ^e	6	87 ± 12	84 ± 4	83 ± 7	81 ± 3	-3%
300-FF-2	4	88 ± 11	85 ± 5	81 ± 8	79 ± 4	-6%
400 Area	7	98 ± 8	85 ± 12	94 ± 9	81 ± 12	-3%
CVDF ^f	4	306 ± 13	154 ± 205	302 ± 18	151 ± 203	-1%
ERDF ^g	3	93 ± 6	88 ± 8	80 ± 10	79 ± 4	-10%
IDF ^{d,h}	1	99 ± 15	91 ± 13	87 ± 13	85 ± 5	-5%

^a maximum annual average ± 2 standard deviations

^b ± 2 standard deviations

^c Numbers indicate a decrease (-) or increase from the 2007 mean

^d Maximum value represents highest quarterly value ± analytical uncertainty

^e TEDF = 300 Area Treated Effluent Disposal Facility

^f CVDF = Cold Vacuum Drying Facility (100 K Area)

^g ERDF = Environmental Restoration Disposal Facility (200 West Area)

^h IDF = Integrated Disposal Facility (200 East Area)

Observations in dose rate monitoring during 2008 included the following:

- The external radiation levels measured at all operational areas during 2008 were lower than 2007 levels.
- Major cleanup activities at the 100-K Area fuel storage basins and adjacent retired reactor buildings were conducted in 2007 and 2008. Overall average dose rates measured in both the 100-K East and 100-K West Areas in 2008 were comparable to the 2007 values. Similarly, dose rate levels measured in 2008 at monitoring stations around the 100-K Area Cold Vacuum Drying Facility (CVDF) were comparable to 2007 levels. The Hose-in-Hose project was completed in May 2007 and dose rate levels measured at the monitoring location situated adjacent to the sludge transfer route decreased to typical Hanford Site baseline levels in 2008. Quarterly dose rate levels for each of the facilities/projects at 100-K Area are presented in graph form in Figure 5-1.
- Average dose rates measured during 2008 in the 100-N Area were approximately 13% lower than 2007 levels. Dose rates observed at the N Springs shoreline TLD location were approximately 7% lower in 2008 than in 2007. Figure 5-2 provides historical trend plots of quarterly dose rates at the 116-N-1, 100-N Area and N-Springs monitoring locations.
- Dose rates observed in the 200-East and 200-West Areas during 2008 were comparable to levels measured in 2007. Dose rates at the 212-R Facility, while again in 2008 the highest on site, were also comparable to those measured during 2007. Figure 5-3 provides historical trend plots of quarterly dose rate levels for each of the 200 Area operational areas.
- Dose rates measured during 2008 at the Environmental Restoration Disposal Facility were approximately 10% lower than 2007 levels.
- Dose rates measured at the 300 Area, 300 Treated Effluent Disposal Facility (TEDF), 300-FF-2 Field Remediation project, and in the 400 Area were consistent with previous years' measurements. Figure 5-4 provides historical trend plots of quarterly dose rate levels for each of these operational areas.
- Maps showing the 2008 TLD locations are provided in Figures 5-5 through 5-12 and individual 2008 TLD results are provided in Table 5-2.

Figure 5-1. Average Quarterly Dose Rates, 100-K Area.

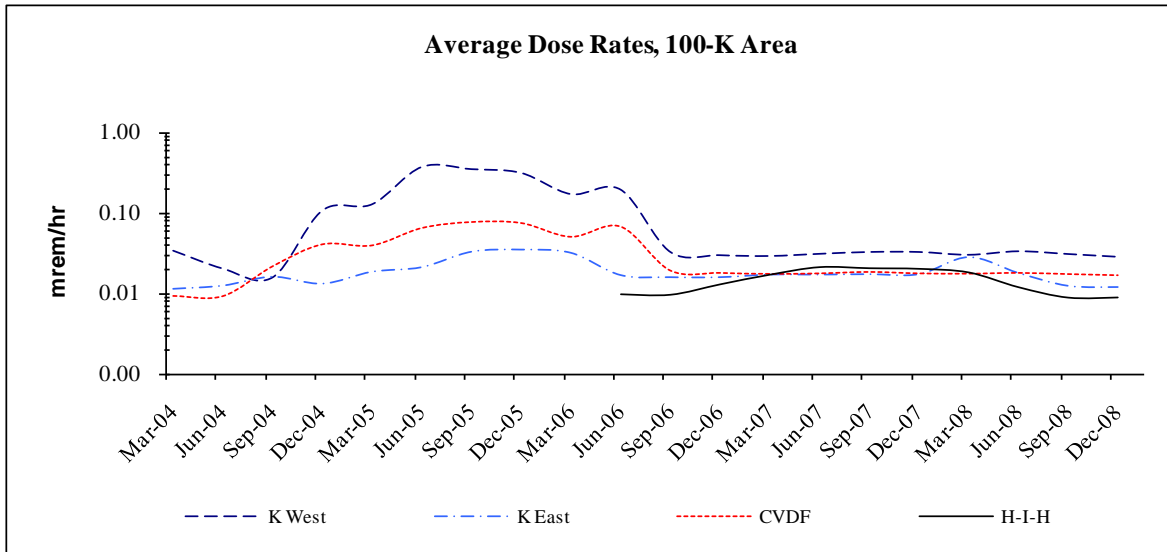


Figure 5-2. Average Quarterly Dose Rates, 100-N Area.

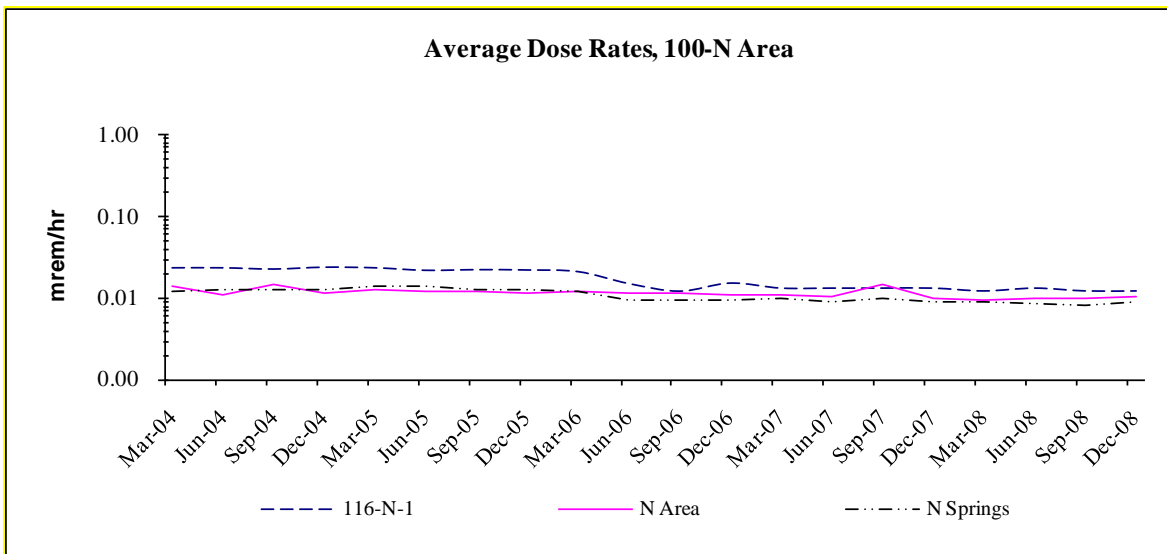


Figure 5-3. Average Quarterly Dose Rates, 200 Areas.

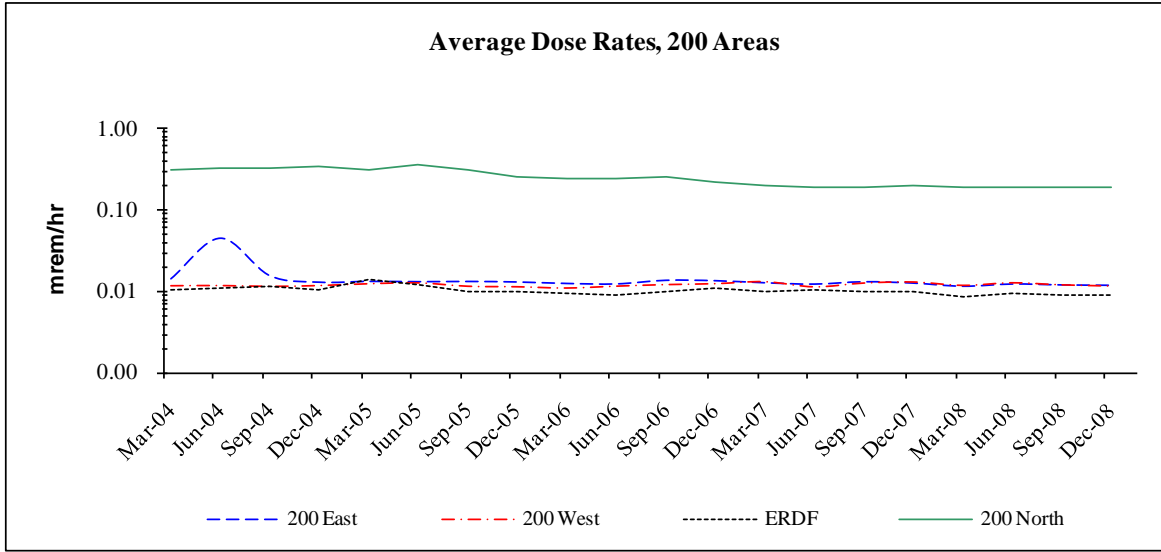


Figure 5-4. Average Quarterly Dose Rates, 300 and 400 Areas.

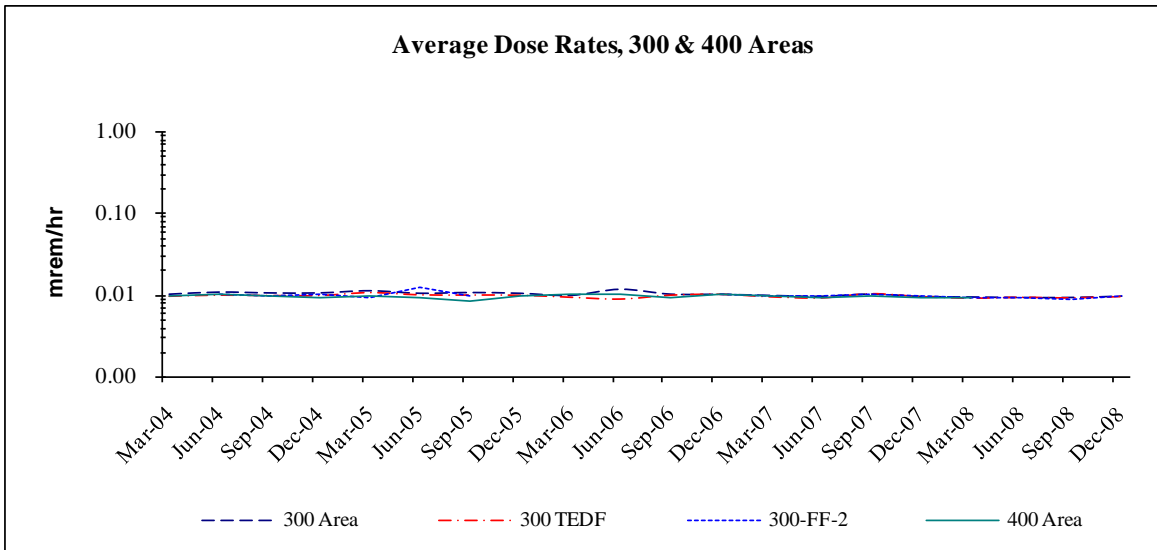


Figure 5-5. 100-B/C Area TLD Locations.

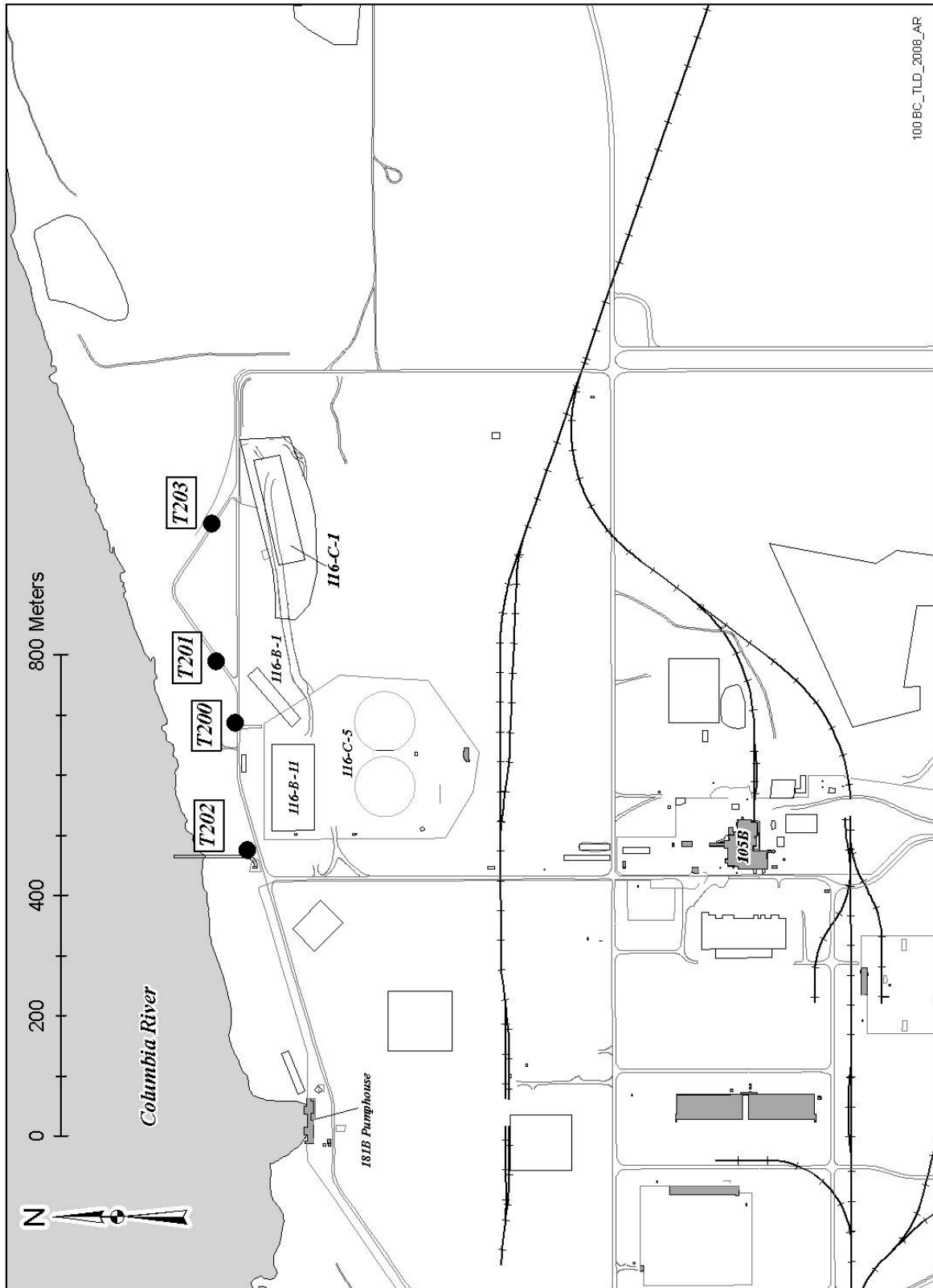


Figure 5-6. 100-K Area TLD Locations.

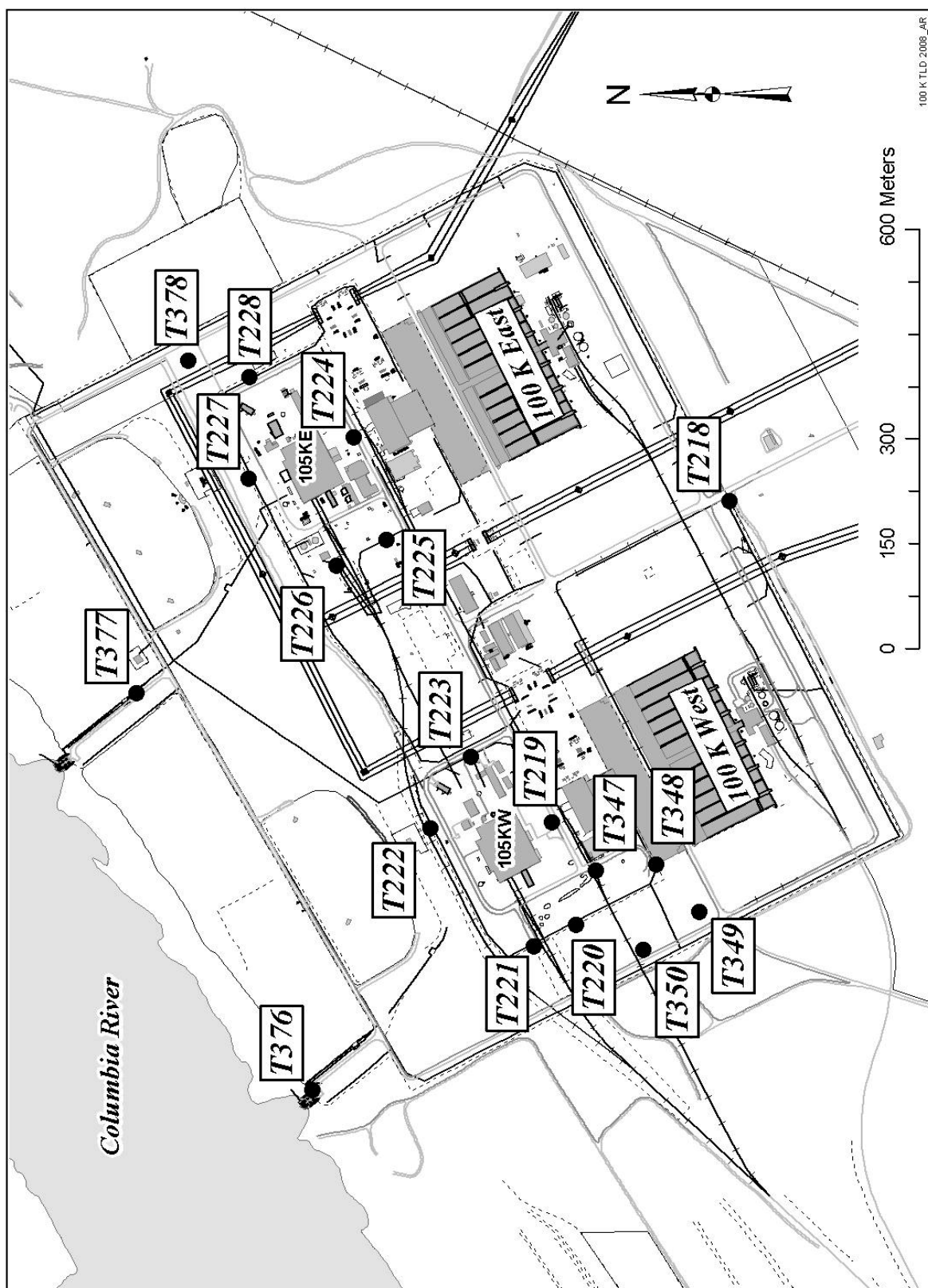
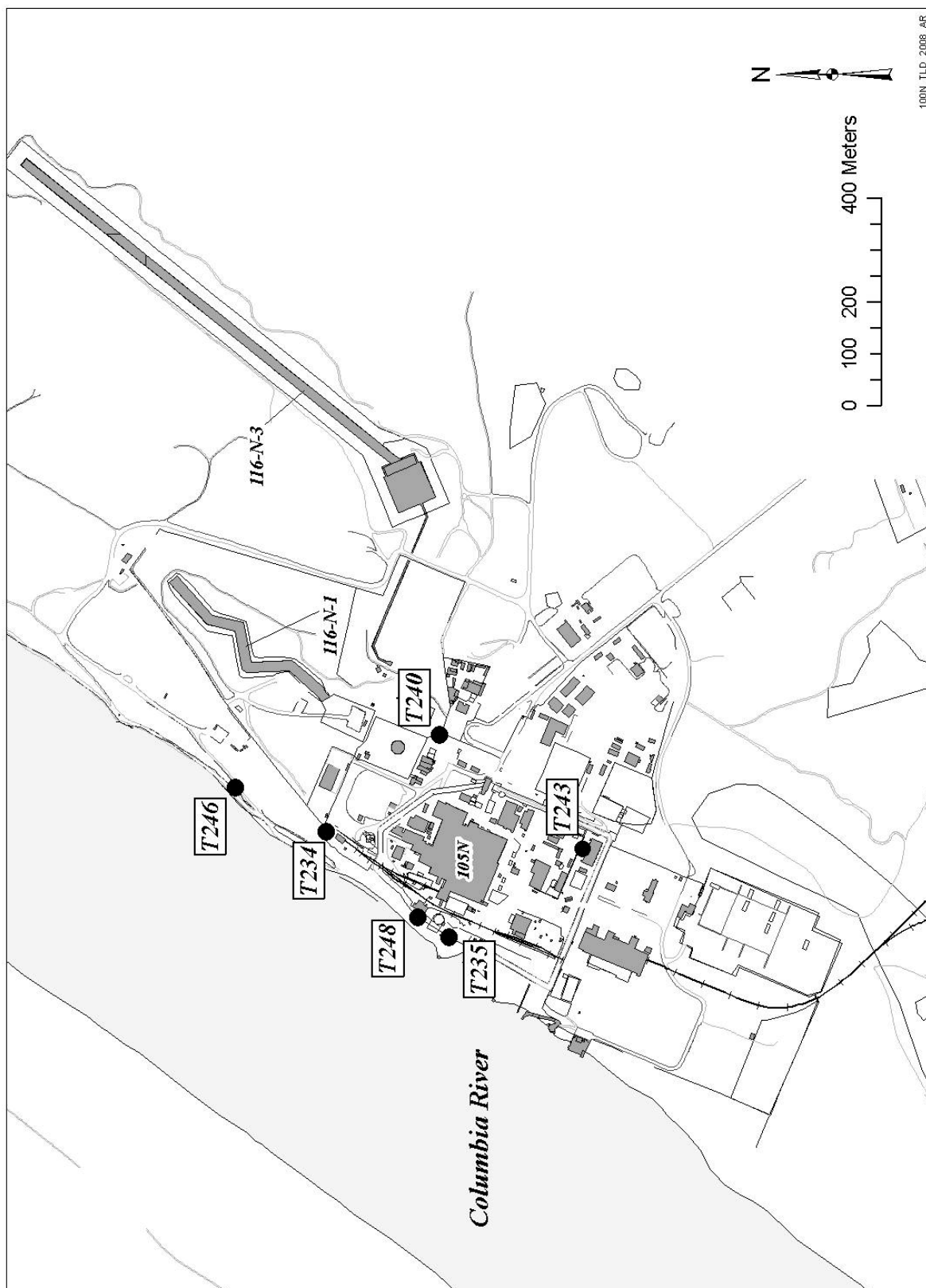


Figure 5-7. 100-N Area TLD Locations.



The figure consists of two maps of the T200 East TLD. The top map shows the entire TLD area, including various tanks, buildings, and infrastructure. A scale bar at the bottom indicates distances from 0 to 1,000 meters, and a north arrow is located in the top left corner. The bottom map is a detailed view of the area around the 241-AW tank, showing a cluster of tanks and buildings. A scale bar at the bottom indicates distances from 0 to 160 meters. Both maps show various tanks, buildings, and infrastructure, with labels for specific tanks and areas.

Figure 5-9. 200 West Area TLD Locations.

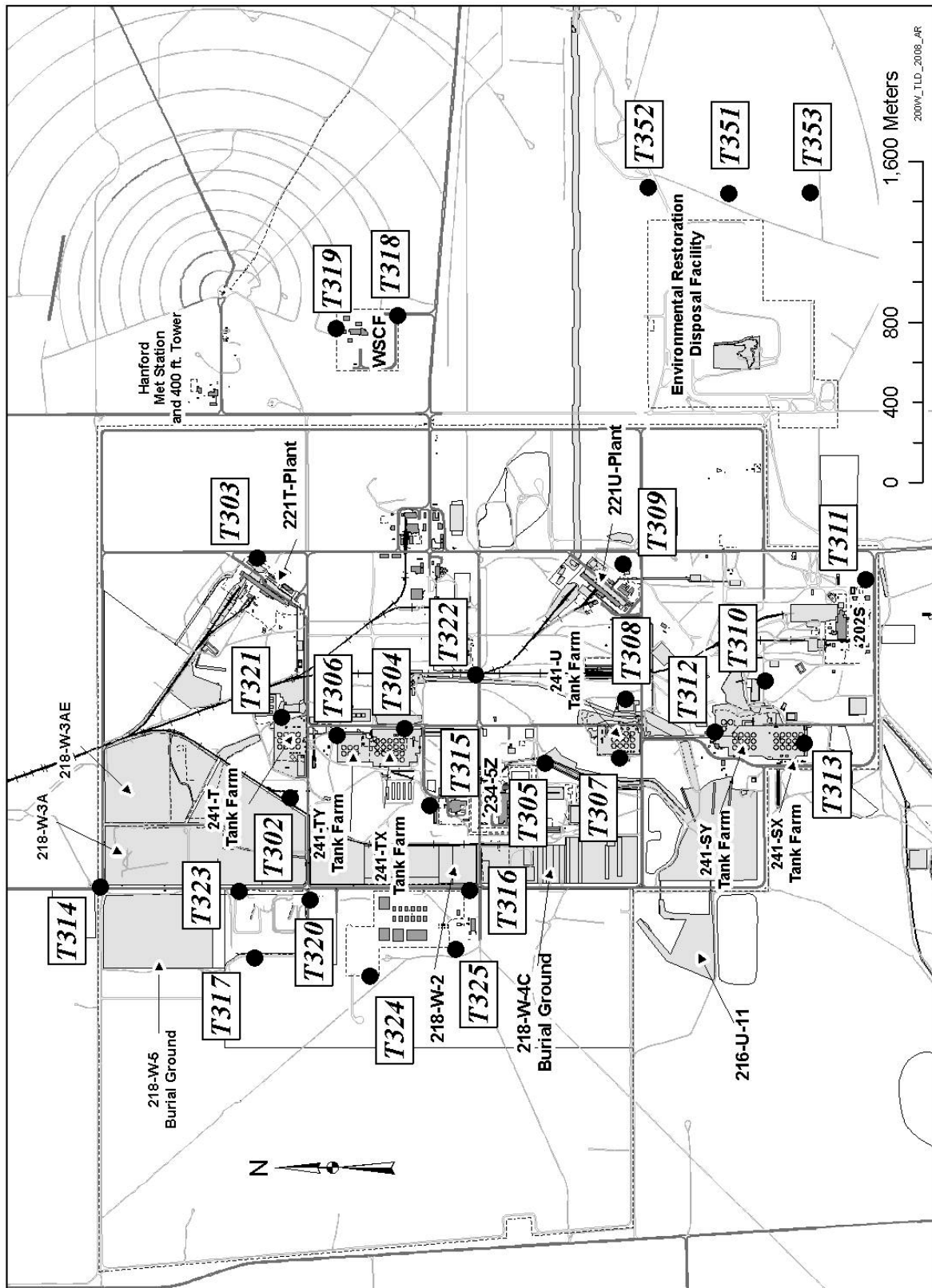


Figure 5-10. 200 North Area TLD Location.

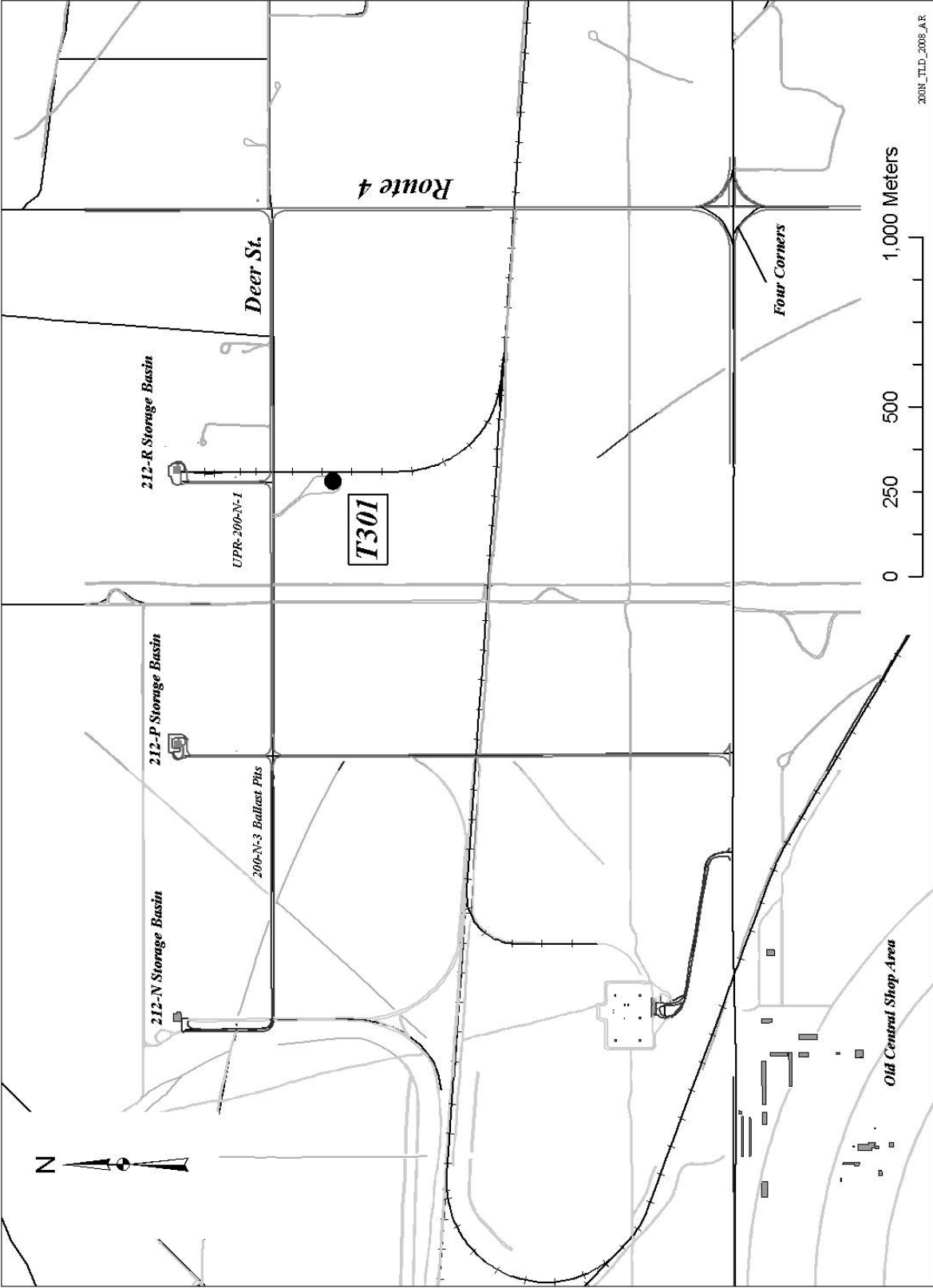


Figure 5-11. 300 Area Treated Effluent Disposal Facility and 300 Area TLD Locations.

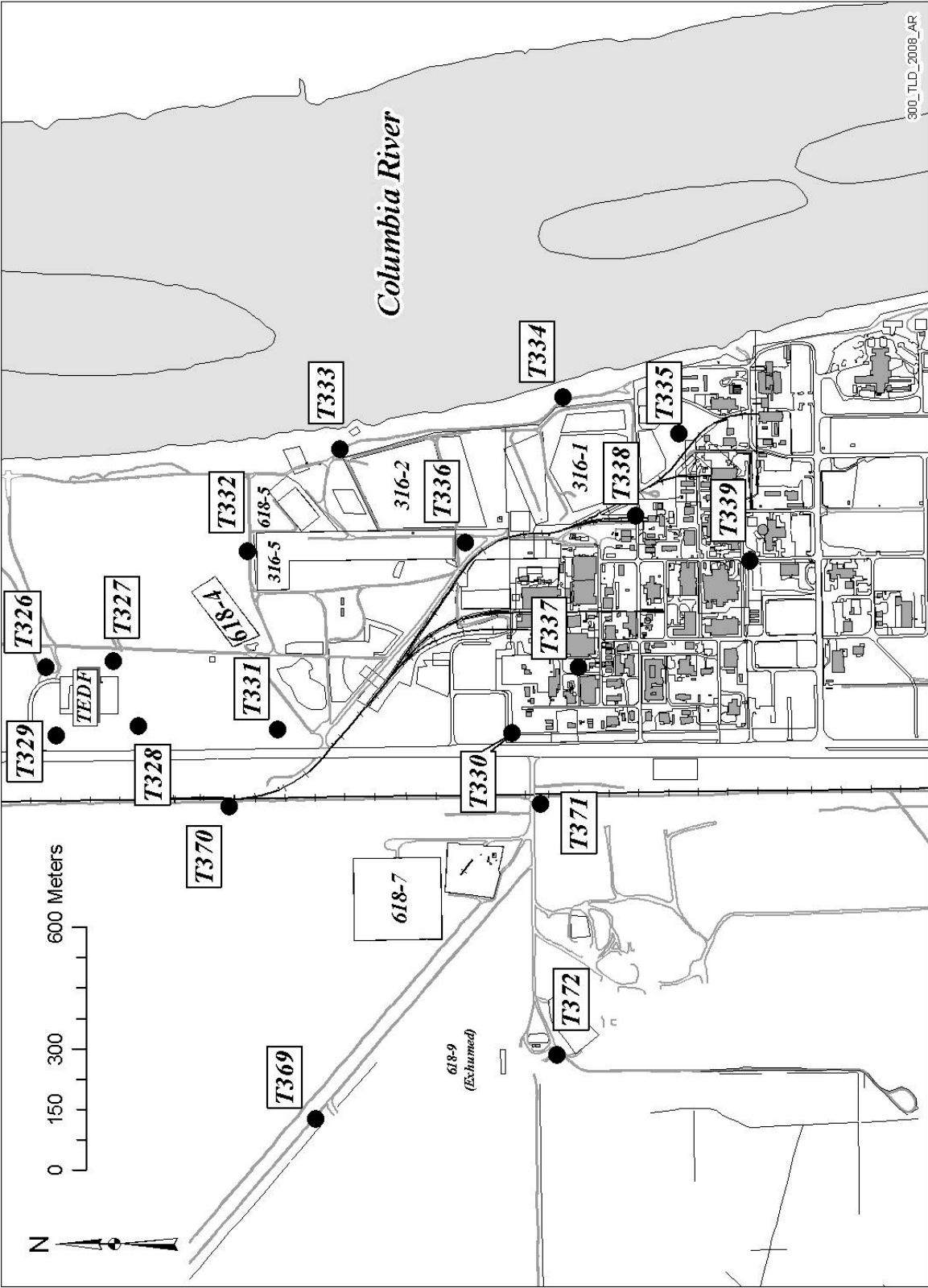


Figure 5-12. 400 Area TLD Locations.

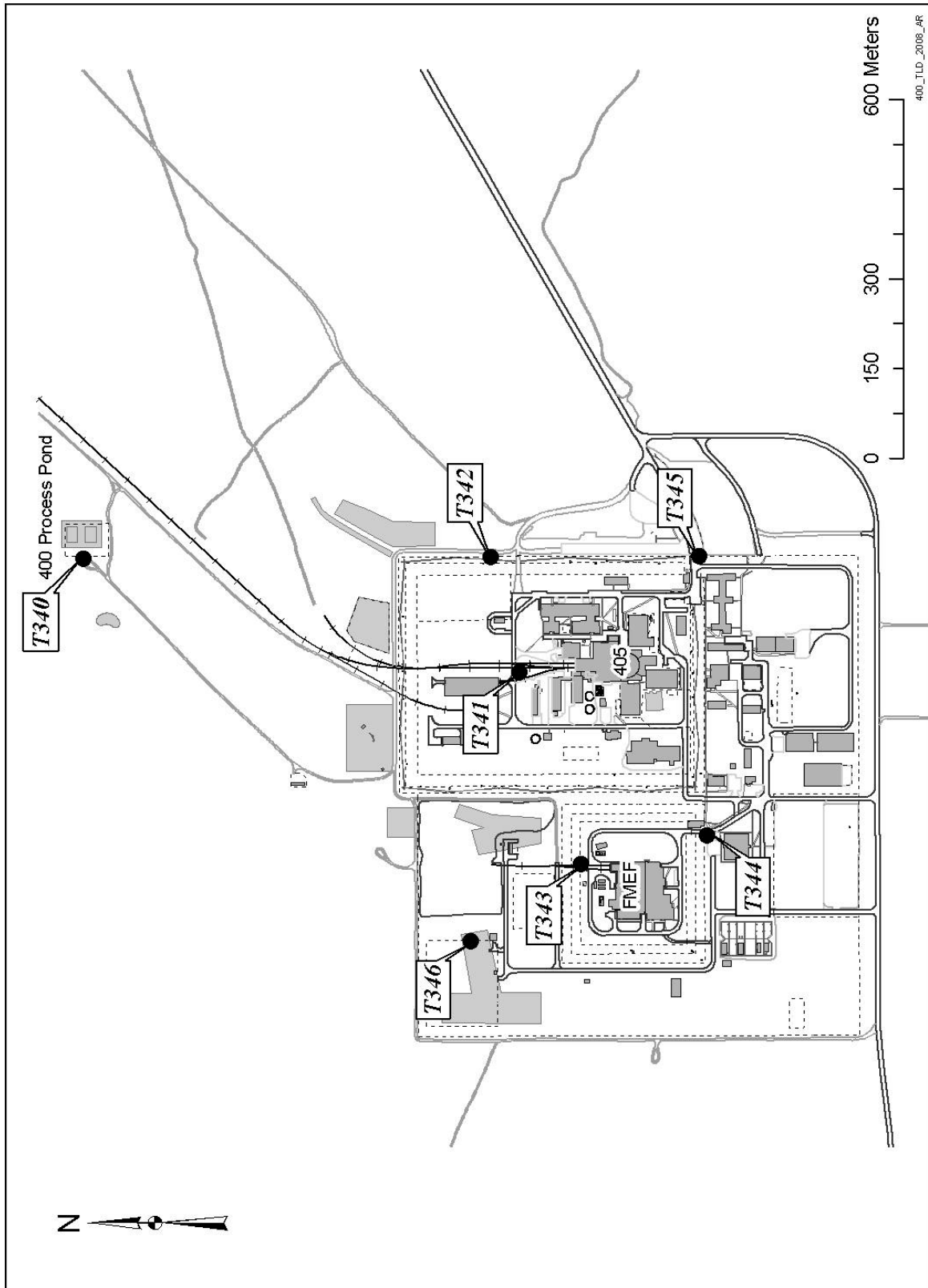


Table 5-2. 2008 TLD Results. (Sheet 1 of 14)

Location		Sample Period	mrem/hr	mrem/day	mrem/qtr	mrem/year	Days in Field
100-B/C Field Remediation project	T200	1st Quarter '08	0.009	0.22	21.8	81	98
	T201		0.009	0.22	21.1	79	98
	T202		0.009	0.21	21.0	78	98
	T203		0.009	0.20	20.0	75	98
	T200	2nd Quarter '08	0.010	0.23	19.3	83	85
	T201		0.009	0.22	18.6	80	85
	T202		0.009	0.21	18.0	78	85
	T203		0.009	0.22	18.8	81	85
	T200	3rd Quarter '08	0.010	0.23	22.5	85	97
	T201		TLD not recovered				
	T202		0.009	0.21	20.4	77	97
	T203		0.008	0.20	19.2	72	97
	T200	4th Quarter '08	0.010	0.23	19.5	85	84
	T201		0.009	0.22	18.7	81	84
	T202		0.009	0.22	18.8	82	84
	T203		0.009	0.21	17.4	75	84

100-B/C, Annual Averages \pm 2 Standard Deviations

	mrem/hr	mrem/day	mrem/qtr	mrem/year
T200	0.010 ± 0.000	0.23 ± 0.01	20.8 ± 0.8	83 ± 3
T201	0.009 ± 0.000	0.22 ± 0.01	20.0 ± 0.6	80 ± 3
T202	0.009 ± 0.001	0.21 ± 0.01	19.6 ± 1.1	78 ± 4
T203	0.009 ± 0.001	0.21 ± 0.02	18.9 ± 1.8	76 ± 7

Location	Sample Period	mrem/hr	mrem/day	mrem/qtr	mrem/year	Days in Field	
100-K Area	T218	1st Quarter '08	0.024	0.58	56.2	212	97
	T219		0.065	1.55	150.1	565	97
	T220		0.025	0.60	58.5	220	97
	T221		0.029	0.69	67.2	253	97
	T222		0.024	0.56	54.6	206	97
	T223		0.013	0.30	29.1	109	97
	T224		0.016	0.38	37.1	140	97
	T225		0.024	0.58	56.5	213	97
	T226		0.020	0.47	45.7	172	97
	T227		0.055	1.32	127.9	481	97
	T228		0.024	0.56	54.6	206	97
	T376		0.008	0.20	19.5	73	97
	T377		0.009	0.21	20.1	76	97
T378	0.038	0.91	88.2	332	97		
	T218	2nd Quarter '08	0.023	0.55	49.9	203	90
	T219		0.067	1.60	143.6	583	90
	T220		0.029	0.71	63.5	258	90
	T221		0.041	0.98	88.6	359	90
	T222		0.024	0.58	52.5	213	90
	T223		0.014	0.33	29.9	121	90
	T224		0.012	0.30	26.6	108	90
	T225		0.021	0.51	46.1	187	90
	T226		0.013	0.31	28.0	113	90
	T227		0.029	0.69	62.5	254	90
	T228		0.013	0.31	28.2	114	90
	T376		0.009	0.21	19.2	78	90
	T377		0.009	0.21	19.3	78	90
	T378	0.018	0.43	38.5	156	90	

Table 5-2. 2008 TLD Results. (Sheet 2 of 14)

Location	Sample Period	mrem/hr	mrem/day	mrem/qtr	mrem/year	Days in Field	
100-K Area	T218	3rd Quarter '08	0.022	0.53	48.3	194	91
	T219		0.068	1.64	149.0	598	91
	T220		0.025	0.60	55.5	220	92
	T221		0.033	0.80	73.3	291	92
	T222		0.021	0.51	46.6	187	91
	T223		0.013	0.31	28.1	113	91
	T224		0.009	0.22	20.4	82	91
	T225		0.017	0.41	37.3	150	91
	T226		0.011	0.26	23.5	94	91
	T227		0.015	0.37	33.7	135	91
	T228		0.009	0.21	19.0	76	91
	T376		0.009	0.21	19.3	78	91
	T377		0.008	0.20	18.4	74	91
	T378		0.009	0.22	20.1	81	91
	T218	4th Quarter '08	0.022	0.53	44.8	192	85
	T219		0.063	1.50	129.4	549	86
	T220		0.025	0.60	50.1	218	84
	T221		0.024	0.56	47.3	206	84
	T222		0.023	0.56	47.3	203	85
	T223		0.012	0.30	25.2	108	85
	T224		0.008	0.19	16.3	69	86
	T225		0.020	0.48	40.6	174	85
	T226		0.009	0.23	19.5	83	86
	T227		0.013	0.31	27.0	115	86
	T228		0.009	0.21	17.7	75	86
	T376		0.008	0.18	15.7	67	86
	T377		0.009	0.21	18.4	78	86
	T378		0.010	0.24	20.8	88	86

100-K Area, Annual Averages ± 2 Standard Deviations

	mrem/hr	mrem/day	mrem/qtr	mrem/year
T218	0.023 \pm 0.002	0.55 \pm 0.05	50.1 \pm 4.4	200 \pm 18
T219	0.065 \pm 0.005	1.57 \pm 0.12	143.4 \pm 10.5	574 \pm 42
T220	0.026 \pm 0.004	0.63 \pm 0.11	57.2 \pm 9.6	229 \pm 39
T221	0.032 \pm 0.015	0.76 \pm 0.36	69.5 \pm 32.5	278 \pm 130
T222	0.023 \pm 0.002	0.55 \pm 0.06	50.5 \pm 5.5	202 \pm 22
T223	0.013 \pm 0.001	0.31 \pm 0.03	28.2 \pm 2.9	113 \pm 12
T224	0.011 \pm 0.007	0.28 \pm 0.17	25.2 \pm 15.5	101 \pm 62
T225	0.021 \pm 0.006	0.50 \pm 0.14	45.4 \pm 13.2	181 \pm 53
T226	0.013 \pm 0.009	0.32 \pm 0.22	29.2 \pm 19.9	117 \pm 79
T227	0.029 \pm 0.038	0.69 \pm 0.92	62.9 \pm 84.2	252 \pm 337
T228	0.014 \pm 0.014	0.33 \pm 0.34	30.0 \pm 30.7	120 \pm 123
T376	0.008 \pm 0.001	0.20 \pm 0.03	18.5 \pm 2.7	74 \pm 11
T377	0.009 \pm 0.000	0.21 \pm 0.01	19.1 \pm 1.0	76 \pm 4
T378	0.019 \pm 0.027	0.46 \pm 0.64	42.0 \pm 58.4	168 \pm 234

Location		Sample Period	mrem/hr	mrem/day	mrem/qtr	mrem/year	Days in Field
CVDF (100-K Area)	T347	1st Quarter '08	0.035	0.84	81.6	307	97
	T348		0.013	0.30	29.3	110	97
	T349		0.009	0.23	21.8	82	97
	T350		0.012	0.29	27.7	104	97
	T347	2nd Quarter '08	0.036	0.85	76.9	312	90
	T348		0.013	0.32	29.0	118	90
	T349		0.010	0.25	22.5	91	90
	T350		0.012	0.29	26.4	107	90

Table 5-2. 2008 TLD Results. (Sheet 3 of 14)

Location		Sample Period	mrem/hr	mrem/day	mrem/qtr	mrem/year	Days in Field
CVDF (100-K Area)	T347	3rd Quarter '08	0.034	0.81	73.9	297	91
	T348		0.013	0.31	28.6	115	91
	T349		0.010	0.23	20.9	84	91
	T350		0.012	0.28	25.6	103	91
	T347	4th Quarter '08	0.033	0.80	68.3	293	85
	T348		0.012	0.29	24.3	104	85
	T349		0.009	0.22	19.1	82	85
	T350		0.012	0.28	23.6	101	85

CVDF, Annual Averages ± 2 Standard Deviations

	mrem/hr	mrem/day	mrem/qtr	mrem/year
T347	0.035 ± 0.002	0.83 ± 0.05	75.6 ± 4.4	302 ± 18
T348	0.013 ± 0.001	0.31 ± 0.03	28.0 ± 2.9	112 ± 12
T349	0.010 ± 0.001	0.23 ± 0.02	21.2 ± 2.1	85 ± 9
T350	0.012 ± 0.001	0.28 ± 0.01	26.0 ± 1.3	104 ± 5

Location		Sample Period	mrem/hr	mrem/day	mrem/qtr	mrem/year	Days in Field
100-N Area	T234	1st Quarter '08	0.009	0.21	20.9	78	98
	T235		0.010	0.25	24.1	90	98
	T240		0.012	0.28	27.8	104	98
	T243		0.008	0.19	19.1	71	98
	T246		0.009	0.22	21.1	79	98
	T248		0.011	0.25	24.7	92	98
	T234	2nd Quarter '08	0.010	0.25	20.8	90	84
	T235		0.011	0.25	21.2	92	84
	T240		0.013	0.31	26.0	113	84
	T243		0.009	0.21	17.5	76	84
	T246		0.009	0.21	17.6	77	84
	T248		0.011	0.27	22.4	98	84
	T234	3rd Quarter '08	0.009	0.22	21.7	82	97
	T235		0.010	0.25	23.9	90	97
	T240		0.012	0.29	27.8	105	97
	T243		Monitoring Location Retired				
	T246		0.008	0.20	19.0	72	97
	T248		0.011	0.27	25.9	97	97
	T234	4th Quarter '08	0.009	0.21	18.1	78	85
	T235		0.011	0.25	21.5	92	85
	T240		0.012	0.28	24.2	104	85
	T246		0.009	0.22	18.8	81	85
	T248		0.012	0.28	23.5	101	85

100-N, Annual Average ± 2 Standard Deviation (2SD)

EDP Code	Site Description	mrems/hr	mrems/day	mrems/qtr	mrems/yr
T234	1314-N Fence	0.009 ± 0.001	0.22 ± 0.03	20.4 ± 3.0	82 ± 12
T235	1908-N Fence	0.010 ± 0.000	0.25 ± 0.01	22.7 ± 0.7	91 ± 3
T240	MO-536 Fenceline	0.012 ± 0.001	0.29 ± 0.02	26.5 ± 2.3	106 ± 9
T243	163-N Wastepad	0.008 ± 0.001	0.20 ± 0.02	18.3 ± 1.7	73 ± 7
T246	N-Springs	0.009 ± 0.001	0.21 ± 0.02	19.2 ± 2.0	77 ± 8
T248	107-N, South	0.011 ± 0.001	0.27 ± 0.02	24.2 ± 1.8	97 ± 7

Table 5-2. 2008 TLD Results. (Sheet 4 of 14)

Location	Sample Period	mrem/hr	mrem/day	mrem/qtr	mrem/year	Days in Field
200 East	1st Quarter '08	0.009	0.21	17.1	76	83
Area		0.009	0.21	16.8	75	82
	T261	0.009	0.22	18.0	79	83
	T262	0.008	0.20	16.8	74	83
	T263	0.009	0.21	17.4	77	83
	T264	0.011	0.26	21.9	97	83
	T265	0.012	0.29	23.7	105	83
	T266	0.009	0.21	17.6	77	83
	T267	0.009	0.21	17.6	77	83
	T268	0.012	0.30	24.5	108	83
	T269	0.010	0.23	19.0	84	83
	T270	0.014	0.33	27.0	119	83
	T271	0.009	0.22	18.3	81	83
	T272	0.011	0.27	22.8	99	84
	T273	0.009	0.21	17.8	78	83
	T274	0.009	0.23	18.7	82	83
	T275	0.009	0.22	18.5	81	83
	T276	0.009	0.21	17.0	75	83
	T277	0.009	0.22	18.8	81	85
	T278	0.009	0.21	17.5	76	84
	T279	0.009	0.22	18.0	80	82
	T280	0.009	0.21	17.6	77	83
	T281	0.009	0.23	18.5	83	82
	T282	0.009	0.22	18.2	79	84
	T283	0.009	0.21	17.6	77	83
	T284	0.012	0.28	23.1	101	84
	T285	0.021	0.51	42.4	187	83
	T286	0.015	0.35	29.6	129	84
	T287	0.014	0.33	27.7	122	83
	T288	0.022	0.54	45.0	196	84
	T289	0.018	0.43	35.5	156	83
	T290	0.012	0.29	24.7	107	84
	T291	0.014	0.33	27.7	121	84
	T292	0.029	0.70	57.9	255	83
	T293	0.012	0.28	23.2	102	83
	T294	0.017	0.42	34.5	152	83
	T295	0.010	0.23	19.1	84	83
	T296	0.009	0.22	18.8	82	84
	T297	0.009	0.21	17.6	77	84
	T298	0.008	0.20	16.6	73	83
	T299	0.010	0.23	19.5	86	83
	T300	0.010	0.23	19.5	84	85

Table 5-2. 2008 TLD Results. (Sheet 5 of 14)

Location	Sample Period	mrem/hr	mrem/day	mrem/qtr	mrem/year	Days in Field
200 East	2nd Quarter '08	0.009	0.22	22.6	80	104
Area		0.009	0.22	23.3	82	104
		0.009	0.22	23.4	82	104
		0.010	0.24	24.6	86	104
		0.009	0.22	22.9	80	104
		0.012	0.29	29.9	105	104
		0.013	0.31	32.4	114	104
		0.010	0.24	25.3	89	104
		0.011	0.25	26.2	92	104
		0.013	0.30	31.1	109	104
		0.010	0.24	25.1	88	104
		0.013	0.32	33.3	117	104
		0.010	0.24	25.2	88	105
		0.012	0.28	28.8	101	104
		0.009	0.22	23.2	82	104
		0.009	0.22	23.3	82	104
		0.010	0.25	25.7	90	104
		0.010	0.23	23.6	83	104
		0.010	0.25	25.5	91	102
		0.009	0.22	23.0	81	103
		0.009	0.22	23.5	82	105
		0.009	0.22	23.4	82	104
		0.010	0.24	24.9	87	105
		0.009	0.22	23.0	81	104
		0.010	0.24	24.6	86	104
		0.012	0.30	31.0	109	104
		0.021	0.51	52.7	185	104
		0.015	0.37	38.2	134	104
		0.014	0.33	34.0	119	104
		0.023	0.56	58.0	204	104
		0.018	0.43	44.8	157	104
		0.015	0.36	37.2	130	104
		0.015	0.35	36.3	128	104
		0.034	0.82	86.1	299	105
		0.012	0.29	30.4	107	104
		0.018	0.44	46.0	160	105
		0.009	0.22	22.7	80	104
		0.012	0.28	29.1	102	104
		0.009	0.21	21.9	77	104
		0.009	0.23	23.4	82	104
		0.010	0.23	24.2	85	104
		0.010	0.25	25.6	91	103

Table 5-2. 2008 TLD Results. (Sheet 6 of 14)

Location	Sample Period	mrem/hr	mrem/day	mrem/qtr	mrem/year	Days in Field
200 East	3rd Quarter '08	0.009	0.22	18.8	81	85
Area		0.009	0.22	18.6	80	85
	T261	0.009	0.21	22.0	76	105
	T262	0.008	0.19	16.5	71	85
	T263	0.009	0.21	17.6	76	85
	T264	0.012	0.29	24.7	106	85
	T265	0.013	0.31	26.2	113	85
	T266	0.009	0.22	18.8	81	85
	T267	0.010	0.23	19.9	86	85
	T268	0.013	0.30	25.5	110	85
	T269	0.010	0.25	21.0	91	84
	T270	0.014	0.34	29.1	125	85
	T271	0.010	0.23	19.2	84	84
	T272	0.012	0.29	24.2	105	84
	T273	0.009	0.21	18.1	78	85
	T274	0.009	0.22	18.7	80	85
	T275	0.009	0.21	18.2	78	85
	T276	0.008	0.20	17.1	73	85
	T277	0.010	0.23	19.6	84	85
	T278	0.009	0.22	18.8	81	85
	T279	0.009	0.22	19.1	82	85
	T280	0.009	0.22	18.5	80	85
	T281	0.009	0.22	18.9	81	85
	T282	0.009	0.21	17.2	75	84
	T283	0.009	0.22	18.9	81	85
	T284	0.013	0.30	25.6	111	84
	T285	0.022	0.52	43.8	190	84
	T286	0.015	0.35	29.8	129	84
	T287	0.013	0.30	25.2	109	84
	T288	0.024	0.56	47.4	206	84
	T289	0.018	0.43	35.8	155	84
	T290	0.012	0.30	25.8	108	87
	T291	0.014	0.34	28.5	124	84
	T292	0.032	0.76	63.2	278	83
	T293	0.012	0.29	24.6	107	84
	T294	0.019	0.45	38.2	166	84
	T295	0.009	0.23	19.3	83	85
	T296	0.011	0.26	22.0	96	84
	T297	0.009	0.23	18.9	82	84
	T298	0.009	0.21	17.5	75	85
	T299	0.009	0.22	18.8	81	85
	T300	0.011	0.26	22.0	96	84

Table 5-2. 2008 TLD Results. (Sheet 7 of 14)

Location	Sample Period	mrem/hr	mrem/day	mrem/qtr	mrem/year	Days in Field	
200 East Area	T259	4th Quarter '08	0.009	0.22	20.4	80	93
	T260		0.009	0.21	20.0	78	93
	T261		0.009	0.22	19.9	80	91
	T262		0.009	0.22	19.9	80	91
	T263		0.009	0.22	19.8	79	91
	T264		0.011	0.27	25.1	99	93
	T265		0.013	0.31	28.8	113	93
	T266		0.009	0.22	20.1	79	93
	T267		0.010	0.23	21.2	83	93
	T268		0.012	0.29	27.3	107	93
	T269		0.010	0.24	22.6	89	93
	T270		0.014	0.33	31.0	122	93
	T271		0.010	0.24	22.0	86	93
	T272		0.013	0.31	27.5	111	90
	T273		0.009	0.20	19.0	75	93
	T274		0.010	0.24	22.2	87	93
	T275		0.010	0.24	22.2	87	93
	T276		0.009	0.22	20.1	79	93
	T277		0.011	0.25	23.4	92	93
	T278		0.009	0.22	20.3	82	91
	T279		0.009	0.21	19.3	77	91
	T280		0.009	0.21	19.2	77	91
	T281		0.010	0.24	21.9	88	91
	T282		0.009	0.22	20.5	81	92
	T283		0.010	0.23	20.8	83	91
	T284		0.012	0.28	26.1	103	92
	T285		0.015	0.35	32.6	129	92
	T286		0.016	0.38	35.1	138	93
	T287		0.013	0.32	29.0	115	92
	T288		0.021	0.51	46.8	186	92
T289		0.017	0.41	37.4	148	92	
T290		0.013	0.31	27.6	113	89	
T291		0.013	0.31	28.9	115	92	
T292		0.033	0.78	71.9	285	92	
T293		0.012	0.29	26.8	106	92	
T294		0.019	0.46	41.5	167	91	
T295		0.009	0.22	20.2	81	91	
T296		0.011	0.26	24.2	96	92	
T297		0.010	0.23	21.2	84	92	
T298		0.008	0.20	18.7	73	93	
T299		0.009	0.22	20.7	81	93	
T300		0.011	0.25	23.2	92	92	

Table 5-2. 2008 TLD Results. (Sheet 8 of 14)

200 East Area, Annual Averages \pm 2 Standard Deviations				
Location	mrem/hr	mrem/day	mrem/qtr	mrem/year
T259	0.009 \pm 0.001	0.22 \pm 0.01	19.7 \pm 1.2	79 \pm 5
T260	0.009 \pm 0.001	0.22 \pm 0.02	19.7 \pm 1.5	79 \pm 6
T261	0.009 \pm 0.001	0.22 \pm 0.01	19.8 \pm 1.2	79 \pm 5
T262	0.009 \pm 0.002	0.21 \pm 0.04	19.5 \pm 3.5	78 \pm 14
T263	0.009 \pm 0.001	0.21 \pm 0.01	19.5 \pm 1.1	78 \pm 4
T264	0.012 \pm 0.001	0.28 \pm 0.03	25.4 \pm 2.3	102 \pm 9
T265	0.013 \pm 0.001	0.30 \pm 0.02	27.8 \pm 2.2	111 \pm 9
T266	0.009 \pm 0.001	0.22 \pm 0.03	20.4 \pm 2.5	82 \pm 10
T267	0.010 \pm 0.001	0.23 \pm 0.03	21.2 \pm 3.0	85 \pm 12
T268	0.012 \pm 0.000	0.30 \pm 0.01	27.1 \pm 0.6	108 \pm 2
T269	0.010 \pm 0.001	0.24 \pm 0.02	22.0 \pm 1.6	88 \pm 6
T270	0.014 \pm 0.001	0.33 \pm 0.02	30.1 \pm 1.8	120 \pm 7
T271	0.010 \pm 0.001	0.23 \pm 0.02	21.2 \pm 1.6	85 \pm 6
T272	0.012 \pm 0.001	0.29 \pm 0.03	26.0 \pm 2.7	104 \pm 11
T273	0.009 \pm 0.001	0.21 \pm 0.02	19.5 \pm 1.4	78 \pm 6
T274	0.009 \pm 0.001	0.23 \pm 0.02	20.7 \pm 1.5	83 \pm 6
T275	0.010 \pm 0.001	0.23 \pm 0.03	21.1 \pm 2.6	85 \pm 11
T276	0.009 \pm 0.001	0.21 \pm 0.02	19.5 \pm 2.1	78 \pm 9
T277	0.010 \pm 0.001	0.24 \pm 0.03	21.8 \pm 2.7	87 \pm 11
T278	0.009 \pm 0.001	0.22 \pm 0.01	20.0 \pm 1.2	80 \pm 5
T279	0.009 \pm 0.000	0.22 \pm 0.01	20.1 \pm 1.1	80 \pm 4
T280	0.009 \pm 0.001	0.22 \pm 0.01	19.8 \pm 1.2	79 \pm 5
T281	0.010 \pm 0.001	0.23 \pm 0.02	21.2 \pm 1.6	85 \pm 6
T282	0.009 \pm 0.001	0.22 \pm 0.02	19.8 \pm 1.4	79 \pm 6
T283	0.009 \pm 0.001	0.23 \pm 0.02	20.6 \pm 1.8	82 \pm 7
T284	0.012 \pm 0.001	0.29 \pm 0.03	26.5 \pm 2.4	106 \pm 10
T285	0.020 \pm 0.007	0.47 \pm 0.16	43.1 \pm 14.5	172 \pm 58
T286	0.015 \pm 0.001	0.36 \pm 0.02	33.2 \pm 2.1	133 \pm 8
T287	0.013 \pm 0.001	0.32 \pm 0.03	29.1 \pm 2.7	116 \pm 11
T288	0.023 \pm 0.002	0.54 \pm 0.05	49.5 \pm 4.6	198 \pm 18
T289	0.018 \pm 0.001	0.42 \pm 0.02	38.6 \pm 2.0	154 \pm 8
T290	0.013 \pm 0.002	0.32 \pm 0.06	28.9 \pm 5.4	115 \pm 21
T291	0.014 \pm 0.001	0.33 \pm 0.03	30.5 \pm 2.8	122 \pm 11
T292	0.032 \pm 0.004	0.77 \pm 0.10	70.1 \pm 9.2	280 \pm 37
T293	0.012 \pm 0.001	0.29 \pm 0.01	26.4 \pm 1.1	106 \pm 4
T294	0.018 \pm 0.002	0.44 \pm 0.04	40.3 \pm 3.4	161 \pm 14
T295	0.009 \pm 0.000	0.22 \pm 0.01	20.4 \pm 1.0	82 \pm 4
T296	0.011 \pm 0.002	0.26 \pm 0.05	23.6 \pm 4.4	94 \pm 17
T297	0.009 \pm 0.001	0.22 \pm 0.02	20.0 \pm 1.9	80 \pm 7
T298	0.009 \pm 0.001	0.21 \pm 0.02	19.0 \pm 2.2	76 \pm 9
T299	0.009 \pm 0.001	0.23 \pm 0.01	20.8 \pm 1.2	83 \pm 5
T300	0.010 \pm 0.001	0.25 \pm 0.03	22.7 \pm 2.4	91 \pm 10

Table 5-2. 2008 TLD Results. (Sheet 9 of 14)

Location	Sample Period	mrem/hr	mrem/day	mrem/qtr	mrem/year	Days in Field
200 West Area	T302	1st Quarter '08	0.010	0.23	19.3	84
	T303		0.017	0.40	33.5	84
	T304		0.013	0.32	26.9	84
	T305		0.009	0.21	17.7	84
	T306		0.012	0.30	24.8	84
	T307		0.010	0.25	20.8	84
	T308		0.010	0.23	19.6	84
	T309		0.009	0.22	18.5	84
	T310		0.010	0.25	20.8	84
	T311		0.008	0.19	16.0	84
	T312		0.021	0.51	42.5	84
	T313		0.017	0.42	35.0	84
	T314		0.009	0.20	17.1	84
	T315		0.009	0.22	18.2	84
	T316		0.013	0.30	25.4	84
	T317		0.009	0.22	18.5	84
	T318		0.009	0.21	17.5	83
	T319		0.009	0.22	18.0	83
	T320		0.012	0.28	23.6	84
	T321		0.011	0.25	21.3	84
	T322		0.008	0.20	16.6	83
	T323		0.009	0.22	18.1	84
	T324		0.027	0.65	54.2	84
	T325		0.012	0.30	24.8	84
	T302	2nd Quarter '08	0.010	0.24	25.4	104
	T303		0.017	0.40	41.2	145
	T304		0.013	0.32	33.4	117
	T305		0.010	0.24	24.8	87
	T306		0.011	0.27	28.2	99
	T307		0.012	0.28	29.2	102
	T308		0.011	0.27	28.3	99
	T309		0.010	0.23	23.8	84
	T310		0.012	0.28	29.2	103
	T311		0.010	0.24	24.5	86
	T312		0.014	0.33	34.3	121
	T313		0.018	0.43	45.0	158
	T314		0.009	0.21	22.2	78
	T315		0.010	0.24	25.2	88
	T316		0.013	0.32	32.8	115
	T317		0.010	0.24	24.8	87
	T318		0.009	0.22	23.2	81
	T319		0.010	0.23	24.3	84
	T320		0.014	0.33	34.4	121
	T321		0.012	0.29	27.7	108
	T322		0.009	0.21	22.3	78
	T323		0.011	0.26	26.8	94
	T324		0.038	0.91	94.3	331
	T325		0.013	0.31	32.4	114

Table 5-2. 2008 TLD Results. (Sheet 10 of 14)

Location	Sample Period	mrem/hr	mrem/day	mrem/qtr	mrem/year	Days in Field
200 West Area	3rd Quarter '08	0.009	0.22	18.8	81	85
	T302	0.014	0.33	28.0	120	85
	T303	0.013	0.32	26.8	115	85
	T304	0.009	0.23	19.1	82	85
	T305	0.011	0.26	22.2	95	85
	T306	0.010	0.23	19.7	84	85
	T307	0.010	0.25	20.8	91	84
	T308	0.010	0.23	19.3	84	84
	T309	0.011	0.26	22.2	96	84
	T310	0.009	0.22	18.2	79	84
	T311	0.015	0.35	29.4	128	84
	T312	0.017	0.40	33.5	145	84
	T313	0.009	0.21	17.3	75	84
	T314	TLD not recovered				84
	T315	0.012	0.29	24.1	105	84
	T316	0.010	0.23	19.1	83	84
	T317	0.009	0.22	18.6	81	84
	T318	0.010	0.23	19.4	84	84
	T319	0.013	0.31	25.7	112	84
	T320	0.011	0.27	25.8	99	95
	T321	0.007	0.16	13.4	57	85
	T322	0.011	0.25	21.1	92	84
	T323	0.033	0.78	65.9	286	84
	T324	0.014	0.34	28.1	122	84
	T325					
	4th Quarter '08	0.010	0.23	20.8	84	90
	T302	0.011	0.27	24.6	100	90
	T303	0.015	0.35	31.6	128	90
	T304	0.010	0.23	20.8	83	91
	T305	0.011	0.27	24.3	99	90
	T306	0.011	0.26	23.5	94	91
	T307	0.011	0.25	23.2	92	92
	T308	0.009	0.22	20.5	82	92
	T309	0.011	0.26	24.3	96	92
	T310	0.010	0.23	20.9	83	92
	T311	0.013	0.32	29.4	117	92
	T312	0.018	0.42	38.7	153	92
	T313	0.009	0.23	20.6	83	91
	T314	0.010	0.24	21.2	86	90
	T315	0.012	0.30	27.5	109	92
	T316	0.010	0.23	20.8	84	91
	T317	0.009	0.20	18.6	75	91
	T318	0.010	0.23	21.0	84	91
	T319	0.013	0.31	27.9	112	91
	T320	0.011	0.26	23.9	97	90
	T321	0.009	0.22	19.7	79	91
	T322	0.012	0.28	25.4	102	91
	T323	0.020	0.48	43.3	174	91
	T324	0.015	0.36	32.6	131	91
	T325					

Table 5-2. 2008 TLD Results. (Sheet 11 of 14)

200 West Area, Annual Averages ± 2 Standard Deviations

Location	mrem/hr	mrem/day	mrem/qtr	mrem/year
T302	0.010 \pm 0.001	0.23 \pm 0.02	21.2 \pm 1.7	85 \pm 7
T303	0.015 \pm 0.005	0.35 \pm 0.12	32.0 \pm 10.9	128 \pm 44
T304	0.014 \pm 0.001	0.33 \pm 0.03	29.8 \pm 2.9	119 \pm 12
T305	0.009 \pm 0.001	0.23 \pm 0.02	20.7 \pm 2.1	83 \pm 8
T306	0.011 \pm 0.001	0.27 \pm 0.03	25.0 \pm 2.7	100 \pm 11
T307	0.011 \pm 0.002	0.26 \pm 0.04	23.4 \pm 3.8	93 \pm 15
T308	0.011 \pm 0.001	0.25 \pm 0.03	23.0 \pm 2.9	92 \pm 12
T309	0.009 \pm 0.000	0.23 \pm 0.01	20.6 \pm 0.9	82 \pm 3
T310	0.011 \pm 0.001	0.27 \pm 0.03	24.2 \pm 2.5	97 \pm 10
T311	0.009 \pm 0.002	0.22 \pm 0.04	20.0 \pm 3.6	80 \pm 14
T312	0.016 \pm 0.007	0.37 \pm 0.17	34.0 \pm 16.0	136 \pm 64
T313	0.017 \pm 0.001	0.42 \pm 0.03	38.1 \pm 2.6	153 \pm 10
T314	0.009 \pm 0.001	0.21 \pm 0.02	19.4 \pm 1.9	78 \pm 7
T315	0.010 \pm 0.001	0.23 \pm 0.03	21.2 \pm 2.4	85 \pm 9
T316	0.013 \pm 0.001	0.30 \pm 0.02	27.5 \pm 2.1	110 \pm 8
T317	0.010 \pm 0.001	0.23 \pm 0.01	20.9 \pm 1.3	84 \pm 5
T318	0.009 \pm 0.001	0.21 \pm 0.02	19.6 \pm 1.5	78 \pm 6
T319	0.009 \pm 0.001	0.23 \pm 0.01	20.8 \pm 1.3	83 \pm 5
T320	0.013 \pm 0.002	0.31 \pm 0.04	28.1 \pm 3.7	112 \pm 15
T321	0.011 \pm 0.001	0.27 \pm 0.03	24.8 \pm 3.2	99 \pm 13
T322	0.008 \pm 0.002	0.20 \pm 0.05	18.1 \pm 5.0	72 \pm 20
T323	0.010 \pm 0.002	0.25 \pm 0.05	23.0 \pm 4.8	92 \pm 19
T324	0.030 \pm 0.015	0.71 \pm 0.37	64.8 \pm 33.9	259 \pm 135
T325	0.014 \pm 0.002	0.33 \pm 0.05	29.7 \pm 5.0	119 \pm 20

Location		Sample Period	mrem/hr	mrem/day	mrem/qtr	mrem/year	Days in Field
212-R (200 North Area)	T301	1st Quarter '08	0.186	4.47	380.0	1633	85
	T301	2nd Quarter '08	0.189	4.53	466.3	1652	103
	T301	3rd Quarter '08	0.190	4.56	387.3	1663	85
	T301	4th Quarter '08	0.187	4.50	404.8	1641	90

212-R, Annual Averages ± 2 Standard Deviations

	mrem/hr	mrem/day	mrem/qtr	mrem/year
T301	0.188 \pm 0.003	4.51 \pm 0.07	411.9 \pm 6.6	1647 \pm 26

Location	Sample Period	mrem/hr	mrem/day	mrem/qtr	mrem/year	Days in Field	
300 Area	T332	1st Quarter '08	0.009	0.22	22.8	79	105
	T333		0.009	0.22	23.4	81	105
	T334		0.009	0.21	21.7	76	105
	T335		0.010	0.23	24.4	85	105
	T336		0.009	0.21	21.9	76	105
	T337		0.009	0.21	22.5	78	105
	T338		0.012	0.28	29.7	103	105
	T339		0.010	0.23	24.5	85	105
	T332	2nd Quarter '08	0.009	0.21	18.1	78	85
	T333		0.010	0.24	20.6	88	85
	T334		0.009	0.21	17.7	76	85
	T335		0.009	0.22	19.0	82	85
	T336		0.009	0.21	17.8	76	85
	T337		0.009	0.20	17.4	75	85
	T338		0.011	0.27	23.0	99	85
	T339		0.010	0.23	19.9	86	85

Table 5-2. 2008 TLD Results. (Sheet 12 of 14)

Location	Sample Period	mrem/hr	mrem/day	mrem/qtr	mrem/year	Days in Field	
300 Area	T332	3rd Quarter '08	0.009	0.22	20.1	80	92
	T333		0.009	0.21	19.7	78	92
	T334		0.008	0.20	18.5	74	92
	T335		0.009	0.22	20.3	81	92
	T336		0.009	0.21	19.6	78	92
	T337		TLD not recovered				
	T338		0.012	0.29	26.2	104	92
	T339		0.009	0.22	20.2	80	92
	T332	4th Quarter '08	0.009	0.22	18.9	81	85
	T333		0.010	0.23	19.5	84	85
	T334		0.010	0.23	19.4	83	85
	T335		0.010	0.23	19.4	83	85
	T336		0.009	0.22	18.9	81	85
	T337		0.009	0.21	17.8	76	85
	T338		0.012	0.29	24.9	107	85
T339		0.010	0.24	20.1	86	85	

300 Area, Annual Averages ± 2 Standard Deviations

	mrem/hr	mrem/day	mrem/qtr	mrem/year
T332	0.009 ± 0.000	0.22 ± 0.01	19.9 ± 0.8	79 ± 3
T333	0.009 ± 0.001	0.23 ± 0.02	20.7 ± 2.1	83 ± 8
T334	0.009 ± 0.001	0.21 ± 0.02	19.2 ± 2.1	77 ± 9
T335	0.009 ± 0.000	0.23 ± 0.01	20.7 ± 0.9	83 ± 4
T336	0.009 ± 0.001	0.21 ± 0.01	19.5 ± 1.1	78 ± 5
T337	0.009 ± 0.000	0.21 ± 0.01	19.1 ± 0.9	77 ± 4
T338	0.012 ± 0.001	0.28 ± 0.02	25.8 ± 1.7	103 ± 7
T339	0.010 ± 0.001	0.23 ± 0.02	21.1 ± 1.4	84 ± 6

Location	Sample Period	mrem/hr	mrem/day	mrem/qtr	mrem/year	Days in Field	
300 TEDF	1st Quarter '08	T326	0.009	0.22	23.3	81	105
		T327	0.009	0.22	23.2	81	105
		T328	0.009	0.22	22.9	80	105
		T329	0.009	0.22	23.5	82	105
		T330	0.009	0.22	22.8	79	105
		T331	0.009	0.20	21.5	75	105
	2nd Quarter '08	T326	0.009	0.21	18.2	77	86
		T327	0.010	0.23	19.6	83	86
		T328	0.009	0.22	19.3	82	86
		T329	0.010	0.23	19.6	83	86
		T330	0.009	0.23	19.3	83	85
		T331	0.009	0.22	18.6	80	85
	3rd Quarter '08	T326	0.009	0.22	19.7	79	91
		T327	0.009	0.22	20.0	80	91
		T328	0.010	0.23	21.0	84	91
		T329	0.009	0.21	19.5	78	91
		T330	0.009	0.21	19.0	76	92
		T331	0.010	0.23	21.2	84	92
	4th Quarter '08	T326	0.010	0.23	19.6	84	85
		T327	0.009	0.22	19.0	81	85
		T328	0.010	0.24	20.5	88	85
		T329	0.009	0.22	19.1	82	85
		T330	0.009	0.22	18.3	79	85
		T331	0.009	0.23	19.2	83	85

Table 5-2. 2008 TLD Results. (Sheet 13 of 14)

300 TEDF, Annual Averages ± 2 Standard Deviations

Location	mrem/hr	mrem/day	mrem/qtr	mrem/year
T326	0.009 ± 0.001	0.22 ± 0.02	20.1 ± 1.5	80 ± 6
T327	0.009 ± 0.000	0.22 ± 0.01	20.3 ± 0.7	81 ± 3
T328	0.009 ± 0.001	0.23 ± 0.02	20.8 ± 1.8	83 ± 7
T329	0.009 ± 0.000	0.22 ± 0.01	20.3 ± 1.1	81 ± 4
T330	0.009 ± 0.001	0.22 ± 0.02	19.7 ± 1.5	79 ± 6
T331	0.009 ± 0.001	0.22 ± 0.02	20.0 ± 2.1	80 ± 8

Location	Sample Period	mrem/hr	mrem/day	mrem/qtr	mrem/year	Days in Field	
300-FF-2 Field Remediation project (300 Area)	T369	1st Quarter '08	0.009	0.22	22.6	79	105
	T370		0.009	0.21	22.4	78	105
	T371		0.008	0.20	20.8	72	105
	T372		0.009	0.22	23.5	82	105
	T369	2nd Quarter '08	0.009	0.21	18.2	78	85
	T370		0.009	0.22	18.9	81	85
	T371		0.009	0.21	18.2	78	85
	T372		0.009	0.21	18.2	78	85
	T369	3rd Quarter '08	0.008	0.20	18.1	72	92
	T370		0.009	0.21	18.9	75	92
	T371		TLD not recovered				n/a
	T372		0.009	0.21	19.7	78	92
	T369	4th Quarter '08	0.009	0.22	18.5	79	85
	T370		0.009	0.21	18.1	78	85
	T371		0.010	0.25	20.9	90	85
	T372		0.010	0.24	20.1	86	85

300-FF-2, Annual Averages ± 2 Standard Deviations

	mrem/hr	mrem/day	mrem/qtr	mrem/year
T369	0.009 ± 0.001	0.21 ± 0.02	19.2 ± 1.8	77 ± 7
T370	0.009 ± 0.001	0.21 ± 0.01	19.5 ± 1.3	78 ± 5
T371	0.009 ± 0.002	0.22 ± 0.05	19.9 ± 4.4	79 ± 18
T372	0.009 ± 0.001	0.22 ± 0.02	20.3 ± 2.0	81 ± 8

Location	Sample Period	mrem/hr	mrem/day	mrem/qtr	mrem/year	Days in Field	
400 Area	T340	1st Quarter '08	0.009	0.21	22.5	78	105
	T341		0.010	0.25	26.3	92	105
	T342		0.010	0.23	23.9	83	105
	T343		0.009	0.22	22.9	80	105
	T344		0.009	0.21	21.9	76	105
	T345		0.009	0.22	22.9	80	105
	T346		0.009	0.21	22.3	78	105
	T340	2nd Quarter '08	0.010	0.23	19.4	83	85
	T341		0.011	0.27	23.3	99	86
	T342		0.010	0.23	19.8	84	86
	T343		0.008	0.20	17.2	73	86
	T344		0.009	0.21	18.1	77	86
	T345		0.009	0.22	18.8	80	86
T346		0.009	0.22	19.2	81	86	

Table 5-2. 2008 TLD Results. (Sheet 14 of 14)

Location	Sample Period	mrem/hr	mrem/day	mrem/qtr	mrem/year	Days in Field	
400 Area	T340	3rd Quarter '08	0.010	0.23	20.9	83	92
	T341		0.011	0.26	24.2	96	92
	T342		0.010	0.24	21.5	86	91
	T343		0.009	0.21	18.7	75	91
	T344		0.009	0.21	18.8	76	91
	T345		0.009	0.21	19.5	78	91
	T346		0.009	0.21	19.2	77	91
	T340	4th Quarter '08	0.010	0.24	20.4	88	85
	T341		0.010	0.24	20.4	89	84
	T342		0.009	0.21	17.6	75	85
	T343		0.009	0.22	18.3	79	85
	T344		0.009	0.21	18.2	78	85
	T345		0.009	0.21	18.0	77	85
T346		0.009	0.22	18.5	79	85	

400 Area, Annual Averages ± 2 Standard Deviations

	mrem/hr	mrem/day	mrem/qtr	mrem/year
T340	0.009 ± 0.001	0.23 ± 0.02	20.7 ± 1.9	83 ± 7
T341	0.011 ± 0.001	0.26 ± 0.03	23.4 ± 2.4	94 ± 9
T342	0.009 ± 0.001	0.23 ± 0.03	20.6 ± 2.4	82 ± 9
T343	0.009 ± 0.001	0.21 ± 0.02	19.2 ± 1.6	77 ± 6
T344	0.009 ± 0.000	0.21 ± 0.01	19.2 ± 0.5	77 ± 2
T345	0.009 ± 0.000	0.22 ± 0.01	19.7 ± 0.6	79 ± 2
T346	0.009 ± 0.000	0.22 ± 0.01	19.7 ± 1.0	79 ± 4

Location		Sample Period	mrem/hr	mrem/day	mrem/qtr	mrem/year	Days in Field
ERDF (200 West Area)	T351	1st Quarter '08	0.009	0.22	18.4	79	85
	T352		0.009	0.20	17.3	75	85
	T353		0.008	0.19	16.4	70	85
	T351	2nd Quarter '08	0.010	0.24	24.5	86	104
	T352		0.009	0.22	23.1	81	104
	T353		0.009	0.22	22.9	80	104
	T351	3rd Quarter '08	0.009	0.20	17.1	74	84
	T352		0.009	0.22	18.9	82	84
	T353		0.009	0.20	17.1	74	84
	T351	4th Quarter '08	0.009	0.22	20.0	81	90
	T352		0.009	0.21	18.8	76	90
	T353		0.009	0.22	20.0	81	90

ERDF, Annual Averages ± 2 Standard Deviations

	mrem/hr	mrem/day	mrem/qtr	mrem/year
T351	0.009 ± 0.001	0.22 ± 0.03	20.1 ± 2.5	80 ± 10
T352	0.009 ± 0.001	0.22 ± 0.02	19.6 ± 1.9	78 ± 7
T353	0.009 ± 0.001	0.21 ± 0.03	19.2 ± 2.6	77 ± 10

Location		Sample Period	mrem/hr	mrem/day	mrem/qtr	mrem/year	Days in Field
(200 East Area)	T375	1st Quarter '08	0.009	0.22	18.5	81	83
	T375	2nd Quarter '08	0.010	0.24	24.8	86	105
	T375	3rd Quarter '08	0.010	0.23	19.7	86	84
	T375	4th Quarter '08	0.010	0.24	21.6	87	91

IDF, Annual Averages ± 2 Standard Deviations

	mrem/hr	mrem/day	mrem/qtr	mrem/year
T375	0.010 ± 0.001	0.23 ± 0.01	21.3 ± 1.2	85 ± 5

6.0 RADIOLOGICAL SURVEYS

In 2008, there were approximately 3,583 hectares (8,853 acres) of posted outdoor contamination areas and 584 hectares (1,443 acres) of posted underground radioactive materials areas at the Hanford Site. During 2008, several waste sites in the 100 Areas (9 hectares [22 acres]) and one waste site in the 600 Area (less than 0.4 hectare [1 acre]) were remediated and released from posting. A listing of these waste sites is provided in Table 6-1.

Posted contamination areas continually vary in number and size from year to year because of ongoing efforts to clean, stabilize, and remediate areas of known contamination. In conjunction, new areas of contamination are also being identified throughout the year. Survey locations, typically associated with cribs, trenches, burial grounds, tank farms, and covered ponds and ditches, are illustrated in Figures 6-1 through 6-10.

It was estimated that the external dose rate at 80% of the identified outdoor contamination areas was less than 1 mrem/hr, 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 2008.

Table 6-1. Waste Sites Remediated and Released From Posting During 2008.

Area	Waste Site	Area	Waste Site
100-B/C	118-B-1	600	UPR-600-16
100-F	118-F-1		
	118-F-2		
	118-F-5F		
	118-F-6		

Legend:

- Contamination Area (Hatched pattern)
- Underground (Solid grey)
- Radioactive Material (Diagonal lines)
- Interim Closed Out/Closed Out (Solid white)

Scale: 0, 250, 500, 1,000 Meters

North Arrow: N

Map Labels: 106-D-1, 106-D-2, 106-D-3, 106-D-4, 106-D-5, 106-D-6, 106-D-7, 106-D-8, 106-D-9, 106-D-10, 106-D-11, 106-D-12, 106-D-13, 106-D-14, 106-D-15, 106-D-16, 106-D-17, 106-D-18, 106-D-19, 106-D-20, 106-D-21, 106-D-22, 106-D-23, 106-D-24, 106-D-25, 106-D-26, 106-D-27, 106-D-28, 106-D-29, 106-D-30, 106-D-31, 106-D-32, 106-D-33, 106-D-34, 106-D-35, 106-D-36, 106-D-37, 106-D-38, 106-D-39, 106-D-40, 106-D-41, 106-D-42, 106-D-43, 106-D-44, 106-D-45, 106-D-46, 106-D-47, 106-D-48, 106-D-49, 106-D-50, 106-D-51, 106-D-52, 106-D-53, 106-D-54, 106-D-55, 106-D-56, 106-D-57, 106-D-58, 106-D-59, 106-D-60, 106-D-61, 106-D-62, 106-D-63, 106-D-64, 106-D-65, 106-D-66, 106-D-67, 106-D-68, 106-D-69, 106-D-70, 106-D-71, 106-D-72, 106-D-73, 106-D-74, 106-D-75, 106-D-76, 106-D-77, 106-D-78, 106-D-79, 106-D-80, 106-D-81, 106-D-82, 106-D-83, 106-D-84, 106-D-85, 106-D-86, 106-D-87, 106-D-88, 106-D-89, 106-D-90, 106-D-91, 106-D-92, 106-D-93, 106-D-94, 106-D-95, 106-D-96, 106-D-97, 106-D-98, 106-D-99, 106-D-100.

Figure 6-3. 2008 Radiological Survey Locations, 100-F Area.

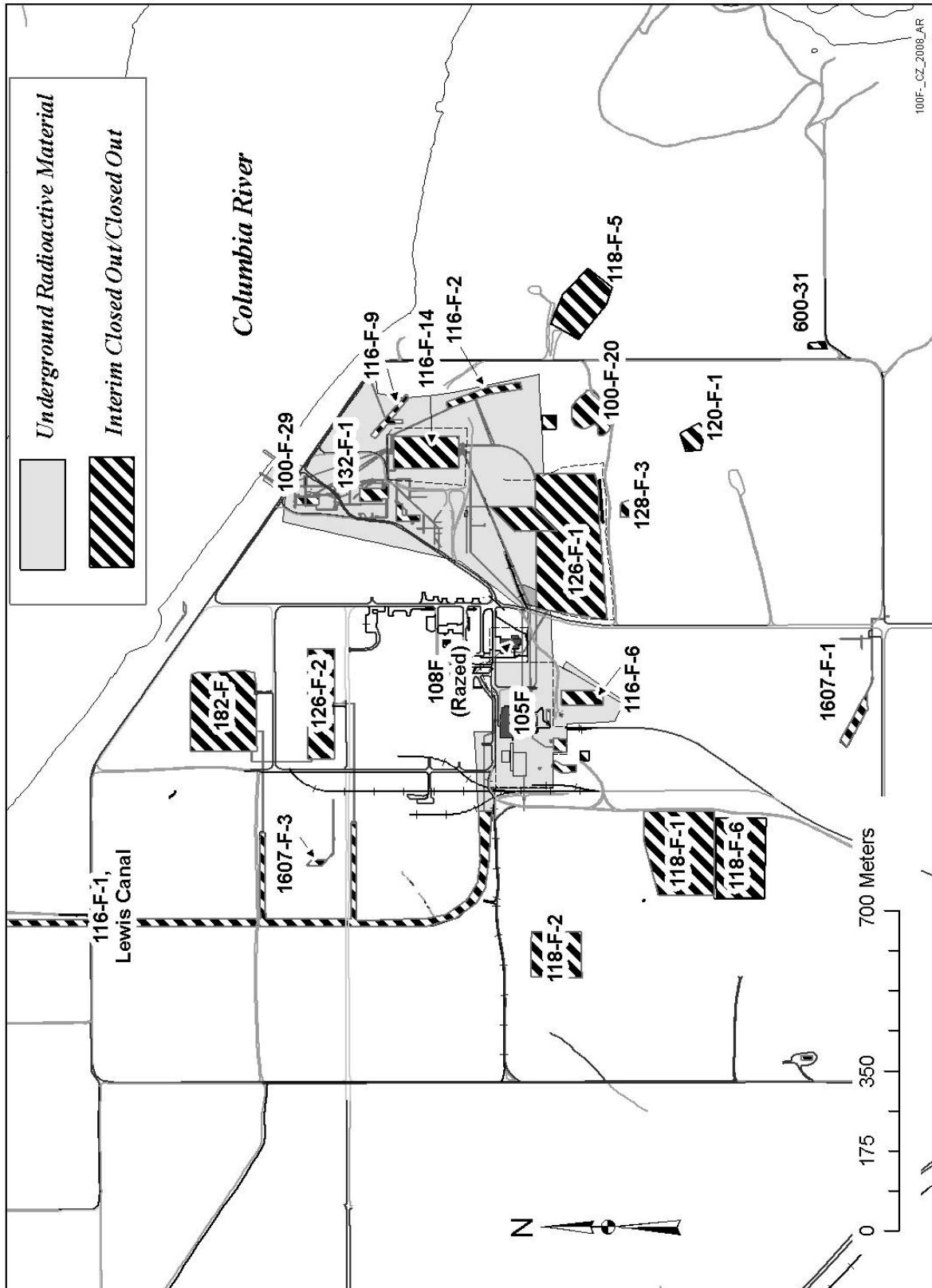


Figure 6-4. 2008 Radiological Survey Locations, 100-H Area.

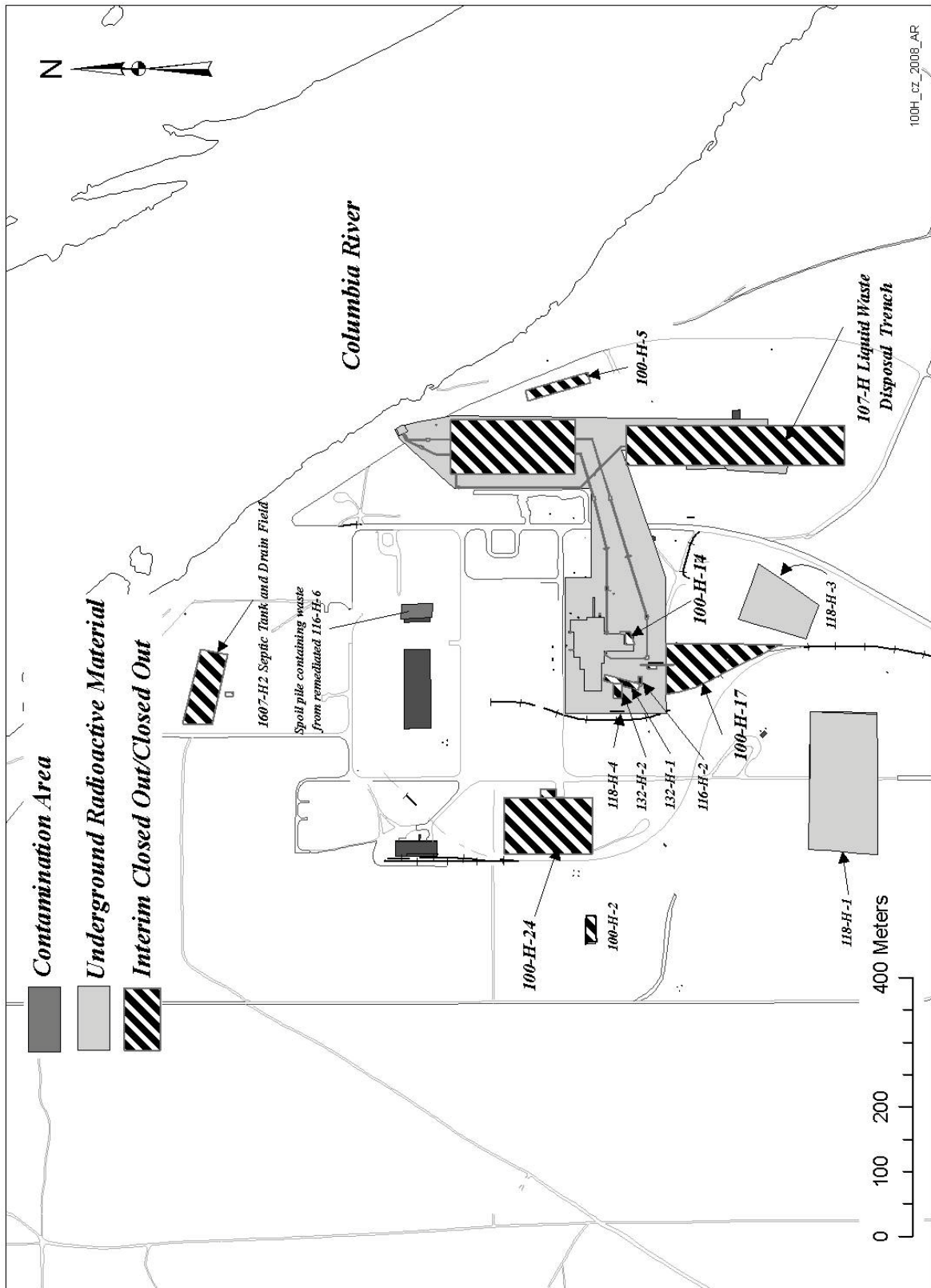


Figure 6-5. 2008 Radiological Survey Locations, 100-K Area.

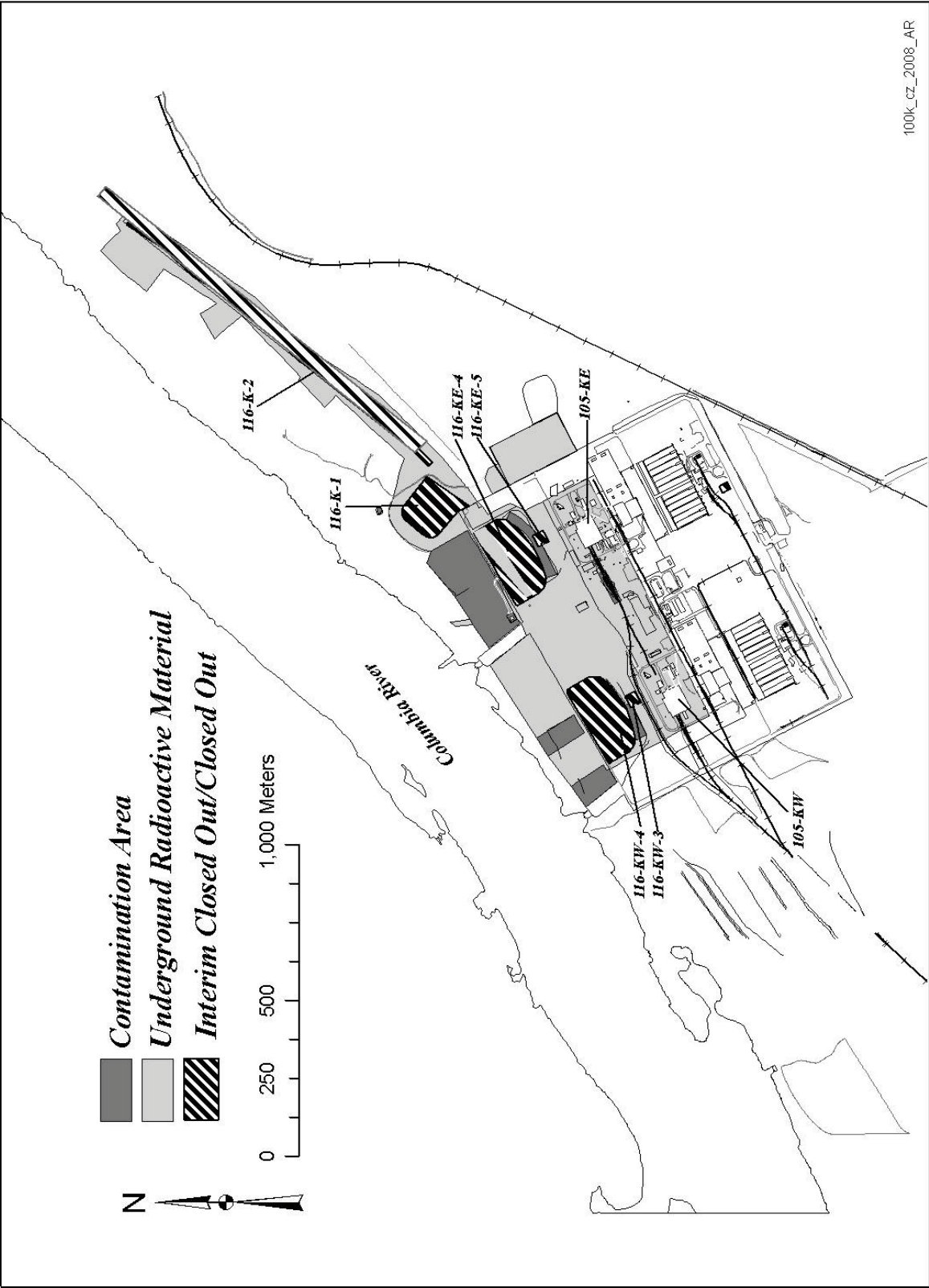


Figure 6-6. 2008 Radiological Survey Locations, 100-N Area.

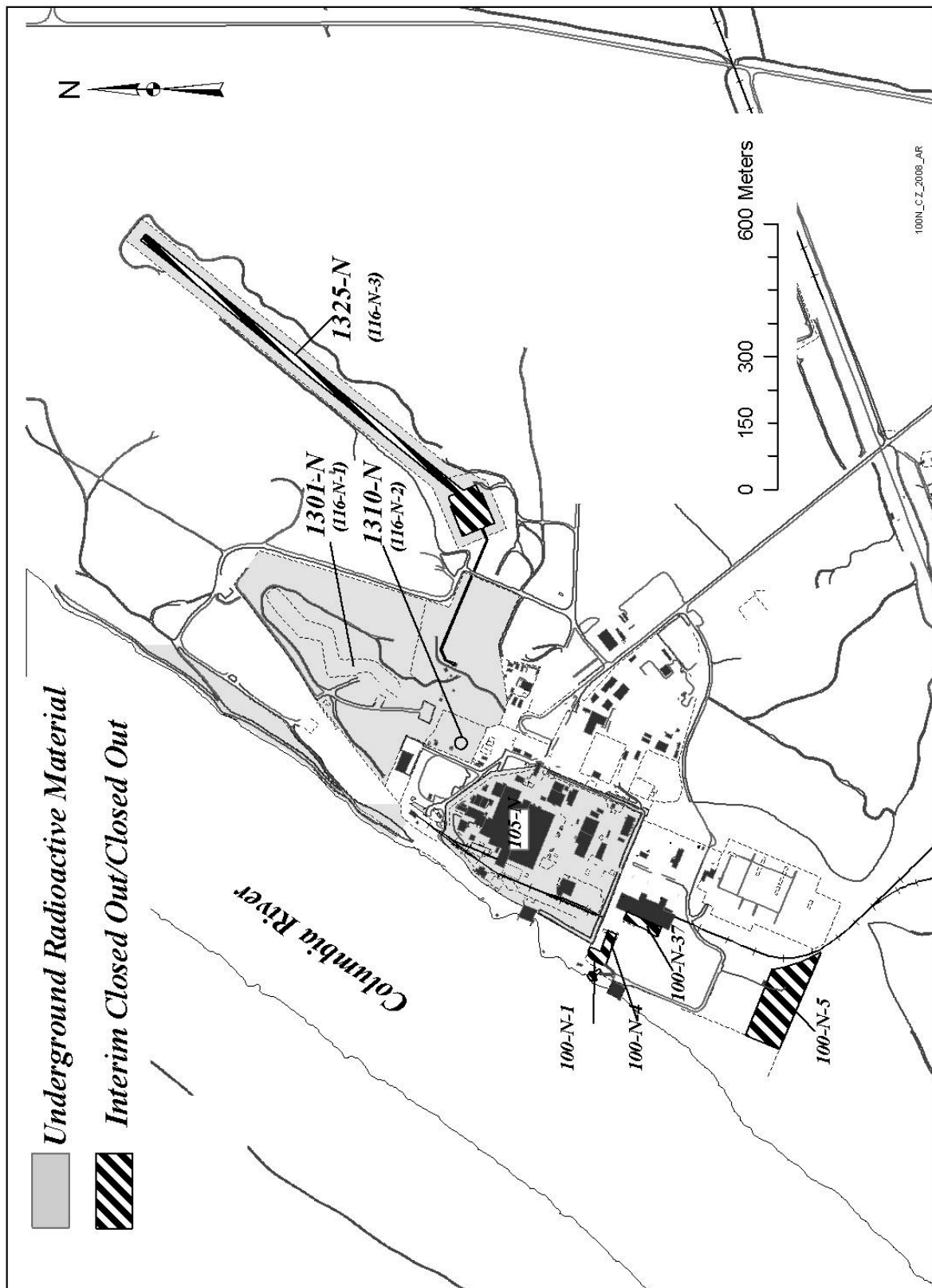


Figure 6-7. 2008 Radiological Survey Locations, 200 East Area.

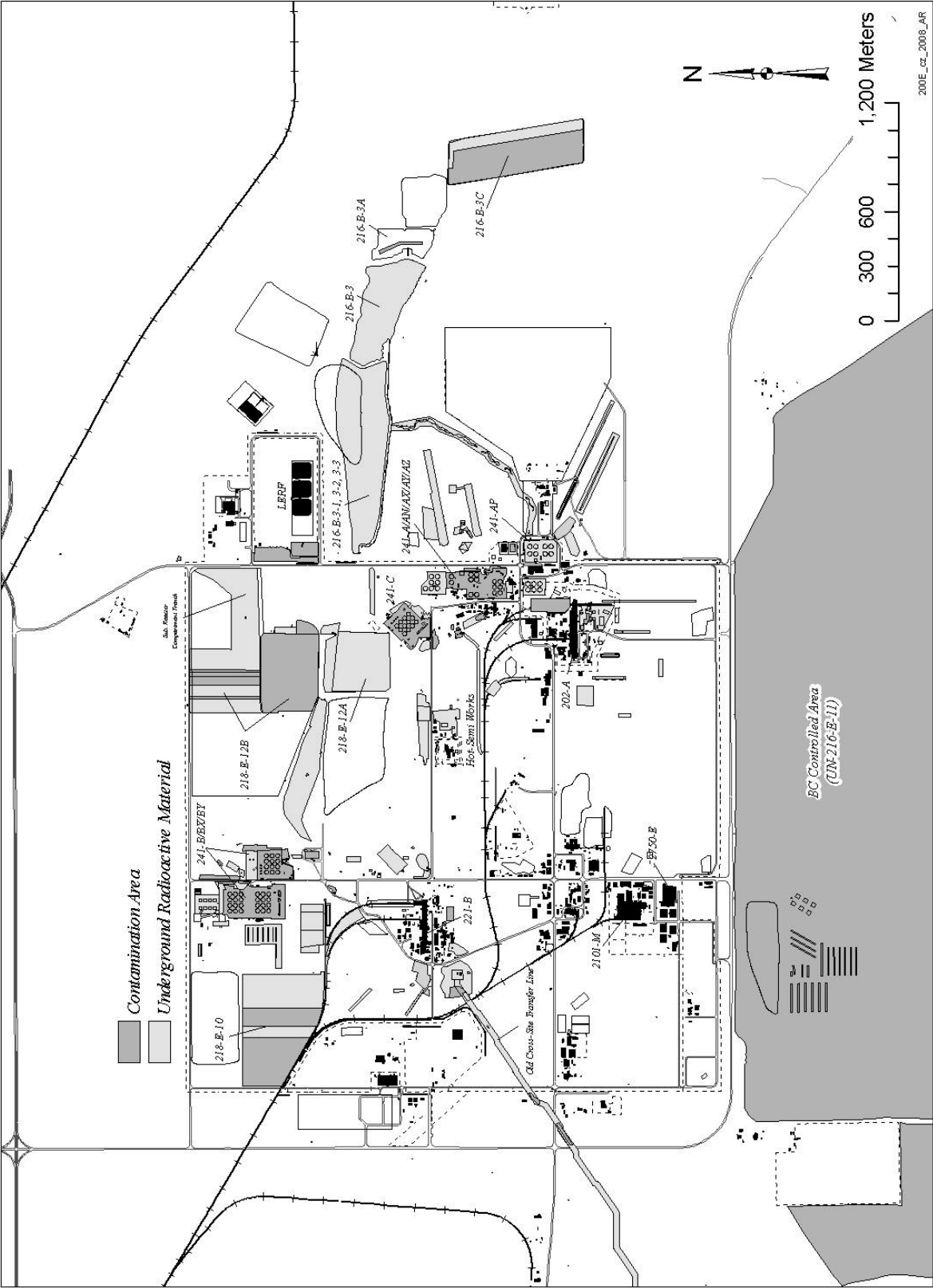


Figure 6-8. 2008 Radiological Survey Locations, 200 West Area.

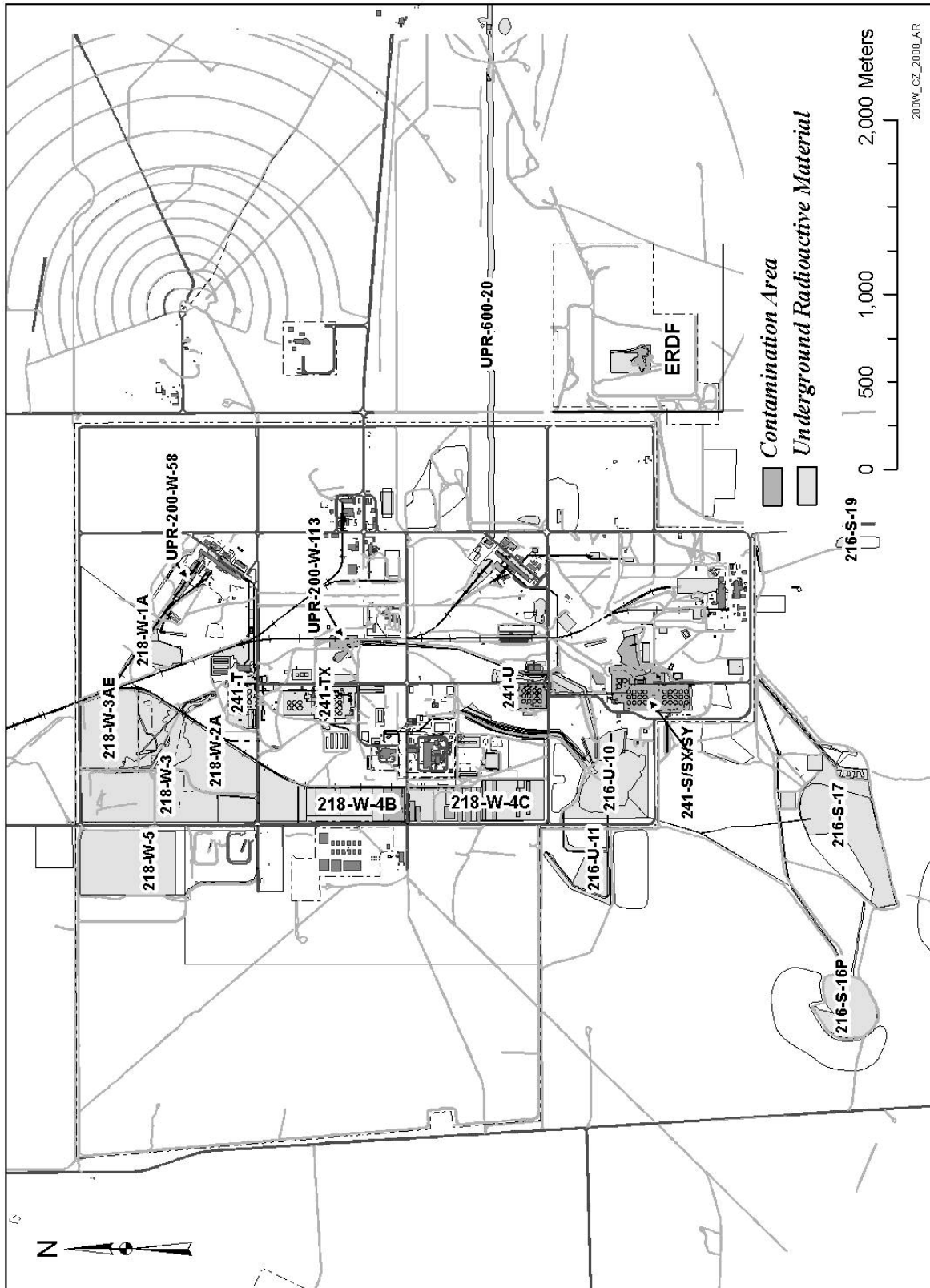


Figure 6-9. 2008 Radiological Survey Locations, 300 Area.

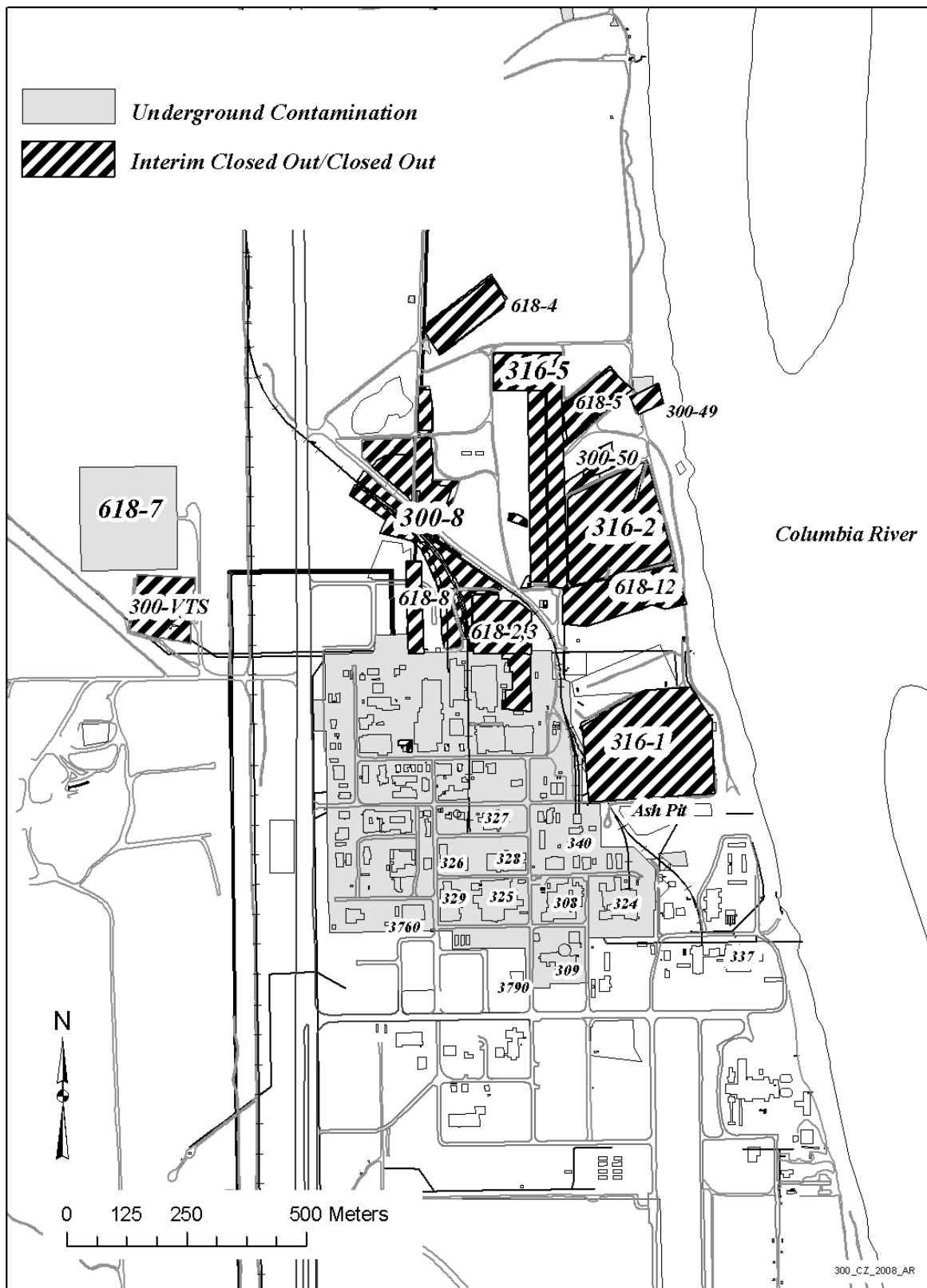
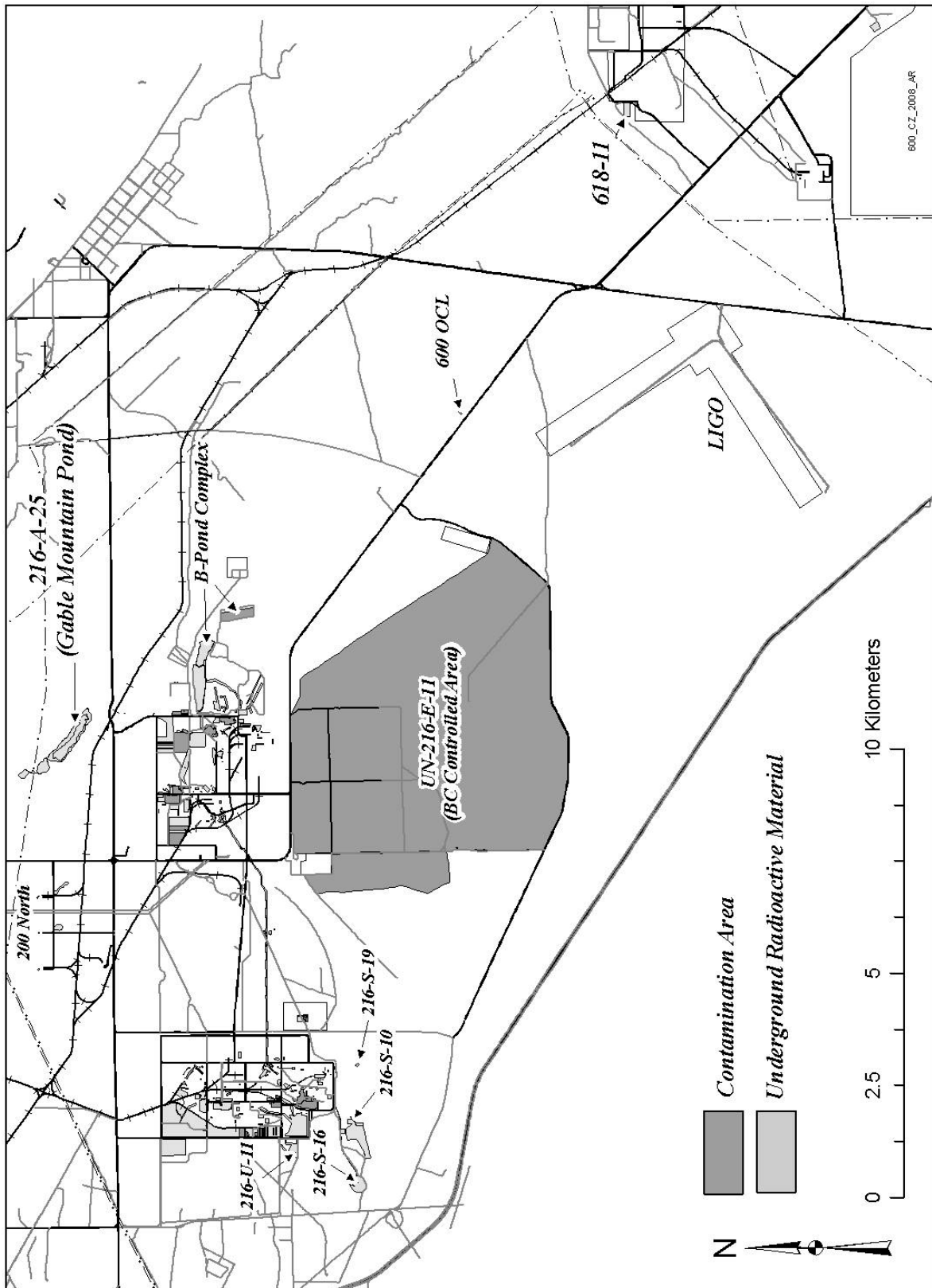


Figure 6-10. 2008 Radiological Survey Locations, 600 Area.



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7.0 INVESTIGATIVE SAMPLING

Investigative samples are typically collected where known or suspected radioactive contamination was present, or to verify radiological conditions at project sites. In 2008, none of the investigative samples collected were analyzed. However, six animal samples collected in 2006 and 2007 were analyzed for radionuclides at the Waste Sampling and Characterization Facility (WSCF) laboratory and the analytical results are provided in Table 7-1. One hundred seventy-three (173) contaminated environmental samples were reported during surveillance and/or cleanup operations in 2008, and all were disposed without isotopic analyses. The locations and field readings for these contaminated samples are listed in Table 7-2.

7.1 SOIL

In 2008, there were 16 instances of radiological contamination in which soil was identified as the carrier of contamination. Of these, 8 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 approximately 15,000 disintegrations per minute (dpm)/100 cm² to more than 2,400,000 dpm/100 cm². Contaminated areas were radiologically posted or cleaned up. The number of contamination incidents and the range of radiation dose rate levels observed in 2008 were generally within historical ranges.

7.2 VEGETATION

In 2008, there were 127 instances in which vegetation was identified as the carrier of radiological contamination. Thirty instances of contaminated vegetation had field readings in excess of 1,000,000 dpm/100 cm². The radioactivity levels were all within historical ranges.

The number of contaminated vegetation incidents increased from 62 in 2007 to 127 in 2008. The increase in the number of instances in 2008 is more than twice the number observed in 2007 and the highest number reported to date. The number of contaminated tumbleweeds can be attributed to favorable growing conditions (moisture) and a resistance to the herbicide that had been used. It is expected that as contaminated vegetation continues to be identified and cleaned up, subsequent years will show a reduction in the number of these incidents. Additional discussion of Vegetation Control activities taken in 2008 can be found in Section 10.10.4 of PNNL-18427 (PNNL 2009a).

7.3 ANIMALS

In 2008, 30 instances of contaminated animals or animal-related contamination were identified. Of these, none were submitted to the laboratory. Three animal-related samples collected in the 200 Areas exhibited field readings in excess of 1,000,000 dpm/100 cm².

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. For 2008, the number of animals found to be contaminated with radioactivity and the range of radionuclide concentrations were within historical ranges.

7.4 SPECIAL CHARACTERIZATION SAMPLING

No special characterization projects were conducted or completed during 2008 to ascertain the radiological, and in some cases, physical condition of specific sites or operations.

Table 7-1. Investigative Sample Results, 2008. (Sheet 1 of 2)

Matrix	Location	Date	Field Reading ^(a)	Isotope	Result ^(b) (pCi/g) ±	Analytical Uncertainty
Mouse	272-S Paint Shop	03/21/06	4,000dpm/100cm ²	⁶⁰ Co	2.1E+00 ±	3.0E+00
				^{89,90} Sr	5.2E+02 ±	6.2E+01
				¹³⁴ Cs	-4.2E-01 ±	2.8E+00
				¹³⁷ Cs	7.5E+01 ±	1.3E+01
				¹⁵² Eu	-8.3E-01 ±	7.0E+00
				¹⁵⁴ Eu	-4.0E+00 ±	8.3E+00
				¹⁵⁵ Eu	2.8E+00 ±	6.0E+00
				Total U	3.6E-02 ±	3.5E-02
				²³⁸ Pu	8.2E-02 ±	9.6E-02
				^{239,240} Pu	3.3E-01 ±	1.2E-01
Matrix	Location	Date	Field Reading ^(a)	Isotope	Result ^(b) (pCi/g) ±	Analytical Uncertainty
Rabbit	241-S Tank Farm	09/12/06	72,000dpm/100cm ²	⁶⁰ Co	7.4E-02 ±	1.8E-01
				^{89,90} Sr	1.0E+03 ±	1.2E+02
				¹³⁴ Cs	1.0E-01 ±	1.8E-01
				¹³⁷ Cs	7.9E+02 ±	1.3E+02
				¹⁵² Eu	5.9E-01 ±	3.1E+00
				¹⁵⁴ Eu	8.1E-02 ±	6.0E-01
				¹⁵⁵ Eu	-2.3E-01 ±	2.3E+00
				Total U	4.7E-03 ±	4.2E-03
				²³⁸ Pu	5.8E-02 ±	2.2E-02
				^{239,240} Pu	7.4E-02 ±	2.4E-02
Matrix	Location	Date	Field Reading ^(a)	Isotope	Result ^(b) (pCi/g) ±	Analytical Uncertainty
Rabbit	272-S Paint Shop	06/13/07	>1,000,000dpm/100cm ²	⁶⁰ Co	1.4E-01 ±	3.3E-01
				^{89,90} Sr	4.6E+03 ±	6.0E+02
				¹³⁴ Cs	2.4E-01 ±	1.1E+00
				¹³⁷ Cs	7.6E+03 ±	1.0E+03
				¹⁵² Eu	2.3E+00 ±	9.1E+00
				¹⁵⁴ Eu	6.5E+00 ±	2.3E+00
				¹⁵⁵ Eu	8.4E-01 ±	6.6E+00
				Total U	1.2E-02 ±	6.2E-03
				²³⁸ Pu	2.7E-01 ±	7.6E-02
				^{239,240} Pu	2.0E+00 ±	5.2E-01

Table 7-1. Investigative Sample Results, 2008. (Sheet 2 of 2)

Matrix	Location	Date	Field Reading ^(a)	Isotope	Result ^(b)	Analytical
					(pCi/g) ±	Uncertainty
Bird	221-T Plant	06/14/07	28,000dpm/100cm ²	⁶⁰ Co	3.0E-01 ±	2.1E+00
				^{89,90} Sr	1.6E+02 ±	1.9E+01
				¹³⁴ Cs	1.4E+00 ±	1.7E+00
				¹³⁷ Cs	1.4E+02 ±	2.0E+01
				¹⁵² Eu	-4.9E-01 ±	4.9E+00
				¹⁵⁴ Eu	-1.4E+00 ±	5.6E+00
				¹⁵⁵ Eu	3.4E+00 ±	4.6E+00
				Total U	3.7E-02 ±	1.5E-02
				²³⁸ Pu	2.3E-01 ±	5.8E-02
				^{239,240} Pu	5.9E+00 ±	1.2E+00
Matrix	Location	Date	Field Reading ^(a)	Isotope	Result ^(b)	Analytical
					(pCi/g) ±	Uncertainty
Mouse	2715-W	07/31/07	20,000dpm/100cm ²	⁶⁰ Co	5.3E-01 ±	1.1E+00
				^{89,90} Sr	1.2E+03 ±	1.4E+02
				¹³⁴ Cs	2.2E-01 ±	1.3E+00
				¹³⁷ Cs	4.6E+02 ±	6.5E+01
				¹⁵² Eu	-5.7E+00 ±	5.7E+00
				¹⁵⁴ Eu	8.1E-01 ±	3.5E+00
				¹⁵⁵ Eu	2.5E+00 ±	6.1E+00
				Total U	3.9E-02 ±	1.6E-02
				²³⁸ Pu	4.7E-01 ±	1.3E-01
				^{239,240} Pu	4.3E+00 ±	1.1E+00
Matrix	Location	Date	Field Reading ^(a)	Isotope	Result ^(b)	Analytical
					(pCi/g) ±	Uncertainty
Rabbit	241-S Tank Farm	11/02/07	>1,000,000dpm/100cm ²	⁶⁰ Co	5.6E-01 ±	3.6E-01
				^{89,90} Sr	6.7E+03 ±	8.0E+02
				¹³⁴ Cs	1.7E+00 ±	1.6E+00
				¹³⁷ Cs	1.2E+04 ±	1.9E+03
				¹⁵² Eu	-2.9E+00 ±	1.0E+01
				¹⁵⁴ Eu	3.0E+00 ±	2.7E+00
				¹⁵⁵ Eu	-9.9E-01 ±	9.1E+00
				Total U	4.1E+01 ±	1.4E-03
				²³⁸ Pu	2.1E-01 ±	5.7E-02
				^{239,240} Pu	1.6E+00 ±	4.2E-01

(a) dpm = disintegrations per minute

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

Table 7-2. Investigative Samples Not Analyzed, 2008. (Sheet 1 of 4)

SAMPLE MATRIX	LOCATION	FIELD READING (Beta/Gamma)	DATE
Tumbleweed	Between 222-S & REDOX	60,000 dpm/100cm ²	01/16/08
Mouse	Inside 224-U	1,500 dpm/100cm ²	01/17/08
Tumbleweeds	Inside Perimeter Fence @ 16th and Dayton St,	36,000 dpm/100cm ²	01/22/08
Tumbleweeds	Corner of 16th & Dayton St	36,000 dpm/100cm ²	01/23/08
Tumbleweeds (8)	On top of 216-A-34 Crib	60,000 dpm/100cm ²	01/23/08
Speck	At RMA-028 @ 241-C Tank Farm	15,000 dpm/100cm ²	01/24/08
Tumbleweeds	Outside the intersection of 16th & Dayton St	60,000 dpm/100cm ²	01/24/08
Tumbleweeds	Outside the Perimeter Fence at 16th & Dayton St	60,000 dpm/100cm ²	01/25/08
Speck	Outside the Perimeter Fence 241-SX Tank Farm	149,000 dpm/100cm ²	01/31/08
Mouse Feces	Outside 209-E Gate (Hot Seniworks)	3,000 dpm/100cm ²	02/01/08
Tumbleweed	Outside 241-BX Tank Farm Perimeter Fence	54,000 dpm/100cm ²	02/04/08
Tumbleweeds	221-Z Plant PFP Entrance	20,000 dpm/100cm ²	02/09/08
Tumbleweeds	Outside 241-U Tank Farm	48,000 dpm/100cm ²	02/09/08
Tumbleweeds (3)	East Side of 284-W Powerhouse	18,000 dpm/100cm ²	02/09/08
Rabbit Feces	Between 242-A Evaporator and 241-A Tank Farm	20,000 dpm/100cm ²	02/11/08
Tumbleweed	Along Buffalo Ave. West of 241-A/AX/AZ Tank Farms	30,000 dpm/100cm ²	02/11/08
Tumbleweeds (3)	Outside the PFP Perimeter Fence	60,000 dpm/100cm ²	02/12/08
Tumbleweeds (2)	On top of the 218-E-12A Burial Ground	120,000 dpm/100cm ²	02/19/08
Bunch Grass	On top of the 218-E-12A Burial Ground	5,400,000 dpm/100cm ²	02/20/08
Tumbleweeds	UPR-200-W-38 on Backside of 221-T	4,200,000 dpm/100cm ²	02/21/08
Tumbleweeds (20)	On top of the 218-E-12A Burial Ground	3,900,000 dpm/100cm ²	02/21/08
Grass Root Balls/Sod Material	UPR-600-20 between Rt 4S and 200-E Fuel Station	120,000 dpm/100cm ²	02/22/08
Soil	16 sq ft Area inside the 216-BC Cribs	60,000 dpm/100cm ²	02/25/08
Tumbleweeds (10)	inside a 20 X 10 ft area inside the 216-BC Cribs	60,000 dpm/100cm ²	02/26/08
Tumbleweeds (10)	10 X 10 ft area around a well inside the 216-BC Cribs	30,000 dpm/100cm ²	02/27/08
Tumbleweeds (8)	West Fenceline 241-U Tank Farm	48,000 dpm/100cm ²	02/27/08
Mud Dauber Nest	Outside Rm 115 at 109-N	80,000 dpm/100cm ²	02/28/08
Tumbleweeds (4)	West side of PFP in Security Buffer Zone	48,000 dpm/100cm ²	02/28/08
Tumbleweed	South side of PFP in Security Buffer Zone	30,000 dpm/100cm ²	02/29/08
Tumbleweeds (>100)	218-E-12B LLBG Trench 94	>1,000,000 dpm/100cm ²	03/04/08
Tumbleweeds (30)	On top of the 216-B-9 Crib	1,794,000 dpm/100cm ²	03/04/08
Tumbleweed	Along Exterior Fence of 241-B Tank Farm	120,000 dpm/100cm ²	03/05/08
Tumbleweeds (>200)	218-E-12B LLBG Trench 94	>1,000,000 dpm/100cm ²	03/06/08
Tumbleweeds (3-bags)	3-Bags (full) collected around 221-U Plant	48,000 dpm/100cm ²	03/08/08
25'X25' area of Tumbleweeds	Over old Pipeline east of 241-SX Tank Farm	100,000 dpm/100cm ²	03/12/08
Soil (8 areas) and Fragment	On top of 218-E-12B Burial Ground	2,400,000 dpm/100cm ²	03/12/08
Tumbleweeds (2)	Outside 200-W Area East Fenceline	18,000 dpm/100cm ²	03/12/08
Soil	inside 200-W-106 West of 241-TX	27,000 dpm/100cm ²	03/17/08
Tumbleweed	West fenceline 241-BX/BY Tank Farm	15,000 dpm/100cm ²	03/18/08
Tumbleweed and Fragments	North Fenceline 241-U Tank Farm	6,000 dpm/100cm ²	03/18/08
Tumbleweed Fragments	East Perimeter Fenceline 241-SY	400,000 dpm/100cm ²	03/19/08
Tumbleweed and Fragments	Northeast of 241-B Tank Farm	100,000 dpm/100cm ²	03/24/08
Tumbleweeds (2)	Along 200-West South Fenceline along Beloit Ave	36,000 dpm/100cm ²	03/24/08
Tumbleweeds and Fragments (4)	Outside West Fenceline 241-S Tank Farm Complex	240,000 dpm/100cm ²	03/25/08
Tumbleweed	Outside West Fenceline 241-TX/TY Tank Farm	210,000 dpm/100cm ²	03/26/08
Speck	Outside the East Side of 241-A Tank Farm	60,000 dpm/100cm ²	03/27/08
Multiple Spots (Specks)	Surrounding 241-ER-311 Catch Tank	200,000 dpm/100cm ²	03/28/08
Multiple Specks	Outside South Perimeter Fence 241-B Tank Farm	300,000 dpm/100cm ²	03/31/08
Ant Mound	Inside the 218-E-12A LLBG	800,000 dpm/100cm ²	04/01/08
Tumbleweeds and Fragments (30)	Inside the 218-E-12A LLBG	>6,000,000 dpm/100cm ²	04/01/08
Tumbleweeds and Fragments (2)	Adjacent to the 200-E-53 CA	400,000 dpm/100cm ²	04/07/08
Rabbit Fecal Pellets (29)	On Lawn @ 242-A Evaporator	10,000 dpm/100cm ²	04/10/08
Tumbleweeds (2)	Outside East Perimeter 241-C Tank Farm	9,000 dpm/100cm ²	04/10/08

Table 7-2. Investigative Samples Not Analyzed, 2008. (Sheet 2 of 4)

SAMPLE MATRIX	LOCATION	FIELD READING (Beta/Gamma)	DATE
Rabbit fecal pellets (31)	North of Fenceline 241-AN Tank Farm	>30,000 dpm/100cm ²	04/21/08
Tumbleweed Fragments	Northeast Fenceline 241-AN Tank Farm	>30,000 dpm/100cm ²	04/21/08
Tumbleweed Fragments (16)	Around the 242-B/BL Building	600,000 dpm/100cm ²	04/23/08
Tumbleweed Fragments	Northeast of 241-T Tank Farm	150,000 dpm/100cm ²	04/29/08
Tumbleweed Fragments (10)	On Top of the 216-S-17 Pond	48,000 dpm/100cm ²	04/29/08
Tumbleweeds (4-Wind Blown)	West Fence 241-BX/BY	48,000 dpm/100cm ²	05/01/08
Spot	Along Perimeter of 241-AW Tank Farm	20,000 dpm/100cm ²	05/05/08
Tumbleweed Fragments & Soil	Along North Perimeter of 241-U Tank Farm	100,000 dpm/100cm ²	05/05/08
Rabbit Feces (20)	Near 242-S and outside 241-S Tank Farm	100,000 dpm/100cm ²	05/06/08
Tumbleweeds (4)	Near 242-S and outside 241-S Tank Farm	6,000 dpm/100cm ²	05/06/08
Rabbit Feces (2)	Near 242-S and outside 241-S Tank Farm	200,000 dpm/100cm ²	05/07/08
Tumbleweed	West Perimeter of 241-A Tank Farm along Buffalo Ave	600,000 dpm/100cm ²	05/08/08
Rabbit	Trapped at the 272-S Building	8,000 dpm/100cm ²	05/09/08
Tumbleweeds (4-Attached)	Inside Weather Enclosure @ 218-E-12B	25,000 dpm/100cm ²	05/09/08
Tumbleweed Fragments (10)	Along 241-A Tank Farm Perimeter Fenceline	55,000 dpm/100cm ²	05/12/08
Tumbleweeds (5)	Along West Fenceline 241-S Tank Farm	30,000 dpm/100cm ²	05/12/08
Rabbit Fecal Pellet	Outside the 241-SY Tank Farm Perimeter	50,000 dpm/100cm ²	05/13/08
Rabbit Fecal Pellet	Outside the 241-AZ Tank Farm Perimeter	80,000 dpm/100cm ²	05/13/08
Tumbleweed	West Fenceline 241-U Tank Farm	12,000 dpm/100cm ²	05/13/08
Tumbleweed	West Fenceline 241-BX Tank Farm	12,000 dpm/100cm ²	05/13/08
Tumbleweed Fragment	South of the 241-A Tank Farm Perimeter	90,000 dpm/100cm ²	05/13/08
Tumbleweeds (Deteriorating) (3)	On top of the 218-E-4 Burial Ground	1,794,000 dpm/100cm ²	05/13/08
Tumbleweeds (Several)	Supporting Cleanup Activities @ 241-S Tank Farm	>1,000,000 dpm/100cm ²	05/13/08
Mice (2)	Trapped at 242-B/BL	18,000 dpm/100cm ²	05/14/08
Mouse	Trapped at 224-U Building	6,000 dpm/100cm ²	05/14/08
Specks	Outside Posted CA @ 218-W-4B	12,000 dpm/100cm ² Alpha	05/15/08
Tumbleweed Fragment	Outside 241-B Tank Farm Perimeter	80,000 dpm/100cm ²	05/19/08
Tumbleweed Fragments (2)	Outside 241-B Tank Farm Perimeter	>1,000,000 dpm/100cm ²	05/20/08
Tumbleweed Fragments (2)	Outside 241-C Tank Farm Perimeter	60,000 dpm/100cm ²	05/27/08
Tumbleweeds (Wind Blown)	Northeast Perimeter Fence of 200-E	600,000 dpm/100cm ²	05/29/08
Tumbleweeds (Wind Blown)	Northeast Perimeter Fence of 200-E	>1,000,000 dpm/100cm ²	06/02/08
Specks (5)	218-W-4B Trench TV7CA	7,500 dpm/100cm ² alpha	06/05/08
Tumbleweed and Fragments	Northeast Perimeter Fence of 200-E	>1,000,000 dpm/100cm ²	06/05/08
Tumbleweed	West Perimeter Fenceline @ 241-U Tank Farm	36,000 dpm/100cm ²	06/12/08
Tumbleweed fragment & Spots	200-E-114 PL from 241-B Tank Farm to BC Cribs	>1,000,000 dpm/100cm ²	06/12/08
Tumbleweed and Fragments	Old Transfer Line East of 241-B Tank Farm	>1,000,000 dpm/100cm ²	06/17/08
Tumbleweeds (50)	Growing on top of the 216-U-10 Pond	60,000 dpm/100cm ²	06/23/08
Tumbleweed Fragments	On UPR-200-E-101 South of 242-B/BL	>1,000,000 dpm/100cm ²	06/30/08
Tumbleweeds (2)	Outside 241-T Tank Farm Perimeter Fence	180,000 dpm/100cm ²	06/30/08
Tumbleweeds (Wind Blown)	South of the 2727-WA Sodium Storage Area	66,000 dpm/100cm ²	07/01/08
Tumbleweeds (Wind Blown)	Along 19th Street	240,000 dpm/100cm ²	07/02/08
Tumbleweed	West fence of FFS area north of 19th Ave.	12,000 dpm/100cm ²	07/07/08
Tumbleweed Fragments (3)	Along West Perimeter Fence of 241-AZ	200,000 dpm/100cm ²	07/07/08
Mouse Feces (3)	Inside 218-W-3AE Solid Waste Burial	80,000 dpm/100cm ²	07/08/08
Tumbleweed	221-U Plant Fenceline	24,000 dpm/100cm ²	07/10/08
Mouse Trap	241-U Tank Farm Perimeter	20,000 dpm/100cm ²	07/15/08
Tumbleweed	2727-WA Fenceline	24,000 dpm/100cm ²	07/18/08
Tumbleweed Fragments (40' X100')	Outside the Northeast Perimeter 218-E-12B LLBG	410,000 dpm/100cm ²	07/18/08
Tumbleweeds	East Fenceline 241-B Tank Farm	1.3 rem open window	07/21/08
Decomposing Rabbit Feces (5)	North Perimeter Fenceline of 241-SY Tank Farm	800,000 dpm/100cm ²	07/22/08
Tumbleweed	South Fenceline of 241-U Tank Farm	42,000 dpm/100cm ²	07/22/08
Tumbleweeds (4)	West Barrier Wall of PFP	48,000 dpm/100cm ²	07/22/08
Tumbleweeds (Wind Blown - 15)	Outside PFP Security Barrier	42,000 dpm/100cm ²	07/23/08

Table 7-2. Investigative Samples Not Analyzed, 2008. (Sheet 3 of 4)

SAMPLE MATRIX	LOCATION	FIELD READING (Beta/Gamma)	DATE
Tumbleweeds (Wind Blown - 4)	Outside the 241-S Tank Farm Perimeter Fence	30,000 dpm/100cm ²	07/23/08
Tumbleweeds (~300)	On Top of the 216-U-10 Pond	56,000 dpm/100cm ²	07/24/08
Tumbleweeds (~300)	South End of the 218-E-12B LLBG	900,000 dpm/100cm ²	07/28/08
Rabbit Fecal Pellet (1)	Outside 244-U Instrument Building	300,000 dpm/100cm ²	07/31/08
Rabbit Fecal Pellets (20)	Around 241-SY-272 @ 241-SY Tank Farm	3,600,000 dpm/100cm ²	07/31/08
Spots in Soil Suspect Rodent Urine (3)	Outside 241-B Tank Farm Perimeter	1,000,000 dpm/100cm ²	08/04/08
Tumbleweed Fragments (5)	200-E-121 along Baltimore Ave.	40,000 dpm/100cm ²	08/05/08
Soil Speck	Perimeter of 241-SY Tank Farm	60,000 dpm/100cm ²	08/12/08
Tumbleweed	At 291-S REDOX Stack	12,000 dpm/100cm ²	08/13/08
Soil	Contaminated soil found under 2" @ 241-TX/TY	90,000 dpm/100cm ²	08/15/08
Tumbleweed (Wind Blown)	Outside West Perimeter Fence 241-AZ Tank Farm	60,000 dpm/100cm ²	08/19/08
Tumbleweed (Wind Blown)	Near LEF/ETF	40,000 dpm/100cm ²	08/20/08
Tumbleweed Fragment	Around FFS Laydown Yard	40,000 dpm/100cm ²	08/20/08
Tumbleweeds (5)	UPR-200-W-161 Around 207-U Basin	54,000 dpm/100cm ²	08/26/08
Tumbleweed	West fenceline 241-BX/BY Tank Farm	12,000 dpm/100cm ²	08/27/08
Tumbleweed Fragment	Around the 200 LEF/ETF	18,000 dpm/100cm ²	08/28/08
Tumbleweed Fragments	South Perimeter Fenceline of 241-B Tank Farm	>1,000,000 dpm/100cm ²	08/28/08
Tumbleweeds	Corner of 19th & Dayton Ave	42,000 dpm/100cm ²	08/28/08
Tumbleweed Fragments	West Perimeter Fence of 218-E-16 Grout Vaults at WTP	72,000 dpm/100cm ²	09/03/08
Speck in Ant Mound	Speck in Ant Mound on top of 200-E-111 PL	54,000 dpm/100cm ²	09/08/08
Spot	Outside the posted CA @ 216-BC-26 Crib	163,000 dpm/100cm ²	09/08/08
Tumbleweeds (100)	Inside 218-E-12B Trench 94	>1,000,000 dpm/100cm ²	09/13/08
Tumbleweeds (30)	Outside Gate 810 200-E-110	>1,000,000 dpm/100cm ²	09/15/08
Tumbleweeds (several)	200-E-135	18,000 dpm/100cm ²	09/15/08
Tumbleweeds	Between Northeast Perimeter Fence and Canton Ave	2,940,000 dpm/100cm ²	09/16/08
Crickets	On Glue Board from inside 242-BBL	12,000 dpm/100cm ²	09/17/08
Tumbleweed	On Top of the 216-U-10 Pond	54,000 dpm/100cm ²	09/17/08
Tumbleweed Fragments	UPR-200-E-143 Northwest of the 244-AR Lift Station	100,000 dpm/100cm ²	09/24/08
Tumbleweed	200-E-109 north of 218-E-12B	>1,000,000 dpm/100cm ²	09/26/08
Rabbit Feces	Outside North Perimeter 241-SY Tank Farm	850,000 dpm/100cm ²	09/29/08
Tumbleweed Fragments	East of 241-BX tank Farm by MO824	>1,000,000 dpm/100cm ²	10/06/08
Tumbleweed Fragments	East of 241-C tank Farm	150,000 dpm/100cm ²	10/06/08
Dried Mouse & Snake	Under CONEX Box Inside PUREX Fence Boundary	200,000 dpm/100cm ²	10/09/08
Rabbit Feces	Outside 241-SX Tank Farm Perimeter	500,000 dpm/100cm ²	10/14/08
Tumbleweed Fragments	200-E-109 North of 218-E-12B	>1,000,000 dpm/100cm ²	10/14/08
Rabbit Feces	Outside the West and North Perimeters 241-S/SX/SY	>1,000,000 dpm/100cm ²	10/16/08
Cottontail Rabbit	Outside North Perimeter 241-SY Tank Farm	420,000 dpm/100cm ²	10/20/08
Tumbleweed Fragments	UPR-200-W-38 South of T-Plant	100,000 dpm/100cm ²	10/23/08
Tumbleweeds (25)	On Top of the 216-A-30 Crib	150,000 dpm/100cm ²	10/23/08
Tumbleweeds (25)	200-E-109 north of the Trench 94	>1,000,000 dpm/100cm ²	10/24/08
Tumbleweeds	200-E-109 north of the Trench 94	>1,000,000 dpm/100cm ²	10/25/08
Tumbleweed Fragments	Canton Ave Side of Gate 810 N. of Trench 94	>1,000,000 dpm/100cm ²	10/27/08
Tumbleweed & Multiple Fragments	Clean Drum Storage NE Side of 221-T Plant	150,000 dpm/100cm ²	10/28/08
Tumbleweeds & Fragments (50)	On top of the 218-E-12B Solid Waste Burial	2,700,000 dpm/100cm ²	10/28/08
Specks	West of 241-S Tank Farm	200,000 dpm/100cm ²	10/29/08
Tumbleweed & Fragments	200-E-109, North and East of 218-E-12B	>1,000,000 dpm/100cm ²	10/29/08
Tumbleweeds (10)	On Top of the 216-U-10 Pond	54,000 dpm/100cm ²	11/03/08
Rabbit Feces	Outside 241-S & SX Tank Farm	>1,000,000 dpm/100cm ²	11/04/08
Tumbleweed	West of 241-BY Tank Farm	60,000 dpm/100cm ²	11/04/08
Tumbleweeds (200)	On Top of the 216-U-10 Pond	114,000 dpm/100cm ²	11/04/08
soil	A 10' X 20" area on top of 200-W-78	72,000 dpm/100cm ²	11/05/08
Tumbleweeds Wind Blown (3)	200-E-17 LERF Perimeter Fence	600,000 dpm/100cm ²	11/06/08
Tumbleweeds (200)	On top of 216-U-10 Covered Pond	900,000 dpm/100cm ²	11/10/08

Table 7-2. Investigative Samples Not Analyzed, 2008. (Sheet 4 of 4)

SAMPLEMATRIX	LOCATION	FIELD READING (Beta/Gamma)	DATE
Tumbleweeds and Fragments	200-E-109, North of 218-E-12B	1,200,000 dpm/100cm ²	11/10/08
Tumbleweed Fragments	Outside Perimeter of 241-ER-151 Diversion Box	>1,000,000 dpm/100cm ²	11/17/08
Tumbleweed Fragments	Outside Perimeter of 241-AP Tank Farm	120,000 dpm/100cm ²	11/17/08
Tumbleweeds	241-TX-155 Diversion Box Perimeter	18,000 dpm/100cm ²	11/17/08
Tumbleweed and Fragments	Outside Perimeter of 241-B Tank Farm & 200-E-120	>1,000,000 dpm/100cm ²	11/18/08
Tumbleweeds (3)	West Fenceline of 241-S Tank Farm Complex	30,000 dpm/100cm ²	11/21/08
Rabbit Feces	Outside Southwest Corner of 241-S Tank Farm	>1,000,000 dpm/100cm ²	11/22/08
Tumbleweed Fragments	Outside 241-A Tank Farm Perimeter	150,000 dpm/100cm ²	11/22/08
Tumbleweed Fragments	On the 200-E-127-PL near the 207-A R.B.	120,000 dpm/100cm ²	12/01/08
Tumbleweed Fragments	On the 200-E-127-PL	30,000 dpm/100cm ²	12/02/08
Tumbleweeds (2)	Along 12th Street across from 241-B Tank Farm	54,000 dpm/100cm ²	12/03/08
Tumbleweed Fragment 10" Long	On the 200-E-127-PL near Gate 810	120,000 dpm/100cm ²	12/04/08
Tumbleweed	West fenceline 241-BX/BY Tank Farm	24,000 dpm/100cm ²	12/10/08
Speck (suspect rabbit urine)	North of the 241-SY Tank Farm	250,000 dpm/100cm ²	12/11/08

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8.0 QUALITY ASSURANCE

Quality assurance (QA) may be defined as the actions necessary to provide confidence that an item, process, or program meets or exceeds the 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. The near-facility environmental monitoring QA program and its objectives are documented in HNF-EP-0538-11, *Near-Facility Environmental Monitoring Quality Assurance Project Plan* (McKinney 2008).

Written operating procedures are an integral part of near-facility environmental monitoring QA. Procedures for field operations are provided in internal manual FSWO-OEM-001 (FSWO 2008) and EP-DI-611 (FH 2008). This section briefly describes the essential components of the near-facility environmental monitoring QA program.

8.1 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.

8.2 SAMPLE REPLICATION

The quality of sample collection methods and strategies is assessed by replicating the original samples and the statistical evaluation of them. Field replicates were collected during 2008 for ambient air, soil, and vegetation samples. Air sample replicate results were 95%, soil replicate results 91%, and vegetation replicate results 98%, the same as the original results (see Table 8-1).

Table 8-1. Summary of Field Replicate Results for 2008.

Medium	Radionuclide	Number of Results		% Agreement
		Compared	In Agreement	
Air	⁶⁰ Co	2	2	100
	⁹⁰ Sr	2	2	100
	¹⁰⁶ Ru	2	2	100
	¹²⁵ Sb	2	2	100
	¹³⁴ Cs	2	2	100
	¹³⁷ Cs	2	2	100
	¹⁵² Eu	2	2	100
	¹⁵⁴ Eu	2	2	100
	¹⁵⁵ Eu	2	2	100
	²³⁴ U	2	2	100
	²³⁵ U	2	2	100
	²³⁸ U	2	2	100
	²³⁸ Pu	2	2	100
	^{239/240} Pu	2	2	100
	gross α	26	24	92
	gross β	26	24	92
	Totals:	80	76	95%
Soil	⁶⁰ Co	9	9	100
	⁶⁵ Zn	9	6	66
	⁹⁰ Sr	9	9	100
	¹⁰³ Ru	9	9	100
	¹⁰⁶ Ru	9	9	100
	¹¹³ Sn	9	9	100
	¹²⁵ Sb	9	9	100
	¹³⁴ Cs	9	8	88
	¹³⁷ Cs	9	7	77
	¹⁴⁴ Ce	9	9	100
	¹⁵² Eu	9	9	100
	¹⁵⁴ Eu	9	9	100
	¹⁵⁵ Eu	9	6	66
	²³⁴ U	9	9	100
	²³⁵ U	9	9	100
	²³⁸ U	9	9	100
	²³⁸ Pu	9	7	77
	^{239/240} Pu	9	7	77
	Totals:	162	149	91%
Vegetation	⁶⁰ Co	5	5	100
	⁶⁵ Zn	5	4	80
	⁹⁰ Sr	5	5	100
	¹⁰³ Ru	5	5	100
	¹⁰⁶ Ru	5	5	100
	¹¹³ Sn	5	5	100
	¹²⁵ Sb	5	5	100
	¹³⁴ Cs	5	5	100
	¹³⁷ Cs	5	5	100
	¹⁴⁴ Ce	5	5	100
	¹⁵² Eu	5	5	100
	¹⁵⁴ Eu	5	5	100
	¹⁵⁵ Eu	5	5	100
	²³⁴ U	5	5	100
	²³⁵ U	5	5	100
	²³⁸ U	5	5	100
	²³⁸ Pu	5	5	100
	^{239/240} Pu	5	5	100
	Totals:	90	89	98%

Sampling methods and strategies were considered acceptable if, for a given sample medium, the overall agreement of all isotopic comparisons made between “original” and “replicate” samples were:

- Equal to or greater than 75% for air samples
- Equal to or greater than 50% for soil and vegetation samples.

The concentrations of a sample and its replicate were considered to be “in close agreement” (meaning the concentrations are, for all practical purposes, identical) if either of the following applies:

- Each concentration falls within the error range of the other; or
- Both the concentration of the sample and its replicate are “essentially zero.”

The concentrations of a sample and its replicate were considered to be “in agreement” (meaning the concentrations are close to the same value) if one of the following applies:

- On a plot, the uncertainty error bars of the sample and its replicate overlap; or
- The lower uncertainty values of both the sample and its replicate extend below the (contractual) minimum detectable concentration; or
- The relative percent difference was <30% or the percent significant difference was <15%.

8.3 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 hardcopy printouts.

8.4 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. 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.

8.5 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 and vegetation are collected annually.

8.6 ANALYTICAL PROCEDURES

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

8.6.1 Pacific Northwest National Laboratory Radiation Standards and Engineering

8.6.1.1 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.

8.6.2 Waste Sampling and Characterization Facility and 222-S Analytical Laboratory

The WSCF and 222-S laboratories provide analytical support to near-facility environmental monitoring. Formal, written laboratory procedures are used in analyzing samples. The WSCF is used for the samples containing typical environmental levels of radioactivity. The WSCF also participates in an annual QA Task Force intercomparison program coordinated by the Radiation Protection Division of the Washington State Department of Health. The 222-S laboratory is typically used for preparation of selected samples and/or analyses of samples containing higher-than-normal levels of radioactivity. Additional discussion regarding the WSCF QA program can be found in Section 10.17 of PNNL-18427 (PNNL 2009a).

9.0 GLOSSARY

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

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: $Bq = 2.7 \text{ E-11 Ci}$.

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.

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. 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. Expressed in units of rem (or sievert).

Composite Sample: A number of samples initially collected from a sample medium 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 of HNF-5173, *PHMC Radiological Control Manual* (FH 2007) 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 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 man.

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).

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: State of Washington, Department of Ecology.

Effective Dose Equivalent (EDE): 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.

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

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 perimeters.

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.

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.

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.

Interim Closed: Areas designated as “Interim Closed” are released from the posting requirements when the remedial actions meet the operable unit’s record of decision cleanup requirements.

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*.

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.

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 (>2 hectares [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.

Operable Unit: A discrete area for which an incremental step can be taken toward comprehensively addressing site problems. The cleanup of a site can be divided into a number of operable units, depending on the complexity of the problems associated with the site.

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

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.

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 areas, 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: A sample that can be expected to exhibit the average properties of the sample source.

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 (<2 hectares [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 91 cm (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 cm³ (0.06 in.) in volume, or areal contamination less than 15 cm² (2.3 in.²) 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 cm (0 in.) to 5 cm (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 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.

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.

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 (administrative control value) 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: The federal agency chartered with carrying out and monitoring the environmental regulations.

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.

Table 9-1. Radionuclide Nomenclature.

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

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10.0 STANDARDS

Table 10-1. U.S. Department of Energy Derived Concentration Guides.^a

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

^aFrom DOE Order 5400.5.

DCG = derived concentration guides

Table 10-2. EPA Concentration Levels for Environmental Compliance.^a
(Radionuclide Concentrations [pCi/m³] in Air)

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

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

Table 10-3. Inaccessible Soil Concentrations (pCi/g).

Radionuclide	100 B,D,K,N	100 F, H	200 West Area	200 East Area	300 Area	400 Area
³ 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
¹⁴ 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
⁵⁵ 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
⁵⁸ 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
⁶⁰ 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
⁶³ 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
⁹⁰ 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
⁹⁹ 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
¹⁰⁶ 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
¹²⁵ 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
¹²⁹ 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
¹³⁴ 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
¹³⁷ 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
¹⁴⁴ 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
¹⁴⁷ 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
¹⁵² 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
¹⁵⁴ 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
¹⁵⁵ 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
²²⁶ 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
²²⁷ 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
²³² 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
²³² 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
²³³ 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
²³⁴ 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
²³⁵ 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
²³⁶ 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
²³⁸ 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
²³⁷ 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
²³⁸ 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
²³⁹ 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
²⁴⁰ 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
²⁴¹ 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
²⁴¹ 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, ²³⁴U was not included in the ²³⁸U limits. For supporting references see WHC-SD-EN-TI-070, *Soil Concentration Limits for Accessible and Inaccessible Areas*.

Table 10-4. Accessible Soil Concentrations (pCi/g).

Radionuclide	100 B,D,K,N	100 F, H	200 West Area	200 East Area	300 Area	400 Area
³ 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
¹⁴ 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
⁵⁵ 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
⁵⁸ 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
⁶⁰ 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
⁶³ 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
⁹⁰ 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
⁹⁹ 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
¹⁰⁶ 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
¹²⁵ 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
¹²⁹ 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
¹³⁴ 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
¹³⁷ 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
¹⁴⁴ 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
¹⁴⁷ 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
¹⁵² 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
¹⁵⁴ 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
¹⁵⁵ 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
²²⁶ 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
²²⁷ 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
²³² 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
²³² 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
²³³ 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
²³⁴ 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
²³⁵ 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
²³⁶ 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
²³⁸ 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
²³⁷ 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
²³⁸ 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
²³⁹ 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
²⁴⁰ 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
²⁴¹ 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
²⁴¹ 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, ²³⁴U was not included in the ²³⁸U limits. For supporting references see WHC-SD-EN-TI-070, *Soil Concentration Limits for Accessible and Inaccessible Areas*.

11.0 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 two-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.

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