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Decontamination and Decommissioning Program

BUILDING 21 AND SURROUNDING SOILS INVESTIGATION DATA REPORT

MOUND PLANT
MIAMISBURG, OHIO

Volume I - Text and Appendice A

June 1995

U.S. Department of Energy
Ohio Field Office

EG&G Mound Applied Technologies

ENVIRONMENTAL RESTORATION PROGRAM

BUILDING 21 AND SURROUNDING SOILS INVESTIGATION DATA REPORT

MOUND PLANT
MIAMISBURG, OHIO

June 1995

U.S. DEPARTMENT OF ENERGY
OHIO FIELD OFFICE

DECONTAMINATION AND DECOMMISSIONING PROGRAM
EG&G MOUND APPLIED TECHNOLOGIES

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LIST OF ACRONYMS

AEC	Atomic Energy Commission
ALARA	as low as reasonably achievable
bgs	below ground surface
BWS&C	Barge, Waggoner, Sumner and Cannon
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CFR	Code of Federal Regulations
CLP	Contract Laboratory Program
cm^2	square centimeters
cmp	counts per minute
D&D	Decontamination and Decommissioning
DFTPP	decafluorotriphenylphosphine
DOE	U.S. Department of Energy
dpm	distegrations per minute
EG&G Mound	EG&G Mound Applied Technologies, Inc.
EPA	Environmental Protection Agency
GC/MS	gas chromatography/mass spectrometry
ICP	inductively coupled plasma
kg	kilogram
LLW	low-level radioactive
m^2	square meters
MDA	minimum detectable activity
mg	milligram
OEPA	Ohio Environmental Protection Agency
OU9	Operable Unit 9
PAH	polyaromatic hydrocarbons
PCB	Polychlorinated Biphenyl
pCi/g	picocurie per gram
PCN	Planned Change Notification
ppb	parts per billion
ppm	parts per million
QA/QC	Quality Assurance/Quality Control
μR/m	microrem per hour
RCRA	Resource Conservation and Recovery Act
RPD	relative percent differences
SAP	Sampling and Analysis Plan
SOW	Statement of Work
SVOC	Semi-volatile organic compound
TOC	Total Organic Carbon
TOX	Total Organic Halide
USEPA	United States Environmental Protection Agency
VOA	Volatile Organic Analysis
VOC	Volatile Organic Compounds
WESTON	Roy F. Weston, Inc.

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Department of Energy, On-Scene Coordinator: Mr. Eric Horstman.
Department of Energy (Geotech), Technical Reviewer: Mr. Richard Neff.
EG&G Mound Applied Technologies, D&D Program Manager: Mr. Joseph Geneczko.
EG&G Mound Applied Technologies, Operable Unit Manager: Mr. Richard Bauer.
EG&G Mound Applied Technologies, Technical Reviewer: Dr. Daniel Carfagno.
Roy F. Weston, Inc., Principal Investigator: Mr. Gordon Horn.
Roy F. Weston, Inc., Technical Author: Mr. Andrew Sperry, Mr. Craig Stoll.
Roy F. Weston, Inc., Technical Reviewer: Dr. Brad White.
Roy F. Weston, Inc., Editor: Ms. Delia Tamez.

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

Roy F. Weston, Inc. (WESTON) conducted an investigation of Building 21 and its surrounding soils to characterize the nature and extent of radiological and chemical contamination. The field work was conducted from 16 August 1994 through 15 December 1994 in accordance with the Sampling and Analysis Plan (SAP) provided to WESTON from EG&G Mound Applied Technologies, Inc. (EG&G Mound). The objective of this investigation is to collect, present and evaluate radiological field screening and laboratory chemical and radiological analytical data for purposes of planning the decontamination and decommissioning (D&D) of Building 21 and its surrounding soils. The data presented is not of the quality needed to characterize the facility for waste management purposes. It should not be used to exclude areas from further characterization or to freely release the facility or any part of the facility in accordance with U.S. Department of Energy (DOE) Order 5400.5. The investigation included five activities:

- Collecting radiological field screening measurements of the Building 21 interior and exterior surfaces.
- Collecting paint and concrete chip samples from the Building 21 interior surfaces, and submitting them to the laboratory for gamma spectroscopy.
- Collecting radiological field screening measurements of the Building 21 surrounding soil grid.
- Collecting soil samples from the Building 21 surrounding soils, and submitting them to the laboratory for gamma and alpha spectroscopy and for analysis of chemical parameters.
- Presenting and evaluating field screening and laboratory analytical data.

ES.1 Radiological Characterization of Building 21

As part of the Building 21 investigation, G-M pancake, alpha scintillometer and micro-R meter field screening of the interior and exterior parts of Building 21 was performed. The results indicate that a total of 88.44 microcuries of total alpha contamination and 438.5 microcuries of beta/gamma contamination is estimated on the Building 21 surfaces. Of the total, 315.6 microcuries total beta/gamma and 29.66 microcuries total alpha are measurable above the paint and surface coating layers. Most of the measurable contamination appears to be on the floors and lower portions of the interior walls. Figure ES.1 shows the distribution of surface alpha radiation on the floors of Building 21. The measured alpha contamination is assumed to be entirely on the surfaces contacted; no estimates of depth could be determined from the data set collected. The measured total beta/gamma

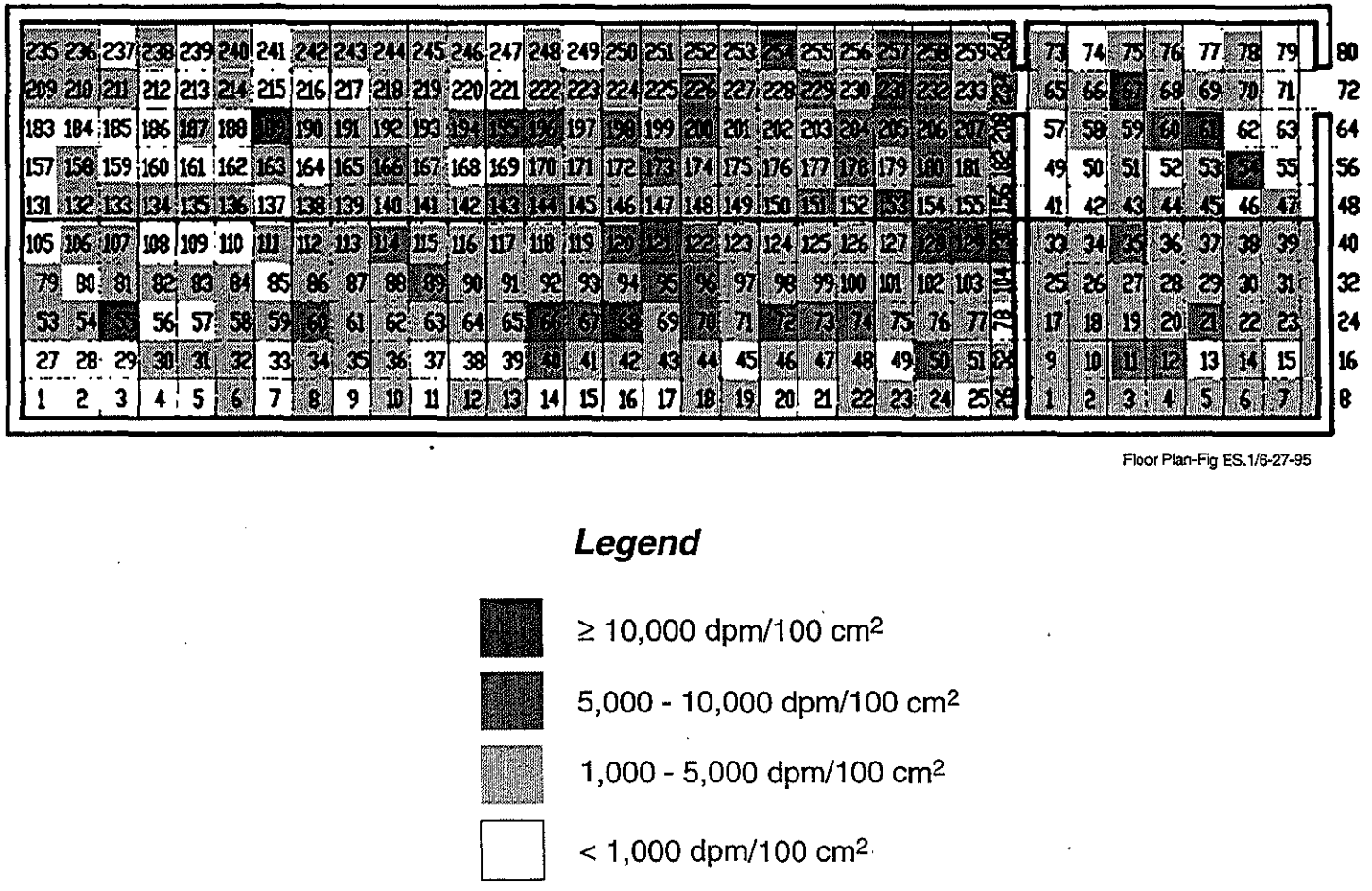


Figure ES.1. Distribution of Total Alpha Contamination on the Floor of Building 21.

contamination is assumed to originate from the surface and some depth within the concrete walls and floors. However, no estimate of depth can be determined from the existing data.

Results of 29 composite and 50 individual samples from the interior of Building 21 indicate that radioactive contamination of thorium-232 and radium-226 is generally higher on the lower part of the walls than on the floors. Thorium-232 and radium-226 occur as high as 1570 and 25.1 pCi/g, respectively on the north wall of Room 1, whereas the floors indicate the same isotopes <500 and 20 pCi/g, respectively. No samples were collected with respect to depth of contamination within the 14 to 16-inch thick concrete walls.

ES.2 Results of Radiological and Chemical Characterization of Surrounding Soils

Results of the gamma (426 soil samples) and alpha (5 percent of soil samples) spectroscopic analyses indicate that the 2 data sets agree very well. In comparison with background values determined as part of the ER Program, all cesium-137, uranium, and radium-226 values are within the upper 95 percent sample tolerance limit expected of naturally occurring soils in the area of EG&G Mound. Comparison of ratios of radionuclides with the uranium-238 decay chain, as determined by alpha spectrometry indicates that uranium-234, thorium-230 and radium-226 are present in approximately similar activities indicating that they are in secular equilibrium. Results of thorium-232 indicates that approximately 23,436 microcuries of thorium-232 are present in the soils surrounding Building 21 above background levels. Figure ES.2 shows the relative distribution of thorium-232 in the 12" to 24" soil interval surrounding Building 21. It was not possible to fully evaluate the possible distribution of plutonium-238 in surrounding soils. The highest value of 15.9 pCi/g is below the current EG&G Mound ALARA guideline of 25 pCi/g.

Results of 129 soil samples submitted for indicator screen analyses and 62 samples for extended analyses indicate the possible presence of 1,2,3-trichlorobenzene, methylene chloride, toluene, naphthalene and a group of polyaromatic hydrocarbons. All metals, PCBs, and cyanide results fall below EG&G Mound background levels or below U.S. Environmental Protection Agency Region III Risk-Based Concentration Table values. The sulfide results were determined to be unusable.

ES.3 CONCLUSIONS AND RECOMMENDATIONS

Within the scope of this investigation, the following observations and recommendations are made.

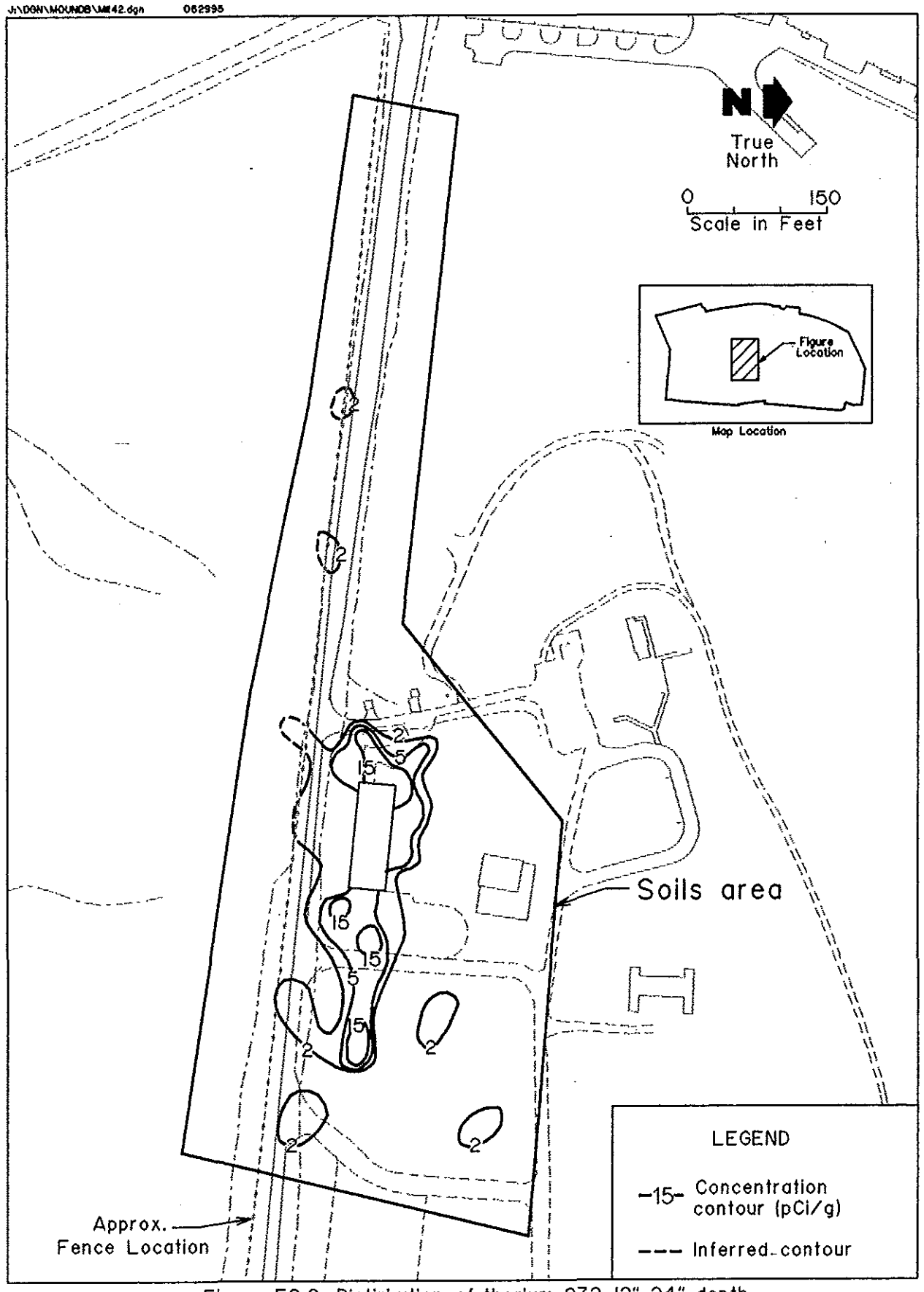


Figure ES.2. Distirbution of thorium-232 12"-24" depth.

First, the obvious processing of the thorium sludges rendered them as altered from naturally occurring thorium materials, even though the isotopic ratios may have remained unaltered. The contaminated facility, therefore, falls out of exemption, and should be managed as low-level radioactive waste (LLW).

Second, no chemical characterization analyses are known to have been performed on the wall or floor material of Building 21. There may have to be assurances that the materials do not include any mixed wastes.

Third, no data from the current investigation reveals any information concerning the possible depth of contamination of the concrete walls and floors of Building 21. Although concrete is a known porous material, the extent of contamination within the 14- to 16-inches thick concrete walls should be determined for purposes of waste minimization. There are currently several known technologies for removing radioactive contaminants from concrete or separating contaminated from uncontaminated materials. The DOE Decommissioning Handbook (PMOL/93-1884) provides detailed information on Decontamination and on Waste Minimization. The Remedial Action Program Information Center can provide additional information on waste management, decontamination, and waste minimization lessons learned. It is the policy of DOE EM-31 to reduce the volumes of radioactive and mixed wastes to the minimum necessary for disposal, as specified in DOE Order 5820.2A. Chapter 3 of DOE Order 5820.2A specifies that all DOE LLW generators shall establish auditable programs (goals, incentives, procedures, and reports) to assure that the amount of LLW shipped for disposal is minimized. Chapter 5 requires all D&D of contaminated materials shall meet the generator requirements of this order.

Forth, insufficient data appears to exist on the possible mixture of the radionuclides, thorium-232 and plutonium-238, in the surrounding soils. Additional sampling for plutonium-238 in the area east of Building 21 (near the historic waste storage area) may be prudent.

Fifth, if there was slight disequilibrium in the decay chains this would not greatly impact any risk assessment estimates due to the fact that numbers generated in risk assessments are based on orders of magnitude and the errors in activity estimates generated assuming equilibrium would be well below an order of magnitude.

Sixth, the data contained in this report is not complete enough for purposes of waste characterization, but it could be utilized to implement a pilot decontamination effort to provide information for the D&D Design and Waste Management Plan. EM-40 D&D guidance requires a waste management plan that addresses waste minimization information, and data gathered from the pilot scale. D&D and depth

sampling efforts could be utilized for waste characterization documentation. In many cases, it is much more efficient and cost effective to characterize the source term prior to demolition and placement of the waste into packages.

SECTION 1

1. INTRODUCTION

1.1. PROGRAM DESCRIPTION

The Decontamination and Decommissioning (D&D) Program manages the decontamination of materials that are radiologically and chemically contaminated during routine operations at the EG&G Mound Applied Technologies, Inc. (EG&G Mound) facility located in Miamisburg, Ohio. This includes the D&D of contaminated soil associated with building and process operations, and extends to the D&D of underground storage tanks and pipes. When facilities or assets such as buildings are declared surplus, are no longer needed, or are required for other purposes, they are assigned to the D&D Program for management.

Under the terms of the Federal Facilities Agreement (FFA) under Section 120 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) between DOE and the U.S. Environmental Protection Agency (effective October 11, 1990 - Administrative Docket No. VW-90-C-075) remedial actions at Mound Plant will be conducted to ensure that environmental impacts associated with past and present activities are thoroughly investigated and appropriate actions are taken to protect the public health, welfare and the environment. The D&D Program at Mound Plant derives its legal authority from the Atomic Energy Act [42 United States Code, 2011] to conduct routine operations, including decontamination of facilities.

As part of the scoping process, Building 21 and its surrounding soils was designated to be investigated by the D&D Program and is currently part of Operable Unit 6 of the Environmental Restoration Program (DOE 1994b). As such, radioactively contaminated facilities and surrounding soils may be remediated to levels determined under the AEA authority. After all radionuclide-contaminated materials have been removed to DOE thresholds, the site may be subject to evaluation under the FFA.

1.2. SCOPE OF WORK

As part of the characterization process, Roy F. Weston, Inc. (WESTON) conducted an investigation to characterize the nature and degree of possible radiological and chemical contamination of Building 21 and its surrounding soils. WESTON conducted field investigations from 16 August 1994 through 15 December 1994 in accordance with the Barge, Waggoner, Sumner and Cannon (BWS&C) Sampling and Analysis Plan (SAP) (Appendix I) for the D&D of Building 21 and Surrounding Soils (EG&G 1994).

This report presents the results of this investigation. The objective of the field investigations was to gather screening data to determine the general nature and extent of contamination for purposes of

planning the D&D. As noted in the SAP, this data is not to be used to exclude areas from further characterization or to allow the unrestricted release of the facility nor any part thereof.

Section 1 of the report describes the D&D Program description, the scope of WESTON's investigation, and the site background and physical setting. Investigative methods are summarized in Section 2, and the field screening and analytical data results are discussed in Section 3. The data quality assessment of analytical results is summarized in Section 4. Investigative conclusions are presented in Section 5. References are presented in Section 6. All tables and figures appear after their initial citation.

1.3. SITE BACKGROUND AND SETTING

The site plan area is shown in Figure 1.1, and the Building 21 floorplan is shown in Figure 1.2. Building 21 was built in 1966. It is a two-room, single storied, reinforced, poured concrete structure (36 ft wide x 112 ft long x 14 ft high) with 14- to 16-inch thick walls and a corrugated tin roof. The SAP states that it was built for the storage of approximately 200 tons of thorium-232 sludge. However, the Operable Unit 9, Site Scoping Report: Volume 7 - Waste Management (DOE 1993a) states that nearly 1650 tons of Brazilian monazite sludges, thorium oxalate and hydroxide sludges, and sulfate sludges were stored at the EG&G Mound in drums and transferred to Building 21 when it was completed.

The thorium sludges were stored at the EG&G Mound, then operated for the Atomic Energy Commission (AEC) by Monsanto Research Corporation as part of the thorium breeder program assignment to separate and purify a large quantity of thorium-232. Uranium Oxide (U_3O_8) is made up of approximately 99.27 percent U-238, .71 percent U-235, .02 percent U-234. Thorium Oxide (ThO_2) is approximately 99.99 percent Th-232. The program was never fully funded and the thorium sludges, initially stored in deteriorated drums, had to be repackaged several times. Building 21 was constructed in 1966 for the bulk storage these sludges. The roof panels were removed and the contents of the drums were emptied into the building. The empty drums were crushed and landfilled on site, but not near Building 21.

The thorium hydroxide and oxalate sludges themselves were received from United Lead Company's Middlesex Sampling Plant, Middlesex, N.J. (DOE 1993a). The monazite sands were treated with a caustic to "crack" the insoluble phosphate ore. The soluble sodium phosphate supernatant was removed and the remaining solids slurried with hydrochloric acid to a slightly acidic pH to solubilize the rare earth elements. It is assumed that disequilibrium would exist only if the monazite sludges (45 percent ThO_2 and 1 percent U_3O_8) had gone through some type of thorium extraction processing. According to a report written by F.C. Mead, Jr. in 1955 ("Development of the Monex Thorium Refining

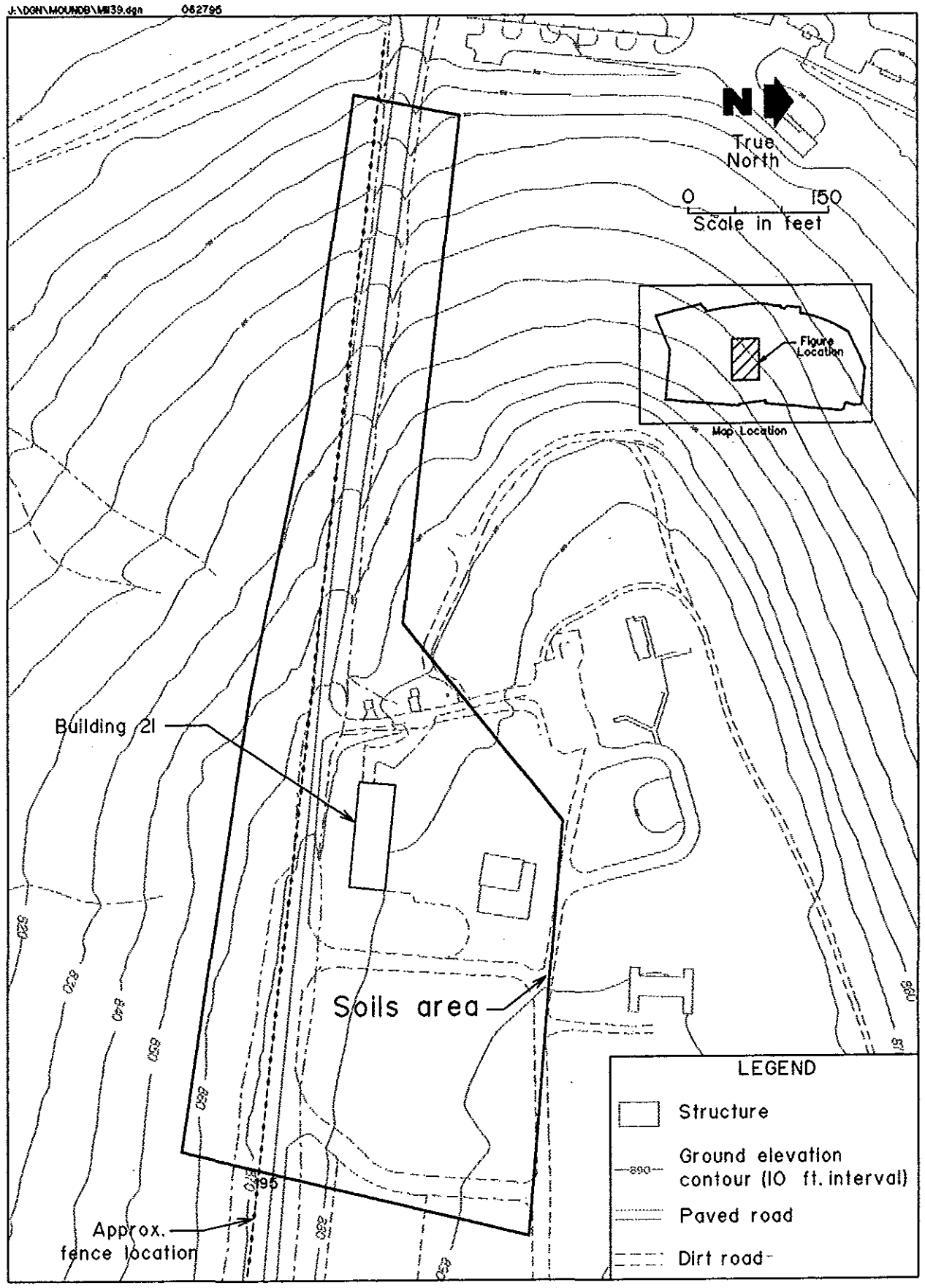


Figure 1.1. Overall site plan.

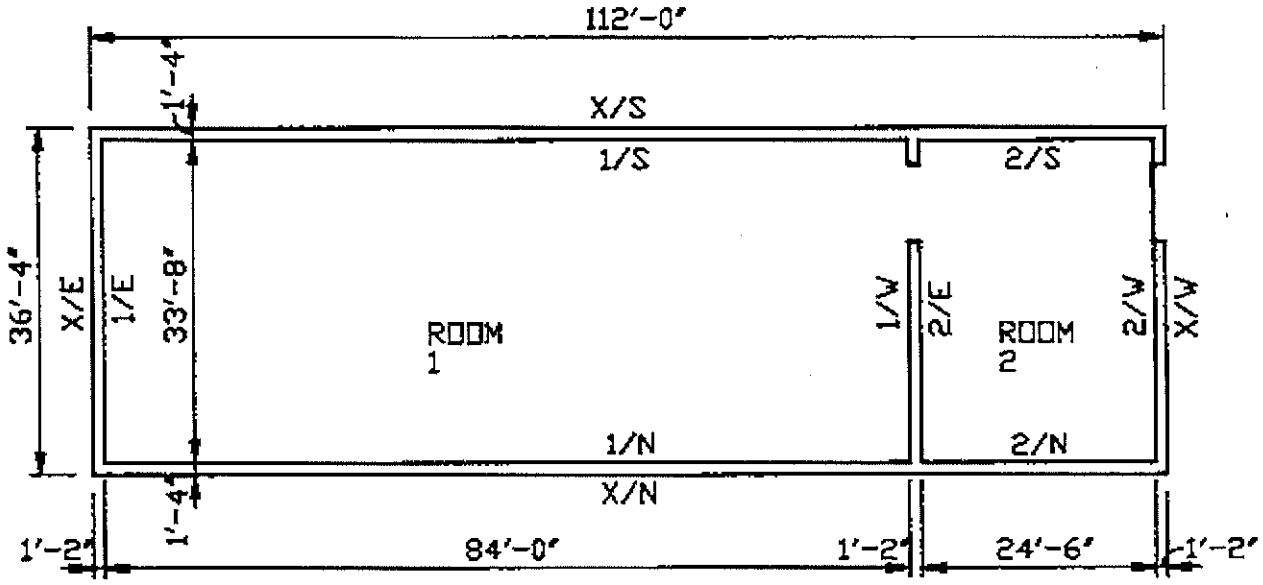


Fig 1.2 FlrPlan/6-28-95

Figure 1.2. Building 21 Floor Plan.

Process Through the Pilot Plant Stage"), these sludges only went through a phosphate extraction process which utilizes a caustic. The only avenue to obtain separation of the uranium daughter radionuclide products (thorium) from the U_3O_8 is by chemical separation such as dissolution in a high oxidation process (i.e. 2-4 molar nitic acid), followed by solvent extraction or fluorination. Separation of the daughters is not achievable in a high alkaline system and therefore equilibrium of the daughters can be assumed. After the latter were removed, the resulting sludges were shipped to the Mound Plant with about 55 percent water content. Redrumming of the drums from 1955 to 1966 resulted in much drying of the materials.

In 1974 the AEC sold the sludges to the General Atomics Company, which removed the material in 1975. In 1976, an initial cleanup of the building and surrounding soils was performed, and the interior was washed and painted. Beginning in 1976, the building was used to store drums containing a uranium concentrate from the Cotter Mill in Colorado. This material was used to extract protactinium-231 and thorium-230 that were used for civilian purposes by the Division of Basic Energy Sciences of the Department of Energy (DOE). The "Cotter Concentrates" material was doubly contained in rigid plastic liners inside the drums and is not considered a source of contamination of the building or area. The relatively low proportion of uranium decay products in samples collected as part of this investigation supports the latter assumption.

The outside area on the north side of Building 21 was used in the mid-1960s to 1970s as a temporary storage area for waste packages contaminated with plutonium-238. Deterioration of these packages resulted in soil contamination unrelated to the materials stored inside Building 21. Previous investigations reportedly found plutonium-238 contamination as high as 34,000 picocuries per gram (pCi/g) in shallow soil samples (DOE 1993b). Confirmation of remediation or cleanup in the area, or additional verification sampling was not identified (DOE 1993b).

SECTION 2

2. INVESTIGATIVE METHODS

This section provides a summary of field investigative methods for characterizing the nature and degree of possible chemical and radiological contamination of Building 21 and the surrounding soils. Field activities for the investigation followed the approved protocols outlined in the SAP. The field program consisted of collecting building and soil samples for field screening and laboratory analysis. Building and soil samples were field screened for volatile organic compounds (VOCs) and radioactivity according to the SAP (EG&G 1994).

2.1. BUILDING 21 INVESTIGATIVE METHODS

This section summarizes the methods that were used to obtain field screening results and to collect samples for radiological analysis of the interior and exterior surfaces of Building 21.

2.1.1. Summary of Field Activities for Building 21 Surfaces

This subsection describes in detail the Building 21 surface field screening, and the paint and concrete chip sampling completed in accordance with the SAP for exterior walls, roof, interior walls, floors, and ceiling. Unless otherwise stated, methods used for grid square location, grid square field screening, sample collection, sample containerization, grid square smear pad wipes, and sample nomenclature follow those specified in the subsections that follow.

2.1.1.1. Exterior Walls

For the Building 21 exterior walls, Micro-R readings were taken from 100 percent of the grid squares. Surface Alpha Scintillometer and G-M Pancake probe readings were taken from approximately 30 percent of the sample grid squares as specified in the SAP, and as identified in Figures A.1.1 through A.1.3 of the SAP. No paint or concrete chip samples were required or collected; therefore, sample surveying consisted of only surface readings.

Deviations from the SAP are summarized in Table 2.1. Table 2.1 also lists the document that supports or initiates a deviation from the SAP, and cites the Appendix of this report in which the referenced document is located.

Table 2.1. Exterior Wall — Deviations from the SAP

Change Document	Summary of Deviation	Appendix
Meeting Notes[b]	Requirement to take smear pad wipes from the exterior walls is removed.	F
PCN #3[a]	Grids omitted from the exterior walls Micro-R scan because they fall below ground surface (bgs) or in the Building 21 doorway. Grids which were screened with the Micro-R meter but not in the geometric center of each grid.	B
PCN #4[a]	No smear pad wipes will be taken from the exterior walls per Meeting Notes.	B
PCN #5[a]	Provides for relocation of all exterior grids which fall bgs or in the doorway.	B
PCN #6[a]	Grids which were screened with the G-M Pancake and Alpha Scintillometer probes but not in the geometric center of the grid.	B

[a] Planned Change Notification as assigned during investigation activities
[b] Meeting Notes from BWS&C (25 August 1994) - Author: Joseph Zimmerman

2.1.1.2. Roof

For the Building 21 roof, surface Alpha Scintillometer and G-M Pancake probe readings were taken from approximately 30 percent of the grid squares as specified in the SAP (Figure A.1.4). No Micro-R meter readings for the roof were required or taken. No paint or concrete chip samples were required or collected; therefore, sample surveying consisted of only surface readings.

Deviations from the SAP are summarized in Table 2.2. Table 2.2 also lists the document that supports or initiates a deviation from the SAP, and cites the appendix of this report in which the referenced document is located.

2.1.1.3. Interior Walls and Floors

For the Building 21 interior walls and floors, surface Alpha Scintillometer and G-M Pancake probe readings were taken from 100 percent of the grid squares, as specified in the SAP (Figures A.1.5 through A.1.9). Paint chip samples were collected from the wall grid squares and concrete chip samples were collected from the floor grid squares. Alpha scintillometer, G-M pancake probe readings ("exposed surfaces"), and smear pad wipes were then taken from 100 percent of the grid squares, as specified in the SAP. Micro-R meter readings for the interior walls or floors were not required or taken.

Table 2.2. Exterior Roof — Deviations from the SAP

Change Document	Summary of Deviation	Appendix
PCN #7[a]	Relocation of samples which fall within one meter of the roof's edge.	B
PCN #45[a]	Cancellation of the asbestos survey.	B
COR #1[c]	The exterior of the Building 21 roof will be gridded. Radiation measurements will be taken at the designate grid locations. No chip samples will be collected. No smear pads will be required.	H
Meeting Notes[b]	Requirement to take smear pad samples from the exterior roof is removed.	F

[a] Planned Change Notification as assigned during investigation activities
[b] Meeting Notes from BWS&C (25 August 1994) - Author: Joseph Zimmerman
[c] Change Order Request #1 - Roy F. Weston, Inc.

Deviations from the SAP are summarized in Table 2.3. Table 2.3 also lists the document that supports or initiates a deviation from the SAP, and cites the appendix of this report in which the referenced document is located.

Table 2.3. Interior Walls and Floor — Deviations from the SAP

Change Document	Summary of Deviation	Appendix
PCN #41[a]	Interior Building 21 grids not screened and samples not collected because locations coincide with Building 21 doorways.	B
Meeting Notes[b]	WESTON will not count smear pad wipes in the field, but rather will submit the samples to the EG&G Mound Project Engineer for counting by EG&G Mound. Requirement for interior chip samples to be submitted for analysis or counting is reduced from all 1023 samples to a number of samples to be identified by BWS&C after review of field screening data.	F
Distribution of Radiological Survey Data[c]	Reviews field screening results and selects specific samples for analysis. Allows for composite sampling of chips in lieu of individual analysis of samples.	E

[a] Planned Change Notification as assigned during investigation activities
[b] Meeting Notes from BWS&C (25 August 1994) - Author: Joseph Zimmerman
[c] Distribution of Building 21 Radiological Survey Data document from BWS&C - Author: Amy Snyder

2.1.1.4. Ceiling

For the Building 21 ceiling, surface Alpha Scintillometer and G-M Pancake probe readings were taken from approximately 30 percent of the available grids, as specified in the SAP (Figure A.1.10). No Micro-R meter readings for the ceiling were required by the SAP. No paint or concrete chip samples were required or collected; therefore, sample surveying consisted of only surface readings. Deviations from the SAP are summarized in Table 2.4. Table 2.4 also lists the document that supports or initiates a deviation from the SAP, and cites the Appendix of this report in which the referenced document is located.

Table 2.4. Interior Ceiling — Deviations from the SAP

Change Document	Summary of Deviation	Appendix
PCN #44[a]	Ceiling grids will not be marked, but will be located by corresponding floor grids.	B
PNC #46[a]	No chip samples will be collected from ceiling grids. Only surface readings with the GM-Pancake and Alpha Scintillometer will be taken.	B

[a] Planned Change Notification as assigned during investigation activities

2.1.2. Grid Square Location

A one-meter-square grid system was delineated on each of the exterior walls, the roof, each of the interior walls, and the floors of both rooms of Building 21. The origin of each wall grid was the wall's lower left corner. The origin of the roof grid was the northeast corner of the roof. For the floor and ceilings, the origin of the grid was the northeast corner of each room. The intersections of grid lines were marked in indelible ink with a cross, and the grid square number was drawn in the upper right hand corner of the grid square. This allows for future location of each grid square if additional sampling is required. The ceiling grid squares were not marked, but can be identified by the corresponding floor grid squares directly below.

2.1.3. Grid Square Radiation Screening Procedures

G-M pancake, alpha scintillometer and a micro-R meter were used to screen sample grid squares, but not all grids were screened with all instruments. One hundred percent of the grids on interior walls and floors were screened with the G-M pancake and alpha scintillometer. The ceilings received

30 percent screening as specified in the SAP. All of the exterior wall grids of Building 21 were screened with the micro-R meter. Approximately 30 percent of the exterior walls were additionally screened with the G-M pancake and alpha scintillometer instruments, as described below.

Background measurements were recorded 3 times daily at a concrete surface located approximately 75 feet west of Building 21.

For the interior surveys, the probes were alternately placed in the center of each grid square, and readings were recorded after the probes were allowed to remain in place for one minute. The G-M pancake probe was coupled with a ratemeter, so an integrated count rate was recorded. The alpha scintillometer probe was coupled with a portable scaler, so a one-minute scaled count rate was recorded. After the initial readings on interior walls and floors, a scraping of approximately 100 square centimeters (cm^2) area in the center of each grid square was exposed by removing the surface material. Additional one-minute direct counts were taken and recorded.

On the exterior walls, gamma measurements were taken with the Micro-R meter by slowly passing the meter over each one meter grid square taking care to pass over the entire grid in one minute. The average rate was noted and the results recorded. No scrapings were taken from the exterior walls.

2.1.4. Recalculation of Counts per Minute (cpm) to DPM/100 cm^2

The alpha scintillometer and G-M pancake instrument systems used for the field survey of Building 21 readout in counts per minute. In order to provide these data in distegrations per minute (dpm) per 100 cm^2 (dpm/100 cm^2) each value must be recalculated according to the specific instrument characteristics, as follows:

$$dpm/100\ cm^2 = (cpm - B_r) / E * 100/A$$

where: cpm = counts per minute;

B_r = background counts per minute (counted daily);

A = active probe area in cm^2; and

E = calibrated efficiency of instrument in cpm/dpm.

The minimum detectable activity (MDA) of the instruments used is calculated as follows:

$MDA = 2.71 + 4.65 \text{ square root } B_r t / (t * E * A/100)$

where: MDA = method detection limit;

B_r = background count rate in cpm;

t = counting time in minutes;

E = detector efficiency in cpm/dpm; and

A = active probe area in cm^2.

The background counts were recorded daily as location 999 for all instruments. The active probe areas for the alpha scintillometer and G-M pancake are 79 and 15.5 cm^2, respectively; the calibrated detector efficiencies are also 0.145 and 0.14 counts/disintegration, respectively.

2.1.5. Paint and Concrete Chip Sample Collection

Upon completion of the initial radiological field screening on the interior and exterior of Building 21, the raw data results were given to EG&G Mound for review and interpretation. As a result of this data review, directions for sampling were provided to WESTON in a document written by BWS&C entitled, "Distribution of Building 21 Radiological Survey Data" (included as Appendix E). In accordance with the specifications of this document, 29 composite and 50 individual paint and concrete chip samples were submitted to the laboratory for full spectrum gamma analysis.

Material samples were collected from the interior walls and floors of Building 21. Paint chip samples were removed from the walls using razor blade knives and the scrapings collected in plastic bags. Concrete chip samples were removed from the floors with a hand-held sledge hammer. The concrete chip samples consist largely of what appears to be a thin (1/8-inch) coating material that was spread or perhaps painted over the concrete. The concrete itself was incidentally included in the coating samples.

2.1.6. Material Sample Containers

Paint chip samples from the walls and concrete chip samples from the floors were collected and immediately placed in one-quart, plastic ziplock baggies at the time of their removal. The bags were labeled with the sample numbers, as described below.

2.1.7. Grid Square Smear Pad Wipes

Smear pad samples were collected from interior wall and floor grids after scraping the paint surface and after the additional instrument readings. The smear pad samples were collected using Whatman #1 4.25 cm filter paper supplied by EG&G Mound. Each filter paper was rubbed over 100 cm^2 in the exposed area in a grid, placed in a manila envelope and labeled with the grid number, and then delivered to the EG&G Mound counting laboratory for analysis.

2.1.8. Sample Nomenclature

Sample nomenclature for building samples is described as **X/Y(ZZZ)**

where: X = Area Identifier

- 1 - Room One Interior (large room)
- 2 - Room Two Interior (small room)
- X - Exterior

Y = Surface Identifier

- F - Floor
- C - Ceiling
- N - North Wall
- S - South Wall
- E - East Wall
- W - West Wall
- R - Roof

Z = Grid Number

- 001 to 999

2.2. SURROUNDING SOILS INVESTIGATIVE METHODS

This section summarizes the methods used for field screening and sample collection for the soils surrounding Building 21.

Methods used for grid square location, grid square field screening, sample collection, sample containerization, and sample nomenclature are described below. Deviations from the SAP are summarized in Table 2.5. Table 2.5 also lists the document that supports or initiates a deviation from the SAP, and cites the Appendix of this report in which the referenced document is located.

Table 2.5. Surrounding Soils — Deviations from the SAP

Change Document	Summary of Deviation	Appendix
PNC #1[a]	Adjustment of soil grid layout to true North.	B
PCN #2[a]	Grids omitted from soils Micro-R scan.	B
PCN #8[a]	Soil sampling locations which did not have a third interval sample collected.	B
PCN #9[a]	Soil sampling locations which did not have a second interval sample collected.	B
PCN #10[a]	Soil samples not collected because sample locations fall outside EG&G Mound fenceline or under Building 21.	B
PCN #11-40[a]	Soil sample locations moved because of obstructions including asphalt roadways, concrete drainage channels, and building structures.	B
PCN #42[a]	Soil sample grids moved at request of D&D Project Engineer.	B
PCN #43[a]	Elimination of the use of the GeoProbe for soil sampling.	B

[a] Planned Change Notification as assigned during investigation activities

2.2.1. Grid Square Location

The surrounding soils area was divided into grids of 10 meters by 10 meters squares each. In accordance with the SAP, 70, actual sampling grids were located using measuring tapes and a Brunton compass (Figure 2.1). Wooden stakes were driven in the corners and center of each sample grid square. The sample grid number was written directly on each center stake with an indelible marker.

2.2.2. Grid Square Field Screening

Prior to sampling activities, a general area screening of each sample grid square was performed by use of a Micro-R meter. Screening consisted of passing the meter, held at waist level, slowly over each grid and recording the average reading.

2.2.3. Sample Collection

Soil samples were collected for radiological analysis from the four corners and center of each sample grid square identified in the SAP and in Figure 2.1. Chemical analysis was performed only on samples collected from the center of each sample grid square.

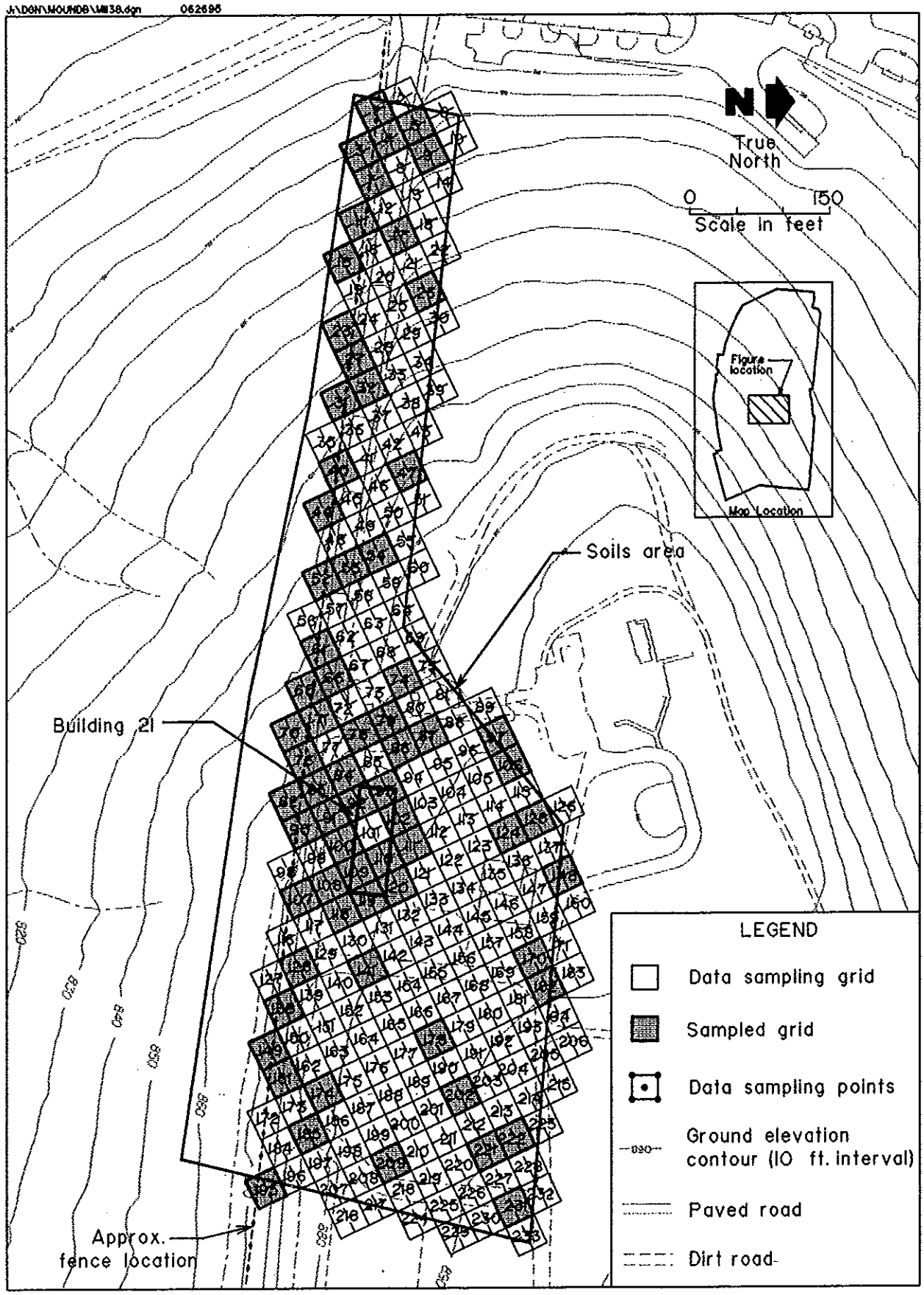


Figure 2.1. Location of soil sampling grid.

Soil samples were collected from three subsurface intervals:

- Interval I -0 to 12 inches below ground surface.
- Interval II -12 to 24 inches below ground surface.
- Interval III -24 to 36 inches below ground surface.

These samples were collected with a 4.25 inch bucket hand auger. The auger was twisted down to 12 inches, retrieved, and the soil inside the bucket was dispensed into a stainless steel mixing bowl. The sample was then mixed thoroughly and transferred to the sample containers with a stainless steel scoop. If rock was encountered before a depth of 36 inches was reached, the soil sample was collected at the soil/rock interface, as required by the SAP.

Water samples were collected in the form of equipment blanks and trip blanks, as described in Section 4, for Quality Assurance/Quality Control (QA/QC) purposes only.

2.2.4. Sample Containers and Analytical Requests

Table 2.6 provides details of container and analytical requirements for all collected radiological soil samples. Table 2.7 shows container and analytical requirements for all collected radiological water samples. Table 2.8 shows container and analytical requirements for all soil samples collected for chemical analysis. Table 2.9 shows container and analytical requirements for all water samples collected for chemical analysis.

2.2.5. Sample Nomenclature

Sample nomenclature for soil samples is described as **WW - X/Y(ZZZ)**

where: WW = Sample Location within each grid square

NE - Northeast corner

NW - Northwest corner

SE - Southeast corner

SW - Southwest corner

CC - Grid Center

X = Type of Sample

0 - Investigative

1 - Duplicate

2 - Equipment Blank

3 - Trip Blank

Y = Interval

1 - 0 to 12 inches

2 - 12 to 24 inches

3 - 24 to 36 inches

Z = Grid Number

001 to 999

Table 2.6. Containers and Analyses — Radiological Soil Samples

Analysis	# Containers/Volume/Type	Preservative
Gamma, Th, U, Pu	One 1000 ml Polyethylene	None

Table 2.7. Containers and Analyses — Radiological Water Samples

Analysis	# Containers/Volume/Type	Preservative
Gamma	One 1000 ml Polyethylene	HNO_3
Th	One 1000 ml Polyethylene	HNO_3
U	One 1000 ml Polyethylene	HNO_3
Pu	One 1000 ml Polyethylene	HNO_3

Table 2.8. Containers and Analyses — Chemical Soil Samples

Analysis	Containers	Preservative
Intervals I, II, and III		
pH, Cyanide, Total Organic Carbon (TOC), Total Organic Halides (TOX)	One 500 ml Glass	Cool
Sulfide	One 250 ml Glass	Zinc Acetate/Cool
Interval II Only		
VOCs	One 60 ml Glass	Cool
Metals, Phenols	One 250 ml Glass	Cool
SVOC, Polychlorinated Biphenyls (PCB)	One 500 ml Glass	Cool

Table 2.9. Containers and Analyses — Chemical Water Samples

Analysis	Containers	Preservative
VOC	Two 40 ml Glass	HCl/Cool
PCB	One 1000 ml Glass	Cool
TOC	One 40 ml Glass	H_2SO_4/Cool
SVOC	One 1000 ml Glass	Cool
Phenols	One 1000 ml Glass	H_2SO_4/Cool
Metals	One 1000 ml Poly	HNO_3
Cyanide	One 500 ml Poly	NaOH
pH	One 250 ml Poly	Cool
Sulfide	One 250 ml Poly	NaOH
TOX	One 250 ml Poly	H_2SO_4

SECTION 3

3. RESULTS

This section summarizes the results of the Building 21 and Surrounding Soils field investigation. The objective of this investigation is to present and evaluate radiological field screening and laboratory analytical data for purposes of planning the D&D of Building 21 and its surrounding soils. The data presented are not of the quality needed to characterize the facility for waste management purposes in conjunction with decontamination. In accordance with the SAP, the field screening data is evaluated against applicable DOE, EG&G and other environmental statutes to identify potential reporting obligations, health and safety concerns and other factors involved with planning the D&D operations. The data are not reviewed in the context to exclude areas from further characterization or to freely release the facility or any part of the facility in accordance with DOE Order 5400.5.

As part of the data evaluation, results of radiological and chemical analyses are compared to evaluation criteria. The criteria included as part of this investigation include:

- Laboratory reporting limits - The detection limit is the lowest concentration at which a compound can be detected in a sample. The reporting limit is the lowest concentration at which the amount of that contaminant in the sample can be accurately and reliably quantified. Because values falling between these two limits are subject to large uncertainty, they were considered inconclusive and were not evaluated as part of this investigation.

- Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and Resource Conservation and Recovery Act (RCRA) regulations. These regulations for chemical constituents, cited in Section 6 of the SAP, are only applicable to a unique process waste or environmental media contaminated by a process waste, and do not apply to the analytical results of this investigation.

- As Low As Reasonably Achievable (ALARA) guidelines - These guidelines establish a cleanup level of 25 pCi/g for plutonium-238.

- DOE Order 5400.5 - This order provides release criteria for surface contamination and generic guidelines for residual concentrations of radium-226, thorium-230 and thorium-232 (5 pCi/g surface and 15 pCi/g subsurface). These guidelines are assumed to be general interest to the data presented and a rigorous analysis of the compliance is beyond the scope of this investigation.

- Ohio Environmental Protection Agency (OHEPA) action level for PCBs concentrations in soil of 50 milligrams per kilogram (mg/kg).

- OHEPA soil pH corrosivity guideline - Establishes a characteristic of corrosivity for soil having a Ph value less than 2.5 or greater than 12.

- EG&G Mound Operable Unit 9 Background Soils Investigation Report (DOE 1994a) - This report established background concentrations of select chemical and radiological

constituents in soils near EG&G Mound. The 95 percent sample tolerance level results were used for comparative purposes (selected tables are reproduced in Appendix A).

- U.S. Environmental Protection Agency (USEPA) (EPA 1995) Region III Risk-Based Concentration Tables (USEPA 1995)- These tables establish soil screening levels for the protection of ground water and air.
- Land Disposal Restrictions - These regulations, cited in 40 Code of Federal Regulations (CFR) Part 268 (CFR 1991), establish criteria by which a waste can be reviewed for disposal in a permitted landfill or land application process.

3.1. BUILDING 21 RESULTS

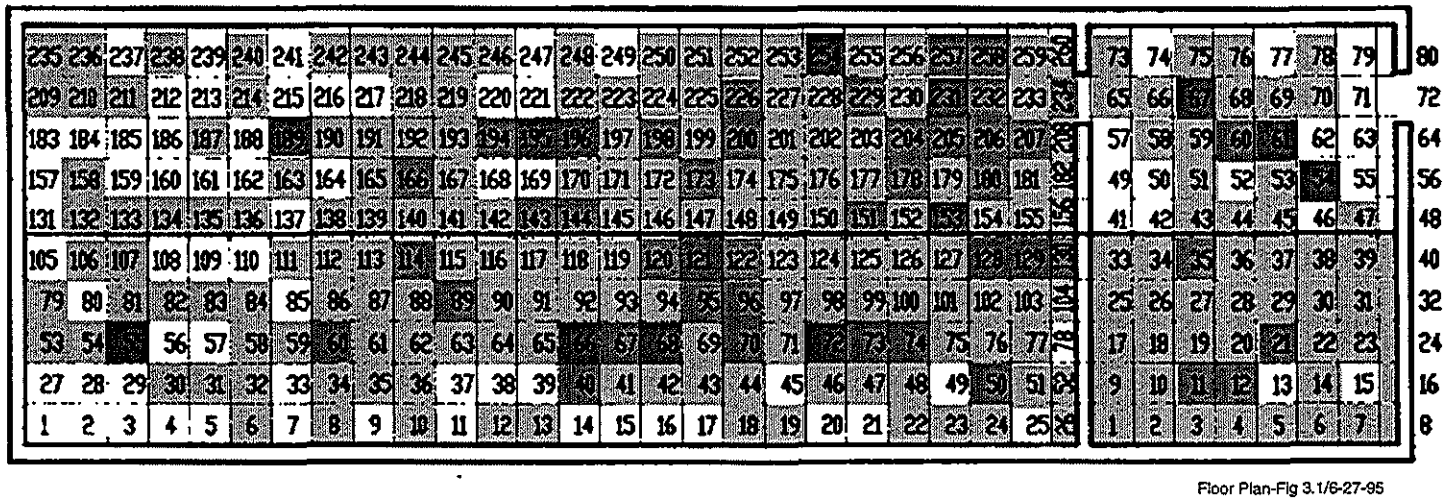
3.1.1. Grid Square Field Screening Results

Field screening of the interior and exterior parts of Building 21 and recalculation of the data were conducted in accordance with the methods described in Section 2.1.4. Results are tabulated in and displayed graphically in Appendix A. Results for each of the G-M pancake, alpha scintillometer and micro-R meter are discussed below.

3.1.1.1. FIELD SURVEYS WITH ALPHA SCINTILLOMETER

The background counts for the alpha scintillometer varied from zero (0) to over 20 counts on some occasions. No specific explanation is known for the relatively high background readings. Perhaps, radon-220 buildup on the probe surface or in the area used for background. As such, the MDA calculated for the instrument used during the Building 21 survey ranged from 24 to 253 dpm/100 cm^2, the mean is 196 dpm/100 cm^2 total alpha radiation, well below the DOE average surface contamination guideline of 1,000 dpm/100 cm^2 for alpha emitters. There may well be areas below the 200 dpm/100 cm^2 guideline (DOE Order 5400.5) for removable surface contamination, but this was not investigated.

To evaluate the alpha scintillometer field surveys, the data are plotted on the wall and floor maps of Building 21. Figure 3.1 shows the distribution of the total alpha contamination of the floor of Building 21, all other maps are provided in Appendix A. All data points above the MDA are plotted. Each of the data points is assumed to be representative of the grid square in which it was taken and as such provides an estimation of the alpha contamination of that surface. This method of estimation provides a simplistic representation of the total surface alpha contamination on the Building 21 walls and floors. Since alpha particles are rapidly attenuated in a solid matrix (typically within a few microns) all of the alpha contamination is assumed to be on the surfaces measured. No estimates of the depth of alpha contamination are possible with the present data set.



Legend

- ≥ 10,000 dpm/100 cm²
- 5,000 - 10,000 dpm/100 cm²
- 1,000 - 5,000 dpm/100 cm²
- < 1,000 dpm/100 cm²

Figure 3.1. Distribution of Total Alpha Contamination on the Floor of Building 21.

A total of 88.44 microcuries of total alpha contamination is estimated on the Building 21 interior surfaces. No detections above the MDA are noted on the exterior walls, roof or ceilings of Building 21. Of the total, 29.66 microcuries appear to be contained in the paint layers, and 58.78 microcuries in the concrete surfaces exposed by scraping (Appendix A). Most of the surface alpha contamination appears to be on the floors and lower portions of the interior walls. An area of approximately 5 square meters (m^2) in the southwest corner of Room 1 contains contamination as high as 36,600 dpm/100 cm^2 total alpha under the surface coating, the highest reading taken during the field survey. Other isolated areas as high as 27,600 dpm/100 cm^2 total alpha occur on top of the paint or surface coatings the floor of Room 2 and the lower parts of the walls of Room 1.

Frequency distribution plots of the total alpha data set are provided in Appendix A. The mean for the painted and scraped surfaces are 1038 and 2305 dpm/100 cm^2, respectively. Standard deviation of the same data sets are 1497 and 3645 dpm/100 cm^2. The coeffients of variation for the same data sets are 1.44 and 1.58, all indicating that the total alpha contamination, as measured is not normally distributed. Figures 3.2 and 3.3 depict the frequency distribution of all alpha radiation measurements on the painted and exposed (scraped) surfaces, respectively.

3.1.1.2. FIELD SURVEYS WITH G-M PANCAKE

The background counts for the G-M pancake instrument varied from approximately 60 to 90 cpm, all reasonable for the area. As such, the MDA calculated for the instrument used during the Building 21 survey ranged from 1784 to 2268, the mean is 2135 dpm/100 cm^2 total beta/gamma radiation, well below the DOE average surface contamination guideline of 5,000 dpm/100 cm^2 (DOE Order 5400.5) for beta-gamma emitters. There may well be areas below the 1,000 dpm/100 cm^2 guideline for removable surface contamination (DOE Order 5400.5), but this was not investigated.

To evaluate the G-M pancake field surveys, the data are plotted on the wall and floor maps of Building 21 (Appendix A). All data points above the MDA are plotted. Each of the data points is assumed to be representative of the grid square in which it was taken and as such provides an estimation of the beta/gamma contamination of that surface. This method of estimation provides a simplistic representation of the total beta/gamma contamination on the Building 21 walls and floors. Gamma radiation and energetic beta radiation can penetrate solid matrices, suggesting that the radiation measured could come from some shallow depth within the concrete walls and floors, including the surface. However, no estimate of the depth of total beta/gamma contamination cannot be estimated from the field measurements.

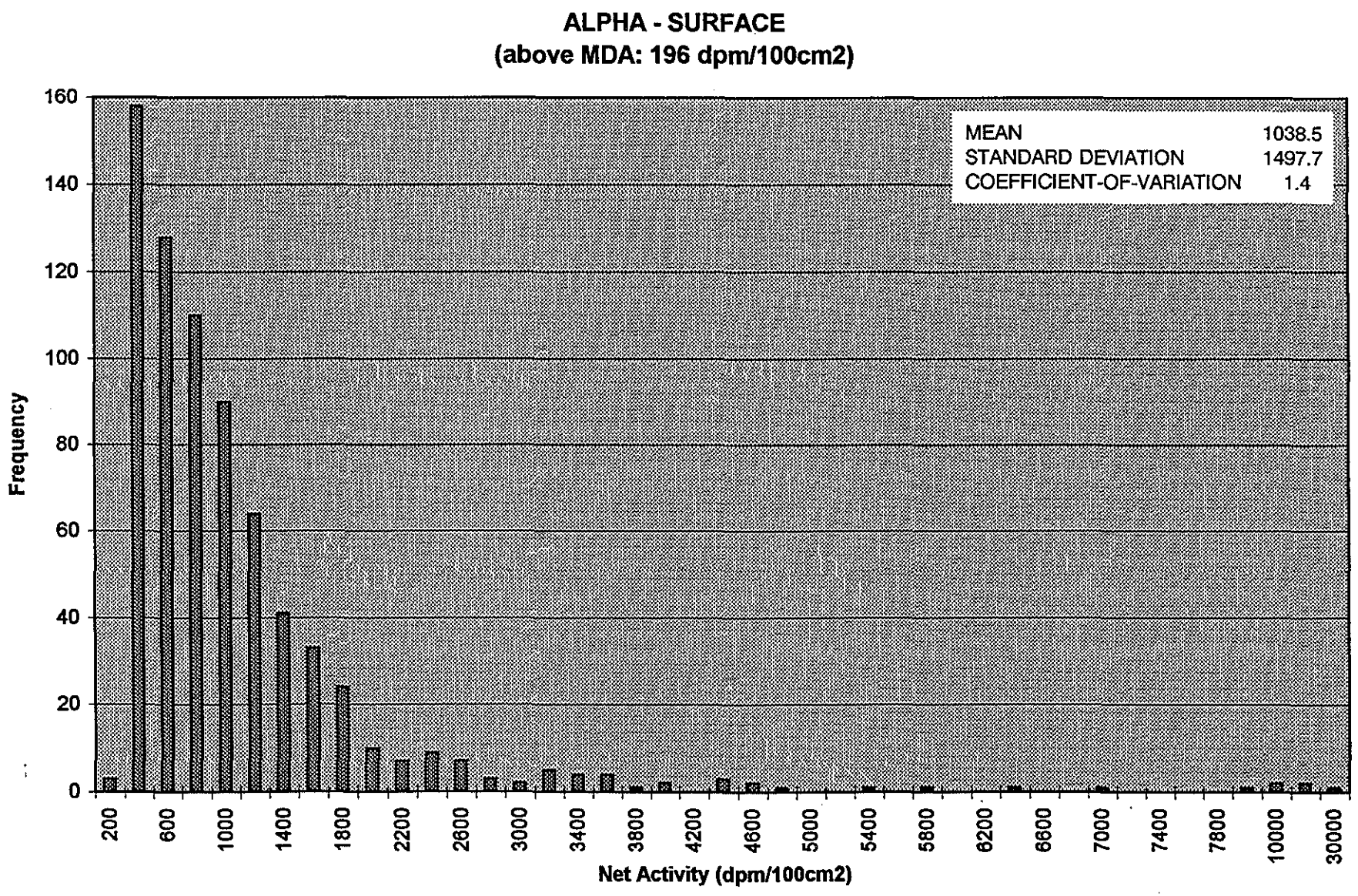


Figure 3.2. Frequency distribution histogram of surface alpha radiation measurements - Building 21.

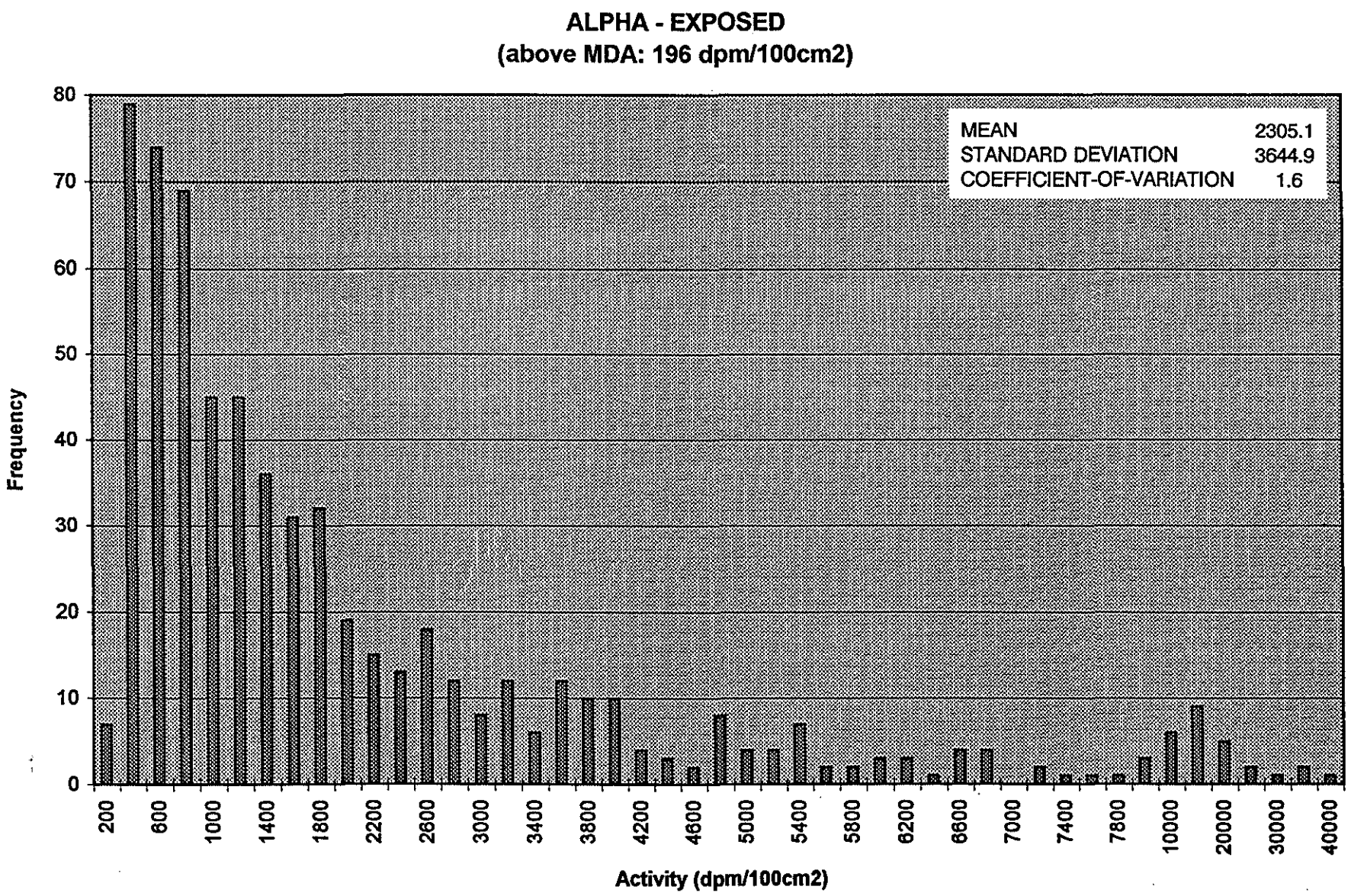


Figure 3.3. Frequency distribution histogram of exposed surface alpha radiation measurements - Building 21.

A total of 438.5 microcuries of beta/gamma contamination is estimated on the Building 21 surfaces. The rare, isolated detections above the MDA on the exterior walls and roof of Building 21 were not included in the estimate. Of the total, 315.6 microcuries are measurable above the paint layers (Appendix A). Most of the measurable beta/gamma contamination appears to be on the floors and lower portions of the interior walls. An area of approximately 10 m^2 in the southwest corner of Room 1 contains contamination as high as 595,600 dpm/100 cm^2 beta/gamma under the surface coating, the highest reading taken during the field survey. Of this, 116,400 dpm/100 cm^2 beta/gamma is measurable above the paint or surface coating. Other isolated areas as high as 111,600 dpm/100 cm^2 beta/gamma occur on top of the paint or surface coatings the floor and south wall of Room 1. This pattern and relative high level of contamination correlated with the alpha surface survey data described above.

Frequency distribution plots of the total beta/gamma data set are provided in Appendix A. The mean for the painted and scraped surfaces are 14,508 and 28,248 dpm/100 cm^2, respectively. Standard deviation of the same data sets are 46,956 and 58,436 dpm/100 cm^2. The coeffients of variation for the same data sets are 3.24 and 2.07, all indicating that the total beta/gamma contamination, as measured is not normally distributed. Figures 3.4 and 3.5 depict the frequency distributions of all the G-M pancake (beta/gamma) measurements or the painted and exposed (scraped) surfaces, respectively.

3.1.1.3. FIELD SURVEYS WITH MICRO-R METER

The micro-R meter reads out directly micro-roentgen per hour (μR/hr), therefore no data conversion is necessary. The exterior parts of Building 21 were surveyed in accordance with the methods described in Section 2. To facilitate evaluation, the data are plotted on the exterior wall maps. Figure 3.6 shows the distribution of micro-R measurements on the north exterior wall of Building 21, all other maps are provided in Appendix A. The background measurements varied from 5 to 8 μR/hr.

Results of the field survey indicate that the upper parts of the exterior walls of Building 21 possess slightly elevated radioactivity. The north exterior wall contains an area of approximately 17 m^2 with radiation slightly greater than 25 μR/hr. Most of the exterior walls of the building possess radiation levels between 9 and 15 μR/hr.

Frequency distribution plots of the micro-R data set are provided in Appendix A. The mean for the exterior walls surfaces is 12.19 μR/hr. Standard deviation of the same data sets is 12.32 μR/hr. The coeffient of variation for the same data set is 1.01, indicating that the total micro-R contamination, as measured is normally distributed.

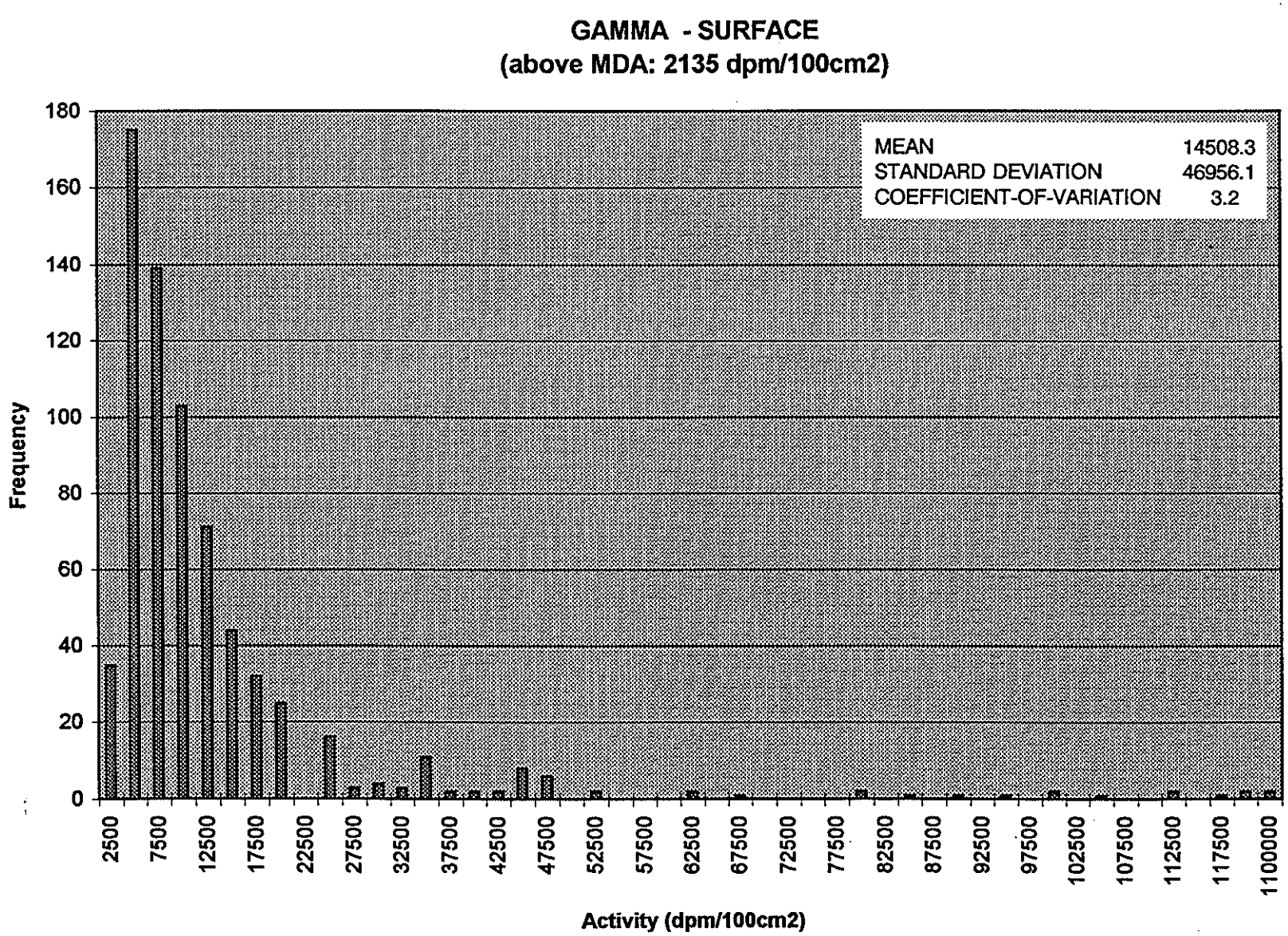


Figure 3.4. Frequency distribution histogram of surface beta/gamma radiation measurements - Building 21.

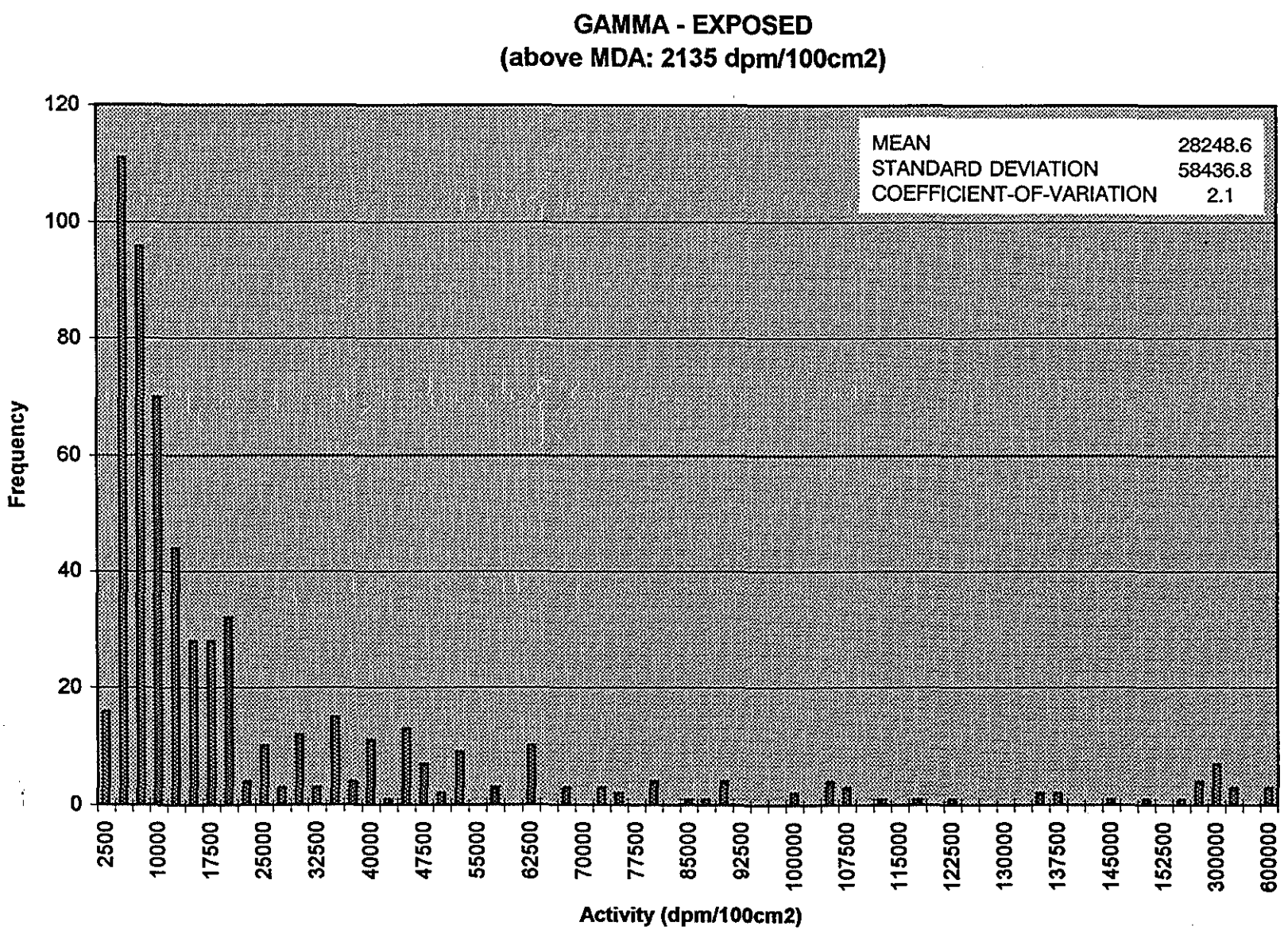


Figure 3.5. Frequency distribution histogram of exposed surface beta/gamma radiation measurements - Building 21.

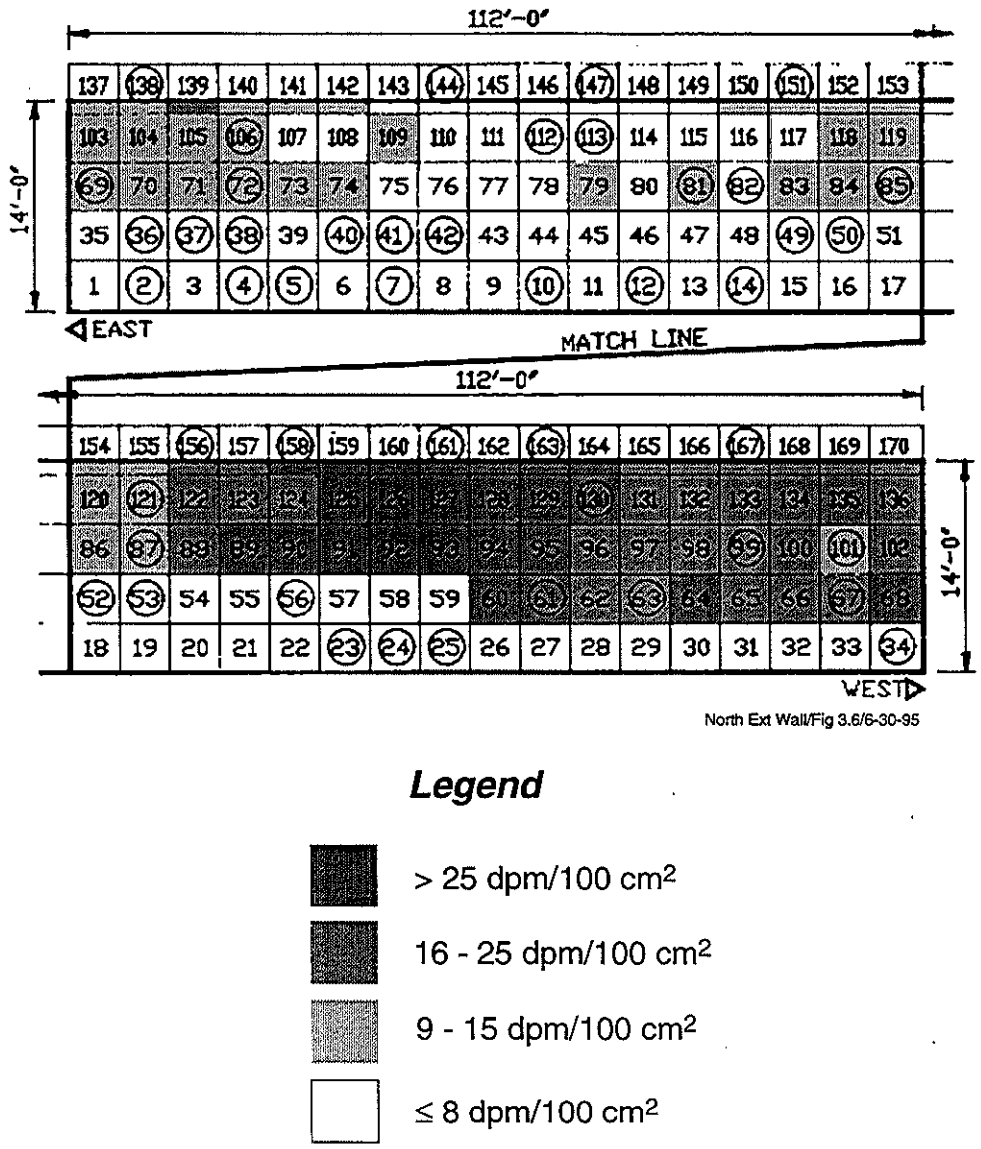


Figure 3.6. Distribution of the Micro-R measurements of the North Exterior Wall of Building 21.

3.1.2. Paint and Concrete Chip Sample Analytical Results

Full spectrum gamma spectroscopy analyses were requested for 29 composite and 50 individual samples from the interior of Building 21. Table 3.1 is a list of the isotopes that were detected at activities above the laboratory MDA, the number of times each isotope was detected, and the maximum activity of each isotope. A summary of all gamma spectroscopy values greater than the MDA is provided in Appendix A. A complete tabulation of all the gamma spectroscopy results for the samples collected in Building 21 is presented in Appendix D. Because of statistical uncertainties inherent in the analytical method, radiological activity measurements that fell below the laboratory minimum detectable activity (MDA) were considered "non-detects," and no further evaluation of data results in that range was made.

Table 3.1. Building 21 Paint and Concrete Chip Sample Gamma Spectroscopy Detection Results

Nuclides Detected	Number of Detections	Maximum Reported Conc. (pCi/g)	$\bar{X}$
Ac-227DA	2	88.9	69.2
K-40	4	37.3	
Ra-224DA	85	2160.0	
Ra-226DA (12 Ci)	65	25.1	
Th-232DA	85	1570.0	243.3

DA: Reported nuclide activity derived by calculation from activity of daughter radionuclide.

CAT.3 - Threshold Value.

These samples indicate actual surficial contamination levels on the floors and walls of Building 21. Radioactive contamination with thorium-232 is generally indicated to be higher on the lower part of the walls than the floors. Thorium-232 occurs as high as 1570 pCi/g thorium-232 in 1 m^2 on the north wall of Room 1 and between 500 and 1,000 Pci/g over 4 m^2 on the south wall. The floor, however, appears to exhibit typical thorium-232 contamination levels <500 Pci/g (Appendix A).

Radium-226 also appears to exhibit it highest contamination levels on the walls rather than the floors. Contamination levels of 25.1 pCi/g on the north wall of Room 1 and 20.9 pCi/g on the south wall are higher than the floors that exhibit typical contamination levels of radium-226 below 20 pCi/g.

3.1.3. Estimate of Isotopic Inventory of Building 21

The total alpha contamination of Building 21 provides a means to estimate the contributions from various isotopic species. However, the estimate is wrought with uncertainty and assailable assumptions. Since analysis was not performed on individual members of each of these two decay series, it can be conservatively assumed that both series are in equilibrium with the radionuclides that have been analyzed as having the highest radioactivity concentration (Thorium-232 and Radium-226).

Additionally:

- Since radium-224 has a half-life of only 3.6 days, it is expected that radium-224 would be in equilibrium with the nuclides preceding it in the series, thorium-228 (half-life = 1.9 years) and radium-228 (half-life = 6.7 years).

- The ratios of radium-224 to radium-226 from the paint chip analyses indicate a mean of approximately 48, indicating that radium-224, and its associated decay chain. from thorium-232 is 48 times more abundant than radium-226 and its associated decay chain.

- The radium-226 actually occurs due to the small percentage of uranium oxide in the original sludges and not as a separate radium source. This assumption is supported by the oxide analyses that indicated that the thorium sludges contained about 1 weight percent uranium oxide (U_3O_8) with 35 to 45 weight percent thorium oxide (ThO_2). The gamma spectroscopy analyses, however are neutral, as the analyses do not indicate the presence of any species higher in the uranium decay chain, but the laboratory was not absolutely required to report them if they were present.

- The alpha decay chain is totally interrupted by the escape of radon species and no alpha emitting isotopes occur lower in either of the decay chains.

- It is assumed that the alpha species comprising the thorium-232 decay chain contributes 96 percent of the measured total alpha activity, and that the alpha species comprising the uranium-238 decay chain contributes 4 percent of the measured total alpha activity.

- The species in the thorium and uranium decay chains are in secular equilibrium with the radium isotopes measured. An assumption difficult to defend without additional data that may be available from the gamma spectroscopy analyses.

- The isolated detections of thorium-227, as actinium-227 are ignored as inconsistencies.

- The alpha scintillometer measurements provide an estimate of the total surface alpha contamination.

With these in mind, the thorium-232 decay chain above radon-220 contains 3 alpha emitting isotopes, thorium-232, thorium-228 and radium-224. Each of these contribute equally, or 32 percent each of the total of 88.44 microcuries (28.3 microcuries each alpha radiation). The uranium-238 decay chain above radon-222 contains 4 alpha emitting isotopes, uranium-238, uranium-234, thorium-230 and

radium-226. Each of these contribute equally, or 1 percent each of the total of 88.44 microcuries (0.88 microcuries each alpha radiation).

3.1.4. Results of Swipe Pad Analyses of Building Interior Surfaces

Wipe/smear pads were taken on the interior walls and floors of Building 21 after the surface paint was scraped and the exposed surface radiation measured. The analyses were performed by EG&G Mound and the results reported to WESTON in hard copy format. Appendix C presents copies of the analyses. At this writing the analyses are not available in electronic format, so no statistical analysis were performed. A cursory review of the data however, indicates that the results of removable alpha and beta contamination are several orders of magnitude below the total alpha and beta contamination measured during the field surveys. Results for wipes counted for alpha radiation indicate that activities generally range from approximately 0 to >100 dpm/100 cm^2 and samples that exceed the alpha activity action level of 20 dpm/100 cm^2 are common. The highest alpha activity measured was 1219 dpm/100 cm^2 on the north wall of Room 1 (1/N 009). The corresponding wipe analysis of the grid with the highest alpha field measurement (36,600 dpm/100 cm^2 at 1/F 153) was 46.8 dpm/100 cm^2. Results for wipes counted for beta radiation indicate that activities generally range from approximately 0 to <100 dpm/100 cm^2 and only 1 sample exceeds the beta activity action level of 200 dpm/100 cm^2. The highest beta activity measured was 437 dpm/100 cm^2 on the north wall of Room 1 (1/N 009). The corresponding wipe analysis of the grid with the highest beta/gamma field measurement (595,600 dpm/100 cm^2 at 1/F 205) was 7.7 dpm/100 cm^2. These data indicate that the radiological contamination associated with the interior surfaces of Building 21 is fixed and cannot be easily removed by simple scrubbing of the surfaces. The removable radiological contamination measured is largely below the 200 and 1,000 dpm/100 cm^2 release criteria for alpha and beta emitters, respectively, per DOE Order 5400.5.

3.2. SURROUNDING SOILS RESULTS

3.2.1. Results of Radiological Field Screening

Micro-R field screening readings were taken from each of the 232 soil sampling grid squares. Background levels, which were determined by taking Micro-R readings on EG&G Mound site away from the investigation area, ranged from 6 to 30 Micro-R/hr. Only four sample grids showed gamma radiation levels that exceeded background levels as measured by the Micro-R meter. These grid squares are listed in Table 3.2. All field screening results for the surrounding soils are tabulated in Appendix A.

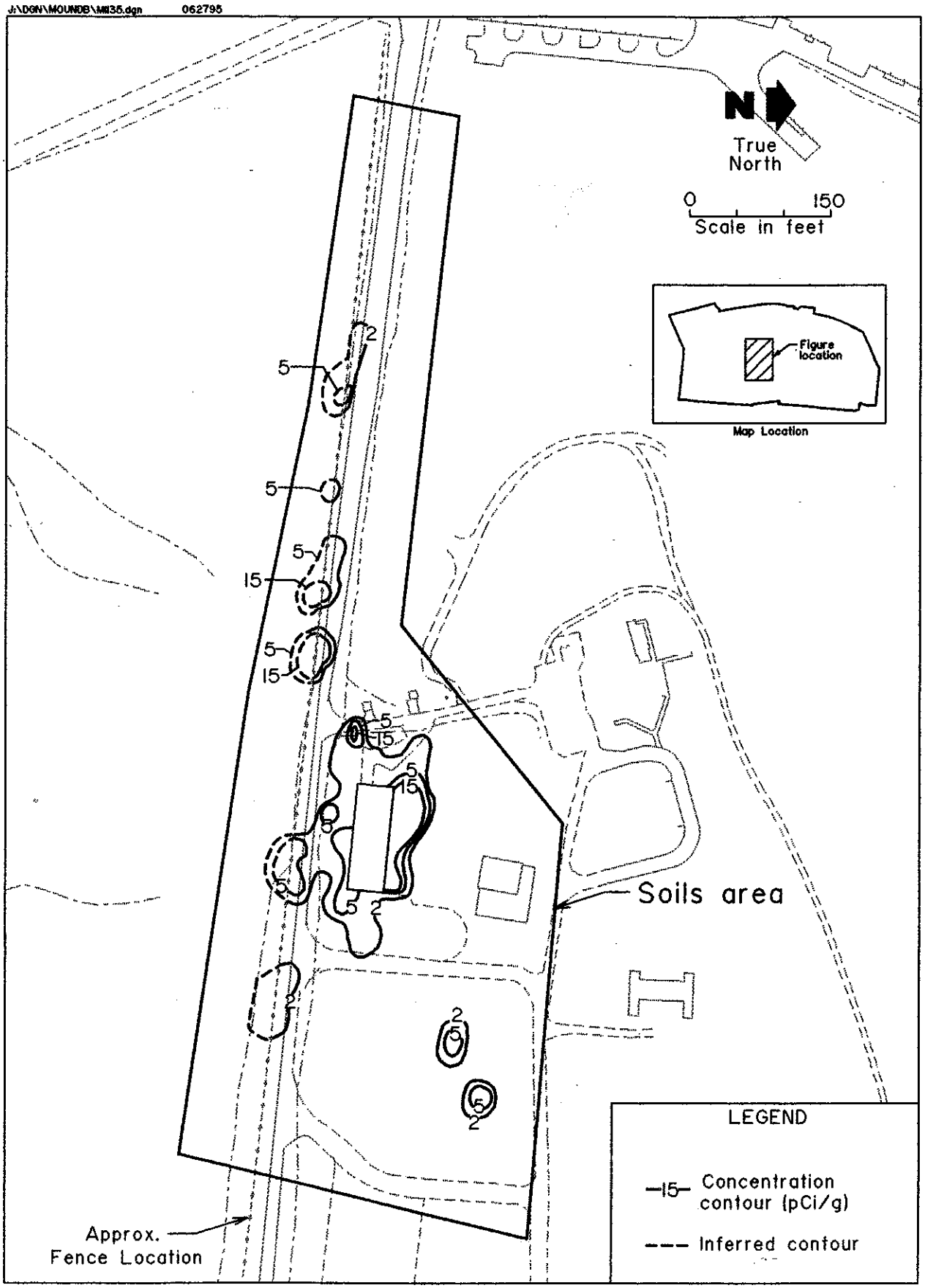


Figure 3.7. Distirbution of thorium-232 0"-12" depth.

Table 3.2. Surrounding Soils Micro-R Field Screening Measurements Above Background

Grid Number	Micro-R Reading (Micro-R/hr)
102	48
153	100
176	240
188	70

Micro-R/hr: Micro-Roentgen per hour.

3.2.2. Results of Radiological Analyses

The laboratory performed full spectrum gamma and alpha spectroscopy on 426 soil samples. The laboratory reported alpha spectroscopy results for only 5 percent of the samples, as required by the SAP. Summaries of the positive detections from the gamma and alpha spectroscopic analyses are provided in Appendix A. A complete tabulation of all gamma and alpha spectroscopic analyses for the surrounding soil samples is presented in Appendix D.

Review of the results of the gamma and alpha spectroscopic analyses indicate that the 2 data sets agree very well. Values are reported in pCi/g in both data sets, and individual analyses of samples taken at identical locations are within 10 percent of each other. In comparison with background values determined as part of the ER Program, all cesium-137, uranium, and radium-226 values are within the upper 95 percent sample tolerance limit expected of naturally occurring soils in the area of EG&G Mound. Comparison of ratios of radionuclides with the uranium-238 decay chain, as determined by alpha spectrometry, indicates that uranium-234, thorium-230 and radium-226 are present in approximately similar activities indicating that they are in secular equilibrium. No additional evaluation of these data were performed as part of this report.

Analytical results of thorium-232 indicates that it is present in activities that exceed the upper 95 percent sample tolerance limit expected of naturally occurring soils in the area of EG&G Mound. Review of the ratios of thorium-228 and thorium-232 from alpha spectroscopy indicate that they are present in approximately similar activities suggesting that they are in approximate secular equilibrium. Figures 3.7 and 3.8 display the approximate distribution of thorium-232 in the soils surrounding Building 21 at surface (0-12 inches) and shallow depths (12-24 inches), respectively. From these data it is calculated that approximately 23, 436 microcuries of thorium-232 are present above background

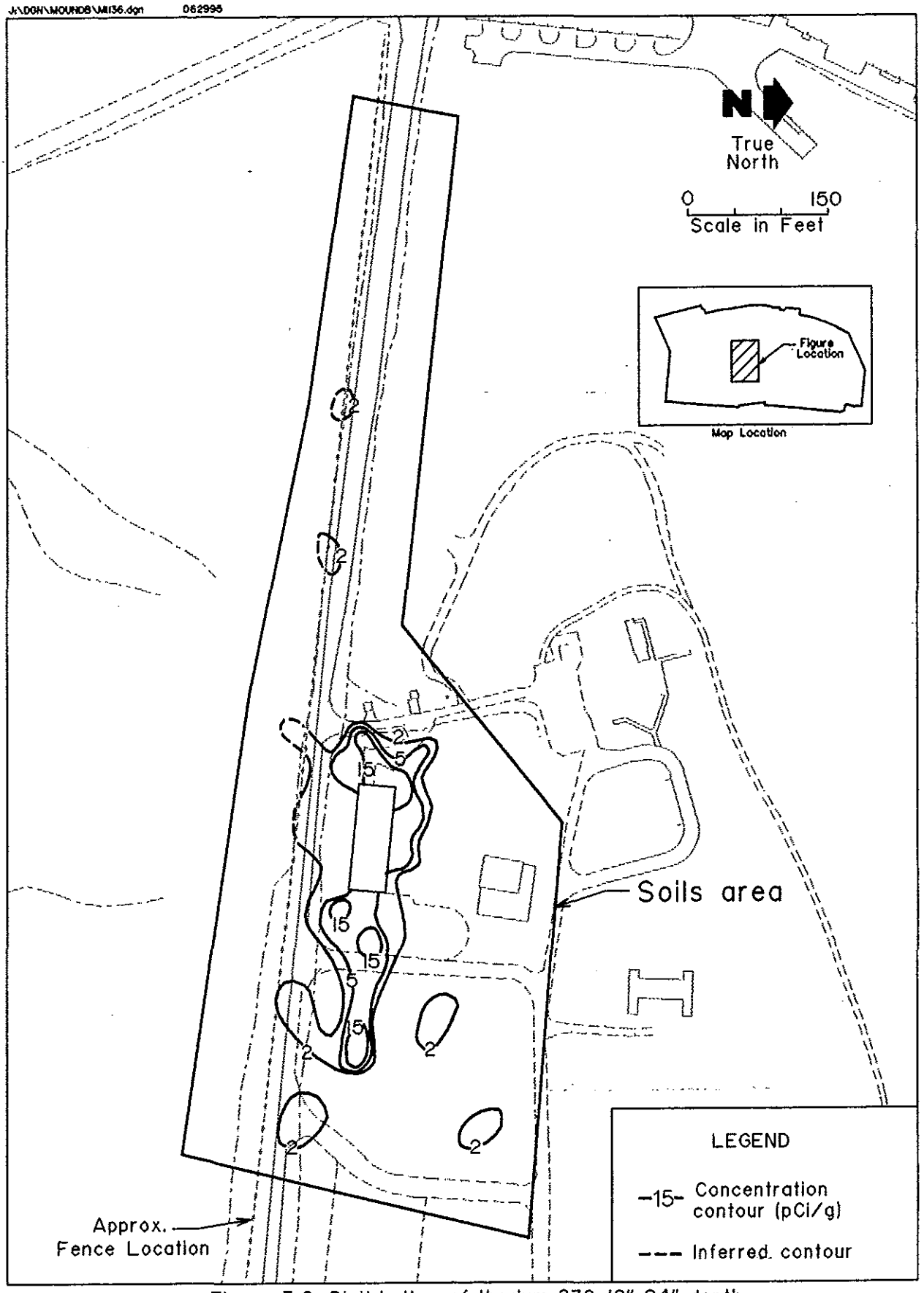


Figure 3.8. Distirbution of thorium-232 12"-24" depth.

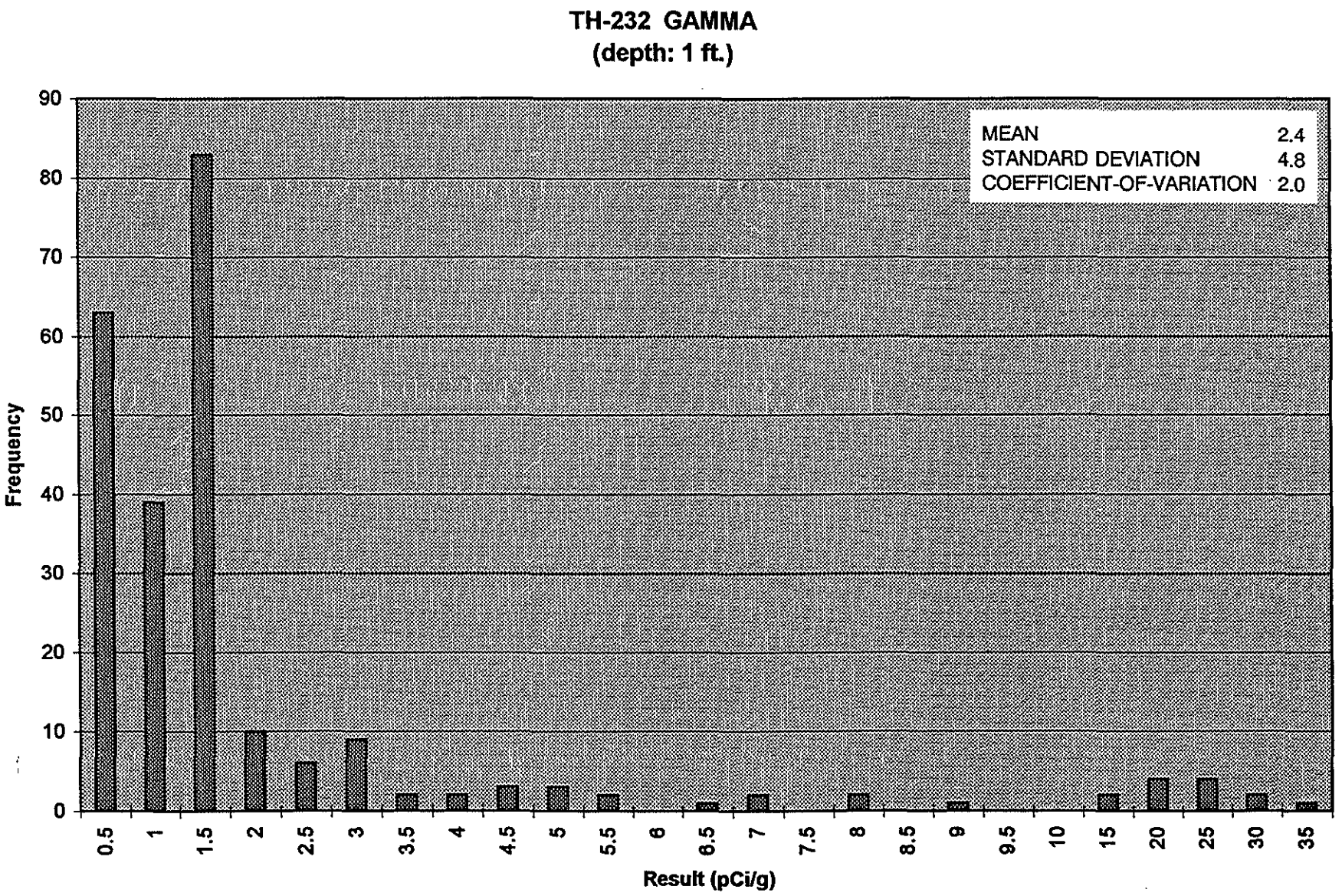


Figure 3.9. Frequency distribution histogram of Thorium-232 in the surface (0-12 inch) of soils surrounding Building 21.

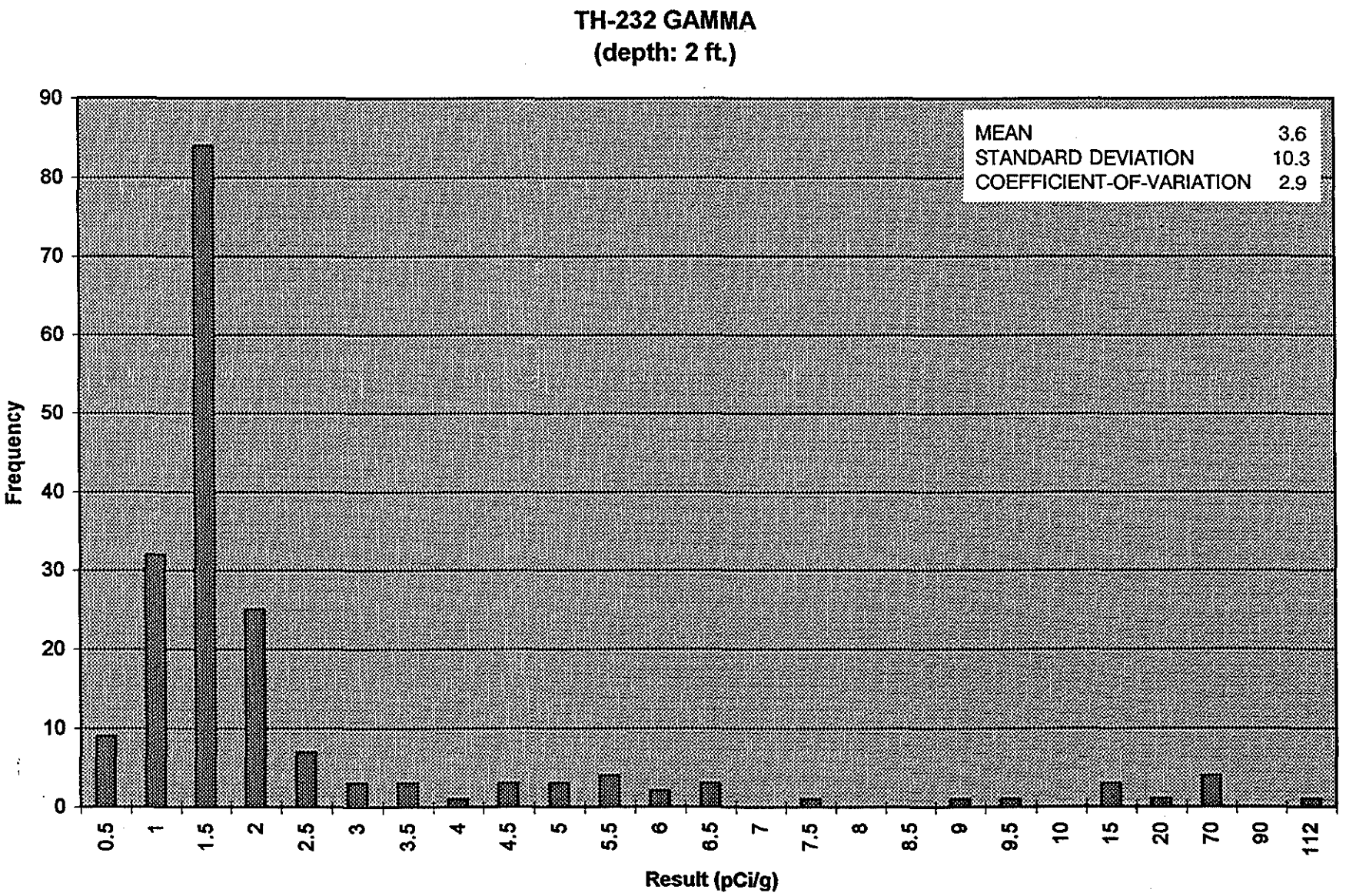


Figure 3.10. Frequency distribution histogram of Thorium-232 in the 12-24 inch depths of soils surrounding Building 21.

levels in the soils surrounding Building 21. Of the total, 13,500 and 9,936 microcuries are estimated for the surface and shallow depth, respectively. The calculation is provided in Appendix A. The mean and standard deviations for thorium-232 analysis are shown in Table 3.3. Frequency histograms for the surface (0-12 inch) and subsurface (12-24 inch) distribution of thorium-234 are shown in Figures 3.9 and 3.10, respectively..

Table 3.3. Statistical Results of Thorium-232 Concentrations in Surrounding Soils

Depth (inches)	Mean (pCi/g)	Standard Deviation	Coefficient of Variance	Minimum (pCi/g)	Maximum (pCi/g)
0-12	2.36[1]	4.81	2.04	0.21	31.20
12-24	3.45[1]	10.28	2.98	0.35	111.0
0-12	0.64[2]	0.35	0.55	0.17	1.40
12-24	1.18[2]	0.31	0.22	0.91	1.87

[1]Gamma Spectrometry
[2]Alpha Spectrometry

Review of the alpha spectroscopic analyses for plutonium-238 indicate 5 positive detections above the upper 95 percent sample tolerance limit of background soils in the area of EG&G Mound. The highest value of 15.9 pCi/g is below the current EG&G Mound ALARA guideline of 25 pCi/g. However, that sample (northwest corner of grid 148) is the only one taken in the approximate area that was historically used for storage of plutonium-238 waste packages (Figure 3.11). It was not possible to evaluate the gamma spectroscopic data for additional information on the possible distribution of plutonium-238. Plutonium-238 has a relatively short half-life of approximately 87 years, its first daughter product by alpha particle emission is uranium-234, that has a very long half-life of the order of 10^8 years. After that, the decay chain is identical to uranium-234. As stated above, the ratio of uranium-234 to the other uranium-238 decay chain products appears to be in equilibrium. This fact can be represented by utilizing the RADDECAY Program. Historical information explains that plutonium-238 spills occurred in the mid-1960's at an area near Building 21. By calculating the decay of the reported high of 34,000 pCi/g of plutonium-238 for 30 years, the in-growth of uranium-234 would be only approximately 2.6 pCi/g. This gross calculation assumes the plutonium-238 was fairly close to its time of production. The fact that the fraction of the daughter uranium-234 to the parent plutonium-238 is on the order of 10^{-5} difference explains why plutonium-238 is considered not to be a contributor to the uranium-234 found in the investigation. It would take approximately 1,000 years for the uranium-234 to reach its maximum concentration as a result of decay of plutonium-238.

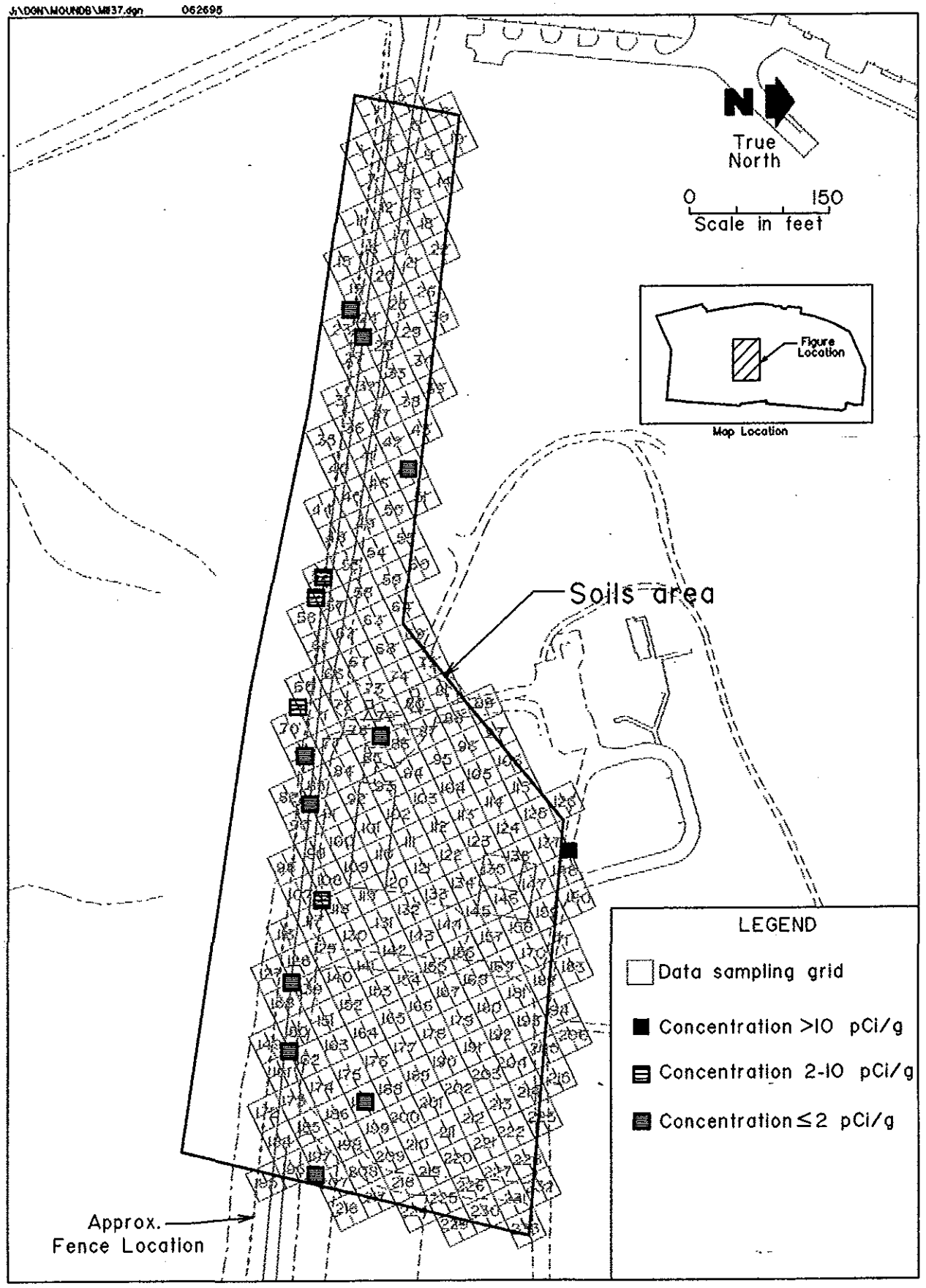


Figure 3.11. Locations and results of Plutonium-238 samples in surrounding soils.

Therefore, the actual presence of any anomalous uranium-234 from plutonium-238 would be nearly impossible to distinguish, as it may be present due to naturally occurring sources and sources associated with the thorium sludges historically stored in Building 21.

Review of other existing data indicates that much higher plutonium-238 contamination may be associated with the soils surrounding Building 21. The Operable Unit 9, Site Scoping Report: Volume 3 - Radiological Survey Data (DOE 1993b) reports that values as high as 34,000 and 17,000 pCi/g surface and subsurface, respectively, have been reported for the area. The history of remediation of the area is complicated by the partial cleanup of the plutonium-238 storage area and the Building 21 soils after the 1974 sludge sale. These data suggest that additional biased sampling in the area should be conducted as part of the D&D characterization.

Review of the gamma spectroscopic analysis for americium-241 indicates 19 positive detections that activities range up to 38.40 pCi/g in 2 samples from the subsurface at Grid Number 124. These elevated readings (Appendix A) are from samples near the area with the highest plutonium-238 result. The mean for surface and subsurface samples is 0.53 and 10.0, respectively, standard deviations are 0.57 and 17.5, respectively. No background sampling for americium-241 was performed (DOE 1994a). The presence of elevated americium-241 in the area of the elevated plutonium-238 analyses is an additional argument that biased sampling for plutonium-238 should be performed.

3.2.3. Results of Chemical Analyses

WESTON submitted 129 soil samples for indicator screen analyses and 62 samples for extended analyses. Raw results for the indicator screen analyses, which included analyses of pH, cyanide, sulfide, total organic carbon (TOC), and total organic halide (TOX), are provided in Appendix D, Sections 1.1, 1.2, 1.3, 1.4, and 1.5, respectively. Laboratory results for the extended analyses, which included analyses of metals, total phenols, VOCs, semi-volatile organic compounds (SVOCs), and polychlorinated biphenyls (PCBs), are provided in Appendix D.

Because chemical measurements that fall between the laboratory's reporting limit and the established detection limit are subject to large statistical uncertainties, these results were considered "non-detects," and no further evaluation of chemical data results in that range was made. Only results values greater than the laboratory reporting limit are presented in this section.

3.2.3.1. Metals Results

Many of the reported concentrations for metals in the Building 21 surrounding soils fall below laboratory reporting limits and were not considered significant for characterizing the sample locations. The metals concentrations in soil, detected above laboratory reporting limits, were evaluated by comparing laboratory results to the established EG&G background levels and the USEPA Region III Risk-Based Table values for these compounds. As shown in Table 3.4, soil samples with metals concentrations that exceed both laboratory reporting limits and EG&G Mound background levels fall below USEPA Region III Risk-Based Concentration Table values. Risk-based concentration levels have not been established for iron, magnesium, and sodium.

3.2.3.2. PCBs Results

None of the soil samples collected for analysis exceeded 50 parts per million (ppm), the OHEPA action level for PCBs.

3.2.3.3. TOC Results

There are no government-specified TOC action limits. Concentrations in the surrounding soil were compared to the average of the reported results plus three standard deviations, to identify outlying samples which may indicate areas of concern. Two samples were identified as outliers, CC 0/1 (196) and CC 0/2 (007); they had concentrations of 175000 mg/kg and 17000 mg/kg, respectively.

3.2.3.4. TOX Results

There are no government-specified TOX action limits. Concentrations in the surrounding soils were compared to the average of the reported results plus three standard deviations, to identify outlying sample locations which may indicate areas of concern. One sample was identified as an outlier, CC 0/2 (026); it had a TOX concentration of 1750 mg/kg.

3.2.3.5. pH Results

According to the OHEPA soil pH corrosivity guideline, a solid waste is characterized as corrosive if pH levels are less than 2.5 or greater than 12.0. None of the soil samples analyzed had a corrosivity characteristic according to this guideline.

Table 3.4. Comparison of Metals Concentrations Detected Above Laboratory Reporting Limits to EG&G Background Levels and U.S. EPA Region III Risk-Based Concentration Table Values

Sample ID	Analyte Name	Reporting Limit	Result	Units	Q	EG&G Mound Background (mg/kg)	US EPA Region III Risk Based Table Values Jan. - June 1995 (mg/kg)
CC 0/2 -86	Aluminum	200	21000	mg/kg		19000	78000
CC 0/2 -97	Aluminum	200	24400	mg/kg		19000	78000
CC 0/2 -124	Aluminum	200	21600	mg/kg		19000	78000
CC 0/2 -151	Aluminum	200	21200	mg/kg		19000	78000
CC 0/2 -163	Aluminum	200	21400	mg/kg		19000	78000
CC 0/2 -187	Aluminum	200	21000	mg/kg		19000	78000
CC 0/2 -31	Arsenic	10	11	mg/kg		8.6	23
CC 0/2 -74	Arsenic	10	10.4	mg/kg		8.6	23
CC 0/2 -86	Arsenic	10	14.8	mg/kg		8.6	23
CC 0/2 -90	Arsenic	10	12.2	mg/kg		8.6	23
CC 0/2 -97	Arsenic	10	14.5	mg/kg		8.6	23
CC 0/2 -106	Arsenic	10	11.3	mg/kg		8.6	23
CC 0/2 -124	Arsenic	10	19.5	mg/kg		8.6	23
CC 0/2 -141	Arsenic	10	18.5	mg/kg		8.6	23
CC 0/2 -151	Arsenic	10	11.1	mg/kg		8.6	23
CC 0/2 -187	Arsenic	10	12.5	mg/kg		8.6	23
CC 0/2 -40	Chromium	10	21.9	mg/kg		20	390
CC 0/2 -86	Chromium	10	25.2	mg/kg		20	390
CC 0/2 -97	Chromium	10	27.9	mg/kg		20	390
CC 0/2 -124	Chromium	10	28.2	mg/kg		20	390
CC 0/2 -151	Chromium	10	24.1	mg/kg		20	390
CC 0/2 -163	Chromium	10	23.7	mg/kg		20	390
CC 0/2 -187	Chromium	10	24	mg/kg		20	390
CC 0/2 -108	Copper	25	30.2	mg/kg		19	2900
CC 0/2 -124	Copper	25	35.9	mg/kg		19	2900
CC 0/2 -221	Copper	25	32.7	mg/kg		19	2900
CC 0/2 -97	Iron	100	44500	mg/kg		35000	NA
CC 0/2 -124	Iron	100	43000	mg/kg		35000	NA
CC 0/2 -151	Iron	100	37300	mg/kg		35000	NA
CC 0/2 -163	Iron	100	35900	mg/kg		35000	NA
CC 0/2 -187	Iron	100	37400	mg/kg		35000	NA
CC 0/2 -71	Magnesium	5000	52500	mg/kg		40000	NA
CC 1/2 -71	Magnesium	5000	51900	mg/kg		40000	NA
CC 0/2 -100	Magnesium	5000	42900	mg/kg		40000	NA
CC 0/2 -182	Magnesium	5000	76600	mg/kg		40000	NA
CC 0/2 -221	Magnesium	5000	52000	mg/kg		40000	NA
CC 0/2 -222	Magnesium	5000	63100	mg/kg		40000	NA
CC 0/2 -79	Mercury	0.2	0.32	mg/kg		0.15	23
CC 0/2 -148	Mercury	0.2	0.2	mg/kg		0.15	23
CC 0/2 -97	Nickel	40	41.9	mg/kg		32	1600
CC 0/2 -111	Sodium	5000	5750	mg/kg		240	NA
CC 0/2 -83	Zinc	20	208	mg/kg		140	23000

3.2.3.6. Sulfide Results

During QA/QC evaluation, the sulfide data were determined unusable. Section 4 of this report contains a justification for this determination.

3.2.3.7. Cyanide Results

Laboratory results indicate four soil samples had concentrations of cyanide that exceeded laboratory reporting limits. These results are listed by location in Table 3.5. The levels of cyanide in these samples are well below the 1600 mg/kg value given in the USEPA Region III Risk-Based Table for free cyanide.

Table 3.5. Cyanide Results Greater Than the Reporting Limit

Sample ID	Sample Matrix	Analyte Name	Reporting Limit	Result	Units	Q	EG&G Mound Background (mg/kg)	USEPA Region III Risk-Based Table Valued Jan.-June 1995 (mg/kg)
CC 0/2 -74	SOIL	Cyanide Analysis	0.55	8	mg/kg		NA	1600
CC 0/2 -44	SOIL	Cyanide Analysis	0.5	6.36	mg/kg		NA	1600
CC 0/2 -90	SOIL	Cyanide Analysis	0.58	1.67	mg/kg		NA	1600
CC 0/2 -32	SOIL	Cyanide Analysis	0.56	0.97	mg/kg		NA	1600

3.2.3.8. Phenols Results

The laboratory results indicate that none of the soils samples contained phenols in concentrations above the laboratory reporting limits.

3.2.3.9. VOCs

The VOCs present in concentrations exceeding laboratory detection limits are 1,2,3-trichlorobenzene, toluene, naphthalene, and methylene chloride. The samples and reported analyte concentration are listed in Table 3.6. Of these detected compounds, concentrations reported for 1,2,3,-trichlorobenzene and toluene were below laboratory reporting limits and were eliminated from further evaluation. Concentrations of naphthalene and methylene chloride which exceed laboratory reporting limits are suspected to be attributable to laboratory contamination, based on the associated blank results. The maximum reported concentrations for methylene chloride and naphthalene were 160 mg/kg and 8

Table 3.6. Volatile Analytes Greater Than the Detection Limit

Sample ID	Matrix	Analyte Name	Reporting Limit	Result	Units	Q	EG&G Mound Background (µg/kg)	U.S. EPA Region III Risk - Based Table Values Jan. - June 1995 (µg/kg)
CC 0/2 92	SOIL	1,2,3-trichlorobenzene	6	3	µg/kg	J	NA	NA
CC 0/2 3	SOIL	Methylene Chloride	3	10	µg/kg	B	NA	8500
CC 0/2 4	SOIL	Methylene Chloride	3	9	µg/kg	B	NA	8500
CC 0/2 7	SOIL	Methylene Chloride	3	6	µg/kg	B	NA	8500
CC 0/2 11	SOIL	Methylene Chloride	3	7	µg/kg	B	NA	8500
CC 0/2 26	SOIL	Methylene Chloride	3	14	µg/kg	B	NA	8500
CC 0/2 26	SOIL	Methylene Chloride	3	13	µg/kg	B	NA	8500
CC 0/2 26	SOIL	Methylene Chloride	3	12	µg/kg	B	NA	8500
CC 0/2 70	SOIL	Methylene Chloride	3	6	µg/kg	B	NA	8500
CC 0/2 78	SOIL	Methylene Chloride	6	8	µg/kg	B	NA	8500
CC 0/2 78	SOIL	Methylene Chloride	6	10	µg/kg	B	NA	8500
CC 0/2 78	SOIL	Methylene Chloride	6	8	µg/kg	B	NA	8500
CC 0/2 78	SOIL	Methylene Chloride	6	20	µg/kg	B	NA	8500
CC 0/2 83	SOIL	Methylene Chloride	6	9	µg/kg	B	NA	8500
CC 0/2 84	SOIL	Methylene Chloride	6	10	µg/kg	B	NA	8500
CC 0/2 86	SOIL	Methylene Chloride	6	10	µg/kg	B	NA	8500
CC 0/2 87	SOIL	Methylene Chloride	6	31	µg/kg	B	NA	8500
CC 0/2 90	SOIL	Methylene Chloride	6	150	µg/kg	B	NA	8500
CC 0/2 90	SOIL	Methylene Chloride	6	140	µg/kg	B	NA	8500
CC 0/2 92	SOIL	Methylene Chloride	6	69	µg/kg	B	NA	8500
CC 0/2 97	SOIL	Methylene Chloride	6	120	µg/kg	B	NA	8500
CC 0/2 100	SOIL	Methylene Chloride	6	11	µg/kg	B	NA	8500
CC 0/2 102	SOIL	Methylene Chloride	6	19	µg/kg	B	NA	8500
CC 0/2 108	SOIL	Methylene Chloride	6	10	µg/kg	B	NA	8500
CC 0/2 111	SOIL	Methylene Chloride	5	9	µg/kg	B	NA	8500
CC 0/2 118	SOIL	Methylene Chloride	6	11	µg/kg	B	NA	8500
CC 0/2 119	SOIL	Methylene Chloride	6	13	µg/kg	B	NA	8500
CC 0/2 120	SOIL	Methylene Chloride	6	14	µg/kg	B	NA	8500
CC 0/2 125	SOIL	Methylene Chloride	6	130	µg/kg	B	NA	8500
CC 0/2 125	SOIL	Methylene Chloride	6	110	µg/kg	B	NA	8500
CC 0/2 141	SOIL	Methylene Chloride	5	110	µg/kg	B	NA	8500
CC 0/2 151	SOIL	Methylene Chloride	6	42	µg/kg	B	NA	8500
CC 0/2 163	SOIL	Methylene Chloride	6	38	µg/kg	B	NA	8500
CC 0/2 182	SOIL	Methylene Chloride	5	50	µg/kg	B	NA	8500
CC 0/2 202	SOIL	Methylene Chloride	6	10	µg/kg	B	NA	8500
CC 0/2 221	SOIL	Methylene Chloride	5	8	µg/kg	B	NA	8500
CC 0/2 222	SOIL	Methylene Chloride	5	9	µg/kg	B	NA	8500
CC 0/2 086RE	SOIL	Methylene Chloride	6	11	µg/kg	B	NA	8500
CC 0/2 087RE	SOIL	Methylene Chloride	6	19	µg/kg	B	NA	8500
CC 0/2 090RE	SOIL	Methylene Chloride	6	160	µg/kg	B	NA	8500
CC 0/2 091RE	SOIL	Methylene Chloride	6	11	µg/kg	B	NA	8500

Table 3.6. (page 2 of 3)

Sample ID	Matrix	Analyte Name	Reporting Limit	Result	Units	Q	EG&G Mound Background (µg/kg)	U.S. EPA Region III Risk - Based Table Values Jan. - June 1995 (µg/kg)
CC 0/2 092RE	SOIL	Methylene Chloride	6	10	µg/kg	B	NA	8500
CC 0/2 106RE	SOIL	Methylene Chloride	6	84	µg/kg	B	NA	8500
CC 0/2 108RE	SOIL	Methylene Chloride	6	12	µg/kg	B	NA	8500
CC 0/2 138RE	SOIL	Methylene Chloride	6	59	µg/kg	B	NA	8500
CC 0/2 141RE	SOIL	Methylene Chloride	5	17	µg/kg	B	NA	8500
CC 0/2 148RE	SOIL	Methylene Chloride	6	42	µg/kg	B	NA	8500
CC 0/2 151RE	SOIL	Methylene Chloride	6	120	µg/kg	B	NA	8500
CC 0/2 170RE	SOIL	Methylene Chloride	6	60	µg/kg	B	NA	8500
CC 0/2 1	SOIL	Methylene Chloride	3	6	µg/kg	BJ	NA	8500
CC 0/2 9	SOIL	Methylene Chloride	3	4	µg/kg	BJ	NA	8500
CC 0/2 17	SOIL	Methylene Chloride	3	5	µg/kg	BJ	NA	8500
CC 0/2 47	SOIL	Methylene Chloride	3	3	µg/kg	BJ	NA	8500
CC 0/2 53	SOIL	Methylene Chloride	3	3	µg/kg	BJ	NA	8500
CC 0/2 54	SOIL	Methylene Chloride	3	4	µg/kg	BJ	NA	8500
CC 0/2 61	SOIL	Methylene Chloride	3	5	µg/kg	BJ	NA	8500
CC 0/2 71	SOIL	Methylene Chloride	3	4	µg/kg	BJ	NA	8500
CC 0/2 76	SOIL	Methylene Chloride	3	3	µg/kg	BJ	NA	8500
CC 0/2 76	SOIL	Methylene Chloride	3	4	µg/kg	BJ	NA	8500
CC 0/2 76	SOIL	Methylene Chloride	3	4	µg/kg	BJ	NA	8500
CC 0/2 001RE	SOIL	Methylene Chloride	3	2	µg/kg	BJ	NA	8500
CC 0/2 007RE	SOIL	Methylene Chloride	3	4	µg/kg	BJ	NA	8500
CC 0/2 011RE	SOIL	Methylene Chloride	3	3	µg/kg	BJ	NA	8500
CC 0/2 017RE	SOIL	Methylene Chloride	3	3	µg/kg	BJ	NA	8500
CC 0/2 40	SOIL	Methylene Chloride	3	3	µg/kg	J	NA	8500
CC 0/2 44	SOIL	Methylene Chloride	3	3	µg/kg	J	NA	8500
CC 0/2 52	SOIL	Methylene Chloride	3	2	µg/kg	J	NA	8500
CC 0/2 65	SOIL	Methylene Chloride	3	6	µg/kg	J	NA	8500
CC 0/2 66	SOIL	Methylene Chloride	3	2	µg/kg	J	NA	8500
CC 0/2 74	SOIL	Methylene Chloride	3	3	µg/kg	J	NA	8500
CC 0/2 79	SOIL	Methylene Chloride	3	3	µg/kg	J	NA	8500
CC 0/2 107	SOIL	Methylene Chloride	6	5	µg/kg	J	NA	8500
CC 0/2 138	SOIL	Methylene Chloride	6	5	µg/kg	J	NA	8500
CC 0/2 161	SOIL	Methylene Chloride	6	5	µg/kg	J	NA	8500
CC 0/2 170	SOIL	Methylene Chloride	6	4	µg/kg	J	NA	8500
CC 0/2 170	SOIL	Methylene Chloride	6	5	µg/kg	J	NA	8500
CC 0/2 170	SOIL	Methylene Chloride	6	5	µg/kg	J	NA	8500
CC 0/2 178	SOIL	Methylene Chloride	6	4	µg/kg	J	NA	8500
CC 0/2 187	SOIL	Methylene Chloride	6	4	µg/kg	J	NA	8500
CC 1/2 202	SOIL	Methylene Chloride	6	3	µg/kg	J	NA	8500
CC 0/2 209	SOIL	Methylene Chloride	6	4	µg/kg	J	NA	8500
CC 0/2 222	SOIL	Methylene Chloride	5	3	µg/kg	J	NA	8500

Table 3.6. (page 3 of 3)

Sample ID	Matrix	Analyte Name	Reporting Limit	Result	Units	Q	EG&G Mound Background (µg/kg)	U.S. EPA Region III Risk - Based Table Values Jan. - June 1995 (µg/kg)
CC 0/2 070RE	SOIL	Methylene Chloride	3	4	µg/kg	J	NA	8500
CC 0/2 071RE	SOIL	Methylene Chloride	3	4	µg/kg	J	NA	8500
CC 0/2 78	SOIL	Naphthalene	6	8	µg/kg	B	NA	3100000
CC 0/2 209	SOIL	Naphthalene	6	6	µg/kg	B	NA	3100000
CC 0/2 3	SOIL	Naphthalene	0	1	µg/kg	J	NA	3100000
CC 0/2 7	SOIL	Naphthalene	0	1	µg/kg	J	NA	3100000
CC 0/2 26	SOIL	Naphthalene	0	1	µg/kg	J	NA	3100000
CC 0/2 26	SOIL	Naphthalene	0	1	µg/kg	J	NA	3100000
CC 0/2 92	SOIL	Naphthalene	6	5	µg/kg	J	NA	3100000
CC 0/2 32	SOIL	Naphthlanene	0	1	µg/kg	J	NA	3100000
CC 0/2 97	SOIL	Toluene	6	76	µg/kg	B	NA	16000000
CC 0/2 125	SOIL	Toluene	6	62	µg/kg	B	NA	16000000
CC 0/2 40	SOIL	Toluene	3	1	µg/kg	J	NA	16000000
CC 0/2 61	SOIL	Toluene	3	1	µg/kg	J	NA	16000000
CC 0/2 65	SOIL	Toluene	3	2	µg/kg	J	NA	16000000
CC 0/2 70	SOIL	Toluene	3	2	µg/kg	J	NA	16000000
CC 0/2 71	SOIL	Toluene	3	1	µg/kg	J	NA	16000000
CC 0/2 74	SOIL	Toluene	3	1	µg/kg	J	NA	16000000
CC 0/2 76	SOIL	Toluene	3	3	µg/kg	J	NA	16000000
CC 0/2 182	SOIL	Toluene	5	1	µg/kg	J	NA	16000000
CC 0/2 202	SOIL	Toluene	6	2	µg/kg	J	NA	16000000
CC 1/2 202	SOIL	Toluene	6	2	µg/kg	J	NA	16000000
CC 0/2 001RE	SOIL	Toluene	3	1	µg/kg	J	NA	16000000
CC 0/2 017RE	SOIL	Toluene	3	1	µg/kg	J	NA	16000000
CC 0/2 065RE	SOIL	Toluene	3	2	µg/kg	J	NA	16000000
CC 0/2 071RE	SOIL	Toluene	3	1	µg/kg	J	NA	16000000
CC 0/2 141RE	SOIL	Toluene	5	2	µg/kg	J	NA	16000000
CC 0/2 170RE	SOIL	Toluene	6	3	µg/kg	J	NA	16000000

mg/kg, respectively. The EPA Region III Risk Based Table values for methylene chloride and naphthalene are 85,000 mg/kg and 3,100 mg/kg, respectively.

The potential presence of VOCs may effect waste disposal decisions on soils that may be remediated as part of the D&D of Building 21. For instance, samples from grids 97 and 125 that contain toluene compounds may also contain elevated thorium-232 activities above a yet to be determined cleanup goal. The impact that the presence of these compounds may have against the waste acceptance criteria was not evaluated, and is beyond the scope of this report.

3.2.3.10. SVOCs

The SVOCs with concentrations which exceed laboratory reporting limits can be basically classified as polyaromatic hydrocarbons (PAHs) and phthalates. Di-n-butylphthalate was identified in many of the laboratory blanks and is a common laboratory contaminant. Because di-n-butylphthalate was systematically present in the blanks, the parameter was not considered a valid indicator of site conditions. The remaining target analytes can be classified as PAHs and are present only in samples from grids 70 and 221. A comparison of PAH concentrations in the soil was made to the USEPA Region III Risk-Based Table and the Land-Ban requirements of 40 CFR 268. As shown in Table 3.7, all soil samples with PAH concentrations which exceed the laboratory reporting limits fall below USEPA Region III Risk-Based Concentration Table values and/or the Land-Ban requirements of 40 CFR 268. There are no risk-based concentration levels or Land-Ban requirements established for benzo(g,h,i)perylene and phenanthrene.

The potential presence of SVOCs may effect waste disposal decisions on soils that may be remediated as part of the D&D of Building 21. For instance, samples from grids 70 and 221 that contain PAH compounds also contain elevated thorium-232 activities above the upper 95 percent sample tolerance limit expected of naturally occurring soils in the area of EG&G Mound. The impact that the presence of these compounds may have against the waste acceptance criteria was not evaluated and is beyond the scope of this report.

Table 3.7. Semi-Volatile Results Greater Than the Reporting Limit

Sample ID	Sample Matrix	Analyte Name	Reporting Limit	Result	Units	Q	US EPA Region III Risk Based Table Values Jan. - June 1995 (µg/kg)	Land-Ban Standards (40 CFR 268) (µg/kg)
CC 0/2 1	SOIL	Di-n-Butylphthalate	390	730	µg/kg	B	NA	NA
CC 0/2 3	SOIL	Di-n-Butylphthalate	380	1400	µg/kg	B	NA	NA
CC 0/2 4	SOIL	Di-n-Butylphthalate	370	1300	µg/kg	B	NA	NA
CC 0/2 17	SOIL	Di-n-Butylphthalate	360	760	µg/kg	B	NA	NA
CC 0/2 70	SOIL	Benzo(a)Anthracene	390	1000	µg/kg		880	8200
CC 0/2 70	SOIL	Benzo(a)Pyrene	390	1000	µg/kg		88	8200
CC 0/2 70	SOIL	Benzo(b)Fluoranthene	390	900	µg/kg		880	NA
CC 0/2 70	SOIL	Benzo(g,h,i)Perylene	390	900	µg/kg		NA	NA
CC 0/2 70	SOIL	Benzo(k)Fluoranthene	390	930	µg/kg		8800	NA
CC 0/2 70	SOIL	Chrysene	390	1000	µg/kg		88000	8200
CC 0/2 70	SOIL	Fluoranthene	390	2000	µg/kg		3100000	8200
CC 0/2 70	SOIL	Indeno(1,2,3-cd)Pyrene	390	660	µg/kg		880	8200
CC 0/2 70	SOIL	Phenanthrene	390	1500	µg/kg		NA	NA
CC 0/2 70	SOIL	Pyrene	390	4000	µg/kg		2300000	NA
CC 0/2 86	SOIL	Di-n-Butylphthalate	360	470	µg/kg	B	NA	NA
CC 0/2 87	SOIL	Di-n-Butylphthalate	370	410	µg/kg	B	NA	NA
CC 0/2 90	SOIL	Di-n-Butylphthalate	390	440	µg/kg	B	NA	NA
CC 0/2 97	SOIL	Di-n-Butylphthalate	420	510	µg/kg	B	NA	NA
CC 0/2 102	SOIL	Di-n-Butylphthalate	380	1200	µg/kg	B	NA	NA
CC 0/2 111	SOIL	Di-n-Butylphthalate	360	750	µg/kg	B	NA	NA
CC 0/2 119	SOIL	Di-n-Butylphthalate	390	490	µg/kg	B	NA	NA
CC 0/2 120	SOIL	Di-n-Butylphthalate	400	470	µg/kg	B	NA	NA
CC 0/2 125	SOIL	Di-n-Butylphthalate	380	400	µg/kg	B	NA	NA
CC 0/2 170	SOIL	Di-n-Butylphthalate	380	390	µg/kg	B	NA	NA
CC 0/2 187	SOIL	Di-n-Butylphthalate	390	620	µg/kg	B	NA	NA
CC 0/2 221	SOIL	Di-n-Butylphthalate	360	600	µg/kg	B	NA	NA
CC 0/2 221	SOIL	Pyrene	360	510	µg/kg		2300000	NA
CC 0/2 222	SOIL	Di-n-Butylphthalate	380	440	µg/kg	B	NA	NA
CC 0/2 01RE	SOIL	Di-n-Butylphthalate	390	700	µg/kg	B	NA	NA
CC 0/2 04RE	SOIL	Di-n-Butylphthalate	370	1200	µg/kg	B	NA	NA
CC 0/2 070RE	SOIL	Benzo(a)Anthracene	390	1000	µg/kg		880	8200
CC 0/2 070RE	SOIL	Benzo(a)Pyrene	390	1000	µg/kg		88	8200
CC 0/2 070RE	SOIL	Benzo(b)Fluoranthene	390	1000	µg/kg		880	NA
CC 0/2 070RE	SOIL	Benzo(g,h,i)Perylene	390	590	µg/kg		NA	NA
CC 0/2 070RE	SOIL	Benzo(k)Fluoranthene	390	950	µg/kg		8800	NA
CC 0/2 070RE	SOIL	Chrysene	390	980	µg/kg		88000	8200
CC 0/2 070RE	SOIL	Fluoranthene	390	1800	µg/kg		3100000	8200
CC 0/2 070RE	SOIL	Indeno(1,2,3-cd)Pyrene	390	500	µg/kg		880	8200
CC 0/2 070RE	SOIL	Phenanthrene	390	1600	µg/kg		NA	NA
CC 0/2 070RE	SOIL	Pyrene	390	3700	µg/kg		2300000	NA
CC 0/2 178RE	SOIL	Di-n-Butylphthalate	370	1200	µg/kg	B	NA	NA
CC 0/2 221RE	SOIL	Benzo(g,h,i)Perylene	360	600	µg/kg		NA	NA
CC 0/2 221RE	SOIL	Di-n-Butylphthalate	360	600	µg/kg	B	NA	NA
CC 0/2 221RE	SOIL	Pyrene	360	480	µg/kg		2300000	NA

SECTION 4

4. QUALITY ASSURANCE/QUALITY CONTROL

The QA/QC requirements for the Building 21 project were specified in the EG&G Mound SAP for the Assessment Phase of the D&D of Building 21 and Surrounding Soils. Section 4 has been divided into two parts: Deviations from the SAP, Section 4.1, and Data Quality Assessment, Section 4.2.

4.1. DEVIATIONS FROM THE SAP

Each deviation from the Building 21 SAP were documented by WESTON using either one of two report formats: a corrective action report, or an investigation-specific plan change notice. Both report formats are described in the following subsections. In addition to the changes and corrective actions initiated by WESTON, several contract clarifications and changes were initiated by EG&G Mound as described in Section 4.1.3.

4.1.1. Corrective Action Report

When a WESTON employee identifies a deviation from plan, a corrective action report is generated. The corrective action report identifies the deviation, the remedial actions taken to return to compliance, the impact of the deviation, and the actions taken to prevent a similar deviation later in the project. During the Building 21 project, five corrective action reports were issued. The reported deviations were: improper preservation of soil samples for sulfide analysis, omitted trip blanks, incorrect identification of two samples, and alpha spectrometry analyses on more than 5 percent of the samples. These deficiencies are not believed to have impacted the data usability. A detailed summary of these differences are in Appendix L.

4.1.2. Investigation-Specific Plan Changes

When a deficiency is noted in a plan during non-field work activities, WESTON documents the correction to the plan with an investigation-specific plan change notice. When a deficiency is noted in a plan during field work activities, WESTON documents the correction to the plan with a WESTON plan change notification (Appendix B). These plan change notices specify the plan to be amended, the date the plan was amended, why the amendment was required, and the amendment itself. During the project, one investigation-specific plan changed and 45 plan change notifications were initiated by WESTON. The majority of these changes were made simply to clarify the contract requirements. Table 4.1 lists the WESTON change, short description of the change, and the affected Section of the SAP. A detailed summary of these changes has been included in Appendix L.

Table 4.1. WESTON Changes

Change Number	Description	Affected Section of SAP
ISPCN-001	Correct sample preservation requirements	Section 5, Table 5-1; Table 5-2
PCN-001	Adjust soil sampling grid to true north	Section 4.3; Drawing C1
PCN-002	Identifies soil grids below Building 21 that were not surveyed with Micro-R	Section 4.3
PCN-003	Identifies wall grids that fell below soil level or coincided with doorways and were not surveyed with Micro-R.	Section 4.0; Section 4.1.2
PCN-004	Eliminates smear samples of building exterior	Section 4.0
PCN-005	See PCN-003	Section 4.1.2
PCN-006	Documents building grids that were truncated and not surveyed on centers	Section 4.0
PCN-007	Documents movement of roof measurements within 1 foot of the edge of the roof.	Section 4.0
PCN-008	Eliminates soil interval samples where bedrock was encountered	Section 5.2; Section 4.3
PCN-009	See PCN-008	Section 5.2; Section 4.3
PCN-010	Eliminates sample locations outside EG&G Mound fenceline and/or below building	Section 4.3.2; Section 5.2
PCN-011 through - 040	Documents sample locations moved due to physical obstructions	Section 4.3.2; Section 5.2
PCN-041	Documents building grids eliminated due to doorways	Section 4.1
PCN-042	Documents soil sample locations moved by Eric Horstman	Section 4.3.2
PCN-043	Documents decision to eliminate Geoprobe sampling	Implementation Plan
PCN-044	Documents decision not to mark ceiling grids	Section 4.1
PCN-045	Documents decision to eliminate asbestos sampling.	Section 5.1.3

4.1.3. EG&G Mound Initiated Plan Changes

Several plan changes were initiated by EG&G Mound prior to beginning the Building 21 sampling and analysis effort. Each of the changes initiated by EG&G Mound was assigned a plan change number in this report. The assigned numbers do not have relevance outside the context of this report. The

EG&G Mound changes to the SAP are summarized below. Many of these changes were initiated to provide clarification to the laboratories and were documented as amendments to the SAP. Changes 1 and 2 were not documented as amendments, but were implemented by EG&G Mound through directions to WESTON. Table 4.2 lists the EG&G Mound changes, a short description of the change, and the affected section of the SAP. Appendix L includes a detailed summary of these changes.

Table 4.2. EG&G Mound Plan Changes

Assigned Number	Description	Section Affected
01	Documents decision to send samples to Quanterra-Richland instead of onsite lab	Section 4.3.3
02	Documents decision to eliminate split sampling	Section 6.4
03	Charges phenol holding time from 7 days to 28 days	Section 5; Table 5-1
04	Specifies uranium isotopes for alpha spectrometry	Section 4.3.4; Laboratory SOW
05	Eliminates Pu-238 and Th-230 isotopes from the gamma spectroscopy analysis	Section 4.3.4; Laboratory SOW
06	Eliminates Pu-241 from alpha spectrometry analysis	Section 4.3.4; Laboratory SOW
07	Adds Th-230 to alpha spectrometry analysis	Section 4.3.4; Laboratory SOW

4.2. DATA QUALITY ASSESSMENT

Section 7.2.4 of the SAP specifies which parameters will be evaluated, and that WESTON, will review organic and inorganic data. The SAP does not specify laboratory QC acceptance criteria or data review acceptance criteria. Based on the information given in paragraph 1, Section 5 of the SAP, EG&G Mound has indicated to WESTON that the data will be used for screening characterization, and WESTON has established acceptance criteria based on that data usage. If the data are used for purposes more stringent than screening characterization, then the data should be validated against a revised criteria set.

The results of the data assessment are summarized for each type of analysis. For each of the parameters reviewed, WESTON described the selected acceptance criteria and whether data were determined unusable.

4.2.1. Volatile Organic Compounds

4.2.1.1. Holding Time

The SAP requires samples submitted for VOC analysis to be analyzed within 14 days of receipt. This holding time is consistent with SW-846. Samples analyzed after 14 days may be biased low. These are listed in Table 4.3. Since the specified holding time was exceeded by no more than three days, the results are unusable.

Table 4.3. Soil Samples that Exceeded 14-day Holding Time for VOC Analyses

CC 0/2 (090)	CC 0/2 (090) RE	CC 0/2 (151) RE	CC 0/2 (222)	CC 0/2 (221)
CC 0/2 (209)	CC 0/2 (231)	CC 0/2 (187)	CC 0/2 (222)	

4.2.1.2. Initial Calibration

Method 8260 specifies the following initial calibration requirements:

- The basic hardware settings must be checked using 4-bromofluorobenzene against acceptance criteria provided in the method.
- A 5-level calibration curve must be developed.
- Four compounds (chloromethane, 1,1 dichloroethane, 1,1,1,2-tetrachloroethane, and chlorobenzene) must have minimum response factors of 0.300.
- Bromoform must have a minimum response factor of 0.250.
- Six compounds (1,1-dichloroethane, chloroform, 1,2-dichloropropane, toluene, ethylbenzene, and vinyl chloride) must have a relative standard deviation of 30 percent or less.

WESTON verified that the relative percent differences were less than 50 percent and the response factors were greater than 0.05 for all target compounds. While the laboratory met all the SW-846 requirements, several sample results were associated with relative standard deviations greater than 50 percent for methylene chloride and chloroethane. The affected samples and analytes are summarized in Tables 4.4 and 4.5. Because the analyte results determined from calibration curves with large relative standard deviations may not be accurate, WESTON has determined them to be unusable.

Table 4.4. VOC Soil Sample Results Affected by Methylene Chloride RSD > 50 Percent

CC 0/2 (125)	CC 0/2 (078)	CC 0/2 (083)	CC 0/2 (084)	CC 0/2 (086)
CC 0/2 (087)	CC 0/2 (091)	CC 0/2 (092)	CC 0/2 (108)	CC 0/2 (118)
CC 0/2 (119)	CC 0/2 (120)	CC 0/2 (100)	CC 0/2 (102)	CC 0/2 (111)
CC 0/2 (141)				

Table 4.5. VOC Soil Sample Results Affected by Chloroethane RSD > 50 Percent

CC 0/2 (001)	CC 0/2 (003)	CC 0/2 (004)	CC 0/2 (007)	CC 0/2 (009)
CC 0/2 (011)	CC 0/2 (017)	CC 0/2 (026)	CC 0/2 (040)	CC 0/2 (044)
CC 0/2 (047)	CC 0/2 (052)	CC 0/2 (053)	CC 0/2 (054)	CC 0/2 (061)
CC 0/2 (065)	CC 0/2 (066)	CC 0/2 (070)	CC 0/2 (071)	CC 0/2 (074)
CC 0/2 (076)	CC 0/2 (0079)	CC 1/2 (071)		

4.2.1.3. Daily Calibration

Method 8260 specifies the following daily calibration requirements:

- The basic hardware settings must be checked using 4-bromofluorobenzene against acceptance criteria provided in the method.
- Four compounds (chloromethane, 1,1-dichloroethane, 1,1,2,2-tetrachloroethane and chlorobenzene) must have a response factor greater than 0.300.
- Bromoform must have a response factor greater than 0.250.
- The percent differences for six compounds (1,1-dichloroethane, chloroform, 1,2-dichloropropane, toluene, ethylbenzene, and vinyl chloride) must be less than 25 percent.
- The internal standards retention time must not change by more than 30 seconds nor can the response change by more than a factor of 2 (50 to 100 percent).

WESTON also verified that the relative percent differences for all other target analytes were less than 90 percent. While the laboratory met all the SW-846 requirements, several analyte results were associated with continuing calibration percent differences greater than 90 percent for chloroethane, bromoethane, dichlorofluoromethane, and trichlorofluoromethane. The affected samples are summarized by analytes in Tables 4.6 and 4.7. These analyte results were determined unusable because of the increased inaccuracy associated with large continuing calibration percent differences.

Table 4.6. VOC Soil Samples Affected by Chloroethane Percent Differences > 90 Percent

CC 0/2 (047)	CC 0/2 (053)	CC 0/2 (054)	CC 0/2 (061)	CC 0/2 (070)
CC 0/2 (071)	CC 0/2 (076)			

Table 4.7. VOC Water Samples Affected by Chloroethane Percent Differences > 90 Percent

CC 03/1 (028)	CC 2/2 (202)			

4.2.1.4. Spectral Performance and Interpretation

Method 8260 in SW-846 provides guidelines for qualitative spectral identification. In general, the laboratory complied with these guidelines. Several spectra associated with target analyte concentrations below the laboratory reporting limit were poor and difficult to confirm. Because these spectra were associated with low concentrations below the reporting limit, the inaccuracy of the spectral identification was not considered significant and the associated data are considered usable.

4.2.1.5. Detection Limits

USEPA SW-846 requires that laboratories determine reporting limits by performing method detection limit studies. The resulting reporting limits are specific to the laboratory and any determined reporting limit is acceptable. The laboratory routinely reported to 5 parts per billion (ppb), which is comparable to the USEPA Contract Laboratory Program (CLP) reporting requirements.

4.2.1.6. Blank Contamination

The laboratory had low levels of methylene chloride and toluene contamination in sample blanks. Because the associated sample results were low (below the EPA Region III Risk levels limits), the blank contamination did not significantly affect data usability.

4.2.1.7. Surrogate Recovery

USEPA SW-846 requires that laboratories determine control limits based on three times the standard deviation of the surrogate recoveries to date. Therefore, any laboratory limits based on the prescribed formula are permissible. Considering the intended data usage, WESTON established a review criteria

of 50 to 150 percent recovery for each of the surrogates. No samples were reported with surrogate recoveries outside this range.

4.2.1.8. Internal Standard Recovery

Method 8260 specifies the internal standard area must be within a factor of 2 (-50 percent to +100 percent) of the last daily calibration check. Several samples were reported with internal standard areas below the acceptance limit. These are listed in Table 4.8. The laboratory re-analyzed these samples and experienced similar matrix interferences in all cases. When the internal standard recovery is suppressed, associated analyte concentrations may be inaccurate and biased high. The bias is the result of how the internal standard is used to quantify associated analyte data. Because the concentration of target analytes in the affected samples was low (below EPA Region III Risk levels limits), the deficiency was not considered significant.

Table 4.8. VOC Soil Samples Affected by Low Internal Standard Recovery

CC 0/2 (001)	CC 0/2 (007)	CC 0/2 (011)	CC 0/2 (017)	CC 0/2 (065)
CC 0/2 (070)	CC 0/2 (071)	CC 0/2 (076)	CC 1/2 (071)	CC 0/2 (090)
CC 0/2 (106)	CC 0/2 (125)	CC 0/2 (138)	CC 0/2 (151)	CC 0/2 (163)
CC 0/2 (170)	CC 0/2 (078)	CC 0/2 (086)	CC 0/2 (087)	CC 0/2 (091)
CC 0/2 (092)	CC 0/2 (108)	CC 0/2 (102)	CC 0/2 (141)	

4.2.1.9. Matrix Spikes

Matrix spikes were not required by the SAP.

4.2.1.10. Laboratory Duplicates

Laboratory duplicates were not required by the SAP nor by the referenced methodology.

4.2.1.11. Field Duplicates

WESTON evaluated the field duplicate relative percent differences against an acceptance criterion of 60 percent. The results of the comparison are summarized in Table 4.9. Sample results near the reporting limit typically have very high relative percent differences due to the limitations of the

laboratory instrumentation, and were not assessed. Analyte concentrations below the laboratory reporting limit have been flagged with a "J." Analyte concentrations reported not detected in Table 4.9 were flagged with a "U." All associated field duplicate results met the acceptance criteria.

Table 4.9. Summary of VOC Soil Sample Field Duplicate Results

Sample ID	Analyte	Primary Result	Duplicate Result	RPD
CC 0/2 (071)	Methylene Chloride	4 J	6 U	200
CC 0/2 (071)	Toluene	1 J	6 U	200
CC 0/2 (202)	Methylene Chloride	10	3 J	108
CC 0/2 (202)	Toluene	2 J	2 J	0

4.2.2. Semi-volatiles Analyses

4.2.2.1. Holding Time

The SAP requires that samples submitted for semi-volatiles analysis be extracted within seven days of receipt. Method 8270 in SW-846 specifies analyses must be completed within 40 days of extraction. Soil samples that were not extracted within seven days are listed in Table 4.10. However, all the soil samples were extracted within 14 days. Because USEPA SW-846 specifies a recommended soil holding time of 14 days from collection to extraction for semi-volatiles analysis, WESTON determined the exceeded holding times did not significantly affect data usability.

Table 4.10. SVOC Soil Samples Not Extracted Within Seven Days of Collection

CC 0/2 (28)	CC 0/2 (31)	CC 0/2 (32)	CC 0/2 (78)	CC 0/2 (83)
CC 0/2 (84)	CC 0/2 (86)	CC 0/2 (87)	CC 0/2 (90)	CC 0/2 (91)
CC 0/2 (92)	CC 0/2 (97)	CC 0/2 (100)	CC 0/2 (102)	CC 0/2 (106)
CC 0/2 (107)	CC 0/2 (108)	CC 0/2 (111)	CC 0/2 (118)	CC 0/2 (119)
CC 0/2 (120)	CC 0/2 (124)	CC 0/2 (125)	CC 0/2 (138)	CC 0/2 (148)
CC 0/2 (151)	CC 0/2 (161)	CC 0/2 (163)	CC 0/2 (170)	CC 0/2 (178)
CC 0/2 (178R)	CC 0/2 (182)	CC 0/2 (187)	CC 0/2 (202)	CC 0/2 (209)
CC 0/2 (221)	CC 0/2 (221)	CC 0/2 (221R)	CC 0/2 (222)	

4.2.2.2. Initial Calibration

Method 8270 in SW-846 specifies the following initial calibration requirements:

- The basic hardware settings must be checked using decafluorotriphenylphosphine (DFTPP) against criteria specified in the method.
- A 5-level calibration curve must be determined.
- The response factor for four compounds (N-nitroso-di-n-propylamine, hexachlorocyclopentadiene, 2,-4 dinitrophenol, and 4-nitrophenol) be greater than or equal to 0.05.
- Thirteen compounds (acenaphthene, 1,4-dichlorobenzene, hexachlorobutadiene, N-nitrosodiphenylamine, di-n-octylphthalate, fluoroanthene, benzo(a)pyrene, 4-chloro-3-methylphenol, 2,4-dichlorophenol, 2-nitrophenol, phenol, pentachlorophenol, and 2,4,6-trichlorophenol) must have a relative standard deviation equal to or less than 30 percent.
- The internal standards retention time must not change by more than 30 seconds nor can the response change by more than a factor of 2 (-50 to +100 percent).

WESTON verified that the relative standard durations were less than 50 percent and the response factors were greater than 0.05 for all target compounds not specifically identified in the Method 8270 initial calibration requirements. The laboratory met the initial calibration requirements for all the samples.

4.2.2.3. Daily Calibration

Method 8270 in SW-846 specifies the following daily calibration requirements:

- The basic hardware settings must be checked using DFTPP against criteria specified in the method.
- The response factors for four compounds (N-nitroso-di-n-propylamine, hexachloropentadiene, 2,4-dinitrophenol and 4- nitrophenol) must be equal to or greater than 0.05.
- The percent difference for 13 compounds (acenaphthene, 1,4-dichlorobenzene, hexachlorobutadiene, N-nitrosodiphenylamine, di-n-octylphthalate, fluoroanthene, benzo(a)pyrene, 4-chloro-3-methylphenol, 2,4-dichlorophenol, 2-nitrophenol, phenol, pentachlorophenol, and 2,4,6-trichlorophenol) must be equal to or less than 30 percent.
- The internal standards retention time must not change by more than 30 seconds nor can the response change by more than a factor of 2 (-50 percent to +100 percent).

In addition to following these daily calibration requirements, WESTON assessed the results against a continuing calibration percent difference requirement of 90 percent. The laboratory met the SW-846 requirements for all samples, and the continuing calibration percent difference of 90 percent was not exceeded for any of the continuing calibration checks associated with the sample data.

4.2.2.4. Spectral Performance and Interpretation

Method 8270 in SW-846 provides guidelines for qualitative spectral identification. In general, the laboratory complied with these guidelines. Several spectra associated with target analyte concentrations below the laboratory reporting limit were poor and difficult to confirm. Because these spectra were associated with low concentrations below the reporting limit, the inaccuracy of the spectral identification was not considered significant and the associated data were considered usable.

4.2.2.5. Detection Limits

SW-846 requires that laboratories determine reporting limits by performing method detection limit studies. The resulting reporting limits are specific to the laboratory and any determined reporting limit is acceptable. The laboratory was routinely reporting 330 to 1900 ppb for soils, which is comparable to the USEPA CLP reporting requirements. Typical CLP limits range from 330 to 800 ppb.

4.2.2.6. Blank Contamination

The laboratory had low levels of blank contamination for di-n-butylphthalate and bis(2-ethylhexyl)phthalate. Because the associated sample results for these analytes were low (less than the EPA Region III Risk levels limits), the blank contamination did not significantly affect data usability.

4.2.2.7. Surrogate Recovery

USEPA SW-846 requires that laboratories determine control limits based on three times the standard deviation of the surrogate recoveries to date. Any laboratory limits based on the EPA specified calculation are permissible. The laboratory appears to have assigned recovery limits based on the USEPA Contract Laboratory Program. Only one sample, CC0/2 (178), had surrogate recoveries outside the CLP acceptance limits (the surrogate recovery for this sample was 0 percent). The sample was re-extracted outside holding time and all surrogates were within the acceptance criteria. The re-extracted sample results were used, but may be biased low due to the exceeded holding time. The degree of the bias can not be determined.

4.2.2.8. Internal Standard Recovery

Method 8270 specifies the internal standard area must be within a factor of 2 (-50 percent to +100 percent) of the last daily calibration check. Several samples were reported with internal standard areas below the acceptance limit, these are summarized in Table 4.11. The laboratory re-analyzed these samples and experienced similar matrix interferences in all cases. When the internal standard recovery is suppressed, associated analyte concentrations may be biased high. The bias is the result of how the internal standard is used to quantify associated analyte data. Because the concentration of target analytes in the affected samples was low (less than EPA Region III Risk levels limits), the deficiency was not considered significant.

Table 4.11. Semi-VOC Samples Affected By Low Internal Standard Recovery

CC 0/2 (001)	CC 0/2 (004)	CC 0/2 (007)	CC 0/2 (061)	CC 0/2 (065)
CC 0/2 (070)	CC 0/2 (071)			

4.2.2.9. Matrix Spikes

Matrix spikes were not required by the SAP.

4.2.2.10. Laboratory Duplicates

Laboratory duplicates were not required by the SAP nor by the referenced methodology.

4.2.2.11. Field Duplicates

WESTON evaluated the field duplicate relative percent differences against an acceptance criterion of 60 percent. The results of the comparison are presented in Table 4.12. Sample results near the reporting limit typically have very high relative percent differences due to the limitations of the laboratory instrumentation; they were not assessed. Analyte values below the laboratory reporting limit have been flagged "J" in Table 4.12. Non-detected results were flagged "U" in Table 4.12. All associated field duplicate results met the acceptance criteria.

Table 4.12. Summary of SVOC Soil Sample Field Duplicate Results

Sample ID	Analyte	Primary Result	Duplicate Result	RPD
CC 0/2 (071)	Di-n-butylphthalate	290 J	270 J	7.1
CC 0/2 (071)	Phenanthrene	54 J	U	200
CC 0/2 (071)	Fluoroanthrene	77 J	44 J	54
CC 0/2 (071)	Pyrene	140 J	43 J	106
CC 0/2 (071)	Benzo(a)anthracene	44 J	U	200
CC 0/2 (071)	Bis(2-ethylexyl)phthalate	150 J	110 J	31
CC 0/2 (202)	Di-n-butylphthalate	490	370	28

4.2.3. PCB Analyses

4.2.3.1. Method

The laboratory performed GC analyses by the Pesticide/PCB method specified in the USEPA SOW OLML1.8 and didn't perform the method specified in the SAP. The CLP method is much more sensitive to PCB concentrations and is technically superior to Method 8270 for PCB analysis.

For the purposes of evaluating data quality, Method 8270 and the CLP method have no common Quality control requirement. However, Method 8080 in SW-846 is comparable to the CLP method and was referenced for quality control requirements. QC requirements were selected from SW-846 because all other SAP methods were from SW-846.

4.2.3.2. Holding Time

The SAP requires that samples submitted for PCB analysis be extracted within seven days of receipt. Many soil samples were not extracted within seven days of receipt, although all the soil samples were extracted within 14 days. Because USEPA SW-846 specifies a recommended soil holding time of 14 days from collection to extraction for pesticide/PCB analysis, WESTON determined that the exceeded holding times did not significantly affect data usability. USEPA SW-846 also specifies that sample analyses for pesticides/PCBs must be completed within 40 days of sample extraction. All samples were analyzed within the 40-day holding time.

4.2.3.3. Initial Calibration

The laboratory did not follow either the cited method nor the method specified in SW-846 for pesticides/PCB analysis (Method 8080). USEPA SW-846 methods require a five-point initial calibration curve. The method followed by the laboratory requires a single point calibration curve. The use of a single point calibration curve may affect the accuracy of the measurements reported by the laboratory. Because the reported concentrations were nearly one thousand times below 50 ppm, the action limit identified for this project, the inaccuracy does not affect data usability.

4.2.3.4. Daily Calibration

USEPA SW-846 states that a calibration standard containing the analytes of interest must be analyzed each day and after every 10 samples. The continuing calibration check must have a percent difference of less than 15 percent. The laboratory adhered to USEPA CLP specifications, which are similar to the SW-846 requirements. The deviation is unlikely to affect data usability, given an action limit of 50 ppm for PCBs in soils and the low concentrations reported by the laboratory.

4.2.3.5. Chromatographic interpretation

USEPA provides guidelines in SW-846 for qualitative chromatographic identification. In general, the laboratory complied with the specifications in Method 8080 and data were determined.

4.2.3.6. Detection Limits

USEPA SW-846 methods require that laboratories determine reporting limits by performing method detection limit studies. The resulting reporting limits are specific to the laboratory and any determined reporting limit is acceptable. The laboratory was routinely reporting 33 to 70 ppb for soils, which is comparable to the USEPA CLP reporting requirements.

4.2.3.7. Blank Contamination

Polychlorinated biphenyls were not reported in any of the laboratory blanks.

4.2.3.8. Surrogate Recovery

USEPA SW-846 requires that laboratories determine control limits based on three times the standard deviation of the surrogate recoveries to date. Therefore, any laboratory limits based on the specified

calculation are permissible. The laboratory appears to have assigned recovery limits based on the USEPA Contract Laboratory Program. While surrogate recoveries were occasionally reported outside criteria for a sample, the variance occurred only on one of the two chromatography columns and was not considered to be reflective of the laboratory quantitative determination.

4.2.3.9. Matrix Spikes

Matrix spikes were not required by the SAP.

4.2.3.10. Laboratory Duplicates

Laboratory duplicates were not required by the SAP nor by the referenced methodology.

4.2.3.11. Field Duplicates

WESTON evaluated the field duplicate relative percent differences for field duplicates against an acceptance criterion of 60 percent. Since PCBs were not detected, it was not possible to determine the precision from the field duplicate results.

4.2.4. Phenol Analyses

4.2.4.1. Holding Time

The SAP requires samples submitted for phenol analysis be analyzed within seven days of receipt. The SAP was amended by EG&G Mound on 31 August 1994 to revise the holding time to 28 days. All samples were analyzed within 28 days.

4.2.4.2. Initial Calibration

USEPA SW-846 Method 9066 requires the calibration curve to be generated from a blank and a minimum of three standard concentrations. The laboratory met this requirement for all samples.

4.2.4.3. Continuing Calibration

USEPA SW-846 Method 9066 requires that the laboratory perform a calibration check for every 15 samples. The method does not establish minimum acceptance criteria for the continuing calibration check recovery. During the review, WESTON verified that the check standard was performed at the

proper frequency and that the percent recovery was within 20 percent of the true value. All samples met the review criteria.

4.2.4.4. Preparation Blank

Method 9066 requires that blanks be introduced at the frequency of one per batch. The laboratory met the method requirements and phenol was not reported in any of the method blanks.

4.2.4.5. Duplicate/Spike

The SAP does not require laboratory duplicates or matrix spikes.

4.2.4.6. Field Duplicates

WESTON evaluated the field duplicate relative percent differences for field duplicates against an acceptance criterion of 60 percent. Since phenols were not detected, it was not possible to determine the precision from the field duplicate results.

4.2.5. Sulfide Analyses

4.2.5.1. Method

The SAP specifies that sulfide analysis must be performed by Method 9030. However, the laboratory performed the analysis by Method 9030A. Method 9030A uses sample distillation and permits both water and soil samples to be analyzed by a titration method. Method 9030 is intended for water samples only and uses an identical titration procedure. Given the need to analyze soil samples, the laboratory's use of method 9030A was appropriate.

4.2.5.2. Holding Time

The SAP specifies the holding time for sulfide analysis to be seven days from collection. Table 4.13 lists the samples which were analyzed outside the holding time. The effect of exceeding the holding time on the sample results cannot be assessed as either a positive or negative bias.

Table 4.13. Summary of Soil Samples Analyzed for Sulfide Outside Holding Time

CC 0/2 (001)	CC 0/2 (004)	CC 0/2 (007)	CC 0/2 (009)	CC 0/2 (011)
CC 0/2 (017)	CC 0/2 (026)	CC 0/2 (040)	CC 0/2 (044)	CC 0/2 (052)
CC 0/2 (061)	CC 0/2 (065)	CC 0/2 (066)	CC 0/2 (070)	CC 0/2 (071)
CC 0/2 (074)	CC 0/2 (076)	CC 0/2 (078)	CC 0/2 (079)	CC 0/2 (083)
CC 0/2 (084)	CC 0/2 (086)	CC 0/2 (087)	CC 0/2 (091)	CC 0/2 (092)
CC 0/2 (093)	CC 0/2 (097)	CC 0/2 (100)	CC 0/2 (102)	CC 0/2 (106)
CC 0/2 (108)	CC 0/2 (111)	CC 0/2 (118)	CC 0/2 (119)	CC 0/2 (120)
CC 0/2 (124)	CC 0/2 (125)	CC 0/2 (138)	CC 0/2 (141)	CC 0/2 (148)
CC 0/2 (151)	CC 0/2 (170)	CC 0/2 (185)	CC 0/2 (187)	CC 0/2 (196)
CC 0/2 (202)	CC 0/2 (209)	CC 0/2 (221)	CC 0/2 (222)	CC 0/2 (231)

4.2.5.3. Calibration

Because Method 9030A is titrimetric, no calibration requirements are appropriate; however, the titrant concentration must be standardized. Standardization results were not included with the laboratory data and were not evaluated. Since the method also requires a check standard for every batch to verify the stability of the titrant and accuracy of the procedure, the lack of standardization data does not warrant rejecting the data.

4.2.5.4. Check Standard Analysis

Method 9030A requires a check standard to be analyzed with every batch of samples. The interpretation of "batch" is unclear in the method, but WESTON interprets it to mean 20 samples or less, or one preparation blank for each day an analysis is performed. The laboratory systematically failed to analyze a check standard each day analyses were performed. The percent recovery for many check standards and spike samples was very low (<50 percent recovery). Due to the lack of standards and poor standard recoveries, many of the results (>90) were rejected. Because of the large number of data points associated with the systematic quality control check omissions and failures, all sulfide results are unusable.

4.2.5.5. Preparation Blank

Method 9030A specifies that a preparation blank must be analyzed with every batch of samples. The interpretation of "batch" is unclear in the method, but WESTON interprets it to mean 20 samples or less, or one preparation blank for each day an analysis is performed. The laboratory systematically failed to analyze a preparation blank each day analyses were performed. Since only low levels of sulfide were reported in the samples, the lack of blank data for the sulfide analyses does not greatly affect the usability of the analytical data.

4.2.5.6. Duplicate/Spike

The SAP does not require laboratory duplicates or matrix spikes.

4.2.5.7. Field Duplicates

Since the sulfide results were judged unreliable due to the poor check standard recoveries and lack of check standard information, the field duplicates were not compared. Table 4.14 summarizes the results for the field duplicates. A "U" indicates that the laboratory did not detect sulfide in the sample fraction.

Table 4.14. Summary of Sulfide Soil Sample Field Duplicate Results

Sample ID	Analyte	Primary Result	Duplicate Result	RPD
CC 0/1 (070)	Sulfide	28.3	43	41
CC 0/1 (052)	Sulfide	42.5	U	200
CC 0/2 (202)	Sulfide	U	U	0
CC 0/1 (221)	Sulfide	56.6	143	86

4.2.6. Total Organic Carbon Analyses

4.2.6.1. Method Selection

The SAP requires that TOC be analyzed in accordance with Method 9060. However, the laboratory analyzed water samples in accordance with Method 415.1 from the USEPA Methods for Chemical Analysis of Water and Wastes. The methods are both accepted USEPA methods of analysis, and variation does not affect the usability of the laboratory data.

4.2.6.2. Holding Time

The SAP specifies that samples submitted for TOC analysis must be analyzed within 28 days of sample collection. All samples were analyzed by the laboratory within the holding time.

4.2.6.3. Initial Calibration

Method 9060 directs the laboratory to use a series of standards encompassing the expected range of sample concentrations. The laboratory typically analyzed a series of five standards with concentrations ranging from 200 ppm to 15000 ppm. The laboratory reported that correlation coefficients for these standards were 0.995 or better. The initial calibration procedures are acceptable and the data are usable.

4.2.6.4. Continuing Calibration Check

Method 9060 requires the laboratory to introduce a check standard after every 15 samples analyzed. However, the method does not specify acceptance criteria. During the data review, WESTON established a limit of 80 to 120 percent for the recovery of the check standard. No data were qualified due to deficient continuing calibration check recoveries.

4.2.6.5. Preparation Blank

Method 9060 requires that a preparation blank be introduced for every batch. However, it does not define the number of samples in one batch nor the acceptance criteria for the blank. During the data review, WESTON established that one batch represented the number of samples run during one day and that the concentration of organic carbon in the blank must be less than the laboratory reporting limit. The laboratory met this requirement for all samples. In general, the laboratory prepared a blank for each work order of samples and a work order never exceeded 20 samples.

4.2.6.6. Quadruplicate Analysis

Method 9060 requires each sample to be analyzed in quadruplicate. The average and range of the four results must be reported by the laboratory. The laboratory performed all TOC analyses in duplicate. The lack of the two additional required measurements may affect data quality. Because the data will be used to characterize the sample location and there are no federal action limits for TOC, the data were not rejected.

4.2.6.7. Matrix Spike Analyses

The SAP does not require a matrix spike analysis.

4.2.6.8. Field Duplicates

WESTON evaluated the field duplicate relative percent differences against an acceptance criterion of 60 percent. The results of the comparison are presented in Table 4.15. All associated field duplicate results met the acceptance criteria.

Table 4.15. Summary of TOC Soil Sample Field Duplicate Results

Sample ID	Analyte	Primary Result	Duplicate Result	RPD
CC 0/1 (070)	TOC	94400	87000	8.2
CC 0/1 (052)	TOC	90800	94300	4
CC 0/2 (202)	TOC	8600	5870	38
CC 0/1 (221)	TOC	136000	127000	6.8

4.2.7. TOX Analyses

4.2.7.1. Method

The SAP requires TOXs to be analyzed by Method 9020A in SW-846. The laboratory performed the analyses by Method 9022 in SW-846. Technically, the deviation does not affect data usability and the data were not rejected.

4.2.7.2. Holding Time

The SAP requires that TOX be analyzed within seven days of collection. On 31 August 1994, EG&G Mound issued an amendment to the SAP which increased the holding time to 28 days. All samples were analyzed within the revised holding time.

4.2.7.3. Initial Calibration

Neither the SAP nor Method 9022 specify an initial calibration requirement.

4.2.7.4. Daily Calibration

Three types of daily calibration are required by Method 9022: an absorption efficiency check, a daily calibration of the instrument using radioactive standards, and a continuing calibration check after every 15 samples. The TOX method requires that the absorption efficiency be measured in duplicate for each batch of carbon prepared and that the recovery be within 5 percent of the true value. The laboratory met all requirements for the absorption efficiency check. No evidence of the instrument being calibrated with the radioactive standards was included in the data. No data were qualified due to the lack of the radioactive standards calibration data. While the method does not specify a recovery requirement for the continuing calibration check, WESTON used a criterion of 80 to 120 percent. Several samples were associated with continuing calibration recoveries of less than 80 percent; the affected samples are summarized in Table 4.16. The affected samples may be biased low.

Table 4.16. TOX Soil Sample Results Rejected Due to Continuing Calibration

CC 0/1 (090)	CC 0/1 (097)	CC 0/1 (106)	CC 0/1 (124)	CC 0/1 (125)
CC 0/1 (128)	CC 0/1 (148)	CC 0/1 (151)	CC 0/1 (163)	CC 0/1 (174)
CC 0/1 (178)	CC 0/1 (182)	CC 0/1 (202)	CC 0/2 (097)	CC 0/2 (097)
CC 0/2 (107)	CC 0/2 (124)	CC 0/2 (125)	CC 0/2 (170)	CC 0/2 (178)
CC 0/2 (182)	CC 0/2 (202)	CC 0/2 (202)	CC 0/2 (148)	CC 0/1 (170)
CC 0/1 (078)	CC 0/1 (083)	CC 0/1 (084)	CC 0/1 (092)	CC 0/1 (141)
CC 0/2 (078)	CC 0/2 (083)	CC 0/2 (084)	CC 0/2 (092)	CC 0/2 (106)
CC 0/2 (102)	CC 0/2 (141)	CC 0/1 (086)	CC 0/1 (087)	CC 0/1 (091)
CC 0/1 (093)	CC 0/1 (100)	CC 0/1 (102)	CC 0/1 (108)	CC 0/1 (111)
CC 0/1 (118)	CC 0/1 (119)	CC 0/1 (120)	CC 0/2 (086)	CC 0/2 (087)
CC 0/2 (091)	CC 0/2 (108)	CC 0/2 (118)	CC 0/2 (119)	CC 0/2 (120)
CC 0/2 (100)	CC 0/2 (111)			

4.2.7.5. Preparation Blank

Method 9022 requires that one blank be prepared for each batch of samples. However, Method 9022 does not define the number of samples in one batch nor the acceptance criteria for the blank. During the data review, WESTON established that one batch represented the number of samples run during one day and that the concentration of TOX in the blank must be less than the laboratory reporting limit. The laboratory met this requirement for all samples. In general, the laboratory prepared a blank for every 10 samples.

4.2.7.6. Matrix Spike Analyses

The SAP does not require a matrix spike analysis.

4.2.7.7. Field Duplicates

WESTON evaluated the field duplicate relative percent differences against an acceptance criterion of 60 percent. The results of the comparison are presented in Table 4.17. Sample results near the reporting limit typically have very high relative percent differences due to the limitations of the laboratory instrumentation, and were not assessed. A "U" was used to indicate that the laboratory reported the sample result as non-detect. All associated field duplicate results met the acceptance criteria.

Table 4.17. Summary of TOX Soil Sample Field Duplicate Results

Sample ID	Analyte	Primary Result	Duplicate Results	Rpd
CC 0/1 (070)	TOX	6.95	17.9	88
CC 0/1 (052)	TOX	24.6	23.9	2.9
CC 0/2 (202)	TOX	12.1	U	200
CC 0/1 (221)	TOX	11.9	15.7	28

4.2.8. Total Cyanide Analyses

4.2.8.1. Method

The SAP requires cyanide to be analyzed by Method 9010 in SW-846. The laboratory performed the analyses by Method 9012 in SW-846 for soils, and cited Method 335.2 from USEPA Methods of

Chemical Analysis for Waters and Wastes for the water samples. Technically, the deviation does not affect data usability and data were not rejected. The laboratory also prepared the samples using midi-distillation, which did not affect data usability.

4.2.8.2. Holding Time

The SAP requires that cyanide samples be analyzed within 12 days of collection. The referenced Method 9012 specifies the holding time for analysis is 14 days. Samples analyzed after the holding time period may be biased low due to degradation of the cyanide. For the purposes of evaluating data usability, the sample analysis time was compared to 14 days. All samples were analyzed within the specified holding time.

4.2.8.3. Initial Calibration

Method 9012 requires that a calibration curve consisting of six standards and a blank be prepared. The method does not specify an acceptable correlation coefficient for the calibration curve. The laboratory failed to provide the correlation coefficient for the calibration curve, but did provide a graphic representation of the calibration curves which appeared linear. Because the largest reported concentration, 7 ppm, was 15 times less than the regulatory limits, the lack of a correlation coefficient to evaluate the curve quality was insignificant.

4.2.8.4. Daily Calibration

Method 9012 specifies that the calibration curve must be verified with every 15 samples. However, the method does not specify the acceptance limit of the continuing calibration check. During WESTON's review of the data, WESTON verified the continuing calibration check recovery was within 75 to 125 percent of the true value, and that the check standard was analyzed at a rate of at least 1 per 15 samples. All samples met these requirements.

4.2.8.5. Preparation Blank

Method 9012 requires that one blank be prepared for each batch of samples. However, Method 9012 does not define the number of samples in one batch nor the acceptance criteria for the blank. During the data review, WESTON established that one batch represented the number of samples run during one day and that the concentration of cyanide in the blank must be less than the laboratory reporting limit. The laboratory met this requirements for all samples.

4.2.8.6. Matrix Spike Analyses

The SAP does not require a matrix spike analysis.

4.2.8.7. Field Duplicate Results

WESTON evaluated the field duplicate relative percent differences for field duplicates against an acceptance criterion of 60 percent. Since there were no positive detections, it was not possible to determine the precision from the field duplicate results.

4.2.9. Inorganic Analyses

4.2.9.1. Method

The SAP requires metals analyses to be performed by Method 6010 in SW-846, with mercury analysis by Method 7470 or 7471. The laboratory performed the analyses by method CLP SOW ILM03.0. The deviation does not affect data usability, and data were not rejected.

4.2.9.2. Holding Time

The SAP requires that all metal analyses, except mercury, be completed with 180 days of sample collection and that mercury analyses be completed within 28 days of sample collection. The holding times for all metal analyses were met.

4.2.9.3. Initial Calibration

Method 6010 specifies that the laboratory should calibrate the instrument according to the manufacturer's instructions. CLP SOW ILM03.0 requires that the laboratory verify the initial calibration of the inductively coupled plasma (ICP) by analyzing a blank and one standard. Because CLP SOW ILM03.0 is essentially the same as Method 6010, the CLP criteria were used to evaluate the laboratory data. All ICP data adhered to the CLP requirement.

Method 7470/7471 require that a calibration curve consisting of three standards and a blank be determined. However, the methods do not specify a minimum correlation coefficient for the calibration curve. For the purposes of reviewing the data quality, a minimum correlation coefficient of 0.995 was used. All samples analyzed by the laboratory met these minimum requirements and were not qualified.

4.2.9.4. Daily Calibration

Method 6010 and CLP SOW ILM03.0 require a continuing calibration verification sample to be analyzed after every 10 samples and at the end of an analytical run, with an acceptance criterion of 90 to 110 percent. All continuing check standards associated with the samples met these frequency and recovery requirements.

Method 7470 and 7471, for mercury analysis, both specify that a continuing calibration check standard must be analyzed after every 15 samples. However, neither method specifies an acceptance range for the check standard recovery. For the purposes of reviewing the data quality, a recovery criterion of 80 to 120 percent was used. All continuing check standards associated with the samples met these frequency and recovery requirements.

4.2.9.5. Blanks

Since none of the reported results exceeded the USEPA Region III Risk Levels presented in Section 4, the impact of laboratory contamination was irrelevant.

4.2.9.6. Continuing Blank Check

Method 6010 specifies that a blank must be introduced once per 10 samples and at the end of an analytical run. The acceptance criterion for the blank is based on historical blank performance at the laboratory. For the purposes of reviewing the data quality, the blank results were evaluated against reporting limits. The blank frequencies were met and blank results were less than the reporting limit for all ICP analyses.

4.2.9.7. Preparation Blank

Method 6010 and Methods 7470/7471 require one blank per batch. The methods do not specify the number of samples in a batch. For the purposes of reviewing the data, a batch has been defined as 20 samples or less prepared in one day. Method 6010 and Method 7470/7471 do not specify the acceptance criteria for the blanks. During the data review, blank values less than the reporting limit were determined acceptable. All preparation blanks were acceptable.

4.2.9.8. Interference Check Standard

Method 6010 requires than an interference checks standard be analyzed at a frequency of twice every eight hours or at the beginning and end of an analytical sequence, whichever is more frequent. The results obtained from the interference check standard must be within 20 percent of the true value. All of the interference check standards associated with the samples met these criteria.

4.2.9.9. Serial Dilutions

Method 6010 requires that analyte concentrations in samples that are sufficiently high should be diluted. The dilution should agree with the un-diluted result within 10 percent. Serial dilutions are suggested for new or unusual sample matrices. The frequency at which the laboratory performed serial dilutions was not evaluated. If a serial dilution was performed by the laboratory, results exceeded the 10 percent criterion and were within a factor of three of the reporting limit, the variance was attributed to natural occurring inaccuracies near the reporting limit. For these analyte results, the accuracy analysis may be affected. In order to evaluate the data point conservatively, the higher value should be used.

4.2.9.10. Matrix Spike Analyses

Matrix spike analyses were not specified by the SAP.

4.2.9.11. Matrix Spike Addition

Method 6010 requires standard addition when a new or unusual sample matrix is encountered by the laboratory. The laboratory did not submit data for standard addition. However, since the required frequency is not clearly delineated in the referenced method, the data were not qualified unusable.

4.2.9.12. Laboratory Duplicate Analyses

Duplicate laboratory analyses was not specified by the SAP.

4.2.9.13. Field Duplicate Results

WESTON evaluated the field duplicate relative percent differences for field duplicates against an acceptance criterion of 60 percent. The results of the comparison are presented in Table 4.18. Sample results near the reporting limit typically have very high relative percent differences due to the

Table 4.18. Summary of Metals Soil Sample Field Duplicate Results

Sample ID	Analyte	Primary Result	Duplicate Result	RPD
CC 0/2 (070)	Aluminum	6450	5650	13
CC 0/2 (070)	Arsenic	5.6	5.2	7
CC 0/2 (070)	Barium	63.9	79.2	21
CC 0/2 (070)	Beryllium	0.24	0.23	4.3
CC 0/2 (070)	Calcium	137000	138000	0.73
CC 0/2 (070)	Cobalt	5	5.1	2
CC 0/2 (070)	Copper	10.4	9	14
CC 0/2 (070)	Iron	12500	12000	4.1
CC 0/2 (070)	Lead	9.9	9.9	0
CC 0/2 (070)	Magnesium	52500	51900	1.1
CC 0/2 (070)	Manganese	348	331	5
CC 0/2 (070)	Nickel	9.7	9	7.5
CC 0/2 (070)	Potassium	1030	932	10
CC 0/2 (070)	Sodium	857	684	22
CC 0/2 (070)	Vanadium	14.2	12.6	11
CC 0/2 (070)	Zinc	55.9	40	33
CC 0/2 (202)	Aluminum	6970	8790	23
CC 0/2 (202)	Arsenic	5.4	7.4	31
CC 0/2 (202)	Barium	59.5	58.4	1.9
CC 0/2 (202)	Beryllium	0.33 B	0.36 B	8.7
CC 0/2 (202)	Cadmium	0.31 B	0.31	0
CC 0/2 (202)	Calcium	3780	3840	1.6
CC 0/2 (202)	Chromium	9.7	11.6	18
CC 0/2 (202)	Cobalt	9.6	9.3 B	3.2
CC 0/2 (202)	Copper	9.6 B	9.9	3.1
CC 0/2 (202)	Iron	11900	15400	26
CC 0/2 (202)	Lead	15.4	14.2	8.1
CC 0/2 (202)	Magnesium	2120	2340	9.9
CC 0/2 (202)	Manganese	441	492	11
CC 0/2 (202)	Nickel	8.7	9.6	10
CC 0/2 (202)	Potassium	605 B	699 B	14
CC 0/2 (202)	Silver	0.65	0.79 B	19
CC 0/2 (202)	Sodium	217 B	302 B	33
CC 0/2 (202)	Vanadium	19	21.8	14
CC 0/2 (202)	Zinc	29.4	34.2	15

limitations of the laboratory instrumentation. They were not assessed. All field duplicate results met the acceptance criteria.

4.2.10. pH Analyses

4.2.10.1. Method

The SAP specifies that pH must be determined following USEPA SW-846 Method 9045. The laboratory reported analyzing the water samples by Method 9040. The laboratory's use of Method 9040 for water samples was appropriate and does not affect the usability of the data.

4.2.10.2. Holding Time

The SAP specifies that pH analyses must be completed immediately. The laboratory analyzed samples 3 to 17 days after the samples were collected. The requirement to analyze immediately has been interpreted to mean on the day of receipt by the laboratory. Because all samples were analyzed at least one day after laboratory receipt, the reported results may be biased. The direction and degree of bias cannot be determined.

4.2.10.3. Field Duplicates

WESTON evaluated the field duplicate relative percent differences (RPD) against an acceptance criterion of 60 percent. The results of the comparison are presented in Table 4.19. All field duplicate results met the acceptance criteria.

4.2.11. Radiological Analyses

The SAP does not require data review of the radiological data. However, two quality check parameters were reviewed during the preparation of the data: field duplicate relative percent differences, and relative percent differences between the isotopes (determined using gamma spectrometry and alpha spectrometry). The results of these evaluations are presented in the following subsections.

4.2.11.1. Field Duplicates

The results obtained for field duplicates were compared using a relative percent difference calculation. The resulting percent differences were grouped by nuclide. An average and standard deviation by nuclide or each reported percent difference was then calculated. The calculated averages and standard deviations are presented in Table 4.20. Large average percent differences indicate poor precision.

However, many of the sample activities used to calculate the relative percent difference were near the minimum detectable activity and may only represent expected instrument variations.

Table 4.19. Summary of pH Soil Sample Field Duplicate Results

Sample ID	Analyte	Primary Result	Duplicate Result	RPD
CC 0/1 (070)	pH	8.12	7.99	1.6
CC 0/1 (052)	pH	8.19	8.32	1.6
CC 0/2 (202)	pH	7.58	7.39	2.5
CC 0/1 (221)	pH	8.88	8.78	1.1

Table 4.20. Summary of Radiological Soil Sample Relative Percent Differences

Isotope	Number of Observations	Average Relative Percent Difference	Standard Deviation
Bismuth-210M	1	200	0
Cesium-137DA	8	82	76
Plutonium-238	10	64	58
Plutonium-239			
Radium-224DA	11	55	58
Radium-226DA	11	18	13
Thorium-228	11	50	48
Thorium-230	11	34	40
Thorium-232	11	48	52
Thorium-232DA	11	39	48
Uranium-234	11	34	41
Uranium-235	6	97	78
Uranium-238DA	11	21	19

4.2.11.2. Gamma Spectrometry to Alpha Spectrometry Comparison

Of the isotopes which were reported from the gamma spectroscopy data, only thorium-232 can be compared to the alpha spectroscopy results. When the relative percent differences for thorium-232 derived from gamma spectrometry were compared to the alpha spectrometry results, all the positive detections had relative percent differences of less than 10 percent. Given the extremely low relative percent differences, the gamma spectroscopy data results appear to be comparable to the alpha spectroscopy results for thorium-232 activities.

SECTION 5

5. CONCLUSIONS

This section summarizes the conclusions of the Building 21 and Surrounding Soils field investigation. The objective of this investigation is to collect, present and evaluate radiological field screening and laboratory chemical and radiological analytical data for purposes of planning the D&D of Building 21 and its surrounding soils. It is emphasized that the data presented is not of the quality needed to characterize the facility for waste management purposes. In accordance with the SAP, the field screening data should be used for planning the D&D operations. It should not be used to exclude areas from further characterization or to freely release the facility or any part of the facility in accordance with DOE Order 5400.5. The investigation included five activities:

- Collecting radiological field screening measurements of the Building 21 interior and exterior surfaces.
- Collecting paint and concrete chip samples from the Building 21 interior surfaces and submitting them to the laboratory for gamma spectroscopy.
- Collecting radiological field screening measurements of the Building 21 surrounding soil grid.
- Collecting soil samples from the Building 21 surrounding soils and submitting them to the laboratory for gamma and alpha spectroscopy and for analysis of chemical parameters.
- Presenting and evaluating field screening and laboratory analytical data.

Both the field investigation and the final report preparation were performed by WESTON. The radiological analyses were performed by Quanterra-Richland Laboratory and the chemical analyses were performed by TMA/Skinner & Sherman Laboratories.

5.1. BUILDING 21

5.1.1. Radiological Field Measurements of Building Surfaces

G-M pancake, alpha scintillometer and micro-R meter field screening of the interior and exterior parts of Building 21 was performed. The results indicate a total of 88.44 microcuries of total alpha contamination and 438.5 microcuries of beta/gamma contamination is estimated on the Building 21 surfaces. Of the total, 315.6 microcuries total beta/gamma and 29.66 microcuries total alpha are measurable above the paint and surface coating layers. Most of the measurable contamination appears to be on the floors and lower portions of the interior walls. The measured alpha contamination is assumed to be entirely on the surfaces contacted, no estimates of depth could be determined from the existing data set. The measured total beta/gamma contamination is assumed to original from the

surface and some depth within the concrete walls and floors. However, no estimate of depth can be determined from the existing data. The total alpha and beta/gamma data sets do not appear to be normally distributed.

No micro-R meter measurements were taken on the interior parts of the building. Results indicate that the upper parts of the exterior walls of Building 21 possess slightly elevated radioactivity. The north exterior wall contains an area of approximately 17 m^2 with radiation slightly greater than 25 uR/hr. The micro-R meter measurement dataset appears to be normally distributed.

5.1.2. Analytical Laboratory Measurements of Building Interior Surfaces

Full spectrum gamma analyses were requested for 29 composite and 50 individual samples from the interior of Building 21. Results indicate radioactive contamination with thorium-232 and radium-226 is generally higher on the lower part of the walls than the floors. Thorium-232 and radium-226 occur as high as 1570 and 25.1 pCi/g, respectively on the north wall of Room 1, whereas the floors indicate the same isotopes <500 and 20 pCi/g, respectively. No samples were collected with respect to depth of contamination within the 14 to 16-inch thick concrete walls.

5.2. SURROUNDING SOILS

5.2.1. Field Measurements

Micro-R field screening readings were taken from each of the 232 soil sampling grid squares. Only four sample grids showed gamma radiation levels that exceeded background levels.

5.2.2. Analytical Laboratory Measurements

5.2.2.1. Radiological Results

The laboratory performed full spectrum gamma and alpha spectroscopy on 426 soil samples. The laboratory reported alpha spectroscopy results for only 5 percent of the samples, as required by the SAP. Results of the gamma and alpha spectroscopic analyses indicate that the 2 data sets agree very well. Values are reported in pCi/g in both data sets, and individual analyses of samples taken at identical locations are within 10 percent of each other. In comparison with background values determined as part of the ER Program, all cesium-137, uranium, and radium-226 values are within the upper 95 percent sample tolerance limit expected of naturally occurring soils in the area of EG&G Mound. Comparison of ratios of radionuclides with the uranium-238 decay chain, as determined by

alpha spectrometry indicates that uranium-234, thorium-230 and radium-226 are present in approximately similar activities indicating that they are in secular equilibrium.

Results of thorium-232 indicates that it is present in activities that exceed the upper 95 percent sample tolerance limit expected of naturally occurring soils in the area of EG&G Mound. Review of the ratios of thorium-228 and thorium-232 from alpha spectroscopy indicate that they are present in approximately similar activities suggesting that they are in approximate secular equilibrium. It is calculated that approximately 23, 436 microcuries of thorium-232 above background levels are present in the top 24 inches of soils surrounding Building 21 (see Appendix A).

Review of the alpha spectroscopic analyses for plutonium-238 indicates 5 positive detections above the upper 95 percent sample tolerance limit of background soils in the area of EG&G Mound. The highest value of 15.9 pCi/g is below the current EG&G Mound ALARA guideline of 25 pCi/g. Elevated concentrations of americium-241 in the same area (as the elevated plutonium-238 sample) suggests wider spread plutonium-238 contamination could be present. Otherwise, it was not possible to evaluate the gamma spectroscopy data for additional information on the possible distribution of plutonium-238.

5.2.2.2. Chemical Results

One hundred and twenty nine soil samples were submitted for indicator screen analyses and 62 samples for extended analyses. The indicator screen analyses included pH, cyanide, sulfide, total organic carbon TOC, and total organic halide TOX. The extended analyses included analyses of metals, total phenols, VOCs, SVOCs, and PCBs. Results indicate the possible presence of 1,2,3-trichlorobenzene, methylene chloride, toluene, naphthalene and a group of polyaromatic hydrocarbons.

All metals, PCBs, and cyanide results fall below EG&G Mound background levels or below USEPA Region III Risk-Based Concentration Table values. The sulfide results were determined to be unusable.

5.3. SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS

Although the interim material sampling instructions for Building 21 walls and floors provided to WESTON (see document entitled "Distribution of Building 21 Radiological Survey Data", Appendix E) infer that the Building 21 characterization sampling is the vehicle that will determine what radionuclides are present and at what levels, the sampling and analysis conducted as part of this investigation may not supply sufficient information or may not be of sufficient quality to comply with the waste

acceptance criteria demanded of the Nevada Test Site Defense Waste Acceptance Criteria, Certification, and Transfer Requirement", known as NVO-325 (Rev. 1). It is beyond the scope of this investigation to conduct a rigorous evaluation of data collected as part of this investigation against the NVO-325 waste acceptance criteria. The objective of data collection is to provide screening level data for purposes of planning the D&D of Building 21 and surrounding soils.

Within the scope of this investigation, the following observations and recommendations are made.

First, the obvious processing of the thorium sludges rendered them as altered from naturally occurring thorium materials, even though the isotopic ratios may have remained unaltered. The contaminated facility, therefore, falls out of exemption, and should be managed as low-level radioactive waste (LLW).

Second, no chemical characterization analyses are known to have been performed on the wall or floor material of Building 21. There may have to be assurances that the materials do not include any mixed wastes.

Third, no data from the current investigation reveals any information concerning the possible depth of contamination of the concrete walls and floors of Building 21. Although concrete is a known porous material, the extent of contamination within the 14- to 16-inches thick concrete walls should be determined for purposes of waste minimization. There are currently several known technologies for removing radioactive contaminants from concrete or separating contaminated from uncontaminated materials. The DOE Decommissioning Handbook (PMOL/93-1884) provides detailed information on Decontamination and on Waste Minimization. The Remedial Action Program Information Center can provide additional information on waste management, decontamination, and waste minimization lessons learned. It is the policy of DOE EM-31 to reduce the volumes of radioactive and mixed wastes to the minimum necessary for disposal, as specified in DOE Order 5820.2A. Chapter 3 of DOE Order 5820.2A specifies that <u>all</u> DOE LLW generators shall establish auditable programs (goals, incentives, procedures, and reports) to assure that the amount of LLW shipped for disposal is minimized. Chapter 5 requires all D&D of contaminated materials shall meet the generator requirements of this order.

Fourth, insufficient data appears to exist on the possible mixture of the radionuclides thorium-232 and plutonium-238 in the surrounding soils. Additional sampling for plutonium-238 in the area east of Building 21 (near the historic waste storage area) may be prudent.

Fifth, if there was slight disequilibrium in the decay chains, this would not greatly impact any risk assessment estimates due to the fact that numbers generated in risk assessments are based on orders of magnitude and the errors in activity estimates generated assuming equilibrium would be well below an order of magnitude.

Sixth, the data contained in this report is not complete enough for purposes of waste characterization; but, it could be utilized to implement a pilot decontamination effort to provide information for the D&D Design and Waste Management Plan. EM-40 D&D guidance requires a waste management plan that addresses waste minimization information, and data gathered from the pilot scale. D&D and depth sampling efforts could be utilized for waste characterization documentation. In many cases, it is much more efficient and cost effective to characterize the source term prior to demolition and placement of the waste into packages.

SECTION 6

6. REFERENCES

CFR 1991 "Land Disposal Restrictions," 40 CFR 268, Code of Federal Regulations, U.S. Government Printing Office, Washington, D.C. July 1991.

DOE. 1993a. "Operable Unit 9, Site Scoping Report: Volume 7 - Waste Management" Environmental Restoration Program, U.S. Department of Energy, Albuquerque Operations Office, Albuquerque, New Mexico, February 1993.

DOE 1993b. "Operable Unit 9, Site Scoping Report: Volume 3 - Radiological Survey Date" Environmental Restoration Program, U.S. Department of Energy, Albuquerque Operations Office, Albuquerque, New Mexico, June 1993.

DOE 1994a. "Operable Unit 9 Background Soils Investigation Soil Chemistry Report," Environmental Restoration Program, U.S. Department of Energy, Albuquerque Operations Office, Albuquerque, New Mexico, March 1994.

DOE 1994b. "Operable Unit 9, Site Scoping Report: Volume 12 - Site Summary." Environmental Restoration Program, U.S. Department of Energy, Albuquerque Operations Office, Albuquerque, New Mexico, December 1994.

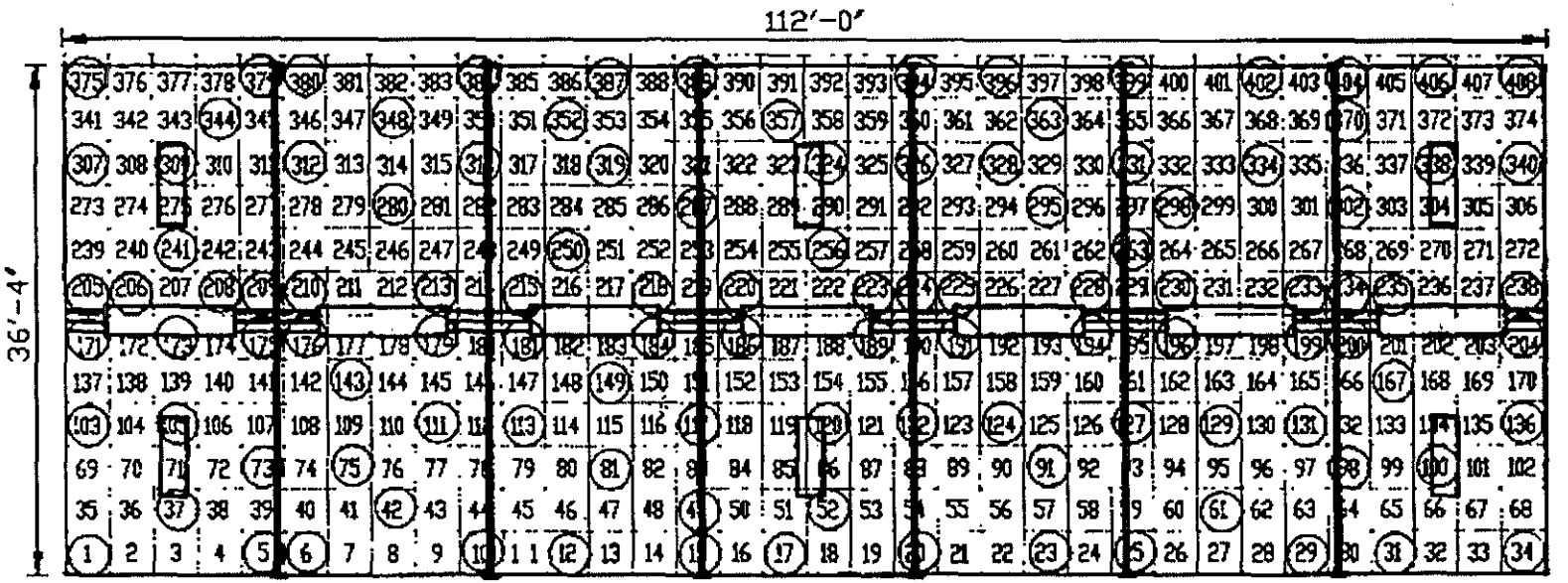
EG&G. 1994. "Sampling and Analysis Plan for the Decontamination and Decommissioning of Building 21 and Surrounding Soils," EG&G Mound Applied Technologies, Miamisburg, Ohio, March 1994.

EPA. 1995. "U.S. EPA Region III Risk-Based Concentration Tables," U.S. Environmental Protection Agency, Region III U.S. EPA, Philadelphia, Pennsylvania, March 1995.

APPENDIX A
DISPLAY AND SUMMARY OF RADIOLOGICAL DATA

A.1. Sampling Grid Locations of Building 21
A.2. Distribution of Alpha Radiation - Building 21
A.3. Summary Data of Alpha Radiation Measurements- Building 21
A.4. Distribution of Beta/Gamma Radiation - Building 21
A.5. Summary Data of Beta/Gamma Radiation Measurements - Building 21
A.6. Calculations of Total Alpha and Beta/Gamma Surface Radiation - Building 21
A.7. Distribution of Micro-R Measurements - Building 21
A.8. Summary Data of Micro-R Measurements - Building 21
A.9. Distribution of Gamma Spectroscopis Analyses of Paint and Concrete - Building 21
A.10. Summary Data of Gamma Spectroscopic Analyses of Paint and Concrete - Building 21
A.11. Summary Data of Gamma Spectroscopic Analyses of Surrounding Soils
A.12. Summary Data of Alpha Spectroscopic Analyses of Surrounding Soils
A.13. Summary Data of Micro-R Measurements of Surrounding Soils
A.14. Calculation of Total Thorium-232 Activity in Surrounding Soils
A.15. Summary of Background Results for Metals, Pesticides/PCBs, Radionuclides and Anions Republished from ER Program Background Soil Investigation (DOE 1994a)

A.1. Sampling Grid Locations of Building 21

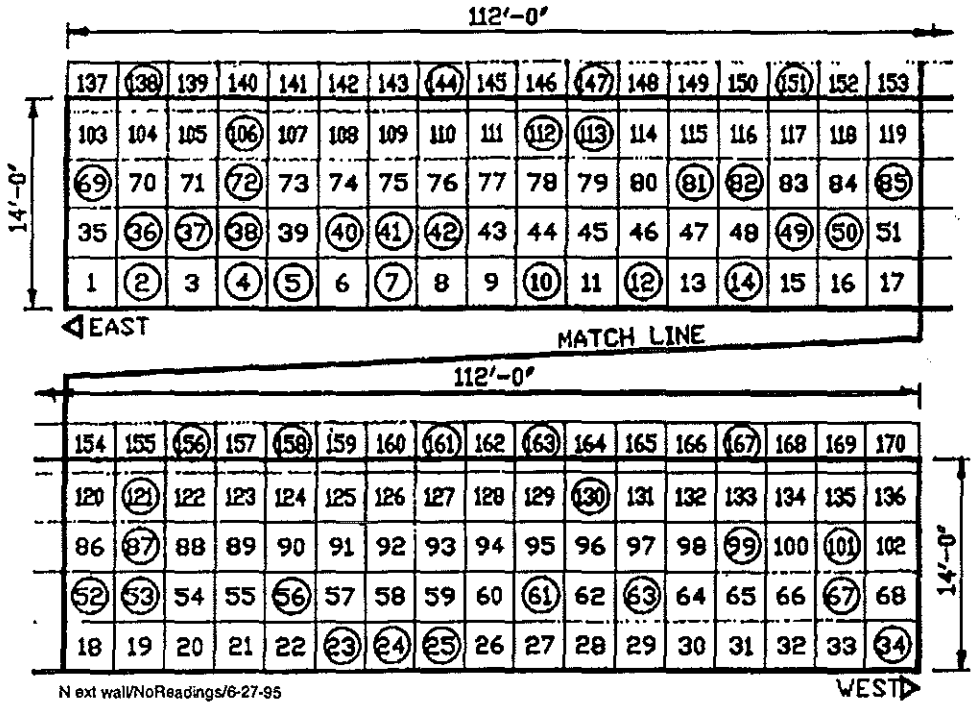


Roof Plan/NoReadings/6-27-95

Legend

Grid to be sampled

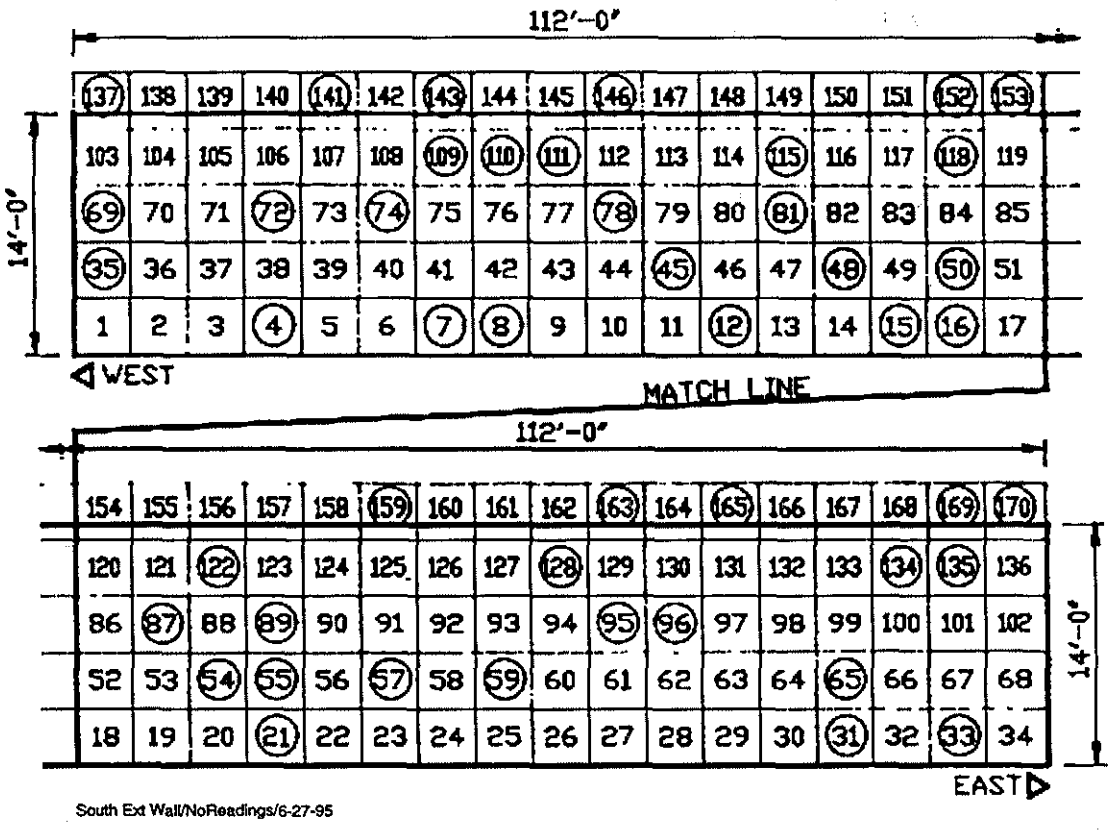
Building 21 Roof Plan Sampling Locations.



Legend

Grid to be sampled

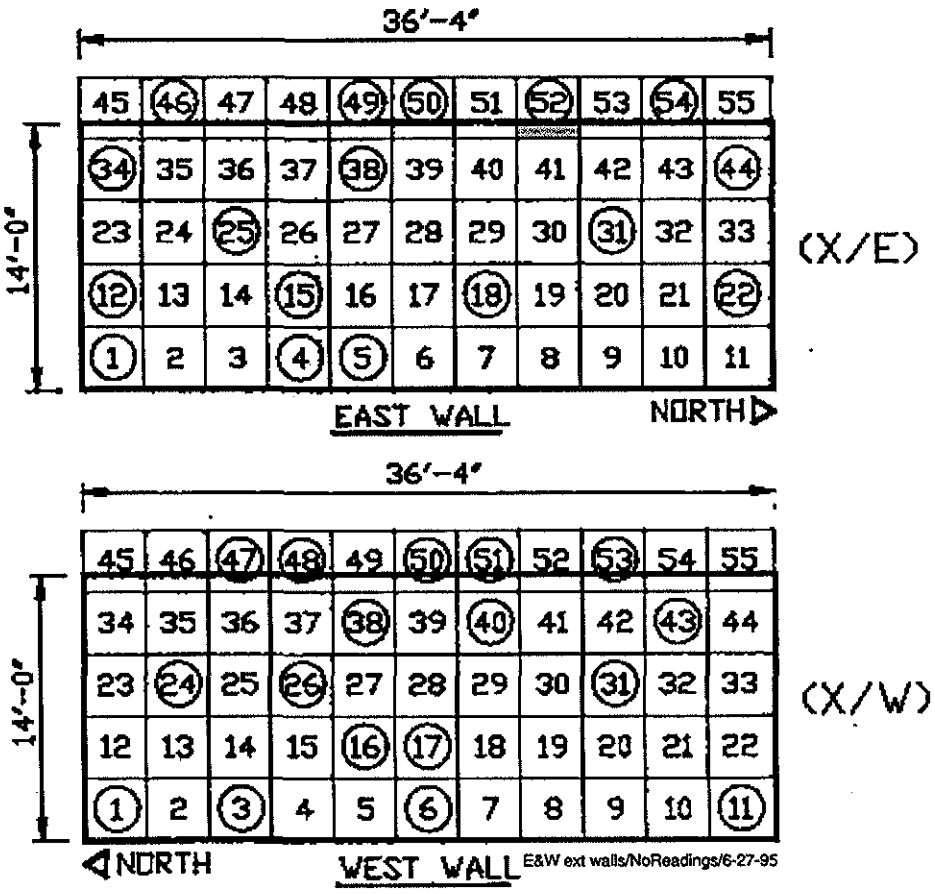
Building 21 North Exterior Wall (X/N) Sampling Locations.



Legend

Grid to be sampled

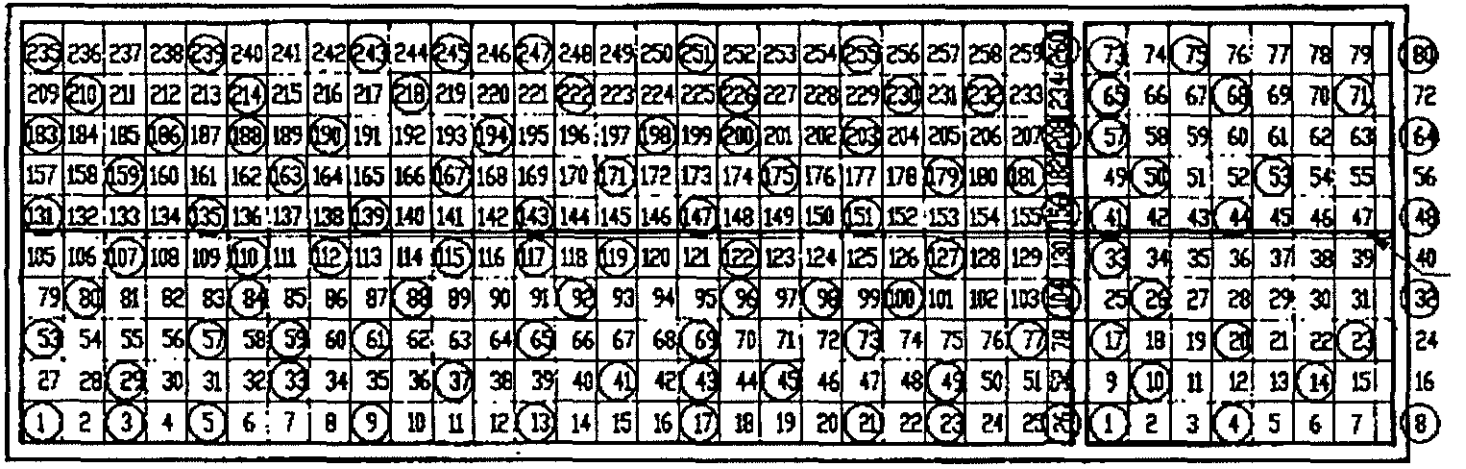
Building 21 South Exterior Wall (X/S) Sampling Locations.



Legend

Grid to be sampled

Building 21 East and West Exterior Walls Sampling Locations.



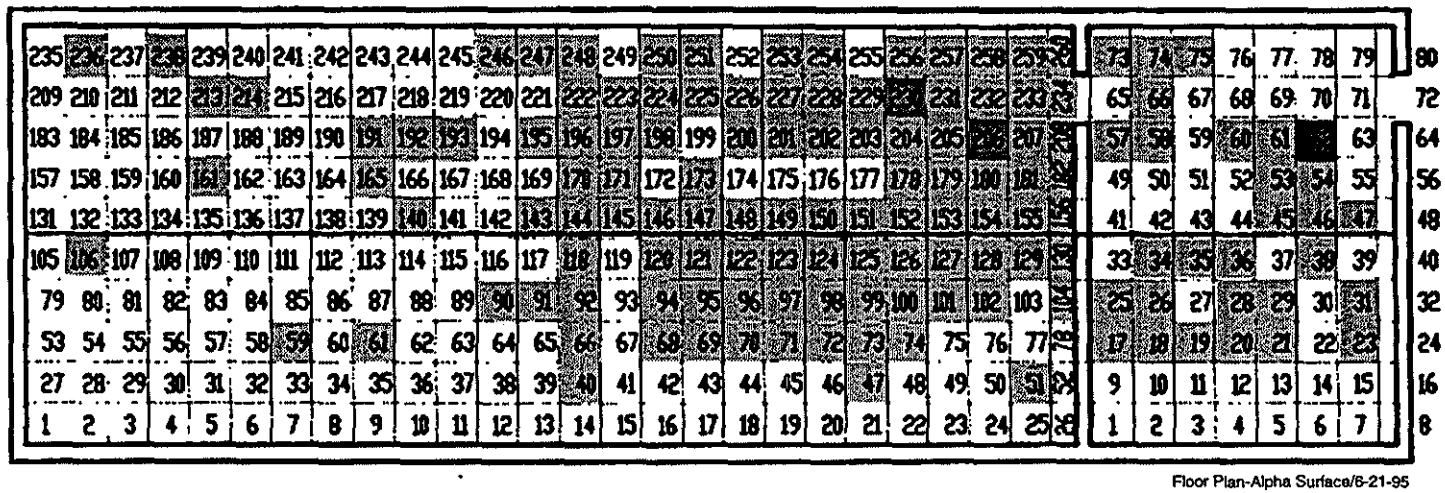
Ref Ceil Plan/NoReadings/6-27-95

Legend

Grid to be sampled

Building 21 Reflected Ceiling Plan and Sampling Locations.

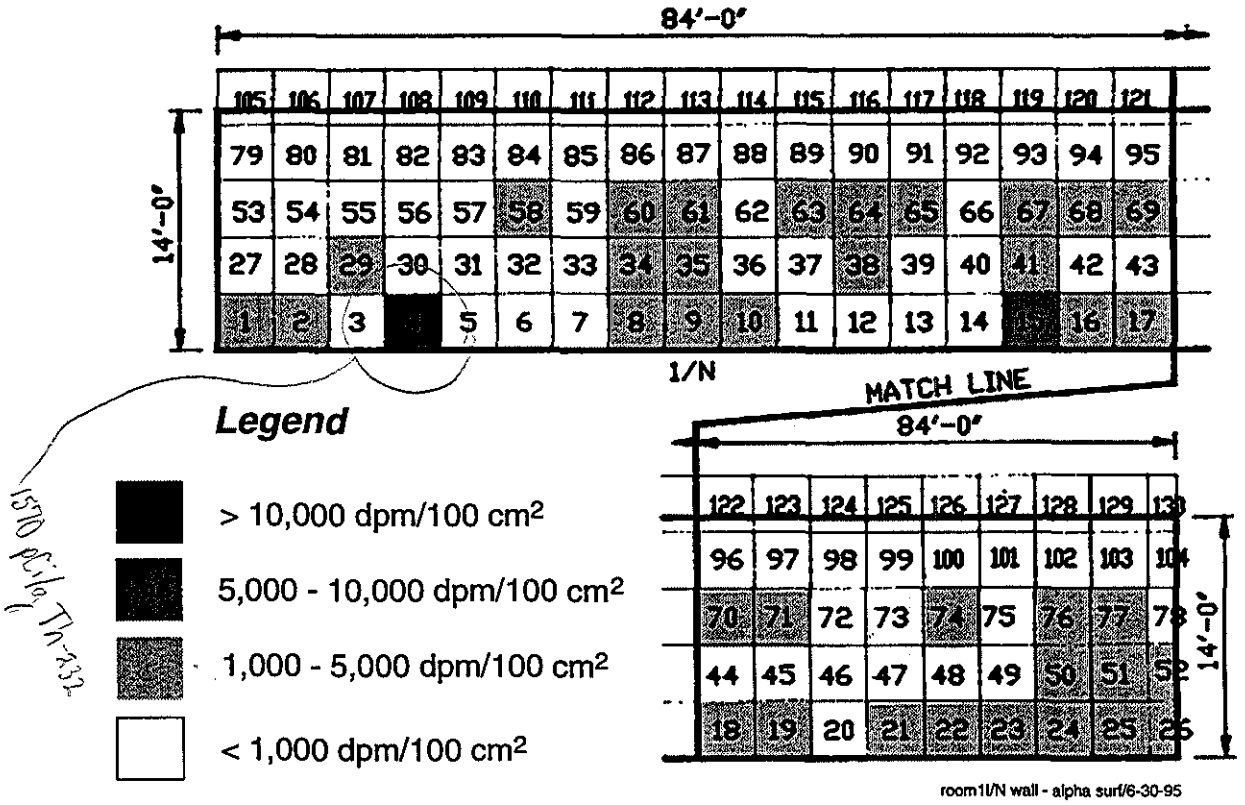
A.2. Distribution of Alpha Radiation - Building 21



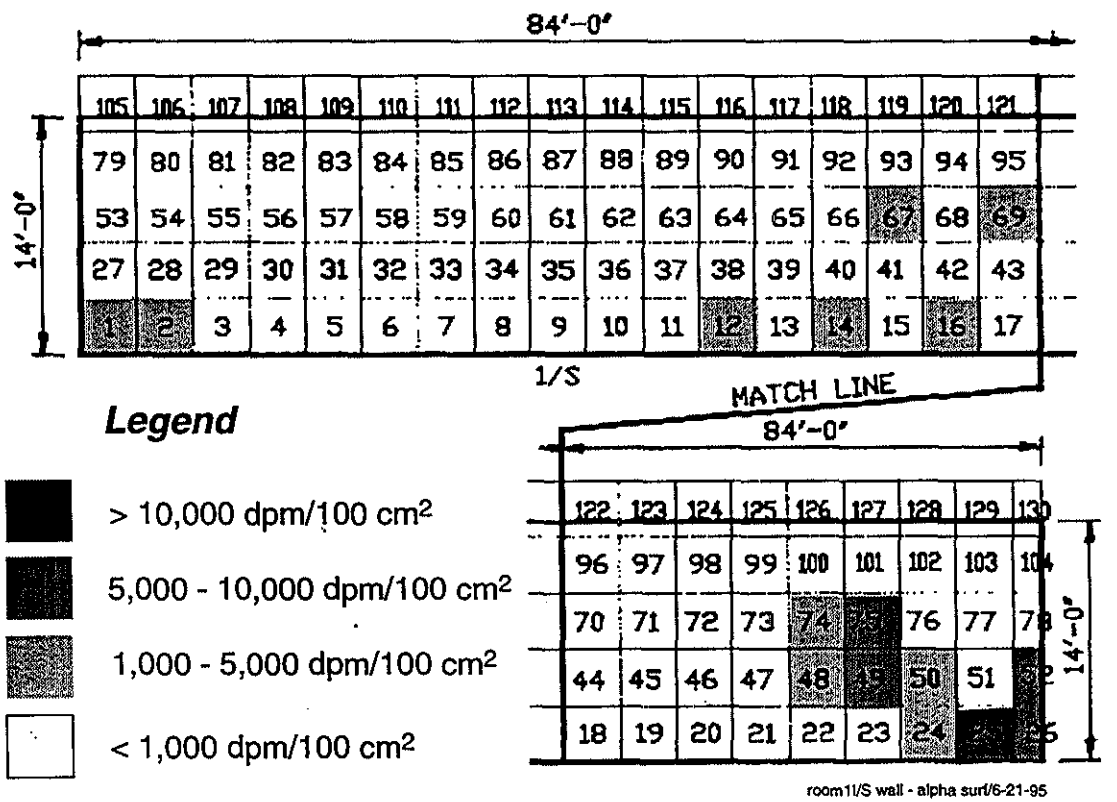
Legend

- > 10,000 dpm/100 cm^2
- 5,000 - 10,000 dpm/100 cm^2
- 1,000 - 5,000 dpm/100 cm^2
- < 1,000 dpm/100 cm^2

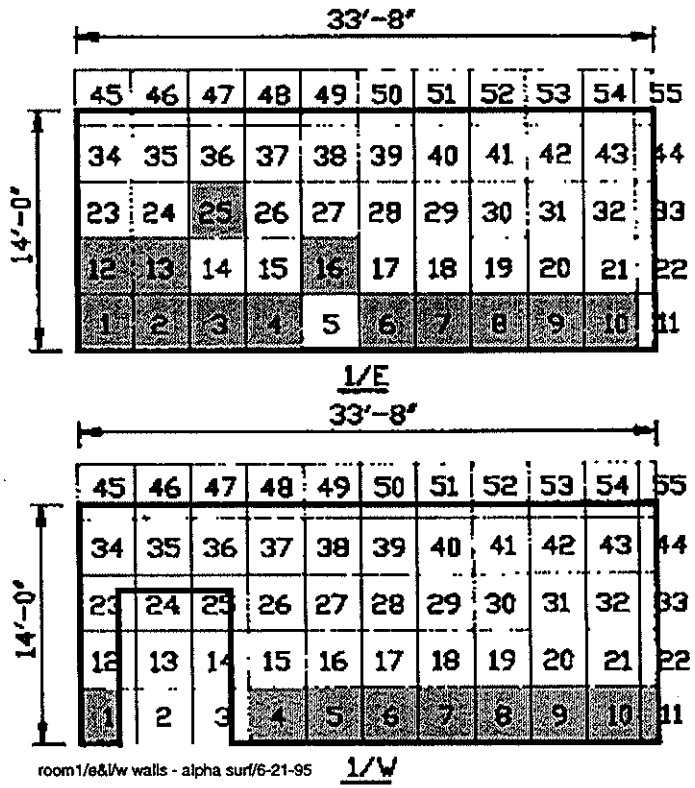
Total Alpha-Surface Contamination Building 21 Floor.



Total Alpha-Surface Contamination - Building 21 Room 1 Interior North Wall (I/N).



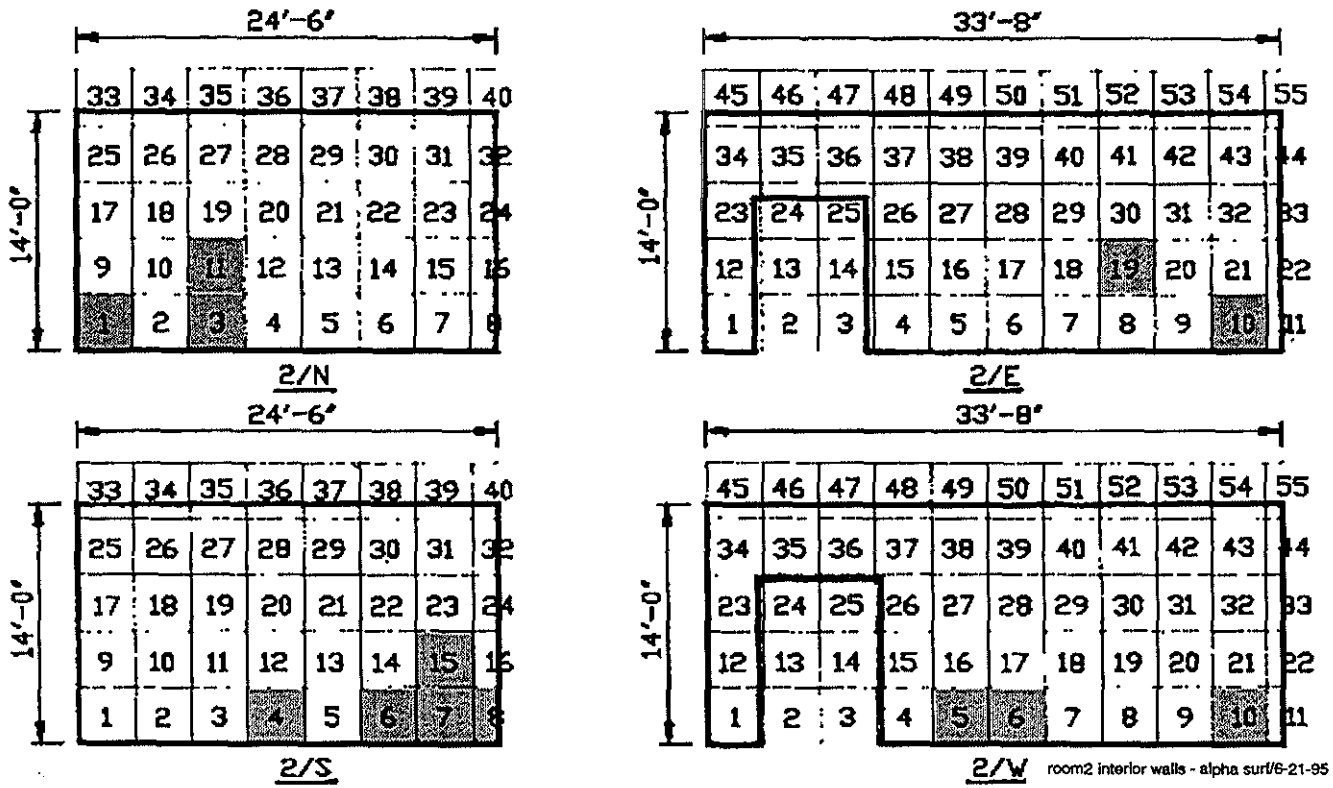
Total Alpha-Surface Contamination - Building 21 Room 1 Interior South Wall (I/S).



Legend

- > 10,000 dpm/100 cm^2
- 5,000 - 10,000 dpm/100 cm^2
- 1,000 - 5,000 dpm/100 cm^2
- < 1,000 dpm/100 cm^2

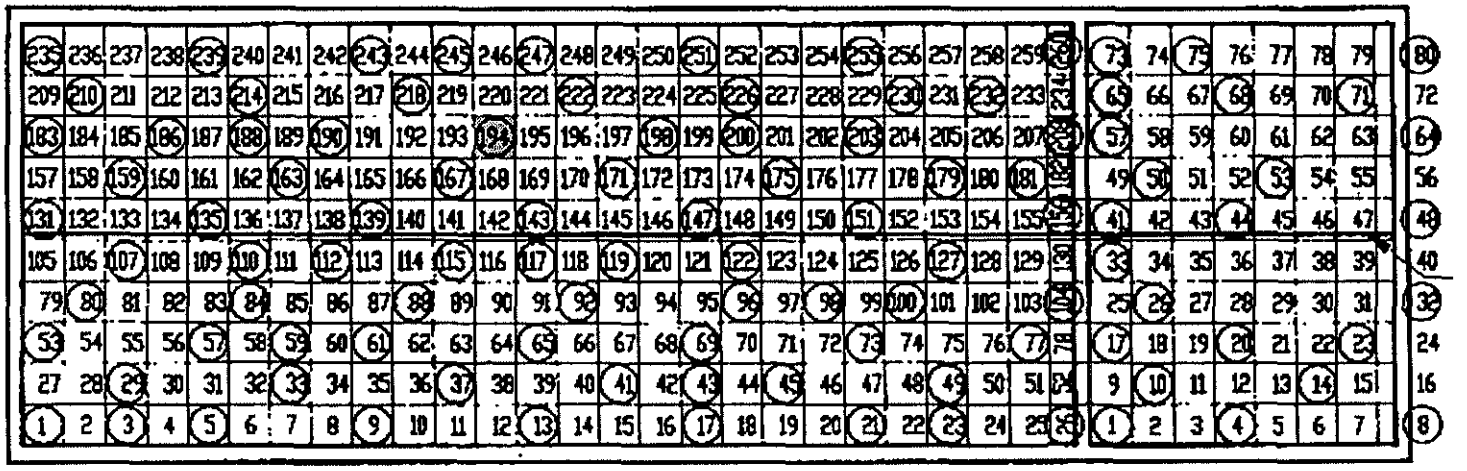
Total Alpha-Surface Contamination - Building 21 Room 1 Interior East (1/E) and West (1/W) Walls.



Legend

- > 10,000 dpm/100 cm^2
- 5,000 - 10,000 dpm/100 cm^2
- 1,000 - 5,000 dpm/100 cm^2
- < 1,000 dpm/100 cm^2

Total Alpha-Surface Contamination - Building 21 Room 2 Interior Walls (2/N,2/S,2/E,2/W).

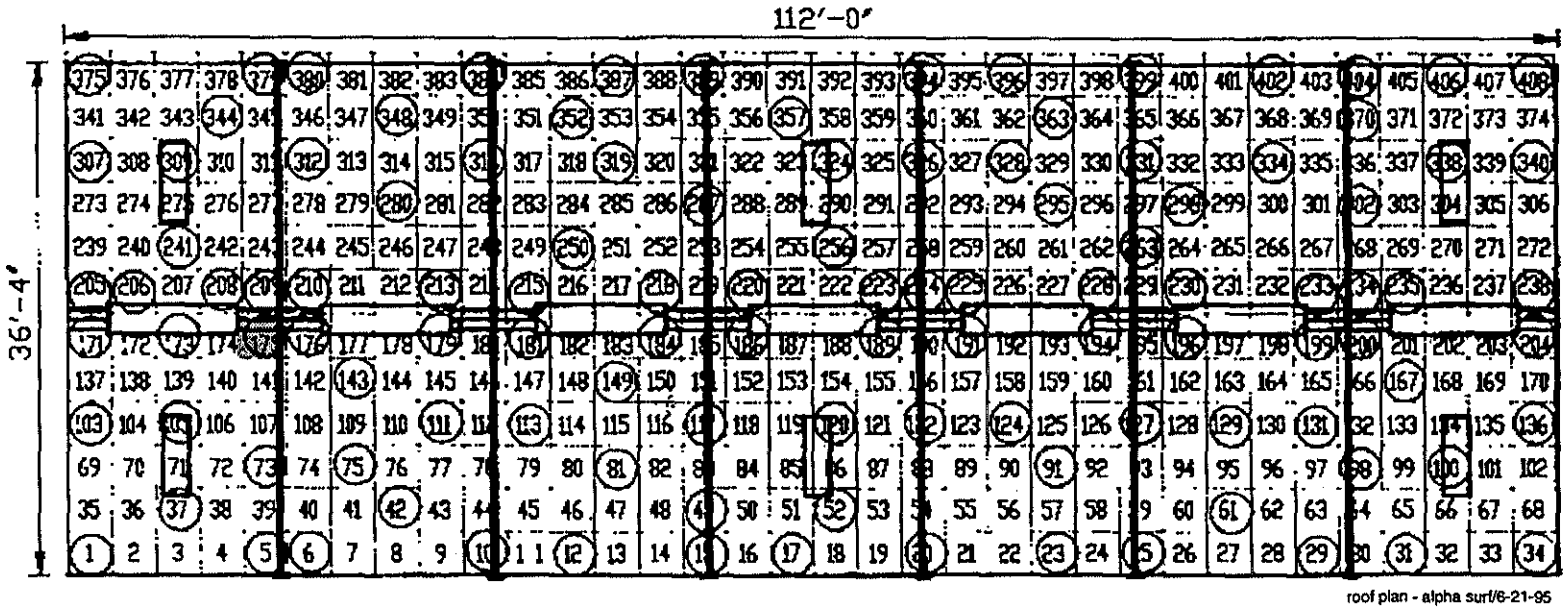


reflected ceiling plan - alpha surf/6-21-95

Legend

- > 10,000 dpm/100 cm^2
- 5,000 - 10,000 dpm/100 cm^2
- 1,000 - 5,000 dpm/100 cm^2
- < 1,000 dpm/100 cm^2

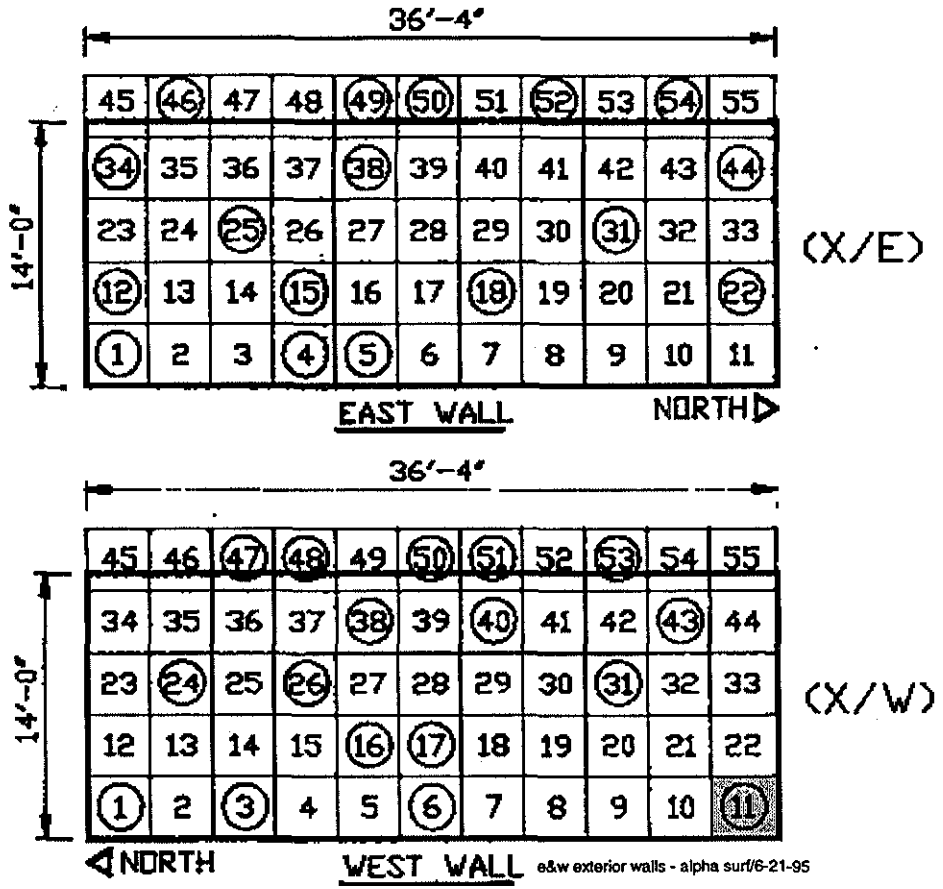
Total Alpha-Surface Contamination - Building 21 Reflected Ceiling Plan and Sampling Locations.



Legend

- > 10,000 dpm/100 cm²
- 5,000 - 10,000 dpm/100 cm²
- 1,000 - 5,000 dpm/100 cm²
- < 1,000 dpm/100 cm²

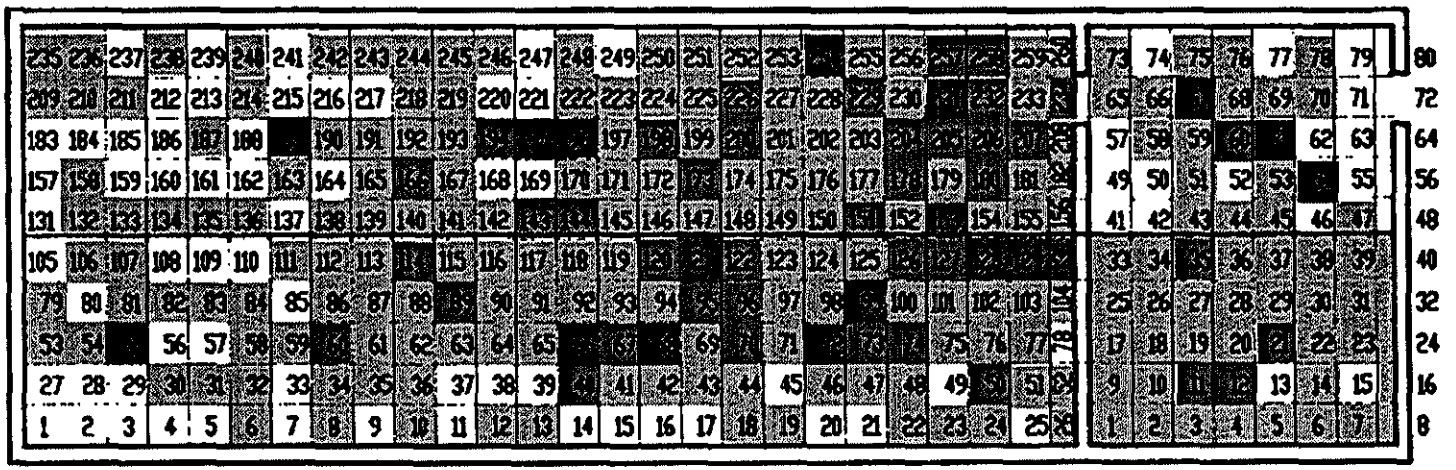
Total Alpha-Surface Contamination - Building 21 Roof Plan and Sampling Locations.



Legend

- > 10,000 dpm/100 cm^2
- 5,000 - 10,000 dpm/100 cm^2
- 1,000 - 5,000 dpm/100 cm^2
- < 1,000 dpm/100 cm^2

Total Alpha-Surface Contamination - Building 21 East and West Exterior Walls Sampling Locations.

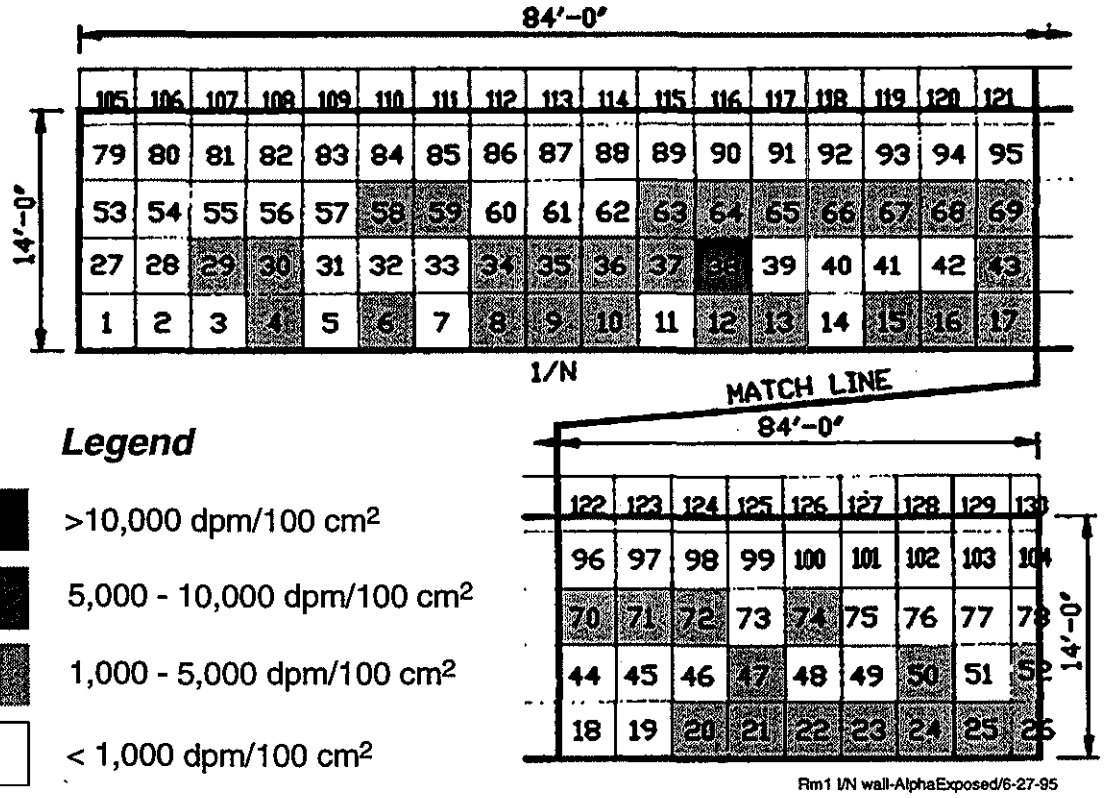


Floor Plan-AlphaExposed/6-27-95

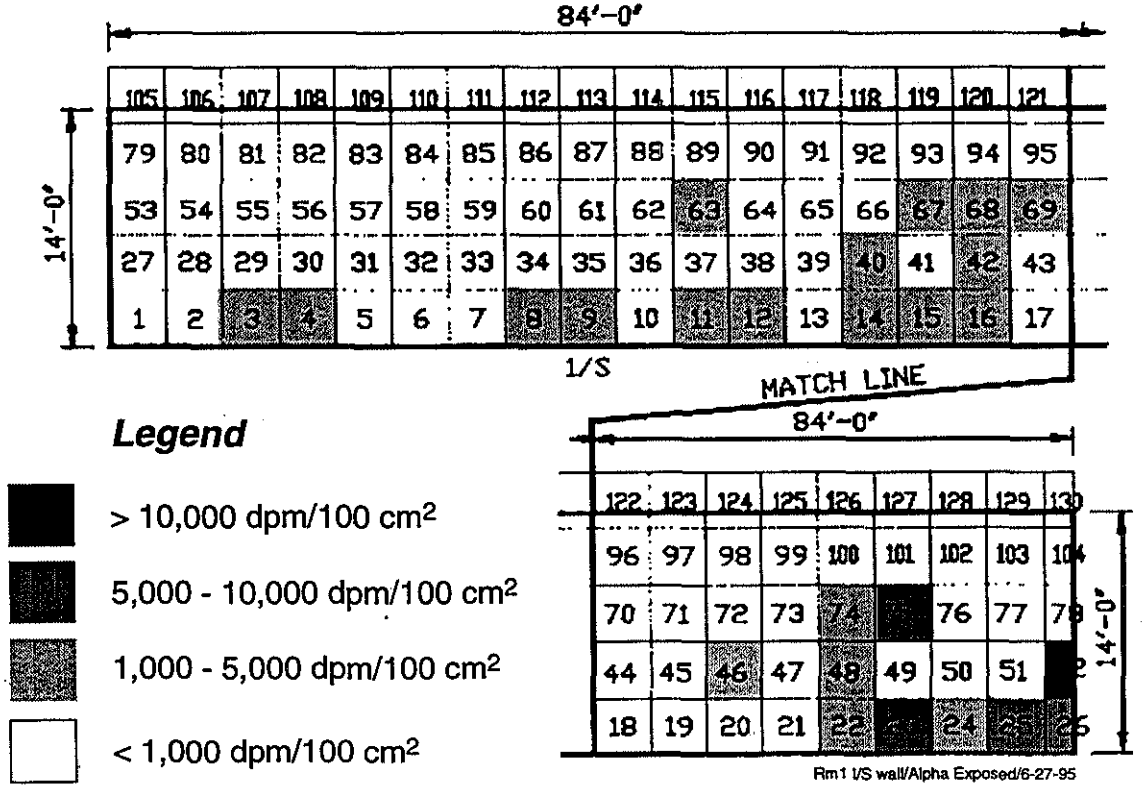
Legend

- ≥ 10,000 dpm/100 cm²
- 5,000 - 10,000 dpm/100 cm²
- 1,000 - 5,000 dpm/100 cm²
- < 1,000 dpm/100 cm²

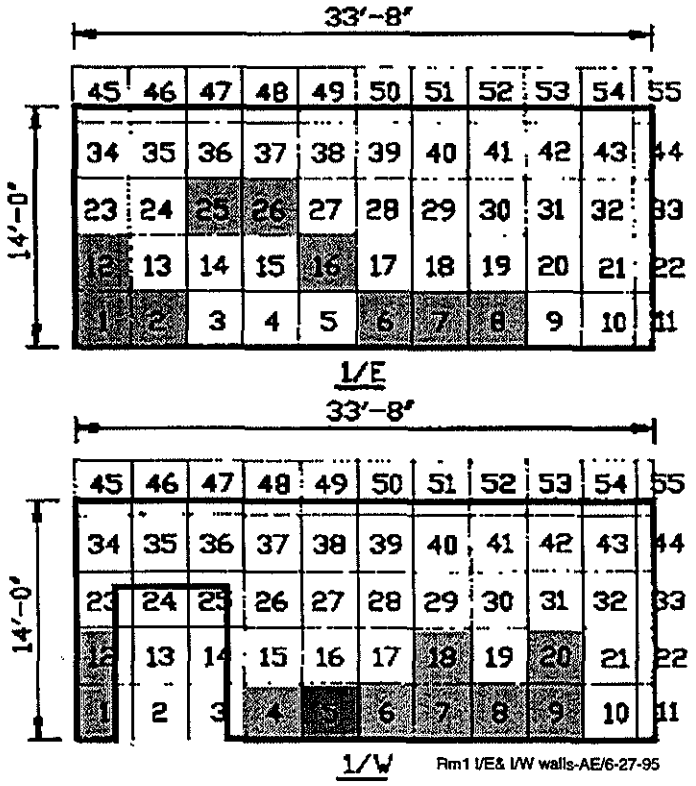
Total Exposed Alpha Contamination - Building 21 Floor.



Total Exposed Alpha Contamination - Building 21 Room 1 Interior North Wall (I/N).



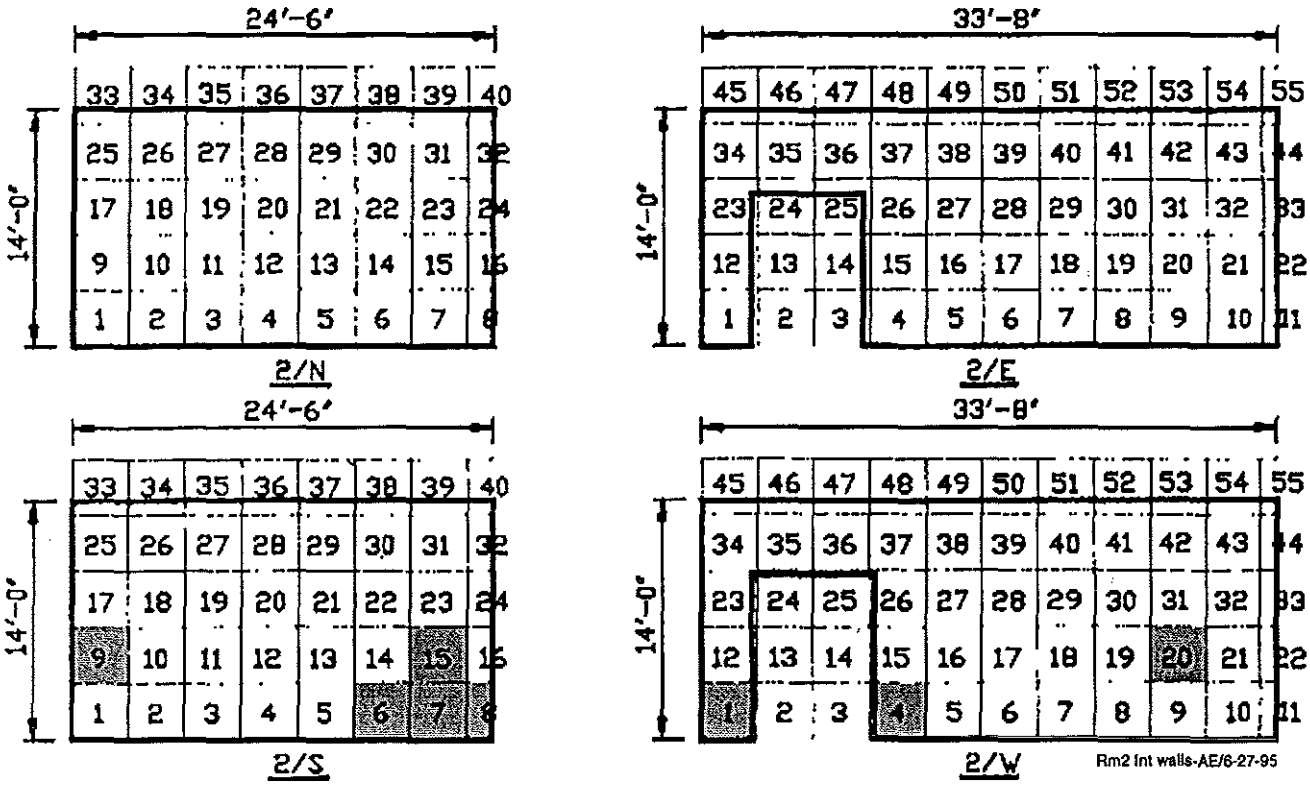
Total Exposed Alpha Contamination - Building 21 Room 1 Interior South Wall (I/S).



Legend

- >10,000 dpm/100 cm^2
- 5,000 - 10,000 dpm/100 cm^2
- 1,000 - 5,000 dpm/100 cm^2
- < 1,000 dpm/100 cm^2

Total Exposed Alpha Contamination - Building 21 Room 1 Interior East (1/E) and West (1/W) Walls.



Legend

- >10,000 dpm/100 cm^2
- 5,000 - 10,000 dpm/100 cm^2
- 1,000 - 5,000 dpm/100 cm^2
- < 1,000 dpm/100 cm^2

Total Exposed Alpha Contamination -
Building 21 Room 2 Interior Walls (2N, 2/S, 2/E, 2/W).

A.3. Summary Data of Alpha Radiation Measurements - Building 21

A.3. Summary Data of Alpha Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
1/E(001)	PAINTED SURFACE	211	1702.31	09/21/94	08:33:00
1/E(001)	EXPOSED SURFACE	229	1859.45	09/21/94	08:34:00
1/E(002)	PAINTED SURFACE	273	2243.56	09/21/94	08:35:00
1/E(002)	EXPOSED SURFACE	187	1492.80	09/21/94	08:35:00
1/E(003)	PAINTED SURFACE	185	1475.34	09/21/94	08:36:00
1/E(003)	EXPOSED SURFACE	89	637.28	09/21/94	08:37:00
1/E(004)	PAINTED SURFACE	173	1370.58	09/21/94	08:37:00
1/E(004)	EXPOSED SURFACE	84	593.63	09/21/94	08:38:00
1/E(005)	PAINTED SURFACE	119	899.17	09/21/94	08:39:00
1/E(005)	EXPOSED SURFACE	119	899.17	09/21/94	08:39:00
1/E(006)	PAINTED SURFACE	159	1248.36	09/21/94	08:45:00
1/E(006)	EXPOSED SURFACE	156	1222.17	09/21/94	08:46:00
1/E(007)	PAINTED SURFACE	220	1780.88	09/21/94	08:47:00
1/E(007)	EXPOSED SURFACE	470	3963.33	09/21/94	08:47:00
1/E(008)	PAINTED SURFACE	293	2418.16	09/21/94	08:48:00
1/E(008)	EXPOSED SURFACE	135	1038.85	09/21/94	08:48:00
1/E(009)	PAINTED SURFACE	189	1510.26	09/21/94	08:49:00
1/E(009)	EXPOSED SURFACE	111	829.33	09/21/94	08:50:00
1/E(010)	PAINTED SURFACE	141	1091.23	09/21/94	08:50:00
1/E(010)	EXPOSED SURFACE	52	314.27	09/21/94	08:51:00
1/E(011)	PAINTED SURFACE	91	654.74	09/21/94	09:00:00
1/E(011)	EXPOSED SURFACE	67	445.22	09/21/94	09:01:00
1/E(012)	PAINTED SURFACE	138	1065.04	09/21/94	09:01:00
1/E(012)	EXPOSED SURFACE	147	1143.61	09/21/94	09:03:00
1/E(013)	PAINTED SURFACE	189	1510.26	09/21/94	09:03:00
1/E(013)	EXPOSED SURFACE	92	663.47	09/21/94	09:04:00
1/E(014)	PAINTED SURFACE	102	750.76	09/21/94	09:05:00
1/E(014)	EXPOSED SURFACE	86	611.09	09/21/94	09:06:00
1/E(015)	PAINTED SURFACE	75	515.06	09/21/94	09:07:00
1/E(015)	EXPOSED SURFACE	94	680.93	09/21/94	09:08:00
1/E(016)	PAINTED SURFACE	245	1999.13	09/21/94	09:14:00
1/E(016)	EXPOSED SURFACE	460	3876.04	09/21/94	09:15:00
1/E(017)	PAINTED SURFACE	91	654.74	09/21/94	09:16:00
1/E(017)	EXPOSED SURFACE	84	593.63	09/21/94	09:17:00
1/E(018)	PAINTED SURFACE	23	61.11	09/21/94	09:17:00
1/E(018)	EXPOSED SURFACE	8	-69.84	09/21/94	09:18:00
1/E(019)	PAINTED SURFACE	34	157.14	09/21/94	09:19:00
1/E(019)	EXPOSED SURFACE	24	69.84	09/21/94	09:20:00
1/E(020)	PAINTED SURFACE	44	244.43	09/21/94	09:21:00
1/E(020)	EXPOSED SURFACE	25	78.57	09/21/94	09:22:00
1/E(021)	PAINTED SURFACE	32	139.68	09/21/94	09:27:00
1/E(021)	EXPOSED SURFACE	18	17.46	09/21/94	09:28:00
1/E(022)	PAINTED SURFACE	49	288.08	09/21/94	09:29:00
1/E(022)	EXPOSED SURFACE	24	69.84	09/21/94	09:30:00
1/E(023)	PAINTED SURFACE	30	122.22	09/21/94	09:32:00
1/E(023)	EXPOSED SURFACE	27	96.03	09/21/94	09:33:00
1/E(024)	PAINTED SURFACE	52	314.27	09/21/94	09:34:00
1/E(024)	EXPOSED SURFACE	102	750.76	09/21/94	09:35:00

A.3. Summary Data of Alpha Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
1/E(025)	PAINTED SURFACE	179	1422.96	09/21/94	09:36:00
1/E(025)	EXPOSED SURFACE	497	4199.04	09/21/94	09:37:00
1/E(026)	PAINTED SURFACE	88	628.55	09/21/94	09:45:00
1/E(026)	EXPOSED SURFACE	482	4068.09	09/21/94	09:46:00
1/E(027)	PAINTED SURFACE	30	122.22	09/21/94	09:46:00
1/E(027)	EXPOSED SURFACE	16	0.00	09/21/94	09:47:00
1/E(028)	PAINTED SURFACE	18	17.46	09/21/94	09:48:00
1/E(028)	EXPOSED SURFACE	8	-69.84	09/21/94	09:49:00
1/E(029)	PAINTED SURFACE	25	78.57	09/21/94	09:50:00
1/E(029)	EXPOSED SURFACE	10	-52.38	09/21/94	09:50:00
1/E(030)	EXPOSED SURFACE	10	-52.38	09/21/94	09:52:00
1/E(031)	PAINTED SURFACE	16	0.00	09/21/94	10:00:00
1/E(031)	EXPOSED SURFACE	19	26.19	09/21/94	10:01:00
1/E(032)	PAINTED SURFACE	17	8.73	09/21/94	10:02:00
1/E(032)	EXPOSED SURFACE	21	43.65	09/21/94	10:02:00
1/E(033)	PAINTED SURFACE	44	244.43	09/21/94	10:04:00
1/E(033)	EXPOSED SURFACE	32	139.68	09/21/94	10:08:00
1/E(034)	PAINTED SURFACE	28	104.76	09/21/94	10:05:00
1/E(034)	EXPOSED SURFACE	44	244.43	09/21/94	10:06:00
1/E(035)	PAINTED SURFACE	22	52.38	09/21/94	10:06:00
1/E(035)	EXPOSED SURFACE	100	733.30	09/21/94	10:07:00
1/E(036)	PAINTED SURFACE	32	139.68	09/21/94	10:29:00
1/E(036)	EXPOSED SURFACE	45	253.16	09/21/94	10:29:00
1/E(037)	PAINTED SURFACE	20	34.92	09/21/94	10:36:00
1/E(037)	EXPOSED SURFACE	18	17.46	09/21/94	10:37:00
1/E(038)	PAINTED SURFACE	12	-34.92	09/21/94	10:30:00
1/E(038)	EXPOSED SURFACE	15	-8.73	09/21/94	10:31:00
1/E(039)	PAINTED SURFACE	16	0.00	09/21/94	10:32:00
1/E(039)	EXPOSED SURFACE	18	17.46	09/21/94	10:33:00
1/E(040)	PAINTED SURFACE	16	0.00	09/21/94	10:34:00
1/E(040)	EXPOSED SURFACE	20	34.92	09/21/94	10:34:00
1/E(041)	PAINTED SURFACE	12	-34.92	09/21/94	11:10:00
1/E(041)	EXPOSED SURFACE	14	-17.46	09/21/94	11:11:00
1/E(042)	PAINTED SURFACE	8	-69.84	09/21/94	11:11:00
1/E(042)	EXPOSED SURFACE	14	-17.46	09/21/94	11:12:00
1/E(043)	PAINTED SURFACE	12	-34.92	09/21/94	11:13:00
1/E(043)	EXPOSED SURFACE	16	0.00	09/21/94	11:14:00
1/E(044)	PAINTED SURFACE	36	174.60	09/21/94	11:15:00
1/E(044)	EXPOSED SURFACE	8	-69.84	09/21/94	11:15:00
1/E(045)	PAINTED SURFACE	14	-17.46	09/21/94	11:16:00
1/E(045)	EXPOSED SURFACE	14	-17.46	09/21/94	11:17:00
1/E(046)	PAINTED SURFACE	20	34.92	09/21/94	11:18:00
1/E(046)	EXPOSED SURFACE	14	-17.46	09/21/94	11:19:00
1/E(047)	PAINTED SURFACE	12	-34.92	09/21/94	11:20:00
1/E(047)	EXPOSED SURFACE	6	-87.30	09/21/94	11:21:00
1/E(048)	PAINTED SURFACE	24	69.84	09/21/94	11:21:00
1/E(048)	EXPOSED SURFACE	18	17.46	09/21/94	11:22:00
1/E(049)	PAINTED SURFACE	26	87.30	09/21/94	11:22:00

A.3. Summary Data of Alpha Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
1/E(049)	EXPOSED SURFACE	18	17.46	09/21/94	11:23:00
1/E(050)	PAINTED SURFACE	12	-34.92	09/21/94	11:23:00
1/E(050)	EXPOSED SURFACE	14	-17.46	09/21/94	11:24:00
1/E(051)	PAINTED SURFACE	26	87.30	09/21/94	11:26:00
1/E(051)	EXPOSED SURFACE	14	-17.46	09/21/94	11:26:00
1/E(052)	PAINTED SURFACE	16	0.00	09/21/94	11:27:00
1/E(052)	EXPOSED SURFACE	24	69.84	09/21/94	11:27:00
1/E(053)	PAINTED SURFACE	8	-69.84	09/21/94	11:28:00
1/E(053)	EXPOSED SURFACE	12	-34.92	09/21/94	11:28:00
1/E(054)	PAINTED SURFACE	18	17.46	09/21/94	11:29:00
1/E(054)	EXPOSED SURFACE	20	34.92	09/21/94	11:29:00
1/E(055)	PAINTED SURFACE	64	419.03	09/21/94	11:30:00
1/E(055)	EXPOSED SURFACE	8	-69.84	09/21/94	11:30:00
1/E(999)	PAINTED SURFACE	15	-8.73	09/21/94	08:01:00
1/E(999)	PAINTED SURFACE	17	8.73	09/21/94	08:02:00
1/F(001)	PAINTED SURFACE	49	331.73	09/08/94	09:40:00
1/F(001)	EXPOSED SURFACE	27	139.68	09/08/94	09:41:00
1/F(002)	PAINTED SURFACE	63	453.95	09/08/94	09:42:00
1/F(002)	EXPOSED SURFACE	21	87.30	09/08/94	09:45:00
1/F(003)	PAINTED SURFACE	54	375.38	09/08/94	09:46:00
1/F(003)	EXPOSED SURFACE	32	183.33	09/08/94	09:47:00
1/F(004)	PAINTED SURFACE	34	200.79	09/08/94	09:48:00
1/F(004)	EXPOSED SURFACE	18	61.11	09/08/94	09:49:00
1/F(005)	PAINTED SURFACE	28	148.41	09/08/94	09:50:00
1/F(005)	EXPOSED SURFACE	51	349.19	09/08/94	09:51:00
1/F(006)	PAINTED SURFACE	46	305.54	09/08/94	10:09:00
1/F(006)	EXPOSED SURFACE	203	1676.12	09/08/94	10:11:00
1/F(007)	PAINTED SURFACE	46	305.54	09/08/94	10:13:00
1/F(007)	EXPOSED SURFACE	65	471.41	09/08/94	10:14:00
1/F(008)	PAINTED SURFACE	52	357.92	09/08/94	10:19:00
1/F(008)	EXPOSED SURFACE	154	1248.36	09/08/94	10:21:00
1/F(009)	PAINTED SURFACE	39	244.43	09/08/94	10:23:00
1/F(009)	EXPOSED SURFACE	57	401.57	09/08/94	10:24:00
1/F(010)	PAINTED SURFACE	72	532.52	09/08/94	10:28:00
1/F(010)	EXPOSED SURFACE	277	2322.13	09/08/94	10:30:00
1/F(011)	PAINTED SURFACE	79	593.63	09/08/94	10:33:00
1/F(011)	EXPOSED SURFACE	87	663.47	09/08/94	10:34:00
1/F(012)	PAINTED SURFACE	60	427.76	09/08/94	10:36:00
1/F(012)	EXPOSED SURFACE	167	1361.85	09/08/94	10:39:00
1/F(013)	PAINTED SURFACE	64	462.68	09/08/94	10:41:00
1/F(013)	EXPOSED SURFACE	458	3902.23	09/08/94	10:42:00
1/F(014)	PAINTED SURFACE	38	235.70	09/08/94	10:43:00
1/F(014)	EXPOSED SURFACE	31	174.60	09/08/94	10:45:00
1/F(015)	PAINTED SURFACE	105	820.60	09/08/94	10:46:00
1/F(015)	EXPOSED SURFACE	114	899.17	09/08/94	10:47:00
1/F(016)	PAINTED SURFACE	55	384.11	09/08/94	10:49:00
1/F(016)	EXPOSED SURFACE	102	794.41	09/08/94	10:50:00
1/F(017)	PAINTED SURFACE	74	549.98	09/08/94	10:51:00

A.3. Summary Data of Alpha Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
1/F(017)	EXPOSED SURFACE	56	392.84	09/08/94	10:53:00
1/F(018)	PAINTED SURFACE	74	549.98	09/08/94	10:55:00
1/F(018)	EXPOSED SURFACE	404	3430.82	09/08/94	10:56:00
1/F(019)	PAINTED SURFACE	51	349.19	09/08/94	10:57:00
1/F(019)	EXPOSED SURFACE	172	1405.50	09/08/94	10:58:00
1/F(020)	PAINTED SURFACE	53	366.65	09/08/94	10:59:00
1/F(020)	EXPOSED SURFACE	97	750.76	09/08/94	11:01:00
1/F(021)	PAINTED SURFACE	78	584.90	09/08/94	11:11:00
1/F(021)	EXPOSED SURFACE	118	934.09	09/08/94	11:13:00
1/F(022)	PAINTED SURFACE	89	680.93	09/08/94	11:14:00
1/F(022)	EXPOSED SURFACE	255	2130.07	09/08/94	11:18:00
1/F(023)	PAINTED SURFACE	69	506.33	09/08/94	11:20:00
1/F(023)	EXPOSED SURFACE	183	1501.53	09/08/94	11:21:00
1/F(024)	PAINTED SURFACE	62	445.22	09/08/94	11:24:00
1/F(024)	EXPOSED SURFACE	146	1178.52	09/08/94	11:24:00
1/F(025)	PAINTED SURFACE	73	541.25	09/08/94	11:25:00
1/F(025)	EXPOSED SURFACE	75	558.71	09/08/94	11:26:00
1/F(026)	PAINTED SURFACE	97	750.76	09/08/94	11:28:00
1/F(026)	EXPOSED SURFACE	528	4513.31	09/08/94	11:30:00
1/F(027)	PAINTED SURFACE	44	288.08	09/08/94	11:32:00
1/F(027)	EXPOSED SURFACE	85	646.01	09/08/94	11:33:00
1/F(028)	PAINTED SURFACE	48	323.00	09/08/94	11:35:00
1/F(028)	EXPOSED SURFACE	45	296.81	09/08/94	11:37:00
1/F(029)	PAINTED SURFACE	39	244.43	09/08/94	11:39:00
1/F(029)	EXPOSED SURFACE	106	829.33	09/08/94	11:41:00
1/F(030)	PAINTED SURFACE	51	349.19	09/08/94	11:48:00
1/F(030)	EXPOSED SURFACE	154	1248.36	09/08/94	11:49:00
1/F(031)	PAINTED SURFACE	39	244.43	09/08/94	11:51:00
1/F(031)	EXPOSED SURFACE	551	4714.10	09/08/94	11:52:00
1/F(032)	PAINTED SURFACE	55	384.11	09/08/94	11:53:00
1/F(032)	EXPOSED SURFACE	424	3605.41	09/08/94	11:58:00
1/F(033)	PAINTED SURFACE	38	235.70	09/08/94	11:59:00
1/F(033)	EXPOSED SURFACE	95	733.30	09/08/94	12:00:00
1/F(034)	PAINTED SURFACE	46	305.54	09/08/94	12:01:00
1/F(034)	EXPOSED SURFACE	164	1335.66	09/08/94	12:02:00
1/F(035)	PAINTED SURFACE	50	340.46	09/08/94	12:03:00
1/F(035)	EXPOSED SURFACE	239	1990.40	09/08/94	12:05:00
1/F(036)	PAINTED SURFACE	49	331.73	09/08/94	12:07:00
1/F(036)	EXPOSED SURFACE	387	3282.41	09/08/94	12:09:00
1/F(037)	PAINTED SURFACE	75	558.71	09/08/94	12:12:00
1/F(037)	EXPOSED SURFACE	190	1562.64	09/08/94	12:14:00
1/F(037)	PAINTED SURFACE	71	497.60	09/19/94	16:25:00
1/F(037)	EXPOSED SURFACE	121	934.09	09/19/94	16:27:00
1/F(038)	PAINTED SURFACE	65	471.41	09/08/94	12:28:00
1/F(038)	EXPOSED SURFACE	151	1222.17	09/08/94	12:29:00
1/F(038)	PAINTED SURFACE	94	545.61	09/23/94	10:25:00
1/F(038)	EXPOSED SURFACE	138	929.73	09/23/94	10:26:00
1/F(039)	PAINTED SURFACE	96	742.03	09/08/94	12:30:00

A.3. Summary Data of Alpha Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
1/F(039)	EXPOSED SURFACE	345	2915.76	09/08/94	12:32:00
1/F(039)	PAINTED SURFACE	76	388.48	09/23/94	10:26:00
1/F(039)	EXPOSED SURFACE	81	432.13	09/23/94	10:27:00
1/F(040)	PAINTED SURFACE	272	2278.48	09/08/94	12:33:00
1/F(040)	EXPOSED SURFACE	648	5560.89	09/08/94	12:34:00
1/F(041)	PAINTED SURFACE	68	497.60	09/08/94	12:35:00
1/F(041)	EXPOSED SURFACE	154	1248.36	09/08/94	12:36:00
1/F(042)	EXPOSED SURFACE	239	1990.40	09/08/94	12:39:00
1/F(042)	PAINTED SURFACE	81	611.09	09/08/94	12:38:00
1/F(043)	PAINTED SURFACE	84	637.28	09/08/94	12:40:00
1/F(043)	EXPOSED SURFACE	276	2313.40	09/08/94	12:41:00
1/F(044)	PAINTED SURFACE	70	515.06	09/08/94	12:43:00
1/F(044)	EXPOSED SURFACE	133	1065.04	09/08/94	12:44:00
1/F(045)	PAINTED SURFACE	95	733.30	09/08/94	12:45:00
1/F(045)	EXPOSED SURFACE	602	5159.32	09/08/94	12:46:00
1/F(045)	EXPOSED SURFACE	47	410.30	09/20/94	12:34:00
1/F(046)	PAINTED SURFACE	114	899.17	09/08/94	14:40:00
1/F(046)	EXPOSED SURFACE	154	1248.36	09/08/94	14:41:00
1/F(047)	PAINTED SURFACE	73	541.25	09/08/94	14:42:00
1/F(047)	EXPOSED SURFACE	211	1745.96	09/08/94	14:43:00
1/F(048)	EXPOSED SURFACE	233	1938.02	09/08/94	14:47:00
1/F(048)	PAINTED SURFACE	60	427.76	09/08/94	00:00:00
1/F(049)	PAINTED SURFACE	61	436.49	09/08/94	14:49:00
1/F(049)	EXPOSED SURFACE	107	838.06	09/08/94	14:51:00
1/F(050)	PAINTED SURFACE	75	558.71	09/08/94	14:51:00
1/F(050)	EXPOSED SURFACE	734	6311.65	09/08/94	14:52:00
1/F(051)	PAINTED SURFACE	58	410.30	09/08/94	14:55:00
1/F(051)	EXPOSED SURFACE	194	1597.56	09/08/94	14:56:00
1/F(051)	PAINTED SURFACE	120	1047.58	09/20/94	13:52:00
1/F(051)	EXPOSED SURFACE	228	1990.40	09/20/94	13:53:00
1/F(051)	PAINTED SURFACE	120	772.59	09/23/94	10:21:00
1/F(051)	EXPOSED SURFACE	228	1715.41	09/23/94	10:22:00
1/F(051)	EXPOSED SURFACE	228	1715.41	09/23/94	10:22:00
1/F(052)	PAINTED SURFACE	98	759.49	09/08/94	14:58:00
1/F(052)	EXPOSED SURFACE	137	1099.96	09/08/94	15:00:00
1/F(053)	PAINTED SURFACE	61	436.49	09/08/94	15:02:00
1/F(053)	EXPOSED SURFACE	200	1649.93	09/08/94	15:03:00
1/F(054)	PAINTED SURFACE	70	515.06	09/08/94	15:03:00
1/F(054)	EXPOSED SURFACE	242	2016.59	09/08/94	15:04:00
1/F(055)	PAINTED SURFACE	67	488.87	09/08/94	15:05:00
1/F(055)	EXPOSED SURFACE	1788	15512.88	09/08/94	15:06:00
1/F(056)	PAINTED SURFACE	83	628.55	09/08/94	15:15:00
1/F(056)	EXPOSED SURFACE	74	549.98	09/08/94	15:17:00
1/F(057)	PAINTED SURFACE	46	305.54	09/08/94	15:20:00
1/F(057)	EXPOSED SURFACE	87	663.47	09/08/94	15:21:00
1/F(058)	PAINTED SURFACE	84	637.28	09/08/94	15:22:00
1/F(058)	EXPOSED SURFACE	233	1938.02	09/08/94	15:23:00
1/F(059)	PAINTED SURFACE	187	1536.45	09/08/94	15:28:00

A.3. Summary Data of Alpha Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
1/F(059)	EXPOSED SURFACE	140	1126.15	09/08/94	15:30:00
1/F(060)	PAINTED SURFACE	74	549.98	09/08/94	15:33:00
1/F(060)	EXPOSED SURFACE	1128	9751.20	09/08/94	15:36:00
1/F(061)	PAINTED SURFACE	141	1134.88	09/08/94	15:41:00
1/F(061)	EXPOSED SURFACE	238	1981.67	09/08/94	15:54:00
1/F(062)	PAINTED SURFACE	84	637.28	09/08/94	15:54:00
1/F(062)	EXPOSED SURFACE	173	1414.23	09/08/94	15:55:00
1/F(063)	PAINTED SURFACE	69	506.33	09/08/94	15:56:00
1/F(063)	EXPOSED SURFACE	289	2426.89	09/08/94	15:57:00
1/F(064)	PAINTED SURFACE	114	899.17	09/08/94	15:58:00
1/F(064)	EXPOSED SURFACE	280	2348.32	09/08/94	16:00:00
1/F(065)	PAINTED SURFACE	104	811.87	09/08/94	16:01:00
1/F(065)	EXPOSED SURFACE	138	1108.69	09/08/94	16:02:00
1/F(066)	PAINTED SURFACE	133	1065.04	09/08/94	16:04:00
1/F(066)	EXPOSED SURFACE	3806	33129.64	09/08/94	16:05:00
1/F(067)	PAINTED SURFACE	102	794.41	09/08/94	16:06:00
1/F(067)	EXPOSED SURFACE	760	6538.63	09/08/94	16:07:00
1/F(068)	PAINTED SURFACE	149	1204.71	09/08/94	16:07:00
1/F(068)	EXPOSED SURFACE	1282	11095.59	09/08/94	16:08:00
1/F(069)	EXPOSED SURFACE	301	2531.65	09/08/94	16:12:00
1/F(069)	PAINTED SURFACE	159	1292.01	09/08/94	16:13:00
1/F(070)	PAINTED SURFACE	162	1318.20	09/08/94	16:13:00
1/F(070)	EXPOSED SURFACE	906	7813.18	09/08/94	16:15:00
1/F(071)	EXPOSED SURFACE	203	1676.12	09/08/94	16:22:00
1/F(071)	PAINTED SURFACE	217	1798.34	09/08/94	16:23:00
1/F(072)	PAINTED SURFACE	144	1161.07	09/08/94	16:24:00
1/F(072)	EXPOSED SURFACE	1231	10650.37	09/08/94	16:24:00
1/F(073)	PAINTED SURFACE	466	3972.06	09/08/94	16:26:00
1/F(073)	EXPOSED SURFACE	614	5264.08	09/08/94	16:27:00
1/F(074)	PAINTED SURFACE	135	1082.50	09/08/94	16:29:00
1/F(074)	EXPOSED SURFACE	908	7830.64	09/08/94	16:29:00
1/F(075)	PAINTED SURFACE	116	916.63	09/08/94	16:30:00
1/F(075)	EXPOSED SURFACE	390	3308.60	09/08/94	16:31:00
1/F(076)	PAINTED SURFACE	112	960.28	09/12/94	09:32:00
1/F(076)	EXPOSED SURFACE	192	1658.66	09/12/94	09:42:00
1/F(077)	PAINTED SURFACE	70	593.63	09/12/94	09:34:00
1/F(077)	EXPOSED SURFACE	168	1449.15	09/12/94	09:34:00
1/F(078)	PAINTED SURFACE	73	619.82	09/12/94	09:35:00
1/F(078)	EXPOSED SURFACE	93	794.41	09/12/94	09:36:00
1/F(079)	PAINTED SURFACE	56	471.41	09/12/94	09:36:00
1/F(079)	EXPOSED SURFACE	192	1658.66	09/12/94	09:37:00
1/F(080)	PAINTED SURFACE	71	602.36	09/12/94	09:38:00
1/F(080)	EXPOSED SURFACE	66	558.71	09/12/94	09:38:00
1/F(081)	PAINTED SURFACE	50	419.03	09/12/94	09:52:00
1/F(081)	EXPOSED SURFACE	295	2557.84	09/12/94	09:53:00
1/F(082)	PAINTED SURFACE	76	646.01	09/12/94	09:53:00
1/F(082)	EXPOSED SURFACE	456	3963.33	09/12/94	09:54:00
1/F(083)	PAINTED SURFACE	79	672.20	09/12/94	09:54:00

A.3. Summary Data of Alpha Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
1/F(083)	EXPOSED SURFACE	128	1099.96	09/12/94	09:55:00
1/F(084)	PAINTED SURFACE	78	663.47	09/12/94	09:55:00
1/F(084)	EXPOSED SURFACE	122	1047.58	09/12/94	09:56:00
1/F(085)	PAINTED SURFACE	78	663.47	09/12/94	09:56:00
1/F(085)	EXPOSED SURFACE	78	663.47	09/12/94	09:57:00
1/F(085)	PAINTED SURFACE	8	-205.15	09/23/94	11:26:00
1/F(085)	EXPOSED SURFACE	3	-248.80	09/23/94	11:27:00
1/F(086)	PAINTED SURFACE	61	515.06	09/12/94	10:07:00
1/F(086)	EXPOSED SURFACE	121	1038.85	09/12/94	10:08:00
1/F(087)	PAINTED SURFACE	103	881.71	09/12/94	10:08:00
1/F(087)	EXPOSED SURFACE	251	2173.72	09/12/94	10:09:00
1/F(088)	PAINTED SURFACE	101	864.25	09/12/94	10:09:00
1/F(088)	EXPOSED SURFACE	183	1580.10	09/12/94	10:10:00
1/F(089)	PAINTED SURFACE	56	471.41	09/12/94	10:10:00
1/F(089)	EXPOSED SURFACE	644	5604.54	09/12/94	10:11:00
1/F(089)	PAINTED SURFACE	8	-205.15	09/23/94	11:34:00
1/F(089)	EXPOSED SURFACE	21	-91.66	09/23/94	11:35:00
1/F(090)	PAINTED SURFACE	164	1414.23	09/12/94	10:12:00
1/F(090)	EXPOSED SURFACE	318	2758.62	09/12/94	10:12:00
1/F(091)	PAINTED SURFACE	128	1099.96	09/12/94	10:31:00
1/F(091)	EXPOSED SURFACE	430	3736.36	09/12/94	10:31:00
1/F(092)	PAINTED SURFACE	128	1099.96	09/12/94	10:32:00
1/F(092)	EXPOSED SURFACE	432	3753.82	09/12/94	10:32:00
1/F(093)	PAINTED SURFACE	78	663.47	09/12/94	10:33:00
1/F(093)	EXPOSED SURFACE	167	1440.42	09/12/94	10:33:00
1/F(094)	PAINTED SURFACE	135	1161.07	09/12/94	10:34:00
1/F(094)	EXPOSED SURFACE	403	3500.65	09/12/94	10:35:00
1/F(095)	PAINTED SURFACE	163	1405.50	09/12/94	10:35:00
1/F(095)	EXPOSED SURFACE	914	7961.59	09/12/94	10:36:00
1/F(096)	PAINTED SURFACE	190	1641.20	09/12/94	10:54:00
1/F(096)	EXPOSED SURFACE	990	8625.05	09/12/94	10:56:00
1/F(097)	PAINTED SURFACE	131	1126.15	09/12/94	10:57:00
1/F(097)	EXPOSED SURFACE	347	3011.79	09/12/94	10:57:00
1/F(098)	PAINTED SURFACE	178	1536.45	09/12/94	10:58:00
1/F(098)	EXPOSED SURFACE	285	2470.54	09/12/94	10:58:00
1/F(099)	PAINTED SURFACE	227	1964.21	09/12/94	10:59:00
1/F(099)	EXPOSED SURFACE	2862	24967.26	09/12/94	10:59:00
1/F(100)	PAINTED SURFACE	121	1038.85	09/12/94	11:00:00
1/F(100)	EXPOSED SURFACE	403	3500.65	09/12/94	11:01:00
1/F(100)	EXPOSED SURFACE	3	-248.80	09/23/94	11:54:00
1/F(101)	PAINTED SURFACE	143	1230.90	09/12/94	11:12:00
1/F(101)	EXPOSED SURFACE	444	3858.58	09/12/94	11:13:00
1/F(102)	PAINTED SURFACE	167	1440.42	09/12/94	11:14:00
1/F(102)	EXPOSED SURFACE	333	2889.57	09/12/94	11:14:00
1/F(103)	PAINTED SURFACE	103	881.71	09/12/94	11:14:00
1/F(103)	EXPOSED SURFACE	247	2138.80	09/12/94	11:15:00
1/F(104)	PAINTED SURFACE	129	1108.69	09/12/94	11:15:00
1/F(104)	EXPOSED SURFACE	175	1510.26	09/12/94	11:16:00

A.3. Summary Data of Alpha Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
1/F(105)	PAINTED SURFACE	67	567.44	09/12/94	11:16:00
1/F(105)	EXPOSED SURFACE	87	742.03	09/12/94	11:17:00
1/F(106)	PAINTED SURFACE	207	1789.61	09/12/94	11:32:00
1/F(106)	EXPOSED SURFACE	368	3195.11	09/12/94	11:33:00
1/F(107)	PAINTED SURFACE	109	934.09	09/12/94	11:33:00
1/F(107)	EXPOSED SURFACE	138	1187.25	09/12/94	11:34:00
1/F(108)	PAINTED SURFACE	67	567.44	09/12/94	11:37:00
1/F(108)	EXPOSED SURFACE	56	471.41	09/12/94	11:37:00
1/F(109)	PAINTED SURFACE	80	680.93	09/12/94	11:34:00
1/F(109)	EXPOSED SURFACE	65	549.98	09/12/94	11:38:00
1/F(110)	PAINTED SURFACE	96	820.60	09/12/94	11:39:00
1/F(110)	EXPOSED SURFACE	74	628.55	09/12/94	11:40:00
1/F(111)	PAINTED SURFACE	69	584.90	09/12/94	11:49:00
1/F(111)	EXPOSED SURFACE	188	1623.75	09/12/94	11:49:00
1/F(112)	PAINTED SURFACE	112	960.28	09/12/94	11:50:00
1/F(112)	EXPOSED SURFACE	286	2479.27	09/12/94	11:50:00
1/F(113)	PAINTED SURFACE	110	942.82	09/12/94	11:51:00
1/F(113)	EXPOSED SURFACE	310	2688.78	09/12/94	11:51:00
1/F(114)	PAINTED SURFACE	102	872.98	09/12/94	11:52:00
1/F(114)	EXPOSED SURFACE	770	6704.50	09/12/94	11:53:00
1/F(115)	PAINTED SURFACE	57	480.14	09/12/94	11:53:00
1/F(115)	EXPOSED SURFACE	408	3544.30	09/12/94	11:54:00
1/F(116)	PAINTED SURFACE	58	488.87	09/12/94	13:30:00
1/F(116)	EXPOSED SURFACE	541	4705.37	09/12/94	13:30:00
1/F(117)	PAINTED SURFACE	88	750.76	09/12/94	13:31:00
1/F(117)	EXPOSED SURFACE	209	1807.07	09/12/94	13:31:00
1/F(118)	PAINTED SURFACE	373	3238.76	09/12/94	13:32:00
1/F(118)	EXPOSED SURFACE	480	4172.85	09/12/94	13:33:00
1/F(119)	PAINTED SURFACE	115	986.47	09/12/94	13:37:00
1/F(119)	EXPOSED SURFACE	305	2645.13	09/12/94	13:37:00
1/F(120)	PAINTED SURFACE	156	1344.39	09/12/94	13:38:00
1/F(120)	EXPOSED SURFACE	863	7516.37	09/12/94	13:38:00
1/F(121)	PAINTED SURFACE	486	4225.23	09/12/94	13:39:00
1/F(121)	EXPOSED SURFACE	1553	13539.94	09/12/94	13:39:00
1/F(122)	PAINTED SURFACE	139	1195.98	09/12/94	13:40:00
1/F(122)	EXPOSED SURFACE	815	7097.34	09/12/94	13:40:00
1/F(123)	PAINTED SURFACE	114	977.74	09/12/94	13:41:00
1/F(123)	EXPOSED SURFACE	353	3064.16	09/12/94	13:41:00
1/F(124)	PAINTED SURFACE	204	1763.42	09/12/94	13:42:00
1/F(124)	EXPOSED SURFACE	400	3474.47	09/12/94	13:51:00
1/F(125)	PAINTED SURFACE	204	1763.42	09/12/94	13:43:00
1/F(125)	EXPOSED SURFACE	227	1964.21	09/12/94	13:44:00
1/F(126)	PAINTED SURFACE	356	3090.35	09/12/94	13:52:00
1/F(126)	EXPOSED SURFACE	775	6748.14	09/12/94	13:53:00
1/F(127)	PAINTED SURFACE	190	1641.20	09/12/94	13:53:00
1/F(127)	EXPOSED SURFACE	834	7263.20	09/12/94	13:54:00
1/F(128)	PAINTED SURFACE	211	1824.53	09/12/94	13:55:00
1/F(128)	EXPOSED SURFACE	407	3535.57	09/12/94	13:56:00

A.3. Summary Data of Alpha Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
1/F(129)	PAINTED SURFACE	187	1615.02	09/12/94	13:57:00
1/F(129)	EXPOSED SURFACE	201	1737.23	09/12/94	13:57:00
1/F(130)	PAINTED SURFACE	203	1754.69	09/12/94	13:57:00
1/F(130)	EXPOSED SURFACE	255	2208.64	09/12/94	13:58:00
1/F(131)	PAINTED SURFACE	66	558.71	09/12/94	14:18:00
1/F(131)	EXPOSED SURFACE	73	619.82	09/12/94	14:19:00
1/F(132)	PAINTED SURFACE	112	960.28	09/12/94	14:19:00
1/F(132)	EXPOSED SURFACE	171	1475.34	09/12/94	14:20:00
1/F(133)	PAINTED SURFACE	60	506.33	09/12/94	14:20:00
1/F(133)	EXPOSED SURFACE	285	2470.54	09/12/94	14:21:00
1/F(134)	PAINTED SURFACE	50	419.03	09/12/94	14:22:00
1/F(134)	EXPOSED SURFACE	176	1518.99	09/12/94	14:22:00
1/F(135)	PAINTED SURFACE	64	541.25	09/12/94	14:22:00
1/F(135)	EXPOSED SURFACE	144	1239.63	09/12/94	14:23:00
1/F(136)	PAINTED SURFACE	104	890.44	09/12/94	14:44:00
1/F(136)	EXPOSED SURFACE	118	1012.66	09/12/94	14:45:00
1/F(137)	PAINTED SURFACE	86	733.30	09/12/94	14:45:00
1/F(137)	EXPOSED SURFACE	82	698.38	09/12/94	14:46:00
1/F(138)	PAINTED SURFACE	116	995.20	09/12/94	14:47:00
1/F(138)	EXPOSED SURFACE	168	1449.15	09/12/94	14:47:00
1/F(139)	PAINTED SURFACE	84	715.84	09/12/94	14:48:00
1/F(139)	EXPOSED SURFACE	450	3910.96	09/12/94	14:49:00
1/F(140)	PAINTED SURFACE	151	1300.74	09/12/94	14:49:00
1/F(140)	EXPOSED SURFACE	194	1676.12	09/12/94	14:50:00
1/F(141)	PAINTED SURFACE	65	549.98	09/12/94	14:59:00
1/F(141)	EXPOSED SURFACE	372	3230.03	09/12/94	14:59:00
1/F(142)	PAINTED SURFACE	78	663.47	09/12/94	15:00:00
1/F(142)	EXPOSED SURFACE	532	4626.80	09/12/94	15:01:00
1/F(143)	PAINTED SURFACE	135	1161.07	09/12/94	15:01:00
1/F(143)	EXPOSED SURFACE	738	6425.14	09/12/94	15:02:00
1/F(144)	PAINTED SURFACE	147	1265.82	09/12/94	15:03:00
1/F(144)	EXPOSED SURFACE	633	5508.51	09/12/94	15:03:00
1/F(145)	PAINTED SURFACE	174	1501.53	09/12/94	15:04:00
1/F(145)	EXPOSED SURFACE	213	1841.99	09/12/94	15:04:00
1/F(146)	PAINTED SURFACE	155	1335.66	09/12/94	15:28:00
1/F(146)	EXPOSED SURFACE	485	4216.50	09/12/94	15:28:00
1/F(147)	PAINTED SURFACE	167	1440.42	09/12/94	15:30:00
1/F(147)	EXPOSED SURFACE	357	3099.08	09/12/94	15:31:00
1/F(148)	PAINTED SURFACE	122	1047.58	09/12/94	15:32:00
1/F(148)	EXPOSED SURFACE	372	3230.03	09/12/94	15:33:00
1/F(149)	PAINTED SURFACE	99	846.79	09/12/94	15:34:00
1/F(149)	EXPOSED SURFACE	285	2470.54	09/12/94	15:35:00
1/F(150)	PAINTED SURFACE	171	1475.34	09/12/94	15:36:00
1/F(150)	EXPOSED SURFACE	432	3753.82	09/12/94	15:37:00
1/F(151)	PAINTED SURFACE	459	3989.52	09/12/94	15:49:00
1/F(151)	EXPOSED SURFACE	1002	8729.81	09/12/94	15:50:00
1/F(152)	PAINTED SURFACE	339	2941.95	09/12/94	15:51:00
1/F(152)	EXPOSED SURFACE	549	4775.21	09/12/94	15:51:00

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Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
1/F(153)	PAINTED SURFACE	162	1396.77	09/12/94	15:52:00
1/F(153)	EXPOSED SURFACE	4200	36647.75	09/12/94	15:53:00
1/F(154)	PAINTED SURFACE	253	2191.18	09/12/94	15:54:00
1/F(154)	EXPOSED SURFACE	232	2007.86	09/12/94	15:54:00
1/F(155)	PAINTED SURFACE	261	2261.02	09/12/94	15:55:00
1/F(155)	EXPOSED SURFACE	178	1536.45	09/12/94	15:56:00
1/F(156)	PAINTED SURFACE	278	2409.43	09/12/94	16:03:00
1/F(156)	EXPOSED SURFACE	227	1964.21	09/12/94	16:04:00
1/F(157)	PAINTED SURFACE	82	698.38	09/12/94	16:05:00
1/F(157)	EXPOSED SURFACE	85	724.57	09/12/94	16:06:00
1/F(158)	PAINTED SURFACE	100	855.52	09/12/94	16:07:00
1/F(158)	EXPOSED SURFACE	380	3299.87	09/12/94	16:08:00
1/F(159)	PAINTED SURFACE	82	698.38	09/12/94	16:09:00
1/F(159)	EXPOSED SURFACE	99	846.79	09/12/94	16:10:00
1/F(160)	PAINTED SURFACE	64	541.25	09/12/94	16:11:00
1/F(160)	EXPOSED SURFACE	97	829.33	09/12/94	16:12:00
1/F(161)	PAINTED SURFACE	157	1353.12	09/12/94	16:17:00
1/F(161)	EXPOSED SURFACE	85	724.57	09/12/94	16:18:00
1/F(162)	PAINTED SURFACE	99	846.79	09/12/94	16:19:00
1/F(162)	EXPOSED SURFACE	91	776.95	09/12/94	16:20:00
1/F(163)	PAINTED SURFACE	116	995.20	09/12/94	16:20:00
1/F(163)	EXPOSED SURFACE	138	1187.25	09/12/94	16:21:00
1/F(164)	PAINTED SURFACE	87	742.03	09/12/94	16:22:00
1/F(164)	EXPOSED SURFACE	111	951.55	09/12/94	16:23:00
1/F(165)	PAINTED SURFACE	118	1012.66	09/12/94	16:23:00
1/F(165)	EXPOSED SURFACE	137	1178.52	09/12/94	16:24:00
1/F(166)	PAINTED SURFACE	81	614.58	09/13/94	08:43:00
1/F(166)	EXPOSED SURFACE	1093	9449.15	09/13/94	08:44:00
1/F(167)	PAINTED SURFACE	89	684.42	09/13/94	08:45:00
1/F(167)	EXPOSED SURFACE	194	1601.05	09/13/94	08:45:00
1/F(168)	PAINTED SURFACE	70	518.55	09/13/94	08:46:00
1/F(168)	EXPOSED SURFACE	98	762.99	09/13/94	08:47:00
1/F(169)	PAINTED SURFACE	101	789.18	09/13/94	08:48:00
1/F(169)	EXPOSED SURFACE	95	736.80	09/13/94	08:48:00
1/F(170)	PAINTED SURFACE	142	1147.10	09/13/94	08:49:00
1/F(170)	EXPOSED SURFACE	178	1461.37	09/13/94	08:50:00
1/F(171)	PAINTED SURFACE	127	1016.15	09/13/94	09:04:00
1/F(171)	EXPOSED SURFACE	377	3198.60	09/13/94	09:05:00
1/F(172)	PAINTED SURFACE	116	920.12	09/13/94	09:06:00
1/F(172)	EXPOSED SURFACE	259	2168.49	09/13/94	09:07:00
1/F(173)	PAINTED SURFACE	282	2369.27	09/13/94	09:08:00
1/F(173)	EXPOSED SURFACE	704	6053.25	09/13/94	09:09:00
1/F(174)	PAINTED SURFACE	101	789.18	09/13/94	09:10:00
1/F(174)	EXPOSED SURFACE	444	3783.50	09/13/94	09:10:00
1/F(175)	PAINTED SURFACE	105	824.09	09/13/94	09:11:00
1/F(175)	EXPOSED SURFACE	264	2212.13	09/13/94	09:12:00
1/F(176)	PAINTED SURFACE	122	972.50	09/13/94	09:23:00
1/F(176)	EXPOSED SURFACE	179	1470.10	09/13/94	09:24:00

A.3. Summary Data of Alpha Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
1/F(177)	PAINTED SURFACE	101	789.18	09/13/94	09:25:00
1/F(177)	EXPOSED SURFACE	569	4874.73	09/13/94	09:26:00
1/F(178)	PAINTED SURFACE	364	3085.12	09/13/94	09:27:00
1/F(178)	EXPOSED SURFACE	718	6175.47	09/13/94	09:28:00
1/F(179)	PAINTED SURFACE	190	1566.13	09/13/94	09:29:00
1/F(179)	EXPOSED SURFACE	431	3670.01	09/13/94	09:30:00
1/F(180)	PAINTED SURFACE	141	1138.37	09/13/94	09:31:00
1/F(180)	EXPOSED SURFACE	629	5398.52	09/13/94	09:33:00
1/F(181)	PAINTED SURFACE	133	1068.53	09/13/94	09:57:00
1/F(181)	EXPOSED SURFACE	178	1461.37	09/13/94	10:00:00
1/F(182)	PAINTED SURFACE	133	1068.53	09/13/94	10:01:00
1/F(182)	EXPOSED SURFACE	305	2570.06	09/13/94	10:02:00
1/F(183)	PAINTED SURFACE	95	736.80	09/13/94	10:02:00
1/F(183)	EXPOSED SURFACE	106	832.82	09/13/94	10:03:00
1/F(184)	PAINTED SURFACE	91	701.88	09/13/94	10:03:00
1/F(184)	EXPOSED SURFACE	110	867.74	09/13/94	10:04:00
1/F(185)	PAINTED SURFACE	87	666.96	09/13/94	10:04:00
1/F(185)	EXPOSED SURFACE	122	972.50	09/13/94	10:05:00
1/F(186)	PAINTED SURFACE	73	544.74	09/13/94	10:15:00
1/F(186)	EXPOSED SURFACE	114	902.66	09/13/94	10:16:00
1/F(187)	PAINTED SURFACE	106	832.82	09/13/94	10:16:00
1/F(187)	EXPOSED SURFACE	140	1129.64	09/13/94	10:17:00
1/F(188)	PAINTED SURFACE	97	754.26	09/13/94	10:17:00
1/F(188)	EXPOSED SURFACE	86	658.23	09/13/94	10:18:00
1/F(189)	PAINTED SURFACE	87	666.96	09/13/94	10:19:00
1/F(189)	EXPOSED SURFACE	1309	11334.79	09/13/94	10:20:00
1/F(190)	PAINTED SURFACE	101	789.18	09/13/94	10:20:00
1/F(190)	EXPOSED SURFACE	571	4892.19	09/13/94	10:22:00
1/F(191)	PAINTED SURFACE	170	1391.53	09/13/94	10:40:00
1/F(191)	EXPOSED SURFACE	222	1845.48	09/13/94	10:41:00
1/F(192)	PAINTED SURFACE	152	1234.40	09/13/94	10:41:00
1/F(192)	EXPOSED SURFACE	312	2631.17	09/13/94	10:42:00
1/F(193)	PAINTED SURFACE	195	1609.78	09/13/94	10:42:00
1/F(193)	EXPOSED SURFACE	152	1234.40	09/13/94	10:42:00
1/F(194)	PAINTED SURFACE	104	815.36	09/13/94	10:43:00
1/F(194)	EXPOSED SURFACE	627	5381.06	09/13/94	10:43:00
1/F(195)	PAINTED SURFACE	128	1024.88	09/13/94	10:44:00
1/F(195)	EXPOSED SURFACE	1210	10470.54	09/13/94	10:45:00
1/F(196)	PAINTED SURFACE	144	1164.56	09/13/94	10:56:00
1/F(196)	EXPOSED SURFACE	1279	11072.89	09/13/94	10:56:00
1/F(197)	PAINTED SURFACE	246	2055.00	09/13/94	10:57:00
1/F(197)	EXPOSED SURFACE	370	3137.49	09/13/94	10:57:00
1/F(198)	PAINTED SURFACE	370	3137.49	09/13/94	10:58:00
1/F(198)	EXPOSED SURFACE	831	7161.94	09/13/94	10:58:00
1/F(199)	PAINTED SURFACE	122	972.50	09/13/94	10:59:00
1/F(199)	EXPOSED SURFACE	555	4752.51	09/13/94	11:00:00
1/F(200)	PAINTED SURFACE	174	1426.45	09/13/94	11:01:00
1/F(200)	EXPOSED SURFACE	757	6515.93	09/13/94	11:01:00

A.3. Summary Data of Alpha Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
1/F(201)	PAINTED SURFACE	131	1051.07	09/13/94	11:09:00
1/F(201)	EXPOSED SURFACE	411	3495.42	09/13/94	11:10:00
1/F(202)	PAINTED SURFACE	166	1356.61	09/13/94	11:11:00
1/F(202)	EXPOSED SURFACE	140	1129.64	09/13/94	11:12:00
1/F(203)	PAINTED SURFACE	323	2727.19	09/13/94	11:13:00
1/F(203)	EXPOSED SURFACE	272	2281.97	09/13/94	11:17:00
1/F(204)	PAINTED SURFACE	516	4412.05	09/13/94	11:14:00
1/F(204)	EXPOSED SURFACE	2274	19759.06	09/13/94	11:15:00
1/F(205)	PAINTED SURFACE	505	4316.02	09/13/94	11:18:00
1/F(205)	EXPOSED SURFACE	3109	27048.45	09/13/94	11:19:00
1/F(206)	PAINTED SURFACE	918	7921.43	09/13/94	11:34:00
1/F(206)	EXPOSED SURFACE	2017	17515.50	09/13/94	11:34:00
1/F(207)	PAINTED SURFACE	380	3224.79	09/13/94	11:35:00
1/F(207)	EXPOSED SURFACE	1459	12644.26	09/13/94	11:35:00
1/F(208)	PAINTED SURFACE	404	3434.31	09/13/94	11:37:00
1/F(208)	EXPOSED SURFACE	496	4237.45	09/13/94	11:38:00
1/F(209)	PAINTED SURFACE	105	824.09	09/13/94	11:39:00
1/F(209)	EXPOSED SURFACE	147	1190.75	09/13/94	11:40:00
1/F(210)	PAINTED SURFACE	100	780.45	09/13/94	11:41:00
1/F(210)	EXPOSED SURFACE	126	1007.42	09/13/94	11:41:00
1/F(211)	PAINTED SURFACE	89	684.42	09/13/94	11:47:00
1/F(211)	EXPOSED SURFACE	158	1286.77	09/13/94	11:48:00
1/F(212)	PAINTED SURFACE	88	675.69	09/13/94	11:48:00
1/F(212)	EXPOSED SURFACE	63	457.44	09/13/94	11:49:00
1/F(213)	PAINTED SURFACE	133	1068.53	09/13/94	11:49:00
1/F(213)	EXPOSED SURFACE	69	509.82	09/13/94	11:49:00
1/F(214)	PAINTED SURFACE	147	1190.75	09/13/94	11:50:00
1/F(214)	EXPOSED SURFACE	301	2535.14	09/13/94	11:51:00
1/F(215)	PAINTED SURFACE	86	658.23	09/13/94	11:51:00
1/F(215)	EXPOSED SURFACE	89	684.42	09/13/94	11:51:00
1/F(216)	PAINTED SURFACE	80	605.85	09/13/94	13:50:00
1/F(216)	EXPOSED SURFACE	68	501.09	09/13/94	13:50:00
1/F(217)	PAINTED SURFACE	107	841.55	09/13/94	13:51:00
1/F(217)	EXPOSED SURFACE	70	518.55	09/13/94	13:51:00
1/F(218)	PAINTED SURFACE	95	736.80	09/13/94	13:52:00
1/F(218)	EXPOSED SURFACE	369	3128.76	09/13/94	13:52:00
1/F(219)	PAINTED SURFACE	109	859.01	09/13/94	13:53:00
1/F(219)	EXPOSED SURFACE	126	1007.42	09/13/94	13:54:00
1/F(220)	PAINTED SURFACE	93	719.34	09/13/94	13:55:00
1/F(220)	EXPOSED SURFACE	109	859.01	09/13/94	13:55:00
1/F(221)	PAINTED SURFACE	83	632.04	09/13/94	14:07:00
1/F(221)	EXPOSED SURFACE	116	920.12	09/13/94	14:08:00
1/F(222)	PAINTED SURFACE	141	1138.37	09/13/94	14:08:00
1/F(222)	EXPOSED SURFACE	341	2884.33	09/13/94	14:10:00
1/F(223)	PAINTED SURFACE	194	1601.05	09/13/94	14:10:00
1/F(223)	EXPOSED SURFACE	210	1740.72	09/13/94	14:11:00
1/F(224)	PAINTED SURFACE	184	1513.75	09/13/94	14:11:00
1/F(224)	EXPOSED SURFACE	295	2482.76	09/13/94	14:12:00

A.3. Summary Data of Alpha Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
1/F(225)	PAINTED SURFACE	187	1539.94	09/13/94	14:12:00
1/F(225)	EXPOSED SURFACE	173	1417.72	09/13/94	14:13:00
1/F(226)	PAINTED SURFACE	136	1094.72	09/13/94	14:22:00
1/F(226)	EXPOSED SURFACE	618	5302.49	09/13/94	14:23:00
1/F(227)	PAINTED SURFACE	180	1478.83	09/13/94	14:23:00
1/F(227)	EXPOSED SURFACE	438	3731.12	09/13/94	14:24:00
1/F(228)	PAINTED SURFACE	254	2124.84	09/13/94	14:24:00
1/F(228)	EXPOSED SURFACE	234	1950.24	09/13/94	14:25:00
1/F(229)	PAINTED SURFACE	392	3329.55	09/13/94	14:26:00
1/F(229)	EXPOSED SURFACE	622	5337.41	09/13/94	14:27:00
1/F(230)	PAINTED SURFACE	722	6210.39	09/13/94	14:28:00
1/F(230)	EXPOSED SURFACE	308	2596.25	09/13/94	14:28:00
1/F(231)	PAINTED SURFACE	523	4473.16	09/13/94	14:55:00
1/F(231)	EXPOSED SURFACE	2754	23949.37	09/13/94	14:55:00
1/F(232)	PAINTED SURFACE	289	2430.38	09/13/94	14:56:00
1/F(232)	EXPOSED SURFACE	786	6769.10	09/13/94	14:57:00
1/F(233)	PAINTED SURFACE	422	3591.44	09/13/94	14:58:00
1/F(233)	EXPOSED SURFACE	328	2770.84	09/13/94	14:59:00
1/F(234)	PAINTED SURFACE	377	3198.60	09/13/94	15:00:00
1/F(234)	EXPOSED SURFACE	682	5861.20	09/13/94	15:01:00
1/F(235)	PAINTED SURFACE	112	885.20	09/13/94	15:02:00
1/F(235)	EXPOSED SURFACE	222	1845.48	09/13/94	15:03:00
1/F(236)	PAINTED SURFACE	145	1173.29	09/13/94	15:11:00
1/F(236)	EXPOSED SURFACE	311	2622.44	09/13/94	15:12:00
1/F(237)	PAINTED SURFACE	108	850.28	09/13/94	15:14:00
1/F(237)	EXPOSED SURFACE	88	675.69	09/13/94	15:15:00
1/F(238)	PAINTED SURFACE	174	1426.45	09/13/94	15:16:00
1/F(238)	EXPOSED SURFACE	154	1251.86	09/13/94	15:18:00
1/F(239)	PAINTED SURFACE	90	693.15	09/13/94	15:19:00
1/F(239)	EXPOSED SURFACE	115	911.39	09/13/94	15:21:00
1/F(240)	PAINTED SURFACE	94	728.07	09/13/94	15:23:00
1/F(240)	EXPOSED SURFACE	197	1627.24	09/13/94	15:23:00
1/F(241)	PAINTED SURFACE	92	710.61	09/13/94	15:27:00
1/F(241)	EXPOSED SURFACE	112	885.20	09/13/94	15:27:00
1/F(242)	PAINTED SURFACE	88	675.69	09/13/94	15:28:00
1/F(242)	EXPOSED SURFACE	139	1120.91	09/13/94	15:29:00
1/F(243)	PAINTED SURFACE	108	850.28	09/13/94	15:29:00
1/F(243)	EXPOSED SURFACE	194	1601.05	09/13/94	15:30:00
1/F(244)	PAINTED SURFACE	84	640.77	09/13/94	15:31:00
1/F(244)	EXPOSED SURFACE	137	1103.45	09/13/94	15:32:00
1/F(245)	PAINTED SURFACE	115	911.39	09/13/94	15:33:00
1/F(245)	EXPOSED SURFACE	260	2177.22	09/13/94	15:33:00
1/F(246)	PAINTED SURFACE	127	1016.15	09/13/94	15:42:00
1/F(246)	EXPOSED SURFACE	158	1286.77	09/13/94	15:43:00
1/F(247)	PAINTED SURFACE	126	1007.42	09/13/94	15:43:00
1/F(247)	EXPOSED SURFACE	110	867.74	09/13/94	15:44:00
1/F(248)	PAINTED SURFACE	280	2351.81	09/13/94	15:45:00
1/F(248)	EXPOSED SURFACE	305	2570.06	09/13/94	15:49:00

A.3. Summary Data of Alpha Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
1/F(249)	PAINTED SURFACE	91	701.88	09/13/94	15:51:00
1/F(249)	EXPOSED SURFACE	105	824.09	09/13/94	15:52:00
1/F(250)	PAINTED SURFACE	126	1007.42	09/13/94	15:53:00
1/F(250)	EXPOSED SURFACE	210	1740.72	09/13/94	15:54:00
1/F(251)	PAINTED SURFACE	131	1051.07	09/13/94	15:56:00
1/F(251)	EXPOSED SURFACE	208	1723.26	09/13/94	15:57:00
1/F(252)	PAINTED SURFACE	90	693.15	09/13/94	15:57:00
1/F(252)	EXPOSED SURFACE	180	1478.83	09/13/94	15:58:00
1/F(253)	PAINTED SURFACE	152	1234.40	09/13/94	15:58:00
1/F(253)	EXPOSED SURFACE	253	2116.11	09/13/94	15:59:00
1/F(254)	PAINTED SURFACE	225	1871.67	09/13/94	15:59:00
1/F(254)	EXPOSED SURFACE	1906	16546.49	09/13/94	16:00:00
1/F(255)	PAINTED SURFACE	118	937.58	09/13/94	16:00:00
1/F(255)	EXPOSED SURFACE	214	1775.64	09/13/94	16:01:00
1/F(256)	PAINTED SURFACE	411	3495.42	09/13/94	16:04:00
1/F(256)	EXPOSED SURFACE	537	4595.37	09/13/94	16:05:00
1/F(257)	PAINTED SURFACE	270	2264.51	09/13/94	16:05:00
1/F(257)	EXPOSED SURFACE	769	6620.69	09/13/94	16:06:00
1/F(258)	PAINTED SURFACE	192	1583.59	09/13/94	16:07:00
1/F(258)	EXPOSED SURFACE	598	5127.89	09/13/94	16:08:00
1/F(259)	PAINTED SURFACE	186	1531.21	09/13/94	16:09:00
1/F(259)	EXPOSED SURFACE	317	2674.81	09/13/94	16:09:00
1/F(260)	PAINTED SURFACE	293	2465.30	09/13/94	16:10:00
1/F(260)	EXPOSED SURFACE	197	1627.24	09/13/94	16:11:00
1/F(999)	PAINTED SURFACE	17	52.38	09/08/94	14:18:00
1/F(999)	PAINTED SURFACE	8	-26.19	09/08/94	16:46:00
1/F(999)	PAINTED SURFACE	7	-34.92	09/08/94	16:48:00
1/F(999)	PAINTED SURFACE	13	17.46	09/08/94	16:49:00
1/F(999)	PAINTED SURFACE	10	-8.73	09/08/94	16:54:00
1/F(999)	PAINTED SURFACE	1	-8.73	09/12/94	16:30:00
1/F(999)	PAINTED SURFACE	3	8.73	09/12/94	16:30:00
1/F(999)	PAINTED SURFACE	17	55.87	09/13/94	16:18:00
1/F(999)	PAINTED SURFACE	21	90.79	09/13/94	16:19:00
1/F(999)	PAINTED SURFACE	0	-92.54	09/13/94	16:19:00
1/F(999)	PAINTED SURFACE	5	-48.89	09/13/94	16:19:00
1/F(999)	PAINTED SURFACE	10	-5.24	09/13/94	16:19:00
1/N(001)	PAINTED SURFACE	245	2073.33	09/14/94	15:23:00
1/N(001)	EXPOSED SURFACE	87	694.02	09/14/94	15:23:00
1/N(002)	PAINTED SURFACE	153	1270.19	09/14/94	15:24:00
1/N(002)	EXPOSED SURFACE	78	615.45	09/14/94	15:24:00
1/N(003)	PAINTED SURFACE	82	650.37	09/14/94	15:25:00
1/N(003)	EXPOSED SURFACE	109	650.37	09/14/94	15:25:00
1/N(004)	PAINTED SURFACE	1467	12741.16	09/14/94	15:26:00
1/N(004)	EXPOSED SURFACE	156	1296.38	09/14/94	15:26:00
1/N(005)	PAINTED SURFACE	103	833.70	09/14/94	15:27:00
1/N(005)	EXPOSED SURFACE	89	711.48	09/14/94	15:27:00
1/N(006)	PAINTED SURFACE	113	921.00	09/14/94	15:51:00
1/N(006)	EXPOSED SURFACE	161	1340.03	09/14/94	15:52:00

A.3. Summary Data of Alpha Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
1/N(007)	PAINTED SURFACE	81	641.64	09/14/94	15:53:00
1/N(007)	EXPOSED SURFACE	70	545.61	09/14/94	15:53:00
1/N(008)	PAINTED SURFACE	211	1776.52	09/14/94	15:54:00
1/N(008)	EXPOSED SURFACE	146	1209.08	09/14/94	15:55:00
1/N(009)	PAINTED SURFACE	202	1697.95	09/14/94	15:55:00
1/N(009)	EXPOSED SURFACE	178	1488.43	09/14/94	15:58:00
1/N(010)	PAINTED SURFACE	183	1532.08	09/14/94	15:59:00
1/N(010)	EXPOSED SURFACE	129	1060.67	09/14/94	16:00:00
1/N(011)	PAINTED SURFACE	117	955.91	09/14/94	16:08:00
1/N(011)	EXPOSED SURFACE	112	912.27	09/14/94	16:09:00
1/N(012)	PAINTED SURFACE	115	938.45	09/14/94	16:09:00
1/N(012)	EXPOSED SURFACE	128	1051.94	09/14/94	16:10:00
1/N(013)	PAINTED SURFACE	64	493.23	09/14/94	16:11:00
1/N(013)	EXPOSED SURFACE	462	3967.70	09/14/94	16:11:00
1/N(014)	PAINTED SURFACE	83	659.10	09/14/94	16:12:00
1/N(014)	EXPOSED SURFACE	73	571.80	09/14/94	16:13:00
1/N(015)	PAINTED SURFACE	667	5757.31	09/14/94	16:14:00
1/N(015)	EXPOSED SURFACE	255	2160.63	09/14/94	16:14:00
1/N(016)	PAINTED SURFACE	142	1174.16	09/14/94	16:23:00
1/N(016)	EXPOSED SURFACE	194	1628.11	09/14/94	16:24:00
1/N(017)	PAINTED SURFACE	198	1663.03	09/14/94	16:25:00
1/N(017)	EXPOSED SURFACE	131	1078.13	09/14/94	16:26:00
1/N(018)	PAINTED SURFACE	126	1034.48	09/14/94	16:27:00
1/N(018)	EXPOSED SURFACE	97	781.32	09/14/94	16:27:00
1/N(019)	PAINTED SURFACE	129	1060.67	09/14/94	16:28:00
1/N(019)	EXPOSED SURFACE	63	484.50	09/14/94	16:28:00
1/N(020)	PAINTED SURFACE	87	694.02	09/14/94	16:29:00
1/N(020)	EXPOSED SURFACE	125	1025.75	09/14/94	16:29:00
1/N(021)	PAINTED SURFACE	280	2306.42	09/15/94	08:47:00
1/N(021)	EXPOSED SURFACE	167	1319.95	09/15/94	08:47:00
1/N(022)	PAINTED SURFACE	306	2533.39	09/15/94	08:48:00
1/N(022)	EXPOSED SURFACE	135	1040.59	09/15/94	08:49:00
1/N(023)	PAINTED SURFACE	230	1869.93	09/15/94	08:49:00
1/N(023)	EXPOSED SURFACE	160	1258.84	09/15/94	08:50:00
1/N(024)	PAINTED SURFACE	320	2655.61	09/15/94	08:50:00
1/N(024)	EXPOSED SURFACE	166	1311.22	09/15/94	08:51:00
1/N(025)	PAINTED SURFACE	415	3484.94	09/15/94	08:52:00
1/N(025)	EXPOSED SURFACE	180	1433.44	09/15/94	08:53:00
1/N(026)	PAINTED SURFACE	556	4715.84	09/15/94	09:09:00
1/N(026)	EXPOSED SURFACE	149	1162.81	09/15/94	09:10:00
1/N(027)	PAINTED SURFACE	76	525.53	09/15/94	09:10:00
1/N(027)	EXPOSED SURFACE	64	420.78	09/15/94	09:11:00
1/N(028)	PAINTED SURFACE	56	350.94	09/15/94	09:11:00
1/N(028)	EXPOSED SURFACE	82	577.91	09/15/94	09:12:00
1/N(029)	PAINTED SURFACE	141	1092.97	09/15/94	09:13:00
1/N(029)	EXPOSED SURFACE	158	1241.38	09/15/94	09:14:00
1/N(030)	PAINTED SURFACE	83	586.64	09/15/94	09:14:00
1/N(030)	EXPOSED SURFACE	240	1957.22	09/15/94	09:15:00

A.3. Summary Data of Alpha Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
1/N(031)	PAINTED SURFACE	94	682.67	09/15/94	09:18:00
1/N(031)	EXPOSED SURFACE	95	691.40	09/15/94	09:19:00
1/N(032)	PAINTED SURFACE	41	219.99	09/15/94	09:19:00
1/N(032)	EXPOSED SURFACE	44	246.18	09/15/94	09:20:00
1/N(033)	PAINTED SURFACE	42	228.72	09/15/94	09:20:00
1/N(033)	EXPOSED SURFACE	92	665.21	09/15/94	09:21:00
1/N(034)	PAINTED SURFACE	248	2027.06	09/15/94	09:21:00
1/N(034)	EXPOSED SURFACE	316	2620.69	09/15/94	09:22:00
1/N(035)	PAINTED SURFACE	149	1162.81	09/15/94	09:22:00
1/N(035)	EXPOSED SURFACE	190	1520.73	09/15/94	09:23:00
1/N(036)	PAINTED SURFACE	85	604.10	09/15/94	09:46:00
1/N(036)	EXPOSED SURFACE	173	1372.33	09/15/94	09:47:00
1/N(037)	PAINTED SURFACE	121	918.38	09/15/94	09:48:00
1/N(037)	EXPOSED SURFACE	189	1512.00	09/15/94	09:48:00
1/N(038)	PAINTED SURFACE	441	3711.92	09/15/94	09:49:00
1/N(038)	EXPOSED SURFACE	598	5082.50	09/15/94	09:50:00
1/N(039)	PAINTED SURFACE	119	900.92	09/15/94	09:51:00
1/N(039)	EXPOSED SURFACE	82	577.91	09/15/94	09:51:00
1/N(040)	PAINTED SURFACE	55	342.21	09/15/94	09:52:00
1/N(040)	EXPOSED SURFACE	41	219.99	09/15/94	09:53:00
1/N(041)	PAINTED SURFACE	310	2568.31	09/15/94	10:05:00
1/N(041)	EXPOSED SURFACE	104	769.97	09/15/94	10:05:00
1/N(042)	PAINTED SURFACE	69	464.43	09/15/94	10:06:00
1/N(042)	EXPOSED SURFACE	84	595.37	09/15/94	10:07:00
1/N(043)	PAINTED SURFACE	99	726.32	09/15/94	10:07:00
1/N(043)	EXPOSED SURFACE	135	1040.59	09/15/94	10:18:00
1/N(044)	PAINTED SURFACE	42	228.72	09/15/94	10:09:00
1/N(044)	EXPOSED SURFACE	46	263.64	09/15/94	10:10:00
1/N(045)	PAINTED SURFACE	49	289.83	09/15/94	10:15:00
1/N(045)	EXPOSED SURFACE	82	577.91	09/15/94	10:16:00
1/N(046)	PAINTED SURFACE	73	499.35	09/15/94	10:25:00
1/N(046)	EXPOSED SURFACE	130	996.94	09/15/94	10:26:00
1/N(047)	PAINTED SURFACE	52	316.02	09/15/94	10:26:00
1/N(047)	EXPOSED SURFACE	146	1136.62	09/15/94	10:27:00
1/N(048)	PAINTED SURFACE	105	778.70	09/15/94	10:28:00
1/N(048)	EXPOSED SURFACE	55	342.21	09/15/94	10:28:00
1/N(049)	PAINTED SURFACE	105	778.70	09/15/94	10:29:00
1/N(049)	EXPOSED SURFACE	103	761.24	09/15/94	10:30:00
1/N(050)	PAINTED SURFACE	133	1023.13	09/15/94	10:31:00
1/N(050)	EXPOSED SURFACE	168	1328.68	09/15/94	10:32:00
1/N(051)	PAINTED SURFACE	132	1014.40	09/15/94	10:48:00
1/N(051)	EXPOSED SURFACE	80	560.45	09/15/94	10:49:00
1/N(052)	PAINTED SURFACE	212	1712.79	09/15/94	10:50:00
1/N(052)	EXPOSED SURFACE	217	1756.44	09/15/94	10:51:00
1/N(053)	PAINTED SURFACE	20	36.67	09/15/94	10:51:00
1/N(053)	EXPOSED SURFACE	28	106.50	09/15/94	10:52:00
1/N(054)	PAINTED SURFACE	38	193.80	09/15/94	10:52:00
1/N(054)	EXPOSED SURFACE	21	45.40	09/15/94	10:53:00

A.3. Summary Data of Alpha Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
1/N(055)	PAINTED SURFACE	36	176.34	09/15/94	10:53:00
1/N(055)	EXPOSED SURFACE	54	333.48	09/15/94	10:54:00
1/N(056)	PAINTED SURFACE	90	647.75	09/15/94	11:22:00
1/N(056)	EXPOSED SURFACE	79	551.72	09/15/94	11:22:00
1/N(056)	EXPOSED SURFACE	24	209.52	09/20/94	15:13:00
1/N(057)	PAINTED SURFACE	128	979.48	09/15/94	11:23:00
1/N(057)	EXPOSED SURFACE	117	883.46	09/15/94	11:23:00
1/N(058)	PAINTED SURFACE	198	1590.57	09/15/94	11:24:00
1/N(058)	EXPOSED SURFACE	174	1381.06	09/15/94	11:24:00
1/N(059)	PAINTED SURFACE	96	700.13	09/15/94	11:24:00
1/N(059)	EXPOSED SURFACE	516	4366.65	09/15/94	11:25:00
1/N(060)	PAINTED SURFACE	155	1215.19	09/15/94	11:25:00
1/N(060)	EXPOSED SURFACE	54	333.48	09/15/94	11:26:00
1/N(061)	PAINTED SURFACE	144	1119.16	09/15/94	11:50:00
1/N(061)	EXPOSED SURFACE	119	900.92	09/15/94	11:51:00
1/N(062)	PAINTED SURFACE	110	822.35	09/15/94	11:51:00
1/N(062)	EXPOSED SURFACE	74	508.08	09/15/94	11:51:00
1/N(063)	PAINTED SURFACE	198	1590.57	09/15/94	11:52:00
1/N(063)	EXPOSED SURFACE	418	3511.13	09/15/94	11:52:00
1/N(064)	PAINTED SURFACE	191	1529.46	09/15/94	11:53:00
1/N(064)	EXPOSED SURFACE	485	4096.03	09/15/94	11:53:00
1/N(065)	PAINTED SURFACE	175	1389.79	09/15/94	11:53:00
1/N(065)	EXPOSED SURFACE	425	3572.24	09/15/94	11:54:00
1/N(066)	PAINTED SURFACE	109	813.62	09/15/94	13:54:00
1/N(066)	EXPOSED SURFACE	408	3423.83	09/15/94	13:55:00
1/N(067)	PAINTED SURFACE	189	1512.00	09/15/94	13:55:00
1/N(067)	EXPOSED SURFACE	422	3546.05	09/15/94	13:56:00
1/N(068)	PAINTED SURFACE	212	1712.79	09/15/94	13:56:00
1/N(068)	EXPOSED SURFACE	354	2952.42	09/15/94	13:57:00
1/N(069)	PAINTED SURFACE	148	1154.08	09/15/94	13:57:00
1/N(069)	EXPOSED SURFACE	257	2105.63	09/15/94	13:58:00
1/N(070)	PAINTED SURFACE	150	1171.54	09/15/94	13:58:00
1/N(070)	EXPOSED SURFACE	247	2018.33	09/15/94	14:00:00
1/N(071)	PAINTED SURFACE	131	1005.67	09/15/94	14:15:00
1/N(071)	EXPOSED SURFACE	559	4742.03	09/15/94	14:15:00
1/N(072)	PAINTED SURFACE	129	988.21	09/15/94	14:16:00
1/N(072)	EXPOSED SURFACE	134	1031.86	09/15/94	14:16:00
1/N(073)	PAINTED SURFACE	48	281.10	09/15/94	14:16:00
1/N(073)	EXPOSED SURFACE	56	350.94	09/15/94	14:17:00
1/N(074)	PAINTED SURFACE	175	1389.79	09/15/94	14:17:00
1/N(074)	EXPOSED SURFACE	369	3083.37	09/15/94	14:18:00
1/N(075)	PAINTED SURFACE	68	455.70	09/15/94	14:18:00
1/N(075)	EXPOSED SURFACE	94	682.67	09/15/94	14:18:00
1/N(076)	PAINTED SURFACE	185	1477.08	09/15/94	15:12:00
1/N(076)	EXPOSED SURFACE	74	508.08	09/15/94	15:13:00
1/N(077)	PAINTED SURFACE	137	1058.05	09/15/94	15:14:00
1/N(077)	EXPOSED SURFACE	47	272.37	09/15/94	15:14:00
1/N(078)	PAINTED SURFACE	41	219.99	09/15/94	15:16:00

A.3. Summary Data of Alpha Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
1/N(078)	EXPOSED SURFACE	41	219.99	09/15/94	15:17:00
1/N(079)	PAINTED SURFACE	31	132.69	09/15/94	15:18:00
1/N(079)	EXPOSED SURFACE	20	36.67	09/15/94	15:18:00
1/N(080)	PAINTED SURFACE	17	10.48	09/15/94	15:19:00
1/N(080)	EXPOSED SURFACE	30	123.96	09/15/94	15:20:00
1/N(081)	PAINTED SURFACE	36	176.34	09/15/94	16:00:00
1/N(081)	EXPOSED SURFACE	16	1.75	09/15/94	16:01:00
1/N(082)	PAINTED SURFACE	15	-6.98	09/15/94	16:02:00
1/N(082)	EXPOSED SURFACE	12	-33.17	09/15/94	16:02:00
1/N(083)	PAINTED SURFACE	32	141.42	09/15/94	16:03:00
1/N(083)	EXPOSED SURFACE	24	71.58	09/15/94	16:03:00
1/N(084)	PAINTED SURFACE	8	-68.09	09/15/94	16:04:00
1/N(084)	EXPOSED SURFACE	20	36.67	09/15/94	16:05:00
1/N(085)	PAINTED SURFACE	25	80.31	09/15/94	16:05:00
1/N(085)	EXPOSED SURFACE	4	-103.01	09/15/94	16:05:00
1/N(086)	PAINTED SURFACE	12	-17.46	09/19/94	09:36:00
1/N(086)	EXPOSED SURFACE	12	-17.46	09/19/94	09:36:00
1/N(087)	PAINTED SURFACE	24	87.30	09/19/94	09:37:00
1/N(087)	EXPOSED SURFACE	5	-78.57	09/19/94	09:38:00
1/N(088)	PAINTED SURFACE	32	157.14	09/19/94	09:39:00
1/N(088)	EXPOSED SURFACE	24	87.30	09/19/94	09:39:00
1/N(089)	PAINTED SURFACE	35	183.33	09/19/94	09:40:00
1/N(089)	EXPOSED SURFACE	4	-87.30	09/19/94	09:41:00
1/N(090)	PAINTED SURFACE	20	52.38	09/19/94	09:41:00
1/N(090)	EXPOSED SURFACE	5	-78.57	09/19/94	09:42:00
1/N(091)	PAINTED SURFACE	16	17.46	09/19/94	10:45:00
1/N(091)	EXPOSED SURFACE	28	122.22	09/19/94	10:45:00
1/N(092)	PAINTED SURFACE	28	122.22	09/19/94	10:46:00
1/N(092)	EXPOSED SURFACE	6	-69.84	09/19/94	10:46:00
1/N(093)	PAINTED SURFACE	8	-52.38	09/19/94	10:47:00
1/N(093)	EXPOSED SURFACE	32	157.14	09/19/94	10:47:00
1/N(094)	PAINTED SURFACE	12	-17.46	09/19/94	10:48:00
1/N(094)	EXPOSED SURFACE	12	-17.46	09/19/94	10:48:00
1/N(095)	PAINTED SURFACE	40	226.98	09/19/94	10:48:00
1/N(095)	EXPOSED SURFACE	12	-17.46	09/19/94	10:49:00
1/N(096)	PAINTED SURFACE	17	26.19	09/19/94	11:35:00
1/N(096)	EXPOSED SURFACE	28	122.22	09/19/94	11:35:00
1/N(097)	PAINTED SURFACE	44	261.89	09/19/94	11:36:00
1/N(097)	EXPOSED SURFACE	32	157.14	09/19/94	11:36:00
1/N(098)	PAINTED SURFACE	12	-17.46	09/19/94	11:36:00
1/N(098)	EXPOSED SURFACE	24	87.30	09/19/94	11:37:00
1/N(099)	PAINTED SURFACE	44	261.89	09/19/94	11:37:00
1/N(099)	EXPOSED SURFACE	28	122.22	09/19/94	11:38:00
1/N(100)	PAINTED SURFACE	20	52.38	09/19/94	11:38:00
1/N(100)	EXPOSED SURFACE	4	-87.30	09/19/94	11:39:00
1/N(101)	PAINTED SURFACE	24	71.58	09/15/94	16:12:00
1/N(101)	EXPOSED SURFACE	21	45.40	09/15/94	16:12:00
1/N(101)	PAINTED SURFACE	4	-103.01	09/19/94	11:42:00

A.3. Summary Data of Alpha Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
1/N(101)	EXPOSED SURFACE	16	1.75	09/19/94	11:42:00
1/N(102)	PAINTED SURFACE	24	71.58	09/15/94	16:13:00
1/N(102)	EXPOSED SURFACE	23	62.85	09/15/94	16:13:00
1/N(103)	PAINTED SURFACE	12	-33.17	09/15/94	16:14:00
1/N(103)	EXPOSED SURFACE	28	106.50	09/15/94	16:14:00
1/N(104)	PAINTED SURFACE	27	97.77	09/15/94	16:15:00
1/N(104)	EXPOSED SURFACE	22	54.12	09/15/94	16:16:00
1/N(105)	PAINTED SURFACE	23	62.85	09/15/94	16:16:00
1/N(105)	EXPOSED SURFACE	30	123.96	09/15/94	16:17:00
1/N(106)	PAINTED SURFACE	25	80.31	09/15/94	16:06:00
1/N(106)	EXPOSED SURFACE	16	1.75	09/15/94	16:07:00
1/N(107)	PAINTED SURFACE	28	106.50	09/15/94	16:07:00
1/N(107)	EXPOSED SURFACE	12	-33.17	09/15/94	16:08:00
1/N(108)	PAINTED SURFACE	24	71.58	09/15/94	16:08:00
1/N(108)	EXPOSED SURFACE	8	-68.09	09/15/94	16:09:00
1/N(109)	PAINTED SURFACE	28	106.50	09/15/94	16:09:00
1/N(109)	EXPOSED SURFACE	7	-76.82	09/15/94	16:10:00
1/N(110)	PAINTED SURFACE	13	-24.44	09/15/94	16:10:00
1/N(110)	EXPOSED SURFACE	9	-59.36	09/15/94	16:11:00
1/N(111)	PAINTED SURFACE	28	122.22	09/19/94	09:58:00
1/N(111)	EXPOSED SURFACE	24	87.30	09/19/94	09:58:00
1/N(112)	PAINTED SURFACE	32	157.14	09/19/94	09:59:00
1/N(112)	EXPOSED SURFACE	30	139.68	09/19/94	10:00:00
1/N(113)	PAINTED SURFACE	20	52.38	09/19/94	10:01:00
1/N(113)	EXPOSED SURFACE	20	52.38	09/19/94	10:02:00
1/N(114)	PAINTED SURFACE	28	122.22	09/19/94	10:02:00
1/N(114)	EXPOSED SURFACE	16	17.46	09/19/94	10:03:00
1/N(115)	PAINTED SURFACE	21	61.11	09/19/94	10:03:00
1/N(115)	EXPOSED SURFACE	20	52.38	09/19/94	10:04:00
1/N(116)	PAINTED SURFACE	12	-17.46	09/19/94	10:50:00
1/N(116)	EXPOSED SURFACE	12	-17.46	09/19/94	10:50:00
1/N(117)	PAINTED SURFACE	6	-69.84	09/19/94	10:50:00
1/N(117)	EXPOSED SURFACE	28	122.22	09/19/94	10:51:00
1/N(118)	PAINTED SURFACE	48	296.81	09/19/94	10:51:00
1/N(118)	EXPOSED SURFACE	4	-87.30	09/19/94	10:51:00
1/N(119)	PAINTED SURFACE	8	-52.38	09/19/94	10:52:00
1/N(119)	EXPOSED SURFACE	8	-52.38	09/19/94	10:53:00
1/N(120)	PAINTED SURFACE	20	52.38	09/19/94	10:53:00
1/N(120)	EXPOSED SURFACE	17	26.19	09/19/94	10:54:00
1/N(121)	PAINTED SURFACE	4	-87.30	09/19/94	11:42:00
1/N(121)	EXPOSED SURFACE	4	-87.30	09/19/94	11:42:00
1/N(122)	PAINTED SURFACE	24	87.30	09/19/94	11:44:00
1/N(122)	EXPOSED SURFACE	16	17.46	09/19/94	11:44:00
1/N(123)	PAINTED SURFACE	4	-87.30	09/19/94	11:44:00
1/N(123)	EXPOSED SURFACE	8	-52.38	09/19/94	11:45:00
1/N(123)	EXPOSED SURFACE	8	-52.38	09/19/94	11:48:00
1/N(124)	PAINTED SURFACE	4	-87.30	09/19/94	11:45:00
1/N(124)	EXPOSED SURFACE	12	-17.46	09/19/94	11:46:00

A.3. Summary Data of Alpha Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
1/N(125)	PAINTED SURFACE	12	-17.46	09/19/94	11:46:00
1/N(125)	EXPOSED SURFACE	8	-52.38	09/19/94	11:46:00
1/N(126)	PAINTED SURFACE	15	8.73	09/19/94	11:54:00
1/N(126)	EXPOSED SURFACE	16	17.46	09/19/94	11:54:00
1/N(127)	PAINTED SURFACE	4	-87.30	09/19/94	11:54:00
1/N(127)	EXPOSED SURFACE	16	17.46	09/19/94	11:55:00
1/N(128)	PAINTED SURFACE	8	-52.38	09/19/94	11:55:00
1/N(128)	EXPOSED SURFACE	2	-104.76	09/19/94	11:56:00
1/N(129)	PAINTED SURFACE	20	52.38	09/19/94	11:56:00
1/N(129)	EXPOSED SURFACE	18	34.92	09/19/94	11:56:00
1/N(130)	PAINTED SURFACE	16	17.46	09/19/94	11:57:00
1/N(130)	EXPOSED SURFACE	9	-43.65	09/19/94	11:57:00
1/N(999)	PAINTED SURFACE	18	19.21	09/15/94	11:56:00
1/N(999)	PAINTED SURFACE	20	36.67	09/15/94	11:56:00
1/N(999)	PAINTED SURFACE	18	19.21	09/15/94	16:17:00
1/N(999)	PAINTED SURFACE	20	36.67	09/15/94	16:18:00
1/N(999)	PAINTED SURFACE	3	-111.74	09/15/94	16:19:00
1/N(999)	PAINTED SURFACE	18	34.92	09/19/94	11:58:00
1/N(999)	PAINTED SURFACE	10	-34.92	09/19/94	11:58:00
1/S(001)	PAINTED SURFACE	204	1514.62	09/19/94	14:07:00
1/S(001)	EXPOSED SURFACE	116	746.40	09/19/94	14:08:00
1/S(002)	PAINTED SURFACE	233	1767.79	09/19/94	14:08:00
1/S(002)	EXPOSED SURFACE	139	947.18	09/19/94	14:09:00
1/S(003)	PAINTED SURFACE	92	536.88	09/19/94	14:10:00
1/S(003)	EXPOSED SURFACE	355	2832.82	09/19/94	14:11:00
1/S(004)	PAINTED SURFACE	89	510.69	09/19/94	14:11:00
1/S(004)	EXPOSED SURFACE	179	1296.38	09/19/94	14:12:00
1/S(005)	PAINTED SURFACE	100	606.72	09/19/94	14:13:00
1/S(005)	EXPOSED SURFACE	78	414.67	09/19/94	14:13:00
1/S(006)	PAINTED SURFACE	74	379.75	09/19/94	14:27:00
1/S(006)	EXPOSED SURFACE	117	755.13	09/19/94	14:35:00
1/S(007)	PAINTED SURFACE	63	283.72	09/19/94	14:37:00
1/S(007)	EXPOSED SURFACE	48	152.77	09/19/94	14:38:00
1/S(008)	PAINTED SURFACE	97	580.53	09/19/94	14:38:00
1/S(008)	EXPOSED SURFACE	221	1663.03	09/19/94	14:39:00
1/S(009)	PAINTED SURFACE	59	248.80	09/19/94	14:39:00
1/S(009)	EXPOSED SURFACE	147	1017.02	09/19/94	14:40:00
1/S(010)	PAINTED SURFACE	78	414.67	09/19/94	14:40:00
1/S(010)	EXPOSED SURFACE	97	580.53	09/19/94	14:41:00
1/S(011)	PAINTED SURFACE	126	833.70	09/19/94	14:43:00
1/S(011)	EXPOSED SURFACE	169	1209.08	09/19/94	14:43:00
1/S(012)	PAINTED SURFACE	270	2090.79	09/19/94	14:44:00
1/S(012)	EXPOSED SURFACE	351	2797.90	09/19/94	14:44:00
1/S(013)	PAINTED SURFACE	92	536.88	09/19/94	14:45:00
1/S(013)	EXPOSED SURFACE	115	737.67	09/19/94	14:45:00
1/S(014)	EXPOSED SURFACE	228	1724.14	09/19/94	14:47:00
1/S(014)	PAINTED SURFACE	253	1942.38	09/19/94	15:07:00
1/S(015)	PAINTED SURFACE	126	833.70	09/19/94	14:47:00

A.3. Summary Data of Alpha Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
1/S(015)	EXPOSED SURFACE	177	1278.92	09/19/94	14:48:00
1/S(016)	PAINTED SURFACE	218	1636.84	09/19/94	14:57:00
1/S(016)	EXPOSED SURFACE	246	1881.27	09/19/94	14:58:00
1/S(017)	PAINTED SURFACE	107	667.83	09/19/94	14:59:00
1/S(017)	EXPOSED SURFACE	137	929.73	09/19/94	14:59:00
1/S(018)	PAINTED SURFACE	133	894.81	09/19/94	15:00:00
1/S(018)	EXPOSED SURFACE	59	248.80	09/19/94	15:01:00
1/S(019)	EXPOSED SURFACE	121	790.05	09/19/94	15:02:00
1/S(019)	PAINTED SURFACE	142	973.37	09/19/94	15:07:00
1/S(020)	PAINTED SURFACE	82	449.59	09/19/94	15:03:00
1/S(020)	EXPOSED SURFACE	85	475.77	09/19/94	15:03:00
1/S(021)	PAINTED SURFACE	129	859.89	09/19/94	15:15:00
1/S(021)	EXPOSED SURFACE	108	676.56	09/19/94	15:15:00
1/S(022)	PAINTED SURFACE	86	484.50	09/19/94	15:16:00
1/S(022)	EXPOSED SURFACE	197	1453.51	09/19/94	15:17:00
1/S(023)	PAINTED SURFACE	137	929.73	09/19/94	15:17:00
1/S(023)	EXPOSED SURFACE	778	6525.53	09/19/94	15:18:00
1/S(024)	PAINTED SURFACE	318	2509.82	09/19/94	15:19:00
1/S(024)	EXPOSED SURFACE	160	1130.51	09/19/94	15:19:00
1/S(025)	PAINTED SURFACE	1262	10750.76	09/19/94	15:20:00
1/S(025)	EXPOSED SURFACE	977	8262.77	09/19/94	15:21:00
1/S(026)	PAINTED SURFACE	1110	9423.83	09/19/94	15:46:00
1/S(026)	EXPOSED SURFACE	739	6185.07	09/19/94	15:47:00
1/S(027)	PAINTED SURFACE	22	-74.20	09/19/94	15:47:00
1/S(027)	EXPOSED SURFACE	24	-56.74	09/19/94	15:47:00
1/S(028)	PAINTED SURFACE	30	-4.36	09/19/94	15:48:00
1/S(028)	EXPOSED SURFACE	27	-30.55	09/19/94	15:49:00
1/S(029)	PAINTED SURFACE	34	30.55	09/19/94	15:49:00
1/S(029)	EXPOSED SURFACE	43	109.12	09/19/94	15:50:00
1/S(030)	PAINTED SURFACE	69	336.10	09/19/94	15:51:00
1/S(030)	EXPOSED SURFACE	72	362.29	09/19/94	15:51:00
1/S(031)	PAINTED SURFACE	71	353.56	09/19/94	16:07:00
1/S(031)	EXPOSED SURFACE	79	423.40	09/19/94	16:07:00
1/S(032)	PAINTED SURFACE	58	240.07	09/19/94	16:08:00
1/S(032)	EXPOSED SURFACE	78	414.67	09/19/94	16:08:00
1/S(033)	PAINTED SURFACE	91	528.15	09/19/94	16:09:00
1/S(033)	EXPOSED SURFACE	122	798.78	09/19/94	16:09:00
1/S(034)	PAINTED SURFACE	112	711.48	09/19/94	16:10:00
1/S(034)	EXPOSED SURFACE	81	440.86	09/19/94	16:10:00
1/S(035)	PAINTED SURFACE	39	74.20	09/19/94	16:11:00
1/S(035)	EXPOSED SURFACE	46	135.31	09/19/94	16:11:00
1/S(036)	PAINTED SURFACE	71	353.56	09/19/94	16:21:00
1/S(036)	EXPOSED SURFACE	89	510.69	09/19/94	16:22:00
1/S(037)	PAINTED SURFACE	71	353.56	09/19/94	14:46:00
1/S(037)	EXPOSED SURFACE	121	790.05	09/19/94	16:22:00
1/S(040)	PAINTED SURFACE	114	720.21	09/23/94	10:29:00
1/S(040)	EXPOSED SURFACE	308	2413.79	09/23/94	10:31:00
1/S(041)	EXPOSED SURFACE	71	619.82	09/20/94	11:44:00

A.3. Summary Data of Alpha Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
1/S(041)	EXPOSED SURFACE	133	1161.07	09/20/94	11:48:00
1/S(042)	PAINTED SURFACE	67	584.90	09/20/94	11:48:00
1/S(042)	EXPOSED SURFACE	191	1667.39	09/20/94	11:55:00
1/S(043)	PAINTED SURFACE	52	453.95	09/20/94	11:58:00
1/S(043)	EXPOSED SURFACE	97	846.79	09/20/94	12:14:00
1/S(044)	PAINTED SURFACE	63	549.98	09/20/94	12:16:00
1/S(044)	EXPOSED SURFACE	47	410.30	09/20/94	12:16:00
1/S(045)	PAINTED SURFACE	47	410.30	09/20/94	12:35:00
1/S(045)	EXPOSED SURFACE	48	419.03	09/20/94	12:37:00
1/S(046)	PAINTED SURFACE	76	663.47	09/20/94	12:38:00
1/S(046)	EXPOSED SURFACE	190	1658.66	09/20/94	12:38:00
1/S(047)	PAINTED SURFACE	43	375.38	09/20/94	12:39:00
1/S(047)	EXPOSED SURFACE	33	288.08	09/20/94	12:39:00
1/S(048)	PAINTED SURFACE	176	1536.45	09/20/94	12:40:00
1/S(048)	EXPOSED SURFACE	138	1204.71	09/20/94	12:41:00
1/S(049)	PAINTED SURFACE	1101	9611.52	09/20/94	12:41:00
1/S(049)	EXPOSED SURFACE	75	654.74	09/20/94	12:42:00
1/S(050)	PAINTED SURFACE	184	1606.29	09/20/94	12:42:00
1/S(050)	EXPOSED SURFACE	91	794.41	09/20/94	12:43:00
1/S(052)	PAINTED SURFACE	596	5202.97	09/20/94	13:54:00
1/S(052)	EXPOSED SURFACE	1322	11540.81	09/20/94	13:55:00
1/S(053)	PAINTED SURFACE	28	244.43	09/20/94	13:55:00
1/S(053)	EXPOSED SURFACE	24	209.52	09/20/94	13:56:00
1/S(054)	PAINTED SURFACE	24	209.52	09/20/94	13:57:00
1/S(054)	EXPOSED SURFACE	16	139.68	09/20/94	13:59:00
1/S(055)	PAINTED SURFACE	45	392.84	09/20/94	14:01:00
1/S(055)	EXPOSED SURFACE	22	192.06	09/20/94	14:03:00
1/S(056)	PAINTED SURFACE	21	-91.66	09/23/94	10:32:00
1/S(056)	EXPOSED SURFACE	24	-65.47	09/23/94	10:32:00
1/S(057)	PAINTED SURFACE	24	209.52	09/20/94	15:15:00
1/S(057)	EXPOSED SURFACE	8	69.84	09/20/94	15:16:00
1/S(058)	PAINTED SURFACE	32	4.36	09/23/94	10:35:00
1/S(058)	EXPOSED SURFACE	18	-117.85	09/23/94	10:36:00
1/S(059)	PAINTED SURFACE	60	248.80	09/23/94	10:37:00
1/S(059)	EXPOSED SURFACE	64	283.72	09/23/94	10:38:00
1/S(060)	PAINTED SURFACE	64	283.72	09/23/94	10:39:00
1/S(060)	EXPOSED SURFACE	60	248.80	09/23/94	10:39:00
1/S(061)	PAINTED SURFACE	76	388.48	09/23/94	10:40:00
1/S(061)	EXPOSED SURFACE	72	353.56	09/23/94	10:41:00
1/S(062)	PAINTED SURFACE	133	886.08	09/23/94	10:42:00
1/S(062)	EXPOSED SURFACE	80	423.40	09/23/94	10:43:00
1/S(063)	PAINTED SURFACE	127	833.70	09/23/94	10:43:00
1/S(063)	EXPOSED SURFACE	173	1235.27	09/23/94	10:44:00
1/S(064)	PAINTED SURFACE	103	624.18	09/23/94	10:45:00
1/S(064)	EXPOSED SURFACE	83	449.59	09/23/94	10:45:00
1/S(065)	PAINTED SURFACE	68	318.64	09/23/94	10:46:00
1/S(065)	EXPOSED SURFACE	24	-65.47	09/23/94	10:47:00
1/S(066)	PAINTED SURFACE	108	667.83	09/23/94	10:48:00

A.3. Summary Data of Alpha Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
1/S(066)	EXPOSED SURFACE	110	685.29	09/23/94	10:48:00
1/S(067)	PAINTED SURFACE	185	1340.03	09/23/94	10:49:00
1/S(067)	EXPOSED SURFACE	335	2649.50	09/23/94	10:49:00
1/S(068)	PAINTED SURFACE	107	659.10	09/23/94	10:50:00
1/S(068)	EXPOSED SURFACE	700	5835.88	09/23/94	10:51:00
1/S(068)	EXPOSED SURFACE	166	1174.16	09/23/94	10:51:00
1/S(069)	PAINTED SURFACE	161	1130.51	09/23/94	10:52:00
1/S(069)	EXPOSED SURFACE	166	1174.16	09/23/94	10:53:00
1/S(070)	PAINTED SURFACE	80	423.40	09/23/94	10:54:00
1/S(070)	EXPOSED SURFACE	60	248.80	09/23/94	10:54:00
1/S(071)	PAINTED SURFACE	100	597.99	09/23/94	10:55:00
1/S(071)	EXPOSED SURFACE	48	144.04	09/23/94	10:56:00
1/S(072)	PAINTED SURFACE	120	772.59	09/23/94	10:56:00
1/S(072)	EXPOSED SURFACE	106	650.37	09/23/94	10:57:00
1/S(073)	PAINTED SURFACE	88	493.23	09/23/94	10:57:00
1/S(073)	EXPOSED SURFACE	89	501.96	09/23/94	10:58:00
1/S(074)	PAINTED SURFACE	159	1113.05	09/23/94	10:58:00
1/S(074)	EXPOSED SURFACE	313	2457.44	09/23/94	10:59:00
1/S(075)	PAINTED SURFACE	828	6953.30	09/23/94	11:00:00
1/S(075)	EXPOSED SURFACE	924	7791.36	09/23/94	11:01:00
1/S(076)	PAINTED SURFACE	89	501.96	09/23/94	11:04:00
1/S(076)	EXPOSED SURFACE	129	851.16	09/23/94	11:05:00
1/S(077)	PAINTED SURFACE	80	423.40	09/23/94	11:06:00
1/S(077)	EXPOSED SURFACE	62	266.26	09/23/94	11:07:00
1/S(078)	PAINTED SURFACE	60	248.80	09/23/94	11:08:00
1/S(078)	EXPOSED SURFACE	64	283.72	09/23/94	11:08:00
1/S(079)	PAINTED SURFACE	8	-205.15	09/23/94	11:11:00
1/S(079)	EXPOSED SURFACE	8	-205.15	09/23/94	11:12:00
1/S(080)	PAINTED SURFACE	17	-126.58	09/23/94	11:13:00
1/S(080)	EXPOSED SURFACE	19	-109.12	09/23/94	11:16:00
1/S(081)	PAINTED SURFACE	5	-231.34	09/23/94	11:20:00
1/S(081)	EXPOSED SURFACE	5	-231.34	09/23/94	11:21:00
1/S(082)	PAINTED SURFACE	5	-231.34	09/23/94	11:22:00
1/S(082)	EXPOSED SURFACE	6	-222.61	09/23/94	11:22:00
1/S(083)	PAINTED SURFACE	7	-213.88	09/23/94	11:23:00
1/S(083)	EXPOSED SURFACE	5	-231.34	09/23/94	11:23:00
1/S(084)	PAINTED SURFACE	20	-100.39	09/23/94	11:24:00
1/S(084)	EXPOSED SURFACE	4	-240.07	09/23/94	11:25:00
1/S(086)	PAINTED SURFACE	12	-170.23	09/23/94	11:28:00
1/S(086)	EXPOSED SURFACE	16	-135.31	09/23/94	11:30:00
1/S(087)	PAINTED SURFACE	28	-30.55	09/23/94	11:31:00
1/S(087)	EXPOSED SURFACE	40	74.20	09/23/94	11:32:00
1/S(088)	PAINTED SURFACE	16	-135.31	09/23/94	11:33:00
1/S(088)	EXPOSED SURFACE	16	-135.31	09/23/94	11:33:00
1/S(089)	PAINTED SURFACE	8	69.84	09/20/94	11:33:00
1/S(089)	EXPOSED SURFACE	21	183.33	09/20/94	11:33:00
1/S(090)	EXPOSED SURFACE	19	-109.12	09/23/94	11:14:00
1/S(090)	PAINTED SURFACE	25	-56.74	09/23/94	11:35:00

A.3. Summary Data of Alpha Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
1/S(090)	EXPOSED SURFACE	8	-205.15	09/23/94	11:36:00
1/S(091)	PAINTED SURFACE	28	-30.55	09/23/94	11:37:00
1/S(091)	EXPOSED SURFACE	20	-100.39	09/23/94	11:37:00
1/S(092)	PAINTED SURFACE	16	139.68	09/20/94	11:37:00
1/S(092)	EXPOSED SURFACE	20	174.60	09/20/94	11:37:00
1/S(093)	PAINTED SURFACE	12	-170.23	09/23/94	11:40:00
1/S(093)	EXPOSED SURFACE	16	-135.31	09/23/94	11:40:00
1/S(094)	PAINTED SURFACE	16	-135.31	09/23/94	11:41:00
1/S(094)	EXPOSED SURFACE	12	-170.23	09/23/94	11:42:00
1/S(095)	PAINTED SURFACE	20	-100.39	09/23/94	11:43:00
1/S(095)	EXPOSED SURFACE	21	-91.66	09/23/94	11:43:00
1/S(096)	PAINTED SURFACE	20	-100.39	09/23/94	11:45:00
1/S(096)	EXPOSED SURFACE	16	-135.31	09/23/94	11:48:00
1/S(097)	PAINTED SURFACE	24	-65.47	09/23/94	11:48:00
1/S(097)	EXPOSED SURFACE	17	-126.58	09/23/94	11:49:00
1/S(098)	PAINTED SURFACE	20	-100.39	09/23/94	11:50:00
1/S(098)	EXPOSED SURFACE	15	-144.04	09/23/94	11:51:00
1/S(099)	PAINTED SURFACE	21	-91.66	09/23/94	11:51:00
1/S(099)	EXPOSED SURFACE	24	-65.47	09/23/94	11:52:00
1/S(100)	PAINTED SURFACE	15	-144.04	09/23/94	11:53:00
1/S(100)	EXPOSED SURFACE	3	26.19	09/20/94	11:53:00
1/S(101)	PAINTED SURFACE	40	349.19	09/20/94	11:19:00
1/S(101)	EXPOSED SURFACE	16	139.68	09/20/94	11:20:00
1/S(102)	PAINTED SURFACE	8	69.84	09/20/94	11:21:00
1/S(102)	EXPOSED SURFACE	8	69.84	09/20/94	11:23:00
1/S(103)	PAINTED SURFACE	63	549.98	09/20/94	11:26:00
1/S(103)	EXPOSED SURFACE	44	384.11	09/20/94	11:27:00
1/S(104)	PAINTED SURFACE	60	523.79	09/20/94	11:29:00
1/S(104)	EXPOSED SURFACE	32	279.35	09/20/94	11:34:00
1/S(105)	PAINTED SURFACE	20	174.60	09/20/94	11:37:00
1/S(105)	EXPOSED SURFACE	21	183.33	09/20/94	11:38:00
1/S(106)	PAINTED SURFACE	12	104.76	09/20/94	10:42:00
1/S(106)	EXPOSED SURFACE	30	261.89	09/20/94	10:43:00
1/S(107)	PAINTED SURFACE	4	34.92	09/20/94	10:45:00
1/S(107)	EXPOSED SURFACE	4	34.92	09/20/94	10:46:00
1/S(108)	PAINTED SURFACE	12	104.76	09/20/94	10:49:00
1/S(108)	EXPOSED SURFACE	27	235.70	09/20/94	11:01:00
1/S(109)	PAINTED SURFACE	20	174.60	09/20/94	11:04:00
1/S(109)	EXPOSED SURFACE	9	78.57	09/20/94	11:06:00
1/S(110)	PAINTED SURFACE	15	130.95	09/20/94	11:06:00
1/S(110)	EXPOSED SURFACE	9	78.57	09/20/94	11:07:00
1/S(111)	PAINTED SURFACE	12	104.76	09/20/94	10:11:00
1/S(111)	EXPOSED SURFACE	9	78.57	09/20/94	10:12:00
1/S(112)	PAINTED SURFACE	28	244.43	09/20/94	10:10:00
1/S(112)	EXPOSED SURFACE	4	34.92	09/20/94	10:11:00
1/S(113)	PAINTED SURFACE	20	174.60	09/20/94	10:08:00
1/S(113)	EXPOSED SURFACE	12	104.76	09/20/94	10:09:00
1/S(114)	PAINTED SURFACE	19	165.87	09/20/94	10:07:00

A.3. Summary Data of Alpha Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
1/S(114)	EXPOSED SURFACE	5	43.65	09/20/94	10:07:00
1/S(115)	PAINTED SURFACE	21	183.33	09/20/94	10:05:00
1/S(115)	EXPOSED SURFACE	13	113.49	09/20/94	10:06:00
1/S(116)	PAINTED SURFACE	28	244.43	09/20/94	09:49:00
1/S(116)	EXPOSED SURFACE	16	139.68	09/20/94	09:50:00
1/S(117)	PAINTED SURFACE	29	253.16	09/20/94	09:48:00
1/S(117)	EXPOSED SURFACE	8	69.84	09/20/94	09:49:00
1/S(118)	PAINTED SURFACE	9	78.57	09/20/94	09:46:00
1/S(118)	EXPOSED SURFACE	4	34.92	09/20/94	09:47:00
1/S(119)	PAINTED SURFACE	8	69.84	09/20/94	09:45:00
1/S(119)	EXPOSED SURFACE	16	139.68	09/20/94	09:46:00
1/S(120)	PAINTED SURFACE	25	218.25	09/20/94	09:44:00
1/S(120)	EXPOSED SURFACE	28	244.43	09/20/94	09:45:00
1/S(121)	PAINTED SURFACE	35	305.54	09/20/94	09:25:00
1/S(121)	EXPOSED SURFACE	12	104.76	09/20/94	09:25:00
1/S(122)	PAINTED SURFACE	28	244.43	09/20/94	09:26:00
1/S(122)	EXPOSED SURFACE	26	226.98	09/20/94	09:26:00
1/S(123)	PAINTED SURFACE	13	113.49	09/20/94	09:27:00
1/S(123)	EXPOSED SURFACE	60	523.79	09/20/94	09:27:00
1/S(124)	PAINTED SURFACE	45	392.84	09/20/94	09:28:00
1/S(124)	EXPOSED SURFACE	32	4.36	09/23/94	12:00:00
1/S(125)	PAINTED SURFACE	16	139.68	09/20/94	09:29:00
1/S(125)	EXPOSED SURFACE	24	209.52	09/20/94	09:29:00
1/S(126)	PAINTED SURFACE	28	244.43	09/20/94	09:06:00
1/S(126)	EXPOSED SURFACE	36	314.27	09/20/94	09:06:00
1/S(127)	PAINTED SURFACE	40	349.19	09/20/94	09:07:00
1/S(127)	EXPOSED SURFACE	43	375.38	09/20/94	09:08:00
1/S(128)	PAINTED SURFACE	66	576.17	09/20/94	09:09:00
1/S(128)	EXPOSED SURFACE	47	410.30	09/20/94	09:09:00
1/S(129)	PAINTED SURFACE	93	811.87	09/20/94	09:10:00
1/S(129)	EXPOSED SURFACE	41	357.92	09/20/94	09:10:00
1/S(130)	PAINTED SURFACE	92	803.14	09/20/94	09:11:00
1/S(130)	EXPOSED SURFACE	36	314.27	09/20/94	09:11:00
1/S(130)	PAINTED SURFACE	92	803.14	09/20/94	09:11:00
1/S(130)	PAINTED SURFACE	92	803.14	09/20/94	09:11:00
1/S(999)	PAINTED SURFACE	34	30.55	09/19/94	09:15:00
1/S(999)	PAINTED SURFACE	27	30.55	09/19/94	09:15:00
1/S(999)	PAINTED SURFACE	0	0.00	09/20/94	09:15:00
1/S(999)	PAINTED SURFACE	0	0.00	09/20/94	09:15:00
1/S(999)	PAINTED SURFACE	0	0.00	09/20/94	09:15:00
1/W(001)	PAINTED SURFACE	234	2029.68	09/21/94	11:42:00
1/W(001)	EXPOSED SURFACE	362	3147.10	09/21/94	11:43:00
1/W(003)	PAINTED SURFACE	483	4203.40	09/21/94	11:43:00
1/W(003)	EXPOSED SURFACE	437	3801.83	09/21/94	11:43:00
1/W(004)	PAINTED SURFACE	206	1785.25	09/21/94	11:44:00
1/W(004)	EXPOSED SURFACE	371	3225.67	09/21/94	11:44:00
1/W(005)	PAINTED SURFACE	190	1645.57	09/21/94	11:45:00
1/W(005)	EXPOSED SURFACE	613	5338.28	09/21/94	11:45:00

A.3. Summary Data of Alpha Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
1/W(006)	PAINTED SURFACE	260	2256.66	09/21/94	11:56:00
1/W(006)	EXPOSED SURFACE	299	2597.12	09/21/94	11:57:00
1/W(007)	PAINTED SURFACE	135	1165.43	09/21/94	11:57:00
1/W(007)	EXPOSED SURFACE	165	1427.32	09/21/94	11:58:00
1/W(008)	PAINTED SURFACE	133	1147.97	09/21/94	11:58:00
1/W(008)	EXPOSED SURFACE	196	1697.95	09/21/94	11:59:00
1/W(009)	PAINTED SURFACE	122	1051.94	09/21/94	11:59:00
1/W(009)	EXPOSED SURFACE	120	1034.48	09/21/94	11:59:00
1/W(010)	PAINTED SURFACE	117	1008.29	09/21/94	12:00:00
1/W(010)	EXPOSED SURFACE	84	720.21	09/21/94	12:00:00
1/W(011)	PAINTED SURFACE	112	964.64	09/21/94	15:52:00
1/W(011)	EXPOSED SURFACE	108	929.73	09/21/94	15:52:00
1/W(012)	PAINTED SURFACE	112	964.64	09/21/94	15:53:00
1/W(012)	EXPOSED SURFACE	130	1121.78	09/21/94	15:53:00
1/W(015)	PAINTED SURFACE	108	929.73	09/21/94	15:54:00
1/W(015)	EXPOSED SURFACE	116	999.56	09/21/94	15:54:00
1/W(016)	PAINTED SURFACE	48	405.94	09/21/94	15:42:00
1/W(016)	EXPOSED SURFACE	52	440.86	09/21/94	15:42:00
1/W(017)	PAINTED SURFACE	46	388.48	09/21/94	15:43:00
1/W(017)	EXPOSED SURFACE	33	274.99	09/21/94	15:43:00
1/W(018)	PAINTED SURFACE	54	458.32	09/21/94	15:44:00
1/W(018)	EXPOSED SURFACE	172	1488.43	09/21/94	15:45:00
1/W(019)	PAINTED SURFACE	56	475.77	09/21/94	15:45:00
1/W(019)	EXPOSED SURFACE	81	694.02	09/21/94	15:46:00
1/W(020)	PAINTED SURFACE	27	222.61	09/21/94	15:47:00
1/W(020)	EXPOSED SURFACE	152	1313.84	09/21/94	15:48:00
1/W(021)	PAINTED SURFACE	48	405.94	09/21/94	15:33:00
1/W(021)	EXPOSED SURFACE	38	318.64	09/21/94	15:34:00
1/W(022)	PAINTED SURFACE	29	240.07	09/21/94	15:34:00
1/W(022)	EXPOSED SURFACE	40	336.10	09/21/94	15:35:00
1/W(023)	PAINTED SURFACE	91	781.32	09/21/94	15:36:00
1/W(023)	EXPOSED SURFACE	18	144.04	09/21/94	15:37:00
1/W(024)	PAINTED SURFACE	7	48.01	09/21/94	15:37:00
1/W(024)	EXPOSED SURFACE	46	388.48	09/21/94	15:38:00
1/W(025)	PAINTED SURFACE	12	91.66	09/21/94	15:40:00
1/W(025)	EXPOSED SURFACE	46	388.48	09/21/94	15:40:00
1/W(026)	PAINTED SURFACE	62	528.15	09/21/94	15:22:00
1/W(026)	EXPOSED SURFACE	62	528.15	09/21/94	15:22:00
1/W(027)	PAINTED SURFACE	30	248.80	09/21/94	15:23:00
1/W(027)	EXPOSED SURFACE	58	493.23	09/21/94	15:24:00
1/W(028)	PAINTED SURFACE	18	144.04	09/21/94	15:24:00
1/W(028)	EXPOSED SURFACE	24	196.42	09/21/94	15:26:00
1/W(029)	PAINTED SURFACE	25	205.15	09/21/94	15:26:00
1/W(029)	EXPOSED SURFACE	26	213.88	09/21/94	15:27:00
1/W(030)	PAINTED SURFACE	9	65.47	09/21/94	14:55:00
1/W(030)	EXPOSED SURFACE	38	318.64	09/21/94	14:55:00
1/W(031)	PAINTED SURFACE	31	257.53	09/21/94	15:11:00
1/W(031)	EXPOSED SURFACE	12	91.66	09/21/94	15:12:00

A.3. Summary Data of Alpha Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
1/W(032)	PAINTED SURFACE	40	336.10	09/21/94	15:13:00
1/W(032)	EXPOSED SURFACE	9	65.47	09/21/94	15:14:00
1/W(033)	PAINTED SURFACE	29	240.07	09/21/94	15:14:00
1/W(033)	EXPOSED SURFACE	17	135.31	09/21/94	15:15:00
1/W(034)	PAINTED SURFACE	7	48.01	09/21/94	15:15:00
1/W(034)	EXPOSED SURFACE	22	178.96	09/21/94	15:16:00
1/W(035)	PAINTED SURFACE	31	257.53	09/21/94	15:17:00
1/W(035)	EXPOSED SURFACE	33	274.99	09/21/94	15:17:00
1/W(036)	PAINTED SURFACE	37	309.91	09/21/94	14:44:00
1/W(036)	EXPOSED SURFACE	26	213.88	09/21/94	14:45:00
1/W(037)	PAINTED SURFACE	28	231.34	09/21/94	14:46:00
1/W(037)	EXPOSED SURFACE	23	187.69	09/21/94	14:47:00
1/W(038)	PAINTED SURFACE	36	301.18	09/21/94	14:50:00
1/W(038)	EXPOSED SURFACE	10	74.20	09/21/94	14:51:00
1/W(039)	PAINTED SURFACE	36	301.18	09/21/94	14:53:00
1/W(039)	EXPOSED SURFACE	24	196.42	09/21/94	14:53:00
1/W(040)	PAINTED SURFACE	49	414.67	09/21/94	14:54:00
1/W(040)	EXPOSED SURFACE	6	39.28	09/21/94	14:55:00
1/W(041)	PAINTED SURFACE	21	170.23	09/21/94	14:29:00
1/W(041)	EXPOSED SURFACE	18	144.04	09/21/94	14:30:00
1/W(042)	PAINTED SURFACE	21	170.23	09/21/94	14:31:00
1/W(042)	EXPOSED SURFACE	9	65.47	09/21/94	14:32:00
1/W(043)	PAINTED SURFACE	27	222.61	09/21/94	14:33:00
1/W(043)	EXPOSED SURFACE	22	178.96	09/21/94	14:35:00
1/W(044)	PAINTED SURFACE	48	405.94	09/21/94	14:36:00
1/W(044)	EXPOSED SURFACE	16	126.58	09/21/94	14:37:00
1/W(045)	PAINTED SURFACE	25	205.15	09/21/94	14:37:00
1/W(045)	EXPOSED SURFACE	13	100.39	09/21/94	14:38:00
1/W(046)	PAINTED SURFACE	48	405.94	09/21/94	14:17:00
1/W(046)	EXPOSED SURFACE	38	318.64	09/21/94	14:18:00
1/W(047)	PAINTED SURFACE	45	379.75	09/21/94	14:19:00
1/W(047)	EXPOSED SURFACE	40	336.10	09/21/94	14:20:00
1/W(048)	PAINTED SURFACE	15	117.85	09/21/94	14:22:00
1/W(048)	EXPOSED SURFACE	30	248.80	09/21/94	14:22:00
1/W(049)	PAINTED SURFACE	33	274.99	09/21/94	14:24:00
1/W(049)	EXPOSED SURFACE	25	205.15	09/21/94	14:24:00
1/W(050)	PAINTED SURFACE	39	327.37	09/21/94	14:25:00
1/W(050)	EXPOSED SURFACE	18	144.04	09/21/94	14:26:00
1/W(051)	PAINTED SURFACE	38	318.64	09/21/94	13:59:00
1/W(051)	EXPOSED SURFACE	9	65.47	09/21/94	14:00:00
1/W(052)	PAINTED SURFACE	20	161.50	09/21/94	14:01:00
1/W(052)	EXPOSED SURFACE	24	196.42	09/21/94	14:03:00
1/W(053)	PAINTED SURFACE	8	56.74	09/21/94	14:11:00
1/W(053)	EXPOSED SURFACE	6	39.28	09/21/94	14:11:00
1/W(054)	PAINTED SURFACE	10	74.20	09/21/94	14:12:00
1/W(054)	EXPOSED SURFACE	12	91.66	09/21/94	14:13:00
1/W(055)	PAINTED SURFACE	20	161.50	09/21/94	14:14:00
1/W(055)	EXPOSED SURFACE	21	170.23	09/21/94	14:15:00

A.3. Summary Data of Alpha Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
1/W(999)	PAINTED SURFACE	0	-13.09	09/21/94	14:17:00
1/W(999)	PAINTED SURFACE	3	13.09	09/21/94	14:19:00
2/E(001)	PAINTED SURFACE	71	344.83	09/22/94	09:13:00
2/E(001)	EXPOSED SURFACE	97	571.80	09/22/94	09:13:00
2/E(002)	PAINTED SURFACE	73	362.29	09/22/94	09:14:00
2/E(002)	EXPOSED SURFACE	63	274.99	09/22/94	09:15:00
2/E(003)	PAINTED SURFACE	123	798.78	09/22/94	09:15:00
2/E(003)	EXPOSED SURFACE	130	859.89	09/22/94	09:15:00
2/E(004)	PAINTED SURFACE	114	720.21	09/22/94	09:16:00
2/E(004)	EXPOSED SURFACE	105	641.64	09/22/94	09:16:00
2/E(005)	PAINTED SURFACE	111	694.02	09/22/94	09:17:00
2/E(005)	EXPOSED SURFACE	125	816.24	09/22/94	09:17:00
2/E(006)	PAINTED SURFACE	88	493.23	09/22/94	09:26:00
2/E(006)	EXPOSED SURFACE	154	1069.40	09/22/94	09:27:00
2/E(007)	PAINTED SURFACE	108	667.83	09/22/94	09:27:00
2/E(007)	EXPOSED SURFACE	108	667.83	09/22/94	09:28:00
2/E(008)	PAINTED SURFACE	140	947.18	09/22/94	09:28:00
2/E(008)	EXPOSED SURFACE	116	737.67	09/22/94	09:29:00
2/E(010)	PAINTED SURFACE	188	1366.22	09/22/94	09:29:00
2/E(010)	EXPOSED SURFACE	160	1121.78	09/22/94	09:30:00
2/E(011)	PAINTED SURFACE	134	894.81	09/22/94	09:32:00
2/E(011)	EXPOSED SURFACE	92	528.15	09/22/94	09:32:00
2/E(012)	PAINTED SURFACE	35	30.55	09/22/94	09:33:00
2/E(012)	EXPOSED SURFACE	53	187.69	09/22/94	09:33:00
2/E(013)	PAINTED SURFACE	80	423.40	09/22/94	09:33:00
2/E(013)	EXPOSED SURFACE	95	554.34	09/22/94	09:34:00
2/E(014)	PAINTED SURFACE	75	379.75	09/22/94	09:34:00
2/E(014)	EXPOSED SURFACE	51	170.23	09/22/94	09:35:00
2/E(015)	PAINTED SURFACE	55	205.15	09/22/94	09:35:00
2/E(015)	EXPOSED SURFACE	79	414.67	09/22/94	09:36:00
2/E(016)	PAINTED SURFACE	90	510.69	09/22/94	09:40:00
2/E(016)	EXPOSED SURFACE	28	-30.55	09/22/94	09:40:00
2/E(017)	PAINTED SURFACE	78	405.94	09/22/94	09:41:00
2/E(017)	EXPOSED SURFACE	54	196.42	09/22/94	09:41:00
2/E(018)	PAINTED SURFACE	44	109.12	09/22/94	09:42:00
2/E(018)	EXPOSED SURFACE	46	126.58	09/22/94	09:42:00
2/E(019)	PAINTED SURFACE	148	1017.02	09/22/94	09:42:00
2/E(019)	EXPOSED SURFACE	66	301.18	09/22/94	09:43:00
2/E(021)	PAINTED SURFACE	100	597.99	09/22/94	10:02:00
2/E(021)	EXPOSED SURFACE	30	-13.09	09/22/94	10:02:00
2/E(022)	PAINTED SURFACE	120	772.59	09/22/94	10:02:00
2/E(022)	EXPOSED SURFACE	100	597.99	09/22/94	10:03:00
2/E(023)	PAINTED SURFACE	53	187.69	09/22/94	10:03:00
2/E(023)	EXPOSED SURFACE	30	-13.09	09/22/94	10:03:00
2/E(024)	PAINTED SURFACE	60	248.80	09/22/94	10:04:00
2/E(024)	EXPOSED SURFACE	66	301.18	09/22/94	10:04:00
2/E(025)	PAINTED SURFACE	66	301.18	09/22/94	10:05:00
2/E(025)	EXPOSED SURFACE	51	170.23	09/22/94	10:05:00

A.3. Summary Data of Alpha Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
2/E(026)	PAINTED SURFACE	138	929.73	09/22/94	10:15:00
2/E(026)	EXPOSED SURFACE	82	440.86	09/22/94	10:15:00
2/E(027)	PAINTED SURFACE	98	580.53	09/22/94	10:16:00
2/E(027)	EXPOSED SURFACE	52	178.96	09/22/94	10:16:00
2/E(028)	PAINTED SURFACE	74	371.02	09/22/94	10:17:00
2/E(028)	EXPOSED SURFACE	58	231.34	09/22/94	10:17:00
2/E(029)	PAINTED SURFACE	88	493.23	09/22/94	10:17:00
2/E(029)	EXPOSED SURFACE	68	318.64	09/22/94	10:18:00
2/E(030)	PAINTED SURFACE	60	248.80	09/22/94	10:18:00
2/E(030)	EXPOSED SURFACE	34	21.82	09/22/94	10:19:00
2/E(031)	PAINTED SURFACE	71	344.83	09/22/94	10:35:00
2/E(031)	EXPOSED SURFACE	36	39.28	09/22/94	10:36:00
2/E(032)	PAINTED SURFACE	57	222.61	09/22/94	10:36:00
2/E(032)	EXPOSED SURFACE	29	-21.82	09/22/94	10:36:00
2/E(033)	PAINTED SURFACE	85	467.04	09/22/94	10:37:00
2/E(033)	EXPOSED SURFACE	49	152.77	09/22/94	10:37:00
2/E(034)	PAINTED SURFACE	27	-39.28	09/22/94	10:37:00
2/E(034)	EXPOSED SURFACE	28	-30.55	09/22/94	10:38:00
2/E(035)	PAINTED SURFACE	39	65.47	09/22/94	10:38:00
2/E(035)	EXPOSED SURFACE	53	187.69	09/22/94	10:38:00
2/E(036)	PAINTED SURFACE	78	405.94	09/22/94	10:56:00
2/E(036)	EXPOSED SURFACE	20	-100.39	09/22/94	10:57:00
2/E(037)	PAINTED SURFACE	42	91.66	09/22/94	10:57:00
2/E(037)	EXPOSED SURFACE	20	-100.39	09/22/94	11:00:00
2/E(038)	PAINTED SURFACE	38	56.74	09/22/94	11:00:00
2/E(038)	EXPOSED SURFACE	24	-65.47	09/22/94	11:01:00
2/E(039)	PAINTED SURFACE	46	126.58	09/22/94	11:03:00
2/E(039)	EXPOSED SURFACE	25	-56.74	09/22/94	11:03:00
2/E(040)	PAINTED SURFACE	22	-82.93	09/22/94	11:04:00
2/E(040)	EXPOSED SURFACE	20	-100.39	09/22/94	11:05:00
2/E(041)	PAINTED SURFACE	31	-4.36	09/22/94	11:29:00
2/E(041)	EXPOSED SURFACE	32	4.36	09/22/94	11:30:00
2/E(042)	PAINTED SURFACE	68	318.64	09/22/94	11:31:00
2/E(042)	EXPOSED SURFACE	36	39.28	09/22/94	11:35:00
2/E(043)	PAINTED SURFACE	47	135.31	09/22/94	11:40:00
2/E(043)	EXPOSED SURFACE	27	-39.28	09/22/94	11:41:00
2/E(044)	PAINTED SURFACE	51	170.23	09/22/94	11:41:00
2/E(044)	EXPOSED SURFACE	11	-178.96	09/22/94	11:42:00
2/E(045)	PAINTED SURFACE	37	48.01	09/22/94	11:43:00
2/E(045)	EXPOSED SURFACE	27	-39.28	09/22/94	11:43:00
2/E(046)	PAINTED SURFACE	34	21.82	09/22/94	11:45:00
2/E(046)	EXPOSED SURFACE	25	-56.74	09/22/94	11:46:00
2/E(047)	PAINTED SURFACE	32	4.36	09/22/94	11:47:00
2/E(047)	EXPOSED SURFACE	9	-196.42	09/22/94	11:47:00
2/E(048)	PAINTED SURFACE	36	39.28	09/22/94	11:48:00
2/E(048)	EXPOSED SURFACE	35	30.55	09/22/94	11:49:00
2/E(049)	PAINTED SURFACE	19	-109.12	09/22/94	11:50:00
2/E(049)	EXPOSED SURFACE	21	-91.66	09/22/94	11:51:00

A.3. Summary Data of Alpha Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
2/E(050)	PAINTED SURFACE	35	-30.55	09/22/94	11:53:00
2/E(050)	EXPOSED SURFACE	17	-126.58	09/22/94	11:54:00
2/E(051)	PAINTED SURFACE	49	152.77	09/22/94	11:55:00
2/E(051)	EXPOSED SURFACE	49	152.77	09/22/94	11:56:00
2/E(052)	PAINTED SURFACE	88	493.23	09/22/94	11:56:00
2/E(052)	EXPOSED SURFACE	33	13.09	09/22/94	11:57:00
2/E(053)	PAINTED SURFACE	36	39.28	09/22/94	11:58:00
2/E(053)	EXPOSED SURFACE	41	82.93	09/22/94	11:59:00
2/E(054)	PAINTED SURFACE	44	109.12	09/22/94	12:01:00
2/E(054)	EXPOSED SURFACE	68	318.64	09/22/94	12:03:00
2/E(055)	PAINTED SURFACE	47	135.31	09/22/94	12:05:00
2/E(055)	EXPOSED SURFACE	23	-74.20	09/22/94	12:05:00
2/E(999)	PAINTED SURFACE	28	-30.55	09/22/94	09:17:00
2/E(999)	PAINTED SURFACE	35	30.55	09/22/94	09:18:00
2/F(001)	PAINTED SURFACE	92	737.67	09/14/94	08:42:00
2/F(001)	EXPOSED SURFACE	267	2265.39	09/14/94	08:42:00
2/F(002)	PAINTED SURFACE	102	824.97	09/14/94	08:43:00
2/F(002)	EXPOSED SURFACE	444	3810.56	09/14/94	08:45:00
2/F(003)	PAINTED SURFACE	83	659.10	09/14/94	08:46:00
2/F(003)	EXPOSED SURFACE	429	3679.62	09/14/94	08:46:00
2/F(004)	PAINTED SURFACE	92	737.67	09/14/94	08:47:00
2/F(004)	EXPOSED SURFACE	562	4840.68	09/14/94	08:52:00
2/F(005)	PAINTED SURFACE	69	536.88	09/14/94	08:48:00
2/F(005)	EXPOSED SURFACE	458	3932.78	09/14/94	08:50:00
2/F(006)	PAINTED SURFACE	60	458.32	09/14/94	08:56:00
2/F(006)	EXPOSED SURFACE	331	2824.09	09/14/94	08:57:00
2/F(007)	PAINTED SURFACE	108	877.35	09/14/94	08:57:00
2/F(007)	EXPOSED SURFACE	274	2326.49	09/14/94	08:57:00
2/F(008)	PAINTED SURFACE	87	694.02	09/14/94	08:58:00
2/F(008)	EXPOSED SURFACE	164	1366.22	09/14/94	08:58:00
2/F(009)	PAINTED SURFACE	105	851.16	09/14/94	08:59:00
2/F(009)	EXPOSED SURFACE	246	2082.06	09/14/94	08:59:00
2/F(010)	PAINTED SURFACE	77	606.72	09/14/94	08:59:00
2/F(010)	EXPOSED SURFACE	247	2090.79	09/14/94	09:00:00
2/F(011)	PAINTED SURFACE	61	467.04	09/14/94	09:12:00
2/F(011)	EXPOSED SURFACE	582	5015.28	09/14/94	09:12:00
2/F(012)	PAINTED SURFACE	61	467.04	09/14/94	09:13:00
2/F(012)	EXPOSED SURFACE	661	5704.93	09/14/94	09:13:00
2/F(013)	PAINTED SURFACE	69	536.88	09/14/94	09:14:00
2/F(013)	EXPOSED SURFACE	94	755.13	09/14/94	09:14:00
2/F(014)	PAINTED SURFACE	72	563.07	09/14/94	09:14:00
2/F(014)	EXPOSED SURFACE	182	1523.35	09/14/94	09:15:00
2/F(015)	PAINTED SURFACE	105	851.16	09/14/94	09:16:00
2/F(015)	EXPOSED SURFACE	95	763.86	09/14/94	09:16:00
2/F(016)	PAINTED SURFACE	113	921.00	09/14/94	09:30:00
2/F(016)	EXPOSED SURFACE	180	1505.89	09/14/94	09:30:00
2/F(017)	PAINTED SURFACE	154	1278.92	09/14/94	09:31:00
2/F(017)	EXPOSED SURFACE	159	1322.57	09/14/94	09:31:00

A.3. Summary Data of Alpha Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
2/F(018)	PAINTED SURFACE	376	3216.94	09/14/94	09:31:00
2/F(018)	EXPOSED SURFACE	346	2955.04	09/14/94	09:32:00
2/F(019)	PAINTED SURFACE	153	1270.19	09/14/94	09:32:00
2/F(019)	EXPOSED SURFACE	545	4692.27	09/14/94	09:33:00
2/F(020)	PAINTED SURFACE	138	1139.24	09/14/94	09:33:00
2/F(020)	EXPOSED SURFACE	550	4735.92	09/14/94	09:34:00
2/F(021)	PAINTED SURFACE	163	1357.49	09/14/94	09:57:00
2/F(021)	EXPOSED SURFACE	616	5312.09	09/14/94	09:58:00
2/F(022)	PAINTED SURFACE	70	545.61	09/14/94	09:59:00
2/F(022)	EXPOSED SURFACE	195	1636.84	09/14/94	09:59:00
2/F(023)	PAINTED SURFACE	153	1270.19	09/14/94	10:00:00
2/F(023)	EXPOSED SURFACE	198	1663.03	09/14/94	10:03:00
2/F(024)	PAINTED SURFACE	137	1130.51	09/14/94	10:04:00
2/F(024)	EXPOSED SURFACE	373	3190.75	09/14/94	10:04:00
2/F(025)	PAINTED SURFACE	175	1462.24	09/14/94	10:05:00
2/F(025)	EXPOSED SURFACE	205	1724.14	09/14/94	10:06:00
2/F(026)	PAINTED SURFACE	176	1470.97	09/14/94	10:22:00
2/F(026)	EXPOSED SURFACE	436	3740.72	09/14/94	10:23:00
2/F(027)	PAINTED SURFACE	122	999.56	09/14/94	10:27:00
2/F(027)	EXPOSED SURFACE	360	3077.26	09/14/94	10:30:00
2/F(028)	PAINTED SURFACE	166	1383.68	09/14/94	10:31:00
2/F(028)	EXPOSED SURFACE	215	1811.44	09/14/94	10:32:00
2/F(029)	PAINTED SURFACE	175	1462.24	09/14/94	10:33:00
2/F(029)	EXPOSED SURFACE	219	1846.36	09/14/94	10:34:00
2/F(030)	EXPOSED SURFACE	429	3679.62	09/14/94	10:39:00
2/F(030)	PAINTED SURFACE	121	990.83	09/14/94	10:36:00
2/F(031)	PAINTED SURFACE	146	1209.08	09/14/94	10:42:00
2/F(031)	EXPOSED SURFACE	365	3120.91	09/14/94	10:43:00
2/F(032)	PAINTED SURFACE	173	1444.78	09/14/94	10:43:00
2/F(032)	EXPOSED SURFACE	297	2527.28	09/14/94	10:44:00
2/F(033)	PAINTED SURFACE	121	990.83	09/14/94	10:45:00
2/F(033)	EXPOSED SURFACE	296	2518.55	09/14/94	10:46:00
2/F(034)	PAINTED SURFACE	261	2213.01	09/14/94	10:47:00
2/F(034)	EXPOSED SURFACE	266	2256.66	09/14/94	10:47:00
2/F(035)	PAINTED SURFACE	139	1147.97	09/14/94	10:48:00
2/F(035)	EXPOSED SURFACE	678	5853.34	09/14/94	10:49:00
2/F(036)	PAINTED SURFACE	153	1270.19	09/14/94	10:55:00
2/F(036)	EXPOSED SURFACE	189	1584.46	09/14/94	10:56:00
2/F(037)	PAINTED SURFACE	76	597.99	09/14/94	10:56:00
2/F(037)	EXPOSED SURFACE	188	1575.73	09/14/94	10:57:00
2/F(038)	PAINTED SURFACE	142	1174.16	09/14/94	10:58:00
2/F(038)	EXPOSED SURFACE	277	2352.68	09/14/94	10:59:00
2/F(039)	PAINTED SURFACE	85	676.56	09/14/94	11:00:00
2/F(039)	EXPOSED SURFACE	264	2239.20	09/14/94	11:01:00
2/F(040)	PAINTED SURFACE	117	955.91	09/14/94	11:02:00
2/F(040)	EXPOSED SURFACE	398	3408.99	09/14/94	11:03:00
2/F(041)	PAINTED SURFACE	105	851.16	09/14/94	11:17:00
2/F(041)	EXPOSED SURFACE	98	790.05	09/14/94	11:18:00

A.3. Summary Data of Alpha Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
2/F(042)	PAINTED SURFACE	109	886.08	09/14/94	11:18:00
2/F(042)	EXPOSED SURFACE	110	894.81	09/14/94	11:19:00
2/F(043)	PAINTED SURFACE	94	755.13	09/14/94	11:20:00
2/F(043)	EXPOSED SURFACE	149	1235.27	09/14/94	11:20:00
2/F(044)	PAINTED SURFACE	88	702.75	09/14/94	11:21:00
2/F(044)	EXPOSED SURFACE	569	4901.79	09/14/94	11:22:00
2/F(045)	PAINTED SURFACE	130	1069.40	09/14/94	11:23:00
2/F(045)	EXPOSED SURFACE	157	1305.11	09/14/94	11:24:00
2/F(046)	PAINTED SURFACE	146	1209.08	09/14/94	11:29:00
2/F(046)	EXPOSED SURFACE	60	458.32	09/14/94	11:31:00
2/F(047)	PAINTED SURFACE	146	1209.08	09/14/94	11:31:00
2/F(047)	EXPOSED SURFACE	154	1278.92	09/14/94	11:32:00
2/F(048)	PAINTED SURFACE	112	912.27	09/14/94	11:33:00
2/F(048)	EXPOSED SURFACE	108	877.35	09/14/94	11:33:00
2/F(049)	PAINTED SURFACE	120	982.10	09/14/94	11:34:00
2/F(049)	EXPOSED SURFACE	75	589.26	09/14/94	11:35:00
2/F(050)	PAINTED SURFACE	84	667.83	09/14/94	11:35:00
2/F(050)	EXPOSED SURFACE	43	309.91	09/14/94	11:37:00
2/F(051)	PAINTED SURFACE	54	405.94	09/14/94	11:41:00
2/F(051)	EXPOSED SURFACE	124	1017.02	09/14/94	11:42:00
2/F(052)	PAINTED SURFACE	100	807.51	09/14/94	11:43:00
2/F(052)	EXPOSED SURFACE	101	816.24	09/14/94	11:43:00
2/F(053)	PAINTED SURFACE	366	3129.64	09/14/94	11:44:00
2/F(053)	EXPOSED SURFACE	204	1715.41	09/14/94	11:45:00
2/F(054)	PAINTED SURFACE	232	1959.84	09/14/94	11:46:00
2/F(054)	EXPOSED SURFACE	1582	13745.09	09/14/94	11:48:00
2/F(055)	PAINTED SURFACE	100	807.51	09/14/94	11:48:00
2/F(055)	EXPOSED SURFACE	38	266.26	09/14/94	11:49:00
2/F(056)	PAINTED SURFACE	70	545.61	09/14/94	13:39:00
2/F(056)	EXPOSED SURFACE	84	667.83	09/14/94	13:40:00
2/F(057)	PAINTED SURFACE	135	1113.05	09/14/94	13:40:00
2/F(057)	EXPOSED SURFACE	98	790.05	09/14/94	13:41:00
2/F(058)	PAINTED SURFACE	159	1322.57	09/14/94	13:41:00
2/F(058)	EXPOSED SURFACE	253	2143.17	09/14/94	13:42:00
2/F(059)	PAINTED SURFACE	119	973.37	09/14/94	13:43:00
2/F(059)	EXPOSED SURFACE	258	2186.82	09/14/94	13:44:00
2/F(060)	PAINTED SURFACE	236	1994.76	09/14/94	13:44:00
2/F(060)	EXPOSED SURFACE	941	8149.28	09/14/94	13:45:00
2/F(061)	PAINTED SURFACE	163	1357.49	09/14/94	13:54:00
2/F(061)	EXPOSED SURFACE	3460	30139.68	09/14/94	13:55:00
2/F(062)	PAINTED SURFACE	3175	27651.68	09/14/94	13:55:00
2/F(062)	EXPOSED SURFACE	58	440.86	09/14/94	13:56:00
2/F(063)	PAINTED SURFACE	53	397.21	09/14/94	13:57:00
2/F(064)	PAINTED SURFACE	33	222.61	09/14/94	13:58:00
2/F(065)	PAINTED SURFACE	117	955.91	09/14/94	13:58:00
2/F(065)	EXPOSED SURFACE	193	1619.38	09/14/94	13:59:00
2/F(066)	PAINTED SURFACE	146	1209.08	09/14/94	14:10:00
2/F(066)	EXPOSED SURFACE	135	1113.05	09/14/94	14:10:00

A.3. Summary Data of Alpha Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
2/F(067)	PAINTED SURFACE	115	938.45	09/14/94	14:13:00
2/F(067)	EXPOSED SURFACE	1797	15622.00	09/14/94	14:50:00
2/F(068)	PAINTED SURFACE	65	501.96	09/14/94	14:17:00
2/F(068)	EXPOSED SURFACE	333	2841.55	09/14/94	14:18:00
2/F(069)	PAINTED SURFACE	22	126.58	09/14/94	14:20:00
2/F(069)	EXPOSED SURFACE	173	1444.78	09/14/94	14:20:00
2/F(070)	PAINTED SURFACE	76	597.99	09/14/94	14:21:00
2/F(070)	EXPOSED SURFACE	235	1986.03	09/14/94	14:22:00
2/F(071)	PAINTED SURFACE	54	405.94	09/14/94	14:24:00
2/F(072)	PAINTED SURFACE	46	336.10	09/14/94	14:25:00
2/F(073)	PAINTED SURFACE	160	1331.30	09/14/94	14:26:00
2/F(073)	EXPOSED SURFACE	135	1113.05	09/14/94	14:27:00
2/F(074)	PAINTED SURFACE	133	1095.59	09/14/94	14:28:00
2/F(074)	EXPOSED SURFACE	93	746.40	09/14/94	14:28:00
2/F(075)	PAINTED SURFACE	194	1628.11	09/14/94	14:29:00
2/F(075)	EXPOSED SURFACE	211	1776.52	09/14/94	14:30:00
2/F(076)	PAINTED SURFACE	93	746.40	09/14/94	14:43:00
2/F(076)	EXPOSED SURFACE	269	2282.85	09/14/94	14:43:00
2/F(077)	PAINTED SURFACE	77	606.72	09/14/94	14:45:00
2/F(077)	EXPOSED SURFACE	113	921.00	09/14/94	14:45:00
2/F(078)	PAINTED SURFACE	46	336.10	09/14/94	14:45:00
2/F(078)	EXPOSED SURFACE	134	1104.32	09/14/94	14:46:00
2/F(079)	PAINTED SURFACE	80	632.91	09/14/94	14:46:00
2/F(079)	EXPOSED SURFACE	87	694.02	09/14/94	14:48:00
2/F(080)	PAINTED SURFACE	74	580.53	09/14/94	14:48:00
2/F(080)	EXPOSED SURFACE	67	519.42	09/14/94	14:49:00
2/F(999)	PAINTED SURFACE	7	-4.36	09/14/94	15:05:00
2/F(999)	PAINTED SURFACE	8	4.36	09/14/94	15:04:00
2/N(001)	PAINTED SURFACE	366	2920.12	09/22/94	15:14:00
2/N(001)	EXPOSED SURFACE	100	597.99	09/22/94	15:15:00
2/N(002)	PAINTED SURFACE	82	440.86	09/22/94	15:18:00
2/N(002)	EXPOSED SURFACE	58	231.34	09/22/94	15:18:00
2/N(003)	PAINTED SURFACE	182	1313.84	09/22/94	15:19:00
2/N(003)	EXPOSED SURFACE	106	650.37	09/22/94	15:20:00
2/N(004)	PAINTED SURFACE	106	650.37	09/22/94	15:21:00
2/N(004)	EXPOSED SURFACE	58	231.34	09/22/94	15:21:00
2/N(005)	PAINTED SURFACE	134	894.81	09/22/94	15:22:00
2/N(005)	EXPOSED SURFACE	116	737.67	09/22/94	15:23:00
2/N(006)	PAINTED SURFACE	127	833.70	09/22/94	15:04:00
2/N(006)	EXPOSED SURFACE	113	711.48	09/22/94	15:06:00
2/N(007)	PAINTED SURFACE	121	781.32	09/22/94	15:07:00
2/N(007)	EXPOSED SURFACE	104	632.91	09/22/94	15:07:00
2/N(008)	EXPOSED SURFACE	98	580.53	09/22/94	15:09:00
2/N(008)	PAINTED SURFACE	109	676.56	09/22/94	15:08:00
2/N(009)	PAINTED SURFACE	66	301.18	09/22/94	15:09:00
2/N(009)	EXPOSED SURFACE	81	432.13	09/22/94	15:10:00
2/N(010)	PAINTED SURFACE	50	161.50	09/22/94	15:11:00
2/N(010)	EXPOSED SURFACE	66	301.18	09/22/94	15:12:00

A.3. Summary Data of Alpha Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
2/N(011)	PAINTED SURFACE	212	1575.73	09/22/94	14:57:00
2/N(011)	EXPOSED SURFACE	84	458.32	09/22/94	14:57:00
2/N(012)	PAINTED SURFACE	88	493.23	09/22/94	14:58:00
2/N(012)	EXPOSED SURFACE	48	144.04	09/22/94	14:58:00
2/N(013)	PAINTED SURFACE	96	563.07	09/22/94	14:59:00
2/N(013)	EXPOSED SURFACE	72	353.56	09/22/94	15:00:00
2/N(014)	EXPOSED SURFACE	80	423.40	09/22/94	15:01:00
2/N(014)	PAINTED SURFACE	52	178.96	09/22/94	15:00:00
2/N(015)	PAINTED SURFACE	107	659.10	09/22/94	15:02:00
2/N(015)	EXPOSED SURFACE	72	353.56	09/22/94	15:03:00
2/N(016)	PAINTED SURFACE	24	-65.47	09/22/94	14:47:00
2/N(016)	EXPOSED SURFACE	53	187.69	09/22/94	14:48:00
2/N(017)	PAINTED SURFACE	27	-39.28	09/22/94	14:50:00
2/N(017)	EXPOSED SURFACE	37	48.01	09/22/94	14:50:00
2/N(018)	PAINTED SURFACE	13	-161.50	09/22/94	14:52:00
2/N(018)	EXPOSED SURFACE	27	-39.28	09/22/94	14:52:00
2/N(019)	PAINTED SURFACE	23	-74.20	09/22/94	14:53:00
2/N(019)	EXPOSED SURFACE	9	-196.42	09/22/94	14:54:00
2/N(020)	PAINTED SURFACE	15	-144.04	09/22/94	14:54:00
2/N(020)	EXPOSED SURFACE	21	-91.66	09/22/94	14:55:00
2/N(021)	PAINTED SURFACE	24	-65.47	09/22/94	14:40:00
2/N(021)	EXPOSED SURFACE	6	-222.61	09/22/94	14:41:00
2/N(022)	PAINTED SURFACE	27	-39.28	09/22/94	14:41:00
2/N(022)	EXPOSED SURFACE	30	-13.09	09/22/94	14:42:00
2/N(023)	PAINTED SURFACE	51	170.23	09/22/94	14:43:00
2/N(023)	EXPOSED SURFACE	37	48.01	09/22/94	14:44:00
2/N(024)	PAINTED SURFACE	33	13.09	09/22/94	14:45:00
2/N(024)	EXPOSED SURFACE	27	-39.28	09/22/94	14:45:00
2/N(025)	PAINTED SURFACE	3	-248.80	09/22/94	14:46:00
2/N(025)	EXPOSED SURFACE	8	-205.15	09/22/94	14:46:00
2/N(026)	PAINTED SURFACE	12	-170.23	09/22/94	14:13:00
2/N(026)	EXPOSED SURFACE	60	248.80	09/22/94	14:13:00
2/N(027)	PAINTED SURFACE	5	-231.34	09/22/94	14:14:00
2/N(027)	EXPOSED SURFACE	80	423.40	09/22/94	14:14:00
2/N(028)	PAINTED SURFACE	23	-74.20	09/22/94	14:16:00
2/N(028)	EXPOSED SURFACE	6	-222.61	09/22/94	14:18:00
2/N(029)	PAINTED SURFACE	24	-65.47	09/22/94	14:19:00
2/N(029)	EXPOSED SURFACE	21	-91.66	09/22/94	14:20:00
2/N(030)	PAINTED SURFACE	15	-144.04	09/22/94	14:21:00
2/N(030)	EXPOSED SURFACE	15	-144.04	09/22/94	14:21:00
2/N(031)	PAINTED SURFACE	20	-100.39	09/22/94	14:02:00
2/N(031)	EXPOSED SURFACE	12	-170.23	09/22/94	14:03:00
2/N(032)	PAINTED SURFACE	12	-170.23	09/22/94	14:04:00
2/N(032)	EXPOSED SURFACE	15	-144.04	09/22/94	14:05:00
2/N(033)	PAINTED SURFACE	12	-170.23	09/22/94	14:06:00
2/N(033)	EXPOSED SURFACE	11	-178.96	09/22/94	14:07:00
2/N(034)	PAINTED SURFACE	7	-213.88	09/22/94	14:08:00
2/N(034)	EXPOSED SURFACE	3	-248.80	09/22/94	14:08:00

A.3. Summary Data of Alpha Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
2/N(035)	PAINTED SURFACE	7	-213.88	09/22/94	14:09:00
2/N(035)	EXPOSED SURFACE	9	-196.42	09/22/94	14:11:00
2/N(036)	PAINTED SURFACE	15	-144.04	09/22/94	13:46:00
2/N(036)	EXPOSED SURFACE	15	-144.04	09/22/94	13:47:00
2/N(037)	PAINTED SURFACE	9	-196.42	09/22/94	13:48:00
2/N(037)	EXPOSED SURFACE	18	-117.85	09/22/94	13:49:00
2/N(038)	PAINTED SURFACE	9	-196.42	09/22/94	13:50:00
2/N(038)	EXPOSED SURFACE	11	-178.96	09/22/94	13:51:00
2/N(039)	PAINTED SURFACE	6	-222.61	09/22/94	13:52:00
2/N(039)	EXPOSED SURFACE	13	-161.50	09/22/94	13:53:00
2/N(040)	PAINTED SURFACE	18	-117.85	09/22/94	13:54:00
2/N(040)	EXPOSED SURFACE	12	-170.23	09/22/94	13:55:00
2/N(999)	PAINTED SURFACE	29	-21.82	09/22/94	09:18:00
2/N(999)	PAINTED SURFACE	34	21.82	09/22/94	09:19:00
2/S(001)	PAINTED SURFACE	86	698.38	09/26/94	11:58:00
2/S(001)	EXPOSED SURFACE	71	567.44	09/26/94	11:59:00
2/S(002)	PAINTED SURFACE	84	680.93	09/26/94	11:59:00
2/S(002)	EXPOSED SURFACE	78	628.55	09/26/94	12:00:00
2/S(003)	PAINTED SURFACE	81	654.74	09/26/94	12:01:00
2/S(003)	EXPOSED SURFACE	59	462.68	09/26/94	12:02:00
2/S(004)	PAINTED SURFACE	135	1126.15	09/26/94	12:02:00
2/S(004)	EXPOSED SURFACE	111	916.63	09/26/94	12:03:00
2/S(005)	PAINTED SURFACE	108	890.44	09/26/94	12:03:00
2/S(005)	EXPOSED SURFACE	106	872.98	09/26/94	12:04:00
2/S(006)	PAINTED SURFACE	322	2758.62	09/26/94	09:02:00
2/S(006)	EXPOSED SURFACE	160	1344.39	09/26/94	09:03:00
2/S(007)	PAINTED SURFACE	149	1248.36	09/26/94	09:02:00
2/S(007)	EXPOSED SURFACE	299	2557.84	09/26/94	09:03:00
2/S(008)	PAINTED SURFACE	131	1091.23	09/26/94	09:02:00
2/S(008)	EXPOSED SURFACE	319	2732.43	09/26/94	09:03:00
2/S(009)	PAINTED SURFACE	64	506.33	09/26/94	09:02:00
2/S(009)	EXPOSED SURFACE	140	1169.79	09/26/94	09:03:00
2/S(010)	PAINTED SURFACE	64	506.33	09/26/94	09:02:00
2/S(010)	EXPOSED SURFACE	120	995.20	09/26/94	09:03:00
2/S(011)	PAINTED SURFACE	57	445.22	09/26/94	15:17:00
2/S(011)	EXPOSED SURFACE	46	349.19	09/26/94	15:18:00
2/S(012)	PAINTED SURFACE	54	419.03	09/26/94	15:19:00
2/S(012)	EXPOSED SURFACE	73	584.90	09/26/94	15:41:00
2/S(013)	PAINTED SURFACE	81	654.74	09/26/94	15:44:00
2/S(013)	EXPOSED SURFACE	48	366.65	09/26/94	15:44:00
2/S(014)	PAINTED SURFACE	95	776.95	09/26/94	15:45:00
2/S(014)	EXPOSED SURFACE	98	803.14	09/26/94	15:46:00
2/S(015)	PAINTED SURFACE	223	1894.37	09/26/94	15:47:00
2/S(015)	EXPOSED SURFACE	154	1292.01	09/26/94	15:48:00
2/S(016)	PAINTED SURFACE	82	663.47	09/26/94	15:02:00
2/S(016)	EXPOSED SURFACE	102	838.06	09/26/94	15:03:00
2/S(017)	PAINTED SURFACE	36	261.89	09/26/94	15:03:00
2/S(017)	EXPOSED SURFACE	24	157.14	09/26/94	15:04:00

A.3. Summary Data of Alpha Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
2/S(018)	PAINTED SURFACE	18	104.76	09/26/94	15:05:00
2/S(018)	EXPOSED SURFACE	18	104.76	09/26/94	15:05:00
2/S(019)	PAINTED SURFACE	45	340.46	09/26/94	15:06:00
2/S(019)	EXPOSED SURFACE	18	104.76	09/26/94	15:09:00
2/S(020)	PAINTED SURFACE	34	244.43	09/26/94	15:10:00
2/S(020)	EXPOSED SURFACE	33	235.70	09/26/94	15:11:00
2/S(021)	PAINTED SURFACE	13	61.11	09/26/94	14:46:00
2/S(021)	EXPOSED SURFACE	50	384.11	09/26/94	14:46:00
2/S(022)	PAINTED SURFACE	5	-8.73	09/26/94	14:47:00
2/S(022)	EXPOSED SURFACE	18	104.76	09/26/94	14:48:00
2/S(023)	PAINTED SURFACE	27	183.33	09/26/94	14:48:00
2/S(023)	EXPOSED SURFACE	17	96.03	09/26/94	14:53:00
2/S(024)	PAINTED SURFACE	25	165.87	09/26/94	14:49:00
2/S(024)	EXPOSED SURFACE	31	218.25	09/26/94	14:50:00
2/S(025)	PAINTED SURFACE	21	130.95	09/26/94	14:51:00
2/S(025)	EXPOSED SURFACE	6	0.00	09/26/94	14:51:00
2/S(026)	PAINTED SURFACE	40	296.81	09/26/94	14:34:00
2/S(026)	EXPOSED SURFACE	21	130.95	09/26/94	14:34:00
2/S(027)	PAINTED SURFACE	42	314.27	09/26/94	14:35:00
2/S(027)	EXPOSED SURFACE	32	226.98	09/26/94	14:36:00
2/S(028)	PAINTED SURFACE	20	122.22	09/26/94	14:36:00
2/S(028)	EXPOSED SURFACE	24	157.14	09/26/94	14:37:00
2/S(029)	PAINTED SURFACE	100	820.60	09/26/94	14:38:00
2/S(029)	PAINTED SURFACE	21	130.95	09/26/94	14:39:00
2/S(029)	EXPOSED SURFACE	11	43.65	09/26/94	14:40:00
2/S(030)	PAINTED SURFACE	31	218.25	09/26/94	14:40:00
2/S(030)	EXPOSED SURFACE	9	26.19	09/26/94	14:41:00
2/S(031)	PAINTED SURFACE	14	69.84	09/26/94	14:19:00
2/S(031)	EXPOSED SURFACE	14	69.84	09/26/94	14:19:00
2/S(032)	PAINTED SURFACE	21	130.95	09/26/94	14:20:00
2/S(032)	EXPOSED SURFACE	12	52.38	09/26/94	14:20:00
2/S(033)	PAINTED SURFACE	22	139.68	09/26/94	14:21:00
2/S(033)	EXPOSED SURFACE	29	200.79	09/26/94	14:21:00
2/S(034)	PAINTED SURFACE	46	349.19	09/26/94	14:22:00
2/S(034)	EXPOSED SURFACE	32	226.98	09/26/94	14:23:00
2/S(035)	PAINTED SURFACE	46	349.19	09/26/94	14:23:00
2/S(035)	EXPOSED SURFACE	70	558.71	09/26/94	14:24:00
2/S(036)	PAINTED SURFACE	21	130.95	09/26/94	13:59:00
2/S(036)	EXPOSED SURFACE	26	174.60	09/26/94	14:00:00
2/S(037)	PAINTED SURFACE	18	104.76	09/26/94	14:01:00
2/S(037)	EXPOSED SURFACE	29	200.79	09/26/94	14:02:00
2/S(038)	PAINTED SURFACE	31	218.25	09/26/94	14:02:00
2/S(038)	EXPOSED SURFACE	20	122.22	09/26/94	14:03:00
2/S(039)	PAINTED SURFACE	18	104.76	09/26/94	14:04:00
2/S(039)	EXPOSED SURFACE	18	104.76	09/26/94	14:05:00
2/S(040)	PAINTED SURFACE	28	192.06	09/26/94	14:06:00
2/S(040)	EXPOSED SURFACE	26	174.60	09/26/94	14:06:00
2/S(999)	PAINTED SURFACE	9	26.19	09/26/94	08:50:00

A.3. Summary Data of Alpha Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
2/S(999)	PAINTED SURFACE	3	-26.19	09/26/94	08:50:00
2/S(999)	PAINTED SURFACE	9	26.19	09/26/94	12:06:00
2/S(999)	PAINTED SURFACE	3	-26.19	09/26/94	12:06:00
2/W(001)	PAINTED SURFACE	107	890.44	09/26/94	11:47:00
2/W(001)	EXPOSED SURFACE	261	2234.83	09/26/94	11:48:00
2/W(004)	PAINTED SURFACE	51	401.57	09/26/94	11:49:00
2/W(004)	EXPOSED SURFACE	308	2645.13	09/26/94	11:49:00
2/W(005)	PAINTED SURFACE	156	1318.20	09/26/94	11:50:00
2/W(005)	EXPOSED SURFACE	89	733.30	09/26/94	11:51:00
2/W(006)	PAINTED SURFACE	213	1815.80	09/26/94	11:38:00
2/W(006)	EXPOSED SURFACE	97	803.14	09/26/94	11:39:00
2/W(007)	PAINTED SURFACE	30	218.25	09/26/94	11:40:00
2/W(007)	EXPOSED SURFACE	68	549.98	09/26/94	11:41:00
2/W(008)	PAINTED SURFACE	83	680.93	09/26/94	11:42:00
2/W(008)	EXPOSED SURFACE	107	890.44	09/26/94	11:42:00
2/W(009)	PAINTED SURFACE	117	977.74	09/26/94	11:43:00
2/W(009)	EXPOSED SURFACE	69	558.71	09/26/94	11:43:00
2/W(010)	PAINTED SURFACE	138	1161.07	09/26/94	11:44:00
2/W(010)	EXPOSED SURFACE	74	602.36	09/26/94	11:45:00
2/W(011)	PAINTED SURFACE	145	1222.17	09/26/94	11:33:00
2/W(011)	EXPOSED SURFACE	65	523.79	09/26/94	11:34:00
2/W(012)	PAINTED SURFACE	85	698.38	09/26/94	11:35:00
2/W(012)	EXPOSED SURFACE	54	427.76	09/26/94	11:35:00
2/W(015)	PAINTED SURFACE	84	689.66	09/26/94	11:36:00
2/W(015)	EXPOSED SURFACE	91	750.76	09/26/94	11:37:00
2/W(016)	PAINTED SURFACE	44	340.46	09/26/94	11:23:00
2/W(016)	EXPOSED SURFACE	95	785.68	09/26/94	11:23:00
2/W(017)	PAINTED SURFACE	50	392.84	09/26/94	11:24:00
2/W(017)	EXPOSED SURFACE	46	357.92	09/26/94	11:25:00
2/W(018)	PAINTED SURFACE	45	349.19	09/26/94	11:26:00
2/W(018)	EXPOSED SURFACE	58	462.68	09/26/94	11:26:00
2/W(019)	PAINTED SURFACE	61	488.87	09/26/94	11:27:00
2/W(019)	EXPOSED SURFACE	64	515.06	09/26/94	11:28:00
2/W(020)	PAINTED SURFACE	54	427.76	09/26/94	11:32:00
2/W(020)	EXPOSED SURFACE	121	1012.66	09/26/94	11:33:00
2/W(021)	PAINTED SURFACE	56	445.22	09/26/94	11:19:00
2/W(021)	EXPOSED SURFACE	41	314.27	09/26/94	11:19:00
2/W(022)	PAINTED SURFACE	62	497.60	09/26/94	11:20:00
2/W(022)	EXPOSED SURFACE	48	375.38	09/26/94	11:20:00
2/W(023)	PAINTED SURFACE	55	436.49	09/26/94	11:21:00
2/W(023)	EXPOSED SURFACE	47	366.65	09/26/94	11:21:00
2/W(026)	PAINTED SURFACE	32	235.70	09/26/94	10:48:00
2/W(026)	EXPOSED SURFACE	22	148.41	09/26/94	10:48:00
2/W(027)	PAINTED SURFACE	69	558.71	09/26/94	10:50:00
2/W(027)	EXPOSED SURFACE	36	270.62	09/26/94	10:50:00
2/W(028)	PAINTED SURFACE	31	226.98	09/26/94	10:51:00
2/W(028)	EXPOSED SURFACE	16	96.03	09/26/94	10:52:00
2/W(029)	EXPOSED SURFACE	26	183.33	09/26/94	10:54:00

A.3. Summary Data of Alpha Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
2/W(029)	PAINTED SURFACE	26	183.33	09/26/94	10:54:00
2/W(030)	PAINTED SURFACE	51	401.57	09/26/94	10:55:00
2/W(030)	EXPOSED SURFACE	25	174.60	09/26/94	11:00:00
2/W(031)	PAINTED SURFACE	55	436.49	09/26/94	10:24:00
2/W(031)	EXPOSED SURFACE	19	122.22	09/26/94	10:25:00
2/W(032)	PAINTED SURFACE	38	288.08	09/26/94	10:25:00
2/W(032)	EXPOSED SURFACE	46	357.92	09/26/94	10:25:00
2/W(033)	PAINTED SURFACE	44	340.46	09/26/94	10:26:00
2/W(033)	EXPOSED SURFACE	20	130.95	09/26/94	10:26:00
2/W(034)	PAINTED SURFACE	22	148.41	09/26/94	10:27:00
2/W(034)	EXPOSED SURFACE	15	87.30	09/26/94	10:27:00
2/W(035)	PAINTED SURFACE	18	113.49	09/26/94	10:27:00
2/W(035)	EXPOSED SURFACE	20	130.95	09/26/94	10:28:00
2/W(036)	PAINTED SURFACE	53	419.03	09/26/94	10:00:00
2/W(036)	EXPOSED SURFACE	19	122.22	09/26/94	10:01:00
2/W(037)	PAINTED SURFACE	24	165.87	09/26/94	10:01:00
2/W(037)	EXPOSED SURFACE	10	43.65	09/26/94	10:02:00
2/W(038)	PAINTED SURFACE	25	174.60	09/26/94	10:03:00
2/W(038)	EXPOSED SURFACE	15	87.30	09/26/94	10:03:00
2/W(039)	PAINTED SURFACE	39	296.81	09/26/94	10:04:00
2/W(039)	EXPOSED SURFACE	25	174.60	09/26/94	10:04:00
2/W(040)	PAINTED SURFACE	30	218.25	09/26/94	10:05:00
2/W(040)	EXPOSED SURFACE	24	165.87	09/26/94	10:05:00
2/W(041)	PAINTED SURFACE	65	523.79	09/26/94	09:38:00
2/W(041)	EXPOSED SURFACE	37	279.35	09/26/94	09:38:00
2/W(042)	PAINTED SURFACE	46	357.92	09/26/94	09:39:00
2/W(042)	EXPOSED SURFACE	60	480.14	09/26/94	09:39:00
2/W(043)	PAINTED SURFACE	16	96.03	09/26/94	09:39:00
2/W(043)	EXPOSED SURFACE	16	96.03	09/26/94	09:40:00
2/W(044)	PAINTED SURFACE	14	78.57	09/26/94	09:40:00
2/W(044)	EXPOSED SURFACE	20	130.95	09/26/94	09:41:00
2/W(045)	PAINTED SURFACE	35	261.89	09/26/94	09:42:00
2/W(045)	EXPOSED SURFACE	6	8.73	09/26/94	09:42:00
2/W(046)	PAINTED SURFACE	31	226.98	09/26/94	09:18:00
2/W(046)	EXPOSED SURFACE	17	104.76	09/26/94	09:19:00
2/W(047)	PAINTED SURFACE	71	576.17	09/26/94	09:19:00
2/W(047)	EXPOSED SURFACE	23	157.14	09/26/94	09:20:00
2/W(048)	PAINTED SURFACE	26	183.33	09/26/94	09:20:00
2/W(048)	EXPOSED SURFACE	22	148.41	09/26/94	09:21:00
2/W(049)	PAINTED SURFACE	25	174.60	09/26/94	09:21:00
2/W(049)	EXPOSED SURFACE	26	183.33	09/26/94	09:21:00
2/W(050)	PAINTED SURFACE	30	218.25	09/26/94	09:22:00
2/W(050)	EXPOSED SURFACE	14	78.57	09/26/94	09:22:00
2/W(051)	PAINTED SURFACE	20	130.95	09/26/94	08:59:00
2/W(051)	EXPOSED SURFACE	28	200.79	09/26/94	08:59:00
2/W(052)	PAINTED SURFACE	34	253.16	09/26/94	09:00:00
2/W(052)	EXPOSED SURFACE	56	445.22	09/26/94	09:00:00
2/W(053)	PAINTED SURFACE	46	357.92	09/26/94	09:01:00

A.3. Summary Data of Alpha Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
2/W(053)	EXPOSED SURFACE	34	253.16	09/26/94	09:01:00
2/W(054)	PAINTED SURFACE	24	165.87	09/26/94	09:02:00
2/W(054)	EXPOSED SURFACE	10	43.65	09/26/94	09:02:00
2/W(055)	PAINTED SURFACE	28	200.79	09/26/94	09:02:00
2/W(055)	EXPOSED SURFACE	12	61.11	09/26/94	09:03:00
2/W(999)	PAINTED SURFACE	8	26.19	09/26/94	08:51:00
2/W(999)	PAINTED SURFACE	2	-26.19	09/26/94	08:51:00
X/E(012)	PAINTED SURFACE	3	-69.84	08/29/94	15:26:00
X/E(015)	PAINTED SURFACE	4	-61.11	08/29/94	15:33:00
X/E(016)	PAINTED SURFACE	4	-61.11	08/29/94	15:34:00
X/E(023)	PAINTED SURFACE	2	-78.57	08/29/94	15:36:00
X/E(025)	PAINTED SURFACE	1	-87.30	08/29/94	15:37:00
X/E(026)	PAINTED SURFACE	5	-52.38	08/29/94	15:39:00
X/E(031)	PAINTED SURFACE	1	-87.30	08/29/94	15:41:00
X/E(033)	PAINTED SURFACE	4	-61.11	08/29/94	15:44:00
X/E(034)	PAINTED SURFACE	3	-69.84	08/29/94	15:44:00
X/E(038)	PAINTED SURFACE	4	-61.11	08/29/94	15:46:00
X/E(044)	PAINTED SURFACE	3	-69.84	08/29/94	15:48:00
X/E(046)	PAINTED SURFACE	4	-61.11	08/29/94	15:53:00
X/E(049)	PAINTED SURFACE	4	-61.11	08/29/94	15:54:00
X/E(050)	PAINTED SURFACE	2	-78.57	08/29/94	15:56:00
X/E(052)	PAINTED SURFACE	19	69.84	08/29/94	15:58:00
X/E(054)	PAINTED SURFACE	9	-17.46	08/29/94	16:00:00
X/N(061)	PAINTED SURFACE	29	157.14	08/29/94	13:09:00
X/N(063)	PAINTED SURFACE	24	113.49	08/29/94	13:11:00
X/N(067)	PAINTED SURFACE	24	113.49	08/29/94	13:13:00
X/N(069)	PAINTED SURFACE	11	0.00	08/29/94	13:14:00
X/N(070)	PAINTED SURFACE	5	-52.38	08/29/94	13:16:00
X/N(071)	PAINTED SURFACE	5	-52.38	08/29/94	13:17:00
X/N(072)	PAINTED SURFACE	6	-43.65	08/29/94	13:18:00
X/N(073)	PAINTED SURFACE	4	-61.11	08/29/94	13:19:00
X/N(074)	PAINTED SURFACE	7	-34.92	08/29/94	13:21:00
X/N(075)	PAINTED SURFACE	5	-52.38	08/29/94	13:22:00
X/N(076)	PAINTED SURFACE	5	-52.38	08/29/94	13:24:00
X/N(078)	PAINTED SURFACE	8	-26.19	08/29/94	13:25:00
X/N(080)	PAINTED SURFACE	7	-34.92	08/29/94	13:26:00
X/N(081)	PAINTED SURFACE	10	-8.73	08/29/94	13:28:00
X/N(082)	PAINTED SURFACE	8	-26.19	08/29/94	13:29:00
X/N(083)	PAINTED SURFACE	8	-26.19	08/29/94	13:30:00
X/N(084)	PAINTED SURFACE	5	-52.38	08/29/94	13:31:00
X/N(085)	PAINTED SURFACE	4	-61.11	08/29/94	13:33:00
X/N(086)	PAINTED SURFACE	6	-43.65	08/29/94	13:34:00
X/N(087)	PAINTED SURFACE	9	-17.46	08/29/94	13:36:00
X/N(088)	PAINTED SURFACE	20	78.57	08/29/94	13:37:00
X/N(090)	PAINTED SURFACE	11	0.00	08/29/94	13:38:00
X/N(091)	PAINTED SURFACE	6	-43.65	08/29/94	13:40:00
X/N(092)	PAINTED SURFACE	157	1274.55	08/29/94	13:41:00
X/N(093)	PAINTED SURFACE	21	87.30	08/29/94	13:42:00

A.3. Summary Data of Alpha Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
X/N(099)	PAINTED SURFACE	12	8.73	08/29/94	13:44:00
X/N(101)	PAINTED SURFACE	13	17.46	08/29/94	13:45:00
X/N(102)	PAINTED SURFACE	11	0.00	08/29/94	13:47:00
X/N(104)	PAINTED SURFACE	2	-78.57	08/29/94	13:52:00
X/N(106)	PAINTED SURFACE	7	-34.92	08/29/94	13:52:00
X/N(107)	PAINTED SURFACE	8	-26.19	08/29/94	13:54:00
X/N(109)	PAINTED SURFACE	1	-87.30	08/29/94	13:57:00
X/N(112)	PAINTED SURFACE	2	-78.57	08/29/94	14:00:00
X/N(113)	PAINTED SURFACE	3	-69.84	08/29/94	14:01:00
X/N(116)	PAINTED SURFACE	4	-61.11	08/29/94	14:03:00
X/N(121)	PAINTED SURFACE	11	0.00	08/29/94	14:04:00
X/N(130)	PAINTED SURFACE	9	-17.46	08/29/94	14:08:00
X/N(138)	PAINTED SURFACE	14	26.19	08/29/94	14:08:00
X/N(140)	PAINTED SURFACE	6	-43.65	08/29/94	14:09:00
X/N(144)	PAINTED SURFACE	11	0.00	08/29/94	14:18:00
X/N(147)	PAINTED SURFACE	12	8.73	08/29/94	14:20:00
X/N(151)	PAINTED SURFACE	14	26.19	08/29/94	14:22:00
X/N(156)	PAINTED SURFACE	18	61.11	08/29/94	14:23:00
X/N(158)	PAINTED SURFACE	15	34.92	08/29/94	14:25:00
X/N(161)	PAINTED SURFACE	5	-52.38	08/29/94	14:27:00
X/N(163)	PAINTED SURFACE	13	17.46	08/29/94	14:28:00
X/N(167)	PAINTED SURFACE	26	130.95	08/29/94	14:30:00
X/S(004)	PAINTED SURFACE	6	-43.65	08/29/94	08:00:00
X/S(035)	PAINTED SURFACE	5	-52.38	08/29/94	08:02:00
X/S(041)	PAINTED SURFACE	3	-69.84	08/29/94	08:04:00
X/S(042)	PAINTED SURFACE	8	-26.19	08/29/94	08:07:00
X/S(045)	PAINTED SURFACE	3	-69.84	08/29/94	08:09:00
X/S(046)	PAINTED SURFACE	7	-34.92	08/29/94	08:11:00
X/S(048)	PAINTED SURFACE	3	-69.84	08/29/94	08:14:00
X/S(049)	PAINTED SURFACE	3	-69.84	08/29/94	08:16:00
X/S(050)	PAINTED SURFACE	5	-52.38	08/29/94	08:18:00
X/S(054)	PAINTED SURFACE	1	-87.30	08/29/94	08:20:00
X/S(055)	PAINTED SURFACE	5	-52.38	08/29/94	08:22:00
X/S(057)	PAINTED SURFACE	12	8.73	08/29/94	08:24:00
X/S(059)	PAINTED SURFACE	7	-34.92	08/29/94	08:24:00
X/S(065)	PAINTED SURFACE	8	-26.19	08/29/94	08:26:00
X/S(067)	PAINTED SURFACE	2	-78.57	08/29/94	08:28:00
X/S(069)	PAINTED SURFACE	7	-34.92	08/29/94	08:30:00
X/S(072)	PAINTED SURFACE	13	17.46	08/29/94	08:33:00
X/S(074)	PAINTED SURFACE	12	8.73	08/29/94	08:35:00
X/S(078)	PAINTED SURFACE	6	-43.65	08/29/94	08:37:00
X/S(081)	PAINTED SURFACE	8	-26.19	08/29/94	08:39:00
X/S(087)	PAINTED SURFACE	14	26.19	08/29/94	08:44:00
X/S(089)	PAINTED SURFACE	4	-61.11	08/29/94	08:46:00
X/S(095)	PAINTED SURFACE	7	-34.92	08/29/94	08:49:00
X/S(096)	PAINTED SURFACE	1	-87.30	08/29/94	08:53:00
X/S(109)	PAINTED SURFACE	7	-34.92	08/29/94	08:55:00
X/S(110)	PAINTED SURFACE	8	-26.19	08/29/94	08:57:00

A.3. Summary Data of Alpha Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
X/S(111)	PAINTED SURFACE	6	-43.65	08/29/94	08:59:00
X/S(115)	PAINTED SURFACE	5	-52.38	08/29/94	09:05:00
X/S(118)	PAINTED SURFACE	5	-52.38	08/29/94	09:07:00
X/S(122)	PAINTED SURFACE	3	-69.84	08/29/94	09:09:00
X/S(128)	PAINTED SURFACE	9	-17.46	08/29/94	09:12:00
X/S(134)	PAINTED SURFACE	3	-69.84	08/29/94	09:14:00
X/S(135)	PAINTED SURFACE	3	-69.84	08/29/94	09:18:00
X/S(137)	PAINTED SURFACE	11	0.00	08/29/94	09:21:00
X/S(139)	PAINTED SURFACE	6	-43.65	08/29/94	09:23:00
X/S(140)	PAINTED SURFACE	19	69.84	08/29/94	09:26:00
X/S(141)	PAINTED SURFACE	70	515.06	08/29/94	09:28:00
X/S(142)	PAINTED SURFACE	36	218.25	08/29/94	09:32:00
X/S(143)	PAINTED SURFACE	7	-34.92	08/29/94	09:34:00
X/S(146)	PAINTED SURFACE	34	200.79	08/29/94	09:37:00
X/S(152)	PAINTED SURFACE	6	-43.65	08/29/94	09:39:00
X/S(153)	PAINTED SURFACE	4	-61.11	08/29/94	09:43:00
X/S(159)	PAINTED SURFACE	2	-78.57	08/29/94	09:45:00
X/S(163)	PAINTED SURFACE	5	-52.38	08/29/94	09:48:00
X/S(165)	PAINTED SURFACE	6	-43.65	08/29/94	09:50:00
X/S(169)	PAINTED SURFACE	7	-34.92	08/29/94	09:54:00
X/S(170)	PAINTED SURFACE	7	-34.92	08/29/94	09:57:00
X/W(006)	PAINTED SURFACE	23	104.76	08/29/94	14:39:00
X/W(011)	PAINTED SURFACE	158	1283.28	08/29/94	14:44:00
X/W(012)	PAINTED SURFACE	3	-69.84	08/29/94	14:45:00
X/W(014)	PAINTED SURFACE	2	-78.57	08/29/94	14:46:00
X/W(016)	PAINTED SURFACE	6	-43.65	08/29/94	14:47:00
X/W(017)	PAINTED SURFACE	19	69.84	08/29/94	14:48:00
X/W(024)	PAINTED SURFACE	1	-87.30	08/29/94	14:50:00
X/W(026)	PAINTED SURFACE	4	-61.11	08/29/94	14:52:00
X/W(029)	PAINTED SURFACE	5	-52.38	08/29/94	14:54:00
X/W(038)	PAINTED SURFACE	2	-78.57	08/29/94	15:00:00
X/W(040)	PAINTED SURFACE	1	-87.30	08/29/94	15:10:00
X/W(047)	PAINTED SURFACE	10	-8.73	08/29/94	15:06:00
X/W(048)	PAINTED SURFACE	28	148.41	08/29/94	15:01:00
X/W(050)	PAINTED SURFACE	5	-52.38	08/29/94	15:02:00
X/W(051)	PAINTED SURFACE	13	17.46	08/29/94	15:13:00
X/W(053)	PAINTED SURFACE	27	139.68	08/29/94	15:17:00
X/W(054)	PAINTED SURFACE	14	26.19	08/29/94	15:21:00
1/C(999)	PAINTED SURFACE	0	0.00	09/27/94	12:13:00
1/C(999)	PAINTED SURFACE	0	0.00	09/27/94	12:13:43
1/C(001)	PAINTED SURFACE	8	69.84	09/27/94	12:34:11
1/C(002)	PAINTED SURFACE	8	69.84	09/27/94	12:34:40
1/C(005)	PAINTED SURFACE	8	69.84	09/27/94	12:35:46
1/C(009)	PAINTED SURFACE	13	113.49	09/27/94	12:36:28
1/C(017)	PAINTED SURFACE	26	226.98	09/27/94	12:43:28
1/C(021)	PAINTED SURFACE	10	87.30	09/27/94	12:44:01
1/C(023)	PAINTED SURFACE	11	96.03	09/27/94	12:44:35
1/C(026)	PAINTED SURFACE	40	349.19	09/27/94	12:45:33

A.3. Summary Data of Alpha Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
1/C(029)	PAINTED SURFACE	8	69.84	09/27/94	12:46:37
1/C(033)	PAINTED SURFACE	28	244.43	09/27/94	12:55:43
1/C(037)	PAINTED SURFACE	6	52.38	09/27/94	12:56:39
1/C(041)	PAINTED SURFACE	7	61.11	09/27/94	12:57:43
1/C(043)	PAINTED SURFACE	8	69.84	09/27/94	12:58:47
1/C(045)	PAINTED SURFACE	20	174.60	09/27/94	12:59:20
1/C(049)	PAINTED SURFACE	14	122.22	09/27/94	13:05:30
1/C(053)	PAINTED SURFACE	14	122.22	09/27/94	13:06:15
1/C(057)	PAINTED SURFACE	4	34.92	09/27/94	13:07:40
1/C(059)	PAINTED SURFACE	18	157.14	09/27/94	13:08:49
1/C(065)	PAINTED SURFACE	16	139.68	09/27/94	13:09:56
1/C(069)	PAINTED SURFACE	32	279.35	09/27/94	13:15:34
1/C(073)	PAINTED SURFACE	7	61.11	09/27/94	13:16:18
1/C(077)	PAINTED SURFACE	16	139.68	09/27/94	13:17:00
1/C(080)	PAINTED SURFACE	21	183.33	09/27/94	13:17:53
1/C(084)	PAINTED SURFACE	18	157.14	09/27/94	13:18:30
1/C(089)	PAINTED SURFACE	16	139.68	09/27/94	13:21:57
1/C(092)	PAINTED SURFACE	10	87.30	09/27/94	13:22:56
1/C(096)	PAINTED SURFACE	18	157.14	09/27/94	13:23:54
1/C(098)	PAINTED SURFACE	20	174.60	09/27/94	13:24:37
1/C(100)	PAINTED SURFACE	28	244.43	09/27/94	13:25:53
1/C(104)	PAINTED SURFACE	12	104.76	09/27/94	13:30:02
1/C(107)	PAINTED SURFACE	32	279.35	09/27/94	13:30:51
1/C(110)	PAINTED SURFACE	12	104.76	09/27/94	13:31:29
1/C(112)	PAINTED SURFACE	12	104.76	09/27/94	13:32:00
1/C(115)	PAINTED SURFACE	18	157.14	09/27/94	13:32:56
1/C(117)	PAINTED SURFACE	16	139.68	09/27/94	13:49:07
1/C(122)	PAINTED SURFACE	26	226.98	09/27/94	13:50:20
1/C(119)	PAINTED SURFACE	14	122.22	09/27/94	13:51:19
1/C(127)	PAINTED SURFACE	14	122.22	09/27/94	13:51:51
1/C(131)	PAINTED SURFACE	16	139.68	09/27/94	13:52:23
1/C(132)	PAINTED SURFACE	14	122.22	09/27/94	13:53:11
1/C(135)	PAINTED SURFACE	21	183.33	09/27/94	13:54:23
1/C(139)	PAINTED SURFACE	14	122.22	09/27/94	13:55:53
1/C(135)	PAINTED SURFACE	21	183.33	09/27/94	14:13:03
1/C(139)	PAINTED SURFACE	14	122.22	09/27/94	14:13:51
1/C(143)	PAINTED SURFACE	12	104.76	09/27/94	14:14:58
1/C(147)	PAINTED SURFACE	6	52.38	09/27/94	14:17:10
1/C(151)	PAINTED SURFACE	26	226.98	09/27/94	14:19:47
1/C(156)	PAINTED SURFACE	22	192.06	09/27/94	14:22:46
1/C(159)	PAINTED SURFACE	72	628.55	09/27/94	14:25:19
1/C(151)	PAINTED SURFACE	26	226.98	09/28/94	08:24:12
1/C(156)	PAINTED SURFACE	22	192.06	09/28/94	08:25:06
1/C(159)	PAINTED SURFACE	72	628.55	09/28/94	08:26:30
1/C(163)	PAINTED SURFACE	14	122.22	09/28/94	08:27:35
1/C(167)	PAINTED SURFACE	12	104.76	09/28/94	08:29:24
1/C(171)	PAINTED SURFACE	10	87.30	09/28/94	08:32:21
1/C(175)	PAINTED SURFACE	8	69.84	09/28/94	08:33:39

A.3. Summary Data of Alpha Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
1/C(179)	PAINTED SURFACE	28	244.43	09/28/94	08:35:19
1/C(181)	PAINTED SURFACE	27	235.70	09/28/94	08:38:44
1/C(183)	PAINTED SURFACE	66	576.17	09/28/94	08:39:40
1/C(186)	PAINTED SURFACE	12	104.76	09/28/94	08:40:19
1/C(188)	PAINTED SURFACE	16	139.68	09/28/94	08:41:08
1/C(190)	PAINTED SURFACE	14	122.22	09/28/94	08:42:01
1/C(194)	PAINTED SURFACE	122	1065.04	09/28/94	08:43:03
1/C(198)	PAINTED SURFACE	38	331.73	09/28/94	08:45:49
1/C(200)	PAINTED SURFACE	26	226.98	09/28/94	08:52:00
1/C(203)	PAINTED SURFACE	17	148.41	09/28/94	08:57:34
1/C(208)	PAINTED SURFACE	62	541.25	09/28/94	08:59:51
1/C(214)	PAINTED SURFACE	10	87.30	09/28/94	09:04:27
1/C(218)	PAINTED SURFACE	17	148.41	09/28/94	09:06:04
1/C(222)	PAINTED SURFACE	19	165.87	09/28/94	09:09:19
1/C(230)	PAINTED SURFACE	15	130.95	09/28/94	09:10:48
1/C(232)	PAINTED SURFACE	21	183.33	09/28/94	09:11:47
1/C(235)	PAINTED SURFACE	16	139.68	09/28/94	09:12:59
1/C(239)	PAINTED SURFACE	11	96.03	09/28/94	09:14:08
1/C(243)	PAINTED SURFACE	29	253.16	09/28/94	10:17:59
1/C(245)	PAINTED SURFACE	14	122.22	09/28/94	10:19:24
1/C(247)	PAINTED SURFACE	11	96.03	09/28/94	10:22:06
1/C(251)	PAINTED SURFACE	18	157.14	09/28/94	10:23:42
1/C(255)	PAINTED SURFACE	13	113.49	09/28/94	10:24:38
1/C(260)	PAINTED SURFACE	36	314.27	09/28/94	10:25:29
1/C(070)	PAINTED SURFACE	15	130.95	09/28/94	13:10:43
1/C(071)	PAINTED SURFACE	1	8.73	09/28/94	13:15:48
1/C(210)	PAINTED SURFACE	4	34.92	09/28/94	09:00:11
2/C(999)	PAINTED SURFACE	0	0.00	09/27/94	12:10:24
2/C(999)	PAINTED SURFACE	0	0.00	09/27/94	12:15:01
2/C(001)	PAINTED SURFACE	32	279.35	09/28/94	10:26:44
2/C(004)	PAINTED SURFACE	25	218.25	09/28/94	10:27:20
2/C(008)	PAINTED SURFACE	34	296.81	09/28/94	10:28:05
2/C(010)	PAINTED SURFACE	25	218.25	09/28/94	10:29:17
2/C(014)	PAINTED SURFACE	22	192.06	09/28/94	10:30:05
2/C(017)	PAINTED SURFACE	21	183.33	09/28/94	10:36:07
2/C(020)	PAINTED SURFACE	22	192.06	09/28/94	10:39:03
2/C(023)	PAINTED SURFACE	16	139.68	09/28/94	10:40:15
2/C(026)	PAINTED SURFACE	26	226.98	09/28/94	10:41:12
2/C(032)	PAINTED SURFACE	19	165.87	09/28/94	10:41:53
2/C(033)	PAINTED SURFACE	28	244.43	09/28/94	10:43:11
2/C(041)	PAINTED SURFACE	34	296.81	09/28/94	10:44:24
2/C(044)	PAINTED SURFACE	28	244.43	09/28/94	10:46:17
2/C(048)	PAINTED SURFACE	20	174.60	09/28/94	10:47:09
2/C(050)	PAINTED SURFACE	32	279.35	09/28/94	10:49:35
2/C(053)	PAINTED SURFACE	15	130.95	09/28/94	10:59:16
2/C(064)	PAINTED SURFACE	29	253.16	09/28/94	11:06:53
2/C(065)	PAINTED SURFACE	26	226.98	09/28/94	12:51:59
2/C(075)	PAINTED SURFACE	37	323.00	09/28/94	13:21:57

A.3. Summary Data of Alpha Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
2/C(080)	PAINTED SURFACE	17	148.41	09/28/94	13:23:34
2/C(057)	PAINTED SURFACE	14	122.22	09/28/94	10:59:16
2/C(068)	PAINTED SURFACE	15	130.95	09/28/94	13:23:34
2/C(071)	PAINTED SURFACE	19	165.87	09/28/94	13:23:34
2/C(073)	PAINTED SURFACE	17	148.41	09/27/94	12:15:01
1/R(036)	PAINTED SURFACE	5	-187.69	10/03/94	08:35:06
1/R(037)	PAINTED SURFACE	10	-144.04	10/03/94	08:36:03
1/R(039)	PAINTED SURFACE	41	126.58	10/03/94	08:37:12
1/R(040)	PAINTED SURFACE	11	-135.31	10/03/94	08:39:16
1/R(042)	PAINTED SURFACE	13	-117.85	10/03/94	08:40:28
1/R(044)	PAINTED SURFACE	25	-13.09	10/03/94	08:41:58
1/R(046)	PAINTED SURFACE	22	-39.28	10/03/94	08:47:20
1/R(048)	PAINTED SURFACE	10	-144.04	10/03/94	08:48:09
1/R(049)	PAINTED SURFACE	15	-100.39	10/03/94	08:49:40
1/R(051)	PAINTED SURFACE	14	-109.12	10/03/94	08:53:27
1/R(052)	PAINTED SURFACE	4	-196.42	10/03/94	08:58:03
1/R(054)	PAINTED SURFACE	8	-161.50	10/03/94	09:00:28
1/R(059)	PAINTED SURFACE	5	-187.69	10/03/94	09:06:54
1/R(061)	PAINTED SURFACE	2	-213.88	10/03/94	09:07:55
1/R(063)	PAINTED SURFACE	5	-187.69	10/03/94	09:11:08
1/R(065)	PAINTED SURFACE	8	-161.50	10/03/94	09:12:23
1/R(067)	PAINTED SURFACE	5	-187.69	10/03/94	09:13:24
1/R(073)	PAINTED SURFACE	5	-187.69	10/03/94	09:14:09
1/R(075)	PAINTED SURFACE	10	-144.04	10/03/94	09:14:58
1/R(081)	PAINTED SURFACE	13	-117.85	10/03/94	09:15:50
1/R(091)	PAINTED SURFACE	5	-187.69	10/03/94	09:16:37
1/R(098)	PAINTED SURFACE	6	-178.96	10/03/94	09:17:16
1/R(098)	PAINTED SURFACE	6	-178.96	10/03/94	09:17:55
1/R(100)	PAINTED SURFACE	1	-222.61	10/03/94	09:18:48
1/R(104)	EXPOSED SURFACE	11	-135.31	10/03/94	09:19:42
1/R(105)	PAINTED SURFACE	2	-213.88	10/03/94	09:20:51
1/R(111)	PAINTED SURFACE	1	-222.61	10/03/94	09:22:55
1/R(113)	PAINTED SURFACE	11	-135.31	10/03/94	09:23:46
1/R(117)	PAINTED SURFACE	10	-144.04	10/03/94	09:24:44
1/R(120)	PAINTED SURFACE	10	-144.04	10/03/94	09:25:44
1/R(122)	PAINTED SURFACE	5	-187.69	10/03/94	09:26:39
1/R(124)	PAINTED SURFACE	13	-117.85	10/03/94	09:27:24
1/R(127)	PAINTED SURFACE	6	-178.96	10/03/94	09:29:06
1/R(129)	PAINTED SURFACE	3	-205.15	10/03/94	09:29:51
1/R(131)	PAINTED SURFACE	2	-213.88	10/03/94	09:30:29
1/R(135)	PAINTED SURFACE	5	-187.69	10/03/94	09:31:16
1/R(143)	PAINTED SURFACE	20	-56.74	10/03/94	09:32:01
1/R(149)	PAINTED SURFACE	10	-144.04	10/03/94	09:32:38
1/R(167)	PAINTED SURFACE	1	-222.61	10/03/94	09:33:25
1/R(172)	PAINTED SURFACE	16	-91.66	10/03/94	09:34:42
1/R(173)	PAINTED SURFACE	15	-100.39	10/03/94	09:36:22
1/R(175)	PAINTED SURFACE	211	1610.65	10/03/94	09:38:41
1/R(176)	PAINTED SURFACE	30	30.55	10/03/94	09:58:23

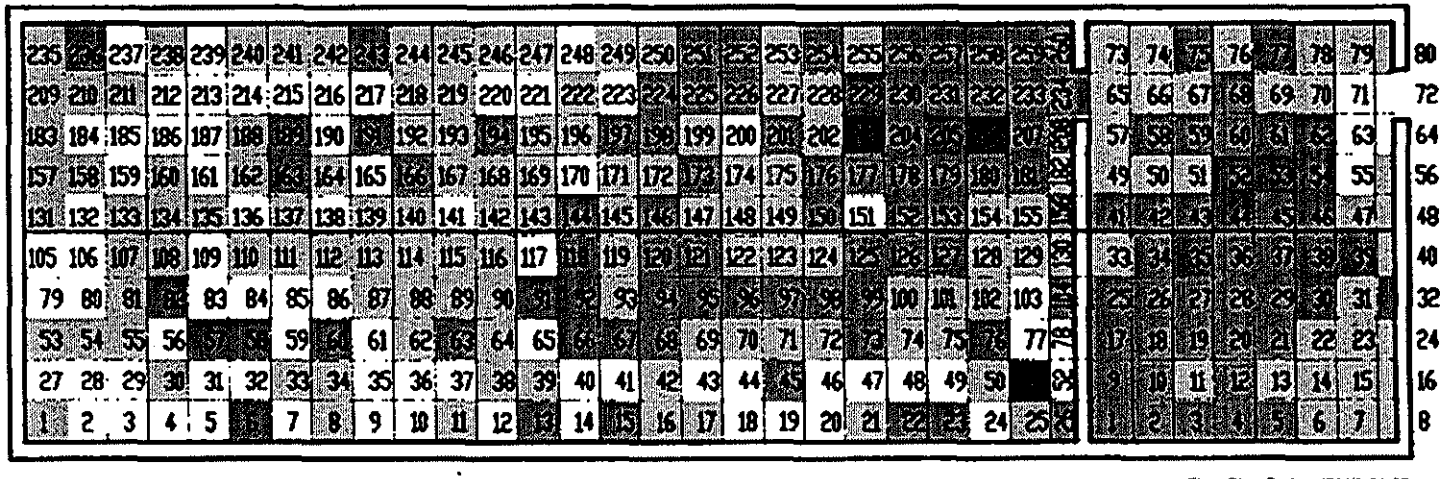
A.3. Summary Data of Alpha Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
1/R(179)	PAINTED SURFACE	25	-13.09	10/03/94	10:00:02
1/R(181)	PAINTED SURFACE	21	-48.01	10/03/94	10:01:07
1/R(184)	PAINTED SURFACE	10	-144.04	10/03/94	10:02:29
1/R(186)	PAINTED SURFACE	11	-135.31	10/03/94	10:03:47
1/R(189)	PAINTED SURFACE	10	-144.04	10/03/94	10:07:05
1/R(191)	PAINTED SURFACE	1	-222.61	10/03/94	10:07:48
1/R(194)	PAINTED SURFACE	4	-196.42	10/03/94	10:09:04
1/R(196)	PAINTED SURFACE	4	-196.42	10/03/94	10:24:22
1/R(199)	PAINTED SURFACE	11	-135.31	10/03/94	10:26:25
1/R(200)	PAINTED SURFACE	6	-178.96	10/03/94	10:27:37
1/R(203)	PAINTED SURFACE	1	-222.61	10/03/94	10:28:36
1/R(206)	PAINTED SURFACE	20	-56.74	10/03/94	10:29:35
1/R(208)	PAINTED SURFACE	26	-4.36	10/03/94	10:32:46
1/R(209)	PAINTED SURFACE	22	-39.28	10/03/94	10:33:58
1/R(210)	PAINTED SURFACE	12	-126.58	10/03/94	11:00:43
1/R(213)	PAINTED SURFACE	21	-48.01	10/03/94	11:02:14
1/R(215)	PAINTED SURFACE	15	-100.39	10/03/94	11:03:57
1/R(218)	PAINTED SURFACE	15	-100.39	10/03/94	11:06:16
1/R(220)	PAINTED SURFACE	5	-187.69	10/03/94	11:07:07
1/R(223)	PAINTED SURFACE	3	-205.15	10/03/94	11:08:32
1/R(224)	PAINTED SURFACE	15	-100.39	10/03/94	11:09:15
1/R(225)	PAINTED SURFACE	19.01	-65.39	10/03/94	11:10:40
1/R(228)	PAINTED SURFACE	11	-135.31	10/03/94	11:21:04
1/R(230)	PAINTED SURFACE	15	-100.39	10/03/94	11:22:01
1/R(233)	PAINTED SURFACE	12	-126.58	10/03/94	11:22:45
1/R(234)	PAINTED SURFACE	6	-178.96	10/03/94	11:23:41
1/R(235)	PAINTED SURFACE	6	-178.96	10/03/94	11:25:05
1/R(237)	PAINTED SURFACE	13	-117.85	10/03/94	11:25:49
1/R(240)	PAINTED SURFACE	25	-13.09	10/03/94	11:26:39
1/R(241)	PAINTED SURFACE	23	-30.55	10/03/94	11:27:28
1/R(250)	PAINTED SURFACE	16	-91.66	10/03/94	11:28:15
1/R(256)	PAINTED SURFACE	10	-144.04	10/03/94	11:29:13
1/R(263)	PAINTED SURFACE	7	-170.23	10/03/94	11:30:01
1/R(280)	PAINTED SURFACE	15	-100.39	10/03/94	11:30:49
1/R(287)	PAINTED SURFACE	13	-117.85	10/03/94	11:32:01
1/R(295)	PAINTED SURFACE	10	-144.04	10/03/94	11:33:04
1/R(298)	PAINTED SURFACE	11	-135.31	10/03/94	11:34:02
1/R(302)	PAINTED SURFACE	15	-100.39	10/03/94	11:34:59
1/R(308)	PAINTED SURFACE	5	-187.69	10/03/94	11:36:11
1/R(309)	PAINTED SURFACE	10	-144.04	10/03/94	11:38:38
1/R(312)	PAINTED SURFACE	7	-170.23	10/03/94	12:39:44
1/R(316)	PAINTED SURFACE	26	-4.36	10/03/94	12:40:42
1/R(319)	PAINTED SURFACE	20	-56.74	10/03/94	12:42:32
1/R(324)	PAINTED SURFACE	2	-213.88	10/03/94	12:43:30
1/R(326)	PAINTED SURFACE	13	-117.85	10/03/94	12:46:17
1/R(328)	PAINTED SURFACE	8	-161.50	10/03/94	12:47:29
1/R(331)	PAINTED SURFACE	10	-144.04	10/03/94	12:50:27
1/R(334)	PAINTED SURFACE	10	-144.04	10/03/94	12:51:52

A.3. Summary Data of Alpha Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
1/R(338)	PAINTED SURFACE	15	-100.39	10/03/94	12:54:36
1/R(339)	PAINTED SURFACE	4	-196.42	10/03/94	12:56:11
1/R(342)	PAINTED SURFACE	10	-144.04	10/03/94	12:56:59
1/R(344)	PAINTED SURFACE	21	-48.01	10/03/94	12:57:55
1/R(345)	PAINTED SURFACE	21	-48.01	10/03/94	12:59:47
1/R(346)	PAINTED SURFACE	16	-91.66	10/03/94	13:03:12
1/R(348)	PAINTED SURFACE	8	-161.50	10/03/94	13:05:15
1/R(350)	PAINTED SURFACE	10	-144.04	10/03/94	13:06:22
1/R(352)	PAINTED SURFACE	8	-161.50	10/03/94	13:08:01
1/R(353)	PAINTED SURFACE	21	-48.01	10/03/94	13:08:46
1/R(355)	PAINTED SURFACE	12	-126.58	10/03/94	13:09:33
1/R(357)	PAINTED SURFACE	5	-187.69	10/03/94	13:10:03
1/R(360)	PAINTED SURFACE	10	-144.04	10/03/94	13:11:18
1/R(362)	PAINTED SURFACE	15	-100.39	10/03/94	13:11:57
1/R(363)	PAINTED SURFACE	19	-65.47	10/03/94	13:13:02
1/R(365)	PAINTED SURFACE	10	-144.04	10/03/94	13:13:50
1/R(368)	PAINTED SURFACE	5	-187.69	10/03/94	13:14:50
1/R(369)	PAINTED SURFACE	70	379.75	10/03/94	13:16:01
1/R(369)	PAINTED SURFACE	10	-144.04	10/03/94	13:16:29
1/R(370)	PAINTED SURFACE	9	-152.77	10/03/94	13:17:26
1/R(373)	PAINTED SURFACE	1	-222.61	10/03/94	13:19:29
1/R(999)	PAINTED SURFACE	29	21.82	10/03/94	13:26:06
1/R(999)	PAINTED SURFACE	24	-21.82	10/03/94	13:34:06
1/R(057)	PAINTED SURFACE	10	-144.04	10/03/94	09:04:49
1/R(372)	PAINTED SURFACE	6	-178.96	10/03/94	13:18:12
1/S(038)	PAINTED SURFACE	94	554.34	09/19/94	16:23:00
1/S(038)	EXPOSED SURFACE	138	938.45	09/19/94	16:24:00
1/S(039)	PAINTED SURFACE	76	397.21	09/19/94	16:25:00
1/S(039)	EXPOSED SURFACE	81	440.86	09/19/94	16:26:00
1/S(085)	PAINTED SURFACE	8	-205.15	09/23/94	11:25:00
1/S(085)	EXPOSED SURFACE	3	-248.80	09/23/94	11:26:00
1/E(030)	PAINTED SURFACE	8	-205.15	09/21/94	09:30:00
1/C(013)	PAINTED SURFACE	2	17.46	09/27/94	12:39:51
1/C(226)	PAINTED SURFACE	26	226.98	09/28/94	09:09:57
1/C(230)	PAINTED SURFACE	15	130.95	09/28/94	09:10:48

A.4. Distribution of Beta/Gamma Radiation - Building 21

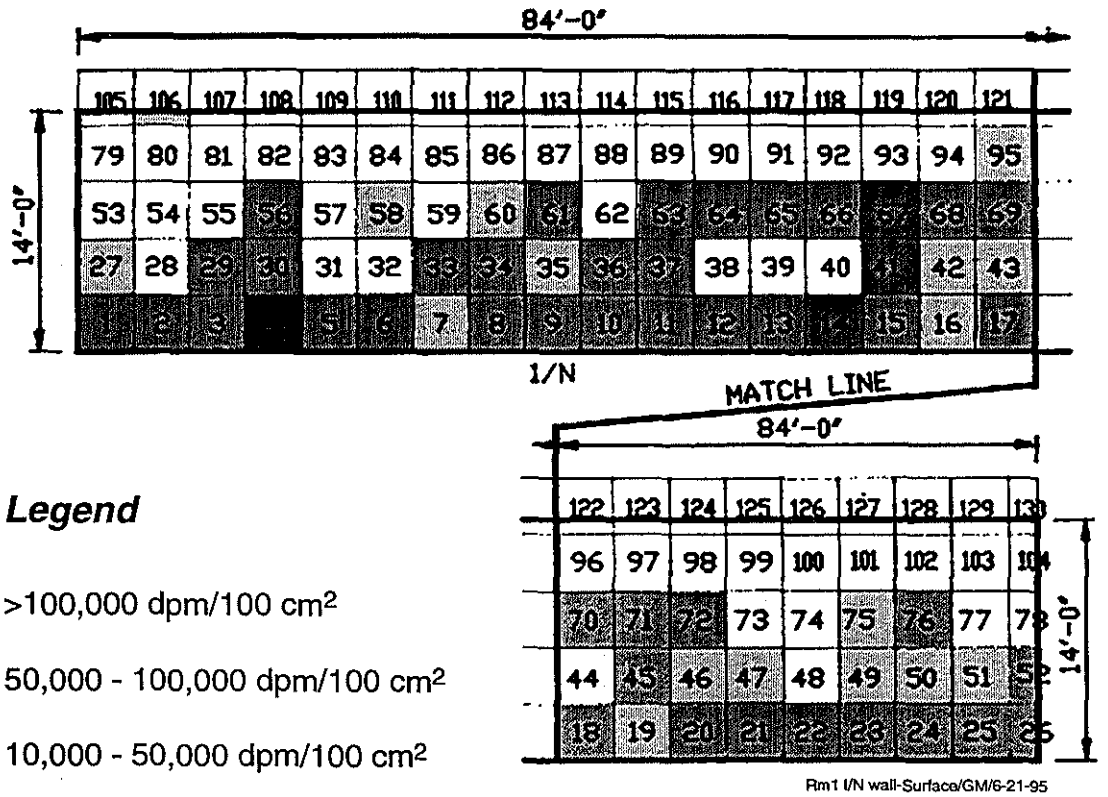


Floor Plan-Surface/GM/6-21-95

Legend

- >100,000 dpm/100 cm^2
- 50,000 - 100,000 dpm/100 cm^2
- 10,000 - 50,000 dpm/100 cm^2
- 5,000 - 10,000 dpm/100 cm^2
- < 5,000 dpm/100 cm^2

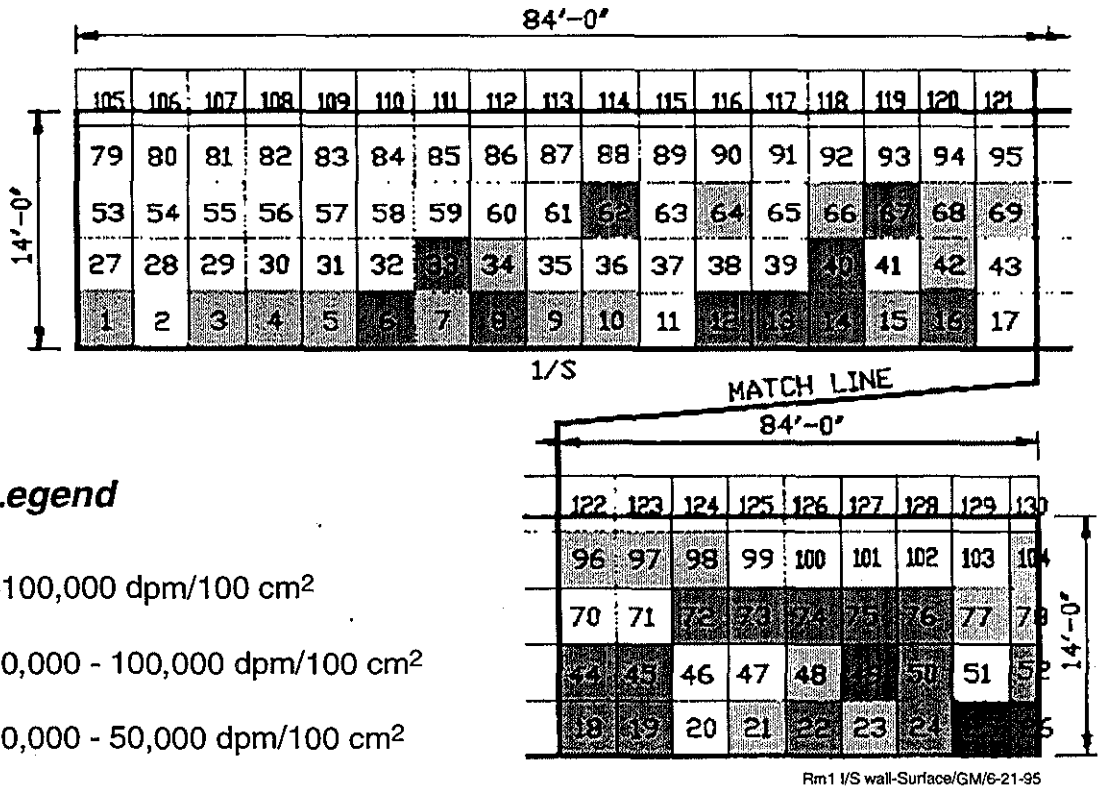
Total Beta/Gamma Surface Contamination - Building 21 Floor.



Legend

- >100,000 dpm/100 cm^2
- 50,000 - 100,000 dpm/100 cm^2
- 10,000 - 50,000 dpm/100 cm^2
- 5,000 - 10,000 dpm/100 cm^2
- < 5,000 dpm/100 cm^2

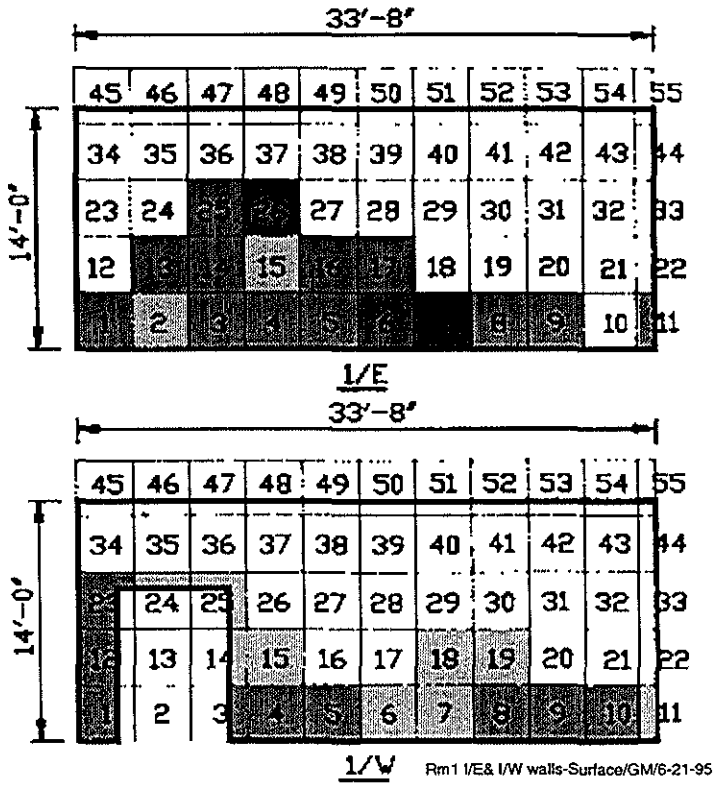
Total Beta/Gamma Surface Contamination - Building 21 Room 1 Interior North Wall (I/N)



Legend

- >100,000 dpm/100 cm^2
- 50,000 - 100,000 dpm/100 cm^2
- 10,000 - 50,000 dpm/100 cm^2
- 5,000 - 10,000 dpm/100 cm^2
- < 5,000 dpm/100 cm^2

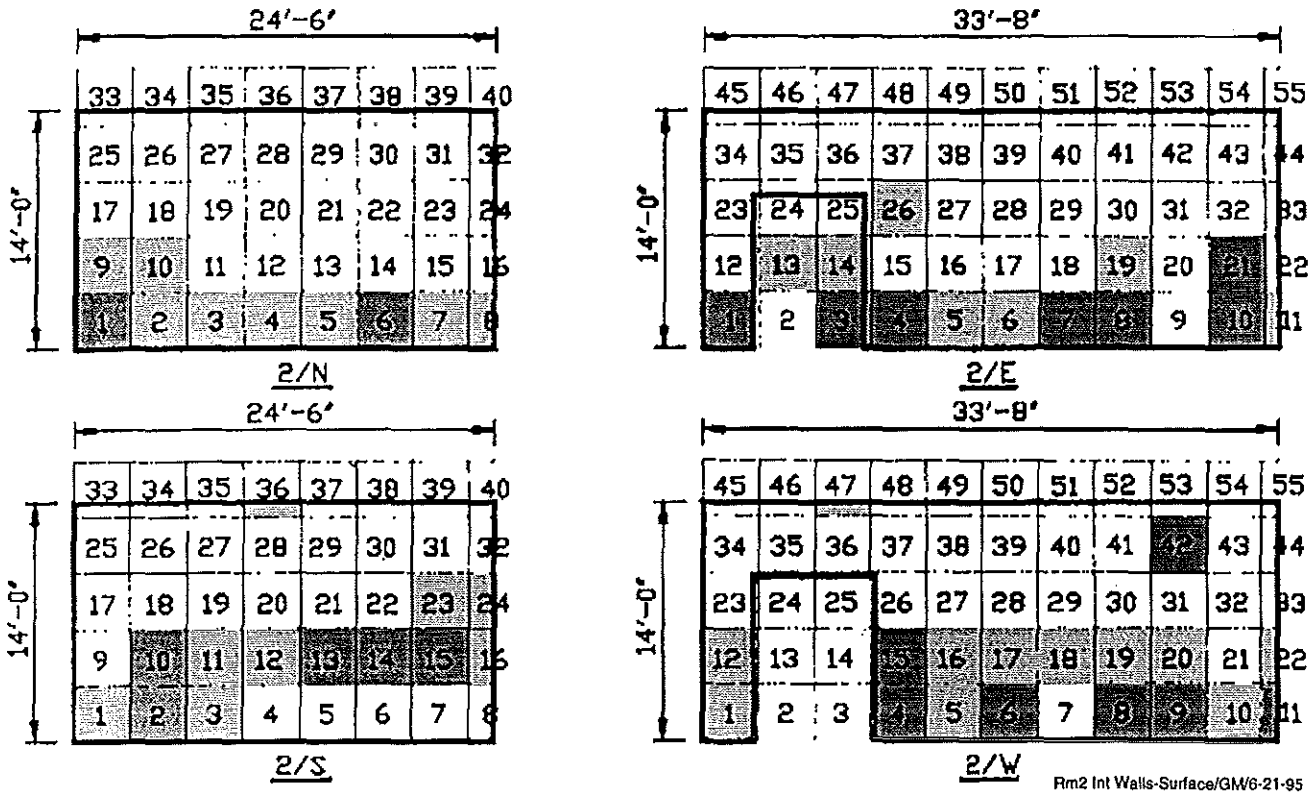
Total Beta/Gamma Surface Contamination - Building 21 Room 1 Interior South Wall (I/S).



Legend

- >100,000 dpm/100 cm^2
- 50,000 - 100,000 dpm/100 cm^2
- 10,000 - 50,000 dpm/100 cm^2
- 5,000 - 10,000 dpm/100 cm^2
- < 5,000 dpm/100 cm^2

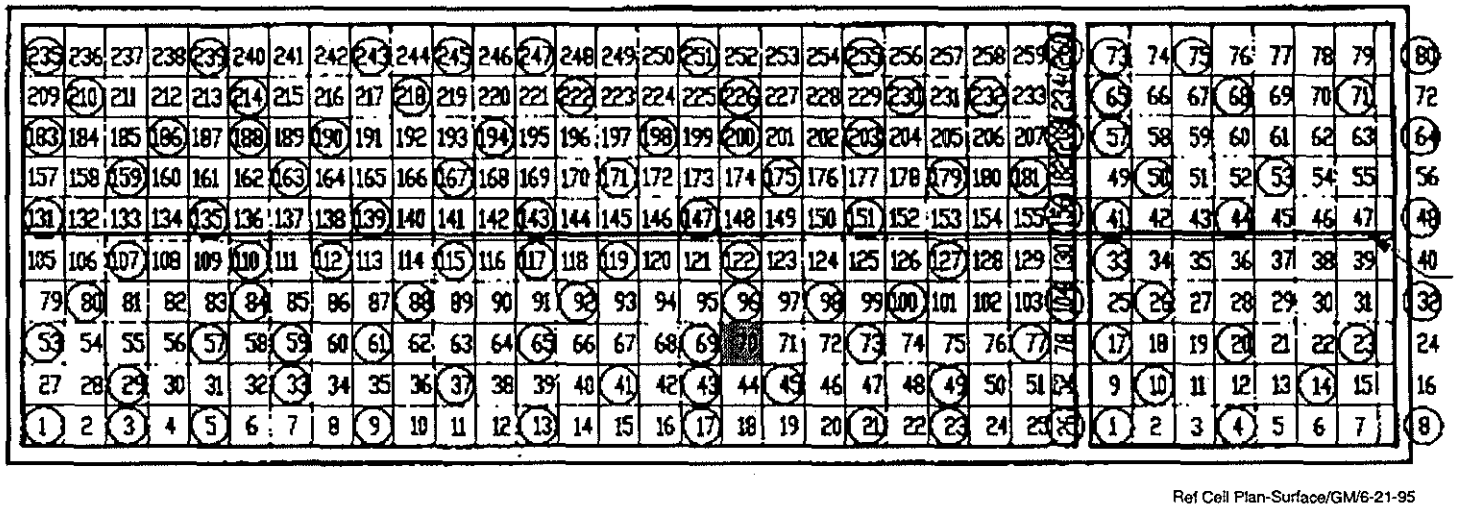
Total Beta/Gamma Surface Contamination - Building 21 Room 1
Interior East (1/E) and West (1/W) Walls



Legend

- >100,000 dpm/100 cm^2
- 50,000 - 100,000 dpm/100 cm^2
- 10,000 - 50,000 dpm/100 cm^2
- 5,000 - 10,000 dpm/100 cm^2
- < 5,000 dpm/100 cm^2

Total Beta/Gamma Surface Contamination -
Building 21 Room 2 Interior Walls (2/N,2/S,2/E,2/W)

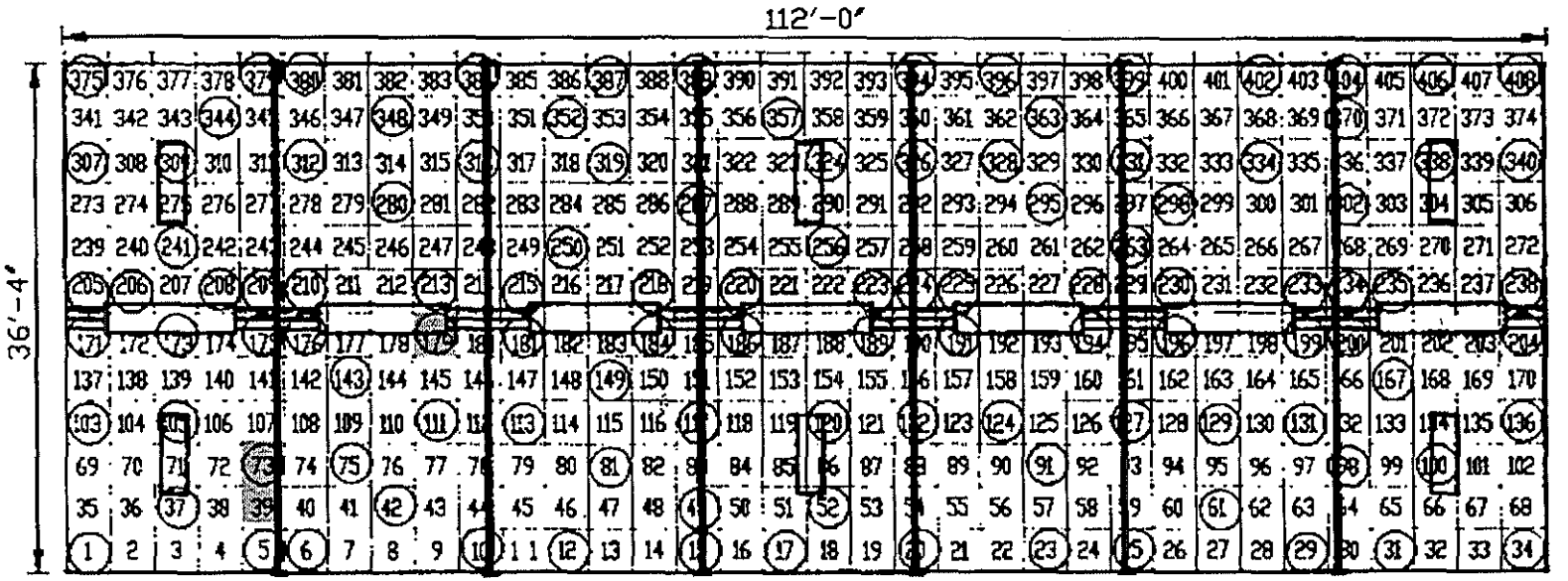


Ref Ceil Plan-Surface/GM/6-21-95

Legend

- >100,000 dpm/100 cm^2
- 50,000 - 100,000 dpm/100 cm^2
- 10,000 - 50,000 dpm/100 cm^2
- 5,000 - 10,000 dpm/100 cm^2
- < 5,000 dpm/100 cm^2

Total Beta/Gamma Surface Contamination - Building 21 Reflected Ceiling Plan

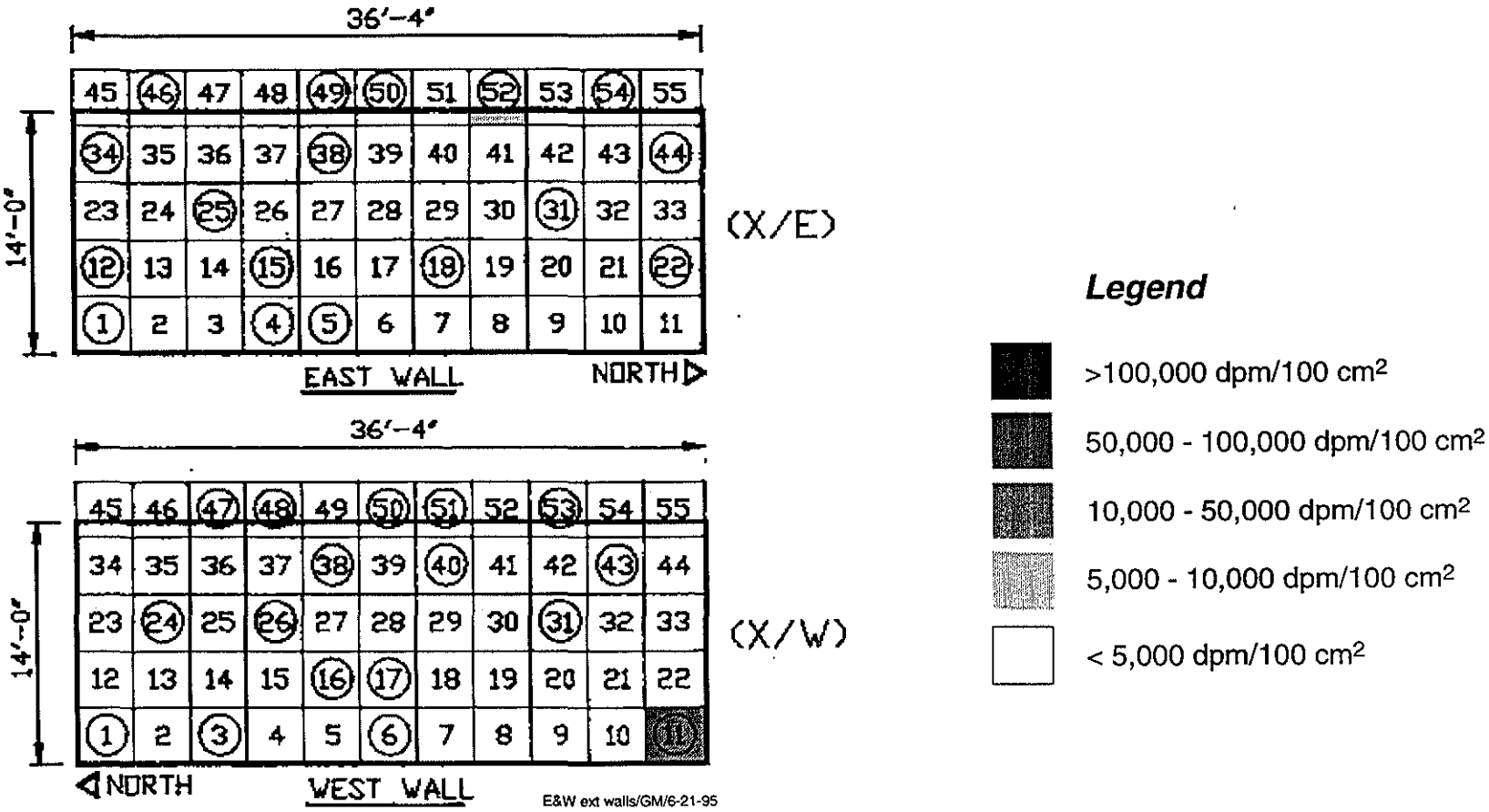


Roof Plan-Surface/GM/6-21-95

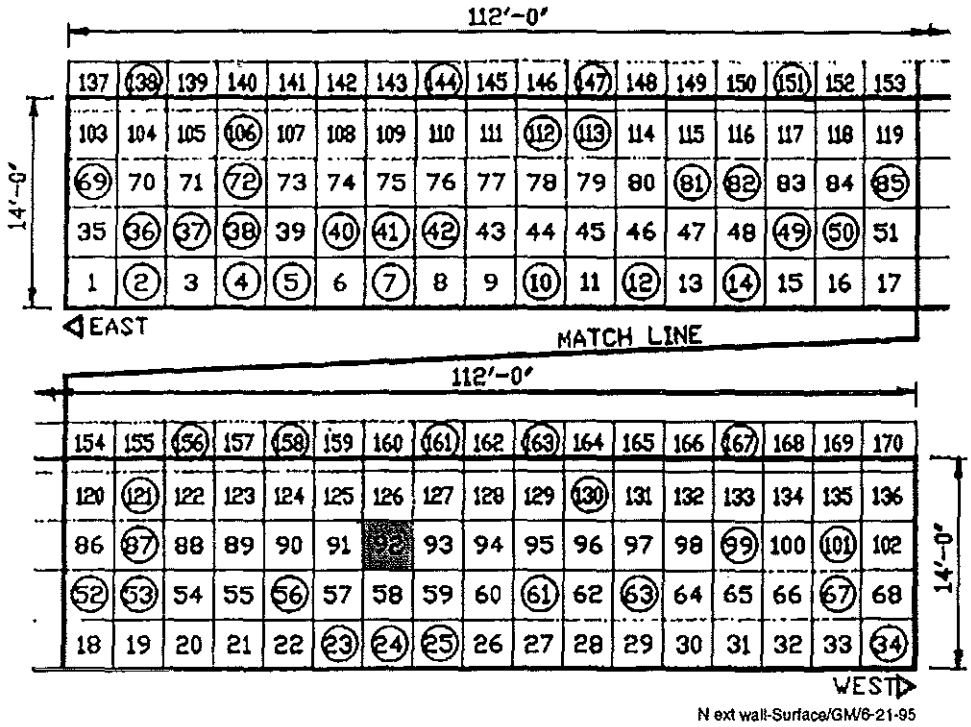
Legend

- >100,000 dpm/100 cm²
- 50,000 - 100,000 dpm/100 cm²
- 10,000 - 50,000 dpm/100 cm²
- 5,000 - 10,000 dpm/100 cm²
- < 5,000 dpm/100 cm²

Total Beta/Gamma Surface Contamination - Building 21 Roof.



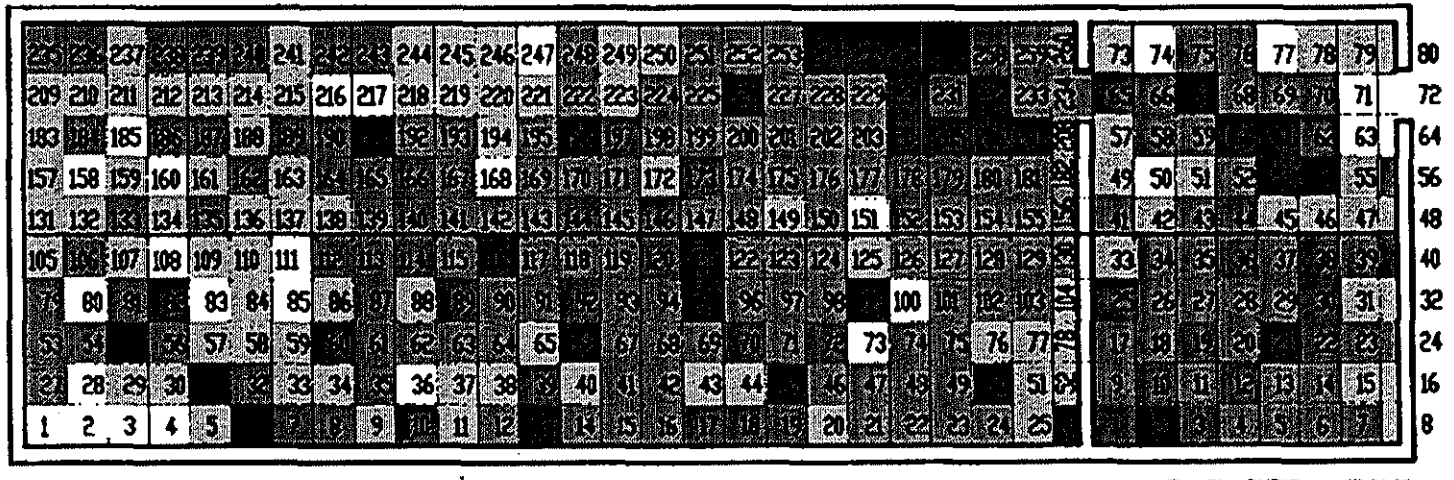
Total Beta/Gamma Surface Contamination - Building 21 East and West Exterior Walls.



Legend

- >100,000 dpm/100 cm^2
- 50,000 - 100,000 dpm/100 cm^2
- 10,000 - 50,000 dpm/100 cm^2
- 5,000 - 10,000 dpm/100 cm^2
- < 5,000 dpm/100 cm^2

Total Beta/Gamma Surface Contamination -
Building 21 North Exterior Wall (X/N) Sampling Locations.

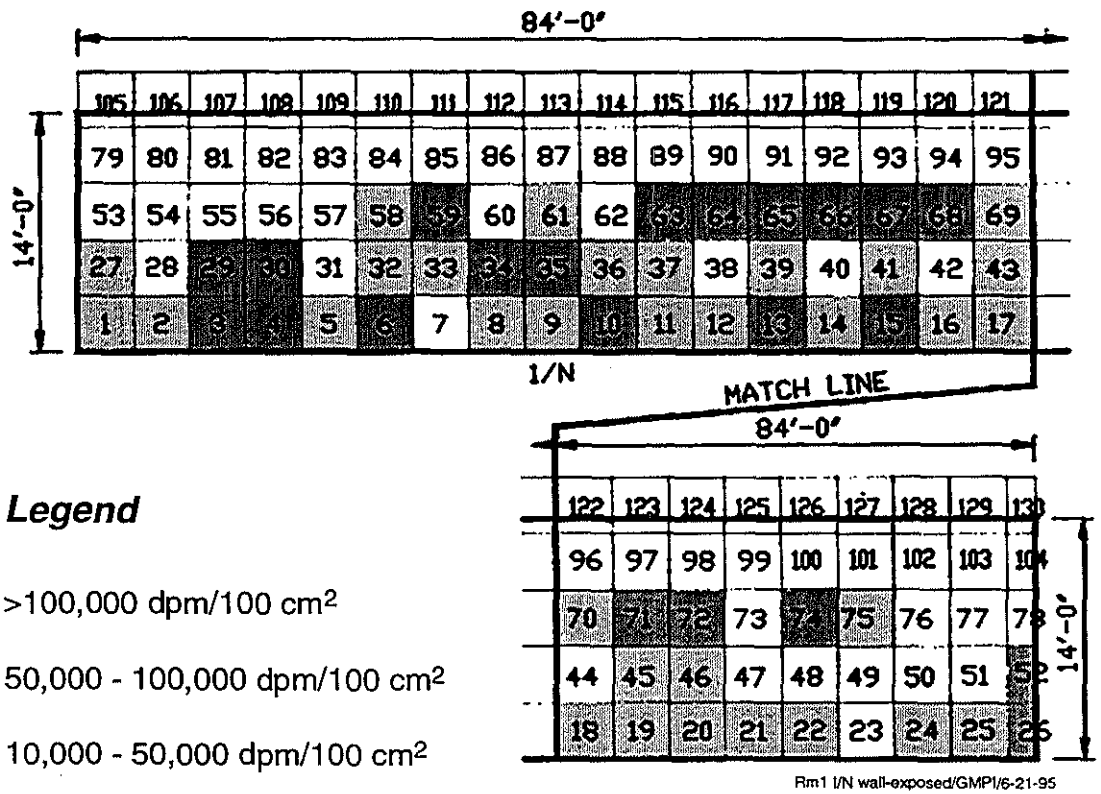


Floor Plan-GMPI Exposed/6-21-95

Legend

- >100,000 dpm/100 cm^2
- 50,000 - 100,000 dpm/100 cm^2
- 10,000 - 50,000 dpm/100 cm^2
- 5,000 - 10,000 dpm/100 cm^2
- < 5,000 dpm/100 cm^2

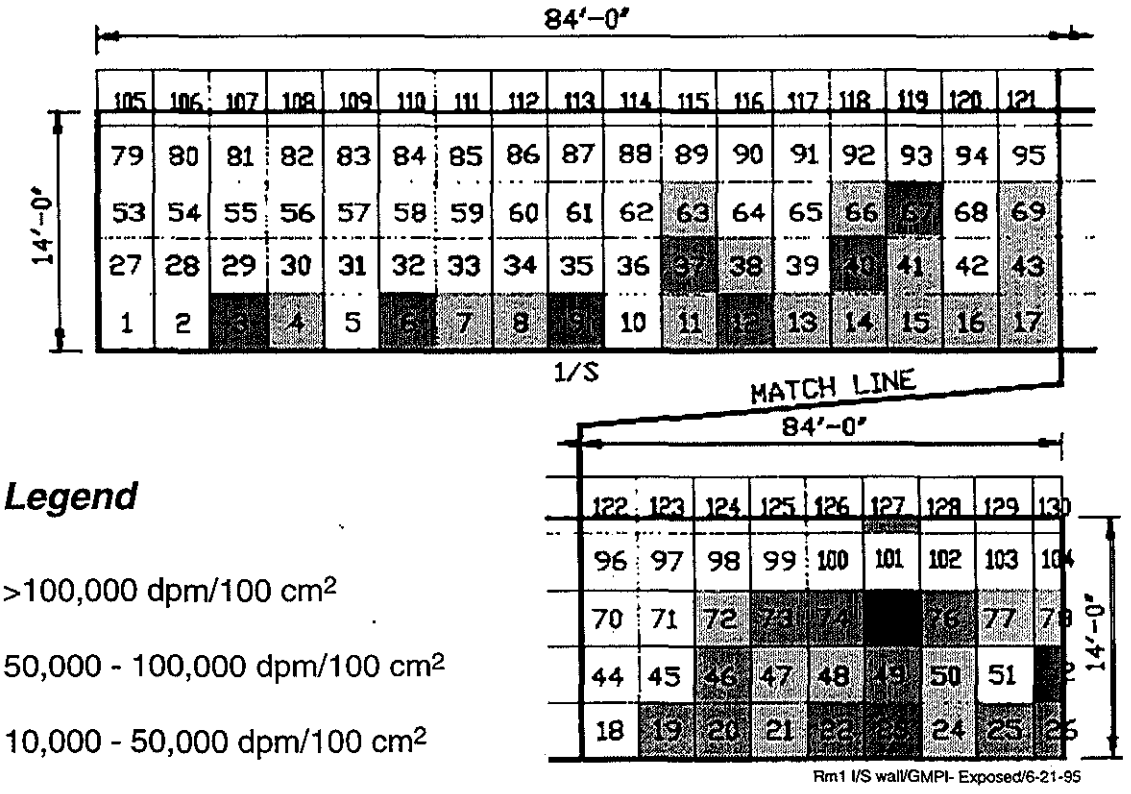
Total Exposed Beta/Gamma Contamination - Building 21 Floor.



Legend

- >100,000 dpm/100 cm^2
- 50,000 - 100,000 dpm/100 cm^2
- 10,000 - 50,000 dpm/100 cm^2
- 5,000 - 10,000 dpm/100 cm^2
- < 5,000 dpm/100 cm^2

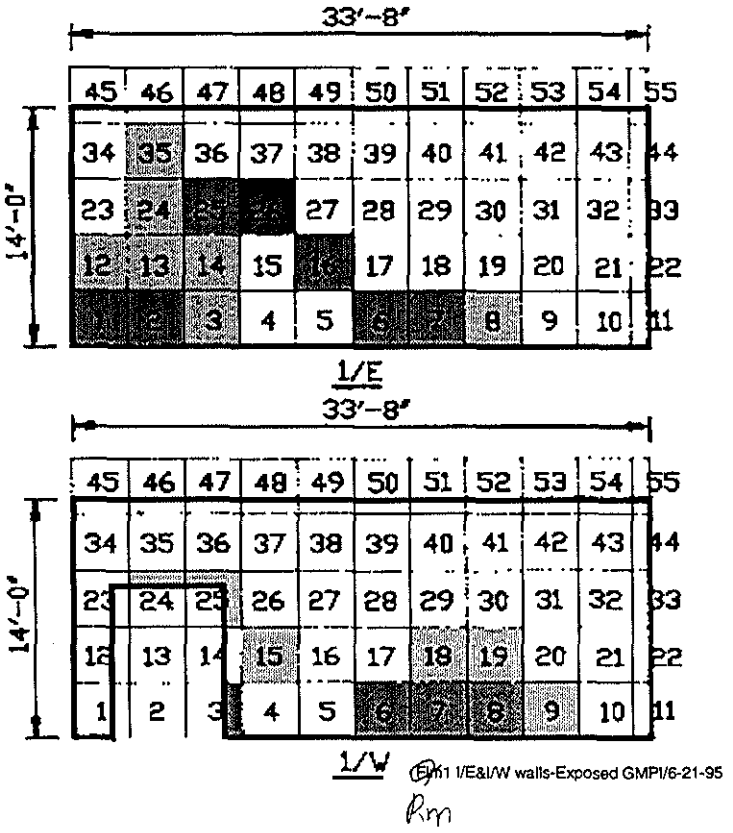
Total Exposed Beta/Gamma Contamination - Building 21 Room 1 Interior North Wall (I/N).



Legend

- >100,000 dpm/100 cm^2
- 50,000 - 100,000 dpm/100 cm^2
- 10,000 - 50,000 dpm/100 cm^2
- 5,000 - 10,000 dpm/100 cm^2
- < 5,000 dpm/100 cm^2

Total Exposed Beta/Gamma Contamination - Building 21 Room 1 Interior South Wall (I/S).



(Fig1 1/E&1/W walls-Exposed GMPI/6-21-95

Legend

- >100,000 dpm/100 cm^2
- 50,000 - 100,000 dpm/100 cm^2
- 10,000 - 50,000 dpm/100 cm^2
- 5,000 - 10,000 dpm/100 cm^2
- < 5,000 dpm/100 cm^2

Total Exposed Beta/Gamma Contamination - Building 21 Room 1 Interior East (1/E) and West (1/W) Walls.

A.5. Summary Data of Beta/Gamma Radiation Measurements- Building 21

A.5. Summary Data of Beta / Gamma Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
1/E(001)	PAINTED SURFACE	800	33410.14	09/21/94	08:02:00
1/E(001)	EXPOSED SURFACE	400	14976.96	09/21/94	08:34:00
1/E(002)	PAINTED SURFACE	260	8525.35	09/21/94	08:34:00
1/E(002)	EXPOSED SURFACE	380	14055.30	09/21/94	08:35:00
1/E(003)	PAINTED SURFACE	300	10368.66	09/21/94	08:36:00
1/E(003)	EXPOSED SURFACE	220	6682.03	09/21/94	08:36:00
1/E(004)	PAINTED SURFACE	320	11290.32	09/21/94	08:37:00
1/E(004)	EXPOSED SURFACE	180	4838.71	09/21/94	08:38:00
1/E(005)	PAINTED SURFACE	320	11290.32	09/21/94	08:38:00
1/E(005)	EXPOSED SURFACE	160	3917.05	09/21/94	08:39:00
1/E(006)	PAINTED SURFACE	1400	61059.91	09/21/94	08:39:00
1/E(006)	EXPOSED SURFACE	370	13594.47	09/21/94	08:46:00
1/E(007)	PAINTED SURFACE	4000	180875.58	09/21/94	08:46:00
1/E(007)	EXPOSED SURFACE	500	19585.25	09/21/94	08:47:00
1/E(008)	PAINTED SURFACE	360	13133.64	09/21/94	08:48:00
1/E(008)	EXPOSED SURFACE	190	5299.54	09/21/94	08:48:00
1/E(009)	PAINTED SURFACE	440	16820.28	09/21/94	08:49:00
1/E(009)	EXPOSED SURFACE	140	2995.39	09/21/94	08:49:00
1/E(010)	PAINTED SURFACE	150	3456.22	09/21/94	08:50:00
1/E(010)	EXPOSED SURFACE	60	-691.24	09/21/94	08:51:00
1/E(011)	PAINTED SURFACE	160	3917.05	09/21/94	08:52:00
1/E(011)	EXPOSED SURFACE	180	4838.71	09/21/94	09:00:00
1/E(011)	PAINTED SURFACE	500	19585.25	09/21/94	09:01:00
1/E(012)	EXPOSED SURFACE	200	5760.37	09/21/94	09:02:00
1/E(013)	PAINTED SURFACE	420	15898.62	09/21/94	09:03:00
1/E(013)	EXPOSED SURFACE	220	6682.03	09/21/94	09:03:00
1/E(014)	PAINTED SURFACE	300	10368.66	09/21/94	09:04:00
1/E(014)	EXPOSED SURFACE	200	5760.37	09/21/94	09:05:00
1/E(015)	PAINTED SURFACE	220	6682.03	09/21/94	09:06:00
1/E(015)	EXPOSED SURFACE	140	2995.39	09/21/94	09:07:00
1/E(016)	PAINTED SURFACE	1100	47235.02	09/21/94	09:08:00
1/E(016)	EXPOSED SURFACE	800	33410.14	09/21/94	09:15:00
1/E(017)	PAINTED SURFACE	600	24193.55	09/21/94	09:15:00
1/E(017)	EXPOSED SURFACE	100	1152.07	09/21/94	09:16:00
1/E(018)	PAINTED SURFACE	130	2534.56	09/21/94	09:17:00
1/E(018)	EXPOSED SURFACE	80	230.41	09/21/94	09:18:00
1/E(019)	PAINTED SURFACE	110	1612.90	09/21/94	09:19:00
1/E(019)	EXPOSED SURFACE	60	-691.24	09/21/94	09:20:00
1/E(020)	PAINTED SURFACE	90	691.24	09/21/94	09:21:00
1/E(020)	EXPOSED SURFACE	50	-1152.07	09/21/94	09:22:00
1/E(021)	PAINTED SURFACE	80	230.41	09/21/94	09:23:00
1/E(021)	EXPOSED SURFACE	70	-230.41	09/21/94	09:27:00
1/E(022)	PAINTED SURFACE	110	1612.90	09/21/94	09:28:00
1/E(022)	EXPOSED SURFACE	80	230.41	09/21/94	09:30:00
1/E(023)	PAINTED SURFACE	150	3456.22	09/21/94	09:31:00
1/E(023)	EXPOSED SURFACE	120	2073.73	09/21/94	09:32:00
1/E(024)	PAINTED SURFACE	180	4838.71	09/21/94	09:34:00
1/E(024)	EXPOSED SURFACE	200	5760.37	09/21/94	09:35:00

A.5. Summary Data of Beta / Gamma Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
1/E(025)	PAINTED SURFACE	600	24193.55	09/21/94	09:36:00
1/E(025)	EXPOSED SURFACE	1400	61059.91	09/21/94	09:37:00
1/E(026)	PAINTED SURFACE	1200	51843.32	09/21/94	09:38:00
1/E(026)	EXPOSED SURFACE	1900	84101.38	09/21/94	09:45:00
1/E(027)	PAINTED SURFACE	100	1152.07	09/21/94	09:46:00
1/E(027)	EXPOSED SURFACE	140	2995.39	09/21/94	09:47:00
1/E(028)	PAINTED SURFACE	120	2073.73	09/21/94	09:48:00
1/E(028)	EXPOSED SURFACE	80	230.41	09/21/94	09:48:00
1/E(029)	PAINTED SURFACE	60	-691.24	09/21/94	09:49:00
1/E(029)	EXPOSED SURFACE	70	-230.41	09/21/94	09:50:00
1/E(030)	PAINTED SURFACE	80	230.41	09/21/94	09:51:00
1/E(030)	EXPOSED SURFACE	60	-691.24	09/21/94	09:52:00
1/E(031)	PAINTED SURFACE	80	230.41	09/21/94	09:53:00
1/E(031)	EXPOSED SURFACE	100	1152.07	09/21/94	10:00:00
1/E(032)	PAINTED SURFACE	120	2073.73	09/21/94	10:01:00
1/E(032)	EXPOSED SURFACE	80	230.41	09/21/94	10:02:00
1/E(033)	PAINTED SURFACE	100	1152.07	09/21/94	10:03:00
1/E(033)	EXPOSED SURFACE	70	-230.41	09/21/94	10:04:00
1/E(034)	PAINTED SURFACE	100	1152.07	09/21/94	10:05:00
1/E(034)	EXPOSED SURFACE	80	230.41	09/21/94	10:05:00
1/E(035)	PAINTED SURFACE	100	1152.07	09/21/94	10:06:00
1/E(035)	EXPOSED SURFACE	240	7603.69	09/21/94	10:07:00
1/E(036)	PAINTED SURFACE	100	1152.07	09/21/94	10:08:00
1/E(036)	EXPOSED SURFACE	110	1612.90	09/21/94	10:29:00
1/E(037)	PAINTED SURFACE	80	230.41	09/21/94	10:30:00
1/E(037)	EXPOSED SURFACE	100	1152.07	09/21/94	10:36:00
1/E(038)	EXPOSED SURFACE	100	1152.07	09/21/94	10:31:00
1/E(038)	PAINTED SURFACE	80	230.41	09/21/94	10:32:00
1/E(039)	PAINTED SURFACE	100	1152.07	09/21/94	10:32:00
1/E(039)	EXPOSED SURFACE	80	230.41	09/21/94	10:33:00
1/E(040)	PAINTED SURFACE	100	1152.07	09/21/94	10:33:00
1/E(040)	EXPOSED SURFACE	100	1152.07	09/21/94	10:34:00
1/E(041)	PAINTED SURFACE	90	691.24	09/21/94	10:38:00
1/E(041)	EXPOSED SURFACE	70	-230.41	09/21/94	11:10:00
1/E(042)	PAINTED SURFACE	80	230.41	09/21/94	11:11:00
1/E(042)	EXPOSED SURFACE	50	-1152.07	09/21/94	11:12:00
1/E(043)	PAINTED SURFACE	100	1152.07	09/21/94	11:13:00
1/E(043)	EXPOSED SURFACE	80	230.41	09/21/94	11:14:00
1/E(044)	PAINTED SURFACE	80	230.41	09/21/94	11:15:00
1/E(044)	EXPOSED SURFACE	90	691.24	09/21/94	11:15:00
1/E(045)	PAINTED SURFACE	85	460.83	09/21/94	11:16:00
1/E(045)	EXPOSED SURFACE	60	-691.24	09/21/94	11:16:00
1/E(046)	PAINTED SURFACE	130	2534.56	09/21/94	11:18:00
1/E(046)	EXPOSED SURFACE	50	-1152.07	09/21/94	11:18:00
1/E(047)	PAINTED SURFACE	80	230.41	09/21/94	11:19:00
1/E(047)	EXPOSED SURFACE	60	-691.24	09/21/94	11:20:00
1/E(048)	PAINTED SURFACE	95	921.66	09/21/94	11:21:00
1/E(048)	EXPOSED SURFACE	50	-1152.07	09/21/94	11:21:00

A.5. Summary Data of Beta / Gamma Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
1/E(049)	PAINTED SURFACE	70	-230.41	09/21/94	11:22:00
1/E(049)	EXPOSED SURFACE	85	460.83	09/21/94	11:23:00
1/E(050)	PAINTED SURFACE	100	1152.07	09/21/94	11:23:00
1/E(050)	EXPOSED SURFACE	140	2995.39	09/21/94	11:24:00
1/E(051)	PAINTED SURFACE	80	230.41	09/21/94	11:25:00
1/E(051)	EXPOSED SURFACE	80	230.41	09/21/94	11:26:00
1/E(052)	PAINTED SURFACE	85	460.83	09/21/94	11:26:00
1/E(052)	EXPOSED SURFACE	90	691.24	09/21/94	11:27:00
1/E(053)	PAINTED SURFACE	100	1152.07	09/21/94	11:27:00
1/E(053)	EXPOSED SURFACE	60	-691.24	09/21/94	11:28:00
1/E(054)	PAINTED SURFACE	60	-691.24	09/21/94	11:28:00
1/E(054)	EXPOSED SURFACE	60	-691.24	09/21/94	11:29:00
1/E(055)	PAINTED SURFACE	90	691.24	09/21/94	11:30:00
1/E(055)	EXPOSED SURFACE	80	230.41	09/21/94	11:30:00
1/E(999)	PAINTED SURFACE	80	230.41	09/21/94	08:00:00
1/E(999)	PAINTED SURFACE	70	-230.41	09/21/94	08:01:00
1/F(001)	PAINTED SURFACE	200	5898.62	09/08/94	09:39:00
1/F(001)	EXPOSED SURFACE	140	3133.64	09/08/94	09:40:00
1/F(002)	PAINTED SURFACE	160	4055.30	09/08/94	09:42:00
1/F(002)	EXPOSED SURFACE	120	2211.98	09/08/94	09:42:00
1/F(003)	PAINTED SURFACE	160	4055.30	09/08/94	09:45:00
1/F(003)	EXPOSED SURFACE	170	4516.13	09/08/94	09:46:00
1/F(004)	PAINTED SURFACE	160	4055.30	09/08/94	09:48:00
1/F(004)	EXPOSED SURFACE	120	2211.98	09/08/94	09:49:00
1/F(005)	PAINTED SURFACE	175	4746.54	09/08/94	09:49:00
1/F(005)	EXPOSED SURFACE	220	6820.28	09/08/94	09:50:00
1/F(006)	PAINTED SURFACE	440	16958.53	09/08/94	10:07:00
1/F(006)	EXPOSED SURFACE	3000	134930.88	09/08/94	10:10:00
1/F(007)	PAINTED SURFACE	120	2211.98	09/08/94	10:11:00
1/F(007)	EXPOSED SURFACE	460	17880.18	09/08/94	10:13:00
1/F(008)	PAINTED SURFACE	240	7741.94	09/08/94	10:17:00
1/F(008)	EXPOSED SURFACE	900	38156.68	09/08/94	10:21:00
1/F(009)	PAINTED SURFACE	150	3594.47	09/08/94	10:22:00
1/F(009)	EXPOSED SURFACE	200	5898.62	09/08/94	10:27:00
1/F(010)	PAINTED SURFACE	150	3594.47	09/08/94	10:28:00
1/F(010)	EXPOSED SURFACE	1400	61198.16	09/08/94	10:29:00
1/F(011)	PAINTED SURFACE	250	8202.76	09/08/94	10:32:00
1/F(011)	EXPOSED SURFACE	190	5437.79	09/08/94	10:33:00
1/F(012)	PAINTED SURFACE	160	4055.30	09/08/94	10:34:00
1/F(012)	EXPOSED SURFACE	320	11428.57	09/08/94	10:38:00
1/F(013)	PAINTED SURFACE	420	16036.87	09/08/94	10:40:00
1/F(013)	EXPOSED SURFACE	2500	111889.40	09/08/94	10:41:00
1/F(014)	PAINTED SURFACE	160	4055.30	09/08/94	10:43:00
1/F(014)	EXPOSED SURFACE	290	10046.08	09/08/94	10:44:00
1/F(015)	PAINTED SURFACE	320	11428.57	09/08/94	10:45:00
1/F(015)	EXPOSED SURFACE	800	33548.39	09/08/94	10:47:00
1/F(016)	PAINTED SURFACE	200	5898.62	09/08/94	10:48:00
1/F(016)	EXPOSED SURFACE	300	10506.91	09/08/94	10:50:00

A.5. Summary Data of Beta / Gamma Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
1/F(017)	PAINTED SURFACE	260	8663.59	09/08/94	10:51:00
1/F(017)	EXPOSED SURFACE	1800	79631.34	09/08/94	10:52:00
1/F(018)	PAINTED SURFACE	165	4285.71	09/08/94	10:54:00
1/F(018)	EXPOSED SURFACE	1400	61198.16	09/08/94	10:55:00
1/F(019)	PAINTED SURFACE	110	1751.15	09/08/94	10:56:00
1/F(019)	EXPOSED SURFACE	1650	72718.89	09/08/94	10:57:00
1/F(020)	PAINTED SURFACE	140	3133.64	09/08/94	10:59:00
1/F(020)	EXPOSED SURFACE	280	9585.25	09/08/94	11:00:00
1/F(021)	PAINTED SURFACE	220	6820.28	09/08/94	11:10:00
1/F(021)	EXPOSED SURFACE	420	16036.87	09/08/94	11:12:00
1/F(022)	PAINTED SURFACE	880	37235.02	09/08/94	11:14:00
1/F(022)	EXPOSED SURFACE	650	26635.94	09/08/94	11:17:00
1/F(023)	PAINTED SURFACE	420	16036.87	09/08/94	11:19:00
1/F(023)	EXPOSED SURFACE	600	24331.80	09/08/94	11:21:00
1/F(024)	PAINTED SURFACE	190	5437.79	09/08/94	11:23:00
1/F(024)	EXPOSED SURFACE	360	13271.89	09/08/94	11:24:00
1/F(025)	PAINTED SURFACE	200	5898.62	09/08/94	11:25:00
1/F(025)	EXPOSED SURFACE	240	7741.94	09/08/94	11:26:00
1/F(026)	PAINTED SURFACE	420	16036.87	09/08/94	11:27:00
1/F(026)	EXPOSED SURFACE	4100	185622.12	09/08/94	11:29:00
1/F(027)	PAINTED SURFACE	180	4976.96	09/08/94	11:31:00
1/F(027)	EXPOSED SURFACE	300	10506.91	09/08/94	11:32:00
1/F(028)	PAINTED SURFACE	120	2211.98	09/08/94	11:37:00
1/F(028)	EXPOSED SURFACE	120	2211.98	09/08/94	11:39:00
1/F(029)	PAINTED SURFACE	145	3364.06	09/08/94	11:38:00
1/F(029)	EXPOSED SURFACE	240	7741.94	09/08/94	11:42:00
1/F(030)	PAINTED SURFACE	210	6359.45	09/08/94	11:47:00
1/F(030)	EXPOSED SURFACE	230	7281.11	09/08/94	11:48:00
1/F(031)	PAINTED SURFACE	120	2211.98	09/08/94	11:51:00
1/F(031)	EXPOSED SURFACE	4000	181013.82	09/08/94	11:52:00
1/F(032)	PAINTED SURFACE	140	3133.64	09/08/94	11:53:00
1/F(032)	EXPOSED SURFACE	850	35852.53	09/08/94	11:54:00
1/F(033)	PAINTED SURFACE	185	5207.37	09/08/94	11:58:00
1/F(033)	EXPOSED SURFACE	185	5207.37	09/08/94	11:59:00
1/F(034)	PAINTED SURFACE	200	5898.62	09/08/94	12:00:00
1/F(034)	EXPOSED SURFACE	230	7281.11	09/08/94	12:01:00
1/F(035)	PAINTED SURFACE	145	3364.06	09/08/94	12:02:00
1/F(035)	EXPOSED SURFACE	775	32396.31	09/08/94	12:04:00
1/F(036)	PAINTED SURFACE	190	5437.79	09/08/94	12:06:00
1/F(036)	EXPOSED SURFACE	140	3133.64	09/08/94	12:08:00
1/F(037)	PAINTED SURFACE	190	5437.79	09/08/94	12:10:00
1/F(037)	EXPOSED SURFACE	280	9585.25	09/08/94	12:13:00
1/F(037)	EXPOSED SURFACE	420	16129.03	09/19/94	16:26:00
1/F(038)	PAINTED SURFACE	240	7741.94	09/08/94	12:27:00
1/F(038)	EXPOSED SURFACE	280	9585.25	09/08/94	12:29:00
1/F(038)	PAINTED SURFACE	190	5529.95	09/19/94	16:27:00
1/F(038)	PAINTED SURFACE	190	5184.33	09/23/94	10:23:00
1/F(038)	EXPOSED SURFACE	330	11635.94	09/23/94	10:25:00

A.5. Summary Data of Beta / Gamma Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
1/F(039)	PAINTED SURFACE	260	8663.59	09/08/94	12:30:00
1/F(039)	EXPOSED SURFACE	1500	65806.45	09/08/94	12:31:00
1/F(039)	PAINTED SURFACE	180	4723.50	09/23/94	10:26:00
1/F(039)	EXPOSED SURFACE	180	4723.50	09/23/94	10:27:00
1/F(040)	PAINTED SURFACE	180	4976.96	09/08/94	12:32:00
1/F(040)	EXPOSED SURFACE	260	8663.59	09/08/94	12:33:00
1/F(041)	PAINTED SURFACE	120	2211.98	09/08/94	12:35:00
1/F(041)	EXPOSED SURFACE	420	16036.87	09/08/94	12:36:00
1/F(042)	PAINTED SURFACE	200	5898.62	09/08/94	12:36:00
1/F(042)	EXPOSED SURFACE	420	16036.87	09/08/94	12:39:00
1/F(043)	PAINTED SURFACE	160	4055.30	09/08/94	12:40:00
1/F(043)	EXPOSED SURFACE	190	5437.79	09/08/94	12:41:00
1/F(044)	PAINTED SURFACE	180	4976.96	09/08/94	12:42:00
1/F(044)	EXPOSED SURFACE	260	8663.59	09/08/94	12:43:00
1/F(045)	PAINTED SURFACE	360	13271.89	09/08/94	12:44:00
1/F(045)	EXPOSED SURFACE	4000	181013.82	09/08/94	12:46:00
1/F(046)	PAINTED SURFACE	220	6820.28	09/08/94	14:18:00
1/F(046)	EXPOSED SURFACE	300	10506.91	09/08/94	14:40:00
1/F(047)	PAINTED SURFACE	300	10506.91	09/08/94	14:41:00
1/F(047)	EXPOSED SURFACE	400	15115.21	09/08/94	14:42:00
1/F(048)	PAINTED SURFACE	160	4055.30	09/08/94	14:44:00
1/F(048)	EXPOSED SURFACE	300	10506.91	09/08/94	14:46:00
1/F(049)	PAINTED SURFACE	190	5437.79	09/08/94	14:49:00
1/F(049)	EXPOSED SURFACE	290	10046.08	09/08/94	14:50:00
1/F(050)	PAINTED SURFACE	250	8202.76	09/08/94	14:51:00
1/F(050)	EXPOSED SURFACE	5000	227096.77	09/08/94	14:52:00
1/F(051)	PAINTED SURFACE	120	2211.98	09/08/94	14:55:00
1/F(051)	EXPOSED SURFACE	350	12811.06	09/08/94	14:56:00
1/F(051)	PAINTED SURFACE	2500	111213.52	09/20/94	12:51:00
1/F(051)	EXPOSED SURFACE	240	7066.05	09/20/94	13:53:00
1/F(051)	PAINTED SURFACE	2500	111635.94	09/23/94	10:18:00
1/F(051)	EXPOSED SURFACE	240	7488.48	09/23/94	10:21:00
1/F(052)	PAINTED SURFACE	220	6820.28	09/08/94	14:57:00
1/F(052)	EXPOSED SURFACE	230	7281.11	09/08/94	14:59:00
1/F(053)	PAINTED SURFACE	200	5898.62	09/08/94	15:01:00
1/F(053)	EXPOSED SURFACE	900	38156.68	09/08/94	15:02:00
1/F(054)	PAINTED SURFACE	200	5898.62	09/08/94	15:03:00
1/F(054)	EXPOSED SURFACE	500	19723.50	09/08/94	15:04:00
1/F(055)	PAINTED SURFACE	250	8202.76	09/08/94	15:05:00
1/F(055)	EXPOSED SURFACE	4500	204055.30	09/08/94	15:06:00
1/F(056)	PAINTED SURFACE	160	4055.30	09/08/94	15:12:00
1/F(056)	EXPOSED SURFACE	300	10506.91	09/08/94	15:16:00
1/F(056)	PAINTED SURFACE	80	-307.22	09/20/94	14:17:00
1/F(057)	PAINTED SURFACE	450	17419.35	09/08/94	15:18:00
1/F(057)	EXPOSED SURFACE	260	8663.59	09/08/94	15:20:00
1/F(058)	PAINTED SURFACE	340	12350.23	09/08/94	15:21:00
1/F(058)	EXPOSED SURFACE	260	8663.59	09/08/94	15:22:00
1/F(059)	PAINTED SURFACE	220	6820.28	09/08/94	15:24:00

A.5. Summary Data of Beta / Gamma Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
1/F(059)	EXPOSED SURFACE	280	9585.25	09/08/94	15:30:00
1/F(060)	PAINTED SURFACE	400	15115.21	09/08/94	15:31:00
1/F(060)	EXPOSED SURFACE	1300	56589.86	09/08/94	15:35:00
1/F(061)	PAINTED SURFACE	180	4976.96	09/08/94	15:38:00
1/F(061)	EXPOSED SURFACE	440	16958.53	09/08/94	15:53:00
1/F(062)	PAINTED SURFACE	240	7741.94	09/08/94	15:54:00
1/F(062)	EXPOSED SURFACE	470	18341.01	09/08/94	15:55:00
1/F(063)	PAINTED SURFACE	300	10506.91	09/08/94	15:56:00
1/F(063)	EXPOSED SURFACE	480	18801.84	09/08/94	15:57:00
1/F(064)	PAINTED SURFACE	230	7281.11	09/08/94	15:57:00
1/F(064)	EXPOSED SURFACE	300	10506.91	09/08/94	15:59:00
1/F(065)	PAINTED SURFACE	190	5437.79	09/08/94	16:00:00
1/F(065)	EXPOSED SURFACE	240	7741.94	09/08/94	16:01:00
1/F(066)	PAINTED SURFACE	1100	47373.27	09/08/94	16:04:00
1/F(066)	EXPOSED SURFACE	4800	217880.18	09/08/94	16:04:00
1/F(067)	PAINTED SURFACE	320	11428.57	09/08/94	16:06:00
1/F(067)	EXPOSED SURFACE	1100	47373.27	09/08/94	16:06:00
1/F(068)	PAINTED SURFACE	850	35852.53	09/08/94	16:07:00
1/F(068)	EXPOSED SURFACE	900	38156.68	09/08/94	16:08:00
1/F(069)	PAINTED SURFACE	250	8202.76	09/08/94	16:09:00
1/F(069)	EXPOSED SURFACE	900	38156.68	09/08/94	16:11:00
1/F(070)	PAINTED SURFACE	250	8202.76	09/08/94	16:13:00
1/F(070)	EXPOSED SURFACE	2200	98064.52	09/08/94	16:14:00
1/F(071)	PAINTED SURFACE	200	5898.62	09/08/94	16:21:00
1/F(071)	EXPOSED SURFACE	420	16036.87	09/08/94	16:22:00
1/F(072)	PAINTED SURFACE	220	6820.28	09/08/94	16:23:00
1/F(072)	EXPOSED SURFACE	2000	88847.93	09/08/94	16:24:00
1/F(073)	PAINTED SURFACE	360	13271.89	09/08/94	16:25:00
1/F(073)	EXPOSED SURFACE	140	3133.64	09/08/94	16:26:00
1/F(074)	PAINTED SURFACE	200	5898.62	09/08/94	16:28:00
1/F(074)	EXPOSED SURFACE	440	16958.53	09/08/94	16:29:00
1/F(075)	PAINTED SURFACE	230	7281.11	09/08/94	16:30:00
1/F(075)	EXPOSED SURFACE	800	33548.39	09/08/94	16:31:00
1/F(076)	PAINTED SURFACE	400	15207.37	09/12/94	09:31:00
1/F(076)	EXPOSED SURFACE	260	8755.76	09/12/94	09:41:00
1/F(077)	PAINTED SURFACE	120	2304.15	09/12/94	09:34:00
1/F(077)	EXPOSED SURFACE	240	7834.10	09/12/94	09:34:00
1/F(078)	PAINTED SURFACE	180	5069.12	09/12/94	09:35:00
1/F(078)	EXPOSED SURFACE	250	8294.93	09/12/94	09:35:00
1/F(079)	PAINTED SURFACE	160	4147.47	09/12/94	09:36:00
1/F(079)	EXPOSED SURFACE	300	10599.08	09/12/94	09:37:00
1/F(080)	PAINTED SURFACE	120	2304.15	09/12/94	09:37:00
1/F(080)	EXPOSED SURFACE	140	3225.81	09/12/94	09:38:00
1/F(081)	PAINTED SURFACE	220	6912.44	09/12/94	09:42:00
1/F(081)	EXPOSED SURFACE	400	15207.37	09/12/94	09:52:00
1/F(082)	PAINTED SURFACE	300	10599.08	09/12/94	09:53:00
1/F(082)	EXPOSED SURFACE	2000	88940.09	09/12/94	09:53:00
1/F(083)	PAINTED SURFACE	120	2304.15	09/12/94	09:54:00

A.5. Summary Data of Beta / Gamma Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
1/F(083)	EXPOSED SURFACE	150	3686.64	09/12/94	09:54:00
1/F(084)	PAINTED SURFACE	160	4147.47	09/12/94	09:55:00
1/F(084)	EXPOSED SURFACE	190	5529.95	09/12/94	09:55:00
1/F(085)	PAINTED SURFACE	160	4147.47	09/12/94	09:56:00
1/F(085)	EXPOSED SURFACE	180	5069.12	09/12/94	09:56:00
1/F(085)	PAINTED SURFACE	40	-1728.11	09/23/94	11:26:00
1/F(085)	EXPOSED SURFACE	120	1958.53	09/23/94	11:26:00
1/F(086)	PAINTED SURFACE	160	4147.47	09/12/94	09:59:00
1/F(086)	EXPOSED SURFACE	180	5069.12	09/12/94	10:07:00
1/F(087)	PAINTED SURFACE	220	6912.44	09/12/94	10:08:00
1/F(087)	EXPOSED SURFACE	320	11520.74	09/12/94	10:08:00
1/F(088)	PAINTED SURFACE	200	5990.78	09/12/94	10:09:00
1/F(088)	EXPOSED SURFACE	270	9216.59	09/12/94	10:09:00
1/F(089)	PAINTED SURFACE	220	6912.44	09/12/94	10:10:00
1/F(089)	EXPOSED SURFACE	1600	70506.91	09/12/94	10:10:00
1/F(089)	PAINTED SURFACE	120	1958.53	09/23/94	11:33:00
1/F(089)	EXPOSED SURFACE	120	1958.53	09/23/94	11:34:00
1/F(090)	PAINTED SURFACE	250	8294.93	09/12/94	10:11:00
1/F(090)	EXPOSED SURFACE	320	11520.74	09/12/94	10:12:00
1/F(091)	PAINTED SURFACE	380	14285.71	09/12/94	10:13:00
1/F(091)	EXPOSED SURFACE	600	24423.96	09/12/94	10:31:00
1/F(092)	PAINTED SURFACE	460	17972.35	09/12/94	10:32:00
1/F(092)	EXPOSED SURFACE	1200	52073.73	09/12/94	10:32:00
1/F(093)	PAINTED SURFACE	215	6682.03	09/12/94	10:33:00
1/F(093)	EXPOSED SURFACE	400	15207.37	09/12/94	10:33:00
1/F(094)	PAINTED SURFACE	300	10599.08	09/12/94	10:34:00
1/F(094)	EXPOSED SURFACE	800	33640.55	09/12/94	10:34:00
1/F(095)	PAINTED SURFACE	1100	47465.44	09/12/94	10:35:00
1/F(095)	EXPOSED SURFACE	2300	102764.98	09/12/94	10:35:00
1/F(096)	EXPOSED SURFACE	800	33640.55	09/12/94	10:36:00
1/F(096)	PAINTED SURFACE	800	33640.55	09/12/94	10:54:00
1/F(097)	PAINTED SURFACE	400	15207.37	09/12/94	10:56:00
1/F(097)	EXPOSED SURFACE	290	10138.25	09/12/94	10:57:00
1/F(098)	PAINTED SURFACE	300	10599.08	09/12/94	10:57:00
1/F(098)	EXPOSED SURFACE	490	19354.84	09/12/94	10:58:00
1/F(099)	PAINTED SURFACE	360	13364.06	09/12/94	10:59:00
1/F(099)	EXPOSED SURFACE	7000	319354.84	09/12/94	10:59:00
1/F(100)	PAINTED SURFACE	260	8755.76	09/12/94	11:00:00
1/F(100)	EXPOSED SURFACE	900	38248.85	09/12/94	11:00:00
1/F(100)	EXPOSED SURFACE	90	576.04	09/23/94	11:54:00
1/F(101)	PAINTED SURFACE	270	9216.59	09/12/94	11:01:00
1/F(101)	EXPOSED SURFACE	1000	42857.14	09/12/94	11:13:00
1/F(102)	PAINTED SURFACE	250	8294.93	09/12/94	11:13:00
1/F(102)	EXPOSED SURFACE	750	31336.41	09/12/94	11:14:00
1/F(103)	PAINTED SURFACE	160	4147.47	09/12/94	11:14:00
1/F(103)	EXPOSED SURFACE	300	10599.08	09/12/94	11:15:00
1/F(104)	PAINTED SURFACE	300	10599.08	09/12/94	11:15:00
1/F(104)	EXPOSED SURFACE	280	9677.42	09/12/94	11:16:00

A.5. Summary Data of Beta / Gamma Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
1/F(105)	PAINTED SURFACE	150	3686.64	09/12/94	11:16:00
1/F(105)	EXPOSED SURFACE	220	6912.44	09/12/94	11:17:00
1/F(106)	PAINTED SURFACE	120	2304.15	09/12/94	11:19:00
1/F(106)	EXPOSED SURFACE	380	14285.71	09/12/94	11:32:00
1/F(107)	PAINTED SURFACE	210	6451.61	09/12/94	11:33:00
1/F(107)	EXPOSED SURFACE	230	7373.27	09/12/94	11:34:00
1/F(108)	PAINTED SURFACE	280	9677.42	09/12/94	11:34:00
1/F(108)	EXPOSED SURFACE	65	-230.41	09/12/94	11:37:00
1/F(109)	PAINTED SURFACE	140	3225.81	09/12/94	11:37:00
1/F(109)	EXPOSED SURFACE	260	8755.76	09/12/94	11:38:00
1/F(110)	PAINTED SURFACE	180	5069.12	09/12/94	11:39:00
1/F(110)	EXPOSED SURFACE	190	5529.95	09/12/94	11:40:00
1/F(111)	PAINTED SURFACE	180	5069.12	09/12/94	11:41:00
1/F(111)	EXPOSED SURFACE	150	3686.64	09/12/94	11:49:00
1/F(112)	PAINTED SURFACE	250	8294.93	09/12/94	11:50:00
1/F(112)	EXPOSED SURFACE	320	11520.74	09/12/94	11:50:00
1/F(113)	PAINTED SURFACE	260	8755.76	09/12/94	11:51:00
1/F(113)	EXPOSED SURFACE	700	29032.26	09/12/94	11:51:00
1/F(114)	PAINTED SURFACE	250	8294.93	09/12/94	11:52:00
1/F(114)	EXPOSED SURFACE	1300	56682.03	09/12/94	11:53:00
1/F(115)	PAINTED SURFACE	180	5069.12	09/12/94	11:53:00
1/F(115)	EXPOSED SURFACE	1000	42857.14	09/12/94	11:54:00
1/F(116)	PAINTED SURFACE	220	6912.44	09/12/94	13:29:00
1/F(116)	EXPOSED SURFACE	2300	102764.98	09/12/94	13:30:00
1/F(117)	PAINTED SURFACE	140	3225.81	09/12/94	13:30:00
1/F(117)	EXPOSED SURFACE	350	12903.23	09/12/94	13:31:00
1/F(118)	PAINTED SURFACE	500	19815.67	09/12/94	13:32:00
1/F(118)	EXPOSED SURFACE	700	29032.26	09/12/94	13:32:00
1/F(119)	PAINTED SURFACE	240	7834.10	09/12/94	13:36:00
1/F(119)	EXPOSED SURFACE	490	19354.84	09/12/94	13:37:00
1/F(120)	PAINTED SURFACE	500	19815.67	09/12/94	13:37:00
1/F(120)	EXPOSED SURFACE	1600	70506.91	09/12/94	13:38:00
1/F(121)	PAINTED SURFACE	650	26728.11	09/12/94	13:39:00
1/F(121)	EXPOSED SURFACE	6000	273271.89	09/12/94	13:39:00
1/F(122)	PAINTED SURFACE	260	8755.76	09/12/94	13:40:00
1/F(122)	EXPOSED SURFACE	420	16129.03	09/12/94	13:40:00
1/F(123)	PAINTED SURFACE	200	5990.78	09/12/94	13:41:00
1/F(123)	EXPOSED SURFACE	420	16129.03	09/12/94	13:41:00
1/F(124)	PAINTED SURFACE	280	9677.42	09/12/94	13:42:00
1/F(124)	EXPOSED SURFACE	1100	47465.44	09/12/94	13:43:00
1/F(125)	PAINTED SURFACE	600	24423.96	09/12/94	13:43:00
1/F(125)	EXPOSED SURFACE	220	6912.44	09/12/94	13:44:00
1/F(126)	PAINTED SURFACE	410	15668.20	09/12/94	13:52:00
1/F(126)	EXPOSED SURFACE	900	38248.85	09/12/94	13:52:00
1/F(127)	PAINTED SURFACE	330	11981.57	09/12/94	13:53:00
1/F(127)	EXPOSED SURFACE	370	13824.88	09/12/94	13:54:00
1/F(128)	PAINTED SURFACE	260	8755.76	09/12/94	13:55:00
1/F(128)	EXPOSED SURFACE	460	17972.35	09/12/94	13:55:00

A.5. Summary Data of Beta / Gamma Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
1/F(129)	PAINTED SURFACE	250	8294.93	09/12/94	13:56:00
1/F(129)	EXPOSED SURFACE	850	35944.70	09/12/94	13:57:00
1/F(130)	PAINTED SURFACE	230	7373.27	09/12/94	13:57:00
1/F(130)	EXPOSED SURFACE	500	19815.67	09/12/94	13:58:00
1/F(131)	PAINTED SURFACE	220	6912.44	09/12/94	14:18:00
1/F(131)	EXPOSED SURFACE	220	6912.44	09/12/94	14:18:00
1/F(132)	PAINTED SURFACE	140	3225.81	09/12/94	14:19:00
1/F(132)	EXPOSED SURFACE	190	5529.95	09/12/94	14:19:00
1/F(133)	PAINTED SURFACE	180	5069.12	09/12/94	14:20:00
1/F(133)	EXPOSED SURFACE	700	29032.26	09/12/94	14:21:00
1/F(134)	PAINTED SURFACE	220	6912.44	09/12/94	14:21:00
1/F(134)	EXPOSED SURFACE	260	8755.76	09/12/94	14:22:00
1/F(135)	PAINTED SURFACE	200	5990.78	09/12/94	14:22:00
1/F(135)	EXPOSED SURFACE	650	26728.11	09/12/94	14:23:00
1/F(136)	PAINTED SURFACE	110	1843.32	09/12/94	14:44:00
1/F(136)	EXPOSED SURFACE	280	9677.42	09/12/94	14:44:00
1/F(137)	PAINTED SURFACE	200	5990.78	09/12/94	14:45:00
1/F(137)	EXPOSED SURFACE	200	5990.78	09/12/94	14:45:00
1/F(138)	PAINTED SURFACE	160	4147.47	09/12/94	14:46:00
1/F(138)	EXPOSED SURFACE	260	8755.76	09/12/94	14:47:00
1/F(139)	PAINTED SURFACE	220	6912.44	09/12/94	14:48:00
1/F(139)	EXPOSED SURFACE	651	26774.19	09/12/94	14:48:00
1/F(140)	PAINTED SURFACE	220	6912.44	09/12/94	14:49:00
1/F(140)	EXPOSED SURFACE	1650	72811.06	09/12/94	14:50:00
1/F(141)	PAINTED SURFACE	170	4608.29	09/12/94	14:58:00
1/F(141)	EXPOSED SURFACE	320	11520.74	09/12/94	14:59:00
1/F(142)	PAINTED SURFACE	180	5069.12	09/12/94	15:00:00
1/F(142)	EXPOSED SURFACE	600	24423.96	09/12/94	15:00:00
1/F(143)	PAINTED SURFACE	260	8755.76	09/12/94	15:01:00
1/F(143)	EXPOSED SURFACE	900	38248.85	09/12/94	15:01:00
1/F(144)	PAINTED SURFACE	600	24423.96	09/12/94	15:02:00
1/F(144)	EXPOSED SURFACE	1400	61290.32	09/12/94	15:03:00
1/F(145)	PAINTED SURFACE	280	9677.42	09/12/94	15:04:00
1/F(145)	EXPOSED SURFACE	550	22119.82	09/12/94	15:04:00
1/F(146)	PAINTED SURFACE	470	18433.18	09/12/94	15:27:00
1/F(146)	EXPOSED SURFACE	1400	61290.32	09/12/94	15:28:00
1/F(147)	PAINTED SURFACE	180	5069.12	09/12/94	15:29:00
1/F(147)	EXPOSED SURFACE	490	19354.84	09/12/94	15:31:00
1/F(148)	PAINTED SURFACE	250	8294.93	09/12/94	15:31:00
1/F(148)	EXPOSED SURFACE	470	18433.18	09/12/94	15:33:00
1/F(149)	PAINTED SURFACE	230	7373.27	09/12/94	15:34:00
1/F(149)	EXPOSED SURFACE	220	6912.44	09/12/94	15:35:00
1/F(150)	PAINTED SURFACE	320	11520.74	09/12/94	15:35:00
1/F(150)	EXPOSED SURFACE	1000	42857.14	09/12/94	15:37:00
1/F(151)	PAINTED SURFACE	40	-1382.49	09/12/94	15:49:00
1/F(151)	EXPOSED SURFACE	140	3225.81	09/12/94	15:49:00
1/F(152)	PAINTED SURFACE	800	33640.55	09/12/94	15:50:00
1/F(152)	EXPOSED SURFACE	1400	61290.32	09/12/94	15:51:00

A.5. Summary Data of Beta / Gamma Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
1/F(153)	PAINTED SURFACE	400	15207.37	09/12/94	15:52:00
1/F(153)	EXPOSED SURFACE	412	15760.37	09/12/94	15:52:00
1/F(154)	PAINTED SURFACE	180	5069.12	09/12/94	15:53:00
1/F(154)	EXPOSED SURFACE	420	16129.03	09/12/94	15:54:00
1/F(155)	PAINTED SURFACE	280	9677.42	09/12/94	15:55:00
1/F(155)	EXPOSED SURFACE	380	14285.71	09/12/94	15:55:00
1/F(156)	PAINTED SURFACE	480	18894.01	09/12/94	16:03:00
1/F(156)	EXPOSED SURFACE	380	14285.71	09/12/94	16:04:00
1/F(157)	PAINTED SURFACE	240	7834.10	09/12/94	16:05:00
1/F(157)	EXPOSED SURFACE	200	5990.78	09/12/94	16:05:00
1/F(158)	PAINTED SURFACE	180	5069.12	09/12/94	16:06:00
1/F(158)	EXPOSED SURFACE	84	645.16	09/12/94	16:07:00
1/F(159)	PAINTED SURFACE	140	3225.81	09/12/94	16:09:00
1/F(159)	EXPOSED SURFACE	240	7834.10	09/12/94	16:10:00
1/F(160)	PAINTED SURFACE	250	8294.93	09/12/94	16:10:00
1/F(160)	EXPOSED SURFACE	140	3225.81	09/12/94	16:11:00
1/F(161)	PAINTED SURFACE	220	6912.44	09/12/94	16:16:00
1/F(161)	EXPOSED SURFACE	220	6912.44	09/12/94	16:18:00
1/F(162)	PAINTED SURFACE	180	5069.12	09/12/94	16:19:00
1/F(162)	EXPOSED SURFACE	300	10599.08	09/12/94	16:19:00
1/F(163)	PAINTED SURFACE	300	10599.08	09/12/94	16:20:00
1/F(163)	EXPOSED SURFACE	220	6912.44	09/12/94	16:21:00
1/F(164)	PAINTED SURFACE	230	7373.27	09/12/94	16:22:00
1/F(164)	EXPOSED SURFACE	400	15207.37	09/12/94	16:22:00
1/F(165)	PAINTED SURFACE	160	4147.47	09/12/94	16:23:00
1/F(165)	EXPOSED SURFACE	290	10138.25	09/12/94	16:24:00
1/F(166)	PAINTED SURFACE	380	14101.38	09/13/94	07:53:00
1/F(166)	EXPOSED SURFACE	1800	79539.17	09/13/94	08:44:00
1/F(167)	PAINTED SURFACE	200	5806.45	09/13/94	08:44:00
1/F(167)	EXPOSED SURFACE	500	19631.34	09/13/94	08:45:00
1/F(168)	PAINTED SURFACE	210	6267.28	09/13/94	08:46:00
1/F(168)	EXPOSED SURFACE	180	4884.79	09/13/94	08:46:00
1/F(169)	PAINTED SURFACE	200	5806.45	09/13/94	08:47:00
1/F(169)	EXPOSED SURFACE	380	14101.38	09/13/94	08:48:00
1/F(170)	PAINTED SURFACE	180	4884.79	09/13/94	08:49:00
1/F(170)	EXPOSED SURFACE	300	10414.75	09/13/94	08:50:00
1/F(171)	PAINTED SURFACE	280	9493.09	09/13/94	09:03:00
1/F(171)	EXPOSED SURFACE	1100	47281.11	09/13/94	09:04:00
1/F(172)	PAINTED SURFACE	280	9493.09	09/13/94	09:05:00
1/F(172)	EXPOSED SURFACE	280	9493.09	09/13/94	09:06:00
1/F(173)	PAINTED SURFACE	360	13179.72	09/13/94	09:08:00
1/F(173)	EXPOSED SURFACE	2200	97972.35	09/13/94	09:08:00
1/F(174)	PAINTED SURFACE	260	8571.43	09/13/94	09:09:00
1/F(174)	EXPOSED SURFACE	480	18709.68	09/13/94	09:10:00
1/F(175)	PAINTED SURFACE	270	9032.26	09/13/94	09:11:00
1/F(175)	EXPOSED SURFACE	500	19631.34	09/13/94	09:11:00
1/F(176)	PAINTED SURFACE	300	10414.75	09/13/94	09:23:00
1/F(176)	EXPOSED SURFACE	420	15944.70	09/13/94	09:24:00

A.5. Summary Data of Beta / Gamma Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
1/F(177)	PAINTED SURFACE	380	14101.38	09/13/94	09:25:00
1/F(177)	EXPOSED SURFACE	500	19631.34	09/13/94	09:26:00
1/F(178)	PAINTED SURFACE	400	15023.04	09/13/94	09:26:00
1/F(178)	EXPOSED SURFACE	1200	51889.40	09/13/94	09:27:00
1/F(179)	PAINTED SURFACE	400	15023.04	09/13/94	09:28:00
1/F(179)	EXPOSED SURFACE	2000	88755.76	09/13/94	09:29:00
1/F(180)	PAINTED SURFACE	300	10414.75	09/13/94	09:30:00
1/F(180)	EXPOSED SURFACE	700	28847.93	09/13/94	09:32:00
1/F(181)	PAINTED SURFACE	400	15023.04	09/13/94	09:57:00
1/F(181)	EXPOSED SURFACE	320	11336.41	09/13/94	09:58:00
1/F(182)	PAINTED SURFACE	280	9493.09	09/13/94	10:01:00
1/F(182)	EXPOSED SURFACE	340	12258.06	09/13/94	10:01:00
1/F(183)	PAINTED SURFACE	200	5806.45	09/13/94	10:02:00
1/F(183)	EXPOSED SURFACE	200	5806.45	09/13/94	10:03:00
1/F(184)	PAINTED SURFACE	170	4423.96	09/13/94	10:03:00
1/F(184)	EXPOSED SURFACE	340	12258.06	09/13/94	10:04:00
1/F(185)	PAINTED SURFACE	120	2119.82	09/13/94	10:04:00
1/F(185)	EXPOSED SURFACE	180	4884.79	09/13/94	10:05:00
1/F(186)	PAINTED SURFACE	170	4423.96	09/13/94	10:15:00
1/F(186)	EXPOSED SURFACE	300	10414.75	09/13/94	10:15:00
1/F(187)	PAINTED SURFACE	140	3041.47	09/13/94	10:16:00
1/F(187)	EXPOSED SURFACE	350	12718.89	09/13/94	10:17:00
1/F(188)	PAINTED SURFACE	240	7649.77	09/13/94	10:17:00
1/F(188)	EXPOSED SURFACE	190	5345.62	09/13/94	10:18:00
1/F(189)	PAINTED SURFACE	460	17788.02	09/13/94	10:19:00
1/F(189)	EXPOSED SURFACE	700	28847.93	09/13/94	10:19:00
1/F(190)	PAINTED SURFACE	180	4884.79	09/13/94	10:20:00
1/F(190)	EXPOSED SURFACE	700	28847.93	09/13/94	10:20:00
1/F(191)	PAINTED SURFACE	340	12258.06	09/13/94	10:40:00
1/F(191)	EXPOSED SURFACE	8500	388294.93	09/13/94	10:40:00
1/F(192)	PAINTED SURFACE	260	8571.43	09/13/94	10:41:00
1/F(192)	EXPOSED SURFACE	1000	42672.81	09/13/94	10:41:00
1/F(193)	PAINTED SURFACE	250	8110.60	09/13/94	10:42:00
1/F(193)	EXPOSED SURFACE	600	24239.63	09/13/94	10:42:00
1/F(194)	PAINTED SURFACE	650	26543.78	09/13/94	10:43:00
1/F(194)	EXPOSED SURFACE	280	9493.09	09/13/94	10:43:00
1/F(195)	PAINTED SURFACE	250	8110.60	09/13/94	10:44:00
1/F(195)	EXPOSED SURFACE	500	19631.34	09/13/94	10:44:00
1/F(196)	PAINTED SURFACE	200	5806.45	09/13/94	10:56:00
1/F(196)	EXPOSED SURFACE	3050	137142.86	09/13/94	10:56:00
1/F(197)	PAINTED SURFACE	400	15023.04	09/13/94	10:57:00
1/F(197)	EXPOSED SURFACE	1200	51889.40	09/13/94	10:57:00
1/F(198)	PAINTED SURFACE	360	13179.72	09/13/94	10:58:00
1/F(198)	EXPOSED SURFACE	1100	47281.11	09/13/94	10:58:00
1/F(199)	PAINTED SURFACE	250	8110.60	09/13/94	10:59:00
1/F(199)	EXPOSED SURFACE	800	33456.22	09/13/94	10:59:00
1/F(200)	PAINTED SURFACE	80	276.50	09/13/94	11:00:00
1/F(200)	EXPOSED SURFACE	500	19631.34	09/13/94	11:01:00

A.5. Summary Data of Beta / Gamma Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
1/F(201)	PAINTED SURFACE	350	12718.89	09/13/94	11:09:00
1/F(201)	EXPOSED SURFACE	400	15023.04	09/13/94	11:10:00
1/F(202)	PAINTED SURFACE	260	8571.43	09/13/94	11:10:00
1/F(202)	EXPOSED SURFACE	460	17788.02	09/13/94	11:11:00
1/F(203)	PAINTED SURFACE	2300	102580.65	09/13/94	11:12:00
1/F(203)	EXPOSED SURFACE	1000	42672.81	09/13/94	11:13:00
1/F(204)	PAINTED SURFACE	420	15944.70	09/13/94	11:14:00
1/F(204)	EXPOSED SURFACE	3800	171705.07	09/13/94	11:15:00
1/F(205)	PAINTED SURFACE	1900	84147.47	09/13/94	11:16:00
1/F(205)	EXPOSED SURFACE	13000	595668.20	09/13/94	11:18:00
1/F(206)	PAINTED SURFACE	2600	116405.53	09/13/94	11:33:00
1/F(206)	EXPOSED SURFACE	6000	273087.56	09/13/94	11:34:00
1/F(207)	PAINTED SURFACE	600	24239.63	09/13/94	11:34:00
1/F(207)	EXPOSED SURFACE	3200	144055.30	09/13/94	11:35:00
1/F(208)	PAINTED SURFACE	500	19631.34	09/13/94	11:37:00
1/F(208)	EXPOSED SURFACE	1100	47281.11	09/13/94	11:37:00
1/F(209)	PAINTED SURFACE	220	6728.11	09/13/94	11:38:00
1/F(209)	EXPOSED SURFACE	280	9493.09	09/13/94	11:39:00
1/F(210)	PAINTED SURFACE	200	5806.45	09/13/94	11:40:00
1/F(210)	EXPOSED SURFACE	250	8110.60	09/13/94	11:41:00
1/F(211)	PAINTED SURFACE	200	5806.45	09/13/94	11:47:00
1/F(211)	EXPOSED SURFACE	220	6728.11	09/13/94	11:47:00
1/F(212)	PAINTED SURFACE	130	2580.65	09/13/94	11:48:00
1/F(212)	EXPOSED SURFACE	200	5806.45	09/13/94	11:48:00
1/F(213)	PAINTED SURFACE	180	4884.79	09/13/94	11:49:00
1/F(213)	EXPOSED SURFACE	220	6728.11	09/13/94	11:49:00
1/F(214)	PAINTED SURFACE	140	3041.47	09/13/94	11:50:00
1/F(214)	EXPOSED SURFACE	280	9493.09	09/13/94	11:50:00
1/F(215)	PAINTED SURFACE	180	4884.79	09/13/94	11:51:00
1/F(215)	EXPOSED SURFACE	200	5806.45	09/13/94	11:51:00
1/F(216)	PAINTED SURFACE	150	3502.30	09/13/94	13:05:00
1/F(216)	EXPOSED SURFACE	120	2119.82	09/13/94	13:50:00
1/F(217)	PAINTED SURFACE	190	5345.62	09/13/94	13:51:00
1/F(217)	EXPOSED SURFACE	180	4884.79	09/13/94	13:51:00
1/F(218)	PAINTED SURFACE	200	5806.45	09/13/94	13:51:00
1/F(218)	EXPOSED SURFACE	240	7649.77	09/13/94	13:52:00
1/F(219)	PAINTED SURFACE	195	5576.04	09/13/94	13:52:00
1/F(219)	EXPOSED SURFACE	290	9953.92	09/13/94	13:54:00
1/F(220)	PAINTED SURFACE	160	3963.13	09/13/94	13:55:00
1/F(220)	EXPOSED SURFACE	200	5806.45	09/13/94	13:55:00
1/F(221)	PAINTED SURFACE	150	3502.30	09/13/94	13:57:00
1/F(221)	EXPOSED SURFACE	200	5806.45	09/13/94	14:07:00
1/F(222)	PAINTED SURFACE	200	5806.45	09/13/94	14:08:00
1/F(222)	EXPOSED SURFACE	370	13640.55	09/13/94	14:08:00
1/F(223)	PAINTED SURFACE	160	3963.13	09/13/94	14:10:00
1/F(223)	EXPOSED SURFACE	260	8571.43	09/13/94	14:10:00
1/F(224)	PAINTED SURFACE	320	11336.41	09/13/94	14:11:00
1/F(224)	EXPOSED SURFACE	800	33456.22	09/13/94	14:11:00

A.5. Summary Data of Beta / Gamma Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
1/F(225)	PAINTED SURFACE	300	10414.75	09/13/94	14:12:00
1/F(225)	EXPOSED SURFACE	1100	47281.11	09/13/94	14:13:00
1/F(226)	PAINTED SURFACE	310	10875.58	09/13/94	14:14:00
1/F(226)	EXPOSED SURFACE	2400	107188.94	09/13/94	14:23:00
1/F(227)	PAINTED SURFACE	250	8110.60	09/13/94	14:23:00
1/F(227)	EXPOSED SURFACE	350	12718.89	09/13/94	14:24:00
1/F(228)	PAINTED SURFACE	290	9953.92	09/13/94	14:24:00
1/F(228)	EXPOSED SURFACE	320	11336.41	09/13/94	14:25:00
1/F(229)	PAINTED SURFACE	2200	97972.35	09/13/94	14:25:00
1/F(229)	EXPOSED SURFACE	600	24239.63	09/13/94	14:27:00
1/F(230)	PAINTED SURFACE	1000	42672.81	09/13/94	14:27:00
1/F(230)	EXPOSED SURFACE	2300	102580.65	09/13/94	14:28:00
1/F(231)	PAINTED SURFACE	1000	42672.81	09/13/94	14:29:00
1/F(231)	EXPOSED SURFACE	1300	56497.70	09/13/94	14:55:00
1/F(232)	PAINTED SURFACE	800	33456.22	09/13/94	14:56:00
1/F(232)	EXPOSED SURFACE	2300	102580.65	09/13/94	14:56:00
1/F(233)	PAINTED SURFACE	1000	42672.81	09/13/94	14:57:00
1/F(233)	EXPOSED SURFACE	1100	47281.11	09/13/94	14:58:00
1/F(234)	PAINTED SURFACE	800	33456.22	09/13/94	14:59:00
1/F(234)	EXPOSED SURFACE	800	33456.22	09/13/94	15:00:00
1/F(235)	PAINTED SURFACE	280	9493.09	09/13/94	15:02:00
1/F(235)	EXPOSED SURFACE	480	18709.68	09/13/94	15:03:00
1/F(236)	PAINTED SURFACE	300	10414.75	09/13/94	15:04:00
1/F(236)	EXPOSED SURFACE	1000	42672.81	09/13/94	15:11:00
1/F(237)	PAINTED SURFACE	180	4884.79	09/13/94	15:13:00
1/F(237)	EXPOSED SURFACE	200	5806.45	09/13/94	15:14:00
1/F(238)	PAINTED SURFACE	200	5806.45	09/13/94	15:15:00
1/F(238)	EXPOSED SURFACE	350	12718.89	09/13/94	15:17:00
1/F(239)	PAINTED SURFACE	160	3963.13	09/13/94	15:18:00
1/F(239)	EXPOSED SURFACE	340	12258.06	09/13/94	15:21:00
1/F(240)	PAINTED SURFACE	280	9493.09	09/13/94	15:22:00
1/F(240)	EXPOSED SURFACE	430	16405.53	09/13/94	15:23:00
1/F(241)	PAINTED SURFACE	200	5806.45	09/13/94	15:24:00
1/F(241)	EXPOSED SURFACE	220	6728.11	09/13/94	15:27:00
1/F(242)	PAINTED SURFACE	230	7188.94	09/13/94	15:28:00
1/F(242)	EXPOSED SURFACE	400	15023.04	09/13/94	15:28:00
1/F(243)	PAINTED SURFACE	300	10414.75	09/13/94	15:29:00
1/F(243)	EXPOSED SURFACE	350	12718.89	09/13/94	15:30:00
1/F(244)	PAINTED SURFACE	230	7188.94	09/13/94	15:30:00
1/F(244)	EXPOSED SURFACE	280	9493.09	09/13/94	15:32:00
1/F(245)	PAINTED SURFACE	200	5806.45	09/13/94	15:32:00
1/F(245)	EXPOSED SURFACE	240	7649.77	09/13/94	15:33:00
1/F(246)	PAINTED SURFACE	280	9493.09	09/13/94	15:34:00
1/F(246)	EXPOSED SURFACE	290	9953.92	09/13/94	15:42:00
1/F(247)	PAINTED SURFACE	240	7649.77	09/13/94	15:43:00
1/F(247)	EXPOSED SURFACE	180	4884.79	09/13/94	15:44:00
1/F(248)	PAINTED SURFACE	84	460.83	09/13/94	15:45:00
1/F(248)	EXPOSED SURFACE	480	18709.68	09/13/94	15:49:00

A.5. Summary Data of Beta / Gamma Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
1/F(249)	PAINTED SURFACE	240	7649.77	09/13/94	15:50:00
1/F(249)	EXPOSED SURFACE	200	5806.45	09/13/94	15:52:00
1/F(250)	PAINTED SURFACE	270	9032.26	09/13/94	15:52:00
1/F(250)	EXPOSED SURFACE	210	6267.28	09/13/94	15:53:00
1/F(251)	PAINTED SURFACE	360	13179.72	09/13/94	15:54:00
1/F(251)	EXPOSED SURFACE	450	17327.19	09/13/94	15:57:00
1/F(252)	PAINTED SURFACE	300	10414.75	09/13/94	15:57:00
1/F(252)	EXPOSED SURFACE	380	14101.38	09/13/94	15:57:00
1/F(253)	PAINTED SURFACE	220	6728.11	09/13/94	15:58:00
1/F(253)	EXPOSED SURFACE	400	15023.04	09/13/94	15:58:00
1/F(254)	PAINTED SURFACE	1100	47281.11	09/13/94	15:59:00
1/F(254)	EXPOSED SURFACE	5000	227004.61	09/13/94	15:59:00
1/F(255)	PAINTED SURFACE	250	8110.60	09/13/94	16:00:00
1/F(255)	EXPOSED SURFACE	3400	153271.89	09/13/94	16:00:00
1/F(256)	PAINTED SURFACE	300	10414.75	09/13/94	16:01:00
1/F(256)	EXPOSED SURFACE	2400	107188.94	09/13/94	16:05:00
1/F(257)	PAINTED SURFACE	480	18709.68	09/13/94	16:05:00
1/F(257)	EXPOSED SURFACE	3000	134838.71	09/13/94	16:06:00
1/F(258)	PAINTED SURFACE	320	11336.41	09/13/94	16:06:00
1/F(258)	EXPOSED SURFACE	1200	51889.40	09/13/94	16:07:00
1/F(259)	PAINTED SURFACE	450	17327.19	09/13/94	16:08:00
1/F(259)	EXPOSED SURFACE	700	28847.93	09/13/94	16:09:00
1/F(260)	PAINTED SURFACE	800	33456.22	09/13/94	16:09:00
1/F(260)	EXPOSED SURFACE	450	17327.19	09/13/94	16:10:00
1/F(999)	PAINTED SURFACE	100	1290.32	09/08/94	14:18:00
1/F(999)	PAINTED SURFACE	70	-92.17	09/08/94	16:45:00
1/F(999)	PAINTED SURFACE	60	-553.00	09/08/94	16:46:00
1/F(999)	PAINTED SURFACE	70	-92.17	09/08/94	16:49:00
1/F(999)	PAINTED SURFACE	60	-553.00	09/08/94	16:51:00
1/F(999)	PAINTED SURFACE	80	460.83	09/12/94	16:26:00
1/F(999)	PAINTED SURFACE	60	-460.83	09/12/94	16:30:00
1/F(999)	PAINTED SURFACE	60	-645.16	09/13/94	16:17:00
1/F(999)	PAINTED SURFACE	50	-1105.99	09/13/94	16:17:00
1/F(999)	PAINTED SURFACE	80	276.50	09/13/94	16:17:00
1/F(999)	PAINTED SURFACE	70	-184.33	09/13/94	16:18:00
1/F(999)	PAINTED SURFACE	110	1658.99	09/13/94	16:18:00
1/N(001)	PAINTED SURFACE	330	12096.77	09/14/94	15:04:00
1/N(001)	EXPOSED SURFACE	200	6105.99	09/14/94	15:23:00
1/N(002)	PAINTED SURFACE	360	13479.26	09/14/94	15:23:00
1/N(002)	EXPOSED SURFACE	180	5184.33	09/14/94	15:24:00
1/N(003)	PAINTED SURFACE	600	24539.17	09/14/94	15:24:00
1/N(003)	EXPOSED SURFACE	320	11635.94	09/14/94	15:25:00
1/N(004)	PAINTED SURFACE	22000	1010714.29	09/14/94	15:25:00
1/N(004)	EXPOSED SURFACE	500	19930.88	09/14/94	15:26:00
1/N(005)	PAINTED SURFACE	490	19470.05	09/14/94	15:27:00
1/N(005)	EXPOSED SURFACE	210	6566.82	09/14/94	15:27:00
1/N(006)	PAINTED SURFACE	380	14400.92	09/14/94	15:28:00
1/N(006)	EXPOSED SURFACE	340	12557.60	09/14/94	15:52:00

A.5. Summary Data of Beta / Gamma Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
1/N(007)	PAINTED SURFACE	250	8410.14	09/14/94	15:52:00
1/N(007)	EXPOSED SURFACE	150	3801.84	09/14/94	15:53:00
1/N(008)	PAINTED SURFACE	300	10714.29	09/14/94	15:54:00
1/N(008)	EXPOSED SURFACE	260	8870.97	09/14/94	15:54:00
1/N(009)	PAINTED SURFACE	300	10714.29	09/14/94	15:55:00
1/N(009)	EXPOSED SURFACE	250	8410.14	09/14/94	15:56:00
1/N(010)	PAINTED SURFACE	450	17626.73	09/14/94	15:59:00
1/N(010)	EXPOSED SURFACE	300	10714.29	09/14/94	15:59:00
1/N(011)	PAINTED SURFACE	380	14400.92	09/14/94	16:00:00
1/N(011)	EXPOSED SURFACE	220	7027.65	09/14/94	16:08:00
1/N(012)	PAINTED SURFACE	400	15322.58	09/14/94	16:09:00
1/N(012)	EXPOSED SURFACE	280	9792.63	09/14/94	16:10:00
1/N(013)	PAINTED SURFACE	800	33755.76	09/14/94	16:10:00
1/N(013)	EXPOSED SURFACE	340	12557.60	09/14/94	16:11:00
1/N(014)	PAINTED SURFACE	1800	79838.71	09/14/94	16:12:00
1/N(014)	EXPOSED SURFACE	180	5184.33	09/14/94	16:12:00
1/N(015)	PAINTED SURFACE	380	14400.92	09/14/94	16:13:00
1/N(015)	EXPOSED SURFACE	380	14400.92	09/14/94	16:14:00
1/N(016)	PAINTED SURFACE	240	7949.31	09/14/94	16:15:00
1/N(016)	EXPOSED SURFACE	250	8410.14	09/14/94	16:24:00
1/N(017)	PAINTED SURFACE	380	14400.92	09/14/94	16:25:00
1/N(017)	EXPOSED SURFACE	240	7949.31	09/14/94	16:26:00
1/N(018)	PAINTED SURFACE	340	12557.60	09/14/94	16:26:00
1/N(018)	EXPOSED SURFACE	200	6105.99	09/14/94	16:27:00
1/N(019)	PAINTED SURFACE	280	9792.63	09/14/94	16:27:00
1/N(019)	EXPOSED SURFACE	220	7027.65	09/14/94	16:28:00
1/N(020)	PAINTED SURFACE	300	10714.29	09/14/94	16:29:00
1/N(020)	EXPOSED SURFACE	250	8410.14	09/14/94	16:29:00
1/N(021)	PAINTED SURFACE	400	14193.55	09/15/94	08:46:00
1/N(021)	EXPOSED SURFACE	240	6820.28	09/15/94	08:47:00
1/N(022)	PAINTED SURFACE	460	16958.53	09/15/94	08:48:00
1/N(022)	EXPOSED SURFACE	220	5898.62	09/15/94	08:48:00
1/N(023)	PAINTED SURFACE	340	11428.57	09/15/94	08:49:00
1/N(023)	EXPOSED SURFACE	160	3133.64	09/15/94	08:50:00
1/N(024)	PAINTED SURFACE	340	11428.57	09/15/94	08:50:00
1/N(024)	EXPOSED SURFACE	260	7741.94	09/15/94	08:51:00
1/N(025)	PAINTED SURFACE	400	14193.55	09/15/94	08:51:00
1/N(025)	EXPOSED SURFACE	300	9585.25	09/15/94	08:52:00
1/N(026)	PAINTED SURFACE	1000	41843.32	09/15/94	08:53:00
1/N(026)	EXPOSED SURFACE	360	12350.23	09/15/94	09:09:00
1/N(027)	PAINTED SURFACE	240	6820.28	09/15/94	09:10:00
1/N(027)	EXPOSED SURFACE	260	7741.94	09/15/94	09:11:00
1/N(028)	PAINTED SURFACE	200	4976.96	09/15/94	09:11:00
1/N(028)	EXPOSED SURFACE	100	368.66	09/15/94	09:12:00
1/N(029)	PAINTED SURFACE	800	32626.73	09/15/94	09:13:00
1/N(029)	EXPOSED SURFACE	340	11428.57	09/15/94	09:13:00
1/N(030)	PAINTED SURFACE	320	10506.91	09/15/94	09:14:00
1/N(030)	EXPOSED SURFACE	500	18801.84	09/15/94	09:15:00

A.5. Summary Data of Beta / Gamma Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
1/N(031)	PAINTED SURFACE	160	3133.64	09/15/94	09:18:00
1/N(031)	EXPOSED SURFACE	180	4055.30	09/15/94	09:18:00
1/N(032)	PAINTED SURFACE	200	4976.96	09/15/94	09:19:00
1/N(032)	EXPOSED SURFACE	220	5898.62	09/15/94	09:19:00
1/N(033)	PAINTED SURFACE	340	11428.57	09/15/94	09:20:00
1/N(033)	EXPOSED SURFACE	220	5898.62	09/15/94	09:20:00
1/N(034)	PAINTED SURFACE	360	12350.23	09/15/94	09:21:00
1/N(034)	EXPOSED SURFACE	400	14193.55	09/15/94	09:22:00
1/N(035)	PAINTED SURFACE	280	8663.59	09/15/94	09:22:00
1/N(035)	EXPOSED SURFACE	400	14193.55	09/15/94	09:23:00
1/N(036)	PAINTED SURFACE	400	14193.55	09/15/94	09:23:00
1/N(036)	EXPOSED SURFACE	220	5898.62	09/15/94	09:46:00
1/N(037)	PAINTED SURFACE	410	14654.38	09/15/94	09:47:00
1/N(037)	EXPOSED SURFACE	300	9585.25	09/15/94	09:48:00
1/N(038)	PAINTED SURFACE	200	4976.96	09/15/94	09:49:00
1/N(038)	EXPOSED SURFACE	200	4976.96	09/15/94	09:50:00
1/N(039)	PAINTED SURFACE	150	2672.81	09/15/94	09:50:00
1/N(039)	EXPOSED SURFACE	300	9585.25	09/15/94	09:51:00
1/N(040)	PAINTED SURFACE	160	3133.64	09/15/94	09:52:00
1/N(040)	EXPOSED SURFACE	150	2672.81	09/15/94	09:53:00
1/N(041)	PAINTED SURFACE	2000	87926.27	09/15/94	09:55:00
1/N(041)	EXPOSED SURFACE	240	6820.28	09/15/94	10:05:00
1/N(042)	PAINTED SURFACE	260	7741.94	09/15/94	10:06:00
1/N(042)	EXPOSED SURFACE	180	4055.30	09/15/94	10:06:00
1/N(043)	PAINTED SURFACE	260	7741.94	09/15/94	10:07:00
1/N(043)	EXPOSED SURFACE	280	8663.59	09/15/94	10:08:00
1/N(044)	PAINTED SURFACE	200	4976.96	09/15/94	10:08:00
1/N(044)	EXPOSED SURFACE	200	4976.96	09/15/94	10:09:00
1/N(045)	PAINTED SURFACE	320	10506.91	09/15/94	10:10:00
1/N(045)	EXPOSED SURFACE	280	8663.59	09/15/94	10:16:00
1/N(046)	PAINTED SURFACE	240	6820.28	09/15/94	10:18:00
1/N(046)	EXPOSED SURFACE	280	8663.59	09/15/94	10:25:00
1/N(047)	PAINTED SURFACE	220	5898.62	09/15/94	10:26:00
1/N(047)	EXPOSED SURFACE	200	4976.96	09/15/94	10:27:00
1/N(048)	PAINTED SURFACE	150	2672.81	09/15/94	10:27:00
1/N(048)	EXPOSED SURFACE	180	4055.30	09/15/94	10:28:00
1/N(049)	PAINTED SURFACE	250	7281.11	09/15/94	10:28:00
1/N(049)	EXPOSED SURFACE	140	2211.98	09/15/94	10:29:00
1/N(050)	PAINTED SURFACE	260	7741.94	09/15/94	10:31:00
1/N(050)	EXPOSED SURFACE	140	2211.98	09/15/94	10:31:00
1/N(051)	PAINTED SURFACE	220	5898.62	09/15/94	10:33:00
1/N(051)	EXPOSED SURFACE	140	2211.98	09/15/94	10:48:00
1/N(052)	PAINTED SURFACE	400	14193.55	09/15/94	10:50:00
1/N(052)	EXPOSED SURFACE	500	18801.84	09/15/94	10:50:00
1/N(053)	PAINTED SURFACE	100	368.66	09/15/94	10:51:00
1/N(053)	EXPOSED SURFACE	80	-553.00	09/15/94	10:51:00
1/N(054)	PAINTED SURFACE	140	2211.98	09/15/94	10:52:00
1/N(054)	EXPOSED SURFACE	80	-553.00	09/15/94	10:52:00

A.5. Summary Data of Beta / Gamma Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
1/N(055)	PAINTED SURFACE	120	1290.32	09/15/94	10:53:00
1/N(055)	EXPOSED SURFACE	60	-1474.65	09/15/94	10:54:00
1/N(056)	PAINTED SURFACE	500	18801.84	09/15/94	10:54:00
1/N(056)	EXPOSED SURFACE	160	3133.64	09/15/94	11:22:00
1/N(056)	EXPOSED SURFACE	60	-1228.88	09/20/94	14:28:00
1/N(057)	PAINTED SURFACE	180	4055.30	09/15/94	11:22:00
1/N(057)	EXPOSED SURFACE	180	4055.30	09/15/94	11:23:00
1/N(057)	PAINTED SURFACE	90	153.61	09/20/94	15:14:00
1/N(058)	PAINTED SURFACE	280	8663.59	09/15/94	11:23:00
1/N(058)	EXPOSED SURFACE	240	6820.28	09/15/94	11:24:00
1/N(059)	PAINTED SURFACE	180	4055.30	09/15/94	11:24:00
1/N(059)	EXPOSED SURFACE	360	12350.23	09/15/94	11:25:00
1/N(060)	PAINTED SURFACE	280	8663.59	09/15/94	11:25:00
1/N(060)	EXPOSED SURFACE	140	2211.98	09/15/94	11:26:00
1/N(061)	PAINTED SURFACE	360	12350.23	09/15/94	11:26:00
1/N(061)	EXPOSED SURFACE	280	8663.59	09/15/94	11:50:00
1/N(062)	PAINTED SURFACE	200	4976.96	09/15/94	11:51:00
1/N(062)	EXPOSED SURFACE	180	4055.30	09/15/94	11:51:00
1/N(063)	PAINTED SURFACE	360	12350.23	09/15/94	11:52:00
1/N(063)	EXPOSED SURFACE	480	17880.18	09/15/94	11:52:00
1/N(064)	PAINTED SURFACE	380	13271.89	09/15/94	11:52:00
1/N(064)	EXPOSED SURFACE	1000	41843.32	09/15/94	11:53:00
1/N(065)	PAINTED SURFACE	420	15115.21	09/15/94	11:53:00
1/N(065)	EXPOSED SURFACE	800	32626.73	09/15/94	11:54:00
1/N(066)	PAINTED SURFACE	380	13271.89	09/15/94	13:54:00
1/N(066)	EXPOSED SURFACE	800	32626.73	09/15/94	13:55:00
1/N(067)	PAINTED SURFACE	2100	92534.56	09/15/94	13:55:00
1/N(067)	EXPOSED SURFACE	700	28018.43	09/15/94	13:56:00
1/N(068)	PAINTED SURFACE	420	15115.21	09/15/94	13:56:00
1/N(068)	EXPOSED SURFACE	500	18801.84	09/15/94	13:56:00
1/N(069)	PAINTED SURFACE	450	16497.70	09/15/94	13:57:00
1/N(069)	EXPOSED SURFACE	280	8663.59	09/15/94	13:58:00
1/N(070)	PAINTED SURFACE	420	15115.21	09/15/94	13:58:00
1/N(070)	EXPOSED SURFACE	240	6820.28	09/15/94	13:59:00
1/N(071)	PAINTED SURFACE	600	23410.14	09/15/94	14:00:00
1/N(071)	EXPOSED SURFACE	750	30322.58	09/15/94	14:15:00
1/N(072)	PAINTED SURFACE	400	14193.55	09/15/94	14:15:00
1/N(072)	EXPOSED SURFACE	370	12811.06	09/15/94	14:16:00
1/N(073)	PAINTED SURFACE	180	4055.30	09/15/94	14:16:00
1/N(073)	EXPOSED SURFACE	180	4055.30	09/15/94	14:17:00
1/N(074)	PAINTED SURFACE	190	4516.13	09/15/94	14:17:00
1/N(074)	EXPOSED SURFACE	430	15576.04	09/15/94	14:17:00
1/N(075)	PAINTED SURFACE	210	5437.79	09/15/94	14:18:00
1/N(075)	EXPOSED SURFACE	300	9585.25	09/15/94	14:18:00
1/N(076)	PAINTED SURFACE	800	32626.73	09/15/94	14:19:00
1/N(076)	EXPOSED SURFACE	140	2211.98	09/15/94	15:13:00
1/N(077)	PAINTED SURFACE	160	3133.64	09/15/94	15:13:00
1/N(077)	EXPOSED SURFACE	120	1290.32	09/15/94	15:14:00

A.5. Summary Data of Beta / Gamma Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
1/N(078)	PAINTED SURFACE	120	1290.32	09/15/94	15:15:00
1/N(078)	EXPOSED SURFACE	100	368.66	09/15/94	15:16:00
1/N(079)	PAINTED SURFACE	140	2211.98	09/15/94	15:17:00
1/N(079)	EXPOSED SURFACE	80	-553.00	09/15/94	15:18:00
1/N(080)	PAINTED SURFACE	160	3133.64	09/15/94	15:19:00
1/N(080)	EXPOSED SURFACE	70	-1013.82	09/15/94	15:19:00
1/N(081)	PAINTED SURFACE	130	1751.15	09/15/94	15:20:00
1/N(081)	EXPOSED SURFACE	70	-1013.82	09/15/94	16:01:00
1/N(082)	PAINTED SURFACE	160	3133.64	09/15/94	16:01:00
1/N(082)	EXPOSED SURFACE	120	1290.32	09/15/94	16:02:00
1/N(083)	PAINTED SURFACE	150	2672.81	09/15/94	16:02:00
1/N(083)	EXPOSED SURFACE	120	1290.32	09/15/94	16:03:00
1/N(084)	PAINTED SURFACE	80	-553.00	09/15/94	16:04:00
1/N(084)	EXPOSED SURFACE	120	1290.32	09/15/94	16:04:00
1/N(085)	PAINTED SURFACE	90	-92.17	09/15/94	16:05:00
1/N(085)	EXPOSED SURFACE	100	368.66	09/15/94	16:05:00
1/N(086)	PAINTED SURFACE	110	1843.32	09/19/94	09:14:00
1/N(086)	EXPOSED SURFACE	80	460.83	09/19/94	09:36:00
1/N(087)	PAINTED SURFACE	70	0.00	09/19/94	09:37:00
1/N(087)	EXPOSED SURFACE	90	921.66	09/19/94	09:37:00
1/N(088)	PAINTED SURFACE	80	460.83	09/19/94	09:38:00
1/N(088)	EXPOSED SURFACE	95	1152.07	09/19/94	09:39:00
1/N(089)	PAINTED SURFACE	80	460.83	09/19/94	09:40:00
1/N(089)	EXPOSED SURFACE	80	460.83	09/19/94	09:41:00
1/N(090)	PAINTED SURFACE	90	921.66	09/19/94	09:41:00
1/N(090)	EXPOSED SURFACE	90	921.66	09/19/94	09:42:00
1/N(091)	PAINTED SURFACE	100	1382.49	09/19/94	10:45:00
1/N(091)	EXPOSED SURFACE	70	0.00	09/19/94	10:45:00
1/N(092)	PAINTED SURFACE	90	921.66	09/19/94	10:46:00
1/N(092)	EXPOSED SURFACE	100	1382.49	09/19/94	10:46:00
1/N(093)	PAINTED SURFACE	80	460.83	09/19/94	10:47:00
1/N(093)	EXPOSED SURFACE	130	2764.98	09/19/94	10:47:00
1/N(094)	PAINTED SURFACE	100	1382.49	09/19/94	10:47:00
1/N(094)	EXPOSED SURFACE	100	1382.49	09/19/94	10:48:00
1/N(095)	PAINTED SURFACE	200	5990.78	09/19/94	10:48:00
1/N(095)	EXPOSED SURFACE	80	460.83	09/19/94	10:49:00
1/N(096)	PAINTED SURFACE	80	460.83	09/19/94	10:54:00
1/N(096)	EXPOSED SURFACE	100	1382.49	09/19/94	11:35:00
1/N(097)	PAINTED SURFACE	140	3225.81	09/19/94	11:36:00
1/N(097)	EXPOSED SURFACE	80	460.83	09/19/94	11:36:00
1/N(098)	PAINTED SURFACE	80	460.83	09/19/94	11:36:00
1/N(098)	EXPOSED SURFACE	80	460.83	09/19/94	11:37:00
1/N(099)	PAINTED SURFACE	80	460.83	09/19/94	11:37:00
1/N(099)	EXPOSED SURFACE	100	1382.49	09/19/94	11:37:00
1/N(100)	PAINTED SURFACE	50	-921.66	09/19/94	11:38:00
1/N(100)	EXPOSED SURFACE	40	-1382.49	09/19/94	11:38:00
1/N(101)	PAINTED SURFACE	70	-1013.82	09/15/94	16:11:00
1/N(101)	EXPOSED SURFACE	100	368.66	09/15/94	16:12:00

A.5. Summary Data of Beta / Gamma Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
1/N(101)	PAINTED SURFACE	100	368.66	09/19/94	11:39:00
1/N(101)	EXPOSED SURFACE	70	-1013.82	09/19/94	11:42:00
1/N(102)	PAINTED SURFACE	100	368.66	09/15/94	16:13:00
1/N(102)	EXPOSED SURFACE	105	599.08	09/15/94	16:13:00
1/N(103)	PAINTED SURFACE	80	-553.00	09/15/94	16:14:00
1/N(103)	EXPOSED SURFACE	120	1290.32	09/15/94	16:14:00
1/N(104)	PAINTED SURFACE	80	-553.00	09/15/94	16:15:00
1/N(104)	EXPOSED SURFACE	130	1751.15	09/15/94	16:16:00
1/N(105)	PAINTED SURFACE	190	4516.13	09/15/94	16:16:00
1/N(105)	EXPOSED SURFACE	100	368.66	09/15/94	16:17:00
1/N(106)	PAINTED SURFACE	210	5437.79	09/15/94	16:06:00
1/N(106)	EXPOSED SURFACE	50	-1935.48	09/15/94	16:07:00
1/N(107)	PAINTED SURFACE	160	3133.64	09/15/94	16:07:00
1/N(107)	EXPOSED SURFACE	100	368.66	09/15/94	16:08:00
1/N(108)	PAINTED SURFACE	120	1290.32	09/15/94	16:08:00
1/N(108)	EXPOSED SURFACE	85	-322.58	09/15/94	16:08:00
1/N(109)	PAINTED SURFACE	80	-553.00	09/15/94	16:09:00
1/N(109)	EXPOSED SURFACE	120	1290.32	09/15/94	16:09:00
1/N(110)	PAINTED SURFACE	100	368.66	09/15/94	16:10:00
1/N(110)	EXPOSED SURFACE	125	1520.74	09/15/94	16:10:00
1/N(111)	PAINTED SURFACE	120	2304.15	09/19/94	09:43:00
1/N(111)	EXPOSED SURFACE	50	-921.66	09/19/94	09:58:00
1/N(112)	PAINTED SURFACE	100	1382.49	09/19/94	09:58:00
1/N(112)	EXPOSED SURFACE	90	921.66	09/19/94	10:00:00
1/N(113)	PAINTED SURFACE	80	-460.83	09/19/94	10:01:00
1/N(113)	EXPOSED SURFACE	90	921.66	09/19/94	10:01:00
1/N(114)	PAINTED SURFACE	90	921.66	09/19/94	10:02:00
1/N(114)	EXPOSED SURFACE	90	921.66	09/19/94	10:03:00
1/N(115)	PAINTED SURFACE	100	1382.49	09/19/94	10:03:00
1/N(115)	EXPOSED SURFACE	85	691.24	09/19/94	10:04:00
1/N(116)	PAINTED SURFACE	80	460.83	09/19/94	10:49:00
1/N(116)	EXPOSED SURFACE	95	1152.07	09/19/94	10:50:00
1/N(117)	PAINTED SURFACE	70	0.00	09/19/94	10:50:00
1/N(117)	EXPOSED SURFACE	60	-460.83	09/19/94	10:50:00
1/N(118)	PAINTED SURFACE	80	460.83	09/19/94	10:51:00
1/N(118)	EXPOSED SURFACE	50	-921.66	09/19/94	10:51:00
1/N(119)	PAINTED SURFACE	80	460.83	09/19/94	10:52:00
1/N(119)	EXPOSED SURFACE	100	1382.49	09/19/94	10:53:00
1/N(120)	PAINTED SURFACE	60	-460.83	09/19/94	10:53:00
1/N(120)	EXPOSED SURFACE	90	921.66	09/19/94	10:53:00
1/N(121)	PAINTED SURFACE	100	1382.49	09/19/94	11:39:00
1/N(121)	EXPOSED SURFACE	100	1382.49	09/19/94	11:42:00
1/N(122)	PAINTED SURFACE	110	1843.32	09/19/94	11:42:00
1/N(122)	EXPOSED SURFACE	70	0.00	09/19/94	11:44:00
1/N(123)	PAINTED SURFACE	110	1843.32	09/19/94	11:44:00
1/N(123)	EXPOSED SURFACE	80	460.83	09/19/94	11:45:00
1/N(124)	PAINTED SURFACE	90	921.66	09/19/94	11:45:00
1/N(124)	EXPOSED SURFACE	55	-691.24	09/19/94	11:45:00

A.5. Summary Data of Beta / Gamma Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
1/N(125)	PAINTED SURFACE	90	921.66	09/19/94	11:46:00
1/N(125)	EXPOSED SURFACE	70	0.00	09/19/94	11:46:00
1/N(126)	PAINTED SURFACE	80	460.83	09/19/94	11:48:00
1/N(126)	EXPOSED SURFACE	125	2534.56	09/19/94	11:54:00
1/N(127)	PAINTED SURFACE	70	0.00	09/19/94	11:54:00
1/N(127)	EXPOSED SURFACE	70	0.00	09/19/94	11:55:00
1/N(128)	PAINTED SURFACE	60	-460.83	09/19/94	11:55:00
1/N(128)	EXPOSED SURFACE	60	-460.83	09/19/94	11:55:00
1/N(129)	PAINTED SURFACE	80	460.83	09/19/94	11:56:00
1/N(129)	EXPOSED SURFACE	110	1843.32	09/19/94	11:56:00
1/N(130)	PAINTED SURFACE	120	2304.15	09/19/94	11:57:00
1/N(130)	EXPOSED SURFACE	90	921.66	09/19/94	11:57:00
1/N(999)	PAINTED SURFACE	80	-553.00	09/15/94	11:55:00
1/N(999)	PAINTED SURFACE	80	-553.00	09/15/94	11:55:00
1/N(999)	PAINTED SURFACE	80	-553.00	09/15/94	16:17:00
1/N(999)	PAINTED SURFACE	80	-553.00	09/15/94	16:18:00
1/N(999)	PAINTED SURFACE	140	2211.98	09/15/94	16:18:00
1/N(999)	PAINTED SURFACE	70	0.00	09/19/94	11:58:00
1/N(999)	PAINTED SURFACE	70	0.00	09/19/94	11:58:00
1/S(001)	PAINTED SURFACE	280	6221.20	09/19/94	14:07:00
1/S(001)	EXPOSED SURFACE	140	-230.41	09/19/94	14:07:00
1/S(002)	PAINTED SURFACE	240	4377.88	09/19/94	14:08:00
1/S(002)	EXPOSED SURFACE	220	3456.22	09/19/94	14:15:00
1/S(003)	PAINTED SURFACE	300	7142.86	09/19/94	14:09:00
1/S(003)	EXPOSED SURFACE	500	16359.45	09/19/94	14:10:00
1/S(004)	PAINTED SURFACE	360	9907.83	09/19/94	14:11:00
1/S(004)	EXPOSED SURFACE	340	8986.18	09/19/94	14:12:00
1/S(005)	PAINTED SURFACE	360	9907.83	09/19/94	14:12:00
1/S(005)	EXPOSED SURFACE	200	2534.56	09/19/94	14:13:00
1/S(006)	PAINTED SURFACE	380	10829.49	09/19/94	14:15:00
1/S(006)	EXPOSED SURFACE	400	11751.15	09/19/94	14:34:00
1/S(007)	PAINTED SURFACE	350	9447.00	09/19/94	14:36:00
1/S(007)	EXPOSED SURFACE	300	7142.86	09/19/94	14:37:00
1/S(008)	EXPOSED SURFACE	300	7142.86	09/19/94	14:38:00
1/S(008)	PAINTED SURFACE	800	30184.33	09/19/94	15:06:00
1/S(009)	PAINTED SURFACE	350	9447.00	09/19/94	14:39:00
1/S(009)	EXPOSED SURFACE	600	20967.74	09/19/94	14:39:00
1/S(010)	PAINTED SURFACE	280	6221.20	09/19/94	14:40:00
1/S(010)	EXPOSED SURFACE	220	3456.22	09/19/94	14:41:00
1/S(011)	PAINTED SURFACE	180	1612.90	09/19/94	14:42:00
1/S(011)	EXPOSED SURFACE	300	7142.86	09/19/94	14:43:00
1/S(012)	PAINTED SURFACE	500	16359.45	09/19/94	14:43:00
1/S(012)	EXPOSED SURFACE	390	11290.32	09/19/94	14:44:00
1/S(013)	PAINTED SURFACE	380	10829.49	09/19/94	14:45:00
1/S(013)	EXPOSED SURFACE	360	9907.83	09/19/94	14:45:00
1/S(014)	PAINTED SURFACE	800	30184.33	09/19/94	14:46:00
1/S(014)	EXPOSED SURFACE	360	9907.83	09/19/94	14:46:00
1/S(015)	PAINTED SURFACE	360	9907.83	09/19/94	14:47:00

A.5. Summary Data of Beta / Gamma Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
1/S(015)	EXPOSED SURFACE	280	6221.20	09/19/94	14:48:00
1/S(016)	PAINTED SURFACE	1000	39400.92	09/19/94	14:48:00
1/S(016)	EXPOSED SURFACE	260	5299.54	09/19/94	14:58:00
1/S(017)	PAINTED SURFACE	220	3456.22	09/19/94	14:58:00
1/S(017)	EXPOSED SURFACE	260	5299.54	09/19/94	14:59:00
1/S(018)	PAINTED SURFACE	380	10829.49	09/19/94	15:00:00
1/S(018)	EXPOSED SURFACE	240	4377.88	09/19/94	15:00:00
1/S(019)	PAINTED SURFACE	380	10829.49	09/19/94	15:01:00
1/S(019)	EXPOSED SURFACE	480	15437.79	09/19/94	15:02:00
1/S(020)	PAINTED SURFACE	250	4838.71	09/19/94	15:03:00
1/S(020)	EXPOSED SURFACE	460	14516.13	09/19/94	15:03:00
1/S(021)	PAINTED SURFACE	300	7142.86	09/19/94	15:08:00
1/S(021)	EXPOSED SURFACE	360	9907.83	09/19/94	15:15:00
1/S(022)	PAINTED SURFACE	480	15437.79	09/19/94	15:15:00
1/S(022)	EXPOSED SURFACE	380	10829.49	09/19/94	15:17:00
1/S(023)	PAINTED SURFACE	320	8064.52	09/19/94	15:17:00
1/S(023)	EXPOSED SURFACE	2000	85483.87	09/19/94	15:18:00
1/S(024)	PAINTED SURFACE	420	12672.81	09/19/94	15:18:00
1/S(024)	EXPOSED SURFACE	300	7142.86	09/19/94	15:19:00
1/S(025)	PAINTED SURFACE	12000	546313.36	09/19/94	15:20:00
1/S(025)	EXPOSED SURFACE	1200	48617.51	09/19/94	15:20:00
1/S(026)	PAINTED SURFACE	7000	315898.62	09/19/94	15:21:00
1/S(026)	EXPOSED SURFACE	1600	67050.69	09/19/94	15:46:00
1/S(027)	PAINTED SURFACE	180	1612.90	09/19/94	15:47:00
1/S(027)	EXPOSED SURFACE	120	-1152.07	09/19/94	15:47:00
1/S(028)	PAINTED SURFACE	120	-1152.07	09/19/94	15:48:00
1/S(028)	EXPOSED SURFACE	120	-1152.07	09/19/94	15:48:00
1/S(029)	PAINTED SURFACE	120	-1152.07	09/19/94	15:49:00
1/S(029)	EXPOSED SURFACE	100	-2073.73	09/19/94	15:50:00
1/S(030)	PAINTED SURFACE	200	2534.56	09/19/94	15:50:00
1/S(030)	EXPOSED SURFACE	200	2534.56	09/19/94	15:51:00
1/S(031)	PAINTED SURFACE	240	4377.88	09/19/94	15:52:00
1/S(031)	EXPOSED SURFACE	200	2534.56	09/19/94	16:07:00
1/S(032)	PAINTED SURFACE	240	4377.88	09/19/94	16:07:00
1/S(032)	EXPOSED SURFACE	160	691.24	09/19/94	16:08:00
1/S(033)	PAINTED SURFACE	1000	39400.92	09/19/94	16:08:00
1/S(033)	EXPOSED SURFACE	240	4377.88	09/19/94	16:09:00
1/S(034)	PAINTED SURFACE	360	9907.83	09/19/94	16:10:00
1/S(034)	EXPOSED SURFACE	180	1612.90	09/19/94	16:10:00
1/S(035)	PAINTED SURFACE	180	1612.90	09/19/94	16:10:00
1/S(035)	EXPOSED SURFACE	160	691.24	09/19/94	16:11:00
1/S(036)	PAINTED SURFACE	220	3456.22	09/19/94	16:14:00
1/S(036)	EXPOSED SURFACE	180	1612.90	09/19/94	16:22:00
1/S(037)	PAINTED SURFACE	250	4838.71	09/19/94	16:22:00
1/S(037)	EXPOSED SURFACE	420	12672.81	09/19/94	16:22:00
1/S(040)	PAINTED SURFACE	400	14861.75	09/23/94	10:28:00
1/S(040)	EXPOSED SURFACE	460	17626.73	09/23/94	10:30:00
1/S(041)	PAINTED SURFACE	180	4301.08	09/20/94	11:38:00

A.5. Summary Data of Beta / Gamma Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
1/S(041)	EXPOSED SURFACE	240	7066.05	09/20/94	11:41:00
1/S(042)	PAINTED SURFACE	200	5222.73	09/20/94	11:48:00
1/S(042)	EXPOSED SURFACE	67	-906.30	09/20/94	11:49:00
1/S(043)	PAINTED SURFACE	0	-3993.86	09/20/94	11:56:00
1/S(043)	EXPOSED SURFACE	250	7526.88	09/20/94	12:14:00
1/S(044)	PAINTED SURFACE	400	14439.32	09/20/94	12:15:00
1/S(044)	EXPOSED SURFACE	170	3840.25	09/20/94	12:16:00
1/S(045)	PAINTED SURFACE	380	13517.67	09/20/94	12:29:00
1/S(045)	EXPOSED SURFACE	170	3840.25	09/20/94	12:37:00
1/S(046)	PAINTED SURFACE	180	4301.08	09/20/94	12:37:00
1/S(046)	EXPOSED SURFACE	320	10752.69	09/20/94	12:38:00
1/S(047)	PAINTED SURFACE	230	6605.22	09/20/94	12:39:00
1/S(047)	EXPOSED SURFACE	230	6605.22	09/20/94	12:39:00
1/S(048)	PAINTED SURFACE	300	9831.03	09/20/94	12:40:00
1/S(048)	EXPOSED SURFACE	300	9831.03	09/20/94	12:41:00
1/S(049)	PAINTED SURFACE	1500	65130.57	09/20/94	12:41:00
1/S(049)	EXPOSED SURFACE	330	11213.52	09/20/94	12:42:00
1/S(050)	PAINTED SURFACE	330	11213.52	09/20/94	12:42:00
1/S(050)	EXPOSED SURFACE	220	6144.39	09/20/94	12:43:00
1/S(052)	PAINTED SURFACE	500	19047.62	09/20/94	13:53:00
1/S(052)	EXPOSED SURFACE	2600	115821.81	09/20/94	13:54:00
1/S(053)	PAINTED SURFACE	90	153.61	09/20/94	13:55:00
1/S(053)	EXPOSED SURFACE	110	1075.27	09/20/94	13:56:00
1/S(054)	PAINTED SURFACE	80	-307.22	09/20/94	13:57:00
1/S(054)	EXPOSED SURFACE	120	1536.10	09/20/94	13:58:00
1/S(055)	PAINTED SURFACE	90	153.61	09/20/94	13:59:00
1/S(055)	EXPOSED SURFACE	60	-1228.88	09/20/94	14:02:00
1/S(056)	PAINTED SURFACE	80	115.21	09/23/94	10:31:00
1/S(056)	EXPOSED SURFACE	60	-806.45	09/23/94	10:32:00
1/S(057)	EXPOSED SURFACE	80	-307.22	09/20/94	15:15:00
1/S(057)	PAINTED SURFACE	90	576.04	09/23/94	10:32:00
1/S(058)	PAINTED SURFACE	60	-806.45	09/23/94	10:34:00
1/S(058)	EXPOSED SURFACE	80	115.21	09/23/94	10:35:00
1/S(059)	PAINTED SURFACE	145	3110.60	09/23/94	10:37:00
1/S(059)	EXPOSED SURFACE	120	1958.53	09/23/94	10:38:00
1/S(060)	PAINTED SURFACE	155	3571.43	09/23/94	10:38:00
1/S(060)	EXPOSED SURFACE	100	1036.87	09/23/94	10:39:00
1/S(061)	PAINTED SURFACE	120	1958.53	09/23/94	10:40:00
1/S(061)	EXPOSED SURFACE	140	2880.18	09/23/94	10:40:00
1/S(062)	PAINTED SURFACE	420	15783.41	09/23/94	10:42:00
1/S(062)	EXPOSED SURFACE	150	3341.01	09/23/94	10:42:00
1/S(062)	PAINTED SURFACE	480	18548.39	09/23/94	10:43:00
1/S(063)	EXPOSED SURFACE	220	6566.82	09/23/94	10:44:00
1/S(064)	PAINTED SURFACE	200	5645.16	09/23/94	10:44:00
1/S(064)	EXPOSED SURFACE	180	4723.50	09/23/94	10:45:00
1/S(065)	PAINTED SURFACE	180	4723.50	09/23/94	10:46:00
1/S(065)	EXPOSED SURFACE	180	4723.50	09/23/94	10:47:00
1/S(066)	PAINTED SURFACE	190	5184.33	09/23/94	10:47:00

A.5. Summary Data of Beta / Gamma Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
1/S(066)	EXPOSED SURFACE	200	5645.16	09/23/94	10:48:00
1/S(067)	PAINTED SURFACE	330	11635.94	09/23/94	10:48:00
1/S(067)	EXPOSED SURFACE	1000	42511.52	09/23/94	10:49:00
1/S(068)	PAINTED SURFACE	240	7488.48	09/23/94	10:50:00
1/S(069)	PAINTED SURFACE	200	5645.16	09/23/94	10:52:00
1/S(069)	EXPOSED SURFACE	200	5645.16	09/23/94	10:53:00
1/S(070)	PAINTED SURFACE	180	4723.50	09/23/94	10:53:00
1/S(070)	EXPOSED SURFACE	150	3341.01	09/23/94	10:54:00
1/S(071)	PAINTED SURFACE	180	4723.50	09/23/94	10:55:00
1/S(071)	EXPOSED SURFACE	150	3341.01	09/23/94	10:55:00
1/S(072)	PAINTED SURFACE	300	10253.46	09/23/94	10:56:00
1/S(072)	EXPOSED SURFACE	240	7488.48	09/23/94	10:57:00
1/S(073)	PAINTED SURFACE	600	24078.34	09/23/94	10:57:00
1/S(073)	EXPOSED SURFACE	300	10253.46	09/23/94	10:58:00
1/S(074)	PAINTED SURFACE	400	14861.75	09/23/94	10:58:00
1/S(074)	EXPOSED SURFACE	1000	42511.52	09/23/94	10:59:00
1/S(075)	PAINTED SURFACE	360	13018.43	09/23/94	10:59:00
1/S(075)	EXPOSED SURFACE	2700	120852.53	09/23/94	11:00:00
1/S(076)	PAINTED SURFACE	300	10253.46	09/23/94	11:01:00
1/S(076)	EXPOSED SURFACE	500	19470.05	09/23/94	11:05:00
1/S(077)	PAINTED SURFACE	200	5645.16	09/23/94	11:05:00
1/S(077)	EXPOSED SURFACE	200	5645.16	09/23/94	11:06:00
1/S(078)	PAINTED SURFACE	230	7027.65	09/23/94	11:07:00
1/S(078)	EXPOSED SURFACE	280	9331.80	09/23/94	11:08:00
1/S(079)	PAINTED SURFACE	80	115.21	09/23/94	11:11:00
1/S(079)	EXPOSED SURFACE	50	-1267.28	09/23/94	11:12:00
1/S(080)	PAINTED SURFACE	100	1036.87	09/23/94	11:13:00
1/S(080)	EXPOSED SURFACE	90	576.04	09/23/94	11:13:00
1/S(081)	PAINTED SURFACE	60	-806.45	09/23/94	11:20:00
1/S(081)	EXPOSED SURFACE	50	-1267.28	09/23/94	11:21:00
1/S(082)	PAINTED SURFACE	50	-1267.28	09/23/94	11:21:00
1/S(082)	EXPOSED SURFACE	50	-1267.28	09/23/94	11:22:00
1/S(083)	PAINTED SURFACE	70	-345.62	09/23/94	11:23:00
1/S(083)	EXPOSED SURFACE	80	115.21	09/23/94	11:23:00
1/S(084)	PAINTED SURFACE	50	-1267.28	09/23/94	11:23:00
1/S(084)	EXPOSED SURFACE	120	1958.53	09/23/94	11:24:00
1/S(086)	PAINTED SURFACE	90	576.04	09/23/94	11:27:00
1/S(086)	EXPOSED SURFACE	95	806.45	09/23/94	11:29:00
1/S(087)	PAINTED SURFACE	110	1497.70	09/23/94	11:31:00
1/S(087)	EXPOSED SURFACE	110	1497.70	09/23/94	11:31:00
1/S(088)	PAINTED SURFACE	105	1267.28	09/23/94	11:32:00
1/S(088)	EXPOSED SURFACE	90	576.04	09/23/94	11:33:00
1/S(089)	PAINTED SURFACE	120	1958.53	09/23/94	11:33:00
1/S(089)	EXPOSED SURFACE	120	1536.10	09/20/94	11:33:00
1/S(090)	PAINTED SURFACE	130	2419.35	09/23/94	11:35:00
1/S(090)	EXPOSED SURFACE	130	2419.35	09/23/94	11:36:00
1/S(091)	PAINTED SURFACE	120	1958.53	09/23/94	11:36:00
1/S(091)	EXPOSED SURFACE	120	1958.53	09/23/94	11:37:00

A.5. Summary Data of Beta / Gamma Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
1/S(092)	PAINTED SURFACE	130	2419.35	09/23/94	11:37:00
1/S(092)	EXPOSED SURFACE	110	1075.27	09/20/94	11:37:00
1/S(093)	PAINTED SURFACE	120	1958.53	09/23/94	11:39:00
1/S(093)	EXPOSED SURFACE	180	4723.50	09/23/94	11:40:00
1/S(094)	PAINTED SURFACE	120	1958.53	09/23/94	11:40:00
1/S(094)	EXPOSED SURFACE	120	1958.53	09/23/94	11:41:00
1/S(095)	PAINTED SURFACE	140	2880.18	09/23/94	11:42:00
1/S(095)	EXPOSED SURFACE	130	2419.35	09/23/94	11:43:00
1/S(096)	PAINTED SURFACE	250	7949.31	09/23/94	11:44:00
1/S(096)	EXPOSED SURFACE	140	2880.18	09/23/94	11:46:00
1/S(097)	PAINTED SURFACE	200	5645.16	09/23/94	11:48:00
1/S(097)	EXPOSED SURFACE	100	1036.87	09/23/94	11:49:00
1/S(098)	PAINTED SURFACE	280	9331.80	09/23/94	11:50:00
1/S(098)	EXPOSED SURFACE	150	3341.01	09/23/94	11:50:00
1/S(099)	PAINTED SURFACE	120	1958.53	09/23/94	11:51:00
1/S(099)	EXPOSED SURFACE	110	1497.70	09/23/94	11:52:00
1/S(100)	PAINTED SURFACE	140	2880.18	09/23/94	11:52:00
1/S(100)	EXPOSED SURFACE	90	153.61	09/20/94	11:53:00
1/S(101)	PAINTED SURFACE	140	2457.76	09/20/94	11:18:00
1/S(101)	EXPOSED SURFACE	190	4761.90	09/20/94	11:19:00
1/S(102)	PAINTED SURFACE	130	1996.93	09/20/94	11:20:00
1/S(102)	EXPOSED SURFACE	120	1536.10	09/20/94	11:22:00
1/S(103)	PAINTED SURFACE	140	2457.76	09/20/94	11:24:00
1/S(103)	EXPOSED SURFACE	130	1996.93	09/20/94	11:26:00
1/S(104)	PAINTED SURFACE	200	5222.73	09/20/94	11:27:00
1/S(104)	EXPOSED SURFACE	120	1958.53	09/23/94	11:55:00
1/S(105)	PAINTED SURFACE	80	-307.22	09/20/94	11:35:00
1/S(105)	EXPOSED SURFACE	70	-768.05	09/20/94	11:37:00
1/S(106)	PAINTED SURFACE	80	-307.22	09/20/94	10:13:00
1/S(106)	EXPOSED SURFACE	80	-307.22	09/20/94	10:43:00
1/S(107)	PAINTED SURFACE	80	-307.22	09/20/94	10:44:00
1/S(107)	EXPOSED SURFACE	70	-768.05	09/20/94	10:46:00
1/S(108)	PAINTED SURFACE	80	-307.22	09/20/94	10:48:00
1/S(108)	EXPOSED SURFACE	100	614.44	09/20/94	10:50:00
1/S(109)	PAINTED SURFACE	80	-307.22	09/20/94	11:03:00
1/S(109)	EXPOSED SURFACE	70	-768.05	09/20/94	11:05:00
1/S(110)	PAINTED SURFACE	100	614.44	09/20/94	11:06:00
1/S(110)	EXPOSED SURFACE	90	576.04	09/23/94	11:56:00
1/S(111)	PAINTED SURFACE	80	-307.22	09/20/94	10:11:00
1/S(111)	EXPOSED SURFACE	100	614.44	09/20/94	10:12:00
1/S(112)	PAINTED SURFACE	80	-307.22	09/20/94	10:10:00
1/S(112)	EXPOSED SURFACE	170	3840.25	09/20/94	10:10:00
1/S(113)	PAINTED SURFACE	120	1536.10	09/20/94	10:08:00
1/S(113)	EXPOSED SURFACE	15	-3302.61	09/20/94	10:09:00
1/S(114)	PAINTED SURFACE	100	614.44	09/20/94	10:06:00
1/S(114)	EXPOSED SURFACE	90	153.61	09/20/94	10:07:00
1/S(115)	PAINTED SURFACE	140	2457.76	09/20/94	09:50:00
1/S(115)	EXPOSED SURFACE	100	614.44	09/20/94	10:06:00

A.5. Summary Data of Beta / Gamma Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
1/S(116)	PAINTED SURFACE	80	-307.22	09/20/94	09:49:00
1/S(116)	EXPOSED SURFACE	80	115.21	09/23/94	11:56:00
1/S(117)	PAINTED SURFACE	80	-307.22	09/20/94	09:48:00
1/S(117)	EXPOSED SURFACE	80	-307.22	09/20/94	09:48:00
1/S(118)	PAINTED SURFACE	100	614.44	09/20/94	09:46:00
1/S(118)	EXPOSED SURFACE	100	614.44	09/20/94	09:47:00
1/S(119)	PAINTED SURFACE	100	614.44	09/20/94	09:45:00
1/S(119)	EXPOSED SURFACE	60	-1228.88	09/20/94	09:46:00
1/S(120)	PAINTED SURFACE	120	1536.10	09/20/94	09:30:00
1/S(120)	EXPOSED SURFACE	80	-307.22	09/20/94	09:45:00
1/S(121)	PAINTED SURFACE	100	614.44	09/20/94	09:12:00
1/S(121)	EXPOSED SURFACE	120	1536.10	09/20/94	09:25:00
1/S(122)	PAINTED SURFACE	80	-307.22	09/20/94	09:26:00
1/S(122)	EXPOSED SURFACE	100	1036.87	09/23/94	11:58:00
1/S(123)	PAINTED SURFACE	80	-307.22	09/20/94	09:27:00
1/S(123)	EXPOSED SURFACE	32	-2519.20	09/20/94	09:27:00
1/S(124)	PAINTED SURFACE	80	-307.22	09/20/94	09:28:00
1/S(124)	EXPOSED SURFACE	80	-307.22	09/20/94	09:28:00
1/S(125)	PAINTED SURFACE	80	-307.22	09/20/94	09:29:00
1/S(125)	EXPOSED SURFACE	100	614.44	09/20/94	09:29:00
1/S(126)	PAINTED SURFACE	120	1536.10	09/20/94	09:05:00
1/S(126)	EXPOSED SURFACE	80	-307.22	09/20/94	09:06:00
1/S(127)	PAINTED SURFACE	140	2457.76	09/20/94	09:07:00
1/S(127)	EXPOSED SURFACE	310	10291.86	09/20/94	09:07:00
1/S(128)	PAINTED SURFACE	80	-307.22	09/20/94	09:08:00
1/S(128)	EXPOSED SURFACE	100	614.44	09/20/94	09:09:00
1/S(129)	PAINTED SURFACE	60	-1228.88	09/20/94	09:09:00
1/S(129)	EXPOSED SURFACE	100	614.44	09/20/94	09:10:00
1/S(129)	PAINTED SURFACE	60	-1228.88	09/20/94	09:09:00
1/S(130)	PAINTED SURFACE	120	1536.10	09/20/94	09:11:00
1/S(130)	EXPOSED SURFACE	80	-307.22	09/20/94	09:11:00
1/S(999)	PAINTED SURFACE	150	230.41	09/19/94	09:15:00
1/S(999)	PAINTED SURFACE	140	-230.41	09/19/94	09:15:00
1/S(999)	PAINTED SURFACE	80	-307.22	09/20/94	09:15:00
1/S(999)	PAINTED SURFACE	70	-768.05	09/20/94	09:15:00
1/S(999)	PAINTED SURFACE	110	1075.27	09/20/94	09:15:00
1/W(001)	PAINTED SURFACE	1100	46082.95	09/21/94	11:35:00
1/W(001)	EXPOSED SURFACE	60	-1843.32	09/21/94	11:42:00
1/W(003)	PAINTED SURFACE	1000	41474.65	09/21/94	11:43:00
1/W(003)	EXPOSED SURFACE	700	27649.77	09/21/94	11:43:00
1/W(004)	PAINTED SURFACE	700	27649.77	09/21/94	11:43:00
1/W(004)	EXPOSED SURFACE	40	-2764.98	09/21/94	11:44:00
1/W(005)	PAINTED SURFACE	650	25345.62	09/21/94	11:45:00
1/W(005)	EXPOSED SURFACE	80	-921.66	09/21/94	11:45:00
1/W(006)	PAINTED SURFACE	300	9216.59	09/21/94	11:46:00
1/W(006)	EXPOSED SURFACE	360	11981.57	09/21/94	11:56:00
1/W(007)	PAINTED SURFACE	300	9216.59	09/21/94	11:57:00
1/W(007)	EXPOSED SURFACE	400	13824.88	09/21/94	11:57:00

A.5. Summary Data of Beta / Gamma Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
1/W(008)	PAINTED SURFACE	320	10138.25	09/21/94	11:58:00
1/W(008)	EXPOSED SURFACE	320	10138.25	09/21/94	11:58:00
1/W(009)	PAINTED SURFACE	320	10138.25	09/21/94	11:59:00
1/W(009)	EXPOSED SURFACE	260	7373.27	09/21/94	11:59:00
1/W(010)	PAINTED SURFACE	1100	46082.95	09/21/94	12:00:00
1/W(010)	EXPOSED SURFACE	200	4608.29	09/21/94	12:00:00
1/W(011)	PAINTED SURFACE	230	5990.78	09/21/94	15:48:00
1/W(011)	EXPOSED SURFACE	200	4608.29	09/21/94	15:52:00
1/W(012)	PAINTED SURFACE	340	11059.91	09/21/94	15:53:00
1/W(012)	EXPOSED SURFACE	180	3686.64	09/21/94	15:53:00
1/W(015)	PAINTED SURFACE	240	6451.61	09/21/94	15:54:00
1/W(015)	EXPOSED SURFACE	260	7373.27	09/21/94	15:54:00
1/W(016)	PAINTED SURFACE	150	2304.15	09/21/94	15:42:00
1/W(016)	EXPOSED SURFACE	160	2764.98	09/21/94	15:42:00
1/W(017)	PAINTED SURFACE	160	2764.98	09/21/94	15:43:00
1/W(017)	EXPOSED SURFACE	140	1843.32	09/21/94	15:43:00
1/W(018)	PAINTED SURFACE	220	5529.95	09/21/94	15:44:00
1/W(018)	EXPOSED SURFACE	260	7373.27	09/21/94	15:44:00
1/W(019)	PAINTED SURFACE	220	5529.95	09/21/94	15:45:00
1/W(019)	EXPOSED SURFACE	220	5529.95	09/21/94	15:46:00
1/W(020)	PAINTED SURFACE	150	2304.15	09/21/94	15:47:00
1/W(020)	EXPOSED SURFACE	200	4608.29	09/21/94	15:47:00
1/W(021)	PAINTED SURFACE	200	4608.29	09/21/94	15:28:00
1/W(021)	EXPOSED SURFACE	150	2304.15	09/21/94	15:34:00
1/W(022)	PAINTED SURFACE	200	4608.29	09/21/94	15:34:00
1/W(022)	EXPOSED SURFACE	160	2764.98	09/21/94	15:35:00
1/W(023)	PAINTED SURFACE	360	11981.57	09/21/94	15:35:00
1/W(023)	EXPOSED SURFACE	180	3686.64	09/21/94	15:36:00
1/W(024)	PAINTED SURFACE	220	5529.95	09/21/94	15:37:00
1/W(024)	EXPOSED SURFACE	220	5529.95	09/21/94	15:38:00
1/W(025)	PAINTED SURFACE	220	5529.95	09/21/94	15:39:00
1/W(025)	EXPOSED SURFACE	210	5069.12	09/21/94	15:40:00
1/W(026)	PAINTED SURFACE	150	2304.15	09/21/94	15:18:00
1/W(026)	EXPOSED SURFACE	170	3225.81	09/21/94	15:22:00
1/W(027)	PAINTED SURFACE	160	2764.98	09/21/94	15:23:00
1/W(027)	EXPOSED SURFACE	170	3225.81	09/21/94	15:23:00
1/W(028)	PAINTED SURFACE	160	2764.98	09/21/94	15:24:00
1/W(028)	EXPOSED SURFACE	160	2764.98	09/21/94	15:25:00
1/W(029)	PAINTED SURFACE	100	0.00	09/21/94	15:26:00
1/W(029)	EXPOSED SURFACE	120	921.66	09/21/94	15:27:00
1/W(030)	PAINTED SURFACE	120	921.66	09/21/94	14:55:00
1/W(030)	EXPOSED SURFACE	140	1843.32	09/21/94	14:55:00
1/W(031)	PAINTED SURFACE	120	921.66	09/21/94	14:55:00
1/W(031)	EXPOSED SURFACE	100	0.00	09/21/94	15:12:00
1/W(032)	PAINTED SURFACE	140	1843.32	09/21/94	15:12:00
1/W(032)	EXPOSED SURFACE	80	-921.66	09/21/94	15:13:00
1/W(033)	PAINTED SURFACE	110	460.83	09/21/94	15:14:00
1/W(033)	EXPOSED SURFACE	120	921.66	09/21/94	15:14:00

A.5. Summary Data of Beta / Gamma Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
1/W(034)	PAINTED SURFACE	130	1382.49	09/21/94	15:15:00
1/W(034)	EXPOSED SURFACE	60	-1843.32	09/21/94	15:16:00
1/W(035)	PAINTED SURFACE	120	921.66	09/21/94	15:17:00
1/W(035)	EXPOSED SURFACE	50	-2304.15	09/21/94	15:17:00
1/W(036)	PAINTED SURFACE	130	1382.49	09/21/94	14:39:00
1/W(036)	EXPOSED SURFACE	130	1382.49	09/21/94	14:45:00
1/W(037)	PAINTED SURFACE	110	460.83	09/21/94	14:45:00
1/W(037)	EXPOSED SURFACE	120	921.66	09/21/94	14:47:00
1/W(038)	PAINTED SURFACE	85	-691.24	09/21/94	14:48:00
1/W(038)	EXPOSED SURFACE	80	-921.66	09/21/94	14:50:00
1/W(039)	PAINTED SURFACE	80	-921.66	09/21/94	14:51:00
1/W(039)	EXPOSED SURFACE	80	-921.66	09/21/94	14:53:00
1/W(040)	PAINTED SURFACE	70	-1382.49	09/21/94	14:53:00
1/W(040)	EXPOSED SURFACE	30	-3225.81	09/21/94	14:54:00
1/W(041)	PAINTED SURFACE	110	460.83	09/21/94	14:26:00
1/W(041)	EXPOSED SURFACE	120	921.66	09/21/94	14:29:00
1/W(042)	PAINTED SURFACE	100	0.00	09/21/94	14:31:00
1/W(042)	EXPOSED SURFACE	100	0.00	09/21/94	14:32:00
1/W(043)	PAINTED SURFACE	70	-1382.49	09/21/94	14:33:00
1/W(043)	EXPOSED SURFACE	80	-921.66	09/21/94	14:34:00
1/W(044)	PAINTED SURFACE	90	-460.83	09/21/94	14:35:00
1/W(044)	EXPOSED SURFACE	100	0.00	09/21/94	14:36:00
1/W(045)	PAINTED SURFACE	140	1843.32	09/21/94	14:37:00
1/W(045)	EXPOSED SURFACE	130	1382.49	09/21/94	14:38:00
1/W(046)	PAINTED SURFACE	170	3225.81	09/21/94	14:15:00
1/W(046)	EXPOSED SURFACE	110	460.83	09/21/94	14:18:00
1/W(047)	PAINTED SURFACE	130	1382.49	09/21/94	14:18:00
1/W(047)	EXPOSED SURFACE	90	-460.83	09/21/94	14:19:00
1/W(048)	PAINTED SURFACE	150	2304.15	09/21/94	14:21:00
1/W(048)	EXPOSED SURFACE	85	-691.24	09/21/94	14:22:00
1/W(049)	PAINTED SURFACE	190	4147.47	09/21/94	14:23:00
1/W(049)	EXPOSED SURFACE	120	921.66	09/21/94	14:24:00
1/W(050)	PAINTED SURFACE	200	4608.29	09/21/94	14:25:00
1/W(050)	EXPOSED SURFACE	100	0.00	09/21/94	14:25:00
1/W(051)	PAINTED SURFACE	80	-921.66	09/21/94	13:56:00
1/W(051)	EXPOSED SURFACE	80	-921.66	09/21/94	14:00:00
1/W(052)	PAINTED SURFACE	70	-1382.49	09/21/94	14:01:00
1/W(052)	EXPOSED SURFACE	80	-921.66	09/21/94	14:02:00
1/W(053)	PAINTED SURFACE	80	-921.66	09/21/94	14:10:00
1/W(053)	EXPOSED SURFACE	95	-230.41	09/21/94	14:11:00
1/W(054)	PAINTED SURFACE	90	-460.83	09/21/94	14:12:00
1/W(054)	EXPOSED SURFACE	100	0.00	09/21/94	14:13:00
1/W(055)	PAINTED SURFACE	100	0.00	09/21/94	14:14:00
1/W(055)	EXPOSED SURFACE	100	0.00	09/21/94	14:15:00
1/W(999)	PAINTED SURFACE	100	0.00	09/21/94	14:16:00
1/W(999)	PAINTED SURFACE	100	0.00	09/21/94	14:18:00
2/E(001)	PAINTED SURFACE	300	10253.46	09/22/94	09:13:00
2/E(001)	EXPOSED SURFACE	120	1958.53	09/22/94	09:14:00

A.5. Summary Data of Beta / Gamma Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
2/E(002)	PAINTED SURFACE	160	3801.84	09/22/94	09:14:00
2/E(002)	EXPOSED SURFACE	160	3801.84	09/22/94	09:14:00
2/E(003)	PAINTED SURFACE	320	11175.12	09/22/94	09:15:00
2/E(003)	EXPOSED SURFACE	160	3801.84	09/22/94	09:15:00
2/E(004)	PAINTED SURFACE	360	13018.43	09/22/94	09:16:00
2/E(004)	EXPOSED SURFACE	120	1958.53	09/22/94	09:16:00
2/E(005)	PAINTED SURFACE	280	9331.80	09/22/94	09:16:00
2/E(005)	EXPOSED SURFACE	120	1958.53	09/22/94	09:17:00
2/E(006)	PAINTED SURFACE	250	7949.31	09/22/94	09:26:00
2/E(006)	EXPOSED SURFACE	210	6105.99	09/22/94	09:27:00
2/E(007)	PAINTED SURFACE	390	14400.92	09/22/94	09:27:00
2/E(007)	EXPOSED SURFACE	160	3801.84	09/22/94	09:27:00
2/E(008)	PAINTED SURFACE	350	12557.60	09/22/94	09:28:00
2/E(008)	EXPOSED SURFACE	200	5645.16	09/22/94	09:28:00
2/E(010)	PAINTED SURFACE	370	13479.26	09/22/94	09:29:00
2/E(010)	EXPOSED SURFACE	150	3341.01	09/22/94	09:30:00
2/E(011)	PAINTED SURFACE	240	7488.48	09/22/94	09:32:00
2/E(011)	EXPOSED SURFACE	160	3801.84	09/22/94	09:32:00
2/E(012)	PAINTED SURFACE	150	3341.01	09/22/94	09:32:00
2/E(012)	EXPOSED SURFACE	180	4723.50	09/22/94	09:33:00
2/E(013)	PAINTED SURFACE	200	5645.16	09/22/94	09:33:00
2/E(013)	EXPOSED SURFACE	140	2880.18	09/22/94	09:34:00
2/E(014)	PAINTED SURFACE	220	6566.82	09/22/94	09:34:00
2/E(014)	EXPOSED SURFACE	140	2880.18	09/22/94	09:35:00
2/E(015)	PAINTED SURFACE	150	3341.01	09/22/94	09:35:00
2/E(015)	EXPOSED SURFACE	100	1036.87	09/22/94	09:36:00
2/E(016)	PAINTED SURFACE	150	3341.01	09/22/94	09:39:00
2/E(016)	EXPOSED SURFACE	110	1497.70	09/22/94	09:40:00
2/E(017)	PAINTED SURFACE	160	3801.84	09/22/94	09:40:00
2/E(017)	EXPOSED SURFACE	115	1728.11	09/22/94	09:41:00
2/E(018)	PAINTED SURFACE	175	4493.09	09/22/94	09:41:00
2/E(018)	EXPOSED SURFACE	130	2419.35	09/22/94	09:42:00
2/E(019)	PAINTED SURFACE	200	5645.16	09/22/94	09:42:00
2/E(019)	EXPOSED SURFACE	140	2880.18	09/22/94	09:43:00
2/E(021)	PAINTED SURFACE	600	24078.34	09/22/94	10:01:00
2/E(021)	EXPOSED SURFACE	100	1036.87	09/22/94	10:02:00
2/E(022)	PAINTED SURFACE	180	4723.50	09/22/94	10:02:00
2/E(022)	EXPOSED SURFACE	100	1036.87	09/22/94	10:03:00
2/E(023)	PAINTED SURFACE	120	1958.53	09/22/94	10:03:00
2/E(023)	EXPOSED SURFACE	120	1958.53	09/22/94	10:03:00
2/E(024)	PAINTED SURFACE	100	1036.87	09/22/94	10:04:00
2/E(024)	EXPOSED SURFACE	120	1958.53	09/22/94	10:04:00
2/E(025)	PAINTED SURFACE	140	2880.18	09/22/94	10:05:00
2/E(025)	EXPOSED SURFACE	80	115.21	09/22/94	10:05:00
2/E(026)	PAINTED SURFACE	215	6336.41	09/22/94	10:15:00
2/E(026)	EXPOSED SURFACE	130	2419.35	09/22/94	10:15:00
2/E(027)	PAINTED SURFACE	170	4262.67	09/22/94	10:15:00
2/E(027)	EXPOSED SURFACE	140	2880.18	09/22/94	10:16:00

A.5. Summary Data of Beta / Gamma Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
2/E(028)	PAINTED SURFACE	150	3341.01	09/22/94	10:16:00
2/E(028)	EXPOSED SURFACE	120	1958.53	09/22/94	10:17:00
2/E(029)	PAINTED SURFACE	120	1958.53	09/22/94	10:17:00
2/E(029)	EXPOSED SURFACE	140	2880.18	09/22/94	10:18:00
2/E(030)	PAINTED SURFACE	100	1036.87	09/22/94	10:18:00
2/E(030)	EXPOSED SURFACE	115	1728.11	09/22/94	10:19:00
2/E(031)	PAINTED SURFACE	150	3341.01	09/22/94	10:35:00
2/E(031)	EXPOSED SURFACE	180	4723.50	09/22/94	10:36:00
2/E(032)	PAINTED SURFACE	120	1958.53	09/22/94	10:36:00
2/E(032)	EXPOSED SURFACE	120	1958.53	09/22/94	10:36:00
2/E(033)	PAINTED SURFACE	160	3801.84	09/22/94	10:36:00
2/E(033)	EXPOSED SURFACE	140	2880.18	09/22/94	10:37:00
2/E(034)	PAINTED SURFACE	140	2880.18	09/22/94	10:37:00
2/E(034)	EXPOSED SURFACE	80	115.21	09/22/94	10:38:00
2/E(035)	PAINTED SURFACE	150	3341.01	09/22/94	10:38:00
2/E(035)	EXPOSED SURFACE	140	2880.18	09/22/94	10:38:00
2/E(036)	PAINTED SURFACE	180	4723.50	09/22/94	10:56:00
2/E(036)	EXPOSED SURFACE	80	115.21	09/22/94	10:56:00
2/E(037)	PAINTED SURFACE	140	2880.18	09/22/94	10:57:00
2/E(037)	EXPOSED SURFACE	80	115.21	09/22/94	10:58:00
2/E(038)	PAINTED SURFACE	170	4262.67	09/22/94	11:00:00
2/E(038)	EXPOSED SURFACE	80	115.21	09/22/94	11:01:00
2/E(039)	PAINTED SURFACE	145	3110.60	09/22/94	11:02:00
2/E(039)	EXPOSED SURFACE	100	1036.87	09/22/94	11:03:00
2/E(040)	PAINTED SURFACE	125	2188.94	09/22/94	11:04:00
2/E(040)	EXPOSED SURFACE	60	-806.45	09/22/94	11:04:00
2/E(041)	PAINTED SURFACE	120	1958.53	09/22/94	11:29:00
2/E(041)	EXPOSED SURFACE	50	-1267.28	09/22/94	11:29:00
2/E(042)	PAINTED SURFACE	100	1036.87	09/22/94	11:30:00
2/E(042)	EXPOSED SURFACE	100	1036.87	09/22/94	11:35:00
2/E(043)	PAINTED SURFACE	130	2419.35	09/22/94	11:40:00
2/E(043)	EXPOSED SURFACE	80	115.21	09/22/94	11:41:00
2/E(044)	PAINTED SURFACE	125	2188.94	09/22/94	11:41:00
2/E(044)	EXPOSED SURFACE	80	115.21	09/22/94	11:42:00
2/E(045)	PAINTED SURFACE	100	1036.87	09/22/94	11:42:00
2/E(045)	EXPOSED SURFACE	65	-576.04	09/22/94	11:43:00
2/E(046)	PAINTED SURFACE	120	1958.53	09/22/94	11:43:00
2/E(046)	EXPOSED SURFACE	120	1958.53	09/22/94	11:45:00
2/E(047)	PAINTED SURFACE	90	576.04	09/22/94	11:46:00
2/E(047)	EXPOSED SURFACE	100	1036.87	09/22/94	11:47:00
2/E(048)	PAINTED SURFACE	90	576.04	09/22/94	11:48:00
2/E(048)	EXPOSED SURFACE	100	1036.87	09/22/94	11:48:00
2/E(049)	PAINTED SURFACE	70	-345.62	09/22/94	11:49:00
2/E(049)	EXPOSED SURFACE	80	115.21	09/22/94	11:50:00
2/E(050)	PAINTED SURFACE	65	-576.04	09/22/94	11:52:00
2/E(050)	EXPOSED SURFACE	60	-806.45	09/22/94	11:53:00
2/E(051)	PAINTED SURFACE	90	576.04	09/22/94	11:54:00
2/E(051)	EXPOSED SURFACE	110	1497.70	09/22/94	11:55:00

A.5. Summary Data of Beta / Gamma Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
2/E(052)	PAINTED SURFACE	100	1036.87	09/22/94	11:56:00
2/E(052)	EXPOSED SURFACE	90	576.04	09/22/94	11:57:00
2/E(053)	PAINTED SURFACE	150	3341.01	09/22/94	11:57:00
2/E(053)	EXPOSED SURFACE	60	-806.45	09/22/94	11:58:00
2/E(054)	PAINTED SURFACE	150	3341.01	09/22/94	12:01:00
2/E(054)	EXPOSED SURFACE	60	-806.45	09/22/94	12:03:00
2/E(055)	PAINTED SURFACE	130	2419.35	09/22/94	12:04:00
2/E(055)	EXPOSED SURFACE	60	-806.45	09/22/94	12:05:00
2/E(999)	PAINTED SURFACE	80	115.21	09/22/94	09:17:00
2/E(999)	PAINTED SURFACE	75	-115.21	09/22/94	09:18:00
2/F(001)	PAINTED SURFACE	700	29147.47	09/14/94	08:07:00
2/F(001)	EXPOSED SURFACE	1500	66013.82	09/14/94	08:42:00
2/F(002)	PAINTED SURFACE	700	29147.47	09/14/94	08:43:00
2/F(002)	EXPOSED SURFACE	3300	148963.13	09/14/94	08:45:00
2/F(003)	PAINTED SURFACE	420	16244.24	09/14/94	08:46:00
2/F(003)	EXPOSED SURFACE	1200	52188.94	09/14/94	08:46:00
2/F(004)	PAINTED SURFACE	420	16244.24	09/14/94	08:47:00
2/F(004)	EXPOSED SURFACE	900	38364.06	09/14/94	08:47:00
2/F(005)	PAINTED SURFACE	330	12096.77	09/14/94	08:48:00
2/F(005)	EXPOSED SURFACE	900	38364.06	09/14/94	08:51:00
2/F(006)	PAINTED SURFACE	190	5645.16	09/14/94	08:52:00
2/F(006)	EXPOSED SURFACE	800	33755.76	09/14/94	08:56:00
2/F(007)	PAINTED SURFACE	180	5184.33	09/14/94	08:57:00
2/F(007)	EXPOSED SURFACE	470	18548.39	09/14/94	08:57:00
2/F(008)	PAINTED SURFACE	230	7488.48	09/14/94	08:58:00
2/F(008)	EXPOSED SURFACE	250	8410.14	09/14/94	08:58:00
2/F(009)	PAINTED SURFACE	400	15322.58	09/14/94	08:58:00
2/F(009)	EXPOSED SURFACE	800	33755.76	09/14/94	08:59:00
2/F(010)	PAINTED SURFACE	350	13018.43	09/14/94	08:59:00
2/F(010)	EXPOSED SURFACE	1200	52188.94	09/14/94	08:59:00
2/F(011)	PAINTED SURFACE	250	8410.14	09/14/94	09:01:00
2/F(011)	EXPOSED SURFACE	900	38364.06	09/14/94	09:12:00
2/F(012)	PAINTED SURFACE	600	24539.17	09/14/94	09:13:00
2/F(012)	EXPOSED SURFACE	2000	89055.30	09/14/94	09:13:00
2/F(013)	PAINTED SURFACE	200	6105.99	09/14/94	09:13:00
2/F(013)	EXPOSED SURFACE	520	20852.53	09/14/94	09:14:00
2/F(014)	PAINTED SURFACE	220	7027.65	09/14/94	09:14:00
2/F(014)	EXPOSED SURFACE	510	20391.71	09/14/94	09:15:00
2/F(015)	PAINTED SURFACE	250	8410.14	09/14/94	09:15:00
2/F(015)	EXPOSED SURFACE	230	7488.48	09/14/94	09:16:00
2/F(016)	PAINTED SURFACE	260	8870.97	09/14/94	09:17:00
2/F(016)	EXPOSED SURFACE	450	17626.73	09/14/94	09:30:00
2/F(017)	PAINTED SURFACE	360	13479.26	09/14/94	09:30:00
2/F(017)	EXPOSED SURFACE	400	15322.58	09/14/94	09:31:00
2/F(018)	PAINTED SURFACE	600	24539.17	09/14/94	09:31:00
2/F(018)	EXPOSED SURFACE	700	29147.47	09/14/94	09:32:00
2/F(019)	PAINTED SURFACE	290	10253.46	09/14/94	09:32:00
2/F(019)	EXPOSED SURFACE	1600	70622.12	09/14/94	09:32:00

A.5. Summary Data of Beta / Gamma Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
2/F(020)	PAINTED SURFACE	500	19930.88	09/14/94	09:33:00
2/F(020)	EXPOSED SURFACE	1000	42972.35	09/14/94	09:34:00
2/F(021)	PAINTED SURFACE	320	11635.94	09/14/94	09:35:00
2/F(021)	EXPOSED SURFACE	3000	135138.25	09/14/94	09:57:00
2/F(022)	PAINTED SURFACE	240	7949.31	09/14/94	09:58:00
2/F(022)	EXPOSED SURFACE	1400	61405.53	09/14/94	09:59:00
2/F(023)	PAINTED SURFACE	220	7027.65	09/14/94	10:00:00
2/F(023)	EXPOSED SURFACE	1000	42972.35	09/14/94	10:02:00
2/F(024)	PAINTED SURFACE	250	8410.14	09/14/94	10:03:00
2/F(024)	EXPOSED SURFACE	800	33755.76	09/14/94	10:04:00
2/F(025)	PAINTED SURFACE	350	13018.43	09/14/94	10:05:00
2/F(025)	EXPOSED SURFACE	1400	61405.53	09/14/94	10:06:00
2/F(026)	PAINTED SURFACE	600	24539.17	09/14/94	10:21:00
2/F(026)	EXPOSED SURFACE	800	33755.76	09/14/94	10:23:00
2/F(027)	PAINTED SURFACE	600	24539.17	09/14/94	10:27:00
2/F(027)	EXPOSED SURFACE	600	24539.17	09/14/94	10:29:00
2/F(028)	PAINTED SURFACE	1000	42972.35	09/14/94	10:30:00
2/F(028)	EXPOSED SURFACE	700	29147.47	09/14/94	10:32:00
2/F(029)	PAINTED SURFACE	450	17626.73	09/14/94	10:33:00
2/F(029)	EXPOSED SURFACE	800	33755.76	09/14/94	10:34:00
2/F(030)	EXPOSED SURFACE	1200	52188.94	09/14/94	10:35:00
2/F(030)	PAINTED SURFACE	500	19930.88	09/14/94	10:39:00
2/F(031)	PAINTED SURFACE	280	9792.63	09/14/94	10:40:00
2/F(031)	EXPOSED SURFACE	1000	42972.35	09/14/94	10:42:00
2/F(032)	PAINTED SURFACE	320	11635.94	09/14/94	10:43:00
2/F(032)	EXPOSED SURFACE	600	24539.17	09/14/94	10:44:00
2/F(033)	PAINTED SURFACE	280	9792.63	09/14/94	10:44:00
2/F(033)	EXPOSED SURFACE	200	6105.99	09/14/94	10:45:00
2/F(034)	PAINTED SURFACE	500	19930.88	09/14/94	10:46:00
2/F(034)	EXPOSED SURFACE	700	29147.47	09/14/94	10:47:00
2/F(035)	PAINTED SURFACE	1800	79838.71	09/14/94	10:48:00
2/F(035)	EXPOSED SURFACE	1000	42972.35	09/14/94	10:49:00
2/F(036)	PAINTED SURFACE	1000	42972.35	09/14/94	10:54:00
2/F(036)	EXPOSED SURFACE	1400	61405.53	09/14/94	10:55:00
2/F(037)	PAINTED SURFACE	350	13018.43	09/14/94	10:56:00
2/F(037)	EXPOSED SURFACE	460	18087.56	09/14/94	10:57:00
2/F(038)	PAINTED SURFACE	350	13018.43	09/14/94	10:58:00
2/F(038)	EXPOSED SURFACE	1400	61405.53	09/14/94	10:58:00
2/F(039)	PAINTED SURFACE	450	17626.73	09/14/94	10:59:00
2/F(039)	EXPOSED SURFACE	600	24539.17	09/14/94	11:00:00
2/F(040)	PAINTED SURFACE	280	9792.63	09/14/94	11:02:00
2/F(040)	EXPOSED SURFACE	1200	52188.94	09/14/94	11:02:00
2/F(041)	PAINTED SURFACE	420	16244.24	09/14/94	11:17:00
2/F(041)	EXPOSED SURFACE	350	13018.43	09/14/94	11:17:00
2/F(042)	PAINTED SURFACE	600	24539.17	09/14/94	11:18:00
2/F(042)	EXPOSED SURFACE	220	7027.65	09/14/94	11:19:00
2/F(043)	PAINTED SURFACE	600	24539.17	09/14/94	11:19:00
2/F(043)	EXPOSED SURFACE	350	13018.43	09/14/94	11:20:00

A.5. Summary Data of Beta / Gamma Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
2/F(044)	PAINTED SURFACE	1200	52188.94	09/14/94	11:21:00
2/F(044)	EXPOSED SURFACE	1800	79838.71	09/14/94	11:22:00
2/F(045)	PAINTED SURFACE	800	33755.76	09/14/94	11:22:00
2/F(045)	EXPOSED SURFACE	200	6105.99	09/14/94	11:23:00
2/F(046)	PAINTED SURFACE	200	6105.99	09/14/94	11:24:00
2/F(046)	EXPOSED SURFACE	200	6105.99	09/14/94	11:30:00
2/F(047)	PAINTED SURFACE	220	7027.65	09/14/94	11:31:00
2/F(047)	EXPOSED SURFACE	220	7027.65	09/14/94	11:32:00
2/F(048)	PAINTED SURFACE	260	8870.97	09/14/94	11:32:00
2/F(048)	EXPOSED SURFACE	240	7949.31	09/14/94	11:33:00
2/F(049)	PAINTED SURFACE	250	8410.14	09/14/94	11:33:00
2/F(049)	EXPOSED SURFACE	200	6105.99	09/14/94	11:34:00
2/F(050)	PAINTED SURFACE	180	5184.33	09/14/94	11:35:00
2/F(050)	EXPOSED SURFACE	160	4262.67	09/14/94	11:36:00
2/F(051)	PAINTED SURFACE	180	5184.33	09/14/94	11:41:00
2/F(051)	EXPOSED SURFACE	280	9792.63	09/14/94	11:42:00
2/F(052)	PAINTED SURFACE	1400	61405.53	09/14/94	11:42:00
2/F(052)	EXPOSED SURFACE	600	24539.17	09/14/94	11:43:00
2/F(053)	PAINTED SURFACE	2200	98271.89	09/14/94	11:44:00
2/F(053)	EXPOSED SURFACE	2400	107488.48	09/14/94	11:45:00
2/F(054)	PAINTED SURFACE	500	19930.88	09/14/94	11:45:00
2/F(054)	EXPOSED SURFACE	12000	549884.79	09/14/94	11:47:00
2/F(055)	PAINTED SURFACE	150	3801.84	09/14/94	11:48:00
2/F(055)	EXPOSED SURFACE	190	5645.16	09/14/94	11:49:00
2/F(056)	PAINTED SURFACE	270	9331.80	09/14/94	13:08:00
2/F(056)	EXPOSED SURFACE	290	10253.46	09/14/94	13:40:00
2/F(057)	PAINTED SURFACE	260	8870.97	09/14/94	13:40:00
2/F(057)	EXPOSED SURFACE	200	6105.99	09/14/94	13:41:00
2/F(058)	PAINTED SURFACE	300	10714.29	09/14/94	13:41:00
2/F(058)	EXPOSED SURFACE	1100	47580.65	09/14/94	13:42:00
2/F(059)	PAINTED SURFACE	460	18087.56	09/14/94	13:43:00
2/F(059)	EXPOSED SURFACE	440	17165.90	09/14/94	13:43:00
2/F(060)	PAINTED SURFACE	600	24539.17	09/14/94	13:44:00
2/F(060)	EXPOSED SURFACE	4600	208870.97	09/14/94	13:44:00
2/F(061)	PAINTED SURFACE	1000	42972.35	09/14/94	13:45:00
2/F(061)	EXPOSED SURFACE	12000	549884.79	09/14/94	13:54:00
2/F(062)	PAINTED SURFACE	1000	42972.35	09/14/94	13:55:00
2/F(062)	EXPOSED SURFACE	1800	79838.71	09/14/94	13:56:00
2/F(063)	PAINTED SURFACE	130	2880.18	09/14/94	13:57:00
2/F(064)	PAINTED SURFACE	160	4262.67	09/14/94	13:57:00
2/F(065)	PAINTED SURFACE	280	9792.63	09/14/94	13:58:00
2/F(065)	EXPOSED SURFACE	1200	52188.94	09/14/94	13:58:00
2/F(066)	PAINTED SURFACE	200	6105.99	09/14/94	13:59:00
2/F(066)	EXPOSED SURFACE	480	19009.22	09/14/94	14:10:00
2/F(067)	PAINTED SURFACE	200	6105.99	09/14/94	14:12:00
2/F(067)	EXPOSED SURFACE	8000	365553.00	09/14/94	14:14:00
2/F(068)	PAINTED SURFACE	1000	42972.35	09/14/94	14:15:00
2/F(068)	EXPOSED SURFACE	1000	42972.35	09/14/94	14:18:00

A.5. Summary Data of Beta / Gamma Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
2/F(069)	PAINTED SURFACE	220	7027.65	09/14/94	14:19:00
2/F(069)	EXPOSED SURFACE	850	36059.91	09/14/94	14:20:00
2/F(070)	PAINTED SURFACE	210	6566.82	09/14/94	14:21:00
2/F(070)	EXPOSED SURFACE	900	38364.06	09/14/94	14:21:00
2/F(071)	PAINTED SURFACE	100	1497.70	09/14/94	14:22:00
2/F(072)	PAINTED SURFACE	95	1267.28	09/14/94	14:24:00
2/F(073)	PAINTED SURFACE	280	9792.63	09/14/94	14:26:00
2/F(073)	EXPOSED SURFACE	250	8410.14	09/14/94	14:27:00
2/F(074)	PAINTED SURFACE	200	6105.99	09/14/94	14:27:00
2/F(074)	EXPOSED SURFACE	160	4262.67	09/14/94	14:28:00
2/F(075)	PAINTED SURFACE	300	10714.29	09/14/94	14:29:00
2/F(075)	EXPOSED SURFACE	480	19009.22	09/14/94	14:29:00
2/F(076)	PAINTED SURFACE	220	7027.65	09/14/94	14:30:00
2/F(076)	EXPOSED SURFACE	600	24539.17	09/14/94	14:43:00
2/F(077)	PAINTED SURFACE	320	11635.94	09/14/94	14:44:00
2/F(077)	EXPOSED SURFACE	160	4262.67	09/14/94	14:45:00
2/F(078)	PAINTED SURFACE	180	5184.33	09/14/94	14:45:00
2/F(078)	EXPOSED SURFACE	260	8870.97	09/14/94	14:46:00
2/F(079)	PAINTED SURFACE	200	6105.99	09/14/94	14:46:00
2/F(079)	EXPOSED SURFACE	240	7949.31	09/14/94	14:47:00
2/F(080)	PAINTED SURFACE	180	5184.33	09/14/94	14:48:00
2/F(080)	EXPOSED SURFACE	240	7949.31	09/14/94	14:48:00
2/F(999)	PAINTED SURFACE	70	115.21	09/14/94	14:51:00
2/F(999)	PAINTED SURFACE	65	-115.21	09/14/94	15:04:00
2/N(001)	PAINTED SURFACE	800	31797.24	09/22/94	15:13:00
2/N(001)	EXPOSED SURFACE	110	0.00	09/22/94	15:14:00
2/N(002)	PAINTED SURFACE	270	7373.27	09/22/94	15:16:00
2/N(002)	EXPOSED SURFACE	100	-460.83	09/22/94	15:18:00
2/N(003)	PAINTED SURFACE	250	6451.61	09/22/94	15:19:00
2/N(003)	EXPOSED SURFACE	120	460.83	09/22/94	15:20:00
2/N(004)	PAINTED SURFACE	320	9677.42	09/22/94	15:20:00
2/N(004)	EXPOSED SURFACE	160	2304.15	09/22/94	15:21:00
2/N(005)	PAINTED SURFACE	260	6912.44	09/22/94	15:22:00
2/N(005)	EXPOSED SURFACE	120	460.83	09/22/94	15:24:00
2/N(006)	PAINTED SURFACE	340	10599.08	09/22/94	15:03:00
2/N(006)	EXPOSED SURFACE	140	1382.49	09/22/94	15:05:00
2/N(007)	PAINTED SURFACE	280	7834.10	09/22/94	15:06:00
2/N(007)	EXPOSED SURFACE	180	3225.81	09/22/94	15:07:00
2/N(008)	PAINTED SURFACE	280	7834.10	09/22/94	15:08:00
2/N(008)	EXPOSED SURFACE	220	5069.12	09/22/94	15:08:00
2/N(009)	PAINTED SURFACE	220	5069.12	09/22/94	15:09:00
2/N(009)	EXPOSED SURFACE	120	460.83	09/22/94	15:10:00
2/N(010)	PAINTED SURFACE	270	7373.27	09/22/94	15:11:00
2/N(010)	EXPOSED SURFACE	110	0.00	09/22/94	15:11:00
2/N(011)	PAINTED SURFACE	180	3225.81	09/22/94	14:55:00
2/N(011)	EXPOSED SURFACE	100	-460.83	09/22/94	14:57:00
2/N(012)	PAINTED SURFACE	180	3225.81	09/22/94	14:57:00
2/N(012)	EXPOSED SURFACE	80	-1382.49	09/22/94	14:58:00

A.5. Summary Data of Beta / Gamma Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
2/N(013)	PAINTED SURFACE	120	460.83	09/22/94	14:59:00
2/N(013)	EXPOSED SURFACE	100	-460.83	09/22/94	14:59:00
2/N(014)	PAINTED SURFACE	160	2304.15	09/22/94	15:00:00
2/N(014)	EXPOSED SURFACE	150	1843.32	09/22/94	15:01:00
2/N(015)	PAINTED SURFACE	200	4147.47	09/22/94	15:02:00
2/N(015)	EXPOSED SURFACE	110	0.00	09/22/94	15:02:00
2/N(016)	PAINTED SURFACE	140	1382.49	09/22/94	14:47:00
2/N(016)	EXPOSED SURFACE	120	460.83	09/22/94	14:48:00
2/N(017)	PAINTED SURFACE	160	2304.15	09/22/94	14:48:00
2/N(017)	EXPOSED SURFACE	120	460.83	09/22/94	14:50:00
2/N(018)	PAINTED SURFACE	150	1843.32	09/22/94	14:51:00
2/N(018)	EXPOSED SURFACE	150	1843.32	09/22/94	14:51:00
2/N(019)	PAINTED SURFACE	120	460.83	09/22/94	14:52:00
2/N(019)	EXPOSED SURFACE	120	460.83	09/22/94	14:53:00
2/N(020)	PAINTED SURFACE	140	1382.49	09/22/94	14:54:00
2/N(020)	EXPOSED SURFACE	140	1382.49	09/22/94	14:55:00
2/N(021)	PAINTED SURFACE	180	3225.81	09/22/94	14:39:00
2/N(021)	EXPOSED SURFACE	140	1382.49	09/22/94	14:40:00
2/N(022)	PAINTED SURFACE	160	2304.15	09/22/94	14:41:00
2/N(022)	EXPOSED SURFACE	120	460.83	09/22/94	14:42:00
2/N(023)	PAINTED SURFACE	200	4147.47	09/22/94	14:43:00
2/N(023)	EXPOSED SURFACE	120	460.83	09/22/94	14:43:00
2/N(024)	PAINTED SURFACE	150	1843.32	09/22/94	14:44:00
2/N(024)	EXPOSED SURFACE	120	460.83	09/22/94	14:45:00
2/N(025)	PAINTED SURFACE	110	0.00	09/22/94	14:46:00
2/N(025)	EXPOSED SURFACE	110	0.00	09/22/94	14:46:00
2/N(026)	PAINTED SURFACE	120	460.83	09/22/94	14:12:00
2/N(026)	EXPOSED SURFACE	15	-4377.88	09/22/94	14:13:00
2/N(027)	PAINTED SURFACE	110	0.00	09/22/94	14:14:00
2/N(027)	EXPOSED SURFACE	120	460.83	09/22/94	14:14:00
2/N(028)	PAINTED SURFACE	100	-460.83	09/22/94	14:15:00
2/N(028)	EXPOSED SURFACE	100	-460.83	09/22/94	14:16:00
2/N(029)	PAINTED SURFACE	120	460.83	09/22/94	14:18:00
2/N(029)	EXPOSED SURFACE	100	-460.83	09/22/94	14:19:00
2/N(030)	PAINTED SURFACE	120	460.83	09/22/94	14:20:00
2/N(030)	EXPOSED SURFACE	100	-460.83	09/22/94	14:21:00
2/N(031)	PAINTED SURFACE	110	0.00	09/22/94	14:02:00
2/N(031)	EXPOSED SURFACE	90	-921.66	09/22/94	14:03:00
2/N(032)	PAINTED SURFACE	120	460.83	09/22/94	14:04:00
2/N(032)	EXPOSED SURFACE	60	-2304.15	09/22/94	14:05:00
2/N(033)	PAINTED SURFACE	80	-1382.49	09/22/94	14:06:00
2/N(033)	EXPOSED SURFACE	100	-460.83	09/22/94	14:07:00
2/N(034)	PAINTED SURFACE	70	-1843.32	09/22/94	14:07:00
2/N(034)	EXPOSED SURFACE	100	-460.83	09/22/94	14:08:00
2/N(035)	PAINTED SURFACE	70	-1843.32	09/22/94	14:09:00
2/N(035)	EXPOSED SURFACE	90	-921.66	09/22/94	14:10:00
2/N(036)	PAINTED SURFACE	120	460.83	09/22/94	13:45:00
2/N(036)	EXPOSED SURFACE	120	460.83	09/22/94	13:46:00

A.5. Summary Data of Beta / Gamma Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
2/N(037)	PAINTED SURFACE	120	460.83	09/22/94	13:47:00
2/N(037)	EXPOSED SURFACE	100	-460.83	09/22/94	13:48:00
2/N(038)	PAINTED SURFACE	120	460.83	09/22/94	13:49:00
2/N(038)	EXPOSED SURFACE	100	-460.83	09/22/94	13:50:00
2/N(039)	PAINTED SURFACE	140	1382.49	09/22/94	13:51:00
2/N(039)	EXPOSED SURFACE	110	0.00	09/22/94	13:52:00
2/N(040)	PAINTED SURFACE	110	0.00	09/22/94	13:54:00
2/N(040)	EXPOSED SURFACE	100	-460.83	09/22/94	13:55:00
2/N(999)	PAINTED SURFACE	100	-460.83	09/22/94	09:18:00
2/N(999)	PAINTED SURFACE	120	460.83	09/22/94	09:19:00
2/S(001)	PAINTED SURFACE	230	8755.76	09/26/94	11:58:00
2/S(001)	EXPOSED SURFACE	120	3686.64	09/26/94	11:58:00
2/S(002)	PAINTED SURFACE	280	11059.91	09/26/94	11:59:00
2/S(002)	EXPOSED SURFACE	140	4608.29	09/26/94	12:00:00
2/S(003)	PAINTED SURFACE	240	9216.59	09/26/94	12:00:00
2/S(003)	EXPOSED SURFACE	130	4147.47	09/26/94	12:01:00
2/S(004)	PAINTED SURFACE	285	11290.32	09/26/94	12:02:00
2/S(004)	EXPOSED SURFACE	160	5529.95	09/26/94	12:03:00
2/S(005)	PAINTED SURFACE	290	11520.74	09/26/94	12:03:00
2/S(005)	EXPOSED SURFACE	180	6451.61	09/26/94	12:04:00
2/S(006)	PAINTED SURFACE	440	18433.18	09/26/94	12:03:00
2/S(006)	EXPOSED SURFACE	280	11059.91	09/26/94	09:02:00
2/S(007)	PAINTED SURFACE	460	19354.84	09/26/94	12:03:00
2/S(007)	EXPOSED SURFACE	280	11059.91	09/26/94	09:02:00
2/S(008)	EXPOSED SURFACE	240	9216.59	09/26/94	09:02:00
2/S(008)	PAINTED SURFACE	400	16589.86	09/26/94	09:02:00
2/S(009)	EXPOSED SURFACE	70	1382.49	09/26/94	09:02:00
2/S(009)	PAINTED SURFACE	140	4608.29	09/26/94	09:02:00
2/S(010)	EXPOSED SURFACE	50	460.83	09/26/94	09:02:00
2/S(010)	PAINTED SURFACE	310	12442.40	09/26/94	09:02:00
2/S(011)	PAINTED SURFACE	210	7834.10	09/26/94	15:17:00
2/S(011)	EXPOSED SURFACE	140	4608.29	09/26/94	15:18:00
2/S(012)	PAINTED SURFACE	200	7373.27	09/26/94	15:19:00
2/S(012)	EXPOSED SURFACE	150	5069.12	09/26/94	15:41:00
2/S(013)	PAINTED SURFACE	260	10138.25	09/26/94	15:43:00
2/S(013)	EXPOSED SURFACE	140	4608.29	09/26/94	15:44:00
2/S(014)	PAINTED SURFACE	280	11059.91	09/26/94	15:45:00
2/S(014)	EXPOSED SURFACE	140	4608.29	09/26/94	15:46:00
2/S(015)	PAINTED SURFACE	280	11059.91	09/26/94	15:47:00
2/S(015)	EXPOSED SURFACE	200	7373.27	09/26/94	15:48:00
2/S(016)	PAINTED SURFACE	220	8294.93	09/26/94	15:01:00
2/S(016)	EXPOSED SURFACE	100	2764.98	09/26/94	15:02:00
2/S(017)	PAINTED SURFACE	110	3225.81	09/26/94	15:03:00
2/S(017)	EXPOSED SURFACE	100	2764.98	09/26/94	15:04:00
2/S(018)	PAINTED SURFACE	120	3686.64	09/26/94	15:04:00
2/S(018)	EXPOSED SURFACE	80	1843.32	09/26/94	15:05:00
2/S(019)	PAINTED SURFACE	120	3686.64	09/26/94	15:06:00
2/S(019)	EXPOSED SURFACE	80	1843.32	09/26/94	15:07:00

A.5. Summary Data of Beta / Gamma Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
2/S(020)	PAINTED SURFACE	120	3686.64	09/26/94	15:10:00
2/S(020)	EXPOSED SURFACE	120	3686.64	09/26/94	15:11:00
2/S(021)	PAINTED SURFACE	70	1382.49	09/26/94	14:45:00
2/S(021)	EXPOSED SURFACE	120	3686.64	09/26/94	14:46:00
2/S(022)	PAINTED SURFACE	100	2764.98	09/26/94	14:47:00
2/S(022)	EXPOSED SURFACE	90	2304.15	09/26/94	14:47:00
2/S(023)	PAINTED SURFACE	180	6451.61	09/26/94	14:48:00
2/S(023)	EXPOSED SURFACE	100	2764.98	09/26/94	14:53:00
2/S(024)	PAINTED SURFACE	160	5529.95	09/26/94	14:49:00
2/S(024)	EXPOSED SURFACE	120	3686.64	09/26/94	14:49:00
2/S(025)	PAINTED SURFACE	90	2304.15	09/26/94	14:50:00
2/S(025)	EXPOSED SURFACE	70	1382.49	09/26/94	14:51:00
2/S(026)	PAINTED SURFACE	70	1382.49	09/26/94	14:33:00
2/S(026)	EXPOSED SURFACE	80	1843.32	09/26/94	14:34:00
2/S(027)	PAINTED SURFACE	70	1382.49	09/26/94	14:35:00
2/S(027)	EXPOSED SURFACE	60	921.66	09/26/94	14:36:00
2/S(028)	EXPOSED SURFACE	80	1843.32	09/26/94	14:37:00
2/S(028)	PAINTED SURFACE	100	2764.98	09/26/94	15:14:00
2/S(029)	EXPOSED SURFACE	70	1382.49	09/26/94	14:39:00
2/S(030)	PAINTED SURFACE	120	3686.64	09/26/94	14:40:00
2/S(030)	EXPOSED SURFACE	100	2764.98	09/26/94	14:41:00
2/S(031)	PAINTED SURFACE	80	1843.32	09/26/94	14:18:00
2/S(031)	EXPOSED SURFACE	100	2764.98	09/26/94	14:19:00
2/S(032)	PAINTED SURFACE	100	2764.98	09/26/94	14:19:00
2/S(032)	EXPOSED SURFACE	70	1382.49	09/26/94	14:20:00
2/S(033)	PAINTED SURFACE	60	921.66	09/26/94	14:20:00
2/S(033)	EXPOSED SURFACE	120	3686.64	09/26/94	14:21:00
2/S(034)	PAINTED SURFACE	80	1843.32	09/26/94	14:22:00
2/S(034)	EXPOSED SURFACE	80	1843.32	09/26/94	14:22:00
2/S(035)	PAINTED SURFACE	120	3686.64	09/26/94	14:23:00
2/S(035)	EXPOSED SURFACE	240	9216.59	09/26/94	14:24:00
2/S(036)	EXPOSED SURFACE	70	1382.49	09/26/94	13:59:00
2/S(036)	PAINTED SURFACE	150	5069.12	09/26/94	14:25:00
2/S(037)	PAINTED SURFACE	140	4608.29	09/26/94	14:00:00
2/S(037)	EXPOSED SURFACE	60	921.66	09/26/94	14:01:00
2/S(038)	PAINTED SURFACE	90	2304.15	09/26/94	14:02:00
2/S(038)	EXPOSED SURFACE	60	921.66	09/26/94	14:03:00
2/S(039)	PAINTED SURFACE	60	921.66	09/26/94	14:03:00
2/S(039)	EXPOSED SURFACE	40	0.00	09/26/94	14:05:00
2/S(040)	PAINTED SURFACE	50	460.83	09/26/94	14:05:00
2/S(040)	EXPOSED SURFACE	40	0.00	09/26/94	14:06:00
2/S(999)	PAINTED SURFACE	50	460.83	09/26/94	08:49:00
2/S(999)	PAINTED SURFACE	60	921.66	09/26/94	08:50:00
2/S(999)	PAINTED SURFACE	50	460.83	09/26/94	12:06:00
2/S(999)	PAINTED SURFACE	0	-1843.32	09/26/94	12:06:00
2/W(001)	PAINTED SURFACE	260	9447.00	09/26/94	11:47:00
2/W(001)	EXPOSED SURFACE	270	9907.83	09/26/94	11:48:00
2/W(004)	PAINTED SURFACE	800	34331.80	09/26/94	11:48:00

A.5. Summary Data of Beta / Gamma Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
2/W(004)	EXPOSED SURFACE	825	35483.87	09/26/94	11:49:00
2/W(005)	PAINTED SURFACE	270	9907.83	09/26/94	11:50:00
2/W(005)	EXPOSED SURFACE	280	10368.66	09/26/94	11:51:00
2/W(006)	PAINTED SURFACE	480	19585.25	09/26/94	11:38:00
2/W(006)	EXPOSED SURFACE	250	8986.18	09/26/94	11:39:00
2/W(006)	PAINTED SURFACE	350	13594.47	09/26/94	11:39:00
2/W(007)	EXPOSED SURFACE	160	4838.71	09/26/94	11:40:00
2/W(008)	PAINTED SURFACE	280	10368.66	09/26/94	11:41:00
2/W(008)	EXPOSED SURFACE	110	2534.56	09/26/94	11:42:00
2/W(009)	PAINTED SURFACE	350	13594.47	09/26/94	11:42:00
2/W(009)	EXPOSED SURFACE	400	15898.62	09/26/94	11:43:00
2/W(010)	PAINTED SURFACE	250	8986.18	09/26/94	11:44:00
2/W(010)	EXPOSED SURFACE	200	6682.03	09/26/94	11:44:00
2/W(011)	PAINTED SURFACE	460	18663.59	09/26/94	11:33:00
2/W(011)	EXPOSED SURFACE	200	6682.03	09/26/94	11:34:00
2/W(012)	PAINTED SURFACE	220	7603.69	09/26/94	11:34:00
2/W(012)	EXPOSED SURFACE	130	3456.22	09/26/94	11:35:00
2/W(015)	PAINTED SURFACE	280	10368.66	09/26/94	11:36:00
2/W(015)	EXPOSED SURFACE	150	4377.88	09/26/94	11:36:00
2/W(016)	PAINTED SURFACE	180	5760.37	09/26/94	11:22:00
2/W(016)	EXPOSED SURFACE	105	2304.15	09/26/94	11:23:00
2/W(017)	PAINTED SURFACE	200	6682.03	09/26/94	11:24:00
2/W(017)	EXPOSED SURFACE	140	3917.05	09/26/94	11:25:00
2/W(018)	PAINTED SURFACE	220	7603.69	09/26/94	11:25:00
2/W(018)	EXPOSED SURFACE	110	2534.56	09/26/94	11:26:00
2/W(019)	PAINTED SURFACE	210	7142.86	09/26/94	11:27:00
2/W(019)	EXPOSED SURFACE	130	3456.22	09/26/94	11:27:00
2/W(020)	PAINTED SURFACE	200	6682.03	09/26/94	11:31:00
2/W(020)	EXPOSED SURFACE	220	7603.69	09/26/94	11:32:00
2/W(021)	PAINTED SURFACE	160	4838.71	09/26/94	11:18:00
2/W(021)	EXPOSED SURFACE	120	2995.39	09/26/94	11:19:00
2/W(022)	PAINTED SURFACE	200	6682.03	09/26/94	11:20:00
2/W(022)	EXPOSED SURFACE	130	3456.22	09/26/94	11:20:00
2/W(023)	PAINTED SURFACE	160	4838.71	09/26/94	11:21:00
2/W(023)	EXPOSED SURFACE	100	2073.73	09/26/94	11:21:00
2/W(026)	PAINTED SURFACE	100	2073.73	09/26/94	10:48:00
2/W(026)	EXPOSED SURFACE	110	2534.56	09/26/94	10:48:00
2/W(027)	EXPOSED SURFACE	100	2073.73	09/26/94	10:50:00
2/W(027)	PAINTED SURFACE	110	2534.56	09/26/94	10:49:00
2/W(028)	PAINTED SURFACE	135	3686.64	09/26/94	10:51:00
2/W(028)	EXPOSED SURFACE	100	2073.73	09/26/94	10:52:00
2/W(029)	PAINTED SURFACE	120	2995.39	09/26/94	10:53:00
2/W(029)	EXPOSED SURFACE	100	2073.73	09/26/94	10:53:00
2/W(030)	PAINTED SURFACE	160	4838.71	09/26/94	10:55:00
2/W(030)	EXPOSED SURFACE	120	2995.39	09/26/94	11:00:00
2/W(031)	PAINTED SURFACE	150	4377.88	09/26/94	10:24:00
2/W(031)	EXPOSED SURFACE	100	2073.73	09/26/94	10:24:00
2/W(032)	PAINTED SURFACE	120	2995.39	09/26/94	10:25:00

A.5. Summary Data of Beta / Gamma Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
2/W(032)	EXPOSED SURFACE	120	2995.39	09/26/94	10:25:00
2/W(033)	PAINTED SURFACE	100	2073.73	09/26/94	10:26:00
2/W(033)	EXPOSED SURFACE	90	1612.90	09/26/94	10:26:00
2/W(034)	PAINTED SURFACE	80	1152.07	09/26/94	10:26:00
2/W(034)	EXPOSED SURFACE	65	460.83	09/26/94	10:27:00
2/W(035)	PAINTED SURFACE	100	2073.73	09/26/94	10:27:00
2/W(035)	EXPOSED SURFACE	80	1152.07	09/26/94	10:27:00
2/W(036)	PAINTED SURFACE	110	2534.56	09/26/94	10:00:00
2/W(036)	EXPOSED SURFACE	90	1612.90	09/26/94	10:00:00
2/W(037)	PAINTED SURFACE	100	2073.73	09/26/94	10:01:00
2/W(037)	EXPOSED SURFACE	70	691.24	09/26/94	10:02:00
2/W(038)	PAINTED SURFACE	80	1152.07	09/26/94	10:02:00
2/W(038)	EXPOSED SURFACE	70	691.24	09/26/94	10:03:00
2/W(039)	PAINTED SURFACE	100	2073.73	09/26/94	10:04:00
2/W(039)	EXPOSED SURFACE	70	691.24	09/26/94	10:04:00
2/W(040)	PAINTED SURFACE	120	2995.39	09/26/94	10:05:00
2/W(040)	EXPOSED SURFACE	65	460.83	09/26/94	10:05:00
2/W(041)	PAINTED SURFACE	120	2995.39	09/26/94	09:38:00
2/W(041)	EXPOSED SURFACE	100	2073.73	09/26/94	09:38:00
2/W(042)	PAINTED SURFACE	340	13133.64	09/26/94	09:39:00
2/W(042)	EXPOSED SURFACE	100	2073.73	09/26/94	09:39:00
2/W(043)	PAINTED SURFACE	80	1152.07	09/26/94	09:39:00
2/W(043)	EXPOSED SURFACE	60	230.41	09/26/94	09:40:00
2/W(044)	PAINTED SURFACE	120	2995.39	09/26/94	09:40:00
2/W(044)	EXPOSED SURFACE	60	230.41	09/26/94	09:41:00
2/W(045)	PAINTED SURFACE	70	691.24	09/26/94	09:42:00
2/W(045)	EXPOSED SURFACE	80	1152.07	09/26/94	09:42:00
2/W(046)	PAINTED SURFACE	160	4838.71	09/26/94	09:18:00
2/W(046)	EXPOSED SURFACE	70	691.24	09/26/94	09:19:00
2/W(047)	PAINTED SURFACE	260	9447.00	09/26/94	09:19:00
2/W(047)	EXPOSED SURFACE	60	230.41	09/26/94	09:19:00
2/W(048)	PAINTED SURFACE	80	1152.07	09/26/94	09:20:00
2/W(048)	EXPOSED SURFACE	50	-230.41	09/26/94	09:20:00
2/W(049)	PAINTED SURFACE	100	2073.73	09/26/94	09:21:00
2/W(049)	EXPOSED SURFACE	80	1152.07	09/26/94	09:21:00
2/W(050)	PAINTED SURFACE	90	1612.90	09/26/94	09:21:00
2/W(050)	EXPOSED SURFACE	100	2073.73	09/26/94	09:22:00
2/W(051)	PAINTED SURFACE	110	2534.56	09/26/94	08:58:00
2/W(051)	EXPOSED SURFACE	70	691.24	09/26/94	08:59:00
2/W(052)	PAINTED SURFACE	115	2764.98	09/26/94	09:00:00
2/W(052)	EXPOSED SURFACE	90	1612.90	09/26/94	09:00:00
2/W(053)	PAINTED SURFACE	100	2073.73	09/26/94	09:00:00
2/W(053)	EXPOSED SURFACE	80	1152.07	09/26/94	09:01:00
2/W(054)	PAINTED SURFACE	90	1612.90	09/26/94	09:01:00
2/W(054)	EXPOSED SURFACE	50	-230.41	09/26/94	09:02:00
2/W(055)	PAINTED SURFACE	70	691.24	09/26/94	09:02:00
2/W(055)	EXPOSED SURFACE	50	-230.41	09/26/94	09:02:00
2/W(999)	PAINTED SURFACE	60	230.41	09/26/94	08:51:00

A.5. Summary Data of Beta / Gamma Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
2/W(999)	PAINTED SURFACE	50	-230.41	09/26/94	08:51:00
X/E(012)	PAINTED SURFACE	82	460.83	08/29/94	15:31:00
X/E(015)	PAINTED SURFACE	54	-829.49	08/29/94	15:33:00
X/E(016)	PAINTED SURFACE	58	-645.16	08/29/94	15:35:00
X/E(023)	PAINTED SURFACE	55	-783.41	08/29/94	15:36:00
X/E(025)	PAINTED SURFACE	58	-645.16	08/29/94	15:38:00
X/E(026)	PAINTED SURFACE	59	-599.08	08/29/94	15:40:00
X/E(031)	PAINTED SURFACE	63	-414.75	08/29/94	15:41:00
X/E(033)	PAINTED SURFACE	90	829.49	08/29/94	15:44:00
X/E(034)	PAINTED SURFACE	52	-921.66	08/29/94	15:45:00
X/E(038)	PAINTED SURFACE	40	-1474.65	08/29/94	15:47:00
X/E(044)	PAINTED SURFACE	120	2211.98	08/29/94	15:53:00
X/E(046)	PAINTED SURFACE	66	-276.50	08/29/94	15:54:00
X/E(049)	PAINTED SURFACE	59	-599.08	08/29/94	15:54:00
X/E(050)	PAINTED SURFACE	160	4055.30	08/29/94	15:57:00
X/E(052)	PAINTED SURFACE	250	8202.76	08/29/94	15:59:00
X/E(054)	PAINTED SURFACE	57	-691.24	08/29/94	16:01:00
X/N(061)	PAINTED SURFACE	150	3594.47	08/29/94	13:11:00
X/N(063)	PAINTED SURFACE	120	2211.98	08/29/94	13:12:00
X/N(067)	PAINTED SURFACE	100	1290.32	08/29/94	13:14:00
X/N(069)	PAINTED SURFACE	65	-322.58	08/29/94	13:15:00
X/N(070)	PAINTED SURFACE	80	368.66	08/29/94	13:17:00
X/N(071)	PAINTED SURFACE	80	368.66	08/29/94	13:18:00
X/N(072)	PAINTED SURFACE	55	-783.41	08/29/94	13:19:00
X/N(073)	PAINTED SURFACE	40	-1474.65	08/29/94	13:20:00
X/N(074)	PAINTED SURFACE	60	-553.00	08/29/94	13:21:00
X/N(075)	PAINTED SURFACE	30	-1935.48	08/29/94	13:23:00
X/N(076)	PAINTED SURFACE	35	-1705.07	08/29/94	13:25:00
X/N(078)	PAINTED SURFACE	60	-553.00	08/29/94	13:26:00
X/N(080)	PAINTED SURFACE	50	-1013.82	08/29/94	13:27:00
X/N(081)	PAINTED SURFACE	80	368.66	08/29/94	13:28:00
X/N(082)	PAINTED SURFACE	55	-783.41	08/29/94	13:29:00
X/N(083)	PAINTED SURFACE	30	-1935.48	08/29/94	13:31:00
X/N(084)	PAINTED SURFACE	50	-1013.82	08/29/94	13:32:00
X/N(085)	PAINTED SURFACE	50	-1013.82	08/29/94	13:33:00
X/N(086)	PAINTED SURFACE	60	-553.00	08/29/94	13:35:00
X/N(087)	PAINTED SURFACE	75	138.25	08/29/94	13:36:00
X/N(088)	PAINTED SURFACE	70	-92.17	08/29/94	13:37:00
X/N(090)	PAINTED SURFACE	90	829.49	08/29/94	13:39:00
X/N(091)	PAINTED SURFACE	140	3133.64	08/29/94	13:40:00
X/N(092)	PAINTED SURFACE	340	12350.23	08/29/94	13:42:00
X/N(093)	PAINTED SURFACE	140	3133.64	08/29/94	13:43:00
X/N(099)	PAINTED SURFACE	70	-92.17	08/29/94	13:44:00
X/N(101)	PAINTED SURFACE	60	-553.00	08/29/94	13:46:00
X/N(102)	PAINTED SURFACE	50	-1013.82	08/29/94	13:51:00
X/N(104)	PAINTED SURFACE	80	368.66	08/29/94	13:52:00
X/N(106)	PAINTED SURFACE	60	-553.00	08/29/94	13:53:00
X/N(107)	PAINTED SURFACE	80	368.66	08/29/94	13:56:00

A.5. Summary Data of Beta / Gamma Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
X/N(109)	PAINTED SURFACE	60	-553.00	08/29/94	13:58:00
X/N(112)	PAINTED SURFACE	44	-1290.32	08/29/94	14:00:00
X/N(113)	PAINTED SURFACE	46	-1198.16	08/29/94	14:02:00
X/N(116)	PAINTED SURFACE	68	-184.33	08/29/94	14:03:00
X/N(121)	PAINTED SURFACE	59	-599.08	08/29/94	14:07:00
X/N(130)	PAINTED SURFACE	92	921.66	08/29/94	14:08:00
X/N(138)	PAINTED SURFACE	74	92.17	08/29/94	14:09:00
X/N(140)	PAINTED SURFACE	64	-368.66	08/29/94	14:10:00
X/N(144)	PAINTED SURFACE	56	-737.33	08/29/94	14:18:00
X/N(147)	PAINTED SURFACE	82	460.83	08/29/94	14:21:00
X/N(151)	PAINTED SURFACE	95	1059.91	08/29/94	14:22:00
X/N(156)	PAINTED SURFACE	68	-184.33	08/29/94	14:24:00
X/N(158)	PAINTED SURFACE	107	1612.90	08/29/94	14:26:00
X/N(161)	PAINTED SURFACE	110	1751.15	08/29/94	14:27:00
X/N(163)	PAINTED SURFACE	78	276.50	08/29/94	14:28:00
X/N(167)	PAINTED SURFACE	96	1105.99	08/29/94	14:32:00
X/S(004)	PAINTED SURFACE	56	-737.33	08/29/94	10:05:00
X/S(035)	PAINTED SURFACE	53	-875.58	08/29/94	10:07:00
X/S(041)	PAINTED SURFACE	46	-1198.16	08/29/94	10:09:00
X/S(042)	PAINTED SURFACE	52	-921.66	08/29/94	10:12:00
X/S(045)	PAINTED SURFACE	66	-276.50	08/29/94	10:14:00
X/S(046)	PAINTED SURFACE	77	230.41	08/29/94	10:16:00
X/S(048)	PAINTED SURFACE	60	-553.00	08/29/94	10:19:00
X/S(049)	PAINTED SURFACE	45	-1244.24	08/29/94	10:21:00
X/S(050)	PAINTED SURFACE	56	-737.33	08/29/94	10:24:00
X/S(054)	PAINTED SURFACE	48	-1105.99	08/29/94	10:27:00
X/S(055)	PAINTED SURFACE	45	-1244.24	08/29/94	10:29:00
X/S(057)	PAINTED SURFACE	58	-645.16	08/29/94	10:32:00
X/S(059)	PAINTED SURFACE	38	-1566.82	08/29/94	10:35:00
X/S(065)	PAINTED SURFACE	88	737.33	08/29/94	10:37:00
X/S(067)	PAINTED SURFACE	50	-1013.82	08/29/94	10:40:00
X/S(069)	PAINTED SURFACE	49	-1059.91	08/29/94	10:42:00
X/S(072)	PAINTED SURFACE	63	-414.75	08/29/94	10:44:00
X/S(074)	PAINTED SURFACE	90	829.49	08/29/94	10:48:00
X/S(078)	PAINTED SURFACE	97	1152.07	08/29/94	10:50:00
X/S(081)	PAINTED SURFACE	67	-230.41	08/29/94	10:53:00
X/S(087)	PAINTED SURFACE	93	967.74	08/29/94	10:55:00
X/S(089)	PAINTED SURFACE	88	737.33	08/29/94	10:57:00
X/S(095)	PAINTED SURFACE	82	460.83	08/29/94	11:02:00
X/S(096)	PAINTED SURFACE	69	-138.25	08/29/94	11:05:00
X/S(109)	PAINTED SURFACE	66	-276.50	08/29/94	11:07:00
X/S(110)	PAINTED SURFACE	52	-921.66	08/29/94	11:10:00
X/S(111)	PAINTED SURFACE	67	-230.41	08/29/94	11:12:00
X/S(115)	PAINTED SURFACE	51	-967.74	08/29/94	11:15:00
X/S(118)	PAINTED SURFACE	47	-1152.07	08/29/94	11:18:00
X/S(122)	PAINTED SURFACE	43	-1336.41	08/29/94	11:20:00
X/S(128)	PAINTED SURFACE	66	-276.50	08/29/94	11:22:00
X/S(134)	PAINTED SURFACE	78	276.50	08/29/94	11:24:00

A.5. Summary Data of Beta / Gamma Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
X/S(135)	PAINTED SURFACE	60	-553.00	08/29/94	11:27:00
X/S(137)	PAINTED SURFACE	61	-506.91	08/29/94	11:29:00
X/S(139)	PAINTED SURFACE	104	1474.65	08/29/94	11:31:00
X/S(140)	PAINTED SURFACE	148	3502.30	08/29/94	11:33:00
X/S(141)	PAINTED SURFACE	170	4516.13	08/29/94	11:35:00
X/S(142)	PAINTED SURFACE	180	4976.96	08/29/94	11:37:00
X/S(143)	PAINTED SURFACE	71	-46.08	08/29/94	11:40:00
X/S(146)	PAINTED SURFACE	72	0.00	08/29/94	11:42:00
X/S(152)	PAINTED SURFACE	54	-829.49	08/29/94	11:44:00
X/S(153)	PAINTED SURFACE	39	-1520.74	08/29/94	11:47:00
X/S(159)	PAINTED SURFACE	56	-737.33	08/29/94	11:49:00
X/S(163)	PAINTED SURFACE	53	-875.58	08/29/94	11:52:00
X/S(165)	PAINTED SURFACE	61	-506.91	08/29/94	11:54:00
X/S(169)	PAINTED SURFACE	100	1290.32	08/29/94	11:58:00
X/S(170)	PAINTED SURFACE	140	3133.64	08/29/94	12:03:00
X/W(006)	PAINTED SURFACE	57	-691.24	08/29/94	14:39:00
X/W(011)	PAINTED SURFACE	375	13963.13	08/29/94	14:45:00
X/W(012)	PAINTED SURFACE	54	-829.49	08/29/94	14:46:00
X/W(014)	PAINTED SURFACE	47	-1152.07	08/29/94	14:47:00
X/W(016)	PAINTED SURFACE	64	-368.66	08/29/94	14:48:00
X/W(017)	PAINTED SURFACE	65	-322.58	08/29/94	14:50:00
X/W(024)	PAINTED SURFACE	49	-1059.91	08/29/94	14:51:00
X/W(026)	PAINTED SURFACE	44	-1290.32	08/29/94	14:52:00
X/W(029)	PAINTED SURFACE	47	-1152.07	08/29/94	15:00:00
X/W(038)	PAINTED SURFACE	39	-1520.74	08/29/94	15:02:00
X/W(040)	PAINTED SURFACE	86	645.16	08/29/94	15:15:00
X/W(047)	PAINTED SURFACE	74	92.17	08/29/94	15:08:00
X/W(048)	PAINTED SURFACE	75	138.25	08/29/94	15:04:00
X/W(050)	PAINTED SURFACE	80	368.66	08/29/94	15:05:00
X/W(051)	PAINTED SURFACE	95	1059.91	08/29/94	15:16:00
X/W(053)	PAINTED SURFACE	85	599.08	08/29/94	15:24:00
X/W(054)	PAINTED SURFACE	70	-92.17	08/29/94	15:25:00
1/C(999)	PAINTED SURFACE	100	230.41	09/27/94	12:10:44
1/C(999)	PAINTED SURFACE	90	-230.41	09/27/94	12:13:26
1/C(001)	PAINTED SURFACE	95	0.00	09/27/94	12:33:35
1/C(002)	PAINTED SURFACE	100	230.41	09/27/94	12:34:25
1/C(005)	PAINTED SURFACE	35	-2764.98	09/27/94	12:34:56
1/C(009)	PAINTED SURFACE	80	-691.24	09/27/94	12:36:00
1/C(013)	PAINTED SURFACE	140	2073.73	09/27/94	12:36:47
1/C(013)	PAINTED SURFACE	2	-4285.71	09/27/94	12:37:21
1/C(017)	PAINTED SURFACE	100	230.41	09/27/94	12:43:07
1/C(021)	PAINTED SURFACE	65	-1382.49	09/27/94	12:43:42
1/C(023)	PAINTED SURFACE	120	1152.07	09/27/94	12:44:15
1/C(026)	PAINTED SURFACE	70	-1152.07	09/27/94	12:45:03
1/C(029)	PAINTED SURFACE	90	-230.41	09/27/94	12:46:16
1/C(033)	PAINTED SURFACE	90	-230.41	09/27/94	12:54:27
1/C(037)	PAINTED SURFACE	60	-1612.90	09/27/94	12:55:59
1/C(041)	PAINTED SURFACE	95	0.00	09/27/94	12:57:05

A.5. Summary Data of Beta / Gamma Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
1/C(043)	PAINTED SURFACE	50	-2073.73	09/27/94	12:58:11
1/C(045)	PAINTED SURFACE	110	691.24	09/27/94	12:59:03
1/C(049)	PAINTED SURFACE	90	-230.41	09/27/94	13:05:03
1/C(053)	PAINTED SURFACE	80	-691.24	09/27/94	13:05:53
1/C(057)	PAINTED SURFACE	30	-2995.39	09/27/94	13:07:12
1/C(059)	PAINTED SURFACE	60	-1612.90	09/27/94	13:08:13
1/C(065)	PAINTED SURFACE	30	-2995.39	09/27/94	13:09:35
1/C(069)	PAINTED SURFACE	70	-1152.07	09/27/94	13:14:56
1/C(073)	PAINTED SURFACE	110	691.24	09/27/94	13:15:54
1/C(077)	PAINTED SURFACE	100	230.41	09/27/94	13:16:35
1/C(080)	PAINTED SURFACE	90	-230.41	09/27/94	13:17:32
1/C(084)	PAINTED SURFACE	50	-2073.73	09/27/94	13:18:10
1/C(089)	PAINTED SURFACE	30	-2995.39	09/27/94	13:21:37
1/C(092)	PAINTED SURFACE	95	0.00	09/27/94	13:22:16
1/C(096)	PAINTED SURFACE	70	-1152.07	09/27/94	13:23:20
1/C(098)	PAINTED SURFACE	60	-1612.90	09/27/94	13:24:13
1/C(100)	PAINTED SURFACE	60	-1612.90	09/27/94	13:25:27
1/C(104)	PAINTED SURFACE	100	230.41	09/27/94	13:29:29
1/C(107)	PAINTED SURFACE	100	230.41	09/27/94	13:30:28
1/C(110)	PAINTED SURFACE	50	-2073.73	09/27/94	13:31:12
1/C(112)	PAINTED SURFACE	30	-2995.39	09/27/94	13:31:43
1/C(115)	PAINTED SURFACE	80	-691.24	09/27/94	13:32:17
1/C(117)	PAINTED SURFACE	120	1152.07	09/27/94	13:48:22
1/C(122)	PAINTED SURFACE	40	-2534.56	09/27/94	13:49:53
1/C(119)	PAINTED SURFACE	80	-691.24	09/27/94	13:50:58
1/C(127)	PAINTED SURFACE	85	-460.83	09/27/94	13:51:35
1/C(131)	PAINTED SURFACE	70	-1152.07	09/27/94	13:52:11
1/C(132)	PAINTED SURFACE	90	-230.41	09/27/94	13:52:51
1/C(135)	PAINTED SURFACE	70	-1152.07	09/27/94	13:53:28
1/C(139)	PAINTED SURFACE	50	-2073.73	09/27/94	13:55:32
1/C(139)	PAINTED SURFACE	50	-2073.73	09/27/94	14:13:20
1/C(143)	PAINTED SURFACE	100	230.41	09/27/94	14:14:13
1/C(147)	PAINTED SURFACE	60	-1612.90	09/27/94	14:16:19
1/C(151)	PAINTED SURFACE	110	691.24	09/27/94	14:18:42
1/C(156)	PAINTED SURFACE	130	1612.90	09/27/94	14:22:28
1/C(159)	PAINTED SURFACE	80	-691.24	09/27/94	14:24:13
1/C(163)	PAINTED SURFACE	60	-1612.90	09/27/94	14:26:18
1/C(151)	PAINTED SURFACE	110	691.24	09/28/94	08:22:52
1/C(156)	PAINTED SURFACE	130	1612.90	09/28/94	08:24:40
1/C(159)	PAINTED SURFACE	0	-4377.88	09/28/94	08:25:45
1/C(163)	PAINTED SURFACE	60	-1612.90	09/28/94	08:27:14
1/C(167)	PAINTED SURFACE	90	-230.41	09/28/94	08:28:05
1/C(171)	PAINTED SURFACE	110	691.24	09/28/94	08:31:38
1/C(175)	PAINTED SURFACE	100	230.41	09/28/94	08:33:04
1/C(179)	PAINTED SURFACE	100	230.41	09/28/94	08:34:25
1/C(181)	PAINTED SURFACE	80	-691.24	09/28/94	08:37:34
1/C(183)	PAINTED SURFACE	55	-1843.32	09/28/94	08:39:05
1/C(186)	PAINTED SURFACE	90	-230.41	09/28/94	08:39:58

A.5. Summary Data of Beta / Gamma Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
1/C(188)	PAINTED SURFACE	80	-691.24	09/28/94	08:40:42
1/C(190)	PAINTED SURFACE	130	1612.90	09/28/94	08:41:33
1/C(194)	PAINTED SURFACE	110	691.24	09/28/94	08:42:33
1/C(198)	PAINTED SURFACE	100	230.41	09/28/94	08:44:27
1/C(200)	PAINTED SURFACE	100	230.41	09/28/94	08:51:29
1/C(203)	PAINTED SURFACE	100	230.41	09/28/94	08:56:41
1/C(208)	PAINTED SURFACE	120	1152.07	09/28/94	08:58:51
1/C(210)	PAINTED SURFACE	90	-230.41	09/28/94	09:00:11
1/C(214)	PAINTED SURFACE	90	-230.41	09/28/94	09:00:44
1/C(218)	PAINTED SURFACE	80	-691.24	09/28/94	09:04:50
1/C(226)	PAINTED SURFACE	70	-1152.07	09/28/94	09:06:31
1/C(222)	PAINTED SURFACE	110	691.24	09/28/94	09:08:57
1/C(226)	PAINTED SURFACE	26	-3179.72	09/28/94	09:09:49
1/C(230)	PAINTED SURFACE	105	460.83	09/28/94	09:10:21
1/C(232)	PAINTED SURFACE	190	4377.88	09/28/94	09:11:09
1/C(235)	PAINTED SURFACE	95	0.00	09/28/94	09:12:23
1/C(239)	PAINTED SURFACE	120	1152.07	09/28/94	09:13:26
1/C(243)	PAINTED SURFACE	90	-230.41	09/28/94	10:16:42
1/C(245)	PAINTED SURFACE	120	1152.07	09/28/94	10:18:24
1/C(247)	PAINTED SURFACE	85	-460.83	09/28/94	10:21:42
1/C(251)	PAINTED SURFACE	80	-691.24	09/28/94	10:22:32
1/C(255)	PAINTED SURFACE	120	1152.07	09/28/94	10:24:06
1/C(260)	PAINTED SURFACE	140	2073.73	09/28/94	10:24:55
1/C(070)	PAINTED SURFACE	701	27926.27	09/28/94	13:11:18
1/C(071)	PAINTED SURFACE	1	-4331.80	09/28/94	13:14:42
2/C(999)	PAINTED SURFACE	70	-1152.07	09/27/94	12:09:52
2/C(999)	PAINTED SURFACE	120	1152.07	09/27/94	12:14:38
2/C(001)	PAINTED SURFACE	140	2073.73	09/28/94	10:26:20
2/C(004)	PAINTED SURFACE	95	0.00	09/28/94	10:27:01
2/C(008)	PAINTED SURFACE	60	-1612.90	09/28/94	10:27:44
2/C(010)	PAINTED SURFACE	30	-2995.39	09/28/94	10:28:28
2/C(014)	PAINTED SURFACE	80	-691.24	09/28/94	10:29:39
2/C(017)	EXPOSED SURFACE	65	-1382.49	09/28/94	10:33:58
2/C(020)	PAINTED SURFACE	40	-2534.56	09/28/94	10:37:20
2/C(023)	PAINTED SURFACE	100	230.41	09/28/94	10:39:36
2/C(026)	PAINTED SURFACE	90	-230.41	09/28/94	10:40:40
2/C(032)	PAINTED SURFACE	80	-691.24	09/28/94	10:41:32
2/C(033)	PAINTED SURFACE	100	230.41	09/28/94	10:42:27
2/C(041)	PAINTED SURFACE	100	230.41	09/28/94	10:43:49
2/C(044)	PAINTED SURFACE	100	230.41	09/28/94	10:45:39
2/C(048)	PAINTED SURFACE	190	4377.88	09/28/94	10:46:39
2/C(050)	PAINTED SURFACE	90	-230.41	09/28/94	10:47:47
2/C(053)	PAINTED SURFACE	110	691.24	09/28/94	10:54:25
2/C(053)	PAINTED SURFACE	15	-3686.64	09/28/94	10:56:29
2/C(057)	PAINTED SURFACE	130	1612.90	09/28/94	10:57:25
2/C(064)	PAINTED SURFACE	150	2534.56	09/28/94	11:03:48
2/C(065)	PAINTED SURFACE	90	-230.41	09/28/94	12:50:28
2/C(075)	PAINTED SURFACE	120	1152.07	09/28/94	13:20:51

A.5. Summary Data of Beta / Gamma Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
2/C(080)	PAINTED SURFACE	90	-230.41	09/28/94	13:22:58
2/C(068)	PAINTED SURFACE	70	-1152.07	09/28/94	12:50:28
2/C(071)	PAINTED SURFACE	80	-691.24	09/28/94	13:20:51
2/C(073)	PAINTED SURFACE	110	691.24	09/28/94	13:20:51
1/R(036)	PAINTED SURFACE	110	460.83	10/03/94	08:05:56
1/R(037)	PAINTED SURFACE	60	-1843.32	10/03/94	08:35:27
1/R(039)	PAINTED SURFACE	270	7834.10	10/03/94	08:36:42
1/R(040)	PAINTED SURFACE	105	230.41	10/03/94	08:37:57
1/R(042)	PAINTED SURFACE	145	2073.73	10/03/94	08:39:43
1/R(044)	PAINTED SURFACE	90	-460.83	10/03/94	08:40:52
1/R(046)	PAINTED SURFACE	105	230.41	10/03/94	08:42:50
1/R(048)	PAINTED SURFACE	80	-921.66	10/03/94	08:47:44
1/R(049)	PAINTED SURFACE	85	-691.24	10/03/94	08:49:09
1/R(051)	PAINTED SURFACE	90	-460.83	10/03/94	08:50:06
1/R(052)	PAINTED SURFACE	90	-460.83	10/03/94	08:54:27
1/R(054)	PAINTED SURFACE	65	-1612.90	10/03/94	08:58:59
1/R(057)	PAINTED SURFACE	70	-1382.49	10/03/94	09:04:49
1/R(061)	PAINTED SURFACE	60	-1843.32	10/03/94	09:07:19
1/R(063)	PAINTED SURFACE	70	-1382.49	10/03/94	09:08:27
1/R(065)	PAINTED SURFACE	60	-1843.32	10/03/94	09:11:42
1/R(067)	PAINTED SURFACE	55	-2073.73	10/03/94	09:12:51
1/R(073)	PAINTED SURFACE	230	5990.78	10/03/94	09:13:44
1/R(075)	PAINTED SURFACE	80	-921.66	10/03/94	09:14:33
1/R(081)	PAINTED SURFACE	100	0.00	10/03/94	09:15:18
1/R(091)	PAINTED SURFACE	95	-230.41	10/03/94	09:16:15
1/R(098)	PAINTED SURFACE	10	-4147.47	10/03/94	09:16:54
1/R(100)	PAINTED SURFACE	80	-921.66	10/03/94	09:18:23
1/R(104)	PAINTED SURFACE	140	1843.32	10/03/94	09:19:21
1/R(105)	PAINTED SURFACE	90	-460.83	10/03/94	09:20:13
1/R(111)	PAINTED SURFACE	110	460.83	10/03/94	09:22:37
1/R(113)	PAINTED SURFACE	110	460.83	10/03/94	09:23:22
1/R(117)	PAINTED SURFACE	110	460.83	10/03/94	09:24:06
1/R(120)	PAINTED SURFACE	130	1382.49	10/03/94	09:25:14
1/R(122)	PAINTED SURFACE	100	0.00	10/03/94	09:26:01
1/R(124)	PAINTED SURFACE	110	460.83	10/03/94	09:26:58
1/R(127)	PAINTED SURFACE	70	-1382.49	10/03/94	09:27:46
1/R(129)	PAINTED SURFACE	90	-460.83	10/03/94	09:29:30
1/R(131)	PAINTED SURFACE	85	-691.24	10/03/94	09:30:09
1/R(135)	PAINTED SURFACE	70	-1382.49	10/03/94	09:30:47
1/R(143)	PAINTED SURFACE	120	921.66	10/03/94	09:31:39
1/R(149)	PAINTED SURFACE	100	0.00	10/03/94	09:32:19
1/R(167)	PAINTED SURFACE	90	-460.83	10/03/94	09:33:04
1/R(172)	PAINTED SURFACE	160	2764.98	10/03/94	09:33:50
1/R(173)	PAINTED SURFACE	130	1382.49	10/03/94	09:35:29
1/R(175)	PAINTED SURFACE	200	4608.29	10/03/94	09:36:48
1/R(176)	PAINTED SURFACE	200	4608.29	10/03/94	09:56:54
1/R(179)	PAINTED SURFACE	270	7834.10	10/03/94	09:59:08
1/R(181)	PAINTED SURFACE	205	4838.71	10/03/94	10:00:35

A.5. Summary Data of Beta / Gamma Radiation Measurements - Building 21

Sample Id	1 Minute Reading	Counts / min	dpm / 100 cm2	Date	Time
1/R(184)	PAINTED SURFACE	100	0.00	10/03/94	10:01:44
1/R(186)	PAINTED SURFACE	90	-460.83	10/03/94	10:03:26
1/R(189)	PAINTED SURFACE	90	-460.83	10/03/94	10:04:06
1/R(191)	PAINTED SURFACE	85	-691.24	10/03/94	10:07:28
1/R(194)	PAINTED SURFACE	100	0.00	10/03/94	10:08:14
1/R(196)	PAINTED SURFACE	90	-460.83	10/03/94	10:10:30
1/R(199)	PAINTED SURFACE	90	-460.83	10/03/94	10:25:48
1/R(200)	PAINTED SURFACE	90	-460.83	10/03/94	10:27:12
1/R(203)	PAINTED SURFACE	80	-921.66	10/03/94	10:28:00
1/R(206)	PAINTED SURFACE	100	0.00	10/03/94	10:28:55
1/R(208)	PAINTED SURFACE	170	3225.81	10/03/94	10:30:28
1/R(209)	PAINTED SURFACE	140	1843.32	10/03/94	10:33:12
1/R(210)	PAINTED SURFACE	190	4147.47	10/03/94	10:59:42
1/R(213)	PAINTED SURFACE	200	4608.29	10/03/94	11:01:48
1/R(215)	PAINTED SURFACE	170	3225.81	10/03/94	11:02:32
1/R(218)	PAINTED SURFACE	165	2995.39	10/03/94	11:05:53
1/R(220)	PAINTED SURFACE	140	1843.32	10/03/94	11:06:40
1/R(223)	PAINTED SURFACE	110	460.83	10/03/94	11:07:28
1/R(224)	PAINTED SURFACE	105	230.41	10/03/94	11:08:53
1/R(225)	PAINTED SURFACE	110	460.83	10/03/94	11:10:02
1/R(228)	PAINTED SURFACE	100	0.00	10/03/94	11:20:45
1/R(230)	PAINTED SURFACE	100	0.00	10/03/94	11:21:33
1/R(233)	PAINTED SURFACE	90	-460.83	10/03/94	11:22:25
1/R(234)	PAINTED SURFACE	80	-921.66	10/03/94	11:23:09
1/R(235)	PAINTED SURFACE	70	-1382.49	10/03/94	11:24:17
1/R(237)	PAINTED SURFACE	60	-1843.32	10/03/94	11:25:23
1/R(240)	PAINTED SURFACE	100	0.00	10/03/94	11:26:09
1/R(241)	PAINTED SURFACE	100	0.00	10/03/94	11:27:01
1/R(250)	PAINTED SURFACE	110	460.83	10/03/94	11:27:46
1/R(256)	PAINTED SURFACE	100	0.00	10/03/94	11:28:45
1/R(263)	PAINTED SURFACE	75	-1152.07	10/03/94	11:29:42
1/R(280)	PAINTED SURFACE	95	-230.41	10/03/94	11:30:21
1/R(287)	PAINTED SURFACE	60	-1843.32	10/03/94	11:31:35
1/R(295)	PAINTED SURFACE	70	-1382.49	10/03/94	11:32:41
1/R(298)	PAINTED SURFACE	100	0.00	10/03/94	11:33:32
1/R(302)	PAINTED SURFACE	80	-921.66	10/03/94	11:34:35
1/R(308)	PAINTED SURFACE	105	230.41	10/03/94	11:35:20
1/R(309)	PAINTED SURFACE	110	460.83	10/03/94	11:37:55
1/R(316)	PAINTED SURFACE	150	2304.15	10/03/94	12:40:23
1/R(319)	PAINTED SURFACE	120	921.66	10/03/94	12:41:50
1/R(324)	PAINTED SURFACE	100	0.00	10/03/94	12:43:07
1/R(326)	PAINTED SURFACE	100	0.00	10/03/94	12:44:11
1/R(328)	PAINTED SURFACE	70	-1382.49	10/03/94	12:47:04
1/R(331)	PAINTED SURFACE	70	-1382.49	10/03/94	12:48:50
1/R(334)	PAINTED SURFACE	100	0.00	10/03/94	12:50:59
1/R(338)	PAINTED SURFACE	70	-1382.49	10/03/94	12:54:13
1/R(339)	PAINTED SURFACE	80	-921.66	10/03/94	12:55:41
1/R(342)	PAINTED SURFACE	85	-691.24	10/03/94	12:56:34

A.6. Calculations of Total Alpha and Beta/Gamma Surface Radiation - Building 21

A.6 Calculations of Total Alpha and Beta/Gamma Surface Radiation - Building 21.

Room	Total Area m2	Exposed >10,000 dpm/100cm2	Alpha >5000	>1,000	<1,000	Area m2
1F	262	16	31	150	65	262
1N	109	0	1	39	68.5	108.5
1S	109	0.5	4.5	20	83.5	108.5
1E	43.5	0	0	9	34.5	43.5
1W	38	0	1	8	29	38
2F	77.25	5	5	49.5	18.5	78
2N	32	0	0	0	32	32
2S	32	0	0	4.5	27.5	32
2E	38	0	0	2	36	38
2W	38	0	0	3	35	38
Subtotal Area m2	778.75	21.5	42.5	285	429.5	778.5
Mean Activity dpm/100 cm2		18347	6560	2216	549	
dpm/m2		1834700	656000	221600	54900	
Subtotal Activity dpm		39446050	27880000	63156000	23579550	1.3E+08
microcurie/dpm		4.51E−07				
TOTAL ALPHA SURFACE ACTIVITY		58.782164 microcuries				

A.6 Calculations of Total Alpha and Beta/Gamma Surface Radiation - Building 21.

Room	Total Area m2	Alpha >10,000 dpm/100cm2	Surface >5000	>1,000	<1,000	Area m2
1F	262	0	2	99	161	262
1N	109	1	1	36	71	109
1S	109	1	3	11	94	109
1E	43.5	0	0	13	30.5	43.5
1W	38	0	0	8	30	38
2F	77.25	1	0	29	47.25	77.25
2N	32	0	0	3	29	32
2S	32	0	0	4.5	27.5	32
2E	38	0	0	2	36	38
2W	38	0	0	3.5	34.5	38
Subtotal Area m2	778.75	3	6	209	560.75	778.75
Mean Activity dpm/100 cm2		17047	6797	2710	545	
dpm/m2		1704700	679700	271000	54500	
Subtotal Activity dpm		5114100	4078200	56639000	30560875	65831300
microcurie/dpm		4.51E−07				
TOTAL ALPHA ACTIVITY EXPOSED		29.657001 microcuries				

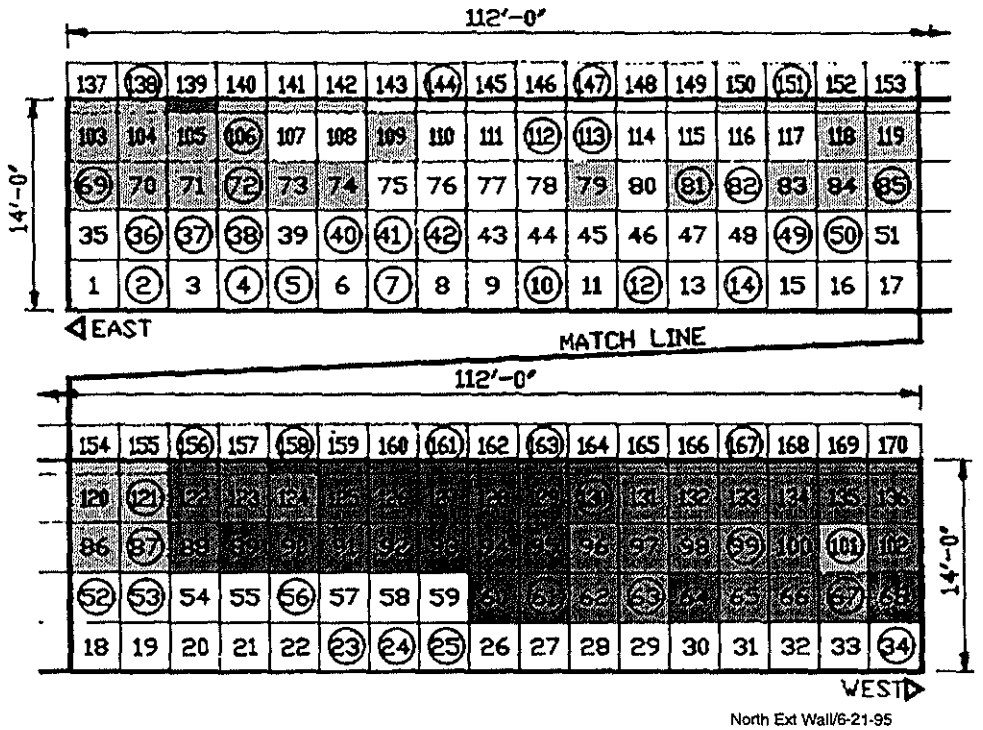
A.6 Calculations of Total Alpha and Beta/Gamma Surface Radiation - Building 21.

Total Surface	Surface Beta/Gamma Activity					
	>100,000 dpm/100cm2	>50,000	>10,000	>5,000	<5,000	Surface Area (m2)
1F	2	2	71	118	69	262
1N	0	0	21	32	56	109
1S	1.5	1	22.5	23	61	109
1E	0	1	6	7	29.5	43.5
1W	0	0	3.5	5	29.5	38
2F	0	4	36.5	30	6.5	77
2N	0	0	2	7.5	22.5	32
2S	0	0	9.5	6.5	16	32
2E	0	0	6	4.5	27.5	38
2W	0	0	6.5	9	22.5	38
Subtotal Area (m2)	3.5	8	184.5	242.5	340	778.5
Mean Activity dpm/100 cm2	311955	76013	18630	7240	3544	
dpm/m2		7601300	1863000	724000	354400	
Subtotal Activity dpm		60810400	3.4E+08	1.8E+08	1.2E+08	7.0E+08
microcurie/dpm		4.51E−07				
Total Beta/ Gamma Activity – Surface		315.6 microcuries				

A.6 Calculations of Total Alpha and Beta/Gamma Surface Radiation - Building 21.

Total Surface	Exposed >100,000 dpm/100cm2	Beta/Gamma Activity >50,000	>10,000	>5,000	<5,000	Surface Area (m2)
1F	24.5	23	122.5	63.5	29	262.5
1N	0	0	21	32	56	109
1S	1.5	1.5	16.5	22.5	67	109
1E	0	1	6	7	29.5	43.5
1W	0	0	3.5	5	29.5	38
2F	7	13.5	32	14.5	10.5	77.5
2N	0	0	0	31.5	0	31.5
2S	0	0	2	5	25	32
2E	0	0	0	2	36	38
2W	0	0	3	4.5	30.5	38
Subtotal Area (m2)	33	39	206.5	187.5	313	779
Mean Activity dpm/100 cm2	211433	67798	22373	7349	3485	
dpm/m2		6779800	2237300	734900	348500	
Subtotal Activity dpm		264412200	4.6E+08	1.4E+08	1.1E+08	9.7E+08
microcurie/dpm		4.51E−07				
Total Beta/ Gamma Activity – Exposed		438.5 microcuries				

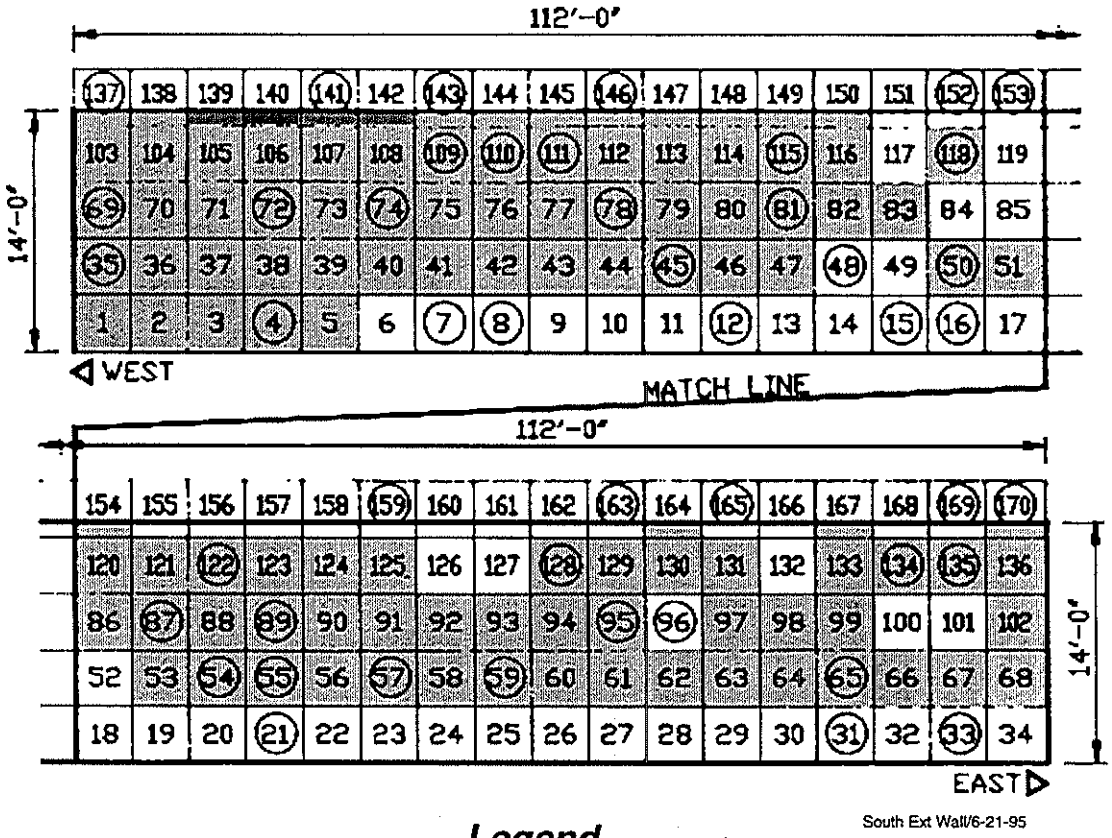
A.7. Distribution of Micro-R Measurements - Building 21



Legend

- > 25 dpm/100 cm^2
- 16 - 25 dpm/100 cm^2
- 9 - 15 dpm/100 cm^2
- ≤ 8 dpm/100 cm^2

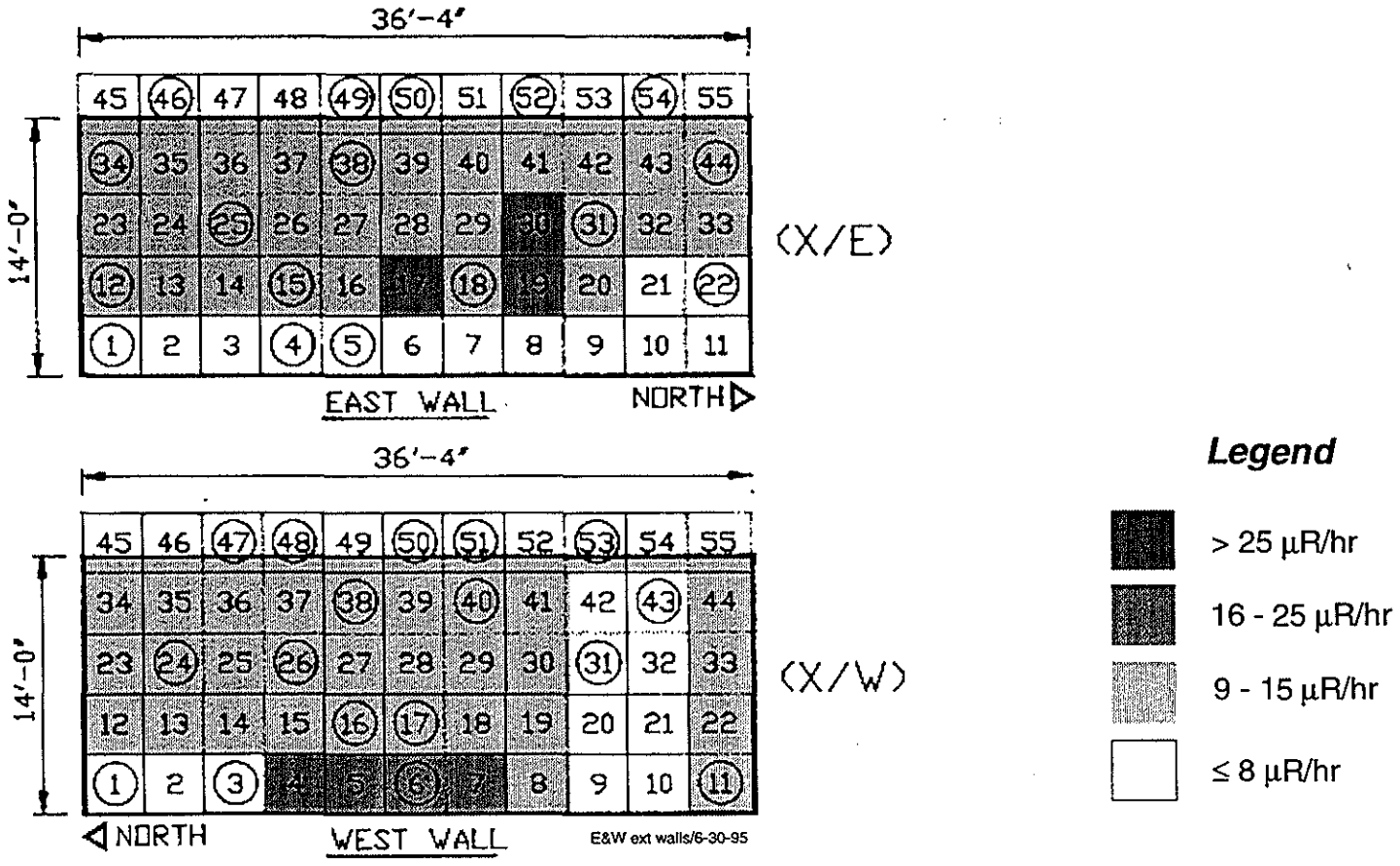
Micro-R Measurements - Building 21 North Exterior Wall (X/S).



Legend

- > 25 µR/hr
- 16 - 25 µR/hr
- 9 - 15 µR/hr
- ≤ 8 µR/hr

Micro-R Measurements - Building 21 South Exterior Wall (X/S).



Micro-R Measurements - Building 21 East and West Exterior Walls.

A.8. Summary Data of Micro-R Measurements - Building 21

A.8. Summary Data of Micro-R Measurements - Building 21

Sample Id	Reading uR/hr	Date	Time
X/E(012)	10	08/25/94	16:10:00
X/E(013)	11	08/25/94	16:11:00
X/E(014)	11	08/25/94	16:12:00
X/E(015)	12	08/25/94	16:13:00
X/E(016)	15	08/25/94	16:13:00
X/E(017)	17	08/25/94	16:13:00
X/E(018)	15	08/25/94	16:14:00
X/E(019)	18	08/25/94	16:16:00
X/E(020)	15	08/25/94	16:16:00
X/E(023)	10	08/25/94	16:16:00
X/E(024)	9	08/25/94	16:32:00
X/E(025)	11	08/25/94	16:34:00
X/E(026)	14	08/25/94	16:34:00
X/E(027)	14	08/25/94	16:34:00
X/E(028)	11	08/25/94	16:35:00
X/E(029)	12	08/25/94	16:41:00
X/E(030)	17	08/25/94	16:41:00
X/E(031)	13	08/25/94	16:41:00
X/E(032)	11	08/25/94	16:42:00
X/E(033)	11	08/25/94	16:42:00
X/E(034)	10	08/25/94	16:43:00
X/E(035)	10	08/25/94	16:43:00
X/E(036)	10	08/25/94	16:45:00
X/E(037)	12	08/25/94	16:45:00
X/E(038)	12	08/25/94	16:45:00
X/E(039)	13	08/25/94	16:47:00
X/E(040)	12	08/25/94	16:47:00
X/E(041)	13	08/25/94	16:47:00
X/E(042)	14	08/25/94	16:48:00
X/E(043)	11	08/25/94	16:49:00
X/E(044)	11	08/25/94	16:50:00
X/E(045)	10	08/25/94	16:50:00
X/E(046)	10	08/25/94	16:50:00
X/E(047)	10	08/25/94	16:52:00
X/E(048)	12	08/25/94	16:52:00
X/E(049)	13	08/25/94	16:53:00
X/E(050)	13	08/25/94	16:53:00
X/E(051)	11	08/25/94	16:53:00
X/E(052)	14	08/25/94	16:54:00
X/E(053)	14	08/25/94	16:55:00
X/E(054)	12	08/25/94	16:55:00
X/E(055)	12	08/25/94	16:56:00
X/N(060)	40	08/25/94	14:42:00
X/N(061)	30	08/25/94	14:47:00
X/N(062)	20	08/25/94	14:47:00
X/N(063)	16	08/25/94	14:48:00
X/N(064)	34	08/25/94	14:48:00
X/N(065)	20	08/25/94	14:50:00

A.8. Summary Data of Micro-R Measurements - Building 21

Sample Id	Reading uR/hr	Date	Time
X/N(066)	17	08/25/94	14:50:00
X/N(067)	17	08/25/94	14:50:00
X/N(068)	30	08/25/94	14:51:00
X/N(069)	14	08/25/94	14:54:00
X/N(070)	14	08/25/94	14:55:00
X/N(071)	11	08/25/94	14:56:00
X/N(072)	9	08/25/94	14:56:00
X/N(073)	9	08/25/94	14:56:00
X/N(074)	9	08/25/94	14:58:00
X/N(078)	8	08/25/94	15:02:00
X/N(079)	9	08/25/94	15:02:00
X/N(080)	7	08/25/94	15:05:00
X/N(081)	9	08/25/94	15:07:00
X/N(082)	8	08/25/94	15:08:00
X/N(083)	9	08/25/94	15:08:00
X/N(084)	9	08/25/94	15:09:00
X/N(085)	10	08/25/94	15:11:00
X/N(086)	9	08/25/94	15:11:00
X/N(087)	11	08/25/94	15:12:00
X/N(088)	18	08/25/94	15:12:00
X/N(089)	42	08/25/94	15:12:00
X/N(090)	26	08/25/95	15:15:00
X/N(091)	37	08/25/94	15:17:00
X/N(092)	48	08/25/94	15:17:00
X/N(093)	44	08/25/94	15:18:00
X/N(094)	30	08/25/94	15:19:00
X/N(095)	26	08/25/94	15:20:00
X/N(096)	20	08/25/94	15:21:00
X/N(097)	18	08/25/94	15:21:00
X/N(098)	19	08/25/94	15:22:00
X/N(099)	18	08/25/94	15:22:00
X/N(100)	16	08/25/94	15:23:00
X/N(101)	14	08/25/94	15:24:00
X/N(102)	16	08/25/94	15:24:00
X/N(103)	11	08/25/94	15:25:00
X/N(104)	10	08/25/94	15:28:00
X/N(105)	11	08/25/94	15:28:00
X/N(106)	9	08/25/94	15:29:00
X/N(107)	8	08/25/94	15:29:00
X/N(108)	8	08/25/94	15:29:00
X/N(109)	9	08/25/94	15:31:00
X/N(110)	8	08/25/94	15:31:00
X/N(111)	7	08/25/94	15:32:00
X/N(112)	7	08/25/94	15:32:00
X/N(113)	7	08/25/94	15:33:00
X/N(114)	7	08/25/94	15:34:00
X/N(115)	8	08/25/94	15:35:00
X/N(116)	8	08/25/94	15:36:00

A.8. Summary Data of Micro-R Measurements - Building 21

Sample Id	Reading uR/hr	Date	Time
X/N(117)	8	08/25/94	15:36:00
X/N(118)	9	08/25/94	15:36:00
X/N(119)	10	08/25/94	15:38:00
X/N(120)	11	08/25/94	15:39:00
X/N(121)	14	08/25/94	15:39:00
X/N(122)	19	08/25/94	15:39:00
X/N(123)	19	08/25/94	15:40:00
X/N(124)	24	08/25/94	15:41:00
X/N(125)	34	08/25/94	15:42:00
X/N(126)	40	08/25/94	15:42:00
X/N(127)	40	08/25/94	15:43:00
X/N(128)	36	08/25/94	15:44:00
X/N(129)	30	08/25/94	15:45:00
X/N(130)	26	08/25/94	15:45:00
X/N(131)	20	08/25/94	15:45:00
X/N(132)	20	08/25/94	15:45:00
X/N(133)	20	08/25/94	15:47:00
X/N(134)	18	08/25/94	15:47:00
X/N(135)	16	08/25/94	15:48:00
X/N(136)	17	08/25/94	15:48:00
X/N(137)	12	08/25/94	15:49:00
X/N(138)	10	08/25/94	15:50:00
X/N(139)	19	08/25/94	15:51:00
X/N(140)	10	08/25/94	15:51:00
X/N(141)	10	08/25/94	15:51:00
X/N(142)	9	08/25/94	15:51:00
X/N(143)	8	08/25/94	15:52:00
X/N(144)	8	08/25/94	15:53:00
X/N(145)	8	08/25/94	15:55:00
X/N(146)	7	08/25/94	15:55:00
X/N(147)	7	08/25/94	15:55:00
X/N(148)	8	08/25/94	15:56:00
X/N(149)	8	08/25/94	15:57:00
X/N(150)	9	08/25/94	15:57:00
X/N(151)	10	08/25/94	15:58:00
X/N(152)	11	08/25/94	15:59:00
X/N(153)	11	08/25/94	16:00:00
X/N(154)	12	08/25/94	16:00:00
X/N(155)	15	08/25/94	16:00:00
X/N(156)	17	08/25/94	16:01:00
X/N(157)	21	08/25/94	16:01:00
X/N(158)	28	08/25/94	16:02:00
X/N(159)	34	08/25/94	16:02:00
X/N(160)	36	08/25/94	16:03:00
X/N(161)	38	08/25/94	16:03:00
X/N(162)	35	08/25/94	16:04:00
X/N(163)	32	08/25/94	16:04:00
X/N(164)	30	08/25/94	16:04:00

A.8. Summary Data of Micro-R Measurements - Building 21

Sample Id	Reading uR/hr	Date	Time
X/N(165)	24	08/25/94	16:04:00
X/N(166)	24	08/25/94	16:05:00
X/N(167)	24	08/25/94	16:05:00
X/N(168)	20	08/25/94	16:06:00
X/N(169)	22	08/25/94	16:06:00
X/N(170)	20	08/25/94	16:06:00
X/S(001)	13	08/24/94	13:37:00
X/S(002)	12	08/24/94	13:39:00
X/S(003)	13	08/24/94	13:39:00
X/S(004)	13	08/24/94	13:39:00
X/S(005)	14	08/24/94	13:40:00
X/S(035)	10	08/24/94	13:40:00
X/S(036)	10	08/24/94	13:42:00
X/S(037)	11	08/24/94	13:43:00
X/S(038)	11	08/24/94	13:43:00
X/S(039)	10	08/24/94	13:43:00
X/S(040)	10	08/24/94	13:43:00
X/S(041)	10	08/24/94	13:44:00
X/S(042)	11	08/24/94	13:45:00
X/S(043)	10	08/24/94	13:45:00
X/S(044)	10	08/24/94	13:46:00
X/S(045)	10	08/24/94	13:46:00
X/S(046)	10	08/24/94	13:47:00
X/S(047)	9	08/24/94	13:47:00
X/S(048)	8	08/24/94	13:48:00
X/S(049)	8	08/24/94	13:49:00
X/S(050)	9	08/24/94	13:50:00
X/S(051)	9	08/24/94	13:50:00
X/S(052)	8	08/24/94	13:51:00
X/S(053)	9	08/24/94	13:51:00
X/S(054)	10	08/24/94	13:53:00
X/S(055)	11	08/24/94	13:53:00
X/S(056)	11	08/24/94	13:54:00
X/S(057)	10	08/24/94	13:54:00
X/S(058)	10	08/24/94	13:55:00
X/S(059)	11	08/24/94	13:55:00
X/S(060)	10	08/24/94	13:56:00
X/S(061)	9	08/24/94	13:56:00
X/S(062)	9	08/24/94	13:57:00
X/S(063)	10	08/24/94	13:57:00
X/S(064)	9	08/24/94	13:58:00
X/S(065)	10	08/24/94	13:58:00
X/S(066)	9	08/24/94	14:01:00
X/S(067)	9	08/24/94	14:02:00
X/S(068)	9	08/24/94	14:03:00
X/S(069)	9	08/24/94	14:04:00
X/S(070)	10	08/24/94	14:05:00
X/S(071)	10	08/24/94	14:05:00

A.8. Summary Data of Micro-R Measurements - Building 21

Sample Id	Reading uR/hr	Date	Time
X/S(072)	10	08/24/94	14:07:00
X/S(073)	11	08/24/94	14:08:00
X/S(074)	10	08/24/94	14:08:00
X/S(075)	10	08/24/94	14:09:00
X/S(076)	9	08/24/94	14:09:00
X/S(077)	9	08/24/94	14:09:00
X/S(078)	9	08/24/94	14:10:00
X/S(079)	9	08/24/94	14:11:00
X/S(080)	9	08/24/94	14:12:00
X/S(081)	9	08/24/94	14:12:00
X/S(082)	9	08/24/94	14:13:00
X/S(083)	9	08/24/94	14:13:00
X/S(084)	8	08/24/94	14:13:00
X/S(085)	8	08/24/94	14:15:00
X/S(086)	9	08/24/94	14:17:00
X/S(087)	9	08/24/94	14:17:00
X/S(088)	10	08/24/94	14:18:00
X/S(089)	9	08/24/94	14:18:00
X/S(090)	9	08/24/94	14:19:00
X/S(091)	9	08/24/94	14:19:00
X/S(092)	9	08/24/94	14:20:00
X/S(093)	10	08/24/94	14:21:00
X/S(094)	9	08/24/94	14:21:00
X/S(095)	9	08/24/94	14:22:00
X/S(096)	8	08/24/94	14:22:00
X/S(097)	9	08/24/94	14:22:00
X/S(098)	10	08/24/94	14:23:00
X/S(099)	9	08/24/94	14:24:00
X/S(100)	8	08/24/94	14:24:00
X/S(101)	8	08/24/94	14:25:00
X/S(102)	9	08/24/94	14:25:00
X/S(103)	9	08/24/94	14:26:00
X/S(104)	10	08/24/94	14:33:00
X/S(105)	10	08/24/94	14:34:00
X/S(106)	12	08/24/94	14:42:00
X/S(107)	10	08/24/94	14:43:00
X/S(108)	11	08/24/94	14:44:00
X/S(109)	10	08/24/94	14:45:00
X/S(110)	10	08/24/94	14:47:00
X/S(111)	9	08/24/94	14:47:00
X/S(112)	9	08/24/94	14:49:00
X/S(113)	9	08/24/94	14:50:00
X/S(114)	9	08/24/94	14:51:00
X/S(115)	9	08/24/94	14:56:00
X/S(116)	9	08/24/94	14:57:00
X/S(117)	8	08/24/94	14:59:00
X/S(118)	9	08/24/94	15:01:00
X/S(119)	8	08/24/94	15:01:00

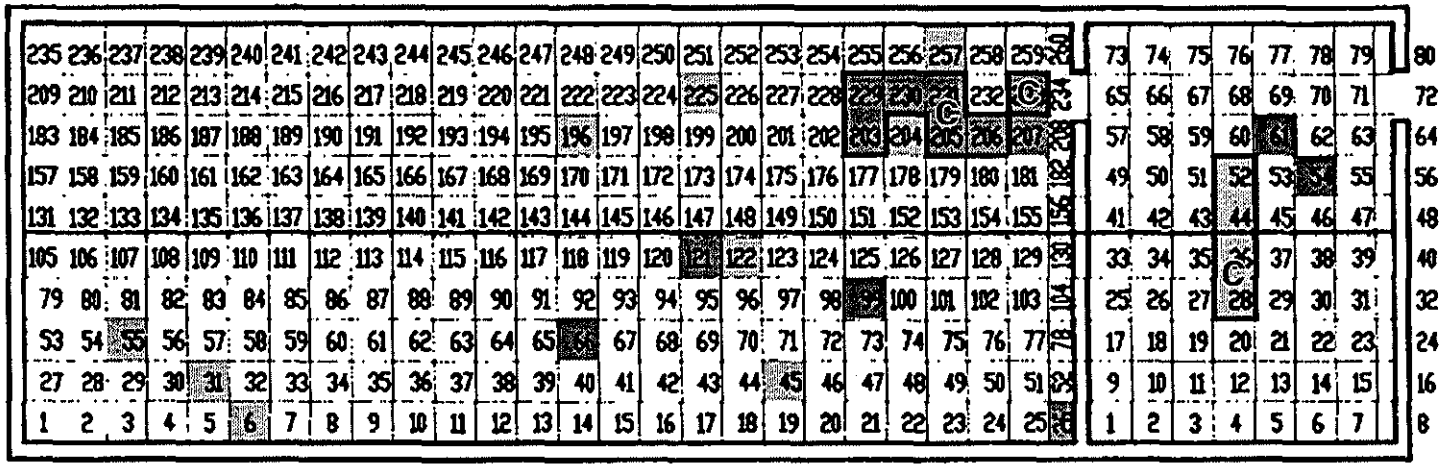
A.8. Summary Data of Micro-R Measurements - Building 21

Sample Id	Reading uR/hr	Date	Time
X/S(120)	9	08/24/94	15:02:00
X/S(121)	9	08/24/94	15:03:00
X/S(122)	9	08/24/94	15:05:00
X/S(123)	9	08/24/94	15:05:00
X/S(124)	9	08/24/94	15:06:00
X/S(125)	9	08/24/94	15:07:00
X/S(126)	8	08/24/94	15:08:00
X/S(127)	8	08/24/94	15:08:00
X/S(128)	9	08/24/94	15:10:00
X/S(129)	9	08/24/94	15:11:00
X/S(130)	9	08/24/94	15:12:00
X/S(131)	9	08/24/94	15:13:00
X/S(132)	8	08/24/94	15:14:00
X/S(133)	9	08/24/94	15:15:00
X/S(134)	9	08/24/94	15:15:00
X/S(135)	9	08/24/94	15:16:00
X/S(136)	9	08/24/94	15:17:00
X/S(137)	9	08/24/94	14:29:00
X/S(138)	12	08/24/94	14:33:00
X/S(139)	24	08/24/94	14:40:00
X/S(140)	30	08/24/94	14:42:00
X/S(141)	17	08/24/94	14:43:00
X/S(142)	23	08/24/94	14:45:00
X/S(143)	10	08/24/94	14:46:00
X/S(144)	10	08/24/94	14:47:00
X/S(145)	10	08/24/94	14:49:00
X/S(146)	11	08/24/94	14:50:00
X/S(147)	10	08/24/94	14:51:00
X/S(148)	10	08/24/94	14:53:00
X/S(149)	9	08/24/94	14:57:00
X/S(150)	9	08/24/94	14:57:00
X/S(151)	8	08/24/94	14:59:00
X/S(152)	8	08/24/94	15:01:00
X/S(153)	8	08/24/94	15:02:00
X/S(154)	9	08/24/94	15:03:00
X/S(155)	8	08/24/94	15:04:00
X/S(156)	8	08/24/94	15:05:00
X/S(157)	8	08/24/94	15:05:00
X/S(158)	8	08/24/94	15:06:00
X/S(159)	8	08/24/94	15:07:00
X/S(160)	8	08/24/94	15:08:00
X/S(161)	8	08/24/94	15:10:00
X/S(162)	8	08/24/94	15:11:00
X/S(163)	7	08/24/94	15:11:00
X/S(164)	9	08/24/94	15:12:00
X/S(165)	7	08/24/94	15:13:00
X/S(166)	8	08/24/94	15:14:00
X/S(167)	9	08/24/94	15:15:00

A.8. Summary Data of Micro-R Measurements - Building 21

Sample Id	Reading uR/hr	Date	Time
X/S(168)	8	08/24/94	15:15:00
X/S(169)	8	08/24/94	15:16:00
X/S(170)	9	08/24/94	15:17:00
X/W(004)	22	08/24/94	15:32:00
X/W(005)	19	08/24/94	15:33:00
X/W(006)	22	08/24/94	15:33:00
X/W(007)	17	08/24/94	15:33:00
X/W(008)	15	08/24/94	15:56:00
X/W(011)	10	08/24/94	15:34:00
X/W(012)	12	08/24/94	15:34:00
X/W(013)	12	08/24/94	15:36:00
X/W(014)	13	08/24/94	15:36:00
X/W(015)	12	08/24/94	15:36:00
X/W(016)	13	08/24/94	15:37:00
X/W(017)	13	08/24/94	15:37:00
X/W(018)	11	08/24/94	15:37:00
X/W(019)	12	08/24/94	15:57:00
X/W(022)	9	08/24/94	15:38:00
X/W(023)	15	08/24/94	15:38:00
X/W(024)	15	08/24/94	15:39:00
X/W(025)	12	08/24/94	15:40:00
X/W(026)	12	08/24/94	15:40:00
X/W(027)	12	08/24/94	15:40:00
X/W(028)	12	08/24/94	15:41:00
X/W(029)	10	08/24/94	15:41:00
X/W(030)	9	08/24/94	15:58:00
X/W(033)	9	08/24/94	15:41:00
X/W(034)	14	08/24/94	15:42:00
X/W(035)	13	08/24/94	15:43:00
X/W(036)	11	08/24/94	15:47:00
X/W(037)	12	08/24/94	15:48:00
X/W(038)	12	08/24/94	15:49:00
X/W(039)	10	08/24/94	15:52:00
X/W(040)	12	08/24/94	15:53:00
X/W(041)	10	08/24/94	15:59:00
X/W(044)	9	08/24/94	16:06:00
X/W(045)	14	08/24/94	15:43:00
X/W(046)	15	08/24/94	15:47:00
X/W(047)	12	08/24/94	15:47:00
X/W(048)	13	08/24/94	15:49:00
X/W(049)	14	08/24/94	15:52:00
X/W(050)	13	08/24/94	15:53:00
X/W(051)	12	08/24/94	15:55:00
X/W(052)	14	08/24/94	16:02:00
X/W(053)	13	08/24/94	16:02:00
X/W(054)	13	08/24/94	16:02:00
X/W(055)	10	08/29/94	16:04:00

A.9. Distribution of Gamma Spectroscopis Analyses of Paint and Concrete - Building 21

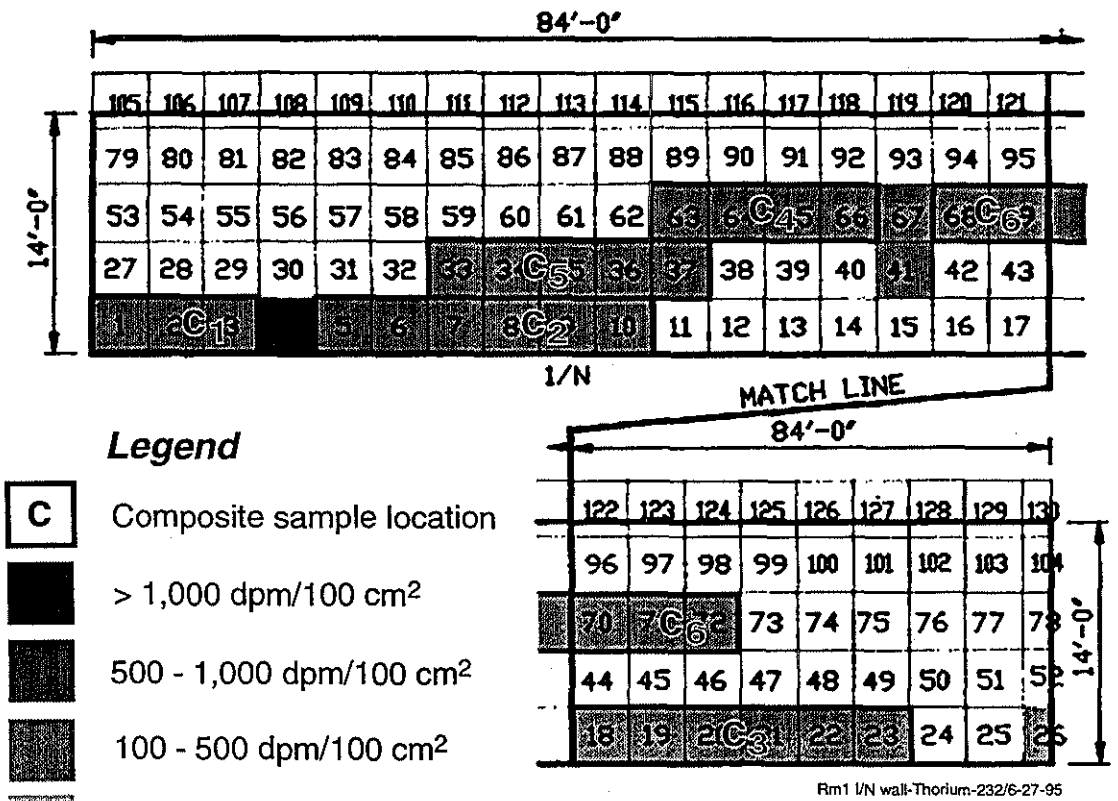


Legend

C	Composite sample location
	> 1,000 dpm/100 cm^2
	500 - 1,000 dpm/100 cm^2
	100 - 500 dpm/100 cm^2
	25 - 100 dpm/100 cm^2
	< 25 dpm/100 cm^2

Thorium-232 Sample Results - Building 21 Floor.

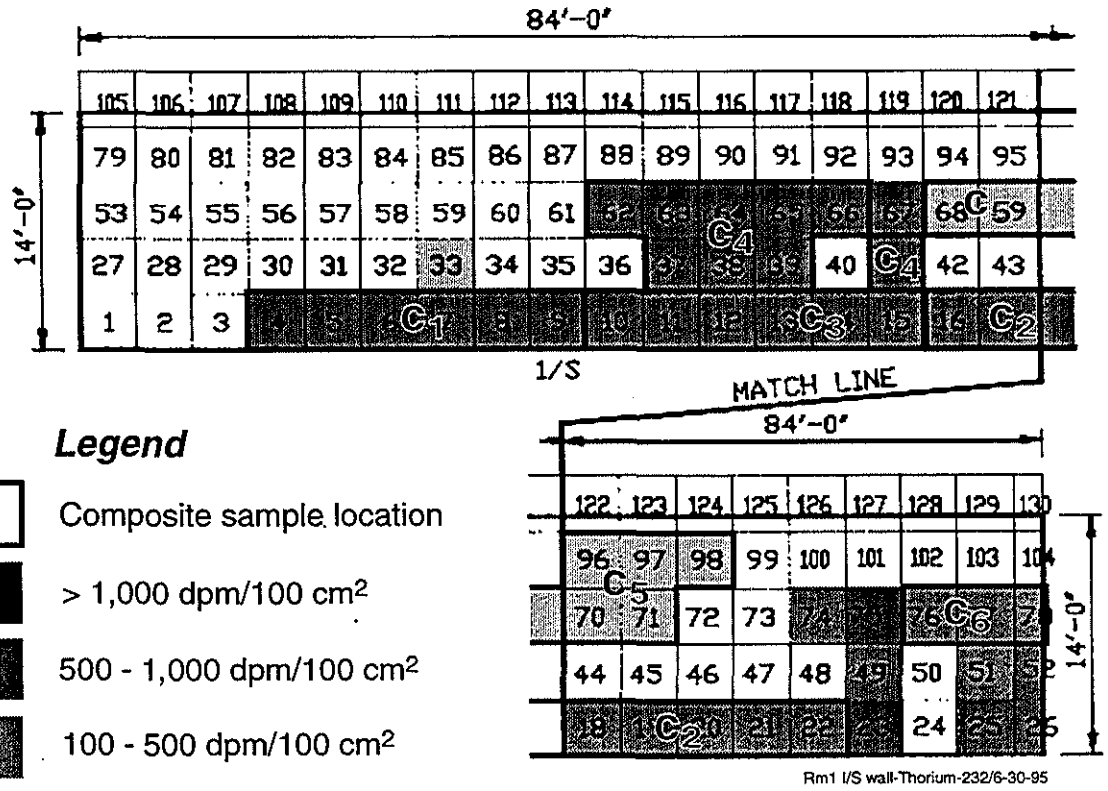
Floor Plan-Thorium-232/6-30-95



Legend

- C — Composite sample location
- > 1,000 dpm/100 cm^2
- 500 - 1,000 dpm/100 cm^2
- 100 - 500 dpm/100 cm^2
- 25 - 100 dpm/100 cm^2
- < 25 dpm/100 cm^2

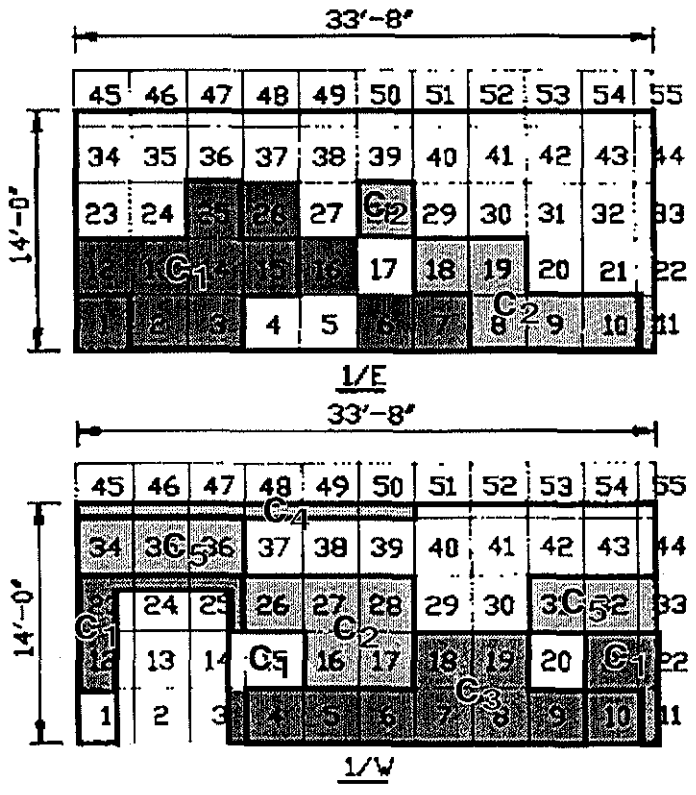
Thorium-232 Sample Results - Building 21 Room 1 Interior North Wall (I/N).



Legend

- C — Composite sample location
- > 1,000 dpm/100 cm²
- 500 - 1,000 dpm/100 cm²
- 100 - 500 dpm/100 cm²
- 25 - 100 dpm/100 cm²
- < 25 dpm/100 cm²

Thorium-232 Sample Results - Building 21 Room 1 Interior South Wall (I/S).

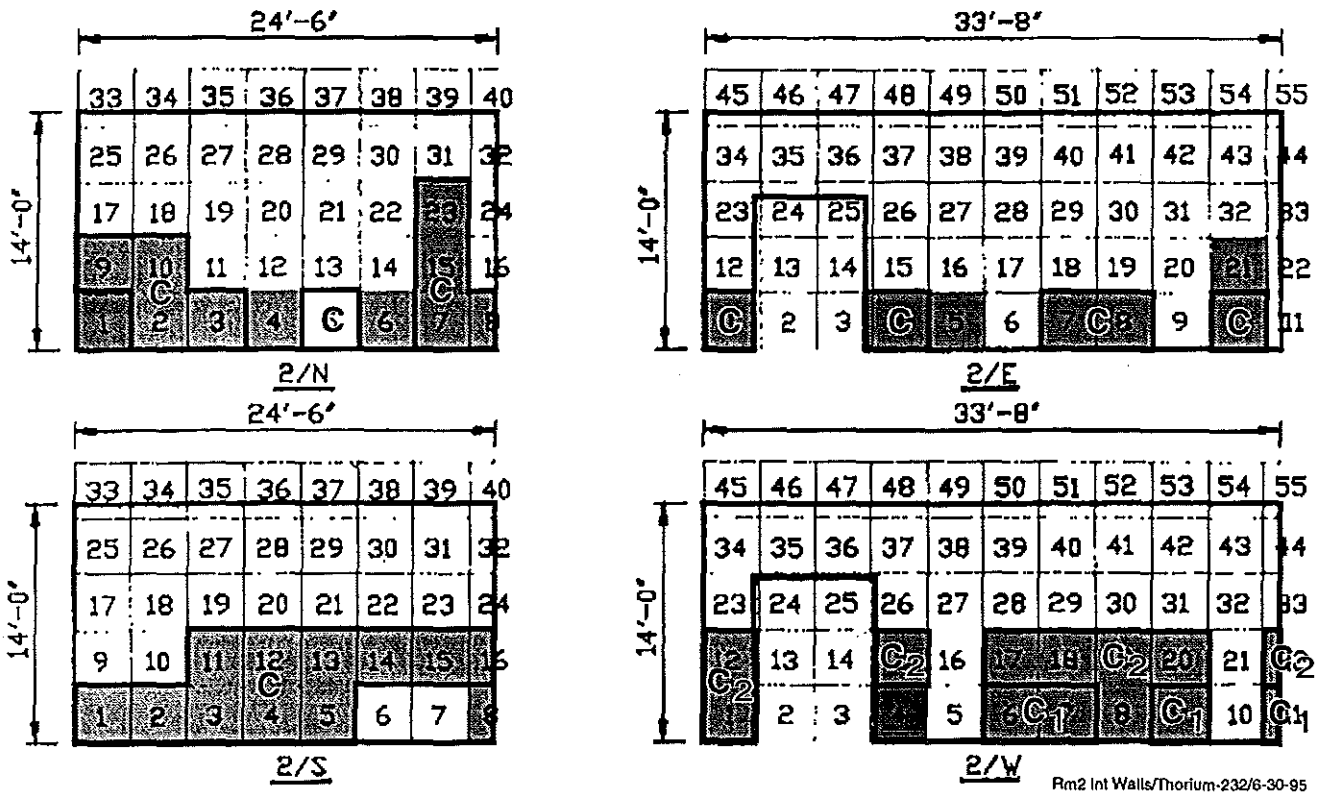


Rm1 I/E&I/W walls/Thorium-232/6-30-95

Legend

- C — Composite sample location
- > 1,000 dpm/100 cm^2
- 500 - 1,000 dpm/100 cm^2
- 100 - 500 dpm/100 cm^2
- 25 - 100 dpm/100 cm^2
- < 25 dpm/100 cm^2

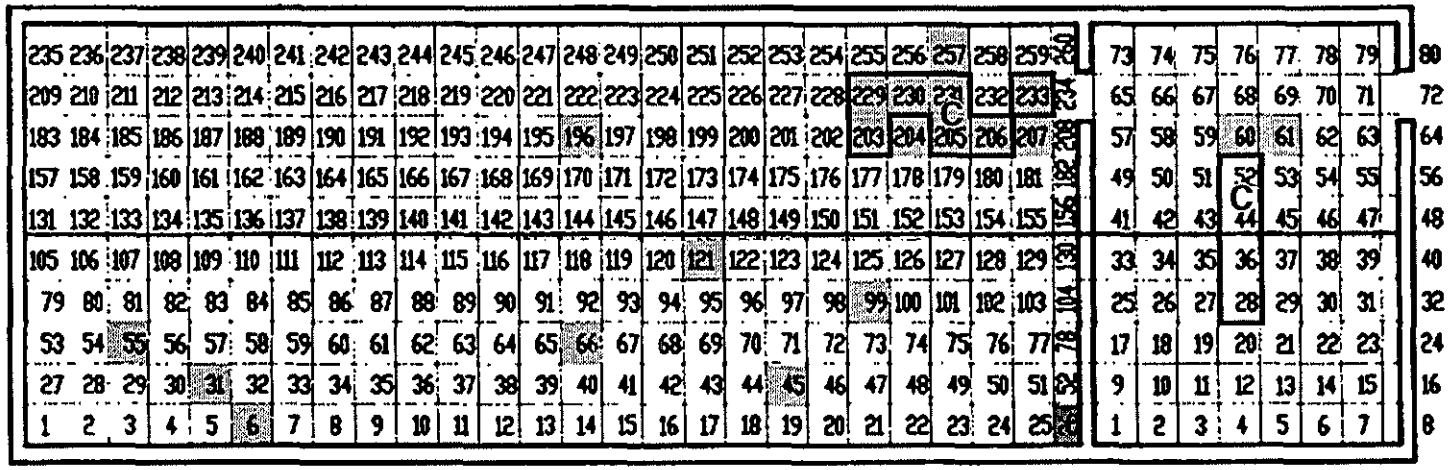
Thorium-232 Sample Results - Building 21 Room 1 Interior East (1/E) and West (1/W) Walls.



Legend

C	Composite sample location
	> 1,000 dpm/100 cm^2
	500 - 1,000 dpm/100 cm^2
	100 - 500 dpm/100 cm^2
	25 - 100 dpm/100 cm^2
	< 25 dpm/100 cm^2

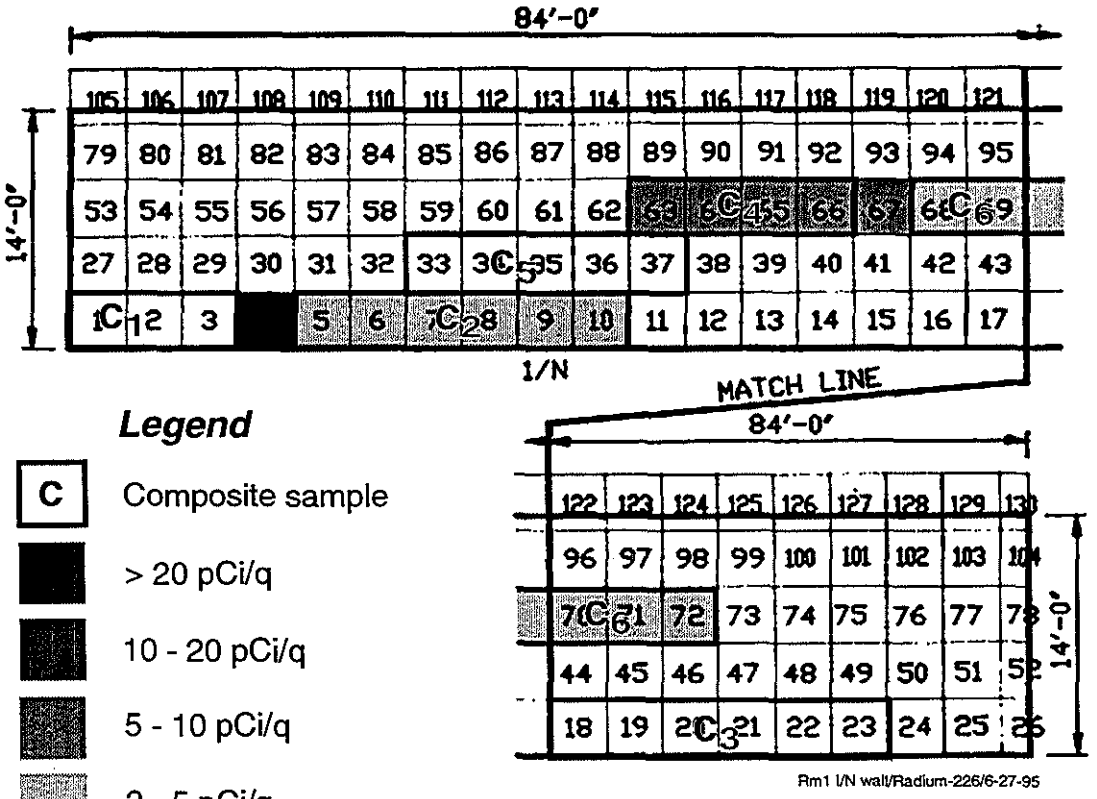
Thorium-232 Sample Results - Building 21 Room 2 Interior Walls (2/N,2/S,2/E,2/W).



Legend

- C — Composite sample
- > 20 pCi/q
- 10 - 20 pCi/q
- 5 - 10 pCi/q
- 2 - 5 pCi/q
- < 2 pCi/q

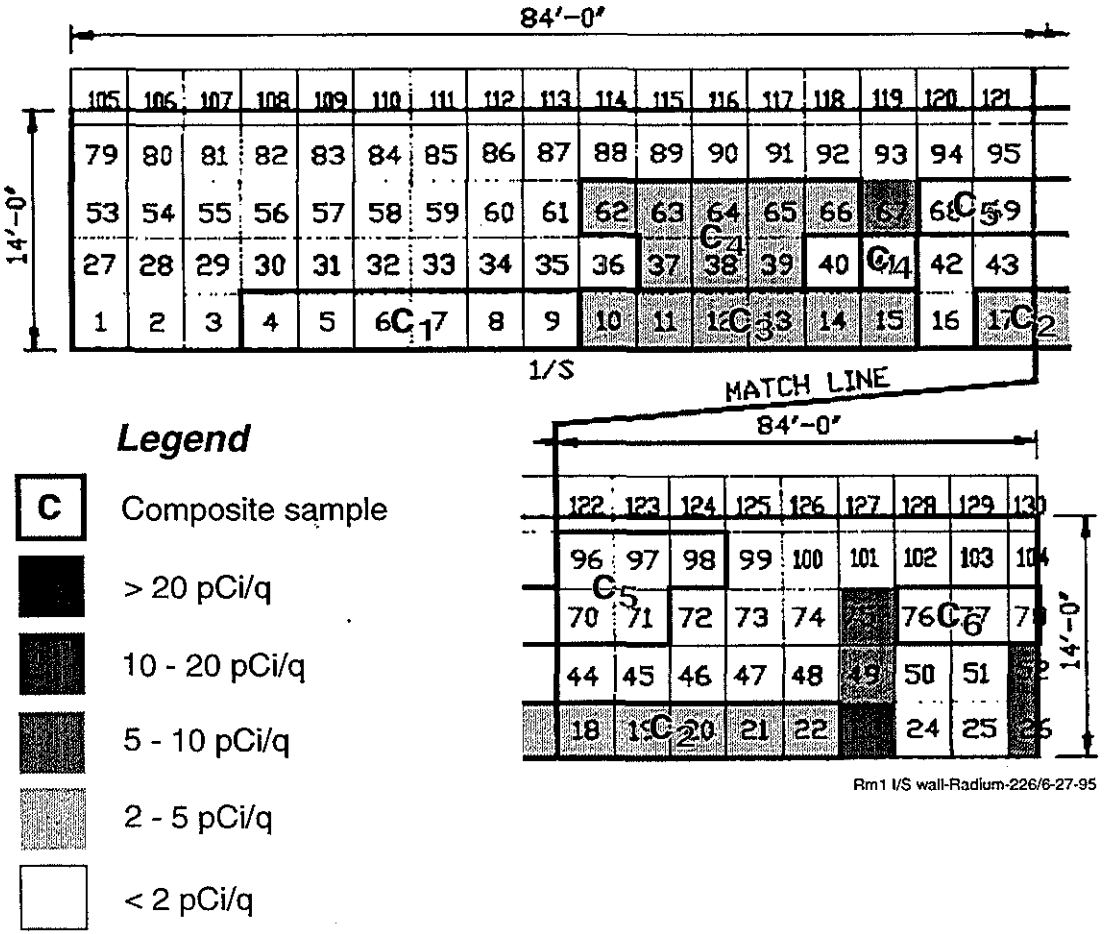
Building 21 Floor Plan and Grid Locations - Radium-226



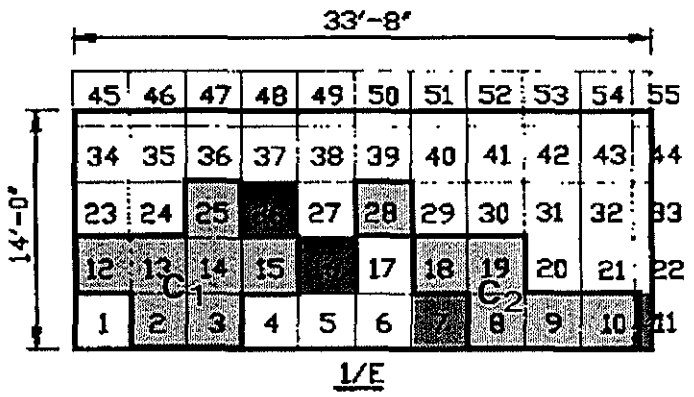
Legend

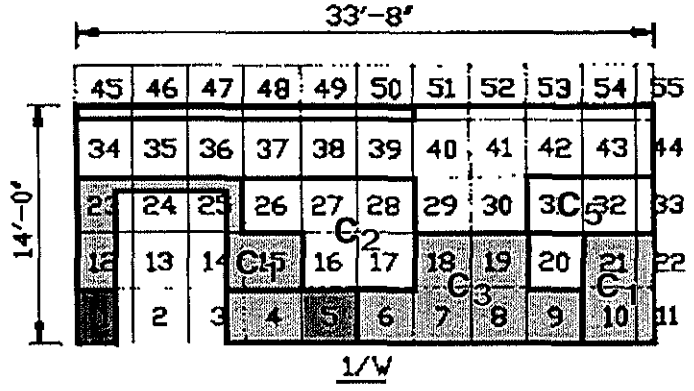
- C — Composite sample
- > 20 pCi/q
- 10 - 20 pCi/q
- 5 - 10 pCi/q
- 2 - 5 pCi/q
- < 2 pCi/q

Building 21 Room 1 Interior North Wall (I/N) Grid Locations, Radium-226

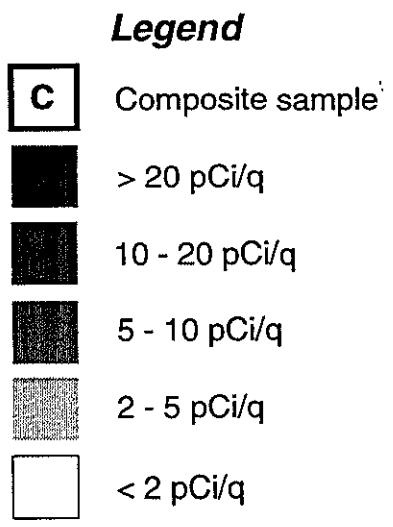


Building 21 Room 1 Interior South Wall (I/S) Grid Locations, Radium-226

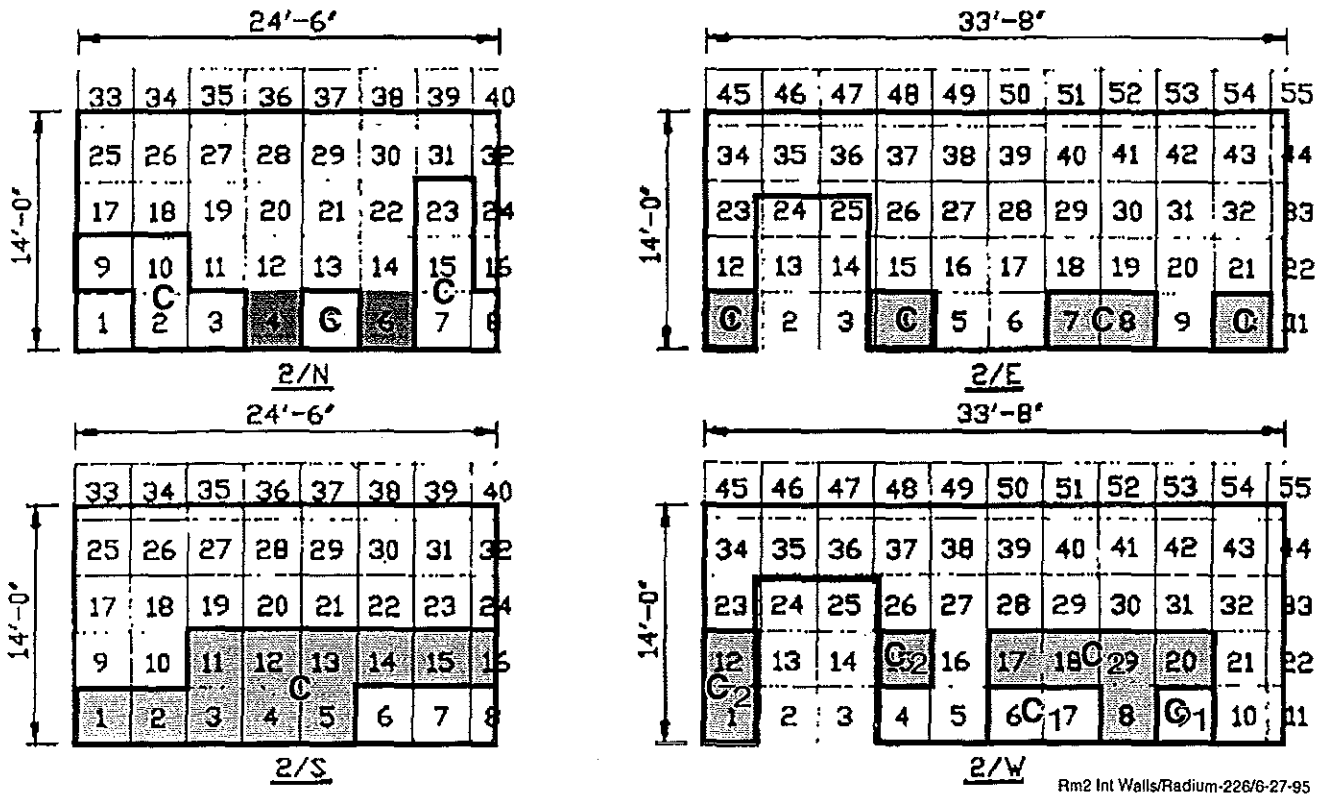




Rm1 I/E&I/W walls/Radium-226/6-27-95



Building 21 Room 1 Interior East (1/E) and West (1/W) Walls Grid Locations, Radium-226



Legend

C	Composite sample
	> 20 pCi/q
	10 - 20 pCi/q
	5 - 10 pCi/q
	2 - 5 pCi/q
	< 2 pCi/q

Building 21 Room 2 Interior Walls (2/N,2/S,2/E,2/W) Grid Locations, Radium-226

A.10. Summary Data of Gamma Spectroscopic Analyses of Paint and Concrete - Building 21

A.10. Summary Data of Gamma Spectroscopic Analysis of Paint and Concrete Samples - Building 21

Sample ID	Isotope	Result	Total Error	Result + Error	MDA	Unit
1/E001	TH-232DA	324.0	35.4	359.4	0.0	pCi/g
1/E001	RA-224DA	394.0	39.9	433.9	0.0	pCi/g
1/E006	TH-232DA	146.0	18.6	164.6	0.0	pCi/g
1/E006	RA-224DA	177.0	18.4	195.4	0.0	pCi/g
1/E007	TH-232DA	264.0	31.2	295.2	0.0	pCi/g
1/E007	RA-226DA	6.2	3.1	9.2	5.5	pCi/g
1/E007	RA-224DA	295.0	30.5	325.5	0.0	pCi/g
1/E016	TH-232DA	406.0	45.9	451.9	0.0	pCi/g
1/E016	RA-226DA	11.3	3.9	15.21	7.1	pCi/g
1/E016	RA-224DA	610.0	61.9	671.9	0.0	pCi/g
1/E026	TH-232DA	402.0	46.1	448.1	0.0	pCi/g
1/E026	RA-226DA	10.1	3.8	13.92	7.1	pCi/g
1/E026	RA-224DA	485.0	49.6	534.6	0.0	pCi/g
1/ECOMP002	TH-232DA	189.0	19.7	208.7	0.0	pCi/g
1/ECOMP002	TH-232DA	169.0	17.6	186.6	0.0	pCi/g
1/ECOMP002	RA-226DA	3.7	0.9	4.574	1.6	pCi/g
1/ECOMP002	RA-226DA	2.1	0.9	2.975	1.6	pCi/g
1/ECOMP002	RA-224DA	238.0	23.9	261.9	0.0	pCi/g
1/ECOMP002	RA-224DA	216.0	21.7	237.7	0.0	pCi/g
1/ECOMP008	TH-232DA	83.5	9.4	92.89	0.0	pCi/g
1/ECOMP008	RA-226DA	1.5	0.8	2.263	1.4	pCi/g
1/ECOMP008	RA-224DA	71.6	7.3	78.94	0.0	pCi/g
1/F006	TH-232DA	49.1	5.4	54.48	0.0	pCi/g
1/F006	RA-226DA	1.5	0.4	1.947	0.7	pCi/g
1/F006	RA-224DA	55.0	5.6	60.58	0.0	pCi/g
1/F026	TH-232DA	179.0	19.8	198.8	0.0	pCi/g
1/F026	RA-226DA	7.5	1.9	9.34	3.3	pCi/g
1/F026	RA-224DA	255.0	25.8	280.8	0.0	pCi/g
1/F031	TH-232DA	66.9	7.1	74.02	0.0	pCi/g
1/F031	RA-226DA	2.9	0.8	3.681	0.0	pCi/g
1/F031	RA-224DA	94.2	9.5	103.69	0.0	pCi/g
1/F045	TH-232DA	76.2	7.9	84.14	0.0	pCi/g
1/F045	RA-226DA	2.3	0.8	3.108	0.0	pCi/g
1/F045	RA-224DA	100.0	10.1	110.1	0.0	pCi/g
1/F050	TH-232DA	23.1	2.7	25.75	0.0	pCi/g
1/F050	TH-232DA	21.7	2.5	24.22	0.0	pCi/g
1/F050	RA-226DA	1.2	0.3	1.525	0.5	pCi/g
1/F050	RA-226DA	0.8	0.2	1.039	0.4	pCi/g
1/F050	RA-224DA	31.2	3.2	34.38	0.0	pCi/g
1/F050	RA-224DA	26.8	2.7	29.54	0.0	pCi/g
1/F055	TH-232DA	77.8	8.3	86.06	0.0	pCi/g
1/F055	RA-226DA	3.8	1.0	4.84	0.0	pCi/g
1/F055	RA-224DA	114.0	11.4	125.4	0.0	pCi/g
1/F066	TH-232DA	137.0	14.1	151.1	0.0	pCi/g
1/F066	RA-226DA	2.8	0.6	3.385	1.0	pCi/g
1/F066	RA-224DA	190.0	19.1	209.1	0.0	pCi/g
1/F099	TH-232DA	108.0	11.6	119.6	0.0	pCi/g

A.10. Summary Data of Gamma Spectroscopic Analysis of Paint and Concrete Samples - Building 21

Sample ID	Isotope	Result	Total Error	Result + Error	MDA	Unit
1/F099	RA-226DA	2.3	0.8	3.045	1.3	pCi/g
1/F099	RA-224DA	144.0	14.5	158.5	0.0	pCi/g
1/F121	TH-232DA	117.0	12.0	129	0.0	pCi/g
1/F121	RA-226DA	2.1	0.5	2.6	0.9	pCi/g
1/F121	RA-224DA	154.0	15.4	169.4	0.0	pCi/g
1/F122	TH-232DA	44.0	4.7	48.74	0.0	pCi/g
1/F122	RA-226DA	1.0	0.3	1.307	0.5	pCi/g
1/F122	RA-224DA	54.8	5.6	60.35	0.0	pCi/g
1/F191	TH-232DA	15.8	2.3	18.06	0.0	pCi/g
1/F191	RA-226DA	0.9	0.4	1.229	0.7	pCi/g
1/F191	RA-224DA	17.0	1.8	18.83	0.0	pCi/g
1/F196	TH-232DA	64.5	6.8	71.25	0.0	pCi/g
1/F196	RA-226DA	1.3	0.4	1.65	0.6	pCi/g
1/F196	RA-224DA	85.4	8.6	93.99	0.0	pCi/g
1/F204	TH-232DA	76.9	8.1	84.96	0.0	pCi/g
1/F204	RA-226DA	1.4	0.4	1.887	0.8	pCi/g
1/F204	RA-224DA	97.8	9.8	107.64	0.0	pCi/g
1/F207	TH-232DA	191.0	19.5	210.5	0.0	pCi/g
1/F207	RA-226DA	2.9	0.7	3.628	1.2	pCi/g
1/F207	RA-224DA	259.0	26.0	285	0.0	pCi/g
1/F225	TH-232DA	28.4	3.2	31.58	0.0	pCi/g
1/F225	RA-226DA	0.8	0.3	1.05	0.5	pCi/g
1/F225	RA-224DA	35.0	3.6	38.56	0.0	pCi/g
1/F257	TH-232DA	84.5	8.8	93.25	0.0	pCi/g
1/F257	RA-226DA	1.2	0.4	1.666	0.7	pCi/g
1/F257	RA-224DA	113.0	11.4	124.4	0.0	pCi/g
1/FCOMP203	TH-232DA	127.0	13.2	140.2	0.0	pCi/g
1/FCOMP203	TH-232DA	121.0	12.5	133.5	0.0	pCi/g
1/FCOMP203	RA-226DA	2.2	0.6	2.77	0.9	pCi/g
1/FCOMP203	RA-226DA	1.8	0.5	2.385	0.9	pCi/g
1/FCOMP203	RA-224DA	152.0	15.2	167.2	0.0	pCi/g
1/FCOMP203	RA-224DA	148.0	14.9	162.9	0.0	pCi/g
1/N004	TH-232DA	1570.0	158.0	1728	0.0	pCi/g
1/N004	RA-226DA	25.1	4.4	29.45	0.0	pCi/g
1/N004	RA-224DA	2160.0	216.0	2376	0.0	pCi/g
1/N004	AC-227DA	49.5	11.4	60.9	0.0	pCi/g
1/N026	TH-232DA	463.0	48.2	511.2	0.0	pCi/g
1/N026	RA-224DA	421.0	42.5	463.5	0.0	pCi/g
1/N041	TH-232DA	162.0	18.5	180.5	0.0	pCi/g
1/N041	RA-224DA	216.0	22.0	238	0.0	pCi/g
1/N067	TH-232DA	288.0	31.8	319.8	0.0	pCi/g
1/N067	RA-226DA	5.0	2.4	7.39	4.3	pCi/g
1/N067	RA-224DA	396.0	40.1	436.1	0.0	pCi/g
1/NCOMP001	TH-232DA	205.0	21.5	226.5	0.0	pCi/g
1/NCOMP001	RA-224DA	188.0	19.0	207	0.0	pCi/g
1/NCOMP005	TH-232DA	199.0	21.1	220.1	0.0	pCi/g
1/NCOMP005	TH-232DA	183.0	19.4	202.4	0.0	pCi/g

A.10. Summary Data of Gamma Spectroscopic Analysis of Paint and Concrete Samples - Building 21

Sample ID	Isotope	Result	Total Error	Result + Error	MDA	Unit
1/NCOMP005	RA-226DA	2.8	1.1	3.82	1.9	pCi/g
1/NCOMP005	RA-224DA	211.0	21.3	232.3	0.0	pCi/g
1/NCOMP005	RA-224DA	200.0	20.2	220.2	0.0	pCi/g
1/NCOMP018	TH-232DA	186.0	19.4	205.4	0.0	pCi/g
1/NCOMP018	RA-226DA	1.8	0.9	2.665	1.6	pCi/g
1/NCOMP018	RA-224DA	180.0	18.1	198.1	0.0	pCi/g
1/NCOMP033	TH-232DA	120.0	13.1	133.1	0.0	pCi/g
1/NCOMP033	TH-232DA	117.0	13.0	130	0.0	pCi/g
1/NCOMP033	RA-226DA	2.0	1.0	2.956	1.7	pCi/g
1/NCOMP033	RA-226DA	1.9	1.0	2.82	1.7	pCi/g
1/NCOMP033	RA-224DA	141.0	14.3	155.3	0.0	pCi/g
1/NCOMP033	RA-224DA	138.0	14.0	152	0.0	pCi/g
1/NCOMP063	TH-232DA	368.0	37.9	405.9	0.0	pCi/g
1/NCOMP063	RA-226DA	6.7	1.7	8.44	2.8	pCi/g
1/NCOMP063	RA-224DA	459.0	46.1	505.1	0.0	pCi/g
1/NCOMP068	TH-232DA	177.0	18.7	195.7	0.0	pCi/g
1/NCOMP068	RA-226DA	2.3	1.2	3.48	2.0	pCi/g
1/NCOMP068	RA-224DA	218.0	22.0	240	0.0	pCi/g
1/S016	TH-232DA	289.0	32.5	321.5	0.0	pCi/g
1/S016	RA-224DA	342.0	34.9	376.9	0.0	pCi/g
1/S023	TH-232DA	606.0	66.1	672.1	0.0	pCi/g
1/S023	RA-226DA	20.9	5.5	26.39	9.5	pCi/g
1/S023	RA-224DA	785.0	79.5	864.5	0.0	pCi/g
→ 1/S023	AC-227DA	88.9	23.4	112.3	0.0	pCi/g
1/S025	TH-232DA	536.0	63.8	599.8	0.0	pCi/g
1/S025	RA-224DA	651.0	67.1	718.1	0.0	pCi/g
1/S026	TH-232DA	689.0	74.1	763.1	0.0	pCi/g
1/S026	RA-226DA	13.4	5.0	18.44	8.8	pCi/g
1/S026	RA-224DA	920.0	92.9	1012.9	0.0	pCi/g
1/S033	TH-232DA	67.0	13.7	80.7	0.0	pCi/g
1/S033	RA-224DA	80.1	9.8	89.92	0.0	pCi/g
1/S049	TH-232DA	139.0	18.9	157.9	0.0	pCi/g
1/S049	RA-226DA	6.1	2.5	8.68	4.8	pCi/g
1/S049	RA-224DA	160.0	16.9	176.9	0.0	pCi/g
1/S051	TH-232DA	237.0	29.5	266.5	0.0	pCi/g
1/S051	RA-224DA	241.0	25.3	266.3	0.0	pCi/g
1/S052	TH-232DA	696.0	75.0	771	0.0	pCi/g
1/S052	RA-226DA	14.5	5.3	19.83	9.3	pCi/g
1/S052	RA-224DA	831.0	84.2	915.2	0.0	pCi/g
1/S067	TH-232DA	178.0	21.0	199	0.0	pCi/g
1/S067	RA-226DA	5.4	2.0	7.35	3.6	pCi/g
1/S067	RA-224DA	251.0	25.6	276.6	0.0	pCi/g
1/S074	TH-232DA	299.0	38.0	337	0.0	pCi/g
1/S074	RA-224DA	381.0	39.8	420.8	0.0	pCi/g
1/S075	TH-232DA	537.0	57.7	594.7	0.0	pCi/g
1/S075	RA-226DA	16.2	4.3	20.45	7.3	pCi/g
1/S075	RA-224DA	699.0	70.7	769.7	0.0	pCi/g

A.10. Summary Data of Gamma Spectroscopic Analysis of Paint and Concrete Samples - Building 21

Sample ID	Isotope	Result	Total Error	Result + Error	MDA	Unit
1/SCOMP004	TH-232DA	101.0	10.9	111.9	0.0	pCi/g
1/SCOMP004	RA-226DA	1.6	0.7	2.303	1.2	pCi/g
1/SCOMP004	RA-224DA	129.0	13.0	142	0.0	pCi/g
1/SCOMP010	TH-232DA	201.0	20.8	221.8	0.0	pCi/g
1/SCOMP010	RA-226DA	2.7	0.9	3.611	1.5	pCi/g
1/SCOMP010	RA-224DA	227.0	22.8	249.8	0.0	pCi/g
1/SCOMP017	TH-232DA	169.0	17.5	186.5	0.0	pCi/g
1/SCOMP017	RA-226DA	3.1	0.9	3.94	1.5	pCi/g
1/SCOMP017	RA-224DA	220.0	22.2	242.2	0.0	pCi/g
1/SCOMP037	TH-232DA	113.0	12.1	125.1	0.0	pCi/g
1/SCOMP037	RA-226DA	2.9	0.8	3.658	1.4	pCi/g
1/SCOMP037	RA-224DA	140.0	14.1	154.1	0.0	pCi/g
1/SCOMP068	TH-232DA	56.5	6.4	62.92	0.0	pCi/g
1/SCOMP068	RA-226DA	1.3	0.6	1.889	1.1	pCi/g
1/SCOMP068	RA-224DA	69.9	7.1	77.03	0.0	pCi/g
1/SCOMP076	TH-232DA	160.0	17.4	177.4	0.0	pCi/g
1/SCOMP076	RA-224DA	171.0	17.3	188.3	0.0	pCi/g
1/W001	TH-232DA	735.0	79.7	814.7	0.0	pCi/g
1/W001	RA-226DA	17.7	5.6	23.33	10.0	pCi/g
1/W001	RA-224DA	836.0	84.8	920.8	0.0	pCi/g
1/W003	TH-232DA	647.0	78.2	725.2	0.0	pCi/g
1/W003	RA-224DA	477.0	50.5	527.5	0.0	pCi/g
1/W004	TH-232DA	235.0	26.2	261.2	0.0	pCi/g
1/W004	RA-226DA	4.6	2.2	6.8	4.0	pCi/g
1/W004	RA-224DA	281.0	28.7	309.7	0.0	pCi/g
1/W005	TH-232DA	365.0	40.9	405.9	0.0	pCi/g
1/W005	RA-226DA	6.3	3.1	9.4	5.5	pCi/g
1/W005	RA-224DA	415.0	42.2	457.2	0.0	pCi/g
1/W010	TH-232DA	102.0	12.0	114	0.0	pCi/g
1/W010	RA-226DA	2.7	1.2	3.89	2.2	pCi/g
1/W010	RA-224DA	108.0	11.1	119.1	0.0	pCi/g
1/WCOMP018	TH-232DA	140.0	14.6	154.6	0.0	pCi/g
1/WCOMP018	RA-226DA	2.3	0.7	3.008	1.3	pCi/g
1/WCOMP018	RA-224DA	150.0	15.2	165.2	0.0	pCi/g
1/WCOMP021	TH-232DA	118.0	12.7	130.7	0.0	pCi/g
1/WCOMP021	RA-226DA	2.1	0.8	2.91	1.3	pCi/g
1/WCOMP021	RA-224DA	113.0	11.4	124.4	0.0	pCi/g
1/WCOMP026	TH-232DA	59.5	7.7	67.16	0.0	pCi/g
1/WCOMP026	RA-224DA	48.9	5.2	54.11	0.0	pCi/g
1/WCOMP031	TH-232DA	30.5	4.0	34.48	0.0	pCi/g
1/WCOMP031	RA-226DA	1.0	0.5	1.54	1.0	pCi/g
1/WCOMP031	RA-224DA	24.8	2.7	27.45	0.0	pCi/g
1/WCOMP045	TH-232DA	47.1	5.5	52.64	0.0	pCi/g
1/WCOMP045	RA-226DA	1.0	0.6	1.585	1.0	pCi/g
1/WCOMP045	RA-224DA	41.7	4.3	46.04	0.0	pCi/g
2/E021	TH-232DA	217.0	25.2	242.2	0.0	pCi/g
2/E021	RA-224DA	200.0	20.7	220.7	0.0	pCi/g

A.10. Summary Data of Gamma Spectroscopic Analysis of Paint and Concrete Samples - Building 21

Sample ID	Isotope	Result	Total Error	Result + Error	MDA	Unit
2/E021	K-40	37.3	15.7	53	30.7	pCi/g
2/ECOMP001	TH-232DA	307.0	31.4	338.4	0.0	pCi/g
2/ECOMP001	RA-226DA	2.2	1.0	3.17	1.7	pCi/g
2/ECOMP001	RA-224DA	245.0	24.6	269.6	0.0	pCi/g
2/ECOMP001	K-40	26.9	6.4	33.26	11.2	pCi/g
2/ECOMP005	TH-232DA	231.0	23.9	254.9	0.0	pCi/g
2/ECOMP005	RA-224DA	190.0	19.1	209.1	0.0	pCi/g
2/ECOMP005	K-40	4.1	5.9	10.06	0.0	pCi/g
2/F021	TH-232DA	87.0	9.1	96.06	0.0	pCi/g
2/F021	RA-226DA	1.2	0.5	1.624	0.8	pCi/g
2/F021	RA-224DA	92.7	9.4	102.05	0.0	pCi/g
2/F054	TH-232DA	185.0	19.3	204.3	0.0	pCi/g
2/F054	RA-226DA	3.4	1.0	4.358	1.6	pCi/g
2/F054	RA-224DA	245.0	24.6	269.6	0.0	pCi/g
2/F060	TH-232DA	62.4	6.7	69.13	0.0	pCi/g
2/F060	RA-226DA	1.6	0.4	2.04	0.8	pCi/g
2/F060	RA-224DA	76.3	7.7	84.01	0.0	pCi/g
2/F061	TH-232DA	375.0	37.9	412.9	0.0	pCi/g
2/F061	RA-226DA	3.3	0.9	4.153	1.4	pCi/g
2/F061	RA-224DA	394.0	39.5	433.5	0.0	pCi/g
2/F067	TH-232DA	63.8	8.5	72.26	0.0	pCi/g
2/F067	RA-226DA	2.7	1.3	3.98	2.4	pCi/g
2/F067	RA-224DA	85.5	9.0	94.46	0.0	pCi/g
2/FCOMP028	TH-232DA	78.4	8.2	86.61	0.0	pCi/g
2/FCOMP028	TH-232DA	76.1	8.1	84.19	0.0	pCi/g
2/FCOMP028	RA-226DA	1.7	0.5	2.178	0.8	pCi/g
2/FCOMP028	RA-226DA	1.2	0.4	1.678	0.8	pCi/g
2/FCOMP028	RA-224DA	81.7	8.2	89.94	0.0	pCi/g
2/FCOMP028	RA-224DA	67.9	6.9	74.76	0.0	pCi/g
2/N001	TH-232DA	579.0	63.9	642.9	0.0	pCi/g
2/N001	RA-224DA	538.0	54.9	592.9	0.0	pCi/g
2/N004	TH-232DA	199.0	26.6	225.6	0.0	pCi/g
2/N004	RA-226DA	6.7	3.4	10.01	6.3	pCi/g
2/N004	RA-224DA	169.0	18.2	187.2	0.0	pCi/g
2/N006	TH-232DA	454.0	49.9	503.9	0.0	pCi/g
2/N006	RA-226DA	6.1	3.2	9.3	5.6	pCi/g
2/N006	RA-224DA	331.0	33.9	364.9	0.0	pCi/g
2/NCOMP002	TH-232DA	245.0	25.2	270.2	0.0	pCi/g
2/NCOMP002	RA-224DA	207.0	20.8	227.8	0.0	pCi/g
2/SCOMP001	TH-232DA	220.0	22.6	242.6	0.0	pCi/g
2/SCOMP001	TH-232DA	216.0	22.1	238.1	0.0	pCi/g
2/SCOMP001	RA-226DA	1.6	0.9	2.471	1.5	pCi/g
2/SCOMP001	RA-226DA	1.6	0.8	2.381	1.3	pCi/g
2/SCOMP001	RA-224DA	188.0	18.9	206.9	0.0	pCi/g
2/SCOMP001	RA-224DA	186.0	18.7	204.7	0.0	pCi/g
2/SCOMP006	TH-232DA	366.0	38.0	404	0.0	pCi/g
2/SCOMP006	RA-226DA	3.3	1.6	4.9	2.8	pCi/g

A.10. Summary Data of Gamma Spectroscopic Analysis of Paint and Concrete Samples - Building 21

Sample ID	Isotope	Result	Total Error	Result + Error	MDA	Unit
2/SCOMP006	RA-224DA	325.0	32.8	357.8	0.0	pCi/g
2/W004	TH-232DA	924.0	98.9	1022.9	0.0	pCi/g
2/W004	RA-224DA	768.0	78.0	846	0.0	pCi/g
2/WCOMP001	TH-232DA	273.0	28.0	301	0.0	pCi/g
2/WCOMP001	RA-226DA	3.5	1.0	4.5	1.7	pCi/g
2/WCOMP001	RA-224DA	224.0	22.5	246.5	0.0	pCi/g
2/WCOMP001	K-40	21.4	5.7	27.12	10.4	pCi/g
2/WCOMP006	TH-232DA	341.0	35.4	376.4	0.0	pCi/g
2/WCOMP006	RA-224DA	272.0	27.4	299.4	0.0	pCi/g

TH232 - 206827 pCi/g (total) ÷ 85

A.11. Summary Data of Gamma Spectroscopic Analyses of Surrounding Soils

A.11. Summary Data of Gamma Spectroscopic Analysis of Surrounding Soils

Sample ID	Isotope	Result	Total Error	Result + Error	MDA	Unit
CC0/1(106)	AM-241	0.17	0.08	0.26	0.14	PCI/G
CC0/2(124)	AM-241	38.30	3.94	42.24	0.00	PCI/G
CC0/2(124)	AM-241	38.40	3.90	42.30	0.00	PCI/G
NE0/1(119)	AM-241	0.31	0.16	0.47	0.00	PCI/G
NE0/1(125)	AM-241	0.22	0.09	0.31	0.00	PCI/G
NE0/2(097)	AM-241	0.44	0.33	0.77	0.00	PCI/G
NE1/1(074)	AM-241	0.18	0.10	0.28	0.17	PCI/G
NW0/1(084)	AM-241	1.36	0.37	1.73	0.00	PCI/G
NW0/1(092)	AM-241	0.83	0.47	1.31	0.00	PCI/G
NW0/1(102)	AM-241	0.44	0.29	0.73	0.00	PCI/G
NW0/1(124)	AM-241	0.42	0.17	0.58	0.00	PCI/G
NW0/2(084)	AM-241	1.26	0.36	1.62	0.00	PCI/G
SE0/1(027)	AM-241	0.02	0.06	0.08	0.00	PCI/G
SE0/1(106)	AM-241	0.11	0.11	0.22	0.00	PCI/G
SE0/2(052)	AM-241	0.29	0.18	0.47	0.28	PCI/G
SE0/2(106)	AM-241	0.56	0.20	0.76	0.00	PCI/G
SW0/1(124)	AM-241	1.81	0.25	2.06	0.00	PCI/G
SW0/2(097)	AM-241	0.85	0.18	1.03	0.00	PCI/G
SW0/2(124)	AM-241	0.23	0.25	0.47	0.00	PCI/G
CC0/2(091)	BI-210M	0.07	0.04	0.11	0.07	PCI/G
SE0/1(076)	BI-210M	0.01	0.01	0.02	0.00	PCI/G
CC0/1(001)	CS-137DA	0.32	0.05	0.37	0.00	PCI/G
CC0/1(003)	CS-137DA	0.54	0.07	0.61	0.00	PCI/G
CC0/1(004)	CS-137DA	0.12	0.03	0.15	0.00	PCI/G
CC0/1(007)	CS-137DA	0.13	0.03	0.16	0.00	PCI/G
CC0/1(009)	CS-137DA	0.12	0.04	0.16	0.00	PCI/G
CC0/1(011)	CS-137DA	0.34	0.07	0.40	0.00	PCI/G
CC0/1(017)	CS-137DA	0.27	0.05	0.33	0.00	PCI/G
CC0/1(026)	CS-137DA	0.14	0.04	0.17	0.00	PCI/G
CC0/1(028)	CS-137DA	0.04	0.02	0.06	0.04	PCI/G
CC0/1(031)	CS-137DA	0.80	0.11	0.91	0.00	PCI/G
CC0/1(040)	CS-137DA	0.15	0.05	0.21	0.00	PCI/G
CC0/1(044)	CS-137DA	0.08	0.02	0.10	0.00	PCI/G
CC0/1(047)	CS-137DA	0.16	0.05	0.20	0.00	PCI/G
CC0/1(047)	CS-137DA	0.19	0.05	0.24	0.00	PCI/G
CC0/1(052)	CS-137DA	0.03	0.01	0.04	0.03	PCI/G
CC0/1(054)	CS-137DA	0.13	0.07	0.20	0.00	PCI/G
CC0/1(066)	CS-137DA	0.26	0.06	0.31	0.00	PCI/G
CC0/1(070)	CS-137DA	0.63	0.09	0.72	0.00	PCI/G
CC0/1(071)	CS-137DA	0.06	0.04	0.09	0.00	PCI/G
CC0/1(074)	CS-137DA	0.44	0.06	0.50	0.00	PCI/G
CC0/1(076)	CS-137DA	0.19	0.04	0.22	0.00	PCI/G
CC0/1(078)	CS-137DA	0.07	0.04	0.10	0.06	PCI/G
CC0/1(079)	CS-137DA	0.48	0.07	0.55	0.00	PCI/G
CC0/1(079)	CS-137DA	0.51	0.07	0.58	0.00	PCI/G
CC0/1(083)	CS-137DA	0.26	0.05	0.31	0.00	PCI/G
CC0/1(087)	CS-137DA	0.10	0.05	0.15	0.00	PCI/G
CC0/1(090)	CS-137DA	0.37	0.06	0.43	0.00	PCI/G
CC0/1(090)	CS-137DA	0.38	0.07	0.45	0.00	PCI/G

Am-241
4.54

4.54E-12 Ci/g.

A.11. Summary Data of Gamma Spectroscopic Analysis of Surrounding Soils

Sample ID	Isotope	Result	Total Error	Result + Error	MDA	Unit
CC0/1(097)	CS-137DA	0.19	0.05	0.25	0.00	PCI/G
CC0/1(106)	CS-137DA	0.35	0.06	0.41	0.00	PCI/G
CC0/1(108)	CS-137DA	0.12	0.05	0.17	0.09	PCI/G
CC0/1(118)	CS-137DA	0.12	0.05	0.17	0.09	PCI/G
CC0/1(119)	CS-137DA	0.12	0.06	0.18	0.00	PCI/G
CC0/1(138)	CS-137DA	0.15	0.04	0.19	0.00	PCI/G
CC0/1(148)	CS-137DA	0.15	0.07	0.21	0.00	PCI/G
CC0/1(161)	CS-137DA	0.14	0.03	0.18	0.00	PCI/G
CC0/1(170)	CS-137DA	0.17	0.03	0.20	0.00	PCI/G
CC0/1(178)	CS-137DA	0.07	0.06	0.13	0.00	PCI/G
CC0/1(182)	CS-137DA	0.04	0.02	0.06	0.00	PCI/G
CC0/1(196)	CS-137DA	0.15	0.04	0.18	0.00	PCI/G
CC0/1(202)	CS-137DA	0.07	0.03	0.10	0.00	PCI/G
CC0/1(231)	CS-137DA	0.05	0.03	0.09	0.00	PCI/G
CC0/2(001)	CS-137DA	0.30	0.05	0.35	0.00	PCI/G
CC0/2(003)	CS-137DA	0.05	0.03	0.08	0.05	PCI/G
CC0/2(004)	CS-137DA	0.09	0.03	0.12	0.00	PCI/G
CC0/2(007)	CS-137DA	0.07	0.02	0.10	0.00	PCI/G
CC0/2(007)	CS-137DA	0.09	0.03	0.12	0.00	PCI/G
CC0/2(009)	CS-137DA	0.10	0.04	0.13	0.00	PCI/G
CC0/2(011)	CS-137DA	0.15	0.04	0.19	0.00	PCI/G
CC0/2(017)	CS-137DA	0.14	0.04	0.18	0.00	PCI/G
CC0/2(026)	CS-137DA	0.05	0.02	0.07	0.04	PCI/G
CC0/2(031)	CS-137DA	1.15	0.15	1.30	0.00	PCI/G
CC0/2(040)	CS-137DA	0.02	0.03	0.06	0.00	PCI/G
CC0/2(044)	CS-137DA	0.23	0.06	0.29	0.00	PCI/G
CC0/2(047)	CS-137DA	0.04	0.05	0.09	0.00	PCI/G
CC0/2(052)	CS-137DA	0.56	0.08	0.63	0.00	PCI/G
CC0/2(061)	CS-137DA	0.57	0.09	0.66	0.00	PCI/G
CC0/2(065)	CS-137DA	0.05	0.02	0.07	0.04	PCI/G
CC0/2(066)	CS-137DA	0.37	0.06	0.43	0.00	PCI/G
CC0/2(070)	CS-137DA	0.12	0.04	0.16	0.00	PCI/G
CC0/2(071)	CS-137DA	0.07	0.04	0.11	0.00	PCI/G
CC0/2(071)	CS-137DA	0.09	0.03	0.12	0.00	PCI/G
CC0/2(074)	CS-137DA	0.18	0.05	0.23	0.00	PCI/G
CC0/2(078)	CS-137DA	0.19	0.08	0.26	0.13	PCI/G
CC0/2(078)	CS-137DA	0.32	0.06	0.38	0.00	PCI/G
CC0/2(079)	CS-137DA	0.15	0.03	0.18	0.00	PCI/G
CC0/2(083)	CS-137DA	0.12	0.05	0.17	0.00	PCI/G
CC0/2(084)	CS-137DA	0.05	0.03	0.08	0.05	PCI/G
CC0/2(087)	CS-137DA	0.07	0.02	0.09	0.00	PCI/G
CC0/2(090)	CS-137DA	0.56	0.08	0.64	0.00	PCI/G
CC0/2(091)	CS-137DA	0.13	0.07	0.19	0.00	PCI/G
CC0/2(092)	CS-137DA	0.05	0.03	0.08	0.00	PCI/G
CC0/2(100)	CS-137DA	0.08	0.04	0.12	0.07	PCI/G
CC0/2(102)	CS-137DA	0.27	0.10	0.37	0.00	PCI/G
CC0/2(106)	CS-137DA	0.14	0.04	0.17	0.00	PCI/G
CC0/2(107)	CS-137DA	0.32	0.07	0.38	0.00	PCI/G
CC0/2(108)	CS-137DA	0.14	0.04	0.18	0.00	PCI/G

A.11. Summary Data of Gamma Spectroscopic Analysis of Surrounding Soils

Sample ID	Isotope	Result	Total Error	Result + Error	MDA	Unit
CC0/2(119)	CS-137DA	0.17	0.06	0.22	0.00	PCI/G
CC0/2(120)	CS-137DA	0.17	0.07	0.24	0.00	PCI/G
CC0/2(124)	CS-137DA	0.05	0.02	0.07	0.04	PCI/G
CC0/2(141)	CS-137DA	0.14	0.04	0.19	0.00	PCI/G
CC0/2(148)	CS-137DA	0.08	0.04	0.12	0.00	PCI/G
CC0/2(161)	CS-137DA	0.16	0.04	0.20	0.00	PCI/G
CC0/2(170)	CS-137DA	0.11	0.03	0.14	0.00	PCI/G
CC0/2(182)	CS-137DA	0.08	0.02	0.11	0.00	PCI/G
CC0/2(209)	CS-137DA	0.11	0.06	0.17	0.00	PCI/G
CC0/2(222)	CS-137DA	0.09	0.04	0.13	0.00	PCI/G
CC0/2(231)	CS-137DA	0.09	0.04	0.13	0.00	PCI/G
CC1/1(070)	CS-137DA	0.34	0.06	0.40	0.00	PCI/G
NE0/1(001)	CS-137DA	0.23	0.05	0.27	0.00	PCI/G
NE0/1(003)	CS-137DA	0.32	0.05	0.37	0.00	PCI/G
NE0/1(007)	CS-137DA	0.23	0.05	0.27	0.00	PCI/G
NE0/1(009)	CS-137DA	0.35	0.05	0.40	0.00	PCI/G
NE0/1(011)	CS-137DA	0.31	0.05	0.36	0.00	PCI/G
NE0/1(015)	CS-137DA	0.31	0.05	0.35	0.00	PCI/G
NE0/1(017)	CS-137DA	0.34	0.06	0.40	0.00	PCI/G
NE0/1(026)	CS-137DA	0.41	0.06	0.47	0.00	PCI/G
NE0/1(027)	CS-137DA	0.13	0.04	0.17	0.00	PCI/G
NE0/1(028)	CS-137DA	0.16	0.05	0.21	0.00	PCI/G
NE0/1(032)	CS-137DA	0.08	0.04	0.12	0.00	PCI/G
NE0/1(040)	CS-137DA	0.05	0.02	0.07	0.04	PCI/G
NE0/1(047)	CS-137DA	0.18	0.05	0.22	0.00	PCI/G
NE0/1(053)	CS-137DA	0.16	0.05	0.20	0.00	PCI/G
NE0/1(054)	CS-137DA	0.07	0.03	0.10	0.05	PCI/G
NE0/1(061)	CS-137DA	0.35	0.06	0.42	0.00	PCI/G
NE0/1(061)	CS-137DA	0.35	0.07	0.42	0.00	PCI/G
NE0/1(065)	CS-137DA	0.20	0.06	0.27	0.00	PCI/G
NE0/1(066)	CS-137DA	0.66	0.09	0.75	0.00	PCI/G
NE0/1(070)	CS-137DA	0.28	0.05	0.32	0.00	PCI/G
NE0/1(071)	CS-137DA	0.12	0.04	0.16	0.00	PCI/G
NE0/1(074)	CS-137DA	0.22	0.04	0.27	0.00	PCI/G
NE0/1(076)	CS-137DA	0.29	0.06	0.35	0.00	PCI/G
NE0/1(078)	CS-137DA	0.04	0.03	0.08	0.00	PCI/G
NE0/1(079)	CS-137DA	0.54	0.07	0.62	0.00	PCI/G
NE0/1(087)	CS-137DA	0.07	0.03	0.10	0.06	PCI/G
NE0/1(090)	CS-137DA	0.28	0.06	0.34	0.00	PCI/G
NE0/1(090)	CS-137DA	0.30	0.07	0.37	0.00	PCI/G
NE0/1(097)	CS-137DA	0.43	0.07	0.50	0.00	PCI/G
NE0/1(107)	CS-137DA	0.28	0.06	0.35	0.00	PCI/G
NE0/1(118)	CS-137DA	0.22	0.09	0.32	0.00	PCI/G
NE0/1(119)	CS-137DA	0.11	0.04	0.16	0.00	PCI/G
NE0/1(120)	CS-137DA	0.03	0.01	0.04	0.03	PCI/G
NE0/1(125)	CS-137DA	0.07	0.02	0.09	0.00	PCI/G
NE0/1(138)	CS-137DA	0.03	0.01	0.04	0.02	PCI/G
NE0/1(141)	CS-137DA	0.06	0.04	0.10	0.00	PCI/G
NE0/1(151)	CS-137DA	0.06	0.02	0.08	0.04	PCI/G

A.11. Summary Data of Gamma Spectroscopic Analysis of Surrounding Soils

Sample ID	Isotope	Result	Total Error	Result + Error	MDA	Unit
NE0/1(161)	CS-137DA	0.07	0.03	0.10	0.00	PCI/G
NE0/1(182)	CS-137DA	0.09	0.03	0.12	0.00	PCI/G
NE0/1(187)	CS-137DA	0.06	0.03	0.09	0.00	PCI/G
NE0/1(202)	CS-137DA	0.03	0.02	0.06	0.00	PCI/G
NE0/1(209)	CS-137DA	0.10	0.04	0.13	0.00	PCI/G
NE0/1(209)	CS-137DA	0.11	0.04	0.15	0.00	PCI/G
NE0/1(231)	CS-137DA	0.05	0.02	0.07	0.00	PCI/G
NE0/2(001)	CS-137DA	0.21	0.05	0.26	0.00	PCI/G
NE0/2(003)	CS-137DA	0.06	0.02	0.08	0.05	PCI/G
NE0/2(011)	CS-137DA	0.22	0.05	0.27	0.00	PCI/G
NE0/2(015)	CS-137DA	0.31	0.05	0.36	0.00	PCI/G
NE0/2(017)	CS-137DA	0.09	0.04	0.12	0.00	PCI/G
NE0/2(023)	CS-137DA	0.85	0.12	0.96	0.00	PCI/G
NE0/2(026)	CS-137DA	0.21	0.05	0.26	0.00	PCI/G
NE0/2(026)	CS-137DA	0.23	0.05	0.28	0.00	PCI/G
NE0/2(027)	CS-137DA	0.18	0.05	0.23	0.00	PCI/G
NE0/2(028)	CS-137DA	0.13	0.05	0.18	0.00	PCI/G
NE0/2(032)	CS-137DA	0.19	0.06	0.25	0.00	PCI/G
NE0/2(047)	CS-137DA	0.56	0.08	0.64	0.00	PCI/G
NE0/2(053)	CS-137DA	0.20	0.05	0.25	0.00	PCI/G
NE0/2(054)	CS-137DA	0.36	0.06	0.42	0.00	PCI/G
NE0/2(054)	CS-137DA	0.40	0.07	0.47	0.00	PCI/G
NE0/2(061)	CS-137DA	0.11	0.04	0.15	0.00	PCI/G
NE0/2(065)	CS-137DA	0.07	0.04	0.11	0.00	PCI/G
NE0/2(066)	CS-137DA	0.24	0.04	0.29	0.00	PCI/G
NE0/2(071)	CS-137DA	0.13	0.03	0.16	0.00	PCI/G
NE0/2(074)	CS-137DA	0.15	0.03	0.18	0.00	PCI/G
NE0/2(076)	CS-137DA	0.23	0.05	0.28	0.00	PCI/G
NE0/2(078)	CS-137DA	0.05	0.03	0.08	0.00	PCI/G
NE0/2(079)	CS-137DA	0.28	0.05	0.34	0.00	PCI/G
NE0/2(090)	CS-137DA	0.28	0.06	0.34	0.00	PCI/G
NE0/2(097)	CS-137DA	0.22	0.06	0.28	0.00	PCI/G
NE0/2(107)	CS-137DA	0.25	0.05	0.30	0.00	PCI/G
NE0/2(118)	CS-137DA	0.26	0.07	0.33	0.00	PCI/G
NE0/2(119)	CS-137DA	0.08	0.04	0.11	0.00	PCI/G
NE0/2(141)	CS-137DA	0.48	0.08	0.57	0.00	PCI/G
NE0/2(148)	CS-137DA	0.08	0.03	0.11	0.00	PCI/G
NE0/2(202)	CS-137DA	0.10	0.04	0.14	0.06	PCI/G
NE1/1(074)	CS-137DA	0.18	0.05	0.23	0.00	PCI/G
NE1/1(178)	CS-137DA	0.04	0.03	0.07	0.00	PCI/G
NE1/2(023)	CS-137DA	0.88	0.12	1.00	0.00	PCI/G
NW0/1(001)	CS-137DA	0.04	0.02	0.07	0.00	PCI/G
NW0/1(017)	CS-137DA	0.10	0.05	0.15	0.00	PCI/G
NW0/1(023)	CS-137DA	0.07	0.04	0.11	0.00	PCI/G
NW0/1(023)	CS-137DA	0.09	0.05	0.14	0.00	PCI/G
NW0/1(026)	CS-137DA	0.05	0.02	0.07	0.04	PCI/G
NW0/1(028)	CS-137DA	0.31	0.06	0.37	0.00	PCI/G
NW0/1(040)	CS-137DA	0.15	0.05	0.19	0.00	PCI/G
NW0/1(047)	CS-137DA	0.07	0.03	0.09	0.05	PCI/G

A.11. Summary Data of Gamma Spectroscopic Analysis of Surrounding Soils

Sample ID	Isotope	Result	Total Error	Result + Error	MDA	Unit
NW0/1(054)	CS-137DA	0.15	0.05	0.19	0.00	PCI/G
NW0/1(061)	CS-137DA	0.10	0.04	0.13	0.00	PCI/G
NW0/1(074)	CS-137DA	0.58	0.08	0.66	0.00	PCI/G
NW0/1(078)	CS-137DA	0.18	0.03	0.22	0.00	PCI/G
NW0/1(079)	CS-137DA	0.09	0.03	0.12	0.06	PCI/G
NW0/1(087)	CS-137DA	0.31	0.06	0.38	0.00	PCI/G
NW0/1(092)	CS-137DA	0.12	0.06	0.18	0.00	PCI/G
NW0/1(097)	CS-137DA	0.23	0.06	0.28	0.00	PCI/G
NW0/1(100)	CS-137DA	0.07	0.03	0.10	0.06	PCI/G
NW0/1(102)	CS-137DA	0.11	0.05	0.17	0.09	PCI/G
NW0/1(107)	CS-137DA	0.15	0.04	0.19	0.00	PCI/G
NW0/1(124)	CS-137DA	0.02	0.02	0.04	0.00	PCI/G
NW0/1(141)	CS-137DA	0.16	0.06	0.22	0.00	PCI/G
NW0/1(141)	CS-137DA	0.19	0.09	0.28	0.00	PCI/G
NW0/1(148)	CS-137DA	0.08	0.03	0.10	0.05	PCI/G
NW0/1(148)	CS-137DA	0.08	0.04	0.12	0.00	PCI/G
NW0/1(151)	CS-137DA	0.07	0.02	0.09	0.04	PCI/G
NW0/1(170)	CS-137DA	0.05	0.03	0.07	0.00	PCI/G
NW0/1(178)	CS-137DA	0.08	0.05	0.13	0.00	PCI/G
NW0/1(182)	CS-137DA	0.07	0.04	0.11	0.00	PCI/G
NW0/1(196)	CS-137DA	0.24	0.05	0.29	0.00	PCI/G
NW0/1(202)	CS-137DA	0.07	0.03	0.10	0.00	PCI/G
NW0/1(209)	CS-137DA	0.07	0.02	0.09	0.00	PCI/G
NW0/2(001)	CS-137DA	0.13	0.03	0.17	0.00	PCI/G
NW0/2(001)	CS-137DA	0.16	0.04	0.20	0.00	PCI/G
NW0/2(023)	CS-137DA	0.09	0.04	0.13	0.00	PCI/G
NW0/2(028)	CS-137DA	0.14	0.05	0.18	0.00	PCI/G
NW0/2(040)	CS-137DA	0.05	0.06	0.11	0.00	PCI/G
NW0/2(047)	CS-137DA	0.06	0.06	0.12	0.00	PCI/G
NW0/2(052)	CS-137DA	0.36	0.06	0.42	0.00	PCI/G
NW0/2(054)	CS-137DA	0.10	0.03	0.13	0.00	PCI/G
NW0/2(074)	CS-137DA	0.43	0.06	0.49	0.00	PCI/G
NW0/2(078)	CS-137DA	0.06	0.03	0.09	0.00	PCI/G
NW0/2(079)	CS-137DA	0.09	0.03	0.12	0.00	PCI/G
NW0/2(084)	CS-137DA	0.08	0.03	0.11	0.06	PCI/G
NW0/2(087)	CS-137DA	0.03	0.03	0.06	0.00	PCI/G
NW0/2(091)	CS-137DA	0.05	0.02	0.08	0.04	PCI/G
NW0/2(097)	CS-137DA	0.08	0.03	0.11	0.00	PCI/G
NW0/2(100)	CS-137DA	0.06	0.06	0.11	0.00	PCI/G
NW0/2(118)	CS-137DA	0.10	0.04	0.15	0.00	PCI/G
NW0/2(138)	CS-137DA	0.45	0.08	0.52	0.00	PCI/G
NW0/2(141)	CS-137DA	0.09	0.04	0.14	0.00	PCI/G
NW0/2(161)	CS-137DA	0.09	0.03	0.12	0.05	PCI/G
NW0/2(170)	CS-137DA	0.12	0.04	0.17	0.00	PCI/G
NW0/2(182)	CS-137DA	0.05	0.03	0.08	0.00	PCI/G
NW0/2(202)	CS-137DA	0.06	0.02	0.09	0.05	PCI/G
NW1/1(023)	CS-137DA	0.20	0.06	0.25	0.00	PCI/G
NW1/1(052)	CS-137DA	0.14	0.05	0.19	0.00	PCI/G
NW1/1(061)	CS-137DA	0.18	0.05	0.23	0.00	PCI/G

A.11. Summary Data of Gamma Spectroscopic Analysis of Surrounding Soils

Sample ID	Isotope	Result	Total Error	Result + Error	MDA	Unit
NW1/1(138)	CS-137DA	0.28	0.05	0.34	0.00	PCI/G
NW1/1(141)	CS-137DA	0.24	0.08	0.33	0.00	PCI/G
NW1/1(148)	CS-137DA	0.22	0.05	0.26	0.00	PCI/G
SE0/1(001)	CS-137DA	0.43	0.06	0.50	0.00	PCI/G
SE0/1(006)	CS-137DA	0.15	0.04	0.18	0.00	PCI/G
SE0/1(007)	CS-137DA	0.57	0.08	0.65	0.00	PCI/G
SE0/1(009)	CS-137DA	0.19	0.04	0.23	0.00	PCI/G
SE0/1(017)	CS-137DA	0.21	0.04	0.25	0.00	PCI/G
SE0/1(026)	CS-137DA	0.11	0.03	0.14	0.00	PCI/G
SE0/1(027)	CS-137DA	0.07	0.03	0.10	0.00	PCI/G
SE0/1(031)	CS-137DA	0.10	0.03	0.13	0.00	PCI/G
SE0/1(032)	CS-137DA	0.19	0.04	0.23	0.00	PCI/G
SE0/1(040)	CS-137DA	0.09	0.03	0.12	0.00	PCI/G
SE0/1(044)	CS-137DA	0.14	0.05	0.20	0.00	PCI/G
SE0/1(061)	CS-137DA	0.08	0.03	0.11	0.00	PCI/G
SE0/1(065)	CS-137DA	0.09	0.03	0.13	0.00	PCI/G
SE0/1(076)	CS-137DA	0.18	0.03	0.21	0.00	PCI/G
SE0/1(083)	CS-137DA	0.13	0.04	0.17	0.00	PCI/G
SE0/1(087)	CS-137DA	0.30	0.06	0.35	0.00	PCI/G
SE0/1(090)	CS-137DA	0.03	0.01	0.04	0.03	PCI/G
SE0/1(097)	CS-137DA	0.30	0.06	0.36	0.00	PCI/G
SE0/1(106)	CS-137DA	0.08	0.02	0.11	0.00	PCI/G
SE0/1(118)	CS-137DA	0.25	0.08	0.33	0.00	PCI/G
SE0/1(141)	CS-137DA	0.16	0.04	0.19	0.00	PCI/G
SE0/1(148)	CS-137DA	0.11	0.04	0.14	0.00	PCI/G
SE0/1(151)	CS-137DA	0.12	0.07	0.18	0.00	PCI/G
SE0/1(161)	CS-137DA	0.26	0.05	0.31	0.00	PCI/G
SE0/1(161)	CS-137DA	0.30	0.05	0.35	0.00	PCI/G
SE0/1(196)	CS-137DA	0.15	0.04	0.19	0.00	PCI/G
SE0/1(231)	CS-137DA	0.05	0.02	0.08	0.00	PCI/G
SE0/2(001)	CS-137DA	0.22	0.05	0.27	0.00	PCI/G
SE0/2(007)	CS-137DA	0.15	0.04	0.19	0.00	PCI/G
SE0/2(017)	CS-137DA	0.19	0.05	0.24	0.00	PCI/G
SE0/2(027)	CS-137DA	0.49	0.07	0.56	0.00	PCI/G
SE0/2(031)	CS-137DA	0.07	0.02	0.09	0.00	PCI/G
SE0/2(031)	CS-137DA	0.18	0.04	0.22	0.00	PCI/G
SE0/2(032)	CS-137DA	0.35	0.06	0.41	0.00	PCI/G
SE0/2(040)	CS-137DA	0.17	0.05	0.22	0.00	PCI/G
SE0/2(044)	CS-137DA	0.11	0.04	0.15	0.00	PCI/G
SE0/2(052)	CS-137DA	0.60	0.09	0.69	0.00	PCI/G
SE0/2(061)	CS-137DA	0.31	0.07	0.38	0.00	PCI/G
SE0/2(065)	CS-137DA	0.18	0.04	0.22	0.00	PCI/G
SE0/2(087)	CS-137DA	0.16	0.05	0.20	0.00	PCI/G
SE0/2(090)	CS-137DA	0.48	0.09	0.57	0.00	PCI/G
SE0/2(107)	CS-137DA	0.15	0.04	0.19	0.00	PCI/G
SE0/2(118)	CS-137DA	0.12	0.03	0.16	0.00	PCI/G
SE0/2(138)	CS-137DA	0.55	0.08	0.62	0.00	PCI/G
SE0/2(141)	CS-137DA	0.12	0.04	0.15	0.00	PCI/G
SE0/2(148)	CS-137DA	0.05	0.03	0.07	0.00	PCI/G

A.11. Summary Data of Gamma Spectroscopic Analysis of Surrounding Soils

Sample ID	Isotope	Result	Total Error	Result + Error	MDA	Unit
SE0/2(161)	CS-137DA	0.06	0.04	0.10	0.00	PCI/G
SE0/2(178)	CS-137DA	0.22	0.04	0.26	0.00	PCI/G
SE0/2(196)	CS-137DA	0.11	0.04	0.15	0.00	PCI/G
SE0/3(052)	CS-137DA	0.10	0.05	0.14	0.00	PCI/G
SE1/1(076)	CS-137DA	0.27	0.05	0.32	0.00	PCI/G
SE1/1(083)	CS-137DA	0.05	0.05	0.09	0.00	PCI/G
SW0/1(026)	CS-137DA	0.34	0.06	0.40	0.00	PCI/G
SW0/1(047)	CS-137DA	0.12	0.04	0.16	0.00	PCI/G
SW0/1(047)	CS-137DA	0.14	0.05	0.19	0.00	PCI/G
SW0/1(061)	CS-137DA	0.24	0.06	0.30	0.00	PCI/G
SW0/1(074)	CS-137DA	0.25	0.06	0.31	0.00	PCI/G
SW0/1(097)	CS-137DA	0.22	0.05	0.27	0.00	PCI/G
SW0/1(124)	CS-137DA	0.05	0.02	0.06	0.00	PCI/G
SW0/1(141)	CS-137DA	0.05	0.02	0.06	0.00	PCI/G
SW0/1(148)	CS-137DA	0.07	0.03	0.09	0.00	PCI/G
SW0/1(182)	CS-137DA	0.02	0.02	0.04	0.00	PCI/G
SW0/1(185)	CS-137DA	0.68	0.09	0.77	0.00	PCI/G
SW0/1(196)	CS-137DA	0.19	0.05	0.24	0.00	PCI/G
SW0/1(202)	CS-137DA	0.04	0.02	0.06	0.04	PCI/G
SW0/1(221)	CS-137DA	0.28	0.06	0.34	0.00	PCI/G
SW0/2(006)	CS-137DA	0.20	0.05	0.25	0.00	PCI/G
SW0/2(047)	CS-137DA	0.18	0.05	0.23	0.00	PCI/G
SW0/2(061)	CS-137DA	0.15	0.04	0.19	0.00	PCI/G
SW0/2(074)	CS-137DA	0.14	0.05	0.20	0.00	PCI/G
SW0/2(148)	CS-137DA	0.08	0.04	0.12	0.00	PCI/G
SW0/2(148)	CS-137DA	0.08	0.06	0.14	0.00	PCI/G
SW0/2(178)	CS-137DA	0.15	0.05	0.20	0.00	PCI/G
SW0/2(178)	CS-137DA	0.16	0.04	0.20	0.00	PCI/G
SW0/2(182)	CS-137DA	0.11	0.05	0.16	0.00	PCI/G
SW0/2(202)	CS-137DA	0.11	0.04	0.16	0.00	PCI/G
SW0/2(202)	CS-137DA	0.15	0.04	0.19	0.00	PCI/G
CC0/1(017)	EU-152	0.09	0.05	0.13	0.08	PCI/G
CC0/2(083)	EU-152	0.10	0.06	0.15	0.10	PCI/G
NE0/1(090)	EU-154	0.20	0.08	0.28	0.16	PCI/G
SE0/1(076)	EU-154	0.01	0.05	0.05	0.00	PCI/G
NW0/2(124)	K-40	16.10	1.84	17.94	0.00	PCI/G
CC0/1(001)	RA-224DA	1.42	0.16	1.58	0.00	PCI/G
CC0/1(003)	RA-224DA	1.31	0.15	1.46	0.00	PCI/G
CC0/1(004)	RA-224DA	0.67	0.08	0.75	0.00	PCI/G
CC0/1(007)	RA-224DA	0.49	0.06	0.56	0.00	PCI/G
CC0/1(009)	RA-224DA	1.28	0.15	1.43	0.00	PCI/G
CC0/1(011)	RA-224DA	1.28	0.15	1.43	0.00	PCI/G
CC0/1(017)	RA-224DA	1.17	0.13	1.30	0.00	PCI/G
CC0/1(026)	RA-224DA	1.28	0.15	1.43	0.00	PCI/G
CC0/1(028)	RA-224DA	1.13	0.15	1.28	0.00	PCI/G
CC0/1(028)	RA-224DA	1.23	0.15	1.38	0.00	PCI/G
CC0/1(031)	RA-224DA	5.15	0.53	5.68	0.00	PCI/G
CC0/1(032)	RA-224DA	1.07	0.13	1.20	0.00	PCI/G
CC0/1(040)	RA-224DA	2.79	0.29	3.08	0.00	PCI/G

A.11. Summary Data of Gamma Spectroscopic Analysis of Surrounding Soils

Sample ID	Isotope	Result	Total Error	Result + Error	MDA	Unit
CC0/1(044)	RA-224DA	0.49	0.06	0.55	0.00	PCI/G
CC0/1(047)	RA-224DA	1.05	0.14	1.19	0.00	PCI/G
CC0/1(047)	RA-224DA	1.15	0.14	1.29	0.00	PCI/G
CC0/1(052)	RA-224DA	0.38	0.06	0.43	0.00	PCI/G
CC0/1(053)	RA-224DA	1.05	0.13	1.18	0.00	PCI/G
CC0/1(054)	RA-224DA	1.19	0.14	1.33	0.00	PCI/G
CC0/1(061)	RA-224DA	0.15	0.04	0.19	0.00	PCI/G
CC0/1(065)	RA-224DA	0.46	0.07	0.53	0.00	PCI/G
CC0/1(066)	RA-224DA	1.22	0.15	1.37	0.00	PCI/G
CC0/1(070)	RA-224DA	4.43	0.46	4.89	0.00	PCI/G
CC0/1(071)	RA-224DA	0.85	0.10	0.95	0.00	PCI/G
CC0/1(074)	RA-224DA	0.99	0.12	1.11	0.00	PCI/G
CC0/1(076)	RA-224DA	0.36	0.05	0.41	0.00	PCI/G
CC0/1(078)	RA-224DA	23.60	2.37	25.97	0.00	PCI/G
CC0/1(079)	RA-224DA	0.93	0.11	1.04	0.00	PCI/G
CC0/1(079)	RA-224DA	0.94	0.11	1.05	0.00	PCI/G
CC0/1(083)	RA-224DA	2.91	0.31	3.22	0.00	PCI/G
CC0/1(084)	RA-224DA	0.42	0.07	0.49	0.00	PCI/G
CC0/1(086)	RA-224DA	1.59	0.18	1.77	0.00	PCI/G
CC0/1(086)	RA-224DA	1.62	0.18	1.80	0.00	PCI/G
CC0/1(087)	RA-224DA	0.94	0.11	1.05	0.00	PCI/G
CC0/1(090)	RA-224DA	2.37	0.25	2.62	0.00	PCI/G
CC0/1(090)	RA-224DA	2.54	0.27	2.81	0.00	PCI/G
CC0/1(091)	RA-224DA	0.30	0.04	0.34	0.00	PCI/G
CC0/1(092)	RA-224DA	3.56	0.38	3.94	0.00	PCI/G
CC0/1(093)	RA-224DA	21.60	2.18	23.78	0.00	PCI/G
CC0/1(097)	RA-224DA	1.13	0.13	1.26	0.00	PCI/G
CC0/1(100)	RA-224DA	0.32	0.05	0.37	0.00	PCI/G
CC0/1(100)	RA-224DA	0.59	0.07	0.66	0.00	PCI/G
CC0/1(102)	RA-224DA	9.28	0.94	10.22	0.00	PCI/G
CC0/1(106)	RA-224DA	0.96	0.12	1.08	0.00	PCI/G
CC0/1(107)	RA-224DA	0.25	0.06	0.30	0.00	PCI/G
CC0/1(108)	RA-224DA	5.64	0.59	6.23	0.00	PCI/G
CC0/1(111)	RA-224DA	1.97	0.21	2.18	0.00	PCI/G
CC0/1(118)	RA-224DA	21.80	2.20	24.00	0.00	PCI/G
CC0/1(119)	RA-224DA	6.25	0.64	6.89	0.00	PCI/G
CC0/1(120)	RA-224DA	1.83	0.20	2.03	0.00	PCI/G
CC0/1(125)	RA-224DA	0.20	0.04	0.24	0.00	PCI/G
CC0/1(138)	RA-224DA	2.78	0.29	3.07	0.00	PCI/G
CC0/1(141)	RA-224DA	0.23	0.04	0.27	0.00	PCI/G
CC0/1(148)	RA-224DA	1.02	0.12	1.14	0.00	PCI/G
CC0/1(151)	RA-224DA	0.78	0.10	0.88	0.00	PCI/G
CC0/1(151)	RA-224DA	1.41	0.16	1.57	0.00	PCI/G
CC0/1(151)	RA-224DA	1.52	0.17	1.69	0.00	PCI/G
CC0/1(161)	RA-224DA	0.99	0.12	1.11	0.00	PCI/G
CC0/1(170)	RA-224DA	0.53	0.07	0.60	0.00	PCI/G
CC0/1(174)	RA-224DA	0.47	0.06	0.53	0.00	PCI/G
CC0/1(178)	RA-224DA	4.45	0.46	4.91	0.00	PCI/G
CC0/1(182)	RA-224DA	0.21	0.05	0.26	0.00	PCI/G

A.11. Summary Data of Gamma Spectroscopic Analysis of Surrounding Soils

Sample ID	Isotope	Result	Total Error	Result + Error	MDA	Unit
CC0/1(185)	RA-224DA	0.16	0.04	0.20	0.00	PCI/G
CC0/1(185)	RA-224DA	0.17	0.04	0.21	0.00	PCI/G
CC0/1(187)	RA-224DA	0.31	0.07	0.38	0.00	PCI/G
CC0/1(196)	RA-224DA	0.37	0.05	0.42	0.00	PCI/G
CC0/1(202)	RA-224DA	0.46	0.06	0.52	0.00	PCI/G
CC0/1(209)	RA-224DA	0.54	0.08	0.61	0.00	PCI/G
CC0/1(221)	RA-224DA	0.11	0.03	0.14	0.00	PCI/G
CC0/1(222)	RA-224DA	0.28	0.04	0.32	0.00	PCI/G
CC0/1(231)	RA-224DA	0.47	0.07	0.54	0.00	PCI/G
CC0/2(001)	RA-224DA	1.40	0.16	1.56	0.00	PCI/G
CC0/2(003)	RA-224DA	1.24	0.14	1.38	0.00	PCI/G
CC0/2(004)	RA-224DA	0.68	0.08	0.76	0.00	PCI/G
CC0/2(007)	RA-224DA	0.88	0.11	0.98	0.00	PCI/G
CC0/2(007)	RA-224DA	0.94	0.11	1.05	0.00	PCI/G
CC0/2(009)	RA-224DA	1.16	0.13	1.29	0.00	PCI/G
CC0/2(011)	RA-224DA	1.32	0.15	1.47	0.00	PCI/G
CC0/2(017)	RA-224DA	1.16	0.13	1.29	0.00	PCI/G
CC0/2(026)	RA-224DA	1.31	0.15	1.46	0.00	PCI/G
CC0/2(028)	RA-224DA	0.96	0.12	1.08	0.00	PCI/G
CC0/2(031)	RA-224DA	5.19	0.54	5.73	0.00	PCI/G
CC0/2(032)	RA-224DA	1.02	0.12	1.14	0.00	PCI/G
CC0/2(040)	RA-224DA	0.80	0.10	0.89	0.00	PCI/G
CC0/2(044)	RA-224DA	1.41	0.16	1.57	0.00	PCI/G
CC0/2(047)	RA-224DA	1.22	0.14	1.36	0.00	PCI/G
CC0/2(052)	RA-224DA	3.51	0.36	3.87	0.00	PCI/G
CC0/2(053)	RA-224DA	0.59	0.08	0.67	0.00	PCI/G
CC0/2(054)	RA-224DA	1.28	0.15	1.43	0.00	PCI/G
CC0/2(061)	RA-224DA	8.82	0.90	9.72	0.00	PCI/G
CC0/2(065)	RA-224DA	1.05	0.12	1.17	0.00	PCI/G
CC0/2(066)	RA-224DA	1.15	0.13	1.28	0.00	PCI/G
CC0/2(070)	RA-224DA	1.84	0.20	2.04	0.00	PCI/G
CC0/2(071)	RA-224DA	0.99	0.12	1.11	0.00	PCI/G
CC0/2(071)	RA-224DA	1.02	0.12	1.14	0.00	PCI/G
CC0/2(074)	RA-224DA	1.13	0.13	1.26	0.00	PCI/G
CC0/2(076)	RA-224DA	0.99	0.12	1.10	0.00	PCI/G
CC0/2(078)	RA-224DA	1.26	0.15	1.41	0.00	PCI/G
CC0/2(078)	RA-224DA	43.40	4.36	47.76	0.00	PCI/G
CC0/2(079)	RA-224DA	0.76	0.09	0.86	0.00	PCI/G
CC0/2(083)	RA-224DA	1.55	0.18	1.73	0.00	PCI/G
CC0/2(084)	RA-224DA	2.80	0.30	3.10	0.00	PCI/G
CC0/2(086)	RA-224DA	1.57	0.18	1.75	0.00	PCI/G
CC0/2(087)	RA-224DA	0.89	0.11	1.00	0.00	PCI/G
CC0/2(090)	RA-224DA	1.97	0.21	2.18	0.00	PCI/G
CC0/2(091)	RA-224DA	6.27	0.65	6.92	0.00	PCI/G
CC0/2(092)	RA-224DA	2.89	0.31	3.20	0.00	PCI/G
CC0/2(097)	RA-224DA	0.99	0.12	1.11	0.00	PCI/G
CC0/2(100)	RA-224DA	14.60	1.47	16.07	0.00	PCI/G
CC0/2(102)	RA-224DA	19.70	1.98	21.68	0.00	PCI/G
CC0/2(106)	RA-224DA	0.59	0.08	0.67	0.00	PCI/G

A.11. Summary Data of Gamma Spectroscopic Analysis of Surrounding Soils

Sample ID	Isotope	Result	Total Error	Result + Error	MDA	Unit
CC0/2(107)	RA-224DA	5.52	0.57	6.09	0.00	PCI/G
CC0/2(108)	RA-224DA	1.63	0.18	1.81	0.00	PCI/G
CC0/2(111)	RA-224DA	0.77	0.10	0.87	0.00	PCI/G
CC0/2(118)	RA-224DA	5.96	0.62	6.58	0.00	PCI/G
CC0/2(119)	RA-224DA	5.45	0.56	6.01	0.00	PCI/G
CC0/2(120)	RA-224DA	29.50	2.96	32.46	0.00	PCI/G
CC0/2(124)	RA-224DA	1.24	0.15	1.39	0.00	PCI/G
CC0/2(124)	RA-224DA	1.34	0.16	1.50	0.00	PCI/G
CC0/2(125)	RA-224DA	1.03	0.13	1.16	0.00	PCI/G
CC0/2(138)	RA-224DA	1.64	0.18	1.82	0.00	PCI/G
CC0/2(141)	RA-224DA	0.51	0.07	0.58	0.00	PCI/G
CC0/2(148)	RA-224DA	1.05	0.13	1.18	0.00	PCI/G
CC0/2(151)	RA-224DA	1.57	0.18	1.75	0.00	PCI/G
CC0/2(161)	RA-224DA	2.05	0.22	2.27	0.00	PCI/G
CC0/2(163)	RA-224DA	1.81	0.20	2.01	0.00	PCI/G
CC0/2(170)	RA-224DA	1.41	0.16	1.57	0.00	PCI/G
CC0/2(182)	RA-224DA	0.26	0.04	0.30	0.00	PCI/G
CC0/2(187)	RA-224DA	1.45	0.16	1.61	0.00	PCI/G
CC0/2(202)	RA-224DA	1.13	0.13	1.26	0.00	PCI/G
CC0/2(209)	RA-224DA	1.22	0.14	1.36	0.00	PCI/G
CC0/2(221)	RA-224DA	2.25	0.24	2.49	0.00	PCI/G
CC0/2(222)	RA-224DA	0.72	0.09	0.80	0.00	PCI/G
CC0/2(231)	RA-224DA	1.11	0.13	1.24	0.00	PCI/G
CC0/3(076)	RA-224DA	0.95	0.11	1.06	0.00	PCI/G
CC1/1(070)	RA-224DA	2.51	0.27	2.78	0.00	PCI/G
CC1/1(221)	RA-224DA	0.07	0.02	0.09	0.04	PCI/G
CC1/2(202)	RA-224DA	1.21	0.14	1.35	0.00	PCI/G
NE0/1(001)	RA-224DA	1.21	0.15	1.36	0.00	PCI/G
NE0/1(003)	RA-224DA	1.47	0.16	1.63	0.00	PCI/G
NE0/1(004)	RA-224DA	1.17	0.14	1.31	0.00	PCI/G
NE0/1(007)	RA-224DA	1.27	0.15	1.42	0.00	PCI/G
NE0/1(009)	RA-224DA	1.17	0.13	1.30	0.00	PCI/G
NE0/1(011)	RA-224DA	0.65	0.08	0.74	0.00	PCI/G
NE0/1(015)	RA-224DA	0.63	0.08	0.70	0.00	PCI/G
NE0/1(017)	RA-224DA	1.32	0.15	1.47	0.00	PCI/G
NE0/1(023)	RA-224DA	0.12	0.03	0.16	0.00	PCI/G
NE0/1(026)	RA-224DA	1.27	0.15	1.42	0.00	PCI/G
NE0/1(027)	RA-224DA	1.17	0.15	1.32	0.00	PCI/G
NE0/1(028)	RA-224DA	1.20	0.14	1.34	0.00	PCI/G
NE0/1(032)	RA-224DA	1.01	0.13	1.14	0.00	PCI/G
NE0/1(040)	RA-224DA	1.27	0.15	1.42	0.00	PCI/G
NE0/1(044)	RA-224DA	1.47	0.17	1.64	0.00	PCI/G
NE0/1(047)	RA-224DA	1.06	0.13	1.19	0.00	PCI/G
NE0/1(052)	RA-224DA	0.93	0.11	1.04	0.00	PCI/G
NE0/1(053)	RA-224DA	1.16	0.14	1.30	0.00	PCI/G
NE0/1(054)	RA-224DA	1.08	0.13	1.21	0.00	PCI/G
NE0/1(061)	RA-224DA	1.10	0.13	1.23	0.00	PCI/G
NE0/1(061)	RA-224DA	1.13	0.13	1.26	0.00	PCI/G
NE0/1(065)	RA-224DA	1.28	0.15	1.43	0.00	PCI/G

A.11. Summary Data of Gamma Spectroscopic Analysis of Surrounding Soils

Sample ID	Isotope	Result	Total Error	Result + Error	MDA	Unit
NEO/1(066)	RA-224DA	1.23	0.14	1.37	0.00	PCI/G
NEO/1(070)	RA-224DA	0.70	0.09	0.79	0.00	PCI/G
NEO/1(071)	RA-224DA	1.88	0.20	2.08	0.00	PCI/G
NEO/1(074)	RA-224DA	0.90	0.11	1.01	0.00	PCI/G
NEO/1(076)	RA-224DA	2.17	0.23	2.40	0.00	PCI/G
NEO/1(078)	RA-224DA	0.68	0.08	0.77	0.00	PCI/G
NEO/1(079)	RA-224DA	1.24	0.14	1.38	0.00	PCI/G
NEO/1(087)	RA-224DA	1.11	0.13	1.24	0.00	PCI/G
NEO/1(090)	RA-224DA	3.56	0.37	3.93	0.00	PCI/G
NEO/1(090)	RA-224DA	3.59	0.38	3.97	0.00	PCI/G
NEO/1(097)	RA-224DA	0.92	0.12	1.04	0.00	PCI/G
NEO/1(102)	RA-224DA	12.70	1.28	13.98	0.00	PCI/G
NEO/1(106)	RA-224DA	0.29	0.05	0.34	0.00	PCI/G
NEO/1(107)	RA-224DA	2.52	0.27	2.79	0.00	PCI/G
NEO/1(111)	RA-224DA	1.37	0.17	1.54	0.00	PCI/G
NEO/1(111)	RA-224DA	1.48	0.17	1.65	0.00	PCI/G
NEO/1(118)	RA-224DA	12.30	1.24	13.54	0.00	PCI/G
NEO/1(119)	RA-224DA	3.47	0.36	3.83	0.00	PCI/G
NEO/1(120)	RA-224DA	0.46	0.06	0.52	0.00	PCI/G
NEO/1(124)	RA-224DA	0.41	0.06	0.47	0.00	PCI/G
NEO/1(124)	RA-224DA	0.44	0.06	0.50	0.00	PCI/G
NEO/1(125)	RA-224DA	0.26	0.04	0.30	0.00	PCI/G
NEO/1(138)	RA-224DA	0.36	0.05	0.41	0.00	PCI/G
NEO/1(141)	RA-224DA	0.55	0.08	0.62	0.00	PCI/G
NEO/1(151)	RA-224DA	0.99	0.11	1.11	0.00	PCI/G
NEO/1(161)	RA-224DA	0.46	0.06	0.52	0.00	PCI/G
NEO/1(163)	RA-224DA	30.60	3.08	33.68	0.00	PCI/G
NEO/1(163)	RA-224DA	30.80	3.09	33.89	0.00	PCI/G
NEO/1(174)	RA-224DA	0.32	0.06	0.37	0.00	PCI/G
NEO/1(178)	RA-224DA	1.06	0.12	1.18	0.00	PCI/G
NEO/1(182)	RA-224DA	0.85	0.11	0.97	0.00	PCI/G
NEO/1(185)	RA-224DA	0.18	0.03	0.21	0.00	PCI/G
NEO/1(187)	RA-224DA	2.04	0.22	2.26	0.00	PCI/G
NEO/1(196)	RA-224DA	1.42	0.16	1.58	0.00	PCI/G
NEO/1(202)	RA-224DA	0.48	0.07	0.55	0.00	PCI/G
NEO/1(209)	RA-224DA	1.20	0.14	1.34	0.00	PCI/G
NEO/1(209)	RA-224DA	1.22	0.15	1.37	0.00	PCI/G
NEO/1(221)	RA-224DA	0.18	0.03	0.21	0.00	PCI/G
NEO/1(222)	RA-224DA	0.12	0.03	0.15	0.00	PCI/G
NEO/1(222)	RA-224DA	0.13	0.03	0.16	0.00	PCI/G
NEO/1(231)	RA-224DA	0.37	0.06	0.43	0.00	PCI/G
NEO/2(001)	RA-224DA	0.79	0.10	0.89	0.00	PCI/G
NEO/2(003)	RA-224DA	1.13	0.14	1.27	0.00	PCI/G
NEO/2(003)	RA-224DA	1.19	0.14	1.33	0.00	PCI/G
NEO/2(011)	RA-224DA	1.16	0.14	1.30	0.00	PCI/G
NEO/2(015)	RA-224DA	0.92	0.11	1.03	0.00	PCI/G
NEO/2(017)	RA-224DA	1.29	0.15	1.44	0.00	PCI/G
NEO/2(023)	RA-224DA	2.05	0.23	2.28	0.00	PCI/G
NEO/2(026)	RA-224DA	1.35	0.16	1.51	0.00	PCI/G

A.11. Summary Data of Gamma Spectroscopic Analysis of Surrounding Soils

Sample ID	Isotope	Result	Total Error	Result + Error	MDA	Unit
NE0/2(026)	RA-224DA	1.44	0.17	1.61	0.00	PCI/G
NE0/2(027)	RA-224DA	1.20	0.14	1.34	0.00	PCI/G
NE0/2(028)	RA-224DA	1.23	0.15	1.38	0.00	PCI/G
NE0/2(032)	RA-224DA	1.22	0.14	1.36	0.00	PCI/G
NE0/2(040)	RA-224DA	0.62	0.08	0.70	0.00	PCI/G
NE0/2(047)	RA-224DA	1.10	0.13	1.23	0.00	PCI/G
NE0/2(052)	RA-224DA	0.58	0.08	0.66	0.00	PCI/G
NE0/2(052)	RA-224DA	0.67	0.09	0.75	0.00	PCI/G
NE0/2(053)	RA-224DA	1.06	0.13	1.19	0.00	PCI/G
NE0/2(054)	RA-224DA	1.09	0.13	1.22	0.00	PCI/G
NE0/2(054)	RA-224DA	1.14	0.13	1.27	0.00	PCI/G
NE0/2(061)	RA-224DA	1.03	0.12	1.15	0.00	PCI/G
NE0/2(065)	RA-224DA	1.26	0.14	1.40	0.00	PCI/G
NE0/2(066)	RA-224DA	0.83	0.10	0.94	0.00	PCI/G
NE0/2(070)	RA-224DA	0.81	0.10	0.92	0.00	PCI/G
NE0/2(071)	RA-224DA	1.21	0.14	1.35	0.00	PCI/G
NE0/2(074)	RA-224DA	0.74	0.09	0.83	0.00	PCI/G
NE0/2(076)	RA-224DA	2.14	0.23	2.37	0.00	PCI/G
NE0/2(078)	RA-224DA	0.77	0.09	0.86	0.00	PCI/G
NE0/2(079)	RA-224DA	1.01	0.12	1.13	0.00	PCI/G
NE0/2(087)	RA-224DA	0.82	0.11	0.92	0.00	PCI/G
NE0/2(090)	RA-224DA	2.39	0.26	2.65	0.00	PCI/G
NE0/2(097)	RA-224DA	1.31	0.16	1.47	0.00	PCI/G
NE0/2(102)	RA-224DA	118.00	11.80	129.80	0.00	PCI/G
NE0/2(106)	RA-224DA	0.34	0.05	0.39	0.00	PCI/G
NE0/2(107)	RA-224DA	1.98	0.22	2.20	0.00	PCI/G
NE0/2(111)	RA-224DA	0.75	0.10	0.86	0.00	PCI/G
NE0/2(118)	RA-224DA	5.39	0.56	5.95	0.00	PCI/G
NE0/2(119)	RA-224DA	1.43	0.16	1.59	0.00	PCI/G
NE0/2(120)	RA-224DA	1.08	0.13	1.21	0.00	PCI/G
NE0/2(124)	RA-224DA	1.08	0.13	1.21	0.00	PCI/G
NE0/2(125)	RA-224DA	1.17	0.14	1.31	0.00	PCI/G
NE0/2(141)	RA-224DA	1.11	0.14	1.25	0.00	PCI/G
NE0/2(148)	RA-224DA	1.28	0.15	1.43	0.00	PCI/G
NE0/2(148)	RA-224DA	1.32	0.15	1.47	0.00	PCI/G
NE0/2(163)	RA-224DA	11.70	1.18	12.88	0.00	PCI/G
NE0/2(174)	RA-224DA	0.63	0.09	0.72	0.00	PCI/G
NE0/2(178)	RA-224DA	7.69	0.78	8.47	0.00	PCI/G
NE0/2(182)	RA-224DA	1.20	0.14	1.34	0.00	PCI/G
NE0/2(202)	RA-224DA	8.69	0.88	9.57	0.00	PCI/G
NE0/2(221)	RA-224DA	0.39	0.06	0.45	0.00	PCI/G
NE1/1(023)	RA-224DA	0.16	0.04	0.20	0.00	PCI/G
NE1/1(074)	RA-224DA	0.95	0.11	1.06	0.00	PCI/G
NE1/1(178)	RA-224DA	1.29	0.15	1.44	0.00	PCI/G
NE1/2(023)	RA-224DA	2.31	0.26	2.57	0.00	PCI/G
NW0/1(001)	RA-224DA	0.41	0.06	0.46	0.00	PCI/G
NW0/1(017)	RA-224DA	1.31	0.15	1.46	0.00	PCI/G
NW0/1(023)	RA-224DA	1.40	0.16	1.56	0.00	PCI/G
NW0/1(023)	RA-224DA	1.42	0.17	1.59	0.00	PCI/G

A.11. Summary Data of Gamma Spectroscopic Analysis of Surrounding Soils

Sample ID	Isotope	Result	Total Error	Result + Error	MDA	Unit
NWO/1(026)	RA-224DA	0.94	0.11	1.05	0.00	PCI/G
NWO/1(028)	RA-224DA	1.26	0.15	1.41	0.00	PCI/G
NWO/1(040)	RA-224DA	1.16	0.14	1.30	0.00	PCI/G
NWO/1(047)	RA-224DA	1.31	0.16	1.47	0.00	PCI/G
NWO/1(052)	RA-224DA	0.41	0.06	0.47	0.00	PCI/G
NWO/1(053)	RA-224DA	1.15	0.14	1.29	0.00	PCI/G
NWO/1(054)	RA-224DA	1.04	0.13	1.17	0.00	PCI/G
NWO/1(061)	RA-224DA	1.18	0.14	1.32	0.00	PCI/G
NWO/1(074)	RA-224DA	1.33	0.15	1.48	0.00	PCI/G
NWO/1(078)	RA-224DA	0.89	0.11	0.99	0.00	PCI/G
NWO/1(079)	RA-224DA	2.56	0.27	2.83	0.00	PCI/G
NWO/1(084)	RA-224DA	8.31	0.85	9.16	0.00	PCI/G
NWO/1(087)	RA-224DA	1.11	0.13	1.24	0.00	PCI/G
NWO/1(091)	RA-224DA	0.30	0.05	0.35	0.00	PCI/G
NWO/1(092)	RA-224DA	8.11	0.83	8.94	0.00	PCI/G
NWO/1(097)	RA-224DA	1.01	0.12	1.13	0.00	PCI/G
NWO/1(100)	RA-224DA	4.88	0.50	5.38	0.00	PCI/G
NWO/1(102)	RA-224DA	19.60	1.97	21.57	0.00	PCI/G
NWO/1(107)	RA-224DA	1.50	0.17	1.67	0.00	PCI/G
NWO/1(108)	RA-224DA	0.36	0.06	0.41	0.00	PCI/G
NWO/1(108)	RA-224DA	0.68	0.08	0.77	0.00	PCI/G
NWO/1(118)	RA-224DA	0.72	0.09	0.81	0.00	PCI/G
NWO/1(124)	RA-224DA	0.37	0.05	0.43	0.00	PCI/G
NWO/1(125)	RA-224DA	0.51	0.07	0.58	0.00	PCI/G
NWO/1(138)	RA-224DA	0.30	0.05	0.35	0.00	PCI/G
NWO/1(141)	RA-224DA	19.90	2.01	21.91	0.00	PCI/G
NWO/1(141)	RA-224DA	22.30	2.24	24.54	0.00	PCI/G
NWO/1(148)	RA-224DA	1.19	0.14	1.33	0.00	PCI/G
NWO/1(148)	RA-224DA	1.23	0.14	1.37	0.00	PCI/G
NWO/1(151)	RA-224DA	1.33	0.15	1.48	0.00	PCI/G
NWO/1(161)	RA-224DA	0.41	0.06	0.47	0.00	PCI/G
NWO/1(170)	RA-224DA	0.45	0.07	0.52	0.00	PCI/G
NWO/1(174)	RA-224DA	0.46	0.06	0.52	0.00	PCI/G
NWO/1(178)	RA-224DA	2.75	0.29	3.04	0.00	PCI/G
NWO/1(182)	RA-224DA	0.39	0.06	0.45	0.00	PCI/G
NWO/1(187)	RA-224DA	1.29	0.15	1.44	0.00	PCI/G
NWO/1(196)	RA-224DA	1.32	0.15	1.47	0.00	PCI/G
NWO/1(202)	RA-224DA	0.59	0.08	0.67	0.00	PCI/G
NWO/1(209)	RA-224DA	0.51	0.06	0.57	0.00	PCI/G
NWO/1(221)	RA-224DA	4.82	0.50	5.32	0.00	PCI/G
NWO/1(222)	RA-224DA	0.11	0.03	0.14	0.00	PCI/G
NWO/1(231)	RA-224DA	0.55	0.07	0.62	0.00	PCI/G
NWO/2(001)	RA-224DA	1.68	0.18	1.86	0.00	PCI/G
NWO/2(001)	RA-224DA	1.69	0.18	1.87	0.00	PCI/G
NWO/2(023)	RA-224DA	1.38	0.16	1.54	0.00	PCI/G
NWO/2(028)	RA-224DA	1.14	0.14	1.28	0.00	PCI/G
NWO/2(040)	RA-224DA	1.12	0.13	1.25	0.00	PCI/G
NWO/2(047)	RA-224DA	1.18	0.14	1.32	0.00	PCI/G
NWO/2(052)	RA-224DA	3.44	0.36	3.80	0.00	PCI/G

A.11. Summary Data of Gamma Spectroscopic Analysis of Surrounding Soils

Sample ID	Isotope	Result	Total Error	Result + Error	MDA	Unit
NWO/2(054)	RA-224DA	1.10	0.14	1.24	0.00	PCI/G
NWO/2(061)	RA-224DA	1.27	0.15	1.42	0.00	PCI/G
NWO/2(074)	RA-224DA	1.27	0.15	1.42	0.00	PCI/G
NWO/2(078)	RA-224DA	0.92	0.11	1.03	0.00	PCI/G
NWO/2(079)	RA-224DA	1.45	0.17	1.62	0.00	PCI/G
NWO/2(084)	RA-224DA	4.71	0.49	5.20	0.00	PCI/G
NWO/2(087)	RA-224DA	1.12	0.13	1.25	0.00	PCI/G
NWO/2(087)	RA-224DA	1.12	0.14	1.26	0.00	PCI/G
NWO/2(091)	RA-224DA	1.42	0.16	1.58	0.00	PCI/G
NWO/2(097)	RA-224DA	0.71	0.11	0.82	0.00	PCI/G
NWO/2(100)	RA-224DA	4.18	0.44	4.62	0.00	PCI/G
NWO/2(102)	RA-224DA	36.40	3.66	40.06	0.00	PCI/G
NWO/2(107)	RA-224DA	0.20	0.03	0.23	0.00	PCI/G
NWO/2(107)	RA-224DA	0.21	0.04	0.25	0.00	PCI/G
NWO/2(108)	RA-224DA	3.27	0.35	3.62	0.00	PCI/G
NWO/2(118)	RA-224DA	6.29	0.64	6.93	0.00	PCI/G
NWO/2(124)	RA-224DA	0.97	0.12	1.09	0.00	PCI/G
NWO/2(125)	RA-224DA	1.21	0.14	1.35	0.00	PCI/G
NWO/2(125)	RA-224DA	1.24	0.14	1.38	0.00	PCI/G
NWO/2(138)	RA-224DA	5.10	0.53	5.63	0.00	PCI/G
NWO/2(141)	RA-224DA	4.24	0.44	4.68	0.00	PCI/G
NWO/2(148)	RA-224DA	1.27	0.15	1.42	0.00	PCI/G
NWO/2(151)	RA-224DA	1.37	0.15	1.52	0.00	PCI/G
NWO/2(161)	RA-224DA	1.80	0.20	2.00	0.00	PCI/G
NWO/2(170)	RA-224DA	1.21	0.14	1.35	0.00	PCI/G
NWO/2(178)	RA-224DA	1.29	0.15	1.44	0.00	PCI/G
NWO/2(182)	RA-224DA	1.14	0.13	1.27	0.00	PCI/G
NWO/2(187)	RA-224DA	1.23	0.14	1.37	0.00	PCI/G
NWO/2(202)	RA-224DA	1.12	0.13	1.25	0.00	PCI/G
NWO/3(061)	RA-224DA	1.13	0.13	1.26	0.00	PCI/G
NW1/1(023)	RA-224DA	1.34	0.16	1.50	0.00	PCI/G
NW1/1(052)	RA-224DA	2.90	0.31	3.21	0.00	PCI/G
NW1/1(061)	RA-224DA	1.29	0.15	1.44	0.00	PCI/G
NW1/1(118)	RA-224DA	1.12	0.13	1.25	0.00	PCI/G
NW1/1(138)	RA-224DA	2.23	0.24	2.47	0.00	PCI/G
NW1/1(141)	RA-224DA	17.30	1.74	19.04	0.00	PCI/G
NW1/1(148)	RA-224DA	1.11	0.13	1.24	0.00	PCI/G
NW1/1(221)	RA-224DA	2.78	0.29	3.07	0.00	PCI/G
SEO/1(001)	RA-224DA	1.36	0.15	1.51	0.00	PCI/G
SEO/1(006)	RA-224DA	1.18	0.14	1.32	0.00	PCI/G
SEO/1(007)	RA-224DA	1.25	0.14	1.39	0.00	PCI/G
SEO/1(009)	RA-224DA	1.25	0.14	1.39	0.00	PCI/G
SEO/1(017)	RA-224DA	1.13	0.13	1.26	0.00	PCI/G
SEO/1(026)	RA-224DA	1.20	0.14	1.34	0.00	PCI/G
SEO/1(027)	RA-224DA	0.40	0.06	0.46	0.00	PCI/G
SEO/1(031)	RA-224DA	0.27	0.06	0.32	0.00	PCI/G
SEO/1(032)	RA-224DA	1.42	0.16	1.58	0.00	PCI/G
SEO/1(040)	RA-224DA	0.88	0.10	0.98	0.00	PCI/G
SEO/1(044)	RA-224DA	1.22	0.14	1.36	0.00	PCI/G

A.11. Summary Data of Gamma Spectroscopic Analysis of Surrounding Soils

Sample ID	Isotope	Result	Total Error	Result + Error	MDA	Unit
SEO/1(047)	RA-224DA	1.05	0.13	1.18	0.00	PCI/G
SEO/1(052)	RA-224DA	0.26	0.05	0.31	0.00	PCI/G
SEO/1(061)	RA-224DA	0.77	0.09	0.86	0.00	PCI/G
SEO/1(065)	RA-224DA	0.35	0.05	0.41	0.00	PCI/G
SEO/1(076)	RA-224DA	0.74	0.10	0.84	0.00	PCI/G
SEO/1(083)	RA-224DA	0.71	0.09	0.80	0.00	PCI/G
SEO/1(085)	RA-224DA	21.60	2.17	23.77	0.00	PCI/G
SEO/1(087)	RA-224DA	6.93	0.71	7.64	0.00	PCI/G
SEO/1(090)	RA-224DA	0.23	0.04	0.27	0.00	PCI/G
SEO/1(097)	RA-224DA	1.10	0.13	1.23	0.00	PCI/G
SEO/1(106)	RA-224DA	0.29	0.04	0.33	0.00	PCI/G
SEO/1(107)	RA-224DA	0.20	0.04	0.24	0.00	PCI/G
SEO/1(111)	RA-224DA	22.50	2.27	24.77	0.00	PCI/G
SEO/1(118)	RA-224DA	7.23	0.75	7.98	0.00	PCI/G
SEO/1(124)	RA-224DA	0.21	0.04	0.24	0.00	PCI/G
SEO/1(138)	RA-224DA	1.22	0.14	1.36	0.00	PCI/G
SEO/1(141)	RA-224DA	2.09	0.23	2.32	0.00	PCI/G
SEO/1(148)	RA-224DA	0.68	0.09	0.77	0.00	PCI/G
SEO/1(151)	RA-224DA	2.74	0.30	3.04	0.00	PCI/G
SEO/1(161)	RA-224DA	1.10	0.13	1.23	0.00	PCI/G
SEO/1(161)	RA-224DA	1.16	0.13	1.29	0.00	PCI/G
SEO/1(174)	RA-224DA	0.24	0.04	0.28	0.00	PCI/G
SEO/1(178)	RA-224DA	0.29	0.05	0.34	0.00	PCI/G
SEO/1(182)	RA-224DA	0.27	0.04	0.31	0.00	PCI/G
SEO/1(187)	RA-224DA	0.16	0.04	0.19	0.00	PCI/G
SEO/1(196)	RA-224DA	1.06	0.12	1.18	0.00	PCI/G
SEO/1(202)	RA-224DA	0.45	0.06	0.51	0.00	PCI/G
SEO/1(209)	RA-224DA	0.07	0.02	0.09	0.04	PCI/G
SEO/1(209)	RA-224DA	0.07	0.03	0.11	0.00	PCI/G
SEO/1(221)	RA-224DA	0.09	0.03	0.12	0.00	PCI/G
SEO/1(231)	RA-224DA	0.95	0.11	1.06	0.00	PCI/G
SEO/2(001)	RA-224DA	1.28	0.14	1.42	0.00	PCI/G
SEO/2(007)	RA-224DA	1.27	0.14	1.41	0.00	PCI/G
SEO/2(017)	RA-224DA	1.17	0.14	1.31	0.00	PCI/G
SEO/2(027)	RA-224DA	2.14	0.23	2.37	0.00	PCI/G
SEO/2(031)	RA-224DA	0.27	0.05	0.33	0.00	PCI/G
SEO/2(031)	RA-224DA	1.26	0.15	1.41	0.00	PCI/G
SEO/2(032)	RA-224DA	1.95	0.21	2.16	0.00	PCI/G
SEO/2(040)	RA-224DA	1.99	0.22	2.21	0.00	PCI/G
SEO/2(044)	RA-224DA	1.41	0.17	1.58	0.00	PCI/G
SEO/2(047)	RA-224DA	1.36	0.16	1.52	0.00	PCI/G
SEO/2(052)	RA-224DA	7.51	0.77	8.28	0.00	PCI/G
SEO/2(061)	RA-224DA	13.20	1.33	14.53	0.00	PCI/G
SEO/2(065)	RA-224DA	0.96	0.12	1.07	0.00	PCI/G
SEO/2(076)	RA-224DA	1.16	0.13	1.29	0.00	PCI/G
SEO/2(085)	RA-224DA	4.98	0.52	5.50	0.00	PCI/G
SEO/2(087)	RA-224DA	4.53	0.47	5.00	0.00	PCI/G
SEO/2(090)	RA-224DA	5.23	0.54	5.77	0.00	PCI/G
SEO/2(097)	RA-224DA	1.28	0.15	1.43	0.00	PCI/G

A.11. Summary Data of Gamma Spectroscopic Analysis of Surrounding Soils

Sample ID	Isotope	Result	Total Error	Result + Error	MDA	Unit
SE0/2(106)	RA-224DA	0.58	0.08	0.66	0.00	PCI/G
SE0/2(107)	RA-224DA	1.69	0.18	1.87	0.00	PCI/G
SE0/2(111)	RA-224DA	6.58	0.67	7.25	0.00	PCI/G
SE0/2(118)	RA-224DA	1.67	0.19	1.86	0.00	PCI/G
SE0/2(124)	RA-224DA	0.90	0.10	1.00	0.00	PCI/G
SE0/2(138)	RA-224DA	2.13	0.23	2.36	0.00	PCI/G
SE0/2(141)	RA-224DA	1.59	0.18	1.77	0.00	PCI/G
SE0/2(148)	RA-224DA	0.27	0.05	0.32	0.00	PCI/G
SE0/2(151)	RA-224DA	1.23	0.15	1.38	0.00	PCI/G
SE0/2(161)	RA-224DA	1.25	0.14	1.39	0.00	PCI/G
SE0/2(178)	RA-224DA	1.03	0.12	1.15	0.00	PCI/G
SE0/2(182)	RA-224DA	0.37	0.05	0.42	0.00	PCI/G
SE0/2(196)	RA-224DA	1.66	0.18	1.84	0.00	PCI/G
SE0/2(202)	RA-224DA	1.14	0.13	1.27	0.00	PCI/G
SE0/3(052)	RA-224DA	2.02	0.22	2.24	0.00	PCI/G
SE0/3(065)	RA-224DA	0.82	0.10	0.92	0.00	PCI/G
SE0/3(076)	RA-224DA	0.74	0.09	0.83	0.00	PCI/G
SE1/1(076)	RA-224DA	1.16	0.14	1.30	0.00	PCI/G
SE1/1(083)	RA-224DA	1.05	0.12	1.17	0.00	PCI/G
SW0/1(006)	RA-224DA	0.77	0.09	0.86	0.00	PCI/G
SW0/1(026)	RA-224DA	1.43	0.16	1.59	0.00	PCI/G
SW0/1(047)	RA-224DA	1.09	0.14	1.23	0.00	PCI/G
SW0/1(047)	RA-224DA	1.18	0.15	1.33	0.00	PCI/G
SW0/1(061)	RA-224DA	1.62	0.18	1.80	0.00	PCI/G
SW0/1(074)	RA-224DA	1.21	0.14	1.35	0.00	PCI/G
SW0/1(097)	RA-224DA	0.91	0.11	1.02	0.00	PCI/G
SW0/1(111)	RA-224DA	0.85	0.11	0.95	0.00	PCI/G
SW0/1(124)	RA-224DA	0.73	0.09	0.82	0.00	PCI/G
SW0/1(141)	RA-224DA	0.44	0.06	0.50	0.00	PCI/G
SW0/1(148)	RA-224DA	0.36	0.05	0.41	0.00	PCI/G
SW0/1(170)	RA-224DA	0.24	0.04	0.28	0.00	PCI/G
SW0/1(178)	RA-224DA	0.21	0.04	0.24	0.00	PCI/G
SW0/1(182)	RA-224DA	0.43	0.06	0.49	0.00	PCI/G
SW0/1(185)	RA-224DA	0.30	0.05	0.35	0.00	PCI/G
SW0/1(185)	RA-224DA	5.32	0.55	5.87	0.00	PCI/G
SW0/1(196)	RA-224DA	1.54	0.17	1.71	0.00	PCI/G
SW0/1(202)	RA-224DA	0.50	0.07	0.57	0.00	PCI/G
SW0/1(209)	RA-224DA	0.13	0.03	0.15	0.00	PCI/G
SW0/1(221)	RA-224DA	4.81	0.50	5.31	0.00	PCI/G
SW0/1(231)	RA-224DA	0.35	0.05	0.40	0.00	PCI/G
SW0/2(006)	RA-224DA	1.26	0.14	1.40	0.00	PCI/G
SW0/2(047)	RA-224DA	1.11	0.14	1.25	0.00	PCI/G
SW0/2(061)	RA-224DA	0.92	0.12	1.03	0.00	PCI/G
SW0/2(074)	RA-224DA	1.15	0.13	1.28	0.00	PCI/G
SW0/2(097)	RA-224DA	1.42	0.16	1.58	0.00	PCI/G
SW0/2(111)	RA-224DA	68.10	6.81	74.91	0.00	PCI/G
SW0/2(124)	RA-224DA	1.11	0.13	1.24	0.00	PCI/G
SW0/2(148)	RA-224DA	0.98	0.12	1.10	0.00	PCI/G
SW0/2(148)	RA-224DA	1.05	0.13	1.18	0.00	PCI/G

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Sample ID	Isotope	Result	Total Error	Result + Error	MDA	Unit
SW0/2(170)	RA-224DA	1.08	0.13	1.21	0.00	PCI/G
SW0/2(178)	RA-224DA	1.58	0.18	1.76	0.00	PCI/G
SW0/2(178)	RA-224DA	1.60	0.18	1.78	0.00	PCI/G
SW0/2(182)	RA-224DA	1.25	0.14	1.39	0.00	PCI/G
SW0/2(196)	RA-224DA	1.28	0.15	1.43	0.00	PCI/G
SW0/2(202)	RA-224DA	1.10	0.13	1.23	0.00	PCI/G
SW0/2(202)	RA-224DA	1.20	0.14	1.34	0.00	PCI/G
SW0/2(221)	RA-224DA	1.49	0.17	1.66	0.00	PCI/G
CC0/1(001)	RA-226DA	0.82	0.14	0.95	0.00	PCI/G
CC0/1(003)	RA-226DA	0.92	0.13	1.05	0.00	PCI/G
CC0/1(004)	RA-226DA	0.36	0.06	0.42	0.09	PCI/G
CC0/1(007)	RA-226DA	0.35	0.06	0.41	0.00	PCI/G
CC0/1(009)	RA-226DA	0.85	0.12	0.97	0.00	PCI/G
CC0/1(011)	RA-226DA	1.08	0.15	1.23	0.00	PCI/G
CC0/1(017)	RA-226DA	0.78	0.11	0.89	0.00	PCI/G
CC0/1(026)	RA-226DA	0.97	0.13	1.10	0.00	PCI/G
CC0/1(028)	RA-226DA	0.65	0.12	0.77	0.00	PCI/G
CC0/1(028)	RA-226DA	0.68	0.11	0.79	0.00	PCI/G
CC0/1(031)	RA-226DA	0.60	0.11	0.72	0.00	PCI/G
CC0/1(032)	RA-226DA	0.54	0.11	0.65	0.00	PCI/G
CC0/1(040)	RA-226DA	0.42	0.08	0.49	0.00	PCI/G
CC0/1(044)	RA-226DA	0.42	0.07	0.49	0.00	PCI/G
CC0/1(047)	RA-226DA	0.85	0.13	0.98	0.00	PCI/G
CC0/1(047)	RA-226DA	0.85	0.15	1.00	0.00	PCI/G
CC0/1(052)	RA-226DA	0.31	0.06	0.37	0.00	PCI/G
CC0/1(053)	RA-226DA	0.72	0.12	0.84	0.00	PCI/G
CC0/1(054)	RA-226DA	0.92	0.14	1.05	0.00	PCI/G
CC0/1(061)	RA-226DA	0.32	0.06	0.37	0.00	PCI/G
CC0/1(065)	RA-226DA	0.36	0.07	0.44	0.00	PCI/G
CC0/1(066)	RA-226DA	0.93	0.14	1.07	0.00	PCI/G
CC0/1(070)	RA-226DA	0.53	0.12	0.65	0.00	PCI/G
CC0/1(071)	RA-226DA	0.41	0.07	0.49	0.00	PCI/G
CC0/1(074)	RA-226DA	1.09	0.14	1.23	0.00	PCI/G
CC0/1(076)	RA-226DA	0.34	0.08	0.42	0.00	PCI/G
CC0/1(078)	RA-226DA	0.80	0.14	0.94	0.00	PCI/G
CC0/1(079)	RA-226DA	0.47	0.09	0.56	0.00	PCI/G
CC0/1(079)	RA-226DA	0.59	0.10	0.69	0.00	PCI/G
CC0/1(083)	RA-226DA	0.88	0.13	1.01	0.00	PCI/G
CC0/1(084)	RA-226DA	0.30	0.08	0.37	0.00	PCI/G
CC0/1(086)	RA-226DA	1.18	0.17	1.35	0.00	PCI/G
CC0/1(086)	RA-226DA	1.20	0.16	1.36	0.00	PCI/G
CC0/1(087)	RA-226DA	0.83	0.12	0.95	0.00	PCI/G
CC0/1(090)	RA-226DA	0.49	0.09	0.58	0.00	PCI/G
CC0/1(090)	RA-226DA	0.51	0.10	0.61	0.00	PCI/G
CC0/1(091)	RA-226DA	0.27	0.06	0.33	0.00	PCI/G
CC0/1(092)	RA-226DA	0.25	0.11	0.37	0.00	PCI/G
CC0/1(093)	RA-226DA	0.88	0.20	1.08	0.00	PCI/G
CC0/1(097)	RA-226DA	1.12	0.16	1.28	0.00	PCI/G
CC0/1(100)	RA-226DA	0.21	0.05	0.25	0.09	PCI/G

A.11. Summary Data of Gamma Spectroscopic Analysis of Surrounding Soils

Sample ID	Isotope	Result	Total Error	Result + Error	MDA	Unit
CC0/1(100)	RA-226DA	0.29	0.06	0.35	0.00	PCI/G
CC0/1(102)	RA-226DA	0.59	0.14	0.73	0.00	PCI/G
CC0/1(106)	RA-226DA	0.96	0.14	1.10	0.00	PCI/G
CC0/1(107)	RA-226DA	0.36	0.07	0.43	0.00	PCI/G
CC0/1(108)	RA-226DA	1.10	0.18	1.28	0.00	PCI/G
CC0/1(111)	RA-226DA	0.52	0.09	0.61	0.00	PCI/G
CC0/1(118)	RA-226DA	0.98	0.20	1.18	0.00	PCI/G
CC0/1(119)	RA-226DA	1.07	0.18	1.25	0.00	PCI/G
CC0/1(120)	RA-226DA	1.16	0.15	1.31	0.00	PCI/G
CC0/1(125)	RA-226DA	0.29	0.06	0.35	0.00	PCI/G
CC0/1(138)	RA-226DA	0.41	0.09	0.50	0.00	PCI/G
CC0/1(141)	RA-226DA	0.26	0.06	0.32	0.00	PCI/G
CC0/1(148)	RA-226DA	0.94	0.14	1.08	0.00	PCI/G
CC0/1(151)	RA-226DA	0.32	0.09	0.41	0.00	PCI/G
CC0/1(151)	RA-226DA	0.34	0.07	0.41	0.00	PCI/G
CC0/1(151)	RA-226DA	0.34	0.07	0.42	0.00	PCI/G
CC0/1(161)	RA-226DA	0.39	0.08	0.47	0.00	PCI/G
CC0/1(170)	RA-226DA	0.55	0.09	0.63	0.00	PCI/G
CC0/1(174)	RA-226DA	0.32	0.07	0.39	0.00	PCI/G
CC0/1(178)	RA-226DA	0.70	0.13	0.84	0.00	PCI/G
CC0/1(182)	RA-226DA	0.29	0.05	0.34	0.09	PCI/G
CC0/1(185)	RA-226DA	0.26	0.05	0.31	0.00	PCI/G
CC0/1(185)	RA-226DA	0.25	0.06	0.32	0.00	PCI/G
CC0/1(187)	RA-226DA	0.35	0.07	0.42	0.00	PCI/G
CC0/1(196)	RA-226DA	0.33	0.07	0.40	0.00	PCI/G
CC0/1(202)	RA-226DA	0.28	0.06	0.34	0.00	PCI/G
CC0/1(209)	RA-226DA	0.54	0.09	0.63	0.00	PCI/G
CC0/1(221)	RA-226DA	0.13	0.04	0.17	0.07	PCI/G
CC0/1(222)	RA-226DA	0.30	0.06	0.35	0.00	PCI/G
CC0/1(231)	RA-226DA	0.54	0.09	0.63	0.00	PCI/G
CC0/2(001)	RA-226DA	0.84	0.13	0.97	0.00	PCI/G
CC0/2(003)	RA-226DA	0.81	0.12	0.93	0.00	PCI/G
CC0/2(004)	RA-226DA	0.43	0.08	0.51	0.00	PCI/G
CC0/2(007)	RA-226DA	0.72	0.11	0.82	0.00	PCI/G
CC0/2(007)	RA-226DA	0.77	0.11	0.87	0.00	PCI/G
CC0/2(009)	RA-226DA	0.73	0.11	0.84	0.00	PCI/G
CC0/2(011)	RA-226DA	1.02	0.15	1.17	0.00	PCI/G
CC0/2(017)	RA-226DA	0.79	0.12	0.91	0.00	PCI/G
CC0/2(026)	RA-226DA	0.91	0.13	1.04	0.00	PCI/G
CC0/2(028)	RA-226DA	0.64	0.11	0.75	0.00	PCI/G
CC0/2(031)	RA-226DA	0.74	0.14	0.88	0.00	PCI/G
CC0/2(032)	RA-226DA	0.67	0.11	0.78	0.00	PCI/G
CC0/2(040)	RA-226DA	0.63	0.10	0.73	0.00	PCI/G
CC0/2(044)	RA-226DA	0.83	0.13	0.96	0.00	PCI/G
CC0/2(047)	RA-226DA	0.90	0.13	1.03	0.00	PCI/G
CC0/2(052)	RA-226DA	0.42	0.10	0.51	0.00	PCI/G
CC0/2(053)	RA-226DA	0.62	0.09	0.71	0.00	PCI/G
CC0/2(054)	RA-226DA	0.95	0.14	1.09	0.00	PCI/G
CC0/2(061)	RA-226DA	0.29	0.07	0.37	0.13	PCI/G

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Sample ID	Isotope	Result	Total Error	Result + Error	MDA	Unit
CC0/2(065)	RA-226DA	0.83	0.12	0.95	0.00	PCI/G
CC0/2(066)	RA-226DA	0.96	0.13	1.09	0.00	PCI/G
CC0/2(070)	RA-226DA	1.09	0.14	1.23	0.00	PCI/G
CC0/2(071)	RA-226DA	0.60	0.10	0.70	0.00	PCI/G
CC0/2(071)	RA-226DA	0.63	0.11	0.74	0.00	PCI/G
CC0/2(074)	RA-226DA	1.12	0.15	1.27	0.00	PCI/G
CC0/2(076)	RA-226DA	1.03	0.14	1.17	0.00	PCI/G
CC0/2(078)	RA-226DA	0.99	0.13	1.12	0.00	PCI/G
CC0/2(078)	RA-226DA	1.14	0.24	1.38	0.00	PCI/G
CC0/2(079)	RA-226DA	0.93	0.13	1.05	0.00	PCI/G
CC0/2(083)	RA-226DA	0.73	0.12	0.85	0.00	PCI/G
CC0/2(084)	RA-226DA	0.86	0.14	1.00	0.00	PCI/G
CC0/2(086)	RA-226DA	1.64	0.22	1.86	0.00	PCI/G
CC0/2(087)	RA-226DA	0.82	0.13	0.94	0.00	PCI/G
CC0/2(090)	RA-226DA	0.82	0.12	0.95	0.00	PCI/G
CC0/2(091)	RA-226DA	0.77	0.17	0.94	0.00	PCI/G
CC0/2(092)	RA-226DA	0.76	0.12	0.88	0.00	PCI/G
CC0/2(097)	RA-226DA	1.00	0.16	1.16	0.00	PCI/G
CC0/2(100)	RA-226DA	0.65	0.13	0.78	0.00	PCI/G
CC0/2(102)	RA-226DA	1.56	0.23	1.79	0.00	PCI/G
CC0/2(106)	RA-226DA	0.70	0.11	0.81	0.00	PCI/G
CC0/2(107)	RA-226DA	0.50	0.09	0.59	0.16	PCI/G
CC0/2(108)	RA-226DA	0.91	0.14	1.05	0.00	PCI/G
CC0/2(111)	RA-226DA	0.43	0.08	0.50	0.00	PCI/G
CC0/2(118)	RA-226DA	0.75	0.11	0.87	0.18	PCI/G
CC0/2(119)	RA-226DA	0.70	0.11	0.81	0.00	PCI/G
CC0/2(120)	RA-226DA	1.42	0.21	1.63	0.00	PCI/G
CC0/2(124)	RA-226DA	1.36	0.17	1.53	0.00	PCI/G
CC0/2(124)	RA-226DA	1.41	0.19	1.60	0.00	PCI/G
CC0/2(125)	RA-226DA	1.29	0.17	1.46	0.00	PCI/G
CC0/2(138)	RA-226DA	1.20	0.17	1.37	0.00	PCI/G
CC0/2(141)	RA-226DA	0.61	0.09	0.70	0.00	PCI/G
CC0/2(148)	RA-226DA	0.95	0.14	1.09	0.00	PCI/G
CC0/2(151)	RA-226DA	0.92	0.16	1.07	0.00	PCI/G
CC0/2(161)	RA-226DA	1.17	0.15	1.32	0.00	PCI/G
CC0/2(163)	RA-226DA	0.68	0.12	0.80	0.00	PCI/G
CC0/2(170)	RA-226DA	1.14	0.15	1.29	0.00	PCI/G
CC0/2(182)	RA-226DA	0.41	0.07	0.47	0.00	PCI/G
CC0/2(187)	RA-226DA	1.33	0.17	1.50	0.00	PCI/G
CC0/2(202)	RA-226DA	1.09	0.14	1.23	0.00	PCI/G
CC0/2(209)	RA-226DA	1.15	0.16	1.31	0.00	PCI/G
CC0/2(221)	RA-226DA	0.42	0.09	0.50	0.00	PCI/G
CC0/2(222)	RA-226DA	0.46	0.09	0.54	0.00	PCI/G
CC0/2(231)	RA-226DA	0.92	0.14	1.05	0.00	PCI/G
CC0/3(076)	RA-226DA	1.14	0.16	1.30	0.00	PCI/G
CC1/1(070)	RA-226DA	0.53	0.10	0.63	0.00	PCI/G
CC1/1(221)	RA-226DA	0.08	0.03	0.10	0.05	PCI/G
CC1/2(202)	RA-226DA	1.17	0.15	1.32	0.00	PCI/G
NE0/1(001)	RA-226DA	0.82	0.13	0.95	0.00	PCI/G

A.11. Summary Data of Gamma Spectroscopic Analysis of Surrounding Soils

Sample ID	Isotope	Result	Total Error	Result + Error	MDA	Unit
NEO/1(003)	RA-226DA	0.52	0.10	0.62	0.00	PCI/G
NEO/1(004)	RA-226DA	0.80	0.12	0.91	0.00	PCI/G
NEO/1(007)	RA-226DA	0.78	0.12	0.90	0.00	PCI/G
NEO/1(009)	RA-226DA	0.86	0.12	0.98	0.00	PCI/G
NEO/1(011)	RA-226DA	0.42	0.08	0.50	0.00	PCI/G
NEO/1(015)	RA-226DA	0.42	0.08	0.50	0.00	PCI/G
NEO/1(017)	RA-226DA	0.95	0.14	1.09	0.00	PCI/G
NEO/1(023)	RA-226DA	0.28	0.05	0.33	0.10	PCI/G
NEO/1(026)	RA-226DA	0.98	0.14	1.13	0.00	PCI/G
NEO/1(027)	RA-226DA	0.76	0.14	0.90	0.00	PCI/G
NEO/1(028)	RA-226DA	0.73	0.13	0.86	0.00	PCI/G
NEO/1(032)	RA-226DA	0.82	0.12	0.94	0.00	PCI/G
NEO/1(040)	RA-226DA	0.57	0.10	0.67	0.00	PCI/G
NEO/1(044)	RA-226DA	0.74	0.11	0.85	0.00	PCI/G
NEO/1(047)	RA-226DA	0.90	0.14	1.04	0.00	PCI/G
NEO/1(052)	RA-226DA	0.62	0.10	0.72	0.00	PCI/G
NEO/1(053)	RA-226DA	1.00	0.15	1.15	0.00	PCI/G
NEO/1(054)	RA-226DA	0.86	0.13	0.99	0.00	PCI/G
NEO/1(061)	RA-226DA	0.87	0.13	0.99	0.00	PCI/G
NEO/1(061)	RA-226DA	0.88	0.14	1.02	0.00	PCI/G
NEO/1(065)	RA-226DA	1.02	0.14	1.16	0.00	PCI/G
NEO/1(066)	RA-226DA	1.06	0.14	1.20	0.00	PCI/G
NEO/1(070)	RA-226DA	0.47	0.09	0.56	0.00	PCI/G
NEO/1(071)	RA-226DA	0.37	0.07	0.44	0.00	PCI/G
NEO/1(074)	RA-226DA	1.09	0.15	1.24	0.00	PCI/G
NEO/1(076)	RA-226DA	0.85	0.13	0.98	0.00	PCI/G
NEO/1(078)	RA-226DA	0.64	0.10	0.74	0.00	PCI/G
NEO/1(079)	RA-226DA	0.79	0.12	0.91	0.00	PCI/G
NEO/1(087)	RA-226DA	1.44	0.19	1.63	0.00	PCI/G
NEO/1(090)	RA-226DA	0.91	0.15	1.06	0.00	PCI/G
NEO/1(090)	RA-226DA	0.95	0.15	1.10	0.00	PCI/G
NEO/1(097)	RA-226DA	0.94	0.14	1.08	0.00	PCI/G
NEO/1(102)	RA-226DA	0.54	0.12	0.66	0.00	PCI/G
NEO/1(106)	RA-226DA	0.50	0.08	0.58	0.00	PCI/G
NEO/1(107)	RA-226DA	0.80	0.13	0.93	0.00	PCI/G
NEO/1(111)	RA-226DA	0.60	0.10	0.71	0.00	PCI/G
NEO/1(111)	RA-226DA	0.68	0.11	0.79	0.00	PCI/G
NEO/1(118)	RA-226DA	0.92	0.19	1.10	0.00	PCI/G
NEO/1(119)	RA-226DA	0.60	0.11	0.71	0.00	PCI/G
NEO/1(120)	RA-226DA	0.40	0.08	0.48	0.00	PCI/G
NEO/1(124)	RA-226DA	0.52	0.08	0.60	0.00	PCI/G
NEO/1(124)	RA-226DA	0.54	0.09	0.62	0.00	PCI/G
NEO/1(125)	RA-226DA	0.29	0.06	0.36	0.00	PCI/G
NEO/1(138)	RA-226DA	0.19	0.05	0.24	0.00	PCI/G
NEO/1(141)	RA-226DA	0.42	0.07	0.49	0.00	PCI/G
NEO/1(151)	RA-226DA	0.29	0.06	0.35	0.00	PCI/G
NEO/1(161)	RA-226DA	0.20	0.04	0.24	0.00	PCI/G
NEO/1(163)	RA-226DA	0.32	0.14	0.46	0.24	PCI/G
NEO/1(163)	RA-226DA	0.52	0.16	0.68	0.26	PCI/G

A.11. Summary Data of Gamma Spectroscopic Analysis of Surrounding Soils

Sample ID	Isotope	Result	Total Error	Result + Error	MDA	Unit
NEO/1(174)	RA-226DA	0.25	0.06	0.31	0.00	PCI/G
NEO/1(178)	RA-226DA	0.41	0.07	0.49	0.00	PCI/G
NEO/1(182)	RA-226DA	0.79	0.12	0.91	0.00	PCI/G
NEO/1(185)	RA-226DA	0.26	0.06	0.32	0.00	PCI/G
NEO/1(187)	RA-226DA	0.24	0.09	0.33	0.00	PCI/G
NEO/1(196)	RA-226DA	1.21	0.17	1.38	0.00	PCI/G
NEO/1(202)	RA-226DA	0.20	0.06	0.26	0.00	PCI/G
NEO/1(209)	RA-226DA	1.20	0.16	1.36	0.00	PCI/G
NEO/1(209)	RA-226DA	1.21	0.16	1.37	0.00	PCI/G
NEO/1(221)	RA-226DA	0.26	0.05	0.31	0.00	PCI/G
NEO/1(222)	RA-226DA	0.15	0.04	0.19	0.08	PCI/G
NEO/1(222)	RA-226DA	0.18	0.04	0.22	0.08	PCI/G
NEO/1(231)	RA-226DA	0.42	0.08	0.50	0.00	PCI/G
NEO/2(001)	RA-226DA	0.64	0.10	0.74	0.00	PCI/G
NEO/2(003)	RA-226DA	0.82	0.15	0.96	0.00	PCI/G
NEO/2(003)	RA-226DA	0.89	0.14	1.02	0.00	PCI/G
NEO/2(011)	RA-226DA	0.83	0.12	0.95	0.00	PCI/G
NEO/2(015)	RA-226DA	0.58	0.09	0.66	0.00	PCI/G
NEO/2(017)	RA-226DA	0.92	0.13	1.05	0.00	PCI/G
NEO/2(023)	RA-226DA	0.50	0.10	0.60	0.00	PCI/G
NEO/2(026)	RA-226DA	0.99	0.14	1.13	0.00	PCI/G
NEO/2(026)	RA-226DA	1.11	0.15	1.26	0.00	PCI/G
NEO/2(027)	RA-226DA	0.74	0.13	0.87	0.00	PCI/G
NEO/2(028)	RA-226DA	0.78	0.13	0.91	0.00	PCI/G
NEO/2(032)	RA-226DA	0.80	0.13	0.93	0.00	PCI/G
NEO/2(040)	RA-226DA	0.52	0.11	0.62	0.00	PCI/G
NEO/2(047)	RA-226DA	0.87	0.14	1.02	0.00	PCI/G
NEO/2(052)	RA-226DA	0.43	0.09	0.52	0.00	PCI/G
NEO/2(052)	RA-226DA	0.56	0.09	0.65	0.00	PCI/G
NEO/2(053)	RA-226DA	0.84	0.14	0.98	0.00	PCI/G
NEO/2(054)	RA-226DA	0.76	0.13	0.89	0.00	PCI/G
NEO/2(054)	RA-226DA	0.80	0.13	0.93	0.00	PCI/G
NEO/2(061)	RA-226DA	0.84	0.13	0.96	0.00	PCI/G
NEO/2(065)	RA-226DA	1.06	0.15	1.21	0.00	PCI/G
NEO/2(066)	RA-226DA	0.86	0.12	0.99	0.00	PCI/G
NEO/2(070)	RA-226DA	1.07	0.14	1.21	0.00	PCI/G
NEO/2(071)	RA-226DA	0.56	0.09	0.64	0.00	PCI/G
NEO/2(074)	RA-226DA	0.90	0.12	1.02	0.00	PCI/G
NEO/2(076)	RA-226DA	0.94	0.14	1.08	0.00	PCI/G
NEO/2(078)	RA-226DA	0.54	0.08	0.63	0.00	PCI/G
NEO/2(079)	RA-226DA	0.72	0.12	0.84	0.00	PCI/G
NEO/2(087)	RA-226DA	1.20	0.16	1.36	0.00	PCI/G
NEO/2(090)	RA-226DA	0.95	0.15	1.10	0.00	PCI/G
NEO/2(097)	RA-226DA	1.21	0.18	1.39	0.00	PCI/G
NEO/2(102)	RA-226DA	1.54	0.39	1.93	0.00	PCI/G
NEO/2(106)	RA-226DA	0.58	0.09	0.67	0.00	PCI/G
NEO/2(107)	RA-226DA	0.83	0.13	0.96	0.00	PCI/G
NEO/2(111)	RA-226DA	0.46	0.09	0.56	0.00	PCI/G
NEO/2(118)	RA-226DA	1.14	0.18	1.32	0.00	PCI/G

A.11. Summary Data of Gamma Spectroscopic Analysis of Surrounding Soils

Sample ID	Isotope	Result	Total Error	Result + Error	MDA	Unit
NE0/2(119)	RA-226DA	1.24	0.16	1.40	0.00	PCI/G
NE0/2(120)	RA-226DA	0.63	0.11	0.74	0.00	PCI/G
NE0/2(124)	RA-226DA	1.16	0.16	1.32	0.00	PCI/G
NE0/2(125)	RA-226DA	1.13	0.15	1.28	0.00	PCI/G
NE0/2(141)	RA-226DA	1.07	0.15	1.22	0.00	PCI/G
NE0/2(148)	RA-226DA	1.18	0.17	1.35	0.00	PCI/G
NE0/2(148)	RA-226DA	1.21	0.16	1.37	0.00	PCI/G
NE0/2(163)	RA-226DA	0.48	0.12	0.59	0.00	PCI/G
NE0/2(174)	RA-226DA	0.44	0.09	0.53	0.00	PCI/G
NE0/2(178)	RA-226DA	1.47	0.19	1.66	0.00	PCI/G
NE0/2(182)	RA-226DA	1.15	0.15	1.30	0.00	PCI/G
NE0/2(202)	RA-226DA	1.22	0.18	1.40	0.00	PCI/G
NE0/2(221)	RA-226DA	0.33	0.06	0.39	0.00	PCI/G
NE1/1(023)	RA-226DA	0.36	0.07	0.43	0.00	PCI/G
NE1/1(074)	RA-226DA	1.03	0.13	1.16	0.00	PCI/G
NE1/1(178)	RA-226DA	0.57	0.11	0.68	0.00	PCI/G
NE1/2(023)	RA-226DA	0.65	0.14	0.80	0.00	PCI/G
NW0/1(001)	RA-226DA	0.30	0.07	0.37	0.00	PCI/G
NW0/1(017)	RA-226DA	0.96	0.14	1.10	0.00	PCI/G
NW0/1(023)	RA-226DA	1.09	0.16	1.25	0.00	PCI/G
NW0/1(023)	RA-226DA	1.20	0.17	1.37	0.00	PCI/G
NW0/1(026)	RA-226DA	0.65	0.10	0.76	0.00	PCI/G
NW0/1(028)	RA-226DA	1.06	0.15	1.21	0.00	PCI/G
NW0/1(040)	RA-226DA	0.38	0.08	0.47	0.00	PCI/G
NW0/1(047)	RA-226DA	0.96	0.14	1.10	0.00	PCI/G
NW0/1(052)	RA-226DA	0.37	0.07	0.45	0.00	PCI/G
NW0/1(053)	RA-226DA	0.73	0.13	0.86	0.00	PCI/G
NW0/1(054)	RA-226DA	0.74	0.14	0.88	0.00	PCI/G
NW0/1(061)	RA-226DA	1.02	0.15	1.17	0.00	PCI/G
NW0/1(074)	RA-226DA	1.14	0.16	1.30	0.00	PCI/G
NW0/1(078)	RA-226DA	0.69	0.10	0.80	0.00	PCI/G
NW0/1(079)	RA-226DA	1.01	0.14	1.15	0.00	PCI/G
NW0/1(084)	RA-226DA	0.48	0.09	0.56	0.15	PCI/G
NW0/1(087)	RA-226DA	0.94	0.15	1.09	0.00	PCI/G
NW0/1(091)	RA-226DA	0.20	0.04	0.24	0.07	PCI/G
NW0/1(092)	RA-226DA	0.84	0.15	0.99	0.00	PCI/G
NW0/1(097)	RA-226DA	1.22	0.17	1.39	0.00	PCI/G
NW0/1(100)	RA-226DA	0.71	0.12	0.83	0.00	PCI/G
NW0/1(102)	RA-226DA	0.71	0.21	0.92	0.00	PCI/G
NW0/1(107)	RA-226DA	0.63	0.12	0.75	0.00	PCI/G
NW0/1(108)	RA-226DA	0.27	0.05	0.33	0.00	PCI/G
NW0/1(108)	RA-226DA	0.32	0.06	0.38	0.00	PCI/G
NW0/1(118)	RA-226DA	0.30	0.05	0.35	0.09	PCI/G
NW0/1(124)	RA-226DA	0.26	0.06	0.32	0.00	PCI/G
NW0/1(125)	RA-226DA	0.67	0.10	0.78	0.00	PCI/G
NW0/1(138)	RA-226DA	0.33	0.05	0.38	0.10	PCI/G
NW0/1(141)	RA-226DA	1.01	0.20	1.21	0.00	PCI/G
NW0/1(141)	RA-226DA	1.19	0.17	1.36	0.00	PCI/G
NW0/1(148)	RA-226DA	1.09	0.15	1.24	0.00	PCI/G

A.11. Summary Data of Gamma Spectroscopic Analysis of Surrounding Soils

Sample ID	Isotope	Result	Total Error	Result + Error	MDA	Unit
NWO/1(148)	RA-226DA	1.08	0.16	1.24	0.00	PCI/G
NWO/1(151)	RA-226DA	0.50	0.08	0.59	0.00	PCI/G
NWO/1(161)	RA-226DA	0.34	0.06	0.39	0.11	PCI/G
NWO/1(170)	RA-226DA	0.51	0.09	0.61	0.00	PCI/G
NWO/1(174)	RA-226DA	0.33	0.07	0.40	0.00	PCI/G
NWO/1(178)	RA-226DA	0.77	0.12	0.90	0.00	PCI/G
NWO/1(182)	RA-226DA	0.47	0.09	0.55	0.00	PCI/G
NWO/1(187)	RA-226DA	0.34	0.07	0.40	0.12	PCI/G
NWO/1(196)	RA-226DA	0.76	0.12	0.88	0.00	PCI/G
NWO/1(202)	RA-226DA	0.38	0.08	0.45	0.00	PCI/G
NWO/1(209)	RA-226DA	0.59	0.10	0.68	0.00	PCI/G
NWO/1(221)	RA-226DA	0.74	0.12	0.86	0.00	PCI/G
NWO/1(222)	RA-226DA	0.22	0.04	0.26	0.08	PCI/G
NWO/1(231)	RA-226DA	0.58	0.08	0.67	0.00	PCI/G
NWO/2(001)	RA-226DA	0.52	0.08	0.60	0.00	PCI/G
NWO/2(001)	RA-226DA	0.59	0.09	0.68	0.00	PCI/G
NWO/2(023)	RA-226DA	1.14	0.18	1.32	0.00	PCI/G
NWO/2(028)	RA-226DA	0.98	0.14	1.11	0.00	PCI/G
NWO/2(040)	RA-226DA	0.71	0.13	0.84	0.00	PCI/G
NWO/2(047)	RA-226DA	0.87	0.15	1.02	0.00	PCI/G
NWO/2(052)	RA-226DA	0.68	0.11	0.79	0.00	PCI/G
NWO/2(054)	RA-226DA	0.77	0.12	0.89	0.00	PCI/G
NWO/2(061)	RA-226DA	1.16	0.16	1.32	0.00	PCI/G
NWO/2(074)	RA-226DA	1.15	0.16	1.31	0.00	PCI/G
NWO/2(078)	RA-226DA	0.93	0.13	1.06	0.00	PCI/G
NWO/2(079)	RA-226DA	0.99	0.13	1.12	0.00	PCI/G
NWO/2(084)	RA-226DA	1.23	0.16	1.39	0.00	PCI/G
NWO/2(087)	RA-226DA	1.11	0.15	1.26	0.00	PCI/G
NWO/2(087)	RA-226DA	1.12	0.15	1.27	0.00	PCI/G
NWO/2(091)	RA-226DA	0.32	0.06	0.38	0.11	PCI/G
NWO/2(097)	RA-226DA	0.86	0.12	0.98	0.00	PCI/G
NWO/2(100)	RA-226DA	0.79	0.14	0.93	0.00	PCI/G
NWO/2(102)	RA-226DA	1.07	0.19	1.26	0.30	PCI/G
NWO/2(107)	RA-226DA	0.36	0.06	0.43	0.00	PCI/G
NWO/2(107)	RA-226DA	0.39	0.07	0.45	0.00	PCI/G
NWO/2(108)	RA-226DA	0.62	0.11	0.72	0.00	PCI/G
NWO/2(118)	RA-226DA	0.78	0.13	0.91	0.00	PCI/G
NWO/2(124)	RA-226DA	0.95	0.14	1.08	0.00	PCI/G
NWO/2(125)	RA-226DA	1.08	0.16	1.24	0.00	PCI/G
NWO/2(125)	RA-226DA	1.14	0.15	1.29	0.00	PCI/G
NWO/2(138)	RA-226DA	0.93	0.14	1.07	0.00	PCI/G
NWO/2(141)	RA-226DA	1.36	0.19	1.55	0.00	PCI/G
NWO/2(148)	RA-226DA	1.17	0.16	1.33	0.00	PCI/G
NWO/2(151)	RA-226DA	1.37	0.17	1.54	0.00	PCI/G
NWO/2(161)	RA-226DA	1.28	0.17	1.45	0.00	PCI/G
NWO/2(170)	RA-226DA	1.06	0.15	1.21	0.00	PCI/G
NWO/2(178)	RA-226DA	1.13	0.16	1.29	0.00	PCI/G
NWO/2(182)	RA-226DA	0.94	0.14	1.08	0.00	PCI/G
NWO/2(187)	RA-226DA	0.83	0.13	0.96	0.00	PCI/G

A.11. Summary Data of Gamma Spectroscopic Analysis of Surrounding Soils

Sample ID	Isotope	Result	Total Error	Result + Error	MDA	Unit
NW0/2(202)	RA-226DA	0.97	0.14	1.11	0.00	PCI/G
NW0/3(061)	RA-226DA	1.17	0.16	1.33	0.00	PCI/G
NW1/1(023)	RA-226DA	1.04	0.15	1.19	0.00	PCI/G
NW1/1(052)	RA-226DA	0.46	0.10	0.56	0.00	PCI/G
NW1/1(061)	RA-226DA	0.90	0.14	1.04	0.00	PCI/G
NW1/1(118)	RA-226DA	0.34	0.06	0.40	0.00	PCI/G
NW1/1(138)	RA-226DA	0.43	0.09	0.53	0.00	PCI/G
NW1/1(141)	RA-226DA	1.13	0.19	1.32	0.00	PCI/G
NW1/1(148)	RA-226DA	0.97	0.14	1.11	0.00	PCI/G
NW1/1(221)	RA-226DA	0.48	0.07	0.55	0.12	PCI/G
SE0/1(001)	RA-226DA	0.95	0.13	1.08	0.00	PCI/G
SE0/1(006)	RA-226DA	0.74	0.11	0.84	0.00	PCI/G
SE0/1(007)	RA-226DA	0.90	0.14	1.04	0.00	PCI/G
SE0/1(009)	RA-226DA	0.85	0.13	0.98	0.00	PCI/G
SE0/1(017)	RA-226DA	0.77	0.11	0.88	0.00	PCI/G
SE0/1(026)	RA-226DA	0.90	0.12	1.02	0.00	PCI/G
SE0/1(027)	RA-226DA	0.34	0.06	0.40	0.11	PCI/G
SE0/1(031)	RA-226DA	0.21	0.06	0.27	0.00	PCI/G
SE0/1(032)	RA-226DA	0.34	0.07	0.41	0.00	PCI/G
SE0/1(040)	RA-226DA	0.42	0.07	0.49	0.00	PCI/G
SE0/1(044)	RA-226DA	1.09	0.15	1.24	0.00	PCI/G
SE0/1(047)	RA-226DA	0.78	0.13	0.92	0.00	PCI/G
SE0/1(052)	RA-226DA	0.40	0.07	0.47	0.00	PCI/G
SE0/1(061)	RA-226DA	0.40	0.07	0.47	0.00	PCI/G
SE0/1(065)	RA-226DA	0.40	0.07	0.46	0.00	PCI/G
SE0/1(076)	RA-226DA	0.35	0.73	1.09	0.00	PCI/G
SE0/1(083)	RA-226DA	0.59	0.09	0.68	0.00	PCI/G
SE0/1(085)	RA-226DA	0.55	0.10	0.65	0.15	PCI/G
SE0/1(087)	RA-226DA	1.44	0.19	1.63	0.00	PCI/G
SE0/1(090)	RA-226DA	0.35	0.07	0.43	0.00	PCI/G
SE0/1(097)	RA-226DA	1.18	0.17	1.35	0.00	PCI/G
SE0/1(106)	RA-226DA	0.46	0.07	0.54	0.00	PCI/G
SE0/1(107)	RA-226DA	0.34	0.06	0.41	0.00	PCI/G
SE0/1(111)	RA-226DA	1.20	0.20	1.40	0.00	PCI/G
SE0/1(118)	RA-226DA	0.77	0.14	0.92	0.00	PCI/G
SE0/1(124)	RA-226DA	0.46	0.08	0.53	0.00	PCI/G
SE0/1(138)	RA-226DA	1.06	0.14	1.20	0.00	PCI/G
SE0/1(141)	RA-226DA	0.41	0.08	0.49	0.00	PCI/G
SE0/1(148)	RA-226DA	0.77	0.12	0.89	0.00	PCI/G
SE0/1(151)	RA-226DA	0.39	0.12	0.51	0.00	PCI/G
SE0/1(161)	RA-226DA	0.49	0.08	0.57	0.00	PCI/G
SE0/1(161)	RA-226DA	0.56	0.10	0.66	0.00	PCI/G
SE0/1(174)	RA-226DA	0.24	0.05	0.29	0.09	PCI/G
SE0/1(178)	RA-226DA	0.34	0.06	0.40	0.00	PCI/G
SE0/1(182)	RA-226DA	0.33	0.06	0.39	0.00	PCI/G
SE0/1(187)	RA-226DA	0.23	0.05	0.27	0.09	PCI/G
SE0/1(196)	RA-226DA	0.44	0.07	0.52	0.00	PCI/G
SE0/1(202)	RA-226DA	0.20	0.06	0.26	0.00	PCI/G
SE0/1(209)	RA-226DA	0.17	0.04	0.21	0.07	PCI/G

A.11. Summary Data of Gamma Spectroscopic Analysis of Surrounding Soils

Sample ID	Isotope	Result	Total Error	Result + Error	MDA	Unit
SEO/1(209)	RA-226DA	0.19	0.04	0.23	0.09	PCI/G
SEO/1(221)	RA-226DA	0.16	0.03	0.19	0.07	PCI/G
SEO/1(231)	RA-226DA	1.02	0.13	1.15	0.00	PCI/G
SEO/2(001)	RA-226DA	0.93	0.13	1.05	0.00	PCI/G
SEO/2(007)	RA-226DA	0.89	0.13	1.02	0.00	PCI/G
SEO/2(017)	RA-226DA	0.89	0.13	1.02	0.00	PCI/G
SEO/2(027)	RA-226DA	0.47	0.08	0.55	0.00	PCI/G
SEO/2(031)	RA-226DA	0.24	0.05	0.29	0.10	PCI/G
SEO/2(031)	RA-226DA	0.93	0.14	1.07	0.00	PCI/G
SEO/2(032)	RA-226DA	0.68	0.11	0.79	0.00	PCI/G
SEO/2(040)	RA-226DA	0.66	0.12	0.78	0.00	PCI/G
SEO/2(044)	RA-226DA	0.98	0.16	1.14	0.00	PCI/G
SEO/2(047)	RA-226DA	1.03	0.15	1.18	0.00	PCI/G
SEO/2(052)	RA-226DA	0.47	0.12	0.58	0.00	PCI/G
SEO/2(061)	RA-226DA	0.64	0.11	0.75	0.17	PCI/G
SEO/2(065)	RA-226DA	0.61	0.10	0.71	0.00	PCI/G
SEO/2(076)	RA-226DA	1.15	0.15	1.30	0.00	PCI/G
SEO/2(085)	RA-226DA	0.87	0.16	1.02	0.00	PCI/G
SEO/2(087)	RA-226DA	1.33	0.17	1.50	0.00	PCI/G
SEO/2(090)	RA-226DA	0.63	0.13	0.76	0.00	PCI/G
SEO/2(097)	RA-226DA	1.22	0.17	1.39	0.00	PCI/G
SEO/2(106)	RA-226DA	0.71	0.10	0.80	0.00	PCI/G
SEO/2(107)	RA-226DA	0.31	0.08	0.40	0.00	PCI/G
SEO/2(111)	RA-226DA	0.83	0.16	0.99	0.00	PCI/G
SEO/2(118)	RA-226DA	1.34	0.17	1.51	0.00	PCI/G
SEO/2(124)	RA-226DA	0.99	0.13	1.12	0.00	PCI/G
SEO/2(138)	RA-226DA	1.06	0.14	1.20	0.00	PCI/G
SEO/2(141)	RA-226DA	0.56	0.10	0.66	0.00	PCI/G
SEO/2(148)	RA-226DA	0.31	0.06	0.38	0.00	PCI/G
SEO/2(151)	RA-226DA	0.30	0.08	0.39	0.16	PCI/G
SEO/2(161)	RA-226DA	1.11	0.15	1.26	0.00	PCI/G
SEO/2(178)	RA-226DA	0.32	0.08	0.41	0.00	PCI/G
SEO/2(182)	RA-226DA	0.55	0.09	0.64	0.00	PCI/G
SEO/2(196)	RA-226DA	1.24	0.17	1.41	0.00	PCI/G
SEO/2(202)	RA-226DA	0.86	0.14	0.99	0.00	PCI/G
SEO/3(052)	RA-226DA	0.93	0.14	1.07	0.00	PCI/G
SEO/3(065)	RA-226DA	0.89	0.12	1.01	0.00	PCI/G
SEO/3(076)	RA-226DA	0.87	0.12	0.99	0.00	PCI/G
SE1/1(076)	RA-226DA	0.45	0.11	0.56	0.00	PCI/G
SE1/1(083)	RA-226DA	0.89	0.13	1.01	0.00	PCI/G
SWO/1(006)	RA-226DA	0.89	0.12	1.01	0.00	PCI/G
SWO/1(026)	RA-226DA	1.01	0.15	1.16	0.00	PCI/G
SWO/1(047)	RA-226DA	0.70	0.12	0.83	0.00	PCI/G
SWO/1(047)	RA-226DA	0.78	0.13	0.91	0.00	PCI/G
SWO/1(061)	RA-226DA	1.05	0.15	1.20	0.00	PCI/G
SWO/1(074)	RA-226DA	1.25	0.17	1.42	0.00	PCI/G
SWO/1(097)	RA-226DA	1.00	0.14	1.14	0.00	PCI/G
SWO/1(111)	RA-226DA	0.31	0.08	0.39	0.00	PCI/G
SWO/1(124)	RA-226DA	0.42	0.07	0.49	0.00	PCI/G

A.11. Summary Data of Gamma Spectroscopic Analysis of Surrounding Soils

Sample ID	Isotope	Result	Total Error	Result + Error	MDA	Unit
SW0/1(141)	RA-226DA	0.32	0.07	0.39	0.00	PCI/G
SW0/1(148)	RA-226DA	0.41	0.07	0.48	0.00	PCI/G
SW0/1(170)	RA-226DA	0.30	0.06	0.36	0.00	PCI/G
SW0/1(178)	RA-226DA	0.18	0.05	0.23	0.00	PCI/G
SW0/1(182)	RA-226DA	0.58	0.09	0.67	0.00	PCI/G
SW0/1(185)	RA-226DA	0.34	0.06	0.41	0.00	PCI/G
SW0/1(185)	RA-226DA	0.77	0.13	0.91	0.00	PCI/G
SW0/1(196)	RA-226DA	1.03	0.15	1.18	0.00	PCI/G
SW0/1(202)	RA-226DA	0.26	0.05	0.31	0.10	PCI/G
SW0/1(209)	RA-226DA	0.24	0.05	0.29	0.09	PCI/G
SW0/1(221)	RA-226DA	1.15	0.16	1.31	0.00	PCI/G
SW0/1(231)	RA-226DA	0.41	0.08	0.49	0.00	PCI/G
SW0/2(006)	RA-226DA	0.87	0.13	1.00	0.00	PCI/G
SW0/2(047)	RA-226DA	0.78	0.14	0.93	0.00	PCI/G
SW0/2(061)	RA-226DA	0.65	0.14	0.78	0.00	PCI/G
SW0/2(074)	RA-226DA	1.18	0.16	1.34	0.00	PCI/G
SW0/2(097)	RA-226DA	1.34	0.18	1.52	0.00	PCI/G
SW0/2(111)	RA-226DA	0.92	0.21	1.13	0.00	PCI/G
SW0/2(124)	RA-226DA	1.27	0.17	1.44	0.00	PCI/G
SW0/2(148)	RA-226DA	1.05	0.15	1.20	0.00	PCI/G
SW0/2(148)	RA-226DA	1.07	0.16	1.23	0.00	PCI/G
SW0/2(170)	RA-226DA	1.04	0.16	1.20	0.00	PCI/G
SW0/2(178)	RA-226DA	0.60	0.10	0.69	0.00	PCI/G
SW0/2(178)	RA-226DA	0.59	0.11	0.70	0.00	PCI/G
SW0/2(182)	RA-226DA	1.16	0.16	1.32	0.00	PCI/G
SW0/2(196)	RA-226DA	1.10	0.16	1.26	0.00	PCI/G
SW0/2(202)	RA-226DA	1.17	0.16	1.33	0.00	PCI/G
SW0/2(202)	RA-226DA	1.19	0.17	1.36	0.00	PCI/G
SW0/2(221)	RA-226DA	1.28	0.17	1.45	0.00	PCI/G
CC0/1(017)	TH-232DA	1.11	0.19	1.30	0.00	PCI/G
CC0/1(026)	TH-232DA	1.16	0.20	1.36	0.00	PCI/G
CC0/1(028)	TH-232DA	1.18	0.24	1.42	0.00	PCI/G
CC0/1(028)	TH-232DA	1.20	0.24	1.44	0.00	PCI/G
CC0/1(031)	TH-232DA	4.78	0.57	5.35	0.00	PCI/G
CC0/1(032)	TH-232DA	1.13	0.21	1.34	0.00	PCI/G
CC0/1(040)	TH-232DA	2.68	0.34	3.02	0.00	PCI/G
CC0/1(044)	TH-232DA	0.59	0.11	0.70	0.00	PCI/G
CC0/1(047)	TH-232DA	1.39	0.24	1.63	0.00	PCI/G
CC0/1(047)	TH-232DA	1.14	0.22	1.36	0.00	PCI/G
CC0/1(052)	TH-232DA	0.34	0.10	0.44	0.00	PCI/G
CC0/1(053)	TH-232DA	1.12	0.21	1.33	0.00	PCI/G
CC0/1(054)	TH-232DA	1.22	0.25	1.47	0.00	PCI/G
CC0/1(061)	TH-232DA	0.22	0.09	0.31	0.00	PCI/G
CC0/1(065)	TH-232DA	0.45	0.11	0.56	0.00	PCI/G
CC0/1(066)	TH-232DA	1.23	0.23	1.46	0.00	PCI/G
CC0/1(070)	TH-232DA	4.14	0.51	4.65	0.00	PCI/G
CC0/1(071)	TH-232DA	0.86	0.15	1.01	0.00	PCI/G
CC0/1(074)	TH-232DA	1.05	0.19	1.24	0.00	PCI/G
CC0/1(076)	TH-232DA	0.35	0.12	0.47	0.00	PCI/G

A.11. Summary Data of Gamma Spectroscopic Analysis of Surrounding Soils

Sample ID	Isotope	Result	Total Error	Result + Error	MDA	Unit
CC0/1(078)	TH-232DA	21.30	2.17	23.47	0.00	PCI/G
CC0/1(079)	TH-232DA	0.80	0.16	0.96	0.00	PCI/G
CC0/1(079)	TH-232DA	0.97	0.19	1.16	0.00	PCI/G
CC0/1(083)	TH-232DA	2.73	0.38	3.11	0.00	PCI/G
CC0/1(084)	TH-232DA	0.51	0.16	0.66	0.00	PCI/G
CC0/1(086)	TH-232DA	1.32	0.23	1.55	0.00	PCI/G
CC0/1(086)	TH-232DA	1.76	0.26	2.02	0.00	PCI/G
CC0/1(087)	TH-232DA	0.93	0.20	1.13	0.00	PCI/G
CC0/1(090)	TH-232DA	2.20	0.29	2.49	0.00	PCI/G
CC0/1(090)	TH-232DA	2.51	0.33	2.84	0.00	PCI/G
CC0/1(091)	TH-232DA	0.31	0.12	0.43	0.00	PCI/G
CC0/1(092)	TH-232DA	3.24	0.41	3.65	0.00	PCI/G
CC0/1(093)	TH-232DA	28.40	2.91	31.31	0.00	PCI/G
CC0/1(097)	TH-232DA	1.27	0.22	1.49	0.00	PCI/G
CC0/1(100)	TH-232DA	0.33	0.09	0.42	0.00	PCI/G
CC0/1(100)	TH-232DA	0.52	0.13	0.65	0.00	PCI/G
CC0/1(102)	TH-232DA	9.00	0.98	9.98	0.00	PCI/G
CC0/1(106)	TH-232DA	1.01	0.20	1.21	0.00	PCI/G
CC0/1(107)	TH-232DA	0.35	0.10	0.45	0.00	PCI/G
CC0/1(108)	TH-232DA	5.12	0.64	5.76	0.00	PCI/G
CC0/1(111)	TH-232DA	1.99	0.27	2.26	0.00	PCI/G
CC0/1(118)	TH-232DA	21.10	2.17	23.27	0.00	PCI/G
CC0/1(119)	TH-232DA	6.20	0.72	6.92	0.00	PCI/G
CC0/1(120)	TH-232DA	1.76	0.28	2.04	0.00	PCI/G
CC0/1(125)	TH-232DA	0.14	0.07	0.21	0.14	PCI/G
CC0/1(138)	TH-232DA	2.71	0.35	3.06	0.00	PCI/G
CC0/1(141)	TH-232DA	0.25	0.10	0.35	0.00	PCI/G
CC0/1(148)	TH-232DA	1.22	0.22	1.44	0.00	PCI/G
CC0/1(151)	TH-232DA	1.25	0.21	1.46	0.00	PCI/G
CC0/1(151)	TH-232DA	1.42	0.22	1.64	0.00	PCI/G
CC0/1(151)	TH-232DA	0.77	0.16	0.94	0.00	PCI/G
CC0/1(161)	TH-232DA	0.87	0.16	1.03	0.00	PCI/G
CC0/1(170)	TH-232DA	0.52	0.12	0.64	0.00	PCI/G
CC0/1(174)	TH-232DA	0.55	0.16	0.70	0.00	PCI/G
CC0/1(178)	TH-232DA	4.71	0.56	5.27	0.00	PCI/G
CC0/1(182)	TH-232DA	0.24	0.09	0.33	0.00	PCI/G
CC0/1(185)	TH-232DA	0.24	0.08	0.32	0.00	PCI/G
CC0/1(185)	TH-232DA	0.29	0.10	0.39	0.00	PCI/G
CC0/1(187)	TH-232DA	0.40	0.11	0.50	0.00	PCI/G
CC0/1(196)	TH-232DA	0.43	0.12	0.55	0.00	PCI/G
CC0/1(202)	TH-232DA	0.38	0.10	0.48	0.00	PCI/G
CC0/1(209)	TH-232DA	0.52	0.13	0.65	0.00	PCI/G
CC0/1(221)	TH-232DA	0.13	0.06	0.19	0.00	PCI/G
CC0/1(222)	TH-232DA	0.25	0.07	0.32	0.00	PCI/G
CC0/1(231)	TH-232DA	0.46	0.12	0.58	0.00	PCI/G
CC0/2(017)	TH-232DA	1.19	0.21	1.40	0.00	PCI/G
CC0/2(026)	TH-232DA	1.29	0.22	1.51	0.00	PCI/G
CC0/2(028)	TH-232DA	1.02	0.23	1.25	0.00	PCI/G
CC0/2(031)	TH-232DA	5.05	0.61	5.66	0.00	PCI/G

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A.11. Summary Data of Gamma Spectroscopic Analysis of Surrounding Soils

Sample ID	Isotope	Result	Total Error	Result + Error	MDA	Unit
CC0/2(032)	TH-232DA	1.17	0.23	1.40	0.00	PCI/G
CC0/2(040)	TH-232DA	0.70	0.15	0.85	0.00	PCI/G
CC0/2(044)	TH-232DA	1.47	0.24	1.71	0.00	PCI/G
CC0/2(047)	TH-232DA	1.34	0.23	1.57	0.00	PCI/G
CC0/2(052)	TH-232DA	3.48	0.41	3.89	0.00	PCI/G
CC0/2(053)	TH-232DA	0.77	0.17	0.94	0.00	PCI/G
CC0/2(054)	TH-232DA	1.22	0.24	1.46	0.00	PCI/G
CC0/2(061)	TH-232DA	8.65	0.94	9.59	0.00	PCI/G
CC0/2(065)	TH-232DA	0.92	0.18	1.10	0.00	PCI/G
CC0/2(066)	TH-232DA	1.17	0.23	1.40	0.00	PCI/G
CC0/2(070)	TH-232DA	1.71	0.27	1.98	0.00	PCI/G
CC0/2(071)	TH-232DA	0.85	0.16	1.01	0.00	PCI/G
CC0/2(071)	TH-232DA	1.14	0.20	1.34	0.00	PCI/G
CC0/2(074)	TH-232DA	1.03	0.19	1.22	0.00	PCI/G
CC0/2(076)	TH-232DA	0.91	0.18	1.09	0.00	PCI/G
CC0/2(078)	TH-232DA	1.24	0.22	1.46	0.00	PCI/G
CC0/2(078)	TH-232DA	41.90	4.26	46.16	0.00	PCI/G
CC0/2(079)	TH-232DA	0.76	0.17	0.93	0.00	PCI/G
CC0/2(083)	TH-232DA	1.52	0.26	1.78	0.00	PCI/G
CC0/2(084)	TH-232DA	2.79	0.39	3.18	0.00	PCI/G
CC0/2(086)	TH-232DA	1.62	0.29	1.91	0.00	PCI/G
CC0/2(087)	TH-232DA	0.91	0.19	1.10	0.00	PCI/G
CC0/2(090)	TH-232DA	1.76	0.27	2.03	0.00	PCI/G
CC0/2(091)	TH-232DA	6.16	0.70	6.86	0.00	PCI/G
CC0/2(092)	TH-232DA	2.73	0.37	3.10	0.00	PCI/G
CC0/2(097)	TH-232DA	1.03	0.19	1.22	0.00	PCI/G
CC0/2(100)	TH-232DA	13.80	1.43	15.23	0.00	PCI/G
CC0/2(102)	TH-232DA	18.60	1.94	20.54	0.00	PCI/G
CC0/2(106)	TH-232DA	0.68	0.14	0.82	0.00	PCI/G
CC0/2(107)	TH-232DA	5.93	0.68	6.61	0.00	PCI/G
CC0/2(108)	TH-232DA	1.28	0.23	1.51	0.00	PCI/G
CC0/2(111)	TH-232DA	0.64	0.16	0.79	0.00	PCI/G
CC0/2(118)	TH-232DA	5.17	0.62	5.79	0.00	PCI/G
CC0/2(119)	TH-232DA	5.03	0.59	5.62	0.00	PCI/G
CC0/2(120)	TH-232DA	28.10	2.87	30.97	0.00	PCI/G
CC0/2(124)	TH-232DA	1.28	0.21	1.49	0.00	PCI/G
CC0/2(124)	TH-232DA	1.31	0.24	1.55	0.00	PCI/G
CC0/2(125)	TH-232DA	1.05	0.22	1.27	0.00	PCI/G
CC0/2(138)	TH-232DA	1.72	0.31	2.03	0.00	PCI/G
CC0/2(141)	TH-232DA	0.49	0.15	0.63	0.00	PCI/G
CC0/2(148)	TH-232DA	1.15	0.20	1.35	0.00	PCI/G
CC0/2(151)	TH-232DA	1.57	0.32	1.89	0.00	PCI/G
CC0/2(161)	TH-232DA	2.11	0.28	2.39	0.00	PCI/G
CC0/2(163)	TH-232DA	1.76	0.28	2.04	0.00	PCI/G
CC0/2(170)	TH-232DA	1.38	0.23	1.61	0.00	PCI/G
CC0/2(182)	TH-232DA	0.29	0.09	0.38	0.00	PCI/G
CC0/2(187)	TH-232DA	1.50	0.26	1.76	0.00	PCI/G
CC0/2(202)	TH-232DA	1.13	0.20	1.33	0.00	PCI/G
CC0/2(209)	TH-232DA	1.22	0.22	1.44	0.00	PCI/G

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A.11. Summary Data of Gamma Spectroscopic Analysis of Surrounding Soils

Sample ID	Isotope	Result	Total Error	Result + Error	MDA	Unit
CC0/2(221)	TH-232DA	2.07	0.28	2.35	0.00	PCI/G
CC0/2(222)	TH-232DA	0.74	0.15	0.90	0.00	PCI/G
CC0/2(231)	TH-232DA	0.91	0.22	1.12	0.00	PCI/G
CC0/3(076)	TH-232DA	1.01	0.19	1.20	0.00	PCI/G
CC1/1(070)	TH-232DA	2.40	0.31	2.71	0.00	PCI/G
CC1/2(202)	TH-232DA	1.07	0.21	1.28	0.00	PCI/G
NE0/1(001)	TH-232DA	1.20	0.22	1.42	0.00	PCI/G
NE0/1(004)	TH-232DA	1.19	0.22	1.41	0.00	PCI/G
NE0/1(009)	TH-232DA	1.10	0.21	1.31	0.00	PCI/G
NE0/1(017)	TH-232DA	1.49	0.23	1.72	0.00	PCI/G
NE0/1(023)	TH-232DA	0.17	0.06	0.23	0.13	PCI/G
NE0/1(026)	TH-232DA	1.26	0.25	1.51	0.00	PCI/G
NE0/1(027)	TH-232DA	1.14	0.21	1.35	0.00	PCI/G
NE0/1(028)	TH-232DA	1.29	0.23	1.52	0.00	PCI/G
NE0/1(032)	TH-232DA	1.03	0.21	1.24	0.00	PCI/G
NE0/1(040)	TH-232DA	1.15	0.21	1.36	0.00	PCI/G
NE0/1(044)	TH-232DA	1.56	0.24	1.80	0.00	PCI/G
NE0/1(047)	TH-232DA	1.13	0.22	1.35	0.00	PCI/G
NE0/1(052)	TH-232DA	1.01	0.18	1.19	0.00	PCI/G
NE0/1(053)	TH-232DA	1.42	0.25	1.67	0.00	PCI/G
NE0/1(054)	TH-232DA	1.23	0.23	1.46	0.00	PCI/G
NE0/1(061)	TH-232DA	1.21	0.24	1.45	0.00	PCI/G
NE0/1(061)	TH-232DA	1.14	0.23	1.37	0.00	PCI/G
NE0/1(065)	TH-232DA	1.26	0.24	1.50	0.00	PCI/G
NE0/1(066)	TH-232DA	1.17	0.21	1.38	0.00	PCI/G
NE0/1(070)	TH-232DA	0.56	0.14	0.70	0.00	PCI/G
NE0/1(071)	TH-232DA	1.69	0.24	1.93	0.00	PCI/G
NE0/1(074)	TH-232DA	1.04	0.19	1.23	0.00	PCI/G
NE0/1(076)	TH-232DA	2.13	0.30	2.43	0.00	PCI/G
NE0/1(078)	TH-232DA	0.73	0.15	0.88	0.00	PCI/G
NE0/1(079)	TH-232DA	1.33	0.21	1.54	0.00	PCI/G
NE0/1(087)	TH-232DA	1.07	0.22	1.29	0.00	PCI/G
NE0/1(090)	TH-232DA	3.72	0.46	4.18	0.00	PCI/G
NE0/1(090)	TH-232DA	3.80	0.47	4.27	0.00	PCI/G
NE0/1(097)	TH-232DA	1.06	0.19	1.25	0.00	PCI/G
NE0/1(102)	TH-232DA	12.10	1.27	13.37	0.00	PCI/G
NE0/1(106)	TH-232DA	0.26	0.11	0.37	0.00	PCI/G
NE0/1(107)	TH-232DA	2.66	0.36	3.02	0.00	PCI/G
NE0/1(111)	TH-232DA	1.25	0.25	1.50	0.00	PCI/G
NE0/1(111)	TH-232DA	1.30	0.22	1.52	0.00	PCI/G
NE0/1(118)	TH-232DA	11.60	1.25	12.85	0.00	PCI/G
NE0/1(119)	TH-232DA	3.21	0.40	3.61	0.00	PCI/G
NE0/1(120)	TH-232DA	0.56	0.11	0.67	0.00	PCI/G
NE0/1(124)	TH-232DA	0.48	0.12	0.61	0.00	PCI/G
NE0/1(124)	TH-232DA	0.48	0.13	0.62	0.00	PCI/G
NE0/1(125)	TH-232DA	0.35	0.09	0.45	0.00	PCI/G
NE0/1(138)	TH-232DA	0.41	0.09	0.50	0.00	PCI/G
NE0/1(141)	TH-232DA	0.66	0.14	0.80	0.00	PCI/G
NE0/1(151)	TH-232DA	0.96	0.16	1.12	0.00	PCI/G

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A.11. Summary Data of Gamma Spectroscopic Analysis of Surrounding Soils

Sample ID	Isotope	Result	Total Error	Result + Error	MDA	Unit
NEO/1(161)	TH-232DA	0.56	0.10	0.66	0.00	PCI/G
NEO/1(163)	TH-232DA	29.80	3.07	32.87	0.00	PCI/G
NEO/1(163)	TH-232DA	31.20	3.22	34.42	0.00	PCI/G
NEO/1(174)	TH-232DA	0.45	0.11	0.55	0.00	PCI/G
NEO/1(178)	TH-232DA	0.94	0.17	1.10	0.00	PCI/G
NEO/1(182)	TH-232DA	1.01	0.19	1.20	0.00	PCI/G
NEO/1(185)	TH-232DA	0.22	0.08	0.30	0.00	PCI/G
NEO/1(187)	TH-232DA	1.96	0.30	2.26	0.00	PCI/G
NEO/1(196)	TH-232DA	1.23	0.23	1.46	0.00	PCI/G
NEO/1(202)	TH-232DA	0.56	0.12	0.68	0.00	PCI/G
NEO/1(209)	TH-232DA	1.12	0.21	1.33	0.00	PCI/G
NEO/1(209)	TH-232DA	1.13	0.23	1.36	0.00	PCI/G
NEO/1(221)	TH-232DA	0.20	0.07	0.27	0.00	PCI/G
NEO/1(222)	TH-232DA	0.10	0.06	0.16	0.00	PCI/G
NEO/1(231)	TH-232DA	0.47	0.12	0.59	0.00	PCI/G
NEO/2(001)	TH-232DA	0.88	0.16	1.05	0.00	PCI/G
NEO/2(017)	TH-232DA	1.38	0.22	1.60	0.00	PCI/G
NEO/2(023)	TH-232DA	2.01	0.29	2.30	0.00	PCI/G
NEO/2(026)	TH-232DA	1.26	0.24	1.50	0.00	PCI/G
NEO/2(026)	TH-232DA	1.55	0.25	1.80	0.00	PCI/G
NEO/2(027)	TH-232DA	1.17	0.20	1.37	0.00	PCI/G
NEO/2(028)	TH-232DA	1.12	0.23	1.35	0.00	PCI/G
NEO/2(032)	TH-232DA	1.14	0.25	1.39	0.00	PCI/G
NEO/2(040)	TH-232DA	0.68	0.15	0.83	0.00	PCI/G
NEO/2(047)	TH-232DA	1.19	0.21	1.40	0.00	PCI/G
NEO/2(052)	TH-232DA	0.63	0.17	0.80	0.00	PCI/G
NEO/2(052)	TH-232DA	0.71	0.15	0.85	0.00	PCI/G
NEO/2(053)	TH-232DA	1.24	0.25	1.49	0.00	PCI/G
NEO/2(054)	TH-232DA	1.22	0.25	1.47	0.00	PCI/G
NEO/2(054)	TH-232DA	1.08	0.24	1.32	0.00	PCI/G
NEO/2(061)	TH-232DA	0.99	0.20	1.19	0.00	PCI/G
NEO/2(065)	TH-232DA	1.24	0.22	1.46	0.00	PCI/G
NEO/2(066)	TH-232DA	0.94	0.16	1.11	0.00	PCI/G
NEO/2(070)	TH-232DA	0.77	0.18	0.94	0.00	PCI/G
NEO/2(071)	TH-232DA	1.22	0.19	1.41	0.00	PCI/G
NEO/2(074)	TH-232DA	0.74	0.14	0.88	0.00	PCI/G
NEO/2(076)	TH-232DA	1.91	0.27	2.18	0.00	PCI/G
NEO/2(078)	TH-232DA	0.68	0.15	0.84	0.00	PCI/G
NEO/2(079)	TH-232DA	1.13	0.19	1.32	0.00	PCI/G
NEO/2(087)	TH-232DA	0.81	0.16	0.97	0.00	PCI/G
NEO/2(090)	TH-232DA	2.55	0.37	2.92	0.00	PCI/G
NEO/2(097)	TH-232DA	1.23	0.25	1.48	0.00	PCI/G
NEO/2(102)	TH-232DA	111.00	11.10	122.10	0.00	PCI/G
NEO/2(106)	TH-232DA	0.36	0.10	0.46	0.00	PCI/G
NEO/2(107)	TH-232DA	1.80	0.28	2.08	0.00	PCI/G
NEO/2(111)	TH-232DA	0.75	0.19	0.93	0.00	PCI/G
NEO/2(118)	TH-232DA	4.87	0.60	5.47	0.00	PCI/G
NEO/2(119)	TH-232DA	1.26	0.23	1.49	0.00	PCI/G
NEO/2(120)	TH-232DA	1.17	0.19	1.36	0.00	PCI/G

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A.11. Summary Data of Gamma Spectroscopic Analysis of Surrounding Soils

Sample ID	Isotope	Result	Total Error	Result + Error	MDA	Unit
NE0/2(124)	TH-232DA	1.11	0.24	1.35	0.00	PCI/G
NE0/2(125)	TH-232DA	1.23	0.21	1.44	0.00	PCI/G
NE0/2(141)	TH-232DA	1.13	0.22	1.35	0.00	PCI/G
NE0/2(148)	TH-232DA	1.23	0.25	1.48	0.00	PCI/G
NE0/2(148)	TH-232DA	1.33	0.25	1.58	0.00	PCI/G
NE0/2(163)	TH-232DA	11.60	1.24	12.84	0.00	PCI/G
NE0/2(174)	TH-232DA	0.85	0.19	1.03	0.00	PCI/G
NE0/2(178)	TH-232DA	7.29	0.80	8.09	0.00	PCI/G
NE0/2(182)	TH-232DA	1.12	0.21	1.33	0.00	PCI/G
NE0/2(202)	TH-232DA	9.35	0.99	10.34	0.00	PCI/G
NE0/2(221)	TH-232DA	0.48	0.13	0.60	0.00	PCI/G
NE1/1(023)	TH-232DA	0.19	0.08	0.27	0.16	PCI/G
NE1/1(074)	TH-232DA	0.99	0.19	1.18	0.00	PCI/G
NE1/1(178)	TH-232DA	1.26	0.21	1.47	0.00	PCI/G
NE1/2(023)	TH-232DA	2.22	0.32	2.54	0.00	PCI/G
NW0/1(001)	TH-232DA	0.35	0.13	0.48	0.00	PCI/G
NW0/1(017)	TH-232DA	1.12	0.23	1.35	0.00	PCI/G
NW0/1(023)	TH-232DA	1.25	0.24	1.49	0.00	PCI/G
NW0/1(023)	TH-232DA	1.40	0.23	1.63	0.00	PCI/G
NW0/1(026)	TH-232DA	1.02	0.16	1.18	0.00	PCI/G
NW0/1(028)	TH-232DA	1.27	0.25	1.52	0.00	PCI/G
NW0/1(040)	TH-232DA	1.20	0.20	1.40	0.00	PCI/G
NW0/1(047)	TH-232DA	1.50	0.27	1.77	0.00	PCI/G
NW0/1(052)	TH-232DA	0.45	0.13	0.58	0.00	PCI/G
NW0/1(053)	TH-232DA	1.49	0.25	1.74	0.00	PCI/G
NW0/1(054)	TH-232DA	0.98	0.23	1.21	0.00	PCI/G
NW0/1(061)	TH-232DA	1.25	0.25	1.50	0.00	PCI/G
NW0/1(074)	TH-232DA	1.27	0.23	1.50	0.00	PCI/G
NW0/1(078)	TH-232DA	0.94	0.17	1.12	0.00	PCI/G
NW0/1(079)	TH-232DA	2.56	0.34	2.90	0.00	PCI/G
NW0/1(084)	TH-232DA	7.51	0.83	8.34	0.00	PCI/G
NW0/1(087)	TH-232DA	1.09	0.19	1.28	0.00	PCI/G
NW0/1(091)	TH-232DA	0.27	0.09	0.36	0.00	PCI/G
NW0/1(092)	TH-232DA	7.85	0.88	8.73	0.00	PCI/G
NW0/1(097)	TH-232DA	0.96	0.18	1.14	0.00	PCI/G
NW0/1(100)	TH-232DA	4.44	0.52	4.96	0.00	PCI/G
NW0/1(102)	TH-232DA	19.90	2.07	21.97	0.00	PCI/G
NW0/1(107)	TH-232DA	1.57	0.26	1.83	0.00	PCI/G
NW0/1(108)	TH-232DA	0.41	0.10	0.51	0.00	PCI/G
NW0/1(108)	TH-232DA	0.59	0.14	0.73	0.00	PCI/G
NW0/1(118)	TH-232DA	0.65	0.11	0.76	0.00	PCI/G
NW0/1(124)	TH-232DA	0.50	0.11	0.61	0.00	PCI/G
NW0/1(125)	TH-232DA	0.52	0.13	0.65	0.00	PCI/G
NW0/1(138)	TH-232DA	0.28	0.09	0.37	0.00	PCI/G
NW0/1(141)	TH-232DA	18.70	1.96	20.66	0.00	PCI/G
NW0/1(141)	TH-232DA	21.20	2.16	23.36	0.00	PCI/G
NW0/1(148)	TH-232DA	1.41	0.22	1.63	0.00	PCI/G
NW0/1(148)	TH-232DA	1.15	0.20	1.35	0.00	PCI/G
NW0/1(151)	TH-232DA	1.18	0.20	1.38	0.00	PCI/G

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A.11. Summary Data of Gamma Spectroscopic Analysis of Surrounding Soils

Sample ID	Isotope	Result	Total Error	Result + Error	MDA	Unit
NWO/1(161)	TH-232DA	0.40	0.11	0.51	0.00	PCI/G
NWO/1(170)	TH-232DA	0.39	0.13	0.53	0.00	PCI/G
NWO/1(174)	TH-232DA	0.53	0.15	0.68	0.00	PCI/G
NWO/1(178)	TH-232DA	2.47	0.34	2.81	0.00	PCI/G
NWO/1(182)	TH-232DA	0.25	0.14	0.40	0.00	PCI/G
NWO/1(187)	TH-232DA	1.31	0.21	1.52	0.00	PCI/G
NWO/1(196)	TH-232DA	1.33	0.24	1.57	0.00	PCI/G
NWO/1(202)	TH-232DA	0.60	0.13	0.73	0.00	PCI/G
NWO/1(209)	TH-232DA	0.75	0.16	0.91	0.00	PCI/G
NWO/1(221)	TH-232DA	5.04	0.59	5.63	0.00	PCI/G
NWO/1(222)	TH-232DA	0.13	0.07	0.20	0.00	PCI/G
NWO/1(231)	TH-232DA	0.57	0.11	0.69	0.00	PCI/G
NWO/2(001)	TH-232DA	1.68	0.22	1.90	0.00	PCI/G
NWO/2(001)	TH-232DA	1.72	0.23	1.95	0.00	PCI/G
NWO/2(023)	TH-232DA	1.43	0.26	1.69	0.00	PCI/G
NWO/2(028)	TH-232DA	1.15	0.23	1.38	0.00	PCI/G
NWO/2(040)	TH-232DA	1.17	0.22	1.39	0.00	PCI/G
NWO/2(047)	TH-232DA	1.33	0.24	1.57	0.00	PCI/G
NWO/2(052)	TH-232DA	3.23	0.40	3.63	0.00	PCI/G
NWO/2(054)	TH-232DA	1.04	0.21	1.25	0.00	PCI/G
NWO/2(061)	TH-232DA	1.17	0.24	1.41	0.00	PCI/G
NWO/2(074)	TH-232DA	1.22	0.23	1.45	0.00	PCI/G
NWO/2(078)	TH-232DA	1.10	0.20	1.30	0.00	PCI/G
NWO/2(079)	TH-232DA	1.55	0.23	1.78	0.00	PCI/G
NWO/2(084)	TH-232DA	4.32	0.51	4.83	0.00	PCI/G
NWO/2(087)	TH-232DA	1.10	0.22	1.32	0.00	PCI/G
NWO/2(087)	TH-232DA	1.12	0.23	1.35	0.00	PCI/G
NWO/2(091)	TH-232DA	1.37	0.20	1.57	0.00	PCI/G
NWO/2(097)	TH-232DA	0.64	0.17	0.81	0.00	PCI/G
NWO/2(100)	TH-232DA	3.99	0.49	4.48	0.00	PCI/G
NWO/2(102)	TH-232DA	35.20	3.62	38.82	0.00	PCI/G
NWO/2(107)	TH-232DA	0.23	0.07	0.31	0.00	PCI/G
NWO/2(107)	TH-232DA	0.25	0.07	0.32	0.00	PCI/G
NWO/2(108)	TH-232DA	3.25	0.44	3.69	0.00	PCI/G
NWO/2(118)	TH-232DA	5.94	0.66	6.60	0.00	PCI/G
NWO/2(124)	TH-232DA	1.22	0.20	1.42	0.00	PCI/G
NWO/2(125)	TH-232DA	1.24	0.21	1.45	0.00	PCI/G
NWO/2(125)	TH-232DA	1.41	0.22	1.63	0.00	PCI/G
NWO/2(138)	TH-232DA	4.76	0.56	5.32	0.00	PCI/G
NWO/2(141)	TH-232DA	4.20	0.50	4.70	0.00	PCI/G
NWO/2(148)	TH-232DA	1.41	0.22	1.63	0.00	PCI/G
NWO/2(151)	TH-232DA	1.39	0.24	1.63	0.00	PCI/G
NWO/2(161)	TH-232DA	1.67	0.26	1.93	0.00	PCI/G
NWO/2(170)	TH-232DA	1.10	0.25	1.35	0.00	PCI/G
NWO/2(178)	TH-232DA	1.16	0.25	1.41	0.00	PCI/G
NWO/2(182)	TH-232DA	1.02	0.22	1.24	0.00	PCI/G
NWO/2(187)	TH-232DA	1.07	0.21	1.28	0.00	PCI/G
NWO/2(202)	TH-232DA	0.96	0.19	1.15	0.00	PCI/G
NWO/3(061)	TH-232DA	1.05	0.22	1.27	0.00	PCI/G

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A.11. Summary Data of Gamma Spectroscopic Analysis of Surrounding Soils

Sample ID	Isotope	Result	Total Error	Result + Error	MDA	Unit
NW1/1(023)	TH-232DA	1.25	0.23	1.48	0.00	PCI/G
NW1/1(052)	TH-232DA	2.60	0.34	2.94	0.00	PCI/G
NW1/1(061)	TH-232DA	1.13	0.21	1.34	0.00	PCI/G
NW1/1(118)	TH-232DA	1.04	0.16	1.20	0.00	PCI/G
NW1/1(138)	TH-232DA	2.22	0.31	2.53	0.00	PCI/G
NW1/1(141)	TH-232DA	16.50	1.72	18.22	0.00	PCI/G
NW1/1(148)	TH-232DA	1.05	0.20	1.25	0.00	PCI/G
NW1/1(221)	TH-232DA	2.68	0.33	3.01	0.00	PCI/G
SE0/1(001)	TH-232DA	1.46	0.23	1.69	0.00	PCI/G
SE0/1(009)	TH-232DA	1.17	0.21	1.38	0.00	PCI/G
SE0/1(026)	TH-232DA	1.20	0.23	1.43	0.00	PCI/G
SE0/1(027)	TH-232DA	0.35	0.12	0.47	0.00	PCI/G
SE0/1(031)	TH-232DA	0.25	0.12	0.36	0.00	PCI/G
SE0/1(032)	TH-232DA	1.39	0.19	1.58	0.00	PCI/G
SE0/1(040)	TH-232DA	0.76	0.15	0.91	0.00	PCI/G
SE0/1(044)	TH-232DA	1.06	0.20	1.26	0.00	PCI/G
SE0/1(047)	TH-232DA	1.00	0.21	1.21	0.00	PCI/G
SE0/1(052)	TH-232DA	0.21	0.10	0.31	0.00	PCI/G
SE0/1(061)	TH-232DA	0.90	0.14	1.04	0.00	PCI/G
SE0/1(065)	TH-232DA	0.40	0.10	0.50	0.00	PCI/G
SE0/1(076)	TH-232DA	0.80	0.15	0.95	0.00	PCI/G
SE0/1(083)	TH-232DA	0.82	0.15	0.96	0.00	PCI/G
SE0/1(085)	TH-232DA	16.50	1.70	18.20	0.00	PCI/G
SE0/1(087)	TH-232DA	6.90	0.76	7.66	0.00	PCI/G
SE0/1(090)	TH-232DA	0.22	0.09	0.30	0.00	PCI/G
SE0/1(097)	TH-232DA	1.08	0.21	1.29	0.00	PCI/G
SE0/1(106)	TH-232DA	0.32	0.09	0.42	0.00	PCI/G
SE0/1(107)	TH-232DA	0.27	0.09	0.36	0.00	PCI/G
SE0/1(111)	TH-232DA	22.00	2.28	24.28	0.00	PCI/G
SE0/1(118)	TH-232DA	6.65	0.77	7.42	0.00	PCI/G
SE0/1(124)	TH-232DA	0.15	0.07	0.22	0.00	PCI/G
SE0/1(138)	TH-232DA	1.33	0.25	1.58	0.00	PCI/G
SE0/1(141)	TH-232DA	2.02	0.29	2.31	0.00	PCI/G
SE0/1(148)	TH-232DA	0.72	0.18	0.90	0.00	PCI/G
SE0/1(151)	TH-232DA	2.81	0.40	3.21	0.00	PCI/G
SE0/1(161)	TH-232DA	1.10	0.18	1.28	0.00	PCI/G
SE0/1(161)	TH-232DA	1.18	0.21	1.39	0.00	PCI/G
SE0/1(174)	TH-232DA	0.30	0.07	0.37	0.00	PCI/G
SE0/1(178)	TH-232DA	0.29	0.10	0.38	0.00	PCI/G
SE0/1(182)	TH-232DA	0.27	0.08	0.34	0.00	PCI/G
SE0/1(187)	TH-232DA	0.19	0.07	0.26	0.14	PCI/G
SE0/1(196)	TH-232DA	1.03	0.18	1.21	0.00	PCI/G
SE0/1(202)	TH-232DA	0.49	0.12	0.60	0.00	PCI/G
SE0/1(209)	TH-232DA	0.12	0.05	0.17	0.10	PCI/G
SE0/1(231)	TH-232DA	1.01	0.18	1.19	0.00	PCI/G
SE0/2(001)	TH-232DA	1.32	0.21	1.53	0.00	PCI/G
SE0/2(027)	TH-232DA	2.16	0.30	2.46	0.00	PCI/G
SE0/2(031)	TH-232DA	1.21	0.22	1.43	0.00	PCI/G
SE0/2(031)	TH-232DA	0.35	0.12	0.47	0.00	PCI/G

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A.11. Summary Data of Gamma Spectroscopic Analysis of Surrounding Soils

Sample ID	Isotope	Result	Total Error	Result + Error	MDA	Unit
SE0/2(032)	TH-232DA	1.83	0.29	2.12	0.00	PCI/G
SE0/2(040)	TH-232DA	2.20	0.30	2.50	0.00	PCI/G
SE0/2(044)	TH-232DA	1.53	0.27	1.80	0.00	PCI/G
SE0/2(047)	TH-232DA	1.51	0.24	1.75	0.00	PCI/G
SE0/2(052)	TH-232DA	6.25	0.71	6.96	0.00	PCI/G
SE0/2(061)	TH-232DA	11.80	1.26	13.06	0.00	PCI/G
SE0/2(065)	TH-232DA	0.99	0.16	1.15	0.00	PCI/G
SE0/2(076)	TH-232DA	1.36	0.23	1.59	0.00	PCI/G
SE0/2(085)	TH-232DA	4.95	0.60	5.55	0.00	PCI/G
SE0/2(087)	TH-232DA	4.21	0.49	4.70	0.00	PCI/G
SE0/2(090)	TH-232DA	5.27	0.61	5.88	0.00	PCI/G
SE0/2(097)	TH-232DA	1.21	0.26	1.47	0.00	PCI/G
SE0/2(106)	TH-232DA	0.57	0.13	0.70	0.00	PCI/G
SE0/2(107)	TH-232DA	1.83	0.25	2.08	0.00	PCI/G
SE0/2(111)	TH-232DA	6.11	0.69	6.80	0.00	PCI/G
SE0/2(118)	TH-232DA	1.73	0.27	2.00	0.00	PCI/G
SE0/2(124)	TH-232DA	0.88	0.16	1.05	0.00	PCI/G
SE0/2(138)	TH-232DA	2.40	0.33	2.73	0.00	PCI/G
SE0/2(141)	TH-232DA	1.57	0.24	1.81	0.00	PCI/G
SE0/2(148)	TH-232DA	0.29	0.12	0.41	0.00	PCI/G
SE0/2(151)	TH-232DA	1.34	0.24	1.58	0.00	PCI/G
SE0/2(161)	TH-232DA	1.24	0.22	1.46	0.00	PCI/G
SE0/2(178)	TH-232DA	1.02	0.20	1.22	0.00	PCI/G
SE0/2(182)	TH-232DA	0.43	0.11	0.53	0.00	PCI/G
SE0/2(196)	TH-232DA	1.65	0.26	1.91	0.00	PCI/G
SE0/2(202)	TH-232DA	1.23	0.21	1.44	0.00	PCI/G
SE0/3(052)	TH-232DA	1.87	0.30	2.17	0.00	PCI/G
SE0/3(065)	TH-232DA	0.94	0.20	1.14	0.00	PCI/G
SE0/3(076)	TH-232DA	0.76	0.17	0.92	0.00	PCI/G
SE1/1(076)	TH-232DA	1.02	0.20	1.22	0.00	PCI/G
SE1/1(083)	TH-232DA	1.12	0.21	1.33	0.00	PCI/G
SW0/1(006)	TH-232DA	1.14	0.20	1.34	0.00	PCI/G
SW0/1(026)	TH-232DA	1.60	0.28	1.88	0.00	PCI/G
SW0/1(047)	TH-232DA	1.07	0.29	1.36	0.00	PCI/G
SW0/1(047)	TH-232DA	1.17	0.21	1.38	0.00	PCI/G
SW0/1(061)	TH-232DA	1.68	0.27	1.95	0.00	PCI/G
SW0/1(074)	TH-232DA	1.13	0.22	1.35	0.00	PCI/G
SW0/1(097)	TH-232DA	0.98	0.20	1.18	0.00	PCI/G
SW0/1(111)	TH-232DA	1.04	0.18	1.22	0.00	PCI/G
SW0/1(124)	TH-232DA	0.80	0.14	0.95	0.00	PCI/G
SW0/1(141)	TH-232DA	0.50	0.12	0.62	0.00	PCI/G
SW0/1(148)	TH-232DA	0.38	0.13	0.51	0.00	PCI/G
SW0/1(170)	TH-232DA	0.18	0.13	0.32	0.00	PCI/G
SW0/1(178)	TH-232DA	0.22	0.07	0.29	0.00	PCI/G
SW0/1(182)	TH-232DA	0.44	0.12	0.56	0.00	PCI/G
SW0/1(185)	TH-232DA	4.95	0.58	5.53	0.00	PCI/G
SW0/1(185)	TH-232DA	0.34	0.09	0.44	0.00	PCI/G
SW0/1(196)	TH-232DA	1.58	0.26	1.84	0.00	PCI/G
SW0/1(202)	TH-232DA	0.50	0.12	0.62	0.00	PCI/G

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A.11. Summary Data of Gamma Spectroscopic Analysis of Surrounding Soils

Sample ID	Isotope	Result	Total Error	Result + Error	MDA	Unit
SW0/1(209)	TH-232DA	0.08	0.05	0.13	0.00	PCI/G
SW0/1(221)	TH-232DA	4.25	0.51	4.76	0.00	PCI/G
SW0/1(231)	TH-232DA	0.31	0.11	0.42	0.00	PCI/G
SW0/2(006)	TH-232DA	1.27	0.22	1.49	0.00	PCI/G
SW0/2(047)	TH-232DA	1.06	0.24	1.30	0.00	PCI/G
SW0/2(061)	TH-232DA	0.96	0.19	1.15	0.00	PCI/G
SW0/2(074)	TH-232DA	1.13	0.22	1.35	0.00	PCI/G
SW0/2(097)	TH-232DA	1.54	0.26	1.80	0.00	PCI/G
SW0/2(111)	TH-232DA	62.40	6.28	68.68	0.00	PCI/G
SW0/2(124)	TH-232DA	1.19	0.21	1.40	0.00	PCI/G
SW0/2(148)	TH-232DA	0.77	0.27	1.05	0.00	PCI/G
SW0/2(148)	TH-232DA	1.06	0.20	1.26	0.00	PCI/G
SW0/2(170)	TH-232DA	1.18	0.25	1.43	0.00	PCI/G
SW0/2(178)	TH-232DA	1.52	0.23	1.75	0.00	PCI/G
SW0/2(178)	TH-232DA	1.53	0.23	1.76	0.00	PCI/G
SW0/2(182)	TH-232DA	1.36	0.27	1.63	0.00	PCI/G
SW0/2(196)	TH-232DA	1.29	0.24	1.53	0.00	PCI/G
SW0/2(202)	TH-232DA	1.22	0.22	1.44	0.00	PCI/G
SW0/2(202)	TH-232DA	1.42	0.24	1.66	0.00	PCI/G
SW0/2(221)	TH-232DA	1.43	0.24	1.67	0.00	PCI/G

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Total: 1215.93 ÷ 432 samples = 2.81 pCi/g.

2.81E-12 Ci/g.

.00000000000281

A.12. Summary Data of Alpha Spectroscopic Analyses of Surrounding Soils

A.12. Summary of Alpha Spectroscopic Analysis of Surrounding Soils

Sample Id	Isotope	Result	Total error	Result + Error	MDA	Unit
CC0/2(047)	CS-137DA	0.04	0.05	0.09	0.00	PCI/G
NE0/1(078)	CS-137DA	0.04	0.03	0.08	0.00	PCI/G
NE0/2(107)	CS-137DA	0.25	0.05	0.30	0.00	PCI/G
NW0/1(023)	CS-137DA	0.09	0.05	0.14	0.00	PCI/G
NW0/1(023)	CS-137DA	0.07	0.04	0.11	0.00	PCI/G
NW0/2(161)	CS-137DA	0.09	0.03	0.12	0.05	PCI/G
NW1/1(148)	CS-137DA	0.22	0.05	0.26	0.00	PCI/G
SE0/1(065)	CS-137DA	0.09	0.03	0.13	0.00	PCI/G
SE0/3(052)	CS-137DA	0.10	0.05	0.14	0.00	PCI/G
CC0/1(052)	PU-238	2.15	0.61	2.76	0.02	PCI/G
CC0/1(187)	PU-238	0.07	0.06	0.13	0.04	PCI/G
CC0/2(047)	PU-238	0.23	0.08	0.30	0.02	PCI/G
CC0/2(076)	PU-238	0.03	0.02	0.05	0.02	PCI/G
NE0/1(023)	PU-238	0.22	0.12	0.34	0.06	PCI/G
NE0/1(078)	PU-238	0.38	0.12	0.50	0.04	PCI/G
NE0/1(078)	PU-238	0.35	0.11	0.46	0.02	PCI/G
NE0/1(196)	PU-238	0.10	0.06	0.15	0.03	PCI/G
NE0/2(107)	PU-238	1.59	0.63	2.22	0.14	PCI/G
NE1/1(023)	PU-238	0.13	0.09	0.21	0.03	PCI/G
NE1/1(023)	PU-238	0.16	0.14	0.30	0.12	PCI/G
NW0/1(023)	PU-238	0.14	0.06	0.20	0.03	PCI/G
NW0/1(138)	PU-238	0.39	0.15	0.54	0.05	PCI/G
NW0/2(161)	PU-238	0.07	0.07	0.15	0.07	PCI/G
NW1/1(148)	PU-238	15.90	2.85	18.75	0.03	PCI/G
SE0/1(065)	PU-238	2.62	0.54	3.16	0.03	PCI/G
SE0/1(083)	PU-238	0.33	0.20	0.53	0.06	PCI/G
SE0/3(052)	PU-238	6.17	1.94	8.11	0.11	PCI/G
CC0/2(076)	PU239/40	0.23	0.10	0.33	0.03	PCI/G
NW1/1(148)	PU239/40	0.17	0.07	0.24	0.03	PCI/G
CC0/1(187)	RA-224DA	0.31	0.07	0.38	0.00	PCI/G
CC0/2(047)	RA-224DA	1.22	0.14	1.36	0.00	PCI/G
CC0/2(076)	RA-224DA	0.99	0.12	1.10	0.00	PCI/G
NE0/1(023)	RA-224DA	0.12	0.03	0.16	0.00	PCI/G
NE0/1(078)	RA-224DA	0.68	0.08	0.77	0.00	PCI/G
NE0/1(196)	RA-224DA	1.42	0.16	1.58	0.00	PCI/G
NE0/2(107)	RA-224DA	1.98	0.22	2.20	0.00	PCI/G
NW0/1(023)	RA-224DA	1.42	0.17	1.59	0.00	PCI/G

A.12. Summary of Alpha Spectroscopic Analysis of Surrounding Soils

Sample ID	Isotope	Result	Total error	Result + Error	MDA	Unit
NW0/1(023)	RA-224DA	1.40	0.16	1.56	0.00	PCI/G
NW0/1(138)	RA-224DA	0.30	0.05	0.35	0.00	PCI/G
NW0/2(161)	RA-224DA	1.80	0.20	2.00	0.00	PCI/G
NW1/1(148)	RA-224DA	1.11	0.13	1.24	0.00	PCI/G
SE0/1(065)	RA-224DA	0.35	0.05	0.41	0.00	PCI/G
SE0/3(052)	RA-224DA	2.02	0.22	2.24	0.00	PCI/G
CC0/1(187)	RA-226DA	0.35	0.07	0.42	0.00	PCI/G
CC0/2(047)	RA-226DA	0.90	0.13	1.03	0.00	PCI/G
CC0/2(076)	RA-226DA	1.03	0.14	1.17	0.00	PCI/G
NE0/1(023)	RA-226DA	0.28	0.05	0.33	0.10	PCI/G
NE0/1(078)	RA-226DA	0.64	0.10	0.74	0.00	PCI/G
NE0/1(196)	RA-226DA	1.21	0.17	1.38	0.00	PCI/G
NE0/2(107)	RA-226DA	0.83	0.13	0.96	0.00	PCI/G
NW0/1(023)	RA-226DA	1.09	0.16	1.25	0.00	PCI/G
NW0/1(023)	RA-226DA	1.20	0.17	1.37	0.00	PCI/G
NW0/1(138)	RA-226DA	0.33	0.05	0.38	0.10	PCI/G
NW0/2(161)	RA-226DA	1.28	0.17	1.45	0.00	PCI/G
NW1/1(148)	RA-226DA	0.97	0.14	1.11	0.00	PCI/G
SE0/1(065)	RA-226DA	0.40	0.07	0.46	0.00	PCI/G
SE0/3(052)	RA-226DA	0.93	0.14	1.07	0.00	PCI/G
CC0/1(187)	TH-232DA	0.40	0.11	0.50	0.00	PCI/G
CC0/2(047)	TH-232DA	1.34	0.23	1.57	0.00	PCI/G
CC0/2(076)	TH-232DA	0.91	0.18	1.09	0.00	PCI/G
NE0/1(023)	TH-232DA	0.17	0.06	0.23	0.13	PCI/G
NE0/1(078)	TH-232DA	0.73	0.15	0.88	0.00	PCI/G
NE0/1(196)	TH-232DA	1.23	0.23	1.46	0.00	PCI/G
NE0/2(107)	TH-232DA	1.80	0.28	2.08	0.00	PCI/G
NW0/1(023)	TH-232DA	1.40	0.23	1.63	0.00	PCI/G
NW0/1(023)	TH-232DA	1.25	0.24	1.49	0.00	PCI/G
NW0/1(138)	TH-232DA	0.28	0.09	0.37	0.00	PCI/G
NW0/2(161)	TH-232DA	1.67	0.26	1.93	0.00	PCI/G
NW1/1(148)	TH-232DA	1.05	0.20	1.25	0.00	PCI/G
SE0/1(065)	TH-232DA	0.40	0.10	0.50	0.00	PCI/G

A.12. Summary of Alpha Spectroscopic Analysis of Surrounding Soils

Sample Id	Isotope	Result	Total error	Result + Error	MDA	Unit
SE0/3(052)	TH-232DA	1.87	0.30	2.17	0.00	PCI/G
CC0/1(052)	TH228	0.32	0.11	0.42	0.03	PCI/G
CC0/1(187)	TH228	0.29	0.10	0.39	0.04	PCI/G
CC0/2(047)	TH228	1.00	0.20	1.20	0.02	PCI/G
CC0/2(047)	TH228	1.10	0.20	1.30	0.01	PCI/G
CC0/2(076)	TH228	0.94	0.18	1.13	0.03	PCI/G
CC0/2(202)	TH228	1.20	0.24	1.44	0.05	PCI/G
CC1/2(202)	TH228	1.07	0.21	1.28	0.04	PCI/G
NE0/1(023)	TH228	0.22	0.07	0.29	0.02	PCI/G
NE0/1(078)	TH228	0.70	0.15	0.85	0.02	PCI/G
NE0/1(196)	TH228	0.40	0.12	0.52	0.03	PCI/G
NE0/2(107)	TH228	1.66	0.32	1.98	0.06	PCI/G
NE1/1(023)	TH228	0.17	0.06	0.23	0.03	PCI/G
NW0/1(023)	TH228	0.63	0.16	0.79	0.04	PCI/G
NW0/1(138)	TH228	0.21	0.06	0.27	0.02	PCI/G
NW0/2(161)	TH228	1.44	0.25	1.69	0.03	PCI/G
NW1/1(148)	TH228	1.21	0.23	1.44	0.04	PCI/G
SE0/1(065)	TH228	0.37	0.09	0.45	0.02	PCI/G
SE0/1(083)	TH228	0.80	0.19	0.99	0.06	PCI/G
SE0/3(052)	TH228	1.92	0.32	2.24	0.03	PCI/G
SE1/1(083)	TH228	0.99	0.21	1.20	0.04	PCI/G
CC0/1(052)	TH230	0.46	0.13	0.59	0.02	PCI/G
CC0/1(187)	TH230	0.55	0.16	0.71	0.03	PCI/G
CC0/2(047)	TH230	0.97	0.19	1.16	0.01	PCI/G
CC0/2(047)	TH230	1.06	0.20	1.26	0.02	PCI/G
CC0/2(076)	TH230	1.07	0.20	1.27	0.02	PCI/G
CC0/2(202)	TH230	1.50	0.28	1.78	0.02	PCI/G
CC1/2(202)	TH230	1.23	0.23	1.46	0.02	PCI/G
NE0/1(023)	TH230	0.52	0.12	0.64	0.01	PCI/G
NE0/1(078)	TH230	0.82	0.16	0.99	0.01	PCI/G
NE0/1(196)	TH230	1.30	0.25	1.55	0.03	PCI/G
NE0/2(107)	TH230	1.09	0.23	1.32	0.03	PCI/G
NE1/1(023)	TH230	0.56	0.12	0.68	0.02	PCI/G
NW0/1(023)	TH230	1.47	0.45	1.92	0.02	PCI/G
NW0/1(023)	TH230	0.89	0.20	1.09	0.03	PCI/G
NW0/1(138)	TH230	0.40	0.10	0.50	0.02	PCI/G
NW0/2(161)	TH230	1.38	0.24	1.62	0.02	PCI/G
NW1/1(148)	TH230	1.05	0.20	1.25	0.02	PCI/G

A.12. Summary of Alpha Spectroscopic Analysis of Surrounding Soils

Sample Id	Isotope	Result	Total error	Result + Error	MDA	Unit
SE0/1(065)	TH230	0.46	0.10	0.56	0.02	PCI/G
SE0/1(083)	TH230	0.72	0.18	0.90	0.04	PCI/G
SE0/3(052)	TH230	1.12	0.21	1.33	0.02	PCI/G
SE1/1(083)	TH230	1.08	0.22	1.30	0.03	PCI/G
CC0/1(052)	TH232	0.30	0.10	0.39	0.02	PCI/G
CC0/1(187)	TH232	0.35	0.12	0.47	0.03	PCI/G
CC0/2(047)	TH232	0.99	0.20	1.18	0.02	PCI/G
CC0/2(047)	TH232	1.10	0.20	1.30	0.02	PCI/G
CC0/2(076)	TH232	0.86	0.17	1.03	0.01	PCI/G
CC0/2(202)	TH232	1.20	0.24	1.44	0.03	PCI/G
CC1/2(202)	TH232	0.97	0.19	1.16	0.02	PCI/G
NE0/1(023)	TH232	0.20	0.07	0.27	0.02	PCI/G
NE0/1(078)	TH232	0.72	0.15	0.86	0.02	PCI/G
NE0/1(196)	TH232	0.95	0.20	1.15	0.02	PCI/G
NE0/2(107)	TH232	1.79	0.33	2.12	0.03	PCI/G
NE1/1(023)	TH232	0.23	0.07	0.30	0.02	PCI/G
NW0/1(023)	TH232	0.86	0.19	1.05	0.02	PCI/G
NW0/1(023)	TH232	1.33	0.29	1.62	0.02	PCI/G
NW0/1(138)	TH232	0.34	0.09	0.44	0.01	PCI/G
NW0/2(161)	TH232	1.34	0.23	1.57	0.01	PCI/G
NW1/1(148)	TH232	0.93	0.19	1.11	0.03	PCI/G
SE0/1(065)	TH232	0.44	0.10	0.54	0.01	PCI/G
SE0/1(083)	TH232	0.77	0.18	0.96	0.04	PCI/G
SE0/3(052)	TH232	1.84	0.30	2.14	0.01	PCI/G
SE1/1(083)	TH232	0.89	0.19	1.08	0.03	PCI/G
CC0/1(052)	U-234	0.38	0.22	0.60	0.10	PCI/G
CC0/1(187)	U-234	0.33	0.13	0.46	0.05	PCI/G
CC0/2(047)	U-234	1.56	2.94	4.50	0.07	PCI/G
CC0/2(047)	U-234	0.89	0.29	1.18	0.06	PCI/G
CC0/2(076)	U-234	0.92	0.23	1.16	0.04	PCI/G
CC0/2(202)	U-234	1.08	0.25	1.33	0.03	PCI/G
CC1/2(202)	U-234	0.70	0.22	0.92	0.06	PCI/G
NE0/1(023)	U-234	0.39	0.12	0.51	0.04	PCI/G
NE0/1(078)	U-234	0.71	0.21	0.91	0.04	PCI/G
NE0/1(196)	U-234	0.88	0.29	1.16	0.07	PCI/G
NE0/2(107)	U-234	0.74	0.18	0.92	0.03	PCI/G
NE1/1(023)	U-234	0.40	0.13	0.53	0.05	PCI/G
NW0/1(023)	U-234	0.57	0.34	0.91	0.04	PCI/G
NW0/1(023)	U-234	0.84	0.22	1.06	0.05	PCI/G

A.12. Summary of Alpha Spectroscopic Analysis of Surrounding Soils

Sample Id	Isotope	Result	Total error	Result + Error	MDA	Unit
NW0/1(138)	U-234	0.33	0.10	0.43	0.03	PCI/G
NW0/2(161)	U-234	0.85	0.23	1.08	0.05	PCI/G
NW1/1(148)	U-234	1.09	0.28	1.37	0.04	PCI/G
SE0/1(065)	U-234	0.39	0.18	0.57	0.10	PCI/G
SE0/1(083)	U-234	0.62	0.17	0.78	0.03	PCI/G
SE0/3(052)	U-234	1.08	0.45	1.53	0.14	PCI/G
SE1/1(083)	U-234	0.84	0.22	1.06	0.04	PCI/G
CC0/2(047)	U-235	0.07	0.06	0.13	0.05	PCI/G
CC0/2(202)	U-235	0.06	0.04	0.10	0.03	PCI/G
NE0/1(023)	U-235	0.03	0.03	0.06	0.03	PCI/G
NE0/1(078)	U-235	0.02	0.03	0.05	0.02	PCI/G
NW0/1(023)	U-235	0.07	0.05	0.11	0.04	PCI/G
NW0/2(161)	U-235	0.06	0.04	0.10	0.03	PCI/G
SE0/3(052)	U-235	0.09	0.09	0.18	0.06	PCI/G
CC0/1(052)	U-238DA	0.42	0.23	0.65	0.11	PCI/G
CC0/1(187)	U-238DA	0.25	0.11	0.37	0.04	PCI/G
CC0/2(047)	U-238DA	1.21	0.36	1.57	0.05	PCI/G
CC0/2(047)	U-238DA	0.78	0.27	1.05	0.06	PCI/G
CC0/2(076)	U-238DA	0.82	0.21	1.03	0.03	PCI/G
CC0/2(202)	U-238DA	1.16	0.27	1.43	0.03	PCI/G
CC1/2(202)	U-238DA	0.96	0.28	1.25	0.06	PCI/G
NE0/1(023)	U-238DA	0.48	0.14	0.62	0.03	PCI/G
NE0/1(078)	U-238DA	0.58	0.18	0.76	0.03	PCI/G
NE0/1(196)	U-238DA	0.82	0.27	1.09	0.05	PCI/G
NE0/2(107)	U-238DA	0.74	0.18	0.92	0.03	PCI/G
NE1/1(023)	U-238DA	0.41	0.14	0.54	0.04	PCI/G
NW0/1(023)	U-238DA	0.57	0.38	0.95	0.03	PCI/G
NW0/1(023)	U-238DA	1.05	0.26	1.31	0.04	PCI/G
NW0/1(138)	U-238DA	0.45	0.13	0.57	0.02	PCI/G
NW0/2(161)	U-238DA	1.23	0.30	1.53	0.05	PCI/G
NW1/1(148)	U-238DA	1.11	0.28	1.39	0.04	PCI/G
SE0/1(065)	U-238DA	0.36	0.17	0.52	0.06	PCI/G
SE0/1(083)	U-238DA	0.55	0.16	0.70	0.03	PCI/G
SE0/3(052)	U-238DA	0.73	0.33	1.06	0.09	PCI/G
SE1/1(083)	U-238DA	0.84	0.22	1.06	0.03	PCI/G

A.13. Summary Data of Micro-R Measurements of Surrounding Soils

A.13. Summary Data of Micro-R Measurements of Surrounding Soils

Sample Id	Reading uR/hr	Date	Time
CC-0/1(001)	11	08/22/94	08:00:00
CC-0/1(002)	7	08/22/94	08:02:00
CC-0/1(003)	9	08/22/94	08:03:00
CC-0/1(004)	7	08/22/94	08:05:00
CC-0/1(005)	9	08/22/94	08:08:00
CC-0/1(006)	10	08/22/94	08:10:00
CC-0/1(007)	7	08/22/94	08:14:00
CC-0/1(008)	8	08/22/94	09:09:00
CC-0/1(009)	10	08/22/94	09:10:00
CC-0/1(010)	9	08/22/94	09:11:00
CC-0/1(011)	9	08/22/94	09:13:00
CC-0/1(012)	7	08/22/94	09:22:00
CC-0/1(013)	10	08/22/94	10:12:00
CC-0/1(014)	9	08/22/94	10:14:00
CC-0/1(015)	9	08/22/94	10:17:00
CC-0/1(016)	7	08/22/94	10:22:00
CC-0/1(017)	9	08/22/94	10:26:00
CC-0/1(018)	12	08/22/94	10:29:00
CC-0/1(019)	7	08/22/94	10:36:00
CC-0/1(020)	7	08/22/94	10:37:00
CC-0/1(021)	10	08/22/94	10:38:00
CC-0/1(022)	11	08/22/94	10:42:00
CC-0/1(023)	9	08/22/94	10:43:00
CC-0/1(024)	7	08/22/94	10:45:00
CC-0/1(025)	9	08/22/94	10:51:00
CC-0/1(026)	11	08/22/94	10:54:00
CC-0/1(027)	8	08/22/94	10:55:00
CC-0/1(028)	8	08/22/94	10:56:00
CC-0/1(029)	10	08/23/94	08:01:00
CC-0/1(030)	9	08/23/94	08:07:00
CC-0/1(031)	9	08/23/94	08:18:00
CC-0/1(032)	8	08/23/94	08:19:00
CC-0/1(033)	9	08/23/94	08:21:00
CC-0/1(034)	12	08/23/94	08:24:00
CC-0/1(035)	10	08/23/94	08:28:00
CC-0/1(036)	8	08/23/94	08:31:00
CC-0/1(037)	9	08/23/94	08:35:00
CC-0/1(038)	10	08/23/94	08:36:00
CC-0/1(039)	10	08/23/94	08:41:00
CC-0/1(040)	8	08/23/94	08:42:00
CC-0/1(041)	7	08/23/94	08:43:00
CC-0/1(042)	9	08/23/94	08:44:00
CC-0/1(043)	10	08/23/94	08:51:00
CC-0/1(044)	9	08/23/94	08:53:00
CC-0/1(045)	8	08/23/94	08:55:00
CC-0/1(046)	8	08/23/94	09:01:00
CC-0/1(047)	10	08/23/94	09:06:00
CC-0/1(048)	7	08/23/94	09:07:00

A.13. Summary Data of Micro-R Measurements of Surrounding Soils

Sample Id	Reading uR/hr	Date	Time
CC-0/1(049)	10	08/23/94	09:09:00
CC-0/1(050)	10	08/23/94	09:12:00
CC-0/1(051)	10	08/23/94	09:15:00
CC-0/1(052)	8	08/23/94	09:19:00
CC-0/1(053)	9	08/23/94	09:21:00
CC-0/1(054)	11	08/23/94	09:24:00
CC-0/1(055)	12	08/23/94	09:26:00
CC-0/1(056)	9	08/23/94	09:28:00
CC-0/1(057)	7	08/23/94	09:32:00
CC-0/1(058)	9	08/23/94	09:35:00
CC-0/1(059)	11	08/23/94	09:37:00
CC-0/1(060)	10	08/23/94	09:38:00
CC-0/1(061)	8	08/24/94	09:41:00
CC-0/1(062)	10	08/24/94	09:41:00
CC-0/1(063)	11	08/24/94	09:44:00
CC-0/1(064)	10	08/24/94	09:51:00
CC-0/1(065)	8	08/24/94	09:52:00
CC-0/1(066)	7	08/24/94	09:52:00
CC-0/1(067)	13	08/24/94	09:53:00
CC-0/1(068)	12	08/24/94	09:53:00
CC-0/1(069)	9	08/24/94	09:54:00
CC-0/1(070)	9	08/24/94	09:54:00
CC-0/1(071)	9	08/24/94	09:54:00
CC-0/1(072)	11	08/24/94	09:55:00
CC-0/1(073)	11	08/24/94	09:56:00
CC-0/1(074)	10	08/24/94	09:56:00
CC-0/1(075)	10	08/24/94	09:56:00
CC-0/1(076)	9	08/24/94	09:57:00
CC-0/1(077)	12	08/24/94	09:57:00
CC-0/1(078)	14	08/24/94	09:57:00
CC-0/1(079)	8	08/24/94	09:58:00
CC-0/1(080)	9	08/24/94	09:59:00
CC-0/1(081)	9	08/24/94	09:59:00
CC-0/1(082)	13	08/24/94	10:00:00
CC-0/1(083)	15	08/24/94	10:00:00
CC-0/1(084)	9	08/24/94	10:00:00
CC-0/1(085)	16	08/24/94	10:03:00
CC-0/1(086)	10	08/24/94	10:03:00
CC-0/1(087)	9	08/24/94	10:04:00
CC-0/1(088)	11	08/24/94	10:04:00
CC-0/1(089)	8	08/24/94	10:04:00
CC-0/1(090)	9	08/24/94	10:05:00
CC-0/1(091)	12	08/24/94	10:06:00
CC-0/1(092)	11	08/24/94	10:07:00
CC-0/1(093)	17	08/24/94	10:07:00
CC-0/1(094)	14	08/24/94	10:07:00
CC-0/1(095)	12	08/24/94	10:08:00
CC-0/1(096)	11	08/24/94	10:09:00

A.13. Summary Data of Micro-R Measurements of Surrounding Soils

Sample Id	Reading uR/hr	Date	Time
CC-0/1(097)	11	08/24/94	10:10:00
CC-0/1(098)	11	08/24/94	10:10:00
CC-0/1(099)	13	08/24/94	10:10:00
CC-0/1(100)	9	08/24/94	10:11:00
CC-0/1(101)	0	00/00/00	00:00:00
CC-0/1(102)	48	08/24/94	10:12:00
CC-0/1(103)	10	08/24/94	10:15:00
CC-0/1(104)	9	08/24/94	10:16:00
CC-0/1(105)	9	08/24/94	10:16:00
CC-0/1(106)	10	08/24/94	10:16:00
CC-0/1(107)	10	08/24/94	10:17:00
CC-0/1(108)	14	08/24/94	10:18:00
CC-0/1(109)	10	08/24/94	10:19:00
CC-0/1(110)	8	08/24/94	10:19:00
CC-0/1(111)	12	08/24/94	10:20:00
CC-0/1(112)	10	08/24/94	10:21:00
CC-0/1(113)	8	08/24/94	10:22:00
CC-0/1(114)	7	08/24/94	10:23:00
CC-0/1(115)	7	08/24/94	10:23:00
CC-0/1(116)	9	08/24/94	10:24:00
CC-0/1(117)	24	08/24/94	10:25:00
CC-0/1(118)	15	08/24/94	10:25:00
CC-0/1(119)	18	08/24/94	10:27:00
CC-0/1(120)	18	08/24/94	10:28:00
CC-0/1(121)	10	08/24/94	10:29:00
CC-0/1(122)	8	08/24/94	10:29:00
CC-0/1(123)	7	08/24/94	10:30:00
CC-0/1(124)	7	08/24/94	10:30:00
CC-0/1(125)	7	08/24/94	10:33:00
CC-0/1(126)	7	08/24/94	10:33:00
CC-0/1(127)	9	08/24/94	10:33:00
CC-0/1(128)	9	08/24/94	10:34:00
CC-0/1(129)	9	08/24/94	10:34:00
CC-0/1(130)	20	08/24/94	10:35:00
CC-0/1(131)	30	08/24/94	10:37:00
CC-0/1(132)	12	08/24/94	10:37:00
CC-0/1(133)	8	08/24/94	10:37:00
CC-0/1(134)	7	08/24/94	10:37:00
CC-0/1(135)	0	00/00/00	00:00:00
CC-0/1(136)	6	08/24/94	10:38:00
CC-0/1(137)	7	08/24/94	10:39:00
CC-0/1(138)	11	08/24/94	10:41:00
CC-0/1(139)	8	08/24/94	10:41:00
CC-0/1(140)	9	08/24/94	10:42:00
CC-0/1(141)	8	08/24/94	10:42:00
CC-0/1(142)	12	08/24/94	10:42:00
CC-0/1(143)	13	08/24/94	10:43:00
CC-0/1(144)	9	08/24/94	10:45:00

A.13. Summary Data of Micro-R Measurements of Surrounding Soils

Sample Id	Reading uR/hr	Date	Time
CC-0/1(145)	6	08/24/94	10:45:00
CC-0/1(146)	7	08/24/94	10:46:00
CC-0/1(147)	7	08/24/94	10:46:00
CC-0/1(148)	7	08/24/94	10:46:00
CC-0/1(149)	12	08/24/94	10:46:00
CC-0/1(150)	11	08/24/94	10:47:00
CC-0/1(151)	8	08/24/94	10:48:00
CC-0/1(152)	9	08/24/94	10:49:00
CC-0/1(153)	100	08/24/94	10:49:00
CC-0/1(154)	8	08/24/94	10:49:00
CC-0/1(155)	9	08/24/94	10:50:00
CC-0/1(156)	8	08/24/94	10:50:00
CC-0/1(157)	6	08/24/94	10:51:00
CC-0/1(158)	8	08/24/94	10:52:00
CC-0/1(159)	7	08/24/94	10:53:00
CC-0/1(160)	10	08/24/94	10:53:00
CC-0/1(161)	9	08/24/94	10:54:00
CC-0/1(162)	8	08/24/94	10:54:00
CC-0/1(163)	11	08/24/94	10:55:00
CC-0/1(164)	15	08/24/94	10:56:00
CC-0/1(165)	7	08/24/94	10:56:00
CC-0/1(166)	7	08/24/94	10:57:00
CC-0/1(167)	12	08/24/94	10:57:00
CC-0/1(168)	9	08/24/94	10:57:00
CC-0/1(169)	8	08/24/94	10:58:00
CC-0/1(170)	9	08/24/94	10:58:00
CC-0/1(171)	11	08/24/94	11:00:00
CC-0/1(172)	8	08/24/94	11:00:00
CC-0/1(173)	7	08/24/94	11:00:00
CC-0/1(174)	7	08/24/94	11:01:00
CC-0/1(175)	11	08/24/94	11:01:00
CC-0/1(176)	240	08/24/94	11:01:00
CC-0/1(177)	18	08/24/94	11:03:00
CC-0/1(178)	6	08/24/94	11:03:00
CC-0/1(179)	13	08/24/94	11:03:00
CC-0/1(180)	9	08/24/94	11:04:00
CC-0/1(181)	6	08/24/94	11:04:00
CC-0/1(182)	7	08/24/94	11:06:00
CC-0/1(183)	13	08/24/94	11:06:00
CC-0/1(184)	8	08/24/94	11:07:00
CC-0/1(185)	7	08/24/94	11:07:00
CC-0/1(186)	6	08/24/94	11:08:00
CC-0/1(187)	10	08/24/94	11:09:00
CC-0/1(188)	70	08/24/94	11:09:00
CC-0/1(189)	10	08/24/94	11:09:00
CC-0/1(190)	10	08/24/94	11:10:00
CC-0/1(191)	7	08/24/94	11:10:00
CC-0/1(192)	5	08/24/94	11:11:00

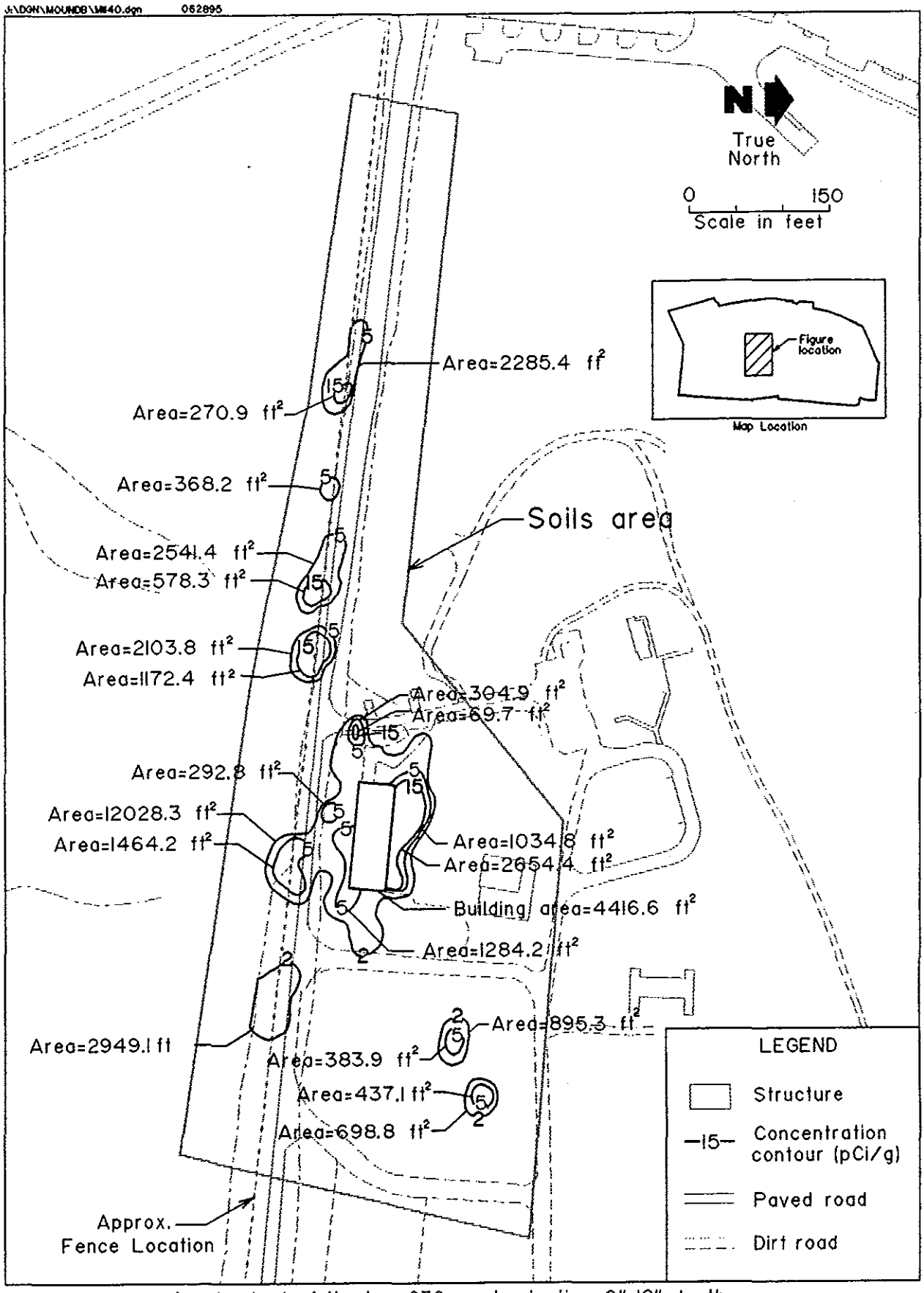
A.13. Summary Data of Micro-R Measurements of Surrounding Soils

Sample Id	Reading uR/hr	Date	Time
CC-0/1(193)	7	08/24/94	11:12:00
CC-0/1(194)	8	08/24/94	11:12:00
CC-0/1(195)	10	08/24/94	11:13:00
CC-0/1(196)	7	08/24/94	11:13:00
CC-0/1(197)	9	08/24/94	11:14:00
CC-0/1(198)	7	08/24/94	11:15:00
CC-0/1(199)	6	08/24/94	11:15:00
CC-0/1(200)	10	08/24/94	11:15:00
CC-0/1(201)	11	08/24/94	11:16:00
CC-0/1(202)	5	08/24/94	11:17:00
CC-0/1(203)	6	08/24/94	11:17:00
CC-0/1(204)	5	08/24/94	11:17:00
CC-0/1(205)	6	08/24/94	11:18:00
CC-0/1(206)	6	08/24/94	11:19:00
CC-0/1(207)	8	08/24/94	11:20:00
CC-0/1(208)	4	08/24/94	11:20:00
CC-0/1(209)	6	08/24/94	11:20:00
CC-0/1(210)	6	08/24/94	11:21:00
CC-0/1(211)	7	08/24/94	11:21:00
CC-0/1(212)	8	08/24/94	11:22:00
CC-0/1(213)	10	08/24/94	11:22:00
CC-0/1(214)	15	08/24/94	11:23:00
CC-0/1(215)	6	08/24/94	11:23:00
CC-0/1(216)	4	08/24/94	11:24:00
CC-0/1(217)	6	08/24/94	11:25:00
CC-0/1(218)	6	08/24/94	11:25:00
CC-0/1(219)	6	08/24/94	11:25:00
CC-0/1(220)	6	08/24/94	11:26:00
CC-0/1(221)	7	08/24/94	11:26:00
CC-0/1(222)	7	08/24/94	11:27:00
CC-0/1(223)	6	08/24/94	11:27:00
CC-0/1(224)	7	08/24/94	11:28:00
CC-0/1(225)	6	08/24/94	11:28:00
CC-0/1(226)	6	08/24/94	11:29:00
CC-0/1(227)	6	08/24/94	11:30:00
CC-0/1(228)	7	08/24/94	11:30:00
CC-0/1(229)	8	08/24/94	11:30:00
CC-0/1(230)	7	08/24/94	11:31:00
CC-0/1(231)	6	08/24/94	11:31:00
CC-0/1(232)	6	08/24/94	11:32:00
CC-0/1(233)	6	08/24/94	11:32:00

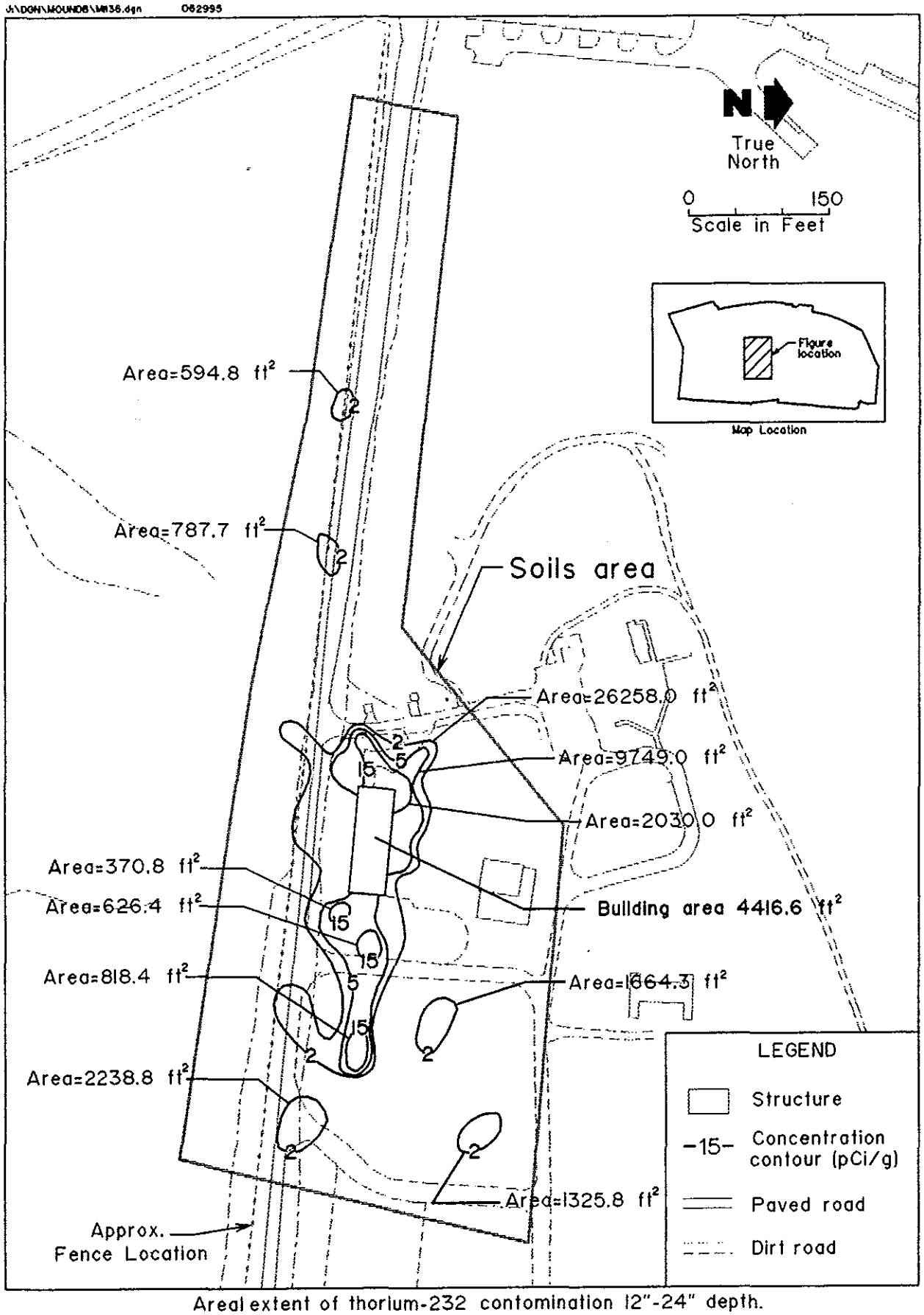
A.14. Calculation of Total Thorium -232 Activity in Surrounding Soils

A.14 Calculation of Total Thorium-232 Activity in surrounding Soils.

Activity Interval	Sum of Areas ft2	Volume m3	cm3	Grams Soil (1.6 g/cm3)	Mean Activity per interval pCi/g	Activity pCi	Microcuries uCi
Depth	0 – 12"						
>2 pCi/g	32869	929.3	9.29E+08	1.49E+09	3.0	4.46E+09	4460.8
>5 pCi/g	10155	287.1	2.87E+08	4.59E+08	8.2	3.77E+09	3767.0
>15 pCi/g	3844	108.7	1.09E+08	1.74E+08	30.3	5.27E+09	5272.5
						Subtotal	13500.4
Depth	12" – 24"						
>2 pCi/g	25803	729.6	7.30E+08	1.17E+09	3.0	3.50E+09	3501.8
>5 pCi/g	7162	202.5	2.02E+08	3.24E+08	8.2	2.66E+09	2656.8
>15 pCi/g	2754	77.9	7.79E+07	1.25E+08	30.3	3.78E+09	3777.5
						Subtotal	9936.1
						Total	23436.4



Areal extent of thorium-232 contomination 0"-12" depth.



Areal extent of thorium-232 contamination 12"-24" depth.

A.15. Summary of Background Results for Metals, Pesticides/PCBs, Radionuclides and Anions Republished from ER Program Background Soils Investigation (DOE 1994a)

Table V.1 Inorganic Background Levels
(All Values in mg/kg)

Parameter	Central Tendency			Tolerance Limit		
	Median	Geometric Mean	Arithmetic Mean	Detection Limit	Maximum	Upper 95% Sample Tolerance Limit
Aluminum						
Surface	NA	NA	9,000	NA	NA	16,000
Subsurface	11,000	NA	NA	NA	NA	22,000
Combined	10,000	NA	NA	NA	NA	19,000
Antimony						
Surface	Samples Rejected			0.45	NA	NA
Subsurface	Unknown Distribution			0.45	NA	NA
Combined				0.45	NA	NA
Arsenic						
Surface	NA	NA	5.5	NA	NA	9.1
Subsurface	NA	NA	5.1	NA	NA	9.0
Combined	NA	NA	5.2	NA	NA	8.6
Barium						
Surface	NA	82	NA	NA	NA	160
Subsurface	NA	77	NA	NA	NA	230
Combined	NA	79	NA	NA	NA	180
Beryllium						
Surface	NA	NA	0.75	NA	NA	1.3
Subsurface	NA	NA	0.74	NA	NA	1.7
Combined	NA	NA	0.74	NA	NA	1.3
Bismuth						
Surface	NA	NA	NA	NA	38	NA
Subsurface	NA	NA	NA	NA	35	NA
Combined	NA	NA	NA	NA	39	NA
Cadmium						
Surface	0.23	NA	NA	NA	NA	1.7
Subsurface	0.23	NA	NA	NA	NA	2.7
Combined	0.23	NA	NA	NA	NA	2.1
Calcium						
Surface	25,000	NA	NA	NA	NA	70,000
Subsurface	60,000	NA	NA	NA	NA	170,000
Combined	NA	27,000	NA	NA	NA	310,000
Chromium						
Surface	NA	NA	13	NA	NA	19
Subsurface	NA	12	NA	NA	NA	31
Combined	NA	NA	13	NA	NA	20
Cobalt						
Surface	NA	NA	11	NA	NA	19
Subsurface	NA	9	NA	NA	NA	28
Combined	NA	NA	11	NA	NA	19
Copper						
Surface	NA	16	NA	NA	NA	28
Subsurface	NA	NA	16	NA	NA	27
Combined	15	NA	NA	NA	NA	26
Iron						
Surface	NA	20,000	NA	NA	NA	38,000
Subsurface	22,000	NA	NA	NA	NA	39,000
Combined	NA	NA	22,000	NA	NA	35,000
Lead						
Surface	22	NA	NA	NA	NA	73
Subsurface	NA	13	NA	NA	NA	32
Combined	NA	18	NA	NA	NA	48
Lithium						
Surface	NA	6.5	NA	NA	NA	25
Subsurface	8	NA	NA	NA	NA	28
Combined	NA	7.5	NA	NA	NA	26

Table V.1 Inorganic Background Levels
(All Values in mg/kg)
(Continued)

Parameter	Central Tendency			Tolerance Limit		
	Median	Geometric Mean	Arithmetic Mean	Detection Limit	Maximum	Upper 95% Sample Tolerance Limit
Magnesium						
Surface	4,300	NA	NA	NA	NA	32,000
Subsurface	5,300	NA	NA	NA	NA	56,000
Combined	NA	NA	13,000	NA	NA	40,000
Manganese						
Surface	NA	630	NA	NA	NA	1,400
Subsurface	NA	570	NA	NA	NA	1,500
Combined	NA	600	NA	NA	NA	1,400
Mercury						
Surface	NA	NA	NA	NA	0.15	NA
Subsurface	NA	NA	NA	NA	0.15	NA
Combined	NA	NA	NA	NA	0.15	NA
Molybdenum						
Surface	17	NA	NA	NA	NA	27
Subsurface	14	NA	NA	NA	NA	27
Combined	NA	NA	14	NA	NA	27
Nickel						
Surface	NA	NA	18	NA	NA	29
Subsurface	NA	20	NA	NA	NA	41
Combined	19	NA	NA	NA	NA	32
Potassium						
Surface	730	NA	NA	NA	NA	2,200
Subsurface	590	NA	NA	NA	NA	1,600
Combined	640	NA	NA	NA	NA	1,900
Selenium						
Surface	NA	NA	NA	NA	0.59	NA
Subsurface	NA	NA	NA	0.40	NA	NA
Combined	NA	NA	NA	NA	0.59	NA
Silver						
Surface	0.55	NA	NA	NA	NA	1.7
Subsurface	0.55	NA	NA	NA	NA	1.7
Combined	0.55	NA	NA	NA	NA	1.7
Sodium						
Surface	NA	61	NA	NA	NA	220
Subsurface	NA	87	NA	NA	NA	280
Combined	NA	73	NA	NA	NA	240
Thallium						
Surface	0.12	NA	NA	NA	NA	0.46
Subsurface	0.12	NA	NA	NA	NA	0.43
Combined	0.12	NA	NA	NA	NA	0.46
Tin						
Surface	2.2	NA	NA	NA	NA	21
Subsurface	4.3	NA	NA	NA	NA	17
Combined	2.3	NA	NA	NA	NA	20
Vanadium						
Surface	NA	NA	17	NA	NA	26
Subsurface	NA	NA	17	NA	NA	27
Combined	NA	NA	17	NA	NA	25
Zinc						
Surface	60	NA	NA	NA	NA	473
Subsurface	53	NA	NA	NA	NA	130
Combined	56	NA	NA	NA	NA	140

U - Below detectable limits.
NA - Not applicable.

Table V.2 Pesticide/PCB Background Levels
(All Values in $\mu g/kg$)

Parameter	Central Tendency			Tolerance Limit		
	Median	Geometric Mean	Arithmetic Mean	Detection Limit	Maximum	Upper 95% Sample Tolerance Limit
4,4-DDD						
Surface	NA	NA	NA	NA	21	4.3
Subsurface	NA	NA	NA	NA	3.3	4.2
Combined	1.9	NA	NA	NA	21	4.2
4,4-DDE						
Surface	1.9	NA	NA	NA	39	12
Subsurface	NA	NA	NA	NA	2.6	4.2
Combined	1.9	NA	NA	NA	39	4.3
4,4-DDT						
Surface	1.9	NA	NA	NA	65	13
Subsurface	NA	NA	NA	NA	24	4.2
Combined	1.9	NA	NA	NA	65	13
Aroclor-1254						
Surface	NA	NA	NA	NA	65	65
Subsurface	NA	NA	NA	NA	24	42
Combined	19	NA	NA	NA	65	58
Endosulfan II (beta)						
Surface	NA	NA	NA	NA	1.9	NA
Subsurface	NA	NA	NA	4.0	NA	NA
Combined	NA	NA	NA	NA	1.9	NA
Methoxychlor						
Surface	9.5	NA	NA	NA	50	50
Subsurface	NA	NA	NA	NA	30	21
Combined	9.5	NA	NA	NA	50	30

U - Below detectable limits.
NA - Not applicable.

Table V.3 Radionuclide Background Levels
(All Values in pCi/g)

Parameter	Central Tendency			Tolerance Limit		
	Median	Geometric Mean	Arithmetic Mean	Detection Limit	Maximum	Upper 95% Sample Tolerance Limit
Cesium-137						
Surface	NA	NA	0.35	NA	NA	0.66
Subsurface	0.06	NA	NA	NA	NA	0.39
Combined	NA	NA	0.22	NA	NA	0.42
Cobalt-60						
Surface	NA	NA	NA	NA	1.0	NA
Subsurface	NA	NA	NA	NA	0.06	NA
Combined	NA	NA	NA	NA	1.0	NA
Plutonium-238						
Surface	0.03	NA	NA	NA	NA	0.19
Subsurface	0.03	NA	NA	NA	NA	0.11
Combined	NA	0.03	NA	NA	NA	0.13
Plutonium-239/240						
Surface	NA	0.05	NA	NA	NA	0.23
Subsurface	NA	0.04	NA	NA	NA	0.17
Combined	NA	0.04	NA	NA	NA	0.18
Potassium-40						
Surface	NA	20	NA	NA	NA	36
Subsurface	20	NA	NA	NA	NA	36
Combined	NA	NA	22	NA	NA	37
Radium-226						
Surface	NA	NA	1.2	NA	NA	1.8
Subsurface	NA	1.1	NA	NA	NA	2.1
Combined	1.1	NA	NA	NA	NA	2.0
Strontium-90						
Surface	0.17	NA	NA	NA	NA	1.10
Subsurface	0.16	NA	NA	NA	NA	0.61
Combined	0.17	NA	NA	NA	NA	0.72
Thorium-228						
Surface	NA	0.96	NA	NA	NA	1.7
Subsurface	NA	NA	0.93	NA	NA	1.6
Combined	NA	NA	0.97	NA	NA	1.5
Thorium-230						
Surface	1.4	NA	NA	NA	NA	3.1
Subsurface	1.6	NA	NA	NA	NA	3.1
Combined	1.5	NA	NA	NA	NA	3.0
Thorium-232						
Surface	NA	NA	0.95	NA	NA	1.4
Subsurface	NA	NA	0.92	NA	NA	1.6
Combined	NA	NA	0.94	NA	NA	1.4
Tritium						
Surface	NA	0.17	NA	NA	NA	4.6
Subsurface	0.02	NA	NA	NA	NA	0.37
Combined	NA	0.08	NA	NA	NA	1.6

Table V.3 Radionuclide Background Levels
(All Values in pCi/g)
(Continued)

Parameter	Central Tendency			Tolerance Limit		
	Median	Geometric Mean	Arithmetic Mean	Detection Limit	Maximum	Upper 95% Sample Tolerance Limit
Uranium-234						
Surface	NA	NA	0.81	NA	NA	1.1
Subsurface	NA	NA	0.83	NA	NA	1.1
Combined	NA	NA	0.82	NA	NA	1.1
Uranium-235/236						
Surface	NA	0.04	NA	NA	NA	0.12
Subsurface	NA	0.04	NA	NA	NA	0.11
Combined	NA	0.04	NA	NA	NA	0.11
Uranium-238						
Surface	NA	NA	0.89	NA	NA	1.2
Subsurface	NA	NA	0.91	NA	NA	1.2
Combined	NA	NA	0.90	NA	NA	1.2

U - Below detectable limits.
NA - Not applicable.

Table V.4 Anion Background Levels
(All Values in mg/kg)

Parameter	Central Tendency			Tolerance Limit		
	Median	Geometric Mean	Arithmetic Mean	Detection Limit	Maximum*	Upper 95% Sample Tolerance Limit
Chloride						
Surface	NA	44	NA	NA	NA	95
Subsurface	NA	46	NA	NA	NA	102
Combined	45	NA	NA	NA	NA	107
Fluoride						
Surface	NA	NA	2.7	NA	NA	5.1
Subsurface	3.9	NA	NA	NA	NA	6.8
Combined	3.3	NA	NA	NA	NA	6.7
Nitrate/Nitrite						
Surface	NA	7.3	NA	NA	NA	33
Subsurface	NA	2.7	NA	NA	NA	14
Combined	NA	4.4	NA	NA	NA	26
Sulfate						
Surface	70	NA	NA	NA	NA	150
Subsurface	30	NA	NA	NA	NA	120
Combined	31	NA	NA	NA	NA	150
TOC						
Surface	NA	NA	15,000	NA	NA	33,000
Subsurface	NA	6,600	NA	NA	NA	49,000
Combined	NA	NA	12,000	NA	NA	28,000

NA - Not applicable.