

RADIOLOGIC AND ENGINEERING ASSESSMENT

FOR

DOE ID NO.: GJ-90101-CC
(INCLUDES ONLY GJ-00461-CC)
ADDRESS: 940 SOUTH 10TH STREET

OCTOBER 1990

**SUPPLEMENTAL
STANDARDS**

FOR

URANIUM MILL TAILINGS REMEDIAL ACTION PROJECT OFFICE

ALBUQUERQUE OPERATIONS OFFICE

DEPARTMENT OF ENERGY

BY

CHFM-NUCLEAR GEOTECH
P.O. Box 14000
Grand Junction, Colorado 81502-5504

APPROVED BY

Joseph D. Virgona
J. VIRGONA
DOE PROJECT ENGINEER

DATE

12/31/90

G90101RE.SS:WHITEWATERS

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PDR WASTE
WM-39 PDR

URFO-3

*with 1/4/91
91-0174*

1.0 INTRODUCTION

The Environmental Protection Agency (EPA) Standards for Remedial Actions at Inactive Uranium Processing Sites (40 CFR Part 192) defines two types of remedial action: control and cleanup. Control is the operation which places the tailings piles in a condition that will minimize the risk to man over a long period of time. Cleanup is the operation which reduces the potential health consequences of tailings that have been dispensed from tailings piles by natural forces or removed by man and used elsewhere in buildings or land. The purpose of the EPA Standards for cleanup is to provide the maximum reasonable protection of public health and the environment. The varied conditions at the designated sites and limited experience with remedial actions, which existed at the time the law was created, made it appropriate for the EPA to allow tailings to be left in place where circumstances make such action reasonable. Circumstances which make removal of tailings contamination unreasonable are accommodated by the EPA through provisions within 40 CFR Part 192 for Supplemental Standards. The Department of Energy (DOE) requested that Chem-Nuclear Geotech consider Application for Supplemental Standards and alternatives for remedial action in an area located at 940 South 10th Street in Grand Junction, Colorado (See Figure 1).

This Radiologic and Engineering Assessment (REA) considers the area located underneath a 10" concrete slab in Building 3 of the Whitewater Complex Commercial property, covering an area of approximately 1,500 square feet.

This REA serves as an Executive Summary for the remainder of this document and contains a description of remediation alternatives, evaluation of health risks for the alternative action, estimated costs of the remedial action, approximate volumes of contaminated materials, and the recommended action. Appendix A contains the Executive Summary for the Radiologic Assessment data and tables that summarize the available radiological data. Appendix B is the Supplemental Standards Application and contains analysis of: land use, health risk, remediation alternatives, construction costs, and local agency input.

2.0 EVALUATION

The building within the area being considered by the Supplemental Standards Application was built in 1979, and therefore, consideration for the National Register of Historic Places is not required.

This REA is focused on the mill tailings contamination located underneath Building 3 of the Whitewater Complex Commercial property in Grand Junction, Colorado. The contamination lies underneath the interior concrete floor slab. Figures 1, 2, 3, and 5 depict the area being considered and summarizes the contamination data. Field assessment radiological data are provided in the Radiological Assessment, Appendix A. This data indicates the depth of contamination to be approximately 48 inches. The mill tailings that have been found underneath Building 3 are assumed to have been placed on the property prior to construction of Building 3, and then subsequently Building 3 was constructed on top of the tailings contamination. The contamination under Building 3 was discovered during remediation of the surrounding parent property in 1990 which was remediated up to the edges of Building 3. The building is used for storing concrete materials.

The alternative actions considered in Appendix B can be summarized as follows:

Alternative 1 - Complete Remediation

Health Risk - Reduced to within EPA standards

Estimated Construction Cost - \$78,973

Approximate Volume of Contaminated Materials Removed - 282 cy

Approximate Volume of Contaminated Materials Remaining - 0 cy

Alternative 2 - No Remediation (Supplemental Standards Application)

Health Risk - See Appendix B, Table B.T1

Estimated Construction Cost - \$0

Approximate Volume of Contaminated Materials Removed - 0 cy

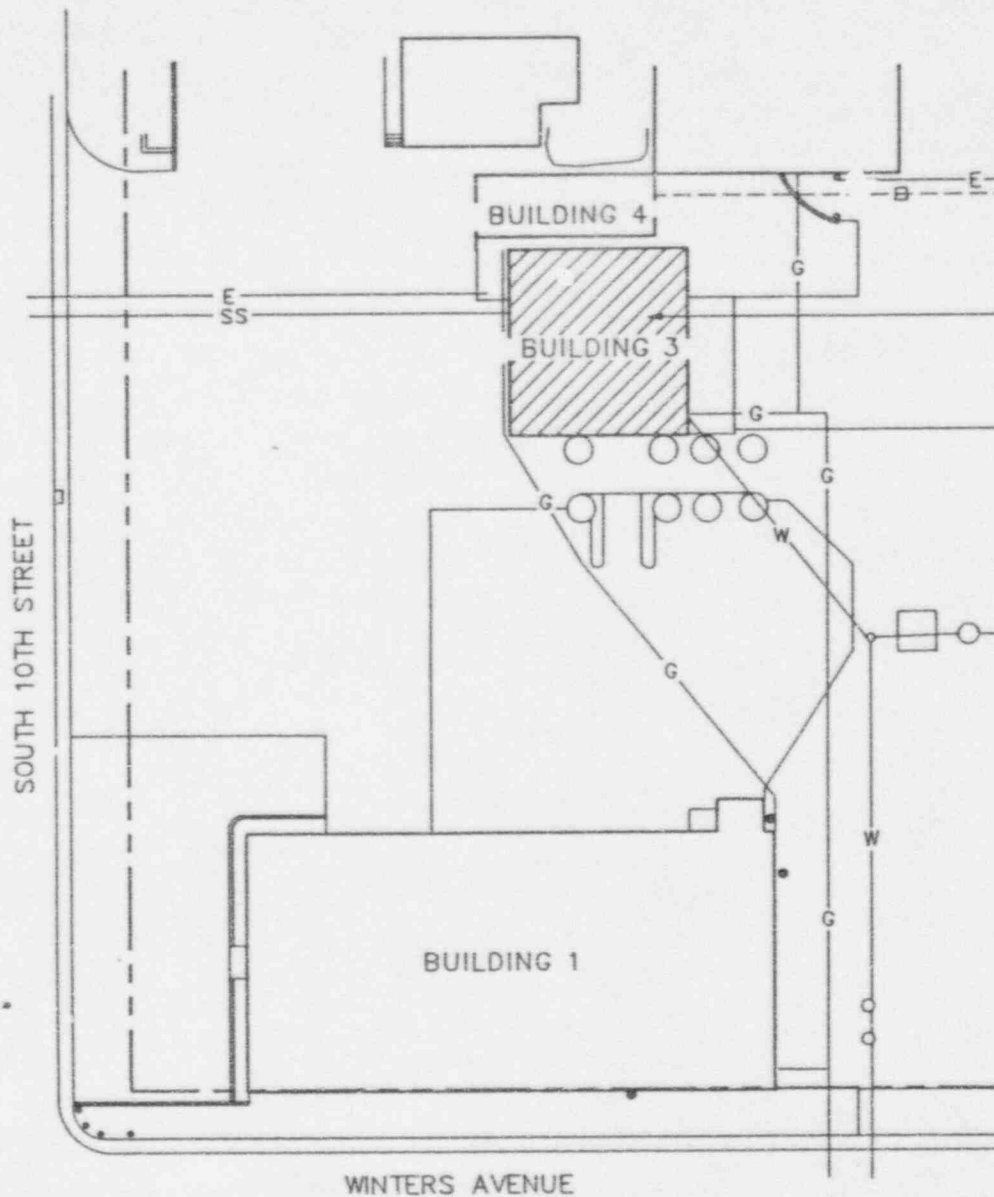
Approximate Volume of Contaminated Materials Remaining - 282 cy

3.0 CONCLUSIONS AND RECOMMENDATIONS

Examination of the health risk performed in Appendix B suggests that there are no identifiable significant health risks if this Application for Supplemental Standards is approved. The cost of remediation is excessive when no significant health risks exist. No change in land use or building use is expected within the foreseeable future. There is little potential for future migration of tailings from the Whitewater Complex Commercial property if the Supplemental Standards Application is approved.

Approval of Supplemental Standards Application should be applied under 40 CFR 192.12 Criteria D (see Appendix B, Section B.1). A long-term tailings management, disposal, and migration control plan should be developed and implemented. The plan should address undiscovered deposits, deposits left in place through Application of Supplemental Standards, and deposits that are not within existing inclusion boundaries.

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REV032587



SUPPLEMENTAL STANDARDS
LOCATION

LEGEND

- SS-W-IW-G- SEWER/WATER/IRR. WATER/GAS
(BURIED)
- E-T-CTV-? ELEC./TELE/ CABLE TV/
UNIDENTIFIED (BURIED)

LOCATION MAP

U.S. DEPARTMENT OF ENERGY

940 S. 10TH ST.

GRAND JUNCTION, CO

DOE ID# GJ-90101-CC

FIGURE 1



NORTH

PARTIAL SITE PLAN

NO SCALE

APPENDIX A
RADIOLOGICAL ASSESSMENT
FOR

DOE ID NO. GJ-90101-CC
(INCLUDES GJ-00461-CC)
940 SOUTH 10TH STREET

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ATTACHMENT

Appendix A for GJ-00461-CC

EXECUTIVE SUMMARY

1.0 INTRODUCTION

This appendix contains the applicable radiological information that was gathered during the remediation of the Whitewater Complex Commercial property. The information presented consists of radiological information.

Following the procedures described in the Field Assessment Operations Technical Data Procedures Manual, data was collected at Building 3 of the Whitewater Complex Commercial property to assess the location and extent of contamination due to residual radioactive material in quantities in excess of the Environmental Protection Agency "Standards for Remedial Action at Inactive Uranium Processing Sites" (40 CFR 192).

2.0 GAMMA EXPOSURE RATE SURVEYS

2.1 Exterior

Exterior gamma exposure rates are not applicable. The contamination in Building 3 lies underneath the uncontaminated concrete building slab and there is no exterior contamination involved. The exterior contamination was remediated during the remediation of the parent property.

2.2 Interior

The interior gamma exposure rates in Building 3 range from 15 to 16 $\mu\text{R/h}$. The interior gamma exposure rates are presented in Figure 2. These measurements were taken at the surface of the concrete slab in Building 3. These gamma levels do not reflect the gamma level of the tailings below the concrete slab, but do reflect the gamma level which people occupying the building would be exposed to. A summary of the radium concentrations in the contaminated soil, obtained from core samples, is presented in Table A.T1.

3.0 RADON/RADON DECAY-PRODUCT CONCENTRATION (RDC)

The radon decay-product concentrations (RDC) were measured in Building 3 by Chem-Nuclear Geotech and found to be below the 0.02 working level standard. The average working level for the measurement period was 0.0074 WL. This indicates that the RDC level does not exceed the EPA standards during the current use of the building. The RDC was measured in the upper level of the building where the only office room exists.

4.0 EXTENT OF CONTAMINATION

4.1 Exterior

Not applicable. The exterior contamination was previously remediated.

4.2 Interior

The extent of contamination is presented in Figure 3.

5.0 REMEDIAL ACTION RECOMMENDATIONS

5.1 Exterior

Not applicable. The exterior contamination was previously remediated.

5.2 Interior

Building 3 of the Whitewater Complex Commercial property should be considered for Application of Supplemental Standards to the area shown on the Extent of Contamination Map, Figure 3 (see Appendix B for further evaluation for the alternatives and recommendations).

90101A.APX:WHITEWATERSS:OA

TABLE A.T1

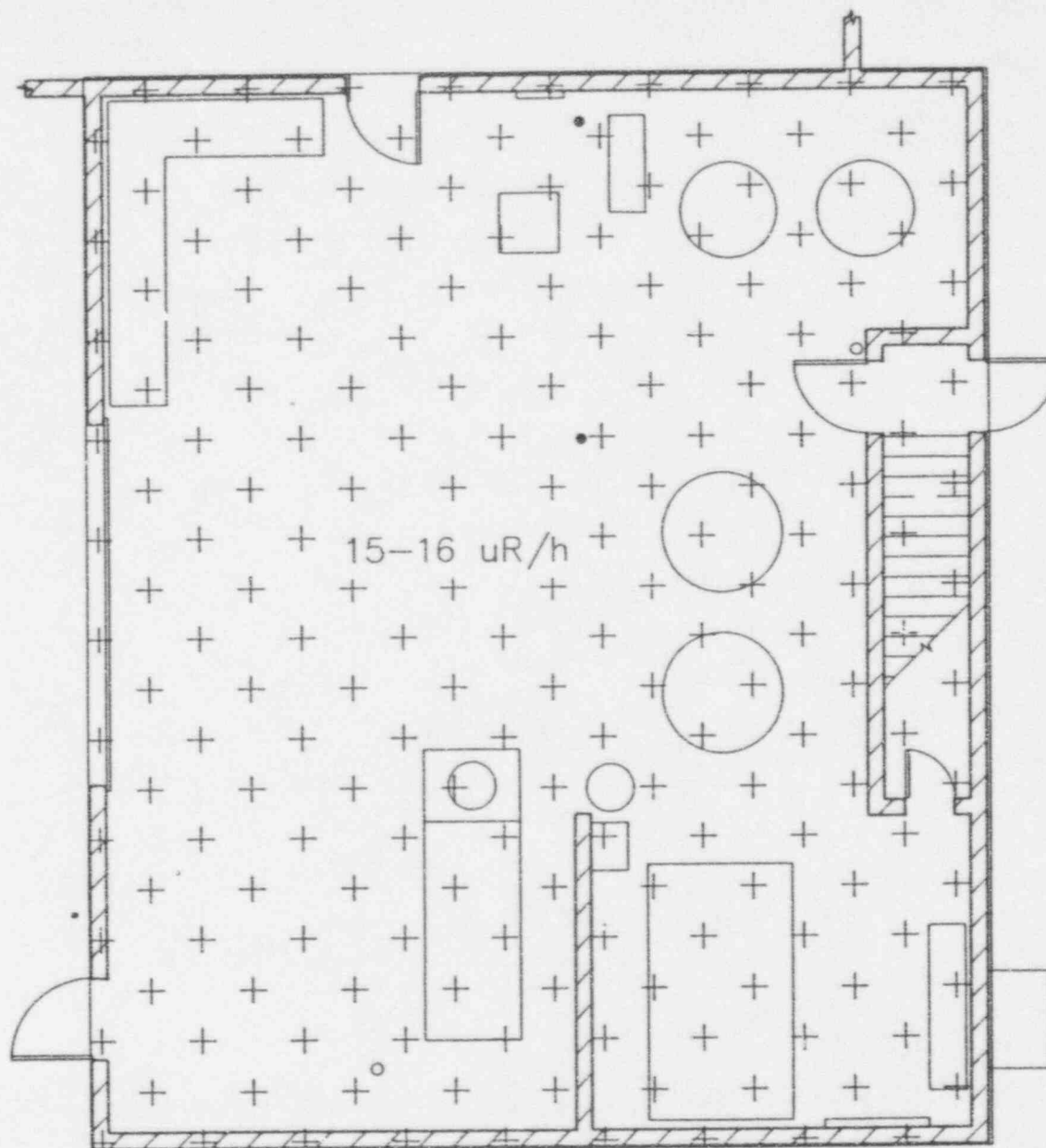
SUMMARY OF RADIOLOGICAL DATA

GJ-90101-CC (Includes: GJ-00461-CC)
940 SOUTH 10TH STREET

* LOCATION NUMBER	GAMMA (uR/h)							RADIUM 226				
	WAIST LEVEL			SURFACE LEVEL			pCi/g			DEPTH OF CONTAMINATION		
	BACKGROUND	MAX	MIN	AVE	MAX	MIN	AVE	BACKGROUND	MAX	MIN	MAX (in)	MIN
	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
135290	12	---	---	---	16	15	16	---	22.2	3.3	48	---
165250	12	---	---	---	16	15	16	---	4.5	2.9	0	---
130210	12	---	---	---	16	15	16	---	46.5	3.6	48	---

* FROM FIGURE 3.

A-4



PARTIAL SITE PLAN (BUILDING 3)
NO SCALE

LEGEND

15-16 GAMMA EXPOSURE RATES AT
GROUND LEVEL IN $\mu\text{R}/\text{h}$



AREA OF EXPOSURE RATE
MEASUREMENT

INTERIOR GAMMA EXPOSURE RATES

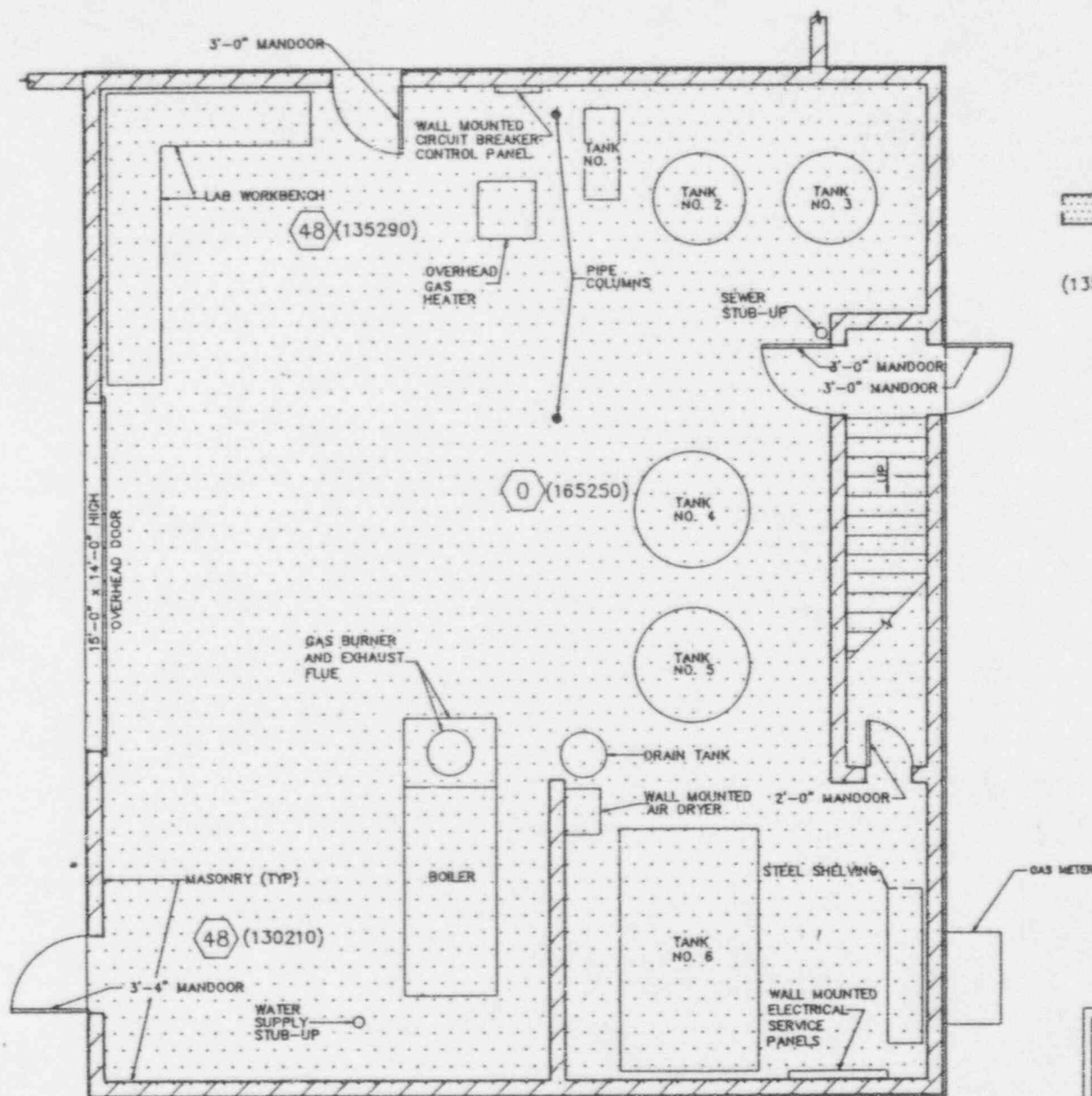
U.S. DEPARTMENT OF ENERGY

940 S. 10TH ST.

GRAND JUNCTION, CO

DOE ID# GJ-90101-CC

FIGURE 2



LEGEND

- DEPTH OF CONT. (IN INCHES)
 AREA OF CONTAMINATION AND APPLICATION OF SUPPLEMENTAL STANDARDS
 (135290) SAMPLE LOCATION NUMBER

EXTENT OF CONTAMINATION

U.S. DEPARTMENT OF ENERGY

940 S. 10TH ST.
GRAND JUNCTION, CO

DOE ID# GJ-90101-CC

FIGURE 3

PARTIAL SITE PLAN (BUILDING 3)
NO SCALE



ATTACHMENT

APPENDIX A FOR GJ-00461-CC

APPENDIX A
RADIOLOGICAL ASSESSMENT FOR
DOE ID NO. GJ-00461-CC

Revised: August 21, 1989

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EXECUTIVE SUMMARY

1.0 INTRODUCTION

This property is Whitewater Building Materials Corporation, located at 940 South Tenth Street.

Following procedures described in the *Field Assessment Operations Technical Data Procedures Manual*, data were collected on this property and assessed to estimate the location of residual radioactive material in excess of the Environmental Protection Agency (EPA) 'Standards for Remedial Action at Inactive Uranium Processing Sites' (40 CFR 192).

This property has been included for remedial action consideration by the Department of Energy historical data review.

2.0 GAMMA EXPOSURE-RATE SURVEYS

2.1 Exterior

The area backgrounds are 18 $\mu\text{R/h}$ and 1.4 pCi/g. The high outside gamma is 108 $\mu\text{R/h}$. Areas of elevated exterior gamma exposure rates are shown in Figure 1.

2.2 Interior

The interior background, as determined by UNC Geotech, is 12 $\mu\text{R/h}$. The high inside gamma readings are: 28 $\mu\text{R/h}$ in Building 1, 18 $\mu\text{R/h}$ in Buildings 2 and 3, 32 $\mu\text{R/h}$ in Building 4, and 15 $\mu\text{R/h}$ in Buildings 5 and 6. There are no areas exceeding the interior gamma exposure rate standards. Interior gamma exposure rates are shown in Figures 2a through 2f.

3.0 RADON/RADON DECAY-PRODUCT CONCENTRATION (RDC)

The Colorado Department of Health Grand Junction Remedial Action Program RDC measurement taken in 1981 was determined to be 0.021 gross working level in Building 1.

4.0 EXTENT OF CONTAMINATION

4.1 Exterior

Figure 3 shows the locations and types of explorations and radium measurements made; the related radium data are listed in Table 1. The maximum radium concentration in the contaminated area is 135.9 pCi/g.

Figure 4a shows the estimated boundaries and depths of exterior contamination. The deposits containing identified residual radioactive materials are characterized as follows:

Beneath numerous concrete slabs, beneath concrete storage bins, beneath asphalt areas, around the above-ground fuel tanks, in dirt/gravel areas, beneath the stoops, in the dirt/gravel ramp, and around the area of the old truck wash west of Building 6.

4.2 Interior

Figures 2a through 2f show the location and types of explorations and radium measurements made, and related radium data are listed in Tables 2a through 2f. The maximum radium concentrations in the contaminated areas are 13.2 pCi/g in Building 1, 20.2 pCi/g in Building 2, 10.3 pCi/g in Building 3, 9.9 pCi/g in Building 4, and 8.9 pCi/g in Building 6.

Figures 4b through 4f show the estimated boundaries and depths of interior contamination. The deposits containing identified residual radioactive materials are characterized as follows:

In the concrete aggregate of the slab-on-grade of Building 1, beneath the concrete floor of Building 2, in the footing/foundation of Building 3, in the footing/foundation and beneath the concrete slab in Building 4, and beneath the concrete floor slabs of Buildings 6.

5.0 REMEDIAL ACTION RECOMMENDATIONS

5.1 Exterior

Exterior Deposits A through C (Figure 4a) should be removed and the appropriate cover material replaced.

5.2 Interior

These buildings have been assessed to exterior standards because the valid working level measurements can not be obtained. The interior deposits should be remediated as follows:

Building 1 (Deposit D, Figure 4b): Remove the contaminated floor slabs. After the floor slabs are removed, the soil beneath should be closely monitored for additional contamination. Replace with new material.

Building 2 (Deposit E, Figure 4c): Remove the floor slab, excavate tailings from beneath, and replace with a new floor slab. It is suspected that another slab of concrete may be present at approximately 21 inches below the floor slab.

Buildings 3 and 4 (Deposit F, Figures 4d and 4e): This deposit consists of a 31-inch-thick footing which supports both Buildings 3 and 4. This deposit should be left in place and area averaging should be applied after the adjacent deposit is remediated.

Building 4 (Deposit G, Figure 4e): Remove the floor slab, excavate tailings from beneath, and replace with new material.

Building 6 (Deposit H, Figure 4f): Remove the floor slab, excavate tailings beneath the clean overburden, and replace with new material.

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Revised: August 21, 1989

TEAM LEADER NOTES

DOE ID NUMBER: GJ-00461-CC

SURVEY DATES: January 1985 and February 14, 1989

ASSESSMENT TECHNICIANS: Stan Sparks and Billie Foust

Owner: Whitewater Building Materials Corporation

Contact: Ed Gardner

Telephone Number: (303) 242-7538

All deposits described in the historical data were located and investigated. Additional contamination was identified throughout the property.

The water meter pit was investigated with a scintillometer. The readings are 140 counts per second (cps) over 160 cps.

Underground utility lines located during the assessment are shown on the drawings.

All structures were gamma scanned. Five cores were drilled through the concrete in the shop area in Building 1. Contamination involves five of the 20 by 20 foot slabs and the 6- to 8-inch-thick concrete. The underlying material should be monitored after the removal of the contaminated concrete. Two cores were drilled in Building 2 (the storage shed). One core was drilled in 1985 and the second core was drilled in 1989. There is a concrete slab below the surface slab at 21 inches. An estimated depth of contamination has been made at 33 inches. The north stem wall which supports Buildings 3 and 4 is contaminated. There is also contamination beneath a portion of the floor of Building 4. There is no contamination associated with Building 5. Building 6 is used to store bags of concrete. One core was drilled in the southeast portion of this structure. An obstruction was hit at 63 inches; the depth of contamination has been estimated at 87 inches. This includes 6 inches of concrete and approximately 5 feet of overburden with an estimated 21 inches of contamination beneath. The attached Footing/Foundation Forms detail these areas.

The Colorado Department of Health Grand Junction Remedial Action Program radon decay-product concentration measurement (0.021 gross working level) taken in Building 1 in 1981 was determined to be invalid due to the proximity to the tailings pile and should not be taken into consideration as part of the assessment.

An additional 101 holes were drilled on February 14, 1989, by a drilling contractor. The depths drilled ranged from 5 to 20 feet.

TEAM LEADER NOTES
GJ-00461-CC
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Contamination in and around the ramp area and draw pits on the east portion of the property range from 45 to 138 inches.

Contamination from this property spills over to the north. The DOE ID number of the spillover property is GJ-90094-CC, located at 1101 Third Avenue. This property is included and is being assessed at this time. Contamination also spills over to the east at DOE ID number GJ-44202-CC, located at 1104 Winters Avenue. This property is also included and is being assessed at this time.

The deposits should be monitored during remedial action to ensure all contamination is removed.

The owner indicated that the south side of Building 1 was an old concrete ditch which was removed when the city built the sidewalk/street. It was filled with rubbish and concrete and then paved over. It extends from the southwest corner to the southeast corner of Building 1. There is 2 to 3 feet of pit run on top of the original boggy area. The entire property was very swampy. Tailings, concrete, and gravel were used to create a stable base.

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Radium Concentrations at Exterior Locations
940 South 10th Street

		Ra-226 (pCi/g)		RDC	Alpha	Comments
Loc #	Grid Location	Depth (in.)	Meas. Type	Non-Deconv.	Deconv.	
1	131520	00-06	SS	64.1		DC = 12 inches
		00	DS	34.1		
		03	TC	22.0	22.0	
		06	DS	4.7		
		06	TC	14.6	10.3	
		09	TC	9.6	4.6	
		12	TC	7.4	4.7	
		15	TC	6.7	6.9	
		18	TC	5.9	5.9	
		21	TC	5.1	4.0	
		24	TC	4.9	4.9	
		27	TC	4.7	4.3	
		30	TC	4.7	4.5	
		33	TC	4.8	5.2	
		36	TC	4.7	4.7	
2	133282	03	TC	4.4	4.4	DC = 0 inches
		06	TC	4.7	4.7	
		09	TC	5.0	5.0	
		12	TC	5.3	5.5	
		15	TC	5.5	5.9	
		18	TC	5.5	6.0	
		21	TC	5.2	5.2	
		24	TC	4.9	4.4	
3	135226	03	TC	4.8	4.8	Through asphalt DC = 6 inches
		06	TC	6.5	6.1	
		09	TC	8.4	13.2	
		12	TC	7.6	9.4	
		15	TC	5.8	4.0	
		18	TC	5.0	4.3	
		21	TC	4.6	4.1	
		24	TC	4.5	4.5	
		27	TC	4.4	4.2	
		30	TC	4.4	4.4	
		33	TC	4.4	4.4	
		36	TC	4.4	4.4	
		39	TC	4.4	4.8	
		42	TC	4.2	4.0	
		45	TC	4.1	4.5	
		48	TC	3.8	3.4	
		51	TC	3.7	3.9	

Radium Concentrations at Exterior Locations
940 South 10th Street

DOE ID #GJ-00461-CC

Loc #	Grid Location	Depth (in.)	Meas. Type	Ra-226 (pCi/g)		RDC	Alpha	Comments
				Non-Deconv.	Deconv.	Working Level	dpm/100 cm ²	
3	135226	54	TC	3.5	3.3			
		57	TC	3.4	3.4			
		60	TC	3.3	3.3			
4	135265	03	TC	5.0	5.0			Asphalt
		06	TC	5.5	5.5			
		09	TC	6.0	5.6			DC = 6 inches
		12	TC	6.7	9.0			
		15	TC	6.1	6.3			
		18	TC	5.4	4.9			
		21	TC	5.0	4.5			
		24	TC	4.9	4.9			
		27	TC	4.8	4.6			
		30	TC	4.8	4.8			
		33	TC	4.8	4.8			
		36	TC	4.8	4.8			
		39	TC	4.8	5.2			
		42	TC	4.6	4.6			
		45	TC	4.4	4.4			
		48	TC	4.2	3.8			
		51	TC	4.2	4.6			
		54	TC	4.0	3.6			
		57	TC	4.0	4.5			
5	136214	00	DS	1.4				Concrete
6	139360	00	DS	1.2				Concrete
		00	DS	1.2				
		03	TC	4.1	4.1			
		06	TC	4.8	3.0			
		09	TC	6.5	9.0			DC = 0 inches
		12	TC	6.8	9.1			
		15	TC	5.8	5.3			
		18	TC	5.1	4.4			
		21	TC	4.8	4.6			
		24	TC	4.6	4.8			
		27	TC	4.3	3.9			
		30	TC	4.2	4.6			
		33	TC	3.9	3.5			
		36	TC	3.8	3.8			
		39	TC	3.7	3.3			

Radium Concentrations at Exterior Locations
940 South 10th Street

ID #GJ-00461-CC

Loc #	Grid Location	Depth (in.)	Meas. Type	Ra-226 (pCi/g)		RDC	Alpha	Comments
				Non-Deconv.	Deconv.	Working Level	dpm/100 cm ²	
6	139360	42	TC	3.8	4.0			
		45	TC	3.8	3.8			
		48	TC	3.8	3.8			
		51	TC	3.8	3.8			
		54	TC	3.8	4.0			
		57	TC	3.7	3.7			
7	140223	00	DS	1.2				Asphalt
8	140230	00	DS	6.4				Asphalt
		03	TC	5.1	5.1			
		06	TC	5.3	4.9			DC = 6 inches
		09	TC	5.7	6.1			
		12	TC	5.9	6.3			
		15	TC	5.9	7.0			
		18	TC	5.3	4.8			
		21	TC	5.0	4.8			
		24	TC	4.8	5.3			
		27	TC	4.3	3.6			
		30	TC	4.2	4.2			
		33	TC	4.1	4.1			
		36	TC	4.0	4.2			
		39	TC	3.8	3.6			
		42	TC	3.7	3.7			
		45	TC	3.6	3.6			
		48	TC	3.5	3.3			
		51	TC	3.5	3.5			
		54	TC	3.5	3.7			
		57	TC	3.4	3.4			
		60	TC	3.3	3.1			
		63	TC	3.3	3.5			
		66	TC	3.2	3.2			
9	140300	00	DS	1.6				Concrete
10	140336	00	DS	1.4				Concrete
11	140390	03	TC	4.0	4.0			Concrete
		06	TC	5.3	6.0			
		09	TC	6.2	8.9			DC = 6 inches
		12	TC	5.6	5.8			
		15	TC	4.9	4.2			
		18	TC	4.6	4.4			
		21	TC	4.4	4.0			

Radium Concentrations at Exterior Locations

940 South 10th Street

DE ID #GJ-00461-CC

Loc #	Grid Location	Depth (in.)	Meas. Type	Ra-226 (pCi/g)		RDC	Alpha	Comments
				Non-Deconv.	Deconv.	Working Level	dpm/100 cm ²	
11	140390	24	TC	4.4	4.4			
		27	TC	4.4	4.6			
		30	TC	4.3	4.3			
		33	TC	4.2	4.2			
		36	TC	4.1	4.5			
		39	TC	3.8	3.3			
		42	TC	3.8	4.2			
		45	TC	3.6	3.4			
		48	TC	3.5	3.5			
		51	TC	3.4	3.4			
		54	TC	3.3	3.3			
12	143460	03	TC	7.7	7.7			DC = 6 inches
		06	TC	7.4	7.2			
		09	TC	7.2	6.8			
		12	TC	7.2	6.8			
		15	TC	7.4	8.5			
		18	TC	7.0	7.0			
		21	TC	6.6	6.4			
		24	TC	6.3	7.0			
		27	TC	5.6	5.2			
		30	TC	5.1	4.6			
		33	TC	4.9	4.7			
		36	TC	4.8	4.6			
		39	TC	4.8	5.0			
		42	TC	4.7	4.5			
		45	TC	4.7	5.1			
		48	TC	4.5	4.5			
		51	TC	4.3	4.5			
		54	TC	4.0	3.6			
		57	TC	3.9	3.9			
		60	TC	3.8	3.8			
		63	TC	3.7	3.3			
		66	TC	3.8	3.8			
13	143508	00	DS	2.0				Gravel road
14	147444	00	DS	19.2				Soil
		03	TC	26.7	26.7			Beside concrete settling tanks
		06	TC	38.6	32.7			
		09	TC	53.8	49.2			
		12	TC	71.6	86.0			DC = 45 inches
		15	TC	81.3	81.8			
		18	TC	90.7	99.2			

Radium Concentrations at Exterior Locations

940 South 10th Street

OE ID #GJ-00461-CC

Loc #	Grid Location	Depth (in.)	Meas Type	Ra-226 (pCi/g)		RDC	Alpha	Comments
				Non-Deconv.	Deconv.	Working Level	dpm/100 cm ²	
14	147444	21	TC	95.3	82.0			
		24	TC	107.4	105.4			
		27	TC	120.6	126.3			
		30	TC	130.6	139.0			
		33	TC	135.9	162.7			
		36	TC	126.1	150.3			
		39	TC	102.7	118.5			
		42	TC	70.4	56.4			
		45	TC	46.0	30.0			
		48	TC	30.6	13.5			
		51	TC	24.8	27.6			
		54	TC	17.4	14.2			
		57	TC	11.8	8.1			
		60	TC	8.3	6.2			
		63	TC	6.0	3.7			
		66	TC	5.0	3.9			
		69	TC	4.6	3.2			
		72	TC	5.0	5.0			
15	148277	00-06	SS	3.1				Asphalt
		03	TC	3.8	3.8			
		06	TC	4.1	3.9			
		09	TC	4.5	4.9			
		12	TC	4.7	4.3			
		15	TC	5.1	5.8			
		18	TC	5.1	4.6			
		21	TC	5.4	6.1			
		24	TC	5.3	5.8			
		27	TC	4.9	4.5			
		30	TC	4.7	4.7			
		33	TC	4.5	4.1			
		36	TC	4.5	4.7			
		39	TC	4.4	4.4			
		42	TC	4.3	4.1			
		45	TC	4.3	4.8			
		48	TC	4.0	3.6			
		51	TC	3.9	4.3			
		54	TC	3.6	3.1			
		57	TC	3.6	3.8			
		60	TC	3.5	3.5			
		63	TC	3.4	3.2			
		66	TC	3.4	3.2			
		69	TC	3.5	3.9			
		72	TC	3.4	3.4			

DC = 0 inches

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		Ra-226 (pCi/g)		RDC		Alpha			
Loc #	Grid Location	Depth (in.)	Meas. Type	Non-Deconv.	Deconv.	Working Level	dpm/100 cm ²	Comments	
16	150260	00	DS	1.0				Concrete	
17	150350	00	DS	<1.0				Concrete	
18	150410	00	DS	4.8				Concrete	
19	153264	00	DS	1.6				Asphalt	
20	160230	03	TC	3.8	3.8			Through asphalt	
		06	TC	4.1	4.5				
		09	TC	4.2	4.4			DC = 30 inches	
		12	TC	4.2	3.7				
		15	TC	4.5	4.3				
		18	TC	4.9	4.9				
		21	TC	5.3	6.0				
		24	TC	5.3	5.8				
		27	TC	5.0	4.8				
		30	TC	4.8	4.8				
		33	TC	4.6	4.6				
		36	TC	4.4	4.0				
		39	TC	4.4	4.6				
		42	TC	4.3	4.1				
		45	TC	4.3	4.3				
		48	TC	4.3	4.7				
		51	TC	4.1	4.1				
		54	TC	3.9	3.7				
		57	TC	3.8	4.0				
		60	TC	3.6	3.4				
		63	TC	3.5	3.3				
		66	TC	3.5	3.7				
		69	TC	3.4	3.2				
		72	TC	3.4	3.8				
		75	TC	3.2	3.2				
21	160240	00	DS	1.5				Asphalt	
22	160290	00	DS	1.9				Concrete	
23	160320	00	DS	<1.0				Concrete	
24	160455	00	DS	6.3				Concrete	
25	160460	00-06	SS	14.6				DC > 48 inches	
		00	DS	33.7					

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Loc #	Grid Location	Depth (in.)	Meas. Type	Ra-226 (pCi/g)		RDC	Alpha	dpm/100 cm ²	Comments
				Non-Deconv.	Deconv.				
25	160460	03	TC	87.6	87.6				
		06	DS	97.5					
		06	TC	109.6	125.2				
		09	TC	122.8	137.6				
		12	TC	127.7	135.5				
		15	TC	128.2	133.0				
		18	TC	126.0	129.6				
		21	TC	121.8	123.9				
		24	TC	116.4	114.6				
		27	TC	112.0	107.7				
		30	TC	110.0	107.5				
		33	TC	109.4	108.9				
		36	TC	109.1	112.8				
		39	TC	106.7	95.0				
		42	TC	110.9	107.0				
		45	TC	117.3	117.8				
		48	TC	123.4	123.4				
26	160493	03	TC	3.3	3.3				DC = 0 inches
		06	TC	3.7	3.5				
		09	TC	4.2	3.7				
		12	TC	5.0	5.4				
		15	TC	5.6	5.4				
		18	TC	6.3	4.3				
		21	TC	8.1	9.9				
		24	TC	8.9	12.6				
		27	TC	7.6	7.8				
		30	TC	6.2	4.2				
		33	TC	5.9	6.8				
		36	TC	5.1	4.7				
		39	TC	4.5	4.1				
		42	TC	4.1	3.7				
		45	TC	3.9	3.5				
		48	TC	3.9	3.5				
		51	TC	4.1	4.1				
27	160520	03	TC	4.0	4.0				DC = 33 inches
		06	TC	4.1	3.9				
		09	TC	4.3	3.2				
		12	TC	5.1	4.9				
		15	TC	6.0	6.0				
		18	TC	6.9	7.4				
		21	TC	7.5	4.8				
		24	TC	9.6	11.2				

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Loc #	Grid Location	Depth (in.)	Meas. Type	Ra-226 (pCi/g)		RDC	Alpha	dpm/100 cm ²	Comments
				Non-Deconv.	Deconv.				
27	160520	27	TC	10.8	12.0				
		30	TC	11.3	17.9				
		33	TC	8.1	5.8				
		36	TC	6.2	4.6				
		39	TC	5.2	4.3				
		42	TC	4.7	3.8				
		45	TC	4.7	5.1				
		48	TC	4.5	4.1				
		51	TC	4.5	4.7				
		54	TC	4.4	4.4				
		57	TC	4.3	3.9				
		60	TC	4.4	4.6				
		63	TC	4.4	4.4				
		66	TC	4.4	4.4				
		69	TC	4.4	4.4				
		72	TC	4.4	4.4				
28	162270	00	DS	1.8					Asphalt
29	165213	00	DS	1.5					Concrete
30	165464	03	TC	11.1	11.1				DC = 45 inches
		06	TC	12.8	15.8				
		09	TC	12.8	14.0				
		12	TC	12.1	11.7				
		15	TC	11.6	9.1				
		18	TC	12.5	10.9				
		21	TC	14.3	13.2				
		24	TC	16.7	14.9				
		27	TC	20.1	25.3				
		30	TC	20.6	24.9				
		33	TC	18.7	21.2				
		36	TC	15.4	15.2				
		39	TC	12.2	9.2				
		42	TC	10.7	12.1				
		45	TC	8.4	6.8				
		48	TC	7.0	6.3				
31	165480	51	TC	6.0	5.1				Gravel road
		54	TC	5.5	5.5				
		57	TC	5.0	4.6				
		60	TC	4.7	4.5				
		63	TC	4.5	4.5				
		66	TC	4.3	4.3				
		00	DS	2.3					
		00	DS	2.3					

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Loc #	Grid Location	Depth (in.)	Meas. Type	Ra-226 (pCi/g)		RDC	Alpha	Comments	
				Non-Deconv.	Deconv.	Working Level	dpm/100 cm ²		
32	167240	03	TC	4.2	4.2			DC = 39 inches	
		06	TC	4.4	4.9				
		09	TC	4.3	4.1				
		12	TC	4.3	4.1				
		15	TC	4.4	4.2				
		18	TC	4.6	4.4				
		21	TC	4.9	4.4				
		24	TC	5.5	3.9				
		27	TC	7.0	8.2				
		30	TC	7.8	11.4				
		33	TC	6.6	6.2				
		36	TC	5.6	5.1				
		39	TC	4.9	3.7				
		42	TC	4.9	5.1				
		45	TC	4.8	4.8				
		48	TC	4.7	4.9				
		51	TC	4.5	4.3				
		54	TC	4.4	4.8				
		57	TC	4.1	3.9				
		60	TC	3.9	3.7				
63	TC	3.8	3.8						
66	TC	3.7	3.7						
33	170330	00	DS	1.3				Concrete	
34	170380	00-07	SS	1.6				Core	
		07-14	SS	41.6	.				
		03	TC	8.3	8.3			DC = 18 inches	
		06	TC	14.3	10.2				
		09	TC	22.6	41.1				
		12	TC	20.5	29.0				
		15	TC	13.6	10.4				
		18	TC	8.5	2.8				
		21	TC	6.6	5.4				
		24	TC	5.4	3.8				
		27	TC	5.1	5.1				
		30	TC	4.8	4.4				
		33	TC	4.7	5.1				
		36	TC	4.4	4.4				
39	TC	4.1	4.1						
35	170510	00	DS	1.7					
36	180300	00	DS	1.5				Concrete	

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		Ra-226 (pCi/g)		RDC	Alpha			
Loc #	Grid Location	Depth (in.)	Meas. Type	Non-Deconv.	Deconv.	Working Level	dpm/100 cm ²	Comments
37	180320	03	TC	3.9	3.9			Concrete
		06	TC	4.6	5.0			
		09	TC	5.1	6.0			DC = 0 inches
		12	TC	5.1	5.1			
		15	TC	5.1	5.3			
		18	TC	5.0	4.5			
		21	TC	5.2	6.1			
		24	TC	4.9	4.7			
		27	TC	4.7	4.7			
		30	TC	4.5	4.3			
		33	TC	4.4	4.4			
		36	TC	4.3	4.3			
		39	TC	4.2	4.2			
		42	TC	4.1	4.1			
		45	TC	4.0	4.2			
		48	TC	3.8	3.4			
		51	TC	3.8	3.8			
		54	TC	3.8	3.8			
		57	TC	3.8	4.3			
		60	TC	3.5	3.0			
		63	TC	3.5	3.5			
38	180340	00	DS	1.5				Concrete
		03	TC	5.8	5.8			
		06	TC	6.9	2.3			DC = 24 inches
		09	TC	10.6	5.4			
		12	TC	17.2	12.4			
		15	TC	26.5	44.1			
		18	TC	25.9	42.3			
		21	TC	16.1	7.7			
		24	TC	11.0	8.5			
		27	TC	7.3	3.7			
		30	TC	5.6	3.3			
		33	TC	5.2	5.0			
		36	TC	4.9	4.5			
		39	TC	4.8	4.6			
		42	TC	4.8	5.0			
		45	TC	4.7	4.9			
		48	TC	4.5	4.1			
		51	TC	4.5	4.5			
		54	TC	4.5	5.0			
		57	TC	4.2	4.0			
		60	TC	4.0	3.8			
63	TC	4.0	4.4					

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Loc #	Grid Location	Depth (in.)	Meas. Type	Ra-226 (pCi/g)		RDC Working Level	Alpha dpm/100 cm ²	Comments
				Non-Deconv.	Deconv.			
38	180340	66	TC	3.8	3.3			
		69	TC	3.9	3.9			
39	180380	00	DS	4.6				Concrete
40	180440	00	DS	4.4				Concrete
		03	TC	7.7	7.7			
		06	TC	12.4	5.6			DC = 27 inches
		09	TC	20.9	14.1			
		12	TC	33.2	28.8			
		15	TC	48.0	54.9			
		18	TC	58.9	94.1			
		21	TC	50.0	72.0			
		24	TC	28.7	13.4			
		27	TC	16.0	3.7			
		30	TC	10.2	4.3			
		33	TC	7.7	5.6			
		36	TC	6.4	4.4			
		39	TC	6.2	6.6			
		42	TC	5.8	6.5			
		45	TC	5.0	4.3			
		48	TC	4.6	4.6			
		51	TC	4.2	4.0			
		54	TC	3.9	3.7			
		57	TC	3.7	3.5			
		60	TC	3.6	3.4			
		63	TC	3.6	3.8			
		66	TC	3.5	3.3			
		69	TC	3.5	3.7			
		72	TC	3.4	3.4			
41	180480	00	DS	1.4				Background
42	185215	00	DS	<1.0				Concrete
43	187285	03	TC	4.1	4.1			Asphalt
		06	TC	4.0	4.2			
		09	TC	3.8	3.4			DC = 0 inches
		12	TC	3.8	3.8			
		15	TC	3.8	3.4			
		18	TC	4.0	4.0			
		21	TC	4.2	4.9			
		24	TC	4.0	2.6			
		27	TC	4.6	5.7			

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				Ra-226 (pCi/g)		RDC	Alpha		
Loc #	Grid Location	Depth (in.)	Meas. Type	Non-Deconv.	Deconv.	Working Level	dpm/100 cm ²	Comments	
43	187285	30	TC	4.6	4.6				
		33	TC	4.6	4.6				
		36	TC	4.6	4.8				
		39	TC	4.5	4.3				
		42	TC	4.5	4.5				
		45	TC	4.5	4.5				
		48	TC	4.5	4.5				
		51	TC	4.5	4.7				
		54	TC	4.4	4.0				
		57	TC	4.5	4.9				
		60	TC	4.4	4.2				
		63	TC	4.4	4.6				
		66	TC	4.3	4.3				
44	190310	00	DS	1.0				Concrete	
45	190510	00	DS	2.0				Background	
46	192500	03	TC	5.4	5.4			DC = 18 inches	
		06	TC	7.4	5.4				
		09	TC	10.5	14.6				
		12	TC	11.3	14.9				
		15	TC	10.1	9.0				
		18	TC	9.5	10.7				
		21	TC	8.2	7.7				
		24	TC	7.2	7.0				
		27	TC	6.3	5.9				
		30	TC	5.6	5.2				
		33	TC	5.1	4.9				
		36	TC	4.7	4.3				
		39	TC	4.5	4.0				
		42	TC	4.6	5.0				
		45	TC	4.5	4.3				
		48	TC	4.5	4.5				
		51	TC	4.5	4.7				
		54	TC	4.4	4.9				
		57	TC	4.0	3.6				
		60	TC	3.8	3.4				
		63	TC	3.8	4.0				
		66	TC	3.7	3.7				
47	197300	00	DS	<1.0				Concrete pad Auger refusal	
		03	TC	2.9	2.9				
		06	TC	3.1	2.9				

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				Ra-226 (pCi/g)		RDC	Alpha	Comments
Loc #	Grid Location	Depth (in.)	Meas. Type	Non-Deconv.	Deconv.	Working Level	dpm/100 cm ²	
47	197300	09	TC	3.4	3.0			
		12	TC	3.9	3.9			
48	199342	00	DS	1.6				Concrete
49	199347	00	DS	2.2				Concrete
50	199352	00	DS	2.7				Concrete
51	200282	03	TC	3.5	3.5			DC = 57 inches
		06	TC	3.9	4.1			
		09	TC	4.2	4.9			
		12	TC	4.1	3.6			
		15	TC	4.3	4.3			
		18	TC	4.5	4.7			
		21	TC	4.6	4.6			
		24	TC	4.7	4.7			
		27	TC	4.8	4.6			
		30	TC	5.0	5.0			
		33	TC	5.2	5.0			
		36	TC	5.5	5.0			
		39	TC	6.1	5.7			
		42	TC	6.9	5.5			
		45	TC	8.5	7.1			
		48	TC	10.9	17.5			
		51	TC	9.6	11.0			
		54	TC	7.5	7.3			
		57	TC	5.5	3.4			
		60	TC	4.7	4.3			
		63	TC	4.1	3.4			
		66	TC	3.9	3.9			
		69	TC	3.7	3.7			
52	200320	00	DS	1.6				Concrete
53	200390	00	DS	3.0				Concrete
54	200410	00	DS	3.8				Concrete
55	200460	03	TC	34.5	34.5			DC = 57 inches
		06	TC	53.0	47.8			
		09	TC	74.4	79.7			
		12	TC	92.8	109.5			
		15	TC	101.8	109.8			

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				Ra-226 (pCi/g)		RDC	Alpha	Comments
Loc #	Grid Location	Depth (in.)	Meas. Type	Non-Deconv.	Deconv.	Working Level	dpm/100 cm ²	
47	197300	09	TC	3.4	3.0			
		12	TC	3.9	3.9			
48	199342	00	DS	1.6				Concrete
49	199347	00	DS	2.2				Concrete
50	199352	00	DS	2.7				Concrete
51	200282	03	TC	3.5	3.5			DC = 57 inches
		06	TC	3.9	4.1			
		09	TC	4.2	4.9			
		12	TC	4.1	3.6			
		15	TC	4.3	4.3			
		18	TC	4.5	4.7			
		21	TC	4.6	4.6			
		24	TC	4.7	4.7			
		27	TC	4.8	4.6			
		30	TC	5.0	5.0			
		33	TC	5.2	5.0			
		36	TC	5.5	5.0			
		39	TC	6.1	5.7			
		42	TC	6.9	5.5			
		45	TC	8.5	7.1			
		48	TC	10.9	17.5			
		51	TC	9.6	11.0			
		54	TC	7.5	7.3			
		57	TC	5.5	3.4			
		60	TC	4.7	4.3			
		63	TC	4.1	3.4			
		66	TC	3.9	3.9			
		69	TC	3.7	3.7			
52	200320	00	DS	1.6				Concrete
53	200390	00	DS	3.0				Concrete
54	200410	00	DS	3.8				Concrete
55	200460	03	TC	34.5	34.5			DC = 57 inches
		06	TC	53.0	47.8			
		09	TC	74.4	79.7			
		12	TC	92.8	109.5			
		15	TC	101.8	109.8			

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				Ra-226 (pCi/g)		RDC	Alpha	Comments
Loc #	Grid Location	Depth (in.)	Meas. Type	Non-Deconv.	Deconv.	Working Level	dpm/100 cm ²	
55	200460	18	TC	106.3	110.0			
		21	TC	108.7	109.9			
		24	TC	110.4	112.4			
		27	TC	111.0	112.6			
		30	TC	110.7	109.5			
		33	TC	111.1	115.0			
		36	TC	109.3	110.5			
		39	TC	106.8	107.5			
		42	TC	103.9	104.8			
		45	TC	100.5	105.7			
		48	TC	94.2	104.3			
		51	TC	82.2	88.2			
		54	TC	66.8	65.4			
		57	TC	52.2	53.3			
		60	TC	37.0	34.7			
		63	TC	23.1	14.0			
		66	TC	14.3	6.1			
		69	TC	10.1	4.9			
		72	TC	8.8	8.8			
56	204213	00	DS	1.1				Concrete
57	205456	00	DS	2.1				Concrete
58	210213	00	DS	2.7				
59	210214	00	DS	<1.0				Concrete
60	210310	00	DS	1.4				Concrete
61	210480	00	DS	1.0				Concrete
		03	TC	5.7	5.7			
		06	TC	7.6	10.6			DC = 30 inches
		09	TC	7.8	9.8			
		12	TC	6.9	4.4			
		15	TC	7.4	4.9			
		18	TC	9.3	5.7			
		21	TC	13.2	15.3			
		24	TC	15.9	28.3			
		27	TC	11.6	9.5			
		30	TC	8.5	5.8			
		33	TC	6.9	5.7			
		36	TC	6.0	5.3			
		39	TC	5.5	5.5			

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Loc #	Grid Location	Depth (in.)	Meas. Type	Ra-226 (pCi/g)		RDC	Alpha	Comments
				Non-Deconv.	Deconv.	Working Level	dpm/100 cm ²	
61	210480	42	TC	5.0	4.6			
		45	TC	4.7	4.7			
		48	TC	4.4	4.4			
		51	TC	4.1	3.9			
		54	TC	3.9	3.9			
		57	TC	3.7	3.3			
		60	TC	3.7	3.7			
62	210500	00	DS	7.1				
63	214350	06	TC	5.3	5.3			Logged through steel drill stem
		12	TC	8.0	-2.5			
		18	TC	16.6	3.6			
		24	TC	32.5	87.6			DC = 36 inches
		30	TC	17.4	7.6			
		36	TC	7.8	-5.5			
		42	TC	5.7	2.7			
		48	TC	5.3	4.1			
		54	TC	5.6	4.7			
		60	TC	6.4	6.4			
64	214351	00	DS	1.8				Gravel
65	215282	03	TC	7.0	7.0			Asphalt
		06	TC	6.9	9.0			
		09	TC	5.6	4.2			DC = 57 inches
		12	TC	5.1	3.9			
		15	TC	5.3	5.5			
		18	TC	5.4	5.4			
		21	TC	5.5	5.7			
		24	TC	5.5	4.6			
		27	TC	6.0	4.2			
		30	TC	7.5	5.4			
		33	TC	10.2	8.4			
		36	TC	13.9	12.5			
		39	TC	18.4	18.6			
		42	TC	22.8	21.0			
		45	TC	28.2	24.3			
		48	TC	35.8	43.8			
		51	TC	38.9	62.0			
		54	TC	29.0	28.3			
		57	TC	19.5	12.6			
		60	TC	13.9	11.4			
		63	TC	9.7	5.4			

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		Ra-226 (pCi/g)		RDC	Alpha		
Loc #	Grid Location	Depth (in.)	Meas. Type	Non-Deconv.	Deconv.	Working Level	dpm/100 cm ² Comments
65	215282	66	TC	7.9	5.8		
		69	TC	7.3	8.7		
		72	TC	5.9	4.7		
		75	TC	5.2	4.3		
		78	TC	5.0	5.0		
66	215300	00-06	SS	2.8			
		06-12	SS	3.0			
		00	DS	1.4			
		06	DS	2.7			
		12	DS	2.4			
67	215340	00-06	SS	2.4			
		06-12	SS	4.1			
		00	DS	2.2			
		06	DS	4.2			
		12	DS	4.3			
68	220320	00	DS	2.3			Gravel
69	220370	00	DS	2.2			Concrete
70	220420	03	TC	9.2	9.2		Through concrete
		06	TC	11.5	14.0		
		09	TC	12.4	16.7		
		12	TC	10.9	12.3		DC = 15 inches
		15	TC	8.6	6.1		
		18	TC	7.7	8.1		
		21	TC	6.6	6.6		
		24	TC	5.5	4.8		
		27	TC	4.8	3.9		
		30	TC	4.6	4.6		
		33	TC	4.4	4.4		
		36	TC	4.2	4.4		
		39	TC	3.9	3.7		
		42	TC	3.7	3.5		
		45	TC	3.6	3.4		
		48	TC	3.6	3.6		
		51	TC	3.6	3.6		
		54	TC	3.6	3.6		
		57	TC	3.6	3.6		
		60	TC	3.6	3.6		
71	220500	03	TC	3.9	3.9		DC = 0 inches

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		Ra-226 (pCi/g)		RDC	Alpha		
Loc #	Grid Location	Depth (in.)	Meas. Type	Non-Deconv.	Deconv.	Working Level	dpm/100 cm ² Comments
71	220500	06	TC	4.4	1.6		
		09	TC	6.5	8.8		
		12	TC	7.3	11.4		
		15	TC	5.8	4.4		
		18	TC	5.1	4.0		
		21	TC	5.0	5.0		
		24	TC	4.9	4.9		
		27	TC	4.8	4.8		
		30	TC	4.7	4.7		
		33	TC	4.7	4.7		
		36	TC	4.6	4.6		
		39	TC	4.6	4.6		
		42	TC	4.6	4.8		
		45	TC	4.5	4.7		
		48	TC	4.3	3.9		
		51	TC	4.3	4.8		
		54	TC	4.0	3.3		
		57	TC	4.1	4.5		
		60	TC	4.0	3.6		
		63	TC	4.1	4.1		
72	222408	00	DS	2.3			Old concrete pad
73	225463	03	TC	6.9	6.9		DC = 36 inches
		06	TC	7.5	8.2		
		09	TC	7.7	7.9		
		12	TC	7.8	6.0		
		15	TC	8.9	7.3		
		18	TC	10.9	4.9		
		21	TC	16.3	14.0		
		24	TC	23.0	31.4		
		27	TC	25.0	40.1		
		30	TC	18.5	19.6		
		33	TC	11.4	5.2		
		36	TC	7.8	4.2		
		39	TC	6.2	4.4		
		42	TC	5.6	5.4		
		45	TC	5.1	4.6		
		48	TC	4.9	4.7		
		51	TC	4.8	4.8		
		54	TC	4.7	4.7		
		57	TC	4.6	4.4		
		60	TC	4.6	4.8		
		63	TC	4.5	4.5		

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Loc #	Grid Location	Depth (in.)	Meas. Type	Ra-226 (pCi/g)		RDC	Alpha	Comments
				Non-Deconv.	Deconv.	Working Level	dpm/100 cm ²	
74	227408	00	DS	1.6				10" thick concrete
75	227436	03	TC	6.4	6.4			DC = 24 inches
		06	TC	8.7	5.9			
		09	TC	12.6	6.2			
		12	TC	20.1	11.9			
		15	TC	32.2	36.8			
		18	TC	41.7	78.1			
		21	TC	30.7	36.0			
		24	TC	16.7	2.8			
		27	TC	10.5	4.6			
		30	TC	7.6	4.9			
		33	TC	6.2	4.8			
		36	TC	5.6	5.2			
		39	TC	5.2	5.0			
		42	TC	4.9	4.9			
		45	TC	4.6	4.8			
		48	TC	4.2	3.7			
		51	TC	4.1	4.3			
		54	TC	3.9	3.5			
		57	TC	3.9	4.1			
		60	TC	3.8	3.6			
		63	TC	3.8	4.2			
		66	TC	3.6	3.6			
76	229282	03	TC	7.1	7.1			DC > 33 inches
		06	TC	7.1	9.2			
		09	TC	5.9	5.0			
		12	TC	5.2	4.3			
		15	TC	5.0	4.8			
		18	TC	4.9	4.9			
		21	TC	4.8	4.3			
		24	TC	5.0	5.4			
		27	TC	5.0	5.0			
		30	TC	5.0	4.8			
		33	TC	5.1	5.1			
77	230280	00	DS	3.5				Gravel
78	230290	00	DS	2.5				
79	230293	00	DS	2.2				Gravel
80	230310	00	DS	2.5				

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Loc #	Grid Location	Depth (in.)	Meas. Type	Ra-226 (pCi/g)		RDC Working Level	Alpha dpm/100 cm ²	Comments
				Non-Deconv.	Deconv.			
81	230330	00	DS	2.3				
82	230411	00	DS	1.3				Concrete by building
83	230480	00	DS	3.1				
84	232432	03	TC	3.5	3.5			DC = 24 inches
		06	TC	4.3	3.6			
		09	TC	5.5	4.8			
		12	TC	7.1	5.3			
		15	TC	9.7	10.9			
		18	TC	11.6	17.8			
		21	TC	10.0	11.6			
		24	TC	7.5	5.4			
		27	TC	6.2	5.3			
		30	TC	5.4	4.5			
		33	TC	5.1	5.1			
		36	TC	4.8	4.8			
85	- 237367	03	TC	3.5	3.5			Concrete ramp DC = 51 inches
		06	TC	3.8	3.8			
		09	TC	4.1	3.6			
		12	TC	4.7	4.5			
		15	TC	5.4	6.1			
		18	TC	5.7	5.5			
		21	TC	6.1	6.1			
		24	TC	6.5	6.0			
		27	TC	7.2	7.7			
		30	TC	7.6	8.0			
		33	TC	7.8	7.1			
		36	TC	8.4	8.8			
		39	TC	8.6	8.6			
		42	TC	9.3	6.8			
		45	TC	11.2	13.7			
		48	TC	11.7	16.1			
		51	TC	9.7	10.4			
		54	TC	7.3	4.6			
		57	TC	6.3	5.6			
		60	TC	5.7	5.7			
		63	TC	5.1	4.0			
		66	TC	5.1	5.5			
		69	TC	4.9	5.3			
		72	TC	4.5	4.1			
		75	TC	4.3	4.3			

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		Ra-226 (pCi/g)		RDC	Alpha		
Loc #	Grid Location	Depth (in.)	Meas. Type	Non-Deconv.	Deconv.	Working Level	dpm/100 cm ² Comments
85	237367	78	TC	4.1	4.1		
		81	TC	3.9	3.9		
86	240217	00-09	SS	2.0			Core on sidewalk
		03	TC	3.4	3.4		
		06	TC	3.6	3.4		DC = 30 inches
		09	TC	3.9	3.5		
		12	TC	4.4	3.9		
		15	TC	5.2	5.0		
		18	TC	6.1	8.1		
		21	TC	5.9	6.6		
		24	TC	5.3	4.8		
		27	TC	5.0	4.6		
		30	TC	4.9	4.7		
		33	TC	4.9	5.1		
		36	TC	4.8	5.0		
		39	TC	4.6	4.2		
		42	TC	4.6	5.0		
		45	TC	4.4	4.0		
		48	TC	4.4	4.6		
		51	TC	4.3	4.1		
		54	TC	4.3	5.5		
		57	TC	3.6	2.5		
		60	TC	3.5	3.5		
87	240330	00	DS	2.1			Gravel
		03	TC	4.1	4.1		
		06	TC	4.7	5.2		
		09	TC	5.0	5.5		DC = 0 inches
		12	TC	5.0	5.2		
		15	TC	4.9	4.7		
		18	TC	4.9	4.0		
		21	TC	5.4	5.6		
		24	TC	5.8	7.4		
		27	TC	5.3	4.8		
		30	TC	5.1	5.1		
		33	TC	4.9	4.9		
		36	TC	4.7	4.5		
		39	TC	4.8	4.6		
		42	TC	4.5	4.5		
		45	TC	4.4	4.6		
		48	TC	4.2	4.2		
		51	TC	4.0	4.0		
		54	TC	3.8	3.8		

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				Ra-226 (pCi/g)		RDC	Alpha		
Loc #	Grid Location	Depth (in.)	Meas. Type	Non-Deconv.	Deconv.	Working Level	dpm/100 cm ²	Comments	
87	240330	57	TC	3.6	3.4				
		60	TC	3.5	3.5				
		63	TC	3.4	3.4				
		66	TC	3.3	3.5				
		69	TC	3.1	2.7				
		72	TC	3.1	3.1				
		75	TC	3.1	3.1				
88	243290	03	TC	4.8	4.8			DC = 6 inches	
		06	TC	5.1	6.2				
		09	TC	4.8	4.4				
		12	TC	4.7	4.7				
		15	TC	4.6	4.2				
		18	TC	4.7	5.1				
		21	TC	4.6	3.9				
		24	TC	4.9	5.4				
		27	TC	4.9	5.1				
		30	TC	4.8	4.6				
		33	TC	4.8	4.8				
		36	TC	4.8	5.0				
		39	TC	4.7	4.5				
		42	TC	4.7	4.9				
		45	TC	4.6	4.8				
		48	TC	4.4	4.0				
		51	TC	4.4	4.9				
		54	TC	4.1	4.1				
		57	TC	3.8	3.4				
		60	TC	3.7	3.9				
89	243307	63	TC	3.5	3.3			Gravel DC = 0 inches	
		66	TC	3.4	3.6				
		69	TC	3.2	2.8				
		72	TC	3.2	3.2				
		03	TC	4.5	4.5				
		06	TC	4.9	5.6				
		09	TC	4.9	5.4				
		12	TC	4.6	4.4				
		15	TC	4.4	3.9				
		18	TC	4.5	4.3				
		21	TC	4.7	4.9				
		24	TC	4.8	5.2				
		27	TC	4.7	4.5				
		30	TC	4.7	4.7				
		33	TC	4.7	4.7				

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		Ra-226 (pCi/g)		RDC	Alpha		
Loc #	Grid Location	Depth (in.)	Meas. Type	Non-Deconv.	Deconv.	Working Level	dpm/100 cm ² Comments
89	243307	36	TC	4.7	4.9		
		39	TC	4.6	4.6		
		42	TC	4.5	4.5		
		45	TC	4.4	4.4		
		48	TC	4.3	4.5		
		51	TC	4.1	4.1		
90	249340	00-06	SS	2.2			
		00	DS	1.3			
91	250210	00	DS	1.4			
92	250310	00	DS	3.1			
93	255445	00	DS	9.6			
		06	DS	37.0			
		12	DS	7.6			
		15	DS	4.9			
		18	DS	<1.0			
94	255473	03	TC	3.4	3.4		DC = 0 inches
		06	TC	3.9	4.4		
		09	TC	4.1	5.0		
		12	TC	3.8	3.4		
		15	TC	3.7	3.2		
		18	TC	3.9	3.4		
		21	TC	4.4	4.8		
		24	TC	4.7	5.1		
		27	TC	4.8	5.2		
		30	TC	4.7	4.7		
		33	TC	4.6	4.6		
		36	TC	4.5	4.3		
		39	TC	4.5	4.7		
		42	TC	4.4	4.4		
		45	TC	4.3	4.3		
		48	TC	4.2	4.4		
		51	TC	4.0	3.8		
		54	TC	3.9	4.3		
95	260283	03	TC	6.2	6.2		DC = 66 inches
		06	TC	6.0	7.4		
		09	TC	5.0	4.1		

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		Ra-226 (pCi/g)		RDC	Alpha		
Loc #	Grid Location	Depth (in.)	Meas. Type	Non-Deconv.	Deconv.	Working Level	dpm/100 cm ² Comments
95	260283	12	TC	4.5	4.0		
		15	TC	4.3	3.8		
		18	TC	4.4	4.0		
		21	TC	4.7	5.2		
		24	TC	4.7	4.5		
		27	TC	4.8	5.0		
		30	TC	4.8	4.8		
		33	TC	4.8	4.8		
		36	TC	4.8	4.8		
		39	TC	4.8	4.6		
		42	TC	4.9	4.9		
		45	TC	5.0	4.8		
		48	TC	5.2	4.3		
		51	TC	5.9	5.4		
		54	TC	6.9	5.3		
		57	TC	8.8	6.1		
		60	TC	12.2	20.9		
		63	TC	10.7	13.0		
		66	TC	7.9	5.1		
		69	TC	6.7	6.5		
		72	TC	5.6	5.6		
96	260295	00	DS	3.1			
97	260320	00-06	SS	3.2			
		00	DS	2.0			
98	263324	00	TC	4.5	4.5		Logged through steel drill stem
		06	TC	5.0	5.2		
		12	TC	5.4	5.8		
		18	TC	5.8	5.6		DC = 0 inches
		24	TC	5.8	6.3		
		30	TC	5.7	6.1		
		36	TC	5.4	5.0		
		42	TC	5.3	5.5		
		48	TC	5.1	6.0		
		54	TC	4.4	3.5		
		60	TC	4.2	4.2		
99	264472	00	DS	1.3			Soil and gravel
		03	TC	3.2	3.2		Background
		06	TC	3.5	3.1		
		09	TC	4.0	3.6		DC = 0 inches
		12	TC	4.7	5.2		

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Loc #	Grid Location	Depth (in.)	Meas. Type	Ra-226 (pCi/g)		RDC	Alpha	Comments
				Non-Deconv.	Deconv.		dpm/100 cm ²	
99	264472	15	TC	5.1	6.2			
		18	TC	4.9	4.9			
		21	TC	4.7	4.5			
		24	TC	4.6	4.6			
		27	TC	4.5	4.5			
		30	TC	4.4	4.2			
		33	TC	4.4	4.4			
		36	TC	4.4	4.4			
		39	TC	4.4	4.4			
100	265215	00	DS	<1.0				Concrete sidewalk
101	265414	00	DS	19.1				Concrete footing
102	267414	00	DS	1.0				Concrete
103	268427	00	DS	1.2				Concrete pad
104	270335	00	DS	1.7				
105	270422	03	TC	3.0	3.0			Concrete
		06	TC	3.1	2.9			
		09	TC	3.3	3.5			DC = 0 inches
		12	TC	3.4	2.9			
		15	TC	3.8	4.0			
		18	TC	4.1	4.3			
		21	TC	4.3	4.5			
		24	TC	4.4	4.6			
		27	TC	4.4	4.8			
		30	TC	4.2	3.8			
		33	TC	4.2	4.4			
		36	TC	4.1	4.1			
		39	TC	4.0	4.0			
		42	TC	3.9	3.9			
		45	TC	3.8	3.8			
		48	TC	3.7	3.5			
		51	TC	3.7	4.1			
		54	TC	3.5	3.0			
		57	TC	3.6	3.6			
106	274282	00	DS	1.4				Concrete
107	280320	00	DS	1.6				
108	280488	03	TC	3.7	3.7			Background

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Loc #	Grid Location	Depth (in.)	Meas. Type	Ra-226 (pCi/g)		Working Level	Alpha dpm/100 cm ²	Comments
				Non-Deconv.	Deconv.			
108	280488	06	TC	4.3	5.0			
		09	TC	4.5	5.2			DC = 0 inches
		12	TC	4.3	3.9			
		15	TC	4.3	4.1			
		18	TC	4.4	4.0			
		21	TC	4.7	5.2			
		24	TC	4.7	4.9			
		27	TC	4.6	4.6			
		30	TC	4.5	4.5			
		33	TC	4.4	4.4			
		36	TC	4.3	4.1			
		39	TC	4.3	4.7			
		42	TC	4.1	3.9			
		45	TC	4.0	3.8			
		48	TC	4.0	4.5			
		51	TC	3.7	3.3			
		54	TC	3.6	3.6			
109	280510	03	TC	3.1	3.1			DC = 0 inches
		06	TC	3.8	4.3			
		09	TC	4.2	3.3			
		12	TC	5.1	4.7			
		15	TC	6.2	6.2			
		18	TC	7.3	9.8			
		21	TC	7.0	7.4			
		24	TC	6.5	6.7			
		27	TC	5.9	5.7			
		30	TC	5.4	5.0			
		33	TC	5.1	4.9			
		36	TC	4.9	4.7			
		39	TC	4.8	4.6			
		42	TC	4.8	5.0			
		45	TC	4.7	4.3			
		48	TC	4.8	5.0			
		51	TC	4.8	5.2			
110	281388	00	DS	<1.0				Concrete
111	283290	03	TC	4.9	4.9			DC = 0 inches
		06	TC	5.3	7.3			

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				Ra-226 (pCi/g)		RDC	Alpha		
Loc #	Grid Location	Depth (in.)	Meas. Type	Non-Deconv.	Deconv.	Working Level	dpm/100 cm ²	Comments	
111	283290	09	TC	4.6	4.1				
		12	TC	4.2	3.7				
		15	TC	4.1	3.9				
		18	TC	4.1	3.7				
		21	TC	4.3	4.1				
		24	TC	4.6	5.0				
		27	TC	4.7	5.1				
		30	TC	4.6	4.4				
		33	TC	4.6	4.8				
		36	TC	4.5	4.3				
		39	TC	4.5	4.7				
		42	TC	4.4	4.4				
		45	TC	4.3	4.3				
		48	TC	4.2	4.6				
		51	TC	3.9	3.7				
		54	TC	3.7	3.0				
		57	TC	3.9	5.0				
		60	TC	3.5	3.1				
		63	TC	3.3	2.8				
		66	TC	3.4	4.1				
		69	TC	3.1	2.6				
		72	TC	3.1	3.1				
112	283390	00	DS	1.4					
		06	DS	4.0					
		12	DS	2.1					
		12	DS	2.8					
113	289291	00	DS	<1.0					
		12	DS	1.8					
		18	DS	1.4					
114	290340	00	DS	<1.0					
115	290413	00	DS	<1.0				Concrete	
116	292252	03	TC	3.3	3.3			DC = 0 inches	
		06	TC	3.4	3.2				
		09	TC	3.6	3.8				
		12	TC	3.7	3.7				
		15	TC	3.8	3.6				
		18	TC	4.0	3.6				
		21	TC	4.4	4.9				
		24	TC	4.5	4.7				

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Loc #	Grid Location	Depth (in.)	Meas. Type	Ra-226 (pCi/g)		RDC	Alpha	dpm/100 cm ²	Comments
				Non-Deconv.	Deconv.				
116	292252	27	TC	4.5	4.5				
		30	TC	4.5	4.5				
		33	TC	4.5	4.7				
		36	TC	4.4	4.2				
		39	TC	4.4	4.4				
		42	TC	4.4	4.4				
		45	TC	4.4	4.4				
		48	TC	4.4	4.6				
		51	TC	4.3	4.1				
		54	TC	4.3	4.3				
		57	TC	4.3	4.5				
		60	TC	4.2	4.0				
		63	TC	4.2	4.2				
117	292348	00	TC	4.3	4.3				Logged through steel drill stem
		06	TC	4.0	1.9				
		12	TC	4.9	4.9				
		18	TC	5.8	6.9				
		24	TC	6.1	7.2				DC = 0 inches
		30	TC	5.8	5.6				
		36	TC	5.6	5.2				
		42	TC	5.6	5.8				
		48	TC	5.5	5.7				
		54	TC	5.3	5.3				
118	296401	00	DS	2.4					Gas line
119	297398	00	TC	4.9	4.9				Logged through steel drill stem
		06	TC	4.5	2.7				
		12	TC	5.1	5.6				
		18	TC	5.4	5.9				
		24	TC	5.4	5.2				DC = 0 inches
		30	TC	5.5	6.0				
		36	TC	5.3	4.9				
		42	TC	5.3	5.8				
		48	TC	5.0	5.7				
		54	TC	4.3	3.4				
120	297401	00	DS	2.5					On top of gas line next to concrete
		06	DS	3.0					
		12	DS	2.6					
		15	DS	3.3					
		18	DS	2.6					

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				Ra-226 (pCi/g)		RDC	Alpha		
Loc #	Grid Location	Depth (in.)	Meas. Type	Non-Deconv.	Deconv.	Working Level	dpm/100 cm ²	Comments	
121	300220	00	DS	3.9					
122	300328	03	TC	3.7	3.7			DC = 0 inches	
		06	TC	4.0	4.4				
		09	TC	4.1	3.0				
		12	TC	4.8	5.7				
		15	TC	5.0	5.4				
		18	TC	5.0	5.0				
		21	TC	5.0	5.0				
		24	TC	5.0	6.1				
		27	TC	4.4	3.2				
		30	TC	4.5	4.5				
		33	TC	4.6	4.6				
		36	TC	4.7	4.9				
		39	TC	4.7	4.9				
		42	TC	4.6	4.4				
		45	TC	4.6	4.6				
		48	TC	4.6	4.6				
		51	TC	4.6	4.6				
		54	TC	4.6	4.6				
		57	TC	4.6	4.6				
		60	TC	4.6	4.6				
123	300510	00	DS	2.9					
		03	TC	9.9	9.9			Auger refusal	
		06	TC	9.1	8.6				
		09	TC	8.6	7.9			DC = 9 inches	
		12	TC	8.5	12.1				
		15	TC	6.4	4.4				
		18	TC	5.4	4.7				
		21	TC	4.6	4.8				
124	301456	03	TC	7.1	7.1			DC = 21 inches	
		06	TC	7.5	9.6				
		09	TC	6.7	5.8				
		12	TC	6.4	6.4				
		15	TC	6.1	6.5				
		18	TC	5.6	5.2				
		21	TC	5.3	5.3				
		24	TC	5.0	4.6				
		27	TC	4.9	4.9				
		30	TC	4.8	4.6				
		33	TC	4.8	5.0				
		36	TC	4.7	4.7				

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				Ra-226 (pCi/g)		RDC	Alpha		
Loc #	Grid Location	Depth (in.)	Meas. Type	Non-Deconv.	Deconv.	Working Level	dpm/100 cm ²	Comments	
124	301456	39	TC	4.6	4.6				
		42	TC	4.5	4.1				
		45	TC	4.6	5.1				
		48	TC	4.4	4.4				
		51	TC	4.2	4.0				
		54	TC	4.1	4.5				
		57	TC	3.8	3.4				
		60	TC	3.7	3.5				
		63	TC	3.7	3.9				
		66	TC	3.6	3.6				
		69	TC	3.5	3.3				
		72	TC	3.5	3.5				
125	304215	00	DS	1.2				Concrete	
126	310390	03	TC	4.3	4.3			Dirt-gravel	
		06	TC	5.0	6.4				
		09	TC	4.9	5.3			DC = 0 inches	
		12	TC	4.8	4.4				
		15	TC	4.4	3.3				
		18	TC	4.8	5.0				
		21	TC	5.1	5.8				
		24	TC	5.0	5.0				
		27	TC	4.9	4.9				
		30	TC	4.8	5.0				
		33	TC	4.6	4.1				
		36	TC	4.7	5.1				
		39	TC	4.6	5.0				
		42	TC	4.3	3.8				
		45	TC	4.3	4.7				
		48	TC	4.1	4.1				
		51	TC	3.9	3.9				
		54	TC	3.7	3.5				
		57	TC	3.6	3.4				
		60	TC	3.6	4.0				
		63	TC	3.4	3.4				
127	310430	03	TC	3.6	3.6			DC = 24 inches	
		06	TC	4.1	4.8				
		09	TC	4.2	3.8				
		12	TC	4.5	4.1				
		15	TC	5.0	5.2				
		18	TC	5.4	5.9				
		21	TC	5.5	6.6				

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		Ra-226 (pCi/g)		RDC	Alpha		
Loc #	Grid Location	Depth (in.)	Meas. Type	Non-Deconv.	Deconv.	Working Level	dpm/100 cm ² Comments
127	310430	24	TC	5.0	4.5		
		27	TC	4.8	4.4		
		30	TC	4.8	4.8		
		33	TC	4.8	4.8		
128	310490	00	DS	2.1			Gravel road
		03	TC	4.2	4.2		
		06	TC	5.0	5.9		DC = 0 inches
		09	TC	5.3	6.7		
		12	TC	4.8	4.1		
		15	TC	4.7	4.2		
		18	TC	4.9	5.4		
		21	TC	4.8	4.8		
		24	TC	4.7	4.9		
		27	TC	4.5	4.1		
		30	TC	4.5	4.3		
		33	TC	4.6	5.0		
		36	TC	4.5	4.5		
		39	TC	4.4	4.4		
		42	TC	4.3	4.3		
		45	TC	4.2	4.2		
		48	TC	4.1	4.3		
		51	TC	3.9	3.7		
		54	TC	3.8	4.0		
		57	TC	3.6	3.4		
129	320360	00	DS	2.1			Concrete
		03	TC	3.1	3.1		
		06	TC	3.5	3.3		DC = 0 inches
		09	TC	4.0	3.5		
		12	TC	4.8	5.2		
		15	TC	5.4	7.0		
		18	TC	5.1	4.6		
		21	TC	5.1	5.8		
130	320390	00	DS	1.2			Pit run
		03	TC	4.4	4.4		DC = 27 inches
31	321434	06	TC	4.9	5.8		

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Loc #	Grid Location	Depth (in.)	Meas. Type	Ra-226 (pCi/g)		RDC	Alpha	dpm/100 cm ²	Comments
				Non-Deconv.	Deconv.				
131	321434	09	TC	4.9	4.9				
		12	TC	4.9	4.7				
		15	TC	5.0	4.1				
		18	TC	5.6	6.3				
		21	TC	5.8	7.0				
		24	TC	5.3	4.9				
		27	TC	5.0	4.8				
		30	TC	4.8	4.4				
		33	TC	4.8	4.8				
132	323328	03	TC	3.6	3.6				Gravel
		06	TC	4.0	3.3				
		09	TC	4.8	4.3				DC = 0 inches
		12	TC	5.9	7.3				
		15	TC	6.2	8.2				
		18	TC	5.4	5.0				
		21	TC	4.8	4.1				
		24	TC	4.6	3.9				
		27	TC	4.8	4.6				
		30	TC	5.1	6.0				
		33	TC	4.9	4.7				
		36	TC	4.8	4.6				
		39	TC	4.8	4.8				
		42	TC	4.8	5.2				
		45	TC	4.6	4.2				
		48	TC	4.6	4.8				
		51	TC	4.5	4.3				
		54	TC	4.5	4.5				
133	330280	00	DS	<1.0					
134	335230	00	DS	1.1					
135	335318	03	TC	4.0	4.0				Concrete
		06	TC	4.6	3.5				
		09	TC	5.8	6.3				DC = 0 inches
		12	TC	6.7	9.4				
		15	TC	6.1	6.5				
		18	TC	5.3	4.4				
		21	TC	5.0	4.8				
		24	TC	4.8	4.6				
		27	TC	4.7	4.2				
		30	TC	4.9	5.4				
		33	TC	4.8	4.6				

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Loc #	Grid Location	Depth (in.)	Meas. Type	Ra-226 (pCi/g)		RDC	Alpha		Comments
				Non-Deconv.	Deconv.		Working Level	dpm/100 cm ²	
135	335318	36	TC	4.8	4.8				
		39	TC	4.8	5.0				
		42	TC	4.7	4.5				
		45	TC	4.7	4.7				
		48	TC	4.7	5.1				
		51	TC	4.5	4.1				
		54	TC	4.5	4.7				
		57	TC	4.4	4.8				
		60	TC	4.1	3.6				
		63	TC	4.1	4.3				
		66	TC	4.0	4.2				
		69	TC	3.8	3.6				
		72	TC	3.7	3.3				
		75	TC	3.8	4.0				
		78	TC	3.8	3.8				
		81	TC	3.8	3.8				
136	335420	00-06	OC	0.9					MCJ-921
		03	TC	5.6	5.6				
		06	TC	6.1	7.2				DC = 0 inches
		09	TC	6.0	7.1				
		12	TC	5.3	4.8				
		15	TC	4.9	4.2				
		18	TC	4.9	4.0				
		21	TC	5.4	5.2				
		24	TC	6.0	7.6				
		27	TC	5.7	5.9				
		30	TC	5.3	5.1				
		33	TC	5.0	4.6				
		36	TC	4.9	4.9				
		39	TC	4.8	4.6				
		42	TC	4.8	5.2				
		45	TC	4.6	4.6				
		48	TC	4.4	4.0				
		51	TC	4.4	4.4				
		54	TC	4.4	4.8				
		57	TC	4.2	4.0				
60	TC	4.1	4.1						
63	TC	4.0	4.0						
137	340230	00	DS	<1.0					On concrete
138	340260	00	DS	1.1					
139	340270	00	DS	<1.0					On concrete

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				Ra-226 (pCi/g)		RDC	Alpha	Comments
Loc #	Grid Location	Depth (in.)	Meas. Type	Non-Deconv.	Deconv.	Working Level	dpm/100 cm ²	
140	340300	00-06	SS	1.7				Core
		06-12	SS	3.9				
		03	TC	3.4	3.4			DC = 0 inches
		06	TC	4.0	3.6			
		09	TC	4.8	5.9			
		12	TC	5.0	5.9			
		15	TC	4.7	4.5			
		18	TC	4.5	4.3			
		21	TC	4.4	4.0			
		24	TC	4.5	4.5			
		27	TC	4.6	4.6			
		30	TC	4.5	4.5			
		33	TC	4.5	4.7			
		36	TC	4.4	4.4			
		39	TC	4.3	4.3			
141	340350	00	DS	1.2				Concrete
142	340460	03	TC	3.5	3.5			DC = 0 inches
		06	TC	4.0	4.5			
		09	TC	4.2	4.2			
		12	TC	4.4	4.8			
		15	TC	4.4	4.2			
		18	TC	4.5	4.3			
		21	TC	4.7	5.1			
		24	TC	4.7	4.5			
		27	TC	4.8	5.0			
		30	TC	4.8	4.8			
		33	TC	4.8	4.6			
		36	TC	4.9	5.3			
		39	TC	4.8	4.8			
		42	TC	4.7	4.5			
		45	TC	4.7	4.9			
		48	TC	4.6	4.6			
		51	TC	4.5	4.7			
		54	TC	4.3	4.3			
143	340490	03	TC	6.1	6.1			DC = 15 inches
		06	TC	7.8	5.8			
		09	TC	10.6	15.8			
		12	TC	10.5	12.3			
		15	TC	9.4	10.3			
		18	TC	7.8	6.9			
		21	TC	6.7	5.1			

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				Ra-226 (pCi/g)		RDC	Alpha		
Loc #	Grid Location	Depth (in.)	Meas. Type	Non-Deconv.	Deconv.	Working Level	dpm/100 cm ²	Comments	
143	340490	24	TC	6.5	7.7				
		27	TC	5.6	4.0				
		30	TC	5.6	5.8				
		33	TC	5.5	5.3				
		36	TC	5.5	6.8				
		39	TC	4.9	3.8				
		42	TC	4.9	5.1				
		45	TC	4.8	4.4				
		48	TC	4.9	5.1				
		51	TC	4.9	5.3				
		54	TC	4.7	4.3				
		60	TC	4.7	4.5				
		63	TC	4.8	5.0				
		66	TC	4.8	4.8				
		69	TC	4.8	4.8				
144	350340	03	TC	3.9	3.9			DC = 0 inches	
		06	TC	4.0	2.4				
		09	TC	5.0	4.6				
		12	TC	6.2	5.7				
		15	TC	7.7	10.5				
		18	TC	7.6	9.7				
		21	TC	6.3	6.1				
		24	TC	5.1	3.7				
		27	TC	4.7	4.0				
		30	TC	4.7	4.9				
		33	TC	4.6	5.0				
		36	TC	4.3	3.8				
		39	TC	4.3	4.1				
		42	TC	4.4	4.6				
		45	TC	4.4	4.6				
		48	TC	4.3	3.9				
		51	TC	4.4	4.8				
		54	TC	4.3	4.3				
		57	TC	4.2	4.2				
		60	TC	4.1	3.9				
		63	TC	4.1	4.1				
145	350390	00	DS	1.7				Sand and gravel	
146	350400	03	TC	3.0	3.0			DC = 0 inches	
		06	TC	3.3	3.3				
		09	TC	3.6	3.8				
		12	TC	3.8	4.0				

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Loc #	Grid Location	Depth (in.)	Meas. Type	Ra-226 (pCi/g)		RDC	Alpha	Working Level	dpm/100 cm ²	Comments
				Non-Deconv.	Deconv.					
146	350400	15	TC	3.9	3.7					
		18	TC	4.1	3.4					
		21	TC	4.7	4.2					
		24	TC	5.6	6.3					
		27	TC	6.1	8.2					
		30	TC	5.4	5.6					
		33	TC	4.6	4.1					
		36	TC	4.1	2.7					
		39	TC	4.4	4.6					
		42	TC	4.6	4.8					
		45	TC	4.7	4.9					
		48	TC	4.7	4.7					
		51	TC	4.7	4.7					
		54	TC	4.7	4.9					
		57	TC	4.6	4.6					
147	353318	03	TC	3.7	3.7					Through concrete
		06	TC	4.5	4.0					
		09	TC	5.6	4.2					DC = 18 inches
		12	TC	7.5	6.1					
		15	TC	10.2	15.9					
		18	TC	9.7	13.6					
		21	TC	7.0	4.3					
		24	TC	5.8	4.4					
		27	TC	5.4	5.0					
		30	TC	5.2	5.4					
		33	TC	4.9	4.5					
		36	TC	4.8	4.6					
		39	TC	4.8	4.6					
		42	TC	4.9	5.4					
		45	TC	4.7	4.2					
		48	TC	4.8	5.2					
		51	TC	4.7	4.7					
148	355455	00	DS	2.1						Soil and gravel
149	359248	00	DS	1.0						Concrete
		03	TC	3.3	3.3					DC = 0 inches
		06	TC	3.7	3.3					
		09	TC	4.3	4.1					
		12	TC	5.0	5.5					
		15	TC	5.4	6.1					
		18	TC	5.4	5.8					
		21	TC	5.2	5.2					

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		Ra-226 (pCi/g)		RDC	Alpha		
Loc #	Grid Location	Depth (in.)	Meas. Type	Non-Deconv.	Deconv.	Working Level	dpm/100 cm ² Comments
149	359248	24	TC	5.0	5.0		
		27	TC	4.8	4.4		
		30	TC	4.8	5.2		
		33	TC	4.6	4.2		
		36	TC	4.6	4.6		
		39	TC	4.6	4.6		
150	360214	00	DS	4.0			Asphalt
		03	TC	10.1	10.1		Water in hole at 12"
		06	TC	12.0	11.1		
		09	TC	14.4	11.0		DC = 51 inches
		12	TC	18.7	13.0		
		15	TC	26.2	34.6		
		18	TC	29.0	47.8		
		21	TC	21.2	19.2		
		24	TC	14.5	7.7		
		27	TC	11.6	9.1		
		30	TC	10.1	7.4		
		33	TC	10.1	8.5		
		36	TC	11.0	11.4		
		39	TC	11.7	12.1		
		42	TC	12.2	12.7		
		45	TC	12.4	16.3		
		48	TC	10.4	11.5		
		51	TC	7.8	4.6		
		54	TC	7.0	7.0		
151	360270	00	DS	<1.0			
		03	TC	3.4	3.4		DC = 0 inches
		06	TC	3.8	4.2		
		09	TC	4.0	4.4		
		12	TC	4.0	3.8		
		15	TC	4.1	3.2		
		18	TC	4.7	5.8		
		21	TC	4.7	4.5		
		24	TC	4.8	5.0		
		27	TC	4.8	4.8		
		30	TC	4.8	5.0		
		33	TC	4.7	4.5		
152	360415	03	TC	8.3	8.3		DC = 6 inches
		06	TC	7.7	8.8		

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Loc #	Grid Location	Depth (in.)	Meas. Type	Ra-226 (pCi/g)		RDC Working Level	Alpha dpm/100 cm ²	Comments
				Non-Deconv.	Deconv.			
152	360415	09	TC	8.5	6.0			
		12	TC	5.6	5.2			
		15	TC	4.9	4.2			
		18	TC	4.6	4.1			
		21	TC	4.6	4.6			
		24	TC	4.6	4.6			
		27	TC	4.6	4.6			
		30	TC	4.6	4.6			
153	360440	00	DS	2.7				
		06	DS	3.6				
		12	DS	1.9				
154	360520	03	TC	8.3	8.3			DC = 9 inches
		06	TC	9.2	12.2			
		09	TC	8.4	9.5			
		12	TC	7.0	6.5			
		15	TC	5.9	5.4			
		18	TC	5.1	3.9			
		21	TC	5.0	5.2			
		24	TC	4.8	4.3			
155	365490	27	TC	4.9	4.9			DC = 18 inches
		03	TC	11.7	11.7			
		06	TC	18.2	12.0			
		09	TC	28.2	34.8			
		12	TC	34.5	66.0			
		15	TC	23.1	19.4			
		18	TC	13.8	4.4			
		21	TC	9.8	5.0			
		24	TC	8.5	9.4			
		27	TC	6.7	5.1			
		30	TC	5.8	5.3			
		33	TC	5.2	4.3			
		36	TC	5.1	5.1			
		39	TC	5.0	5.0			
		42	TC	4.9	4.5			
156	366502	45	TC	5.0	5.0			DC = 21 inches
		03	TC	6.0	6.0			
		06	TC	7.4	7.8			
		09	TC	8.6	8.1			
		12	TC	10.1	10.5			
		15	TC	11.4	14.1			

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Loc #	Grid Location	Depth (in.)	Meas. Type	Ra-226 (pCi/g)		RDC	Alpha	Comments
				Non-Deconv.	Deconv.	Working Level	dpm/100 cm ²	
156	366502	18	TC	11.2	13.7			
		21	TC	9.6	10.0			
		24	TC	7.8	7.1			
		27	TC	6.4	5.3			
		30	TC	5.6	4.9			
		33	TC	5.2	4.8			
		36	TC	5.0	4.8			
		39	TC	4.9	4.9			
		42	TC	4.8	4.6			
		45	TC	4.8	5.0			
		48	TC	4.7	4.7			
		51	TC	4.6	4.2			
		54	TC	4.7	5.1			
		57	TC	4.6	4.4			
		60	TC	4.6	5.0			
		63	TC	4.4	4.0			
		66	TC	4.4	4.9			
		69	TC	4.1	4.1			
157	369360	03	TC	3.4	3.4			Dirt-gravel
		06	TC	3.8	4.5			
		09	TC	3.8	3.6			DC = 0 inches
		12	TC	3.9	4.1			
		15	TC	3.9	3.7			
		18	TC	4.0	3.8			
		21	TC	4.2	4.7			
		24	TC	4.1	3.7			
		27	TC	4.2	4.4			
		30	TC	4.2	4.4			
		33	TC	4.1	3.7			
		36	TC	4.2	4.2			
		39	TC	4.3	4.1			
		42	TC	4.5	4.7			
		45	TC	4.6	4.6			
		48	TC	4.7	4.9			
		51	TC	4.7	4.7			
		54	TC	4.7	4.7			
		57	TC	4.7	4.7			
		60	TC	4.7	4.9			
		63	TC	4.6	4.4			
		66	TC	4.6	4.6			
158	370250	00	DS	<1.0				
159	370325	03	TC	4.6	4.6			Through concrete

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				Ra-226 (pCi/g)		RDC	Alpha	Comments
Loc #	Grid Location	Depth (in.)	Meas. Type	Non-Deconv	Deconv.	Working Level	dpm/100 cm ²	
159	370325	06	TC	6.1	4.3			DC = 18 inches
		09	TC	8.6	6.6			
		12	TC	12.2	16.1			
		15	TC	13.6	23.7			
		18	TC	9.3	6.3			
		21	TC	6.7	4.0			
		24	TC	5.6	4.4			
		27	TC	5.2	4.7			
		30	TC	5.1	5.3			
		33	TC	4.9	4.7			
		36	TC	4.8	4.6			
		39	TC	4.8	4.8			
		42	TC	4.8	5.0			
		45	TC	4.7	4.5			
		48	TC	4.7	4.7			
		51	TC	4.7	4.9			
		54	TC	4.6	4.2			
160	370340	00	DS	1.1				
		06	DS	2.4				
		12	DS	4.6				
		16	DS	10.5				
161	370460	03	TC	4.3	4.3			DC = 0 inches
		06	TC	5.0	7.0			
		09	TC	4.6	3.7			
		12	TC	4.7	4.7			
		15	TC	4.8	4.4			
		18	TC	5.1	5.3			
		21	TC	5.3	6.5			
		24	TC	4.8	3.9			
		27	TC	4.8	5.2			
162	371340	30	TC	4.6	4.6			Gravel DC = 24 inches
		00	DS	1.8				
		03	TC	4.0	4.0			
		06	TC	4.8	3.7			
		09	TC	6.2	4.8			
		12	TC	8.4	8.6			
		15	TC	10.5	10.9			
		18	TC	12.4	16.1			
		21	TC	12.2	18.4			

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Loc #	Grid Location	Depth (in.)	Meas. Type	Ra-226 (pCi/g)		RDC	Alpha	dpm/100 cm ²	Comments
				Non-Deconv.	Deconv.				
162	371340	24	TC	8.5	6.4				
		27	TC	6.0	3.2				
		30	TC	5.1	3.5				
		33	TC	5.1	4.9				
		36	TC	5.2	5.7				
		39	TC	5.0	4.6				
		42	TC	5.0	5.2				
		45	TC	4.9	4.5				
		48	TC	5.0	5.4				
		51	TC	4.9	4.9				
163	374275	03	TC	4.1	4.1				Concrete
		06	TC	5.1	5.5				
		09	TC	5.9	8.4				DC = 6 inches
		12	TC	5.3	5.7				
		15	TC	4.5	2.5				
		18	TC	4.8	5.3				
		21	TC	4.8	5.0				
		24	TC	4.7	4.9				
		27	TC	4.5	4.1				
		30	TC	4.5	4.7				
		33	TC	4.4	4.4				
		36	TC	4.3	3.9				
		39	TC	4.4	4.6				
		42	TC	4.4	4.8				
		45	TC	4.2	3.8				
		48	TC	4.2	3.8				
		51	TC	4.4	5.5				
		54	TC	4.0	3.6				
		57	TC	3.8	3.8				
		60	TC	3.6	3.4				
		63	TC	3.5	3.5				
		66	TC	3.4	3.4				
		69	TC	3.3	3.3				
164	380310	00	DS	2.2					Background
165	380330	00	DS	6.5					
		03	TC	12.2	12.2				Auger refusal
		06	TC	10.0	10.7				
		09	TC	7.4	5.4				DC = 9 inches
		12	TC	5.9	4.5				
		15	TC	5.2	4.5				
		18	TC	4.9	4.9				

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				Ra-226 (pCi/g)		RDC	Alpha	Comments
Loc #	Grid Location	Depth (in.)	Meas. Type	Non-Deconv.	Deconv.	Working Level	dpm/100 cm ²	
166	380370	00	DS	2.8				
		03	TC	6.7	6.7			Dirt
		06	TC	7.8	8.0			
		09	TC	8.8	9.3			DC = 45 inches
		12	TC	9.5	9.9			
		15	TC	10.0	10.9			
		18	TC	10.0	9.8			
		21	TC	10.1	10.8			
		24	TC	9.8	8.9			
		27	TC	10.0	10.0			
		30	TC	10.2	9.7			
		33	TC	10.7	10.3			
		36	TC	11.4	10.0			
		39	TC	12.9	15.6			
		42	TC	12.9	18.6			
		45	TC	9.7	8.3			
		48	TC	7.3	4.8			
		51	TC	6.3	5.8			
		54	TC	5.6	5.1			
		57	TC	5.2	4.8			
		60	TC	5.0	4.6			
		63	TC	5.0	4.8			
		66	TC	5.1	5.6			
		69	TC	4.9	4.5			
		72	TC	4.9	5.1			
		75	TC	4.8	4.6			
		78	TC	4.8	4.8			
		81	TC	4.8	5.0			
		84	TC	4.7	4.5			
		87	TC	4.7	5.1			
		90	TC	4.5	4.0			
		93	TC	4.6	5.3			
		96	TC	4.3	4.1			
		99	TC	4.1	4.1			
		102	TC	3.9	3.9			
167	380390	03	TC	3.3	3.3			Dirt
		06	TC	3.5	3.9			
		09	TC	3.5	3.1			DC = 0 inches
		12	TC	3.7	3.9			
		15	TC	3.8	3.4			
		18	TC	4.1	4.3			
		21	TC	4.3	4.3			
		24	TC	4.5	4.3			

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		Ra-226 (pCi/g)				RDC	Alpha		
Loc #	Grid Location	Depth (in.)	Meas. Type	Non-Deconv.	Deconv.	Working Level	dpm/100 cm ²	Comments	
167	380390	27	TC	4.8	4.1				
		30	TC	5.5	5.3				
		33	TC	6.3	5.9				
		36	TC	7.3	7.1				
		39	TC	8.4	11.4				
		42	TC	7.8	9.2				
		45	TC	6.4	5.3				
		48	TC	5.6	5.1				
		51	TC	5.1	4.4				
		54	TC	5.0	5.2				
		57	TC	4.8	4.6				
		60	TC	4.7	4.5				
		63	TC	4.7	4.5				
		66	TC	4.8	5.0				
		69	TC	4.8	5.0				
		72	TC	4.7	4.7				
		75	TC	4.6	4.6				
		78	TC	4.5	4.1				
		81	TC	4.6	4.8				
		84	TC	4.6	4.6				
		87	TC	4.6	4.8				
		90	TC	4.5	4.5				
		93	TC	4.4	4.4				
		96	TC	4.3	4.8				
		99	TC	3.9	3.5				
		102	TC	3.7	3.7				
168	380510	03	TC	4.9	4.9			DC = 21 inches	
		06	TC	6.2	5.3				
		09	TC	8.0	6.8				
		12	TC	10.5	11.7				
		15	TC	12.3	16.9				
		18	TC	11.5	14.3				
		21	TC	9.1	8.9				
		24	TC	6.8	4.8				
		27	TC	5.6	4.2				
		30	TC	5.2	5.0				
		33	TC	4.9	4.5				
		36	TC	4.8	5.0				
		39	TC	4.6	4.6				
169	382238	00	DS	2.1				Gravel by fuel tank	
170	382433	03	TC	4.2	4.2			DC = 0 inches	

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				Ra-226 (pCi/g)		RDC	Alpha		
Loc #	Grid Location	Depth (in.)	Meas. Type	Non-Deconv.	Deconv.	Working Level	dpm/100 cm ²	Comments	
170	382433	06	TC	5.0	6.2				
		09	TC	5.1	6.3				
		12	TC	4.5	3.4				
		15	TC	4.5	4.5				
		18	TC	4.5	3.8				
		21	TC	4.9	6.0				
		24	TC	4.7	4.7				
		27	TC	4.5	4.0				
		30	TC	4.6	4.6				
		33	TC	4.7	4.9				
		36	TC	4.7	4.5				
		39	TC	4.8	5.2				
		42	TC	4.7	4.5				
		45	TC	4.7	4.7				
		48	TC	4.7	4.7				
		51	TC	4.7	4.7				
		54	TC	4.7	4.9				
		57	TC	4.6	4.4				
		60	TC	4.6	4.6				
171	385290	00	DS	2.4					
172	335318	03	TC	3.4	3.4			DC = 0 inches	
		06	TC	3.5	3.3				
		09	TC	3.7	3.9				
		12	TC	3.8	3.6				
		15	TC	4.0	4.4				
		18	TC	4.0	3.6				
		21	TC	4.2	4.6				
		24	TC	4.2	4.2				
		27	TC	4.2	3.8				
		30	TC	4.4	4.0				
		33	TC	4.8	5.5				
		36	TC	4.8	4.8				
		39	TC	4.8	5.0				
		42	TC	4.7	4.3				
173	390264	00-06	OC	2.0				MCJ-922 DC = 0 inches	
		03	TC	4.4	4.4				
		06	TC	5.4	4.2				
		09	TC	7.1	10.7				

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Loc #	Grid Location	Depth (in.)	Meas. Type	Ra-226 (pCi/g)		RDC	Alpha	Comments
				Non-Deconv.	Deconv.	Working Level	dpm/100 cm ²	
173	390264	12	TC	6.8	6.8			
		15	TC	6.5	9.2			
		18	TC	4.7	1.3			
		21	TC	4.8	5.0			
		24	TC	4.8	4.8			
		27	TC	4.8	4.8			
		30	TC	4.8	4.8			
		33	TC	4.8	4.8			
		36	TC	4.8	4.8			
		39	TC	4.8	5.0			
		42	TC	4.7	4.5			
		45	TC	4.7	4.7			
		48	TC	4.7	4.7			
		51	TC	4.7	4.7			
		54	TC	4.7	4.7			
		57	TC	4.7	4.7			
		60	TC	4.7	4.7			
		63	TC	4.7	4.7			
		66	TC	4.7	4.9			
		69	TC	4.6	5.3			
72	TC	4.1	4.1					
174	390270	03	TC	5.4	5.4			Concrete
		06	TC	8.3	7.6			
		09	TC	11.6	19.1			DC = 15 inches
		12	TC	10.7	15.1			
		15	TC	7.3	4.6			
		18	TC	5.4	2.7			
		21	TC	5.0	4.1			
		24	TC	5.1	5.5			
		27	TC	5.0	5.2			
		30	TC	4.8	4.4			
		33	TC	4.8	5.0			
		36	TC	4.7	4.5			
		39	TC	4.7	4.9			
		42	TC	4.6	4.4			
		45	TC	4.6	4.8			
48	TC	4.5	4.1					
51	TC	4.6	4.6					
175	390283	03	TC	5.2	5.2			DC = 18 inches
		06	TC	7.3	6.1			
		09	TC	10.1	7.8			
		12	TC	14.2	25.4			

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				Ra-226 (pCi/g)		RDC	Alpha		
Loc #	Grid Location	Depth (in.)	Meas. Type	Non-Deconv.	Deconv.	Working Level	dpm/100 cm ²	Comments	
175	390283	15	TC	12.0	15.4				
		18	TC	7.9	3.6				
		21	TC	6.2	4.2				
		24	TC	5.6	5.1				
		27	TC	5.3	5.3				
		30	TC	5.0	4.3				
		33	TC	5.1	5.6				
		36	TC	4.9	4.4				
		39	TC	5.0	5.4				
		42	TC	4.9	4.7				
		45	TC	4.9	4.9				
		48	TC	4.9	4.9				
		51	TC	4.9	5.1				
		54	TC	4.8	4.8				
		57	TC	4.7	4.9				
		60	TC	4.5	4.7				
		63	TC	4.2	4.0				
		66	TC	4.0	4.4				
		69	TC	3.6	3.1				
		72	TC	3.5	3.5				
176	394365	00	DS	1.7				Sand and gravel	
177	394407	00	DS	1.5				Slope, side of ramp	
178	395310	00	DS	<1.0				Gravel	
179	395354	03	TC	4.0	4.0			On dirt ramp	
		06	TC	4.0	4.2				
		09	TC	3.9	3.9			DC = 0 inches	
		12	TC	3.8	3.4				
		15	TC	3.9	3.7				
		18	TC	4.1	4.3				
		21	TC	4.2	4.7				
		24	TC	4.0	3.6				
		27	TC	4.0	4.2				
		30	TC	3.9	4.1				
		33	TC	3.7	3.2				
		36	TC	3.8	4.2				
		39	TC	3.7	3.5				
		42	TC	3.7	3.5				
		45	TC	3.8	4.0				
		48	TC	3.8	3.6				
		51	TC	3.9	4.1				

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Loc #	Grid Location	Depth (in.)	Meas. Type	Ra-226 (pCi/g)		RDC	Alpha	Working Level	dpm/100 cm ²	Comments
				Non-Deconv.	Deconv.					
179	395354	54	TC	3.9	3.9					
		57	TC	3.9	3.9					
		60	TC	3.9	3.4					
		63	TC	4.2	4.2					
		66	TC	4.5	4.9					
		69	TC	4.6	4.8					
		72	TC	4.6	4.6					
		75	TC	4.6	4.6					
		78	TC	4.6	4.8					
		81	TC	4.5	4.1					
		84	TC	4.6	5.0					
		87	TC	4.5	4.3					
		90	TC	4.5	4.7					
		93	TC	4.4	4.4					
		96	TC	4.3	4.1					
		99	TC	4.3	4.7					
		102	TC	4.1	4.1					
		105	TC	3.9	3.9					
		108	TC	3.7	3.7					
		111	TC	3.5	3.3					
		114	TC	3.4	3.4					
		117	TC	3.3	3.3					
180	396216	00	TC	6.6	6.6					Logged through steel drill stem
		06	TC	10.0	13.4					
		12	TC	11.5	20.9					
		18	TC	7.7	3.8					DC = 18 inches
		24	TC	6.1	3.8					
		30	TC	5.8	5.6					
		36	TC	5.6	4.9					
		42	TC	5.8	6.7					
		48	TC	5.5	5.5					
		54	TC	5.2	5.4					
		60	TC	4.8	4.6					
181	397360	00	TC	6.7	6.7					Logged through steel drill stem
		06	TC	8.4	7.9					
		12	TC	10.4	13.1					
		18	TC	10.9	11.6					DC = 54 inches
		24	TC	11.0	10.3					
		30	TC	11.5	12.6					
		36	TC	11.4	6.8					
		42	TC	13.9	24.6					
		48	TC	10.4	10.4					

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Loc #	Grid Location	Depth (in.)	Meas. Type	Ra-226 (pCi/g)		RDC Working Level	Alpha dpm/100 cm ²	Comments
				Non-Deconv.	Deconv.			
131	397360	54	TC	8.9	4.2			
		60	TC	4.9	4.9			
182	400217	03	TC	8.4	8.4			DC = 21 inches
		06	TC	13.6	7.6			
		09	TC	22.2	19.4			
		12	TC	32.4	48.6			
		15	TC	33.5	52.2			
		18	TC	24.1	25.9			
		21	TC	13.7	4.3			
		24	TC	8.6	3.4			
		27	TC	8.4	4.3			
		30	TC	5.4	4.5			
		33	TC	4.9	4.4			
		36	TC	4.7	4.3			
		39	TC	4.7	5.1			
		42	TC	4.5	4.1			
		45	TC	4.5	4.9			
183	400350	00	DS	2.1				
184	400460	00	DS	1.3				Gravel and soil
		03	TC	5.2	5.2			
		06	TC	7.0	3.8			DC = 21 inches
		09	TC	10.6	10.4			
		12	TC	14.3	18.6			
		15	TC	15.6	23.2			
		18	TC	12.6	15.6			
		21	TC	7.9	2.9			
		24	TC	6.0	4.0			
		27	TC	5.2	3.8			
		30	TC	5.2	5.6			
		33	TC	5.0	5.0			
		36	TC	4.8	4.3			
		39	TC	4.9	5.3			
		42	TC	4.8	4.6			
		45	TC	4.8	4.8			
		48	TC	4.8	4.8			
		51	TC	4.8	4.8			
		54	TC	4.8	4.6			
		57	TC	4.9	5.1			
		60	TC	4.9	4.9			

Radium Concentrations at Exterior Locations
940 South 10th Street

DOE ID #GJ-00481-CC

Loc #	Grid Location	Depth (in.)	Meas. Type	Ra-226 (pCi/g)		RDC	Alpha	Comments
				Non-Deconv.	Deconv.	Working Level	dpm/100 cm ²	
184	400460	63	TC	4.9	4.9			
		66	TC	4.9	4.9			
		69	TC	4.9	4.9			
185	400500	00	DS	2.3				DC = 30 inches
		03	TC	6.1	6.1			
		06	TC	7.4	4.7			
		09	TC	10.2	8.8			
		12	TC	13.8	12.6			
		15	TC	18.1	11.7			
		18	TC	26.0	16.2			
		21	TC	39.4	50.1			
		24	TC	46.8	79.5			
		27	TC	35.8	38.5			
		30	TC	23.3	15.3			
		33	TC	15.3	10.0			
		36	TC	10.3	6.0			
		39	TC	7.7	5.4			
		42	TC	6.4	5.3			
		45	TC	5.7	5.0			
		48	TC	5.4	5.0			
		51	TC	5.3	4.9			
		54	TC	5.4	4.9			
		57	TC	5.8	5.6			
		60	TC	6.3	9.3			
		63	TC	5.1	3.1			
		66	TC	5.0	5.0			
		69	TC	4.9	4.9			
		72	TC	4.8	4.8			
186	402250	00	DS	2.6				On concrete
		06	DS	2.2				Hz under concrete
		12	DS	2.1				
		18	DS	1.8				
187	405334	03	TC	5.3	5.3			DC = 6 inches
		06	TC	5.6	7.2			
		09	TC	5.0	4.6			
		12	TC	4.6	4.1			
		15	TC	4.5	4.1			
		18	TC	4.6	5.0			
		21	TC	4.5	4.3			
		24	TC	4.5	4.3			

Radium Concentrations at Exterior Locations

DOE ID #GJ-00461-CC

940 South 1st Street

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		Ra-226 (pCi/g)		RDC	Alpha		
Loc #	Grid Location	Depth (in.)	Meas. Type	Non-Deconv.	Deconv.	Working Level	dpm/100 cm ² Comments
187	405334	27	TC	4.6	4.8		
		30	TC	4.6	4.6		
		33	TC	4.6	4.4		
		36	TC	4.7	5.1		
		39	TC	4.6	4.4		
		42	TC	4.6	4.6		
188	406490	03	TC	4.8	4.8		DC = 30 inches
		06	TC	6.1	4.7		
		09	TC	8.2	6.4		
		12	TC	11.3	7.2		
		15	TC	16.7	12.8		
		18	TC	24.3	21.6		
		21	TC	33.4	41.2		
		24	TC	38.1	61.9		
		27	TC	29.4	32.6		
		30	TC	18.9	11.4		
		33	TC	12.6	9.2		
		36	TC	8.2	3.0		
		39	TC	6.7	6.0		
		42	TC	5.6	4.2		
		45	TC	5.3	4.9		
		48	TC	5.2	5.4		
		51	TC	5.0	4.8		
		54	TC	4.9	4.4		
		57	TC	5.1	5.8		
		60	TC	4.9	4.4		
		63	TC	5.0	5.4		
		66	TC	4.9	4.7		
		69	TC	4.9	4.9		
		72	TC	4.9	4.7		
		75	TC	5.0	5.2		
		78	TC	5.0	5.0		
		81	TC	5.0	5.0		
		84	TC	5.0	5.2		
		87	TC	4.9	4.9		
189	408373	03	TC	13.0	13.0		DC = 57 inches
		06	TC	15.6	18.8		
		09	TC	16.4	15.3		
		12	TC	17.8	20.8		
		15	TC	17.5	20.3		
		18	TC	15.6	14.2		
		21	TC	14.5	13.8		

Radium Concentrations at Exterior Locations

DOE ID #GJ-00461-CC

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Loc #	Grid Location	Depth (in.)	Meas. Type	Ra-226 (pCi/g)		RDC	Alpha	dpm/100 cm ²	Comments
				Non-Deconv.	Deconv.				
189	408373	24	TC	13.8	13.6				
		27	TC	13.2	13.2				
		30	TC	12.6	11.4				
		33	TC	12.7	11.3				
		36	TC	13.6	13.6				
		39	TC	14.5	15.7				
		42	TC	14.7	14.5				
		45	TC	15.0	16.8				
		48	TC	14.3	15.5				
		51	TC	12.9	13.1				
		54	TC	11.4	12.5				
		57	TC	9.3	8.8				
		60	TC	8.6	9.0				
		63	TC	7.7	6.3				
		66	TC	7.6	8.5				
		69	TC	7.0	6.6				
		72	TC	6.6	7.0				
		75	TC	6.0	5.8				
		78	TC	5.5	4.8				
		81	TC	5.4	5.9				
		84	TC	5.0	4.6				
		87	TC	4.8	4.8				
190	409230	00	DS	4.0					Pea gravel
		05	TC	6.3	6.3				Inside retaining wall-water
		06	TC	6.5	6.7				at 6"
		09	TC	6.6	8.4				
		12	TC	5.7	4.6				DC = 6 inches
		15	TC	5.4	5.4				
		18	TC	5.1	4.9				
		21	TC	4.9	4.5				
		24	TC	4.9	5.1				
		27	TC	4.8	4.8				
		30	TC	4.7	4.7				
191	410230	03	TC	11.4	11.4				Soil looks and smells
		06	TC	9.2	9.2				of petroleum
		09	TC	7.0	5.4				
		12	TC	5.7	4.8				DC = 6 inches
		15	TC	4.9	3.8				
		18	TC	4.7	4.5				
		21	TC	4.6	4.6				
		24	TC	4.5	4.3				
		27	TC	4.5	4.5				

Radium Concentrations at Exterior Locations

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Loc #	Grid Location	Depth (in.)	Meas. Type	Ra-226 (pCi/g)		RDC	Alpha	Comments
				Non-Deconv.	Deconv.	Working Level	dpm/100 cm ²	
191	410230	30	TC	4.5	4.5			
192	410250	00	DS	2.4				
193	410270	00	DS	4.1				
194	410290	03	TC	5.2	5.2			DC = 21 inches
		06	TC	6.6	5.2			
		09	TC	8.8	7.6			
		12	TC	11.7	10.8			
		15	TC	15.1	25.1			
		18	TC	12.9	16.3			
		21	TC	8.8	5.8			
		24	TC	6.4	3.4			
		27	TC	5.7	5.0			
		30	TC	5.4	5.4			
		33	TC	5.1	4.6			
		36	TC	5.1	5.3			
		39	TC	5.0	4.8			
		42	TC	5.0	5.2			
		45	TC	4.9	4.9			
195	412418	00	DS	3.8				Under conveyor belt DC = 6 inches
		03	TC	8.3	8.3			
		06	TC	8.8	12.0			
		09	TC	7.5	7.9			
		12	TC	6.0	4.9			
		15	TC	5.1	4.0			
		18	TC	4.8	5.0			
		21	TC	4.4	3.7			
		24	TC	4.4	4.8			
		27	TC	4.2	3.7			
		30	TC	4.3	4.7			
		33	TC	4.2	3.7			
		36	TC	4.4	4.8			
		39	TC	4.4	4.4			
		42	TC	4.4	4.2			
		45	TC	4.5	4.7			
		48	TC	4.5	4.5			
		51	TC	4.5	4.5			
		54	TC	4.5	4.5			
		57	TC	4.5	4.5			
		60	TC	4.5	4.7			
		63	TC	4.4	4.4			

Radium Concentrations at Exterior Locations

DOE ID #GJ-00461-CC

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Loc #	Grid Location	Depth (in.)	Meas. Type	Ra-226 (pCi/g)		RDC	Alpha	dpm/100 cm ²	Comments
				Non-Deconv.	Deconv.				
196	413394	03	TC	4.0	4.0				DC = 0 inches
		06	TC	4.1	3.7				
		09	TC	4.4	4.8				
		12	TC	4.5	4.1				
		15	TC	4.8	4.4				
		18	TC	5.3	6.0				
		21	TC	5.4	4.3				
		24	TC	6.1	5.2				
		27	TC	7.3	8.9				
		30	TC	7.6	8.1				
		33	TC	7.6	7.4				
		36	TC	7.7	8.1				
		39	TC	7.6	8.0				
		42	TC	7.3	8.5				
		45	TC	6.3	5.8				
		48	TC	5.6	5.1				
		51	TC	5.2	3.8				
		54	TC	5.6	6.3				
		57	TC	5.6	6.0				
		60	TC	5.4	5.4				
		63	TC	5.2	5.2				
197	415237	00	DS	1.6					Gravel
198	415296	00	DS	<1.0					Concrete pad
199	418234	03	TC	5.7	5.7				DC = 24 inches
		06	TC	6.9	8.0				
		09	TC	7.5	8.4				
		12	TC	7.6	8.7				
		15	TC	7.1	6.0				
		18	TC	7.1	8.3				
		21	TC	6.7	7.6				
		24	TC	5.7	5.7				
200	418291	00	DS	15.5					Gravel by pad
201	420290	03	TC	4.4	4.4				Dirt near storage bin DC = 21 inches Based on deconvolved data
		06	TC	5.2	5.9				
		09	TC	5.6	4.5				
		12	TC	6.6	6.4				
		18	TC	8.1	10.8				
		21	TC	7.0	7.0				
		24	TC	5.9	4.8				

Radium Concentrations at Exterior Locations

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Loc #	Grid Location	Depth (in.)	Meas. Type	Ra-226 (pCi/g)		RDC	Alpha	Comments
				Non-Deconv.	Deconv.	Working Level	dpm/100 cm ²	
201	420290	27	TC	5.4	4.5			
		30	TC	5.4	5.8			
		33	TC	5.2	5.4			
		36	TC	4.9	5.1			
		39	TC	4.5	3.8			
		42	TC	4.5	4.5			
		45	TC	4.5	4.5			
		48	TC	4.5	4.5			
		51	TC	4.5	4.7			
		54	TC	4.4	4.2			
		57	TC	4.4	4.4			
		60	TC	4.4	4.4			
		63	TC	4.4	4.8			
		66	TC	4.2	4.0			
		69	TC	4.1	4.5			
		72	TC	3.8	3.8			
		75	TC	3.5	3.3			
		78	TC	3.3	2.9			
		81	TC	3.3	3.3			
202	420291	00	DS	2.2				Concrete
203	420300	03	TC	3.4	3.4			DC = 0 inches
		06	TC	3.3	2.4			
		09	TC	3.7	3.7			
		12	TC	4.1	3.7			
		15	TC	4.7	4.3			
		18	TC	5.5	6.7			
		21	TC	5.6	6.3			
		24	TC	5.3	5.7			
		27	TC	4.8	3.7			
		30	TC	4.9	4.5			
		33	TC	5.2	6.3			
		36	TC	4.9	4.4			
		39	TC	4.9	5.1			
		42	TC	4.8	4.6			
		45	TC	4.8	4.8			
		48	TC	4.8	5.0			
		51	TC	4.7	4.5			
		54	TC	4.7	4.7			
		57	TC	4.7	4.7			
		60	TC	4.7	4.7			
		63	TC	4.7	4.7			
204	420330	03	TC	3.5	3.5			DC = 0 inches

Radium Concentrations at Exterior Locations
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		Ra-226 (pCi/g)		RDC	Alpha		
Loc #	Grid Location	Depth (in.)	Meas. Type	Non-Deconv.	Deconv.	Working Level	dpm/100 cm ² Comments
204	420330	06	TC	3.4	3.0		
		09	TC	3.5	3.1		
		12	TC	3.8	3.8		
		15	TC	4.1	4.6		
		18	TC	4.1	3.9		
		21	TC	4.2	4.4		
		24	TC	4.2	4.2		
		27	TC	4.2	3.8		
		30	TC	4.4	4.4		
		33	TC	4.6	4.8		
		36	TC	4.7	4.5		
		39	TC	4.9	5.3		
		42	TC	4.9	4.9		
		45	TC	4.9	4.9		
		48	TC	4.9	4.9		
		51	TC	4.9	5.1		
		54	TC	4.8	5.3		
		57	TC	4.4	3.0		
		60	TC	4.8	5.7		
		63	TC	4.7	4.5		
205	420360	03	TC	3.8	3.8		DC = 0 inches
		06	TC	3.9	3.9		
		09	TC	4.0	4.4		
		12	TC	3.9	3.9		
		15	TC	3.8	3.4		
		18	TC	3.9	4.1		
		21	TC	3.9	3.9		
		24	TC	3.9	3.7		
		27	TC	4.0	4.0		
		30	TC	4.1	4.3		
		33	TC	4.1	3.9		
		36	TC	4.2	4.6		
		39	TC	4.1	3.9		
		42	TC	4.1	4.1		
		45	TC	4.1	4.3		
		48	TC	4.0	3.8		
		51	TC	4.0	3.8		
		54	TC	4.1	4.3		
		57	TC	4.1	4.1		
		60	TC	4.1	4.1		
		63	TC	4.1	4.1		

Radium Concentrations at Exterior Locations

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Loc #	Grid Location	Depth (in.)	Meas. Type	Ra-226 (pCi/g)		RDC	Alpha	Comments
				Non-Deconv.	Deconv.	Working Level	dpm/100 cm ²	
205	420360	66	TC	4.1	3.9			
		69	TC	4.2	4.4			
		72	TC	4.2	4.0			
		75	TC	4.3	3.9			
		78	TC	4.6	4.8			
		81	TC	4.8	5.2			
		84	TC	4.8	4.8			
		87	TC	4.8	4.8			
		90	TC	4.8	4.8			
		93	TC	4.8	4.8			
206	420440	03	TC	4.6	4.6			DC = 0 inches
		06	TC	4.8	3.4			
		09	TC	5.8	6.3			
		12	TC	6.5	7.7			
		15	TC	6.5	6.7			
		18	TC	6.4	6.4			
		21	TC	6.3	6.3			
		24	TC	6.2	6.2			
		27	TC	6.1	6.1			
		30	TC	6.0	6.2			
		33	TC	5.8	5.6			
		36	TC	5.7	5.7			
		39	TC	5.6	5.4			
		42	TC	5.6	5.8			
		45	TC	5.5	5.3			
		48	TC	5.5	5.3			
		51	TC	5.6	5.8			
207	420450	00	DS	4.2				Auger refusal DC = 12 inches
		03	TC	7.3	7.3			
		06	TC	7.5	12.3			
		09	TC	5.0	-3.0			
		12	TC	7.0	7.0			
		12	DS	6.5				
208	420520	00	DS	4.1				DC = 12 inches
		03	TC	10.9	10.9			
		06	TC	12.4	15.1			
		09	TC	12.4	17.0			
		12	TC	9.8	10.5			
		15	TC	6.8	3.8			

Radium Concentrations at Exterior Locations

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Loc #	Grid Location	Depth (in.)	Meas. Type	Ra-226 (pCi/g)		RDC Working Level	Alpha dpm/100 cm ²	Comments
				Non-Deconv.	Deconv.			
208	420520	18	TC	5.5	4.1			
		21	TC	5.0	5.0			
		24	TC	4.5	4.5			
209	422514	00	DS	1.9				Gravel
210	425408	00	DS	3.2				Slope of ramp
		03	TC	3.9	3.9			
		06	TC	4.0	2.9			DC = 0 inches
		09	TC	4.7	4.3			
		12	TC	5.6	5.6			
		15	TC	6.5	6.9			
		18	TC	7.2	8.3			
		21	TC	7.3	6.6			
		24	TC	7.8	8.9			
		27	TC	7.7	7.5			
		30	TC	7.7	7.9			
		33	TC	7.6	7.1			
		36	TC	7.8	8.3			
		39	TC	7.7	8.2			
		42	TC	7.3	6.8			
		45	TC	7.2	6.8			
		48	TC	7.3	7.5			
		51	TC	7.3	7.1			
		54	TC	7.4	7.6			
		57	TC	7.4	7.6			
		60	TC	7.3	7.5			
		63	TC	7.1	6.9			
		66	TC	7.0	7.0			
211	427377	00	DS	2.9				Soil
212	428490	00	DS	2.1				Gravel ramp
213	430260	00	DS	2.8				Pit run
		03	TC	5.8	5.8			
		06	TC	7.1	8.2			DC = 6 inches
		09	TC	7.8	11.4			
		12	TC	6.5	6.0			
		15	TC	5.5	4.8			
		18	TC	4.9	4.2			
		21	TC	4.7	3.5			
		24	TC	5.2	5.9			
		27	TC	5.3	6.4			

Radium Concentrations at Exterior Locations

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				Ra-226 (pCi/g)		RDC	Alpha	Comments
Loc #	Grid Location	Depth (in.)	Meas. Type	Non-Deconv.	Deconv.	Working Level	dpm/100 cm ²	
213	430260	30	TC	4.8	4.1			
		33	TC	4.7	4.5			
		36	TC	4.7	4.9			
		39	TC	4.6	4.2			
		42	TC	4.7	5.1			
		45	TC	4.6	4.6			
		48	TC	4.5	4.1			
		51	TC	4.6	4.6			
		54	TC	4.7	4.9			
		57	TC	4.7	4.9			
		60	TC	4.6	4.6			
		63	TC	4.5	4.5			
		66	TC	4.4	4.4			
214	430470	00	DS	3.0				DC = 6 inches
		03	TC	5.0	5.0			
		06	TC	4.5	4.7			
		09	TC	3.9	3.2			
		12	TC	3.7	3.2			
		15	TC	3.8	4.0			
		18	TC	3.8	3.6			
		21	TC	3.9	4.3			
		24	TC	3.8	2.7			
		30	TC	4.3	5.0			
		33	TC	4.4	4.4			
215	432270	00	DS	2.0				Gravel
216	433490	00	DS	2.1				Gravel ramp
217	436428	00	DS	<1.0				In building
218	436514	00	DS	14.0				Soil on ramp
		03	TC	9.9	9.9			
		06	TC	12.0	10.8			DC = 27 inches
		09	TC	14.8	18.5			
		12	TC	15.5	18.3			
		15	TC	14.6	15.8			
		18	TC	13.0	13.4			
		21	TC	11.2	9.8			
		24	TC	10.2	11.6			
		27	TC	8.4	7.7			
		30	TC	7.0	6.1			
		33	TC	6.1	5.6			

Radium Concentrations at Exterior Locations
940 South 10th Street

DE ID #GJ-00461-CC

Loc #	Grid Location	Depth (in.)	Meas. Type	Ra-226 (pCi/g)		RDC	Alpha	Comments
				Non-Deconv.	Deconv.	Working Level	dpm/100 cm ²	
218	436514	36	TC	5.5	5.1			
		39	TC	5.1	4.6			
		42	TC	5.0	5.0			
		45	TC	4.9	4.5			
		48	TC	5.0	5.4			
		51	TC	4.9	4.7			
		54	TC	4.9	4.9			
219	438218	03	TC	5.5	5.5			DC = 21 inches
		06	TC	6.9	7.1			
		09	TC	8.2	8.7			
		12	TC	9.2	12.0			
		15	TC	8.6	10.0			
		18	TC	7.2	6.7			
		21	TC	6.1	5.6			
		24	TC	5.3	4.2			
		27	TC	5.1	5.3			
		30	TC	4.8	4.4			
		33	TC	4.7	4.5			
		36	TC	4.7	4.9			
		39	TC	4.6	4.4			
		42	TC	4.6	4.6			
		45	TC	4.6	5.0			
		48	TC	4.4	4.6			
		51	TC	4.1	4.1			
220	439452	03	TC	5.2	5.2			DC = 6 inches
		06	TC	6.2	8.2			
		09	TC	6.1	7.2			
		12	TC	5.4	4.9			
		15	TC	5.0	4.5			
		18	TC	4.9	4.2			
		21	TC	5.2	5.7			
		24	TC	5.2	5.4			
		27	TC	5.1	5.3			
		30	TC	4.9	4.5			
		33	TC	4.9	4.9			
		36	TC	4.9	4.9			
		39	TC	4.9	4.9			
		42	TC	4.9	5.3			
		45	TC	4.7	4.2			
		48	TC	4.8	5.3			
		51	TC	4.6	4.2			
		54	TC	4.6	4.8			

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Loc #	Grid Location	Depth (in.)	Meas. Type	Ra-226 (pCi/g)		RDC Working Level	Alpha dpm/100 cm ²	Comments
				Non-Deconv.	Deconv.			
220	439452	57	TC	4.5	4.3			
		60	TC	4.5	4.9			
		63	TC	4.3	4.1			
		66	TC	4.2	4.2			
221	440219	03	TC	5.2	5.2			DC = 21 inches
		06	TC	5.6	4.7			
		09	TC	6.5	6.0			
		12	TC	7.7	7.9			
		15	TC	8.8	12.2			
		18	TC	8.0	9.4			
		21	TC	6.4	5.3			
		24	TC	5.4	4.5			
		27	TC	4.9	4.4			
		30	TC	4.7	4.5			
		33	TC	4.6	4.6			
		36	TC	4.5	4.5			
222	440247	03	TC	4.8	4.8			Dirt DC = 15 inches
		06	TC	6.5	4.5			
		09	TC	9.3	11.6			
		12	TC	10.8	17.7			
		15	TC	8.4	7.9			
		18	TC	6.3	3.5			
		21	TC	5.8	5.4			
		24	TC	5.5	5.7			
		27	TC	5.1	5.1			
		30	TC	4.7	4.2			
		33	TC	4.6	4.4			
		36	TC	4.6	5.0			
		39	TC	4.4	4.0			
		42	TC	4.4	4.6			
		45	TC	4.3	4.3			
223	440270	00	DS	3.8				DC = 12 inches Based on deconvolved data
		03	TC	5.4	5.4			
		06	TC	6.3	6.5			
		09	TC	7.1	6.0			
		12	TC	8.5	11.9			
		15	TC	8.0	10.1			
		18	TC	6.3	4.3			
		21	TC	5.7	5.2			
		24	TC	5.4	5.0			
		27	TC	5.3	5.5			

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Loc #	Grid Location	Depth (in.)	Meas. Type	Ra-226 (pCi/g)		RDC	Alpha	Comments
				Non-Deconv.	Deconv.	Working Level	dpm/100 cm ²	
223	440270	30	TC	5.1	5.1			
		33	TC	4.9	4.5			
		36	TC	4.9	4.9			
		39	TC	4.9	5.1			
		42	TC	4.8	4.6			
		45	TC	4.8	5.0			
		48	TC	4.7	4.5			
		51	TC	4.7	4.7			
		54	TC	4.7	5.1			
		57	TC	4.5	4.5			
		60	TC	4.3	4.3			
		63	TC	4.1	3.9			
		66	TC	4.0	4.2			
		69	TC	3.8	3.6			
		72	TC	3.7	3.7			
224	440372	03	TC	3.7	3.7			DC = 0 inches
		06	TC	4.0	4.5			
		09	TC	4.0	4.0			
		12	TC	4.0	4.2			
		15	TC	3.9	3.5			
		18	TC	4.0	4.2			
		21	TC	4.0	4.0			
		24	TC	4.0	4.0			
		27	TC	4.0	4.0			
		30	TC	4.0	4.0			
		33	TC	4.0	4.0			
		36	TC	4.0	4.0			
		39	TC	4.0	4.0			
		42	TC	4.0	4.0			
		45	TC	4.0	4.0			
		48	TC	4.0	4.0			
		51	TC	4.0	3.6			
		54	TC	4.2	4.6			
		57	TC	4.2	4.4			
		60	TC	4.1	4.5			
		63	TC	3.8	3.3			
		66	TC	3.8	4.0			
		69	TC	3.7	4.1			
		72	TC	3.4	2.9			
		75	TC	3.4	3.6			
		78	TC	3.3	2.9			
		81	TC	3.4	3.6			
		84	TC	3.4	3.4			

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Loc #	Grid Location	Depth (in.)	Meas. Type	Ra-226 (pCi/g)		RDC	Alpha	Comments
				Non-Deconv.	Deconv.	Working Level	dpm/100 cm ²	
224	440372	87	TC	3.4	3.4			
		90	TC	3.4	3.4			
		93	TC	3.4	3.4			
		96	TC	3.4	3.2			
		99	TC	3.5	3.9			
		102	TC	3.4	3.4			
225	440390	00	DS	1.3				Gravel ramp
226	440460	03	TC	5.4	5.4			DC = 6 inches
		06	TC	6.4	7.1			
		09	TC	7.0	8.4			
		12	TC	6.8	6.8			
		15	TC	6.6	5.7			
		18	TC	6.9	5.8			
		21	TC	7.8	9.9			
		24	TC	7.5	9.3			
		27	TC	6.2	5.3			
		30	TC	5.4	4.9			
		33	TC	4.9	4.2			
		36	TC	4.8	4.6			
		39	TC	4.8	4.6			
		42	TC	4.9	5.3			
		45	TC	4.8	4.8			
227	445315	00	DS	3.2				Gravel ramp
		03	TC	7.5	7.5			DC = 6 inches
		06	TC	8.4	12.5			
		09	TC	7.0	5.4			
		12	TC	6.5	7.4			
		15	TC	5.5	5.0			
		18	TC	4.8	3.7			
		21	TC	4.7	4.7			
		24	TC	4.6	4.6			
		27	TC	4.5	4.5			
		30	TC	4.4	4.2			
		33	TC	4.4	4.4			
		36	TC	4.4	4.4			
		39	TC	4.4	4.6			
		42	TC	4.3	3.9			
		45	TC	4.4	4.6			
		48	TC	4.4	4.6			
		51	TC	4.3	4.1			
		54	TC	4.3	4.3			

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Loc #	Grid Location	Depth (in.)	Meas. Type	Ra-226 (pCi/g)		RDC	Alpha	Working Level	dpm/100 cm ²	Comments
				Non-Deconv.	Deconv.					
227	445315	57	TC	4.3	4.3					
		60	TC	4.3	4.3					
		63	TC	4.3	4.3					
		66	TC	4.3	4.3					
		69	TC	4.3	4.1					
		72	TC	4.4	4.8					
		75	TC	4.3	4.1					
		78	TC	4.3	4.3					
		81	TC	4.3	4.3					
		84	TC	4.3	4.7					
		87	TC	4.1	3.6					
		90	TC	4.2	4.4					
		93	TC	4.2	4.4					
		96	TC	4.1	4.3					
		99	TC	3.9	3.5					
		102	TC	3.9	3.9					
		105	TC	3.9	4.1					
		108	TC	3.8	3.4					
		111	TC	3.9	4.1					
		114	TC	3.9	3.7					
228	450330	00	DS	3.7						
229	450340	00	DS	1.6						
230	450380	00	DS	1.8						
231	450460	00	DS	8.1						
		03	TC	17.3	17.3					
		06	TC	26.4	18.9					
		09	TC	39.7	32.8					
		12	TC	57.0	55.0					
		15	TC	75.4	137.6					
		18	TC	58.8	76.4					
		21	TC	32.3	12.0					
		24	TC	17.2	2.4					
		27	TC	10.4	2.0					
		30	TC	8.3	6.9					
		33	TC	7.0	5.4					

DC = 21 inches

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Loc #	Grid Location	Depth (in.)	Meas. Type	Ra-226 (pCi/g)		Working Level	Alpha dpm/100 cm ²	Comments
				Non-Deconv.	Deconv.			
231	450460	36	TC	6.6	6.8			
		39	TC	6.1	6.8			
		42	TC	5.2	3.6			
		45	TC	5.2	5.2			
232	451428	00	DS	<1.0				In building
233	453435	03	TC	7.4	7.4			DC = 6 inches
		06	TC	9.2	14.0			
		09	TC	8.3	10.1			
		12	TC	6.4	4.8			
		15	TC	5.4	4.3			
		18	TC	5.0	4.5			
		21	TC	4.9	4.5			
		24	TC	5.0	5.2			
		27	TC	5.0	5.4			
		30	TC	4.8	4.4			
		33	TC	4.8	4.8			
		36	TC	4.8	4.8			
		39	TC	4.8	4.6			
		42	TC	4.9	5.3			
		45	TC	4.8	4.6			
		48	TC	4.8	5.0			
		51	TC	4.7	4.7			
		54	TC	4.6	4.2			
		57	TC	4.7	5.1			
		60	TC	4.6	4.4			
		63	TC	4.6	4.8			
		66	TC	4.5	4.5			
		69	TC	4.4	4.4			
234	453497	03	TC	11.2	11.2			DC = 63 inches
		06	TC	15.0	13.0			
		09	TC	19.9	25.6			
		12	TC	21.6	24.1			
		15	TC	21.9	19.4			
		18	TC	23.6	25.0			
		21	TC	24.5	27.2			
		24	TC	23.9	26.6			
		27	TC	21.8	22.5			
		30	TC	19.3	22.0			
		33	TC	15.3	12.5			
		36	TC	12.9	11.1			
		39	TC	11.5	9.2			

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Loc #	Grid Location	Depth (in.)	Meas. Type	Ra-226 (pCi/g)		RDC	Alpha	Comments
				Non-Deconv.	Deconv.	Working Level	dpm/100 cm ²	
234	453497	42	TC	11.4	8.6			
		45	TC	12.9	9.7			
		48	TC	16.2	12.5			
		51	TC	21.6	27.1			
		54	TC	23.9	41.5			
		57	TC	16.3	13.8			
		60	TC	10.1	4.6			
		63	TC	7.0	3.6			
		66	TC	5.8	4.7			
		69	TC	5.2	4.5			
		72	TC	5.0	4.6			
		75	TC	5.0	5.0			
		78	TC	5.0	4.8			
		81	TC	5.1	5.3			
		84	TC	5.1	5.5			
		87	TC	4.9	4.2			
		90	TC	5.1	5.1			
235	455290	03	TC	2.8	2.8			DC = 0 inches
		06	TC	2.8	2.4			
		09	TC	3.0	3.2			
		12	TC	3.1	3.3			
		15	TC	3.1	2.7			
		18	TC	3.3	3.5			
		21	TC	3.4	3.6			
		24	TC	3.4	3.2			
		27	TC	3.5	3.7			
		30	TC	3.5	3.3			
		33	TC	3.6	3.4			
		36	TC	3.8	4.3			
		39	TC	3.7	3.5			
		42	TC	3.7	3.5			
		45	TC	3.8	4.2			
		48	TC	3.7	3.3			
		51	TC	3.8	4.2			
		54	TC	3.7	3.5			
		57	TC	3.7	3.7			
		60	TC	3.7	4.1			
		63	TC	3.5	3.1			
		66	TC	3.5	3.5			
		69	TC	3.5	3.5			
		72	TC	3.5	3.5			
		75	TC	3.5	3.5			
		78	TC	3.5	3.5			

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Loc #	Grid Location	Depth (in.)	Meas. Type	Ra-226 (pCi/g)		Working Level	Alpha dpm/100 cm ²	Comments
				Non-Deconv.	Deconv.			
235	455290	81	TC	3.5	3.5			
		84	TC	3.5	3.5			
		87	TC	3.5	3.3			
		90	TC	3.6	3.8			
		93	TC	3.6	3.6			
		96	TC	3.6	3.8			
		99	TC	3.5	3.3			
		102	TC	3.5	3.5			
		105	TC	3.5	3.5			
		108	TC	3.5	3.5			
		111	TC	3.5	3.5			
		114	TC	3.5	3.5			
		117	TC	3.5	3.5			
		120	TC	3.5	3.5			
		123	TC	3.5	3.5			
		126	TC	3.5	3.7			
		129	TC	3.4	3.4			
236	458478	03	TC	4.5	4.5			DC = 60 inches
		06	TC	5.0	3.9			
		09	TC	6.1	7.3			
		12	TC	6.5	6.5			
		15	TC	6.9	7.1			
		18	TC	7.2	7.6			
		21	TC	7.3	7.5			
		24	TC	7.3	7.5			
		27	TC	7.2	6.8			
		30	TC	7.3	7.5			
		33	TC	7.3	6.9			
		36	TC	7.5	7.1			
		39	TC	7.9	7.4			
		42	TC	8.6	7.2			
		45	TC	10.1	8.9			
		48	TC	12.3	14.4			
		51	TC	13.3	17.6			
		54	TC	11.9	10.8			
		57	TC	11.1	13.4			
		60	TC	9.0	8.3			
		63	TC	7.3	6.9			
		66	TC	5.8	4.4			
		69	TC	5.1	4.2			
		72	TC	4.9	4.5			
		75	TC	4.9	4.9			
		78	TC	4.9	4.9			

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Loc #	Grid Location	Depth (in.)	Meas. Type	Ra-226 (pCi/g)		RDC	Alpha	Working Level	dpm/100 cm ²	Comments
				Non-Deconv.	Deconv.					
236	458478	81	TC	4.9	5.1					
		84	TC	4.8	4.6					
		87	TC	4.8	4.8					
		90	TC	4.8	4.8					
		93	TC	4.8	4.8					
		98	TC	4.8	4.8					
		99	TC	4.8	5.0					
		102	TC	4.7	4.7					
237	460210	00-06	SS	3.9						DC = 27 inches
		00	DS	3.6						
		03	TC	5.8	5.8					
		06	DS	6.9						
		06	TC	7.2	8.6					
		09	TC	7.8	9.2					
		12	TC	7.6	3.8					
		15	TC	6.7	6.3					
		18	TC	6.0	5.8					
		21	TC	5.4	4.9					
		24	TC	5.1	4.7					
		27	TC	5.0	5.2					
		30	TC	4.8	4.4					
		33	TC	4.8	5.2					
		36	TC	4.6	4.2					
		39	TC	4.6	4.8					
		42	TC	4.5	4.5					
		45	TC	4.4	4.6					
		48	TC	4.2	4.2					
		51	TC	4.0	3.6					
		54	TC	4.0	4.2					
		57	TC	3.9	3.7					
		60	TC	3.9	3.9					
238	460320	00	DS	2.1						Gravel ramp
239	460346	03	TC	3.7	3.7					Dirt-gravel
		06	TC	4.0	4.7					
		09	TC	3.9	3.5					DC = 0 inches
		12	TC	4.0	4.0					
		15	TC	4.1	4.5					
		18	TC	4.0	3.6					
		21	TC	4.1	4.5					
		24	TC	4.0	3.6					
		27	TC	4.1	4.5					

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Loc #	Grid Location	Depth (in.)	Meas. Type	Ra-226 (pCi/g)		Working Level	Alpha dpm/100 cm ²	Comments
				Non-Deconv.	Deconv.			
239	460346	30	TC	4.0	4.0			
		33	TC	3.9	3.7			
		36	TC	3.9	4.1			
		39	TC	3.8	3.8			
		42	TC	3.7	3.3			
		45	TC	3.8	4.0			
		48	TC	3.8	3.3			
		51	TC	4.1	4.3			
		54	TC	4.3	4.8			
		57	TC	4.2	3.8			
		60	TC	4.3	4.8			
		63	TC	4.1	4.3			
		66	TC	3.8	3.4			
		69	TC	3.7	3.7			
		72	TC	3.6	3.4			
		75	TC	3.6	3.8			
		78	TC	3.5	3.3			
		81	TC	3.5	3.5			
		84	TC	3.5	3.3			
		87	TC	3.6	3.8			
		90	TC	3.6	3.6			
		93	TC	3.6	3.8			
		96	TC	3.5	3.1			
		99	TC	3.6	3.6			
		102	TC	3.7	3.7			
		105	TC	3.8	3.8			
		108	TC	3.9	3.9			
		111	TC	4.0	4.2			
		114	TC	4.0	3.1			
		117	TC	4.5	5.4			
		120	TC	4.5	4.0			
		123	TC	4.8	4.6			
		126	TC	5.2	6.4			
		129	TC	4.9	4.5			
		132	TC	4.8	4.6			
		135	TC	4.8	5.0			
		138	TC	4.7	4.3			
		141	TC	4.8	5.0			
		144	TC	4.8	5.0			
		147	TC	4.7	4.3			
		150	TC	4.8	5.2			
		153	TC	4.7	4.5			
		156	TC	4.7	4.7			
		159	TC	4.7	4.7			

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Loc #	Grid Location	Depth (in.)	Meas. Type	Ra-226 (pCi/g)		RDC	Alpha	Comments
				Non-Deconv.	Deconv.	Working Level	dpm/100 cm ²	
239	460346	162	TC	4.7	4.9			
		165	TC	4.6	4.6			
240	460360	00	DS	2.1				
241	460370	00	DS	1.7				Pit run
242	460395	00	DS	1.5				Gravel ramp
243	460409	03	TC	3.2	3.2			DC = 0 inches
		06	TC	3.4	3.4			
		09	TC	3.6	3.4			
		12	TC	3.9	3.9			
		15	TC	4.2	4.9			
		18	TC	4.1	3.9			
		21	TC	4.1	4.1			
		24	TC	4.1	4.3			
		27	TC	4.0	3.8			
		30	TC	4.0	4.2			
		33	TC	3.9	3.7			
		36	TC	3.9	3.9			
		39	TC	3.9	3.7			
		42	TC	4.0	4.5			
		45	TC	3.8	3.4			
		48	TC	3.8	3.8			
		51	TC	3.8	3.8			
		54	TC	3.8	3.8			
		57	TC	3.8	4.0			
		60	TC	3.7	3.3			
		63	TC	3.8	4.0			
		66	TC	3.8	3.6			
		69	TC	3.9	3.9			
		72	TC	4.0	4.0			
		75	TC	4.1	4.3			
		78	TC	4.1	4.1			
		81	TC	4.1	4.3			
		84	TC	4.0	3.8			
		37	TC	4.0	4.2			
		90	TC	3.9	3.7			
		93	TC	3.9	4.3			
		96	TC	3.7	3.2			
		99	TC	3.8	4.0			
		102	TC	3.8	3.8			
		105	TC	3.8	3.6			

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		Ra-226 (pCi/g)		RDC	Alpha		
Loc #	Grid Location	Depth (in.)	Meas. Type	Non-Deconv.	Deconv.	Working Level	dpm/100 cm ² Comments
243	460409	108	TC	3.9	3.7		
		111	TC	4.1	4.5		
		114	TC	4.1	3.7		
		117	TC	4.3	4.3		
		120	TC	4.5	4.7		
		123	TC	4.6	4.6		
		126	TC	4.7	4.9		
		129	TC	4.7	4.9		
		132	TC	4.6	4.6		
		135	TC	4.5	4.3		
		138	TC	4.5	4.1		
		141	TC	4.7	4.7		
		144	TC	4.9	5.6		
		147	TC	4.7	3.8		
		150	TC	5.0	5.4		
		153	TC	5.1	5.3		
		156	TC	5.1	5.3		
		159	TC	5.0	5.0		
		162	TC	4.9	4.7		
		165	TC	4.9	5.1		
		168	TC	4.8	4.8		
244	461236	03	TC	6.9	6.9		Dirt
		06	TC	9.0	10.1		
		09	TC	10.5	13.9		DC = 18 inches
		12	TC	10.1	12.1		
		15	TC	8.6	5.9		
		18	TC	8.6	8.6		
		21	TC	8.6	11.3		
		24	TC	7.1	6.6		
		27	TC	5.9	4.8		
		30	TC	5.3	4.8		
		33	TC	5.0	4.8		
		36	TC	4.8	4.8		
		39	TC	4.6	4.2		
		42	TC	4.6	4.8		
		45	TC	4.5	4.5		
		48	TC	4.4	4.6		
		51	TC	4.2	4.0		
		54	TC	4.1	4.1		
		57	TC	4.0	4.0		
		60	TC	3.9	3.7		
		63	TC	3.9	3.9		
245	462233	00	DS	<1.0			

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		Ra-226 (pCi/g)				RDC	Alpha		
Loc #	Grid Location	Depth (in.)	Meas. Type	Non-Deconv.	Deconv.	Working Level	dpm/100 cm ²	Comments	
245	462233	03	TC	4.8	4.8			DC = 18 inches	
		06	TC	5.9	4.3				
		09	TC	7.9	6.8				
		12	TC	10.5	13.3				
		15	TC	11.5	17.5				
		18	TC	9.1	8.9				
		21	TC	6.8	4.3				
		24	TC	5.9	5.5				
		27	TC	5.2	4.5				
		30	TC	4.9	4.7				
		33	TC	4.7	4.3				
		36	TC	4.7	4.9				
		39	TC	4.6	4.6				
		42	TC	4.5	4.5				
		45	TC	4.4	4.2				
		48	TC	4.4	4.4				
46	465385	03	TC	4.7	4.7			DC = 6 inches	
		06	TC	5.5	6.7				
		09	TC	5.6	7.0				
		12	TC	4.9	4.4				
		15	TC	4.5	4.1				
		18	TC	4.3	4.1				
		21	TC	4.2	4.2				
		24	TC	4.1	4.3				
		27	TC	3.9	3.5				
		30	TC	3.9	4.1				
		33	TC	3.8	3.4				
		36	TC	3.9	4.3				
		39	TC	3.8	3.8				
		42	TC	3.7	3.3				
		45	TC	3.8	4.0				
		48	TC	3.8	3.8				
		51	TC	3.8	3.8				
		54	TC	3.8	3.8				
		57	TC	3.8	3.8				
		60	TC	3.8	3.8				
		63	TC	3.8	3.6				
		66	TC	3.9	4.3				
		69	TC	3.8	3.6				
		72	TC	3.8	3.8				
		75	TC	3.8	3.8				
		78	TC	3.8	4.0				
		81	TC	3.7	3.9				

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Loc #	Grid Location	Depth (in.)	Meas. Type	Ra-226 (pCi/g)		Working Level	Alpha dpm/100 cm ²	Comments
				Non-Deconv.	Deconv.			
246	465385	84	TC	3.5	3.0			
		87	TC	3.6	3.8			
		90	TC	3.6	3.2			
		93	TC	3.8	4.0			
		96	TC	3.9	4.1			
		99	TC	3.9	4.1			
		102	TC	3.8	3.8			
		105	TC	3.7	3.7			
		108	TC	3.6	3.2			
		111	TC	3.7	3.9			
		114	TC	3.7	3.5			
		117	TC	3.8	3.8			
		120	TC	3.9	3.7			
		123	TC	4.1	4.1			
		126	TC	4.3	4.5			
		129	TC	4.4	4.0			
		132	TC	4.7	5.1			
		135	TC	4.8	5.0			
		138	TC	4.8	4.8			
		141	TC	4.8	4.8			
247	465445	03	TC	15.0	15.0			DC = 45 inches
		06	TC	17.7	20.5			
		09	TC	18.8	24.8			
		12	TC	16.5	17.9			
		15	TC	13.4	13.2			
		18	TC	10.4	5.1			
		21	TC	10.4	5.2			
		24	TC	13.3	3.0			
		27	TC	22.0	23.1			
		30	TC	30.1	35.6			
		33	TC	35.1	50.0			
		36	TC	31.7	40.2			
		39	TC	23.5	24.0			
		42	TC	15.0	9.3			
		45	TC	9.7	3.7			
		48	TC	7.8	6.4			
		51	TC	6.7	6.5			
		54	TC	5.7	4.3			
		57	TC	5.5	5.5			
		60	TC	5.3	5.1			
		63	TC	5.2	5.4			
		66	TC	5.0	4.6			
		69	TC	5.0	5.0			

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		Ra-226 (pCi/g)				RDC	Alpha		
Loc #	Grid Location	Depth (in.)	Meas. Type	Non-Deconv.	Deconv.	Working Level	dpm/100 cm ²	Comments	
247	465445	72	TC	5.0	5.4				
		75	TC	4.8	4.4				
		78	TC	4.8	4.6				
		81	TC	4.9	5.3				
		84	TC	4.8	4.6				
		87	TC	4.8	4.8				
		90	TC	4.8	4.8				
		93	TC	4.8	4.8				
248	467460	03	TC	4.4	4.4				
		06	TC	4.9	3.7				
		09	TC	6.1	5.7				
		12	TC	7.5	8.9				
		15	TC	8.1	8.3				
		18	TC	8.6	7.9				
		21	TC	9.5	10.0				
		24	TC	10.1	11.7				
		27	TC	9.8	11.6				
		30	TC	8.5	8.3				
		33	TC	7.3	5.9				
		36	TC	6.9	6.9				
		39	TC	6.5	6.1				
		42	TC	6.3	5.9				
		45	TC	6.3	6.3				
		48	TC	6.3	6.1				
		51	TC	6.4	6.0				
		54	TC	6.7	7.1				
		57	TC	6.8	6.8				
		60	TC	6.9	7.6				
		63	TC	6.6	6.6				
		66	TC	6.3	6.1				
		69	TC	6.1	5.7				
		72	TC	6.1	6.1				
		75	TC	6.1	5.2				
		78	TC	6.6	5.2				
		81	TC	7.9	5.1				
		84	TC	10.8	8.8				
		87	TC	14.8	12.8				
		90	TC	19.9	26.8				
		93	TC	21.1	35.1				
		96	TC	14.4	10.1				
		99	TC	10.1	7.6				
		102	TC	7.2	3.8				
		105	TC	6.2	5.5				

DC = 102 inches

Radium Concentrations at Exterior Locations
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Loc #	Grid Location	Depth (in.)	Meas. Type	Ra-226 (pCi/g)		RDC	Alpha	Comments
				Non-Deconv.	Deconv.	Working Level	dpm/100 cm ²	
248	467460	108	TC	5.6	4.9			
		111	TC	5.4	5.4			
		114	TC	5.2	4.8			
		117	TC	5.2	5.4			
		120	TC	5.1	4.7			
		123	TC	5.2	5.7			
		126	TC	5.0	4.5			
		129	TC	5.1	5.1			
		132	TC	5.2	5.0			
		135	TC	5.4	5.4			
249	470240	00	DS	3.1				Gravel
250	470310	00	DS	3.0				Upper roadway
		06	DS	4.3				
		09	DS	2.7				DC = 6 inches
251	470330	00	DS	6.0				
-252	470435	03	TC	5.5	5.5			DC = 21 inches
		06	TC	6.3	5.2			
		09	TC	7.7	7.0			
		12	TC	9.5	8.1			
		15	TC	12.1	17.6			
		18	TC	11.6	16.4			
		21	TC	8.4	5.7			
		24	TC	6.7	5.8			
		27	TC	5.5	4.4			
		30	TC	4.9	4.2			
		33	TC	4.7	4.5			
		36	TC	4.6	4.4			
		39	TC	4.6	4.6			
		42	TC	4.6	4.4			
		45	TC	4.7	5.1			
		48	TC	4.6	4.6			
		51	TC	4.5	4.5			
253	478428	00	DS	1.6				In building
254	480230	00	DS	2.2				Gravel
255	480335	00	DS	2.3				Gravel ramp
256	480340	03	TC	5.3	5.3			DC = 66 inches

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Loc #	Grid Location	Depth (in.)	Meas. Type	Ra-226 (pCi/g)		RDC	Alpha	Comments
				Non-Deconv.	Deconv.	Working Level	dpm/100 cm ²	
256	480340	06	TC	6.9	8.3			
		09	TC	7.7	10.2			
		12	TC	7.1	7.1			
		15	TC	6.5	5.6			
		18	TC	6.4	6.0			
		21	TC	6.5	6.5			
		24	TC	6.6	6.6			
		27	TC	6.7	6.2			
		30	TC	7.1	8.0			
		33	TC	7.0	6.5			
		36	TC	7.2	7.4			
		39	TC	7.3	7.1			
		42	TC	7.5	7.1			
		45	TC	7.9	8.1			
		48	TC	8.2	8.6			
		51	TC	8.3	7.4			
		54	TC	8.9	8.2			
		57	TC	9.9	10.8			
		60	TC	10.4	11.6			
		63	TC	10.2	11.4			
		66	TC	9.3	9.3			
		69	TC	8.4	8.9			
		72	TC	7.2	7.4			
		75	TC	5.9	5.5			
		78	TC	4.8	3.7			
		81	TC	4.3	3.8			
		84	TC	4.1	4.3			
		87	TC	3.8	3.4			
		90	TC	3.7	3.7			
		93	TC	3.6	3.6			
		96	TC	3.5	3.5			
		99	TC	3.4	3.4			
		102	TC	3.3	3.1			
		105	TC	3.3	3.3			
		108	TC	3.3	3.1			
		111	TC	3.4	3.2			
		114	TC	3.6	3.4			
		117	TC	3.9	3.5			
		120	TC	4.4	4.8			
		123	TC	4.7	5.2			
		126	TC	4.7	4.7			
		129	TC	4.7	4.5			
		132	TC	4.8	5.0			
		135	TC	4.8	4.8			

Radionuclide Concentrations at Exterior Locations

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Loc #	Grid Location	Depth (in.)	Meas. Type	Ra-226 (pCi/g)		RDC Working Level	Alpha dpm/100 cm ²	Comments
				Non-Deconv.	Deconv.			
256	480340	138	TC	4.8	4.6			
		141	TC	4.9	5.1			
		144	TC	4.9	4.9			
		147	TC	4.9	5.1			
		150	TC	4.8	4.6			
		153	TC	4.8	5.2			
		156	TC	4.6	4.6			
		159	TC	4.4	4.4			
		162	TC	4.2	4.0			
		165	TC	4.1	4.1			
		168	TC	4.0	4.0			
257	480390	00	DS	1.8				
258	480460	00	DS	1.4				Dirt
		03	TC	3.8	3.8			
		06	TC	4.8	5.0			DC = 111 inches
		09	TC	5.7	6.6			
		12	TC	6.1	7.0			
		15	TC	6.0	6.4			
		18	TC	5.7	5.9			
		21	TC	5.3	5.3			
		24	TC	4.9	4.5			
		27	TC	4.7	4.7			
		30	TC	4.5	4.3			
		33	TC	4.4	4.6			
		36	TC	4.2	4.0			
		39	TC	4.1	3.7			
		42	TC	4.2	4.4			
		45	TC	4.2	4.2			
		48	TC	4.2	4.0			
		51	TC	4.3	4.7			
		54	TC	4.2	3.8			
		57	TC	4.3	4.7			
		60	TC	4.2	4.0			
		63	TC	4.2	3.8			
		66	TC	4.4	4.6			
		69	TC	4.5	4.5			
		72	TC	4.6	4.4			
		75	TC	4.8	5.0			
		78	TC	4.9	5.1			
		81	TC	4.9	4.9			
		84	TC	4.9	5.3			
		87	TC	4.7	4.5			

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Loc #	Grid Location	Depth (in.)	Meas. Type	Ra-226 (pCi/g)		RDC	Alpha	Comments
				Non-Deconv.	Deconv.	Working Level	dpm/100 cm ²	
258	480460	90	TC	4.6	4.1			
		93	TC	4.8	3.9			
		96	TC	5.5	4.6			
		99	TC	6.7	6.2			
		102	TC	8.2	9.1			
		105	TC	9.2	11.5			
		108	TC	8.9	11.4			
		111	TC	7.2	6.7			
		114	TC	5.8	4.4			
		117	TC	5.2	4.5			
		120	TC	5.0	4.8			
		123	TC	4.9	4.7			
		126	TC	4.9	5.1			
		129	TC	4.8	4.8			
		132	TC	4.7	4.5			
		135	TC	4.7	4.9			
		138	TC	4.6	4.4			
		141	TC	4.6	4.6			
259	488420	00	DS	1.4				Gravel ramp
260	490235	03	TC	4.1	4.1			DC = 0 inches
		06	TC	4.8	4.8			
		09	TC	5.5	5.0			
		12	TC	6.5	8.1			
		15	TC	6.6	8.2			
		18	TC	5.8	5.1			
		21	TC	5.4	5.0			
		24	TC	5.2	5.0			
		27	TC	5.1	5.3			
		30	TC	4.9	4.9			
		33	TC	4.7	4.3			
		36	TC	4.7	5.2			
		39	TC	4.4	3.9			
		42	TC	4.4	4.8			
		45	TC	4.2	4.2			
		48	TC	4.0	4.0			
		51	TC	3.8	3.4			
		54	TC	3.8	3.8			
		57	TC	3.8	3.8			
		60	TC	3.8	3.8			
		63	TC	3.8	3.8			
		66	TC	3.8	3.8			
261	490295	03	TC	6.1	6.1			DC = 6 inches

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		Ra-226 (pCi/g)		RDC	Alpha		
Loc #	Grid Location	Depth (in.)	Meas. Type	Non-Deconv.	Deconv.	Working Level	dpm/100 cm ² Comments
261	490295	06	TC	7.0	7.9		
		09	TC	7.4	7.2		
		12	TC	7.9	8.4		
		15	TC	8.1	8.8		
		18	TC	7.9	7.7		
		21	TC	7.8	8.3		
		24	TC	7.4	8.5		
		27	TC	6.4	6.4		
		30	TC	5.4	5.4		
		33	TC	4.4	3.5		
		36	TC	3.9	3.5		
		39	TC	3.6	2.7		
		42	TC	3.8	4.0		
		45	TC	3.9	4.4		
		48	TC	3.7	3.5		
		51	TC	3.6	3.4		
		54	TC	3.6	3.6		
		57	TC	3.6	3.8		
		60	TC	3.5	3.3		
		63	TC	3.5	3.5		
262	490360	00	DS	5.7			Gravel ramp
263	490370	00	DS	2.4			
264	490400	03	TC	4.4	4.4		DC = 90 inches
		06	TC	4.7	5.1		
		09	TC	4.8	5.3		
		12	TC	4.6	5.3		
		15	TC	4.0	3.5		
		18	TC	3.7	3.2		
		21	TC	3.7	3.7		
		24	TC	3.7	3.0		
		27	TC	4.1	4.5		
		30	TC	4.3	4.8		
		33	TC	4.2	4.4		
		36	TC	4.0	3.8		

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Loc #	Grid Location	Depth (in.)	Meas. Type	Ra-226 (pCi/g)		RDC	Alpha	Comments
				Non-Deconv.	Deconv.	Working Level	dpm/100 cm ²	
264	490400	39	TC	3.9	4.1			
		42	TC	3.7	3.7			
		45	TC	3.5	3.1			
		48	TC	3.5	3.5			
		51	TC	3.5	3.5			
		54	TC	3.5	3.1			
		57	TC	3.7	3.7			
		60	TC	3.9	3.5			
		63	TC	4.3	4.5			
		66	TC	4.6	4.1			
		69	TC	5.2	3.2			
		72	TC	6.9	6.5			
		75	TC	8.8	8.1			
		78	TC	11.1	13.1			
		81	TC	12.3	15.5			
		84	TC	11.7	13.8			
		87	TC	9.9	9.4			
		90	TC	8.4	8.4			
		93	TC	6.9	6.4			
		96	TC	5.7	5.7			
265	490483	00	DS	1.6				Gravel ramp
		03	TC	5.7	5.7			
		06	TC	6.7	7.9			DC = 114 inches
		09	TC	7.0	7.2			
		12	TC	7.2	7.4			
		15	TC	7.3	7.1			
		18	TC	7.5	6.8			
		21	TC	8.1	7.9			
		24	TC	8.8	8.4			
		27	TC	9.7	9.7			
		30	TC	10.6	11.5			
		33	TC	11.0	10.6			
		36	TC	11.6	12.8			
		39	TC	11.5	13.6			
		42	TC	10.2	9.5			
		45	TC	9.3	9.8			
		48	TC	8.1	7.4			
		51	TC	7.3	7.3			
		54	TC	6.5	5.6			
		57	TC	6.2	5.8			
		60	TC	6.1	6.1			
		63	TC	6.0	5.8			
		66	TC	6.0	6.2			

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				Ra-226 (pCi/g)		RDC	Alpha		
Loc #	Grid Location	Depth (in.)	Meas. Type	Non-Deconv.	Deconv.	Working Level	dpm/100 cm ²	Comments	
265	490483	69	TC	5.9	5.9				
		72	TC	5.8	5.4				
		75	TC	5.9	6.3				
		78	TC	5.8	5.3				
		81	TC	6.0	5.8				
		84	TC	6.3	6.3				
		87	TC	6.6	7.0				
		90	TC	6.7	6.0				
		93	TC	7.2	6.5				
		96	TC	8.1	6.9				
		99	TC	9.7	12.2				
		102	TC	9.9	9.0				
		105	TC	10.6	10.4				
		108	TC	11.4	16.2				
		111	TC	9.5	7.4				
		114	TC	8.8	9.0				
		117	TC	8.0	7.8				
		120	TC	7.3	6.9				
		123	TC	6.8	6.8				
		126	TC	6.3	5.6				
		129	TC	6.2	6.4				
		132	TC	6.0	6.0				
266	492260	00	DS	3.4				Gravel	
		03	TC	6.4	6.4				
		06	TC	7.2	8.4			DC = 6 inches	
		09	TC	7.3	6.6				
		12	TC	7.8	10.6				
		15	TC	6.7	6.2				
		18	TC	5.9	5.4				
		21	TC	5.4	5.2				
		24	TC	5.0	4.6				
		27	TC	4.8	4.6				
		30	TC	4.7	4.7				
267	493455	00	DS	2.3				Gravel ramp	
268	495216	00	DS	1.7				Gravel	
269	498364	03	TC	4.3	4.3			Dirt	
		06	TC	5.0	5.9				
		09	TC	5.2	4.8			DC = 51 inches	
		12	TC	5.6	6.0				
		15	TC	5.8	6.3				

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		Ra-226 (pCi/g)		RDC	Alpha		
Loc #	Grid Location	Depth (in.)	Meas. Type	Non-Deconv.	Deconv.	Working Level	dpm/100 cm ² Comments
269	498364	18	TC	5.7	5.7		
		21	TC	5.6	5.1		
		24	TC	5.8	5.8		
		27	TC	6.0	5.8		
		30	TC	6.3	5.8		
		33	TC	6.9	5.5		
		36	TC	8.3	7.9		
		39	TC	9.9	9.5		
		42	TC	11.7	13.8		
		45	TC	12.3	16.9		
		48	TC	10.3	10.1		
		51	TC	8.4	6.4		
		54	TC	7.6	7.2		
		57	TC	7.0	6.6		
		60	TC	6.6	6.1		
		63	TC	6.5	6.5		
		66	TC	6.4	6.4		
		69	TC	6.3	7.0		
		72	TC	5.8	6.0		
		75	TC	5.2	5.2		
		78	TC	4.6	4.1		
		81	TC	4.3	3.9		
		84	TC	4.2	4.2		
		87	TC	4.1	4.3		
		90	TC	3.9	3.4		
		93	TC	4.0	4.4		
		96	TC	3.9	3.9		
		99	TC	3.8	3.8		
		102	TC	3.7	3.5		
		105	TC	3.7	3.5		
		108	TC	3.8	3.1		
		111	TC	4.3	4.8		
		114	TC	4.5	4.5		
		117	TC	4.7	4.7		
		120	TC	4.9	5.1		
		123	TC	5.0	5.7		
		126	TC	4.7	4.2		
		129	TC	4.7	4.5		
		132	TC	4.8	5.0		
		135	TC	4.8	4.8		
		138	TC	4.8	4.8		
0	500510	03	TC	9.8	9.8		
		06	TC	12.1	16.7		

DC = 15 inches

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				Ra-226 (pCi/g)		RDC	Alpha		
Loc #	Grid Location	Depth (in.)	Meas. Type	Non-Deconv.	Deconv.	Working Level	dpm/100 cm ²	Comments	
270	500510	09	TC	11.8	13.5				
		12	TC	9.4	9.0				
		15	TC	7.2	5.8				
		18	TC	5.8	4.6				
		21	TC	5.1	4.2				
		24	TC	4.9	4.7				
		27	TC	4.8	4.6				
		30	TC	4.8	4.8				
		33	TC	4.8	5.0				
		36	TC	4.7	4.5				
		39	TC	4.7	4.7				
		42	TC	4.7	4.7				
		45	TC	4.7	4.7				
		48	TC	4.7	4.3				
		51	TC	4.9	5.6				
		54	TC	4.7	4.3				
		57	TC	4.7	4.7				
		60	TC	4.7	4.7				
		63	TC	4.7	4.7				
271	505397	03	TC	4.8	4.8			Dirt-gravel	
		06	TC	5.1	4.9				
		09	TC	5.5	5.3				
		12	TC	6.0	6.0				
		15	TC	6.5	6.0				
		18	TC	7.3	8.2				
		21	TC	7.6	8.1				
		24	TC	7.6	7.4				
		27	TC	7.7	8.1				
		30	TC	7.6	7.4				
		33	TC	7.6	7.4				
		36	TC	7.7	7.7				
		39	TC	7.8	7.6				
		42	TC	8.0	7.6				
		45	TC	8.4	8.0				
		48	TC	9.0	9.2				
		51	TC	9.5	8.6				
		54	TC	10.5	9.4				
		57	TC	12.1	11.2				
		60	TC	14.2	11.4				
		63	TC	17.9	12.6				
		66	TC	24.6	16.4				
		69	TC	35.9	29.0				
		72	TC	51.1	56.3				

Dirt-gravel

DC = 135 inches

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Loc #	Grid Location	Depth (in.)	Meas. Type	Ra-226 (pCi/g)		RDC	Alpha	Comments
				Non-Deconv.	Deconv.	Working Level	dpm/100 cm ²	
271	505397	75	TC	63.4	79.0			
		78	TC	66.9	75.6			
		81	TC	65.5	68.2			
		84	TC	62.6	51.6			
		87	TC	65.9	60.6			
		90	TC	72.2	80.0			
		93	TC	74.1	83.5			
		96	TC	70.7	86.2			
		99	TC	58.6	76.4			
		102	TC	36.5	25.1			
		105	TC	20.8	3.4			
		108	TC	14.9	4.4			
		111	TC	14.9	16.9			
		114	TC	13.8	9.5			
		117	TC	15.1	5.9			
		120	TC	21.6	23.2			
		123	TC	27.2	43.2			
		126	TC	23.8	29.1			
		129	TC	17.4	15.6			
		132	TC	12.0	6.1			
		135	TC	9.9	8.8			
		138	TC	8.4	7.7			
		141	TC	7.3	6.8			
		144	TC	6.5	5.6			
		147	TC	6.2	6.0			
		150	TC	6.0	4.9			
		153	TC	6.4	6.4			
272	508440	00	DS	2.4				
273	510260	00	DS	1.0				Gravel
274	510320	00	DS	1.9				
275	510468	00	DS	4.7				Gravel ramp
		00	TC	5.4	5.4			DC = 0 inches
		06	TC	5.4	5.9			Logged through steel drill
		12	TC	5.1	3.9			stem
		18	TC	5.5	4.8			
		24	TC	6.3	7.2			
		30	TC	6.6	7.0			
		36	TC	6.7	6.9			
		42	TC	6.7	6.0			
		48	TC	7.1	8.7			

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Loc #	Grid Location	Depth (in.)	Meas. Type	Ra-226 (pCi/g)		RDC	Alpha	dpm/100 cm ²	Comments
				Non-Deconv.	Deconv.				
275	510468	54	TC	6.6	5.2				
		60	TC	6.9	7.3				
		66	TC	7.0	7.4				
		72	TC	6.9	7.6				
		78	TC	6.4	6.2				
		84	TC	6.0	5.6				
		90	TC	5.8	5.4				
		96	TC	5.8	6.9				
		102	TC	5.2	4.1				
		108	TC	5.2	3.6				
		120	TC	6.1	6.8				
		126	TC	6.6	8.4				
		132	TC	6.1	5.2				
		138	TC	6.1	6.1				
		144	TC	6.1	5.9				
		150	TC	6.2	6.7				
		156	TC	6.0	5.6				
		162	TC	6.0	6.2				
		168	TC	5.9	6.1				
		174	TC	5.7	6.4				
		180	TC	5.1	5.1				
276	512465	00	DS	5.4					Gravel ramp
277	513213	00	DS	2.2					Dirt
		03	TC	4.1	4.1				DC = 0 inches
		06	TC	4.5	4.7				
		09	TC	4.8	4.3				
		12	TC	5.4	4.0				
		15	TC	6.8	9.6				
		18	TC	6.6	7.1				
		21	TC	6.1	5.7				
		24	TC	5.8	5.4				
		27	TC	5.7	5.7				
		30	TC	5.6	5.4				
		33	TC	5.6	5.6				
278	518356	03	TC	4.1	4.1				DC = 18 inches
		06	TC	5.1	3.9				
		09	TC	6.8	5.4				
		12	TC	9.3	12.5				
		15	TC	10.0	14.3				
		18	TC	8.3	8.7				
		21	TC	6.4	5.9				

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Loc #	Grid Location	Depth (in.)	Meas. Type	Ra-226 (pCi/g)		RDC	Alpha	Comments
				Non-Deconv.	Deconv.	Working Level	dpm/100 cm ²	
278	518356	24	TC	4.8	3.2			
		27	TC	4.1	3.2			
		30	TC	3.9	3.9			
		33	TC	3.7	3.5			
		36	TC	3.6	3.4			
		39	TC	3.6	3.8			
		42	TC	3.5	3.5			
		45	TC	3.4	3.2			
		48	TC	3.4	3.4			
		51	TC	3.4	3.4			
		54	TC	3.4	3.4			
		57	TC	3.4	3.6			
		60	TC	3.3	3.3			
		63	TC	3.2	3.0			
		66	TC	3.2	3.0			
		69	TC	3.3	3.5			
		72	TC	3.3	3.3			
279	518360	00	DS	10.3				Concrete
280	518426	03	TC	6.5	6.5			DC = 138 inches
		06	TC	6.7	6.9			
		09	TC	6.8	6.8			
		12	TC	6.9	7.3			
		15	TC	6.8	6.8			
		18	TC	6.7	6.7			
		21	TC	6.6	6.6			
		24	TC	6.5	5.8			
		27	TC	6.8	7.0			
		30	TC	7.0	6.3			
		33	TC	7.6	7.6			
		36	TC	8.2	10.3			
		39	TC	7.6	6.7			
		42	TC	7.5	7.3			
		45	TC	7.5	7.0			
		48	TC	7.8	8.2			
		51	TC	7.9	6.3			
		54	TC	8.9	9.3			
		57	TC	9.7	10.1			
		60	TC	10.3	10.5			
		63	TC	10.8	11.2			
		66	TC	11.1	10.7			
		69	TC	11.6	13.2			
		72	TC	11.2	12.6			

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Loc #	Grid Location	Depth (in.)	Meas. Type	Ra-226 (pCi/g)		RDC	Alpha	dpm/100 cm ²	Comments
				Non-Deconv.	Deconv.				
280	518426	75	TC	10.0	11.8				
		78	TC	7.8	5.5				
		81	TC	6.9	7.1				
		84	TC	5.9	5.4				
		87	TC	5.2	4.0				
		90	TC	5.2	5.2				
		93	TC	5.2	5.4				
		96	TC	5.1	4.9				
		99	TC	5.1	5.1				
		102	TC	5.1	4.9				
		105	TC	5.2	4.8				
		108	TC	5.5	5.7				
		111	TC	5.7	4.5				
		114	TC	6.6	7.0				
		117	TC	7.3	8.4				
		120	TC	7.4	4.0				
		123	TC	9.4	11.5				
		126	TC	10.2	9.7				
		129	TC	11.3	7.4				
		132	TC	14.6	18.5				
		135	TC	15.7	23.9				
		138	TC	12.2	11.1				
		141	TC	9.3	9.3				
281	519317	00	DS	6.4					Sand
282	520230	00	DS	2.1					Background
283	520258	00	DS	3.3					Auger refusal DC = 6 inches
		03	TC	7.6	7.6				
		06	TC	8.5	10.5				
		06	DS	9.3					
		09	TC	8.3	8.3				
284	520295	00	DS	1.3					By truck wash area
285	520310	00	DS	1.7					Pit run
		06	DS	4.8					
		12	DS	3.7					
286	520341	03	TC	5.0	5.0				Dirt DC = 6 inches
		06	TC	6.6	9.1				
		09	TC	6.8	9.8				
		12	TC	5.3	4.9				

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		Ra-226 (pCi/g)		RDC	Alpha		
Loc #	Grid Location	Depth (in.)	Meas. Type	Non-Deconv.	Deconv.	Working Level	dpm/100 cm ² Comments
286	520341	15	TC	4.0	2.8		
		18	TC	3.4	2.9		
		21	TC	3.1	3.1		
		24	TC	2.8	2.4		
		27	TC	2.7	2.9		
		30	TC	2.5	2.1		
		33	TC	2.5	2.9		
		36	TC	2.3	2.5		
		39	TC	2.0	2.2		
		42	TC	1.6	1.2		
		45	TC	1.4	1.2		
		48	TC	1.3	1.1		
		51	TC	1.3	1.3		
287	521435	00	DS	1.3			Gravel ramp
288	527298	03	TC	5.8	5.8		DC = 18 inches
		06	TC	7.1	8.7		
		09	TC	7.5	7.0		Based on the
		12	TC	8.2	7.8		deconvolved data
		15	TC	9.1	13.0		
		18	TC	7.8	7.1		
		21	TC	6.9	5.8		
		24	TC	6.6	6.6		
		27	TC	6.3	7.2		
		30	TC	5.5	4.8		
		33	TC	5.1	4.9		
		36	TC	4.8	4.3		
		39	TC	4.8	5.2		
		42	TC	4.6	4.4		
		45	TC	4.5	4.5		
289	530240	48	TC	4.4	4.4		
		51	TC	4.3	4.3		
		54	TC	4.2	4.2		
		00	DS	3.0			
		03	TC	5.8	5.8		
		06	TC	6.3	7.2		Auger refusal
290	530280	06	DS	5.5			Center of roadway
		09	TC	6.3	7.0		DC = 6 inches
		12	TC	5.9	5.9		
		15	TC	5.5	5.5		
		00	DS	2.4			

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Loc #	Grid Location	Depth (in.)	Meas. Type	Ra-226 (pCi/g)		RDC Working Level	Alpha dpm/100 cm ²	Comments
				Non-Deconv.	Deconv.			
291	530450	00	DS	1.4				DC = 133 inches Based on the deconvolved data
		03	TC	5.9	5.9			
		06	TC	6.2	7.1			
		09	TC	6.0	6.2			
		12	TC	5.7	5.5			
		15	TC	5.5	5.5			
		18	TC	5.3	5.1			
		21	TC	5.2	5.2			
		24	TC	5.1	4.7			
		27	TC	5.2	5.2			
		30	TC	5.3	4.6			
		33	TC	5.8	6.3			
		36	TC	6.0	6.2			
		39	TC	6.1	6.5			
		42	TC	6.0	5.8			
		45	TC	6.0	6.0			
		48	TC	6.0	5.8			
		51	TC	6.1	6.3			
		54	TC	6.1	5.9			
		57	TC	6.2	6.4			
		60	TC	6.2	6.2			
		63	TC	6.2	6.7			
		66	TC	5.9	5.4			
		69	TC	5.9	5.7			
		72	TC	6.0	6.4			
		75	TC	5.9	5.9			
		78	TC	5.8	5.6			
		81	TC	5.8	6.2			
		84	TC	5.6	5.4			
		87	TC	5.5	5.3			
		90	TC	5.5	5.1			
		93	TC	5.7	5.9			
		96	TC	5.8	5.8			
		99	TC	5.9	7.0			
		102	TC	5.4	5.4			
		105	TC	4.9	5.1			
		108	TC	4.3	3.6			
		111	TC	4.1	4.1			
		114	TC	3.9	3.4			
		117	TC	4.0	3.8			
		120	TC	4.2	4.0			
		123	TC	4.5	3.4			
		126	TC	5.4	5.0			
		129	TC	6.5	6.1			

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Loc #	Grid Location	Depth (in.)	Meas. Type	Ra-226 (pCi/g)		RDC Working Level	Alpha dpm/100 cm ²	Comments
				Non-Deconv.	Deconv.			
291	530450	132	TC	7.8	11.4			
		135	TC	7.1	7.6			
		138	TC	6.1	5.6			
		141	TC	5.4	4.9			
		144	TC	5.0	4.3			
		147	TC	5.0	5.0			
		150	TC	5.0	5.2			
		153	TC	4.9	4.7			
		156	TC	4.9	4.9			
		159	TC	4.9	4.9			
292	530480	00	DS	9.7				Auger refusal
		03	TC	8.8	8.8			
		06	TC	12.4	14.9			DC = 24 inches
		09	TC	14.6	19.4			
		12	TC	14.1	14.6			
		15	TC	13.3	13.1			
		18	TC	12.6	16.3			
		21	TC	9.8	9.8			
		24	TC	7.0	4.7			
		27	TC	5.5	3.4			
		30	TC	5.2	5.0			
		33	TC	5.0	5.0			
293	534304	00	DS	1.3				Gravel and sand
294	538518	03	TC	37.1	37.1			Water below 66"
		06	TC	43.8	71.4			
		09	TC	35.0	40.5			DC = 15 inches
		12	TC	23.1	18.7			
		15	TC	13.7	5.7			
		18	TC	8.8	3.8			
		21	TC	6.7	4.9			
		24	TC	5.6	4.5			
		27	TC	5.1	4.4			
		30	TC	5.0	5.2			
		33	TC	4.8	4.6			
		36	TC	4.7	4.7			
		39	TC	4.6	4.4			
		42	TC	4.6	4.8			
		45	TC	4.5	4.3			
		48	TC	4.5	4.7			
		51	TC	4.4	4.4			
		54	TC	4.3	4.1			

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Loc #	Grid Location	Depth (in.)	Meas. Type	Ra-226 (pCi/g)		RDC	Alpha	dpm/100 cm ²	Comments
				Non-Deconv.	Deconv.	Working Level			
294	538518	57	TC	4.3	4.5				
		60	TC	4.2	4.4				
		63	TC	4.0	4.0				
		66	TC	3.8	3.8				
295	540230	00	DS	1.7					
296	540240	00	DS	1.4					Gravel
297	540320	00	DS	2.1					
298	540345	03	TC	11.0	11.0				DC = 15 inches
		06	TC	11.7	11.0				
		09	TC	12.8	18.8				
		12	TC	10.5	11.2				
		15	TC	7.8	5.7				
		18	TC	6.3	4.9				
		21	TC	5.6	4.9				
		24	TC	5.3	5.1				
		27	TC	5.1	4.9				
		30	TC	5.0	5.2				
		33	TC	4.8	4.6				
		36	TC	4.7	4.7				
		39	TC	4.6	4.8				
		42	TC	4.4	4.2				
		45	TC	4.3	4.3				
		48	TC	4.2	4.0				
		51	TC	4.2	4.0				
		54	TC	4.3	4.3				
299	540460	00	DS	1.1					DC = 24 inches
		03	TC	7.1	7.1				
		06	TC	10.1	6.9				
		09	TC	14.9	13.1				
		12	TC	20.7	34.4				
		15	TC	18.8	24.3				
		18	TC	13.8	10.4				
		21	TC	10.7	10.5				
		24	TC	7.7	5.6				
		27	TC	5.9	3.9				
		30	TC	5.2	4.5				
		33	TC	4.9	4.9				
		36	TC	4.6	4.6				
300	545215	03	TC	6.4	6.4				

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Loc #	Grid Location	Depth (in.)	Meas. Type	Ra-226 (pCi/g)		RDC	Alpha	Comments
				Non-Deconv.	Deconv.	Working Level	dpm/100 cm ²	
300	545215	06	TC	8.6	8.6			
		09	TC	10.8	14.9			
		12	TC	10.7	15.3			DC = 15 inches
		15	TC	8.0	6.4			
		18	TC	6.2	4.8			
		21	TC	5.2	4.3			
		24	TC	4.7	4.3			
		27		4.4	4.0			
		30		4.3	4.3			
		33		4.2	4.2			
		36		4.1	4.1			
		39		4.2	4.2			
		42	TC	3.6	3.6			
		45	TC	3.7	3.7			
		48	TC	3.6	3.6			
		51	TC	3.5	3.3			
		54	TC	3.5	3.5			
301	547382	00	DS	11.9				Soil
302	548412	00	DS	62.2				Gravel by pad
		03	TC	44.6	44.6			
		06	TC	52.8	98.5			DC = 18 inches
		09	TC	35.3	30.9			
		12	TC	20.3	4.8			
		15	TC	14.0	11.0			
		18	TC	9.4	5.1			
		21	TC	7.2	5.2			
		24	TC	6.1	5.6			
		27	TC	5.3	4.2			
		30	TC	5.1	4.9			
		33	TC	5.0	5.0			
		36	TC	4.9	4.5			
		39	TC	5.0	5.5			
		42	TC	4.8	4.3			
		45	TC	4.9	4.7			
		48	TC	5.1	5.1			
303	549373	00	DS	36.3				Dirt
		03	TC	38.7	38.7			
		06	TC	34.3	47.3			DC = 12 inches
		09	TC	22.6	17.4			
		12	TC	13.8	7.0			
		15	TC	8.8	3.8			

Radium Concentrations at Exterior Locations

DOE ID #GJ-00461-CC

940 South 10th Street

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				Ra-226 (pCi/g)		RDC	Alpha		
Loc #	Grid Location	Depth (in.)	Meas. Type	Non-Deconv.	Deconv.	Working Level	dpm/100 cm ²	Comments	
303	549373	18	TC	6.6	5.7				
		21	TC	4.9	3.7				
		24	TC	3.9	3.2				
		27	TC	3.3	2.8				
		30	TC	3.0	2.6				
		33	TC	2.9	2.7				
		36	TC	2.9	3.1				
		39	TC	2.8	2.8				
		42	TC	2.7	2.7				
304	555277	03	TC	23.9	23.9			DC = 12 inches	
		06	TC	30.1	53.6				
		09	TC	23.1	28.4				
		12	TC	13.1	4.4				
		15	TC	8.0	2.5				
		18	TC	6.0	4.2				
		21	TC	5.0	4.1				
		24	TC	4.5	4.1				
		27	TC	4.2	4.0				
		30	TC	4.0	4.0				
		33	TC	3.8	3.8				
		36	TC	3.6	3.2				
		39	TC	3.6	3.8				
		42	TC	3.5	3.3				
		45	TC	3.5	3.5				
		48	TC	3.5	3.7				
		51	TC	3.4	3.2				
		54	TC	3.4	3.8				
		57	TC	3.2	3.2				
305	559450	00	DS	2.4				Gravel road	
306	560330	00	DS	2.1				Dirt near pond DC = 0 inches	
		03	TC	3.3	3.3				
		06	TC	3.6	3.4				
		09	TC	4.0	4.2				
		12	TC	4.3	4.7				
		15	TC	4.4	4.6				
		18	TC	4.4	4.4				
		21	TC	4.4	4.4				
		24	TC	4.4	4.8				
		27	TC	4.2	4.0				
		30	TC	4.1	4.1				
		33	TC	4.0	4.2				

Loc #	Grid Location	Depth (in.)	Meas. Type	Ra-226 (pCi/g)		RDC	Alpha	dpm/100 cm ²	Comments
				Non-Deconv.	Deconv.				
306	580330	36	TC	3.8	3.3				
		39	TC	3.9	4.1				
		42	TC	3.9	3.9				
		45	TC	3.9	4.3				
		48	TC	3.7	3.5				
		51	TC	3.6	3.6				
307	580360	03	TC	4.9	4.9				DC = 6 inches
		06	TC	6.2	7.8				
		09	TC	6.6	8.7				
		12	TC	5.8	6.2				
		15	TC	4.8	3.9				
		18	TC	4.3	2.9				
		21	TC	4.6	5.0				
		24	TC	4.7	4.5				
		27	TC	4.9	5.8				
		30	TC	4.6	4.2				
		33	TC	4.5	4.5				
		36	TC	4.4	4.2				
		39	TC	4.4	4.8				
		42	TC	4.2	3.8				
		45	TC	4.2	4.4				
		48	TC	4.1	4.1				
		51	TC	4.0	4.0				
		54	TC	3.9	3.7				
		57	TC	3.9	3.9				
		60	TC	3.9	3.9				
308	580430	03	TC	7.0	7.0				DC = 21 inches
		06	TC	7.3	2.7				
		09	TC	10.2	9.8				
		12	TC	13.3	18.8				
		15	TC	13.3	17.4				
		18	TC	11.0	11.7				
		21	TC	8.3	6.7				
		24	TC	6.5	5.1				
		27	TC	5.5	4.1				
		30	TC	5.3	5.3				
		33	TC	5.1	4.7				
		36	TC	5.1	5.3				
		39	TC	5.0	5.0				
		42	TC	4.9	4.7				
		45	TC	4.9	5.1				
		48	TC	4.8	4.6				

Table 1
Radium Concentrations at Exterior Locations
940 South 10th Street

DOE ID #GJ-00461-CC

Loc #	Grid Location	Depth (in.)	Meas. Type	Ra-226 (pCi/g)		RDC Working Level	Alpha dpm/100 cm ²	Comments
				Non-Deconv.	Deconv.			
308	560430	51	TC	4.8	4.8			
		54	TC	4.8	4.8			
309	560450	00	DS	<1.0				Pit run
		06	DS	1.2				
310	565280	00	DS	7.1				Truck wash area
311	565500	03	TC	9.9	9.9			DC = 21 inches
		06	TC	15.3	16.9			
		09	TC	19.8	20.5			
		12	TC	23.9	31.5			
		15	TC	23.7	29.2			
		18	TC	20.4	25.0			
		21	TC	14.5	12.9			
		24	TC	9.5	4.7			
		27	TC	7.2	4.7			
		30	TC	6.3	4.7			
312	570300	33	TC	6.3	6.3			
		03	TC	3.2	3.2			DC = 0 inches
		06	TC	3.9	4.4			
		09	TC	4.3	4.8			
		12	TC	4.4	4.4			
		15	TC	4.5	5.0			
		18	TC	4.3	4.1			
		21	TC	4.2	4.6			
		24	TC	3.9	3.5			
		27	TC	3.8	3.6			
		30	TC	3.8	3.8			
		33	TC	3.8	3.8			
		36	TC	3.8	4.2			
313	570340	39	TC	3.6	3.4			
		42	TC	3.5	3.5			
		45	TC	3.4	3.4			
		00	DS	1.9				
		00	DS	3.2				Sandy edge of road
314	570390	00	DS	3.2				
315	570470	00	DS	1.7				
316	570480	00	DS	1.1				Gravel
317	580220	00	DS	3.1				By truck wash area

Radium Concentrations at Exterior Locations

DOE ID #GJ-00461-CC

940 South 10th Street

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Loc #	Grid Location	Depth (in.)	Meas. Type	Ra-226 (pCi/g)		RDC	Alpha	dpm/100 cm ²	Comments
				Non-Deconv.	Deconv.				
317	580220	03	TC	5.9	5.9				Dirt
		06	DS	6.6					
		09	TC	7.3	5.7				DC = 27 inches
		12	TC	9.6	10.1				
		15	TC	11.6	13.2				
		18	TC	12.7	15.5				
		21	TC	12.2	14.7				
		24	TC	10.3	12.3				
		27	TC	7.3	3.7				
		30	TC	6.3	5.9				
		33	TC	5.5	4.1				
		36	TC	5.5	5.5				
318	580325	00	DS	<1.0					Truck wash area
319	580370	00	DS	1.0					Pit run
		04	DS	2.8					
320	580375	00	DS	2.0					
321	590420	00	DS	<1.0					By truck wash area
322	590440	00	DS	2.0					By truck wash area
323	590500	00	DS	7.6					Northeast corner of property
		03	TC	7.5	7.5				
		06	TC	6.0	4.9				DC = 6 inches
		09	TC	5.1	3.7				
		12	TC	5.0	5.0				
		15	TC	4.9	5.1				
		18	TC	4.7	4.3				
		21	TC	4.7	4.7				
		24	TC	4.7	4.9				
		27	TC	4.6	4.6				
		30	TC	4.5	4.5				
324	600480	00	DS	1.5					By truck wash area

Radium Concentrations at Exterior Locations
940 South 10th Street

DOE ID #GJ-00461-CC

				Ra-226 (pCi/g)		RDC	Alpha		
Loc #	Grid Location	Depth (in.)	Meas. Type	Non-Deconv.	Deconv.	Working Level	dpm/100 cm ²	Comments	
325	602213	00	DS	2.3				By truck wash area	

Measurement Types:

- AS = Alpha Sample
- DH = Downhole Survey
- DS = Delta Scintillometer
- GB = GAD-6 Borehole
- GS = GAD-6 Surface
- OC = Soil Sample by Opp. Crys. Sys.
- RP = Radon Profile
- SS = Soil Sample by UNC Lab
- TC = Total Count Borehole

Notes:

- DC = Depth of Contamination
- [n] = Reading Taken n-Inches Above Floor or Ground
- Date of Survey = 12-11-84
- Team Leader = AR, CRK, BJF

Radium Concentrations at Interior Locations

DOE ID #GJ-00461-CC

940 South 10th Street

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		Ra-226 (pCi/g)		RDC		Alpha		Comments
Loc #	Grid Location	Depth (in.)	Meas. Type	Non-Deconv.	Deconv.	Working Level	dpm/100 cm ²	
326	135210	00	DS	1.1			*	Building 1
327	168233	06-12	SS	12.9				Soil under core #2
		00-06	SS	13.2				Core #2/Building 1
328	179237	00	DS	10.4				Building 1
329	180243	00	DS	<1.0			*	Building 1
330	205274	03	TC	3.8	3.8			Concrete core
		06	TC	4.2	4.7			
		09	TC	4.3	4.7			DC = 0 inches
		12	TC	4.2	4.0			
		15	TC	4.2	4.2			
		18	TC	4.2	4.2			
		21	TC	4.2	3.8			
		24	TC	4.4	4.4			
		27	TC	4.6	4.6			
		30	TC	4.8	5.3			
		33	TC	4.7	4.9			
		36	TC	4.5	4.3			
		39	TC	4.4	4.2			
		42	TC	4.4	4.4			
		45	TC	4.4	4.4			
		48	TC	4.4	4.4			
		51	TC	4.4	4.8			
		54	TC	4.2	4.2			
		57	TC	4.0	4.0			
		60	TC	3.8	3.6			
		63	TC	3.7	3.7			
		66	TC	3.6	3.6			
		69	TC	3.5	3.5			
		72	TC	3.4	3.4			
331	220173	08-14	OC	2.6				MDF-493
		03	TC	7.0	7.0			Concrete core
		06	TC	6.8	8.2			
		09	TC	5.8	5.4			DC = 8 inches
		12	TC	5.0	4.1			
		15	TC	4.7	4.3			
		18	TC	4.6	3.7			
		21	TC	5.0	4.1			
		24	TC	5.9	7.3			
		27	TC	6.0	7.2			

Radium Concentrations at Interior Locations
940 South 10th Street

DOE ID #GJ-00461-CC

				Ra-226 (pCi/g)		RDC	Alpha		
Loc #	Grid Location	Depth (in.)	Meas. Type	Non-Deconv.	Deconv.	Working Level	dpm/100 cm ²	Comments	
331	220173	30	TC	5.4	5.0				
		33	TC	5.0	4.6				
		36	TC	4.8	4.8				
		39	TC	4.6	4.2				
		42	TC	4.6	5.0				
		45	TC	4.4	3.9				
		48	TC	4.5	4.9				
		51	TC	4.4	4.8				
		54	TC	4.1	3.9				
		57	TC	3.9	3.9				
		60	TC	3.7	3.5				
		63	TC	3.6	3.8				
		66	TC	3.4	3.2				
		69	TC	3.3	3.1				
		72	TC	3.3	3.3				
332	236210	06-12	SS	3.7				Soil under core #1	
		00-06	SS	10.3				Core #1 building #1	
333	237259	00	DS	2.6				*	Building 1
334	242259	00	DS	8.4				*	Building 1
335	277260	00	DS	9.1				*	Building 1
336	283260	00	DS	1.7				*	Building 1
337	300164	03	TC	3.1	3.1			DC = 0 inches	
		06	TC	3.2	2.8				
		09	TC	3.5	3.5				
		12	TC	3.8	4.2				
		15	TC	3.9	4.1				
		18	TC	3.9	3.5				
		21	TC	4.1	4.3				
		24	TC	4.2	4.4				
		27	TC	4.2	4.2				
		30	TC	4.2	3.8				
		33	TC	4.4	4.8				
		36	TC	4.4	4.4				
		39	TC	4.4	4.6				
		42	TC	4.3	3.9				
		45	TC	4.4	4.8				
		48	TC	4.3	4.3				
		51	TC	4.2	4.0				

Radium Concentrations at Interior Locations

DOE ID #GJ-00461-CC

940 South 10th Street

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Loc #	Grid Location	Depth (in.)	Meas. Type	Ra-226 (pCi/g)		RDC	Alpha	Working Level	dpm/100 cm ²	Comments
				Non-Deconv.	Deconv.					
337	300164	54	TC	4.2	4.4					
		57	TC	4.1	4.1					
		60	TC	4.0	4.2					
		63	TC	3.8	3.6					
		66	TC	3.7	3.7					
338	300225	03	TC	5.7	5.7					Concrete core
		06	TC	5.6	6.5					
		09	TC	5.0	4.6					DC = 8 inches
		12	TC	4.6	4.1					
		15	TC	4.5	4.1					
		18	TC	4.6	4.4					
		21	TC	4.8	4.4					
		24	TC	5.2	5.9					
		27	TC	5.2	5.7					
		30	TC	4.9	5.1					
		33	TC	4.5	4.0					
		36	TC	4.4	4.2					
		39	TC	4.4	4.4					
		42	TC	4.4	4.8					
		45	TC	4.2	3.8					
		48	TC	4.2	4.6					
		51	TC	4.0	4.0					
		54	TC	3.8	3.8					
		57	TC	3.6	3.4					
		60	TC	3.5	3.5					
		63	TC	3.4	3.2					
		66	TC	3.4	3.6					
		69	TC	3.3	2.9					
		72	TC	3.4	3.8					
		75	TC	3.3	3.1					
		78	TC	3.3	3.3					
339	308198	00	DS	1.0						* Building 1
340	316219	00	DS	5.7						* Building 1
341	324221	00	DS	<1.0						* Building 1

Measurement Types:

- AS = Alpha Sample
- DH = Downhole Survey
- DS = Delta Scintillometer
- GB = GAD-6 Borehole
- GS = GAD-6 Surface
- OC = Soil Sample by Opp. Crys. Sys.
- RP = Radon Profile
- SS = Soil Sample by UNC Lab
- TC = Total Count Borehole

Notes:

- DC = Depth of Contamination
- [n] = Reading Taken n-Inches Above Floor or Ground
- Date of Survey = 12-11-84
- Team Leader = AR, CRK, BJF

Radium Concentrations at Interior Locations

OE ID #GJ-00481-CC

940 South 10th Street

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Loc #	Grid Location	Depth (in.)	Meas. Type	Ra-226 (pCi/g)		RDC Level	Alpha dpm/100 cm ²	Comments
				Non-Deconv.	Deconv.			
342	125177	00	DS	<1.0				Southwest corner Building 2
343	220240	00	DS	1.2				Building 2
		03	TC	2.8	2.8			
		06	TC	3.2	3.2			DC > 15 inches
		09	TC	3.6	3.8			
		12	TC	3.9	4.3			
		15	TC	4.0	4.0			
344	260294	03	TC	4.0	4.0			Concrete
		06	TC	5.1	4.7			
		09	TC	6.4	5.3			DC > 21 inches
		12	TC	8.3	4.7			
		15	TC	12.2	5.3			
		18	TC	20.0	33.5			
		21	TC	20.2	20.2			
345	315177	00	DS	<1.0				Southeast corner Building 2

Measurement Types:

AS = Alpha Sample
 DH = Downhole Survey
 DS = Delta Scintillometer
 GB = GAD-6 Borehole
 GS = GAD-6 Surface
 OC = Soil Sample by Opp. Crys. Sys.
 RP = Radon Profile
 SS = Soil Sample by UNC Lab
 TC = Total Count Borehole

Notes: DC = Depth of Contamination
 [n] = Reading Taken n-Inches
 Above Floor or Ground
 Date of Survey = 12-11-84
 Team Leader = AR, CRK, BJJ

Radium Concentrations at Interior Locations
940 South 10th Street

DOE ID #GJ-00461-CC

				Ra-226 (pCi/g)	RDC	Alpha		
Loc #	Grid Location	Depth (in.)	Meas. Type	Non-Deconv.	Deconv.	Working Level	dpm/100 cm ²	Comments
346	122192	00	DS	2.4				Southwest corner Building 3
347	148290	00	DS	1.0				South of North door threshold
348	148298	00	DS	10.3				North door threshold
349	170298	00	DS	17.5				Footer
350	200298	00	DS	1.5				Footer
351	215297	00	DS	<1.0				Northeast corner Building 3

Measurement Types:
AS = Alpha Sample
DH = Downhole Survey
DS = Delta Scintillometer
GB = GAD-3 Borehole
GS = GAD-6 Surface
OC = Soil Sample by Opp. Crys. Sys.
RP = Radon Profile
SS = Soil Sample by UNC Lab
TC = Total Count Borehole

Notes: DC = Depth of Contamination
[n] = Reading Taken n-Inches
Above Floor or Ground
Date of Survey = 12-11-84
Team Leader = AR, CRK, BJF

Radium Concentrations at Interior Locations
940 South 10th Street

DOE ID #GJ-00461-CC

Loc #	Grid Location	Depth (in.)	Meas. Type	Ra-226 (pCi/g)		RDC	Alpha	Comments
				Non-Deconv.	Deconv.		dpm/100 cm ²	
352	127254	00	DS	8.6			*	W end middle Building 4
353	217214	00	DS	2.0				
354	226254	00	DS	8.6			*	Middle of Building 4
355	236212	00	DS	8.9				
356	281212	00	DS	16.9				
357	282252	00	DS	2.4			*	East end of Building 4
358	290214	00	DS	2.1				
359	318212	00	DS	9.9				Concrete
360	318252	00	DS	<1.0			*	East end-middle Building 4

Measurement Types:

AS = Alpha Sample
 DH = Downhole Survey
 DS = Delta Scintillometer
 GB = GAD-6 Borehole
 GS = GAD-6 Surface
 OC = Soil Sample by Opp. Crys. Sys.
 RP = Radon Profile
 SS = Soil Sample by UNC Lab
 TC = Total Count Borehole

Notes: DC = Depth of Contamination
 [n] = Reading Taken n-Inches
 Above Floor or Ground
 Date of Survey = 12-11-84
 Team Leader = AR, CRK, BJF

Radium Concentrations at Interior Locations
940 South 10th Street

				Ra-226 (pCi/g)	RDC	Alpha		
Loc #	Grid Location	Depth (in.)	Meas. Type	Non-Deconv.	Deconv.	Working Level	dpm/100 cm ²	Comments
361	112182	00	DS	<1.0				Southwest corner of Building 5
362	148233	00	DS	2.0				Building 5
363	258233	00	DS	1.5				Building 5
364	338223	00	DS	1.1				Building 5

Measurement AS = Alpha Sample
Types: DH = Downhole Survey
DS = Delta Scintillometer
GB = GAD-6 Borehole
GS = GAD-6 Surface
OC = Soil Sample by Opp. Crys. Sys.
RP = Radon Profile
SS = Soil Sample by UNC Lab
TC = Total Count Borehole

Notes: DC = Depth of Contamination
[n] = Reading Taken n-Inches
Above Floor or Ground
Date of Survey = 12-11-84
Team Leader = AR, CRK, BJF

Table 2f

Radium Concentrations at Interior Locations
940 South 10th Street

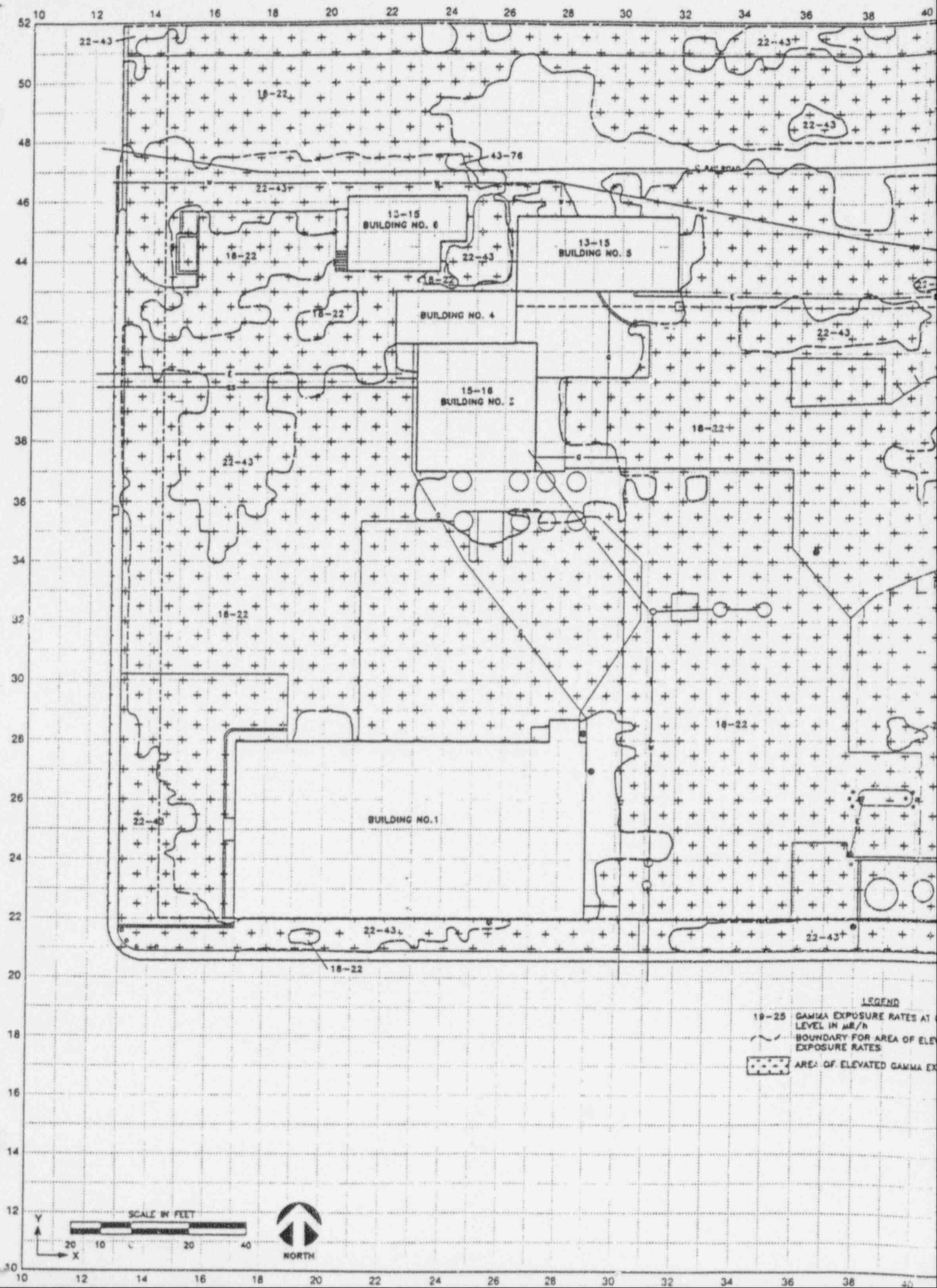
DOE ID #GJ-00461-CC

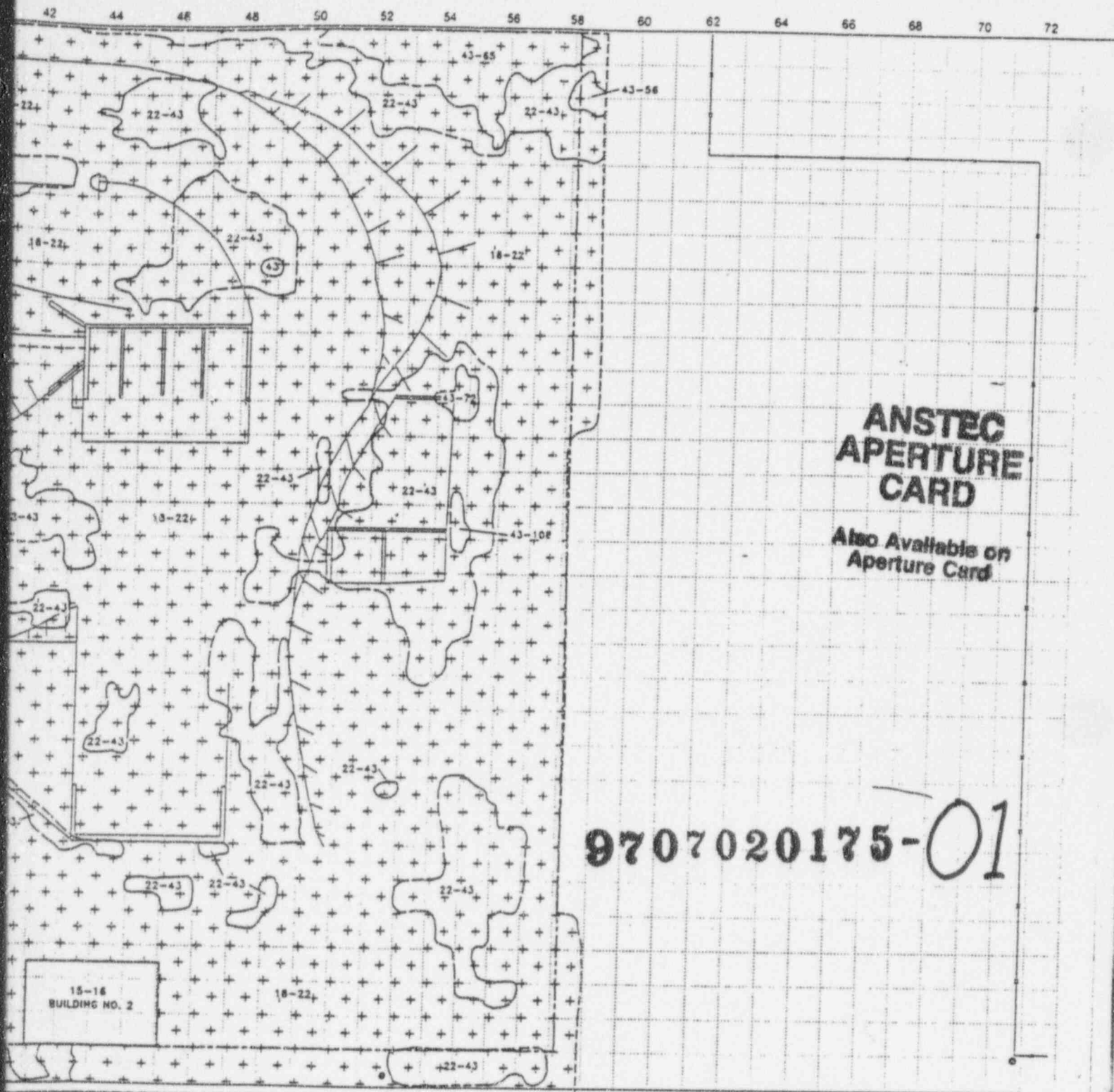
Loc #	Grid Location	Depth (in.)	Meas. Type	Ra-226 (pCi/g)		RDC Working Level	Alpha dpm/100 cm ²	Comments
				Non-Deconv.	Deconv.			
365	122172	00	DS	<1.0				Southwest corner of Building 6
366	181172	00	DS	<1.0				South-middle edge Building 6
367	210200	03	TC	2.9	2.9			Auger refusal DC > 63 inches
		06	TC	3.3	3.3			
		09	TC	3.7	3.9			
		12	TC	4.0	4.2			
		15	TC	4.2	5.3			
		18	TC	3.8	2.2			
		21	TC	4.3	5.2			
		24	TC	4.3	4.1			
		27	TC	4.4	4.6			
		30	TC	4.4	4.4			
		33	TC	4.4	4.4			
		36	TC	4.4	4.4			
		39	TC	4.4	4.4			
		42	TC	4.4	4.2			
		45	TC	4.5	4.7			
		48	TC	4.5	2.9			
		54	TC	5.4	5.6			
		57	TC	6.2	5.0			
		60	TC	7.7	8.2			
		63	TC	8.9	8.9			

Measurement Types:

- AS = Alpha Sample
- DH = Downhole Survey
- DS = Delta Scintillometer
- GB = GAD-6 Borehole
- GS = GAD-6 Surface
- OC = Soil Sample by Opp. Crys. Sys.
- RP = Radon Profile
- SS = Soil Sample by UNC Lab
- TC = Total Count Borehole

Notes: DC = Depth of Contamination
[n] = Reading Taken n-Inches
Above Floor or Ground
Date of Survey = 12-11-84
Team Leader = AR, CRK, BJF





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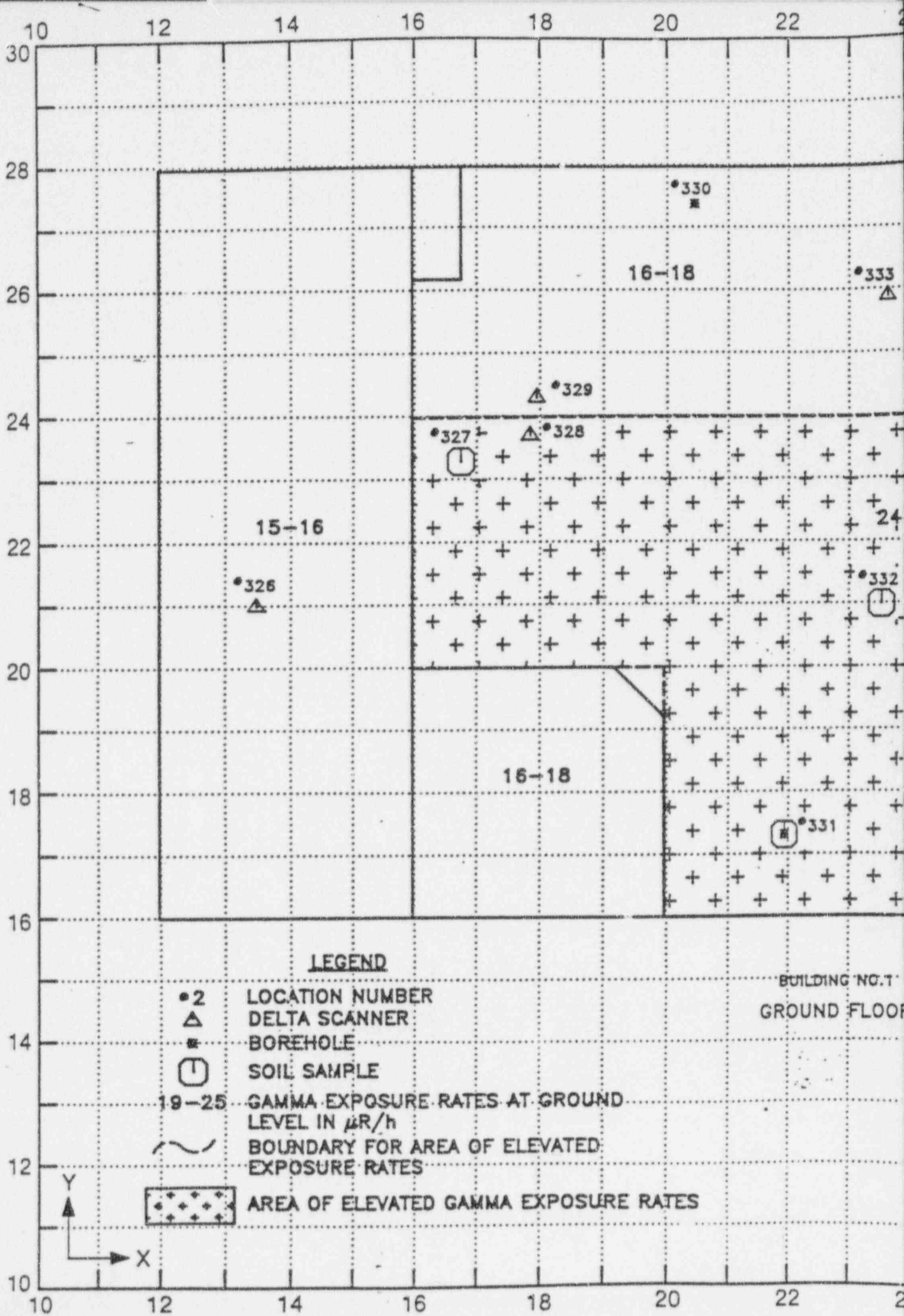
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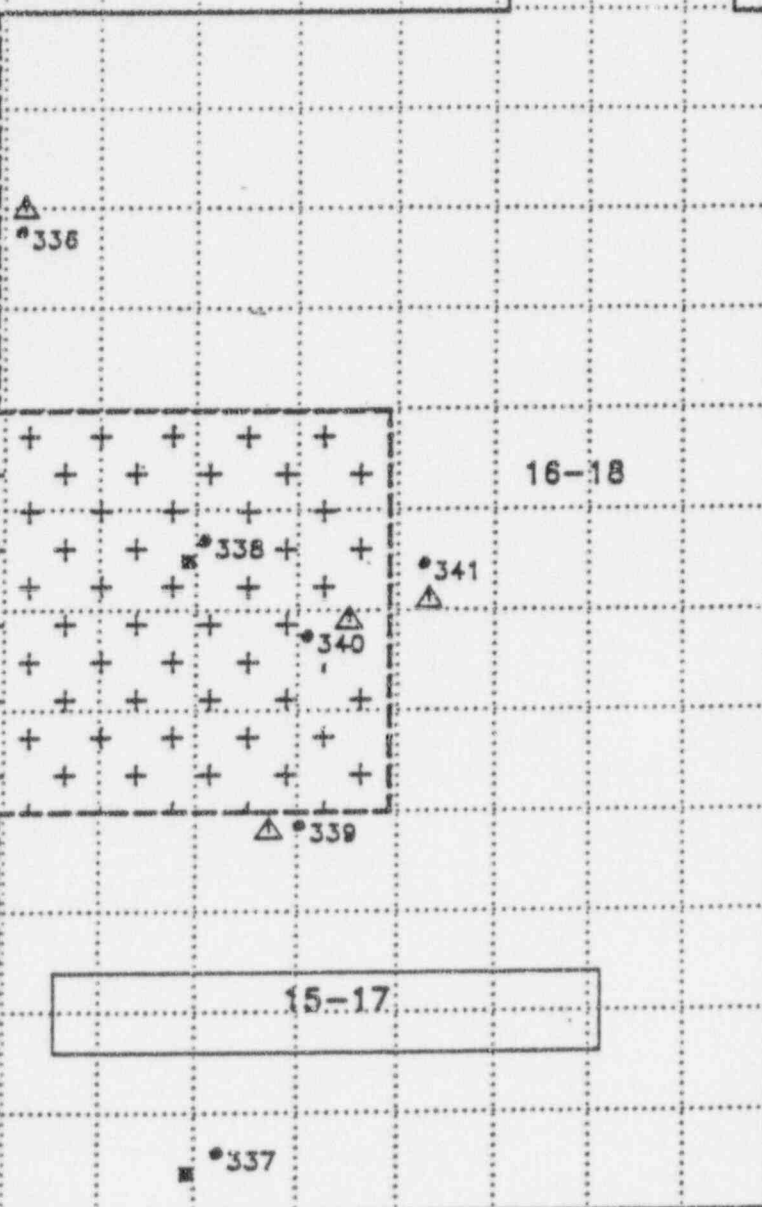
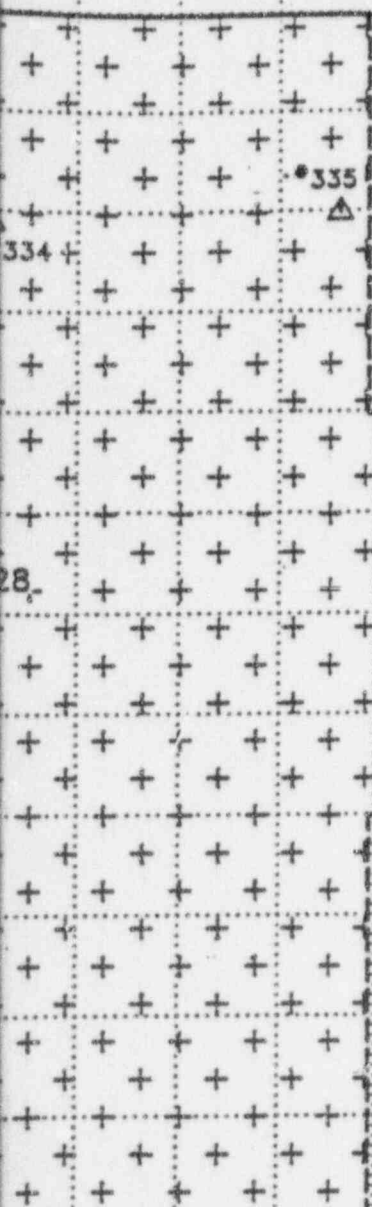
ALL GAMMA MEASUREMENTS ARE WITHIN THE
RANGE OF NORMAL BACKGROUND UNLESS
OTHERWISE NOTED.

FIGURE 1
GAMMA EXPOSURE RATES

NO. DATE		REVISIONS		BY	CK	A.E.	APP.	NO.	DATE	REVISIONS		BY	CK	A.E.	APP.
REFERENCE--NO. OF OCCUPANTS															
ADDRESS--DO NOT--MAIL--REPLY--E.															
INSTRUMENT NO.		SURVEYOR		DATE		U.S. DEPARTMENT OF ENERGY GRAND JUNCTION PROJECTS OFFICE, COLORADO									
P-1000		S. Smith		3/75		940 S. 10TH STREET GRAND JUNCTION, COLORADO									
SURVEY DATE		TIME		SUBMITTER		APPROVAL		DATE		APPROVAL DOC		DATE			
3/75		3/75		S. Smith		[Signature]		3/75		[Signature]					
VERIFICATION		DATE		UNC Geotech											
				BOX NO. 61-00481 SWE NO. 3-0058-01											

This drawing, prepared for the Uranium Mill Tailings
Remedial Action Project, is for the sole use of the U.S.
Department of Energy and its contractors. It is not a
land survey plat or an improvement survey plat and is
not to be relied upon for the establishment of legal
boundaries, or other future improvement lines.





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CARD**

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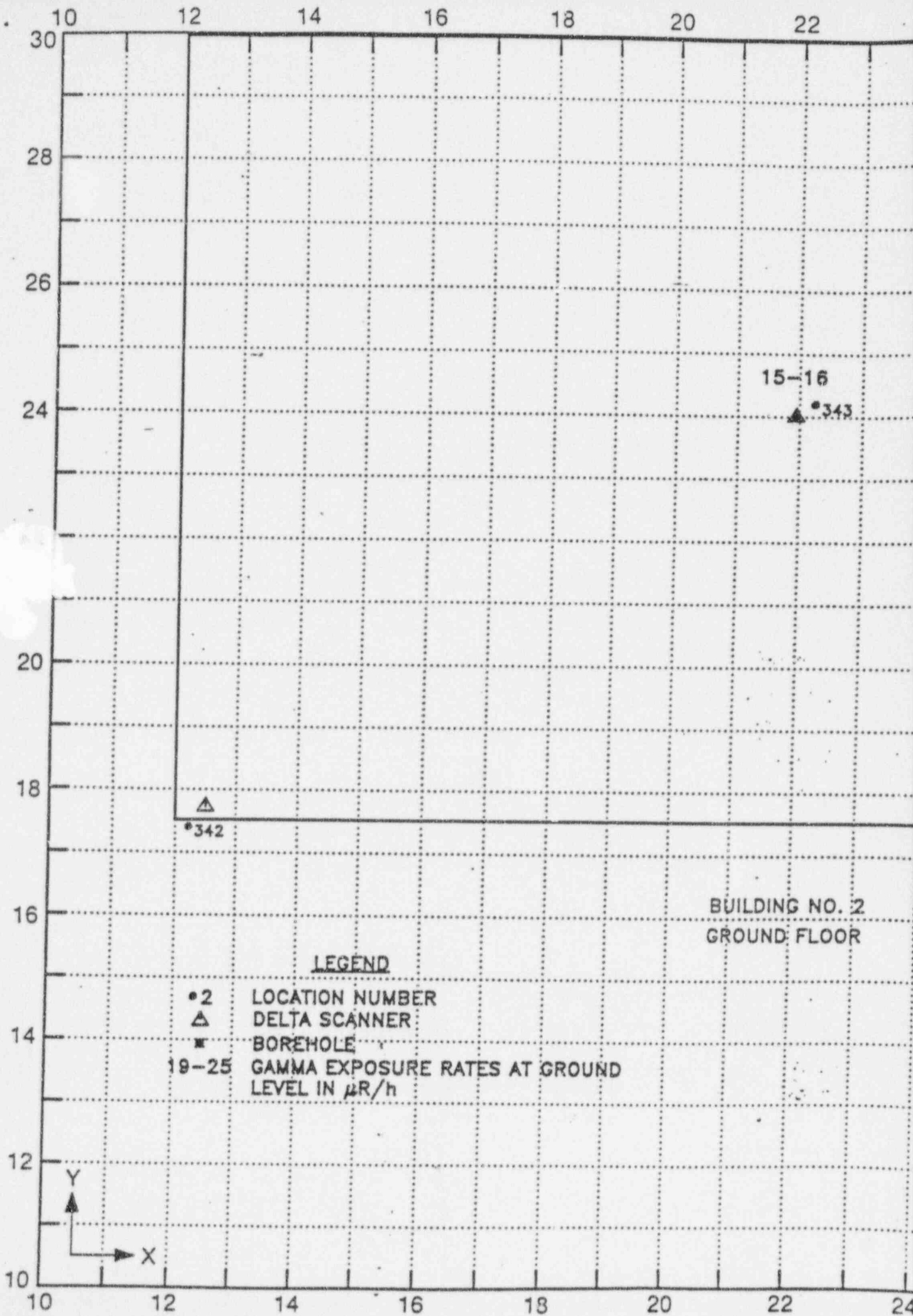
9707020175-02

**FIGURE 2a
INTERIOR GAMMA EXPOSURE RATES/SAMPLE LOCATIONS.**



<i>349 Rexford</i>										<i>0</i>									
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RESIDENCE—NO. OF OCCUPANTS																			
NON-RESIDENCE—MAN-HRS./WK.																			
INSTRUMENT NO.		SURVEYOR		DESIGNED		DATE		U.S. DEPARTMENT OF ENERGY GRAND JUNCTION PROJECTS OFFICE, COLORADO 940 S. 10TH STREET GRAND JUNCTION, COLORADO											
<i>Prosmop 54</i>		<i>S. Spradley 3/59</i>		DRAWN		<i>FAO 3-59</i>													
				CHECKED															
				PROJ. ENG.															
SURVEY DATE		TIME		APPROVAL		DATE		APPROVAL DOE		DATE									
VERIFICATION		DATE		APPROVAL		DATE		APPROVAL DOE		DATE									
DOE ID NO. GJ-00461 DWG. NO. 3-B258-G2 SHT 2 OF 4																			

UNC Geotech



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345

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Aperture Card

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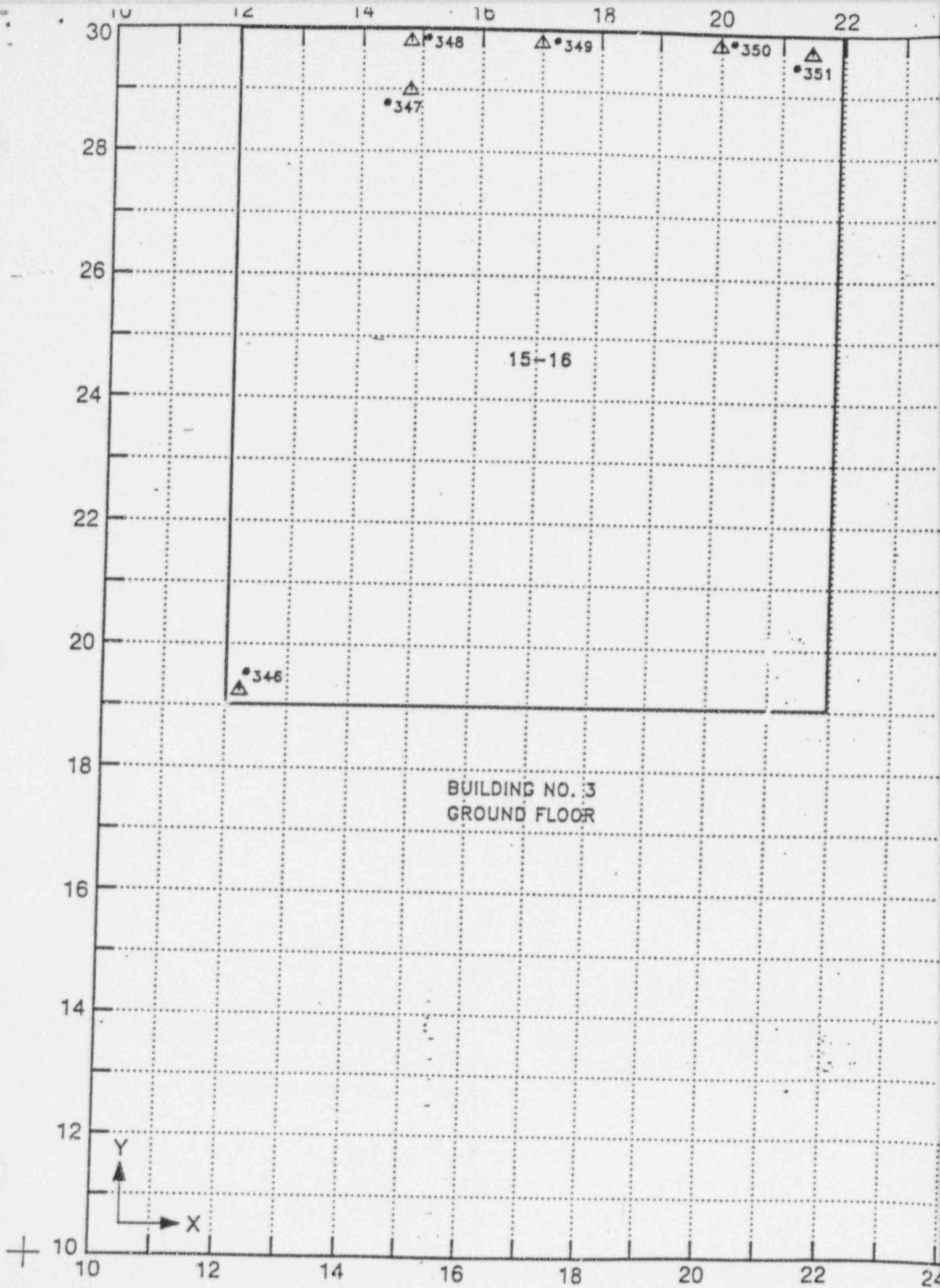
FIGURE 2b

INTERIOR GAMMA EXPOSURE RATES/SAMPLE LOCATIONS:



NORTH
NOT TO SCALE

388 Revised										g																																																											
NO.		DATE		REVISIONS						BY		CK.		A.E.		APP.		NO.		DATE		REVISIONS						BY		CK.		A.E.		APP.																																			
RESIDENCE - NO. OF OCCUPANTS																												U.S. DEPARTMENT OF ENERGY GRAND JUNCTION PROJECTS OFFICE, COLORADO <div style="text-align: center;"> 940 S. 10TH STREET GRAND JUNCTION, COLORADO </div>																																									
NON-RESIDENCE -- MAN-HRS./WK.																																																																					
DESIGNED:														DATE																																																							
DRAWN:														FAO 3-89																																																							
CHECKED:																																																																					
PROJ. ENG.																																																																					
PROJECT NO.														APPROVAL														DATE														APPROVAL DOE														DATE													
SURVEY DATE														TIME																												DOE ID NO.														GJ-00481													
VERIFICATION														DATE																												DWG. NO.														3-B258-G3													



LEGEND

- 2 LOCATION NUMBER
- Δ DELTA SCANNER
- 19-25 GAMMA EXPOSURE RATES AT GROUND LEVEL IN $\mu R/h$

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CARD**

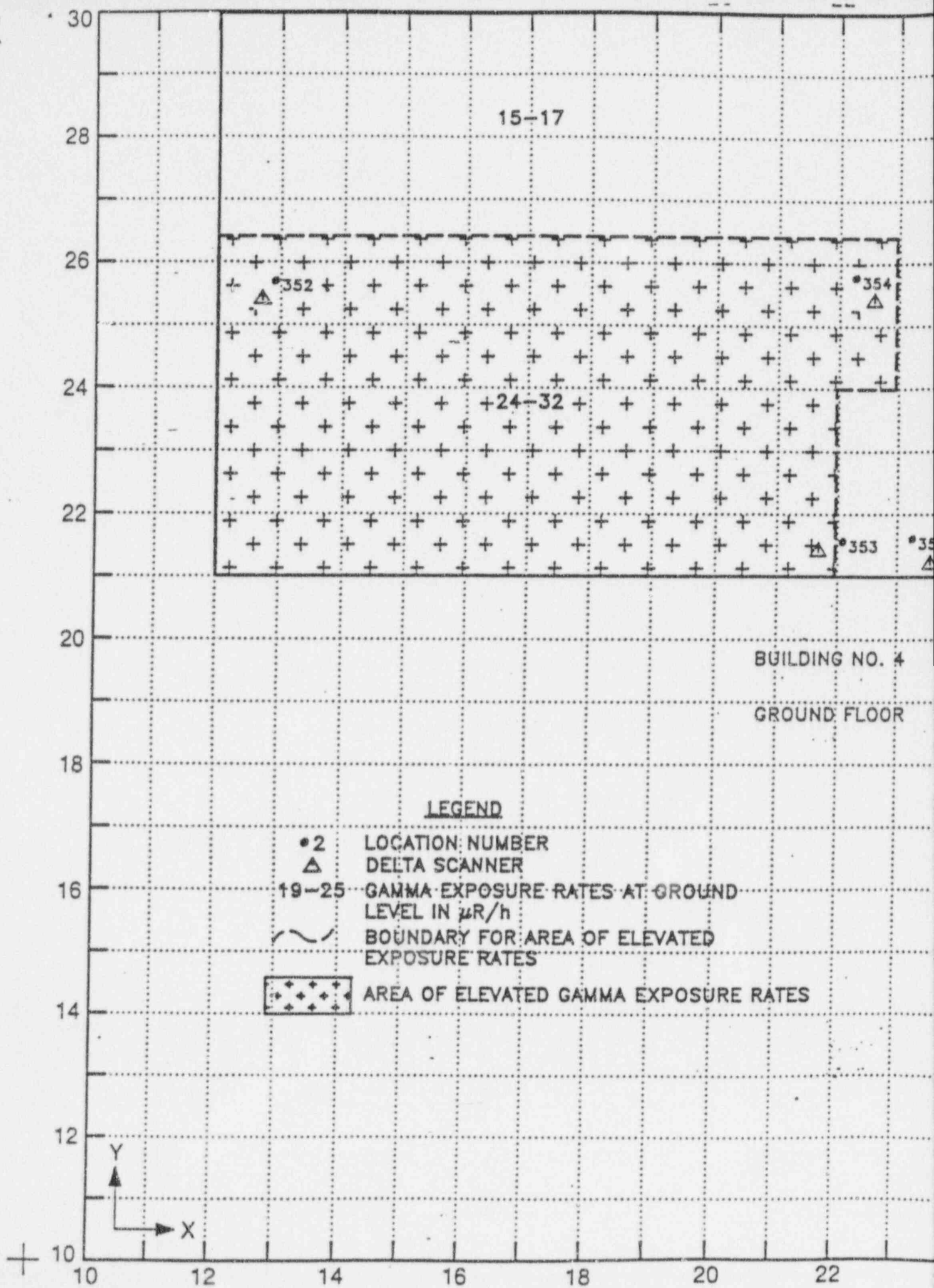
Also Available on
Aperture Card

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FIGURE 2c
INTERIOR GAMMA EXPOSURE RATES/SAMPLE LOCATIONS



389 Revised		68													
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NON-RESIDENCE—MAN-HRS./WK.				DESIGNED:		DATE		940 S. 10TH STREET GRAND JUNCTION, COLORADO							
INSTRUMENT NO.		SURVEYOR		DRAWN:		FAD 3-89									
3. Spence		3/89		CHECKED:											
SURVEY DATE		TIME		PROJ. ENG.											
VERIFICATION		DATE		APPROVAL		DATE		APPROVAL DOE		DATE					
				UNC Geotech				DOE ID NO.		GJ-00461					
								DWC NO.		3-B258-G4		SHT 4		OF 14	



15-17

*357

*360

*356

*358

-39

*359

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CARD**

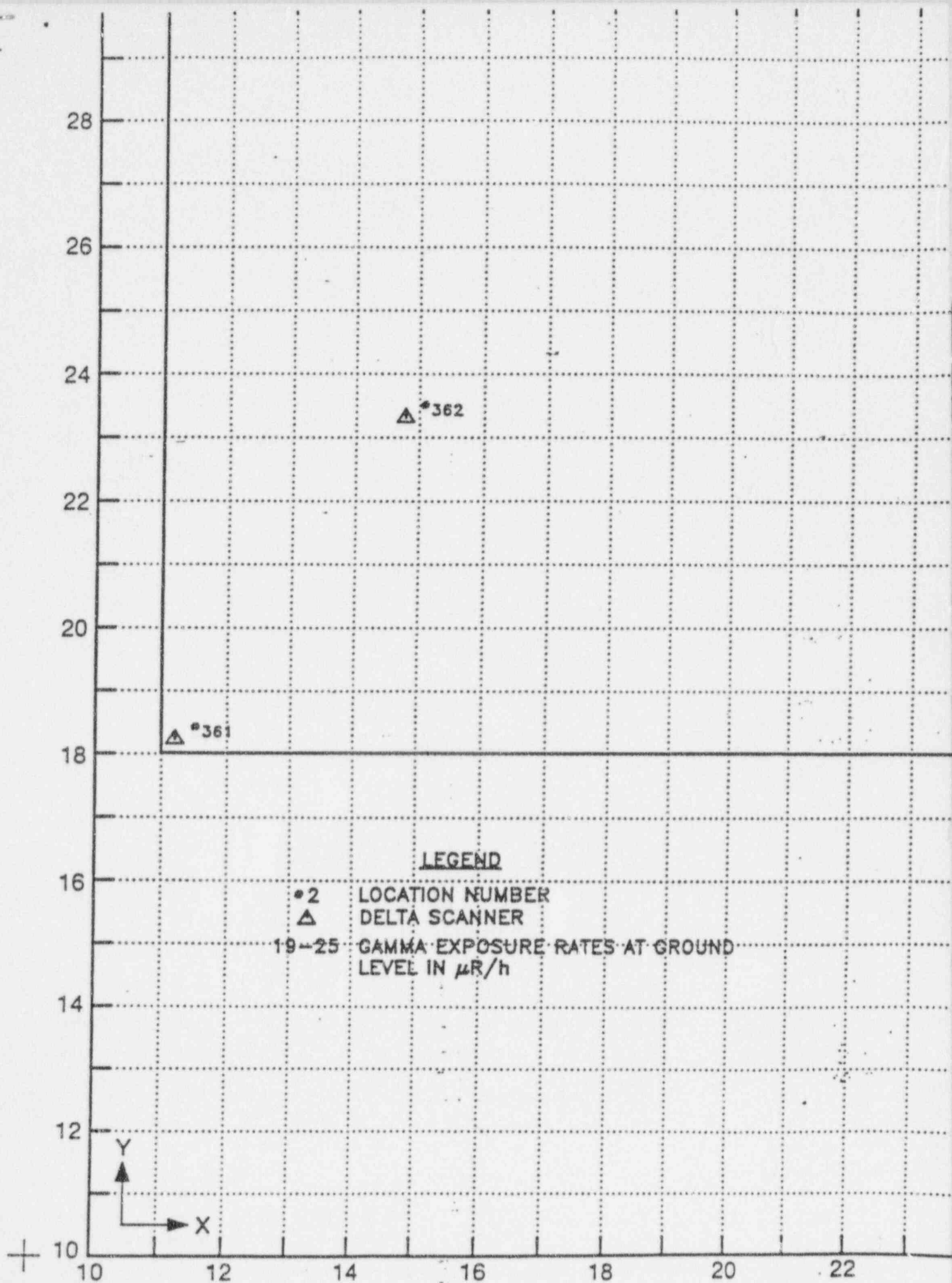
Also Available on
Aperture Card

9707020175-05

FIGURE 2d
INTERIOR GAMMA EXPOSURE RATES/SAMPLE LOCATIONS



355 Revised		08													
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NON-RESIDENCE—MAN-HRS./WK.						DESIGNED: DATE									
INSTRUMENT NO.		SURVEYOR		DRAWN		FAD		3-89		940 S. 10TH STREET GRAND JUNCTION, COLORADO					
3/89		G. Sparks		CHECKED:											
SURVEY DATE		TIME		PROJ. ENG.						APPROVAL		DATE		APPROVAL DOE	
VERIFICATION		DATE		UNC Geotech						DOE ID NO.		GJ-00461			
										DWG. NO.		3-B258-G5		SHT 5 of 14	



13-15

△ 363

△ 364

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CARD**

Also Available on
Aperture Card

BUILDING NO. 5
GROUND FLOOR

9707020175

06

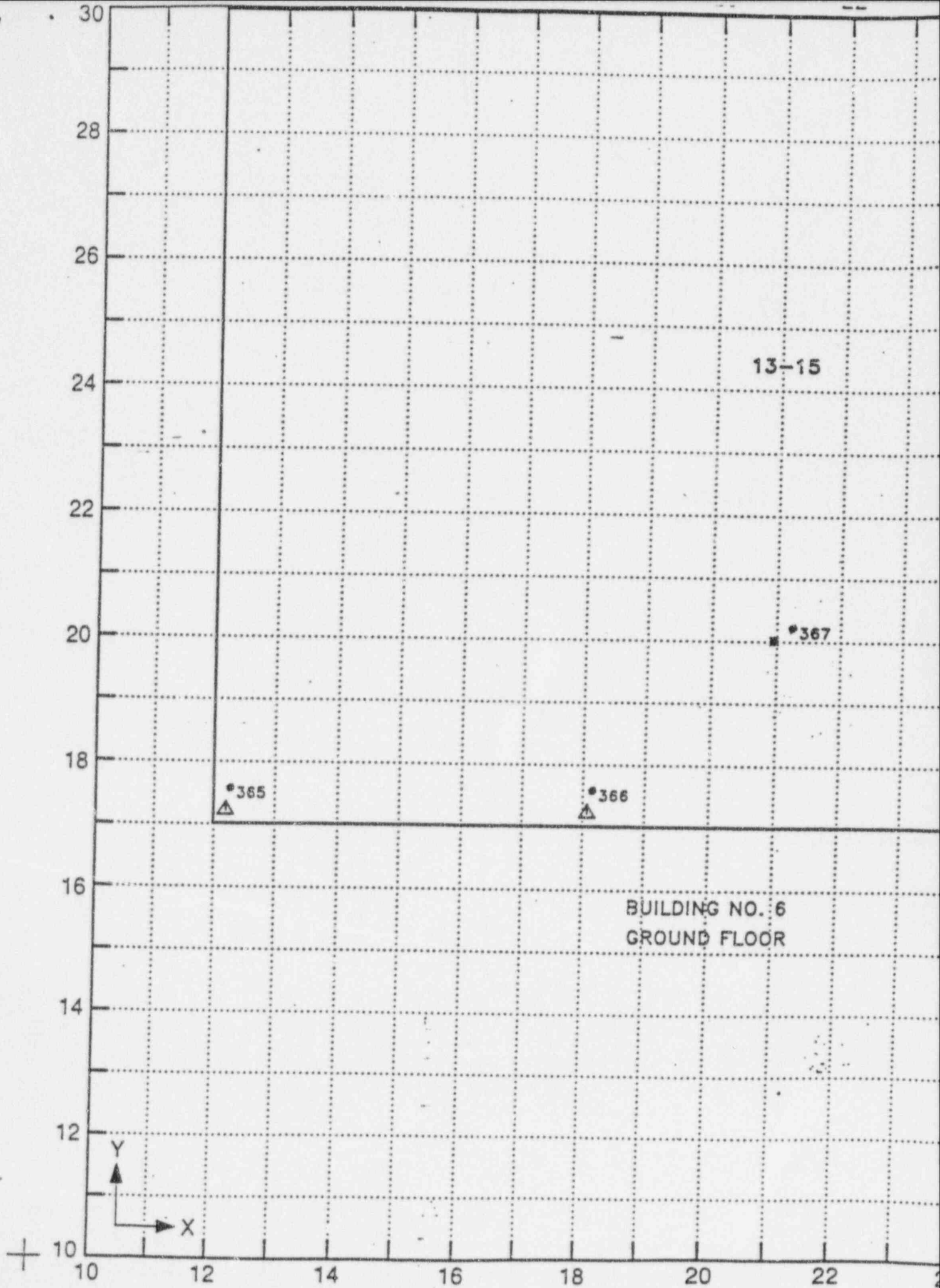
FIGURE 2
INTERIOR GAMMA EXPOSURE RATES/SAMPLE LOCATIONS



<i>369 Revised</i>										<i>W</i>									
NO.	DATE	REVISIONS				BY	CK.	A.E.	APP.	NO.	DATE	REVISIONS				BY	CK.	A.E.	APP.
RESIDENCE—NO. OF OCCUPANTS										U.S. DEPARTMENT OF ENERGY GRAND JUNCTION PROJECTS OFFICE, COLORADO 940 S. 10TH STREET GRAND JUNCTION, COLORADO									
NON-RESIDENCE—MAN-HRS./WK.																			
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DRAWN					DATE														
CHECKED					PROJ. ENG.					APPROVAL					DATE				
SURVEY DATE					TIME					APPROVAL					DATE				
VERIFICATION					DATE					DOE ID NO.					GJ-00461				
					UNC Geotech					DWG NO.					3-B258-G6				

*Prepared by
S. Spence
3/99*

[Signature]



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LEGEND

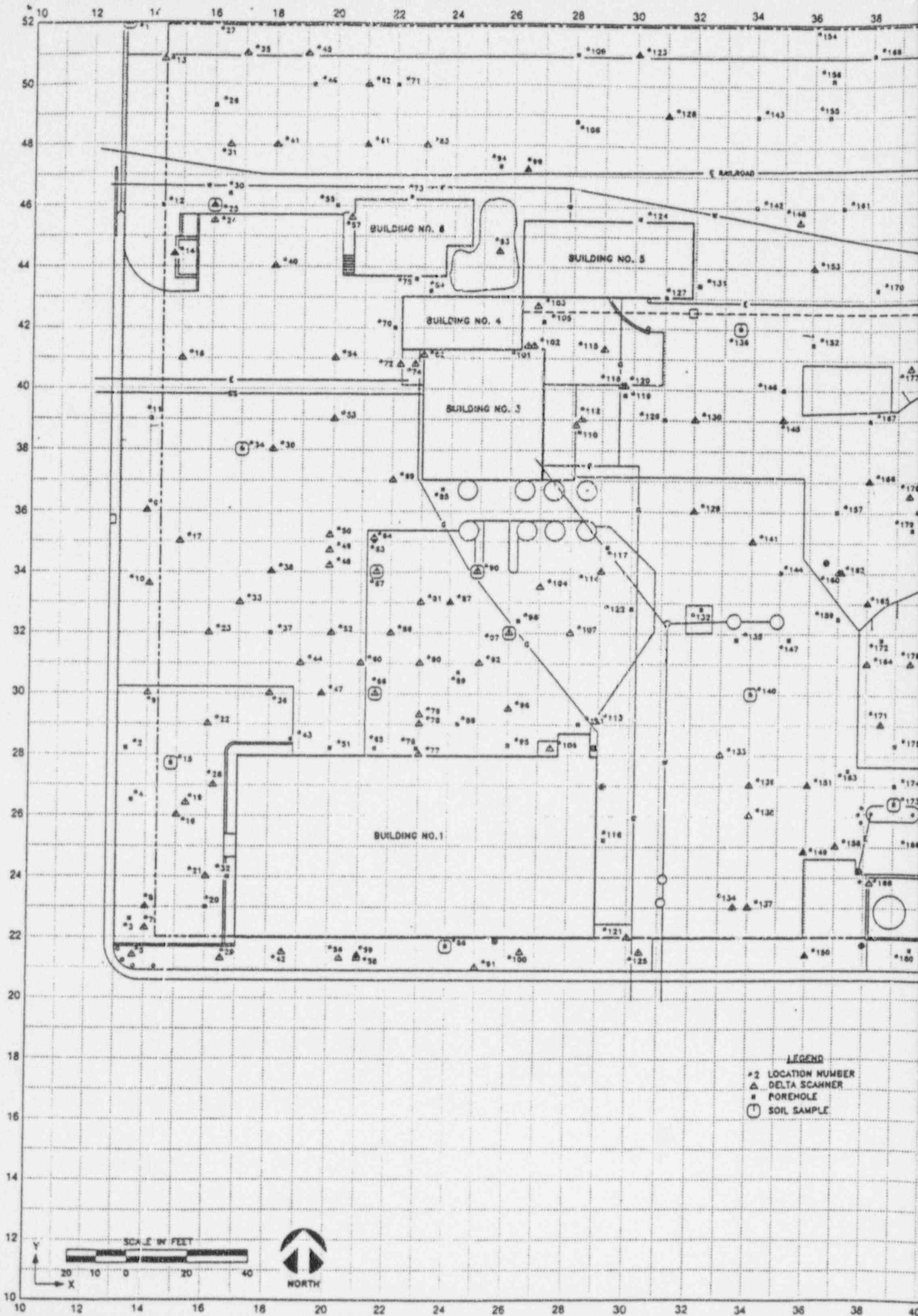
- 2 LOCATION NUMBER
- △ DELTA SCANNER
- * BOREHOLE
- 19-25 GAMMA EXPOSURE RATES AT GROUND
LEVEL IN $\mu R/h$

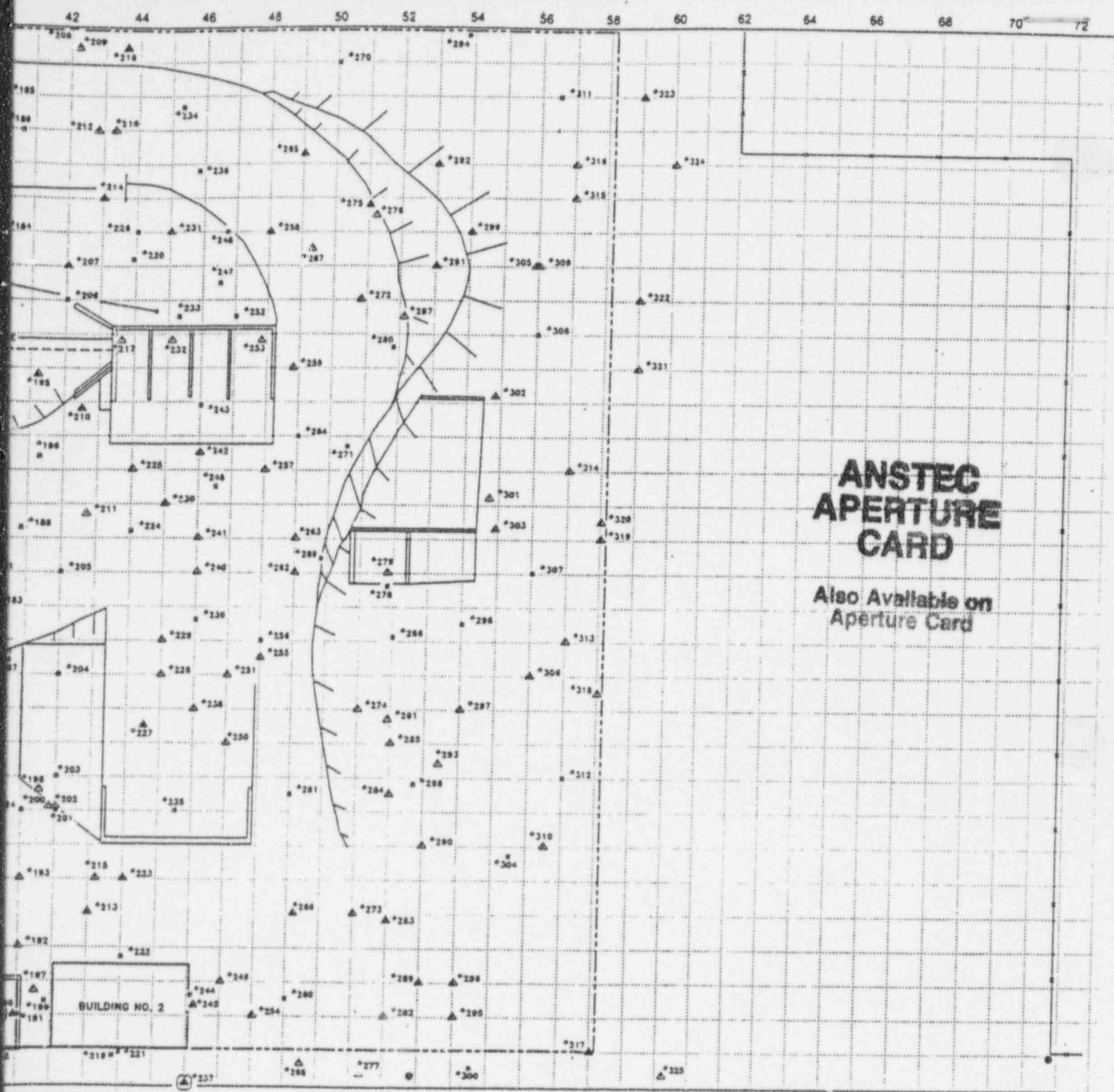
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FIGURE 21
INTERIOR GAMMA EXPOSURE RATES/SAMPLE LOCATIONS



36 Revised		1/8													
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NON-RESIDENCE—MAN-HRS./WK.															
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Prepared By:				DRAWN		3-87									
S. Spence 3/89				CHECKED											
				PROJ. ENG.											
SURVEY DATE		TIME		APPROVAL		DATE		APPROVAL DOE		DATE					
VERIFICATION		DATE		UNC Geotech		DOE ID NO.		GJ-00451		DWG. NO.		3-B258-G7		SHT 7 of 14	



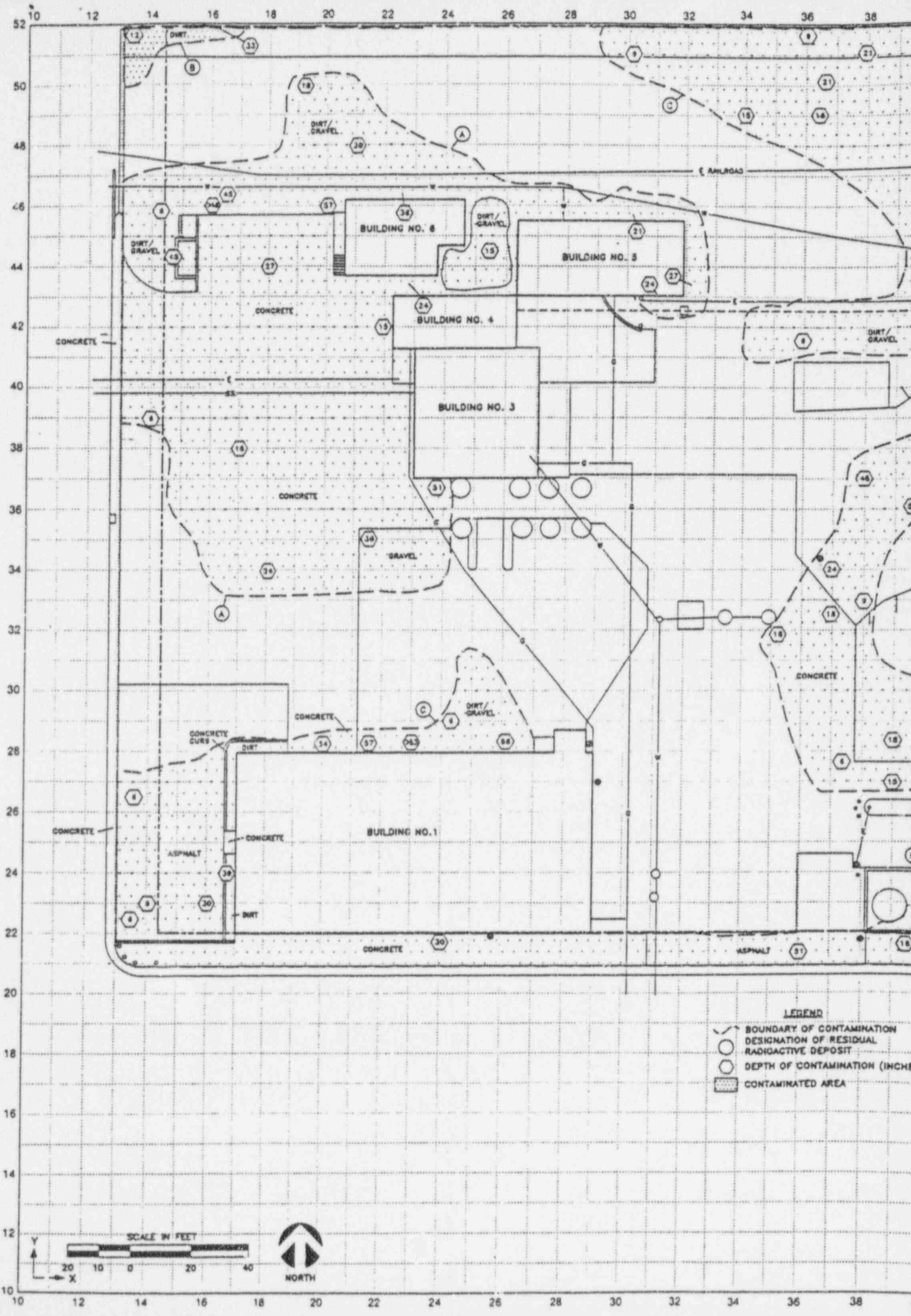


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FIGURE 3
EXTERIOR SAMPLE LOCATIONS

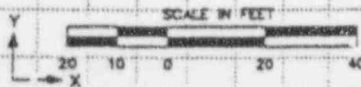
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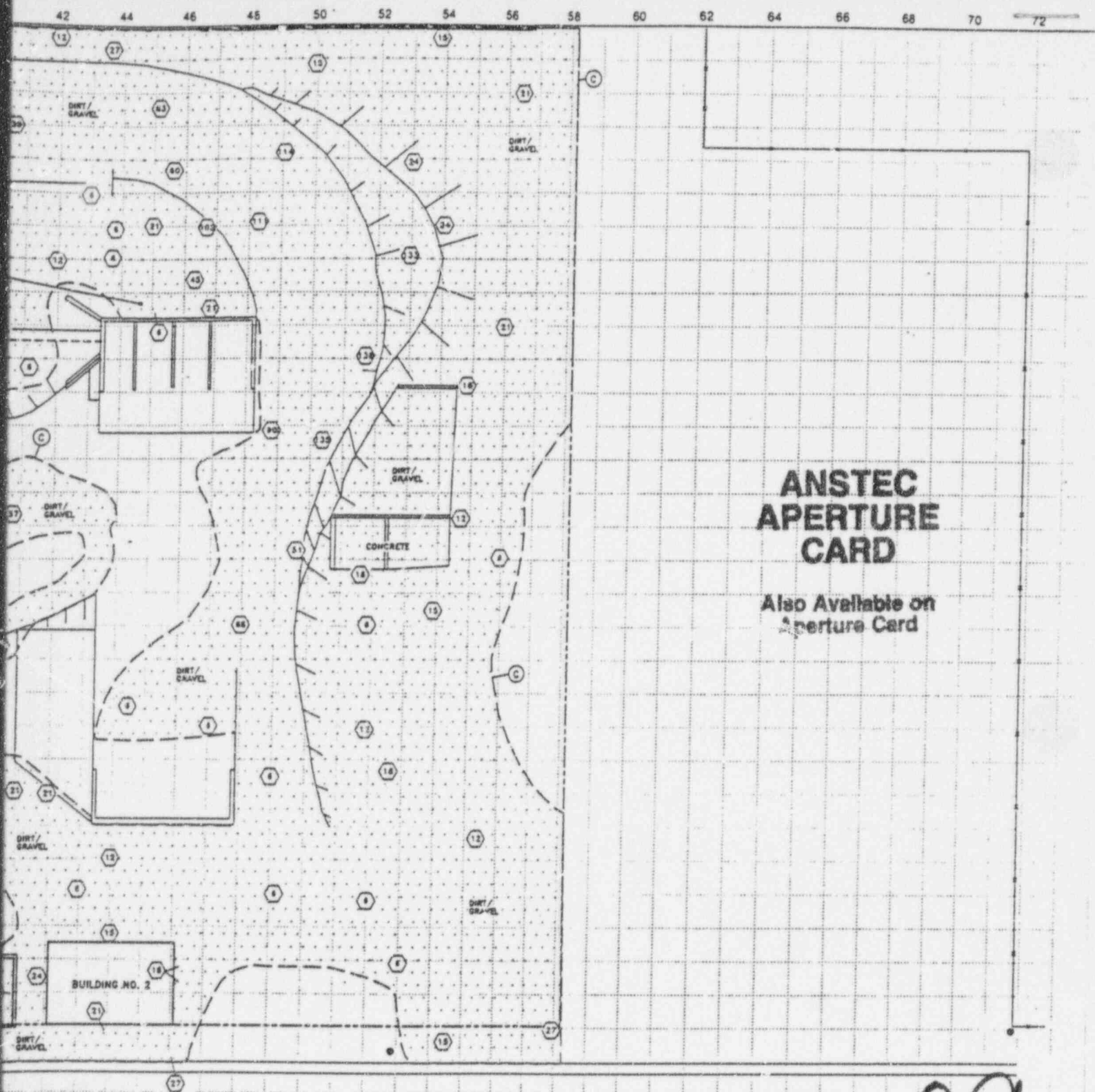
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RESIDENCE—NO. OF OCCUPANTS															
NON-RESIDENCE—ALL-USE/USE															
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INSTRUMENT NO.		SURVEYOR		DESIGNED		DATE		940 S. 10TH STREET GRAND JUNCTION, COLORADO							
Plan 31		S. Spauld 7/57		DRAWING		3/57									
SURVEY DATE		TIME		CHECKED		3/57									
VERIFICATION		DATE		APPROVAL		DATE									
UNC Geotech															
SHEET NO. 3-523A-08															



LEGEND

- BOUNDARY OF CONTAMINATION
- DESIGNATION OF RESIDUAL RADIOACTIVE DEPOSIT
- DEPTH OF CONTAMINATION (INCHES)
- CONTAMINATED AREA





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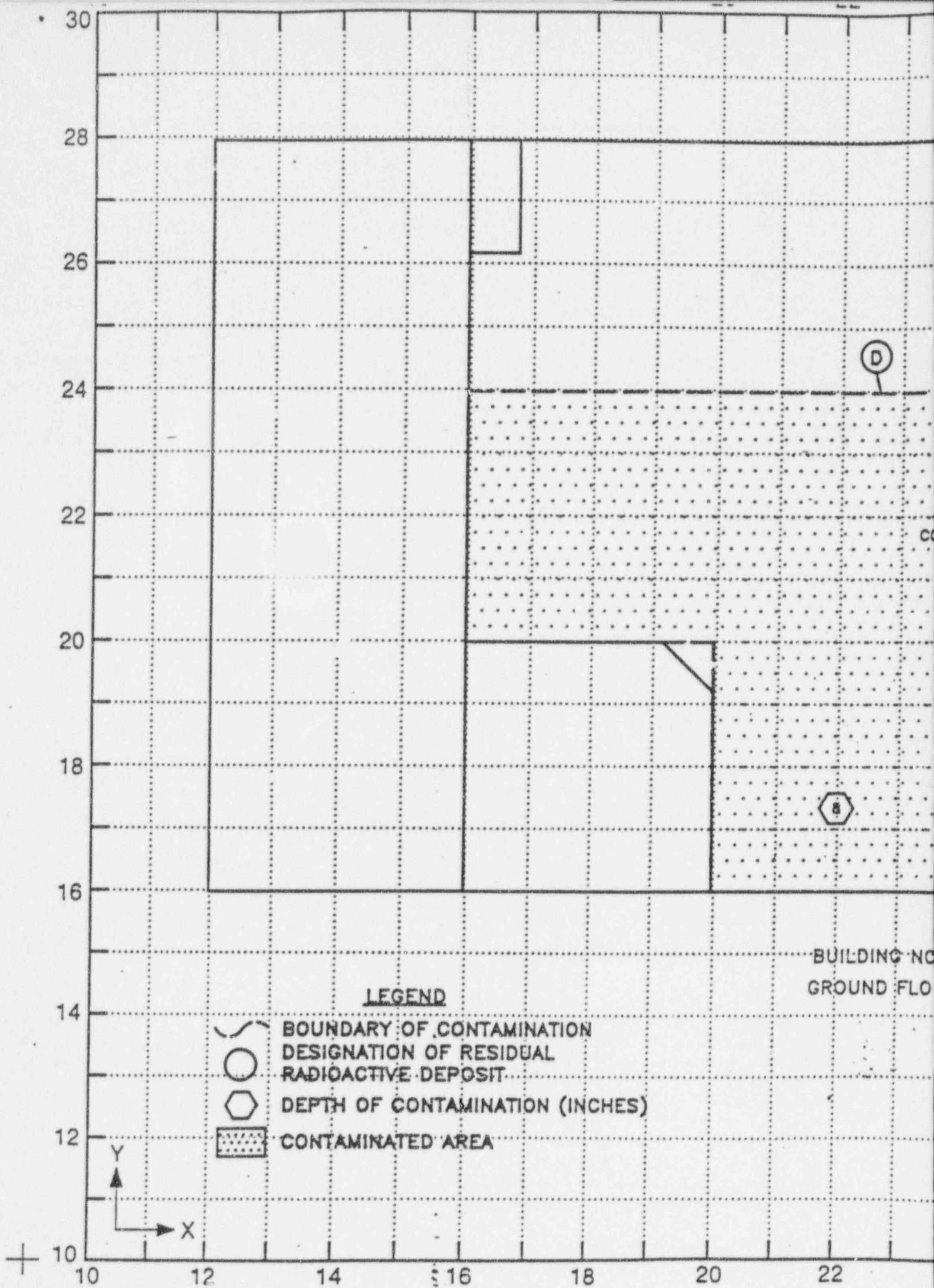
Also Available on
Aperture Card

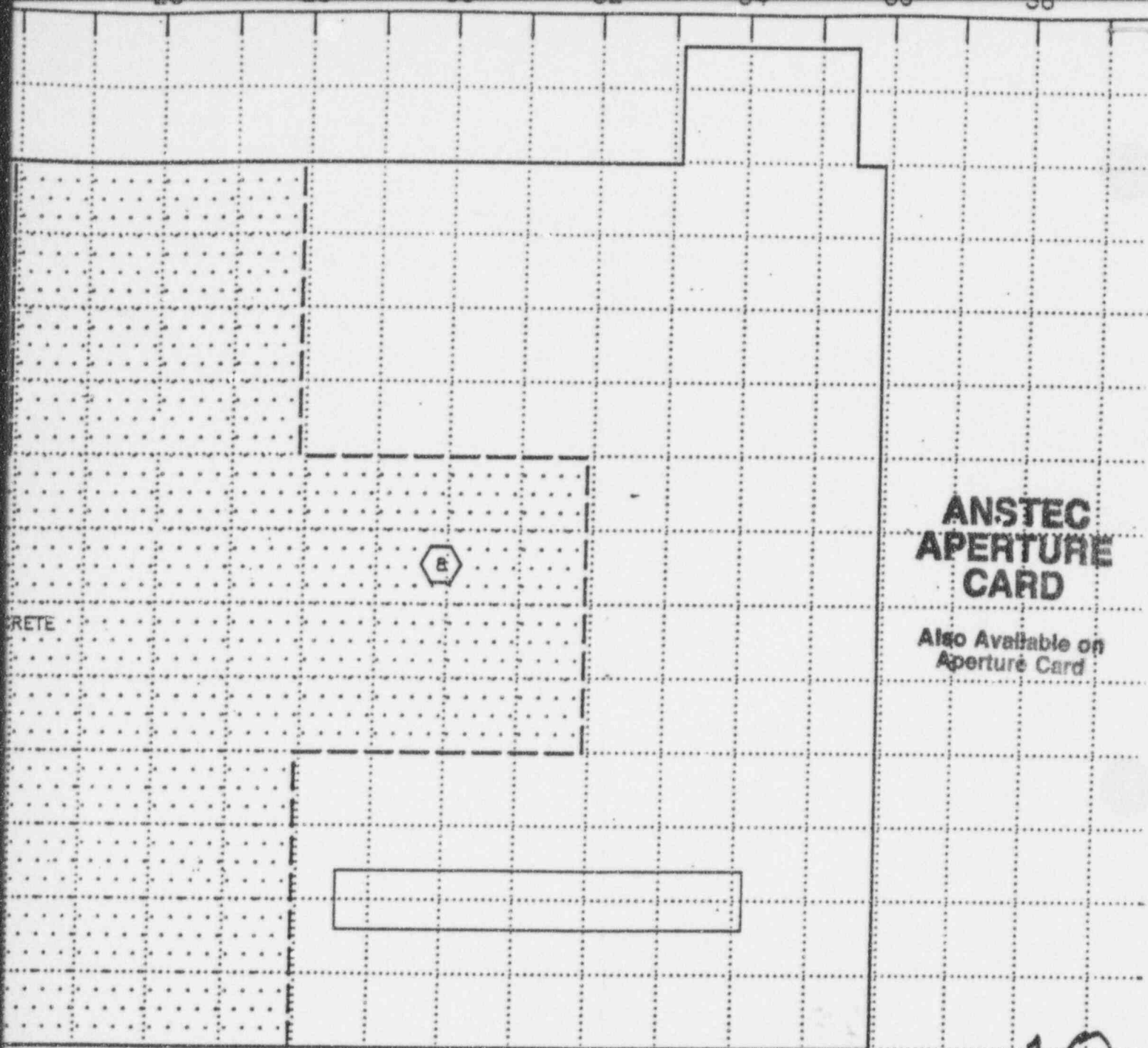
9707020175-09

FIGURE 4
EXTERIOR ESTIMATED EXTENT OF CONTAMINATION

<p><i>35. Revised</i> <i>U</i></p>													
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NON-RESIDENCE - GRASS, PINE, WIL.						<p>940 S. 10TH STREET GRAND JUNCTION, COLORADO</p>							
INSTRUMENT NO.		SURVEYOR		DESIGNED		DATE		<p>940 S. 10TH STREET GRAND JUNCTION, COLORADO</p>					
<i>P. 35</i>		<i>3/79</i>		<i>3-87</i>		<i>3-87</i>							
<i>S. Smith</i>				<i>3-87</i>		<i>3-87</i>							
DATE		TIME		APPROVAL		DATE		<p>UNC Geotech</p>					
<i>3/79</i>				<i>3/87</i>		<i>3/87</i>							
VERIFICATION		DATE		DATE		DATE							

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-10

FIGURE 4b
INTERIOR ESTIMATED EXTENT OF CONTAMINATION



3/8/89 Revised		46													
NO.	DATE	REVISIONS	BY	CK.	A.E.	APP.	NO.	DATE	REVISIONS	BY	CK.	A.E.	AP		
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NON-RESIDENCE—MAN-HRS./WK.														GRAND JUNCTION PROJECTS OFFICE, COLORADO	
INSTRUMENT NO.		SURVEYOR		DESIGNED:		DATE		940 S. 10TH STREET GRAND JUNCTION, COLORADO							
				DRAWN:		3-89									
				CHECKED:											
				PROJ. ENG.											
SURVEY DATE		TIME		APPROVED:		3/8/89		APPROVAL		DATE		APPROVAL DOE		DATE	
VERIFICATION		DATE		UNC Geotech						DOE ID NO.		GJ-00451			
										DWG NO		3-B258-G10		SH-10 014	

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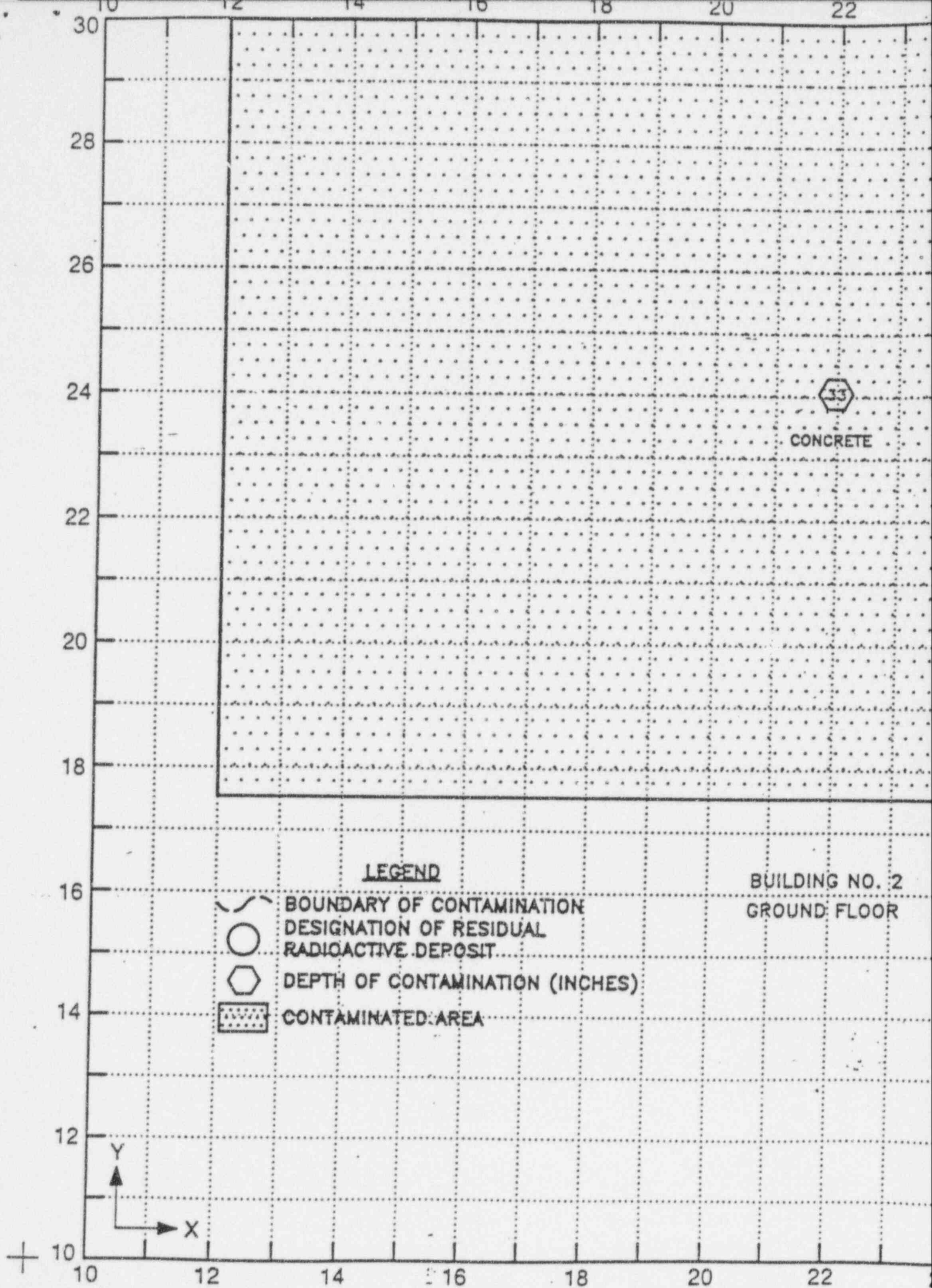
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26 28 30 32 34 36 38

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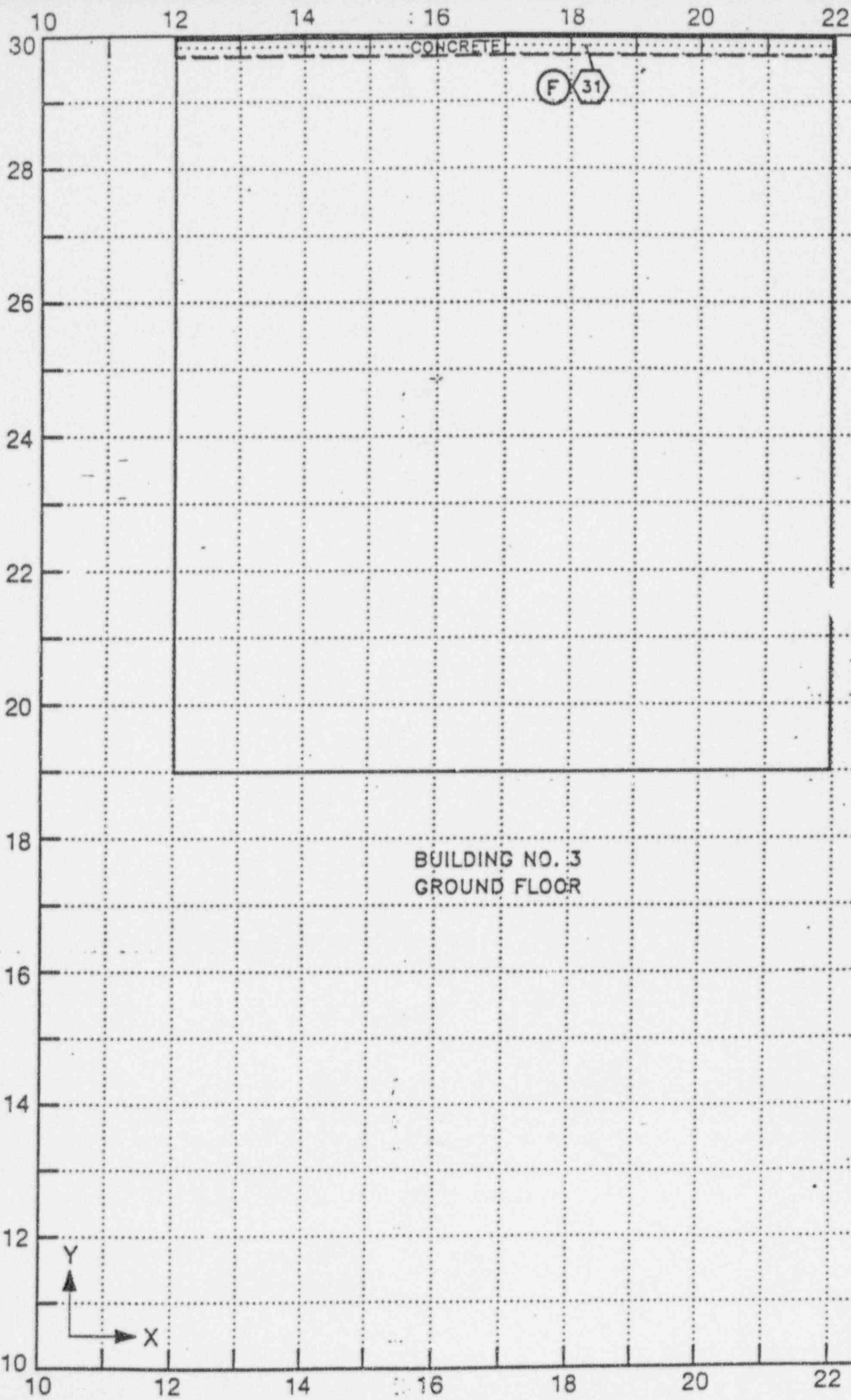
Also Available on
Aperture Card

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
FIGURE 4c
INTERIOR ESTIMATED EXTENT OF CONTAMINATION



389 Keweenaw													
NO.	DATE	REVISIONS	BY	CR.	A.E.	APP.	NO.	DATE	REVISIONS	BY	CR.	A.E.	APP.
RESIDENCE—NO. OF OCCUPANTS					U.S. DEPARTMENT OF ENERGY GRAND JUNCTION PROJECTS OFFICE, COLORADO								
NON-RESIDENCE—MAN-HRS./Wk.					940 S. 10TH STREET GRAND JUNCTION, COLORADO								
INSTRUMENT NO.		SURVEYOR		DESIGNED		DATE		APPROVAL					
				DRAWN		3-89							
				CHECKED									
				PROJ. ENG.									
SURVEY DATE		TIME		APPROVAL		DATE		APPROVAL DOE		DATE			
VERIFICATION		DATE		UNC Geotech		DOE ID NO		GJ-00451		DWG NO 3-B258-G11 SH 11 OF 14			



LEGEND

-  BOUNDARY OF CONTAMINATION
-  DESIGNATION OF RESIDUAL RADIOACTIVE DEPOSIT
-  DEPTH OF CONTAMINATION (INCHES)
-  CONTAMINATED AREA

**ANSTEC
APERTURE
CARD**

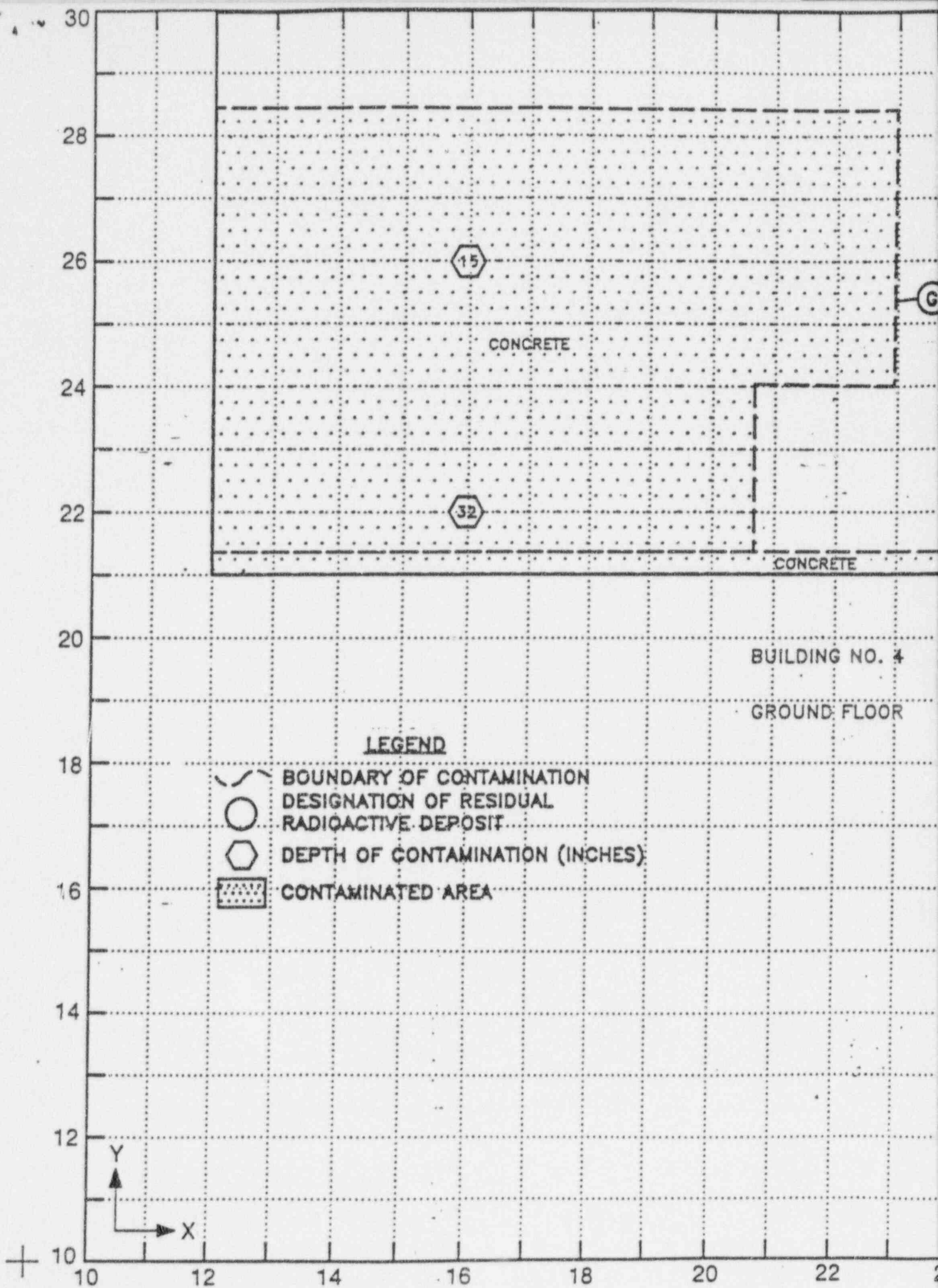
Also Available on
Aperture Card

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FIGURE 4d
INTERIOR ESTIMATED EXTENT OF CONTAMINATION



NO. DATE		REVISIONS		BY	CK	A.E.	APP.	NO.	DATE	REVISIONS		BY	CK	A.E.	APP.
RESIDENCE—NO. OF OCCUPANTS										U.S. DEPARTMENT OF ENERGY GRAND JUNCTION PROJECTS OFFICE, COLORADO 940 S. 10TH STREET GRAND JUNCTION, COLORADO					
NON-RESIDENCE—MAN-HRS./WK.															
INSTRUMENT NO.		SURVEYOR													
DESIGNED:		DATE													
DRAWN:		FAD 3-89													
CHECKED:															
PROJ. ENG.															
APPROVAL		DATE													
APPROVAL DOE		DATE													
SURVEY DATE		TIME													
VERIFICATION		DATE													
UNC Geotech										DOE ID NO. GJ-00461 DWG NO 3-B258-G12 SH 12 OF 14					



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Aperture Card

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FIGURE 4 INTERIOR ESTIMATED EXTENT OF CONTAMINATION



3/89 Revised of													
NO.	DATE	REVISIONS	BY	CK.	A.E.	APP.	NO.	DATE	REVISIONS	BY	CK.	A.E.	APP.
RESIDENCE—NO. OF OCCUPANTS						U.S. DEPARTMENT OF ENERGY GRAND JUNCTION PROJECTS OFFICE, COLORADO							
NON-RESIDENCE—MAN-HRS./WK.						DESIGNED: DATE							
INSTRUMENT NO.						DRAWN: 3-89							
SURVEYOR						CHECKED:							
PREPARED BY						PROJ. ENG.:							
G. S. Smith 7/59						APPROVAL							
SURVEY DATE						DATE		APPROVAL DOE		DATE			
VERIFICATION						DATE		DOE ID NO. GJ-00461					
UNC Geotech						DWC NO. 3-B258-G13		SHT 13		of 14			





26 28 30 32 34 36 38 40

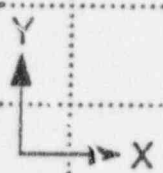
CONCRETE

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BUILDING NO. 6
GROUND FLOOR

LEGEND

-  BOUNDARY OF CONTAMINATION
-  DESIGNATION OF RESIDUAL
RADIOACTIVE DEPOSIT
-  DEPTH OF CONTAMINATION (INCHES)
-  CONTAMINATED AREA



**ANSTEC
APERTURE
CARD**

Also Available on
Aperture Card

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FIGURE 4f
INTERIOR ESTIMATED EXTENT OF CONTAMINATION



3/89 Keen 14									
NO.	DATE	REVISIONS	BY	CK.	A.E.	APP.	NO.	DATE	REVISIONS
RESIDENCE—NO. OF OCCUPANTS					U.S. DEPARTMENT OF ENERGY GRAND JUNCTION PROJECTS OFFICE, COLORADO				
NON-RESIDENCE—MAN-HRS./WK.					DESIGNED: DATE				
INSTRUMENT NO.		SURVEYOR		DRAWN: 30 3-89		940 S. 10TH STREET GRAND JUNCTION, COLORADO			
SURVEY DATE		TIME		CHECKED:		PROJ. ENG.			
VERIFICATION		DATE		APPROVAL		DATE		APPROVAL DOE	
UNC Geotech					DOE ID NO. GJ-00461				
					DWG. NO. 3-B258-G14 SH 14 OF 14				

APPENDIX B

APPLICATION FOR SUPPLEMENTAL STANDARDS DOE ID NO. GJ-90101-CC (INCLUDES: GJ-00461-CC)

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B.1 APPLICABLE EPA CRITERIA

B.2 INTRODUCTION

- B.2.1 Common Location and Legal Description
- B.2.2 Major Physical Features
- B.2.3 General Assumptions and Parameters
- B.2.4 Land Use
- B.2.5 Local Agency Input

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- B.3.1 Health Risk Analysis

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 - B.4.1.1 Work Description
 - B.4.1.2 Health Risk Analysis
 - B.4.1.3 Construction Parameters
 - B.4.1.4 Alternative Specific Issues
 - B.4.1.5 Engineering Data
- B.4.2 Alternative 2 - No Remediation (Supplemental Standards Application)
 - B.4.2.1 Work Description
 - B.4.2.2 Health Risk Analysis
 - B.4.2.3 Construction Parameters
 - B.4.2.4 Alternative Specific Issues
 - B.4.2.5 Engineering Data

B.5 SUMMARY

B.6 RECOMMENDATIONS

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- B.T1 Health Risk Analysis
- B.T2 Cost Estimate for Alternative 1

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- Figure 4 Reconstruction Detail
- Figure 5 Typical Cross-Section

EXHIBITS

- Owner Request for Comments
- Comments from Owner

B.1 Applicable EPA Criteria

Supplemental Standards Application is in accordance with the regulations set by the Environmental Protection Agency (EPA) in 40 CFR 192. The potential and applicable criteria as stated in 40 CFR 192.12 is as follows:

- _____ a) Remedial action would pose a clear and present risk of injury to workers or to members of the public
- _____ b) Remedial action would directly cause excessive environmental harm
- _____ c) The cost of remedial action at the vicinity site is unreasonably high relative to long-term benefits
- X d) The cost of remedial action for cleanup of a building is unreasonably high relative to benefits
- _____ e) There is no known remedial action
- _____ f) Radionuclides other than Radium-226 and its decay products are present

An "X" indicates the appropriate subsection(s) for this application.

B.2 Introduction

This Supplemental Standards Application pertains to the mill tailings contamination underneath Building 3 of the Whitewater Complex Commercial property, in Grand Junction, Colorado. Figure 3 in Appendix A, depicts the area in which Supplemental Standards Application is being considered. Remediation of the surrounding property was terminated at the edges of Building 3 leaving behind the mill tailings. The excavation was stopped as close as possible without disrupting the foundation of Building 3.

B.2.1 Common Location and Legal Description

Lots 1 through 32, inclusive Block 22, Milldale Subdivision plus 1/2 of vacated 4th Avenue plus 11th Street adjoining said lots as described in Book 1111, Page 738, and Book 1147, Page 547 of Mesa County Records, Mesa County, Colorado.

B.2.2 Major Physical Features

Building 3 of the Whitewater Complex Commercial property is a two story concrete block building with large steel doors. It is located in an industrial section of Grand Junction, surrounded by other industrial buildings. The building is used for storing concrete materials.

B.2.3 General Assumptions and Parameters

The boundaries applied towards this Supplemental Standards Application will include the area underneath the concrete floor slab and footers of Building 3 as shown on Figures 3 and 5.

B.2.4 Land Use

This application considers an area underneath Building 3 of the Whitewater Complex Commercial property, which is intended to remain as a materials batch plant. The Owners have no plans of changing the building's use at this time and the residual useful lifetime of the building is probably 50 years. The area surrounding Building 3 probably will remain an industrial area for the foreseeable future. Therefore, a change in land use should not be expected.

B.2.5 Local Agency Input

The Department of Energy (DOE) requested that Chem-Nuclear Geotech consider Application for Supplemental Standards in an area located at 940 South 10th Street. A conversation was conducted with the property owners to explain the data and evaluation of alternatives. Chem-Nuclear Geotech submitted a Request for Formal Comments regarding this Application to the property owners and responses have been received. Copies of relevant correspondence are attached as exhibits.

The Owner questions the cost effectiveness in cleaning up mill tailings. Chem-Nuclear Geotech feels that the \$280 per cubic yard to clean up the mill tailings under Building 3 is not cost effective when there is no health risk. The average cost of cleaning up the rest of the complex is \$53 per cubic yard.

The Owner asks for assurance that Whitewater Building Materials Corporation will not face litigation if the mill tailings are left in place. No such assurance can be given. However, if Supplemental Standards are concurred, the property can be certified that it has been remediated to EPA standards (with the use of Supplemental Standards).

Questions were raised about future contact of the mill tailings if they are dug up. The Owner admits there is no change in use of Building 3 in the foreseeable future. Even if the building was demolished, the incidental short-term contact by a worker would not be considered a health hazard.

Future management and control of mill tailings which has been an issue on previous Supplemental Standards Applications, is another issue raised by the Owner on this Application. Chem-Nuclear Geotech has recognized this concern and has recommended development of a long-term control plan. Resolution of this issue, however, is beyond the scope of this Application.

B.3 Radiological Data

The Appendix A contains the radiological data that is relevant to this Supplemental Standards Application. The Appendix A consists of an Executive Summary, tables which summarize radiological data, and the Appendix A for the parent property.

The radiological conditions within the Supplemental Standards Application area are summarized as follows:

- a. Exposure rate range at ground level over contaminated areas = 15 to 16 uR/h

- b. Average exposure rate at ground level over contaminated area(s) = 16 uR/h

B.3.1 Health Risk Analysis

The analysis of health risks is presented in Table B.T1. Exposure potentials are compared with two criteria as follows:

- a. Long-term exposures are examined based on an allowable exposure rate of 100 mRem per year above background (hereinafter referred to as 100 mRem dose).
- b. Short-term unusual exposures are examined based on an allowable exposure rate of 500 mRem per year above background (hereinafter referred to as 500 mRem dose).

The maximum gamma dose rate at waist level recommended by the International Commission on Radiological Protection (ICRP, 1977, 1978) in DOE ORDER 5400.5 (March 1990) is 100 mRem dose. This is the dose limit for an individual member of the general public. Doses which exceed 100 mRem dose are acceptable when the higher exposures do not persist for long periods and when the average annual dose over an individual's lifetime is expected to be less than 100 mRem dose. The ICRP and the DOE suggest that dose rates be "reduced as low as is reasonably achievable", but also state that no annual dose shall exceed 500 mRem dose. The health risk analysis presented in this Application for Supplemental Standards has compared the dose rates measured at ground level with the recommendations of the ICRP and DOE regarding waist level exposures. This procedure ensures a conservative evaluation.

The long-term exposure analysis considers three scenarios showing the following:

- a. The required number of hours of continuous exposure to obtain the 100 mRem dose. This scenario is intended to model the exposure received by an individual residing on the site in the extreme case where no time away from the site is considered.
- b. The hours per day of exposure during a continuous one year period required to receive the 100 mRem dose. This scenario is intended to represent a maximum allowable daily exposure by an individual who occupies the point where the high gamma reading occurs.
- c. The hours per day of exposure during a one year period, utilizing week days only (260 days), required to receive the 100 mRem dose. This scenario models the potential exposure that could be received by an individual working in the area the indicated number of hours daily for one year.

The short-term unusual exposure analysis also considers three potential scenarios as follow:

- a. The required number of hours of continuous exposure to obtain the 500 mRem dose. The intent of this scenario is to allow examination of the estimated time of continuous exposure required to receive the allowable dose.

TABLE B.71

HEALTH RISK ANALYSIS

GJ-90101-CC (Includes: GJ-00461-CC)

940 SOUTH 10TH STREET

LOCATION	GAMMA (uR/h)				LONG TERM EXPOSURE ANALYSIS			SHORT-TERM OCCUPATIONAL EXPOSURE ANALYSIS		
	SURFACE			EXPOSURE RATE ABOVE BACKGROUND	REQUIRED NUMBER OF	REQUIRED NUMBER OF	REQUIRED NUMBER OF	REQUIRED NUMBER OF	REQUIRED NUMBER OF	REQUIRED NUMBER OF
	BACKGROUND	MAX.	MIN.		HOURS OF CONTINUOUS	HOURS PER DAY OVER	HOURS PER DAY OVER	HOURS OF CONTINUOUS	48 HOUR "REPAIR"	24 HOUR EMERGENCY
					EXPOSURE TO RECEIVE	ONE YEAR TO RECEIVE	260 DAYS TO RECEIVE	EXPOSURE TO RECEIVE	SCENARIOS TO RECEIVE	SCENARIOS TO RECEIVE
	100 mRem DOSE	100 mRem DOSE	100 mRem DOSE	500 mRem DOSE	500 mRem DOSE	500 mRem DOSE				
Interior Building 3	12	16	15	4	25,000	68	96	125,000	2,604	5,208
Worse Case Scenario:	12	16		4	25,000	68	96	125,000	2,604	5,208

Note 1: Worse Case Senerio is based on the lowest background and highest surface gamma measurements, regardless of whether they were found in the same approximate location.

- b. The number of 48-hour temporary occupancy periods, in one year, necessary to receive a 500 mRem dose. This scenario represents the case where an individual occupies the site for repair work or other short-term purposes.
- c. The number of 24-hour periods of exposure, in one year, necessary to receive a 500 mRem dose. This scenario considers emergency operations to perform repair work at the site.

The worst case scenario is based on the minimum background and maximum surface gamma rates that were measured, without consideration of the relative physical location of each. In every case, the scenarios presented above can be described as unlikely but possible. The scenarios do not create a model of likely situations, but present data that can be used to evaluate the potential for a health hazard if this Supplemental Standards Application is approved.

The maximum known gamma exposure rate, above background, occurring throughout the Supplemental Standards area is equal to the worst case scenario. The worst case scenario depicts occupation of a site for an average of 68 hours per day during a one year period to receive the 100 mRem dose. It is impossible for this situation to occur even if a person stood on the spot continuously.

The RDC were measured in Building 3 by Chem-Nuclear Geotech and found to be below the 0.02 working level standard. The average working level for the measurement period was 0.0074 WL. This indicates that the RDC level does not exceed the EPA standards during current use of the building. The RDC was measured in the upper level of the building where the only office room exists.

B.4 Remediation Alternatives

Supplemental Standards Application is only one of the available alternatives for compliance with the EPA regulations. Evaluation of an alternative action in any area of tailings contamination logically includes consideration of the cost and health risk associated with the available choice. Two alternatives, complete remediation or Application of Supplemental Standards (no remediation), are considered.

B.4.1 Alternative 1 - Complete Remediation

B.4.1.1 Work Description

The work required for this alternative includes but is not limited to removal and replacement of the concrete floor slab; excavation and disposal of contaminated materials; furnish and install backfill material; temporarily remove and reinstall batch tanks and boiler; install a radon vent system; and complete miscellaneous concrete repair work.

B.4.1.2 Health Risk Analysis

Health risks in the Supplemental Standards Application area, due to tailings contamination, are already within the EPA standards. The gamma exposure level and the RDC level which an occupant would be exposed to will not be significantly reduced even if the remediation were to occur. The radiological levels would be reduced in the soils underlying the building should remediation occur.

B.4.1.3 Construction Parameters

Construction of this alternative consists primarily of temporarily relocating the batch plant and then removal of the uncontaminated concrete floor slab. The contaminated fill under the slab would then have to be excavated and replaced with clean fill. The building's foundation would require supporting while excavation is completed underneath it. A new concrete floor slab would have to be placed and the material batch plant relocated to the original location.

B.4.1.4 Alternative Specific Issues

This alternative will encounter relatively high construction costs due to the interior construction necessary. The building is currently used as a materials batch plant and operations cannot be interrupted during construction. Operations for the batch plant will then require a temporary location while construction is being completed. Also, there is a short time frame during the company's slow period to disassemble the batch plant.

B.4.1.5 Engineering Data

No areas of contamination which exceed the EPA standards will remain in place. The estimated Subcontractor cost of remedial action work required for this alternative is \$78,973. A tabulation of the cost estimate elements is presented in Table B.T2. The estimated volume of contaminated materials to be removed is 282 cy. The average cost per cubic yard to remove the tailings would be \$280 (see Figure 4 for Reconstruction Plan).

B.4.2 Alternative 2 - No Remediation (Supplemental Standards Application)**B.4.2.1 Work Description**

No work is required for this alternative.

B.4.2.2 Health Risk Analysis

The health risks associated with this alternative are approximated in Table B.T1. There is a low probability that allowable gamma dose rates will be exceeded, based on the data presented in Table B.T1.

B.4.2.3 Construction Parameters

Construction is not required for this alternative.

B.4.2.4 Alternative Specific Issues

No other specific issues exist for this alternative.

TABLE B.T2

GJ-90101-CC (Includes: GJ-00461-CC)
940 SOUTH 10TH STREET

COST ESTIMATE FOR ALTERNATIVE 1: COMPLETE REMEDIATION

ITEM NUMBER	ITEM DESCRIPTION	UNITS	QUANTITY	UNIT PRICE	TOTAL PRICE
=====	=====	=====	=====	=====	=====
1.	Remove and place new 6" concrete floor slab	SF	1,500	\$6.00	\$9,000
2.	Remove and haul contaminated material	CY	282	20.00	5,640
3.	Haul and place roadbase	CY	282	13.00	3,666
4.	Remove and reinstall boiler	LS	1	7,500.00	7,500 —
5.	Remove and reinstall batch tanks to temporary location	LS	1	5,000.00	5,000 —
6.	Install and remove temporary fence	LF	75	5.00	375
7.	Sawcut existing concrete slab	LF	177	3.50	620
8.	Shoring and bulk concrete for footer support	CY	50	450.00	22,500
9.	Epoxy covering on floor slab	SF	1,600	3.00	4,800
10.	Radon vent system	LF	160	3.50	560
11.	Remove and reinstall batch tanks to original location	LS	1	5,000.00	5,000 —
12.	Timber support of exterior batch tanks	LS	1	500.00	500 —
13.	Cut and refinish masonry wall at control access	LS	1	150.00	150
14.	Repair exterior concrete	LS	1	500.00	500
TOTAL:					=====
					\$65,811
CONTINGENCY: 20%					\$13,162
TOTAL ESTIMATED COST:					=====
					\$78,973

SEAL 1/2" EXPANSION JOINT WITH
A FLOWABLE SILICONE SEALANT
 NEW CONCRETE SLAB, REINFORCE
WITH WWF 6x6-W4xW4
 2" SANDBED OVER DRAINAGE
FABRIC
 8" BED OF SCREENED ROCK
 MASONRY (TYP)
 NEW 4" DIA. PERF. PVC
VENT PIPE WITH 2" MIN.
COVER AROUND PIPE
 EXISTING CONCRETE
 (4) #4 CONTINUOUS
REINF. (GR. 60)
SPACED AS SHOWN
 #4 x □ @ 18" (GR. 40)
 NEW CONCRETE
 3 TON SCREW JACKS @
2'-0" O.C.
 1'-0" x 1'-0" x 1-1/2"
PRECAST CONCRETE
PADS UNDER EACH
JACK ($f'_c=4500$ PSI)
 2'-0" MIN.
 SLOPE OF EXCAVATION
TO BOTTOM OF TAILINGS
 LIMIT OF EXCAVATION
BEFORE UNDERMINING
PROTECTION SHALL BE
PROVIDED

RECONSTRUCTION DETAIL

NO SCALE

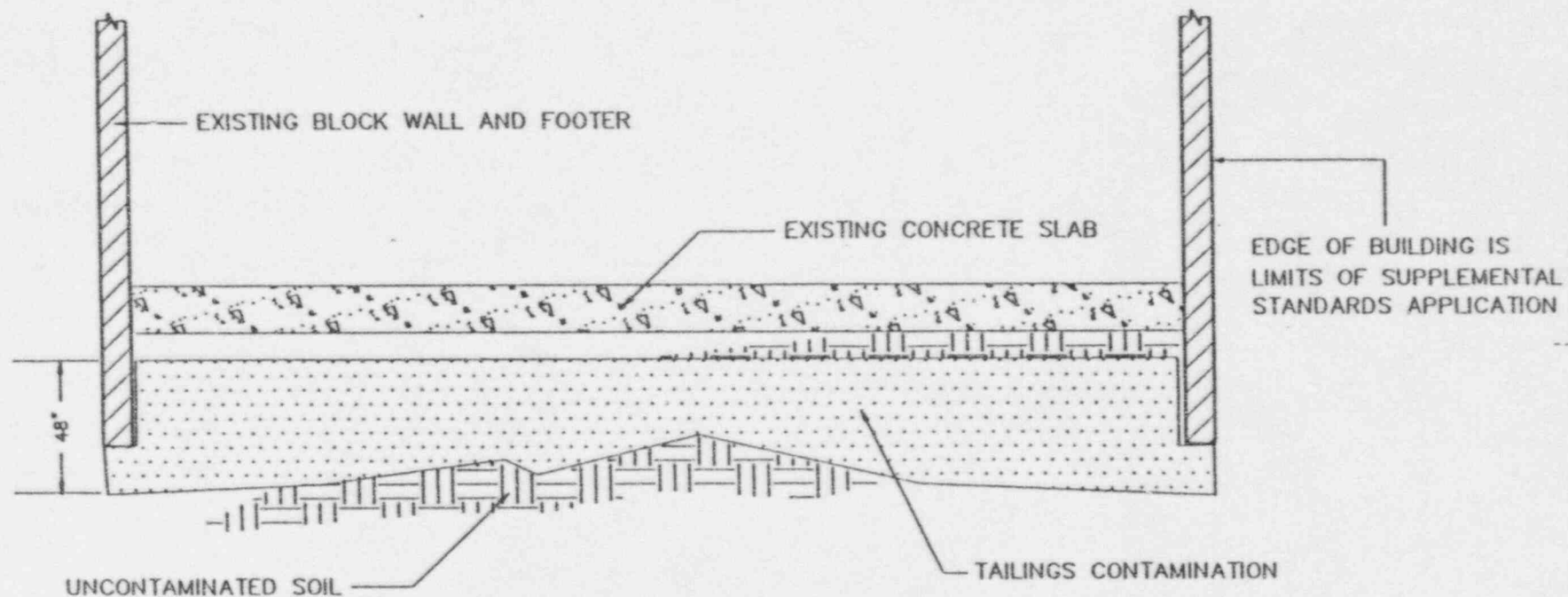
TYPICAL SECTION

U.S. DEPARTMENT OF ENERGY

940 S. 10TH ST.
GRAND JUNCTION, CO

DOE ID# GJ-90101-CC

FIGURE 4



TYPICAL SECTION

NO SCALE

CROSS-SECTION

U.S. DEPARTMENT OF ENERGY

940 S. 10TH ST.

GRAND JUNCTION, CO

DOE ID# GJ-90101-CC

FIGURE 5

B.4.2.5 Engineering Data

No cost is associated with this alternative. The approximate volume of contaminated materials that will be left in place, based on the extent of contamination shown in Figure 3 and Figure 5 is 282 cy.

B.5 Summary

The data in Table B.T1 suggests that there are no identifiable significant health risks if this Supplemental Standards Application is approved. In the worst case, a person would have to occupy the point of high gamma exposure for a continuous period of 25,000 hours to receive a 100 mRem dose. It is impossible for an individual to be exposed for the amount of time necessary to exceed the recommended annual maximum dose of 100 mRem, due to both the length of time required and the physical location of those exposure rates.

Remediation alternatives examined by this Application can be summarized as follows:

Alternative 1 - Complete remediation

Health Risk - Reduced to within EPA standards

Estimated Construction Cost - \$78,973

Approximate Volume of Contaminated Materials Removed - 282 cy

Approximate Volume of Contaminated Materials Remaining - 0 cy

Alternative 2 - No Remediation (Supplemental Standards Application)

Health Risk - See Appendix B, Table B.T1

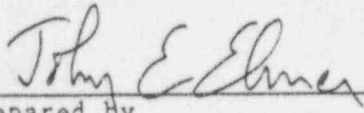
Estimated Construction Cost - \$0

Approximate Volume of Contaminated Materials Removed - 0 cy

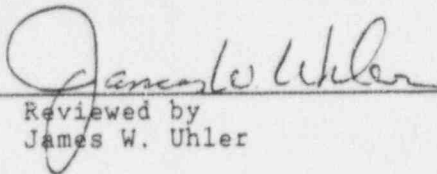
Approximate Volume of Contaminated Materials Remaining - 282 cy

B.6 Recommendations

Supplemental Standards should be applied under 40 CFR 192.12 Criteria D (see Section B.1). The anticipated period of occupancy of Building 3 is limited to normal working hours during a 40-hour week. The incremental radiation level that would be affected by the remedial action is small. The residual useful lifetime of the building is at least 50 years, and it is unlikely that future construction would disturb the tailings left in place. A long-term tailings management, disposal, and migration control plan should be developed and implemented as required in the Romer-Twining UMTRA Management Agreement.


Prepared by
John E. Elmer


Date 10/31/90


Reviewed by
James W. Uhler


Date 10/31/90

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REV062888:01

UNC Geotech

UNC Geotech
2597 B 3/4 Road
P.O. Box 14000
Grand Junction, Colorado 81502-5504
303/242-8621

September 4, 1990

Mr. Ed Gardner
Whitewater Building Material
940 South 10th Street
Grand Junction, Colorado 81501

SUBJECT: SUPPLEMENTAL STANDARDS APPLICATION AT DOE ID No. GJ-90101-CC

Dear Mr. Gardner:

This letter is to inform you that Chem Nuclear Geotech is proceeding with an Application for Supplemental Standards for the uranium mill tailings under Building 3. As part of the procedure for Supplemental Standards, Chem Nuclear Geotech has the responsibility to explain this process and solicit comments from the property owner.

The Environmental Protection Agency supplemental standards allow tailings deposits to remain in place when one or more of the following situations exist: a) clear and present risk to workers and/or the general public; b) excessive environmental harm; c) excessive cost of land cleanup relative to benefits; d) excessive cost of building cleanup relative to benefits; or e) radionuclides other than Ra-226 exist.

This application involves only those tailings which are under Building 3. Item "d" of the above criteria is used as justification for this Supplemental Standards Application.

This letter extends the opportunity for you to comment or express any concerns that you may have about this Supplemental Standards Application. It is requested that your response:

1. Acknowledge that this Supplemental Standards Application has been explained to you or your staff;
2. Indicates any proposed construction or land use changes in this area in the foreseeable future; and
3. Includes any other questions or comments you may have regarding this Supplemental Standards Application.

We would appreciate a written response from you within two weeks of our meeting to help us facilitate finishing the Application.

Sincerely,


John E. Elmer
Supplemental Standards Coordinator

cc: J. Virgona - DOE
M. Madson - Chem Nuclear

GARDLTR.JEE:SSMISC:OA

WHITEWATER BUILDING MATERIALS CORPORATION

940 South 10th Street, P.O. Box 1769
GRAND JUNCTION, COLORADO 81502



SAND & GRAVEL PRODUCTS
Phone 242-7537



READY MIXED CONCRETE
Phone 242-4843

14 September 1990

Mr. John E. Elmer
Supplemental Standards Coordinator
UNC Geotech
P.O. Box 14000
Grand Junction, Colorado 81502-5504

Re: Your letter dated 4 September 1990, Supplemental Standards
Application at DOE ID No. GJ-90101-CC.

Dear Mr. Elmer,

Whitewater, after review of the above letter and meeting on 5 September 1990, **DOES NOT ACCEPT** the reasoning or position of Chem Nuclear Geotech concerning the tailings under Building 3.

First of all the Federal Government took responsibility for correcting a problem created by the tailings and placed higher priority to that end than a monetary consideration. Your use of item (d), excessive cost of building cleanup relative to benefits, falls on deaf ears. We know the amount of money spent to clean up everything around this building for a city block. DOE Projects GJ-00461-CC and GJ-44202-CC were finished in April 1990 and remediated land and buildings on all sides of Building 3. Open spaces, roadways, parking areas and a vacant lot were cleaned of all tailings and I don't recall a concern for cost benefits. During these remedial action projects it was determined that Building 3, thought to be clean, was also contaminated. At that time immediate inclusion of Building 3 would have been less costly than now. Whitewater was led to believe that to add this area would delay and confuse the current projects but not to worry as Building 3 would be engineered and bid as a separate project later. If your cost estimate of \$79,000.00 is not cost effective then we want to know what the cost effective figure is?

Secondly, Whitewater worries about the future. Can the Federal Government, its representatives or the Colorado Department of Health give us the assurance that we will not face litigation because of these tailings? In the foreseeable future we anticipate no change in our business or use of this building. But, what happens when we want to sell the property?, what about needed repairs that would put us or others in contact with these tailings?, how will these tailings be viewed in the

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future?, what litigation does this ownership or future owners face?, where would we take the tailings if we were forced to remove them?, will a bank loan money on this property?, what about insurance?. These questions go on and on.

Again Whitewater feels that a reconsideration of this matter is needed and remediation of Building 3 is reasonable and meets the criteria for clean up.

Respectfully Submitted
Whitewater Building Materials Corp.

A handwritten signature in cursive script that reads "Arline M. Stewart".

Arline M. Stewart
President