FINAL STATUS SURVEY REPORT

SURVEY UNITS 1 AND 2 IN

INTERIOR OF PLAINVILLE, MASSACHUSETTS PLANT

OF

ENGELHARD CORPORATION

Prepared for

Engelhard Corporation

Route 152

Plainville, Massachusetts 02782

November, 1996

Prepared by:

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REPLACEMENT PAGES

joints were uncovered when office partitions added after the cessation of nuclear operations were removed.

- Unaffected Area - The contiguous area in Building 1 was designated as unaffected since it did not contain residual radioactivity (see Figure 2-3). Also, areas in Building 2 that did not exhibit elevated levels of radioactivity during the 1994 characterization survey were designated as unaffected.

3.4.2 Survey Units and Reference Grids

For the final status survey, the affected area was divided into two survey units, due to different levels of contamination based on the 1994 characterization survey. The first unit (Unit 1) consists of the rooms with higher measured surface contamination levels prior to decontamination, i.e. the scrap melt room (2M), the precious metals storage room (2L), and the tunnel ("D" on Figure 2-3). The second unit (Unit 2) consists of the rest of the affected area whose surface contamination levels were generally less than those in Survey Unit 1 prior to decontamination. Figure 3-1 shows these two units. The room layouts within the survey units are provided with the data base in Appendix A.

For Survey units 1 and 2 floor surfaces, grid lines were established in the field for survey documentation. The grids were tied to a room feature (usually the northeast corner) and can also be related to a reference survey point for Building 2 surveyed by a Massachusetts licensed surveyor. The grids used in each room are shown in Figures A-1 through A-14. Within Unit 1, a square

gamma scans were conducted of the floor and lower wall surfaces using the gas flow-detectors (see Table 3.1), and beta-gamma scans of the upper walls and ceilings using the ratemeter/G-M detector combination described in Table 3.1.

Once the piping and expansion joints were removed from the floor, a NaI gamma radiation survey was performed on the soil surface. Areas of elevated gamma radiation were further scanned with the portable detection instruments to establish if elevated radioactivity existed in the soil.

3.4.4 Surface Activity Measurements

3.4.4.1 Direct Measurements

Direct (fixed) beta-gamma surface measurements were performed at the intersection of each grid line and at any elevated areas located during the scans. The designated instruments in Table 3.1 were used for these measurements. The locations of these measurements are shown in Figures A-2 through A-15. Grid layouts are explained in Section 3.4.2.

3.4.4.2 Removable Contamination Measurements

Smears were taken at locations where scabbling passes reduced the surface activity to below the fixed (average) limit but over the removable limit. The smears were read onsite, and the results used to assess the need for additional decontamination. After decontamination was completed, a smear was taken as part of the final survey at each grid intersection location to validate that removable limits had been met. Taken with the direct measurements , the data base served to validate that both the fixed and removable limits had been met.

Final Status Survey: Introduction

Formulas

Net Measured Count Rate Units: cpm

$$= \frac{Gross\ Counts}{Count\ Time} - Background\ Count\ Rate$$

Measured Activity Units: dpm/100 sq. cm.

$$= \frac{Net\ Measured\ Count\ Rate}{Instrument\ Efficiency \bullet \left(\frac{Detector\ Area}{100\ sqcm}\right)}$$

Effective Alpha Activity Units: dpm/100 sq. cm.

$$= Measured\ Activity \bullet Total\ U\ Conversion\ Factor$$

Minimum Detectable Activity (MDA) Units: dpm/100 sq. cm.

$$= \frac{2.71 + 4.65 \bullet \sqrt{Background\ Count\ Rate \bullet Count\ Time}}{Count\ Time \bullet Instrument\ Efficiency \bullet \left(\frac{Detector\ Area}{100\ sqcm}\right)}$$

1.96 * Standard Deviation (2 σ error) Units: dpm/100 sq. cm.

$$= Total\ U\ Conversion\ Factor \bullet \frac{1.96 \bullet \sqrt{Meas.\ Counts / Count\ Time^2 + Bkgd\ Counts / Count\ Time^2}}{Instrument\ Efficiency \bullet \left(\frac{Detector\ Area}{100\ sqcm}\right)}$$

Notes

1. Entries in bold are for G-M detector (15 sq. cm probe). Other detector measurements are for large area proportional detector (425 sq. cm). Smears are for 100 sq. cm.

2. Total U Conversion factors: 2.5 for large area detector, 3.2 for G-M detector, 1.0 for smears.

3. Grid locations not in the database are not applicable due to room configurations (removed or no walls, cut floors or expansion joints, *et cetera*)

4. G-M detectors and smears represent 1 minute counts. Large area detector values are for 0.5 minute counts. Background counts were for one 1 minute.

5. Survey Unit 1: 2L, 2M, and, TUNNEL
   Survey Unit 2: 2A, ENTRY, 2B, 2C, 2D, 2E, 2F, 2G, 2H, 2K, 2N, and, 2P.

6. A Letter,Number designation (*e.g.*, C,3) is a point on the floor. An @ sign in front of a Letter,Number designation (*e.g.*, @C,3) is a point on the ceiling over the floor point. A Letter, Number, Number designation (C,0,0+1) indicates a wall location. The second number is the distance is from the wall-floor interface (*e.g.*, +1 meter, -1 meter).

Final Status Survey: Statistics

Survey Data Average:

$$\bar{x} = \frac{\sum_{i=1}^{n} x_i}{n}$$

Standard Deviation:

$$s_x = \sqrt{\frac{\sum_{i=1}^{n} (\bar{x} - x_i)^2}{n-1}}$$

Guideline Value = 5000 dpm/100 sq. cm Total U
Estimating Factor (for Table B-2, NUREG/CR-5849) = (Guideline Value - Average) / Standard Deviation

Room Floor Survey

Survey Unit	No. of Measurements Taken	Average, dpm/100 sq. cm	Standard Deviation, dpm/100 sq. cm	Estimating Factor	No. of Samples Needed
Unit 1	388	809	822	5	< 9
Unit 2	465	621	598	7	< 9

Lower Wall Survey

Survey Unit	No. of Measurements Taken	Average, dpm/100 sq. cm	Standard Deviation, dpm/100 sq. cm	Estimating Factor	No. of Samples Needed
Unit 1	366	527	1194	4	< 9
Unit 2	326	953	1214	3	< 9

Upper Wall Survey

Survey Unit	No. of Measurements Taken	Average, dpm/100 sq. cm	Standard Deviation, dpm/100 sq. cm	Estimating Factor	No. of Samples Needed
Unit 1	72	43	1179	4	< 9
Unit 2	45	637	1438	3	< 9

Ceiling Survey

Survey Unit	No. of Measurements Taken	Average, dpm/100 sq. cm	Standard Deviation, dpm/100 sq. cm	Estimating Factor	No. of Samples Needed
Unit 1	72	704	702	6	< 9
Unit 2	37	298	1222	4	< 9

Floor Smears Survey

Survey Unit	No. of Measurements Taken	Average, dpm/100 sq. cm	Standard Deviation, dpm/100 sq. cm	Estimating Factor	No. of Samples Needed
Unit 1	506	2	3	1889	< 9
Unit 2	395	1	2	2522	< 9

RR1 - 13 Sterling Pines
Tuxedo, New York 10987

November 20, 1996

Mr. Richard H. Turtil
Division of Waste Management/LLDP
Mail Step T-8F-37
11545 Rockville Pike
Rockville, MD 20852-2738

Subject: Final Status Survey Report
Engelhard Corporation
Plainville Facility Buildings

Dear Mr. Turtil:

I am enclosing, on behalf of my client Engelhard Corporation, two copies of the Final Status Survey Report (FSR) for the decommissioning of the Plainville facility buildings. The results of the survey have confirmed that the radiological levels in the buildings are consistent with NRC release criteria as applied in accordance with NUREG/CR-5849 requirements.

Timely confirmatory measurements of the final status survey results by the NRC, scheduled for the month of January, 1997, and a release from any further decontamination requirements are essential to allow the buildings to be demolished by Engelhard.

Please contact me at (914) 351-2880 if there is any clarification required of the material in the report prior to your arrival at the site.

Sincerely,

Robert E. Berlin, DPH

cc: Mr. Eric Abelquist, ORISE
Mr. Mark Roberts, USNRC

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1.0 BACKGROUND INFORMATION

D.E. Makepeace, predecessor of the current Engelhard Corporation, manufactured nuclear fuel elements at its plant on Route 152 in Plainville, Massachusetts from 1957 until cessation of operations in 1962. Manufacturing operations in Building 2 of the plant involved the use of natural uranium, enriched uranium, and depleted uranium. The Building 2 interior and equipment used in the fuel fabrication operations were decontaminated and a final radiological survey was performed by Engelhard Industries in 1963. Based on the results of this survey and a confirmatory survey of the Building 2 interior and equipment conducted by the Atomic Energy Commission AEC, the facility licenses were terminated. The decontaminated equipment was removed from the plant and sold to the Italian government. Subsequently, the area used for nuclear fabrication was converted to other non-nuclear metal fabrication operations.

A radiation Scoping Survey was conducted of the plant in July 1988 as a part of a multi-phase site assessment initiated by Engelhard Corporation to identify potential areas of environmental concern. This survey identified the radiological contaminants of concern clearly as U238, U235, and U234 at relatively low concentrations.

A more detailed characterization survey of Buildings 1 and 2 was conducted in March 1994, which resulted in delineating affected and unaffected areas based on current Nuclear Regulatory Commission (NRC) regulatory guidelines. An NRC-approved Decontamination Plan for releasing Building 2 affected areas in accordance with current criteria was then implemented. The affected areas were decontaminated during the June/October 1996 period.

Engelhard conducted a final radiological status survey of each of two survey units in Building 2 as the decontamination effort was completed. This document describes the plan and ultimate results for the final status survey. The results of the survey demonstrate that the radiation levels in the building now satisfies NRC residual contamination guidelines, established for release of formerly licensed sites to unrestricted use.

Supporting information is presented in the April 1993 Decontamination Plan and the August 1994 Radiological Characterization Survey of Interior of the Plainville facility.

This final status survey report covers only Buildings 1 and 2; the decommissioning project for the exterior regions of the facility is scheduled to be undertaken later upon NRC approval of Engelhard Corporation's proposed approach to exterior decontamination.

2.0 SITE INFORMATION

2.1 Site Description

The Engelhard facility is located at 30 Taunton Street (also known as Massachusetts Highway Route 152) in Plainville, Norfolk County, Massachusetts. Figure 2-1 is a current site plan of the facility, with the portion of the plant used for nuclear fuel fabrication in the 1957-62 period shown in relation to the remainder of the plant and exterior grounds. Fuel element fabrication operations were totally segregated from the non-nuclear manufacturing and other operations.

The interior layout of Buildings 1 and 2, which were the only buildings existing at the time of nuclear fuel fabrication, is shown in Figure 2-2. Neither Building 1 or 2 is currently being used for any Engelhard operations, and there is no Engelhard worker population in these buildings.

The affected areas in Building 2 was well delineated, based on the results of the characterization survey and knowledge of the plant operating history. The affected area, as shown by the shaded area in Figure 2-3, was entirely within Building 2 and consisted of:

- Rooms where localized average surface contamination levels on the floor and in cracks and crevices exceed applicable residual surface contamination criteria. These rooms include the tunnel ramp, the former precious metal storage room (2L), the former scrap melt room (2M), the corridor and part of the floor in the room north of the scrap melt room (2N), part of the floor in the former melt room (2H), and the room on the left of the entrance corridor in Building 2 (2B).

- Rooms where localized average floor surface contamination levels were less than the residual surface contamination release criteria, but were elevated above background levels (greater than 2-3 times background). These rooms were decontaminated based on ALARA considerations. The rooms are designated as 2A, 2C, 2D, 2F, room to the north of 2I (subsequently designated 2P), and 2K in Figure 2-3.
- Subfloor piping originating in the affected area where elevated radiation levels were measured in the drain inlet openings and outlets.

The remainder of Building 2, and all of Building 1, was classified as unaffected. During decontamination activities, rooms 2E and 2G were added to the affected area.

The land use and ownership of the properties surrounding and adjacent to the Plainville site is shown in Figure 2-4. Engelhard owns the vacant property directly across Taunton Street. The areas to the north, west, and south of the site are either vacant and are part of a Natural Resources Trust, or are covered by Turnpike Lake.

2.2 Building Conditions at Time of Final Status Survey

The building decommissioning activities, undertaken from June through October 1996, consisted of the removing of remaining equipment from the affected area, collecting and removing loose material, scabbling contaminated surfaces (mainly floors and some walls) and collecting the removed material, and sawing and breaking concrete floors to remove piping and floor joints. The piping was generally found to be physically intact and without perforation, with a few small pockets of contaminated soil under locations where the pipe had been cut due to plant

modifications after 1964. At the time the final status survey was performed, the contaminated soil had been removed. In addition, expansion joints had been cut out of the floor to remove any contamination that had collected in these locations and localized areas of radiologically — contaminated material had been removed from overhead piping, structural members, and electrical buss ducts. The remediation control surveys had shown all surfaces to be within NRC residual surface contamination criteria.

2.3 Identity of Potential Contaminants and Release Guidelines

As already mentioned, it has been determined, based on knowledge of the fuel element manufacturing process, and the results of the 1994 characterization survey, the radiological contaminants are the uranium isotopes: U238, U235, and U234. The uranium is enriched in U234 and U235 above naturally occurring levels.

Therefore, based on this combination of uranium isotopes, the NRC surface alpha residual contamination release guideline values are:

5000 dpm/100cm^2 - average over 1m^2

15000 dpm/100cm^2 - maximum over 100 cm^2

1000 dpm/100cm^2 - removable over 100cm^2

The soil residual contamination guideline value is 30pCi/g, total uranium (U238 + U235 + U234). This limit is applied to the soil adjacent to the removed piping and from under the floor expansion joints.

3.0 FINAL STATUS SURVEY OVERVIEW

3.1 Survey Objectives

The purpose of the final status survey was to demonstrate that the residual radiological conditions in Buildings 1 and 2 of the Plainville facility satisfy NRC guidelines (see Section 2.3 above) and that the buildings can, therefore, be released for unrestricted future use (no radiological controls). Specifically, the final status survey data base should show that:

A. Surface Activity of Plainville Buildings:

- Average surface residual alpha activity levels (total of fixed and removable activity) are at or below the guideline values defined in Section 2.3.
- Reasonable efforts have been made to identify, evaluate, and remove, if necessary, areas of residual surface activity exceeding the guideline values, and to reduce areas of elevated surface activity (below guideline values) to ALARA levels. Remaining locations of residual activity exceeding the guidelines value may be acceptable provided the activity levels are less than three times the guideline values, when averaged over a surface region of 100 cm^2, and provided the average level within a $1m^2$ area containing the elevated area is within the guideline value.

B. Volume Activity of Soil Adjacent to Piping and Building Materials:

- Average residual radionuclide concentrations are at or below the guideline value defined in Section 2.3. Averaging is based on a $100m^2$ (10m x 10m) grid area.

- Reasonable efforts have been made to identify, evaluate, and remove, if necessary, areas of residual surface activity exceeding the guideline values. Areas of residual activity exceeding the guideline value (elevated areas) may be acceptable provided they do not exceed the guideline value by greater than a factor of $(100/A)^{\frac{1}{2}}$, where A is the area of residual activity in m^2, and provided the activity level at any location does not exceed three times the guideline values.

C. Exposure Rate

- Exposure rates do not exceed 5 uR/h above background at 1m above the remediated surfaces. Exposure rates may be averaged over a $100m^2$ grid area. Maximum exposure rates over any discrete area may not exceed 10 uR/h above background.

A 95% minimum level of confidence that the above conditions have been met was to be demonstrated. The interior rooms in Building 2 (the affected area) were divided into two survey units (Figure 3-1) and the 95% level of confidence was to be applied to each survey unit separately. Survey Unit 1 represents the region of Building 2 with the higher contamination levels compared to the remainder of Building 2 affected area. This remainder comprises Survey Unit 2.

3.2 Organization and Responsibilities

The final status survey was conducted by the same qualified Engelhard and subcontractor personnel who had conducted the 1988 and 1994 characterization and subsequent remediation control surveys.

During decommissioning activities, radiological surveys of building surface levels and analysis of smears were performed by personnel from Foster Wheeler and Hilbert Associates (a subcontractor to Foster Wheeler). These field measurements provided rapid feedback during the remediation and established the basis for the final set of surface verification data. QA/QC verification surveys were conducted by Drs. Berlin and Duggan, radiological contractors working directly for Engelhard Corporation. Soil samples were analyzed by gamma spectrometer techniques by Hilbert Associates at their laboratory facility in Saratoga Springs, NY. Ten percent of all final soil samples were sent for analysis to an outside contract laboratory, IEA Laboratory, for independent verification. Additionally, NRC Region I laboratories analyzed soil samples previously analyzed by Hilbert Associates. Engelhard, and its subcontractors, conducted QA/QC programs which were monitored by Dr. Berlin in his role as Engelhard's QA coordinator.

3.3 Instrumentation

The instruments that were used in the final status survey are listed in Table 3.1. The table also describes the specific use of each instrument. Each instrument was initially calibrated to NIST-traceable standards prior to use on the project, and then checked daily for radiation response and efficiency prior to use.

The large area probe ($425cm^2$) gas flow proportional detectors were used for scans and direct measurements on the floors and lower walls and provided the majority of the data points. These cart-mounted units were operated at the beta-gamma detection voltage for maximum detection

sensitivity. The results were then converted to equivalent surface alpha levels for total uranium (see Section 3.7). The G-M pancake detector with the $15cm^2$ probe was used to: 1) survey the upper walls, ceilings, and building components, 2) isolate localized elevated areas on the floor and lower walls initially identified as contaminated with the large area detector, and 3) affirm that areas identified in "2)" were removed.

3.4 Survey Procedures

Survey planning and procedures were conducted in accordance with the Manual for Conducting Radiological Surveys In Support of License Termination, NUREG/CR-5849. Survey procedures undertaken are summarized in this section.

3.4.1 Area Classification

The building interior was divided into affected and unaffected areas to establish the sampling pattern and frequency. The basis for the affected and unaffected area classification, as applied to the building interior are:

- Affected Area - As delineated in Figure 2-3, the rooms in Buildings 2 were defined as affected (see Section 2.1) based on both historical records and the prior characterization surveys. These locations included areas where uranium billets were stored and fabricated into nuclear fuel elements and adjoining rooms used for auxiliary services.

  The affected area in Building 2 was increased during the decontamination operation to include localized areas originally designated as "unaffected," where previously undetected floor

joints were uncovered when office partitions added after the cessation of nuclear operations were removed.

- Unaffected Area - The contiguous area in Building 1 was designated as unaffected since it did not contain residual radioactivity (see Figure 2-3). Also, areas in Building 2 that did not exhibit elevated levels of radioactivity during the 1994 characterization survey were designated as unaffected.

3.4.2 Survey Units and Reference Grids

For the final status survey, the affected area was divided into two survey units, due to different levels of contamination based on the 1994 characterization survey. The first unit (Unit 1) consists of the rooms with higher measured surface contamination levels prior to decontamination, i.e. the scrap melt room (2M), the precious metals storage room (2L), the tunnel ("D" on Figure 2-3), and the room across from the scrap melt room (with the platform) (2N). The second unit (Unit 2) consists of the rest of the affected area whose surface contamination levels were generally less than those in Survey Unit 1 prior to decontamination. Figure 3-1 shows these two units. The room layouts within the survey units are provided with the data base in Appendix A.

For Survey units 1 and 2 floor surfaces, grid lines were established in the field for survey documentation. The grids were tied to a room feature (usually the northeast corner) and can also be related to a reference survey point for Building 2 surveyed by a Massachusetts licensed surveyor. The grids used in each room are shown in Figures A-1 through A-14. Within Unit 1, a square

1 meter by 1 meter grid was laid out in each room. Letters were assigned to grid lines oriented east/west (A, B, C, ----) and numbers assigned to grid lines oriented north/south. A 1 meter by 1 meter grid was painted on each wall, for the area 1 meter off the floor. The wall sample was indicated by its location on the floor grid and its height in meters off the floor (e.g. 5,A,0+1).

Within Unit 2, a square 2 meter by 2 meter grid was laid out in each room. The grids were tied to the northeast corner of each room and painted onto the floor surface. Letters were assigned to grid lines oriented east/west (A,B,C, -----) and numbers assigned to grid lines oriented north/south. A 1 meter high by 2 meter wide grid was painted on each wall, for the area 1 meter off the floor. The wall sample was indicated by its location on the floor grid and its height in meters off the floor (e.g. 5,A,0+1).

For upper walls and ceilings, fixed contamination measurements were taken roughly on a 4 meter by 4 meter grid. In addition to fixed measurements, some smears were taken from features on the ceiling that might collect dust at or near the fixed measurement location. Unlike the floor and lower wall surfaces, the grid was not painted on the upper walls and ceiling: the floor grid served as a reference for the upper area surveys.

Exposure rate measurements were taken within a 10m by 10m area within each room, one meter off the floor surface.

The floor and wall surface measurements taken in the unaffected area (i.e. Building 1) during the 1994 characterization survey

satisfy the criterion for unaffected area sampling in NUREG/CR-5849 and are being provided as a basis for verification that residual contamination criteria have been met in this area (see Appendix B). In addition, the region in Building 1 adjacent to the control point, (i.e., the access point into Building 2 during decontamination activities) to the affected area, was remeasured subsequent to decontamination.

For the exterior roof surface, surface contamination measurements were taken on a 7m x 7m grid, and along with volumetric samples. The measurements and samples were taken as part of the characterization survey of the exterior of the site and results are provided in this report (Appendix C) since the buildings will be demolished prior to the exterior decontamination.

All horizontal surfaces on the exterior of Building 2 (i.e., window ledges) were also measured to demonstrate the absence of surface contamination during the final status survey. Measurement locations and results are provided in Appendix D.

3.4.3 Surface Scans

Surfaces were scanned subsequent to the decontamination activities to determine if any locations of residual surface activity remained. One hundred percent of the floor and lower wall surfaces in the affected area was scanned. Special attention was paid to cracks, floor drains, and floor joints. Non-contaminated upper wall and overhead surfaces were scanned in the immediate vicinity of the fixed measurement locations. Building surface beta-

gamma scans were conducted of the floor and lower wall surfaces using the gas flow-detectors (see Table 3.1), and beta-gamma scans of the upper walls and ceilings using the ratemeter/G-M detector combination described in Table 3.1.

Once the piping and expansion joints were removed from the floor, a NaI gamma radiation survey was performed on the soil surface. Areas of elevated gamma radiation were further scanned with the portable detection instruments to establish if elevated radioactivity existed in the soil.

3.4.4 Surface Activity Measurements

3.4.4.1 Direct Measurements

Direct (fixed) beta-gamma surface measurements were performed at the intersection of each grid line and at any elevated areas located during the scans. The designated instruments in Table 3.1 were used for these measurements. The locations of these measurements are shown in Figures A-2 through A-15. Grid layouts are explained in Section 3.4.2.

3.4.4.2 Removable Contamination Measurements

Smears were taken at locations where scabbling passes reduced the surface activity to below the fixed (average) limit but over the removable limit. The smears were read onsite, and the results used to assess the need for additional decontamination. After decontamination was completed, a smear was taken as part of the final survey at each grid intersection location to validate that both fixed and removable limits had been met.

Upon completion of the surface activity measurement phase of the final status survey, an independent QA program was conducted, consisting of direct surface measurements and smears at grid intersection locations.

3.4.5 Exposure Rate Measurements

Gamma exposure rates were measured in each room at 1m above the floor surface, at the appropriate midpoint of a 10m x 10m square, and the results recorded. For rooms greater than $100m^2$, multiple measurements were taken in the room. QA validation of the exposure measurements were also obtained.

3.4.6 Soil Sampling

Soil samples were collected from the soil underlying all pipe joints, at other suspect locations along the pipe lines, and from under the expansion joints. Each sample was subject to gamma spectroscopy analysis by Hilbert Associates. Areas in each room where concrete was removed and soil sampled are shown in Figures A-2 to A-15 (cross-batched areas) correlated with the grid locations in Table A-18. Ten percent of the soil samples (QA samples) were sent to IEA laboratories for alpha spectroscopy analysis. Except for two samples (2N-0015 and 2M-0065), which were split in the field, samples sent to IEA were the exact sample analyzed by Hilbert Associates. This process was possible, due to the non-destructive nature of the Hilbert Associates analysis. A total of 138 soil samples were analyzed (126 samples plus 12 QA samples). The soil analysis was the final verification step after

the surface scans and surveys in assuring that the soil was not contaminated.

In addition, the NRC (Region 1) analyzed 9 soil samples as a further QA check on the validity of the results. Each of these samples were previously analyzed by Hilbert Associates.

All soil samples taken during decontamination activities (except those sent to IEA) have been archived and can be retrieved for future analysis.

3.5 Background Level Determinations

Background measurements were taken prior to each days survey at a location in the unaffected area which has similar surface characteristics and materials as the affected area. This location was a patch of scabbled concrete in Building 1. The same instruments were used as were employed in the affected area survey. As described above, the daily background measurements were taken with the detector probe positioned over scabbled concrete in the unaffected area. This background is representative of the bulk of the measurements taken for the final status survey. However, there are three cases where this background was inappropriate: 1) on ceramic wall tiles with naturally-occurring radionuclides, 2) on wallboard, and 3) on steel or like structural components. For the first case, the background over the scabbled concrete was too low, while for the other two cases, the background was too high, due to natural radionuclides in the concrete. Table A1, in Appendix A, presents the deviation from the daily background that must be included to more accurately asses the levels of contamination for these three cases.

Background uranium concentrations in soil were obtained from samples collected in the unaffected area during the exterior characterization program. Statistical procedures described in NUREG/CR-5849 were used to assure that the averages determined for each parameter were representative of true average background levels.

3.6 Sample Analysis

Smears were analyzed by an onsite instrument (see Table 3.1) for gross alpha activity to assess removable contamination levels. Soil samples were analyzed for U238 and U235 by gamma spectroscopy, with total uranium (U234 + U235 + U238) determined on the basis of the site-specific isotopic (u-234 to U-235) ratio. QA soil samples were analyzed for the uranium isotopes by alpha spectroscopy techniques.

3.7 Data Interpretation

Survey results for fixed measurements were recorded on data sheets. The record shows the sample location (room and grid point) and the instrument measurement. Activity measurements were converted to total surface alpha uranium activity (dpm/cm^2) using an instrument-specific conversion factor. This factor, 2.5 for the large area (425 cm^2) gas-flow proportional detector and 3.2 for the G-M detector, considers the efficiencies for detecting the three beta particles emitted by U-238 and U-235 daughter products and the alpha particles emitted by U-238, U-235, and U-234. Alpha efficiencies used to calculate the factors (0.04 for the large area detector and 0.03 for the G-M detector) are twenty-five percent of bench top alpha efficiencies for the detectors. This reduction reflects the difficulty in measuring alpha particles on rough

surfaces and is taken from NUREG-1507, Minimum Detectable Concentrations with Typical Radiation Survey Instruments for Various Contaminants and Field Conditions. The approach for using these factors is documented in the Final Status Survey Plan for this project and the September 14, 1996 Responses to NRC Comments on the Plan.

The data conversion and statistical analysis techniques in NUREG/CR-5849 were used to convert the reported data into a form that permitted a direct comparison with residual contamination guidelines and thus assess if remediation goals had been met. The calculation methodology is shown with the analyzed data in Appendix A of this Report. Surface activity measurements were converted to units of dpm/100cm^2 by applying instrument efficiencies, the conversion factors discussed above and detector area. Exposure rates are represented in uR/h, and soil concentrations in pCi/g. The data reported in Appendices A-D has been adjusted by subtracting the natural background levels except for the soil analyses.

Additional decontamination was performed (e.g. multiple scabbling passes) whenever the remediation control survey measurements showed that guidelines were not being met. As a result, there were no remaining "hot spots" and "hot spot" averaging criteria did not need to be applied.

3.8 Records

All soil samples. smears, logbooks, and original survey data records have been archived at the Engelhard or laboratory facility and will be held until such time as authorized by the NRC for disposal.

4.0 SURVEY FINDINGS AND RESULTS

Appendices A-D contain tables of radiological data collected during the final status survey and 1994 characterization survey that provide the basis for verifying that the residual contamination objectives have been achieved. Summary tables and statistical data interpretations are included in the appendices.

4.1 Background Levels

Background surface activity measurements for the scabbled concrete and wall surfaces are provided in Tables A2 - A14. Background average alpha activity for the ceramic tiles, steel and sheetrock surfaces are found in Table A1 for both the large area and G-M detectors. Background interior exposure rates averaged 6 uR/h. Average background soil concentrations, as determined from the 1994 - 1995 exterior soil characterization survey, were 0.59 pCi/g for U238, 0.05 pCi/g for U235, and 1.0 pCi/g for U234, or 1.64 pCi/g total uranium.

4.2 Building Surveys

4.2.1 Surface Activity Measurements

Tables A-2 through A-14 present the results of final surface activity measurements in the individual rooms comprising the two survey units. The measured counts and corresponding surface activity is provided as well as the converted effective alpha activity, applying the appropriate conversion factor (2.5 for the gas flow proportional detector, and 3.2 for the G-M pancake detector). Bolded entries represent measurements made by the G-M detector. Each table also includes the measurement minimum detectable activity (MDA) and uncertainties. Removable activity is

provided for each room in the appropriate table based on the analysis of smears. The results of the QA analysis of the decontaminated surfaces is provided in Tables A21 - A24. All final measurements at each floor, wall, and overhead location were within the average uranium residual contamination guideline values of 5000 dpm/100cm^2 and removable contamination guideline of 1000 dpm/100 cm^2.

4.2.2 Scans

Scans of the floor and wall surfaces in the survey units in Building 2 were conducted prior to the initial scabbling pass and subsequent to each scabbling pass. The last remediation control scan provided the basis for conducting the final status surface activity measurements on the grid.

An additional surface scan of the floor area was conducted subsequent to all concrete and soil removal to verify that all radiologically-contaminated material had been removed and that previously surveyed floor areas were not re-contaminated. The gas flow proportional detector (425 cm^2 probe) was used to scan the floor area in ratemeter mode. If ratemeter measurements exceeded a predetermined rate (approximately 3500 dpm/100cm^2 total uranium), 30 second scalar measurements were taken. The results of the scan showed no areas of contamination above the 5000 dpm/cm^2 total uranium guideline.

4.2.3 Unaffected Area Surveys

The unaffected area, as defined by the results of the 1994 interior characterization survey and additional measurements during the final status survey QA program, encompasses Building 1 interior floor and wall

surfaces and certain Building 2 rooms. The data base supporting this designation is provided in Section 4.3 of the Radiological Characterization Survey Report of August 1994, and is summarized in Tables B1-B6. The surface activity readings have been converted to alpha levels and the measurement MDAs, and uncertainties included in the tables.

4.2.4 Exposure Rates

Exposure rates in each of the rooms in the survey unit are provided in Table A19. They ranged from 0 to 2 uR/h above background. All values are within the guideline levels of 5 uR/h above background. QA results are in Table A25.

4.3 Soil Surveys

Soil surveys were conducted of the soil under the piping that was removed from the concrete floor, and of the soil at the base of the expansion joints. The soil surfaces were scanned to locate any hot spots and samples collected at intervals along the pipe runs at points where the pipes had been cut and where the existence of pockets of contaminated soil were suspected. The results of the analyses of these verification soil samples are provided in Table A18, and related to the trench and joint locations shown in Figures A-2 - A-15 (cross-batched areas). QA soil analyses, which included samples collected during the remediation and final status surveys, are provided in Table A20. None of the verification samples contained uranium in excess of the soil residual contamination guidelines of 30 pCi/g total uranium.

The soil concentrations were determined by gamma spectroscopy. This technique quantifies the U-238 and U-235 present in the samples. To determine the total uranium content of a sample, the U-235 concentration

was multiplied by a factor of 21 to estimate the U-234 concentration. This factor of 21 is based on the U-234 to U-235 ratios determined by alpha spectroscopy for 42 samples during the 1994-1995 exterior characterization investigations. The average ratio for the 42 samples was 19 with an average deviation from the mean of 2 for those samples. The factor of 21 (19 & 2) was used as a conservative estimate, since the total uranium concentration is almost exclusively due to the U-234 concentration.

4.4 Roof Material Surveys

The roof surfaces and drains were originally treated as part of the exterior of the plant and the characterization data presented in Section 3.4.7 of the Exterior Site Characterization Program Report of October, 1995. The demolition of the building prior to the exterior decontamination program requires that the radioactivity on roof surfaces be assessed as part of this interior program and needs to be verified as being below residual contamination levels. Accordingly, the data and interpreted results for Building 2 are also being provided in this report. Table C1 provides the results of the beta gamma surface scans of the building roof surface and drains at each roof grid intersection (see Figure C-1) and shows the surface measurements well within average surface contamination guidelines. Table C2 provides the U238, U235, U234, and total uranium analyses of five composite roof material samples taken of the material comprising the original Building 2 roof surface. Average total uranium concentration in these samples ranged from 3.1 - 23.3 pCi/g. The maximum concentration of 23.3 pCi/g for sample EP-RFIC

is below the residual contamination criteria of 30 pCi/g. Thus decontamination of the roof material is not required.

4.5 Data Evaluation

Table A17 summarizes the surface measurements in Survey Units 1 and 2 in the affected area. Average values and standard deviations are provided for the floor, wall, and ceiling measurements and for the floor smears in each survey unit. Comparison of the average values in the survey units with the guidelines showed that the guidelines level are satisfied at the 95% confidence level.

Tables A22 and A24 provide comparable summary data for the total alpha surface and removable activity, respectively, obtained during the final QA survey. Applying the analytical approach in NUREG/CR-5849, a comparison of the differences of the means of the final surface measurements and the corresponding QA measurements was made, with the results showing the differences to be insignificant at the 95% confidence level.

Tables B4 and B6 present summaries of the surface floor and wall measurement taken in the unaffected area. averages and standard deviations are provided. The guidelines were satisfied at the 95% confidence level.

4.6 Special Surveys

This section documents surveys that do not readily fit into a previous category.

4.6.1 Building 2 Exterior

Horizontal surfaces on the exterior of Building 2 were surveyed for contamination (Figure D-1 and Table D1). These surfaces included window sills, door thresholds, and foundation edges. The roof was excluded from this survey (see Section 4.4). A G-M detector with a ratemeter-scalar was used (15 cm^2 probe) for the survey. Horizontal surfaces were first scanned. A one-minute scalar reading was taken at the point on the surface with the highest ratemeter reading. Only two measurements were elevated above background. One measurement, taken on a window sill below a pipe penetration in 2M, was elevated but below the 5000 dpm/100 cm^2 total uranium (alpha) guideline. The other elevated measurement was on a window sill of the tunnel. This activity level exceeded the total uranium guideline value and the window sill was removed and disposed of as radioactive waste. The interior sill for this window was identified as contaminated during the 1992 characterization survey (and remediated during decontamination activities).

As shown in Table D1, all other exterior surface locations measured had effective alpha activity levels well below the guideline value.

4.6.2 Electric Buss Duct

Building 2 contained six 440 volt electric buss ducts. Five of these ducts exhibited contamination, generally limited to hold-down clips on the top of the duct. These ducts were decontaminated with wire brushes and vacuumed. Surveys demonstrated that, following decontamination, activity levels for duct surfaces were well below the 5000 dpm/100 cm^2 total uranium guideline. However, one of these contaminated ducts, 2-1

running from 2L through 2F and 2C to 2A, was contaminated throughout the top duct surface and could not be decontaminated. Therefore, it is being handled as radioactive waste.

4.6.3 Room 2N Overhead

Most of the overhead surveys in Building 2 indicated that the upper walls, ceiling, and ceiling structural members did not have contamination levels significantly greater than background. One area that did exhibit elevated measurements, including areas above the 5000 dpm/100 cm^2 total uranium guideline, was Room 2N. Contamination was seen on structural I-beams and piping at or near the room ceiling. These overhead areas were decontaminated by vacuuming, needle gunning, or removing contaminated pieces. All post remediation surveys indicated that activity levels for overhead surfaces were below the 5000 dpm/100cm^2 total uranium guideline.

4.6.4 Special Soil Area

A separate designation for certain small pockets of soil underlying the tunnel and adjacent foundation wall within the Building 2 footprint has been made. These "special soil areas" contain concentrations of uranium at levels greater than the 30 pCi/g guideline value. These special soil areas are located at a depth greater than four feet below the existing Building 2 slab. Because of the depth of these areas and proximity to the exterior, Engelhard Corporation has grouped these areas with the exterior soils for disposition in conjunction with the exterior contaminated soil. The alternative ultimately chosen for exterior soils will be more cost effective in dealing with these special soil pockets than those techniques available during the decontamination of Building 2. In

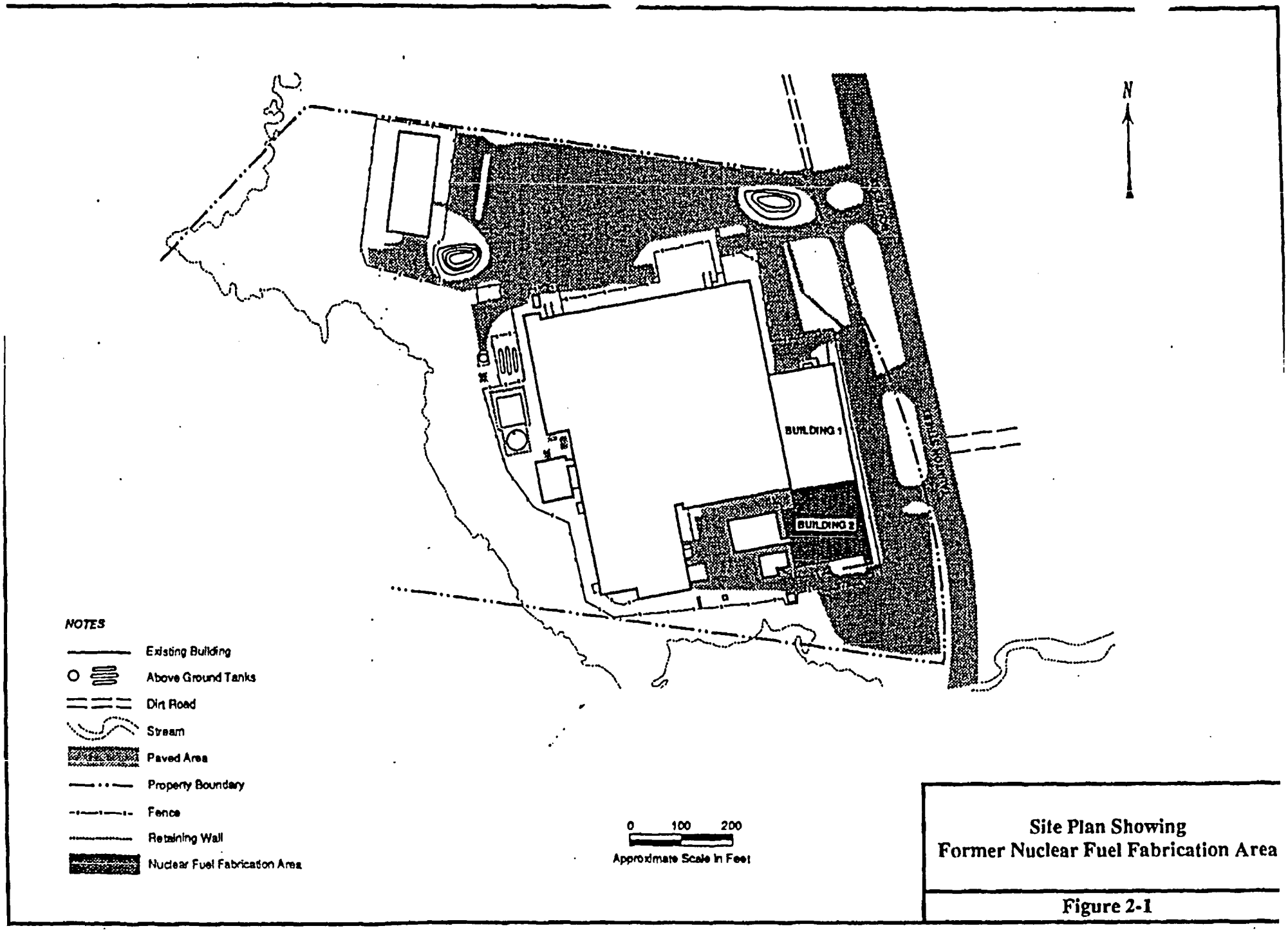
addition, their existence does not obstruct removal of the overlying building structure, which is the objective of this phase of the decommissioning.

5.0 SUMMARY

Decontamination of the affected area in Survey Units 1 and 2 of Building 2 was conducted between June and early October, 1996. Remediation control surveys were conducted to guide the decontamination effort, and a final status survey conducted during October, 1996. Independent QA surface surveys and soil analyses were performed. Results of the final status survey demonstrate that the decontamination program successfully reduced residual activity in the survey units to within the NRC limits for unrestricted use.

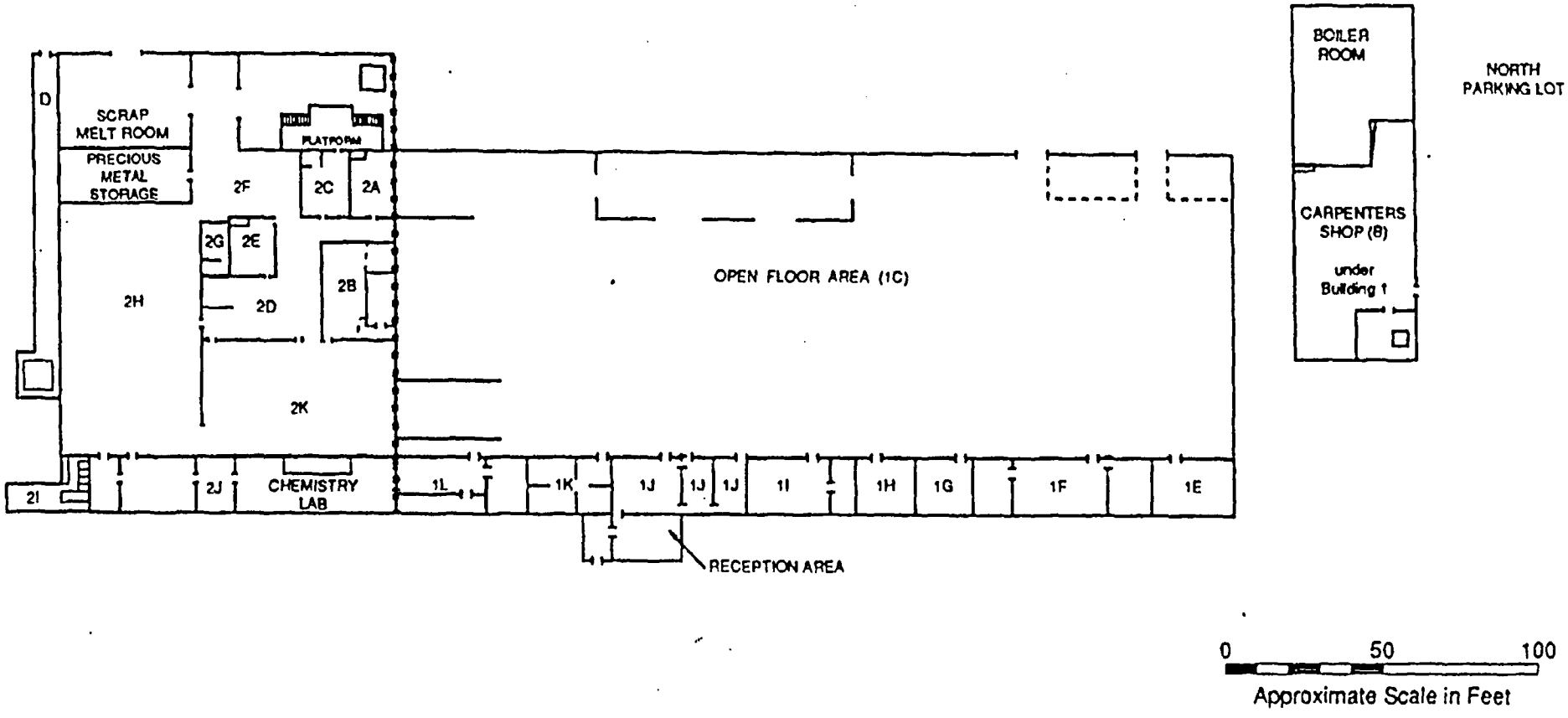
Table 3.1 Radiation Survey Instruments

Instrument Description	Applicability
425 cm^2 gas flow detector, floor monitoring configuration.	Scans and direct measurements of the floor surfaces.
424 cm^2 gas flow detector, vertical surfaces monitoring configuration.	Scans and direct measurements of the lower wall surfaces.
Ludlum Model 2221 ratemeter with Ludlum Model 44-9 G-M pancake detector (or equivalent)	Direct beta-gamma radiation surveys of the floors, walls and ceilings.
Ludlum Model 2929 dual channel scaler (or equivalent scaler instrumentation)	Benchtop scaler for alpha and beta-gamma scaler counts of smears.
Bicron uRem tissue equivalent organic scintillator ratemeter.	General Area gamma radiation surveys at one meter above surface.



Site Plan Showing
Former Nuclear Fuel Fabrication Area

Figure 2-1

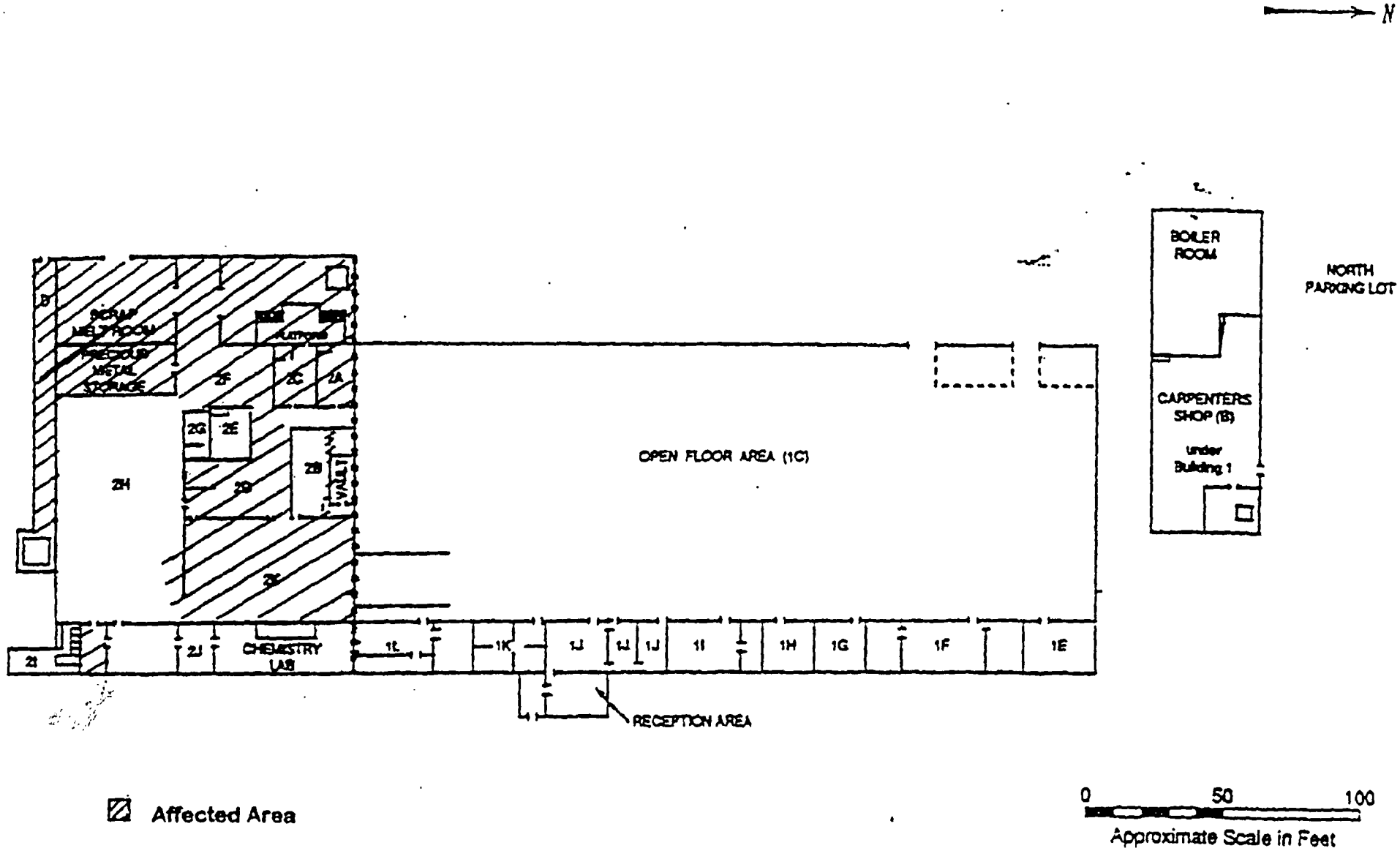


NOTE

* * * Partition wall separating building 1&2

Current Layout of Buildings 1 & 2 Floor Area and Carpenters Shop

Figure 2-2

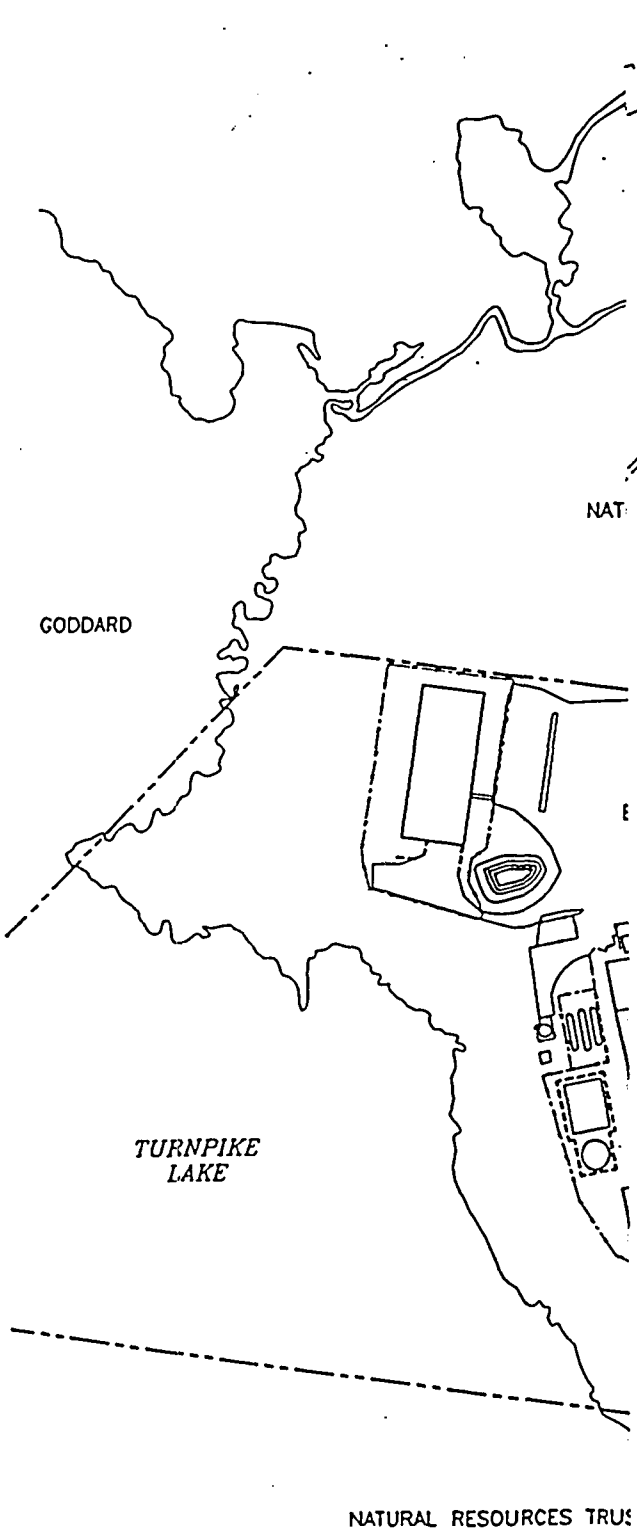


Affected Area

NOTE

▪ ▪ ▪ Partition wall separating building 1&2

Figure 2-3
Buildings 1 & 2
with Affected Area



EXPLANATION

- Existing Building
- Above Ground Tanks
- Dirt Road
- Stream
- Property Boundary
- Fence

N

0 250 500

SCALE IN FEET

ENVIRON

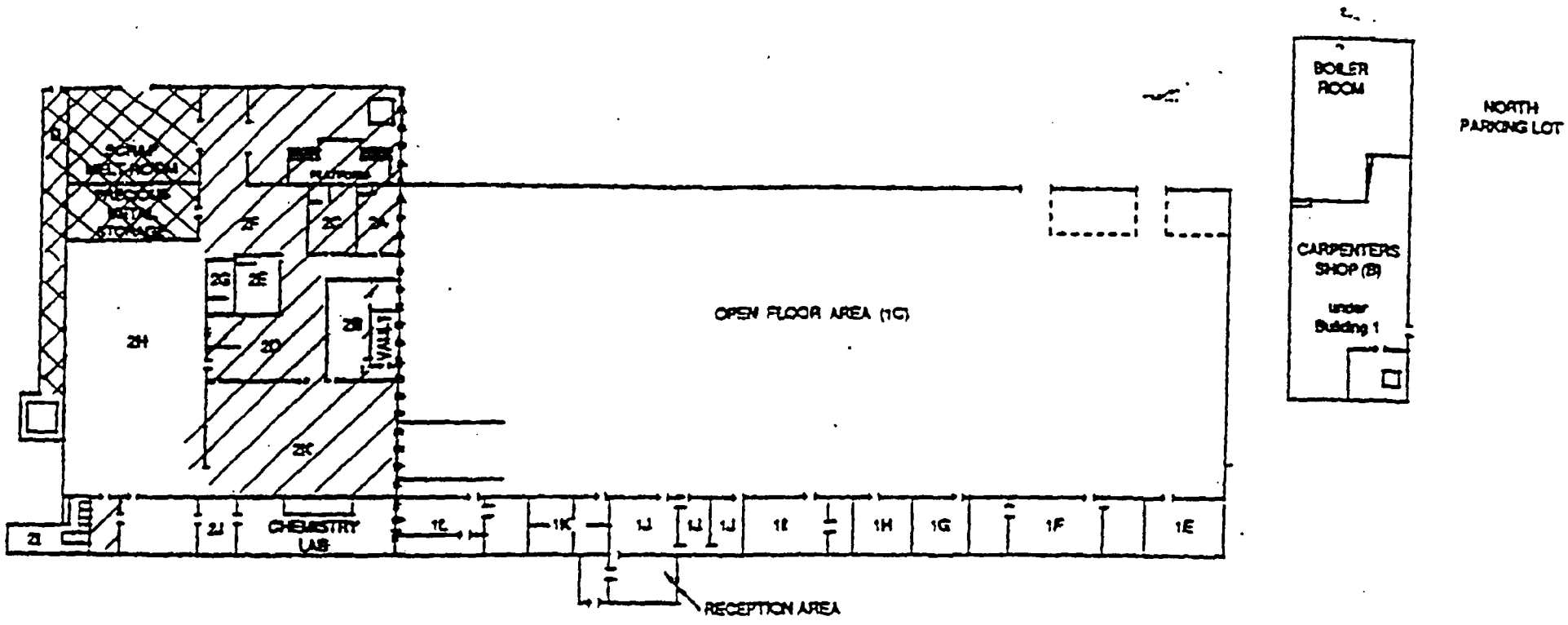
Counsel in Health and Environmental Science

5820 Shellmound Street, Suite 700, Emeryville, California 94608

Adjacent Land Use and Ownership
Engelhard Corporation
Plainville, MA

DATE:	CONTRACT NUMBER:		FIGURE
12/8/93	03-3578C		2-4
DRAFTER: DC	APPROVED:	REVISED:	

G:\03357BC\ADJPROP



Survey Unit 1

Survey Unit 2

0 50 100

Approximate Scale in Feet

NOTE

• • • Partition wall separating building 1&2

Figure 3-1
Survey Units 1 & 2

APPENDIX A

AFFECTED AREA MEASUREMENTS

- FINAL STATUS SURVEY: INTRODUCTION
- AFFECTED AREA ROOM LAYOUT AND INDIVIDUAL ROOM GRID LAYOUTS - (WITH REMOVED CONCRETE AREAS INDICATED) ROOMS 2A, 2B AND ENTRY, 2C, 2D, 2E, 2F, 2G, 2H, 2K, 2L, 2M, 2N, 2P, TUNNEL. (FIGURES A-1 THROUGH A-14)
- FINAL STATUS SURVEY: BACKGROUND (TABLE A1)
- FINAL STATUS SURVEY: ROOMS 2A THROUGH TUNNEL (TABLE A2-A15)
- FINAL STATUS SURVEY: STATISTICS (TABLE A17)
- FINAL STATUS SURVEY: SOIL SAMPLE ANALYSIS (TABLE A18)
- FINAL STATUS SURVEY: GAMMA DOSE (EXPOSURE) RATE (TABLE A19)
- FINAL STATUS SURVEY: SOIL QA (TABLE A20)
- FINAL STATUS SURVEY: QA - FLOOR MEASUREMENTS (TABLE A21)
- FINAL STATUS SURVEY: QA - FLOOR MEASUREMENTS SUMMARIES (TABLE A22)
- FINAL STATUS SURVEY: QA - REMOVABLE ACTIVITY (TABLE A23)
- FINAL STATUS SURVEY: QA - REMOVABLE ACTIVITY SUMMARY (TABLE A24)
- FINAL STATUS SURVEY: QA - EXPOSURE RATE (TABLE A25)

Final Status Survey: Introduction

Formulas

Net Measured Count Rate Units: cpm

$$= \frac{Gross\ Counts}{Count\ Time} - Background\ Count\ Rate$$

Measured Activity Units: dpm/100 sq. cm.

$$= \frac{Net\ Measured\ Count\ Rate}{Instrument\ Efficiency \bullet \left({}^{Detector\ Area}/_{100sqcm}\right)}$$

Effective Alpha Activity Units: dpm/100 sq. cm.

$$= Measured\ Activity \bullet Total\ U\ Conversion\ Factor$$

Minimum Detectable Activity (MDA) Units: dpm/100 sq. cm.

$$= \frac{2.71 + 4.65 \bullet \sqrt{Background\ Count\ Rate \bullet Count\ Time}}{Count\ Time \bullet Instrument\ Efficiency \bullet \left({}^{Detector\ Area}/_{100sqcm}\right)}$$

1.96 * Standard Deviation (2 σ error) Units: dpm/100 sq. cm.

$$= Total\ U\ Conversion\ Factor \bullet \frac{1.96 \bullet \sqrt{Meas.Counts / Count\ Time^2 + Bkgd\ Counts / Count\ Time^2}}{Instrument\ Efficiency \bullet \left({}^{Detector\ Area}/_{100sqcm}\right)}$$

Notes

1. Entries in bold are for G-M detector (15 sq. cm probe). Other detector measurements are for large area proportional detector (425 sq. cm). Smears are for 100 sq. cm.

2. Total U Conversion factors: 2.5 for large area detector, 3.2 for G-M detector, 1.0 for smears.

3. Grid locations not in the database are not applicable due to room configurations (removed or no walls, cut floors or expansion joints, *et cetera*)

4. G-M detectors and smears represent 1 minute counts. Large area detector values are for 0.5 minute counts.

5. Survey Unit 1: 2A, ENTRY, 2B, 2C, 2D, 2E, 2F, 2G, 2H, 2K, 2N, and, 2P.
   Survey Unit 2: 2L, 2M, and, TUNNEL

6. A Letter,Number designation (*e.g.*, C,3) is a point on the floor. An @ sign in front of a Letter,Number designation (*e.g.*, @C,3) is a point on the ceiling over the floor point.
   A Letter, Number, Number designation (C,0,0+1) indicates a wall location. The second number is the distance is from the wall-floor interface (*e.g.*, +1 meter, -1 meter).

FIGURE A-1 ENGELHARD PLANT AFFL ED AREA ROOM LAYOUT

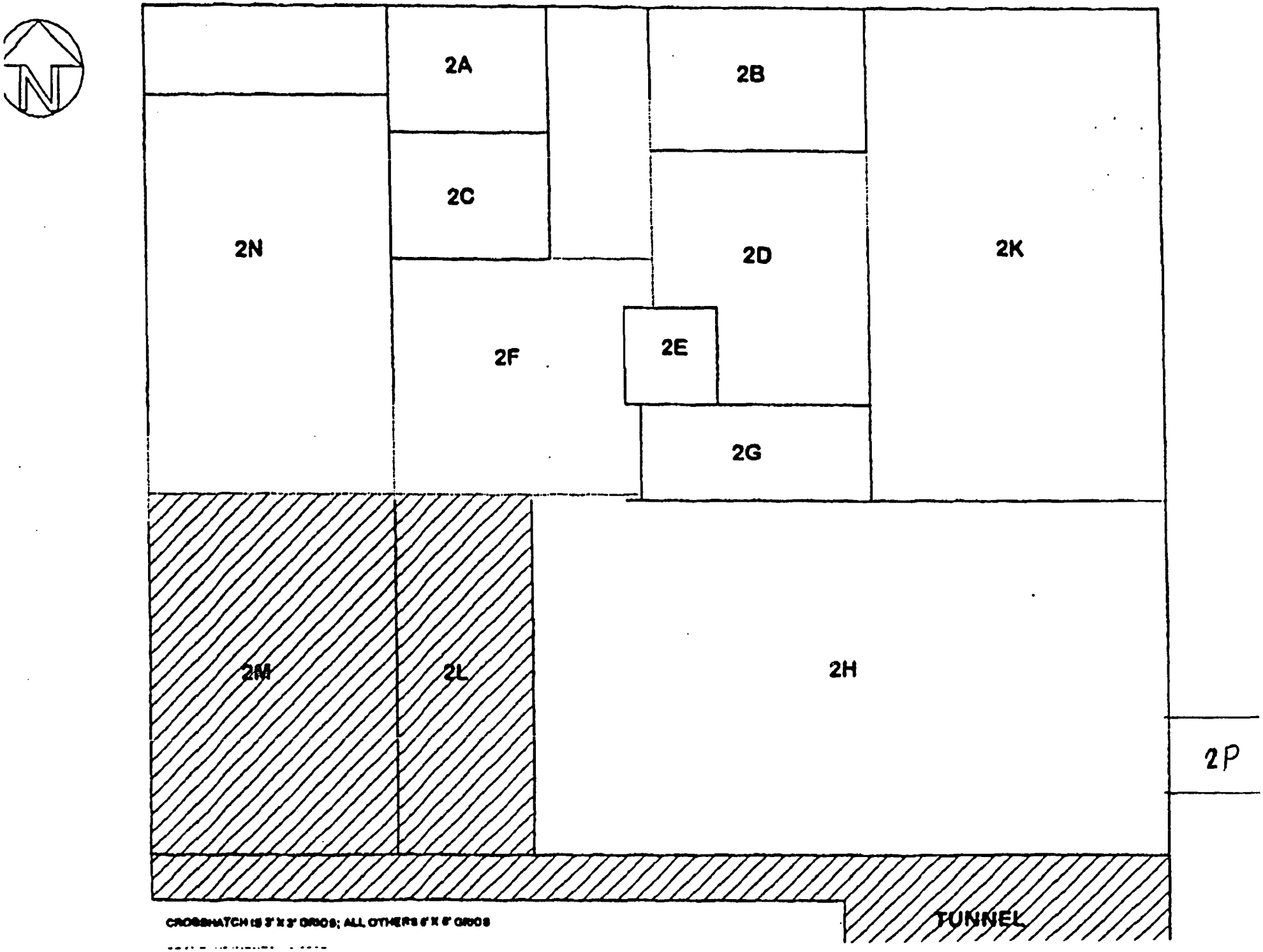
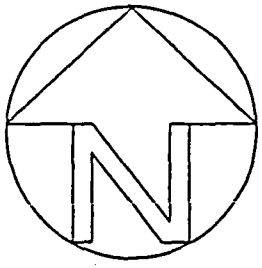
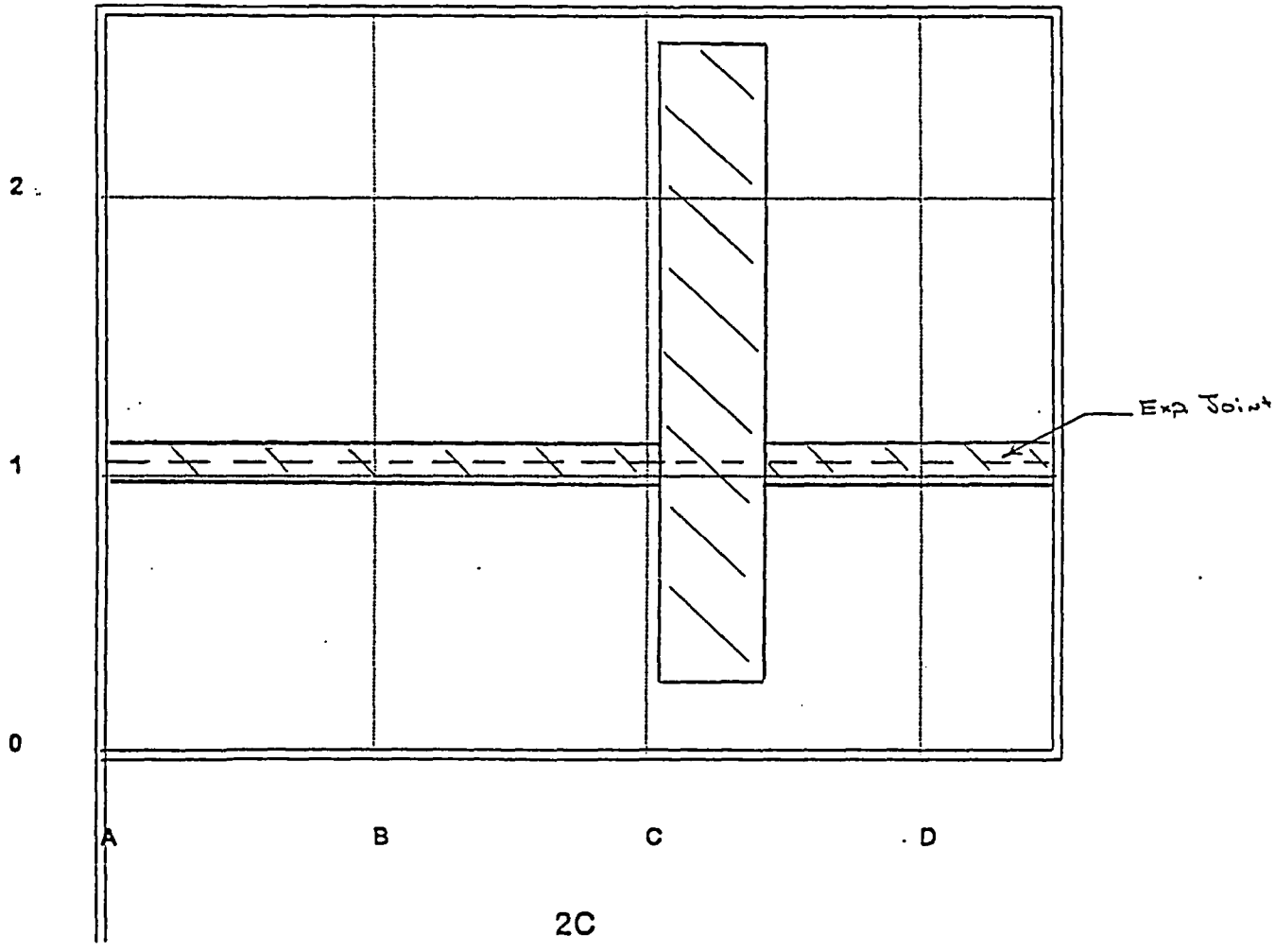


FIGURE A-2

ENGELHARD PLANT

ROOM 2A





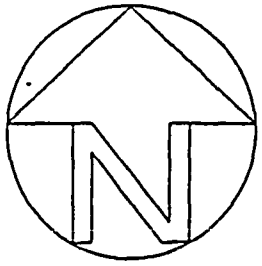
2C

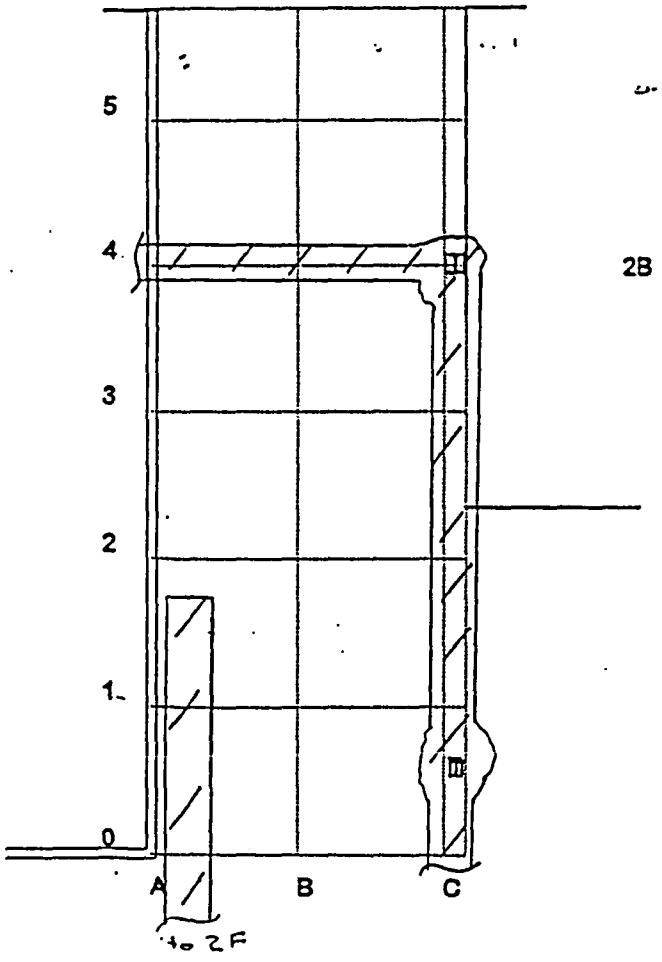
NOTE;
CROSS-HATCHED AREA IS SOIL UNDER FOUNDATION SLAB EXPOSED BY REMOVAL OF PIPING AND EXPANSION JOINTS

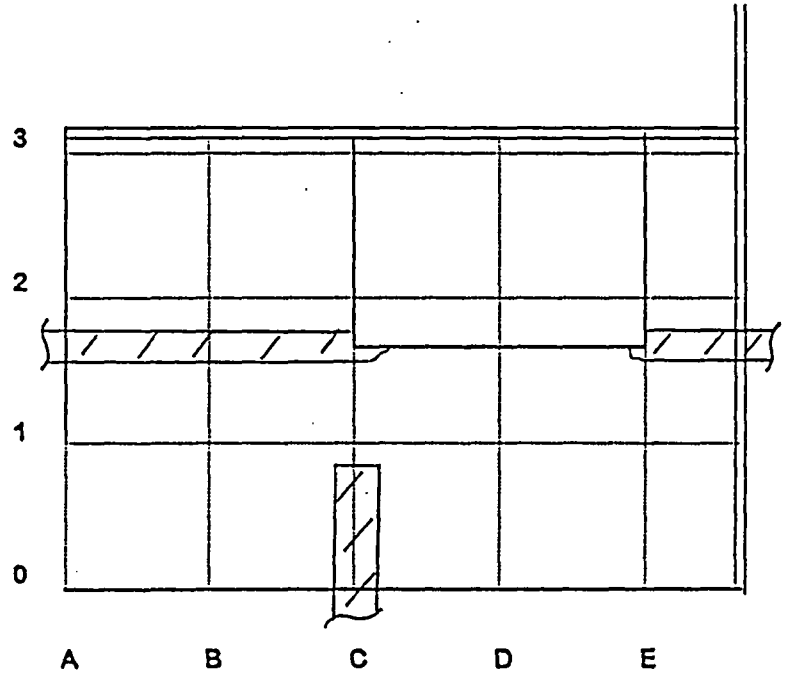
6' X 6' GRID

FIGURE A-3

ENGELHARD PLANT
ROOM 2B AND ENTRY





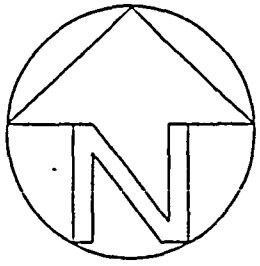


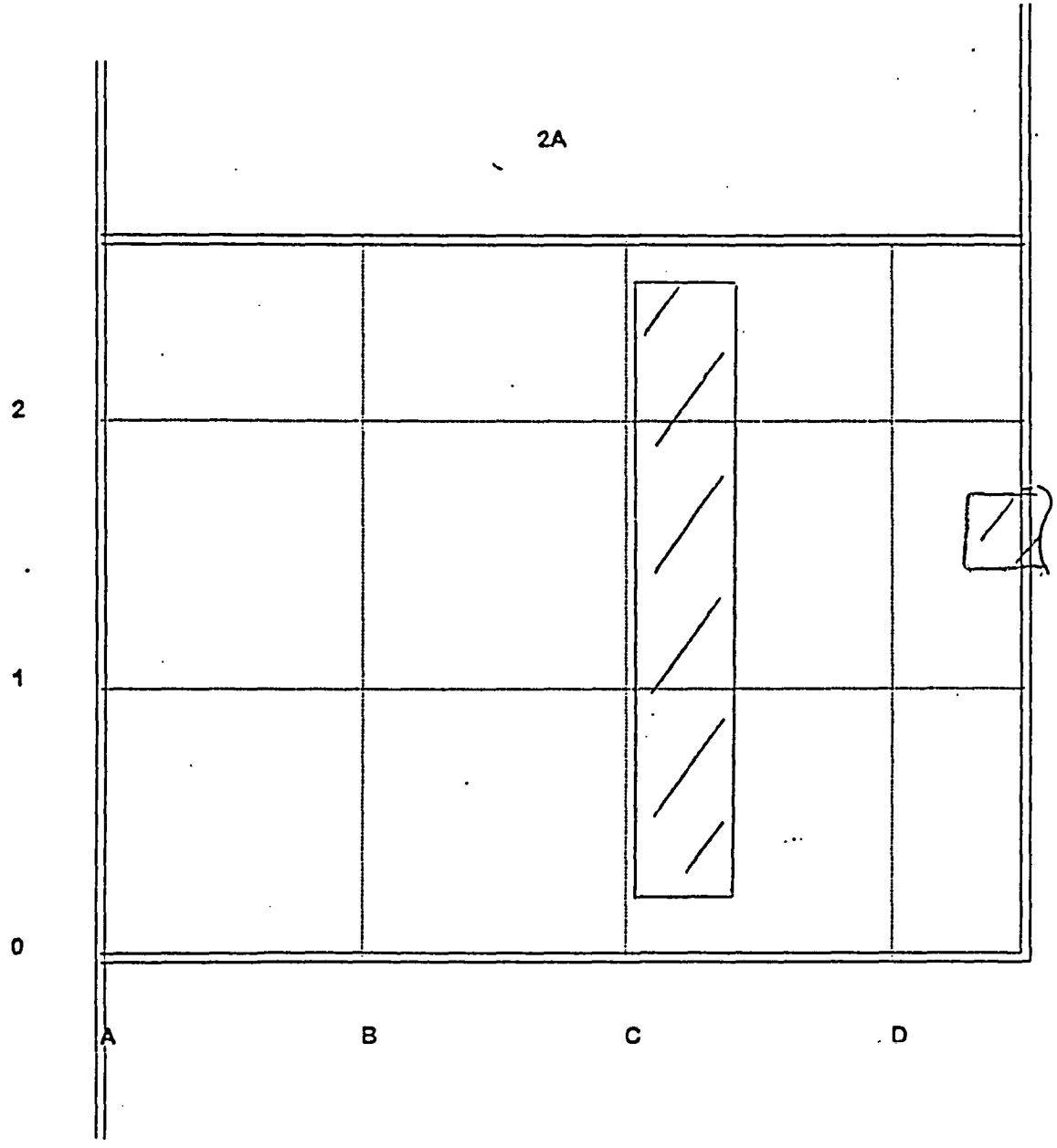
6' X 6' GRID

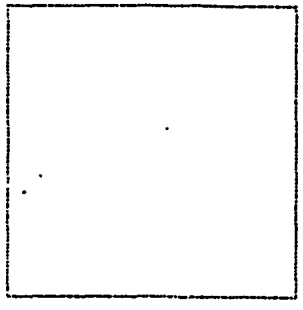
FIGURE A-4

ENGELHARD PLANT

ROOM 2C



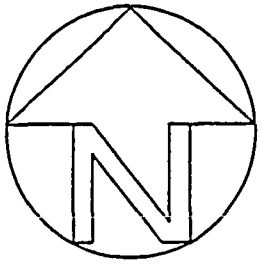


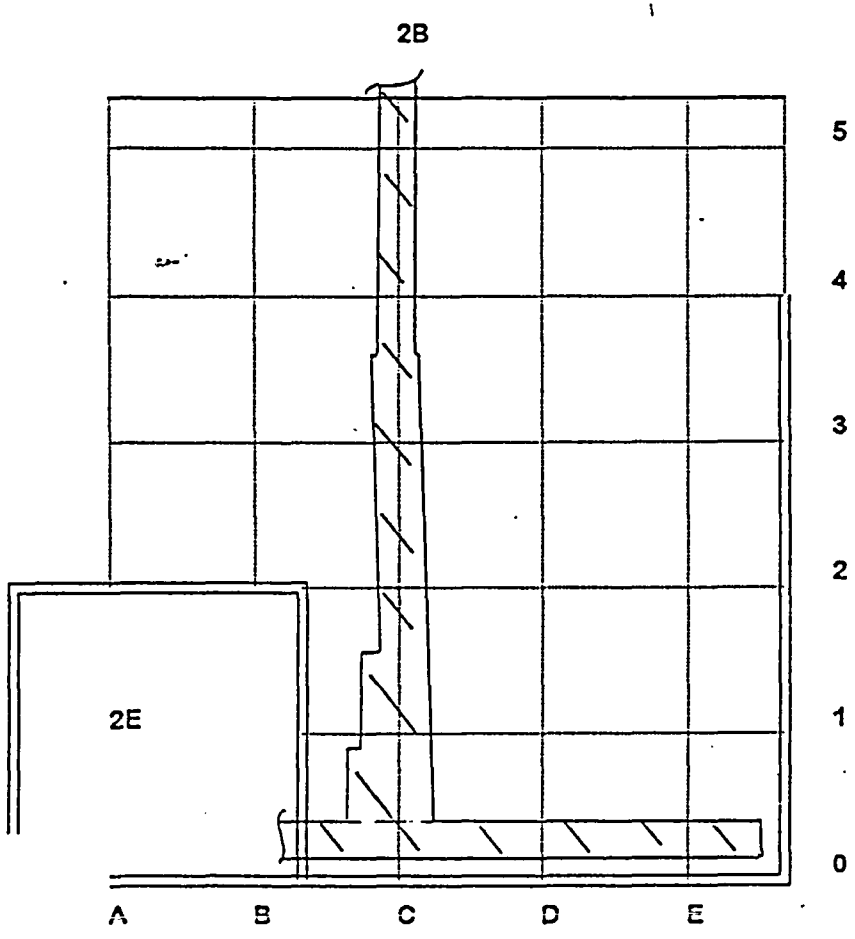


6' X 6' GRID

FIGURE A-5

ENGELHARD PLANT
ROOM 2D





6' X 6' GRID

FIGURE A-6

ENGELHARD PLANT
ROOM 2E

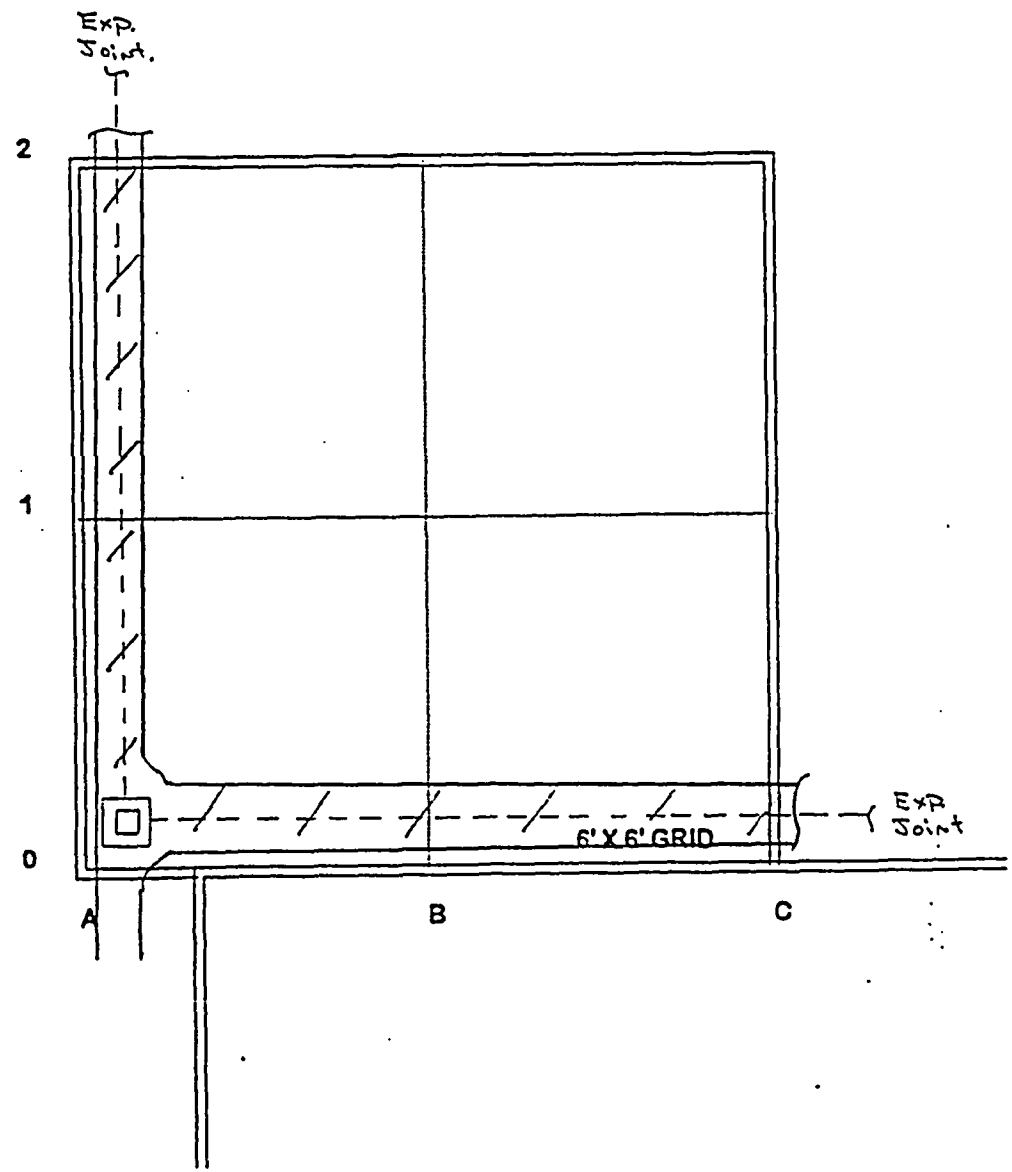
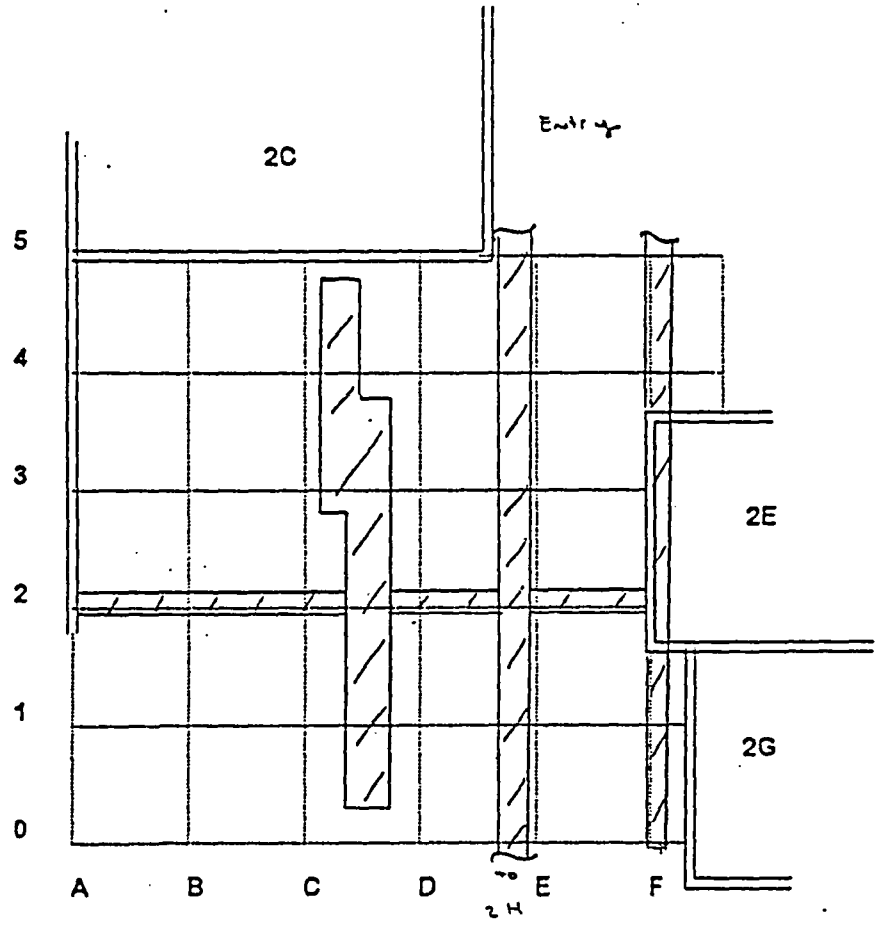


FIGURE A-7

ENGELHARD PLANT

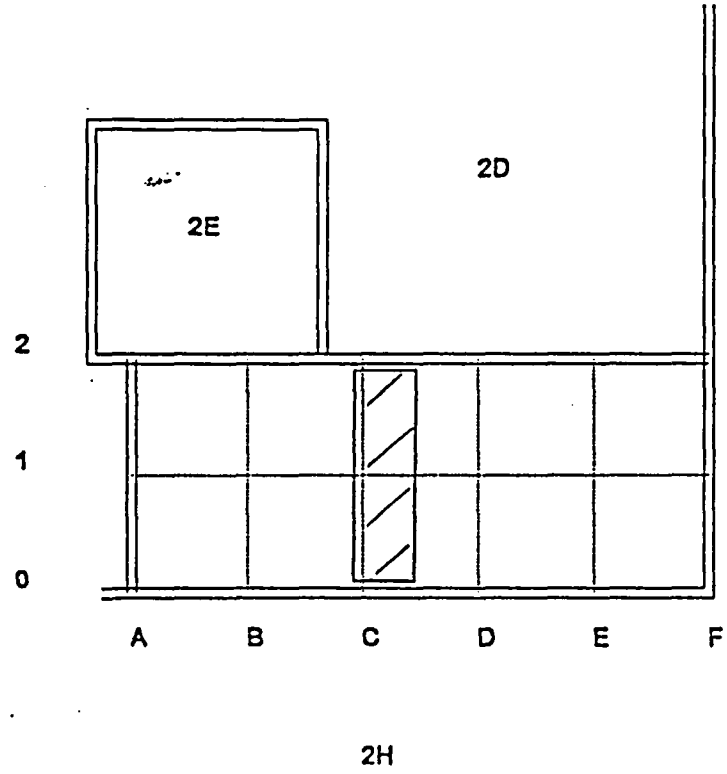
ROOM 2F



6' X 6' GRID

FIGURE A-8

ENGELHARD PLANT
ROOM 2G

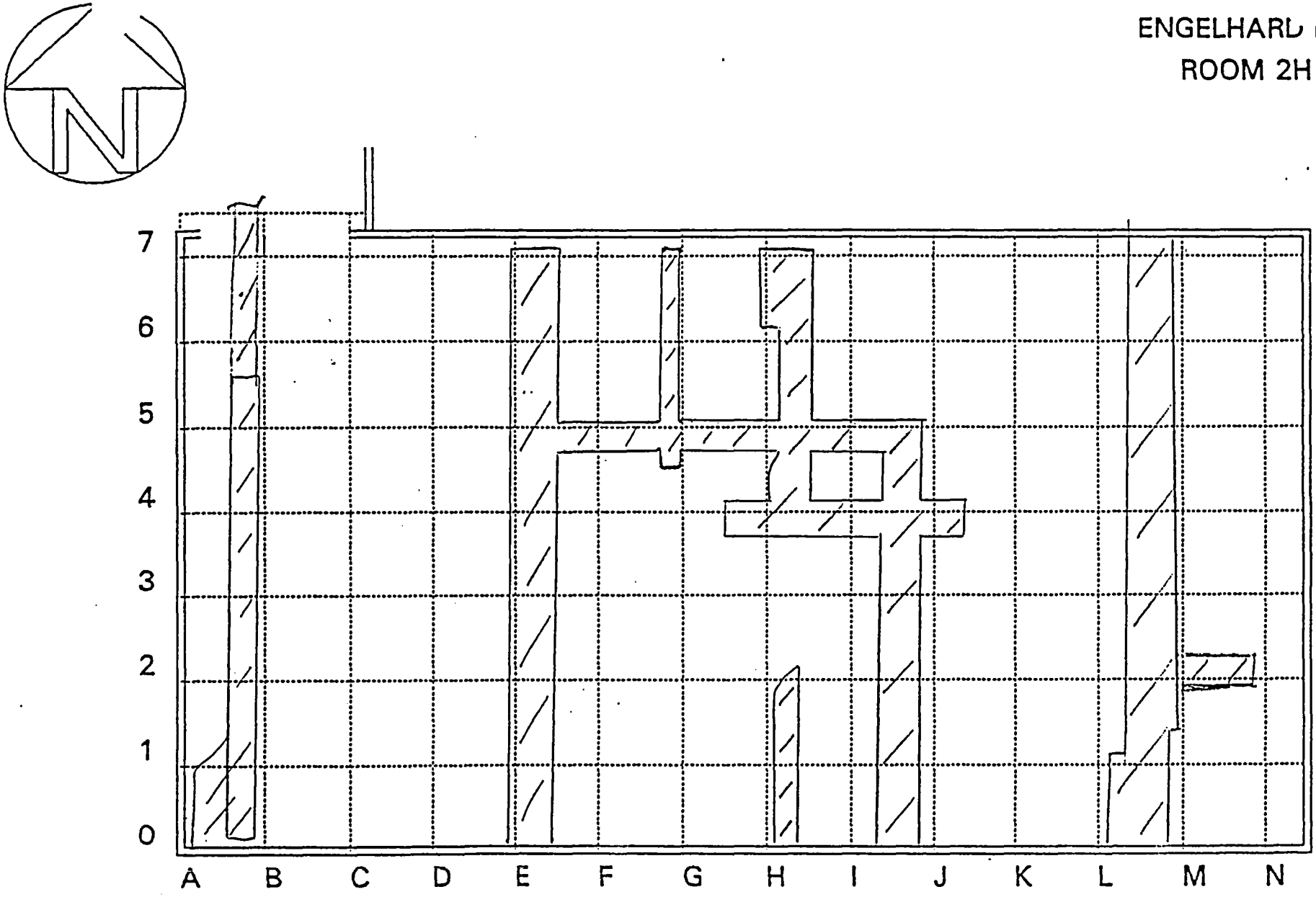


6' X 6' GRID

FIGUF 9

ENGELHARD PLANT

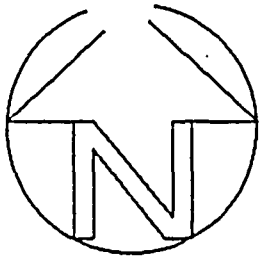
ROOM 2H

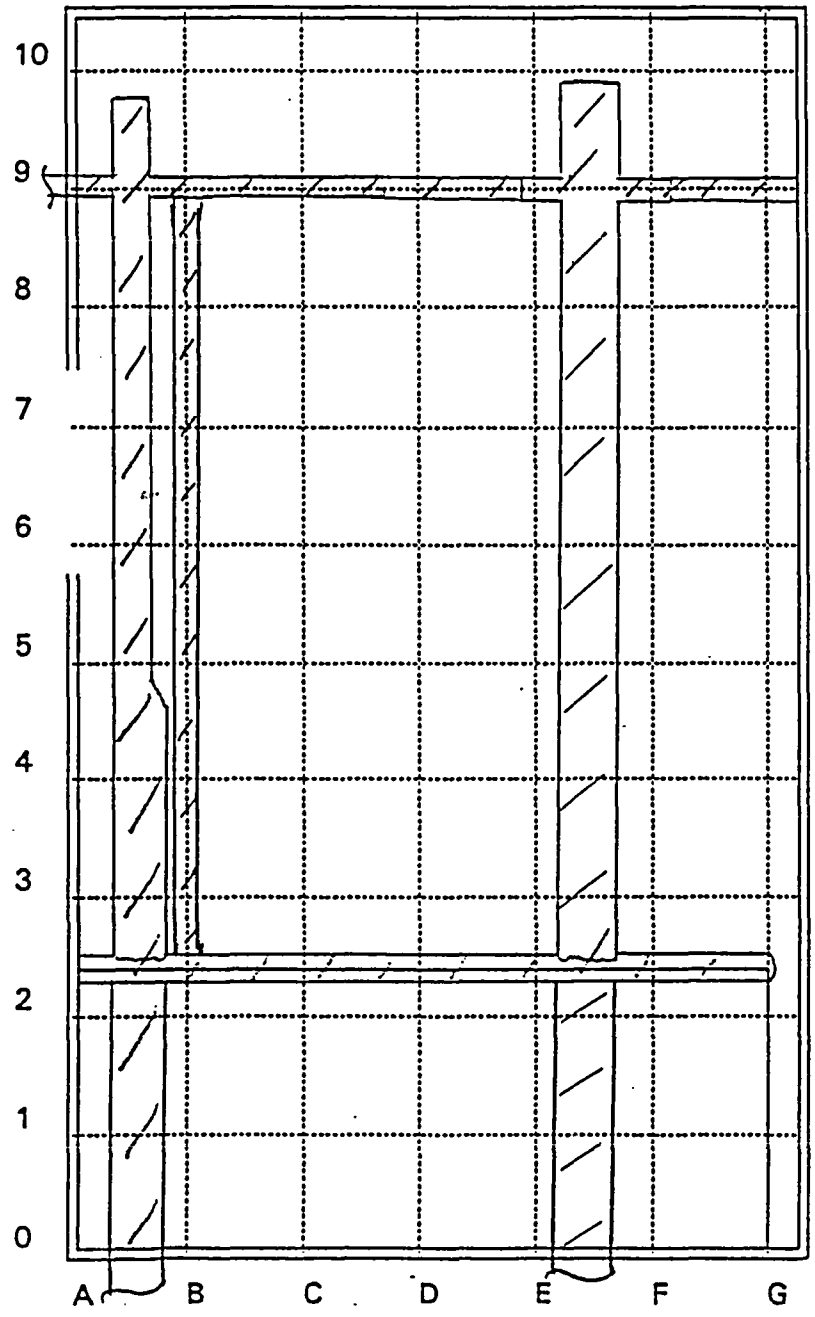


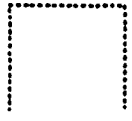
6' X 6' GRID

FIGURE A-10

ENGELHARD PLANT
ROOM 2K



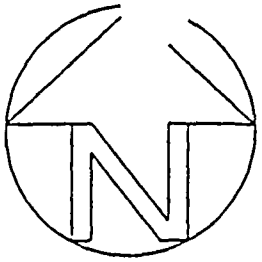


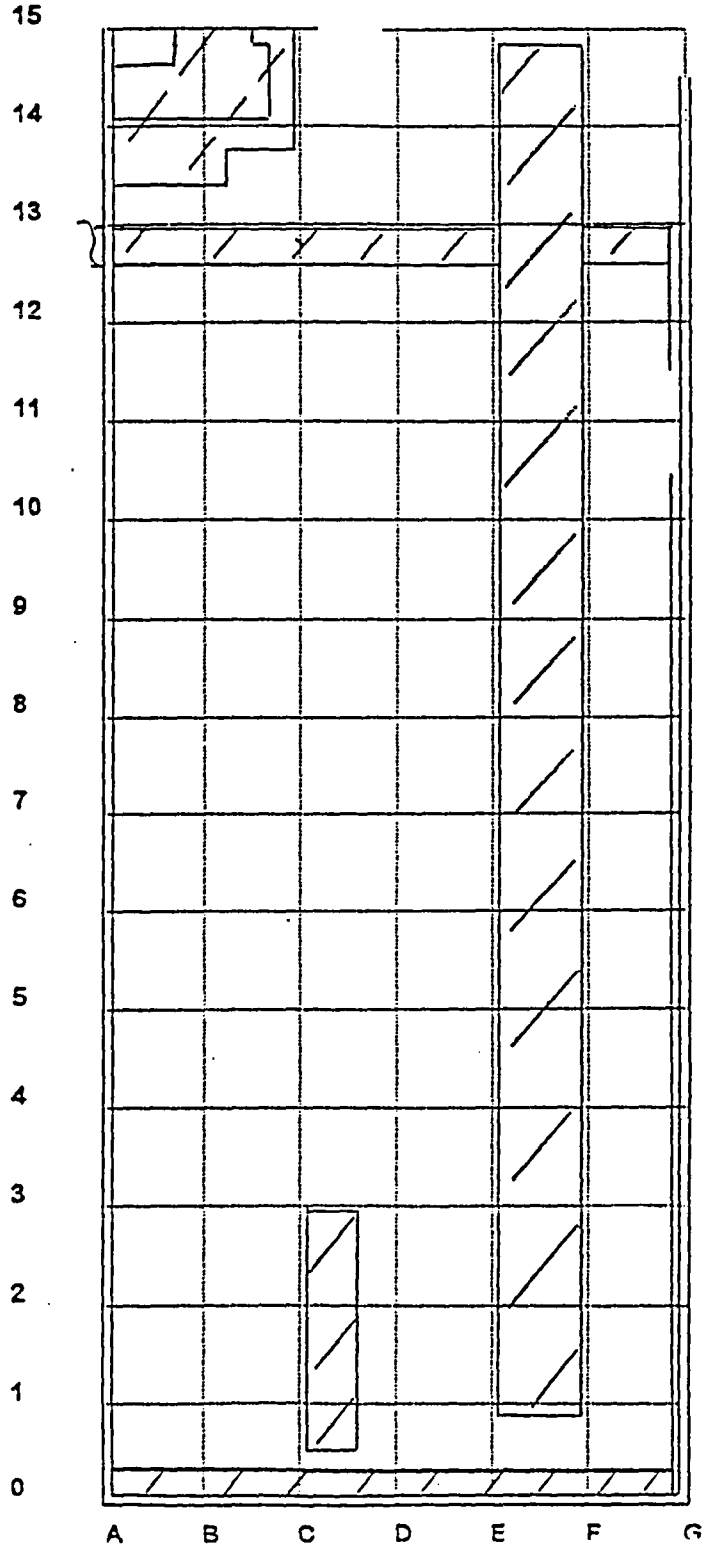


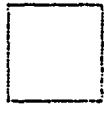
6' X 6' GRID

FIGUF 11

ENGELHARD PLANT
ROOM 2L



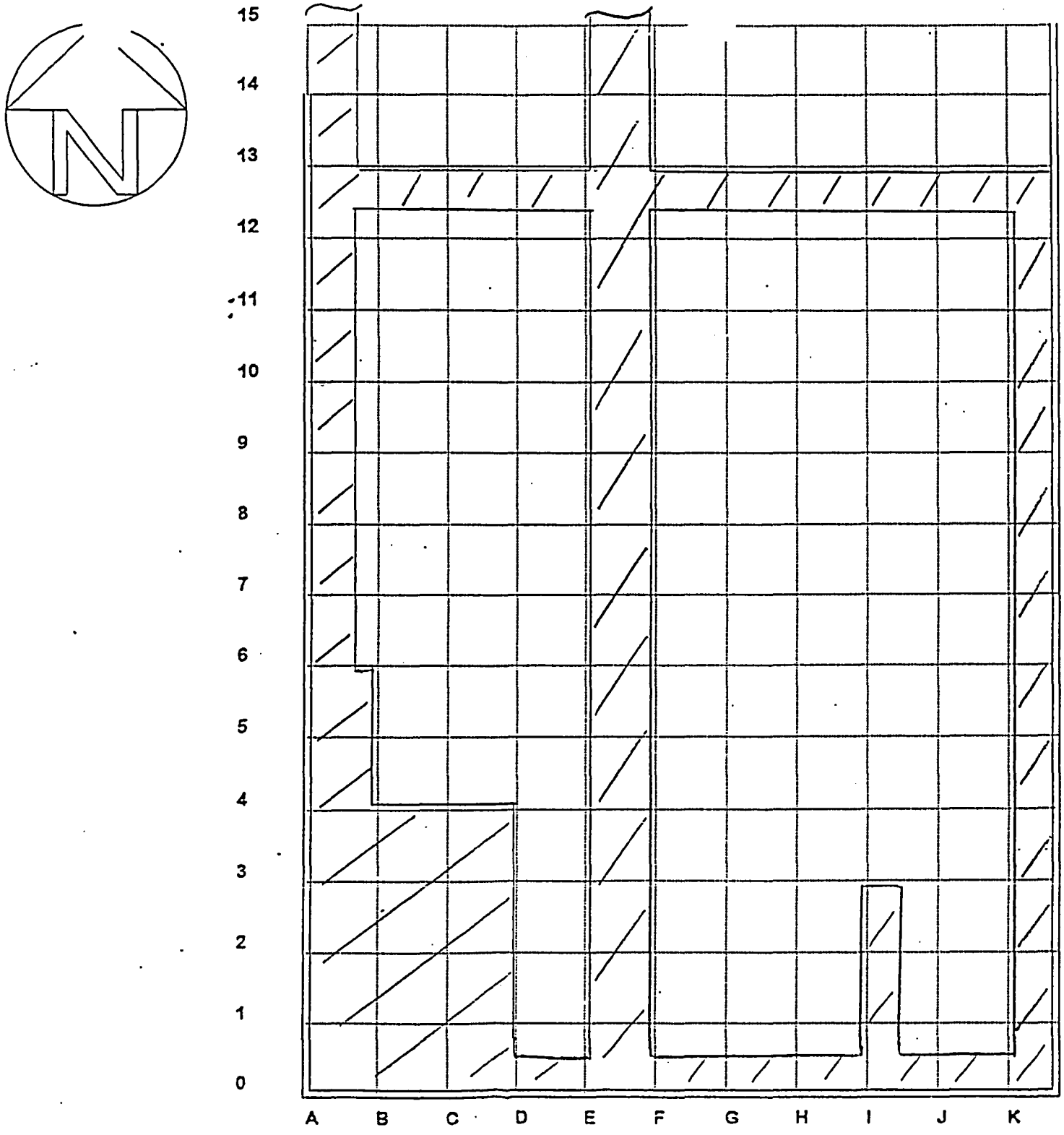




3' X 3' GRID

FIG' A-12

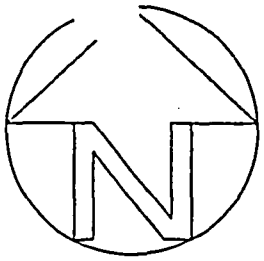
ENGELHARD PLANT
ROOM 2M

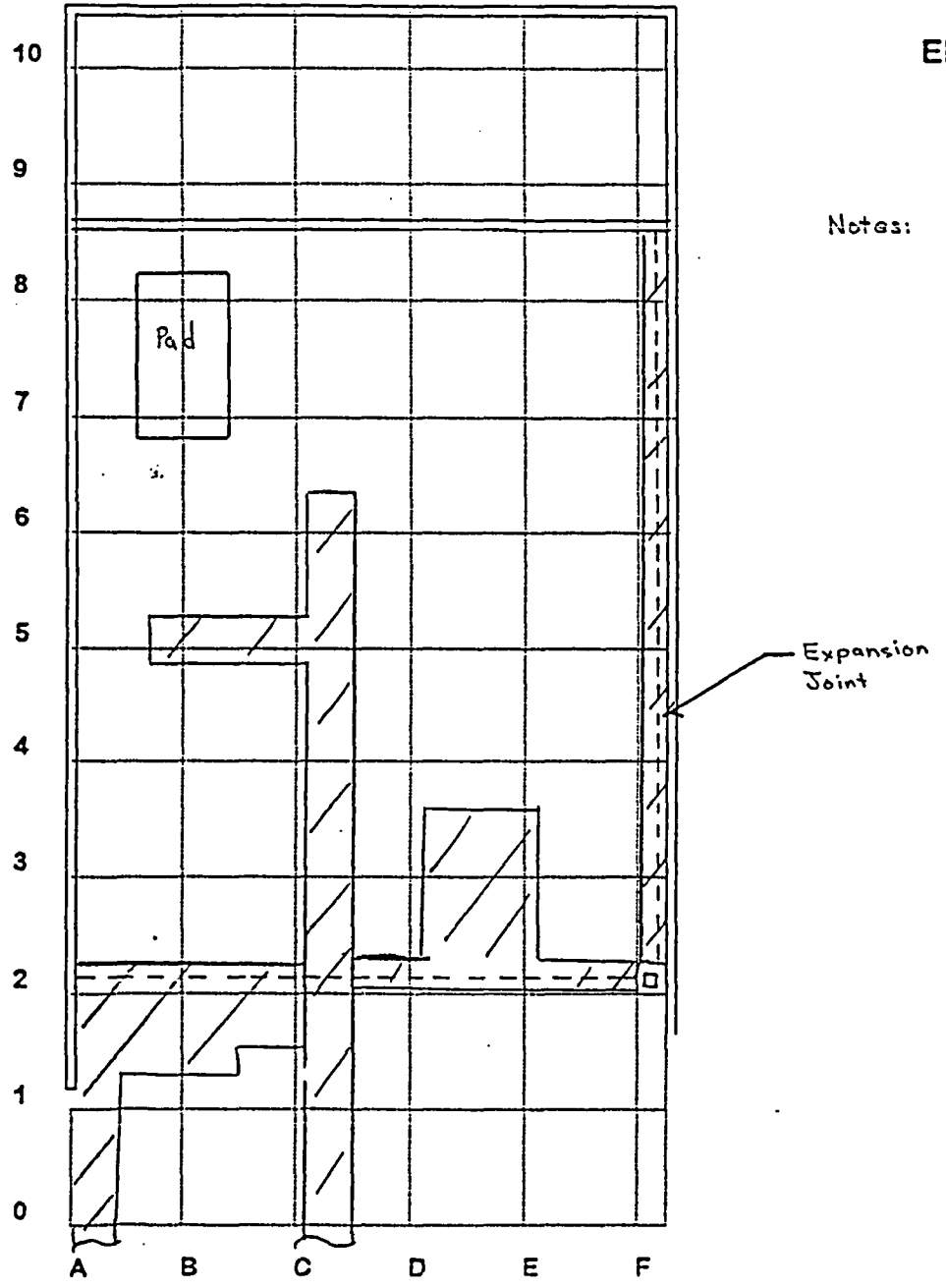


3' X 3' GRID

FIGURE A-13

ENGELHARD PLANT
ROOM 2N



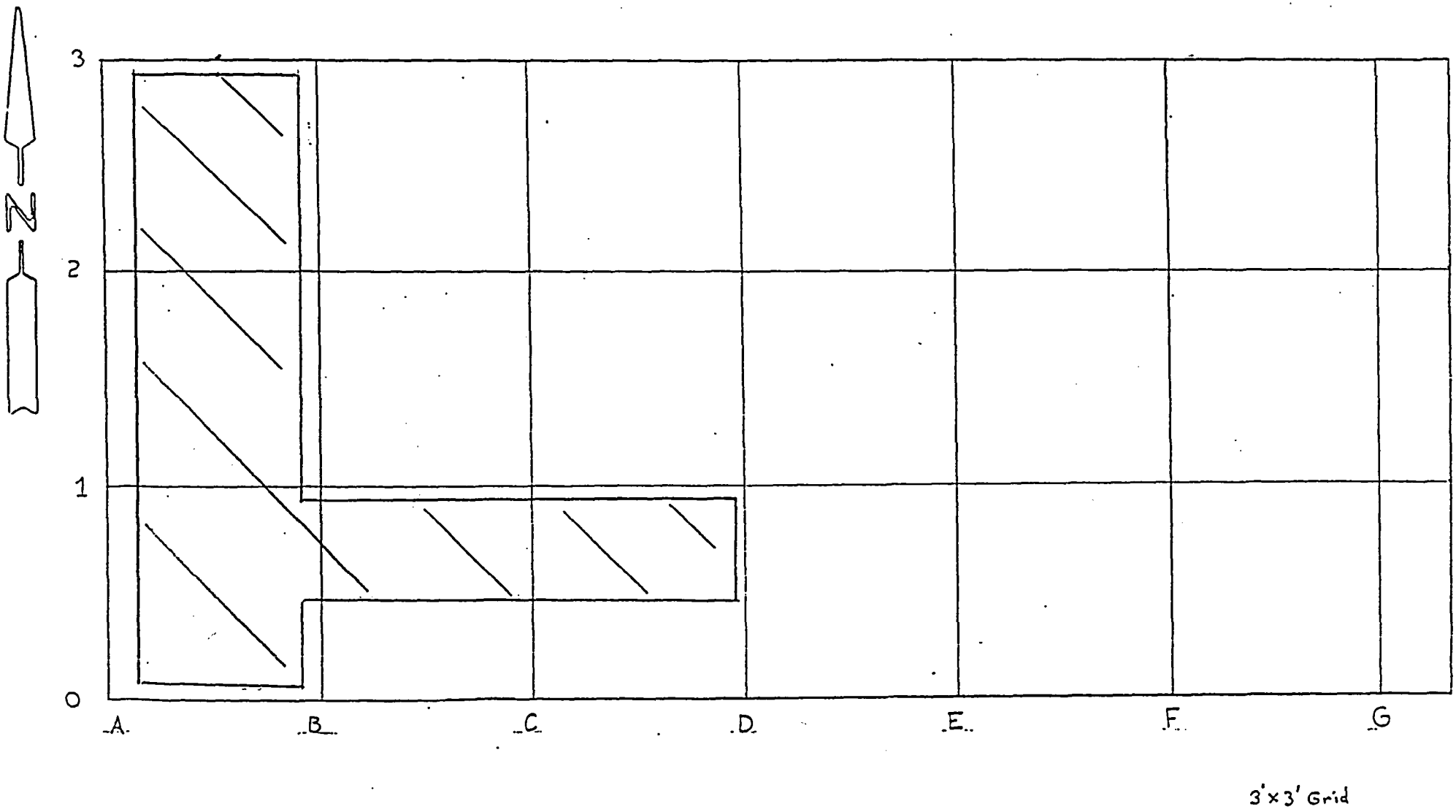


Notes:

6' X 6' GRID

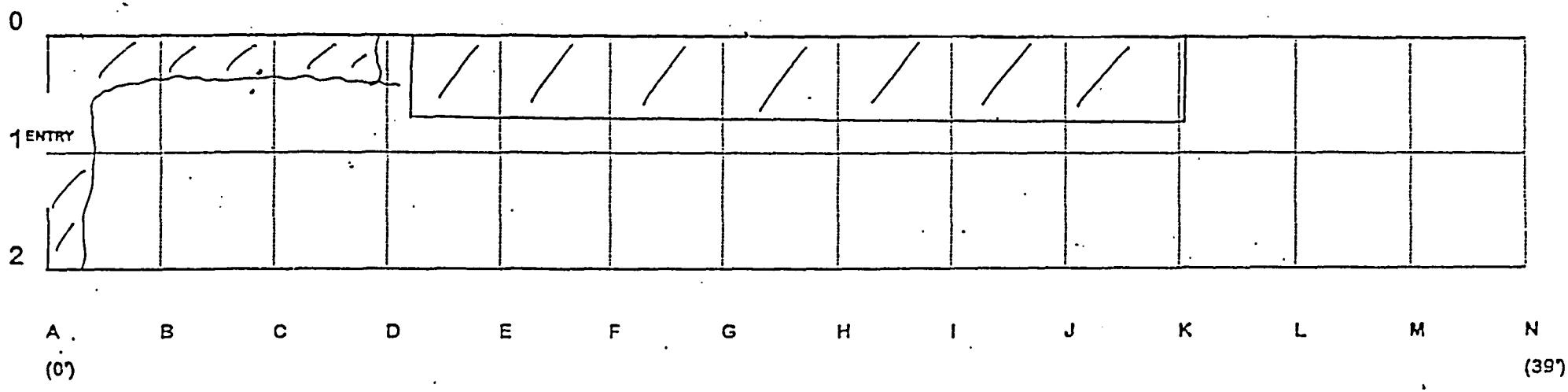
FIGURE A-14

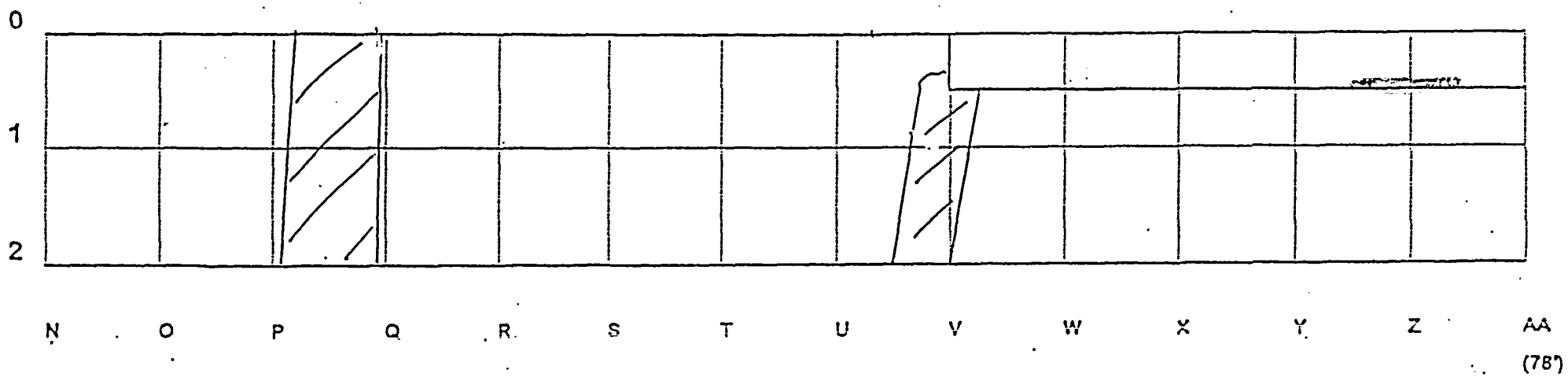
ENGELHARD PLANT
ROOM 2P



ENGELHARD PLANT TUNNEL

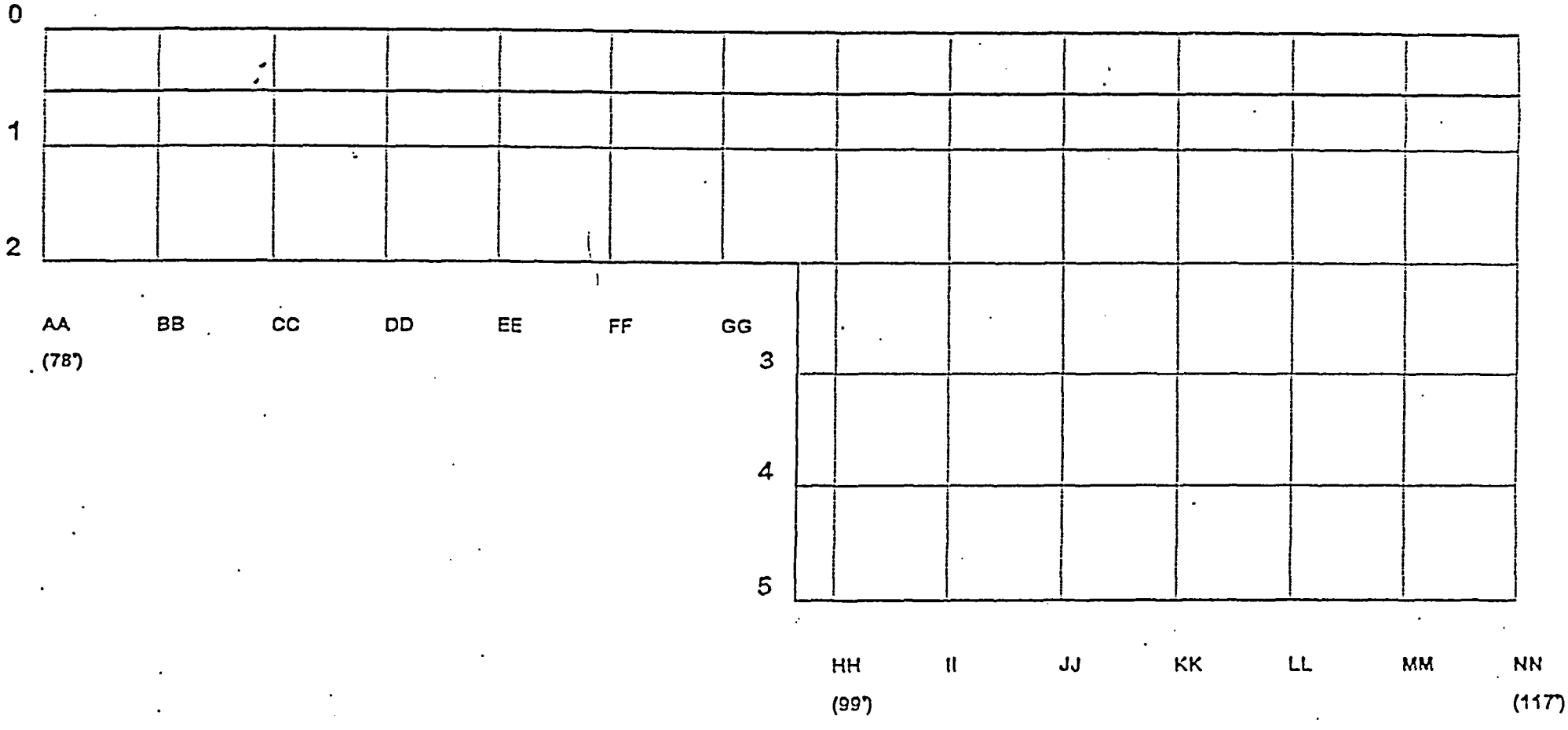
FIGURE A15





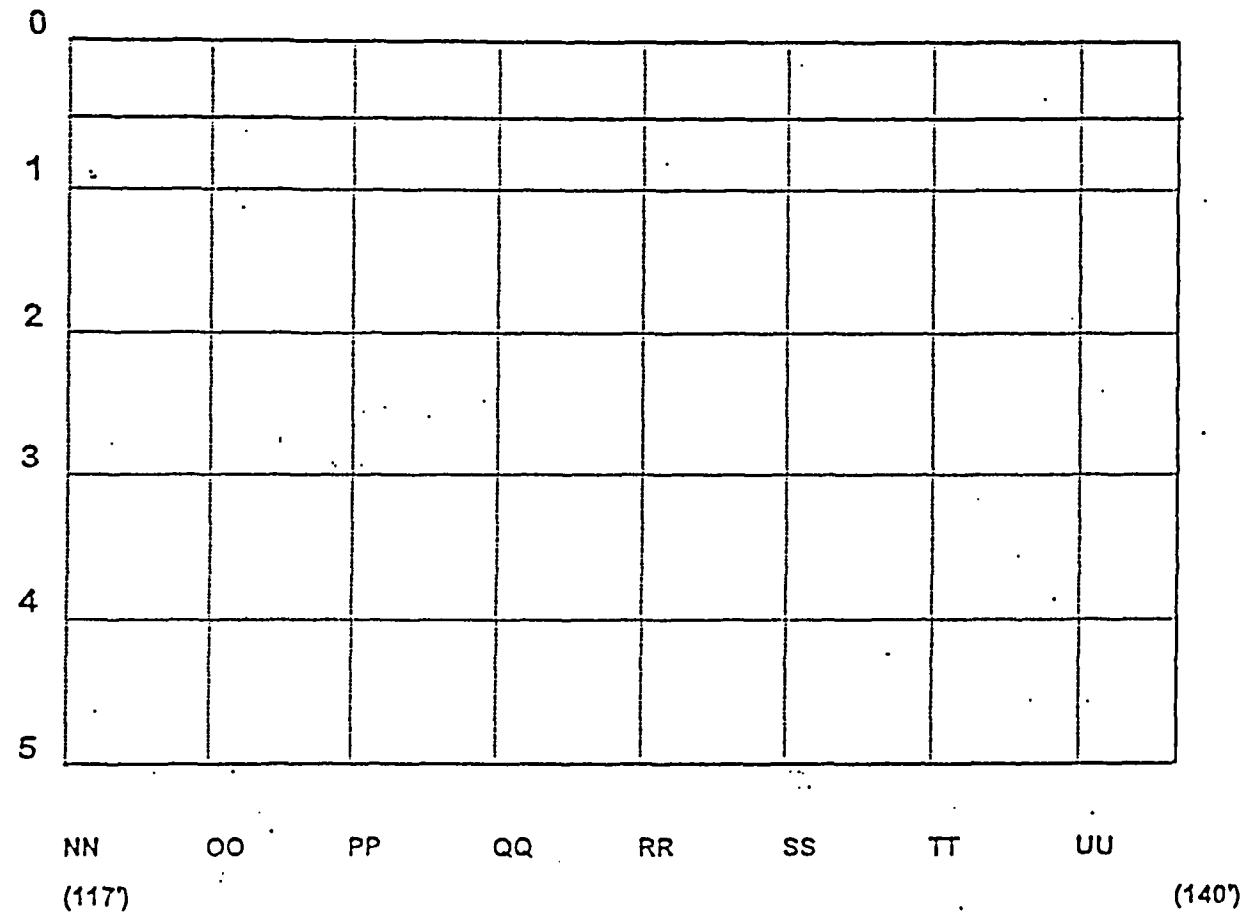
GRID 3' X 3'

ENGELHARD PLANT TUNNEL



GRID 3' X 3'

ENGELHARD PLANT TUNNEL



GRID 3' X 3'

TABLE A1

Final Status Survey: Background

Baseline

Baseline background measurements are comprised of measurements taken by the G-M detector and large area detectors on a scabbled area of concrete floor in an building free of contamination.

Ceramic Tiles

	Average, net cpm	Average, net dpm
Large Area Detectors	792	3773
G-M Detectors	30	150

Steel

	Average, net cpm	Average, net dpm
G-M Detectors	-24	-122

Sheetrock

	Average, net cpm	Average, net dpm
Large Area Detectors	-246	-1296
G-M Detectors	-24	-119

Final Status Survey: Room 2A

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
FLOOR							
A,0	964	1239	0.21	664	772	1930	392
A,1	978	1239	0.21	664	803	2008	394
A,2	872	1239	0.21	664	566	1415	377
A,2+1	827	1239	0.21	664	465	1162	370
B,0	982	1239	0.21	664	812	2031	395
B,1	878	1239	0.21	664	579	1448	378
B,2	825	1239	0.21	664	461	1151	370
B,2+1	854	1239	0.21	664	525	1314	375
C,0	1238	1239	0.21	664	1386	3465	432
C,1	995	1239	0.21	664	841	2104	397
C,2	810	1239	0.21	664	427	1067	367
C,2+1	1106	1239	0.21	664	1090	2725	413
D,0	950	1239	0.21	664	741	1852	390
D,1	884	1239	0.21	664	593	1482	379
D,2	840	1239	0.21	664	494	1235	372
D,2+1	934	1239	0.21	664	705	1762	387

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TABLE A2

Final Status Survey: Room 2A

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
D+0.6,0	825	1239	0.21	664	461	1151	370
D+0.6,1	848	1239	0.21	664	512	1280	374
D+0.6,2	791	1239	0.21	664	384	961	364
D+0.6,2+1	882	1239	0.21	664	588	1471	379
LOWER WALLS							
A,0,0	**117**	**78**	**0.2**	**4670**	**1300**	**4160**	**2919**
A,1,0+1	699	1204	0.21	654	217	543	347
A,2,0	**114**	**78**	**0.2**	**4670**	**1200**	**3840**	**2897**
A,2,0+1 CR	1050	1996.33	0.21	838	116	290	432
A,2+1,0	**116**	**78**	**0.2**	**4670**	**1267**	**4053**	**2912**
B,0,0+1	427	1204	0.21	654	-392	-980	296
B,2+1,0	**95**	**78**	**0.2**	**4670**	**567**	**1813**	**2750**
B,2+1,0+1 CR	1071	1996.33	0.21	838	163	408	435
C,0,0+1	482	1204	0.21	654	-269	-672	307
C,2+1,0	**118**	**78**	**0.2**	**4670**	**1333**	**4267**	**2927**
C,2+1,0+1 CR	1089	1996.33	0.21	838	204	509	438
D,0,0+1	471	1204	0.21	654	-294	-734	305

Final Status Survey: Room 2A

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
D,2+1,0	76	78	0.2	4670	-67	-213	2594
D,2+1,0+1 CR	1077	1996.33	0.21	838	177	442	436
D+0.6,1,0	85	78	0.2	4670	233	747	2669
D+0.6,1,0+1	708	1204	0.21	654	238	594	349
D+0.6,2,0	73	78	0.2	4670	-167	-533	2569
D+0.6,2,0+1	739	1204	0.21	654	307	768	354
D+0.6,2+1,0	67	78	0.2	4670	-367	-1173	2517
UPPER WALLS							
A,1,0+2.2	63	73	0.2	4527	-333	-1067	2438
A,2,0+2.2 CR	112	103	0.2	5323	300	960	3066
B,0,0+2.2 SH	38	49.2	0.2	3768	-373	-1195	1952
B,2+1,0+2.2 CR	114	103	0.2	5323	367	1173	3080
C,0,0+2.2 SH	44	49.2	0.2	3768	-173	-555	2018
C,2+1,0+2.2 CR	95	103	0.2	5323	-267	-853	2942
D,0,0+2.2 SH	43	49.2	0.2	3768	-207	-661	2007
D,2+1,0+2.2 CR	99	103	0.2	5323	-133	-427	2971
D+0.6,1,0+2.2 SH	56	49.2	0.2	3768	227	725	2144

Final Status Survey: Room 2A

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
D+0.6,2,0+2.2 SH	**41**	**49.2**	**0.2**	**3768**	**-273**	**-875**	**1986**
CEILING							
@C,2 SS	**46**	**48.6**	**0.2**	**3747**	**-87**	**-277**	**2033**
SMEARS							
A,0	0	0.2	0.33	15	-1	-1	0
A,1	0	0.2	0.33	15	-1	-1	0
A,2	3	0.2	0.33	15	8	8	10
A,2+1	1	0.2	0.33	15	2	2	6
B,0	1	0.2	0.33	15	2	2	6
B,1	1	0.2	0.33	15	2	2	6
B,2	1	0.2	0.33	15	2	2	6
B,2+1	1	0.2	0.33	15	2	2	6
C,0	2	0.2	0.33	15	5	5	8
C,1	1	0.2	0.33	15	2	2	6
C,2	1	0.2	0.33	15	2	2	6
C,2+1	1	0.2	0.33	15	2	2	6
D,0	1	0.2	0.33	15	2	2	6

Final Status Survey: Room 2A

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
D,1	0	0.2	0.33	15	-1	-1	0
D,2	1	0.2	0.33	15	2	2	6
D,2+1	0	0.2	0.33	15	-1	-1	0
D+0.6,0	1	0.2	0.33	15	2	2	6
D+0.6,1	1	0.2	0.33	15	2	2	6
D+0.6,2	2	0.2	0.33	15	5	5	8
D+0.6,2+1	1	0.2	0.33	15	2	2	6

Final Status Survey: Room 2B

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
FLOOR							
A,0	868	1452	0.21	1008	318	796	385
A,1	795	1452	0.21	1008	155	387	374
A,2	857	1452	0.21	1008	294	734	384
A,3	796	1452	0.21	1008	157	392	374
B,0	1022	1452	0.21	1008	663	1658	409
B,1	702	1452	0.21	1008	-54	-134	358
B,2	823	1452	0.21	1008	217	543	378
B,3	874	1452	0.21	1008	332	829	386
C,0	793	1452	0.21	1008	150	375	373
C,1	711	1452	0.21	1008	-34	-84	360
C,1+1	940	1452	0.21	1008	480	1199	396
C,3	747	1452	0.21	1008	47	118	366
D,0	787	1452	0.21	1008	137	342	372
D,1	707	1452	0.21	1008	-43	-106	359
D,2	70	71	0.22	4062	-30	-97	2257
D,3	99	71	0.22	4062	848	2715	2478

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TABLE A3

Final Status Survey: Room 2B

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
E,0	731	1452	0.21	1008	11	28	363
E,1	816	1452	0.21	1008	202	504	377
E,2	710	1452	0.21	1008	-36	-90	360
E,3	777	1452	0.21	1008	114	286	371
E+1,0	893	1452	0.21	1008	374	936	389
E+1,1	760	1452	0.21	1008	76	190	368
E+1,2	760	1452	0.21	1008	76	190	368
E+1,3	779	1452	0.21	1008	119	297	371
LOWER WALLS							
A,3+0.2,0	**84**	**73**	**0.23**	**3936**	**319**	**1020**	**2278**
B,3+0.2,0	**85**	**73**	**0.23**	**3936**	**348**	**1113**	**2285**
B,3+0.2,0+1 CR	838	1887.6	0.2	1204	-249	-622	417
C,3+0.2,0	**97**	**73**	**0.23**	**3936**	**696**	**2226**	**2370**
C,3+0.2,0+1 CR	930	1887.6	0.2	1204	-32	-81	432
D,1+1.2,0	**82**	**73**	**0.2**	**4527**	**300**	**960**	**2603**
D,1+1.2,0+1	970	1091	0.19	968	1051	2628	428
D,3+0.2,0	**99**	**71**	**0.22**	**4062**	**848**	**2715**	**2478**

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Final Status Survey: Room 2B

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
D,3+0.2,0+1	891	1091	0.19	968	856	2139	414
E,3+0.2,0	**87**	**73**	**0.23**	**3936**	**406**	**1299**	**2300**
E,3+0.2,0+1	549	1133	0.2	937	-41	-103	333
E+1,0,0	**108**	**73**	**0.23**	**3936**	**1014**	**3246**	**2446**
E+1,1,0	**102**	**73**	**0.23**	**3936**	**841**	**2690**	**2405**
E+1,1,0+1	573	1133	0.2	937	15	38	337
E+1,2,0	**86**	**73**	**0.23**	**3936**	**377**	**1206**	**2292**
E+1,2,0+1	592	1133	0.2	937	60	150	341
E+1,3,0	**84**	**73**	**0.2**	**4527**	**367**	**1173**	**2620**
E+1,3,0+1	632	1133	0.2	937	154	385	349
E+1,3+0.2,0	**75**	**73**	**0.23**	**3936**	**58**	**186**	**2212**
UPPER WALLS							
Not Applicable to this room							
CEILING							
Not Applicable to this room							
SMEARS							
A,0	2	0.2	0.33	15	5	5	8

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Final Status Survey: Room 2B

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
A,1	1	0.2	0.33	15	2	2	6
A,2	1	0.2	0.33	15	2	2	6
A,3	1	0.2	0.33	15	2	2	6
B,0	1	0.2	0.33	15	2	2	6
B,1	1	0.2	0.33	15	2	2	6
B,2	0	0.2	0.33	15	-1	-1	0
B,3	1	0.2	0.33	15	2	2	6
C,0	2	0.2	0.33	15	5	5	8
C,1	1	0.2	0.33	15	2	2	6
C,1+1	1	0.2	0.33	15	2	2	6
C,2	1	0.2	0.33	15	2	2	6
C,3	1	0.2	0.33	15	2	2	6
D,0	1	0.2	0.33	15	2	2	6
D,1	1	0.2	0.33	15	2	2	6
D,2	1	0.2	0.33	15	2	2	6
D,3	1	0.2	0.33	15	2	2	6
E,0	0	0.2	0.33	15	-1	-1	0

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Final Status Survey: Room 2B

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
E,1	0	0.2	0.33	15	-1	-1	0
E,2	1	0.2	0.33	15	2	2	6
E,3	1	0.2	0.33	15	2	2	6
E+1,0	0	0.2	0.33	15	-1	-1	0
E+1,1	1	0.2	0.33	15	2	2	6
E+1,2	1	0.2	0.33	15	2	2	6
E+1,3	1	0.2	0.33	15	2	2	6

Final Status Survey: Room ENTRY

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
FLOOR							
A,0	885	1563	0.23	954	212	529	358
A,1	947	1563	0.23	954	339	847	367
A,2	1218	1563	0.23	954	893	2233	402
A,3	1008	1563	0.23	954	463	1159	375
A,4	813	1474	0.21	1015	170	426	377
A,5	928	1563	0.23	954	300	749	364
A,5+1.8	1459	1563	0.23	954	1386	3465	431
B,0	914	1563	0.23	954	271	678	362
B,1	948	1563	0.23	954	341	852	367
B,2	986	1563	0.23	954	418	1046	372
B,3	1059	1563	0.23	954	568	1419	382
B,4	923	1563	0.23	954	290	724	363
B,5	905	1563	0.23	954	253	632	361
B,5+1.8	841	1563	0.23	954	122	304	352
C,0	912	1563	0.23	954	267	668	362
C,1	1146	1563	0.23	954	746	1864	393

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TABLE A4

Final Status Survey: Room ENTRY

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
C,2	1157	1563	0.23	954	768	1921	394
C,3	1034	1563	0.23	954	517	1292	378
C,4	1024	1563	0.23	954	496	1240	377
C,5	1061	1563	0.23	954	572	1430	382
C,5+1.8	1009	1563	0.23	954	465	1164	375
LOWER WALLS							
A,0,0	**74**	**77**	**0.2**	**4641**	**-100**	**-320**	**2569**
A,0,0+1	575	1175	0.19	1004	-31	-77	358
A,2,0	**90**	**77**	**0.2**	**4641**	**433**	**1387**	**2702**
A,2,0+1	632	1175	0.19	1004	110	276	369
A,3,0	**63**	**77**	**0.2**	**4641**	**-467**	**-1493**	**2474**
A,3,0+1	562	1175	0.19	1004	-63	-158	355
A,5,0	**103**	**77**	**0.2**	**4641**	**867**	**2773**	**2805**
A,5,0+1	575	1175	0.19	1004	-31	-77	358
A,5+1.8,0	**101**	**77**	**0.2**	**4641**	**800**	**2560**	**2789**
A,5+1.8,0+1	603	1175	0.19	1004	38	96	363
UPPER WALLS							

Final Status Survey: Room ENTRY

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
A,0+1,0+3.3	83	77	0.2	4641	200	640	2645
A,1+1.5,0+3.3	78	77	0.2	4641	33	107	2603
A,3+1,0+3.3	63	77	0.2	4641	-467	-1493	2474
A,5+1,0+3.3	74	77	0.2	4641	-100	-320	2569
CEILING							
@A,1 SS	44	49	0.2	3761	-167	-533	2016
@C,2 SS	49	49	0.2	3761	0	0	2070
SMEARS							
A,0	1	0.2	0.33	15	2	2	6
A,1	0	0.2	0.33	15	-1	-1	0
A,2	1	0.2	0.33	15	2	2	6
A,3	1	0.2	0.33	15	2	2	6
A,4	1	0.2	0.33	15	2	2	6
A,5	1	0.2	0.33	15	2	2	6
A,5+1.8	1	0.2	0.33	15	2	2	6
B,0	1	0.2	0.33	15	2	2	6
B,1	0	0.2	0.33	15	-1	-1	0

Final Status Survey: Room ENTRY

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
B,2	1	0.2	0.33	15	2	2	6
B,3	0	0.2	0.33	15	-1	-1	0
B,4	1	0.2	0.33	15	2	2	6
B,5	0	0.2	0.33	15	-1	-1	0
B,5+1.8	0	0.2	0.33	15	-1	-1	0
C,0	1	0.2	0.33	15	2	2	6
C,1	1	0.2	0.33	15	2	2	6
C,2	0	0.2	0.33	15	-1	-1	0
C,3	0	0.2	0.33	15	-1	-1	0
C,4	0	0.2	0.33	15	-1	-1	0
C,5	0	0.2	0.33	15	-1	-1	0
C,5+1.8	1	0.2	0.33	15	2	2	6

Final Status Survey: Room 2C

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
FLOOR							
A,0	803	1296	0.23	619	317	793	337
A,1	1005	1296	0.23	619	730	1826	365
A,2	764	1296	0.23	619	237	593	331
A,2+1	790	1296	0.23	619	291	726	335
B,0	1087	1296	0.23	619	898	2246	377
B,1	1604	1296	0.23	619	1956	4890	440
B,2	987	1296	0.23	619	694	1734	363
B,2+1	1058	1296	0.23	619	839	2097	373
C,0	952	1296	0.23	619	622	1555	358
C,1	1063	1296	0.23	619	849	2123	373
C,2	1112	1296	0.23	619	949	2373	380
C,2+1	1470	1296	0.23	619	1682	4205	425
D,0	979	1296	0.23	619	677	1693	362
D,1	1307	1296	0.23	619	1348	3371	405
D,2	1019	1296	0.23	619	759	1898	367
D,2+1	1160	1296	0.23	619	1048	2619	386

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Table A5

Final Status Survey: Room 2C

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
D+0.6,0	893	1296	0.23	619	501	1253	350
D+0.6,1	945	1296	0.23	619	608	1519	357
D+0.6,2	1470	1296	0.23	619	1682	4205	425
D+0.6,2+1	952	1296	0.23	619	622	1555	358
LOWER WALLS							
A,0,0	**99**	**63**	**0.2**	**4226**	**1200**	**3840**	**2661**
A,1,0	**108**	**73**	**0.2**	**4527**	**1167**	**3733**	**2813**
A,1,0+1	650	1282	0.2	708	21	53	359
A,2,0	**77**	**63**	**0.2**	**4226**	**467**	**1493**	**2474**
A,2,0+1	550	1282	0.2	708	-214	-535	340
A,2+1,0	**77**	**63**	**0.2**	**4226**	**467**	**1493**	**2474**
B,0,0	**100**	**63**	**0.2**	**4226**	**1233**	**3947**	**2669**
B,0,0+1	650	1282	0.2	708	21	53	359
B,2+1,0+1	440	1282	0.2	708	-473	-1182	318
C,0,0	**117**	**73**	**0.2**	**4527**	**1467**	**4693**	**2882**
C,0,0+1	670	1282	0.2	708	68	171	363
C,2+1,0+1	490	1282	0.2	708	-355	-888	328

Final Status Survey: Room 2C

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
D,0,0	101	63	0.2	4226	1267	4053	2677
D,0,0+1	630	1282	0.2	708	-26	-65	355
D,2+1,0+1	570	1282	0.2	708	-167	-418	344
D+0.6,0,0	86	63	0.2	4226	767	2453	2552
D+0.6,1,0	83	63	0.2	4226	667	2133	2526
D+0.6,1,0+1	680	1282	0.2	708	92	229	365
D+0.6,2,0	118	73	0.2	4527	1500	4800	2889
D+0.6,2,0+1	720	1282	0.2	708	186	465	372
D+0.6,2+1,0	112	73	0.2	4527	1300	4160	2844
UPPER WALLS							
A,1,0+2.2	71	73	0.2	4527	-67	-213	2509
A,2,0+2.2	68	73	0.2	4527	-167	-533	2483
B,0,0+2.2	67	73	0.2	4527	-200	-640	2474
B,2+1,0+2.2 SR	61	49.2	0.2	3768	393	1259	2195
C,0,0+2.2	65	73	0.2	4527	-267	-853	2456
C,2+1,0+2.2 SR	48	49.2	0.2	3768	-40	-128	2061
D,0,0+2.2	65	73	0.2	4527	-267	-853	2456

Final Status Survey: Room 2C

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
D,2+1,0+2.2 SR	**58**	**49.2**	**0.2**	**3768**	**293**	**939**	**2165**
D+0.6,1,0+2.2	**70**	**73**	**0.2**	**4527**	**-100**	**-320**	**2500**
D+0.6,2,0+2.2	**63**	**73**	**0.2**	**4527**	**-333**	**-1067**	**2438**
CEILING							
@C,2 SS	**47**	**48.6**	**0.2**	**1171**	**-53**	**-171**	**2044**
SMEARS							
D,2+1	1	0.59	0.32	20	1	1	6
C,2+1	2	0.59	0.32	20	4	4	9
B,2+1	0	0.59	0.32	20	-2	-2	0
A,1	0	0.59	0.32	20	-2	-2	0
C+1.5,1	0	0.59	0.32	20	-2	-2	0
C+1.5,0+1.5	0	0.59	0.32	20	-2	-2	0
C+1, 0+1	0	0.59	0.32	20	-2	-2	0
B,0	1	0.59	0.32	20	1	1	6
A,1	0	0.19	0.32	15	-1	-1	0
A,0	0	0.19	0.32	15	-1	-1	0
B,0	0	0.19	0.32	15	-1	-1	0

Final Status Survey: Room 2C

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
C,0	0	0.19	0.32	15	-1	-1	0
D+0.6,1+1.5	0	0.19	0.32	15	-1	-1	0
D+0.6,2+1	1	0.19	0.32	15	3	3	6

Final Status Survey: Room 2D

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
FLOOR							
A,2	831	1558	0.26	600	94	235	310
A,3	754	1558	0.26	600	-45	-113	300
A,4	968	1558	0.26	600	342	855	327
A,5	900	1558	0.26	600	219	548	318
A,5+0.5	950	1558	0.26	600	310	774	325
B+0.5,0	770	1558	0.26	600	-16	-41	302
B+0.5,1	750	1558	0.26	600	-52	-131	299
B,2	778	1558	0.26	600	-2	-5	303
B,3	835	1558	0.26	600	101	253	310
B,4	1067	1558	0.26	600	521	1303	338
B,5	850	1558	0.26	600	129	321	312
B,5+0.5	903	1558	0.26	600	224	561	319
C,0	775	1558	0.26	600	-7	-18	303
C,1	707	1558	0.26	600	-130	-326	294
C,2	780	1558	0.26	600	2	5	303
C,3	979	1558	0.26	600	362	905	328

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Final Status Survey: Room 2D

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
C,4	1000	1558	0.26	600	400	1000	331
C,5	716	1558	0.26	600	-114	-285	295
C,5+0.5	753	1558	0.26	600	-47	-118	300
D,0	690	1558	0.26	600	-161	-403	291
D,1	850	1558	0.26	600	129	321	312
D,2	900	1558	0.26	600	219	1625 548	318
D,3	900	1558	0.26	600	219	548	318
D,4	936	1558	0.26	600	284	710	323
D,5	825	1558	0.26	600	83	208	309
D,5+0.5	750	1558	0.26	600	-52	-131	299
E,0	713	1558	0.26	600	-119	-299	294
E,1	820	1558	0.26	600	74	186	308
E,2	845	1558	0.26	600	119	299	312
E,3	800	1558	0.26	600	38	95	306
E,4	781	1558	0.26	600	4	9	303
E,5	870	1558	0.26	600	165	1000 412	315 1000
E,5+0.5	963	1558	0.26	600	333	833	326

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Final Status Survey: Room 2D

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
E+1,0	800	1558	0.26	600	38	95	306
E+1,1	878	1558	0.26	600	179	448	316
E+1,2	731	1558	0.26	600	-87	-217	297
E+1,3	825	1558	0.26	600	83	208	309
E+1,4	800	1558	0.26	600	38	95	306
E+1,5	825	1558	0.26	600	83	208	309
E+1,5+0.5	865	1558	0.26	600	156	389	314
LOWER WALLS							
E+1,0,0	**76**	**72**	**0.21**	**4284**	**127**	**406**	**2422**
E+1,0,0+1	580	1204	0.21	654	-49	-123	326
E+1,1,0	**68**	**72**	**0.21**	**4284**	**-127**	**-406**	**2356**
E+1,1,0+1	400	1204	0.21	654	-453	-1132	291
E+1,2,0	**72**	**72**	**0.21**	**4284**	**0**	**0**	**2389**
E+1,2,0+1	563	1204	0.21	654	-87	-218	323
E+1,3,0	**83**	**72**	**0.21**	**4284**	**349**	**1117**	**2479**
E+1,3,0+1	520	1204	0.21	654	-184	-459	315
E+1,4,0	**74**	**72**	**0.21**	**4284**	**63**	**203**	**2406**

Final Status Survey: Room 2D

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
E+1,4,0+1	530	1204	0.21	654	-161	-403	317
E+1,5,0	**84**	**72**	**0.21**	**4284**	**381**	**1219**	**2487**
E+1,5,0+1	557	1204	0.21	654	-101	-252	322
UPPER WALLS							
E+1,0+1,0+2.2	**71**	**77**	**0.2**	**4641**	**-200**	**-640**	**2543**
E+1,1+1,0+2.2	**71**	**77**	**0.2**	**4641**	**-200**	**-640**	**2543**
E+1,3,0+2.2	**75**	**77**	**0.2**	**4641**	**-67**	**-213**	**2578**
E+1,4+1,0+2.2 SS	**52**	**52.6**	**0.2**	**3886**	**-20**	**-64**	**2138**
CEILING							
@A,2 SS	**63**	**52.6**	**0.2**	**3886**	**347**	**1109**	**2248**
@A,3+1 SS	**60**	**52.6**	**0.2**	**3886**	**247**	**789**	**2218**
@C,0 SS	**62**	**52.6**	**0.2**	**3886**	**313**	**1003**	**2238**
@C,2 SS	**68**	**52.6**	**0.2**	**3886**	**513**	**1643**	**2296**
@C,3+1 SS	**57**	**52.6**	**0.2**	**3886**	**147**	**469**	**2189**
@C+1,5+0.5 SS	**48**	**52.6**	**0.2**	**3886**	**-153**	**-491**	**2097**
@E,0 SS	**71**	**52.6**	**0.2**	**3886**	**613**	**1963**	**2324**
@E,2 SS	**49**	**52.6**	**0.2**	**3886**	**-120**	**-384**	**2107**

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Final Status Survey: Room 2D

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
@E,4 SS	**57**	**52.6**	**0.2**	**3886**	**147**	**469**	**2189**
@E,5 SS	**53**	**52.6**	**0.2**	**3886**	**13**	**43**	**2148**
SMEARS							
@A,2; Elect. Distr. Panel	5	0.59	0.32	20	14	14	14
@A,3+1; I-Beam	3	0.59	0.32	20	8	8	11
@A,5+0.5; Conduit	2	0.59	0.32	20	4	4	9
@C,0; Drain Pipe	1	0.59	0.32	20	1	1	6
@C,2; Bar Joist	3	0.59	0.32	20	8	8	11
@C+1,3+1; I-Beam	2	0.59	0.32	20	4	4	9
@C+1,5+0.5; Sprinkler Pipe	0	0.59	0.32	20	-2	-2	0
@E,0; Angle Iron	0	0.59	0.32	20	-2	-2	0
@E,2; Light Fixture	3	0.19	0.32	15	9	9	11
@E+1,3+1; Light Fixture	1	0.19	0.32	15	3	3	6
@E+1,5+0.5; Insulation Pipe	2	0.19	0.32	15	6	6	9
A,2	0	0.2	0.33	15	-1	-1	0
A,3	1	0.2	0.33	15	2	2	6
A,4	0	0.2	0.33	15	-1	-1	0

Final Status Survey: Room 2D

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
A,5	0	0.2	0.33	15	-1	-1	0
A,5+0.5	1	0.2	0.33	15	2	2	6
B+0.5,0	0	0.2	0.33	15	-1	-1	0
B+0.5,1	1	0.2	0.33	15	2	2	6
B,2	1	0.2	0.33	15	2	2	6
B,3	1	0.2	0.33	15	2	2	6
B,4	1	0.2	0.33	15	2	2	6
B,5	0	0.2	0.33	15	-1	-1	0
B,5+0.5	1	0.2	0.33	15	2	2	6
C,0	0	0.2	0.33	15	-1	-1	0
C,1	0	0.2	0.33	15	-1	-1	0
C,2	0	0.2	0.33	15	-1	-1	0
C,3	1	0.2	0.33	15	2	2	6
C,4	1	0.2	0.33	15	2	2	6
C,5	0	0.2	0.33	15	-1	-1	0
C,5+0.5	9	0.2	0.33	15	27	27	18
D,0	0	0.2	0.33	15	-1	-1	0

Final Status Survey: Room 2D

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
D,1	1	0.2	0.33	15	2	2	6
D,2	1	0.2	0.33	15	2	2	6
D,3	0	0.2	0.33	15	-1	-1	0
D,4	1	0.2	0.33	15	2	2	6
D,5	0	0.2	0.33	15	-1	-1	0
D,5+0.5	0	0.2	0.33	15	-1	-1	0
E,0	1	0.2	0.33	15	2	2	6
E,1	0	0.2	0.33	15	-1	-1	0
E,2	1	0.2	0.33	15	2	2	6
E,3	0	0.2	0.33	15	-1	-1	0
E,4	2	0.2	0.33	15	5	5	8
E,5	0	0.2	0.33	15	-1	-1	0
E,5+0.5	1	0.2	0.33	15	2	2	6
E+1,0	1	0.2	0.33	15	2	2	6
E+1,1	0	0.2	0.33	15	-1	-1	0
E+1,2	0	0.2	0.33	15	-1	-1	0
E+1,3	1	0.2	0.33	15	2	2	6

Final Status Survey: Room 2D

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
E+1,4	0	0.2	0.33	15	-1	-1	0
E+1,5	1	0.2	0.33	15	2	2	6
E+1,5+0.5	0	0.2	0.33	15	-1	-1	0

Final Status Survey: Room 2E

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
FLOOR							
A,0	868	1283	0.21	675	508	1269	379
A,1	761	1283	0.21	675	268	669	361
A,2	884	1283	0.21	675	543	1359	381
B,0	756	1283	0.21	675	257	641	360
B,1	788	1283	0.21	675	328	821	366
B,2	955	1283	0.21	675	703	1756	392
C,0	829	1283	0.21	675	420	1050	372
C,1	807	1283	0.21	675	371	927	369
C,2	939	1283	0.21	675	667	1667	390
LOWER WALLS							
Not Applicable to this Room							
UPPER WALLS							
A,1,0+2.2 SR	45	47.01	0.21	3514	-64	-204	1910
B,0,0+2.2 SR	42	47.01	0.21	3514	-159	-509	1879
B,2,0+2.2 SR	39	47.01	0.21	3514	-254	-814	1847
C,1,0+2.2 SR	47	47.01	0.21	3514	0	-1	1931

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Final Status Survey: Room 2E

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
CEILING							
@C,2 SR	**44**	**49.2**	**0.2**	**3768**	**-173**	**-555**	**2018**
SMEARS							
A,0	0	0.2	0.33	15	-1	-1	0
A,1	0	0.2	0.33	15	-1	-1	0
A,2	1	0.2	0.33	15	2	2	6
B,0	0	0.2	0.33	15	-1	-1	0
B,1	0	0.2	0.33	15	-1	-1	0
B,2	0	0.2	0.33	15	-1	-1	0
C,0	2	0.2	0.33	15	5	5	8
C,1	1	0.2	0.33	15	2	2	6
C,2	0	0.2	0.33	15	-1	-1	0

Final Status Survey: Room 2F

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
FLOOR							
A,0	802	1409	0.22	675	209	521	356
A,1	618	1409	0.22	675	-185	-463	326
A,2	846	1409	0.22	675	303	757	363
A,3	717	1249	0.21	666	207	518	352
A,4	743	1249	0.21	666	266	664	357
A,5	750	1249	0.21	666	281	703	358
B,0	711	1409	0.22	675	14	35	342
B,1	975	1409	0.22	675	579	1447	382
B,2	827	1409	0.22	675	262	655	360
B,3	720	1249	0.21	666	214	535	353
B,4	739	1249	0.21	666	257	641	356
B,5	920	1249	0.21	666	662	1655	385
C,0	623	1409	0.22	675	-174	-436	327
C,1	722	1409	0.22	675	37	94	344
C,2	624	1409	0.22	675	-172	-430	327
C,3	789	1249	0.21	666	369	922	364

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Final Status Survey: Room 2F

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
C,4	667	1249	0.21	666	95	238	344
C,5	1046	1249	0.21	666	945	2361	405
D,0	702	1409	0.22	675	-5	-13	340
D,1	806	1409	0.22	675	217	543	357
D,2	1134	1409	0.22	675	919	2297	404
D,3	823	1249	0.21	666	445	1112	370
D,4	786	1249	0.21	666	362	905	364
D,5	1178	1249	0.21	666	1240	3101	424
E,0	820	1401	0.2	740	281	703	394
E,1	801	1401	0.2	740	236	591	391
E,2	794	1401	0.2	740	220	550	390
E,3	849	1401	0.2	740	349	874	399
E,4	832	1401	0.2	740	309	774	396
E,5	810	1401	0.2	740	258	644	393
F,0	810	1401	0.2	740	258	644	393
F,1	746	1401	0.2	740	107	268	382
F,1+1.2	880	1401	0.2	740	422	1056	404

Final Status Survey: Room 2F

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
F,3	847	1401	0.2	740	345	862	399
F,4	772	1401	0.2	740	168	421	386
F,5	826	1401	0.2	740	295	738	395
LOWER WALLS							
A,2,0	**97**	**70**	**0.2**	**4439**	**900**	**2880**	**2702**
A,2,0+1	540	1144	0.2	670	-75	-188	331
A,3,0	**75**	**70**	**0.2**	**4439**	**167**	**533**	**2517**
A,3,0+1	550	1144	0.2	670	-52	-129	333
A,4,0	**90**	**70**	**0.2**	**4439**	**667**	**2133**	**2645**
A,4,0+1	560	1144	0.2	670	-28	-71	335
A,5,0	**96**	**70**	**0.2**	**4439**	**867**	**2773**	**2694**
A,5,0+1	590	1144	0.2	670	42	106	341
B,5,0	**104**	**77**	**0.2**	**4641**	**900**	**2880**	**2813**
B,5,0+1	664	1144	0.2	670	216	541	355
C,5,0	**93**	**77**	**0.2**	**4641**	**533**	**1707**	**2726**
C,5,0+1	660	1144	0.2	670	207	518	355
D,5,0	**94**	**77**	**0.2**	**4641**	**567**	**1813**	**2734**

Final Status Survey: Room 2F

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
D,5,0+1	640	1144	0.2	670	160	400	351
E,5,0	102	70	0.2	4439	1067	3413	2742
E,5,0+1	607	1144	0.2	670	82	206	345
UPPER WALLS							
A,3,0+2.2	49	43.38	0.21	3387	178	571	1914
A,5+0.5,0+2.2	45	43.38	0.21	3387	51	165	1872
C,0,0+2.2	41	43.38	0.21	3387	-76	-242	1829
E,0,0+2.2	63	43.38	0.21	3387	623	1993	2054
E,5+0.5,0+2.2	44	43.38	0.21	3387	20	63	1861
E+1,1+1,0+2.2	84	69	0.21	4199	476	1524	2463
E+1,3,0+2.2	89	69	0.21	4199	635	2032	2503
E+1,4+1,0+2.2	75	69	0.21	4199	190	610	2389
CEILING							
@A,2 SS	45	43.38	0.21	3387	51	165	1872
@A,3+1 SS	43	43.38	0.21	3387	-12	-39	1851
@A,5+0.5 SS	67	43.38	0.21	3387	750	2399	2092
@C,0 SS	56	43.38	0.21	3387	401	1282	1985

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Final Status Survey: Room 2F

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
@C,2 SS	**45**	**43.38**	**0.21**	**3387**	**51**	**165**	**1872**
@C+1,3+1 SS	**57**	**43.38**	**0.21**	**3387**	**432**	**1384**	**1995**
@C+1,5+0.5 SS	**47**	**43.38**	**0.21**	**3387**	**115**	**368**	**1893**
@E,0 SS	**49**	**43.38**	**0.21**	**3387**	**178**	**571**	**1914**
@E,2 SS	**54**	**43.38**	**0.21**	**3387**	**337**	**1079**	**1965**
@E+1,3+1 SS	**59**	**43.38**	**0.21**	**3387**	**496**	**1587**	**2015**
@E+1,5+0.5 SS	**66**	**43.38**	**0.21**	**3387**	**718**	**2298**	**2082**
SMEARS							
@A,2; Elect. Distr. Panel	5	0.59	0.32	20	14	14	14
@A,3+1; I-Beam	3	0.59	0.32	20	8	8	11
@A,5+0.5; Conduit	2	0.59	0.32	20	4	4	9
@C,0; Drain Pipe	1	0.59	0.32	20	1	1	6
@C,2; Bar Joist	3	0.59	0.32	20	8	8	11
@C+1,3+1; I-Beam	2	0.59	0.32	20	4	4	9
@C+1,5+0.5; Sprinkler Pipe	0	0.59	0.32	20	-2	-2	0
@E,0; Angle Iron	0	0.59	0.32	20	-2	-2	0
@E,2; Light Fixture	3	0.19	0.32	15	9	9	11

Final Status Survey: Room 2F

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
@E+1,3+1; Light Fixture	1	0.19	0.32	15	3	3	6
@E+1,5+0.5; Insulation Pipe	2	0.19	0.32	15	6	6	9
A,0	0	0.23	0.33	15	-1	-1	0
A,1	2	0.23	0.33	15	5	5	8
A,2	1	0.23	0.33	15	2	2	6
A,3	1	0.23	0.33	15	2	2	6
A,4	0	0.23	0.33	15	-1	-1	0
A,5	1	0.23	0.33	15	2	2	6
B,0	1	0.23	0.33	15	2	2	6
B,1	0	0.23	0.33	15	-1	-1	0
B,2	1	0.23	0.33	15	2	2	6
B,3	1	0.23	0.33	15	2	2	6
B,4	1	0.23	0.33	15	2	2	6
B,5	0	0.23	0.33	15	-1	-1	0
C,0	1	0.23	0.33	15	2	2	6
C,1	0	0.23	0.33	15	-1	-1	0
C,2	0	0.23	0.33	15	-1	-1	0

Final Status Survey: Room 2F

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
C,3	1	0.23	0.33	15	2	2	6
C,4	1	0.23	0.33	15	2	2	6
C,5	1	0.23	0.33	15	2	2	6
D,0	1	0.23	0.33	15	2	2	6
D,1	1	0.23	0.33	15	2	2	6
D,2	1	0.23	0.33	15	2	2	6
D,3	1	0.23	0.33	15	2	2	6
D,4	1	0.23	0.33	15	2	2	6
D,5	0	0.23	0.33	15	-1	-1	0
E,0	0	0.23	0.33	15	-1	-1	0
E,1	0	0.23	0.33	15	-1	-1	0
E,2	1	0.23	0.33	15	2	2	6
E,3	1	0.23	0.33	15	2	2	6
E,4	1	0.23	0.33	15	2	2	6
E,5	0	0.23	0.33	15	-1	-1	0
F,0	1	0.23	0.33	15	2	2	6
F,1	1	0.23	0.33	15	2	2	6

Final Status Survey: Room 2F

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
F,1+1.2	0	0.23	0.33	15	-1	-1	0
F,3	2	0.23	0.33	15	5	5	8
F,4	1	0.23	0.33	15	2	2	6
F,5	1	0.23	0.33	15	2	2	6

Final Status Survey: Room 2G

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
FLOOR							
A,0	975	1283	0.21	675	747	1868	395
A,1	1024	1283	0.21	675	857	2143	403
A,2	814	1283	0.21	675	387	966	370
B,0	877	1283	0.21	675	528	1319	380
B,1	922	1283	0.21	675	629	1571	387
B,2	798	1283	0.21	675	351	877	367
C,0	1031	1283	0.21	675	873	2182	404
C,1	853	1283	0.21	675	474	1185	376
C,2	1253	1283	0.21	675	1370	3426	436
D,0	1051	1283	0.21	675	918	2294	407
D,1	1126	1283	0.21	675	1086	2714	418
D,2	1048	1283	0.21	675	911	2277	406
E,0	905	1283	0.21	675	590	1476	384
E,1	780	1316	0.21	683	273	683	366
E,2	661	1283	0.21	675	44	109	344
F,0	930	1283	0.21	675	646	1616	388

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Final Status Survey: Room 2G

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
F,1	1141	1283	0.21	675	1119	2798	420
F,2	639	1283	0.21	675	-6	-14	340
LOWER WALLS							
A,0,0	108	78	0.2	4670	1000	3200	2851
B,0,0	91	78	0.2	4670	433	1387	2718
C,0,0	68	78	0.2	4670	-333	-1067	2526
D,0,0	102	78	0.2	4670	800	2560	2805
E,0,0	84	78	0.2	4670	200	640	2661
F,0,0	88	78	0.2	4670	333	1067	2694
F,1,0	113	78	0.2	4670	1167	3733	2889
F,2,0	74	78	0.2	4670	-133	-427	2578
UPPER WALLS							
A,1,0+2 SH	43	47.01	0.21	3514	-127	-407	1889
B+1,0,0+2	67	72	0.21	4284	-159	-508	2347
B+1,2,0+2 SH	45	47.01	0.21	3514	-64	-204	1910
D+1,0,0+2	77	72	0.21	4284	159	508	2430
D+1,2,0+2 SH	40	47.01	0.21	3514	-223	-712	1857

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Final Status Survey: Room 2G

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
F,1,0+2	64	72	0.21	4284	-254	-813	2322
CEILING							
@C,2 SS	47	48.6	0.2	3747	-53	-171	2044
SMEARS							
A,0	1	0.2	0.33	15	2	2	6
A,1	1	0.2	0.33	15	2	2	6
A,2	0	0.2	0.33	15	-1	-1	0
B,0	0	0.2	0.33	15	-1	-1	0
B,1	1	0.2	0.33	15	2	2	6
B,2	1	0.2	0.33	15	2	2	6
C,0	1	0.2	0.33	15	2	2	6
C,1	0	0.2	0.33	15	-1	-1	0
C,2	1	0.2	0.33	15	2	2	6
D,0	0	0.2	0.33	15	-1	-1	0
D,1	0	0.2	0.33	15	-1	-1	0
D,2	1	0.2	0.33	15	2	2	6
E,0	0	0.2	0.33	15	-1	-1	0

Final Status Survey: Room 2G

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
E,1	1	0.2	0.33	15	2	2	6
E,2	0	0.2	0.33	15	-1	-1	0
F,0	1	0.2	0.33	15	2	2	6
F,1	0	0.2	0.33	15	-1	-1	0
F,2	0	0.2	0.33	15	-1	-1	0

Final Status Survey: Room 2H

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
FLOOR							
K,6	632	1336	0.2	723	-85	-212	358
K,7	649	1336	0.2	723	-45	-112	361
K,7+0.2	513	1336	0.2	723	-365	-912	336
L,6	721	1336	0.2	723	125	312	374
L,7	766	1336	0.2	723	231	576	382
L,7+0.2	581	1336	0.2	723	-205	-512	349
M,6	702	1336	0.2	723	80	200	371
M,7	726	1336	0.2	723	136	341	375
M,7+0.2	711	1336	0.2	723	101	253	373
N,6	710	1336	0.2	723	99	247	373
N,7	616	1336	0.2	723	-122	-306	355
N,7+0.2	506	1336	0.2	723	-381	-953	334
LOWER WALLS							
K,7+0.2,0+1	520	1091	0.19	689	-63	-158	342
L,7+0.2,0+1	479	1091	0.19	689	-165	-412	333
M,7+0.2,0+1	481	1091	0.19	689	-160	-399	333

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Final Status Survey: Room 2H

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
N,7+0.2,0+1	411	1091	0.19	689	-333	-833	317
UPPER WALLS							
L,7+0.2,0+3	484	1091	0.19	689	-152	-381	334
CEILING							
@C,5 SS	60	50.2	0.2	3803	327	1045	2195
@C+0.5, 4 SS	56	50.2	0.2	3803	193	619	2155
@D,2+1 SS	57	50.2	0.2	3803	227	725	2165
@D+1.5,1+1.5 SS	47	50.2	0.2	3803	-107	-341	2061
@E,2+1 SS	53	50.2	0.2	3803	93	299	2124
@G, 6+0.5 SS	57	50.2	0.2	3803	227	725	2165
@G,7 SS	51	50.2	0.2	3803	27	85	2103
@H,1 SS	63	50.2	0.2	3803	427	1365	2224
@I,3 SS	51	50.2	0.2	3803	27	85	2103
@K,5 SS	67	50.2	0.2	3803	560	1792	2263
@K,6 SS	48	50.2	0.2	3803	-73	-235	2072
@L3 SS	56	50.2	0.2	3803	193	619	2155
@M1 SS	59	50.2	0.2	3803	293	939	2185

Final Status Survey: Room 2H

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
@M,6+1 SS	**54**	**50.2**	**0.2**	**3803**	**127**	**405**	**2134**
SMEARS							
A,1	1	0.23	0.33	15	2	2	6
A,2	1	0.23	0.33	15	2	2	6
A,3	1	0.23	0.33	15	2	2	6
A,4	0	0.23	0.33	15	-1	-1	0
A,5	0	0.23	0.33	15	-1	-1	0
A,6	2	0.23	0.33	15	5	5	8
A,7	1	0.23	0.33	15	2	2	6
A,7+0.2	1	0.23	0.33	15	2	2	6
B,0	0	0.23	0.33	15	-1	-1	0
B,1	1	0.23	0.33	15	2	2	6
B,2	0	0.23	0.33	15	-1	-1	0
B,3	0	0.23	0.33	15	-1	-1	0
B,4	0	0.23	0.33	15	-1	-1	0
B,5	2	0.23	0.33	15	5	5	8
B,6	1	0.23	0.33	15	2	2	6

Final Status Survey: Room 2H

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
B,7	1	0.23	0.33	15	2	2	6
B,7+0.2	1	0.23	0.33	15	2	2	6
C,0	4	0.23	0.33	15	11	11	12
C,1	1	0.23	0.33	15	2	2	6
C,2	0	0.23	0.33	15	-1	-1	0
C,3	0	0.23	0.33	15	-1	-1	0
C,4	1	0.23	0.33	15	2	2	6
C,5	0	0.23	0.33	15	-1	-1	0
C,6	0	0.23	0.33	15	-1	-1	0
C,7	1	0.23	0.33	15	2	2	6
C,7+0.2	0	0.23	0.33	15	-1	-1	0
D,0	2	0.23	0.33	15	5	5	8
D,1	0	0.23	0.33	15	-1	-1	0
D,2	0	0.23	0.33	15	-1	-1	0
D,3	0	0.23	0.33	15	-1	-1	0
D,4	1	0.23	0.33	15	2	2	6
D,5	2	0.23	0.33	15	5	5	8

Final Status Survey: Room 2H

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
D,6	0	0.23	0.33	15	-1	-1	0
D,7	1	0.23	0.33	15	2	2	6
E,1	0	0.23	0.33	15	-1	-1	0
E,2	0	0.23	0.33	15	-1	-1	0
E,3	1	0.23	0.33	15	2	2	6
E,4	0	0.23	0.33	15	-1	-1	0
E,5	1	0.23	0.33	15	2	2	6
E,6	0	0.23	0.33	15	-1	-1	0
E,7	0	0.23	0.33	15	-1	-1	0
F,0	1	0.23	0.33	15	2	2	6
F,1	1	0.23	0.33	15	2	2	6
F,2	0	0.23	0.33	15	-1	-1	0
F,3	0	0.23	0.33	15	-1	-1	0
F,4	1	0.23	0.33	15	2	2	6
F,5	0	0.23	0.33	15	-1	-1	0
F,6	0	0.23	0.33	15	-1	-1	0
F,7	0	0.23	0.33	15	-1	-1	0

Final Status Survey: Room 2H

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
G,0	1	0.23	0.33	15	2	2	6
G,1	1	0.23	0.33	15	2	2	6
G,2	0	0.23	0.33	15	-1	-1	0
G,3	0	0.23	0.33	15	-1	-1	0
G,4	0	0.23	0.33	15	-1	-1	0
G,5	0	0.23	0.33	15	-1	-1	0
G,6	1	0.23	0.33	15	2	2	6
G,7	1	0.23	0.33	15	2	2	6
H,0	2	0.23	0.33	15	5	5	8
H,1	1	0.23	0.33	15	2	2	6
H,2	1	0.23	0.33	15	2	2	6
H,3	0	0.23	0.33	15	-1	-1	0
H,4	1	0.23	0.33	15	2	2	6
H,5	0	0.23	0.33	15	-1	-1	0
H,6	0	0.23	0.33	15	-1	-1	0
H,7	0	0.23	0.33	15	-1	-1	0
I,0	1	0.23	0.33	15	2	2	6

Final Status Survey: Room 2H

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
I,1	0	0.23	0.33	15	-1	-1	0
I,2	0	0.23	0.33	15	-1	-1	0
I,3	0	0.23	0.33	15	-1	-1	0
I,5	2	0.23	0.33	15	5	5	8
I,6	1	0.23	0.33	15	2	2	6
I,7	1	0.23	0.33	15	2	2	6
J,0	3	0.23	0.33	15	8	8	10
J,1	0	0.23	0.33	15	-1	-1	0
J,2	0	0.23	0.33	15	-1	-1	0
J,3	0	0.23	0.33	15	-1	-1	0
J,4	0	0.23	0.33	15	-1	-1	0
J,5	0	0.23	0.33	15	-1	-1	0
J,6	1	0.23	0.33	15	2	2	6
J,7	0	0.23	0.33	15	-1	-1	0
K,0	4	0.23	0.33	15	11	11	12
K,1	0	0.23	0.33	15	-1	-1	0
K,2	0	0.23	0.33	15	-1	-1	0

Final Status Survey: Room 2H

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
K,3	0	0.23	0.33	15	-1	-1	0
K,4	1	0.23	0.33	15	2	2	6
K,5	0	0.23	0.33	15	-1	-1	0
K,6	0	0.23	0.33	15	-1	-1	0
K,7	0	0.23	0.33	15	-1	-1	0
L,0	1	0.23	0.33	15	2	2	6
L,1	1	0.23	0.33	15	2	2	6
L,2	1	0.23	0.33	15	2	2	6
L,3	0	0.23	0.33	15	-1	-1	0
L,4	1	0.23	0.33	15	2	2	6
L,5	1	0.23	0.33	15	2	2	6
L,6	0	0.23	0.33	15	-1	-1	0
L,7	0	0.23	0.33	15	-1	-1	0
M,0	1	0.23	0.33	15	2	2	6
M,1	1	0.23	0.33	15	2	2	6
M,3	1	0.23	0.33	15	2	2	6
M,4	0	0.23	0.33	15	-1	-1	0

Final Status Survey: Room 2H

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
M,5	0	0.23	0.33	15	-1	-1	0
M,6	0	0.23	0.33	15	-1	-1	0
M,7	0	0.23	0.33	15	-1	-1	0
N,0	1	0.23	0.33	15	2	2	6
N,1	0	0.23	0.33	15	-1	-1	0
N,2	1	0.23	0.33	15	2	2	6
N,3	0	0.23	0.33	15	-1	-1	0
N,4	1	0.23	0.33	15	2	2	6
N,5	1	0.23	0.33	15	2	2	6
N,6	1	0.23	0.33	15	2	2	6
N,7	1	0.23	0.33	15	2	2	6
N+0.6,0	1	0.23	0.33	15	2	2	6
N+0.6,1	2	0.23	0.33	15	5	5	8
N+0.6,2	0	0.23	0.33	15	-1	-1	0
N+0.6,3	0	0.23	0.33	15	-1	-1	0
N+0.6,4	1	0.23	0.33	15	2	2	6
N+0.6,5	1	0.23	0.33	15	2	2	6

Final Status Survey: Room 2H

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
N+0.6,6	0	0.23	0.33	15	-1	-1	0
N+0.6,7	2	0.23	0.33	15	5	5	8

Final Status Survey: Room 2K

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
FLOOR							
A,0	579	1093	0.21	624	73	182	321
A,1	677	1093	0.21	624	292	731	338
A,2	586	1093	0.21	624	89	221	322
A,3	808	1093	0.21	624	586	1465	361
A,4	610	1323	0.24	600	-101	-252	295
A,5	747	1323	0.24	600	168	419	315
A,6	781	1323	0.24	600	234	586	320
A,7	700	1323	0.24	600	75	189	308
A,8	722	1323	0.24	600	119	297	312
A,9	657	1323	0.24	600	-9	-22	302
A,10	619	1323	0.24	600	-83	-208	296
A,10+1	752	1323	0.24	600	177	444	316
B,0	572	1093	0.21	624	57	143	319
B,1	546	1093	0.21	624	-1	-3	314
B,2	573	1093	0.21	624	59	148	319
B,3	682	1093	0.21	624	304	759	339

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Final Status Survey: Room 2K

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
B,4	667	1323	0.24	600	11	27	303
B,5	691	1323	0.24	600	58	145	307
B,6	640	1323	0.24	600	-42	-105	299
B,7	655	1323	0.24	600	-13	-32	302
B,8	709	1323	0.24	600	93	233	310
B,9	745	1323	0.24	600	164	409	315
B,10	738	1323	0.24	600	150	375	314
B,10+1	830	1323	0.24	600	330	826	327
C,0	566	1093	0.21	624	44	109	318
C,1	600	1093	0.21	624	120	300	324
C,2	594	1093	0.21	624	106	266	323
C,3	751	1093	0.21	624	458	1146	351
C,4	724	1093	0.21	624	398	994	347
C,5	749	1093	0.21	624	454	1134	351
C,6	700	1323	0.24	600	75	189	308
C,7	700	1323	0.24	600	75	189	308
C,8	720	1323	0.24	600	115	287	311

Final Status Survey: Room 2K

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
C,9	697	1323	0.24	600	70	174	308
C,10	943	1323	0.24	600	552	1380	343
C,10+1	635	1323	0.24	600	-52	-130	299
D,0	600	1093	0.21	624	120	300	324
D,1	663	1093	0.21	624	261	653	336
D,2	678	1093	0.21	624	295	737	339
D,3	726	1093	0.21	624	402	1006	347
D,4	808	1093	0.21	624	586	1465	361
D,5	829	1093	0.21	624	633	1583	365
D,6	788	1093	0.21	624	541	1353	358
D,7	777	1093	0.21	624	517	1291	356
D,8	690	1323	0.24	600	56	140	307
D,9	971	1474	0.21	722	524	1311	402
D,10	648	1323	0.24	600	-26	-66	301
D,10+1	642	1323	0.24	600	-38	-96	300
E,0	705	1093	0.21	624	355	888	343
E,1	556	1093	0.21	624	21	53	316

Final Status Survey: Room 2K

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
E,2	597	1093	0.21	624	113	283	324
E,3	679	1323	0.24	600	34	86	305
E,4	729	1323	0.24	600	132	331	313
E,5	685	1323	0.24	600	46	115	306
E,6	753	1323	0.24	600	179	449	316
E,7	752	1323	0.24	600	177	444	316
E,8	814	1093	0.21	624	599	1499	362
E,9	729	1093	0.21	624	409	1022	348
E,10	726	1093	0.21	624	402	1006	347
E,10+1	723	1093	0.21	624	396	989	347
F,0	600	1093	0.21	624	120	300	324
F,1	669	1093	0.21	624	275	686	337
F,2	757	1093	0.21	624	472	1179	352
F,3	633	1323	0.24	600	-56	-140	298
F,4	653	1323	0.24	600	-17	-42	301
F,5	658	1323	0.24	600	-7	-17	302
F,6	741	1323	0.24	600	156	390	315

Final Status Survey: Room 2K

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
F,7	746	1323	0.24	600	166	414	315
F,8	810	1323	0.24	600	291	728	325
F,9	725	1093	0.21	624	400	1000	347
F,10	735	1093	0.21	624	422	1056	349
F,10+1	764	1093	0.21	624	487	1218	354
G,0	672	1093	0.21	624	281	703	338
G,1	648	1093	0.21	624	227	569	333
G,2	716	1093	0.21	624	380	950	345
G,3	760	1093	0.21	624	478	1196	353
G,4	671	1093	0.21	624	279	697	337
G,5	700	1093	0.21	624	344	860	343
G,6	735	1093	0.21	624	422	1056	349
G,7	667	1093	0.21	624	270	675	337
G,8	761	1093	0.21	624	481	1202	353
G,9	710	1093	0.21	624	366	916	344
G,10	750	1093	0.21	624	456	1140	351
G,10+1	808	1093	0.21	624	586	1465	361

Final Status Survey: Room 2K

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
G+0.3,0	752	1093	0.21	624	461	1151	352
G+0.3,1	700	1093	0.21	624	344	860	343
G+0.3,2	715	1093	0.21	624	378	944	345
G+0.3,3	853	1093	0.21	624	687	1717	368
G+0.3,4	810	1093	0.21	624	590	1476	361
G+0.3,5	950	1093	0.21	624	904	2261	384
G+0.3,6	818	1093	0.21	624	608	1521	363
G+0.3,7	903	1093	0.21	624	799	1997	377
G+0.3,8	998	1093	0.21	624	1012	2529	392
G+0.3,9	750	1093	0.21	624	456	1140	351
G+0.3,10	775	1093	0.21	624	512	1280	356
G+0.3,10+1	791	1093	0.21	624	548	1370	358
LOWER WALLS							
A,0,0+1	550	1231	0.22	631	-140	-350	307
A,1,0+1	543	1231	0.22	631	-155	-388	306
A,2,0+1	583	1231	0.22	631	-70	-174	313
A,3,0	**85**	**69**	**0.21**	**4199**	**508**	**1625**	**2471**

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Final Status Survey: Room 2K

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
A,3,0+1	558	1231	0.22	631	-123	-307	308
A,4,0	**62**	**69**	**0.21**	**4199**	**-222**	**-711**	**2279**
A,4,0+1	599	1231	0.22	631	-35	-88	316
A,5,0	**94**	**69**	**0.21**	**4199**	**794**	**2540**	**2542**
A,5,0+1	535	1231	0.22	631	-172	-430	304
A,8,0	**86**	**69**	**0.21**	**4199**	**540**	**1727**	**2479**
A,8,0+1	654	1231	0.22	631	82	206	325
A,9,0	**64**	**69**	**0.21**	**4199**	**-159**	**-508**	**2296**
A,9,0+1	634	1231	0.22	631	40	99	322
A,10,0	**82**	**69**	**0.21**	**4199**	**413**	**1321**	**2447**
A,10,0+1	650	1231	0.22	631	74	184	324
A,10+1,0+1	635	1231	0.22	631	42	104	322
B,0,0+1	590	1231	0.22	631	-55	-136	314
B,10+1,0	**80**	**69**	**0.21**	**4199**	**349**	**1117**	**2430**
B,10+1,0+1 CR	946	1847.6	0.2	847	52	131	433
C,0,0+1	571	1231	0.22	631	-95	-238	311
C,10+1,0	**88**	**69**	**0.21**	**4199**	**603**	**1930**	**2495**

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Final Status Survey: Room 2K

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
C,10+1,0+1 CR	933	1847.6	0.2	847	22	54	431
D,0,0+1	557	1231	0.22	631	-125	-313	308
D,10+1,0	**86**	**69**	**0.21**	**4199**	**540**	**1727**	**2479**
D,10+1,0+1 CR	900	1847.6	0.2	847	-56	-140	425
E,0,0+1	549	1231	0.22	631	-142	-356	307
E,10+1,0	**79**	**69**	**0.21**	**4199**	**317**	**1016**	**2422**
E,10+1,0+1 CR	978	1847.6	0.2	847	128	319	437
F,0,0+1	597	1231	0.22	631	-40	-99	315
F,10+1,0	**74**	**69**	**0.21**	**4199**	**159**	**508**	**2381**
F,10+1,0+1 CR	941	1847.6	0.2	847	40	101	432
G+0.3,0,0+1 CR	913	1847.6	0.2	847	-25	-64	428
G+0.3,2,0+1 CR	900	1847.6	0.2	847	-56	-140	425
G+0.3,3,0	**76**	**69**	**0.21**	**4199**	**222**	**711**	**2398**
G+0.3,3,0+1 CR	936	1847.6	0.2	847	29	72	431
G+0.3,4,0	**84**	**69**	**0.21**	**4199**	**476**	**1524**	**2463**
G+0.3,4,0+1 CR	940	1847.6	0.2	847	38	95	432
G+0.3,5,0	**93**	**69**	**0.21**	**4199**	**762**	**2438**	**2534**

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Final Status Survey: Room 2K

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
G+0.3,5,0+1 CR	917	1847.6	0.2	847	-16	-40	428
G+0.3,6,0	**91**	**69**	**0.21**	**4199**	**698**	**2235**	**2519**
G+0.3,6,0+1 CR	901	1847.6	0.2	847	-54	-134	426
G+0.3,7,0	**100**	**69**	**0.21**	**4199**	**984**	**3149**	**2588**
G+0.3,7,0+1 CR	920	1847.6	0.2	847	-9	-22	429
G+0.3,8,0	**84**	**69**	**0.21**	**4199**	**476**	**1524**	**2463**
G+0.3,8,0+1	578	1093	0.2	655	74	185	336
G+0.3,9,0	**78**	**69**	**0.21**	**4199**	**286**	**914**	**2414**
G+0.3,9,0+1 CR	912	1847.6	0.2	847	-28	-69	427
G+0.3,10,0	**71**	**69**	**0.21**	**4199**	**63**	**203**	**2356**
G+0.3,10,0+1 CR	962	1847.6	0.2	847	90	225	435
G+0.3,10+1,0+1 CR	968	1847.6	0.2	847	104	260	436
UPPER WALLS							
A,1,0+5	**45**	**69**	**0.21**	**4199**	**-762**	**-2438**	**2126**
A,3,0+5	**78**	**69**	**0.21**	**4199**	**286**	**914**	**2414**
A,5,0+5	**55**	**69**	**0.21**	**4199**	**-444**	**-1422**	**2217**
A,7,0+5	**72**	**69**	**0.21**	**4199**	**95**	**305**	**2364**

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Final Status Survey: Room 2K

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
A,9,0+5	66	69	0.21	4199	-95	-305	2313
A,10+1,0+5	86	69	0.21	4199	540	1727	2479
C,0,0+5	95	69	0.21	4199	825	2641	2550
C,10+1,0+5	83	69	0.21	4199	444	1422	2455
E,0,0+5	66	69	0.21	4199	-95	-305	2313
E,10+1,0+5	99	69	0.21	4199	952	3048	2581
G,0,0+5	52	69	0.21	4199	-540	-1727	2190
G,10+1,0+5	103	69	0.21	4199	1079	3454	2611
G+0.3,1,0+5	80	69	0.21	4199	349	1117	2430
G+0.3,3,0+5	78	69	0.21	4199	286	914	2414
G+0.3,5,0+5	77	69	0.21	4199	254	813	2406
G+0.3,7,0+5	75	69	0.21	4199	190	610	2389
G+0.3,9,0+5	99	69	0.21	4199	952	3048	2581
CEILING							
@A,0 SS	61	53.8	0.21	3740	229	731	2133
@A,2 SS	59	53.8	0.21	3740	165	528	2115
@A,4 SS	64	53.8	0.21	3740	324	1036	2161

Final Status Survey: Room 2K

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
@A,6 SS	62	53.8	0.21	3740	260	833	2143
@A,8 SS	56	53.8	0.21	3740	70	223	2086
@A,10 SS	59	53.8	0.21	3740	165	528	2115
@C,0 SS	63	53.8	0.21	3740	292	935	2152
@C,2 SS	67	53.8	0.21	3740	419	1341	2188
@C,4 SS	58	53.8	0.21	3740	133	427	2105
@C,6 SS	51	53.8	0.21	3740	-89	-284	2038
@C,8 SS	55	53.8	0.21	3740	38	122	2077
@C,10 SS	61	53.8	0.21	3740	229	731	2133
@E,0 SS	74	53.8	0.21	3740	641	2052	2251
@E,2 SS	72	53.8	0.21	3740	578	1849	2233
@E,4 SS	71	53.8	0.21	3740	546	1747	2224
@E,6 SS	57	53.8	0.21	3740	102	325	2096
@E,8 SS	59	53.8	0.21	3740	165	528	2115
@E,10 SS	63	53.8	0.21	3740	292	935	2152
@G,0 SS	71	53.8	0.21	3740	546	1747	2224
@G,2 SS	60	53.8	0.21	3740	197	630	2124

Final Status Survey: Room 2K

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
@G,4 SS	**60**	**53.8**	**0.21**	**3740**	**197**	**630**	**2124**
@G,6 SS	**61**	**53.8**	**0.21**	**3740**	**229**	**731**	**2133**
@G,8 SS	**62**	**53.8**	**0.21**	**3740**	**260**	**833**	**2143**
@G,10 SS	**60**	**53.8**	**0.21**	**3740**	**197**	**630**	**2124**
SMEARS							
A,0	2	0.23	0.33	15	5	5	8
A,1	1	0.23	0.33	15	2	2	6
A,2	0	0.23	0.33	15	-1	-1	0
A,3	0	0.23	0.33	15	-1	-1	0
A,4	1	0.23	0.33	15	2	2	6
A,5	0	0.23	0.33	15	-1	-1	0
A,6	1	0.23	0.33	15	2	2	6
A,7	1	0.23	0.33	15	2	2	6
A,8	2	0.23	0.33	15	5	5	8
A,9	3	0.23	0.33	15	8	8	10
A,10	1	0.23	0.33	15	2	2	6
A,10+1	0	0.23	0.33	15	-1	-1	0

Final Status Survey: Room 2K

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
B,0	3	0.23	0.33	15	8	8	10
B,1	2	0.23	0.33	15	5	5	8
B,2	1	0.23	0.33	15	2	2	6
B,3	1	0.23	0.33	15	2	2	6
B,4	0	0.23	0.33	15	-1	-1	0
B,5	1	0.23	0.33	15	2	2	6
B,6	0	0.23	0.33	15	-1	-1	0
B,7	1	0.23	0.33	15	2	2	6
B,8	1	0.23	0.33	15	2	2	6
B,9	2	0.23	0.33	15	5	5	8
B,10	1	0.23	0.33	15	2	2	6
B,10+1	1	0.23	0.33	15	2	2	6
C,0	1	0.23	0.33	15	2	2	6
C,1	2	0.23	0.33	15	5	5	8
C,2	1	0.23	0.33	15	2	2	6
C,3	1	0.23	0.33	15	2	2	6
C,4	0	0.23	0.33	15	-1	-1	0

Final Status Survey: Room 2K

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
C,5	0	0.23	0.33	15	-1	-1	0
C,6	0	0.23	0.33	15	-1	-1	0
C,7	0	0.23	0.33	15	-1	-1	0
C,8	0	0.23	0.33	15	-1	-1	0
C,9	0	0.23	0.33	15	-1	-1	0
C,10	0	0.23	0.33	15	-1	-1	0
C,10+1	1	0.23	0.33	15	2	2	6
D,0	1	0.23	0.33	15	2	2	6
D,1	2	0.23	0.33	15	5	5	8
D,2	1	0.23	0.33	15	2	2	6
D,3	0	0.23	0.33	15	-1	-1	0
D,4	0	0.23	0.33	15	-1	-1	0
D,5	1	0.23	0.33	15	2	2	6
D,6	1	0.23	0.33	15	2	2	6
D,7	1	0.23	0.33	15	2	2	6
D,8	1	0.23	0.33	15	2	2	6
D,9	0	0.23	0.33	15	-1	-1	0

Final Status Survey: Room 2K

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
D,10	2	0.23	0.33	15	5	5	8
D,10+1	0	0.23	0.33	15	-1	-1	0
E,0	0	0.23	0.33	15	-1	-1	0
E,1	3	0.23	0.33	15	8	8	10
E,2	1	0.23	0.33	15	2	2	6
E,3	1	0.23	0.33	15	2	2	6
E,4	0	0.23	0.33	15	-1	-1	0
E,5	2	0.23	0.33	15	5	5	8
E,6	2	0.23	0.33	15	5	5	8
E,7	0	0.23	0.33	15	-1	-1	0
E,8	1	0.23	0.33	15	2	2	6
E,9	1	0.23	0.33	15	2	2	6
E,10	2	0.23	0.33	15	5	5	8
E,10+1	1	0.23	0.33	15	2	2	6
F,0	0	0.23	0.33	15	-1	-1	0
F,1	1	0.23	0.33	15	2	2	6
F,2	2	0.23	0.33	15	5	5	8

Final Status Survey: Room 2K

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
F,3	1	0.23	0.33	15	2	2	6
F,4	0	0.23	0.33	15	-1	-1	0
F,5	0	0.23	0.33	15	-1	-1	0
F,6	0	0.23	0.33	15	-1	-1	0
F,7	1	0.23	0.33	15	2	2	6
F,8	1	0.23	0.33	15	2	2	6
F,9	0	0.23	0.33	15	-1	-1	0
F,10	1	0.23	0.33	15	2	2	6
F,10+1	1	0.23	0.33	15	2	2	6
G,0	1	0.23	0.33	15	2	2	6
G,1	1	0.23	0.33	15	2	2	6
G,2	1	0.23	0.33	15	2	2	6
G,3	1	0.23	0.33	15	2	2	6
G,4	0	0.23	0.33	15	-1	-1	0
G,5	0	0.23	0.33	15	-1	-1	0
G,6	0	0.23	0.33	15	-1	-1	0
G,7	1	0.23	0.33	15	2	2	6

Final Status Survey: Room 2K

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
G,8	2	0.23	0.33	15	5	5	8
G,9	0	0.23	0.33	15	-1	-1	0
G,10	0	0.23	0.33	15	-1	-1	0
G,10+1	1	0.23	0.33	15	2	2	6
G+0.3,0	2	0.23	0.33	15	5	5	8
G+0.3,1	1	0.23	0.33	15	2	2	6
G+0.3,2	1	0.23	0.33	15	2	2	6
G+0.3,3	1	0.23	0.33	15	2	2	6
G+0.3,4	0	0.23	0.33	15	-1	-1	0
G+0.3,5	0	0.23	0.33	15	-1	-1	0
G+0.3,6	1	0.23	0.33	15	2	2	6
G+0.3,7	1	0.23	0.33	15	2	2	6
G+0.3,8	1	0.23	0.33	15	2	2	6
G+0.3,9	1	0.23	0.33	15	2	2	6
G+0.3,10	1	0.23	0.33	15	2	2	6
G+0.3,10+1	0	0.23	0.33	15	-1	-1	0

Final Status Survey: Room 2L

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
FLOOR							
A,0	879	1332	0.21	687	477	1193	382
A,1	913	1332	0.21	687	554	1384	388
A,2	810	1332	0.21	687	323	807	371
A,3	731	1332	0.21	687	146	364	358
A,4	724	1332	0.21	687	130	325	357
A,5	810	1332	0.21	687	323	807	371
A,6	805	1332	0.21	687	311	779	370
A,7	805	1332	0.21	687	311	779	370
A,8	790	1332	0.21	687	278	695	368
A,9	842	1332	0.21	687	394	986	376
A,10	720	1332	0.21	687	121	303	356
A,11	724	1332	0.21	687	130	325	357
A,12	739	1332	0.21	687	164	409	360
A,13	884	1296	0.23	619	483	1207	348
A,14	975	1296	0.23	619	669	1673	361
A,15	746	1332	0.21	687	179	448	361

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Final Status Survey: Room 2L

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
B,0	840	1332	0.21	687	390	975	376
B,1	805	1332	0.21	687	311	779	370
B,2	760	1332	0.21	687	211	527	363
B,3	736	1332	0.21	687	157	392	359
B,4	773	1332	0.21	687	240	599	365
B,5	723	1332	0.21	687	128	319	357
B,6	752	1332	0.21	687	193	482	362
B,7	716	1332	0.21	687	112	280	356
B,8	748	1332	0.21	687	184	459	361
B,9	734	1332	0.21	687	152	381	359
B,10	827	1332	0.21	687	361	902	374
B,11	808	1332	0.21	687	318	796	371
B,12	860	1332	0.21	687	435	1087	379
B,13	1175	1296	0.23	619	1078	2696	388
B,14	863	1296	0.23	619	440	1100	345
B,15	790	1332	0.21	687	278	695	368
C,0	780	1332	0.21	687	255	639	366

Final Status Survey: Room 2L

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
C,1	756	1332	0.21	687	202	504	362
C,2	802	1332	0.21	687	305	762	370
C,3	1000	1332	0.21	687	748	1871	401
C,4	700	1332	0.21	687	76	190	353
C,5	803	1332	0.21	687	307	768	370
C,6	740	1332	0.21	687	166	415	360
C,7	665	1332	0.21	687	-2	-6	347
C,8	760	1332	0.21	687	211	527	363
C,9	710	1332	0.21	687	99	246	355
C,10	683	1332	0.21	687	38	95	350
C,11	768	1332	0.21	687	229	571	364
C,12	749	1332	0.21	687	186	465	361
C,13	730	1332	0.21	687	143	359	358
C,14	725	1332	0.21	687	132	331	357
D,0	1171	1296	0.23	619	1070	2675	388
D,1	743	1332	0.21	687	173	431	360
D,2	727	1332	0.21	687	137	342	357

Final Status Survey: Room 2L

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
D,3	673	1332	0.21	687	16	39	348
D,4	735	1332	0.21	687	155	387	359
D,5	675	1332	0.21	687	20	50	349
D,6	720	1332	0.21	687	121	303	356
D,7	760	1332	0.21	687	211	527	363
D,8	800	1332	0.21	687	300	751	370
D,9	817	1332	0.21	687	338	846	372
D,10	765	1332	0.21	687	222	555	364
D,11	809	1332	0.21	687	320	801	371
D,12	645	1332	0.21	687	-47	-118	343
D,13	760	1332	0.21	687	211	527	363
D,14	810	1332	0.21	687	323	807	371
D,15	814	1332	0.21	687	332	829	372
E,0	1007	1296	0.23	619	735	1836	366
E,1	692	1332	0.21	687	58	146	352
E,2	710	1332	0.21	687	99	246	355
E,3	677	1332	0.21	687	25	62	349

Final Status Survey: Room 2L

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
E,4	690	1332	0.21	687	54	134	351
E,5	650	1332	0.21	687	-36	-90	344
E,6	725	1332	0.21	687	132	331	357
E,7	770	1332	0.21	687	233	583	365
E,8	746	1332	0.21	687	179	448	361
E,9	840	1332	0.21	687	390	975	376
E,10	790	1332	0.21	687	278	695	368
E,11	747	1332	0.21	687	182	454	361
E,12	1011	1332	0.21	687	773	1933	403
E,13	800	1332	0.21	687	300	751	370
E,14	810	1332	0.21	687	323	807	371
E,15	800	1332	0.21	687	300	751	370
F,0	794	1332	0.21	687	287	717	369
F,1	760	1332	0.21	687	211	527	363
F,2	810	1332	0.21	687	323	807	371
F,3	720	1332	0.21	687	121	303	356
F,4	765	1332	0.21	687	222	555	364

Final Status Survey: Room 2L

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
F,5	750	1332	0.21	687	188	471	361
F,6	723	1332	0.21	687	128	319	357
F,7	759	1332	0.21	687	208	521	363
F,8	793	1332	0.21	687	285	711	368
F,9	745	1332	0.21	687	177	443	361
F,10	719	1332	0.21	687	119	297	356
F,11	731	1332	0.21	687	146	364	358
F,12	766	1332	0.21	687	224	560	364
F,13	976	1332	0.21	687	695	1737	397
F,14	812	1332	0.21	687	327	818	372
F,15	1173	1332	0.21	687	1136	2840	426
G,0	788	1332	0.21	687	273	683	368
G,1	717	1332	0.21	687	114	286	356
G,2	729	1332	0.21	687	141	353	358
G,3	701	1332	0.21	687	78	196	353
G,4	697	1332	0.21	687	69	174	352
G,5	703	1332	0.21	687	83	207	353

Final Status Survey: Room 2L

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
G,6	775	1332	0.21	687	244	611	366
G,7	753	1332	0.21	687	195	487	362
G,8	701	1332	0.21	687	78	196	353
G,9	697	1332	0.21	687	69	174	352
G,10	640	1332	0.21	687	-58	-146	343
G,11	740	1332	0.21	687	166	415	360
G,12	752	1332	0.21	687	193	482	362
G,13	828	1332	0.21	687	363	908	374
G,14	948	1332	0.21	687	632	1580	393
G,15	863	1332	0.21	687	441	1104	380
LOWER WALLS							
A,0,0+1	724	1280	0.2	708	198	494	373
A,1,0	**92**	**71**	**0.21**	**4256**	**667**	**2133**	**2542**
A,1,0+1	645	1280	0.2	708	12	29	358
A,2,0	**89**	**71**	**0.21**	**4256**	**571**	**1829**	**2519**
A,2,0+1	671	1280	0.2	708	73	182	363
A,3,0	**94**	**71**	**0.21**	**4256**	**730**	**2337**	**2558**

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Final Status Survey: Room 2L

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
A,3,0+1	646	1280	0.2	708	14	35	358
A,4,0	**96**	**71**	**0.21**	**4256**	**794**	**2540**	**2573**
A,4,0+1	606	1280	0.2	708	-80	-200	351
A,5,0	**63**	**71**	**0.21**	**4256**	**-254**	**-813**	**2305**
A,5,0+1	648	1280	0.2	708	19	47	359
A,8,0	**108**	**71**	**0.21**	**4256**	**1175**	**3759**	**2664**
A,8,0+1	650	1280	0.2	708	24	59	359
A,9,0	**97**	**71**	**0.21**	**4256**	**825**	**2641**	**2581**
A,9,0+1	680	1280	0.2	708	94	235	365
A,10,0	**82**	**71**	**0.21**	**4256**	**349**	**1117**	**2463**
A,10,0+1	650	1280	0.2	708	24	59	359
A,11,0	**72**	**71**	**0.21**	**4256**	**32**	**102**	**2381**
A,11,0+1	635	1280	0.2	708	-12	-29	356
A,12,0	**102**	**71**	**0.21**	**4256**	**984**	**3149**	**2619**
A,12,0+1	624	1280	0.2	708	-38	-94	354
A,13,0+1	618	1280	0.2	708	-52	-129	353
A,14,0	**78**	**71**	**0.21**	**4256**	**222**	**711**	**2430**

Final Status Survey: Room 2L

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
A,14,0+1	610	1280	0.2	708	-71	-176	352
A,15,0+1	590	1280	0.2	708	-118	-294	348
B,0,0	**78**	**73**	**0.21**	**4311**	**159**	**508**	**2447**
B,0,0+1	649	1280	0.19	745	22	56	378
B,15,0	**81**	**71**	**0.21**	**4256**	**317**	**1016**	**2455**
B,15,0+1	670	1280	0.2	708	71	176	363
C,0,0	**70**	**73**	**0.21**	**4311**	**-95**	**-305**	**2381**
C,0,0+1	621	1280	0.19	745	-47	-118	372
D,0,0	**72**	**73**	**0.21**	**4311**	**-32**	**-102**	**2398**
D,0,0+1	663	1280	0.19	745	57	142	381
E,0,0	**80**	**73**	**0.21**	**4311**	**222**	**711**	**2463**
E,0,0+1	645	1280	0.19	745	12	31	377
F,0,0	**74**	**73**	**0.21**	**4311**	**32**	**102**	**2414**
F,0,0+1	630	1280	0.19	745	-25	-62	374
F,15,0	**101**	**71**	**0.21**	**4256**	**952**	**3048**	**2611**
F,15,0+1	620	1280	0.2	708	-47	-118	353
G,0,0	**72**	**73**	**0.21**	**4311**	**-32**	**-102**	**2398**

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Final Status Survey: Room 2L

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
G,2,0+1	607	1280	0.2	708	-78	-194	351
G,1,0	**84**	**71**	**0.21**	**4256**	**413**	**1321**	**2479**
G,1,0+1	620	1280	0.2	708	-47	-118	353
G,2,0	**66**	**71**	**0.21**	**4256**	**-159**	**-508**	**2331**
G,2,0+1	603	1280	0.2	708	-87	-218	350
G,3,0	**66**	**71**	**0.21**	**4256**	**-159**	**-508**	**2331**
G,3,0+1	617	1280	0.2	708	-54	-135	353
G,4,0	**88**	**71**	**0.21**	**4256**	**540**	**1727**	**2511**
G,4,0+1	635	1280	0.2	708	-12	-29	356
G,5,0	**71**	**71**	**0.21**	**4256**	**0**	**0**	**2373**
G,5,0+1	613	1280	0.2	708	-64	-159	352
G,6,0	**74**	**71**	**0.21**	**4256**	**95**	**305**	**2398**
G,6,0+1	576	1280	0.2	708	-151	-376	345
G,7,0	**64**	**71**	**0.21**	**4256**	**-222**	**-711**	**2313**
G,7,0+1	592	1280	0.2	708	-113	-282	348
G,8,0	**75**	**71**	**0.21**	**4256**	**127**	**406**	**2406**
G,8,0+1	550	1280	0.2	708	-212	-529	340

Final Status Survey: Room 2L

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
G,9,0	**78**	**71**	**0.21**	**4256**	**222**	**711**	**2430**
G,9,0+1	640	1280	0.2	708	0	0	357
G,10,0	**77**	**71**	**0.21**	**4256**	**190**	**610**	**2422**
G,10,0+1	615	1280	0.2	708	-59	-147	353
G,11,0	**69**	**71**	**0.21**	**4256**	**-63**	**-203**	**2356**
G,11,0+1	627	1280	0.2	708	-31	-76	355
G,12,0	**68**	**71**	**0.21**	**4256**	**-95**	**-305**	**2347**
G,12,0+1	640	1280	0.2	708	0	0	357
G,13,0	**77**	**71**	**0.21**	**4256**	**190**	**610**	**2422**
G,13,0+1	650	1280	0.2	708	24	59	359
G,14,0	**80**	**71**	**0.21**	**4256**	**286**	**914**	**2447**
G,14,0+1	635	1280	0.2	708	-12	-29	356
G,15,0+1	628	1280	0.2	708	-28	-71	355
UPPER WALLS							
A,4,0+5	**76**	**69**	**0.21**	**4199**	**222**	**711**	**2398**
A,8,0+5	**80**	**69**	**0.21**	**4199**	**349**	**1117**	**2430**
A,12,0+5	**59**	**69**	**0.21**	**4199**	**-317**	**-1016**	**2253**

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Final Status Survey: Room 2L

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
A,15,0+5	75	69	0.21	4199	190	610	2389
B,0,0+5	70	69	0.21	4199	32	102	2347
D,0,0+5	73	69	0.21	4199	127	406	2373
D,15,0+5	69	69	0.21	4199	0	0	2339
G,0,0+5	65	69	0.21	4199	-127	-406	2305
G,4,0+5	74	69	0.21	4199	159	508	2381
G,8,0+5	79	69	0.21	4199	317	1016	2422
G,12,0+5	59	69	0.21	4199	-317	-1016	2253
G,15,0+5	75	69	0.21	4199	190	610	2389
CEILING							
@A,0 SS	61	53.38	0.21	3727	242	774	2129
@A,4 SS	59	53.38	0.21	3727	178	571	2111
@A,9 SS	64	53.38	0.21	3727	337	1079	2157
@A,15 SS	62	53.38	0.21	3727	274	876	2139
@D,1 SS	56	53.38	0.21	3727	83	266	2082
@D,3 SS	59	53.38	0.21	3727	178	571	2111
@D,7 SS	63	53.38	0.21	3727	305	977	2148

Final Status Survey: Room 2L

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
@D,9 SS	**67**	**53.38**	**0.21**	**3727**	**432**	**1384**	**2185**
@F1 SS	**58**	**53.38**	**0.21**	**3727**	**147**	**469**	**2101**
@F6 SS	**51**	**53.38**	**0.21**	**3727**	**-76**	**-242**	**2034**
@G10 SS	**55**	**53.38**	**0.21**	**3727**	**51**	**165**	**2073**
@G15 SS	**61**	**53.38**	**0.21**	**3727**	**242**	**774**	**2129**
SMEARS							
A,0	0	0.23	0.33	15	-1	-1	0
A,1	0	0.23	0.33	15	-1	-1	0
A,2	1	0.23	0.33	15	2	2	6
A,3	3	0.23	0.33	15	8	8	10
A,4	0	0.23	0.33	15	-1	-1	0
A,5	1	0.23	0.33	15	2	2	6
A,6	1	0.23	0.33	15	2	2	6
A,7	2	0.23	0.33	15	5	5	8
A,8	0	0.23	0.33	15	-1	-1	0
A,9	1	0.23	0.33	15	2	2	6
A,10	1	0.23	0.33	15	2	2	6

Final Status Survey: Room 2L

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
A,11	0	0.23	0.33	15	-1	-1	0
A,12	1	0.23	0.33	15	2	2	6
A,13	2	0.23	0.33	15	5	5	8
B,0	0	0.23	0.33	15	-1	-1	0
B,1	0	0.23	0.33	15	-1	-1	0
B,2	1	0.23	0.33	15	2	2	6
B,3	0	0.23	0.33	15	-1	-1	0
B,4	1	0.23	0.33	15	2	2	6
B,5	0	0.23	0.33	15	-1	-1	0
B,6	0	0.23	0.33	15	-1	-1	0
B,7	0	0.23	0.33	15	-1	-1	0
B,8	0	0.23	0.33	15	-1	-1	0
B,9	0	0.23	0.33	15	-1	-1	0
B,10	1	0.23	0.33	15	2	2	6
B,11	1	0.23	0.33	15	2	2	6
B,12	0	0.23	0.33	15	-1	-1	0
B,13	1	0.23	0.33	15	2	2	6

Final Status Survey: Room 2L

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
C,0	0	0.23	0.33	15	-1	-1	0
C,1	1	0.23	0.33	15	2	2	6
C,2	0	0.23	0.33	15	-1	-1	0
C,3	2	0.23	0.33	15	5	5	8
C,4	0	0.23	0.33	15	-1	-1	0
C,5	0	0.23	0.33	15	-1	-1	0
C,6	0	0.23	0.33	15	-1	-1	0
C,7	1	0.23	0.33	15	2	2	6
C,8	1	0.23	0.33	15	2	2	6
C,9	1	0.23	0.33	15	2	2	6
C,10	1	0.23	0.33	15	2	2	6
C,11	0	0.23	0.33	15	-1	-1	0
C,12	1	0.23	0.33	15	2	2	6
C,13	0	0.23	0.33	15	-1	-1	0
C,14	1	0.23	0.33	15	2	2	6
C,15	0	0.23	0.33	15	-1	-1	0
D,0	1	0.23	0.33	15	2	2	6

Final Status Survey: Room 2L

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
D,1	1	0.23	0.33	15	2	2	6
D,2	0	0.23	0.33	15	-1	-1	0
D,3	0	0.23	0.33	15	-1	-1	0
D,4	0	0.23	0.33	15	-1	-1	0
D,5	0	0.23	0.33	15	-1	-1	0
D,6	1	0.23	0.33	15	2	2	6
D,7	0	0.23	0.33	15	-1	-1	0
D,8	0	0.23	0.33	15	-1	-1	0
D,9	2	0.23	0.33	15	5	5	8
D,10	0	0.23	0.33	15	-1	-1	0
D,11	0	0.23	0.33	15	-1	-1	0
D,12	1	0.23	0.33	15	2	2	6
D,13	0	0.23	0.33	15	-1	-1	0
D,14	0	0.23	0.33	15	-1	-1	0
D,15	0	0.23	0.33	15	-1	-1	0
E,0	0	0.23	0.33	15	-1	-1	0
E,1	2	0.23	0.33	15	5	5	8

Final Status Survey: Room 2L

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
E,2	0	0.23	0.33	15	-1	-1	0
E,3	0	0.23	0.33	15	-1	-1	0
E,4	1	0.23	0.33	15	2	2	6
E,5	1	0.23	0.33	15	2	2	6
E,6	0	0.23	0.33	15	-1	-1	0
E,7	1	0.23	0.33	15	2	2	6
E,8	0	0.23	0.33	15	-1	-1	0
E,9	0	0.23	0.33	15	-1	-1	0
E,10	1	0.23	0.33	15	2	2	6
E,11	1	0.23	0.33	15	2	2	6
E,12	0	0.23	0.33	15	-1	-1	0
E,13	0	0.23	0.33	15	-1	-1	0
E,14	1	0.23	0.33	15	2	2	6
E,15	1	0.23	0.33	15	2	2	6
F,0	0	0.23	0.33	15	-1	-1	0
F,1	0	0.23	0.33	15	-1	-1	0
F,2	1	0.23	0.33	15	2	2	6

Final Status Survey: Room 2L

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
F,3	0	0.23	0.33	15	-1	-1	0
F,4	1	0.23	0.33	15	2	2	6
F,5	0	0.23	0.33	15	-1	-1	0
F,6	0	0.23	0.33	15	-1	-1	0
F,7	1	0.23	0.33	15	2	2	6
F,8	0	0.23	0.33	15	-1	-1	0
F,9	0	0.23	0.33	15	-1	-1	0
F,10	1	0.23	0.33	15	2	2	6
F,11	1	0.23	0.33	15	2	2	6
F,12	0	0.23	0.33	15	-1	-1	0
F,13	0	0.23	0.33	15	-1	-1	0
F,14	1	0.23	0.33	15	2	2	6
F,15	0	0.23	0.33	15	-1	-1	0
G,0	0	0.23	0.33	15	-1	-1	0
G,1	3	0.23	0.33	15	8	8	10
G,2	1	0.23	0.33	15	2	2	6
G,3	0	0.23	0.33	15	-1	-1	0

Final Status Survey: Room 2L

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
G,4	0	0.23	0.33	15	-1	-1	0
G,5	1	0.23	0.33	15	2	2	6
G,6	0	0.23	0.33	15	-1	-1	0
G,7	1	0.23	0.33	15	2	2	6
G,8	0	0.23	0.33	15	-1	-1	0
G,9	1	0.23	0.33	15	2	2	6
G,10	0	0.23	0.33	15	-1	-1	0
G,11	1	0.23	0.33	15	2	2	6
G,12	2	0.23	0.33	15	5	5	8
G,13	0	0.23	0.33	15	-1	-1	0
G,14	0	0.23	0.33	15	-1	-1	0
G,15	1	0.23	0.33	15	2	2	6

Final Status Survey: Room 2M

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
FLOOR							
A,6	678	1401	0.2	740	-53	-132	370
A,7	688	1401	0.2	740	-29	-74	371
A,8	761	1401	0.2	740	142	356	384
A,9	683	1401	0.2	740	-41	-103	371
A,13	777	1401	0.2	740	180	450	387
A,14	837	1401	0.2	740	321	803	397
A,15	822	1401	0.2	740	286	715	395
B,0	1201	1401	0.2	740	1178	2944	454
B,1	819	1401	0.2	740	279	697	394
B,2	750	1401	0.2	740	116	291	382
B,3	845	1401	0.2	740	340	850	399
B,4	823	1401	0.2	740	288	721	395
B,5	792	1401	0.2	740	215	538	390
B,6	873	1401	0.2	740	406	1015	403
B,7	747	1401	0.2	740	109	274	382
B,8	754	1401	0.2	740	126	315	383

Final Status Survey: Room 2M

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
B,9	836	1401	0.2	740	319	797	397
B,10	881	1401	0.2	740	425	1062	405
B,11	758	1401	0.2	740	135	338	384
B,12	838	1401	0.2	740	324	809	397
B,13	729	1401	0.2	740	67	168	379
B,14	754	1401	0.2	740	126	315	383
B,15	726	1401	0.2	740	60	150	378
C,0	975	1401	0.2	740	646	1615	420
C,1	792	1401	0.2	740	215	538	390
C,2	792	1401	0.2	740	215	538	390
C,3	779	1401	0.2	740	185	462	387
C,4	771	1401	0.2	740	166	415	386
C,5	672	1401	0.2	740	-67	-168	369
C,6	901	1401	0.2	740	472	1179	408
C,7	768	1401	0.2	740	159	397	386
C,8	705	1401	0.2	740	11	26	375
C,9	827	1401	0.2	740	298	744	396

Final Status Survey: Room 2M

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
C,10	1000	1401	0.2	740	705	1762	424
C,11	767	1401	0.2	740	156	391	385
C,12	765	1401	0.2	740	152	379	385
C,13	693	1401	0.2	740	-18	-44	372
C,14	1111	1401	0.2	740	966	2415	441
C,15	1296	1401	0.2	740	1401	3503	468
D,0	961	1401	0.2	740	613	1532	417
D,1	726	1401	0.2	740	60	150	378
D,2	806	1401	0.2	740	248	621	392
D,3	919	1401	0.2	740	514	1285	411
D,4	707	1401	0.2	740	15	38	375
D,5	698	1401	0.2	740	-6	-15	373
D,6	740	1401	0.2	740	93	232	381
D,7	790	1401	0.2	740	211	526	389
D,8	725	1401	0.2	740	58	144	378
D,9	769	1401	0.2	740	161	403	386
D,10	868	1401	0.2	740	394	985	402

Final Status Survey: Room 2M

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
D,11	974	1401	0.2	740	644	1609	420
D,12	878	1401	0.2	740	418	1044	404
D,13	704	1401	0.2	740	8	21	374
D,14	689	1401	0.2	740	-27	-68	372
D,15	743	1401	0.2	740	100	250	381
E,0	984	1401	0.2	740	667	1668	421
E,1	756	1401	0.2	740	131	326	383
E,2	762	1401	0.2	740	145	362	385
E,3	710	1401	0.2	740	22	56	375
E,4	733	1401	0.2	740	76	191	379
E,5	705	1401	0.2	740	11	26	375
E,6	739	1401	0.2	740	91	226	381
E,7	863	1401	0.2	740	382	956	402
E,8	848	1401	0.2	740	347	868	399
E,9	772	1401	0.2	740	168	421	386
E,10	996	1401	0.2	740	695	1738	423
E,11	940	1401	0.2	740	564	1409	414

Final Status Survey: Room 2M

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
E,12	914	1401	0.2	740	502	1256	410
E,13	680	1401	0.2	740	-48	-121	370
E,14	810	1401	0.2	740	258	644	393
E,15	700	1401	0.2	740	-1	-3	374
F,0	865	1401	0.2	740	387	968	402
F,1	745	1401	0.2	740	105	262	382
F,2	764	1401	0.2	740	149	374	385
F,3	833	1401	0.2	740	312	779	397
F,4	776	1401	0.2	740	178	444	387
F,5	742	1401	0.2	740	98	244	381
F,6	749	1401	0.2	740	114	285	382
F,7	787	1401	0.2	740	204	509	389
F,8	826	1401	0.2	740	295	738	395
F,9	852	1401	0.2	740	356	891	400
F,10	737	1401	0.2	740	86	215	380
F,11	690	1401	0.2	740	-25	-62	372
F,12	705	1401	0.2	740	11	26	375

Final Status Survey: Room 2M

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
F,13	675	1401	0.2	740	-60	-150	369
F,14	883	1401	0.2	740	429	1074	405
F,15	671	1401	0.2	740	-69	-174	368
G,0	847	1401	0.2	740	345	862	399
G,1	815	1401	0.2	740	269	674	394
G,2	758	1401	0.2	740	135	338	384
G,3	1003	1401	0.2	740	712	1779	424
G,4	783	1401	0.2	740	194	485	388
G,5	744	1401	0.2	740	102	256	381
G,6	738	1401	0.2	740	88	221	380
G,7	698	1401	0.2	740	-6	-15	373
G,8	709	1401	0.2	740	20	50	375
G,9	793	1401	0.2	740	218	544	390
G,10	732	1401	0.2	740	74	185	379
G,11	728	1401	0.2	740	65	162	379
G,12	727	1401	0.2	740	62	156	378
G,13	737	1401	0.2	740	86	215	380

Final Status Survey: Room 2M

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
G,14	820	1401	0.2	740	281	703	394
G,15	686	1401	0.2	740	-34	-85	371
H,0	1092	1401	0.2	740	921	2303	438
H,1	701	1401	0.2	740	1	3	374
H,2	733	1401	0.2	740	76	191	379
H,3	720	1401	0.2	740	46	115	377
H,4	727	1401	0.2	740	62	156	378
H,5	706	1401	0.2	740	13	32	375
H,6	714	1401	0.2	740	32	79	376
H,7	803	1401	0.2	740	241	603	392
H,8	706	1401	0.2	740	13	32	375
H,9	844	1401	0.2	740	338	844	398
H,10	919	1401	0.2	740	514	1285	411
H,11	724	1401	0.2	740	55	138	378
H,12	812	1401	0.2	740	262	656	393
H,13	662	1401	0.2	740	-91	-226	367
H,14	704	1401	0.2	740	8	21	374

Final Status Survey: Room 2M

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
H,15	706	1401	0.2	740	13	32	375
I,0	910	1401	0.2	740	493	1232	409
I,1	717	1401	0.2	740	39	97	377
I,2	704	1401	0.2	740	8	21	374
I,3	830	1401	0.2	740	305	762	396
I,4	695	1401	0.2	740	-13	-32	373
I,5	722	1401	0.2	740	51	126	378
I,6	716	1401	0.2	740	36	91	376
I,7	812	1401	0.2	740	262	656	393
I,8	1085	1401	0.2	740	905	2262	437
I,9	841	1401	0.2	740	331	826	398
I,10	764	1401	0.2	740	149	374	385
I,11	824	1401	0.2	740	291	726	395
I,12	769	1401	0.2	740	161	403	386
I,13	665	1401	0.2	740	-84	-209	367
I,14	901	1401	0.2	740	472	1179	408
I,15	659	1401	0.2	740	-98	-244	366

Final Status Survey: Room 2M

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
J,0	818	1401	0.2	740	276	691	394
J,1	784	1401	0.2	740	196	491	388
J,2	735	1401	0.2	740	81	203	380
J,3	716	1401	0.2	740	36	91	376
J,4	734	1401	0.2	740	79	197	380
J,5	717	1401	0.2	740	39	97	377
J,6	728	1401	0.2	740	65	162	379
J,7	833	1401	0.2	740	312	779	397
J,8	745	1401	0.2	740	105	262	382
J,9	821	1401	0.2	740	284	709	395
J,10	929	1401	0.2	740	538	1344	412
J,11	679	1401	0.2	740	-51	-126	370
J,12	756	1401	0.2	740	131	326	383
J,13	668	1401	0.2	740	-76	-191	368
J,14	669	1401	0.2	740	-74	-185	368
J,15	668	1401	0.2	740	-76	-191	368
K,0	830	1401	0.2	740	305	762	396

Final Status Survey: Room 2M

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
K,1	753	1401	0.2	740	124	309	383
K,2	749	1401	0.2	740	114	285	382
K,3	893	1401	0.2	740	453	1132	407
K,4	696	1401	0.2	740	-11	-26	373
K,5	796	1401	0.2	740	225	562	390
K,6	788	1401	0.2	740	206	515	389
K,7	793	1401	0.2	740	218	544	390
K,8	747	1401	0.2	740	109	274	382
K,9	805	1401	0.2	740	246	615	392
K,10	936	1401	0.2	740	554	1385	413
K,11	786	1401	0.2	740	201	503	389
K,12	798	1401	0.2	740	229	574	391
K,13	644	1401	0.2	740	-133	-332	364
K,14	647	1401	0.2	740	-126	-315	364
K,15	710	1401	0.2	740	22	56	375
LOWER WALLS							
A,0,0-1	662	940	0.18	677	502	1255	384

Final Status Survey: Room 2M

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
A,0,0	**76**	**70**	**0.2**	**4439**	**200**	**640**	**2526**
A,0,0+1 CR	850	1560.14	0.18	867	183	457	451
A,1,0-1	558	940	0.18	677	230	575	361
A,1,0	**75**	**70**	**0.2**	**4439**	**167**	**533**	**2517**
A,1,0+1 CR	865	1560.14	0.18	867	222	555	454
A,2,0-1	595	940	0.18	677	327	817	369
A,2,0	**72**	**70**	**0.2**	**4439**	**67**	**213**	**2491**
A,2,0+1 CR	830	1560.14	0.18	867	131	326	447
A,3,0-1	625	940	0.18	677	405	1013	376
A,3,0	**70**	**70**	**0.2**	**4439**	**0**	**0**	**2474**
A,3,0+1 CR	831	1560.14	0.18	867	133	333	448
A,4,0-1	710	940	0.18	677	627	1569	394
A,4,0	**70**	**70**	**0.2**	**4439**	**0**	**0**	**2474**
A,4,0+1 CR	760	1560.14	0.18	867	-52	-131	434
A,5,0-1	635	940	0.18	677	431	1078	378
A,5,0	**80**	**70**	**0.2**	**4439**	**333**	**1067**	**2561**
A,5,0+1 CR	851	1560.14	0.18	867	185	464	451

12/26/96

Final Status Survey: Room 2M

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
A,6,0-1	635	940	0.18	677	431	1078	378
A,6,0	**80**	**70**	**0.2**	**4439**	**333**	**1067**	**2561**
A,6,0+1 CR	870	1560.14	0.18	867	235	588	455
A,10,0+1 CR	890	1560.14	0.18	867	287	718	458
A,11,0+1 CR	1500	1898.6	0.2	859	1296	3239	512
A,12,0+1 CR	1300	1898.6	0.2	859	825	2063	486
A,13,0+1 CR	1300	1898.6	0.2	859	825	2063	486
A,14,0 CR	1200	1898.6	0.2	859	590	1475	472
A,15,0+1 CR	1200	1898.6	0.2	859	590	1475	472
B,0,0-1	599	940	0.18	677	337	843	370
B,0,0+1 CR	910	1560.14	0.18	867	340	849	462
C,0,0-1	714	940	0.18	677	638	1595	395
C,0,0+1 CR	853	1560.14	0.18	867	191	477	452
D,0,0-1	845	940	0.18	677	980	2451	421
D,0,0+1 CR	845	1560.14	0.18	867	170	424	450
E,0,0-1	600	940	0.18	677	340	850	370
E,0,0+1 CR	645	1898.6	0.2	859	-716	-1790	386

12/26/96

Final Status Survey: Room 2M

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
F,0,0+1 CR	1003	1898.6	0.2	859	126	316	443
G,0,0+1 CR	872	1898.6	0.2	859	-182	-455	423
H,0,0+1 CR	930	1898.6	0.2	859	-45	-114	432
I,0,0+1 CR	870	1898.6	0.2	859	-187	-466	423
J,0,0+1 CR	937	1898.6	0.2	859	-29	-72	433
K,0,0+1 CR	940	1898.6	0.2	859	-22	-55	434
K+0.5,0,0+1	648	1144	0.2	670	179	447	352
K+0.5,1,0+1	680	1144	0.2	670	254	635	358
K+0.5,2,0+1	645	1144	0.2	670	172	429	352
K+0.5,3,0+1	685	1144	0.2	670	266	665	359
K+0.5,4,0+1	710	1144	0.2	670	325	812	364
K+0.5,5,0+1	640	1144	0.2	670	160	400	351
K+0.5,6,0+1	519	1144	0.2	670	-125	-312	327
K+0.5,7,0+1	570	1144	0.2	670	-5	-12	337
K+0.5,8,0+1	640	1144	0.2	670	160	400	351
K+0.5,9,0+1	620	1144	0.2	670	113	282	347
K+0.5,10,0+1	549	1144	0.2	670	-54	-135	333

Final Status Survey: Room 2M

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
K+0.5,11,0+1	570	1144	0.2	670	-5	-12	337
K+0.5,12,0+1	640	1144	0.2	670	160	400	351
K+0.5,13,0+1	790	1144	0.2	670	513	1282	378
K+0.5,14,0+1	570	1144	0.2	670	-5	-12	337
K+0.5,15,0+1	582	1144	0.2	670	24	59	340
UPPER WALLS							
K+0.5,1,0+1	45	74	0.22	4142	-879	-2812	2073
K+0.5,4,0+1	42	74	0.22	4142	-970	-3103	2047
K+0.5,8,0+1	80	74	0.22	4142	182	582	2359
K+0.5,12,0+1	61	74	0.22	4142	-394	-1261	2208
K+0.5,15,0+1	74	74	0.22	4142	0	0	2312
CEILING							
@A,4 SS	58	47.16	0.22	3359	328	1051	1949
@A,8 SS	72	47.16	0.22	3359	753	2409	2075
@A,12 SS	78	47.16	0.22	3359	935	2991	2126
@A,15 SS	89	47.16	0.22	3359	1268	4057	2218
@D,1 SS	55	47.16	0.22	3359	238	760	1921

Final Status Survey: Room 2M

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
@D,4 SS	60	47.16	0.22	3359	389	1245	1967
@D,8 SS	61	47.16	0.22	3359	419	1342	1977
@D,12 SS	53	47.16	0.22	3359	177	566	1902
@D,15 SS	49	47.16	0.22	3359	56	178	1864
@H,1 SS	54	47.16	0.22	3359	207	663	1912
@H,4 SS	42	47.16	0.22	3359	-156	-500	1795
@H,8 SS	40	47.16	0.22	3359	-217	-694	1774
@H,12 SS	36	47.16	0.22	3359	-338	-1082	1733
@H,15 SS	50	47.16	0.22	3359	86	275	1873
SMEARS							
B,4	0	0.23	0.33	15	-1	-1	0
B,5	1	0.23	0.33	15	2	2	6
B,6	0	0.23	0.33	15	-1	-1	0
B,7	0	0.23	0.33	15	-1	-1	0
B,8	0	0.23	0.33	15	-1	-1	0
B,9	1	0.23	0.33	15	2	2	6
B,10	1	0.23	0.33	15	2	2	6

Final Status Survey: Room 2M

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
B,11	2	0.23	0.33	15	5	5	8
B,12	0	0.23	0.33	15	-1	-1	0
B,13	0	0.23	0.33	15	-1	-1	0
B,14	1	0.23	0.33	15	2	2	6
B,15	0	0.23	0.33	15	-1	-1	0
C,4	1	0.23	0.33	15	2	2	6
C,5	2	0.23	0.33	15	5	5	8
C,6	0	0.23	0.33	15	-1	-1	0
C,7	0	0.23	0.33	15	-1	-1	0
C,8	0	0.23	0.33	15	-1	-1	0
C,9	0	0.23	0.33	15	-1	-1	0
C,10	0	0.23	0.33	15	-1	-1	0
C,11	2	0.23	0.33	15	5	5	8
C,12	1	0.23	0.33	15	2	2	6
C,13	0	0.23	0.33	15	-1	-1	0
C,14	0	0.23	0.33	15	-1	-1	0
C,15	0	0.23	0.33	15	-1	-1	0

Final Status Survey: Room 2M

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
D,4	0	0.23	0.33	15	-1	-1	0
D,5	1	0.23	0.33	15	2	2	6
D,6	0	0.23	0.33	15	-1	-1	0
D,7	0	0.23	0.33	15	-1	-1	0
D,8	1	0.23	0.33	15	2	2	6
D,9	0	0.23	0.33	15	-1	-1	0
D,10	1	0.23	0.33	15	2	2	6
D,11	1	0.23	0.33	15	2	2	6
D,12	1	0.23	0.33	15	2	2	6
D,13	1	0.23	0.33	15	2	2	6
D,14	1	0.23	0.33	15	2	2	6
D,15	0	0.23	0.33	15	-1	-1	0
E,4	0	0.23	0.33	15	-1	-1	0
E,5	1	0.23	0.33	15	2	2	6
E,6	0	0.23	0.33	15	-1	-1	0
E,7	0	0.23	0.33	15	-1	-1	0
E,8	1	0.23	0.33	15	2	2	6

Final Status Survey: Room 2M

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
E,9	1	0.23	0.33	15	2	2	6
E,10	1	0.23	0.33	15	2	2	6
E,11	0	0.23	0.33	15	-1	-1	0
E,12	0	0.23	0.33	15	-1	-1	0
E,13	0	0.23	0.33	15	-1	-1	0
E,14	0	0.23	0.33	15	-1	-1	0
E,15	0	0.23	0.33	15	-1	-1	0
F,1	2	0.23	0.33	15	5	5	8
F,2	1	0.23	0.33	15	2	2	6
F,3	0	0.23	0.33	15	-1	-1	0
F,4	0	0.23	0.33	15	-1	-1	0
F,5	0	0.23	0.33	15	-1	-1	0
F,6	1	0.23	0.33	15	2	2	6
F,7	1	0.23	0.33	15	2	2	6
F,8	2	0.23	0.33	15	5	5	8
F,9	0	0.23	0.33	15	-1	-1	0
F,10	0	0.23	0.33	15	-1	-1	0

Final Status Survey: Room 2M

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
F,11	1	0.23	0.33	15	2	2	6
F,12	2	0.23	0.33	15	5	5	8
F,13	0	0.23	0.33	15	-1	-1	0
F,14	1	0.23	0.33	15	2	2	6
F,15	1	0.23	0.33	15	2	2	6
G,1	1	0.23	0.33	15	2	2	6
G,2	1	0.23	0.33	15	2	2	6
G,3	1	0.23	0.33	15	2	2	6
G,4	0	0.23	0.33	15	-1	-1	0
G,5	1	0.23	0.33	15	2	2	6
G,6	0	0.23	0.33	15	-1	-1	0
G,7	0	0.23	0.33	15	-1	-1	0
G,8	0	0.23	0.33	15	-1	-1	0
G,9	1	0.23	0.33	15	2	2	6
G,10	0	0.23	0.33	15	-1	-1	0
G,11	0	0.23	0.33	15	-1	-1	0
G,12	1	0.23	0.33	15	2	2	6

Final Status Survey: Room 2M

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
G,13	1	0.23	0.33	15	2	2	6
G,14	1	0.23	0.33	15	2	2	6
G,15	1	0.23	0.33	15	2	2	6
H,1	0	0.23	0.33	15	-1	-1	0
H,2	0	0.23	0.33	15	-1	-1	0
H,3	0	0.23	0.33	15	-1	-1	0
H,4	0	0.23	0.33	15	-1	-1	0
H,5		0.23	0.33	15	-1	-1	0
H,6	1	0.23	0.33	15	2	2	6
H,7	0	0.23	0.33	15	-1	-1	0
H,8	0	0.23	0.33	15	-1	-1	0
H,9	1	0.23	0.33	15	2	2	6
H,10	1	0.23	0.33	15	2	2	6
H,11	0	0.23	0.33	15	-1	-1	0
H,12	1	0.23	0.33	15	2	2	6
H,13	0	0.23	0.33	15	-1	-1	0
H,14	1	0.23	0.33	15	2	2	6

Final Status Survey: Room 2M

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
H,15	0	0.23	0.33	15	-1	-1	0
I,1	3	0.23	0.33	15	8	8	10
I,2	1	0.23	0.33	15	2	2	6
I,3	0	0.23	0.33	15	-1	-1	0
I,4	0	0.23	0.33	15	-1	-1	0
I,5	1	0.23	0.33	15	2	2	6
I,6	0	0.23	0.33	15	-1	-1	0
I,7	0	0.23	0.33	15	-1	-1	0
I,8	1	0.23	0.33	15	2	2	6
I,9	0	0.23	0.33	15	-1	-1	0
I,10	0	0.23	0.33	15	-1	-1	0
I,11	0	0.23	0.33	15	-1	-1	0
I,12	0	0.23	0.33	15	-1	-1	0
I,13	0	0.23	0.33	15	-1	-1	0
I,14	0	0.23	0.33	15	-1	-1	0
I,15	0	0.23	0.33	15	-1	-1	0
J,1	2	0.23	0.33	15	5	5	8

Final Status Survey: Room 2M

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
J,2	1	0.23	0.33	15	2	2	6
J,3	0	0.23	0.33	15	-1	-1	0
J,4	0	0.23	0.33	15	-1	-1	0
J,5	0	0.23	0.33	15	-1	-1	0
J,6	0	0.23	0.33	15	-1	-1	0
J,7	0	0.23	0.33	15	-1	-1	0
J,8	0	0.23	0.33	15	-1	-1	0
J,9	0	0.23	0.33	15	-1	-1	0
J,10	0	0.23	0.33	15	-1	-1	0
J,11	1	0.23	0.33	15	2	2	6
J,12	0	0.23	0.33	15	-1	-1	0
J,13	1	0.23	0.33	15	2	2	6
J,14	0	0.23	0.33	15	-1	-1	0
J,15	1	0.23	0.33	15	2	2	6
K,1	1	0.23	0.33	15	2	2	6
K,2	1	0.23	0.33	15	2	2	6
K,3	1	0.23	0.33	15	2	2	6

Final Status Survey: Room 2M

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
K,4	0	0.23	0.33	15	-1	-1	0
K,5	0	0.23	0.33	15	-1	-1	0
K,6	0	0.23	0.33	15	-1	-1	0
K,7	1	0.23	0.33	15	2	2	6
K,8	0	0.23	0.33	15	-1	-1	0
K,9	0	0.23	0.33	15	-1	-1	0
K,10	0	0.23	0.33	15	-1	-1	0
K,11	1	0.23	0.33	15	2	2	6
K,12	1	0.23	0.33	15	2	2	6
K,13	0	0.23	0.33	15	-1	-1	0
K,14	0	0.23	0.33	15	-1	-1	0
K,15	2	0.23	0.33	15	5	5	8

Final Status Survey: Room 2N

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
FLOOR							
A,0	928	1283	0.21	675	642	1605	388
A,1	720	1283	0.21	675	176	440	354
A,2	912	1283	0.21	675	606	1515	386
A,3	802	1283	0.21	675	360	899	368
A,4	799	1283	0.21	675	353	882	367
A,5	796	1283	0.21	675	346	866	367
A,6	860	1283	0.21	675	490	1224	377
A,7	868	1283	0.21	675	508	1269	379
A,8	805	1283	0.21	675	366	916	368
A,8+1	808	1283	0.21	675	373	933	369
B,0	1224	1283	0.21	675	1305	3263	432
B,1	721	1283	0.21	675	178	445	354
B,2	669	1283	0.21	675	62	154	345
B,3	717	1283	0.21	675	169	423	354
B,4	723	1283	0.21	675	183	457	355
B,5	735	1283	0.21	675	210	524	357

Final Status Survey: Room 2N

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
B,6	791	1283	0.21	675	335	838	366
B,7	740	1283	0.21	675	221	552	358
B,8	678	1283	0.21	675	82	204	347
B,8+1	806	1283	0.21	675	369	922	369
C,0	832	1283	0.21	675	427	1067	373
C,1	693	1283	0.21	675	115	289	350
C,2	721	1283	0.21	675	178	445	354
C,3	799	1283	0.21	675	353	882	367
C,4	1078	1283	0.21	675	978	2445	411
C,5	854	1283	0.21	675	476	1190	376
C,6	796	1283	0.21	675	346	866	367
C,7	724	1283	0.21	675	185	462	355
C,8	772	1283	0.21	675	292	731	363
C,8+1	785	1283	0.21	675	322	804	365
D,0	672	1283	0.21	675	68	171	346
D,1	770	1283	0.21	675	288	720	363
D,2	601	1283	0.21	675	-91	-227	333

Final Status Survey: Room 2N

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
D,3	611	1283	0.21	675	-68	-171	335
D,4	1217	1283	0.21	675	1290	3224	431
D,5	1019	1283	0.21	675	846	2115	402
D,6	875	1283	0.21	675	523	1308	380
D,7	712	1283	0.21	675	158	395	353
D,8	770	1283	0.21	675	288	720	363
D,8+1	748	1283	0.21	675	239	597	359
E,0	840	1283	0.21	675	445	1112	374
E,1	651	1283	0.21	675	21	53	342
E,2	664	1283	0.21	675	50	126	345
E,3	683	1283	0.21	675	93	232	348
E,4	706	1283	0.21	675	145	361	352
E,5	777	1283	0.21	675	304	759	364
E,6	735	1283	0.21	675	210	524	357
E,7	634	1283	0.21	675	-17	-42	339
E,8	823	1283	0.21	675	407	1017	371
E,8+1	820	1283	0.21	675	400	1000	371

Final Status Survey: Room 2N

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
F,0	890	1283	0.21	675	557	1392	382
F,1	668	1283	0.21	675	59	148	345
F,2	725	1283	0.21	675	187	468	355
F,3	690	1283	0.21	675	109	272	349
F,4	712	1283	0.21	675	158	395	353
F,5	663	1283	0.21	675	48	120	344
F,6	809	1283	0.21	675	375	938	369
F,7	746	1283	0.21	675	234	585	359
F,8	731	1283	0.21	675	201	501	356
F,8+1	972	1283	0.21	675	741	1852	395
LOWER WALLS							
A,2,0	**117**	**74**	**0.21**	**4339**	**1365**	**4368**	**2752**
A,2,0+1 CR	988	1807.87	0.19	882	208	521	461
A,3,0	**82**	**74**	**0.21**	**4339**	**254**	**813**	**2487**
A,3,0+1 CR	912	1807.87	0.19	882	20	50	448
A,4,0	**81**	**74**	**0.21**	**4339**	**222**	**711**	**2479**
A,4,0+1 CR	872	1807.87	0.19	882	-79	-198	442

Final Status Survey: Room 2N

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
A,5,0	**97**	**74**	**0.21**	**4339**	**730**	**2337**	**2604**
A,5,0+1 CR	845	1807.87	0.19	882	-146	-365	437
A,6,0	**110**	**74**	**0.21**	**4339**	**1143**	**3657**	**2701**
A,6,0+1 CR	884	1807.87	0.19	882	-49	-123	444
A,7,0	**106**	**74**	**0.21**	**4339**	**1016**	**3251**	**2671**
A,7,0+1 CR	845	1807.87	0.19	882	-146	-365	437
A,8,0	**91**	**74**	**0.21**	**4339**	**540**	**1727**	**2558**
A,8,0+1 CR	896	1807.87	0.19	882	-20	-49	446
B,8+1,0	**83**	**74**	**0.21**	**4339**	**286**	**914**	**2495**
B,8+1,0+1 CR	967	1807.87	0.19	882	156	390	457
C,8+1,0	**110**	**74**	**0.21**	**4339**	**1143**	**3657**	**2701**
C,8+1,0+1 CR	937	1807.87	0.19	882	82	205	452
D,8+1,0	**101**	**74**	**0.21**	**4339**	**857**	**2743**	**2634**
D,8+1,0+1 CR	1003	1807.87	0.19	882	245	613	463
E,8+1,0	**93**	**74**	**0.21**	**4339**	**603**	**1930**	**2573**
E,8+1,0+1 CR	937	1807.87	0.19	882	82	205	452
F,8+1,0	**103**	**74**	**0.21**	**4339**	**921**	**2946**	**2649**

Final Status Survey: Room 2N

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
F,8+1,0+1 CR	952	1807.87	0.19	882	119	298	455
F+0.3,2,0+1	582	1091	0.19	689	90	226	355
F+0.3,3,0+1	560	1091	0.19	689	36	90	350
F+0.3,4,0+1	557	1091	0.19	689	28	71	350
F+0.3,5,0+1	581	1091	0.19	689	88	220	355
F+0.3,6,0+1	572	1091	0.19	689	66	164	353
F+0.3,7,0+1	578	1091	0.19	689	80	201	354
F+0.3,8,0+1	580	1091	0.19	689	85	214	354
UPPER WALLS							
See Special Surveys in Final Status Survey Report							
CEILING							
See Special Surveys in Final Status Survey Report							
SMEARS							
A,2	0	0.23	0.33	15	-1	-1	0
A,3	1	0.23	0.33	15	2	2	6
A,4	0	0.23	0.33	15	-1	-1	0
A,5	0	0.23	0.33	15	-1	-1	0

Final Status Survey: Room 2N

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
A,6	0	0.23	0.33	15	-1	-1	0
A,7	1	0.23	0.33	15	2	2	6
A,8	1	0.23	0.33	15	2	2	6
A,8+1	0	0.23	0.33	15	-1	-1	0
B,0	1	0.23	0.33	15	2	2	6
B,1	0	0.23	0.33	15	-1	-1	0
B,2	0	0.23	0.33	15	-1	-1	0
B,3	2	0.23	0.33	15	5	5	8
B,4	1	0.23	0.33	15	2	2	6
B,6	0	0.23	0.33	15	-1	-1	0
B,7	1	0.23	0.33	15	2	2	6
B,8+1	1	0.23	0.33	15	2	2	6
C,0	0	0.23	0.33	15	-1	-1	0
C,1	1	0.23	0.33	15	2	2	6
C,2	0	0.23	0.33	15	-1	-1	0
C,3	1	0.23	0.33	15	2	2	6
C,4	2	0.23	0.33	15	5	5	8

Final Status Survey: Room 2N

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
C,6	0	0.23	0.33	15	-1	-1	0
C,7	0	0.23	0.33	15	-1	-1	0
C,8	1	0.23	0.33	15	2	2	6
C,8+1	0	0.23	0.33	15	-1	-1	0
D,0	0	0.23	0.33	15	-1	-1	0
D,1	1	0.23	0.33	15	2	2	6
D,2	0	0.23	0.33	15	-1	-1	0
D,3	0	0.23	0.33	15	-1	-1	0
D,4	0	0.23	0.33	15	-1	-1	0
D,5	1	0.23	0.33	15	2	2	6
D,6	0	0.23	0.33	15	-1	-1	0
D,7	2	0.23	0.33	15	5	5	8
D,8	1	0.23	0.33	15	2	2	6
D,8+1	1	0.23	0.33	15	2	2	6
E,0	0	0.23	0.33	15	-1	-1	0
E,1	0	0.23	0.33	15	-1	-1	0
E,2	1	0.23	0.33	15	2	2	6

Final Status Survey: Room 2N

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
E,3	0	0.23	0.33	15	-1	-1	0
E,4	0	0.23	0.33	15	-1	-1	0
E,5	1	0.23	0.33	15	2	2	6
E,6	3	0.23	0.33	15	8	8	10
E,7	1	0.23	0.33	15	2	2	6
E,8	0	0.23	0.33	15	-1	-1	0
E,8+1	2	0.23	0.33	15	5	5	8
F,0	0	0.23	0.33	15	-1	-1	0
F,1	0	0.23	0.33	15	-1	-1	0
F,2	1	0.23	0.33	15	2	2	6
F,3	1	0.23	0.33	15	2	2	6
F,4	0	0.23	0.33	15	-1	-1	0
F,5	1	0.23	0.33	15	2	2	6
F,6	0	0.23	0.33	15	-1	-1	0
F,7	0	0.23	0.33	15	-1	-1	0
F,8	1	0.23	0.33	15	2	2	6

Final Status Survey: Room 2P

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
FLOOR							
A,0	661	1139	0.18	1043	239	598	394
A,1	704	1139	0.18	1043	352	879	403
A,2	623	1139	0.18	1043	140	350	386
A,3	603	1139	0.18	1043	88	219	382
B,0	657	1139	0.18	1043	229	572	393
B,1	596	1139	0.18	1043	69	173	380
B,2	539	1139	0.18	1043	-80	-199	368
B,3	692	1139	0.18	1043	320	801	400
C,0	612	1139	0.18	1043	111	278	384
C,1	556	1139	0.18	1043	-35	-88	371
C,1+1	589	1139	0.18	1043	51	127	379
C,3	577	1139	0.18	1043	20	49	376
D,0	581	1139	0.18	1043	30	75	377
D,1	700	1139	0.18	1043	341	853	402
D,2	561	1139	0.18	1043	-22	-56	373
D,3	618	1139	0.18	1043	127	317	385

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Final Status Survey: Room 2P

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
E,0	614	1139	0.18	1043	116	291	384
E,1	596	1139	0.18	1043	69	173	380
E,2	560	1139	0.18	1043	-25	-62	372
E,3	635	1139	0.18	1043	171	428	389
F,0	665	1139	0.18	1043	250	624	395
F,1	637	1139	0.18	1043	176	441	389
F,2	565	1139	0.18	1043	-12	-29	373
F,3	620	1139	0.18	1043	132	330	385
G,0	605	1139	0.18	1043	93	232	382
G,1	690	1139	0.18	1043	315	788	400
G,2	580	1139	0.18	1043	27	69	377
G,3	634	1139	0.18	1043	169	422	388
G+0.4,0	665	1139	0.18	1043	250	624	395
G+0.4,1	658	1139	0.18	1043	231	578	393
G+0.4,2	671	1139	0.18	1043	265	663	396
G+0.4,3	665	1139	0.18	1043	250	624	395
LOWER WALLS							

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Final Status Survey: Room 2P

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
A,0,0 CR	**115**	**108**	**0.2**	**5444**	**233**	**747**	**3122**
A,0,0+1 CR	901	1817.6	0.18	1313	-20	-51	472
A,1,0 CR	**93**	**108**	**0.2**	**5444**	**-500**	**-1600**	**2964**
A,1,0+1 CR	903	1817.6	0.18	1313	-15	-38	472
A,2,0 CR	**117**	**108**	**0.2**	**5444**	**300**	**960**	**3136**
A,2,0+1 CR	867	1817.6	0.18	1313	-109	-273	466
A,3,0	**80**	**71**	**0.2**	**4468**	**300**	**960**	**2569**
A,3,0+1 CR	869	1817.6	0.18	1313	-104	-260	466
B,0,0 CR	**92**	**108**	**0.2**	**5444**	**-533**	**-1707**	**2957**
B,0,0+1 CR	847	1817.6	0.18	1313	-162	-404	462
B,3,0 CR	**88**	**108**	**0.2**	**5444**	**-667**	**-2133**	**2927**
B,3,0+1 CR	891	1817.6	0.18	1313	-47	-116	470
C,0,0 CR	**94**	**108**	**0.2**	**5444**	**-467**	**-1493**	**2971**
C,0,0+1 CR	927	1817.6	0.18	1313	48	119	476
C,3,0	**77**	**71**	**0.2**	**4468**	**200**	**640**	**2543**
C,3,0+1 CR	863	1817.6	0.18	1313	-120	-299	465
D,0,0	**60**	**71**	**0.2**	**4468**	**-367**	**-1173**	**2393**

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Final Status Survey: Room 2P

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
D,0,0+1	650	1139	0.18	1043	210	526	392
D,3,0	**68**	**71**	**0.2**	**4468**	**-100**	**-320**	**2465**
D,3,0+1	470	1139	0.18	1043	-260	-650	352
E,0,0 CR	**105**	**108**	**0.2**	**5444**	**-100**	**-320**	**3051**
E,0,0+1 CR	913	1818.14	0.18	1314	10	26	474
E,3,0 CR	**111**	**108**	**0.2**	**5444**	**100**	**320**	**3094**
E,3,0+1 CR	903	1818.14	0.18	1314	-16	-40	472
F,0,0 CR	**123**	**108**	**0.2**	**5444**	**500**	**1600**	**3178**
F,0,0+1 CR	930	1818.14	0.18	1314	55	137	477
F,3,0	**83**	**71**	**0.2**	**4468**	**400**	**1280**	**2594**
F,3,0+1 CR	923	1818.14	0.18	1314	36	91	475
G,0,0 CR	**96**	**108**	**0.2**	**5444**	**-400**	**-1280**	**2986**
G,0,0+1 CR	917	1818.14	0.18	1314	21	52	474
G,3,0	**79**	**71**	**0.2**	**4468**	**267**	**853**	**2561**
G,3,0+1 CR	920	1818.14	0.18	1314	29	71	475
G+0.4,0,0 CR	**117**	**108**	**0.2**	**5444**	**300**	**960**	**3136**
G+0.4,0,0+1 CR	919	1818.14	0.18	1314	26	65	475

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Final Status Survey: Room 2P

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
G+0.4,1,0 CR	104	108	0.2	5444	-133	-427	3044
G+0.4,1,0+1 CR	886	1818.14	0.18	1314	-60	-151	469
G+0.4,2,0 CR	108	108	0.2	5444	0	0	3073
G+0.4,2,0+1 CR	931	1818.14	0.18	1314	57	143	477
G+0.4,3,0 CR	100	108	0.2	5444	-267	-853	3015
G+0.4,3,0+1 CR	938	1818.14	0.18	1314	76	189	478
UPPER WALLS							
A,0,0+3.3 CR	93	109.5	0.21	5218	-524	-1676	2833
A,1,0+3.3 CR	106	109.5	0.21	5218	-111	-356	2923
A,2,0+3.3 CR	102	109.5	0.21	5218	-238	-762	2896
A,3,0+3.3 CR	107	109.5	0.21	5218	-79	-254	2930
D,0,0+3.3	56	52.8	0.21	3708	102	325	2077
D,3,0+3.3	58	52.8	0.21	3708	165	528	2096
G,0,0+3.3 CR	91	109.5	0.21	5218	-587	-1879	2819
G,3,0+3.3 CR	95	109.5	0.21	5218	-460	-1473	2847
CEILING							
@A,0 SS	61	52.38	0.21	3694	274	876	2120

Final Status Survey: Room 2P

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
@A,3 SS	**59**	**52.38**	**0.21**	**3694**	**210**	**673**	**2101**
@C,1+0.5 SS	**72**	**52.38**	**0.21**	**3694**	**623**	**1993**	**2221**
@D,0+0.5 SS	**61**	**52.38**	**0.21**	**3694**	**274**	**876**	**2120**
@D,2 SS	**59**	**52.38**	**0.21**	**3694**	**210**	**673**	**2101**
@F+0.7, 0+0.7 SS	**63**	**52.38**	**0.21**	**3694**	**337**	**1079**	**2139**
@F,2+0.7 SS	**57**	**52.38**	**0.21**	**3694**	**147**	**469**	**2082**
SMEARS							
A,0	1	0.23	0.33	15	2	2	6
A,1	2	0.23	0.33	15	5	5	8
A,2	0	0.23	0.33	15	-1	-1	0
A,3	1	0.23	0.33	15	2	2	6
B,0	0	0.23	0.33	15	-1	-1	0
B,1	0	0.23	0.33	15	-1	-1	0
B,2	1	0.23	0.33	15	2	2	6
B,3	2	0.23	0.33	15	5	5	8
C,0	0	0.23	0.33	15	-1	-1	0
C,1	0	0.23	0.33	15	-1	-1	0

Final Status Survey: Room 2P

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
C,1+1	1	0.23	0.33	15	2	2	6
C,3	1	0.23	0.33	15	2	2	6
D,0	1	0.23	0.33	15	2	2	6
D,1	1	0.23	0.33	15	2	2	6
D,2	0	0.23	0.33	15	-1	-1	0
D,3	0	0.23	0.33	15	-1	-1	0
E,0	2	0.23	0.33	15	5	5	8
E,1	1	0.23	0.33	15	2	2	6
E,2	1	0.23	0.33	15	2	2	6
E,3	0	0.23	0.33	15	-1	-1	0
F,0	0	0.23	0.33	15	-1	-1	0
F,1	0	0.23	0.33	15	-1	-1	0
F,2	0	0.23	0.33	15	-1	-1	0
F,3	1	0.23	0.33	15	2	2	6
G,0	0	0.23	0.33	15	-1	-1	0
G,1	0	0.23	0.33	15	-1	-1	0
G,2	0	0.23	0.33	15	-1	-1	0

Final Status Survey: Room 2P

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
G,3	1	0.23	0.33	15	2	2	6
G+0.4,0	1	0.23	0.33	15	2	2	6
G+0.4,1	1	0.23	0.33	15	2	2	6
G+0.4,2	0	0.23	0.33	15	-1	-1	0
G+0.4,3	2	0.23	0.33	15	5	5	8

Final Status Survey. Room TUNNEL

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
FLOOR							
A,0	980	1428	0.21	1000	596	1490	401
A,1	999	1428	0.21	1000	639	1597	404
A,2	969	1428	0.21	1000	571	1429	400
B,0	931	1428	0.21	1000	486	1216	394
B,1	998	1428	0.21	1000	636	1591	404
B,2	882	1428	0.21	1000	376	941	387
C,0	972	1428	0.21	1000	578	1445	400
C,1	909	1428	0.21	1000	437	1092	391
C,2	879	1428	0.21	1000	370	924	386
D,0	895	1428	0.21	1000	406	1014	389
D,1	897	1428	0.21	1000	410	1025	389
D,2	1034	1428	0.21	1000	717	1793	410
E,0	883	1428	0.21	1000	379	947	387
E,1	947	1428	0.21	1000	522	1305	397
E,2	924	1428	0.21	1000	471	1176	393
F,1	941	1428	0.21	1000	509	1272	396

Final Status Survey. Room TUNNEL

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
F,2	946	1428	0.21	1000	520	1300	396
G,0	933	1428	0.21	1000	491	1227	394
G,1	1002	1428	0.21	1000	645	1613	405
G,2	1024	1428	0.21	1000	695	1737	408
H,0	929	1428	0.21	1000	482	1204	394
H,1	897	1428	0.21	1000	410	1025	389
H,2	866	1428	0.21	1000	341	852	384
I,0	889	1428	0.21	1000	392	980	388
I,1	887	1428	0.21	1000	388	969	387
I,2	826	1428	0.21	1000	251	627	378
J,0	875	1428	0.21	1000	361	902	385
J,1	815	1428	0.21	1000	226	566	376
J,2	926	1428	0.21	1000	475	1188	393
K,0	911	1428	0.21	1000	441	1104	391
K,1	832	1428	0.21	1000	264	661	379
K,2	948	1428	0.21	1000	524	1311	397
L,0	837	1428	0.21	1000	276	689	379

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Final Status Survey. Room TUNNEL

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
L,1	804	1428	0.21	1000	202	504	374
L,2	910	1428	0.21	1000	439	1098	391
M,0	835	1428	0.21	1000	271	678	379
M,1	794	1428	0.21	1000	179	448	373
M,2	903	1428	0.21	1000	424	1059	390
N,0	1074	1428	0.21	1000	807	2017	415
N,1	865	1428	0.21	1000	338	846	384
N,2	894	1428	0.21	1000	403	1008	388
O,0	1073	1428	0.21	1000	804	2011	415
O,1	875	1428	0.21	1000	361	902	385
O,2	859	1428	0.21	1000	325	812	383
P,0	987	1428	0.21	1000	612	1529	403
P,1	911	1428	0.21	1000	441	1104	391
P,2	882	1428	0.21	1000	376	941	387
Q,0	989	1428	0.21	1000	616	1541	403
Q,1	824	1428	0.21	1000	246	616	377
Q,2	883	1428	0.21	1000	379	947	387

Final Status Survey: Room TUNNEL

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
R,0	1077	1428	0.21	1000	813	2034	416
R,1	849	1428	0.21	1000	303	756	381
R,2	862	1428	0.21	1000	332	829	383
S,0	906	1428	0.21	1000	430	1076	390
S,1	821	1428	0.21	1000	240	599	377
S,2	769	1428	0.21	1000	123	308	368
T,0	811	1428	0.21	1000	217	543	375
T,1	799	1428	0.21	1000	190	476	373
T,2	820	1428	0.21	1000	238	594	377
U,0	776	1428	0.21	1000	139	347	370
U,1	789	1428	0.21	1000	168	420	372
U,2	801	1428	0.21	1000	195	487	374
V,0+0.5	761	1428	0.21	1000	105	263	367
V,1	808	1428	0.21	1000	211	527	375
V,2	827	1428	0.21	1000	253	633	378
W,0+0.5	802	1428	0.21	1000	197	493	374
W,1	830	1428	0.21	1000	260	650	378

Final Status Survey: Room TUNNEL

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
W,2	723	1428	0.21	1000	20	50	361
X,0+0.5	801	1428	0.21	1000	195	487	374
X,1	819	1428	0.21	1000	235	588	377
X,2	731	1428	0.21	1000	38	95	362
Y,0+0.5	822	1428	0.21	1000	242	605	377
Y,1	807	1428	0.21	1000	208	521	375
Y,2	777	1428	0.21	1000	141	353	370
Z,0+0.5	795	1428	0.21	1000	182	454	373
Z,1	815	1428	0.21	1000	226	566	376
Z,2	842	1428	0.21	1000	287	717	380
AA,0+0.5	789	1428	0.21	1000	168	420	372
AA,1	872	1428	0.21	1000	354	885	385
AA,2	797	1428	0.21	1000	186	465	373
BB,0+0.5	810	1428	0.21	1000	215	538	375
BB,1	872	1428	0.21	1000	354	885	385
BB,2	813	1428	0.21	1000	222	555	376
CC,0+0.5	835	1428	0.21	1000	271	678	379

Final Status Survey: Room TUNNEL

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
CC,1	849	1428	0.21	1000	303	756	381
CC,2	835	1428	0.21	1000	271	678	379
DD,0+0.5	836	1428	0.21	1000	273	683	379
DD,1	824	1428	0.21	1000	246	616	377
DD,2	870	1428	0.21	1000	350	874	385
EE,0+0.5	790	1428	0.21	1000	170	426	372
EE,1	878	1428	0.21	1000	368	919	386
EE,2	897	1428	0.21	1000	410	1025	389
FF,0+0.5	835	1428	0.21	1000	271	678	379
FF,1	831	1428	0.21	1000	262	655	378
FF,2	882	1428	0.21	1000	376	941	387
GG,0+0.5	831	1428	0.21	1000	262	655	378
GG,1	850	1428	0.21	1000	305	762	381
GG,2	946	1428	0.21	1000	520	1300	396
HH,0+0.5	795	1478	0.21	1017	125	314	375
HH,1	792	1428	0.21	1000	175	437	372
HH,2	914	1428	0.21	1000	448	1120	391

Final Status Survey: Room TUNNEL

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
HH,3	884	1478	0.21	1017	325	812	389
HH,4	762	1478	0.21	1017	52	129	369
II,0+0.5	1062	1478	0.21	1017	724	1810	415
II,1	1081	1478	0.21	1017	766	1916	418
II,2	935	1428	0.21	1000	495	1238	395
II,3	754	1478	0.21	1017	34	84	368
II,4	876	1478	0.21	1017	307	768	388
II,5	923	1478	0.21	1017	412	1031	395
JJ,0+0.5	795	1478	0.21	1017	125	314	375
JJ,1	761	1478	0.21	1017	49	123	369
JJ,2	750	1478	0.21	1017	25	62	367
JJ,3	765	1478	0.21	1017	58	146	370
JJ,4	715	1478	0.21	1017	-54	-134	362
JJ,5	926	1478	0.21	1017	419	1048	395
KK,0+0.5	821	1478	0.21	1017	184	459	379
KK,1	707	1478	0.21	1017	-72	-179	360
KK,2	1092	1428	0.21	1000	847	2118	418

Final Status Survey: Room TUNNEL

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity; dpm/100 sq. cm	1.96*Standard Deviation
KK,3	846	1428	0.21	1000	296	739	381
KK,4	714	1478	0.21	1017	-56	-140	361
KK,5	985	1478	0.21	1017	551	1378	404
LL,0+0.5	1222	1478	0.21	1017	1082	2706	438
LL,1	790	1478	0.21	1017	114	286	374
LL,2	893	1428	0.21	1000	401	1003	388
LL,3	1012	1428	0.21	1000	668	1669	406
LL,4	901	1478	0.21	1017	363	908	391
LL,5	909	1478	0.21	1017	381	952	393
MM,0+0.5	847	1478	0.21	1017	242	605	383
MM,1	757	1478	0.21	1017	40	101	369
MM,2	1079	1478	0.21	1017	762	1905	418
MM,3	838	1478	0.21	1017	222	555	382
MM,4	743	1478	0.21	1017	9	22	366
MM,5	796	1478	0.21	1017	128	319	375
NN,0+0.5	797	1478	0.21	1017	130	325	375
NN,1	835	1428	0.21	1000	271	678	379

Final Status Survey: Room TUNNEL

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
NN,2	1012	1428	0.21	1000	668	1669	406
NN,3	1116	1478	0.21	1017	845	2112	423
NN,4	830	1478	0.21	1017	204	510	380
NN,5	799	1478	0.21	1017	134	336	375
OO,0+0.5	859	1478	0.21	1017	269	672	385
OO,1	860	1428	0.21	1000	327	818	383
OO,2	1100	1428	0.21	1000	865	2162	419
OO,3	990	1428	0.21	1000	618	1546	403
OO,4	827	1478	0.21	1017	197	493	380
OO,5	772	1478	0.21	1017	74	185	371
PP,0+0.5	1065	1478	0.21	1017	731	1826	416
PP,1	953	1428	0.21	1000	536	1339	397
PP,2	825	1428	0.21	1000	249	622	378
PP,3	822	1428	0.21	1000	242	605	377
PP,4	763	1478	0.21	1017	54	134	370
PP,5	723	1478	0.21	1017	-36	-90	363
QQ,0+0.5	884	1478	0.21	1017	325	812	389

Final Status Survey: Room TUNNEL

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
QQ,1	779	1478	0.21	1017	90	224	372
QQ,2	756	1478	0.21	1017	38	95	368
QQ,3	831	1478	0.21	1017	206	515	380
QQ,4	751	1478	0.21	1017	27	67	368
QQ,5	797	1478	0.21	1017	130	325	375
RR,0+0.5	724	1478	0.21	1017	-34	-84	363
RR,1	788	1478	0.21	1017	110	275	374
RR,2	736	1478	0.21	1017	-7	-17	365
RR,3	855	1478	0.21	1017	260	650	384
RR,4	873	1478	0.21	1017	300	751	387
RR,5	784	1478	0.21	1017	101	252	373
SS,0+0.5	754	1478	0.21	1017	34	84	368
SS,1	843	1478	0.21	1017	233	583	382
SS,2	730	1478	0.21	1017	-20	-50	364
SS,3	722	1478	0.21	1017	-38	-95	363
SS,4	746	1478	0.21	1017	16	39	367
SS,5	722	1478	0.21	1017	-38	-95	363

Final Status Survey: Room TUNNEL

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
TT,0+0.5	744	1478	0.21	1017	11	28	366
TT,1	786	1478	0.21	1017	105	263	373
TT,2	720	1478	0.21	1017	-43	-106	362
TT,3	750	1478	0.21	1017	25	62	367
TT,4	774	1478	0.21	1017	78	196	371
TT,5	810	1478	0.21	1017	159	398	377
UU,0+0.5	760	1478	0.21	1017	47	118	369
UU,1	758	1478	0.21	1017	43	106	369
UU,2	772	1478	0.21	1017	74	185	371
UU,3	740	1478	0.21	1017	2	6	366
UU,4	753	1478	0.21	1017	31	78	368
UU,5	701	1478	0.21	1017	-85	-213	359
UU+0.8,0+0.5	625	1478	0.21	1017	-255	-639	346
UU+0.8,1	589	1478	0.21	1017	-336	-840	340
UU+0.8,2	610	1478	0.21	1017	-289	-723	344
UU+0.8,3	620	1478	0.21	1017	-267	-667	345
UU+0.8,4	602	1478	0.21	1017	-307	-768	342

Final Status Survey: Room TUNNEL

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
UU+0.8,5	667	1478	0.21	1017	-161	-403	354
LOWER WALLS							
A,0,0+1	840	1208	0.21	921	529	1322	371
A,2,0+1	810	1208	0.21	921	462	1154	366
B,0,0+1	746	1208	0.21	921	318	796	355
B,2,0	**89**	**70**	**0.2**	**4439**	**633**	**2027**	**2636**
B,2,0+1	668	1208	0.21	921	143	359	342
C,0,0+1	768	1208	0.21	921	368	919	359
C,2,0	**92**	**70**	**0.2**	**4439**	**733**	**2347**	**2661**
C,2,0+1	667	1208	0.21	921	141	353	342
D,0,0	**80**	**70**	**0.2**	**4439**	**333**	**1067**	**2561**
D,0,0+1	690	1208	0.21	921	193	482	346
D,2,0	**79**	**70**	**0.2**	**4439**	**300**	**960**	**2552**
D,2,0+1	650	1091	0.19	968	259	647	369
E,0,0	**92**	**70**	**0.2**	**4439**	**733**	**2347**	**2661**
E,0,0+1	680	1208	0.21	921	170	426	344
E,2,0	**96**	**70**	**0.2**	**4439**	**867**	**2773**	**2694**

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Final Status Survey: Room TUNNEL

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
E,2,0+1	741	1091	0.19	968	484	1211	386
F,0,0	**84**	**70**	**0.2**	**4439**	**467**	**1493**	**2594**
F,0,0+1	792	1208	0.21	921	421	1053	363
F,2,0	**84**	**70**	**0.2**	**4439**	**467**	**1493**	**2594**
F,2,0+1	620	1091	0.19	968	185	461	363
G,0,0	**84**	**70**	**0.2**	**4439**	**467**	**1493**	**2594**
G,0,0+1	722	1208	0.21	921	264	661	351
G,2,0	**108**	**70**	**0.2**	**4439**	**1267**	**4053**	**2789**
G,2,0+1	749	1208	0.21	921	325	812	356
H,0,0	**65**	**70**	**0.2**	**4439**	**-167**	**-533**	**2429**
H,0,0+1	610	1208	0.21	921	13	34	332
H,2,0	**79**	**70**	**0.2**	**4439**	**300**	**960**	**2552**
H,2,0+1	683	1208	0.21	921	177	443	345
I,0,0	**73**	**70**	**0.2**	**4439**	**100**	**320**	**2500**
I,0,0+1	662	1208	0.21	921	130	325	341
I,2,0	**87**	**70**	**0.2**	**4439**	**567**	**1813**	**2620**
I,2,0+1	623	1208	0.21	921	43	106	334

Final Status Survey. Room TUNNEL

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
J,0,0	**72**	**70**	**0.2**	**4439**	**67**	**213**	**2491**
J,0,0+1	623	1208	0.21	921	43	106	334
J,2,0	**99**	**70**	**0.2**	**4439**	**967**	**3093**	**2718**
J,2,0+1	629	1208	0.21	921	56	140	335
K,0,0	**85**	**70**	**0.2**	**4439**	**500**	**1600**	**2603**
K,0,0+1	636	1208	0.21	921	72	179	336
K,2,0	**83**	**70**	**0.2**	**4439**	**433**	**1387**	**2586**
K,2,0+1	625	1208	0.21	921	47	118	334
L,0,0	**92**	**70**	**0.2**	**4439**	**733**	**2347**	**2661**
L,0,0+1	578	1208	0.21	921	-58	-146	326
L,2,0	**95**	**73**	**0.2**	**4527**	**733**	**2347**	**2710**
L,2,0+1	666	1208	0.21	921	139	347	342
M,0,0	**86**	**70**	**0.2**	**4439**	**533**	**1707**	**2611**
M,0,0+1	657	1208	0.21	921	119	297	340
M,2,0	**70**	**70**	**0.2**	**4439**	**0**	**0**	**2474**
M,2,0+1	697	1208	0.21	921	208	521	347
N,0,0	**82**	**70**	**0.2**	**4439**	**400**	**1280**	**2578**

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Final Status Survey: Room TUNNEL

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
N,0,0+1	525	1208	0.21	921	-177	-443	316
N,2,0	**70**	**70**	**0.2**	**4439**	**0**	**0**	**2474**
N,2,0+1	672	1208	0.21	921	152	381	343
O,0,0	**87**	**70**	**0.2**	**4439**	**567**	**1813**	**2620**
O,0,0+1	635	1208	0.21	921	69	174	336
O,2,0	**97**	**70**	**0.2**	**4439**	**900**	**2880**	**2702**
O,2,0+1	692	1208	0.21	921	197	493	346
P,0,0	**105**	**70**	**0.2**	**4439**	**1167**	**3733**	**2766**
P,0,0+1	620	1208	0.21	921	36	90	333
P,2,0	**83**	**70**	**0.2**	**4439**	**433**	**1387**	**2586**
P,2,0+1	630	1208	0.21	921	58	146	335
Q,0,0	**86**	**70**	**0.2**	**4439**	**533**	**1707**	**2611**
Q,0,0+1	635	1208	0.21	921	69	174	336
Q,2,0	**83**	**70**	**0.2**	**4439**	**433**	**1387**	**2586**
Q,2,0+1	631	1208	0.21	921	61	151	335
R,0,0	**84**	**70**	**0.2**	**4439**	**467**	**1493**	**2594**
R,0,0+1	640	1208	0.21	921	81	202	337

Final Status Survey. Room TUNNEL

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
R,2,0	**100**	**70**	**0.2**	**4439**	**1000**	**3200**	**2726**
R,2,0+1	599	1208	0.21	921	-11	-28	330
S,0,0	**72**	**70**	**0.2**	**4439**	**67**	**213**	**2491**
S,0,0+1	610	1208	0.21	921	13	34	332
S,2,0	**72**	**70**	**0.2**	**4439**	**67**	**213**	**2491**
S,2,0+1	639	1208	0.21	921	78	196	337
T,0,0	**102**	**70**	**0.2**	**4439**	**1067**	**3413**	**2742**
T,0,0+1	720	1208	0.21	921	260	650	351
T,2,0	**94**	**70**	**0.2**	**4439**	**800**	**2560**	**2677**
T,2,0+1	657	1208	0.21	921	119	297	340
U,0,0	**106**	**70**	**0.2**	**4439**	**1200**	**3840**	**2774**
U,0,0+1	690	1208	0.21	921	193	482	346
U,2,0	**77**	**70**	**0.2**	**4439**	**233**	**747**	**2535**
U,2,0+1	631	1208	0.21	921	61	151	335
V,0,0	**99**	**70**	**0.2**	**4439**	**967**	**3093**	**2718**
V,0,0+1	617	1208	0.21	921	29	73	333
V,2,0	**63**	**70**	**0.2**	**4439**	**-233**	**-747**	**2411**

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Final Status Survey: Room TUNNEL

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
V,2,0+1	639	1208	0.21	921	78	196	337
W,0+0.5,0	**90**	**70**	**0.2**	**4439**	**667**	**2133**	**2645**
W,0+0.5,0+1	596	1208	0.21	921	-18	-45	329
W,2,0	**86**	**70**	**0.2**	**4439**	**533**	**1707**	**2611**
W,2,0+1	651	1208	0.21	921	105	263	339
X,0+0.5,0	**72**	**70**	**0.2**	**4439**	**67**	**213**	**2491**
X,0+0.5,0+1	709	1208	0.21	921	235	588	349
X,2,0	**82**	**70**	**0.2**	**4439**	**400**	**1280**	**2578**
X,2,0+1	627	1208	0.21	921	52	129	335
Y,0+0.5,0	**100**	**70**	**0.2**	**4439**	**1000**	**3200**	**2726**
Y,0+0.5,0+1	635	1208	0.21	921	69	174	336
Y,2,0	**84**	**70**	**0.2**	**4439**	**467**	**1493**	**2594**
Y,2,0+1	593	1208	0.21	921	-25	-62	328
Z,0+0.5,0	**117**	**70**	**0.2**	**4439**	**1567**	**5013**	**2859**
Z,0+0.5,0+1	600	1208	0.21	921	-9	-22	330
Z,2,0	**92**	**70**	**0.2**	**4439**	**733**	**2347**	**2661**
Z,2,0+1	662	1208	0.21	921	130	325	341

Final Status Survey: Room TUNNEL

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
AA,0+0.5,0	**95**	**70**	**0.2**	**4439**	**833**	**2667**	**2686**
AA,0+0.5,0+1	606	1208	0.21	921	4	11	331
AA,2,0	**72**	**70**	**0.2**	**4439**	**67**	**213**	**2491**
AA,2,0+1	595	1208	0.21	921	-20	-50	329
BB,0+0.5,0	**84**	**70**	**0.2**	**4439**	**467**	**1493**	**2594**
BB,0+0.5,0+1	624	1208	0.21	921	45	112	334
BB,2,0	**71**	**70**	**0.2**	**4439**	**33**	**107**	**2483**
BB,2,0+1	654	1208	0.21	921	112	280	340
CC,0+0.5,0	**73**	**70**	**0.2**	**4439**	**100**	**320**	**2500**
CC,0+0.5,0+1	629	1208	0.21	921	56	140	335
CC,2,0	**84**	**70**	**0.2**	**4439**	**467**	**1493**	**2594**
CC,2,0+1	658	1208	0.21	921	121	303	340
DD,0+0.5,0	**99**	**70**	**0.2**	**4439**	**967**	**3093**	**2718**
DD,0+0.5,0+1	629	1208	0.21	921	56	140	335
DD,2,0	**107**	**70**	**0.2**	**4439**	**1233**	**3947**	**2781**
DD,2,0+1	669	1208	0.21	921	146	364	342
EE,0+0.5,0	**82**	**70**	**0.2**	**4439**	**400**	**1280**	**2578**

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Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
EE,0+0.5,0+1	603	1208	0.21	921	-2	-6	330
EE,2,0	**102**	**70**	**0.2**	**4439**	**1067**	**3413**	**2742**
EE,2,0+1	697	1208	0.21	921	208	521	347
FF,0+0.5,0	**77**	**70**	**0.2**	**4439**	**233**	**747**	**2535**
FF,0+0.5,0+1	592	1208	0.21	921	-27	-67	328
FF,2,0	**78**	**70**	**0.2**	**4439**	**267**	**853**	**2543**
FF,2,0+1	710	1208	0.21	921	238	594	349
GG,0+0.5,0	**99**	**73**	**0.2**	**4527**	**867**	**2773**	**2742**
GG,0+0.5,0+1	629	1208	0.21	921	56	140	335
GG,2,0	**80**	**73**	**0.2**	**4527**	**233**	**747**	**2586**
GG,2,0+1	629	1208	0.21	921	56	140	335
GG+0.7,2,0+1	786	1137	0.21	894	487	1218	359
GG+0.7,3,0+1	745	1137	0.21	894	396	989	352
GG+0.7,4,0+1	710	1137	0.21	894	317	793	346
GG+0.7,5,0+1	606	1137	0.21	894	84	210	328
HH,0+0.5,0	**114**	**73**	**0.2**	**4527**	**1367**	**4373**	**2859**
HH,0+0.5,0+1	621	980	0.18	969	342	856	377

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Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
HH,4+0.3,0	**78**	**74**	**0.18**	**5062**	**148**	**474**	**2864**
HH,5,0+1	650	1137	0.21	894	183	457	336
II,0+0.5,0	**119**	**73**	**0.2**	**4527**	**1533**	**4907**	**2897**
II,0+0.5,0+1	664	980	0.18	969	455	1137	386
II,5,0	**95**	**74**	**0.18**	**5062**	**778**	**2489**	**3020**
II,5,0+1	638	1137	0.21	894	156	389	333
JJ,0+0.5,0+1	840	980	0.18	969	915	2288	422
JJ,5,0	**92**	**74**	**0.18**	**5062**	**667**	**2133**	**2993**
JJ,5,0+1	559	1137	0.21	894	-21	-53	319
KK,0+0.5,0	**86**	**70**	**0.2**	**4439**	**533**	**1707**	**2611**
KK,0+0.5,0+1	660	940	0.18	950	497	1242	383
KK,5,0	**93**	**74**	**0.18**	**5062**	**704**	**2252**	**3002**
KK,5,0+1	549	1137	0.21	894	-44	-109	317
LL,0+0.5,0	**115**	**73**	**0.2**	**4527**	**1400**	**4480**	**2867**
LL,0+0.5,0+1	770	940	0.18	950	784	1961	406
LL,5,0	**96**	**74**	**0.18**	**5062**	**815**	**2607**	**3029**
LL,5,0+1	601	1137	0.21	894	73	182	327

Final Status Survey: Room TUNNEL

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
MM,0+0.5,0	**101**	**70**	**0.2**	**4439**	**1033**	**3307**	**2734**
MM,0+0.5,0+1	750	940	0.18	950	732	1830	402
MM,5,0	**98**	**74**	**0.18**	**5062**	**889**	**2844**	**3047**
MM,5,0+1	587	1137	0.21	894	41	104	324
NN,0+0.5,0	**92**	**70**	**0.2**	**4439**	**733**	**2347**	**2661**
NN,0+0.5,0+1	673	940	0.18	950	531	1327	386
NN,5,0	**99**	**74**	**0.18**	**5062**	**926**	**2963**	**3055**
NN,5,0+1	611	1137	0.21	894	95	238	329
OO,0+0.5,0	**101**	**70**	**0.2**	**4439**	**1033**	**3307**	**2734**
OO,0+0.5,0+1	779	940	0.18	950	808	2020	408
OO,5,0	**112**	**74**	**0.18**	**5062**	**1407**	**4504**	**3168**
OO,5,0+1	570	1091	0.19	968	61	152	352
PP,0+0.5,0	**116**	**70**	**0.2**	**4439**	**1533**	**4907**	**2851**
PP,0+0.5,0+1	703	940	0.18	950	609	1523	392
PP,5,0	**108**	**74**	**0.18**	**5062**	**1259**	**4030**	**3134**
PP,5,0+1	526	1091	0.19	968	-48	-121	343
QQ,0+0.5,0	**72**	**70**	**0.2**	**4439**	**67**	**213**	**2491**

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Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
QQ,0+0.5,0+1	680	940	0.18	950	549	1373	388
QQ,5,0	**109**	**74**	**0.18**	**5062**	**1296**	**4148**	**3142**
QQ,5,0+1	558	1091	0.19	968	31	77	350
RR,0+0.5,0	**87**	**70**	**0.2**	**4439**	**567**	**1813**	**2620**
RR,0+0.5,0+1	635	940	0.18	950	431	1078	378
RR,5,0	**114**	**74**	**0.18**	**5062**	**1481**	**4741**	**3185**
RR;5,0+1	591	1091	0.19	968	113	282	357
SS,0+0.5,0	**97**	**74**	**0.18**	**5062**	**852**	**2726**	**3038**
SS,0+0.5,0+1	640	940	0.18	950	444	1111	379
SS,5,0	**79**	**74**	**0.18**	**5062**	**185**	**593**	**2873**
SS,5,0+1	654	1091	0.19	968	269	672	369
TT,0+0.5,0	**74**	**70**	**0.2**	**4439**	**133**	**427**	**2509**
TT,0+0.5,0+1	638	940	0.18	950	439	1098	379
TT,5,0	**76**	**74**	**0.18**	**5062**	**74**	**237**	**2845**
TT,5,0+1	576	1091	0.19	968	76	189	354
UU,0+0.5,0	**80**	**70**	**0.2**	**4439**	**333**	**1067**	**2561**
UU,0+0.5,0+1	697	940	0.18	950	593	1484	391

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Final Status Survey: Room TUNNEL

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
UU,5,0	**81**	**74**	**0.18**	**5062**	**259**	**830**	**2892**
UU,5,0+1	640	940	0.18	950	444	1111	379
UU+0.8,0+0.8,0	**80**	**70**	**0.2**	**4439**	**333**	**1067**	**2561**
UU+0.8,0+0.8,0+1	690	940	0.18	950	575	1438	390
UU+0.8,1,0	**109**	**74**	**0.18**	**5062**	**1296**	**4148**	**3142**
UU+0.8,1,0+1	641	940	0.18	950	447	1118	379
UU+0.8,2,0	**111**	**74**	**0.18**	**5062**	**1370**	**4385**	**3160**
UU+0.8,2,0+1	568	940	0.18	950	256	641	363
UU+0.8,3,0	**103**	**74**	**0.18**	**5062**	**1074**	**3437**	**3091**
UU+0.8,3,0+1	625	940	0.18	950	405	1013	376
UU+0.8,4,0	**89**	**74**	**0.18**	**5062**	**556**	**1778**	**2966**
UU+0.8,4,0+1	591	940	0.18	950	316	791	368
UU+0.8,5,0	**95**	**74**	**0.18**	**5062**	**778**	**2489**	**3020**
UU+0.8,5,0+1	610	940	0.18	950	366	915	372
UPPER WALLS - INTERFACE BETWEEN LEDGE AND WALL							
U,0 @ ledge	**104**	**76**	**0.21**	**4393**	**889**	**2844**	**2671**
V,0 @ ledge	**85**	**76**	**0.21**	**4393**	**286**	**914**	**2526**

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Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
W,0 @ ledge	88	76	0.21	4393	381	1219	2550
X,0 @ ledge	77	76	0.21	4393	32	102	2463
Y,0 @ ledge	88	76	0.21	4393	381	1219	2550
Z,0 @ ledge	79	76	0.21	4393	95	305	2479
AA,0 @ ledge	89	76	0.21	4393	413	1321	2558
BB,0 @ ledge	76	76	0.21	4393	0	0	2455
CC,0 @ ledge	78	76	0.21	4393	63	203	2471
DD,0 @ ledge	96	76	0.21	4393	635	2032	2611
EE,0 @ ledge	97	76	0.21	4393	667	2133	2619
FF,0 @ ledge	73	76	0.21	4393	-95	-305	2430
GG,0 @ ledge	67	76	0.21	4393	-286	-914	2381
HH,0 @ ledge	108	76	0.21	4393	1016	3251	2701
II,0 @ ledge	99	76	0.21	4393	730	2337	2634
JJ,0 @ ledge	99	76	0.21	4393	730	2337	2634
KK,0 @ ledge	92	76	0.21	4393	508	1625	2581
LL,0 @ ledge	81	76	0.21	4393	159	508	2495
MM,0 @ ledge	76	76	0.21	4393	0	0	2455

Final Status Survey: Room TUNNEL

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
NN,0 @ ledge	92	76	0.21	4393	508	1625	2581
OO,0 @ ledge	108	76	0.21	4393	1016	3251	2701
PP,0 @ ledge	107	76	0.21	4393	984	3149	2694
QQ,0 @ ledge	108	76	0.21	4393	1016	3251	2701
RR,0 @ ledge	89	76	0.21	4393	413	1321	2558
SS,0 @ ledge	75	76	0.21	4393	-32	-102	2447
TT,0 @ ledge	74	76	0.21	4393	-63	-203	2439
UU,0 @ ledge	72	76	0.21	4393	-127	-406	2422
UU+0.8,0 @ ledge	72	76	0.21	4393	-127	-406	2422
CEILING							
@D,1 SR	49	50.39	0.19	4010	-49	-156	2194
@H,1 SR	45	50.39	0.19	4010	-189	-605	2149
@L,1 SR	42	50.39	0.19	4010	-294	-942	2115
@P,1 SR	41	50.39	0.19	4010	-329	-1054	2104
@T,1 SR	44	50.39	0.19	4010	-224	-717	2138
@X,1 SR	47	50.39	0.19	4010	-119	-381	2172
@BB,1 SR	43	50.39	0.19	4010	-259	-830	2127

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Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
@FF,1 SR	**39**	**50.39**	**0.19**	**4010**	**-400**	**-1279**	**2081**
@JJ,2 SR	**34**	**50.39**	**0.19**	**4010**	**-575**	**-1840**	**2022**
@NN,2 SR	**42**	**50.39**	**0.19**	**4010**	**-294**	**-942**	**2115**
@RR,2 SR	**40**	**50.39**	**0.19**	**4010**	**-365**	**-1167**	**2092**
SMEARS							
B,1	1	0.23	0.33	15	2	2	6
B,2	1	0.23	0.33	15	2	2	6
C,1	1	0.23	0.33	15	2	2	6
C,2	1	0.23	0.33	15	2	2	6
D,1	1	0.23	0.33	15	2	2	6
D,2	0	0.23	0.33	15	-1	-1	0
E,1	0	0.23	0.33	15	-1	-1	0
E,2	1	0.23	0.33	15	2	2	6
F,1	0	0.23	0.33	15	-1	-1	0
F,2	1	0.23	0.33	15	2	2	6
G,1	1	0.23	0.33	15	2	2	6
G,2	2	0.23	0.33	15	5	5	8

Final Status Survey. Room TUNNEL

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
H,1	2	0.23	0.33	15	5	5	8
H,2	1	0.23	0.33	15	2	2	6
I,1	0	0.23	0.33	15	-1	-1	0
I,2	1	0.23	0.33	15	2	2	6
J,1	1	0.23	0.33	15	2	2	6
J,2	0	0.23	0.33	15	-1	-1	0
K,0	1	0.23	0.33	15	2	2	6
K,1	2	0.23	0.33	15	5	5	8
K,2	0	0.23	0.33	15	-1	-1	0
L,0	1	0.23	0.33	15	2	2	6
L,1	0	0.23	0.33	15	-1	-1	0
L,2	1	0.23	0.33	15	2	2	6
M,0	0	0.23	0.33	15	-1	-1	0
M,1	0	0.23	0.33	15	-1	-1	0
M,2	0	0.23	0.33	15	-1	-1	0
N,0	0	0.23	0.33	15	-1	-1	0
N,1	1	0.23	0.33	15	2	2	6

Final Status Survey. Room TUNNEL

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
N,2	1	0.23	0.33	15	2	2	6
O,0	1	0.23	0.33	15	2	2	6
O,1	0	0.23	0.33	15	-1	-1	0
O,2	1	0.23	0.33	15	2	2	6
P,0	1	0.23	0.33	15	2	2	6
P,1	0	0.23	0.33	15	-1	-1	0
P,2	1	0.23	0.33	15	2	2	6
Q,0	0	0.23	0.33	15	-1	-1	0
Q,1	1	0.23	0.33	15	2	2	6
Q,2	0	0.23	0.33	15	-1	-1	0
R,0	0	0.23	0.33	15	-1	-1	0
R,1	0	0.23	0.33	15	-1	-1	0
R,2	0	0.23	0.33	15	-1	-1	0
S,0	1	0.23	0.33	15	2	2	6
S,1	1	0.23	0.33	15	2	2	6
S,2	0	0.23	0.33	15	-1	-1	0
T,0	1	0.23	0.33	15	2	2	6

Final Status Survey: Room TUNNEL

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
T,1	2	0.23	0.33	15	5	5	8
T,2	1	0.23	0.33	15	2	2	6
U,0	0	0.23	0.33	15	-1	-1	0
U,1	2	0.23	0.33	15	5	5	8
U,2	1	0.23	0.33	15	2	2	6
V,0+0.5	1	0.23	0.33	15	2	2	6
W,1	1	0.23	0.33	15	2	2	6
W,2	0	0.23	0.33	15	-1	-1	0
X,1	1	0.23	0.33	15	2	2	6
X,2	1	0.23	0.33	15	2	2	6
Y,1	1	0.23	0.33	15	2	2	6
Y,2	1	0.23	0.33	15	2	2	6
Z,1	0	0.23	0.33	15	-1	-1	0
Z,2	0	0.23	0.33	15	-1	-1	0
AA,1	2	0.23	0.33	15	5	5	8
AA,2	0	0.23	0.33	15	-1	-1	0
BB,1	2	0.23	0.33	15	5	5	8

Final Status Survey: Room TUNNEL

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
BB,2	1	0.23	0.33	15	2	2	6
CC,1	0	0.23	0.33	15	-1	-1	0
CC,2	0	0.23	0.33	15	-1	-1	0
DD,1	1	0.23	0.33	15	2	2	6
DD,2	0	0.23	0.33	15	-1	-1	0
EE,1	0	0.23	0.33	15	-1	-1	0
EE,2	0	0.23	0.33	15	-1	-1	0
FF,1	1	0.23	0.33	15	2	2	6
FF,2	1	0.23	0.33	15	2	2	6
GG,1	1	0.23	0.33	15	2	2	6
GG,2	0	0.23	0.33	15	-1	-1	0
HH,1	0	0.23	0.33	15	-1	-1	0
HH,2	1	0.23	0.33	15	2	2	6
HH,3	1	0.23	0.33	15	2	2	6
HH,4	0	0.23	0.33	15	-1	-1	0
HH,5	1	0.23	0.33	15	2	2	6
II,1	0	0.23	0.33	15	-1	-1	0

Final Status Survey: Room TUNNEL

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
II,2	0	0.23	0.33	15	-1	-1	0
II,3	0	0.23	0.33	15	-1	-1	0
II,4	0	0.23	0.33	15	-1	-1	0
II,5	2	0.23	0.33	15	5	5	8
JJ,1	1	0.23	0.33	15	2	2	6
JJ,2	0	0.23	0.33	15	-1	-1	0
JJ,3	0	0.23	0.33	15	-1	-1	0
JJ,4	1	0.23	0.33	15	2	2	6
JJ,5	0	0.23	0.33	15	-1	-1	0
KK,1	1	0.23	0.33	15	2	2	6
KK,2	0	0.23	0.33	15	-1	-1	0
KK,3	1	0.23	0.33	15	2	2	6
KK,4	1	0.23	0.33	15	2	2	6
KK,5	0	0.23	0.33	15	-1	-1	0
LL,1	2	0.23	0.33	15	5	5	8
LL,2	2	0.23	0.33	15	5	5	8
LL,3	1	0.23	0.33	15	2	2	6

Final Status Survey: Room TUNNEL

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
LL,4	2	0.23	0.33	15	5	5	8
LL,5	0	0.23	0.33	15	-1	-1	0
MM,1	1	0.23	0.33	15	2	2	6
MM,2	1	0.23	0.33	15	2	2	6
MM,3	2	0.23	0.33	15	5	5	8
MM,4	1	0.23	0.33	15	2	2	6
MM,5	1	0.23	0.33	15	2	2	6
NN,1	1	0.23	0.33	15	2	2	6
NN,2	1	0.23	0.33	15	2	2	6
NN,3	0	0.23	0.33	15	-1	-1	0
NN,4	0	0.23	0.33	15	-1	-1	0
NN,5	1	0.23	0.33	15	2	2	6
OO,1	1	0.23	0.33	15	2	2	6
OO,2	1	0.23	0.33	15	2	2	6
OO,3	1	0.23	0.33	15	2	2	6
OO,4	0	0.23	0.33	15	-1	-1	0
OO,5	1	0.23	0.33	15	2	2	6

Final Status Survey. Room TUNNEL

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
PP,1	2	0.23	0.33	15	5	5	8
PP,2	1	0.23	0.33	15	2	2	6
PP,3	0	0.23	0.33	15	-1	-1	0
PP,4	0	0.23	0.33	15	-1	-1	0
PP,5	0	0.23	0.33	15	-1	-1	0
QQ,1	0	0.23	0.33	15	-1	-1	0
QQ,2	0	0.23	0.33	15	-1	-1	0
QQ,3	1	0.23	0.33	15	2	2	6
QQ,4	0	0.23	0.33	15	-1	-1	0
QQ,5	0	0.23	0.33	15	-1	-1	0
RR,1	0	0.23	0.33	15	-1	-1	0
RR,2	1	0.23	0.33	15	2	2	6
RR,3	1	0.23	0.33	15	2	2	6
RR,4	1	0.23	0.33	15	2	2	6
RR,5	1	0.23	0.33	15	2	2	6
SS,1	1	0.23	0.33	15	2	2	6
SS,2	0	0.23	0.33	15	-1	-1	0

Final Status Survey. Room TUNNEL

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
SS,3	0	0.23	0.33	15	-1	-1	0
SS,4	1	0.23	0.33	15	2	2	6
SS,5	0	0.23	0.33	15	-1	-1	0
TT,1	1	0.23	0.33	15	2	2	6
TT,2	1	0.23	0.33	15	2	2	6
TT,3	1	0.23	0.33	15	2	2	6
TT,4	1	0.23	0.33	15	2	2	6
TT,5	1	0.23	0.33	15	2	2	6
UU,1	0	0.23	0.33	15	-1	-1	0
UU,2	0	0.23	0.33	15	-1	-1	0
UU,3	1	0.23	0.33	15	2	2	6
UU,4	0	0.23	0.33	15	-1	-1	0
UU,5	1	0.23	0.33	15	2	2	6
UU+0.8,1	0	0.23	0.33	15	-1	-1	0
UU+0.8,2	1	0.23	0.33	15	2	2	6
UU+0.8,3	0	0.23	0.33	15	-1	-1	0
UU+0.8,4	0	0.23	0.33	15	-1	-1	0

Final Status Survey. Room TUNNEL

Grid Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
UU+0.8,5	0	0.23	0.33	15	-1	-1	0

12/26/96

Final Status Survey. Room Exterior

Survey Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
UPPER WALLS							
A	118	69	0.21	4199	1556	4978	2723
B	79	69	0.21	4199	317	1016	2422
C	85	69	0.21	4199	508	1625	2471
D	72	69	0.21	4199	95	305	2364
E	62	69	0.21	4199	-222	-711	2279
F	78	69	0.21	4199	286	914	2414
G	74	69	0.21	4199	159	508	2381
H	78	69	0.21	4199	286	914	2414
I	71	69	0.21	4199	63	203	2356
J	78	69	0.21	4199	286	914	2414
K	80	69	0.21	4199	349	1117	2430
L	83	69	0.21	4199	444	1422	2455
M	75	69	0.21	4199	190	610	2389
N	72	69	0.21	4199	95	305	2364
O	69	69	0.21	4199	0	0	2339
P	78	69	0.21	4199	286	914	2414

Final Status Survey: Room Exterior

Survey Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation
Q	71	69	0.21	4199	63	203	2356
R	64	69	0.21	4199	-159	-508	2296
S	65	69	0.21	4199	-127	-406	2305
T	51	69	0.21	4199	-571	-1829	2181
U	83	69	0.21	4199	444	1422	2455
V	68	69	0.21	4199	-32	-102	2331
W	No Data						
X	82	69	0.21	4199	413	1321	2447
Y	82	69	0.21	4199	413	1321	2447
Z	82	69	0.21	4199	413	1321	2447

Final Status Survey: Introduction

Formulas

Net Measured Count Rate Units: cpm

$$= \frac{Gross\ Counts}{Count\ Time} - Background\ Count\ Rate$$

Measured Activity Units: dpm/100 sq. cm.

$$= \frac{Net\ Measured\ Count\ Rate}{Instrument\ Efficiency \bullet \left({}^{Detector\ Area}/_{100sqcm} \right)}$$

Effective Alpha Activity Units: dpm/100 sq. cm.

$$= Measured\ Activity \bullet Total\ U\ Conversion\ Factor$$

Minimum Detectable Activity (MDA) Units: dpm/100 sq. cm.

$$= \frac{2.71 + 4.65 \bullet \sqrt{Background\ Count\ Rate \bullet Count\ Time}}{Count\ Time \bullet Instrument\ Efficiency \bullet \left({}^{Detector\ Area}/_{100sqcm} \right)}$$

1.96 * Standard Deviation (2 σ error) Units: dpm/100 sq. cm.

$$= Total\ U\ Conversion\ Factor \bullet \frac{1.96 \bullet \sqrt{Meas.Counts / Count\ Time^2 + Bkgd\ Counts / Count\ Time^2}}{Instrument\ Efficiency \bullet \left({}^{Detector\ Area}/_{100sqcm} \right)}$$

Notes

1. Entries in bold are for G-M detector (15 sq. cm probe). Other detector measurements are for large area proportional detector (425 sq. cm). Smears are for 100 sq. cm.

2. Total U Conversion factors: 2.5 for large area detector, 3.2 for G-M detector, 1.0 for smears.

3. Grid locations not in the database are not applicable due to room configurations (removed or no walls, cut floors or expansion joints, *et cetera*)

4. G-M detectors and smears represent 1 minute counts. Large area detector values are for 0.5 minute counts. Background counts were for one 1 minute.

5. Survey Unit 1: 2L, 2M, and, TUNNEL
   Survey Unit 2: 2A, ENTRY, 2B, 2C, 2D, 2E, 2F, 2G, 2H, 2K, 2N, and, 2P.

6. A Letter,Number designation (*e.g.*, C,3) is a point on the floor. An @ sign in front of a Letter,Number designation (*e.g.*, @C,3) is a point on the ceiling over the floor point. A Letter, Number, Number designation (C,0,0+1) indicates a wall location. The second number is the distance is from the wall-floor interface (*e.g.*, +1 meter, -1 meter).

Final Status Survey: Statistics

Survey Data Average:

$$\bar{x} = \frac{\sum_{i=1}^{n} x_i}{n}$$

Standard Deviation:

$$s_x = \sqrt{\frac{\sum_{i=1}^{n} (\bar{x} - x_i)^2}{n-1}}$$

Guideline Value = 5000 dpm/100 sq. cm Total U
Estimating Factor (for Table B-2, NUREG/CR-5849) = (Guideline Value - Average) / Standard Deviation

Room Floor Survey

Survey Unit	No. of Measurements Taken	Average, dpm/100 sq. cm	Standard Deviation, dpm/100 sq. cm	Estimating Factor	No. of Samples Needed
Unit 2	388	809	822	5	< 9
Unit 1	465	621	598	7	< 9

Lower Wall Survey

Survey Unit	No. of Measurements Taken	Average, dpm/100 sq. cm	Standard Deviation, dpm/100 sq. cm	Estimating Factor	No. of Samples Needed
Unit 2	366	385	1209	4	< 9
Unit 1	326	956	1213	3	< 9

Upper Wall Survey

Survey Unit	No. of Measurements Taken	Average, dpm/100 sq. cm	Standard Deviation, dpm/100 sq. cm	Estimating Factor	No. of Samples Needed
Unit 2	72	-169	1324	4	< 9
Unit 1	45	637	1438	3	< 9

Ceiling Survey

Survey Unit	No. of Measurements Taken	Average, dpm/100 sq. cm	Standard Deviation, dpm/100 sq. cm	Estimating Factor	No. of Samples Needed
Unit 2	72	691	699	6	< 9
Unit 1	37	274	1203	4	< 9

Floor Smears Survey

Survey Unit	No. of Measurements Taken	Average, dpm/100 sq. cm	Standard Deviation, dpm/100 sq. cm	Estimating Factor	No. of Samples Needed
Unit 2	506	2	3	1889	< 9
Unit 1	395	1	2	2523	< 9

Final Status Survey: Soil

Soil Sample Number	Sample Grid Location	Sample Activity, pCi/g							
		U-238	+/- error	MDA	U-235	+/- error	MDA	U-234	Total U
2A-001	C+0.6, 1	6.09	0.62	0.63	0.47	0.05	0.04	9.89	16.45
2A-002	C+0.3, 1	5.31	0.58	0.59	0.57	0.05	0.04	11.9	17.78
2A-003	C+0.5, 2+0.5	0.92	0.35	0.43	0.04	0.03	0.04	0.8	1.76
2A-004	A,1	2.64	0.65	0.73	0.23	0.05	0.05	4.86	7.73
2A-007	D+0.4, 1	3.96	0.52	0.68	0.44	0.05	0.05	9.2	13.6
2A-008	A+0.6, 1	3.98	0.49	0.62	0.31	0.04	0.05	6.4	10.69
2B-001	A+1.7, 1+1.3	2.89	0.49	0.69	0.41	0.04	0.05	8.6	11.9
2B-002	C, 0+0.7	0.42	0.36	0.58	0.04	0.03	0.05	0.9	1.36
2C-001	C+0.5, 2	0.4	0.57	0.8	0.05	0.05	0.06	0.95	1.4
2C-002	C+0.5, 0+0.5	0.63	0.54	0.74	-0.02	0.04	0.07	-0.4	0.21
2D-001	C, 0+1.2	0.49	0.35	0.46	0.12	0.03	0.04	2.42	3.03
2D-002	B+1.5, 1+0.3	1.73	0.44	0.54	0.13	0.04	0.04	2.66	4.52
2D-003	C, 3+0.5	0.42	0.37	0.51	0.01	0.03	0.04	0.29	0.72
2D-005	C+0.5, 0+0.5	-0.17	0.5	0.78	0.1	0.04	0.05	2	1.93
2D-006	D+1.5, 0+0.5	0.38	0.48	0.69	0.13	0.04	0.05	2.7	3.21
2E-002	A+0.2, 1	3.81	0.53	0.74	0.64	0.05	0.05	13.3	17.75
2E-003	A+1.8, 0+0.2	0.27	0.06	0.1	0.09	0.01	0.01	1.8	2.16
2F-001	C+1, 0+1	1.54	0.45	0.56	0.5	0.05	0.04	10.43	12.47
2F-002	C+1, 3+1.2	0.84	0.38	0.47	0.11	0.03	0.04	2.25	3.2
2F-003	C+0.7, 4+1	0.49	0.35	0.45	0.04	0.03	0.04	0.8	1.33
2F-004	D+1.8, 1+1.3	0.43	0.35	0.47	0.02	0.03	0.04	0.52	0.97
2F-005	D+1.8, 3+1.2	0.79	0.34	0.43	0.06	0.03	0.04	1.21	2.06
2F-007	E+1, 2	0.38	0.43	0.69	0.1	0.04	0.07	2.07	2.55
2F-008	F, 4+0.5	2.36	0.5	0.76	0.5	0.05	0.06	10.6	13.46
2F-009	D+1, 2	0.5	0.35	0.57	0.05	0.03	0.05	1.1	1.65
2F-010	B+0.3, 2	0.61	0.35	0.56	0.13	0.03	0.04	2.8	3.54
2F-011	F,1	2.68	0.18	0.26	0.56	0.02	0.02	11.7	14.94
2G-001	C+0.5, 0+0.5	0.43	0.66	0.9	-0.01	0.06	0.09	-0.24	0.18
2G-002	C+0.5,1+1.5	0.66	0.55	0.7	0.05	0.05	0.06	1	1.71
2H-002	A+1.5, 3	0.09	0.36	0.51	0.06	0.03	0.04	1.17	1.32
2H-003	A+1.5, 4+1.5	0.36	0.34	0.45	0.03	0.03	0.04	0.63	1.02
2H-008	E+0.5, 6+1	-0.03	0.38	0.55	0.09	0.03	0.04	1.82	1.88
2H-009	H+0.3, 1+0.3	0.29	0.35	0.49	0.02	0.03	0.04	0.51	0.82
2H-010	H+1, 5+0.7	0.71	0.38	0.5	0.04	0.03	0.05	0.82	1.57
2H-011	H+1, 6+1.7	0.34	0.36	0.5	0.06	0.03	0.04	1.33	1.73
2H-012	L+1.5, 0+0.2	2.14	0.5	0.62	0.72	0.05	0.04	15.18	18.04
2H-013	L+1.8, 1+1.8	0.58	0.39	0.51	0.14	0.04	0.04	2.87	3.59
2H-014	L+1.5, 4	0.67	0.37	0.49	0.06	0.03	0.04	1.24	1.97
2H-015	L+1.3, 5+0.7	0.43	0.35	0.46	0.1	0.03	0.04	2.12	2.65
2H-018	A+1.5, 1+0.5	-0.02	0.56	0.82	0.01	0.05	0.07	0.28	0.27
2H-019	E+0.8, 5+1	1.01	0.55	0.63	0.02	0.08	0.08	0.47	1.5
2H-020	E+0.8, 5	1.01	0.61	0.78	0.04	0.05	0.08	0.76	1.81
2H-021	E+0.8, 3+1	0.69	0.59	0.76	0.05	0.05	0.06	1.15	1.89
2H-022	L+1, 0+0.8	0.65	0.53	0.69	0.02	0.04	0.07	0.34	1.01
2H-024	G+0.8, 4+1.8	0.33	0.4	0.68	0.14	0.04	0.06	2.8	3.27

TABLE A18

Final Status Survey: Soil

Soil Sample Number	Sample Grid Location	Sample Activity, pCi/g							
		U-238	+/- error	MDA	U-235	+/- error	MDA	U-234	Total U
2H-025	I+0.5, 4+1.8	0.69	0.37	0.57	0.08	0.03	0.05	1.6	2.37
2H-026	I+1.5, 3+0.5	0.59	0.37	0.59	0.06	0.03	0.05	1.4	2.05
2H-028	I+1.5, 2+0.3	0.6	0.34	0.54	0.05	0.03	0.05	1	1.65
2H-029	I+1.5, 0+0.5	0.15	0.32	0.54	0.02	0.03	0.05	0.4	0.57
2H-030	H+0.5, 0+0.7	0.34	0.34	0.56	0.03	0.03	0.05	0.6	0.97
2H-031	H+0.5, 3+1.8	0.39	0.35	0.58	0.04	0.03	0.05	0.9	1.33
2H-032	J+0.7, 3+1.8	0.43	0.35	0.56	0.09	0.03	0.05	1.9	2.42
2H-033	E+0.5, 2+0.7	0.9	0.34	0.48	0.05	0.03	0.05	1	1.95
2H-034	E+0.5, 0+1.5	0	0.34	0.6	0.05	0.03	0.05	1	1.05
2H-035	L+1.5, 3+0.8	0.39	0.39	0.64	0.1	0.03	0.05	2.1	2.59
2H-036	A+0.5, 0+1	0.36	0.36	0.57	0.03	0.03	0.06	0.5	0.89
2K-001	A+1, 2+1.5	0.34	0.38	0.52	0.07	0.03	0.04	1.57	1.98
2K-002	A+1, 6+1	0.24	0.37	0.5	0.02	0.03	0.04	0.43	0.69
2K-003	A+1, 8+0.7	0.8	0.4	0.51	0.17	0.04	0.05	3.65	4.62
2K-005	E+1, 4+1.5	0.31	0.36	0.49	0.07	0.03	0.04	1.37	1.75
2K-006	E+1, 7+0.5	1.28	0.44	0.55	0.33	0.04	0.04	6.87	8.48
2K-007	E+1, 9+1	0.8	0.38	0.48	0.16	0.03	0.04	3.28	4.24
2K-009	E+1, 2+1.8	0.65	0.55	0.74	0.07	0.05	0.06	1.46	2.18
2K-010	A+0.5, 1+0.3	0.48	0.33	0.53	0.04	0.03	0.05	0.8	1.32
2K-011	E+1, 1+0.3	0.06	0.34	0.58	0.05	0.03	0.05	1.1	1.21
2K-012	A+1, 0+1.5	0.45	0.37	0.6	0.04	0.03	0.05	0.8	1.29
2K-015	F+1, 9	2.58	0.47	0.68	0.36	0.04	0.05	7.5	10.44
2K-016	D+1.3, 9	2.63	0.51	0.75	0.63	0.05	0.05	13.3	16.56
2K-019	B, 8+0.2	3.59	0.55	0.78	0.6	0.05	0.06	12.6	16.79
2K-020	B, 6+0.2	0.84	0.39	0.61	0.15	0.03	0.05	3.2	4.19
2K-021	B, 4+1	0.82	0.48	0.77	0.94	0.06	0.05	19.8	21.56
2K-022	B, 3	0.59	0.38	0.64	0.17	0.03	0.05	3.6	4.36
2K-023	A+1, 9	2.68	0.42	0.6	0.64	0.04	0.04	13.5	16.82
2K-024	C, 9	1.6	0.43	0.62	0.21	0.04	0.05	4.4	6.21
2K-025	F, 2+1	0.68	0.48	0.79	0.19	0.04	0.06	3.9	4.77
2K-026	C+0.5, 2+0.6	1.44	0.46	0.68	0.28	0.04	0.06	5.9	7.62
2L-001	E+0.5, 1+0.5	0.35	0.34	0.46	0.01	0.03	0.04	0.24	0.6
2L-002	E+0.5, 8+0.2	0.62	0.39	0.53	0.03	0.03	0.05	0.69	1.34
2L-003	E+0.5, 14+0.5	0.72	0.39	0.51	0.2	0.04	0.04	4.1	5.02
2L-004	C+0.3, 2+0.5	0.63	0.37	0.48	0.05	0.03	0.04	1.13	1.81
2L-006	E+0.5, 11+0.5	0.37	0.61	1.01	0.02	0.05	0.09	0.39	0.78
2L-007	E+0.5, 4+0.5	0.67	0.51	0.81	-0.01	0.08	0.08	-0.27	0.39
2L-008	B+0.9, 12+0.8	0.53	0.39	0.63	0.07	0.03	0.05	1.5	2.1
2L-009	F+0.7, 12+0.7	0.93	0.07	0.11	0.19	0.01	0.01	4	5.12
2L-010	B+0.2, 14+0.4	0.69	0.14	0.22	0.18	0.01	0.02	3.7	4.57
2L-011	E+0.8, 0+0.3	0.47	0.06	0.1	0.06	0.01	0.01	1.3	1.83
2L-012	B+0.8, 0+0.3	0.77	0.17	0.26	0.05	0.01	0.02	1.1	1.92
2M-002	E+0.5, 10+0.8	-0.17	0.34	0.61	0.11	0.03	0.05	2.2	2.14
2M-003	E+0.5, 4+0.3	0.74	0.37	0.6	0.1	0.03	0.05	2.2	3.04
2M-006	I+0.3, 1+0.8	0.55	0.42	0.69	0.64	0.05	0.05	13.5	14.69

Final Status Survey: Soil

Soil Sample Number	Sample Grid Location	Sample Activity, pCi/g							
		U-238	+/- error	MDA	U-235	+/- error	MDA	U-234	Total U
2M-007	C+0.3, 2	0.6	0.43	0.71	0.54	0.05	0.05	11.4	12.54
2M-008	E+0.5, 0+0.8	0.55	0.38	0.6	0.08	0.03	0.05	1.7	2.33
2M-009	K+0.3, 10+0.2	2.82	0.43	0.6	0.33	0.04	0.05	6.9	10.05
2M-010	K+0.3, 7+0.7	1.92	0.21	0.3	0.22	0.02	0.02	4.6	6.74
2M-011	K+0.3, 4+0.5	1.71	0.4	0.58	0.26	0.04	0.05	5.4	7.37
2M-012	K+0.3, 1+0.8	5.48	0.39	0.49	0.8	0.04	0.04	16.8	23.08
2M-013	H+0.5, 12+0.5	0.21	0.29	0.49	0.05	0.02	0.04	1.1	1.36
2M-014	C+0.5, 12+0.5	1.18	0.42	0.67	0.19	0.04	0.05	4	5.37
2M-015	J+0.2, 0+0.3	0.39	0.33	0.55	0.07	0.03	0.05	1.5	1.96
2M-021	A+0.2, 2+0.3	1.64	0.62	0.81	0.83	0.06	0.05	17.5	19.97
2M-022	A+0.2, 11+0.3	2.26	0.48	0.62	0.35	0.04	0.04	7.41	10.02
2M-023	A+0.2, 8+0.5	5.44	0.75	0.85	0.68	0.06	0.05	14.31	20.43
2M-024	A+0.2, 1+0.2	1.31	0.49	0.65	0.29	0.04	0.04	6	7.6
2M-026	A+0.5, 12+0.5	0.35	0.46	0.66	0.12	0.03	0.04	2.5	2.97
2M-027	A+0.2, 5+0.7	0.76	0.09	0.12	0.08	0.01	0.01	1.7	2.54
2M-028	C,4	0.79	0.4	0.59	0.06	0.03	0.03	1.2	2.05
2M-029	D,2	0.86	0.4	0.53	0.05	0.03	0.03	1.1	
2N-003	C+0.5, 1+0.7	0.67	0.35	0.56	0.03	0.03	0.05	0.6	1.3
2N-004	C+0.5, 5+1	0.21	0.33	0.56	0.07	0.03	0.05	1.4	1.68
2N-005	C+0.5, 2+0.5	-0.03	0.34	0.62	0.05	0.03	0.05	1.1	1.12
2N-009	F+0.3, 2+1.8	1.23	0.4	0.59	0.18	0.04	0.05	3.7	5.11
2N-010	F+0.3, 4+1.8	1.11	0.43	0.68	0.57	0.05	0.05	11.9	13.58
2N-012	F+0.3, 8	2.99	0.66	0.97	0.54	0.06	0.07	11.3	14.83
2N-013	B+0.5, 5	0.3	0.38	0.54	0.07	0.03	0.04	1.41	1.78
2N-014	A+0.3, 1+1.8	1.68	0.42	0.55	0.23	0.03	0.04	4.81	6.72
2N-015	A+0.1, 0+1.8	2.72	0.53	0.63	0.41	0.04	0.04	8.7	11.83
2N-016	F+0.3, 6+0.5	0.45	0.34	0.47	0.05	0.02	0.03	1.1	1.6
2P-001	Old Locker Room	0.63	0.43	0.59	0.08	0.03	0.04	1.6	2.31
2P-002	Old Shower Room	1.8	0.58	0.69	0.37	0.05	0.05	7.8	9.97
2P-003	Old Bathrcom	2.1	0.51	0.66	0.34	0.04	0.04	7.2	9.64
2P-004	A+0.6, 1+0.3	0.93	0.42	0.57	0.04	0.04	0.04	0.9	1.87
ENTRY-002	A+0.5, 1+1.5	0.35	0.56	0.96	0.08	0.05	0.08	1.59	2.02
ENTRY-003	C, 3+0.5	1.03	0.4	0.65	0.2	0.03	0.05	4.2	5.43
ENTRY-004	C, 1+0.5	3.9	0.5	0.68	0.4	0.04	0.06	8.3	12.6
ENTRY-006	A+1.5, 4	2.72	0.47	0.67	0.3	0.04	0.05	6.3	9.32
TUNNEL-00	A+0.3, 1+0.7	1.19	0.62	0.84	0.25	0.05	0.05	5.2	6.64

Final Status Survey: Gamma Dose Rate

Room	Location	Gamma Dose Rate, (w/ background) µR/hr	Gamma Dose Rate, (w/o background) µR/hr
Entry	B,3	7	1
2A	C,2	6	0
2B	B,1	6	0
2B	D, 2+0.5	7	1
2C	C,1	6	0
2D	D,3	7	1
2E	B,1	6	0
2F	D,2	7	1
2G	C,1	7	1
2H	D,4	6	0
2H	K,3	6	0
2K	C,4	7	1
2K	E,8	7	1
2L	C,4	6	0
2L	E,12	7	1
2M	C,4	7	1
2M	D,12	6	0
2M	H,4	6	0
2M	I,12	7	1
2N	B,4	6	0
2P	D,1	6	0
Tunnel	I,1	7	1
Tunnel	W,1	7	1
Tunnel	KK,4	7	1

TABLE A19

Final Status Survey: Soil QA

Soil Sample Number*	Laboratory	Sample Activity, pCi/g					
		U-238	+/- error	MDA	U-235	+/- error	MDA
2A-008	Hilbert	3.98	0.49	0.62	0.31	0.04	0.05
2A-008	IEA	3.82	0.79		0.27	0.16	
2A-008(D)	IEA	3.73	0.69		0.39	0.23	
2D-002	Hilbert	1.73	0.44	0.54	0.13	0.04	0.04
2D-002	NRC	1.3	0.1		0.06	0.03	
2F-001	Hilbert	1.54	0.45	0.56	0.5	0.05	0.04
2F-001	IEA	2.39	0.81		<MDA		
2F-008	Hilbert	2.36	0.5	0.76	0.5	0.05	0.06
2F-008	IEA	5.21	0.67		0.59	0.17	
2H-001	Hilbert	101.05	2.56	2.33	24.63	0.32	0.11
2H-001	NRC	77.5	1.4		21.7	0.2	
2H-001S	IEA	102.6	2.4		28.9	0.74	
2H-003	Hilbert	0.36	0.34	0.45	0.03	0.03	0.04
2H-003	NRC	0.2	0.1		<0.05		
2H-006	Hilbert	31.06	1.29	1.16	4.5	0.13	0.06
2H-006	NRC	18.6	0.6		3.5	0.1	
2H-006S	IEA	3.31	0.67		0.65	0.24	
2H-006S(D)	IEA	17.94	1.1		3.38	0.42	
2H-010	Hilbert	0.71	0.38	0.5	0.04	0.03	0.05
2H-010	NRC	0.2	0.1		<0.05		
2H-014	Hilbert	0.67	0.37	0.49	0.06	0.03	0.04
2H-014	NRC	0.7	0.2		0.09	0.04	
2H-030	Hilbert	0.34	0.34	0.56	0.03	0.03	0.05
2H-030	IEA	1.03	0.54		<MDA		
2K-002	Hilbert	0.24	0.37	0.5	0.02	0.03	0.04
2K-002	NRC	0.2	0.1		0.04	0.03	
2K-004	Hilbert	4.9	0.8	0.97	3.98	0.12	0.06
2K-004	NRC	4.1	0.2		2.54	0.06	
2K-005	Hilbert	0.31	0.36	0.49	0.07	0.03	0.04
2K-005	NRC	0.2	0.1		0.03	0.03	
2K-005	IEA	0.78	0.61		<MDA		
2L-004	Hilbert	0.63	0.37	0.48	0.05	0.03	0.04
2L-004	IEA	1.45	0.62		<MDA		
2M-007	Hilbert	0.6	0.43	0.71	0.54	0.05	0.05
2M-007	IEA	1.6	0.58		0.47	0.16	
2N-005	Hilbert	-0.03	0.34	0.62	0.05	0.03	0.05
2N-005	IEA	1.48	0.57		<MDA		

* Sample numbers with an S, split samples; Samples with a (D), lab duplicates

TABLE A20

FINAL STATUS SURVEY - QUALITY ASSURANCE

FACILITY: Engelhard - Plainville LOCATION: Building 2

DATE: 23-Oct-96

PURPOSE: QA

Instrument B

INSTRUMENT: 2221

PROBE:
Face area: 425 cm2
Efficiency: 20.0% cpm/dpm

Survey type: b/g alpha beta/gamma exposure rate

Background rate: 1618 cpm
Count time: 1 minutes

MDA: 223 dpm/100cm2
Alpha Multiplier 2.5

FINAL STATUS SURVEY - QUALITY ASSURANCE
FLOOR MEASUREMENTS

LOCATION	COORDINATES		GROSS (counts)	NET (counts)	BETA/GAMMA ACTIVITY (dpm/100cm2)	EFFECTIVE ALPHA (dpm/100cm2)	ALPHA UNCERTAINTY (95%)	INST (A/B)	SURVEY UNIT
Room 2D	A	3	1861	243	290	725	340	B	1
Room 2D	A	5	2221	603	710	1775	357	B	1
Room 2D	B	4	2431	813	960	2400	367	B	1
Room 2D	B	5.5	2014	396	470	1175	347	B	1
Room 2D	C	4	2353	735	860	2150	363	B	1
Room 2D	D	1	1822	204	240	600	338	B	1
Room 2D	D	2	2167	549	650	1625	355	B	1
Room 2D	D	4	2215	597	700	1750	357	B	1
Room 2D	E	3	1895	277	330	825	342	B	1
Room 2D	E	5	2025	407	480	1200	348	B	1
Room 2D	E+0.5	1	1866	248	290	725	340	B	1
Room 2E	B	1	1917	299	350	875	343	B	1
Room 2E	B	2	1860	242	280	700	340	B	1
Room 2E	C	2	2087	469	550	1375	351	B	1
Room 2F	A	1	1552	-66	-80	-200	325	B	1
Room 2F	A	3	1785	167	200	500	336	B	1
Room 2F	B	2	1774	156	180	450	336	B	1
Room 2F	B	4	1878	260	310	775	341	B	1
Room 2F	C	0	1652	34	40	100	330	B	1
Room 2F	C	1	1820	202	240	600	338	B	1
Room 2F	C	3	1897	279	330	825	342	B	1
Room 2F	D	4	1993	375	440	1100	346	B	1
Room 2F	D	5	2481	863	1020	2550	369	B	1
Room 2F	E	1	1665	47	60	150	330	B	1
Room 2F	E	3	1848	230	270	675	339	B	1
Room 2F	F	4	1799	181	210	525	337	B	1
Room 2G	A	0	2337	719	850	2125	363	B	1
Room 2G	B	0	2387	769	900	2250	365	B	1
Room 2G	B	2	1956	338	400	1000	345	B	1
Room 2G	D	1	2750	1132	1330	3325	381	B	1
Room 2G	D	2	2644	1026	1210	3025	376	B	1
Room 2G	E	1	2654	1036	1220	3050	377	B	1
Room 2G	F	2	1618	0	0	0	328	B	1
Room 2K	A	10	1941	323	380	950	344	B	1
Room 2K	B	0	1508	-110	-130	-325	322	B	1
Room 2K	B	1	1683	65	80	200	331	B	1
Room 2K	C	3	1593	-25	-30	-75	327	B	1
Room 2K	C	5	1786	168	200	500	336	B	1
Room 2K	C	8	2241	623	730	1825	358	B	1
Room 2K	D	2	1614	-4	0	0	328	B	1
Room 2K	D	3	1820	202	240	600	338	B	1
Room 2K	D	4	2097	479	560	1400	351	B	1
Room 2K	D	6	1874	256	300	750	341	B	1
Room 2K	D	10	2179	561	660	1650	355	B	1
Room 2K	E	1	1640	22	30	75	329	B	1
Room 2K	E	5	1887	269	320	800	341	B	1
Room 2K	E	7	2131	513	600	1500	353	B	1
Room 2K	E	10	1927	309	360	900	343	B	1
Room 2K	F	1	1511	-107	-130	-325	322	B	1
Room 2K	F	3	1861	243	290	725	340	B	1
Room 2K	F	5	1836	218	260	650	339	B	1
Room 2K	F	6	2038	420	490	1225	349	B	1
Room 2K	F	10.5	1904	286	340	850	342	B	1
Room 2K	G	2	1775	157	180	450	336	B	1
Room 2K	G	10	1932	314	370	925	343	B	1
Room 2K	G+0.5	8	2240	622	730	1825	358	B	1

TABLE A21

FINAL STATUS SURVEY - QUALITY ASSURANCE
FLOOR MEASUREMENTS

.OCATION	COORDINATES		GROSS (counts)	NET (counts)	BETA/GAMMA ACTIVITY (dpm/100cm2)	EFFECTIVE ALPHA (dpm/100cm2)	ALPHA UNCERTAINTY (95%)	INST (A/B)	SURVEY UNIT
Room 2L	A	2	1750	132	160	400	335	B	2
Room 2L	A	11	1814	196	230	575	338	B	2
Room 2L	B	1	1801	183	220	550	337	B	2
Room 2L	B	10	1865	247	290	725	340	B	2
Room 2L	B	12	1787	169	200	500	336	B	2
Room 2L	B	13	1687	69	80	200	331	B	2
Room 2L	C	3.5	1797	179	210	525	337	B	2
Room 2L	C	6	2021	403	470	1175	348	B	2
Room 2L	C	8	1795	177	210	525	337	B	2
Room 2L	C	15	1708	90	110	275	332	B	2
Room 2L	D	1	1769	151	180	450	335	B	2
Room 2L	D	2	1983	365	430	1075	346	B	2
Room 2L	D	5	2121	503	590	1475	352	B	2
Room 2L	D	7	1740	122	140	350	334	B	2
Room 2L	D	10	1542	-76	-90	-225	324	B	2
Room 2L	D	11	1916	298	350	875	343	B	2
Room 2L	D	12	1688	70	80	200	331	B	2
Room 2L	D	13	1703	85	100	250	332	B	2
Room 2L	D	14	1929	311	370	925	343	B	2
Room 2L	E	6	1691	73	90	225	332	B	2
Room 2L	E	8	1892	274	320	800	342	B	2
Room 2L	E	12	1690	72	80	200	332	B	2
Room 2L	E	14	1626	8	10	25	328	B	2
Room 2L	E	15	1722	104	120	300	333	B	2
Tunnel	C	2	1918	300	350	875	343	B	2
Tunnel	D	1	1946	328	390	975	344	B	2
Tunnel	H	1	1891	273	320	800	341	B	2
unnel	L	2	1922	304	360	900	343	B	2
Tunnel	M	1	1978	360	420	1050	346	B	2
Tunnel	P	1	2021	403	470	1175	348	B	2
Tunnel	Q	2	1793	175	210	525	337	B	2
Tunnel	M	0	1821	203	240	600	338	B	2
Tunnel	S	0	1931	313	370	925	343	B	2
Tunnel	X	1	1730	112	130	325	334	B	2
Tunnel	BB	2	1718	100	120	300	333	B	2
Tunnel	DD	1	1825	207	240	600	338	B	2
Tunnel	GG	1	1748	130	150	375	334	B	2
Tunnel	JJ	3	2009	391	460	1150	347	B	2
Tunnel	NN	1	1885	267	310	775	341	B	2
Tunnel	UU	3	1799	181	210	525	337	B	2

FINAL STATUS SURVEY - QUALITY ASSURANCE
FLOOR MEASUREMENTS

ALL READINGS	NET (counts)	BETA/GAMMA ACTIVITY (dpm/100cm2)	EFFECTIVE ALPHA (dpm/100cm2)
AVERAGE	290	342	855
Sample St. Dev	245	288	721
Number	96	96	96
Maximum	1132	1330	3325
Minimum	-110	-130	-325

SURVEY UNIT 1	NET (counts)	BETA/GAMMA ACTIVITY (dpm/100cm2)	EFFECTIVE ALPHA (dpm/100cm2)
AVERAGE	351	413	1032
Sample St. Dev	290	341	852
Number	56	56	56
Maximum	1132	1330	3325
Minimum	-110	-130	-325

SURVEY UNIT 2	NET (counts)	BETA/GAMMA ACTIVITY (dpm/100cm2)	EFFECTIVE ALPHA (dpm/100cm2)
AVERAGE	206	243	606
Sample St. Dev	125	146	365
Number	40	40	40
Maximum	503	590	1475
Minimum	-76	-90	-225

TABLE A22

FINAL STATUS SURVEY - QUALITY ASSURANCE
REMOVABLE ACTIVITY

FACILITY: Engelhard - Plainville LOCATION: Building 2

DATE: 24-Oct-96

PURPOSE: QA

Instrument A

INSTRUMENT: 1000

PROBE: 43-10

Efficiency: 38.0% cpm/dpm

Survey type: alpha alpha beta/gamma exposure rate

Background rate: 0 cpm
Count time: 1 minutes

MDA: 7 dpm/100cm2

Instrument B

INSTRUMENT: ESP-2

PROBE: HP-260

Efficiency: 8.1% cpm/dpm

Survey type: b/g alpha beta/gamma exposure rate

Background rate: 29 cpm
Count time: 1 minutes

MDA: 343 dpm/100cm2

FINAL STATUS SURVEY - QUALITY ASSURANCE
REMOVABLE ACTIVITY

LOCATION	COORDINATES		BETA/GAMMA GROSS (counts)	BETA/GAMMA NET (counts)	BETA/GAMMA ACTIVITY (dpm/100cm2)	BETA/GAMMA UNCERTAINTY (95%)	ALPHA GROSS (counts)	ALPHA NET (counts)	ALPHA ACTIVITY (dpm/100cm2)	ALPHA UNCERTAINTY (95%)	SURVEY UNIT
Room 2D	A	3	29	0	0	184	1	1	3	5	1
Room 2D	A	5	21	-8	-99	171	0	0	0	0	1
Room 2D	B	4	45	16	198	208	0	0	0	0	1
Room 2D	B	5.5	34	5	62	192	1	1	3	5	1
Room 2D	C	4	46	17	210	210	0	0	0	0	1
Room 2D	D	1	29	0	0	184	1	1	3	5	1
Room 2D	D	2	35	6	74	194	1	1	3	5	1
Room 2D	D	4	25	-4	-49	178	0	0	0	0	1
Room 2D	E	3	26	-3	-37	179	0	0	0	0	1
Room 2D	E	5	34	5	62	192	0	0	0	0	1
Room 2D	E+0.5	1	29	0	0	184	1	1	3	5	1
Room 2E	B	1	41	12	148	202	3	3	8	9	1
Room 2E	B	2	40	11	136	201	1	1	3	5	1
Room 2E	C	2	26	-3	-37	179	1	1	3	5	1
Room 2F	A	1	40	11	136	201	1	1	3	5	1
Room 2F	A	3	40	11	136	201	6	6	16	13	1
Room 2F	B	2	38	9	111	198	0	0	0	0	1
Room 2F	B	4	34	5	62	192	0	0	0	0	1
Room 2F	C	0	28	-1	-12	183	3	3	8	9	1
Room 2F	C	1	37	8	99	197	1	1	3	5	1
Room 2F	C	3	27	-2	-25	181	0	0	0	0	1
Room 2F	D	4	39	10	123	200	1	1	3	5	1
Room 2F	D	5	34	5	62	192	0	0	0	0	1
Room 2F	E	1	35	6	74	194	0	0	0	0	1
Room 2F	E	3	38	9	111	198	1	1	3	5	1
Room 2F	F	4	26	-3	-37	179	0	0	0	0	1
Room 2G	A	0	40	11	136	201	0	0	0	0	1
Room 2G	B	0	37	8	99	197	0	0	0	0	1
Room 2G	B	2	33	4	49	191	0	0	0	0	1
Room 2G	D	1	22	-7	-86	173	1	1	3	5	1
Room 2G	D	2	38	9	111	198	0	0	0	0	1
Room 2G	E	1	32	3	37	189	2	2	5	7	1
Room 2G	F	2	29	0	0	184	0	0	0	0	1
Room 2K	A	10	34	5	62	192	0	0	0	0	1
Room 2K	B	0	27	-2	-25	181	2	2	5	7	1
Room 2K	B	1	30	1	12	186	0	0	0	0	1
Room 2K	C	3	45	16	198	208	0	0	0	0	1
Room 2K	C	5	24	-5	-62	176	1	1	3	5	1
Room 2K	C	8	29	0	0	184	0	0	0	0	1
Room 2K	D	2	31	2	25	187	0	0	0	0	1
Room 2K	D	3	34	5	62	192	1	1	3	5	1
Room 2K	D	4	36	7	86	195	0	0	0	0	1
Room 2K	D	6	31	2	25	187	0	0	0	0	1
Room 2K	D	10	32	3	37	189	1	1	3	5	1
Room 2K	E	1	32	3	37	189	0	0	0	0	1
Room 2K	E	5	33	4	49	191	0	0	0	0	1
Room 2K	E	7	40	11	136	201	0	0	0	0	1
Room 2K	E	10	32	3	37	189	1	1	3	5	1
Room 2K	F	1	34	5	62	192	0	0	0	0	1
Room 2K	F	3	30	1	12	186	1	1	3	5	1
Room 2K	F	5	24	-5	-62	176	1	1	3	5	1
Room 2K	F	6	25	-4	-49	178	0	0	0	0	1
Room 2K	F	10.5	49	20	247	214	0	0	0	0	1
Room 2K	G	2	28	-1	-12	183	0	0	0	0	1
Room 2K	G	10	30	1	12	186	1	1	3	5	1
Room 2K	G+0.5	8	39	10	123	200	1	1	3	5	1
Room 2L	A	2	45	16	198	208	0	0	0	0	2
Room 2L	A	11	28	-1	-12	183	0	0	0	0	2
Room 2L	B	1	33	4	49	191	0	0	0	0	2
Room 2L	B	10	41	12	148	202	0	0	0	0	2
Room 2L	B	12	24	-5	-62	176	0	0	0	0	2
Room 2L	B	13	32	3	37	189	1	1	3	5	2
Room 2L	C	3.5	34	5	62	192	1	1	3	5	2
Room 2L	C	6	33	4	49	191	0	0	0	0	2
Room 2L	C	8	32	3	37	189	0	0	0	0	2

TABLE A23

FINAL STATUS SURVEY - QUALITY ASSURANCE
REMOVABLE ACTIVITY

LOCATION	COORDINATES		BETA/GAMMA GROSS (counts)	BETA/GAMMA NET (counts)	BETA/GAMMA ACTIVITY (dpm/100cm2)	BETA/GAMMA UNCERTAINTY (95%)	ALPHA GROSS (counts)	ALPHA NET (counts)	ALPHA ACTIVITY (dpm/100cm2)	ALPHA UNCERTAINTY (95%)	SURVEY UNIT
Room 2L	C	15	44	15	185	207	0	0	0	0	2
Room 2L	D	1	31	2	25	187	0	0	0	0	2
Room 2L	D	2	41	12	148	202	1	1	3	5	2
Room 2L	D	5	32	3	37	189	0	0	0	0	2
Room 2L	D	7	24	-5	-62	176	1	1	3	5	2
Room 2L	D	10	24	-5	-62	176	1	1	3	5	2
Room 2L	D	11	34	5	62	192	1	1	3	5	2
Room 2L	D	12	30	1	12	186	1	1	3	5	2
Room 2L	D	13	29	0	0	184	0	0	0	0	2
Room 2L	D	14	34	5	62	192	2	2	5	7	2
Room 2L	E	6	41	12	148	202	0	0	0	0	2
Room 2L	E	8	40	11	136	201	0	0	0	0	2
Room 2L	E	12	32	3	37	189	1	1	3	5	2
Room 2L	E	14	38	9	111	198	1	1	3	5	2
Room 2L	E	15	42	13	160	204	1	1	3	5	2
Tunnel	C	2	35	6	74	194	0	0	0	0	2
Tunnel	D	1	37	8	99	197	1	1	3	5	2
Tunnel	H	1	31	2	25	187	0	0	0	0	2
Tunnel	L	2	31	2	25	187	0	0	0	0	2
Tunnel	M	1	33	4	49	191	1	1	3	5	2
Tunnel	P	1	55	26	321	222	1	1	3	5	2
Tunnel	Q	2	26	-3	-37	179	0	0	0	0	2
Tunnel	M	0	28	-1	-12	183	0	0	0	0	2
Tunnel	S	0	35	6	74	194	0	0	0	0	2
Tunnel	X	1	31	2	25	187	2	2	5	7	2
Tunnel	BB	2	30	1	12	186	0	0	0	0	2
Tunnel	DD	1	27	-2	-25	181	0	0	0	0	2
Tunnel	GG	1	36	7	86	195	0	0	0	0	2
Tunnel	JJ	3	40	11	136	201	1	1	3	5	2
Tunnel	NN	1	34	5	62	192	1	1	3	5	2
Tunnel	UU	3	29	0	0	184	0	0	0	0	2

FINAL STATUS SURVEY - QUALITY ASSURANCE
REMOVABLE ACTIVITY

ALL READINGS	BETA/GAMMA NET (counts)	BETA/GAMMA ACTIVITY (dpm/100cm2)	ALPHA NET (counts)	ALPHA ACTIVITY (dpm/100cm2)
AVERAGE	4	55	1	2
Sample St. Dev	6	78	1	2
Number	96	96	96	96
Maximum	26	321	6	16
Minimum	-8	-99	0	0

SURVEY UNIT 1	BETA/GAMMA NET (counts)	BETA/GAMMA ACTIVITY (dpm/100cm2)	ALPHA NET (counts)	ALPHA ACTIVITY (dpm/100cm2)
AVERAGE	4	51	1	2
Sample St. Dev	6	77	1	3
Number	56	56	56	56
Maximum	20	247	6	16
Minimum	-8	-99	0	0

SURVEY UNIT 2	BETA/GAMMA NET (counts)	BETA/GAMMA ACTIVITY (dpm/100cm2)	ALPHA NET (counts)	ALPHA ACTIVITY (dpm/100cm2)
AVERAGE	5	60	0	1
Sample St. Dev	6	79	1	2
Number	40	40	40	40
Maximum	26	321	2	5
Minimum	-5	-62	0	0

TABLE A24

FINAL STATUS SURVEY: QA - EXPOSURE RATE

Room	Location	Gamma Exposure Rate -μR/hr
2 Entry	C,3	1
2A	C,1	0
2B	D,1	1
2C	B,1	1
2D	E,3	0
2E	B,2	0
2F	C,O	1
2F	E,3	0
2G	D,1	0
2K	C,8	1
2K	E,10	1
2L	B,1	0
2L	A,11	1
2L	D,14	1
2M	B,7	0
2M	F,1	1
2M	H,7	2
2M	J,10	0
2N	B,3	0
2N	D,4	-1
TUNNEL	C,2	1
TUNNEL	L,2	2
TUNNEL	P,1	1
2P	D,1	0

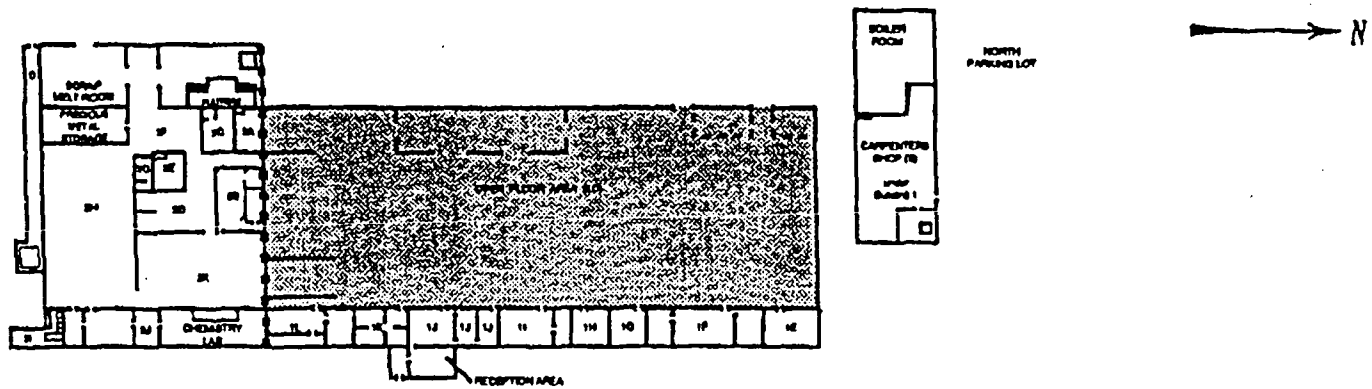
NOTE:
Background exposure rate measurement of 6μR/hr has been subtracted from each value in the table.

TABLE A25

APPENDIX B

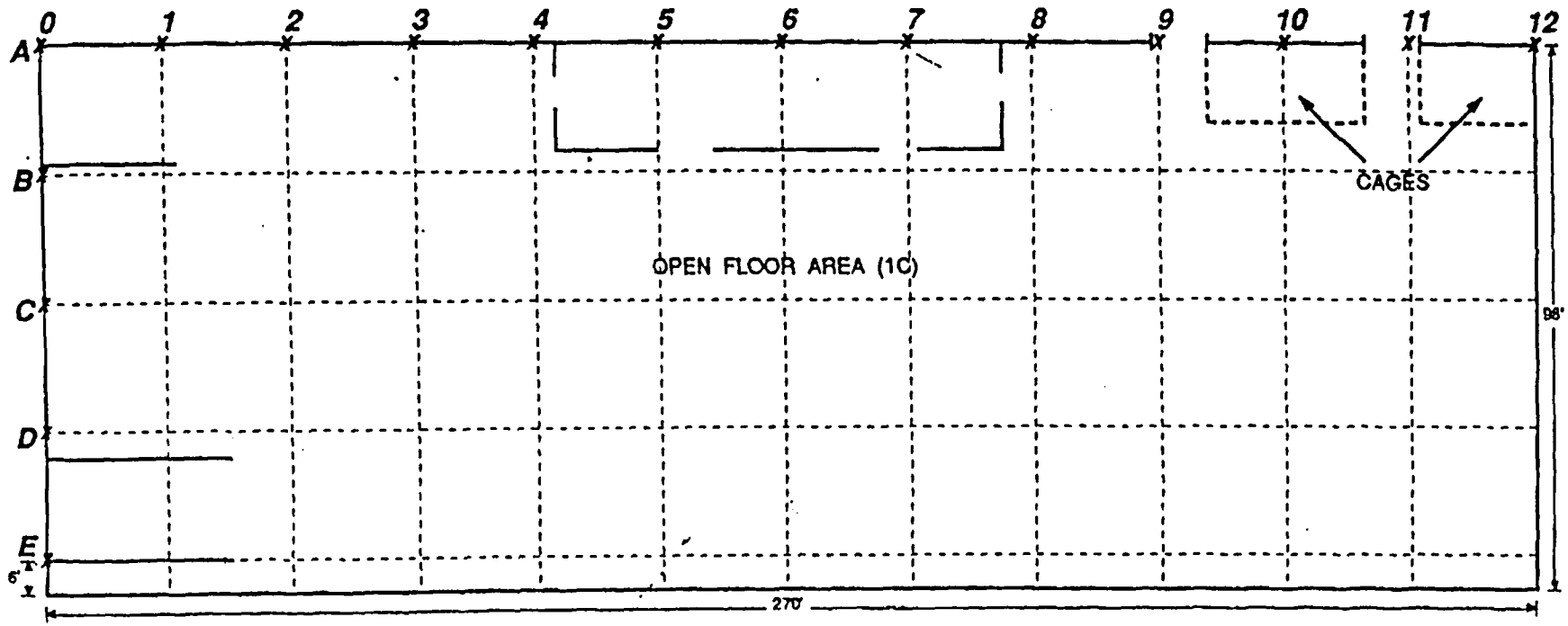
UNAFFECTED AREA MEASUREMENTS

- INTRODUCTION
- UNAFFECTED AREA INDIVIDUAL ROOM GRID LAYOUTS - BUILDING 1: OPEN FLOOR AREA, ROOMS ALONG EAST SIDE OF BUILDING; BUILDING 2: MELT ROOM 2A, BATH, SHOWERS, LOCKERS, OFFICES AND LABORATORIES ON EAST SIDE OF BUILDING (FIGURES B-1 THROUGH B-5).
- CHARACTERIZATION SURVEY FLOOR MEASUREMENTS (TABLE 1)
- CHARACTERIZATION SURVEY FLOOR MEASUREMENTS SUMMARY (TABLE B2)
- CHARACTERIZATION SURVEY REMOVABLE ACTIVITY (TABLE B3)
- CHARACTERIZATION SURVEY REMOVABLE ACTIVITY SUMMARY (TABLE B4)
- CHARACTERIZATION SURVEY DOSE RATE (TABLE B5)
- CHARACTERIZATION SURVEY DOSE RATE SUMMARY (TABLE B6)



NOTE

Indicates Area of Detail



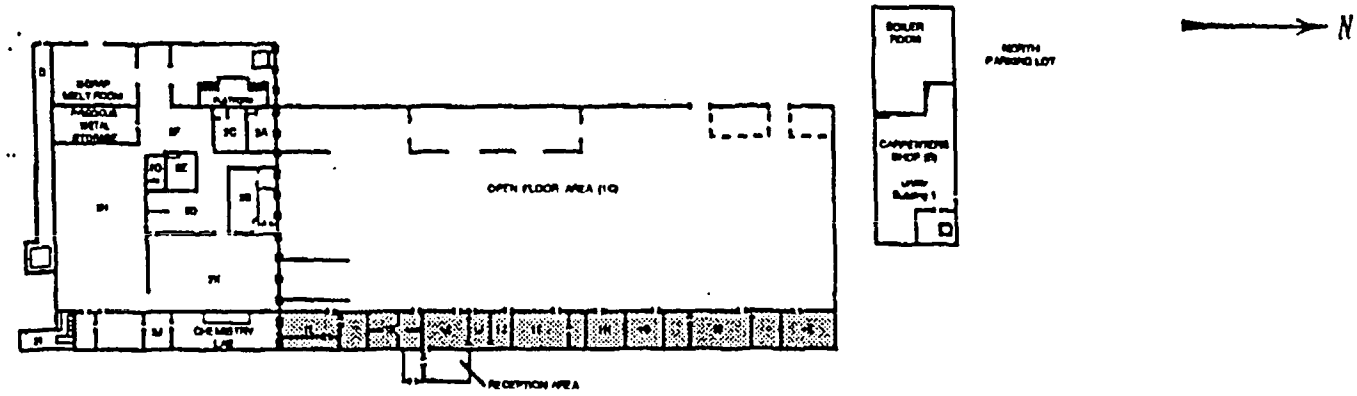
NOTES

1. Floor samples taken on a 7m x7m grid referenced to southwest corner.
2. Wall samples taken at varying heights from 1-2m along all 4 perimeter walls at locations 14 m apart corresponding to floor locations (i.e. A0, A2, A4, etc.)

0 10 20 30
Approximate Scale in Feet

Building 1
Open Floor Area

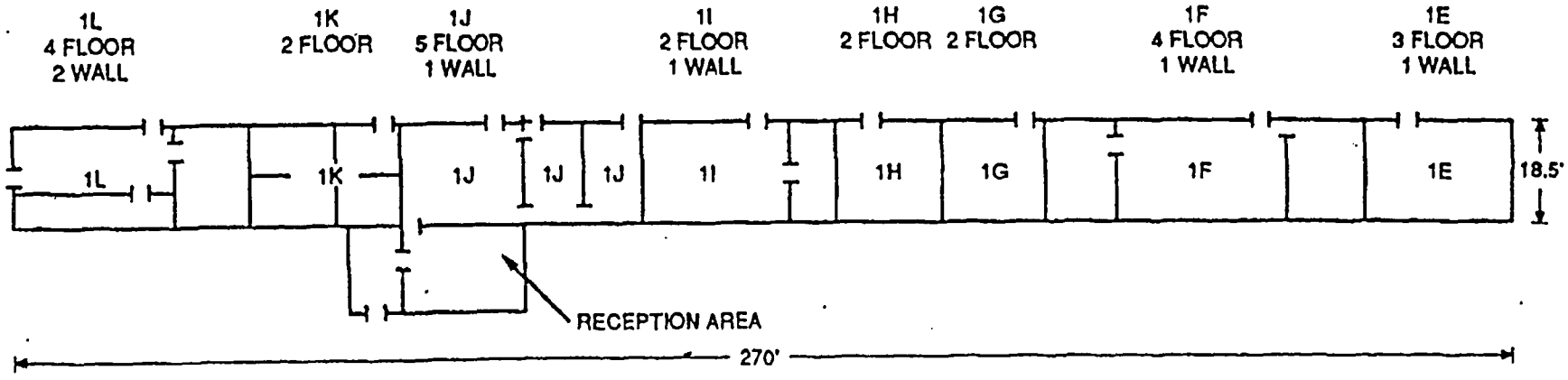
FIGURE B-1



NOTE

Indicates Area of Detail

BUILDING 1
LABORATORIES, BATHROOMS AND OFFICES



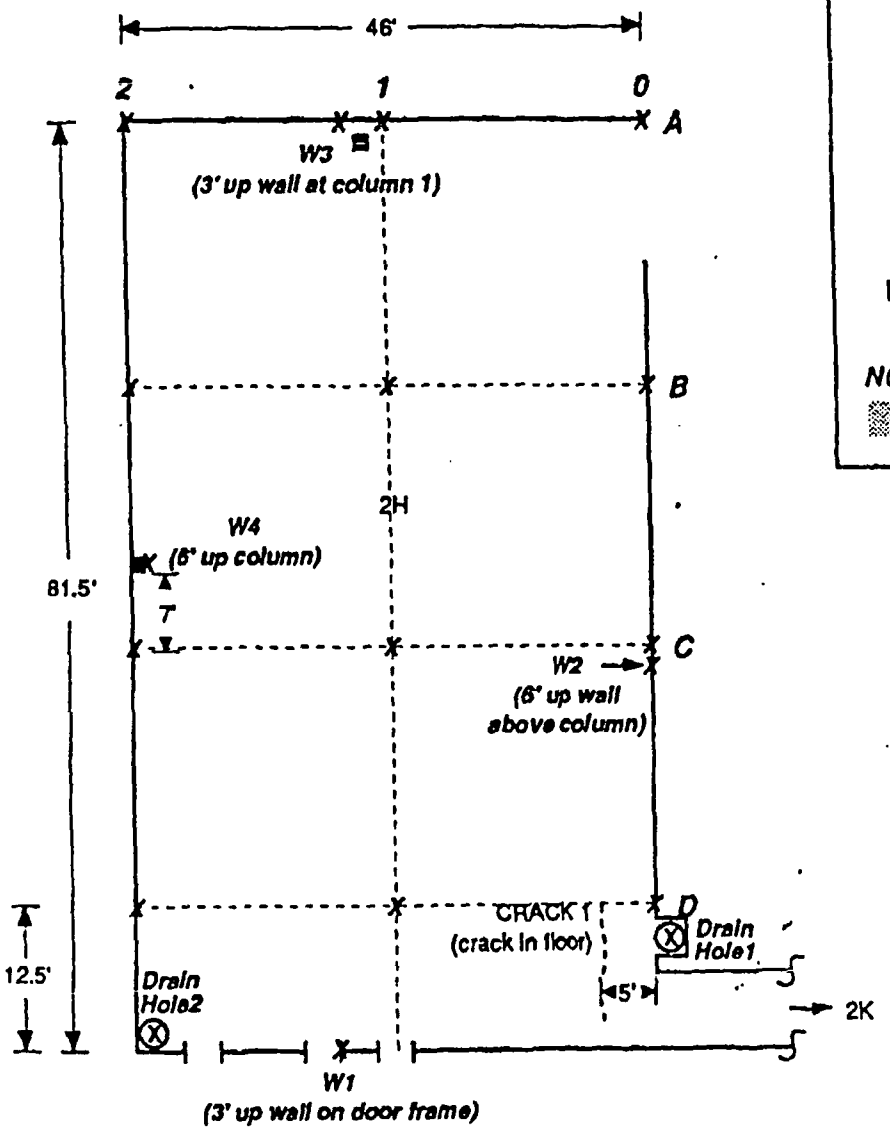
NOTES

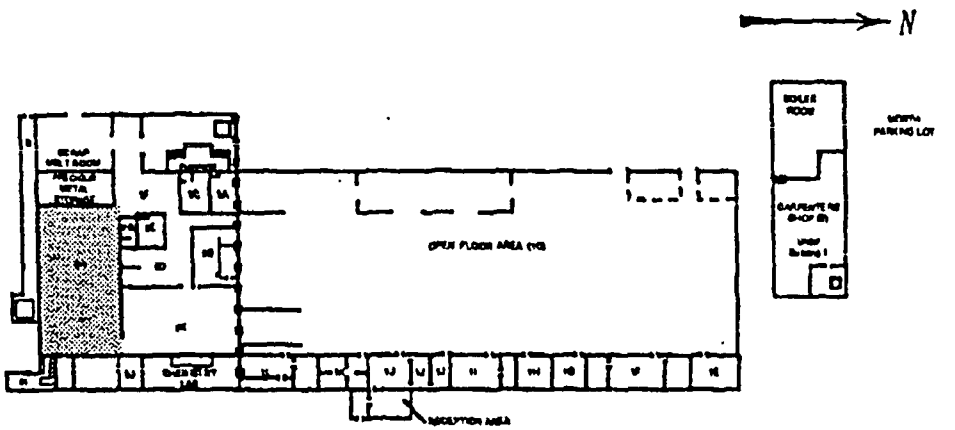
1. Random floor and wall samples referenced to entrance door location..
2. Wall samples taken at various heights between 1-2m.

0 10 20 30
Approximate Scale In Feet

Building 1
Rooms Along East Side of Building

FIGURE B-2





NOTE

Indicates Area of Detail

NOTES

X Sample locations

■ Column

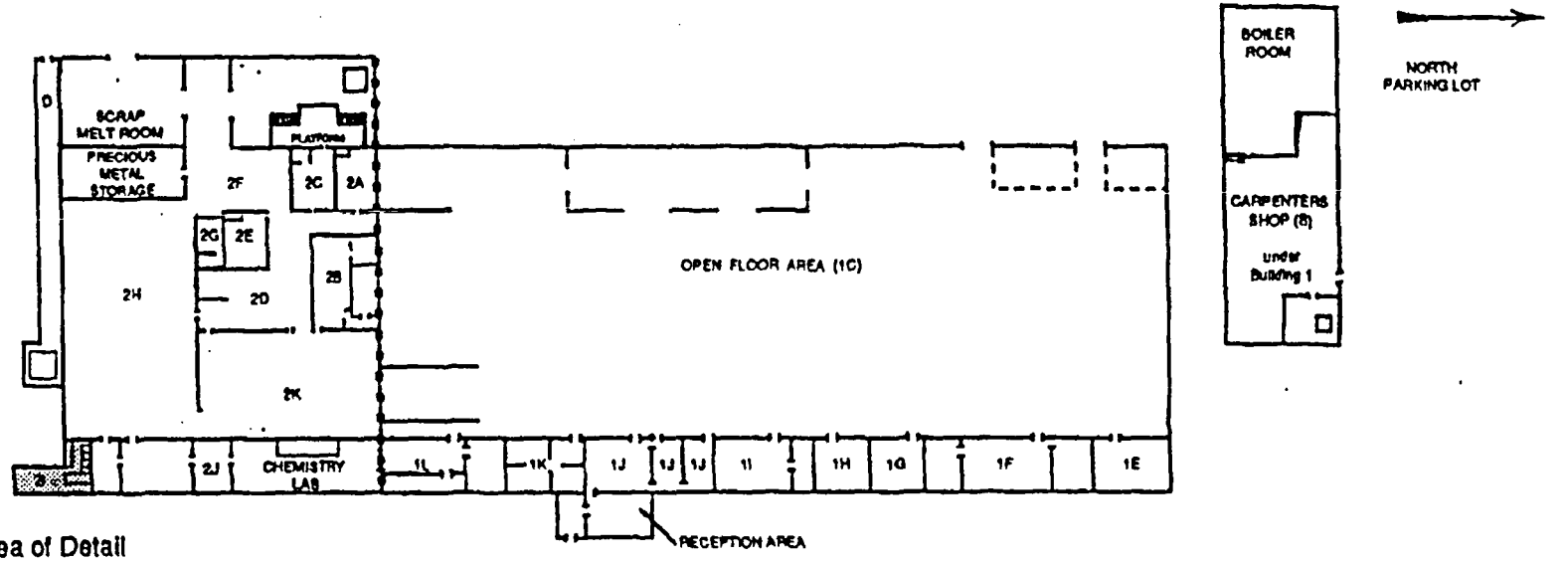
Floor samples taken on 7m x 7m grid referenced to northwest corner of room.

0 10 20 30

Approximate Scale in Feet

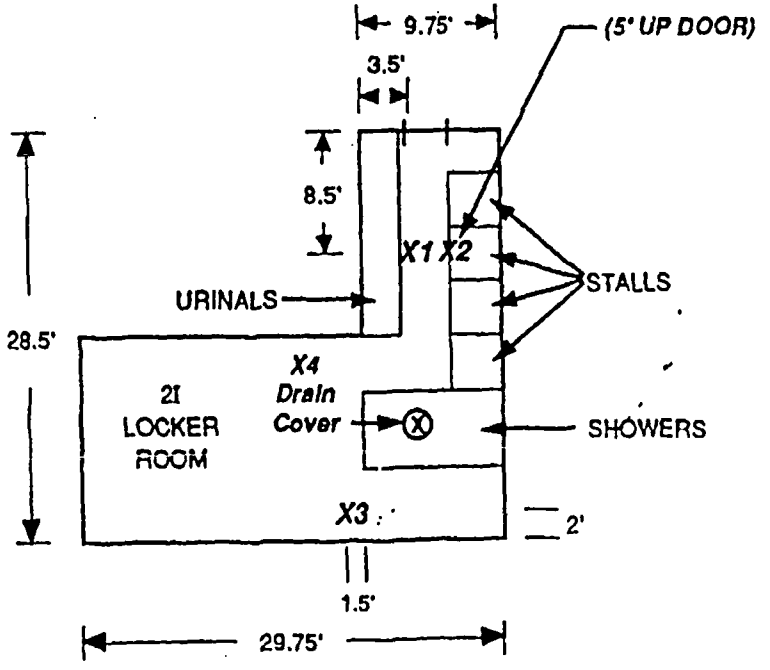
Building 2
Melt Room East of
Precious Metal Storage - 2H

FIGURE B-3



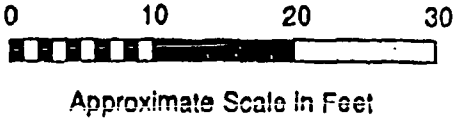
NOTE

Indicates Area of Detail



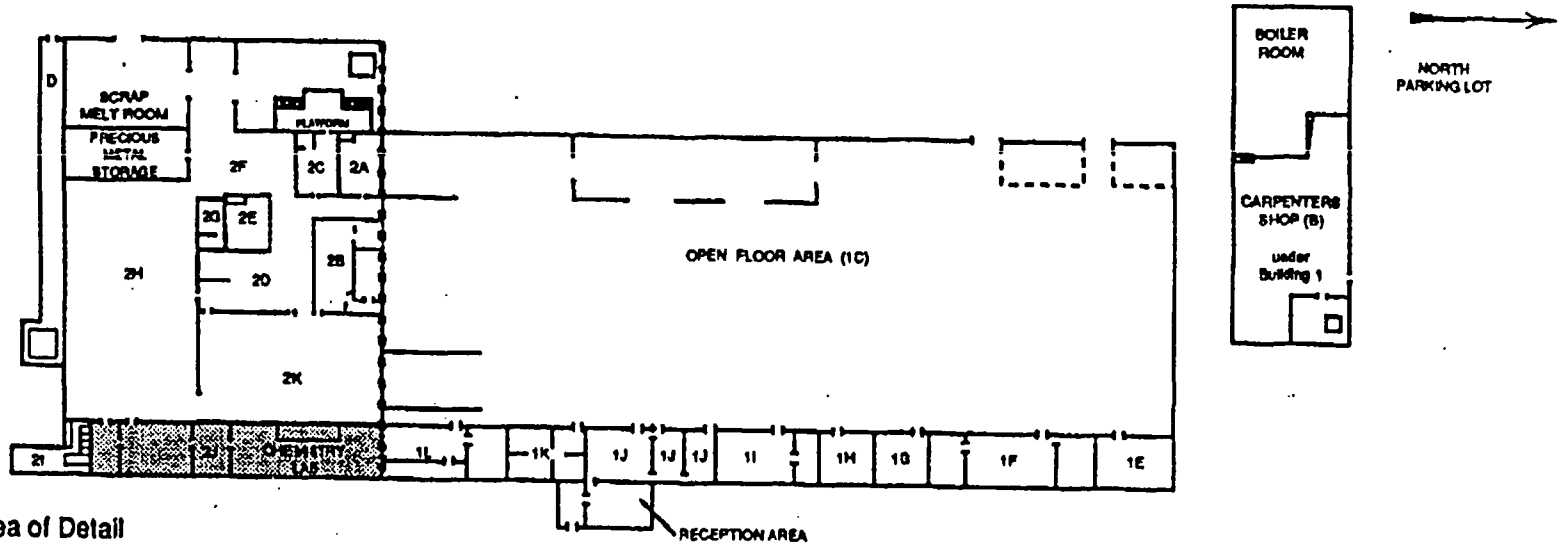
NOTE

X Sample locations



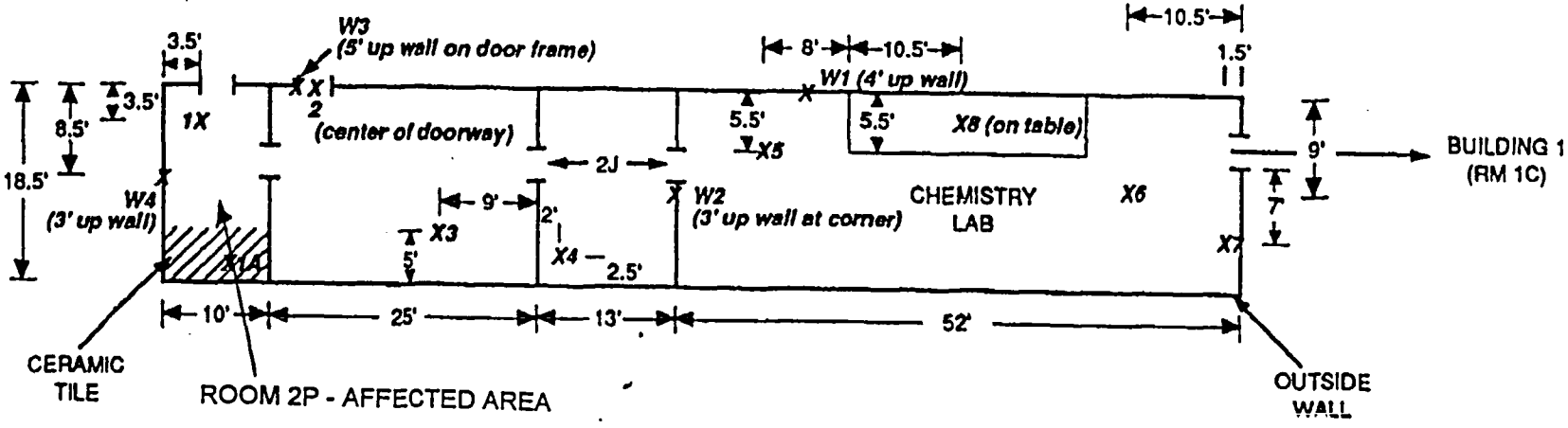
Building 2
Bath, Showers, Lockers
East of Melt Room 2H

FIGURE B-4



NOTE

Indicates Area of Detail



NOTES

X Sample locations
Measurements taken under floor tiles at locations 1,2,4, and on uncovered ceramic tile at 1A.

0 10 20 30

Approximate Scale in Feet

Offices and Laboratories on East Side of Building

FIGURE B-5

CHARACTERIZATION SURVEY

FACILITY: Engelhard - Plainville LOCATION: Building 2

PURPOSE: QA

Instrument A

INSTRUMENT: ESP-2 SURVEY DATE: 05-Mar-94 06-Mar-94

PROBE: HP-260
Face area: 15.5 cm2
Efficiency: 26.0% cpm/dpm

Survey type: b/g alpha beta/gamma exposure rate

Background rate 56 cpm
Count time: 0.75 minutes

MDA: 1087 dpm/100cm2
Alpha Multiplier 3.2

Instrument B

INSTRUMENT: 2221 SURVEY DATE: 24-Oct-96

PROBE:
Face area: 425 cm2
Efficiency: 20.0% cpm/dpm

Survey type: b/g alpha beta/gamma exposure rate

Background rate 1618 cpm
Count time: 1 minutes

MDA: 223 dpm/100cm2
Alpha Multiplier 2.5

CHARACTERIZATION SURVEY
FLOOR MEASUREMENTS

LOCATION	COORDINATES		GROSS (counts)	NET (counts)	BETA/GAMMA ACTIVITY (dpm/100cm2)	EFFECTIVE ALPHA (dpm/100cm2)	ALPHA UNCERTAINTY (95%)	INST (A/B)
Room 1C	A	0	49	7	230	736	2126	A
Room 1C	A	1	65	23	760	2432	2283	A
Room 1C	A	2	61	19	630	2016	2245	A
Room 1C	A	3	47	5	170	544	2106	A
Room 1C	A	4	33	-9	-300	-960	1958	A
Room 1C	A	5	32	-10	-330	-1056	1947	A
Room 1C	A	6	51	9	300	960	2147	A
Room 1C	A	7	57	15	500	1600	2206	A
Room 1C	A	8	57	15	500	1600	2206	A
Room 1C	A	9	54	12	400	1280	2176	A
Room 1C	A	10	58	16	530	1696	2216	A
Room 1C	A	11	54	12	400	1280	2176	A
Room 1C	A	12	55	13	430	1376	2186	A
Room 1C	B	12	52	10	330	1056	2157	A
Room 1C	B	11	48	6	200	640	2116	A
Room 1C	B	10	41	-1	-30	-96	2044	A
Room 1C	B	9	36	-6	-200	-640	1990	A
Room 1C	B	8	37	-5	-170	-544	2001	A
Room 1C	B	7	48	6	200	640	2116	A
Room 1C	B	6	34	-8	-260	-832	1969	A
Room 1C	B	5	37	-5	-170	-544	2001	A
Room 1C	B	4	46	4	130	416	2096	A
Room 1C	B	3	39	-3	-100	-320	2023	A
Room 1C	B	2	37	-5	-170	-544	2001	A
Room 1C	B	1	30	-12	-400	-1280	1924	A
Room 1C	B	0	33	-9	-300	-960	1958	A
Room 1C	C	0	52	10	330	1056	2157	A
Room 1C	C	1	53	11	360	1152	2166	A
Room 1C	C	2	36	-6	-200	-640	1990	A
Room 1C	C	3	38	-4	-130	-416	2012	A
Room 1C	C	4	52	10	330	1056	2157	A
Room 1C	C	5	49	7	230	736	2126	A
Room 1C	C	6	64	22	730	2336	2273	A
Room 1C	C	7	42	0	0	0	2054	A
Room 1C	C	8	35	-7	-230	-736	1980	A
Room 1C	C	9	52	10	330	1056	2157	A
Room 1C	C	10	65	23	760	2432	2283	A
Room 1C	C	11	55	13	430	1376	2186	A
Room 1C	C	12	53	11	360	1152	2166	A
Room 1C	D	12	54	12	400	1280	2176	A
Room 1C	D	11	55	13	430	1376	2186	A
Room 1C	D	10	57	15	500	1600	2206	A
Room 1C	D	9	49	7	230	736	2126	A
Room 1C	D	8	49	7	230	736	2126	A
Room 1C	D	7	39	-3	-100	-320	2023	A
Room 1C	D	6	56	14	460	1472	2196	A
Room 1C	D	5	43	1	30	96	2065	A
Room 1C	D	4	48	6	200	640	2116	A
Room 1C	D	3	53	11	360	1152	2166	A
Room 1C	D	2	48	6	200	640	2116	A
Room 1C	D	1	49	7	230	736	2126	A
Room 1C	D	0	55	13	430	1376	2186	A
Room 1C	E	0	61	19	630	2016	2245	A
Room 1C	E	1	43	1	30	96	2065	A
Room 1C	E	2	55	13	430	1376	2186	A
Room 1C	E	3	45	3	100	320	2085	A
Room 1C	E	4	46	4	130	416	2096	A
Room 1C	E	5	53	11	360	1152	2166	A
Room 1C	E	6	54	12	400	1280	2176	A

TABLE B1

CHARACTERIZATION SURVEY
FLOOR MEASUREMENTS

LOCATION	COORDINATES		GROSS (counts)	NET (counts)	BETA/GAMMA ACTIVITY (dpm/100cm2)	EFFECTIVE ALPHA (dpm/100cm2)	ALPHA UNCERTAINTY (95%)	INST (A/B)
Room 1C	E	7	50	8	260	832	2136	A
Room 1C	E	8	58	16	530	1696	2216	A
Room 1C	E	9	50	8	260	832	2136	A
Room 1C	E	10	56	14	460	1472	2196	A
Room 1C	E	11	54	12	400	1280	2176	A
Room 1C	E	12	46	4	130	416	2096	A
Room 1C	W	1	37	-5	-170	-544	2001	A
Room 1C	W	2	51	9	300	960	2147	A
Room 1C	W	3	33	-9	-300	-960	1958	A
Room 1C	W	4	46	4	130	416	2096	A
Room 1C	W	5	38	-4	-130	-416	2012	A
Room 1C	W	6	57	15	500	1600	2206	A
Room 1C	W	7	56	14	460	1472	2196	A
Room 1C	W	8	37	-5	-170	-544	2001	A
Room 1C	W	9	38	-4	-130	-416	2012	A
Room 1C	W	10	51	9	300	960	2147	A
Room 1C	W	11	46	4	130	416	2096	A
Room 1C	W	12	35	-7	-230	-736	1980	A
Room 1C	W	13	50	8	260	832	2136	A
Room 1C	W	14	51	9	300	960	2147	A
Room 1C	W	15	59	17	560	1792	2225	A
Room 1C	W	16	47	5	170	544	2106	A
Room 1C	W	17	41	-1	-30	-96	2044	A
Room 1C	W	18	42	0	0	0	2054	A
Room 1C	W	19	53	11	360	1152	2166	A
Room 1E	E	1	36	-6	-200	-640	1990	A
Room 1E	E	2	50	8	260	832	2136	A
Room 1E	E	3	40	-2	-70	-224	2033	A
Room 1E	E	4	42	0	0	0	2054	A
Room 1F	F	1	33	-9	-300	-960	1958	A
Room 1F	F	2	35	-7	-230	-736	1980	A
Room 1F	F	3	40	-2	-70	-224	2033	A
Room 1F	F	4	36	-6	-200	-640	1990	A
Room 1F	F	5	40	-2	-70	-224	2033	A
Room 1G	G	1	42	0	0	0	2054	A
Room 1G	G	2	48	6	200	640	2116	A
Room 1H	H	1	54	12	400	1280	2176	A
Room 1H	H	2	41	-1	-30	-96	2044	A
Room 1I	I	1	47	5	170	544	2106	A
Room 1I	I	2	76	34	1120	3584	2384	A
Room 1I	I	3	45	3	100	320	2085	A
Room 1J	J	1	53	11	360	1152	2166	A
Room 1J	J	2	36	-6	-200	-640	1990	A
Room 1J	J	3	41	-1	-30	-96	2044	A
Room 1J	J	4	27	-15	-500	-1600	1891	A
Room 1J	J	5	38	-4	-130	-416	2012	A
Room 1J	J	6	40	-2	-70	-224	2033	A
Room 1K	K	1	39	-3	-100	-320	2023	A
Room 1K	K	2	37	-5	-170	-544	2001	A
Room 1L	L	1	36	-6	-200	-640	1990	A
Room 1L	L	2	41	-1	-30	-96	2044	A
Room 1L	L	3	43	1	30	96	2065	A
Room 1L	L	4	41	-1	-30	-96	2044	A
Room 1L	L	5	33	-9	-300	-960	1958	A
Room 1L	L	6	33	-9	-300	-960	1958	A
Room 2H	A	0	38	-4	-130	-416	2012	A
Room 2H	A	1	39	-3	-100	-320	2023	A
Room 2H	A	2	41	-1	-30	-96	2044	A
Room 2H	B	0	37	-5	-170	-544	2001	A

CHARACTERIZATION SURVEY
FLOOR MEASUREMENTS

LOCATION	COORDINATES		GROSS (counts)	NET (counts)	BETA/GAMMA ACTIVITY (dpm/100cm2)	EFFECTIVE ALPHA (dpm/100cm2)	ALPHA UNCERTAINTY (95%)	INST (A/B)
Room 2H	B	1	33	-9	-300	-960	1958	A
Room 2H	B	2	55	13	430	1376	2186	A
Room 2H	C	0	48	6	200	640	2116	A
Room 2H	C	1	45	3	100	320	2085	A
Room 2H	C	2	67	25	830	2656	2301	A
Room 2H	D	0	48	6	200	640	2116	A
Room 2H	D	1	32	-10	-330	-1056	1947	A
Room 2H	D	2	50	8	260	832	2136	A
Room 2H	W	1	38	-4	-130	-416	2012	A
Room 2H	W	2	36	-6	-200	-640	1990	A
Room 2H	W	3	49	7	230	736	2126	A
Room 2H	W	4	37	-5	-170	-544	2001	A
Room 2I	I	1	43	1	30	96	2065	A
Room 2I	I	2	31	-11	-360	-1152	1936	A
Room 2I	I	3	45	3	100	320	2085	A
Room 2I	I	4	35	-7	-230	-736	1980	A
Chem Lab		1	1873	255	300	750	341	B
Chem Lab		2	1691	73	90	225	332	B
Chem Lab		3	1505	-113	-130	-325	322	B
Chem Lab		4	1662	44	50	125	330	B
Chem Lab		5	1683	65	80	200	331	B
Chem Lab		6	2092	474	560	1400	351	B
Chem Lab		7	1786	168	200	500	336	B
Chem Lab		8	1696	78	90	225	332	B
Tile room		1	2317	699	820	2050	362	B
Tile room		2	1941	323	380	950	344	B
Tile room		3	1363	-255	-300	-750	315	B
Tile room		4	1454	-164	-190	-475	320	B
Tile room		5	1415	-203	-240	-600	317	B
Access control		8	1735	117	140	350	334	B
Access control		9	1936	318	370	925	344	B
Access control		10	1243	-375	-440	-1100	308	B
Access control		11	1676	58	70	175	331	B

CHARACTERIZATION SURVEY
FLOOR MEASUREMENTS

ALL READINGS	BETA/GAMMA ACTIVITY (dpm/100cm2)	EFFECTIVE ALPHA (dpm/100cm2)
AVERAGE	120	375
Sample St. Dev	303	947
Number	151	151
Maximum	1120	3584
Minimum	-500	-1600

TABLE B2

CHARACTERIZATION SURVEY
REMOVABLE ACTIVITY

FACILITY: Engelhard - Plainville

DATE: Mar-94

PURPOSE: QA

Instrument A - Period 1

INSTRUMENT: ESP-2

PROBE: AC-3

Efficiency: 15.0% cpm/dpm

Survey type: alpha

Background rate 0 cpm
Count time: 0.5 minutes

MDA: 36 dpm/100cm2

Instrument A - Period 2

INSTRUMENT: 1000

PROBE: 43-10

Efficiency: 38.0% cpm/dpm

Survey type: alpha

Background rat 0 cpm
Count time: 1 minutes

MDA: 7 dpm/100cm2

Instrument B - Period 1

INSTRUMENT: ESP-2

PROBE: HP-260

Efficiency: 26.0% cpm/dpm

Survey type: beta/gamma

Background rate 35 cpm
Count time: 0.75 minutes

MDA: 136 dpm/100cm2

Instrument B - Period 2

INSTRUMENT: ESP-2

PROBE: HP-260

Efficiency: 30.0% cpm/dpm

Survey type: beta/gamma

Background rat 29 cpm
Count time: 1 minutes

MDA: 93 dpm/100cm2

CHARACTERIZATION SURVEY
REMOVABLE ACTIVITY

LOCATION	COORDINATES		BETA/GAMMA GROSS (counts)	BETA/GAMMA NET (counts)	BETA/GAMMA ACTIVITY (dpm/100cm2)	BETA/GAMMA UNCERTAINTY (95%)	ALPHA GROSS (counts)	ALPHA NET (counts)	ALPHA ACTIVITY (dpm/100cm2)	ALPHA UNCERTAINTY (95%)	SAMPLE PERIOD
Room 1C	A	0	30	3.75	19	81	0	0	0	0	1
Room 1C	A	1	28	1.75	9	80	1	1	13	26	1
Room 1C	A	2	30	3.75	19	81	0	0	0	0	1
Room 1C	A	3	13	-13.25	-68	70	0	0	0	0	1
Room 1C	A	4	25	-1.25	-6	78	0	0	0	0	1
Room 1C	A	5	20	-6.25	-32	75	0	0	0	0	1
Room 1C	A	6	30	3.75	19	81	1	1	13	26	1
Room 1C	A	7	33	6.75	35	83	1	1	13	26	1
Room 1C	A	8	31	4.75	24	82	0	0	0	0	1
Room 1C	A	9	33	6.75	35	83	0	0	0	0	1
Room 1C	A	10	39	12.75	65	86	0	0	0	0	1
Room 1C	A	11	34	7.75	40	83	1	1	13	26	1
Room 1C	A	12	25	-1.25	-6	78	0	0	0	0	1
Room 1C	B	12	24	-2.25	-12	77	0	0	0	0	1
Room 1C	B	11	25	-1.25	-6	78	0	0	0	0	1
Room 1C	B	10	33	6.75	35	83	0	0	0	0	1
Room 1C	B	9	25	-1.25	-6	78	0	0	0	0	1
Room 1C	B	8	23	-3.25	-17	77	0	0	0	0	1
Room 1C	B	7	27	0.75	4	79	0	0	0	0	1
Room 1C	B	6	22	-4.25	-22	76	1	1	13	26	1
Room 1C	B	5	31	4.75	24	82	0	0	0	0	1
Room 1C	B	4	24	-2.25	-12	77	0	0	0	0	1
Room 1C	B	3	22	-4.25	-22	76	0	0	0	0	1
Room 1C	B	2	35	8.75	45	84	0	0	0	0	1
Room 1C	B	1	30	3.75	19	81	0	0	0	0	1
Room 1C	B	0	27	0.75	4	79	0	0	0	0	1
Room 1C	C	0	34	7.75	40	83	0	0	0	0	1
Room 1C	C	1	28	1.75	9	80	0	0	0	0	1
Room 1C	C	2	30	3.75	19	81	0	0	0	0	1
Room 1C	C	3	36	9.75	50	85	0	0	0	0	1
Room 1C	C	4	21	-5.25	-27	75	0	0	0	0	1
Room 1C	C	5	17	-9.25	-47	72	0	0	0	0	1
Room 1C	C	6	27	0.75	4	79	0	0	0	0	1
Room 1C	C	7	31	4.75	24	82	0	0	0	0	1
Room 1C	C	8	33	6.75	35	83	0	0	0	0	1
Room 1C	C	9	23	-3.25	-17	77	0	0	0	0	1
Room 1C	C	10	21	-5.25	-27	75	0	0	0	0	1
Room 1C	C	11	25	-1.25	-6	78	1	1	13	26	1
Room 1C	C	12	36	9.75	50	85	0	0	0	0	1
Room 1C	D	12	27	0.75	4	79	0	0	0	0	1
Room 1C	D	11	22	-4.25	-22	76	0	0	0	0	1
Room 1C	D	10	27	0.75	4	79	0	0	0	0	1
Room 1C	D	9	34	7.75	40	83	0	0	0	0	1
Room 1C	D	8	33	6.75	35	83	1	1	13	26	1
Room 1C	D	7	30	3.75	19	81	0	0	0	0	1
Room 1C	D	6	30	3.75	19	81	0	0	0	0	1
Room 1C	D	5	33	6.75	35	83	0	0	0	0	1
Room 1C	D	4	35	8.75	45	84	0	0	0	0	1
Room 1C	D	3	28	1.75	9	80	0	0	0	0	1
Room 1C	D	2	29	2.75	14	80	0	0	0	0	1
Room 1C	D	1	31	4.75	24	82	0	0	0	0	1
Room 1C	D	0	26	-0.25	-1	79	0	0	0	0	1
Room 1C	E	0	28	1.75	9	80	0	0	0	0	1
Room 1C	E	1	29	2.75	14	80	0	0	0	0	1
Room 1C	E	2	26	-0.25	-1	79	0	0	0	0	1
Room 1C	E	3	25	-1.25	-6	78	0	0	0	0	1
Room 1C	E	4	22	-4.25	-22	76	0	0	0	0	1
Room 1C	E	5	36	9.75	50	85	0	0	0	0	1
Room 1C	E	6	29	2.75	14	80	0	0	0	0	1
Room 1C	E	7	21	-5.25	-27	75	0	0	0	0	1
Room 1C	E	8	31	4.75	24	82	0	0	0	0	1
Room 1C	E	9	32	5.75	29	82	0	0	0	0	1
Room 1C	E	10	26	-0.25	-1	79	0	0	0	0	1
Room 1C	E	11	29	2.75	14	80	0	0	0	0	1
Room 1C	E	12	18	-8.25	-42	73	0	0	0	0	1
Room 1C	W	1	23	-3.25	-17	77	0	0	0	0	1
Room 1C	W	2	27	0.75	4	79	0	0	0	0	1
Room 1C	W	3	27	0.75	4	79	0	0	0	0	1

TABLE B3

CHARACTERIZATION SURVEY
REMOVABLE ACTIVITY

LOCATION	COORDINATES		BETA/GAMMA GROSS (counts)	BETA/GAMMA NET (counts)	BETA/GAMMA ACTIVITY (dpm/100cm2)	BETA/GAMMA UNCERTAINTY (95%)	ALPHA GROSS (counts)	ALPHA NET (counts)	ALPHA ACTIVITY (dpm/100cm2)	ALPHA UNCERTAINTY (95%)	SAMPLE PERIOD
Room 1C	W	4	33	6.75	35	83	0	0	0	0	1
Room 1C	W	5	25	-1.25	-6	78	0	0	0	0	1
Room 1C	W	6	29	2.75	14	80	0	0	0	0	1
Room 1C	W	7	30	3.75	19	81	0	0	0	0	1
Room 1C	W	8	26	-0.25	-1	79	0	0	0	0	1
Room 1C	W	9	28	1.75	9	80	0	0	0	0	1
Room 1C	W	10	17	-9.25	-47	72	0	0	0	0	1
Room 1C	W	11	21	-5.25	-27	75	0	0	0	0	1
Room 1C	W	12	16	-10.25	-53	72	0	0	0	0	1
Room 1C	W	13	13	-13.25	-68	70	0	0	0	0	1
Room 1C	W	14	22	-4.25	-22	76	0	0	0	0	1
Room 1C	W	15	24	-2.25	-12	77	0	0	0	0	1
Room 1C	W	16	29	2.75	14	80	0	0	0	0	1
Room 1C	W	17	23	-3.25	-17	77	0	0	0	0	1
Room 1C	W	18	23	-3.25	-17	77	0	0	0	0	1
Room 1C	W	19	21	-5.25	-27	75	1	1	13	26	1
Room 1E	E	1	22	-4.25	-22	76	0	0	0	0	1
Room 1E	E	2	30	3.75	19	81	0	0	0	0	1
Room 1E	E	3	32	5.75	29	82	0	0	0	0	1
Room 1E	E	4	32	5.75	29	82	0	0	0	0	1
Room 1F	F	1	24	-2.25	-12	77	0	0	0	0	1
Room 1F	F	2	18	-8.25	-42	73	0	0	0	0	1
Room 1F	F	3	24	-2.25	-12	77	0	0	0	0	1
Room 1F	F	4	21	-5.25	-27	75	0	0	0	0	1
Room 1F	F	5	25	-1.25	-6	78	0	0	0	0	1
Room 1G	G	1	30	3.75	19	81	0	0	0	0	1
Room 1G	G	2	22	-4.25	-22	76	0	0	0	0	1
Room 1H	H	1	22	-4.25	-22	76	0	0	0	0	1
Room 1H	H	2	37	10.75	55	85	0	0	0	0	1
Room 1I	I	1	29	2.75	14	80	0	0	0	0	1
Room 1I	I	2	24	-2.25	-12	77	0	0	0	0	1
Room 1I	I	3	27	0.75	4	79	0	0	0	0	1
Room 1J	J	1	31	4.75	24	82	0	0	0	0	1
Room 1J	J	2	29	2.75	14	80	0	0	0	0	1
Room 1J	J	3	37	10.75	55	85	1	1	13	26	1
Room 1J	J	4	38	11.75	60	86	0	0	0	0	1
Room 1J	J	5	20	-6.25	-32	75	0	0	0	0	1
Room 1J	J	6	23	-3.25	-17	77	0	0	0	0	1
Room 1K	K	1	24	-2.25	-12	77	0	0	0	0	1
Room 1K	K	2	27	0.75	4	79	0	0	0	0	1
Room 1L	L	1	17	-9.25	-47	72	0	0	0	0	1
Room 1L	L	2	33	6.75	35	83	0	0	0	0	1
Room 1L	L	3	22	-4.25	-22	76	0	0	0	0	1
Room 1L	L	4	19	-7.25	-37	74	1	1	13	26	1
Room 1L	L	5	40	13.75	71	87	0	0	0	0	1
Room 1L	L	6	21	-5.25	-27	75	0	0	0	0	1
Room 2H	A	0	20	-6.25	-32	75	0	0	0	0	1
Room 2H	A	1	30	3.75	19	81	0	0	0	0	1
Room 2H	A	2	31	4.75	24	82	0	0	0	0	1
Room 2H	B	0	21	-5.25	-27	75	0	0	0	0	1
Room 2H	B	1	34	7.75	40	83	0	0	0	0	1
Room 2H	B	2	21	-5.25	-27	75	0	0	0	0	1
Room 2H	C	0	21	-5.25	-27	75	0	0	0	0	1
Room 2H	C	1	33	6.75	35	83	0	0	0	0	1
Room 2H	C	2	31	4.75	24	82	0	0	0	0	1
Room 2H	D	0	32	5.75	29	82	0	0	0	0	1
Room 2H	D	1	27	0.75	4	79	0	0	0	0	1
Room 2H	D	2	25	-1.25	-6	78	0	0	0	0	1
Room 2H	W	1	26	-0.25	-1	79	0	0	0	0	1
Room 2H	W	2	34	7.75	40	83	0	0	0	0	1
Room 2H	W	3	21	-5.25	-27	75	0	0	0	0	1
Room 2H	W	4	29	2.75	14	80	0	0	0	0	1
Room 2I	I	1	21	-5.25	-27	75	0	0	0	0	1
Room 2I	I	2	29	2.75	14	80	0	0	0	0	1
Room 2I	I	3	26	-0.25	-1	79	0	0	0	0	1
Room 2I	I	4	19	-7.25	-37	74	0	0	0	0	1
Chem Lab		1	31	2	7	51	0	0	0	0	2
Chem Lab		2	41	12	40	55	0	0	0	0	2

CHARACTERIZATION SURVEY
REMOVABLE ACTIVITY

LOCATION	COORDINATES	BETA/GAMMA GROSS (counts)	BETA/GAMMA NET (counts)	BETA/GAMMA ACTIVITY (dpm/100cm2)	BETA/GAMMA UNCERTAINTY (95%)	ALPHA GROSS (counts)	ALPHA NET (counts)	ALPHA ACTIVITY (dpm/100cm2)	ALPHA UNCERTAINTY (95%)	SAMPLE PERIOD
Chem Lab	3	26	-3	-10	48	0	0	0	0	2
Chem Lab	4	35	6	20	52	0	0	0	0	2
Chem Lab	5	28	-1	-3	49	0	0	0	0	2
Chem Lab	6	35	6	20	52	0	0	0	0	2
Chem Lab	7	34	5	17	52	1	1	3	5	2
Chem Lab	8	29	0	0	50	2	2	5	7	2
Tile room	1	28	-1	-3	49	0	0	0	0	2
Tile room	2	31	2	7	51	2	2	5	7	2
Tile room	3	51	22	73	58	2	2	5	7	2
Tile room	4	32	3	10	51	0	0	0	0	2
Tile room	5	31	2	7	51	0	0	0	0	2

CHARACTERIZATION SURVEY
REMOVABLE ACTIVITY

ALL READINGS	BETA/GAMMA ACTIVITY (dpm/100cm2)	ALPHA ACTIVITY (dpm/100cm2)
AVERAGE	4	1
Sample St. Dev	28	3
Number	147	147
Maximum	73	13
Minimum	-68	0

TABLE B4

CHARACTERIZATION SURVEY
DOSE RATE

FACILITY: Engelhard - Plainville

PURPOSE: QA

Instrument A

INSTRUMENT: BICRON MicroRem

SURVEY DATE: 05-Mar-94 06-Mar-94

Survey type: exposure rate

Background rate: [illegible]7 urem/hr

CHARACTERIZATION SURVEY
DOSE RATE

LOCATION	COORDINATES		NET RADIATION LEVEL (urem/hr)
Room 1C	A	0	2
Room 1C	A	1	2
Room 1C	A	2	-1
Room 1C	A	3	0
Room 1C	A	4	0
Room 1C	A	5	0
Room 1C	A	6	0
Room 1C	A	7	-1
Room 1C	A	8	1
Room 1C	A	9	1
Room 1C	A	10	2
Room 1C	A	11	1
Room 1C	A	12	2
Room 1C	B	12	0
Room 1C	B	11	-2
Room 1C	B	10	0
Room 1C	B	9	-1
Room 1C	B	8	-2
Room 1C	B	7	0
Room 1C	B	6	0
Room 1C	B	5	-2
Room 1C	B	4	-1
Room 1C	B	3	0
Room 1C	B	2	-1
Room 1C	B	1	-1
Room 1C	B	0	0
Room 1C	C	0	0
Room 1C	C	1	1
Room 1C	C	2	0
Room 1C	C	3	0
Room 1C	C	4	0
Room 1C	C	5	-1
Room 1C	C	6	-1
Room 1C	C	7	-1
Room 1C	C	8	0
Room 1C	C	9	-1
Room 1C	C	10	0
Room 1C	C	11	0
Room 1C	C	12	-1
Room 1C	D	12	-1
Room 1C	D	11	0
Room 1C	D	10	-3
Room 1C	D	9	-1
Room 1C	D	8	-1
Room 1C	D	7	-1
Room 1C	D	6	0
Room 1C	D	5	0
Room 1C	D	4	-1
Room 1C	D	3	-2
Room 1C	D	2	-2
Room 1C	D	1	0
Room 1C	D	0	1
Room 1C	E	0	1
Room 1C	E	1	2
Room 1C	E	2	1
Room 1C	E	3	-1
Room 1C	E	4	1
Room 1C	E	5	3
Room 1C	E	6	2

TABLE B5

CHARACTERIZATION SURVEY
DOSE RATE

LOCATION	COORDINATES		NET RADIATION LEVEL (urem/hr)
Room 1C	E	7	0
Room 1C	E	8	-1
Room 1C	E	9	-1
Room 1C	E	10	-2
Room 1C	E	11	-1
Room 1C	E	12	0
Room 1C	W	1	2
Room 1C	W	2	-1
Room 1C	W	3	1
Room 1C	W	4	0
Room 1C	W	5	1
Room 1C	W	6	1
Room 1C	W	7	2
Room 1C	W	8	0
Room 1C	W	9	-1
Room 1C	W	10	0
Room 1C	W	11	1
Room 1C	W	12	-1
Room 1C	W	13	0
Room 1C	W	14	-1
Room 1C	W	15	2
Room 1C	W	16	0
Room 1C	W	17	1
Room 1C	W	18	0
Room 1C	W	19	0
Room 1E	E	1	0
Room 1E	E	2	1
Room 1E	E	3	0
Room 1E	E	4	1
Room 1F	F	1	1
Room 1F	F	2	-2
Room 1F	F	3	0
Room 1F	F	4	-1
Room 1F	F	5	2
Room 1G	G	1	-1
Room 1G	G	2	2
Room 1H	H	1	2
Room 1H	H	2	0
Room 1I	I	1	1
Room 1I	I	2	0
Room 1I	I	3	1
Room 1J	J	1	1
Room 1J	J	2	2
Room 1J	J	3	2
Room 1J	J	4	1
Room 1J	J	5	-1
Room 1J	J	6	0
Room 1K	K	1	1
Room 1K	K	2	-1
Room 1L	L	1	0
Room 1L	L	2	-1
Room 1L	L	3	-1
Room 1L	L	4	1
Room 1L	L	5	-1
Room 1L	L	6	0
Room 2H	A	0	1
Room 2H	A	1	1
Room 2H	A	2	0
Room 2H	B	0	0

CHARACTERIZATION SURVEY
DOSE RATE

LOCATION	COORDINATES		NET RADIATION LEVEL (urem/hr)
Room 2H	B	1	1
Room 2H	B	2	0
Room 2H	C	0	1
Room 2H	C	1	0
Room 2H	C	2	2
Room 2H	D	0	1
Room 2H	D	1	2
Room 2H	D	2	0
Room 2H	W	1	1
Room 2H	W	2	1
Room 2H	W	3	-1
Room 2H	W	4	0
Room 2I	I	1	1
Room 2I	I	2	-1
Room 2I	I	3	0
Room 2I	I	4	0

CHARACTERIZATION SURVEY
DOSE RATE

ALL READINGS	RADIATION LEVEL (urem/hr)
AVERAGE	0
Sample St. Dev	1
Number	134
Maximum	3
Minimum	-3

TABLE B6

APPENDIX C

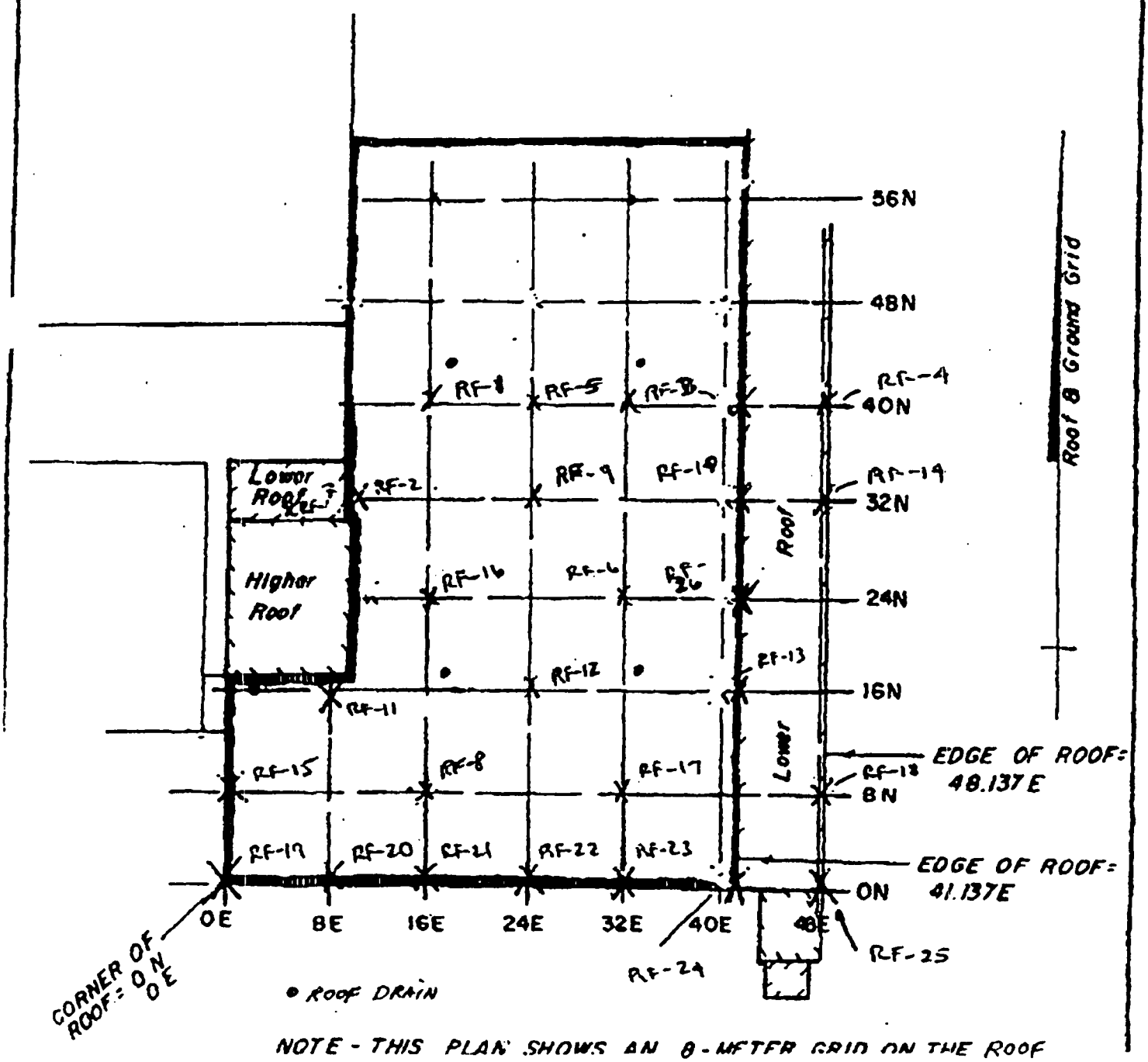
ROOF MATERIAL MEASUREMENTS

GRID LOCATIONS ON BUILDING 2 ROOF (FIGURE C-1)

DIRECT SURFACE MEASUREMENTS ON ROOF (TABLE C1)

URANIUM CONCENTRATIONS IN ROOF MATERIAL SAMPLES (TABLE C2)

FIGURE C-1
GRID LOCATIONS ON BUILDING 2 ROOF



NOTE - THIS PLAN SHOWS AN 8-METER GRID ON THE ROOF

HILBERT ASSOCIATES, INC.

DIRECT SURFACE MEASUREMENT ANALYSIS REPORT
(ratemeter measurement)

SAMPLE DATE: 1/12/95
LOCATION: Engelhard Plant Roof Samples

RADIATION MEASUREMENT: Beta-Gamma
RESULTS REPORTED UNITS: dpm per 100cm2
MEASUREMENT TYPE: direct ratemeter scan survey

BACKGROUND COUNT RATE (CPM)	50
INSTRUMENT TIME CONSTANT (SEC)	10.0

SAMPLE #	LOCATION CODE	LOCATION DESCRIPTION	GROSS SAMPLE COUNTS	NET SAMPLE COUNT RATE (CPM)	RESULTS (DPM/100CM2)	95% ERROR (DPM/100CM2)	MDA (DPM/100CM2)
1	RF-01	40N 16E	50	0	0	1461	2449
2	RF-02	32N 09E	50	0	0	1461	2449
3	RF-03	40N 40E	80	30	1290	1848	2449
4	RF-04	40N 48E	50	0	0	1461	2449
5	RF-05	40N 24E	70	20	860	1729	2449
6	RF-06	24N 32E	50	0	0	1461	2449
7	RF-07	32N 04E	50	0	0	1461	2449
8	RF-08	08N 16E	80	30	1290	1848	2449
9	RF-09	32N 24E	50	0	0	1461	2449
10	RF-10	32N 40E	70	20	860	1729	2449
11	RF-11	16N 08E	50	0	0	1461	2449
12	RF-12	16N 24E	50	0	0	1461	2449
13	RF-13	16N 41E	50	0	0	1461	2449
14	RF-14	32N 48E	70	20	860	1729	2449
15	RF-15	08N 00E	70	20	860	1729	2449
16	RF-16	24N 16E	50	0	0	1461	2449
17	RF-17	08N 32E	50	0	0	1461	2449
18	RF-18	08N 48E	50	0	0	1461	2449
19	RF-19	00N 00E	70	20	860	1729	2449
20	RF-20	00N 08E	70	20	860	1729	2449
21	RF-21	00N 16E	70	20	860	1729	2449
22	RF-22	00N 24E	70	20	860	1729	2449
23	RF-23	00N 32E	70	20	860	1729	2449
24	RF-24	00N 41E	70	20	860	1729	2449
25	RF-25	00N 48E	70	20	860	1729	2449
26	RF-26	24N 41E	70	20	860	1729	2449
27	RD-01	18N 18E	90	40	1720	1960	2449
28	RD-02	18N 43E	50	0	0	1461	2449
29	RD-03	17N 03E	50	0	0	1461	2449
30	RD-04	43N 33E	50	0	0	1461	2449
31	RD-05	17N 33E	50	0	0	1461	2449
32							
33							
34							
35							
36							
37							
38							
39							
40							

TABLE C1

Instrument Model & s/n:		ESP-1 s/n 3027
Detector Model & s/n:		N1009 s/n 09311
Calibration Date:		8/26/94
Efficiency	0.15	cpm / dpm based on S/Y90
Detector Area	15.5	cm2

ENGELHARD - PLAINVILLE, MA

URANIUM CONCENTRATIONS IN ROOF SAMPLES

			Uranium 238 Progeny						Uranium 235			Uranium 234*			Uranium Total	
GENERAL	SAMPLE	SPEC	Th234 (63 keV)			Th234 (93 keV)			U235 (186 keV)			U235 x 22			U Total	
AREA	IDENTIFICATION	FILE ID	Conc	+/-	MDA	Conc	+/-	MDA	Conc	+/-	MDA	Conc	+/-	MDA	Conc	+/-
		ENS_M	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g
ROOF SAMPLES																
ROOF	EP-RF1C	398	5.28	1.18	1.48	4.99	0.69	0.93	0.80	0.11	0.10	17.6	2.4	2.3	23.3	2.5
ROOF	EP-RF2C	399	0.65	1.16	1.79	1.65	0.65	1.00	0.24	0.07	0.09	5.4	1.6	2.0	7.3	1.7
ROOF	EP-RF3C	400	2.03	0.98	1.51	0.96	0.62	0.96	0.09	0.07	0.10	2.0	1.4	2.2	3.1	1.6
ROOF	EP-RF4C	401	1.08	1.09	1.68	1.60	0.64	0.99	0.18	0.07	0.09	3.9	1.5	2.0	5.7	1.6
ROOF	EP-RFDG	402	0.97	1.34	2.06	1.18	0.69	1.06	0.09	0.08	0.12	2.1	1.8	2.7	3.3	1.9

APPENDIX D

BUILDING 2 EXTERIOR HORIZONTAL SURFACE MEASUREMENTS

EXTERIOR MEASUREMENT LOCATIONS (FIGURE D-1)

FINAL STATUS SURVEY: EXTERIOR HORIZONTAL SURFACE LOCATIONS (TABLE D1)

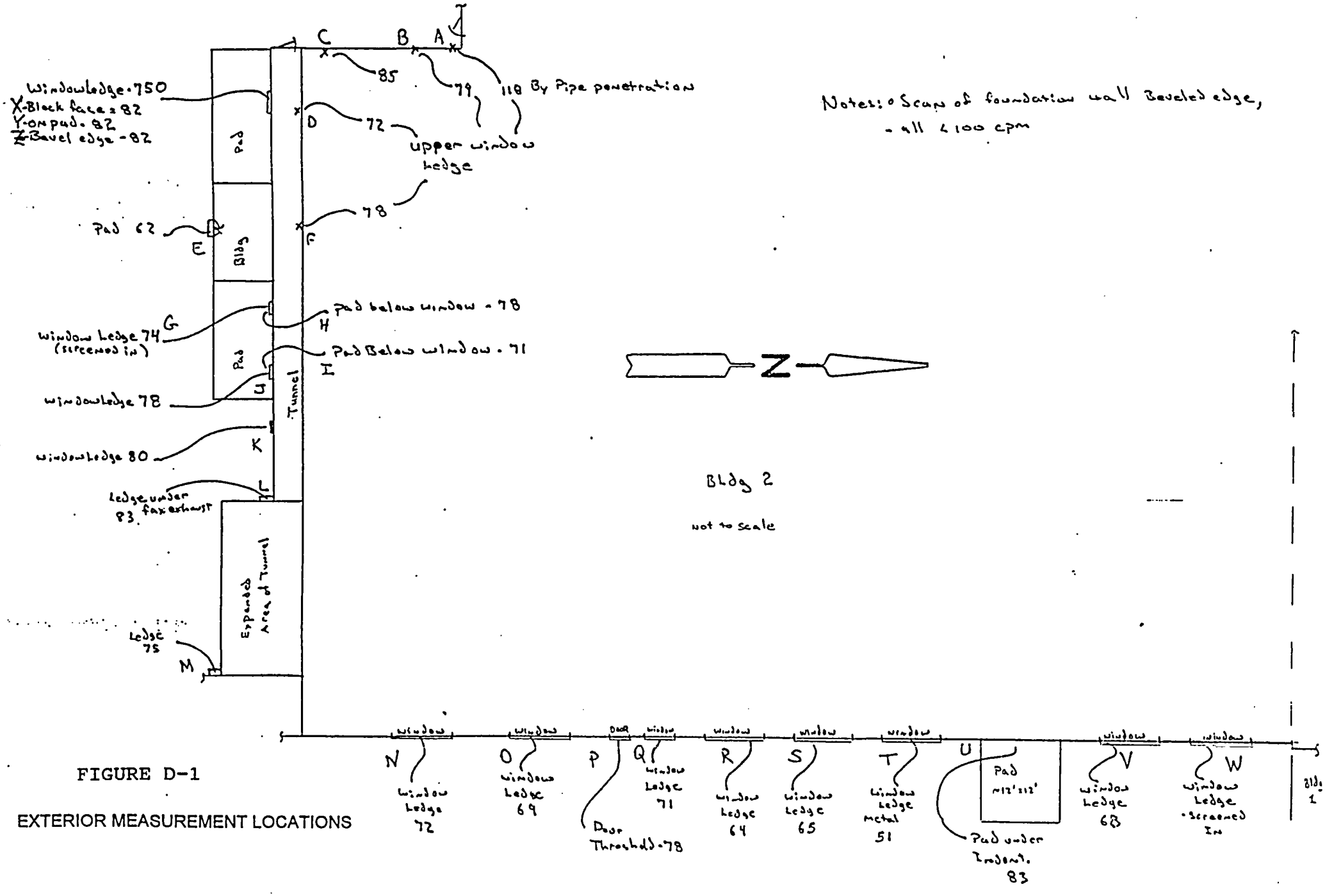


FIGURE D-1

EXTERIOR MEASUREMENT LOCATIONS

FINAL STATUS SURVEY ; EXTERIOR HORIZONTAL SURFACE LOCATIONS

Survey Location	Measured Counts	Background CPM	Efficiency, c/d	Minimum Detectable Activity, dpm/100 sq cm	Measured Activity, dpm/100 sq. cm	Effective Alpha Activity, dpm/100 sq. cm	1.96*Standard Deviation	
UPPER WALLS								
A	118	69	0.21	1312	1556	4978	2723	
B	79	69	0.21	1312	317	1016	2422	
C	85	69	0.21	1312	508	1625	2471	
D	72	69	0.21	1312	95	305	2364	
E	62	69	0.21	1312	-222	-711	2279	
F	78	69	0.21	1312	286	914	2414	
G	74	69	0.21	1312	159	508	2381	
H	78	69	0.21	1312	286	914	2414	
I	71	69	0.21	1312	63	203	2356	
J	78	69	0.21	1312	286	914	2414	
K	80	69	0.21	1312	349	1117	2430	
L	83	69	0.21	1312	444	1422	2455	
M	75	69	0.21	1312	190	610	2389	
N	72	69	0.21	1312	95	305	2364	
O	69	69	0.21	1312	0	0	2339	
P	78	69	0.21	1312	286	914	2414	
Q	71	69	0.21	1312	63	203	2356	
R	64	69	0.21	1312	-159	-508	2296	
S	65	69	0.21	1312	-127	-406	2305	
T	51	69	0.21	1312	-571	-1829	2181	
U	83	69	0.21	1312	444	1422	2455	
V	68	69	0.21	1312	-32	-102	2331	
W	No Data							
X	82	69	0.21	1312	413	1321	2447	
Y	82	69	0.21	1312	413	1321	2447	
Z	82	69	0.21	1312	413	1321	2447	

11/01/96

TABLE D1