



Final Survey Report for Decommissioning of the Molycorp, Inc. York, Pennsylvania Facility

Prepared for:

Unocal Molycorp, Inc.
Washington, Pennsylvania

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IT Project No. 768380

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List of Abbreviations

Bkgd.	Background
cfm	Cubic feet per minute
CFR	Code of Federal Regulations
cm	Centimeters
cm ²	Centimeters squared
cpm	Counts per minute
D&D	Decontamination and Decommissioning
dpm	Disintegrations per minute
Eff.	Efficiency (cpm/dpm)
gpm	Gallons per minute
HSP	Health and Safety Plan
IT	IT Corporation
LaLn	Lanthanides
m ²	Meters squared
MDA	Minimum Detectable Activity
mg/m ³	Milligrams per cubic meter
mR/h	Milli-Roentgen per hour
NIST	National Institute of Standards and Technology
NUREG	Office of Nuclear Regulatory Research
NRC	U. S. Nuclear Regulatory Commission
ORAU	Oak Ridge Associated Universities
ppm	Parts per million
QA	Quality Assurance
QC	Quality Control
REC	Rare earth chloride
RSO	Radiation Safety Officer
t	Time
Th	Thorium
TLV	Threshold limit value
U	Uranium
μCi	Microcurie 2,220,000 dpm
μR	Micro-Roentgen
μR/h	Micro-Roentgen per hour
WP	Work plan
wt. %	Weight percent
4π	Four pi geometry

1.0 Background

1.1 Reason for Decommissioning

Molycorp, Inc. closed their York Pennsylvania facility in March 1993. The manufacturing of lanthanide chemicals was transferred to other Molycorp locations within the United States. The facility is licensed by the United States Nuclear Regulatory Commission (NRC) under Source Materials License SMB 1408. After operations ceased, the license was amended to possession and storage only.

With no future manufacturing operations planned for Molycorp's York facility, a site decommissioning plan was submitted (August 1995). The decommissioning objectives of the plan focused primarily on excavating soils and subsequent disposal of soils. An addendum to the existing decommissioning plan will be submitted with this report to the NRC (Addendum 1) that describes the procedures for decontamination and surveying of equipment and structures. The primary focus of Addendum 1 is the decontamination and subsequent demolition of all buildings (except Building 9-Office and Laboratory and Building 15-Storage Warehouse).

This report is written for all buildings at the York, Pennsylvania facility, using the requirements of *Addendum 1 to the Site Decommissioning Plan for Molycorp, Inc. York, Pennsylvania Facility*. As this report is written to encompass all buildings at the York Facility, the main text, Chapters 1 through 7, have been broadly written and include generic decommissioning information for each building. However, Chapter 2 provides more specific information on the decontamination techniques used in each building. Decontamination and decommissioning (D&D) information will be included as report appendices and will be submitted to the NRC as each building is completed.

1.2 Management Approach

IT Corporation (IT) conducted this work with a staff of qualified management and health physics personnel. The Project Manager was John Stokowski whose responsibility it was to: direct all D&D activities at the facility; interface with the client and keep them apprised of the project status; and ensure the work was executed in a cost effective manner and completed according to the requirements in the decommissioning plan, the work plan (WP), and the site specific health and safety plan (HSP).

Mr. Stokowski was assisted in his tasks by Daniel Williams the project site Health Physicist Supervisor and Radiation Safety Officer (RSO) and Stephen Duce, CHP who acted as senior health physics reviewer. Mr. Williams ensured that radiological surveys and D&D activities were performed according to the decommissioning plan, the WP, and the HSP requirements and the requirements of Title 10 Code of Federal Regulations (CFR) Parts 19 and 20. The team operated under the supervision of the IT RSO. The RSO was given the authority to make necessary changes to project plans as the survey progressed. The RSO directly supervised the activities of the health physics technicians, monitored the use of all gross alpha and beta counting equipment, and reviewed all radiological surveys, work conducted under a radiation work permit, and screening analyses conducted on-site and at off-site laboratories

The Addendum 1 to the Site Decommissioning Plan for MolyCorp, Inc. York, Pennsylvania Facility plan consisted of systematic processes and procedures that were deemed acceptable by industry standards and the NRC. Activities (organized units of work needed to complete a function) were defined, and tasks (specific work assignments within a specific activity) were delegated to the appropriate team members.

2.0 Site Description

Molycorp, Inc.'s York, Pennsylvania facility was used for research and development of mineral extraction from raw and semiprocessed ore. This facility is situated on the outskirts of the City of York, Pennsylvania, at 350 North Sherman Street in Spring Garden Township. This facility produced a broad line of inorganic rare earth chemicals used for various industrial purposes.

2.1 Ownership

The facility located at 350 North Sherman Street, York, Pennsylvania was deeded to Molybdenum Corporation of America, a private corporation, from York Metal and Alloys Company on May 31, 1930.

Previous owners include:

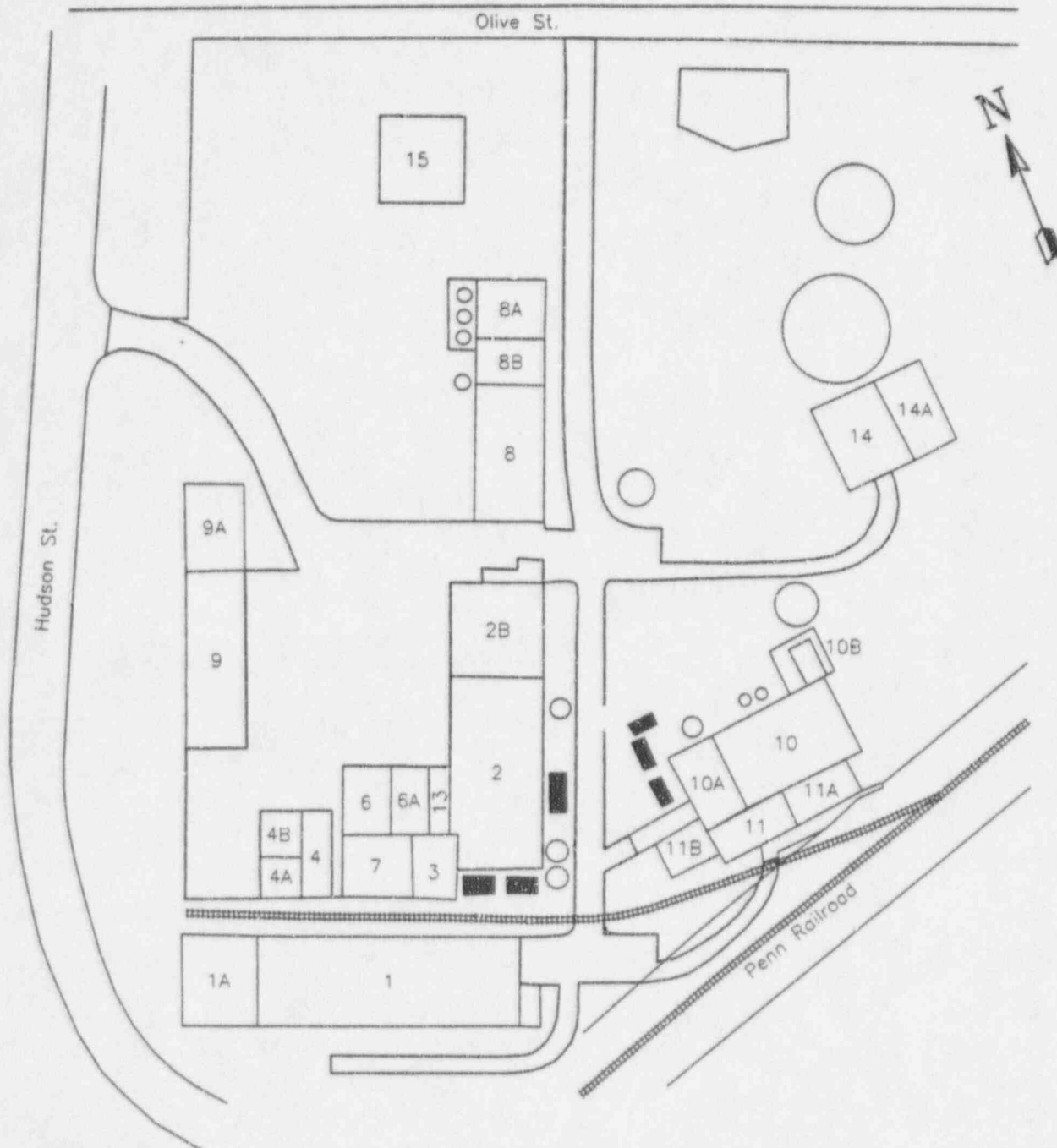
- York Metal and Alloys Company [1920-1930]
- The Alloys Corporation [1920]
- York Ferro-Alloys Company [1919-1920]
- York Metal and Alloy Company [1910-1919]
- Morton Manufacturing Company [1900-1919]

2.2 Facility Description

The site is approximately six acres in size. The facility is bound by a perimeter chain-link fence and is bordered by Olive Street to the north, North Sherman Street to the east, the Pennsylvania Railroad to the south, and Hudson Street to the west (compass directions are approximate). Eight structures, two clarifiers and one holding tank were erected on the property (Figure 1). The structures include an office building, a laboratory, utility and maintenance areas, storage and process buildings, and a waste treatment plant. The facility was once served by the rail line and multiple loading docks. Yard areas are primarily paved with several large pervious (i.e., soil/grass) areas.

2.2.1 Buildings

Building 1 - Mill Room. Building 1 is a 188' long x 49' wide x 20' high brick masonry and steel truss roof structure with corrugated metal and transite roof panels and a reinforced concrete floor. Interior partitions are constructed of brick masonry. Located in



BUILDING NAME	NUMBER
Laboratory	9A
Tank Room	2
99.9% Ce Room	3
REC Area	10, 10A, 10B, 11, 11A, 11B
Wastewater Treatment	14, 14A
Tank Room Admin Area	2B
Administration Building	9
Moly Building	8, 8A

BUILDING NAME	NUMBER
Mill Room	1
Locker/Lunch Room	4, 4A, 4B
Boiler House	7
Compressor Room	6A
Supply Room	6
Pipe Rack Room	13
Warehouse	15

FIGURE 1
YORK, PENNSYLVANIA SITE BUILDING LAYOUT

the southeast corner is a 39' long x 16' wide x 18' high wood framed structure with transite panel sheathing. Building 1 was primarily utilized as a warehouse for the storage of material and a shipping and receiving area. Apparent modifications to this structure include an exposed metal truss roof (1980's), and wood framed storage rooms and bricked-over windows (dates of modifications unknown).

The storage rooms in the southeast corner of this building were previously surveyed for release and a report was submitted to the NRC by Co Physics. A valve pit in the western most room of the wooden structure and noted on the Co Physics' survey exhibits residual contamination above guideline values.

Areas were decontaminated using various methods that include: soap and water washing, vacuuming, and surface scarification. Scarified floor and wall surfaces are identified by 1/8-inch grooves in the exposed surface of the substrate. Other decontaminated wall surfaces can be visually identified by a clean appearance to the surrounding wall areas.

Inaccessible areas include, an exhaust fan in the overhead of the west room, two recessed scales, and a suspect basement. The upper part of the fan was inaccessible as it protruded through the ceiling. Personnel were not allowed on the roof as the structural integrity of the roof was in question. However, fixed and loose surface contamination surveys were performed on accessible areas of the fan. The pad areas of the scales were surveyed as part of the floor. Scale sump areas will be surveyed during the slab removal. Presence of a basement was not verified

Penetrations in this structure include doors, windows, steam and water lines, electrical conduit, roof ventilation and floor drains. All service utilities for this building are above grade with the exception of floor drains.

Building 2 - Tank Room. Building 2 is a 165' long x 53' wide x 12' high wood frame/brick masonry and wood truss roof structure with exterior and interior transite sheathing, a reinforced concrete floor and a wood roof deck coated with a waterproofing material. In the northwest corner, a 21' long x 12' wide x 8' high wood frame office area was constructed. Building 2 was a process area used to convert cerium mineral concentrate into a line of 95% pure cerium products.

Areas of the walls and floor exhibiting residual contamination above guideline values were

decontaminated using various methods including: vacuuming, jack hammering, and surface scarification. Scarified floor surfaces are identified by 1/8-inch grooves in the substrate. Areas decontaminated by jack hammer operations are identified by pitting of floor surfaces.

Two centrifuge motors, two centrifuge motor stands, two ovens, and one roto-hearth remain in the building. Inaccessible areas are limited to below grade piping runs that open at grade and centrifuge motor internals. Penetrations in this structure include doors, windows, steam and water lines, electrical conduit, roof ventilation and floor drains. All service utilities for this building are above grade with the exception of floor drains.

Building 3 - 99% Ce Room (SX). Building 3 is a 24' long x 35' wide x 13' high brick masonry and steel truss roof structure with a reinforced concrete floor and corrugated transite roof panels. Building 3 was a process area used to convert cerium mineral concentrate into a line of high purity (99.9%) cerium products. The only apparent modification to this structure is a sump/valve pit in the southwest corner covered with concrete (modification date unknown).

Several methods were employed during building decontamination. High-pressure water washing with magnesium sulfate was used on the lower portions of walls, while surface scarification and jack hammering were required for the floor. Scarified floor surfaces are identified by 1/8-inch tracks in the substrate. Areas decontaminated with jack hammer operations are identified by pitting of floor surfaces. Locations containing transite panels were washed with low pressure water.

Inaccessible areas include underground pipes and a covered sump. Penetrations in this structure include doors, steam and water lines, electrical conduit, roof ventilation and floor drains. All service utilities for this building are above grade with the exception of floor drains.

Building 4 - Lunch Room, Locker Room, Workshop. Building 4 is a 49' long x 39' wide x 10' high brick masonry and steel/wood truss roof structure with a reinforced concrete floor and corrugated metal roof panels coated with a waterproofing compound. The building is divided into three separate rooms, a locker room (4), a lunch room (4A) and a workshop (4B).

Areas exhibiting residual contamination above guideline values were decontaminated by vacuuming. Five point averaging was used on grids that were not decontaminated.

A drain pipe in the locker room leading from the sink to a covered trench was inaccessible. The trench was not included as part of the floor survey as it was considered "below grade" and hence not within the scope of this phase of the D&D project. Penetrations in this structure include doors, windows, steam and water lines, electrical conduit, roof ventilation and floor drains. All service utilities for this building are above grade with the exception of floor drains.

Building 6 - Stock Room. Building 6 is a 47' long x 38' wide x 14' high brick masonry and steel truss structure with a reinforced concrete floor and corrugated metal roof panels. The building is divided along the north and south axis into two separate rooms (east and west). Apparent modifications to the west side of the building include a wood framed office space, bricked-over windows and doorways and a concrete block wall. The apparent modifications to the east side of the building include a bricked-over doorway and windows (dates of modifications unknown).

Vacuuming was the only decontamination method used in this building. Five point averaging of grids was used to complete final release surveys.

Two valve pits are located in the west side of Building 6. The southern most valve pit exhibits activity above guideline values and the other valve pit does not exhibit any residual activity. A sump and valve pit are located in the east side of Building 6 and were not surveyed. All sumps and valve pits are below grade and are not part of the final release survey report.

A concrete block wall was constructed in front of the original brick wall on the west side of Building 6 making the original brick wall inaccessible. Overhead piping in the east room, extending from the west wall, make part of the ceiling and wall areas approximately twelve feet from grade, inaccessible. Transite panels used for the electrical panel installation made the original surface of the east wall in the east room inaccessible.

Three air compressors, large electrical panels and a heat exchanger remain on the east side of Building 6. No fixed equipment remains on the west side. Penetrations in this structure

include doors, windows, steam and water lines, electrical conduit, and floor sumps. All service utilities for this building are above grade with the exception of floor drains.

Building 7 - Boiler Room. The Boiler Room is a 34' long x 41' wide x 12' high brick masonry and steel truss roof structure with a reinforced concrete floor and corrugated metal roof panels. The building houses two boilers (out-of-service) and a fire suppression system. No apparent structural modifications have been made to this building.

Removal of thoriated welding rods was the only decontamination required in this building. Penetrations in this structure include doors, windows, steam, gas and water lines, electrical conduit, roof ventilation and floor drains. All service utilities for this building are above grade with the exception of floor drains.

Building 8 - Moly Building. Building 8 is a 128' long x 38' wide x 12' high brick masonry, steel frame and wood truss roof structure with a reinforced concrete floor and an asphalt shingle roof. Interior partitions are constructed of brick masonry and the ceiling consists of transite panels. Building 8 is divided into three separate rooms. A small concrete block room was added to the southwest corner of Room 3. Five metal tension rods were installed between the east and west walls to prevent a continued lateral shift of the east wall. This reinforcement proved totally ineffective when the west wall deflected in an equal manner. Building 8 was a process area used to refine Molybdenum from raw ore.

Wall and ceiling surfaces of this building were previously surveyed by Co Physics. Results of the survey were submitted to the NRC.

Vacuuming, surface scarification and equipment removal were the methods of decontamination used in this building. All trenches and ledges were vacuumed to remove decomposed brick and grout. All above grade horizontal surfaces not decontaminated by vacuuming were decontaminated using soap and water washing. Scarification of floor surfaces can be identified by 1/8-inch grooves in the substrate. Five point averaging of grids was used to complete final release surveys.

Inaccessible areas include the interior roof structure in all three rooms due to the transite ceiling, a sump on the south wall of Room 1 and an recessed scale in Room 3. The scale pad area and sump cover were surveyed as part of the floor. Penetrations in this structure

include doors, windows, steam and water lines, electrical conduit, roof ventilation and floor drains. All service utilities for this building are above grade with the exception of floor drains.

Building 9 - Office and Laboratory. Building 9 is a 126' long x 30' wide x 10' high wood frame and wood truss roof structure with an asphalt shingle roof and a steel reinforced concrete floor. The building has a partial basement and an attic storage area. The apparent modifications to this structure include the addition of central heat and air and a laboratory addition with basement to the northern end of the building.

Soap and water washing, vacuuming, surface scarification and equipment removal were the decontamination methods used in this building. Penetrations in this structure include doors, windows, steam, gas and water lines, electrical conduit, roof ventilation, gas and floor drains. All service utilities for this building are above grade with the exception of liquid effluent drains.

Building 10 - REC Building The Rare Earth Chloride (REC) Building is divided into three separate areas, REC Building [Building 10], lanthanids (LaLn) Chloride Digest Area [Building 10A] and the Boiler Room [Building 10B]. Building 10 and 10A combined measure 98' long x 36' wide x 22' high and are brick masonry and steel roof truss structures with reinforced concrete floors and corrugated metal roof panels. Building 10B is a 31' long x 11' wide x 12' high masonry block and steel frame roof structure with a reinforced concrete floor and prefabricated concrete roof panels.

The apparent modifications to this structure include the addition of Building 11 on the southern wall, the addition of Building 10A and bricked-over windows. Building 10 and 10A were both process areas used to convert bastnasite mineral concentrate into a purified mixture of rare earth chlorides. Building 10B was the boiler room.

Penetrations in this structure include doors, windows, steam and water lines, electrical conduit, and floor drains. All service utilities for this building are above grade with the exception of floor drains.

Building 11 - Drum Storage. Building 11 is divided into two separate areas, the drum storage area [Building 11 and 11A] and the LaLn Chloride Evaporator Area [Building 11B]. Building 11 and 11A combined measure 67' long x 19' wide x 14' high and are brick

masonry and steel truss roof structures with a reinforced concrete floors and corrugated metal roof panels. Building 11B is a 30' long x 24' wide x 14' high wood frame and steel truss roof structure with a reinforced concrete floor and corrugated metal roof panels. Building 11B was a process area used to evaporate the clarified rare earth chloride liquor into a solid material. The only apparent modification to this structure is the addition of Building 11B (modification date unknown).

The decontamination methods utilized in this structure were soap and water washing, vacuuming, and surface scarification. Scarified areas can be identified by 1/8-inch grooves in the substrate. Penetrations in this structure include doors, windows and electrical conduit. All service utilities for this building are above grade.

Building 13 - Pipe Room. The Pipe Room is a 45' long x 11' wide x 14' high brick masonry and wood truss roof structure with a reinforced concrete floor and a wood roof deck. Decontamination of this structure was not required. There are no apparent modifications to this structure. Penetrations in this structure include doors, steam and water lines, electrical conduit, and roof ventilation. All service utilities for this building are above grade.

Building 14 - Waste Treatment. Building 14 is divided along the north and south axis into two areas [Building 14 and Building 14A]. Building 14 is a 50' long x 47' wide x 18' high wood frame and wood truss structure with a reinforced concrete floor and exterior corrugated metal wall and roof panels. The interior walls are partially sheathed with oriented-strand board. A 12' long x 12' wide x 10' high wood frame electrical room was constructed in the southwest corner. Building 14A is a 50' long x 31' wide x 16' high prefabricated metal building with a structural steel frame, corrugated exterior metal wall and roof panels and a reinforced concrete floor. The interior walls are partially sheathed with a composite fiber board.

The only apparent modification to this structure was the addition of Building 14A (1970's). Penetrations in this structure include doors, steam, gas and water lines, electrical conduit, and floor drains. All service utilities for this building are above grade with the exception of floor drains.

Building 15 - Storage Warehouse. Building 15 is a 41' long x 41' wide x 15' high prefabricated metal building with a structural steel frame, corrugated exterior metal wall and roof panels and a reinforced concrete floor. There are no apparent modifications to this structure. Penetrations in this structure include doors, gas lines and electrical conduit. All service utilities for this building are above grade.

2.2.2 Geology and Hydrogeology

Unocal Molycorp contracted Foster Wheeler Environmental Corporation in March of 1991 to characterize the soils and ground water at the York facility. The following information was obtained from the report generated by Foster Wheeler Environmental Corporation.

2.2.2.1 General Geology

Most of the plant area is underlain by limestone of the Kinzers Formation which is terminated near the north end of the plant area by the Gnatstown Overthrust. Bedrock was generally found at about 13 feet below the surface. The soils above the limestone vary substantially and consist of regolith and a variety of impc . fill materials. There is a significant clay zone at the location of the overthrust which acts as an aquitard to flow of the shallow ground water to the north.

2.2.2.2 Hydrology of the Shallow Water Aquifer

This study was limited to the easterly two thirds of the plant area where the refining, process piping, water treatment and waste disposal facilities are located.

During the field investigation, March 1990, the water table south of the clay zone was at an average depth of approximately six feet below the surface. Average saturated thickness of the aquifer above the top of the limestone was seven feet. Historical well records indicate that the ground water level varies by several feet and the average thickness of the saturated aquifer south of the clay zone may range from 2 to 9 feet. Along the clay zone, the water table deepens to the north by approximately fifteen feet over a horizontal distance of about fifty feet.

Shallow ground water at the site results from infiltration of precipitation over an area approximately five acres lying within and to the west of the plant area. The average ground water discharge through the plant site as a result of this infiltration is probably less

than 3 gallons per minute. It is possible that this flow varies from near zero to several times the average.

Accretion from the deep limestone aquifer significantly affects the shallow aquifer. Over 20 years ago a well was drilled in the easterly part of the plant area to a depth of approximately 200 feet. There is a natural flow from the deep well at a higher hydrostatic head than that of the shallow aquifer. Water is pumped at a rate of 10 gallons per minute from a sump constructed at the top of the well to keep the shallow water table from rising too high. The sump is not sealed and when the flow from the well exceeds the pumping rate, the excess flow adds to the natural shallow aquifer flow. The relatively high hydrostatic head of the deep well suggests that there may be additional upward seepage from the deep aquifer to the shallow aquifer. Observations indicated that if such is the case, most of such seepage is along the east side of the plant area.

Analysis indicates the average shallow ground water flow across the plant area to the west of the deep well is on the order of 3 gallons per minute and that the flow varies from near zero to several gallons per minute. Accretions from the deep well and possibly upward seepage from the aquifer increase the amount of the shallow ground water flow into the east of the deep well. The general direction of the shallow ground water flow in the plant area is to the northeast. West of the deep well the flow direction and hydraulic gradients are highly variable and dependent on the total and relative magnitude of the accretions from infiltration of precipitation and flow from the deep aquifer.

3.0 Operating History

Since the transfer of property in 1900 to the commercial industry, various manufacturing activities have occurred at this location. These activities included the manufacture of plateware and jewelry by Morton Manufacturing Company and the production of metal alloys by York Metal and Alloys Company, York Ferro-Alloys Company, The Alloys Corporation, and York Metal and Alloy Company.

3.1 Licensing and Operations

Molycorp Inc.'s York, Pennsylvania facility produced a broad line of inorganic rare earth chemicals used to make catalysts for the chemical industry and for various other industrial purposes. The rare earth processing plant was part of the facility that had raw material which contained enhanced concentrations of thorium (Th) and uranium (U). Between 1965 and 1992, the thorium concentrations were significant enough to require Molycorp, Inc. to obtain a Source Materials License (application submitted June 18, 1981). Source Materials License SMB-1408 (Docket 40-08794) was issued on February 23, 1982.

License SMB-1408 has been amended seven times. The dates and amendments to the license are listed below.

10/28/82

License Amendment No. 1 - Condition 16 permitting the blending of rare earth chloride residue and/or cerium fluoride with bastnasite rare earth concentrate to form rare earth products. Condition 14 amended.

03/29/83

License Amendment No. 2 - Condition 15 specifies the minimum qualifications for Radiation Safety Officer.

06/06/83

License Amendment No. 3 - Processing of source material for the recovery of yttrium is authorized subject to: Condition 16 requiring the implementation of the radiological monitoring and safety program described in June 18, 1981 application.

10/21/83

License Amendment No. 4 - Authorization for discontinuity of dosimetry program.

03/13/85

License Amendment No. 5 - Condition 13 amended.

07/30/87

License Amendment No. 6 - Condition 3 revises the amendment number, Condition 9 authorizes the blending of rare earth residues with soda ash, Condition 14 incorporates the date of May 7, 1987.

08/12/88

Molycorp requests license extension to 12/31/91 and withdraws license renewal application.

03/23/91

Molycorp requests review of license renewal submitted in January 1987.

04/17/91

NRC requests Molycorp submit license application.

06/17/91

Molycorp requests license renewal extension to 01/01/92.

07/11/91

NRC accepts license application extension to 01/01/92.

08/24/94

License Amendment No. 7: Allows for the storage, characterization, and decommissioning of equipment/structures in accordance with an approved plan and transfer of products and wastes to authorized recipients.

The operational history includes occasional spills affecting some surficial soils that could potentially affect the groundwater. Importantly, the site does not represent a threat to the public health and safety or to the environment. Additionally, while low concentrations of Th are present in the site soils, there is no evidence indicating that any of the Th or U is migrating off the site.

3.2 Processes Performed

The Molycorp York REC Processing Plant carried on five basic processes that involved low concentration Th source material along with traces of U source material.

Both Th and U naturally occur as low level contaminants in the feed materials. These elements concentrate in either impurity residues or co-products.

3.2.1 Rare Earth (LaLn) Chloride Process

This process converts bastnasite mineral concentrate produced at the Mountain Pass, California mine into a purified mixture of RECs. This plant produced about 6 million pounds per year.

Raw materials fed to this process consist of bastnasite concentrate, caustic soda and water. The bastnasite concentrate contains about 70% rare earth oxide as fluoroarbonates, and small amounts of barite, celestite and other gangue minerals. An average of about 0.126 weight percent (wt.%) Th and 20 parts per million (ppm) U is present in this feed as various types of bastnasite and monazite impurities. For worker protection, the maximum permissible concentration of bastnasite dust in the air, based only on radiation dose, was 531 mg/m³. A 3' long x 3' wide x 5' high bag house with six collector bags and a 500-cfm (cubic feet per minute) blower was used at the bastnasite feed point to capture and recycle generated dust, thus protecting employees and the environment. Wet-processing was used in all phases of the extraction process following the feed point.

Typical a 5,000-pound bastnasite reactor charge contained about 6.3 pounds of Th and 0.1 pounds of U.

A slurry of the bastnasite concentrate in 50% caustic soda was prepared and introduced into a pressure reactor vessel where it was heated with steam to an elevated temperature and pressure to enhance the reaction.

The reaction products consisted of a slurry of insoluble rare earth hydrate and unreacted minerals and soluble sodium fluoride, sodium carbonate and excess caustic soda. The slurry of rare earth hydrate was then discharged into water where decantation washes with water were performed until the rare earth hydrate solids were essentially free of soluble sodium salts. At this point the Th was present as either as insoluble, unreacted feed material or insoluble hydrates, mixed with the rare earth hydrate solids.

The washed REC hydrate solids were then added to an excess of hydrochloric acid to form soluble rare earth chlorides. Rare earth hydrate was added until all excess acid was consumed. Any iron or Th solubilized by the acid precipitated and was added to the insoluble fraction.

The REC solution/slurry was filtered to remove the solids and obtain a clarified liquor of REC suitable for evaporation to a solid product. The clarified liquor or REC contained no significant quantity of Th or U. A representative sample of solid product generally contained about 3.5 ppm Th and 2.0 ppm U.

The filtered solids obtained from the acid dissolution step contained unreacted bastnasite, other gangue minerals and all the Th present in the original material. Compared with the feed, the degree of Th enrichment in this residue is several fold.

The filtered solid residue contained about 50% moisture and was fed damp into 55 gallon plastic drums for disposal. The Th content (dry basis) of the residue varied in the 0.4 to 0.9 wt.% range and averaged about 0.65 wt.%. Roughly 1,940 pounds of wet residue was produced from each reactor charge and an average of two charges were processed daily. About 115,000 pounds of residue (145 barrels) were produced in a month.

3.2.2 95% Cerium Process and Cerium Fluoride Process

This process converted cerium mineral concentrate, produced at the Mountain Pass California mine, into a line of 95% pure cerium products. About 1.5 million pounds per year of products were made.

The cerium concentrate process feed material was a dry powder containing approximately 60% ceric oxide of an 88% purity, in the form of a mixture of basic ceric oxide and cerous fluoride. Other gangue minerals present included barite, celestite, monazite and silica. Th and U were impurities present at about 0.225% and 20 ppm, respectively. The maximum permissible concentration of cerium concentrate dust in building air, based on radiation dose only, was 355 mg/m³.

A 30-inch-diameter, 14-inch-high wet scrubber with 6 feet of 2-inch plastic Tellerettes was used at the cerium feed point to capture any possible fugitive dust and thereby protect employees and the environment. This scrubber was equipped with a 3,000-cfm blower and circulated 45 gallon per minute (gpm) of scrubbing solution over the packed bed. Solids were collected in the 1,000 gallon scrubber reservoir and were disposed of with the plant's waste treatment residue.

A typical cerium reaction charge was about 4,000 pounds per digest tank, containing about 9 pounds of Th and 0.88 pounds of U. Wet chemical processing was used at all stages after the initial feed to the process line.

The cerium concentrate reacted with an excess of strong hydrochloric acid in order to convert the basic ceric oxide present into a water soluble cerous chloride. Quantities of chlorine gas were produced due to oxidation of a chloride ion by ceric form cerium. Chlorine off gas from the reaction was scrubbed with caustic soda solution to form sodium hypochlorite.

Fluoride salts present in the concentrate were not significantly dissolved by this treatment and formed the bulk of the insoluble residue. Additionally, the Th minerals contained in the feed cerium concentrate did not dissolve, and hence, accumulated with the insoluble fluoride residue. This acidic reaction slurry was then centrifuged to separate unreacted solids from the cerium chloride liquor. This liquor was then further treated with sodium carbonate solution to produce a 95% pure cerous carbonate product with no significant Th content.

The washed fluoride residue consisted of a mixture cerium fluorite and other unreacted gangue minerals, as well as essentially all of the Th present in the original concentrate. The degree of Th enrichment in this residue was about twofold. This fluoride residue contained about 50% moisture and was shoveled damp into 55-gallon plastic drums for disposal or further processing to make a technical grade cerium fluoride product. The residue Th content varied in the 0.2 to 0.8 wt.% range and averaged about 0.45 wt.%. About 115,000 pounds (145 barrels) were produced each month on average.

About 30,000 pounds of dry technical grade cerium fluoride were produced from this residue each year. Preparatory processing consists primarily of drying the residue and milling and packaging the resultant product. The maximum permissible concentration for normal cerium fluoride product dust in building air was 187 mg/cubic meter due to Th content. The occupational threshold limit value (TLV) due to fluoride content is 2.5 mg/m³. Appropriate dust masks were used to prevent hazards to personnel.

3.2.3 99.9% Cerium Process

This process converted cerium mineral concentrate into a line of high purity (99.9%) cerium products. About 200,000 pounds of product were produced per year. Again, the

cerium concentrate was dissolved in an acid media under oxidizing conditions and the resultant solution of ceric ions was extracted with a liquid cation exchanger to separate high purity cerium. Typically 2,000 pounds of dry cerium was used for each feed digest, every third day. The same wet scrubber used in the 95% cerium process was used to minimize employee and environmental contamination by feed materials. After this feed dissolution step, all further processing employed wet methods.

The cerium concentrate was dissolved in a mixture of sulfuric and nitric acids. Potassium permanganate was added to the mixture to promote oxidation of cerous ions to ceric ions. Some boric acid was also added to complex soluble fluoride ions.

The oxidized, acidic solution of ceric sulfate and/or ceric nitrate was centrifuged to remove unreacted solids, including the largely undissolved Th minerals. The clarified liquor was contacted with an organic collector dissolved in kerosene to selectively extract ceric ions into an immiscible organic phase. The loaded organic phase was separated from the acidic liquor and subsequently treated for recovery of a high purity line of cerium products which contain no significant amount of Th. Unwanted rare earth minerals were precipitated from the solvent extraction raffinate and combined with the acidic solution residue to be centrifuged as mentioned above.

The centrifuged solids from the reaction represented a waste residue containing the Th present in the initial feed material. A several fold enrichment of Th occurred, producing a residue with a somewhat higher Th content than the cerium fluoride. Approximately 10,000 pounds of 50% moisture residue were produced and drummed into 55-gallon plastic drums in a typical month.

3.2.4 Yttrium Process

The ore was dissolved completely in muratic acid and neutralized to pH 3.5 with caustic soda. This neutralization precipitated the iron, Th oxide and U. The barium chloride was added at this point to co-precipitate the daughters of natural U and Th with barium sulfate.

The solids were separated from the liquid by filtration and were stored in plastic drums until disposal was arranged. These waste solids contained all of the radioactive constituents of the ore.

The liquid fraction was acidified to pH 2.0 and precipitated with oxalic acid to yield a solid Yttrium Oxalate. The oxalate was fired to an oxide then shipped to MolyCorp's Louviers facility for further purification. The oxalate precipitation mother liquid was neutralized to pH 8.0 to 10.0 to remove zinc and aluminum prior to discharge into our effluent treatment system.

3.2.5 Molybdenum Recovery

There is little process knowledge available in facility records to describe the molybdenum recovery processes conducted in Building 8. What is known about this process is that the feed stock for the chemical recovery process contained no significant amount of trace Th or U. Therefore, it was not anticipated that this building would be radioactively contaminated to the extent that the other process buildings were.

3.3 Waste Disposal Practices

During past operational history of this site, approximately 103 drums of residues were generated from lead removal steps in the 95% and 99.9% cerium processes. These lead sulfide residues contained approximately 0.4% Th oxide. The drums were stored at the site until a process was developed to recover the lanthanide.

As a result of processing concentrates containing source material, the facility generated clarifier residue, high in rare earths, containing 0.15% Th oxide. This material was sent to MolyCorp's Mountain Pass, California plant for reprocessing.

There was a landfill area on the plant site containing about 400 cubic yards of material. The landfill was used to dispose of residue from the settling pond whose composition was similar to the clarifier residues. The average Th content was 0.07%. This material was excavated, treated and disposed of according to limits set forth in 10 CFR Part 20.

Cerium concentrate was shipped to the York facility from the Mountain Pass, California facility in paper bags. After the bags were emptied, they were placed in a manifested dumpster which was taken to a landfill for disposal. The dumpster and its contents were released for unrestricted use and the release of the dumpster was logged. The radioactivity of the dumpster was checked before the dumpster was removed from the site.

D&D activities were controlled to minimize the generation of D&D related wastes and to minimize the volume of those wastes generated. D&D generated wastes and all existing wastes were fully characterized and packaged for future disposal at Molycorp's Washington, Pennsylvania site or a licensed disposal facility.

4.0 Decommissioning Activities

4.1 Objectives

The objective of the decommissioning plan is to allow for termination of Molycorp's NRC license and subsequent demolition of site structures except for Buildings 9 and 15. The first phase of decommissioning activities calls for the free release for unrestricted use of site buildings and demolition to grade. All floor drains are considered to be below grade and will be lined with polyethylene and filled with gravel prior to the demolition of buildings. The second phase of decommissioning activities involves areas of the site below grade.

4.2 Results of Previous Surveys

Molycorp performed monthly radiation surveys in all areas of the facility. The results of these surveys range from 0.02 milli-Roentgen per hour (mR/h) to 1.8 mR/h.

In August 1982, Radiation Surveillance Associates, Inc. performed a radiation survey of six site structures which constituted the major areas used for the processing and storage of radioactive products. Three of the six buildings surveyed exhibited exposure rates at or near background (Building 1-Mill Room, Building 8-Moly Building, and Building 15-Warehouse). The other three buildings exhibited exposure rates moderately higher than background levels (Building 10/11-REC Building, Building 14-Waste Treatment Plant, and Building 2-Tank Room).

In July 1984, EG&G/Energy Measurements conducted an aerial radiological survey for the NRC of a 38-square kilometer area centered on the York facility. While exposure rates ranged from 4 to 34 micro-Roentgen per hour (μ R/h) throughout the survey area, it was highest over the York facility. Spectral analysis revealed gamma-emitting radionuclides of the Th decay chain as the primary contributors to this elevated activity.

At the request of the NRC, Oak Ridge Associated Universities (ORAU) performed a detailed radiological survey of the York facility on June 3-12, 1985. This survey was performed to evaluate potential releases and mitigation of radioactive materials from the plant site. Small areas outside the fenced perimeter of the plant were contaminated. These areas were excavated during 1987-88, drummed and transported to Mountain Pass for reprocessing.

4.3 Decontamination Procedures

Decontamination of structures and equipment was managed by IT and performed in conjunction with Icesolve Inc. and R&R International, Inc. Several different decontamination methods were employed to remove surficial residual contamination from process equipment and structures.

IT provided the equipment and labor necessary to dismantle process equipment and systems. Icesolve Inc. provided equipment and labor to decontaminate process equipment and structures using high pressure water blasting, carbon dioxide pellet blasting, and magnesium sulfate entrained in high pressure water. R & R International, Inc. provided equipment and labor for the decontamination of process equipment using high pressure water and carbon dioxide pellet blasting.

Decontamination of process equipment and structures used the following procedure:

1. Equipment characterization surveys were performed and areas in excess of guideline release values were identified.
2. Contaminated equipment was brought to the decontamination facility for initial decontamination with one of the following methods.
 - a. High-pressure water blasting
 - b. Carbon dioxide pellet blasting
 - c. Magnesium sulfate entrained water blasting
3. Following initial decontamination, the equipment was surveyed for free release. If equipment was not decontaminated to release limits, the equipment was brought back to the decontamination area for additional decontamination. Material having residual contamination below the release limits was placed in a "clean hold" area.
4. Contaminated equipment that could not be cleaned was either placed into 20 cubic yard roll off containers to await final disposal or, if the contaminated area on equipment was less than 50% of the total surface area, the contaminated area was removed and placed into the roll off container for disposal. The remaining portion was resurveyed for free release and placed in a "clean hold" area.

5.0 Final Survey Procedures

IT used facility descriptions and other pertinent information to classify the York, Pennsylvania buildings as affected and unaffected in accordance with Draft NUREG/CR 5849 *Manual for Conducting Radiological Surveys in Support of License Termination*. Surveys were planned and performed in accordance with the guidance provided in NUREG/CR-5849 for affected and unaffected areas.

5.1 Sampling Parameters

All collected samples were analyzed for alpha and beta/gamma radiations. Instruments used in the conduct of surveys are discussed in Section 5.5.1. Techniques for instrument usage are discussed in Section 5.5.2.

Site structures were classified into two categories: unaffected and affected areas. Unaffected areas were defined as areas where no radioactive material was used or stored, or where there was a low probability of having radioactive material present during process operations. Unaffected areas having residual contamination in excess of 25% of guideline values were reclassified as affected areas. Affected areas are defined as areas where radioactive material was used or stored, or where there is a high probability of residual contamination.

Unaffected areas were surveyed as follows, a smear and a fixed count were obtained at a total of 30 locations or 10% of the unaffected area, whichever was greater. In addition a small area around each smear location was frisked with a 100 square centimeter (cm²) probe to determine if contamination levels exceeded 25% of the final release limits.

Affected structures were initially divided into two separate areas: affected areas (2 meters and below on walls and the floor) and unaffected areas (above 2 meters on walls and the ceilings). Affected areas were surveyed as follows, each square meter was 100% frisked, a one minute static count was taken at the point in each square meter which exhibited the highest activity, and a 100 cm² smear sample was collected at the same location.

Initial area classification was based on process knowledge provided by Molycorp personnel. Characterization surveys performed in unaffected areas dictated the revised area classifications.

5.2 Background Levels Identified

Radiation background levels established for the site were determined by taking data points outside and inside the perimeter of the facility and averaging the results. The background for alpha and beta contamination was determined by entering the structure/room and performing a one minute static count in the area of lowest background. Background for the low background smear counter was determined by performing 10-one minute background counts and averaging the data. Smear counter background was determined monthly or whenever the daily background counts were outside of the acceptance criteria established for background variance.

Radiation background dose rates, as measured with a Ludlum Model 19 μ R meter, varied with time and environmental conditions during the course of this project. Ambient background varied in buildings from 8 to 30 μ R/hr. There were three factors that seemed to affect measured background. The first of these was the nature of the building material used. Many of these buildings were made of brick whose origin was unknown and whose age varied by decades. It was observed that surface count rates varied from building to building on what would appear to be unaffected brick. On-site studies were conducted where clean brick or clean brick surfaces were obtained by extracting bricks from the wall and measuring the surface count rates. It was determined that these surface count rates were as high on the clean surface as on a suspect contaminated surface. Similar results were obtained when clean bricks were cut in half and the newly exposed surface count rate was measured. Several bricks of varied age were sent to an outside analytical laboratory for analysis by gamma spectroscopy. Results of these measurements showed the potassium-40 (K-40) and Th concentrations varied widely, by a factor of two or more. These varied concentrations demonstrated that the brick's naturally occurring radioactive material concentrations did vary and this variance would affect the ambient background in different buildings and the surface alpha and beta count rates.

A second factor that affected background measurements was building geometry. In Building 10 there were several alcoves built under Building 11 that were made of masonry brick with concrete floors. These rooms were configured such that the center of the room was approximately five to six feet from any wall. In these rooms the background was considerably higher than in larger building spaces.

A third factor that was observed to affected background was the ambient levels of radon and thoron in the building atmosphere. During the performance of these surveys most

buildings were not ventilated which resulted in stagnant ambient air. Air samples collected in these buildings during the course of the decontamination showed that the radon and thoron concentrations varied widely as a result of environmental conditions (i.e., inversions, windy conditions, calm air, etc). The ambient concentrations of the radon and thoron affected the background dose rates.

Therefore, when reviewing the dose rate data for the building surveys it is evident that the background does vary, seemingly within the same room. However, some of these surveys were performed on different days, sometimes months apart, and background values varied, in most cases, within the range of 8 to 15 $\mu\text{R/hr}$. In some cases the background was as high as 30 $\mu\text{R/hr}$.

5.3 Major Contaminants Identified

Th and U are the major site contaminants. Locations and levels of concentration are identified in Section 3.0, Operating History.

5.4 Guidelines Established

Guidelines used for the release of process equipment and structures were those listed in Regulatory Guide 1.86 *Termination of Operating Licenses for Nuclear Reactors* Table 5-2. These limits were established by the United States Atomic Energy Commission, which later became the NRC. The Draft *Manual for Conducting Radiological Surveys in Support of License Termination* NUREG/CR-5849 was used for guidance during the performance of structural release surveys. Equipment release guidance was provided by Molycorp, Inc.'s *Surface Contamination Survey and Release Procedure for Equipment*. This procedure has been reviewed and approved by the NRC for release of equipment from Molycorp, Inc.'s facilities.

The release criteria for process equipment and structures specifies average residual surface contamination in a 100 cm^2 area cannot exceed the average values of Table 5-2 for Th and no one location can exceed the maximum value listed. Additionally, there can be no residual loose contamination in excess of the removable values in a 100 cm^2 area.

5.5 Equipment and Procedures Selected

5.5.1 Instruments and Equipment

The instrumentation that project personnel used to perform the final radiological survey are listed in Table 5-3. Portable instruments were calibrated semiannually by the manufacturer using sources traceable to the National Institute for Standards and Technology (NIST), and source checked each day prior to use and each night after use. The bench-top alpha and beta counting system was calibrated using sources traceable to NIST and source checked each day before and after the instrument was used for sample counting. Electroplated sources made with Th-230 were used for the alpha calibration and check sources. Beta calibration and check sources were performed with Technetium-99 (Tc-99). Tracking of instrument backgrounds, accuracy, and reliability was performed using daily source check sheets (Reference IT Corporation Standard Operating Procedure RPP-004 *Instrumentation and Surveillance*).

5.5.2 Instrument Use Technique

The Measurements described in this section were performed using the grid reference system described in Section 5.1. The following sections describe the individual surveys performed within each of those reference grids.

5.5.2.1 Surface Scans

Unaffected and affected area surfaces were scanned to identify locations of residual surface and near-surface activity according to the following schedule:

- Affected Floors - 100% of the surface
- Unaffected Floors - 10% of the area or 30 data points.
- Affected Lower 2 Meters of Walls - 100% of the surface.
- Unaffected Lower 2 Meters of Walls - 10% of the area or 30 data points.
- Affected Upper Walls and Ceiling - 100% of the accessible wall and ceiling surfaces.
- Unaffected Walls and Ceiling - 10% of the area or 30 data points scanned.
- Unaffected Exterior Walls and Roof - within several feet of each penetration.

Building interior surface scans were conducted for alpha, beta, and gamma radiation. Rough or porous surfaces (e.g., asphalt, building exteriors, etc.) were scanned for alpha, beta and gamma radiations.

Because of low surface contamination guidelines, scanning surveys were performed with large area gas proportional detectors. Alpha and beta-gamma measurements were made with the gas proportional detectors using the Ludlum Model 2224 scaler/rate meters.

Surfaces were scanned at speeds no greater than 2 inches per second for alpha and beta-gamma detection instruments. Audible indicators were used to identify locations having elevated (2 to 4 times ambient) levels of direct radiation. These scanning speeds along with the use of audible indicators allowed for the detection of contamination at levels below the surface contamination guidelines. Locations exhibiting elevated radiation levels were noted so a detailed measurement could be obtained and, if necessary, decontamination and/or removal¹, followed by a resurvey of the area.

5.5.2.2 Surface Activity Measurements

Unaffected area direct measurements were taken at areas which would most likely exhibit residual contamination in excess of guideline values. Affected area direct measurements were made at the area of the grid which exhibited the highest reading during the scan portion of the survey. Unless precluded by surface conditions or physical parameters, the most sensitive of the instruments listed for surface measurements was used (Table 5-2). Measurements were made by integrating counts over a one-minute period. The one minute count time ensured that the minimum detectable activity (MDA) was approximately 25% of the guidelines for beta-gamma emitters and 25% of the guidelines for alpha emitters. These measurements were made with the large area gas proportional detectors and Ludlum Model 2224 scaler/rate meters described above.

Appendix A presents summary tables of the results of surface activity measurements. All individual measurements were within guideline values. Appendix C presents all field data collection forms.

5.5.2.3 Exposure Rate Measurements

Unaffected area gamma exposure rate measurement frequency was one per static measurement location. Affected area measurements were uniformly spaced, and at a minimum, one measurement was made for every 4 m² of surface area. Gamma exposure

rates were measured at 1 meter above the floor and roof surfaces and 1 meter from the wall with a μ R meter utilizing a scintillation detector.

Appendix A presents summary tables of the results of dose rate measurements. All individual measurements were within guideline values. Appendix C presents all field data collection forms.

5.5.3 Procedures

Section 5.0, Final Survey Procedures, and subsequent subsections outline the procedures used during the performance of the final release surveys. Section 3.3, Waste Disposal Practices, addresses the issues of survey derived contaminated wastes and disposal of said wastes.

5.5.4 Surveying Organization

IT was contracted by Unocal to conduct D&D activities at the Molycorp Inc., York facility. IT is a multi-disciplined environmental consulting firm. One discipline within IT's realm of experience is D&D services of commercial and government owned radiologically contaminated facilities. IT's role in D&D activities is: a) to supply project management, b) radiological oversight for IT and contract laborers for the dismantling of equipment and demolition of structures, c) to supply health physics personnel to conduct radiological measurements and provide radiological job coverage, and d) to write all project documents.

Several subcontractors were contracted to perform a variety of functions on this project including, but not limited to, labor for decontamination of process equipment and structures, and health physics support for radiological surveys. All subcontracted persons were required to comply with IT's Site HSP. All site workers, IT employees and subcontractor personnel, at a minimum, received Radiological Worker II training or passed an equivalency exam. All site workers, IT employees and subcontractors participated in a bioassay program. There were no uptakes of Th during project operations.

6.0 Survey Findings

This section provides the methods for evaluating all radiological final survey data. Specific building information is provided in Appendix A and field data collection forms are provided in Appendix C.

6.1 Techniques for Reducing/Evaluating Data

Raw static count survey data was recorded during the actual survey. The data was then transferred to a spreadsheet to convert data units (cpm/100 cm²) to standard units (dpm/100 cm²). The equation used was as follows:

$$\frac{\text{Static cpm} - \text{Background cpm}}{\text{Efficiency}} = \text{Activity (dpm)}$$

Grids exhibiting residual contamination in excess of guideline values, but less than maximum values allowed for any one square meter were averaged. The procedure for averaging activity in a one square meter grid was as follows:

- Collect data from four additional survey points in the grid.
- Add the original data to the four additional data points.
- Divide the sum of the five data points by the number of survey points (5).
- Subtract background from the resultant average.
- Divide the net count rate by the efficiency of the instrument.
- Compare the resulting activity to the guideline value; if less than - no further survey or decontamination required; if greater than - decontamination and resurvey of the area is required.

6.2 Statistical Evaluation

The number of background data points required to satisfy the 95% confidence to within $\pm 20\%$ was determined in accordance with NUREG/CR-5849. Twenty-one additional alpha background data points were collected on February 25, 1997. The data are summarized in Appendix B, Table B-1.

6.3 Comparison of Findings with Guideline Values and Conditions

The number of sample data points required to satisfy the 95% confidence level was determined in accordance with NUREG/CR-5849. The data are summarized in Appendix B, Tables B-2 and B-3.

6.4 Residual Activity Inventory

Calculations were performed to estimate the total residual activity on interior surfaces in the facility. Remaining surface activity was estimated by multiplying the mean surface fixed plus loose contamination, either alpha or beta, in dpm per 100 cm² by 100 to convert all data to dpm/m². This value was then multiplied by the total interior surface area in m², and the total area dpm was divided by the conversion factor 2.22 E6 dpm/μCi. Total activity is the sum of the residual alpha and beta activity. Appendix B, Table B-4 presents the data used in this calculation and the estimated final residual activity.

7.0 Summary

Molycorp, Inc. no longer uses the facility located at 350 North Sherman Street, York Pennsylvania, for the manufacturing of lanthanide chemicals. This facility contains eleven structures previously used for the process of lanthanide extraction. Various operations have been performed at the facility and an NRC Source Material License was granted to Molycorp, Inc. Seven amendments were made to the original license for activities which differed from the requirements and/or conditions of the original license.

Termination of the NRC license is the main objective of the D&D activities. Final release status surveys were performed in accordance with NUREG/CR-5849. The guidelines for residual contaminant surface activities were obtained from Regulatory Guide 1.86. All radiological instruments used for the final release status surveys were chosen for their ability to detect residual contamination below guideline values.

Results of the field surveys, listed in Appendices A, B and C, demonstrate that the decontamination activities were effective in reducing residual activity to meet the NRC limits for release for unrestricted use.

**Building 4 Appendices
Final Survey Report for Decommissioning
of the Molycorp, Inc.
York, Pennsylvania Facility**

Prepared for:

**Unocal Molycorp, Inc.
Washington, Pennsylvania**

Prepared by:

**IT Corporation
Knoxville, Tennessee**

IT Project No. 768380

May 1997

Appendix A

Building Survey Data Molycorp. Inc. Building 4

Molycorp Inc. Building 4

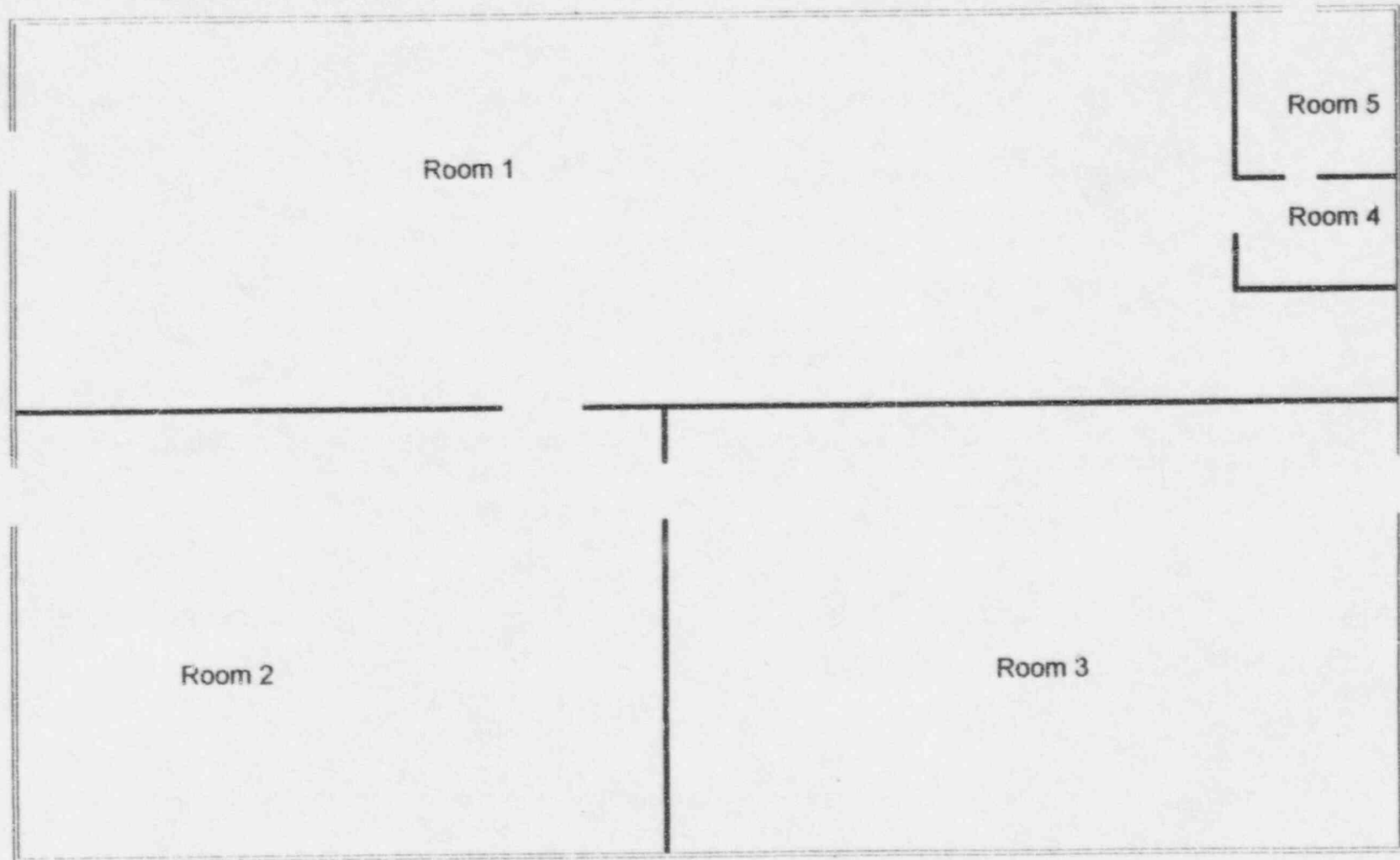
Tabulated survey data for Molycorp Inc. Building 4 are presented in Tables A-1 through A-29. Figure 2 shows the overall five room layout of Building 4.

Subsequent figures show components of each room, e.g., north wall, south wall, east wall, west wall, ceiling, or floor. Each component figure has been included with the tabulated survey data that support the figure, i.e., Figure 3 is immediately in front of Tables A-1a and A-1u. For convention, table numbering uses an "a" or "u" in the title to identify areas as either affected or unaffected.

Table A-29 is a listing of the tabulated "total" and "removable" surface activity, including reported uncertainties and MDA, for each measurement within each grid. This table also cross-references to the applicable figure for each numbered grid.

Survey data for floor grids associated with rooms 4 and 5 have been included in Table A-6a.

Figure 2



Building 4 - Overhead View

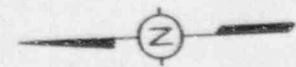
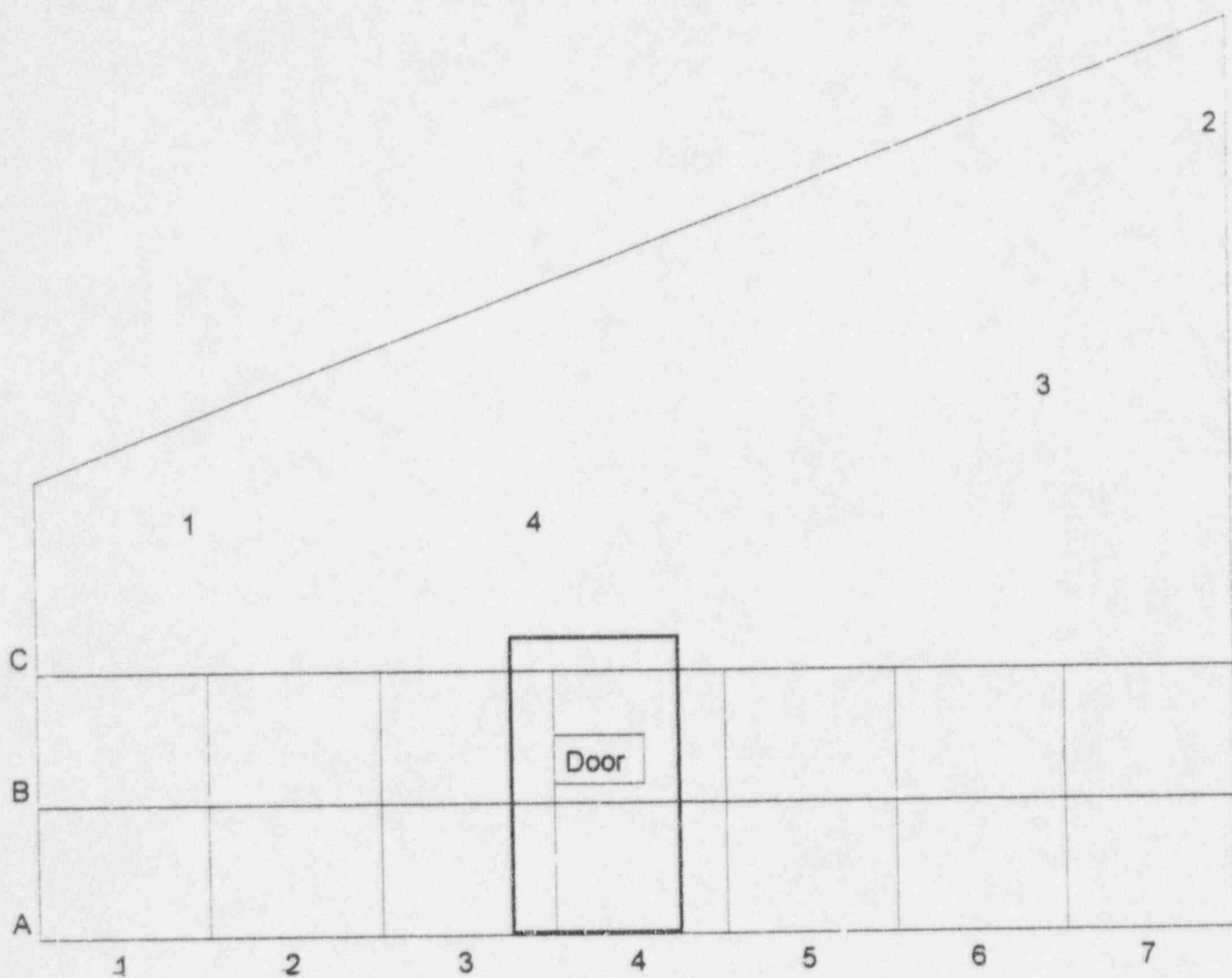


Figure 3



Building 4 Room 1 - North Wall

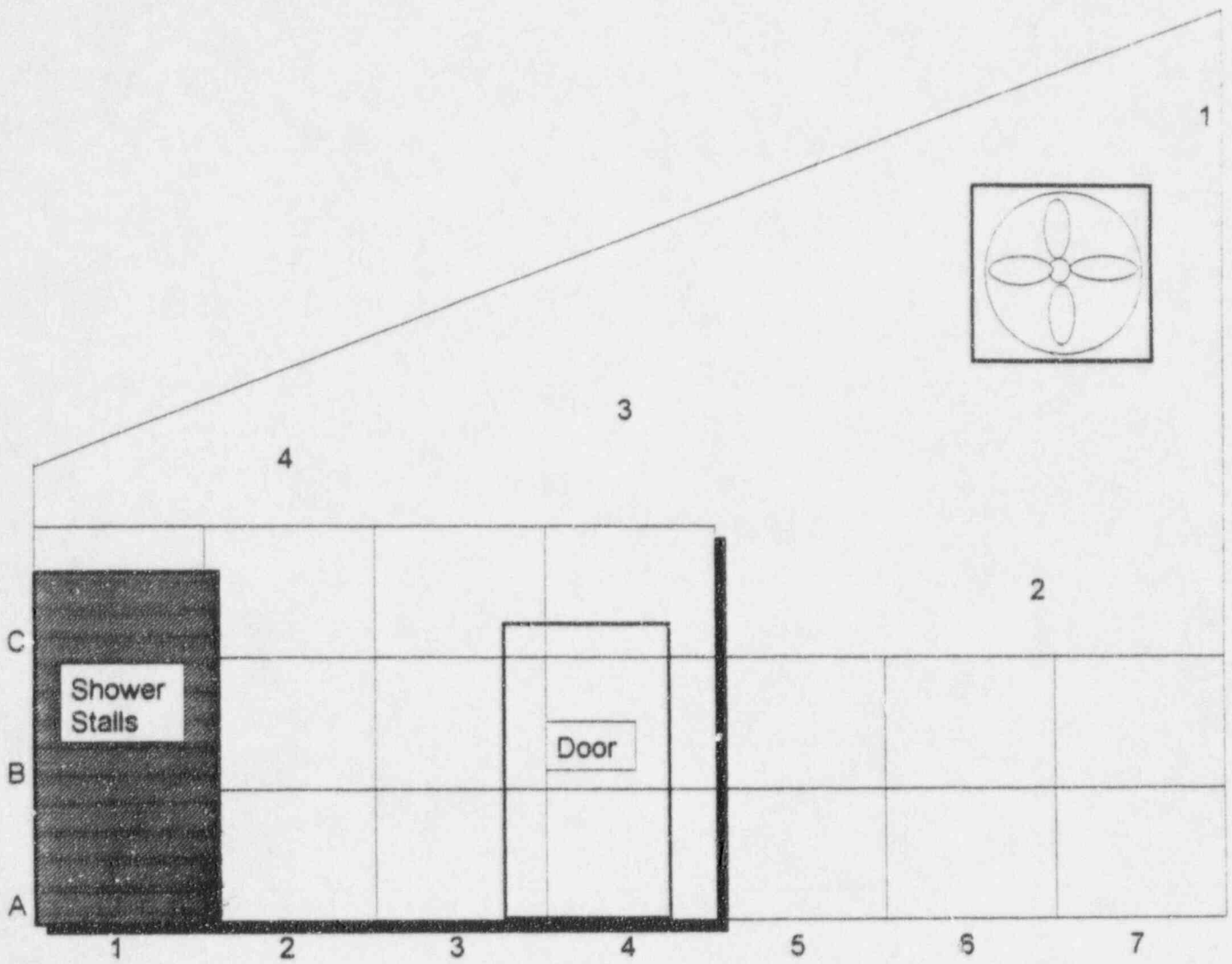
Table A-1a
Building 4 Room 1
North Wall - Affected Area
Survey Number - 022097040101

Survey Point	Raw Counts Beta/Gamma cpm/100 cm ²	Raw Counts Alpha cpm/100 cm ²	Background Beta/Gamma cpm/100 cm ²	Background Alpha cpm/100 cm ²	Eff. Beta Gamma	Eff. Alpha	Net Activity Beta/Gamma dpm/100 cm ²	Net Activity Alpha dpm/100 cm ²	Instrument Used	Gamma Bkgd	Gamma Reading	Instrument Used
A1	269	4	200	3	23 %	16 %	300.00	6.25	Model 2224 SN 129450	15	20	Model 19 SN 76228
A2	242	2	200	3	23 %	16 %	182.61	-6.25	Model 2224 SN 129450	15	18	Model 19 SN 76228
A3	273	4	200	3	23 %	16 %	317.39	6.25	Model 2224 SN 129450	15	18	Model 19 SN 76228
A4	243	4	200	3	23 %	16 %	186.96	6.25	Model 2224 SN 129450	15	16	Model 19 SN 76228
A5	226	5	200	3	23 %	16 %	113.04	12.50	Model 2224 SN 129450	15	16	Model 19 SN 76228
A6	200	0	200	3	23 %	16 %	0.00	-13.75	Model 2224 SN 129450	15	16	Model 19 SN 76228
A7	222	1	200	3	23 %	16 %	95.65	-12.50	Model 2224 SN 129450	15	16	Model 19 SN 76228
B1	203	6	200	3	23 %	16 %	13.04	18.75	Model 2224 SN 129450	15	15	Model 19 SN 76228
B2	199	1	200	3	23 %	16 %	-4.35	-12.50	Model 2224 SN 129450	15	15	Model 19 SN 76228
B3	215	3	200	3	23 %	16 %	65.22	0.00	Model 2224 SN 129450	15	16	Model 19 SN 76228
B4	231	8	200	3	23 %	16 %	134.78	31.25	Model 2224 SN 129450	15	16	Model 19 SN 76228
B5	251	8	200	3	23 %	16 %	221.74	31.25	Model 2224 SN 129450	15	18	Model 19 SN 76228
B6	270	2	200	3	23 %	16 %	304.35	-6.25	Model 2224 SN 129450	15	15	Model 19 SN 76228
B7	283	6	200	3	23 %	16 %	360.87	18.75	Model 2224 SN 129450	15	15	Model 19 SN 76228

Table A-1u
 Building 4 Room 1
 North Wall - Unaffected Area
 Survey Number - 91896040117

Survey Point	Raw Counts Beta/Gamma cpm/100 cm ²	Raw Counts Alpha cpm/100 cm ²	Background Beta/Gamma cpm/100 cm ²	Background Alpha cpm/100 cm ²	Eff. Beta Gamma	Eff. Alpha	Net Activity Beta/Gamma dpm/100 cm ²	Net Activity Alpha dpm/100 cm ²	Instrument Used	Gamma Bkgd	Gamma Reading	Instrument Used
1	283	1	202	2	32 %	12 %	253.13	-8.33	Model 2224 SN 116240	11	11	Model 19 SN 91491
2	270	1	202	2	32 %	12 %	212.50	-8.33	Model 2224 SN 116240	11	11	Model 19 SN 91491
3	258	3	202	2	32 %	12 %	175.00	8.33	Model 2224 SN 116240	11	11	Model 19 SN 91491
4	260	1	202	2	32 %	12 %	181.25	-8.33	Model 2224 SN 116240	11	11	Model 19 SN 91491

Figure 4



Building 4 Room 1 - South Wall

Table A-2a
 Building 4 Room 1
 South Wall - Affected Area
 Survey Numbers - 91696040115 & 91696040116

Survey Point	Raw Counts Beta/Gamma cpm/100 cm ²	Raw Counts Alpha cpm/100 cm ²	Background Beta/Gamma cpm/100 cm ²	Background Alpha cpm/100 cm ²	Eff. Beta Gamma	Eff. Alpha	Net Activity Beta/Gamma dpm/100 cm ²	Net Activity Alpha dpm/100 cm ²	Instrument Used	Gamma Bkgd	Gamma Reading	Instrument Used
A2	283	13	226	3	32 %	12 %	178.13	83.33	Model 2224 SN 116240	11	11	Model 19 SN 91491
A3	243	7	226	3	32 %	12 %	53.13	33.33	Model 2224 SN 116240	11	11	Model 19 SN 91491
A4	249	5	226	3	32 %	12 %	71.88	16.67	Model 2224 SN 116240	11	11	Model 19 SN 91491
A5	246	2	167	2	33 %	14 %	239.39	0.00	Model 2224 SN 118241	11	12	Model 19 SN 91491
A6	255	1	167	2	33 %	14 %	266.67	-7.14	Model 2224 SN 118241	11	12	Model 19 SN 91491
A7	307	3	167	2	33 %	14 %	424.24	7.14	Model 2224 SN 118241	11	12	Model 19 SN 91491
B2	256	1	226	3	32 %	12 %	93.75	-16.67	Model 2224 SN 116240	11	11	Model 19 SN 91491
B3	285	3	226	3	32 %	12 %	184.38	0.00	Model 2224 SN 116240	11	11	Model 19 SN 91491
B4	242	1	226	3	32 %	12 %	50.00	-16.67	Model 2224 SN 116240	11	11	Model 19 SN 91491
B5	234	1	167	2	33 %	14 %	203.03	-7.14	Model 2224 SN 118241	11	12	Model 19 SN 91491
B6	282	1	167	2	33 %	14 %	348.48	-7.14	Model 2224 SN 118241	11	12	Model 19 SN 91491
B7	238	2	167	2	33 %	14 %	215.15	0.00	Model 2224 SN 118241	11	12	Model 19 SN 91491
C1	244	2	226	3	32 %	12 %	56.25	-8.33	Model 2224 SN 116240	11	11	Model 19 SN 91491
C2	228	4	226	3	32 %	12 %	6.25	8.33	Model 2224 SN 116240	11	11	Model 19 SN 91491

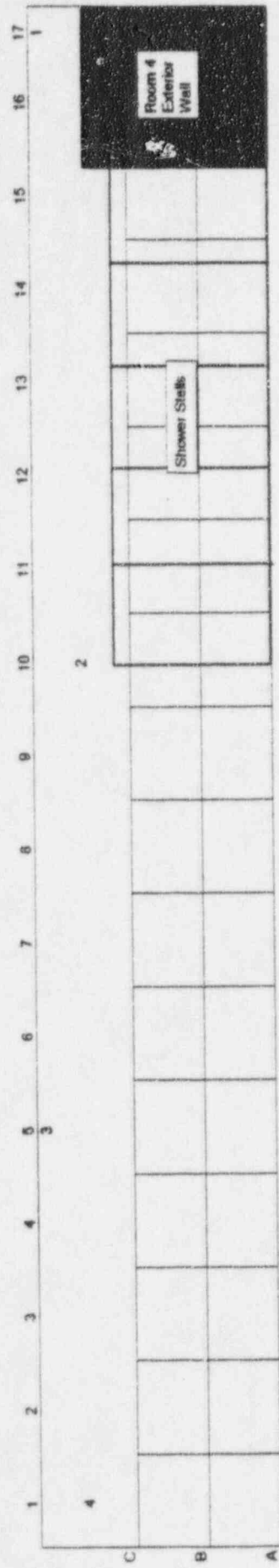
Table A-2a
 Building 4 Room 1
 South Wall - Affected Area
 Survey Numbers - 91696040115 & 91696040116

Survey Point	Raw Counts Beta/Gamma cpm/100 cm ²	Raw Counts Alpha cpm/100 cm ²	Background Beta/Gamma cpm/100 cm ²	Background Alpha cpm/100 cm ²	Eff. Beta Gamma	Eff. Alpha	Net Activity Beta/Gamma dpm/100 cm ²	Net Activity Alpha dpm/100 cm ²	Instrument Used	Gamma Bkgd	Gamma Reading	Instrument Used
C3	208	5	226	3	32 %	12 %	-56.25	16.67	Model 2224 SN 116240	11	11	Model 19 SN 91491
C4	261	0	226	3	32 %	12 %	109.38	-25.00	Model 2224 SN 116240	11	11	Model 19 SN 91491

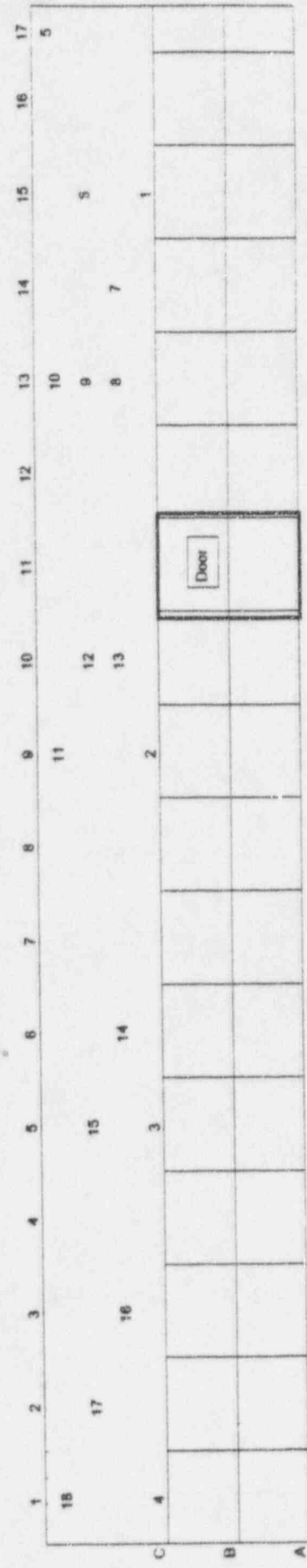
Table A-2u
 Building 4 Room 1
 South Wall - Unaffected Area
 Survey Number - 91896040117

Survey Point	Raw Counts Beta/Gamma cpm/100 cm ²	Raw Counts Alpha cpm/100 cm ²	Background Beta/Gamma cpm/100 cm ²	Background Alpha cpm/100 cm ²	Eff. Beta Gamma	Eff. Alpha	Net Activity Beta/Gamma dpm/100 cm ²	Net Activity Alpha dpm/100 cm ²	Instrument Used	Gamma Bkgd	Gamma Reading	Instrument Used
1	125	0	202	2	32 %	12 %	-240.63	-16.67	Model 2224 SN 116240	11	11	Model 19 SN 91491
2	212	0	202	2	32 %	12 %	31.25	-16.67	Model 2224 SN 116240	11	11	Model 19 SN 91491
3	218	0	202	2	32 %	12 %	50.00	-16.67	Model 2224 SN 116240	11	11	Model 19 SN 91491
4	183	1	202	2	32 %	12 %	-59.38	-8.33	Model 2224 SN 116240	11	11	Model 19 SN 91491
5	164	2	202	2	32 %	12 %	-118.75	0.00	Model 2224 SN 116240	11	11	Model 19 SN 91491

Figure 5



Building 4 Room 1 - East Interior Wall



Building 4 Room 1 - West Interior Wall



Table A-3a
Building 4 Room 1
East Wall - Affected Area
Survey Number - 91796040116

Survey Point	Raw Counts Beta/Gamma cpm/100 cm ²	Raw Counts Alpha cpm/100 cm ²	Background Beta/Gamma cpm/100 cm ²	Background Alpha cpm/100 cm ²	Eff. Beta Gamma	Eff. Alpha	Net Activity Beta/Gamma dpm/100 cm ²	Net Activity Alpha dpm/100 cm ²	Instrument Used	Gamma Bkgd	Gamma Reading	Instrument Used
A1	189	0	226	3	32 %	12 %	-115.63	-25.00	Model 2224 SN 116240	11	11	Model 19 SN 91491
A2	183	1	226	3	32 %	12 %	-134.38	-16.67	Model 2224 SN 116240	11	11	Model 19 SN 91491
A3	205	0	226	3	32 %	12 %	-65.63	-25.00	Model 2224 SN 116240	11	11	Model 19 SN 91491
A4	194	0	226	3	32 %	12 %	-100.00	-25.00	Model 2224 SN 116240	11	11	Model 19 SN 91491
A5	196	1	226	3	32 %	12 %	-93.75	-16.67	Model 2224 SN 116240	11	11	Model 19 SN91491
A6	208	0	226	3	32 %	12 %	-56.25	-25.00	Model 2224 SN 116240	11	11	Model 19 SN91491
A7	242	5	226	3	32 %	12 %	50.00	16.67	Model 2224 SN 116240	11	11	Model 19 SN91491
A8	211	8	226	3	32 %	12 %	-46.88	41.67	Model 2224 SN 116240	11	11	Model 19 SN91491
A9	308	8	226	3	32 %	12 %	256.25	41.67	Model 2224 SN 116240	11	11	Model 19 SN 91491
A10	210	3	200	3	23 %	16 %	43.48	0	Model 2224 SN 129450	15	15	Model 19 SN 76228
A11	211	3	200	3	23 %	16 %	47.83	9	Model 2224 SN 129450	15	15	Model 19 SN 76228
A12	206	5	240	4	23 %	16 %	-147.83	7.14	Model 2224 SN 116257	8	8	Model 19 SN 91491
A13	253	6	240	4	23 %	16 %	56.52	14.29	Model 2224 SN 116257	8	10	Model 19 SN 91491
A14	210	8	240	4	23 %	16 %	-130.43	28.57	Model 2224 SN 116257	8	8	Model 19 SN 91491
A16	282	3	167	2	52 %	14 %	348.48	7.14	Model 2224 SN 118241	11	12	Model 19 SN 91491

Table A-3a
 Building 4 Room 1
 East Wall - Affected Area
 Survey Number - 91796040116

Survey Point	Raw Counts Beta/Gamma cpm/100 cm ²	Raw Counts Alpha cpm/100 cm ²	Background Beta/Gamma cpm/100 cm ²	Background Alpha cpm/100 cm ²	Eff. Beta Gamma	Eff. Alpha	Net Activity Beta/Gamma dpm/100 cm ²	Net Activity Alpha dpm/100 cm ²	Instrument Used	Gamma Bkgd	Gamma Reading	Instrument Used
A17	251	0	167	2	52 %	14 %	254.55	7.14	Model 2224 SN 118241	11	12	Model 19 SN 91491
B1	174	2	226	3	32 %	12 %	-162.50	-8.33	Model 2224 SN 116240	11	11	Model 19 SN 91491
B2	176	1	226	3	32 %	12 %	-156.25	-16.67	Model 2224 SN 116240	11	11	Model 19 SN 91491
B3	211	0	226	3	32 %	12 %	-46.88	-25.00	Model 2224 SN 116240	11	11	Model 19 SN 91491
B4	168	1	226	3	32 %	12 %	-181.25	-16.67	Model 2224 SN 116240	11	11	Model 19 SN 91491
B5	193	0	226	3	32 %	12 %	-103.13	-25.00	Model 2224 SN 116240	11	11	Model 19 SN 91491
B6	194	2	226	3	32 %	12 %	-100.00	-8.33	Model 2224 SN 116240	11	11	Model 19 SN 91491
B7	229	0	226	3	32 %	12 %	9.38	-25.00	Model 2224 SN 116240	11	11	Model 19 SN 91491
B8	210	1	226	3	32 %	12 %	-50.00	-16.67	Model 2224 SN 116240	11	11	Model 19 SN 91491
B9	217	1	226	3	32 %	12 %	-28.13	-16.67	Model 2224 SN 116240	11	11	Model 19 SN 91491
B16	253	3	167	2	52 %	14 %	260.61	7.14	Model 2224 SN 118241	11	12	Model 19 SN 91491
B17	260	3	167	2	52 %	14 %	281.82	7.14	Model 2224 SN 118241	11	12	Model 19 SN 91491

Table A-3u
 Building 4 Room 1
 East Wall - Unaffected Area
 Survey Number - 91896040117

Survey Point	Raw Counts Beta/Gamma cpm/100 cm ²	Raw Counts Alpha cpm/100 cm ²	Background Beta/Gamma cpm/100 cm ²	Background Alpha cpm/100 cm ²	Eff. Beta Gamma	Eff. Alpha	Net Activity Beta/Gamma dpm/100 cm ²	Net Activity Alpha dpm/100 cm ²	Instrument Used	Gamma Bkgd	Gamma Reading	Instrument Used
1	278	1	202	2	32 %	12 %	237.50	-8.33	Model 2224 SN 116240	11	11	Model 19 SN 91491
2	229	2	202	2	32 %	12 %	84.38	0.00	Model 2224 SN 116240	11	11	Model 19 SN 91491
3	265	1	202	2	32 %	12 %	196.88	-8.33	Model 2224 SN 116240	11	11	Model 19 SN 91491
4	262	0	202	2	32 %	12 %	187.50	-16.67	Model 2224 SN 116240	11	11	Model 19 SN 91491

Table A-4a
Building 4 Room 1
West Wall - Affected Area
Survey Number - 91796040116

Survey Point	Raw Counts Beta/Gamma cpm/100 cm ²	Raw Counts Alpha cpm/100 cm ²	Background Beta/Gamma cpm/100 cm ²	Background Alpha cpm/100 cm ²	Eff. Beta Gamma	Eff. Alpha	Net Activity Beta/Gamma dpm/100 cm ²	Net Activity Alpha dpm/100 cm ²	Instrument Used	Gamma Bkgd	Gamma Reading	Instrument Used
A1	266	3	226	3	32 %	12 %	125.00	0.00	Model 2224 SN 16240	11	11	Model 19 SN 91491
A2	246	4	226	3	32 %	12 %	62.50	8.33	Model 2224 SN 16240	11	11	Model 19 SN 91491
A3	218	0	226	3	32 %	12 %	-25.00	-25.00	Model 2224 SN 16240	11	11	Model 19 SN 91491
A4	281	4	226	3	32 %	12 %	171.88	8.33	Model 2224 SN 16240	11	11	Model 19 SN 91491
A5	231	6	226	3	32 %	12 %	15.63	25.00	Model 2224 SN 16240	11	11	Model 19 SN 91491
A6	264	3	226	3	32 %	12 %	118.75	0.00	Model 2224 SN 16240	11	11	Model 19 SN 91491
A7	293	2	226	3	32 %	12 %	209.38	-8.33	Model 2224 SN 16240	11	11	Model 19 SN 91491
A8	245	3	226	3	32 %	12 %	59.38	0.00	Model 2224 SN 16240	11	11	Model 19 SN 91491
A9	273	3	226	3	32 %	12 %	146.88	0.00	Model 2224 SN 16240	11	11	Model 19 SN 91491
A10	249	3	226	3	32 %	12 %	71.88	0.00	Model 2224 SN 16240	11	11	Model 19 SN 91491
A11	171	2	226	3	32 %	12 %	-171.88	-8.33	Model 2224 SN 16240	11	11	Model 19 SN 91491
A12	286	3	226	3	32 %	12 %	187.50	0.00	Model 2224 SN 16240	11	11	Model 19 SN 91491
A13	273	2	226	3	32 %	12 %	146.88	-8.33	Model 2224 SN 16240	11	11	Model 19 SN 91491
A14	246	3	226	3	32 %	12 %	62.50	0.00	Model 2224 SN 16240	11	11	Model 19 SN 91491
A15	389	2	226	3	32 %	12 %	509.38	-8.33	Model 2224 SN 16240	11	11	Model 19 SN 91491

Table A-4a
Building 4 Room 1
West Wall - Affected Area
Survey Number - 91796040116

Survey Point	Raw Counts Beta/Gamma cpm/100 cm ²	Raw Counts Alpha cpm/100 cm ²	Background Beta/Gamma cpm/100 cm ²	Background Alpha cpm/100 cm ²	Eff. Beta Gamma	Eff. Alpha	Net Activity Beta/Gamma dpm/100 cm ²	Net Activity Alpha dpm/100 cm ²	Instrument Used	Gamma Ekgd	Gamma Reading	Instrument Used
A16	280	4	226	3	32 %	12 %	168.75	-8.33	Model 2224 SN 16240	11	11	Model 19 SN 91491
A17	284	2	226	3	32 %	12 %	181.25	-16.67	Model 2224 SN 16240	11	11	Model 19 SN 91491
B1	254	3	226	3	32 %	12 %	87.50	0.00	Model 2224 SN 16240	11	11	Model 19 SN 91491
B2	227	3	226	3	32 %	12 %	3.13	0.00	Model 2224 SN 16240	11	11	Model 19 SN 91491
B3	255	3	226	3	32 %	12 %	90.63	0.00	Model 2224 SN 16240	11	11	Model 19 SN 91491
B4	274	2	226	3	32 %	12 %	150.00	-8.33	Model 2224 SN 16240	11	11	Model 19 SN 91491
B5	291	5	226	3	32 %	12 %	203.13	16.67	Model 2224 SN 16240	11	11	Model 19 SN 91491
B6	340	5	226	3	32 %	12 %	356.25	16.67	Model 2224 SN 16240	11	11	Model 19 SN 91491
B7	269	1	226	3	32 %	12 %	134.38	-16.67	Model 2224 SN 16240	11	11	Model 19 SN 91491
B8	278	2	226	3	32 %	12 %	162.50	-8.33	Model 2224 SN 16240	11	11	Model 19 SN 91491
B9	237	0	226	3	32 %	12 %	34.38	-25.00	Model 2224 SN 16240	11	11	Model 19 SN 91491
B10	231	5	226	3	32 %	12 %	15.63	16.67	Model 2224 SN 16240	11	11	Model 19 SN 91491
B11	150	1	226	3	32 %	12 %	-237.50	-16.67	Model 2224 SN 16240	11	11	Model 19 SN 91491
B12	260	3	226	3	32 %	12 %	106.25	0.00	Model 2224 SN 16240	11	11	Model 19 SN 91491
B13	249	1	226	3	32 %	12 %	71.88	-16.67	Model 2224 SN 16240	11	11	Model 19 SN 91491

Table A-4a
 Building 4 Room 1
 West Wall - Affected Area
 Survey Number - 91796040116

Survey Point	Raw Counts Beta/Gamma cpm/100 cm ²	Raw Counts Alpha cpm/100 cm ²	Background Beta/Gamma cpm/100 cm ²	Background Alpha cpm/100 cm ²	Eff. Beta Gamma	Eff. Alpha	Net Activity Beta/Gamma dpm/100 cm ²	Net Activity Alpha dpm/100 cm ²	Instrument Used	Gamma Bkgd	Gamma Reading	Instrument Used
B14	263	2	226	3	32 %	12 %	115.63	-8.33	Model 2224 SN 16240	11	11	Model 19 SN 91491
B15	296	2	226	3	32 %	12 %	218.75	-8.33	Model 2224 SN 16240	11	11	Model 19 SN 91491
B16	282	2	226	3	32 %	12 %	175.00	-8.33	Model 2224 SN 16240	11	11	Model 19 SN 91491
B17	283	4	226	3	32 %	12 %	178.13	8.33	Model 2224 SN 16240	11	11	Model 19 SN 91491

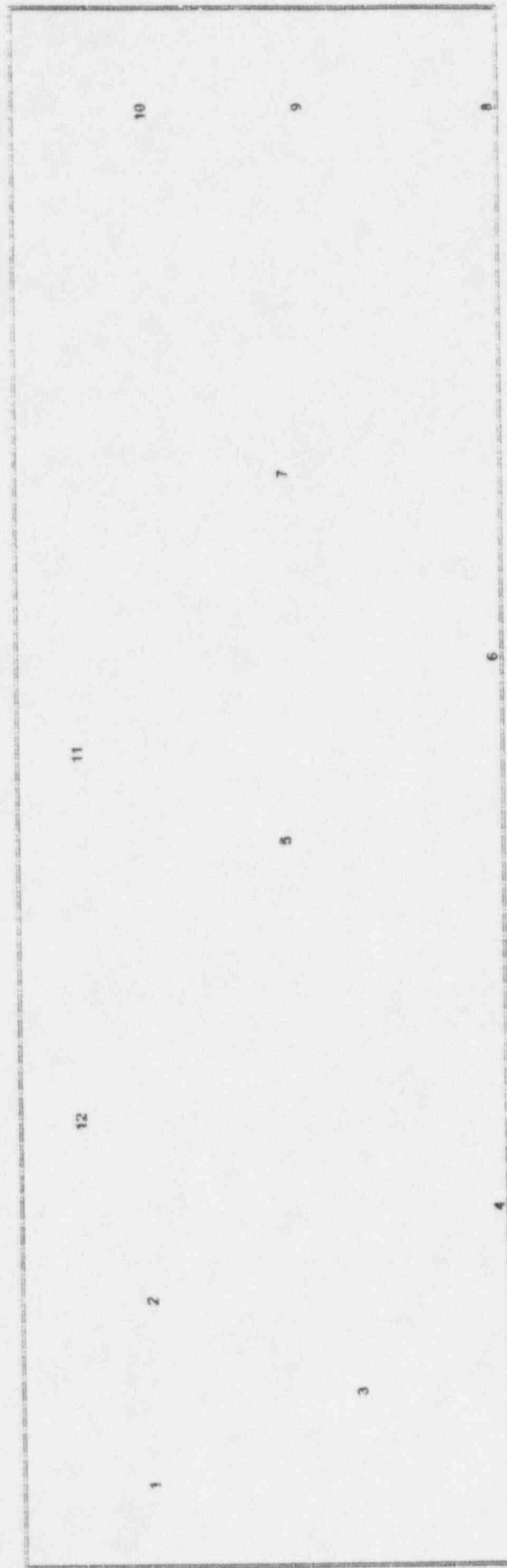
Table A-4u
Building 4 Room 1
West Wall - Unaffected Area
Survey Number - 91896040117

Survey Point	Raw Counts Beta/Gamma cpm/100 cm ²	Raw Counts Alpha cpm/100 cm ²	Background Beta/Gamma cpm/100 cm ²	Background Alpha cpm/100 cm ²	Est. Beta Gammas	Est. Alpha	Net Activity Beta/Gamma dpm/100 cm ²	Net Activity Alpha dpm/100 cm ²	Instrument Used	Gamma Bkgd	Gamma Reading	Instrument Used
1	230	4	202	2	32 %	12 %	87.50	16.67	Model 2224 SN 116240	11	11	Model 19 SN 91491
2	220	1	202	2	32 %	12 %	56.25	-8.33	Model 2224 SN 116240	11	11	Model 19 SN 91491
3	246	4	202	2	32 %	12 %	137.50	16.67	Model 2224 SN 116240	11	11	Model 19 SN 91491
4	223	0	202	2	32 %	12 %	65.63	-16.67	Model 2224 SN 116240	11	11	Model 19 SN 91491
5	253	1	202	2	32 %	12 %	159.38	-8.33	Model 2224 SN 116240	11	11	Model 19 SN 91491
6	217	1	202	2	32 %	12 %	46.88	-8.33	Model 2224 SN 116240	11	11	Model 19 SN 91491
7	201	1	202	2	32 %	12 %	-3.13	-8.33	Model 2224 SN 116240	11	11	Model 19 SN 91491
8	215	1	202	2	32 %	12 %	40.63	-8.33	Model 2224 SN 116240	11	11	Model 19 SN 91491
9	176	4	202	2	32 %	12 %	-81.25	16.67	Model 2224 SN 116240	11	11	Model 19 SN 91491
10	190	1	202	2	32 %	12 %	-37.50	-8.33	Model 2224 SN 116240	11	11	Model 19 SN 91491
11	171	1	202	2	32 %	12 %	-96.88	-8.33	Model 2224 SN 116240	11	11	Model 19 SN 91491
12	184	0	202	2	32 %	12 %	-56.25	-16.67	Model 2224 SN 116240	11	11	Model 19 SN 91491
13	177	1	202	2	32 %	12 %	-78.13	-8.33	Model 2224 SN 116240	11	11	Model 19 SN 91491
14	189	0	202	2	32 %	12 %	-40.63	-16.67	Model 2224 SN 116240	11	11	Model 19 SN 91491
15	238	1	202	2	32 %	12 %	112.50	-8.33	Model 2224 SN 116240	11	11	Model 19 SN 91491

Table A-4u
 Building 4 Room 1
 West Wall - Unaffected Area
 Survey Number - 91896040117

Survey Point	Raw Counts Beta/Gamma cpm/100 cm ²	Raw Counts Alpha cpm/100 cm ²	Background Beta/Gamma cpm/100 cm ²	Background Alpha cpm/100 cm ²	Eff. Beta Gamma	Eff. Alpha	Net Activity Beta/Gamma dpm/100 cm ²	Net Activity Alpha dpm/100 cm ²	Instrument Used	Gamma Bkgd	Gamma Reading	Instrument Used
16	205	0	202	2	32 %	12 %	9.38	-16.67	Model 2224 SN 116240	11	11	Model 19 SN 91491
17	194	4	202	2	32 %	12 %	-25.00	16.67	Model 2224 SN 116240	11	11	Model 19 SN 91491
18	206	1	202	2	32 %	12 %	12.50	-8.33	Model 2224 SN 116240	11	11	Model 19 SN 91491

Figure 6



Building 4 Room 1 - Ceiling

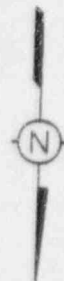
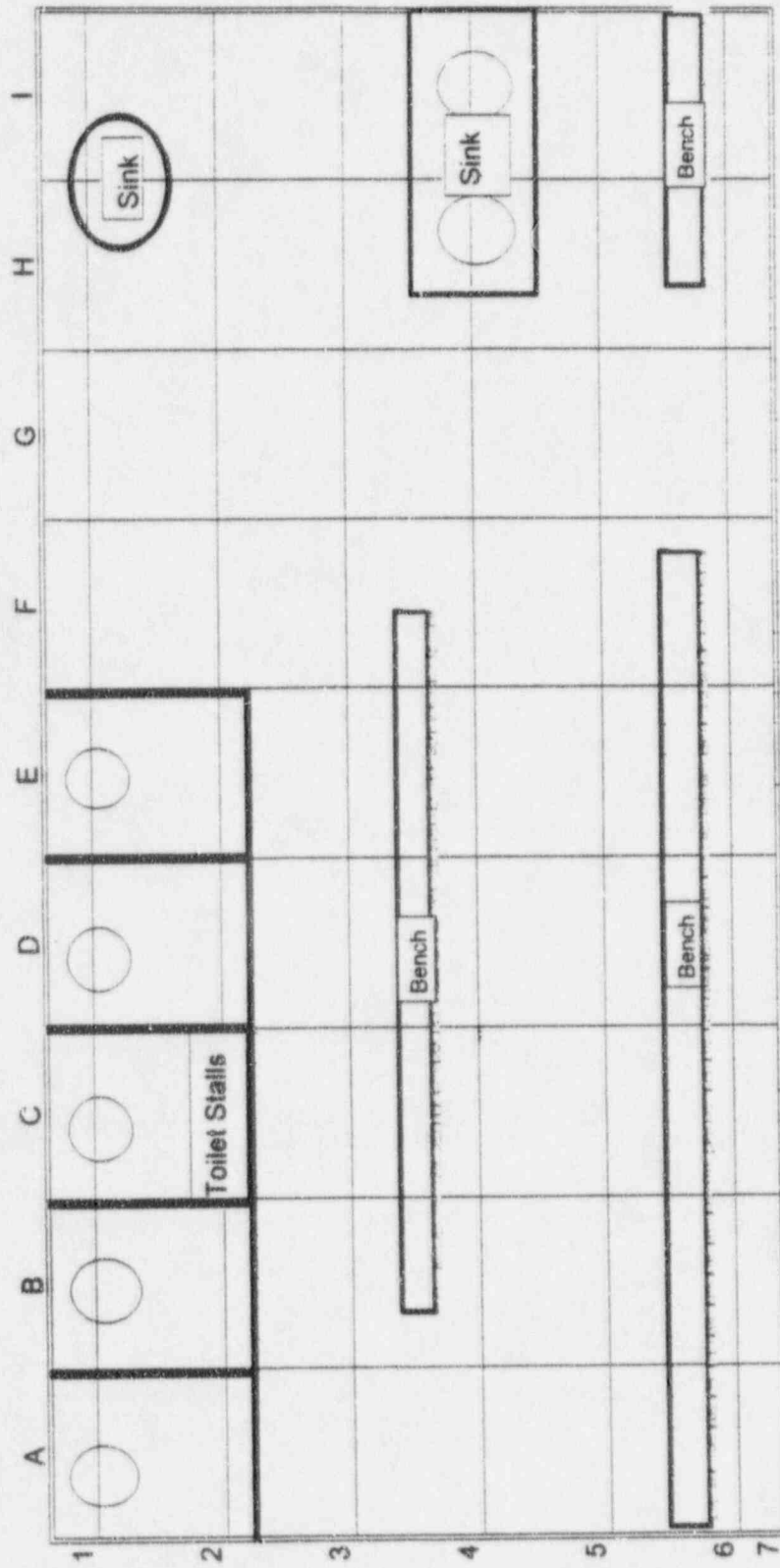


Table A-5u
Building 4 Room 1
Ceiling - Unaffected Area
Survey Number - 91896040117

Survey Point	Raw Counts Beta/Gamma cpm/100 cm ²	Raw Counts Alpha cpm/100 cm ²	Background Beta/Gamma cpm/100 cm ²	Background Alpha cpm/100 cm ²	Eff. Beta Gamma	Eff. Alpha	Net Activity Beta/Gamma dpm/100 cm ²	Net Activity Alpha dpm/100 cm ²	Instrument Used	Gamma Bkgd	Gamma Reading	Instrument Used
1	260	3	202	2	32 %	12 %	-103.13	8.33	Model 2224 SN 116240	11	11	Model 19 SN 91491
2	169	2	202	2	32 %	12 %	-187.50	0.00	Model 2224 SN 116240	11	11	Model 19 SN 91491
3	142	0	202	2	32 %	12 %	-178.13	-16.67	Model 2224 SN 116240	11	11	Model 19 SN 91491
4	145	1	202	2	32 %	12 %	-131.25	-8.33	Model 2224 SN 116240	11	11	Model 19 SN 91491
5	160	0	202	2	32 %	12 %	-163.75	-16.67	Model 2224 SN 116240	11	11	Model 19 SN 91491
6	148	2	202	2	32 %	12 %	-171.88	0.00	Model 2224 SN 116240	11	11	Model 19 SN 91491
7	147	0	202	2	32 %	12 %	-100.00	-16.67	Model 2224 SN 116240	11	11	Model 19 SN 91491
8	170	0	202	2	32 %	12 %	-159.38	-16.67	Model 2224 SN 116240	11	11	Model 19 SN 91491
9	151	1	202	2	32 %	12 %	-187.50	-8.33	Model 2224 SN 116240	11	11	Model 19 SN 91491
10	142	0	202	2	32 %	12 %	-187.50	-16.67	Model 2224 SN 116240	11	11	Model 19 SN 91491

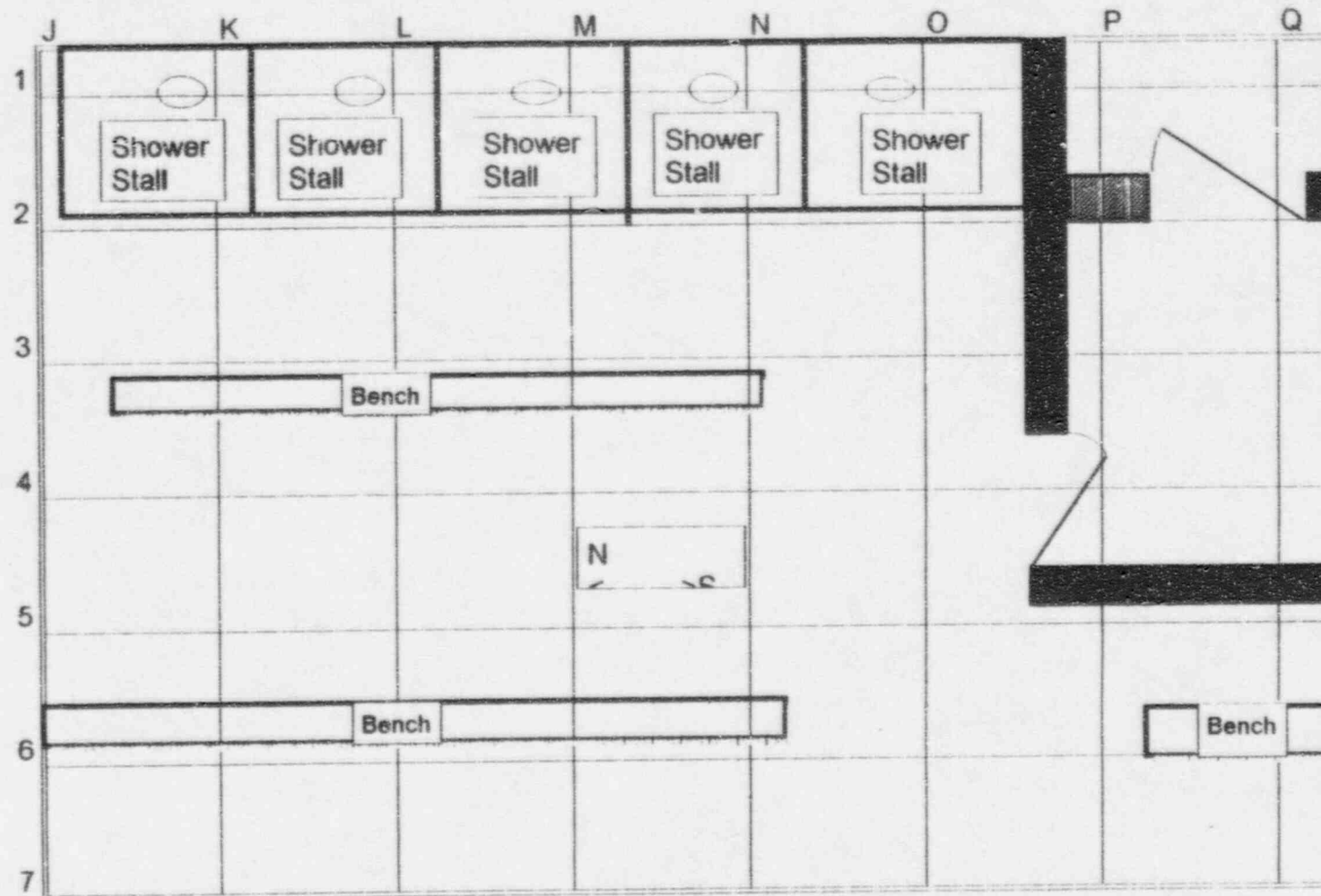
Figure 7



Building 4 Room 1 - Floor



Figure 8



Building 4 Room 1 - Floor

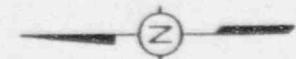


Table A-6a
 Building 4 Room 1
 Floor - Affected Area
 Survey Number - 90596040103 & 90996040104 & 91096040105 & 091396040112 & 022097040102

Survey Point	Raw Counts Beta/Gamma cpm/100 cm ²	Raw Counts Alpha cpm/100 cm ²	Background Beta/Gamma cpm/100 cm ²	Background Alpha cpm/100 cm ²	Eff. Beta Gamma	Eff. Alpha	Net Activity Beta/Gamma dpm/100 cm ²	Net Activity Alpha dpm/100 cm ²	Instrument Used	Gamma Bkgd	Gamma Reading	Instrument Used
A1	281	18	214	1	30 %	16 %	223.33	106.25	Model 2224 SN 132150	10	10	Model 19 SN 91491
A2	418	34	264	1	27 %	17 %	570.37	194.12	Model 2224 SN 132142	10	10	Model 19 SN 91491
A3	299	10	264	1	27 %	17 %	129.63	52.94	Model 2224 SN 132142	10	10	Model 19 SN 91491
A4	300	7	264	1	27 %	17 %	133.33	35.29	Model 2224 SN 132142	10	10	Model 19 SN 91491
A5	241	6	264	1	27 %	17 %	-85.19	29.41	Model 2224 SN 132142	10	10	Model 19 SN 91491
A6	265	9	264	1	27 %	17 %	3.70	47.06	Model 2224 SN 132142	10	10	Model 19 SN 91491
A7	308	5	264	1	27 %	17 %	162.96	23.53	Model 2224 SN 132142	10	10	Model 19 SN 91491
B1	227	11	214	1	30 %	16 %	43.33	62.50	Model 2224 SN 132150	10	10	Model 19 SN 91491
B2	328	21	264	1	27 %	17 %	237.04	117.65	Model 2224 SN 132142	10	10	Model 19 SN 91491
B3	282	3	264	1	27 %	17 %	66.67	11.76	Model 2224 SN 132142	10	10	Model 19 SN 91491
B4	253	9	264	1	27 %	17 %	-40.74	47.06	Model 2224 SN 132142	10	10	Model 19 SN 91491
B5	353	23	264	1	27 %	17 %	329.63	129.41	Model 2224 SN 132142	10	10	Model 19 SN 91491
B6	360	14	264	1	27 %	17 %	355.56	76.47	Model 2224 SN 132142	10	10	Model 19 SN 91491
B7	214.2	20.6	188	3	32 %	15 %	119.09	92.00	Model 2224 SN 132142	10	10	Model 19 SN 91491
C1	306	26	214	1	30 %	16 %	306.67	156.25	Model 2224 SN 132150	10	10	Model 19 SN 91491

Table A-6a
 Building 4 Room 1
 Floor - Affected Area
 Survey Number - 90596040103 & 90996040104 & 91096040105 & 091396040112 & 022097040102

Survey Point	Raw Counts Beta/Gamma cpm/100 cm ²	Raw Counts Alpha cpm/100 cm ²	Background Beta/Gamma cpm/100 cm ²	Background Alpha cpm/100 cm ²	Eff. Beta Gamma	Eff. Alpha	Net Activity Beta/Gamma dpm/100 cm ²	Net Activity Alpha dpm/100 cm ²	Instrument Used	Gamma Bkgd	Gamma Reading	Instrument Used
C2	385	34	264	1	27 %	17 %	448.15	194.12	Model 2224 SN 132142	10	10	Model 19 SN 91491
C3	299	5	264	1	27 %	17 %	129.63	23.53	Model 2224 SN 132142	10	10	Model 19 SN 91491
C4	290	5	264	1	27 %	17 %	96.30	23.53	Model 2224 SN 132142	10	10	Model 19 SN 91491
C5	276	17	264	1	27 %	17 %	44.44	94.12	Model 2224 SN 132142	10	10	Model 19 SN 91491
C6	299	11	264	1	27 %	17 %	129.63	58.82	Model 2224 SN 132142	10	10	Model 19 SN 91491
C7	268	13.6	188	3	22 %	15 %	363.64	70.67	Model 2224 SN 132142	10	10	Model 19 SN 91491
D1	194	11	214	1	30 %	16 %	-66.67	62.50	Model 2224 SN 132150	10	10	Model 19 SN 91491
D2	360	69	264	1	27 %	17 %	355.96	223.53	Model 2224 SN 132142	10	10	Model 19 SN 91491
D3	312	16	264	1	27 %	17 %	177.78	88.24	Model 2224 SN 132142	10	10	Model 19 SN 91491
D4	252	7	264	1	27 %	17 %	-44.44	35.29	Model 2224 SN 132142	10	10	Model 19 SN 91491
D5	259	10	264	1	27 %	17 %	-18.52	52.94	Model 2224 SN 132142	10	10	Model 19 SN 91491
D6	304	11	264	1	27 %	17 %	148.15	58.82	Model 2224 SN 132142	10	10	Model 19 SN 91491
D7	309	17	264	1	27 %	17 %	166.67	94.12	Model 2224 SN 132142	10	10	Model 19 SN 91491
E1	196	11	214	1	30 %	16 %	-60.00	62.50	Model 2224 SN 132150	10	10	Model 19 SN 91491
E2	321	28	264	1	27 %	17 %	211.11	158.82	Model 2224 SN 132142	10	10	Model 19 SN 91491

Table A-6a
 Building 4 Room 1
 Floor - Affected Area
 Survey Number - 90596040103 & 90996040104 & 91096040105 & 091396040112 & 022097040102

Survey Point	Raw Counts Beta/Gamma cpm/100 cm ²	Raw Counts Alpha cpm/100 cm ²	Background Beta/Gamma cpm/100 cm ²	Background Alpha cpm/100 cm ²	Eff. Beta Gamma	Eff. Alpha	Net Activity Beta/Gamma dpm/100 cm ²	Net Activity Alpha dpm/100 cm ²	Instrument Used	Gamma Bkgd	Gamma Reading	Instrument Used
E3	290	7	264	1	27 %	17 %	96.30	35.29	Model 2224 SN 132142	10	10	Model 19 SN 91491
E4	295	10	264	1	27 %	17 %	114.81	52.94	Model 2224 SN 132142	10	10	Model 19 SN 91491
E5	269	12	264	1	27 %	17 %	18.52	64.71	Model 2224 SN 132142	10	10	Model 19 SN 91491
E6	332	15	264	1	27 %	17 %	251.85	82.35	Model 2224 SN 132142	10	10	Model 19 SN 91491
E7	342	32	264	1	27 %	17 %	288.89	182.33	Model 2224 SN 132142	10	10	Model 19 SN 91491
F1	148	6	214	1	30 %	16 %	-220.00	31.25	Model 2224 SN 132150	10	10	Model 19 SN 91491
F2	347	23	264	1	27 %	17 %	307.41	129.41	Model 2224 SN 132142	10	10	Model 19 SN 91491
F3	300	9	264	1	27 %	17 %	133.33	47.06	Model 2224 SN 132142	10	10	Model 19 SN 91491
F4	301	14	264	1	27 %	17 %	157.04	76.47	Model 2224 SN 132142	10	10	Model 19 SN 91491
F5	246	19	264	1	27 %	17 %	-66.67	105.88	Model 2224 SN 132142	10	10	Model 19 SN 91491
F6	309	7	264	1	27 %	17 %	166.67	35.29	Model 2224 SN 132142	10	10	Model 19 SN 91491
F7	313	13	264	1	27 %	17 %	181.48	70.59	Model 2224 SN 132142	10	10	Model 19 SN 91491
G1	320	7	264	1	27 %	17 %	207.41	35.29	Model 2224 SN 132142	10	10	Model 19 SN 91491
G2	270	16	264	1	27 %	17 %	22.22	28.24	Model 2224 SN 132142	10	10	Model 19 SN 91491
G3	259	4	264	1	27 %	17 %	-18.52	17.65	Model 2224 SN 132142	10	10	Model 19 SN 91491

Table A-6a
 Building 4 Room 1
 Floor - Affected Area
 Survey Number - 90596040103 & 90996040104 & 91096040105 & 091396040112 & 022097040102

Survey Point	Raw Counts Beta/Gamma cpm/100 cm ²	Raw Counts Alpha cpm/100 cm ²	Background Beta/Gamma cpm/100 cm ²	Background Alpha cpm/100 cm ²	Eff. Beta Gamma	Eff. Alpha	Net Activity Beta/Gamma dpm/100 cm ²	Net Activity Alpha dpm/100 cm ²	Instrument Used	Gamma Pkgd	Gamma Reading	Instrument Used
G4	245	6	264	1	27 %	17 %	-70.37	29.41	Model 2224 SN 132142	10	10	Model 19 SN 91491
G5	244	4	264	1	27 %	17 %	-74.07	17.65	Model 2224 SN 132142	10	10	Model 19 SN 91491
G6	254	5	264	1	27 %	17 %	-37.04	25.53	Model 2224 SN 132142	10	10	Model 19 SN 91491
G7	221	13	264	1	27 %	17 %	-159.26	70.59	Model 2224 SN 132142	10	10	Model 19 SN 91491
H1	405	25	264	1	27 %	17 %	522.22	141.18	Model 2224 SN 132142	10	10	Model 19 SN 91491
H2	273	10	264	1	27 %	17 %	33.33	52.94	Model 2224 SN 132142	10	10	Model 19 SN 91491
H3	200	5	264	1	27 %	17 %	-237.04	23.53	Model 2224 SN 132142	10	10	Model 19 SN 91491
H4	163	4	264	1	27 %	17 %	-374.07	17.65	Model 2224 SN 132142	10	10	Model 19 SN 91491
H5	329	9	264	1	27 %	17 %	240.74	47.06	Model 2224 SN 132142	10	10	Model 19 SN 91491
H6	204	9	264	1	27 %	17 %	-222.22	47.06	Model 2224 SN 132142	10	10	Model 19 SN 91491
H7	244	14	264	1	27 %	17 %	-74.07	76.47	Model 2224 SN 132142	10	10	Model 19 SN 91491
I1	414	21	264	1	27 %	17 %	555.56	117.65	Model 2224 SN 132142	10	10	Model 19 SN 91491
I2	420	38	264	1	27 %	17 %	577.78	217.65	Model 2224 SN 132142	10	10	Model 19 SN 91491
I3	224	13	264	1	27 %	17 %	-148.15	70.59	Model 2224 SN 132142	10	10	Model 19 SN 91491
I4	194	9	264	1	27 %	17 %	-259.26	47.06	Model 2224 SN 132142	10	10	Model 19 SN 91491

Table A-6a
 Building 4 Room 1
 Floor - Affected Area
 Survey Number - 90596040101 / 90996040104 & 91096040105 & 091396040112 & 022097040102

Survey Point	Raw Counts Beta/Gamma cpm/100 cm ²	Raw Counts Alpha cpm/100 cm ²	Background Beta/Gamma cpm/100 cm ²	Background Alpha cpm/100 cm ²	Eff. Beta Gamma	Eff. Alpha	Net Activity Beta/Gamma dpm/100 cm ²	Net Activity Alpha dpm/100 cm ²	Instrument Used	Gamma Bkgd	Gamma Reading	Instrument Used
I5	307	7	264	1	27 %	17 %	159.26	35.29	Model 2224 SN 132142	10	10	Model 19 SN 91491
I6	176	6	264	1	27 %	17 %	-325.93	29.41	Model 2224 SN 132142	10	10	Model 19 SN 91491
I7	327	31	264	1	27 %	17 %	233.33	176.47	Model 2224 SN 132142	10	10	Model 19 SN 91491
J1	492	26	264	1	27 %	17 %	844.44	147.06	Model 2224 SN 132142	10	10	Model 19 SN 91491
J2	533	30	264	1	27 %	17 %	996.30	170.59	Model 2224 SN 132142	10	10	Model 19 SN 91491
J3	275	18	264	1	27 %	17 %	40.74	100.00	Model 2224 SN 132142	10	10	Model 19 SN 91491
J4	271	21	264	1	27 %	17 %	25.93	117.65	Model 2224 SN 132142	10	10	Model 19 SN 91491
J5	344	16	264	1	27 %	17 %	296.30	88.24	Model 2224 SN 132142	10	10	Model 19 SN 91491
J6	208	5	264	1	27 %	17 %	-207.41	23.33	Model 2224 SN 132142	10	10	Model 19 SN 91491
J7	282	20	264	1	27 %	17 %	66.67	111.76	Model 2224 SN 132142	10	10	Model 19 SN 91491
K1	200	2	200	3	23 %	16 %	0.00	-6.25	Model 2224 SN 129450	15	15	Model 19 SN 76228
K2	335	10	264	1	27 %	17 %	262.96	52.94	Model 2224 SN 132142	10	10	Model 19 SN 91491
K3	166	11	264	1	27 %	17 %	-362.96	58.82	Model 2224 SN 132142	10	10	Model 19 SN 91491
K4	308	24	264	1	27 %	17 %	162.96	135.29	Model 2224 SN 132142	10	10	Model 19 SN 91491
K5	286	14	264	1	27 %	17 %	81.48	76.47	Model 2224 SN 132142	10	10	Model 19 SN 91491

Table A-6a
 Building 4 Room 1
 Floor - Affected Area
 Survey Number - 90596040103 & 90996040104 & 91096040105 & 091396040112 & 022097040102

Survey Point	Raw Counts Beta/Gamma cpm/100 cm ²	Raw Counts Alpha cpm/100 cm ²	Background Beta/Gamma cpm/100 cm ²	Background Alpha cpm/100 cm ²	Eff. Beta Gamma	Eff. Alpha	Net Activity Beta/Gamma dpm/100 cm ²	Net Activity Alpha dpm/100 cm ²	Instrument Used	Gamma Bkgd	Gamma Reading	Instrument Used
K6	176	4	264	1	27 %	17 %	-325.93	17.65	Model 2224 SN 132142	10	10	Model 19 SN 91491
K7	298	17	264	1	27 %	17 %	125.93	94.12	Model 2224 SN 132142	10	10	Model 19 SN 91491
L1	199	3	200	3	23 %	16 %	-4.35	0.00	Model 2224 SN 129450	15	15	Model 19 SN 76228
L2	480	10	264	1	27 %	17 %	800.00	52.94	Model 2224 SN 132142	10	10	Model 19 SN 91491
L3	404	24	264	1	27 %	17 %	518.82	135.29	Model 2224 SN 132142	10	10	Model 19 SN 91491
L4	432	32	264	1	27 %	17 %	622.22	182.35	Model 2224 SN 132142	10	10	Model 19 SN 91491
L5	272	10	264	1	27 %	17 %	29.63	32.94	Model 2224 SN 132142	10	10	Model 19 SN 91491
L6	320	9	264	1	27 %	17 %	207.41	47.06	Model 2224 SN 132142	10	10	Model 19 SN 91491
L7	409	19	264	1	27 %	17 %	537.04	105.88	Model 2224 SN 132142	10	10	Model 19 SN 91491
M1	231	8	240	4	23 %	14 %	-39.13	28.57	Model 2224 SN 116257	8	8	Model 19 SN 91491
M2	204	10	234	2	30 %	16 %	-100.00	50.00	Model 2224 SN 132150	10	10	Model 19 SN 91491
M3	309	26	234	2	30 %	16 %	250.00	150.00	Model 2224 SN 132150	10	10	Model 19 SN 91491
M4	185	8	234	2	30 %	16 %	-163.33	37.50	Model 2224 SN 132150	10	10	Model 19 SN 91491
M5	243	5	234	2	30 %	16 %	30.00	18.75	Model 2224 SN 132150	10	10	Model 19 SN 91491
M6	251	6	234	2	30 %	16 %	56.67	25.00	Model 2224 SN 132150	10	10	Model 19 SN 91491

Table A-6a
 Building 4 Room 1
 Floor - Affected Area
 Survey Number - 90596040103 & 90996040104 & 91096040105 & 091396040112 & 022097040102

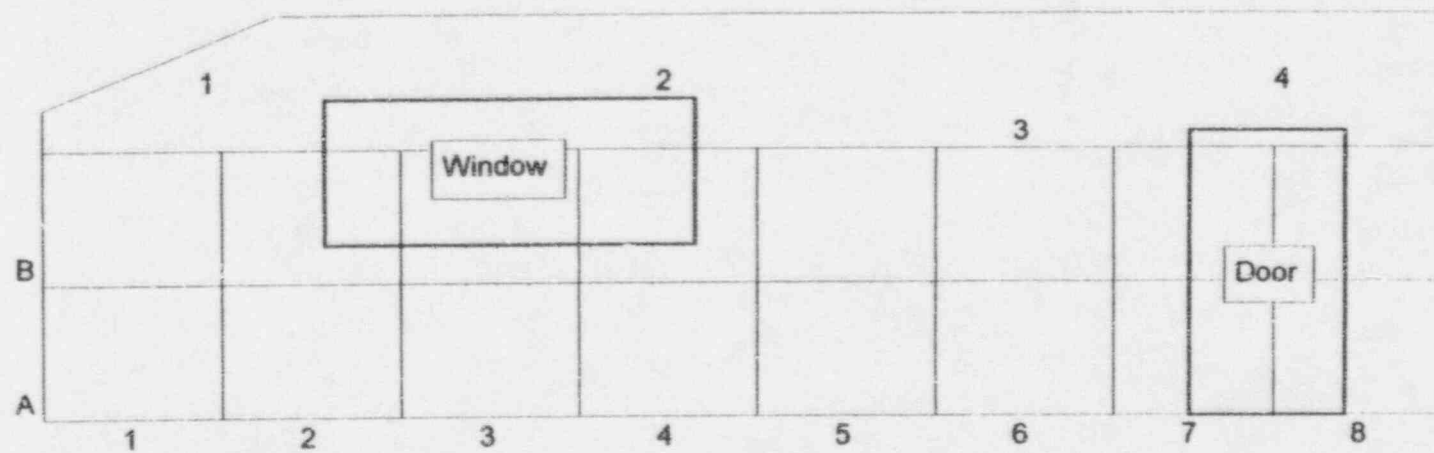
Survey Point	Raw Counts Beta/Gamma cpm/100 cm ²	Raw Counts Alpha cpm/100 cm ²	Background Beta/Gamma cpm/100 cm ²	Background Alpha cpm/100 cm ²	E.T. Beta Gamma	E.T. Alpha	Net Activity Beta/Gamma dpm/100 cm ²	Net Activity Alpha dpm/100 cm ²	Instrument Used	Gamma Bkgd	Gamma Reading	Instrument Used
M7	252	12	234	2	30 %	16 %	60.00	62.50	Model 2224 SN 132150	10	10	Model 19 SN 91491
N1	192	16	240	4	23 %	16 %	-208.71	85.71	Model 2224 SN 116257	8	10	Model 19 SN 91491
N2	199	12	234	2	30 %	16 %	-116.67	62.50	Model 2224 SN 132150	10	10	Model 19 SN 91491
N3	479	12	234	2	30 %	16 %	816.67	62.50	Model 2224 SN 132150	10	10	Model 19 SN 91491
N4	352	16	234	2	30 %	16 %	393.33	87.50	Model 2224 SN 132150	10	10	Model 19 SN 91491
N5	293	17	234	2	30 %	16 %	196.67	93.75	Model 2224 SN 132150	10	10	Model 19 SN 91491
N6	224	11	234	2	30 %	16 %	-33.33	56.25	Model 2224 SN 132150	10	10	Model 19 SN 91491
N7	209	16	234	2	30 %	16 %	-83.33	87.50	Model 2224 SN 132150	10	10	Model 19 SN 91491
O1	243	3	240	4	23 %	14 %	13.04	-7.14	Model 2224 SN 116257	8	10	Model 19 SN 91491
O2	209	13	234	2	30 %	16 %	-83.33	68.75	Model 2224 SN 132150	10	10	Model 19 SN 91491
O3	394	17	234	2	30 %	16 %	533.33	93.75	Model 2224 SN 132150	10	10	Model 19 SN 91491
O4	403	29	234	2	30 %	16 %	563.33	168.75	Model 2224 SN 132150	10	10	Model 19 SN 91491
O5	349	10	234	2	30 %	16 %	383.33	50.00	Model 2224 SN 132150	10	10	Model 19 SN 91491
O6	252	14	234	2	30 %	16 %	60.00	75.00	Model 2224 SN 132150	10	10	Model 19 SN 91491
O7	250	27	234	2	30 %	16 %	53.33	156.25	Model 2224 SN 132150	10	10	Model 19 SN 91491

Table A-6a
Building 4 Room 1
Floor - Affected Area

Survey Number - 90596040103 & 90996040104 & 91096040105 & 091396040112 & 022097040102

Survey Point	Raw Counts Beta/Gamma cpm/100 cm ²	Raw Counts Alpha cpm/100 cm ²	Background Beta/Gamma cpm/100 cm ²	Background Alpha cpm/100 cm ²	Eff Beta Gamma	Eff Alpha	Net Activity Beta/Gamma dpm/100 cm ²	Net Activity Alpha dpm/100 cm ²	Instrument Used	Gamma Bkgd	Gamma Reading	Instrument Used
P1	261	9	234	2	30 %	16 %	90.00	43.75	Model 2224 SN 132150	10	10	Model 19 SN 91491
P2	325	5	234	2	30 %	16 %	303.33	18.75	Model 2224 SN 132150	10	10	Model 19 SN 91491
P3	338	15	234	2	30 %	16 %	346.67	81.25	Model 2224 SN 132150	10	10	Model 19 SN 91491
P4	349	22	234	2	30 %	16 %	383.33	125.00	Model 2224 SN 132150	10	10	Model 19 SN 91491
P5	299	25	234	2	30 %	16 %	216.67	143.75	Model 2224 SN 132150	10	10	Model 19 SN 91491
P6	223	18	234	2	30 %	16 %	-36.67	100.00	Model 2224 SN 132150	10	10	Model 19 SN 91491
P7	258	28	234	2	30 %	16 %	80.00	162.50	Model 2224 SN 132150	10	10	Model 19 SN 91491
Q1	292	10	234	2	30 %	16 %	193.33	50.00	Model 2224 SN 132150	10	10	Model 19 SN 91491
Q2	299	8	234	2	30 %	16 %	216.67	37.50	Model 2224 SN 132150	10	10	Model 19 SN 91491
Q3	336	8	234	2	30 %	16 %	340.00	37.50	Model 2224 SN 132150	10	10	Model 19 SN 91491
Q4	267	13	234	2	30 %	16 %	110.00	68.75	Model 2224 SN 132150	10	10	Model 19 SN 91491
Q5	211	14	234	2	30 %	16 %	-76.67	75.00	Model 2224 SN 132150	10	10	Model 19 SN 91491
Q6	241	15	234	2	30 %	16 %	23.33	81.25	Model 2224 SN 132150	10	10	Model 19 SN 91491
Q7	239	21	234	2	30 %	16 %	16.67	118.75	Model 2224 SN 132150	10	10	Model 19 SN 91491

Figure 9



Building 4 Room 2 - North Wall

Table A-7a
Building 4 Room 2
North Wall - Affected Area
Survey Number - 92396040207

Survey Point	Raw Counts Beta/Gamma cpm/100 cm ²	Raw Counts Alpha cpm/100 cm ²	Background Beta/Gamma cpm/100 cm ²	Background Alpha cpm/100 cm ²	Eff. Beta Gamma	Eff. Alpha	Net Activity Beta/Gamma dpm/100 cm ²	Net Activity Alpha dpm/100 cm ²	Instrument Used	Gamma Hkgl	Gamma Reading	Instrument Used
A1	248	7	118	4	30 %	16 %	433.33	18.75	Model 2224 SN 132150	10	10	Model 19 SN 91491
A2	232	6	118	4	30 %	16 %	346.67	12.50	Model 2224 SN 132150	10	10	Model 19 SN 91491
A3	184	9	118	4	30 %	16 %	220.00	31.25	Model 2224 SN 132150	10	10	Model 19 SN 91491
A4	171	8	118	4	30 %	16 %	176.67	25.00	Model 2224 SN 132150	10	10	Model 19 SN 91491
A5	139	9	118	4	30 %	16 %	70.00	31.25	Model 2224 SN 132150	10	10	Model 19 SN 91491
A6	264	7	118	4	30 %	16 %	485.67	18.75	Model 2224 SN 132150	10	10	Model 19 SN 91491
A7	211	13	118	4	30 %	16 %	310.00	56.25	Model 2224 SN 132150	10	10	Model 19 SN 91491
A8	229	6	118	4	30 %	16 %	370.00	12.50	Model 2224 SN 132150	10	11	Model 19 SN 91491
B1	180	13	118	4	30 %	16 %	206.67	56.25	Model 2224 SN 132150	10	10	Model 19 SN 91491
B2	160	5	118	4	30 %	16 %	140.00	6.25	Model 2224 SN 132150	10	10	Model 19 SN 91491
B3	143	10	118	4	30 %	16 %	83.33	37.50	Model 2224 SN 132150	10	10	Model 19 SN 91491
B4	91	11	118	4	30 %	16 %	-90.00	43.75	Model 2224 SN 132150	10	10	Model 19 SN 91491
B5	185	8	118	4	30 %	16 %	223.33	25.00	Model 2224 SN 132150	10	10	Model 19 SN 91491
B6	194	9	118	4	30 %	16 %	253.33	31.25	Model 2224 SN 132150	10	10	Model 19 SN 91491
B7	198	8	118	4	30 %	16 %	266.67	25.00	Model 2224 SN 132150	10	10	Model 19 SN 91491

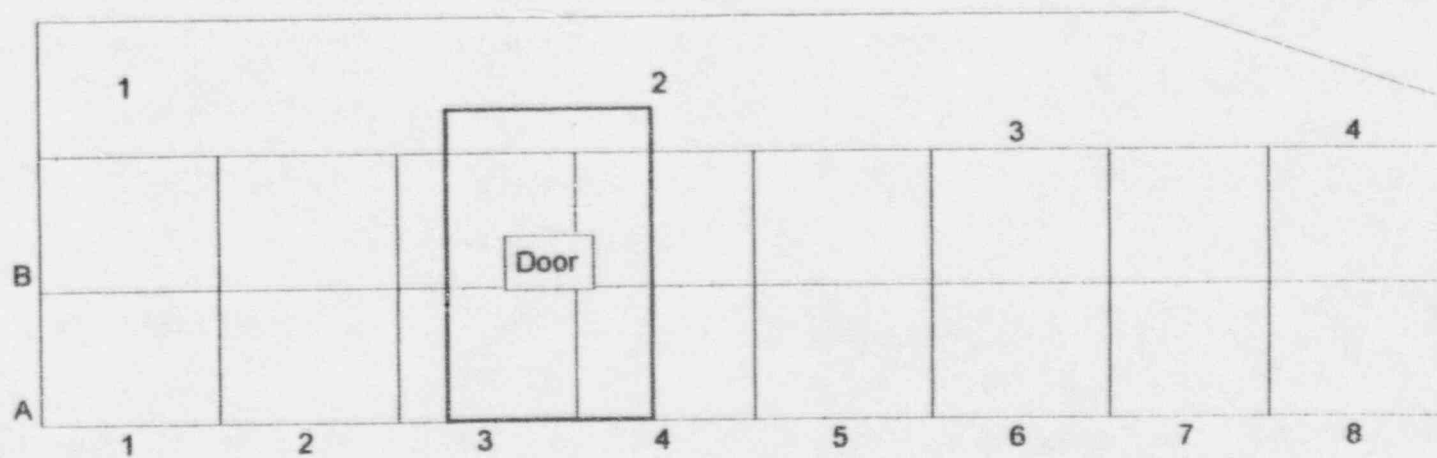
Table A-7a
 Building 4 Room 2
 North Wall - Affected Area
 Survey Number - 92396040207

Survey Point	<u>Raw Counts</u> Beta/Gamma cpm/100 cm ²	<u>Raw Counts</u> Alpha cpm/100 cm ²	<u>Background</u> Beta/Gamma cpm/100 cm ²	<u>Background</u> Alpha cpm/100 cm ²	<u>Eff.</u> Beta Gamma	<u>Eff.</u> Alpha	<u>Net Activity</u> Beta/Gamma dpm/100 cm ²	<u>Net Activity</u> Alpha dpm/100 cm ²	Instrument Used	Gamma Bkgd	Gamma Reading	Instrument Used
B8	236	3	200	3	25 %	16 %	256.52	0.00	Model 2224 SN 129450	12	12	Model 19 SN 76228

Table A-7u
 Building 4 Room 2
 North Wall - Unaffected Area
 Survey Number 092396040211

Survey Point	Raw Counts Beta/Gamma cpm/100 cm ²	Raw Counts Alpha cpm/100 cm ²	Background Beta/Gamma cpm/100 cm ²	Background Alpha cpm/100 cm ²	Eff. Beta Gamma	Eff. Alpha	Net Activity Beta/Gamma dpm/100 cm ²	Net Activity Alpha dpm/100 cm ²	Instrument Used	Gamma Bkgd	Gamma Reading	Instrument Used
1	149	9	177	4	30 %	16 %	-93.33	31.25	Model 2224 SN 132150	10	10	Model 19 SN 91491
2	167	8	177	4	30 %	16 %	-33.33	25.00	Model 2224 SN 132150	10	10	Model 19 SN 91491
3	132	6	177	4	30 %	16 %	-150.00	12.50	Model 2224 SN 132150	10	10	Model 19 SN 91491
4	138	6	177	4	30 %	16 %	-130.00	12.50	Model 2224 SN 132150	10	10	Model 19 SN 91491

Figure 10



Building 4 Room 2 - South Wall

Table A-8a
Building 4 Room 2
South Wall - Affected Area
Survey Number 092396040208

Survey Point	Raw Counts Beta/Gamma cpm/100 cm ²	Raw Counts Alpha cpm/100 cm ²	Background Beta/Gamma cpm/100 cm ²	Background Alpha cpm/100 cm ²	Eff. Beta Gamma	Eff. Alpha	Net Activity Beta/Gamma dpm/100 cm ²	Net Activity Alpha dpm/100 cm ²	Instrument Used	Gamma Bkgd	Gamma Reading	Instrument Used
A1	208	4	155	2	31 %	13 %	170.97	15.38	Model 2224 SN 116257	10	12	Model 19 SN 91491
A2	180	5	155	2	31 %	13 %	80.65	23.08	Model 2224 SN 116257	10	12	Model 19 SN 91491
A3	157	4	155	2	31 %	13 %	6.45	15.38	Model 2224 SN 116257	10	10	Model 19 SN 91491
A4	189	4	155	2	31 %	13 %	109.68	15.38	Model 2224 SN 116257	10	12	Model 19 SN 91491
A5	201	2	155	2	31 %	13 %	148.39	0.00	Model 2224 SN 116257	10	10	Model 19 SN 91491
A6	181	2	155	2	31 %	13 %	83.87	0.00	Model 2224 SN 116257	10	10	Model 19 SN 91491
A7	199	4	155	2	31 %	13 %	141.94	15.38	Model 2224 SN 116257	10	12	Model 19 SN 91491
A8	179	6	155	2	31 %	13 %	77.42	30.77	Model 2224 SN 116257	10	10	Model 19 SN 91491
B1	163	2	155	2	31 %	13 %	25.81	0.00	Model 2224 SN 116257	10	12	Model 19 SN 41941
B2	175	0	155	2	31 %	13 %	64.52	-15.38	Model 2224 SN 116257	10	10	Model 19 SN 41941
B3	167	4	155	2	31 %	13 %	38.71	15.38	Model 2224 SN 116257	10	10	Model 19 SN 41941
B4	163	3	155	2	31 %	13 %	25.81	7.69	Model 2224 SN 116257	10	10	Model 19 SN 41941
B5	191	2	155	2	31 %	13 %	116.13	0.00	Model 2224 SN 116257	10	10	Model 19 SN 41941
B6	179	1	155	2	31 %	13 %	77.42	-7.69	Model 2224 SN 116257	10	12	Model 19 SN 41941
B7	161	2	155	2	31 %	13 %	19.35	0.00	Model 2224 SN 116257	10	12	Model 19 SN 41941

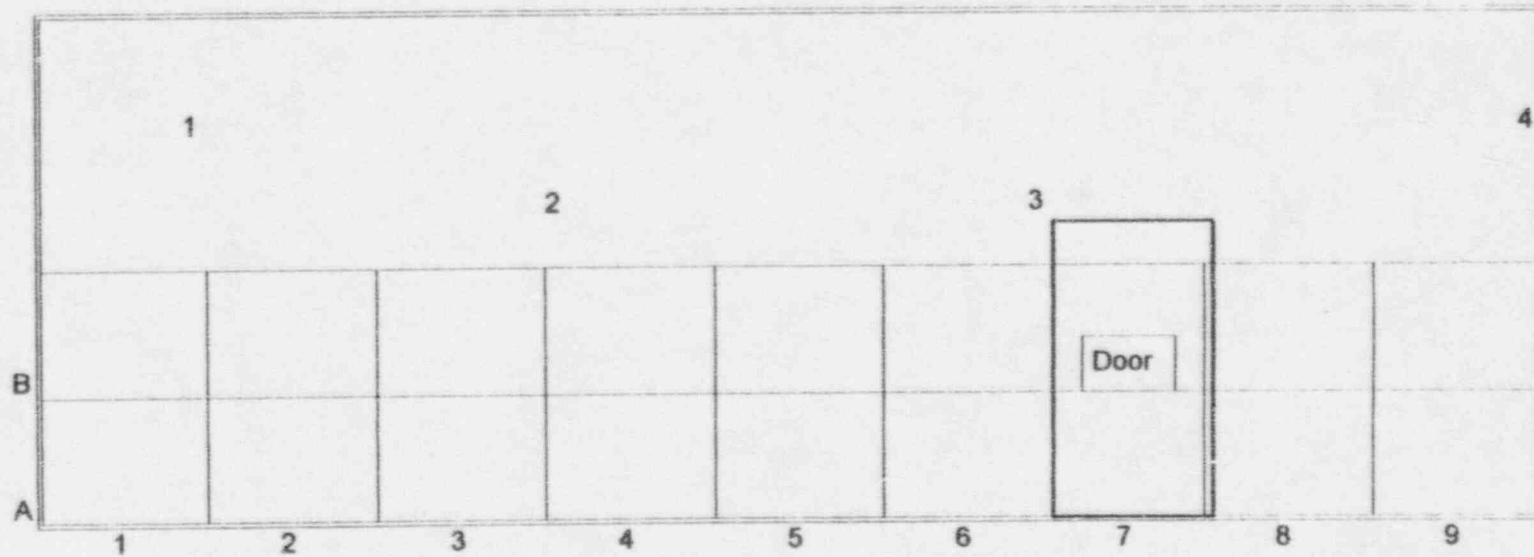
Table A-8a
 Building 4 Room 2
 South Wall - Affected Area
 Survey Number 052396040208

Survey Point	Raw Counts Beta/Gamma cpm/100 cm ²	Raw Counts Alpha cpm/100 cm ²	Background Beta/Gamma cpm/100 cm ²	Background Alpha cpm/100 cm ²	Eff. Beta Gamma	Eff. Alpha	Net Activity Beta/Gamma cpm/100 cm ²	Net Activity Alpha cpm/100 cm ²	Instrument Used	Gamma Rdgd	Gamma Reading	Instrument Used
B8	177	1	155	2	31 %	13 %	70.97	0.00	Model 2224 SN 116257	10	10	Model 19 SN 41941

Table A-8u
 Building 4 Room 2
 South Wall - Unaffected Area
 Survey Number 092396040211

Survey Point	Raw Counts Beta/Gamma cpm/100 cm ²	Raw Counts Alpha cpm/100 cm ²	Background Beta/Gamma cpm/100 cm ²	Background Alpha cpm/100 cm ²	Eff. Beta Gamma	Eff. Alpha	Net Activity Beta/Gamma dpm/100 cm ²	Net Activity Alpha dpm/100 cm ²	Instrument Used	Gamma Bkgd	Gamma Reading	Instrument Used
9	174	6	177	4	30 %	16 %	-10.00	12.50	Model 2224 SN 132150	10	10	Model 19 SN 91491
10	148	4	177	4	30 %	16 %	-96.67	0.00	Model 2224 SN 132150	10	10	Model 19 SN 91491
11	176	6	177	4	30 %	16 %	-3.33	12.50	Model 2224 SN 132150	10	10	Model 19 SN 91491
12	171	4	177	4	30 %	16 %	-20.00	0.00	Model 2224 SN 132150	10	10	Model 19 SN 91491

Figure 11



Building 4 Room 2 - East Wall



Table A-9a
Building 4 Room 2
East Wall - Affected Area
Survey Number 092096040206

Survey Point	Raw Counts Beta/Gamma cpm/100 cm ²	Raw Counts Alpha cpm/100 cm ²	Background Beta/Gamma cpm/100 cm ²	Background Alpha cpm/100 cm ²	Eff. Beta Gamma	Eff. Alpha	Net Activity Beta/Gamma dpm/100 cm ²	Net Activity Alpha dpm/100 cm ²	Instrument Used	Gamma Bkgd	Gamma Reading	Instrument Used
A1	281	17	214	9	30 %	16%	223.33	30.00	Model 2224 SN 132150	8	10	Model 19 SN 91491
A2	225	6	214	9	30 %	16%	36.67	-18.75	Model 2224 SN 132150	8	10	Model 19 SN 91491
A3	298	6	214	9	30 %	16%	280.00	-18.75	Model 2224 SN 132150	8	10	Model 19 SN 91491
A4	318	13	214	9	30 %	16%	346.67	25.00	Model 2224 SN 132150	8	10	Model 19 SN 91491
A5	252	7	214	9	30 %	16%	126.67	-12.50	Model 2224 SN 132150	8	10	Model 19 SN 91491
A6	237	3	214	9	30 %	16%	76.67	-37.50	Model 2224 SN 132150	8	10	Model 19 SN 91491
A7	187	4	214	9	30 %	16%	-90.00	-31.25	Model 2224 SN 132150	8	10	Model 19 SN 91491
A8	285	6	214	9	30 %	16%	236.67	-18.75	Model 2224 SN 132150	8	10	Model 19 SN 91491
A9	307	2	214	9	30 %	16%	310.00	-43.75	Model 2224 SN 132150	8	10	Model 19 SN 91491
B1	222	4	214	9	30 %	16%	26.67	-31.25	Model 2224 SN 132150	8	10	Model 19 SN 91491
B2	267	5	214	9	30 %	16%	176.67	-25.00	Model 2224 SN 132150	8	10	Model 19 SN 91491
B3	282	4	214	9	30 %	16%	226.67	-31.25	Model 2224 SN 132150	8	10	Model 19 SN 91491
B4	283	5	214	9	30 %	16%	230.00	-25.00	Model 2224 SN 132150	8	10	Model 19 SN 91491
B5	224	2	214	9	30 %	16%	33.33	-43.75	Model 2224 SN 132150	8	10	Model 19 SN 91491
B6	298	2	214	9	30 %	16%	280.00	-43.75	Model 2224 SN 132150	8	10	Model 19 SN 91491

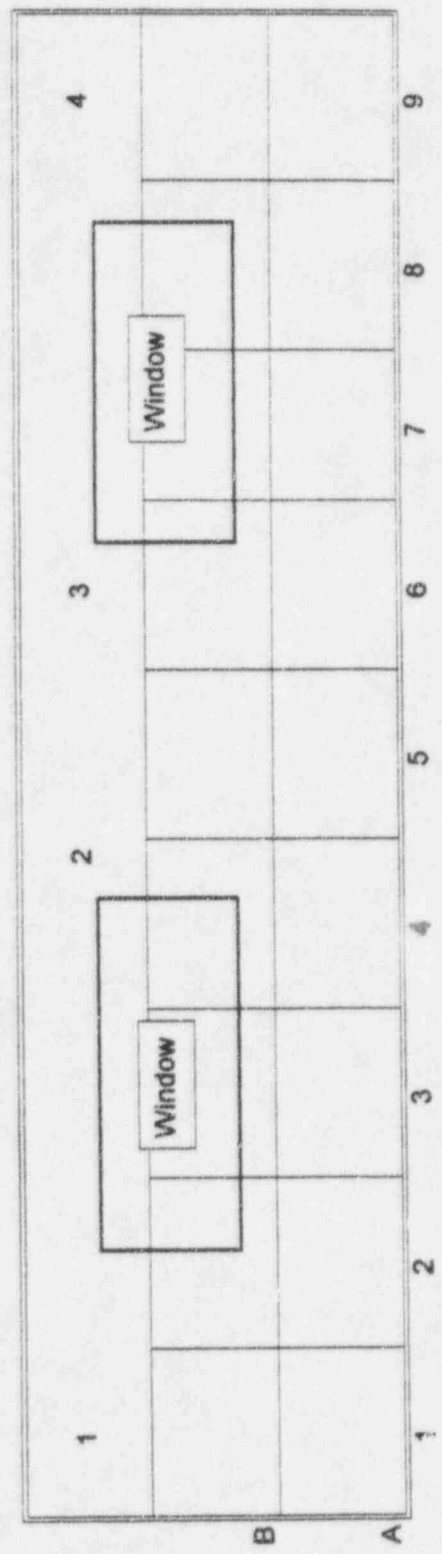
Table A-9a
 Building 4 Room 2
 East Wall - Affected Area
 Survey Number 092096040205

Survey Point	<u>Raw Counts</u> Beta/Gamma cpm/100 cm ²	<u>Raw Counts</u> Alpha cpm/100 cm ²	<u>Background</u> Beta/Gamma cpm/100 cm ²	<u>Background</u> Alpha cpm/100 cm ²	<u>Eff</u> Beta Gamma	<u>Eff</u> Alpha	<u>Net Activity</u> Beta/Gamma dpm/100 cm ²	<u>Net Activity</u> Alpha dpm/100 cm ²	Instrument Used	Gamma Bkgd	Gamma Reading	Instrument Used
B7	187	5	214	9	30 %	16%	-90.00	-25.00	Model 2224 SN 132150	8	10	Model 19 SN 91491
B8	304	5	214	9	30 %	16%	300.00	-25.00	Model 2224 SN 132150	8	10	Model 19 SN 91491
B9	270	6	214	9	30 %	16 %	186.67	-18.75	Model 2224 SN 132150	8	10	Model 19 SN 91491

Table A-9u
 Building 4 Room 2
 East Wall - Unaffected Area
 Survey Number 092396040211

Survey Point	Raw Counts Beta/Gamma cpm/100 cm ²	Raw Counts Alpha cpm/100 cm ²	Background Beta/Gamma cpm/100 cm ²	Background Alpha cpm/100 cm ²	Eff. Beta Gamma	Eff. Alpha	Net Activity Beta/Gamma dpm/100 cm ²	Net Activity Alpha dpm/100 cm ²	Instrument Used	Gamma Bkgd	Gamma Reading	Instrument Used
5	145	2	177	4	30 %	16 %	-106.67	-12.50	Model 2224 SN 132150	10	10	Model 19 SN 91491
6	108	4	177	4	30 %	16 %	-230.00	0.00	Model 2224 SN 132150	10	10	Model 19 SN 91491
7	103	0	177	4	30 %	16 %	-246.67	-25.00	Model 2224 SN 132150	10	10	Model 19 SN 91491
8	123	1	177	4	30 %	16 %	-180.00	-18.75	Model 2224 SN 132150	10	10	Model 19 SN 91491

Figure 12



Building 4 Room 2 - West Wall



Table A-10a
 Building 4 Room 2
 West Wall - Affected Area
 Survey Number 092096040206 & 092396040207

Survey Point	Raw Counts Beta/Gamma cpm/100 cm ²	Raw Counts Alpha cpm/100 cm ²	Background Beta/Gamma cpm/100 cm ²	Background Alpha cpm/100 cm ²	Eff. Beta Gamma	Eff. Alpha	Net Activity Beta/Gamma dpm/100 cm ²	Net Activity Alpha dpm/100 cm ²	Instrument Used	Gamma Bkgd	Gamma Reading	Instrument Used
A1	250	5	214	9	30 %	16%	120.00	-25.00	Model 2224 SN 132150	8	10	Model 19 SN 41941
A2	256	9	214	9	30 %	16%	140.00	0.00	Model 2224 SN 132150	8	10	Model 19 SN 41941
A3	243	6	214	9	30 %	16%	96.67	-18.75	Model 2224 SN 132150	8	10	Model 19 SN 41941
A4	272	4	214	9	30 %	16%	193.33	-31.25	Model 2224 SN 132150	8	10	Model 19 SN 41941
A5	221	4	214	9	30 %	16%	23.33	-31.25	Model 2224 SN 132150	8	10	Model 19 SN 41941
A6	118	8	118	4	30 %	16%	0.00	25.00	Model 2224 SN 132150	10	10	Model 19 SN 41941
A7	104	16	118	4	30 %	16%	-46.67	75.00	Model 2224 SN 132150	10	10	Model 19 SN 41941
A8	112	21	118	4	30 %	16%	-20.00	106.25	Model 2224 SN 132150	10	10	Model 19 SN 41941
A9	125	6	118	4	30 %	16%	23.33	12.50	Model 2224 SN 132150	10	10	Model 19 SN 41941
B1	178	4	214	9	30 %	16%	-120.00	-31.25	Model 2224 SN 132150	8	10	Model 19 SN 41941
B2	203	5	214	9	30 %	16%	-36.67	-25.00	Model 2224 SN 132150	8	10	Model 19 SN 41941
B3	202	11	214	9	30 %	16%	-40.00	12.50	Model 2224 SN 132150	8	10	Model 19 SN 41941
B4	227	2	214	9	30 %	16%	43.33	-43.75	Model 2224 SN 132150	8	10	Model 19 SN 41941
B5	211	5	214	9	30 %	16%	-10.00	-25.00	Model 2224 SN 132150	8	10	Model 19 SN 41941
B6	154	6	118	4	30 %	16%	120.00	12.50	Model 2224 SN 132150	10	10	Model 19 SN 41941

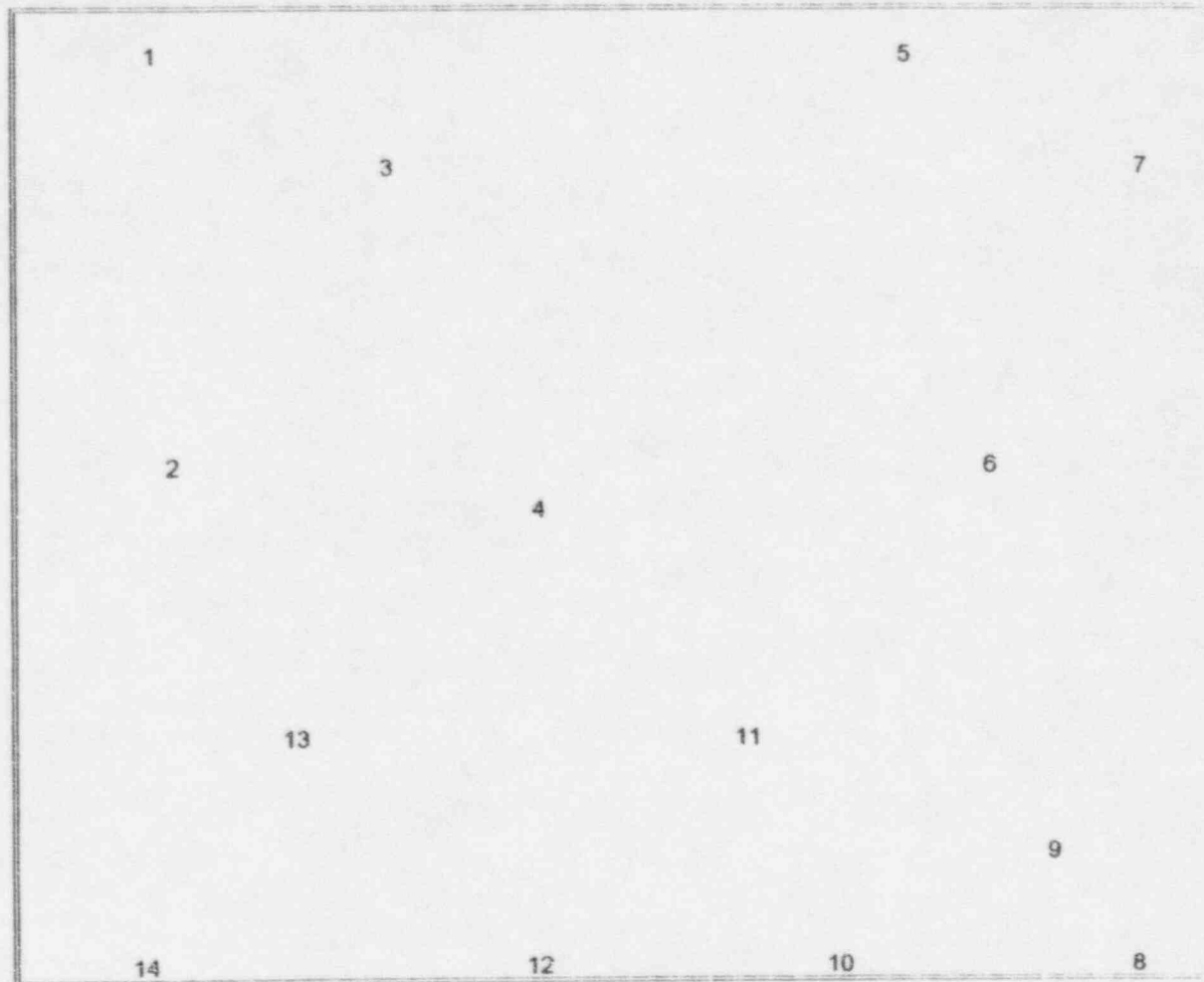
Table A-10a
 Building 4 Room 2
 West Wall - Affected Area
 Survey Number 092096040206 & 092396040207

Survey Point	Raw Counts Beta/Gamma cpm/100 cm ²	Raw Counts Alpha cpm/100 cm ²	Background Beta/Gamma cpm/100 cm ²	Background Alpha cpm/100 cm ²	Eff. Beta Gamma	Eff. Alpha	Net Activity Beta/Gamma dpm/100 cm ²	Net Activity Alpha dpm/100 cm ²	Instrument Used	Gamma Bkgd	Gamma Reading	Instrument Used
B7	102	14	118	4	30 %	16%	-53.33	62.50	Model 2224 SN 132150	10	10	Model 19 SN 41941
B8	93	9	118	4	30 %	16%	-83.33	31.25	Model 2224 SN 132150	10	10	Model 19 SN 41941
B9	96	17	118	4	30 %	16 %	-73.33	81.25	Model 2224 SN 132150	10	10	Model 19 SN 41941

Table A-10u
 Building 4 Room 2
 West Wall - Unaffected Area
 Survey Number 092396040211

Survey Point	Raw Counts Beta/Gamma cpm/100 cm ²	Raw Counts Alpha cpm/100 cm ²	Background Beta/Gamma cpm/100 cm ²	Background Alpha cpm/100 cm ²	Eff. Beta Gamma	Eff. Alpha	Net Activity Beta/Gamma dpm/100 cm ²	Net Activity Alpha dpm/100 cm ²	Instrument Used	Gamma Hkgd	Gamma Reading	Instrument Used
13	137	8	177	4	30 %	16 %	-133.33	25.00	Model 2224 SN 132150	10	10	Model 19 SN 91491
14	183	10	177	4	30 %	16 %	20.00	37.50	Model 2224 SN 132150	10	10	Model 19 SN 91491
15	190	6	177	4	30 %	16 %	43.33	12.50	Model 2224 SN 132150	10	10	Model 19 SN 91491
16	114	5	177	4	30 %	16 %	-210.00	6.25	Model 2224 SN 132150	10	10	Model 19 SN 91491

Figure 13



Building 4 Room 2 - Ceiling

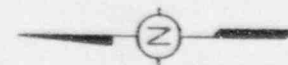
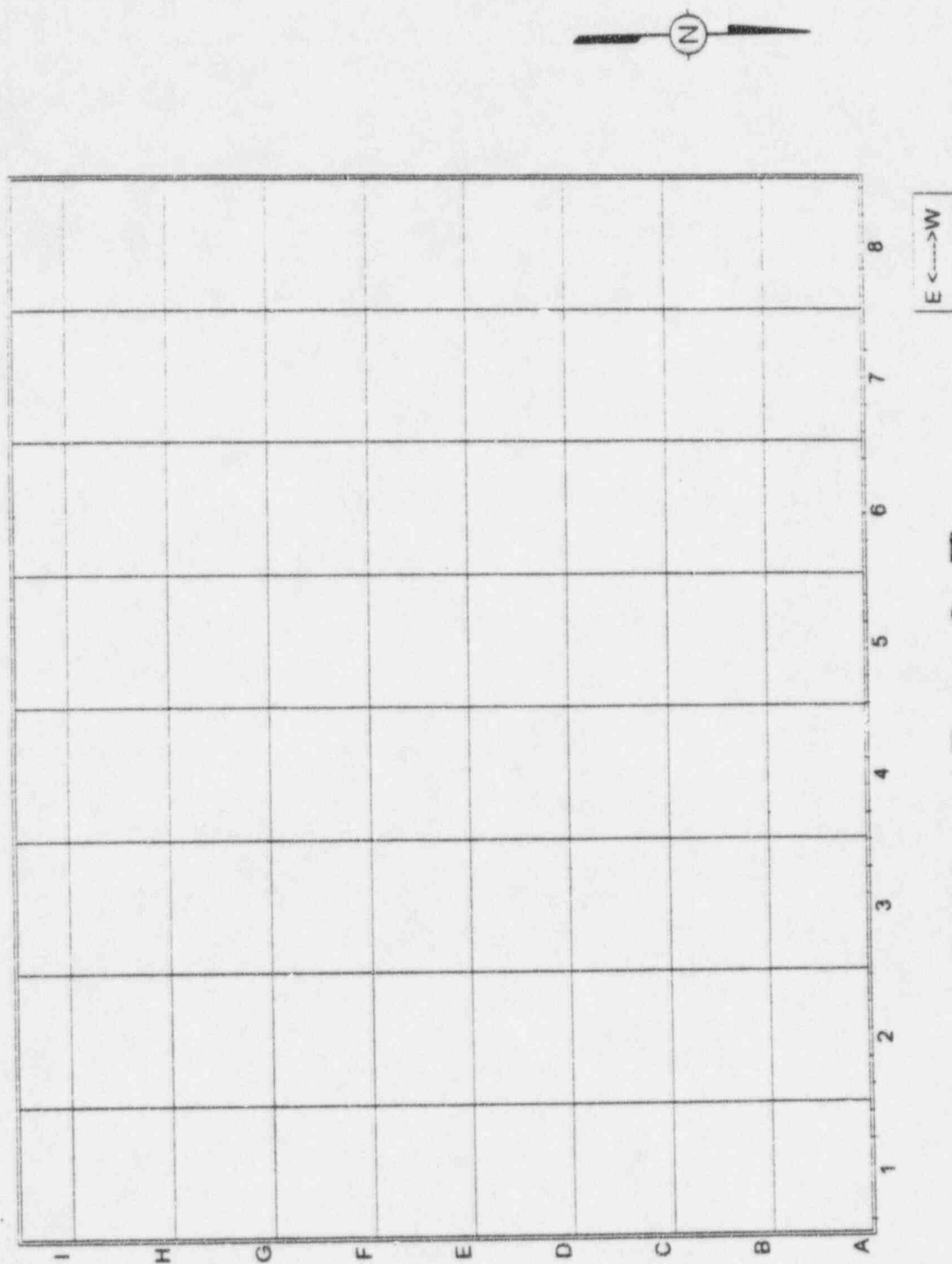


Table A-11u
 Building 4 Room 2
 Ceiling - Unaffected Area
 Survey Number 092396-10210

Survey Point	Raw Counts Beta/Gamma cpm/100 cm ²	Raw Counts Alpha cpm/100 cm ²	Background Beta/Gamma cpm/100 cm ²	Background Alpha cpm/100 cm ²	Eff. Beta Gamma	Eff. Alpha	Net Activity Beta/Gamma dpm/100 cm ²	Net Activity Alpha dpm/100 cm ²	Instrument Used	Gamma Bkgd	Gamma Reading	Instrument Used
1	142	1	147	2	31 %	13%	-16.13	-7.69	Model 2224 SN 116257	10	10	Model 19 SN 91491
2	139	3	147	2	31 %	13%	-25.81	7.69	Model 2224 SN 116257	10	10	Model 19 SN 91491
3	156	4	147	2	31 %	13%	29.03	15.38	Model 2224 SN 116257	10	10	Model 19 SN 91491
4	144	3	147	2	31 %	13%	-9.68	7.69	Model 2224 SN 116257	10	10	Model 19 SN 91491
5	185	2	147	2	31 %	13%	122.58	0.00	Model 2224 SN 116257	10	10	Model 19 SN 91491
6	172	2	147	2	31 %	13%	80.65	0.00	Model 2224 SN 116257	10	10	Model 19 SN 91491
7	178	1	147	2	31 %	13%	100.00	-7.69	Model 2224 SN 116257	10	10	Model 19 SN 91491
8	141	2	147	2	31 %	13%	-19.35	0.00	Model 2224 SN 116257	10	10	Model 19 SN 91491
9	166	3	147	2	31 %	13%	61.29	7.69	Model 2224 SN 116257	10	10	Model 19 SN 91491
10	194	1	147	2	31 %	13%	151.61	-7.69	Model 2224 SN 116257	10	10	Model 19 SN 91491
11	172	9	147	2	31 %	13%	80.65	53.85	Model 2224 SN 116257	10	10	Model 19 SN 91491
12	144	6	147	2	31 %	13%	-9.68	30.77	Model 2224 SN 116257	10	10	Model 19 SN 91491
13	209	12	147	2	31 %	13%	200.00	76.92	Model 2224 SN 116257	10	10	Model 19 SN 91491
14	201	1	147	2	31 %	13%	174.19	-7.69	Model 2224 SN 116257	10	10	Model 19 SN 91491

Figure 14



Building 4 Room 2 - Floor

Table A-12a
 Building 4 Room 2
 Floor - Affected Area
 Survey Number 091996040205 & 092096040206 & 101096040004

Survey Point	Raw Counts Beta/Gamma cpm/100 cm ²	Raw Counts Alpha cpm/100 cm ²	Background Beta/Gamma cpm/100 cm ²	Background Alpha cpm/100 cm ²	Eff. Beta Gamma	Eff. Alpha	Net Activity Beta/Gamma dpm/100 cm ²	Net Activity Alpha dpm/100 cm ²	Instrument Used	Gamma Bkgd	Gamma Reading	Instrument Used
A1	178	8	155	3	32 %	12 %	71.88	41.67	Model 2224 SN 116240	9	12	Model 19 SN 76228
A2	205	11	155	3	32 %	12 %	156.25	66.67	Model 2224 SN 116240	9	10	Model 19 SN 76228
A3	175	13	155	3	32 %	12 %	62.50	83.33	Model 2224 SN 116240	9	10	Model 19 SN 76228
A4	171	22	155	3	32 %	12 %	50.00	158.33	Model 2224 SN 116240	9	9	Model 19 SN 76228
A5	234	13	155	3	32 %	12 %	246.88	83.33	Model 2224 SN 116240	9	9	Model 19 SN 76228
A6	145	14	155	3	32 %	12 %	-31.25	91.67	Model 2224 SN 116240	9	9	Model 19 SN 76228
A7	184	13	155	3	32 %	12 %	90.63	83.33	Model 2224 SN 116240	9	9	Model 19 SN 76228
A8	160	10	155	3	32 %	12 %	15.63	58.33	Model 2224 SN 116240	9	9	Model 19 SN 76228
B1	227	15	155	3	32 %	12 %	225.00	100.00	Model 2224 SN 116240	9	12	Model 19 SN 76228
B2	197	18	155	3	32 %	12 %	131.25	125.00	Model 2224 SN 116240	9	10	Model 19 SN 76228
B3	184	14	155	3	32 %	12 %	90.63	91.67	Model 2224 SN 116240	9	10	Model 19 SN 76228
B4	173	24	155	3	32 %	12 %	56.25	175.00	Model 2224 SN 116240	9	10	Model 19 SN 76228
B5	177	14	155	3	32 %	12 %	68.75	91.67	Model 2224 SN 116240	9	9	Model 19 SN 76228
B6	133	4	155	3	32 %	12 %	-68.75	8.33	Model 2224 SN 116240	9	9	Model 19 SN 76228
B7	163	5	155	3	32 %	12 %	25.00	16.67	Model 2224 SN 116240	9	9	Model 19 SN 76228

Table A-12a
 Building 4 Room 2
 Floor - Affected Area
 Survey Number 091996040205 & 092096040206 & 101096040004

Survey Point	Raw Counts Beta/Gamma cpm/100 cm ²	Raw Counts Alpha cpm/100 cm ²	Background Beta/Gamma cpm/100 cm ²	Background Alpha cpm/100 cm ²	Eff. Beta Gamma	Eff. Alpha	Net Activity Beta/Gamma dpm/100 cm ²	Net Activity Alpha dpm/100 cm ²	Instrument Used	Gamma Bkgd	Gamma Reading	Instrument Used
B8	130	10	155	3	32 %	12 %	-15.63	58.33	Model 2224 SN 116240	9	9	Model 19 SN 76228
C1	191	12	155	3	32 %	12 %	1125.50	75.00	Model 2224 SN 116240	9	12	Model 19 SN 76228
C2	173	18	155	3	32 %	12 %	56.25	125.00	Model 2224 SN 116240	9	10	Model 19 SN 76228
C3	179	9	155	3	32 %	12 %	75.00	50.00	Model 2224 SN 116240	9	10	Model 19 SN 76228
C4	219	30	155	3	32 %	12 %	200.00	225.00	Model 2224 SN 116240	9	10	Model 19 SN 76228
C5	144	13	155	3	32 %	12 %	-34.38	83.33	Model 2224 SN 116240	9	9	Model 19 SN 76228
C6	162	7	155	3	32 %	12 %	21.88	33.33	Model 2224 SN 116240	9	9	Model 19 SN 76228
C7	176	8	155	3	32 %	12 %	65.63	41.67	Model 2224 SN 116240	9	9	Model 19 SN 76228
C8	145	12	155	3	32 %	12 %	-31.25	75.00	Model 2224 SN 116240	9	9	Model 19 SN 76228
D1	291	17	214	9	30 %	16 %	256.67	50.00	Model 2224 SN 132150	8	10	Model 19 SN 91941
D2	198	12	155	3	32 %	12 %	134.38	75.00	Model 2224 SN 116240	8	10	Model 19 SN 91941
D3	188	13	155	3	32 %	12 %	103.13	83.33	Model 2224 SN 116240	8	10	Model 19 SN 91941
D4	220	44	155	3	32 %	12 %	203.13	341.67	Model 2224 SN 116240	8	10	Model 19 SN 91941
D5	197	9	155	3	32 %	12 %	131.25	50.00	Model 2224 SN 116240	8	10	Model 19 SN 91941
D6	202	5	155	3	32 %	12 %	146.88	16.67	Model 2224 SN 116240	8	10	Model 19 SN 91941

Table A-12a
 Building 4 Room 2
 Floor - Affected Area
 Survey Number 091996040205 & 092096040206 & 101096040004

Survey Point	Raw Counts Beta/Gamma cpm/100 cm ²	Raw Counts Alpha cpm/100 cm ²	Background Beta/Gamma cpm/100 cm ²	Background Alpha cpm/100 cm ²	Eff. Beta Gamma	Eff. Alpha	Net Activity Beta/Gamma dpm/100 cm ²	Net Activity Alpha dpm/100 cm ²	Instrument Used	Gamma Bkgd	Gamma Reading	Instrument Used
D7	200	9	155	3	32 %	12 %	140.63	50.00	Model 2224 SN 116240	8	10	Model 19 SN 91941
D8	192	24	155	3	32 %	12 %	115.63	175.00	Model 2224 SN 116240	8	10	Model 19 SN 91941
E1	309	56	214	9	30 %	16 %	316.67	293.75	Model 2224 SN 132150	8	10	Model 19 SN 91941
E2	245	19	214	9	30 %	16 %	103.33	62.50	Model 2224 SN 132150	8	10	Model 19 SN 91941
E3	247	13	214	9	30 %	16 %	110.00	25.00	Model 2224 SN 132150	8	10	Model 19 SN 91941
E4	231	22	214	9	30 %	16 %	56.67	81.25	Model 2224 SN 132150	8	10	Model 19 SN 91941
E5	235	21	214	9	30 %	16 %	70.00	75.00	Model 2224 SN 132150	8	10	Model 19 SN 91941
E6	226	26	214	9	30 %	16 %	40.00	106.25	Model 2224 SN 132150	8	10	Model 19 SN 91941
E7	232	11	214	9	30 %	16 %	60.00	12.50	Model 2224 SN 132150	8	10	Model 19 SN 91941
E8	213	10	214	9	30 %	16 %	-3.33	6.25	Model 2224 SN 132150	8	10	Model 19 SN 91941
F1	255	20	214	9	30 %	16 %	136.67	68.75	Model 2224 SN 132150	8	10	Model 19 SN 91941
F2	218	20	214	9	30 %	16 %	13.33	68.75	Model 2224 SN 132150	8	10	Model 19 SN 91941
F3	235	19	214	9	30 %	16 %	70.00	62.50	Model 2224 SN 132150	8	10	Model 19 SN 91941
F4	223	13	214	9	30 %	16 %	30.00	25.00	Model 2224 SN 132150	8	10	Model 19 SN 91941
F5	249	17	214	9	30 %	16 %	116.67	50.00	Model 2224 SN 132150	8	10	Model 19 SN 91941

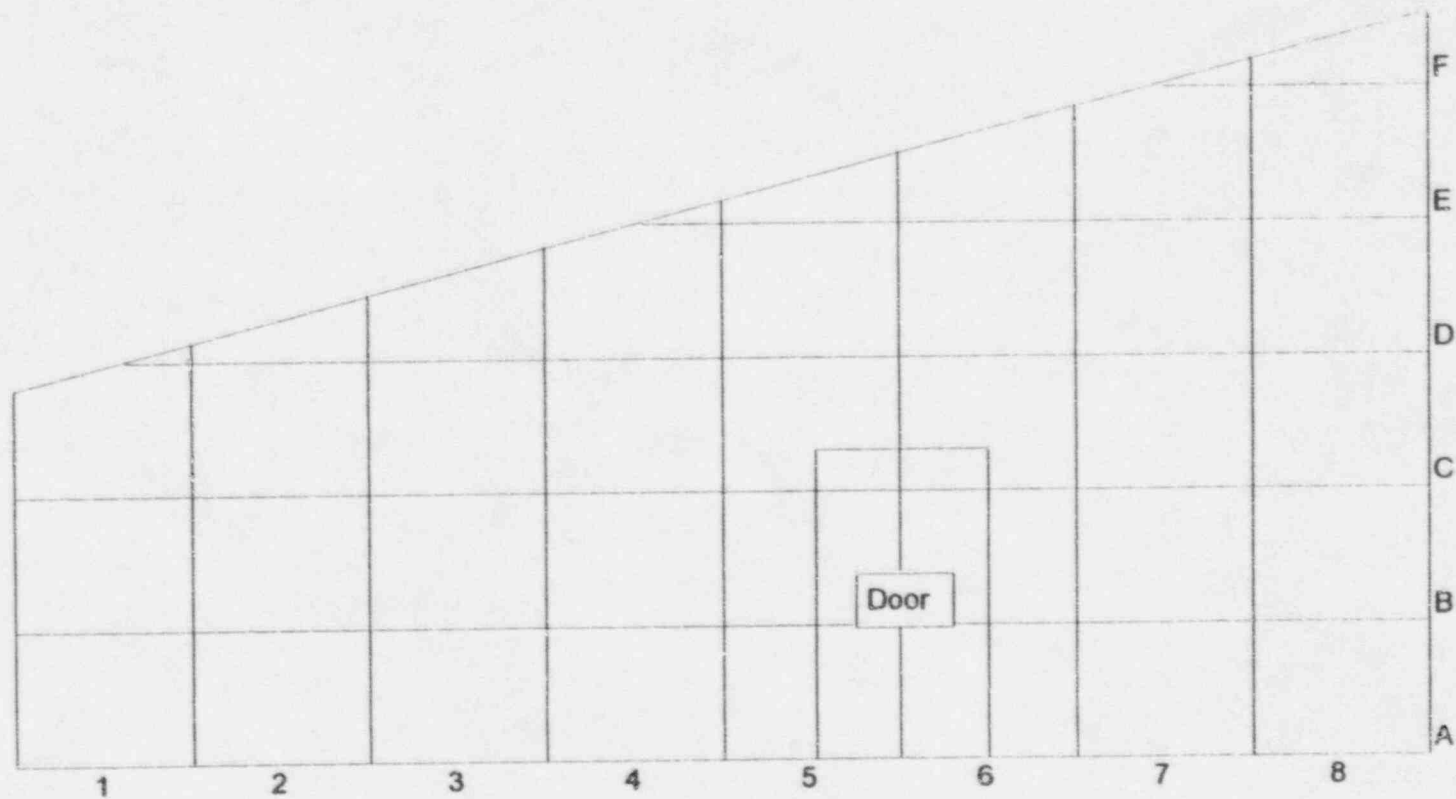
Table A-12a
Building 4 Room 2
Floor - Affected Area
Survey Number 091996040205 & 092096040206 & 101096040004

Survey Point	Raw Counts Beta/Gamma cpm/100 cm ²	Raw Counts Alpha cpm/100 cm ²	Background Beta/Gamma cpm/100 cm ²	Background Alpha cpm/100 cm ²	Eff. Beta Gamma	Eff. Alpha	Net Activity Beta/Gamma dpm/100 cm ²	Net Activity Alpha dpm/100 cm ²	Instrument Used	Gamma Bicgd	Gamma Reading	Instrument Used
F6	233	21	214	9	30 %	16 %	63.33	75.00	Model 2224 SN 132150	8	10	Model 19 SN 91941
F7	218	16	214	9	30 %	16 %	13.33	43.75	Model 2224 SN 132150	8	10	Model 19 SN 91941
F8	263	34	214	9	30 %	16 %	163.33	156.25	Model 2224 SN 132150	8	10	Model 19 SN 91941
G1	242	18	214	9	30 %	16 %	93.33	56.25	Model 2224 SN 132150	8	10	Model 19 SN 91941
G2	221	21	214	9	30 %	16 %	23.33	75.00	Model 2224 SN 132150	8	10	Model 19 SN 91941
G3	220	24	214	9	30 %	16 %	20.00	93.75	Model 2224 SN 132150	8	10	Model 19 SN 91941
G4	237	23	214	9	30 %	16 %	76.67	87.50	Model 2224 SN 132150	8	10	Model 19 SN 91941
G5	248	24	214	9	30 %	16 %	113.33	93.75	Model 2224 SN 132150	8	10	Model 19 SN 91941
G6	228	11	214	9	30 %	16 %	46.67	12.50	Model 2224 SN 132150	8	10	Model 19 SN 91941
G7	232	8	214	9	30 %	16 %	60.00	-6.25	Model 2224 SN 132150	8	10	Model 19 SN 91941
G8	249.8	20.6	135	2	22 %	15 %	521.82	124.00	Model 2224 SN 132150	8	10	Model 19 SN 91941
H1	252	20	214	9	30 %	16 %	126.67	68.75	Model 2224 SN 132150	8	10	Model 19 SN 91941
H2	240	20	214	9	30 %	16 %	86.67	68.75	Model 2224 SN 132150	8	10	Model 19 SN 91941
H3	217	21	214	9	30 %	16 %	10.00	75.00	Model 2224 SN 132150	8	10	Model 19 SN 91941
H4	207	23	214	9	30 %	16 %	-23.33	87.50	Model 2224 SN 132150	8	10	Model 19 SN 91941

Table A-12a
 Building 4 Room 2
 Floor - Affected Area
 Survey Number 091996040205 & 092096040206 & 101096040004

Survey Point	Raw Counts Beta/Gamma cpm/100 cm ²	Raw Counts Alpha cpm/100 cm ²	Background Beta/Gamma cpm/100 cm ²	Background Alpha cpm/100 cm ²	Eff. Beta Gamma	Eff. Alpha	Net Activity Beta/Gamma dpm/100 cm ²	Net Activity Alpha dpm/100 cm ²	Instrument Used	Gamma Bkgd	Gamma Reading	Instrument Used
H5	218	12	214	9	30 %	16 %	13.33	18.75	Model 2224 SN 132150	8	10	Model 19 SN 91941
H6	253	33	214	9	30 %	16 %	130.00	150.00	Model 2224 SN 132150	8	10	Model 19 SN 91941
H7	214	18	214	9	30 %	16 %	0.00	56.25	Model 2224 SN 132150	8	10	Model 19 SN 91941
H8	290	22	214	9	30 %	16 %	253.33	81.25	Model 2224 SN 132150	8	10	Model 19 SN 91941
I1	249	16	214	9	30 %	16 %	116.67	43.75	Model 2224 SN 132150	8	10	Model 19 SN 91941
I2	222	19	214	9	30 %	16 %	26.67	62.50	Model 2224 SN 132150	8	10	Model 19 SN 91941
I3	264	17	214	9	30 %	16 %	116.67	50.00	Model 2224 SN 132150	8	10	Model 19 SN 91941
I4	301	20	214	9	30 %	16 %	390.00	68.75	Model 2224 SN 132150	8	10	Model 19 SN 91941
I5	263	11	214	9	30 %	16 %	163.33	12.50	Model 2224 SN 132150	8	10	Model 19 SN 91941
I6	275	7	214	9	30 %	16 %	203.33	-12.50	Model 2224 SN 132150	8	10	Model 19 SN 91941
I7	234	10	214	9	30 %	16 %	66.67	6.25	Model 2224 SN 132150	8	10	Model 19 SN 91941
I8	223	11	214	9	30 %	16 %	30.00	12.50	Model 2224 SN 132150	8	10	Model 19 SN 91941

Figure 15



Building 4 Room 3 - North Wall

Table A-13a
 Building 4 Room 3
 North Wall - Affected Area
 Survey Numbers - 92596040308 & 92696040310 & 92696040311

Survey Point	Raw Counts Beta/Gamma cpm/100 cm ²	Raw Counts Alpha cpm/100 cm ²	Background Beta/Gamma cpm/100 cm ²	Background Alpha cpm/100 cm ²	Eff. Beta Gamma	Eff. Alpha	Net Activity Beta/Gamma dpm/100 cm ²	Net Activity Alpha dpm/100 cm ²	Instrument Used	Gamma Bkgd	Gamma Reading	Instrument Used
A1	221	5	218	0	29 %	16 %	10.34	31.25	Model 2224 SN 132151	15	15	Model 19 SN 76228
A2	265	3	218	0	29 %	16 %	162.07	18.75	Model 2224 SN 132151	15	14	Model 19 SN 76228
A3	264	4	218	0	29 %	16 %	158.62	25.00	Model 2224 SN 132151	15	15	Model 19 SN 76228
A4	223	4	218	0	29 %	16 %	17.24	25.00	Model 2224 SN 132151	15	16	Model 19 SN 76228
A5	208	4	218	0	29 %	16 %	-34.48	25.00	Model 2224 SN 132151	15	10	Model 19 SN 76228
A6	241	7	218	0	29 %	16 %	79.31	43.75	Model 2224 SN 132151	15	14	Model 19 SN 76228
A7	191	9	218	0	29 %	16 %	-93.10	56.25	Model 2224 SN 132151	15	15	Model 19 SN 76228
A8	236	5	218	0	29 %	16 %	62.07	31.25	Model 2224 SN 132151	15	14	Model 19 SN 76228
B1	200	3	218	0	29 %	16 %	-62.07	18.75	Model 2224 SN 132151	15	15	Model 19 SN 76228
B2	292	7	218	0	29 %	16 %	255.17	43.75	Model 2224 SN 132151	15	15	Model 19 SN 76228
B3	202	6	218	0	29 %	16 %	-55.17	37.50	Model 2224 SN 132151	15	15	Model 19 SN 76228
B4	226	12	218	0	29 %	16 %	27.59	75.00	Model 2224 SN 132151	15	13	Model 19 SN 76228
B5	218	7	218	0	29 %	16 %	0.00	43.75	Model 2224 SN 132151	15	15	Model 19 SN 76228
B6	297	15	218	0	29 %	16 %	272.41	93.75	Model 2224 SN 132151	15	15	Model 19 SN 76228
B7	230	17	218	0	29 %	16 %	41.38	106.25	Model 2224 SN 132151	15	15	Model 19 SN 76228

Table A-13a
 Building 4 Room 3
 North Wall - Affected Area
 Survey Numbers - 92596040308 & 92696040310 & 92696040311

Survey Point	Raw Counts Beta/Gamma cpm/100 cm ²	Raw Counts Alpha cpm/100 cm ²	Background Beta/Gamma cpm/100 cm ²	Background Alpha cpm/100 cm ²	Eff. Beta Gamma	Eff. Alpha	Net Activity Beta/Gamma dpm/100 cm ²	Net Activity Alpha dpm/100 cm ²	Instrument Used	Gamma Bkgd	Gamma Reading	Instrument Used
B8	236	5	218	0	29 %	16 %	6.90	31.25	Model 2224 SN 132151	15	15	Model 19 SN 76228
C1	249	5	207	6	32 %	12 %	131.25	-8.33	Model 2224 SN 116257	10	10	Model 19 SN 91491
C2	230	6	207	6	32 %	12 %	71.88	0.00	Model 2224 SN 116257	10	10	Model 19 SN 91491
C3	238	5	207	6	32 %	12 %	96.88	-8.33	Model 2224 SN 116257	10	10	Model 19 SN 91491
C4	246	6	207	6	32 %	12 %	121.88	0.00	Model 2224 SN 116257	10	11	Model 19 SN 91491
C5	301	4	207	6	32 %	12 %	293.75	-16.67	Model 2224 SN 116257	10	11	Model 19 SN 91491
C6	306	2	207	6	32 %	12 %	309.38	-33.33	Model 2224 SN 116257	10	10	Model 19 SN 91491
C7	295	6	207	6	32 %	12 %	275.00	0.00	Model 2224 SN 116257	10	10	Model 19 SN 91491
C8	299	3	207	6	32 %	12 %	287.50	-25.00	Model 2224 SN 116257	10	10	Model 19 SN 91491
D1	305	7	288	8	30 %	17 %	56.67	-5.88	Model 2224 SN 132142	10	10	Model 19 SN 91491
D2	275	5	288	8	30 %	17 %	-43.33	-17.65	Model 2224 SN 132142	10	10	Model 19 SN 91491
D3	256	7	288	8	30 %	17 %	-106.67	-5.88	Model 2224 SN 132142	10	10	Model 19 SN 91491
D4	348	8	288	8	30 %	17 %	200.00	0.00	Model 2224 SN 132142	10	10	Model 19 SN 91491
D5	360	6	288	8	30 %	17 %	240.00	-11.76	Model 2224 SN 132142	10	10	Model 19 SN 91491
D6	313	8	288	8	30 %	17 %	83.33	0.00	Model 2224 SN 132142	10	10	Model 19 SN 91491

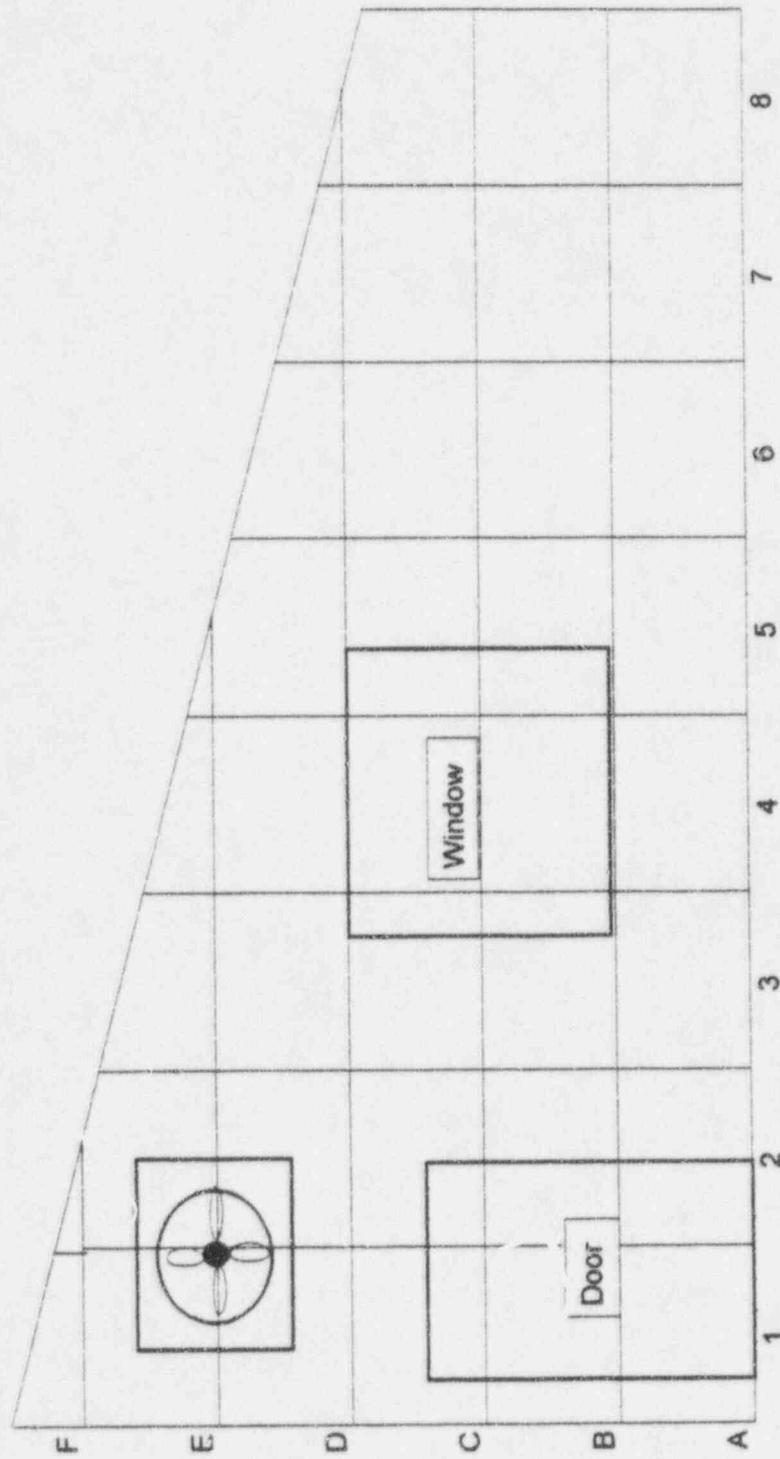
Table A-13a
 Building 4 Room 3
 North Wall - Affected Area
 Survey Numbers - 92596040308 & 92696040310 & 92696040311

Survey Point	Raw Counts Beta/Gamma cpm/100 cm ²	Raw Counts Alpha cpm/100 cm ²	Background Beta/Gamma cpm/100 cm ²	Background Alpha cpm/100 cm ²	Eff. Beta Gamma	Eff. Alpha	Net Activity Beta/Gamma dpm/100 cm ²	Net Activity Alpha dpm/100 cm ²	Instrument Used	Gamma Bkgd	Gamma Reading	Instrument Used
D7	332	6	288	8	30 %	17 %	146.67	-11.67	Model 2224 SN 132142	10	10	Model 19 SN 91491
D8	398	3	288	8	30 %	17 %	366.67	-29.41	Model 2224 SN 132142	10	10	Model 19 SN 91491
E4	323	4	288	8	30 %	17 %	116.67	-23.53	Model 2224 SN 132142	10	10	Model 19 SN 91491
E5	353	8	288	8	30 %	17 %	216.67	0.00	Model 2224 SN 132142	10	10	Model 19 SN 91491
E6	329	6	288	8	30 %	17 %	136.67	-11.76	Model 2224 SN 132142	10	10	Model '9 SN 91491
E7	277	3	288	8	30 %	17 %	-36.67	-29.41	Model 2224 SN 132142	10	10	Model 19 SN 91491
E8	309	6	288	8	30 %	17 %	70.00	-11.76	Model 2224 SN 132142	10	10	Model 19 SN 91491
F7	281	5	288	8	30 %	17 %	-23.33	-17.65	Model 2224 SN 132142	10	10	Model 19 SN 91491
F8	360	5	288	8	30 %	17 %	240.00	-17.65	Model 2224 SN 132142	10	10	Model 19 SN 91491

Table A-13u
 Building 4 Room 3
 North Wall - Unaffected Area
 Survey Numbers -92696040309

Survey Point	Raw Counts Beta/Gamma cps/100 cm ²	Raw Counts Alpha cps/100 cm ²	Background Beta/Gamma cps/100 cm ²	Background Alpha cps/100 cm ²	Eff. Beta Gamma	Eff. Alpha	Net Activity Beta/Gamma dpm/100 cm ²	Net Activity Alpha dpm/100 cm ²	Instrument Used	Gamma Bkgrd	Gamma Reading	Instrument Used
1	388	6	204	2	30 %	17 %	613.33	23.33	Model 2224 SN 132142	10	10	Model 19 SN 91491
2	333	7	204	2	30 %	17 %	430.00	29.41	Model 2224 SN 132142	10	10	Model 19 SN 91491
3	331	9	204	2	30 %	17 %	423.33	41.18	Model 2224 SN 132142	10	10	Model 19 SN 91491

Figure 16



Building 4 Room 3 - South Wall

Table A-14a
 Building 4 Room 3
 South Wall - Affected Area
 Survey Numbers - 92696040310 & 92696040311

Survey Point	Raw Counts Beta/Gamma cpm/100 cm ²	Raw Counts Alpha cpm/100 cm ²	Background Beta/Gamma cpm/100 cm ²	Background Alpha cpm/100 cm ²	Eff Beta Gamma	Eff Alpha	Net Activity Beta/Gamma dpm/100 cm ²	Net Activity Alpha dpm/100 cm ²	Instrument Used	Gamma Bkgd	Gamma Reading	Instrument Used
A1	223	12	218	6	29 %	16 %	224.14	37.50	Model 2224 SN 132151	10	15	Model 19 SN 76228
A2	305	17	218	6	29 %	16 %	300.00	68.75	Model 2224 SN 132151	10	15	Model 19 SN 76228
A3	299	7	218	6	29 %	16 %	279.31	6.25	Model 2224 SN 132151	10	15	Model 19 SN 76228
A4	281	10	218	6	29 %	16 %	217.24	25.00	Model 2224 SN 132151	10	115	Model 19 SN 76228
A5	377	8	218	6	29 %	16 %	548.28	12.50	Model 2224 SN 132151	10	16	Model 19 SN 76228
A6	394	9	218	6	29 %	16 %	606.90	18.75	Model 2224 SN 132151	10	15	Model 19 SN 76228
A7	251	5	218	6	29 %	16 %	113.79	-6.25	Model 2224 SN 132151	10	15	Model 19 SN 76228
A8	245	5	218	6	29 %	16 %	93.10	-6.25	Model 2224 SN 132151	10	15	Model 19 SN 76228
B1	284	10	218	6	29 %	16 %	227.59	25.00	Model 2224 SN 132151	10	15	Model 19 SN 76228
B2	265	8	218	6	29 %	16 %	162.07	12.50	Model 2224 SN 132151	10	14	Model 19 SN 76228
B3	286	7	218	6	29 %	16 %	234.48	6.25	Model 2224 SN 132151	10	15	Model 19 SN 76228
B4	218	8	218	6	29 %	16 %	0.00	12.50	Model 2224 SN 132151	10	13	Model 19 SN 76228
B5	286	5	218	6	29 %	16 %	234.48	-6.25	Model 2224 SN 132151	10	15	Model 19 SN 76228
B6	279	9	218	6	29 %	16 %	210.34	18.75	Model 2224 SN 132151	10	15	Model 19 SN 76228

Table A-14a
 Building 4 Room 3
 South Wall - Affected Area
 Survey Numbers - 92696040310 & 92696040311

Survey Point	Raw Counts Beta/Gamma cpm/100 cm ²	Raw Counts Alpha cpm/100 cm ²	Background Beta/Gamma cpm/100 cm ²	Background Alpha cpm/100 cm ²	Eff. Beta Gamma	Eff. Alpha	Net Activity Beta/Gamma dpm/100 cm ²	Net Activity Alpha dpm/100 cm ²	Instrument Used	Gamma Bkgd	Gamma Reading	Instrument Used
B7	228	7	218	6	29 %	16 %	34.48	6.25	Model 2224 SN 132151	10	15	Model 19 SN 76228
B8	282	6	218	6	29 %	16 %	220.69	0.00	Model 2224 SN 132151	10	15	Model 19 SN 76228
C1	263	3	288	8	30 %	17 %	181.25	-25.00	Model 2224 SN 132142	10	11	Model 19 SN 91491
C2	253	5	288	8	30 %	17 %	143.75	-8.33	Model 2224 SN 132142	10	10	Model 19 SN 91491
C3	271	3	288	8	30 %	17 %	200.00	-25.00	Model 2224 SN 132142	10	10	Model 19 SN 91491
C4	251	4	288	8	30 %	17 %	137.50	-16.67	Model 2224 SN 132142	10	10	Model 19 SN 91491
C5	263	2	288	8	30 %	17 %	175.00	-33.33	Model 2224 SN 132142	10	11	Model 19 SN 91491
C6	290	3	288	8	30 %	17 %	259.38	-25.00	Model 2224 SN 132142	10	10	Model 19 SN 91491
C7	238	2	288	8	30 %	17 %	96.88	-33.33	Model 2224 SN 132142	10	11	Model 19 SN 91491
C8	248	3	288	8	30 %	17 %	128.13	-25.00	Model 2224 SN 132142	10	11	Model 19 SN 91491
D1	308	6	288	8	30 %	17 %	66.67	-11.76	Model 2224 SN 132142	10	10	Model 19 SN 91491
D2	307	3	288	8	30 %	17 %	63.33	-29.41	Model 2224 SN 132142	10	10	Model 19 SN 91491
D3	306	2	288	8	30 %	17 %	60.00	-35.29	Model 2224 SN 132142	10	10	Model 19 SN 91491
D4	348	7	288	8	30 %	17 %	200.00	-5.88	Model 2224 SN 132142	10	10	Model 19 SN 91491

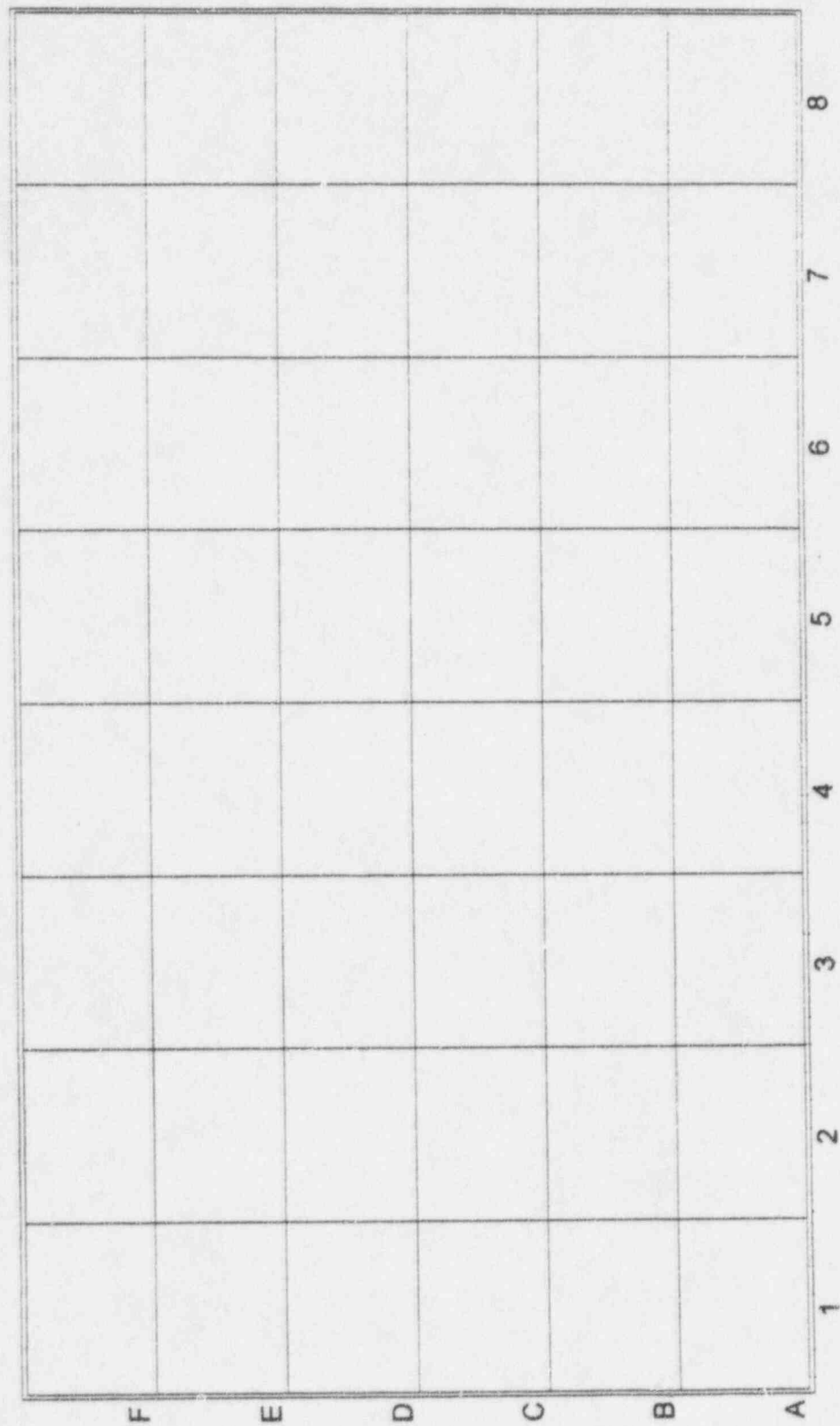
Table A-14a
 Building 4 Room 3
 South Wall - Affected Area
 Survey Numbers - 92696040310 & 92696040311

Survey Point	Raw Counts Beta/Gamma cpm/100 cm ²	Raw Counts Alpha cpm/100 cm ²	Background Beta/Gamma cpm/100 cm ²	Background Alpha cpm/100 cm ²	Eff. Beta Gamma	Eff. Alpha	Net Activity Beta/Gamma dpm/100 cm ²	Net Activity Alpha dpm/100 cm ²	Instrument Used	Gamma Bkgd	Gamma Reading	Instrument Used
D5	317	7	282	8	30 %	17 %	96.67	-5.88	Model 2224 SN 132142	10	10	Model 19 SN 91491
D6	346	5	288	8	30 %	17 %	193.33	-17.65	Model 2224 SN 132142	10	10	Model 19 SN 91491
D7	329	1	288	8	30 %	17 %	136.67	-41.18	Model 2224 SN 132142	10	10	Model 19 SN 91491
D8	281	5	288	8	30 %	17 %	-23.33	-17.65	Model 2224 SN 132142	10	10	Model 19 SN 91491
E1	240	31	288	8	30 %	17 %	-160.00	135.29	Model 2224 SN 132142	10	10	Model 19 SN 91491
E2	316	7	288	8	30 %	17 %	93.33	-5.88	Model 2224 SN 132142	10	10	Model 19 SN 91491
E3	328	9	288	8	30 %	17 %	133.33	5.88	Model 2224 SN 132142	10	10	Model 19 SN 91491
E4	309	8	288	8	30 %	17 %	70.00	0.00	Model 2224 SN 132142	10	10	Model 19 SN 91491
E5	309	6	288	8	30 %	17 %	70.00	-11.76	Model 2224 SN 132142	10	10	Model 19 SN 91491
F1	202	37	288	8	30 %	17 %	-286.67	170.59	Model 2224 SN 132142	10	10	Model 19 SN 91491
F2	319	25	288	8	30 %	17 %	103.33	100.00	Model 2224 SN 132142	10	10	Model 19 SN 91491

Table A-14u
 Building 4 Room 3
 South Wall - Unaffected Area
 Survey Numbers -92696040309

Survey Point	Raw Counts Beta/Gamma cpm/100 cm ²	Raw Counts Alpha cpm/100 cm ²	Background Beta/Gamma cpm/100 cm ²	Background Alpha cpm/100 cm ²	Eff. Beta Gamma	Eff. Alpha	Net Activity Beta/Gamma dpm/100 cm ²	Net Activity Alpha dpm/100 cm ²	Instrument Used	Gamma Bkgd	Gamma Reading	Instrument Used
1	334	11	204	2	30 %	17 %	433.33	52.94	Model 2224 SN 132142	10	10	Model 19 SN 91491
2	318	7	204	2	30 %	17 %	380.00	29.41	Model 2224 SN 132142	10	10	Model 19 SN 91491
3	302	5	204	2	30 %	17 %	326.67	17.65	Model 2224 SN 132142	10	10	Model 19 SN 91491

Figure 17



Building 4 Room 3 - East Wall

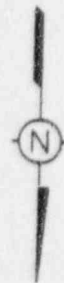


Table A-15a
 Building 4 Room 3
 East Wall - Affected Area
 Survey Numbers - 92596040308 & 92696040310 & 92696040311

Survey Point	Raw Counts Beta/Gamma cpm/100 cm ²	Raw Counts Alpha cpm/100 cm ²	Background Beta/Gamma cpm/100 cm ²	Background Alpha cpm/100 cm ²	Eff. Beta Gamma	Eff. Alpha	Net Activity Beta/Gamma dpm/100 cm ²	Net Activity Alpha dpm/100 cm ²	Instrument Used	Gamma Skel	Gamma Reading	Instrument Used
A1	254	4	218	0	29 %	16 %	124.14	25.00	Model 2224 SN 132151	15	15	Model 19 SN 76228
A2	265	2	218	0	29 %	16 %	162.07	12.50	Model 2224 SN 132151	15	14	Model 19 SN 76228
A3	232	4	218	0	29 %	16 %	48.28	25.00	Model 2224 SN 132151	15	13	Model 19 SN 76228
A4	225	4	218	0	29 %	16 %	24.14	25.00	Model 2224 SN 132151	15	15	Model 19 SN 76228
A5	237	7	218	0	29 %	16 %	65.52	43.75	Model 2224 SN 132151	15	15	Model 19 SN 76228
A6	295	3	218	0	29 %	16 %	265.52	18.75	Model 2224 SN 132151	15	15	Model 19 SN 76228
A7	207	4	218	0	29 %	16 %	-37.93	25.00	Model 2224 SN 132151	15	15	Model 19 SN 76228
A8	195	9	218	0	29 %	16 %	-79.31	56.25	Model 2224 SN 132151	15	12	Model 19 SN 76228
B1	242	8	218	0	29 %	16 %	82.76	50.00	Model 2224 SN 132151	15	15	Model 19 SN 76228
B2	231	7	218	0	29 %	16 %	-17.24	43.75	Model 2224 SN 132151	15	13	Model 19 SN 76228
B3	265	15	218	0	29 %	16 %	162.07	93.75	Model 2224 SN 132151	15	16	Model 19 SN 76228
B4	205	5	218	0	29 %	16 %	-44.83	31.25	Model 2224 SN 132151	15	15	Model 19 SN 76228
B5	219	8	218	0	29 %	16 %	3.45	50.00	Model 2224 SN 132151	15	15	Model 19 SN 76228
B6	217	2	218	0	29 %	16 %	-3.45	12.50	Model 2224 SN 132151	15	15	Model 19 SN 76228
B7	199	6	218	0	29 %	16 %	-65.52	37.50	Model 2224 SN 132151	15	15	Model 19 SN 76228

Table A-15a
 Building 4 Room 3
 East Wall - Affected Area
 Survey Numbers - 92596040308 & 92696040310 & 92696040311

Survey Point	Raw Counts Beta/Gamma cpm/100 cm ²	Raw Counts Alpha cpm/100 cm ²	Background Beta/Gamma cpm/100 cm ²	Background Alpha cpm/100 cm ²	Eff. Beta Gamma	Eff. Alpha	Net Activity Beta/Gamma dpm/100 cm ²	Net Activity Alpha dpm/100 cm ²	Instrument Used	Gamma Bkgd	Gamma Reading	Instrument Used
B8	223	10	218	0	29 %	16 %	17.24	62.50	Model 2224 SN 132151	15	15	Model 19 SN 76228
C1	226	2	207	6	32 %	12 %	59.38	-33.33	Model 2224 SN 116257	10	11	Model 19 SN 91491
C2	227	2	207	6	32 %	12 %	62.50	-33.33	Model 2224 SN 116257	10	11	Model 19 SN 91491
C3	236	4	207	6	32 %	12 %	90.63	-16.67	Model 2224 SN 116257	10	10	Model 19 SN 91491
C4	265	5	207	6	32 %	12 %	181.25	-8.33	Model 2224 SN 116257	10	10	Model 19 SN 91491
C5	184	8	207	6	32 %	12 %	-71.88	16.67	Model 2224 SN 116257	10	11	Model 19 SN 91491
C6	218	4	207	6	32 %	12 %	34.38	-16.67	Model 2224 SN 116257	10	10	Model 19 SN 91491
C7	231	2	207	6	32 %	12 %	75.00	-33.33	Model 2224 SN 116257	10	10	Model 19 SN 91491
C8	229	1	207	6	32 %	12 %	68.75	-41.67	Model 2224 SN 116257	10	10	Model 19 SN 91491
D1	338	10	288	8	30 %	17 %	166.67	11.76	Model 2224 SN 132142	10	10	Model 19 SN 91491
D2	354	7	288	8	30 %	17 %	220.00	-5.88	Model 2224 SN 132142	10	10	Model 19 SN 91491
D3	360	7	288	8	30 %	17 %	240.00	-5.88	Model 2224 SN 132142	10	10	Model 19 SN 91491
D4	336	6	288	8	30 %	17 %	160.00	-11.76	Model 2224 SN 132142	10	10	Model 19 SN 91491
D5	281	6	288	8	30 %	17 %	-23.33	-11.76	Model 2224 SN 132142	10	10	Model 19 SN 91491
D6	305	7	288	8	30 %	17 %	56.67	-5.88	Model 2224 SN 132142	10	10	Model 19 SN 91491

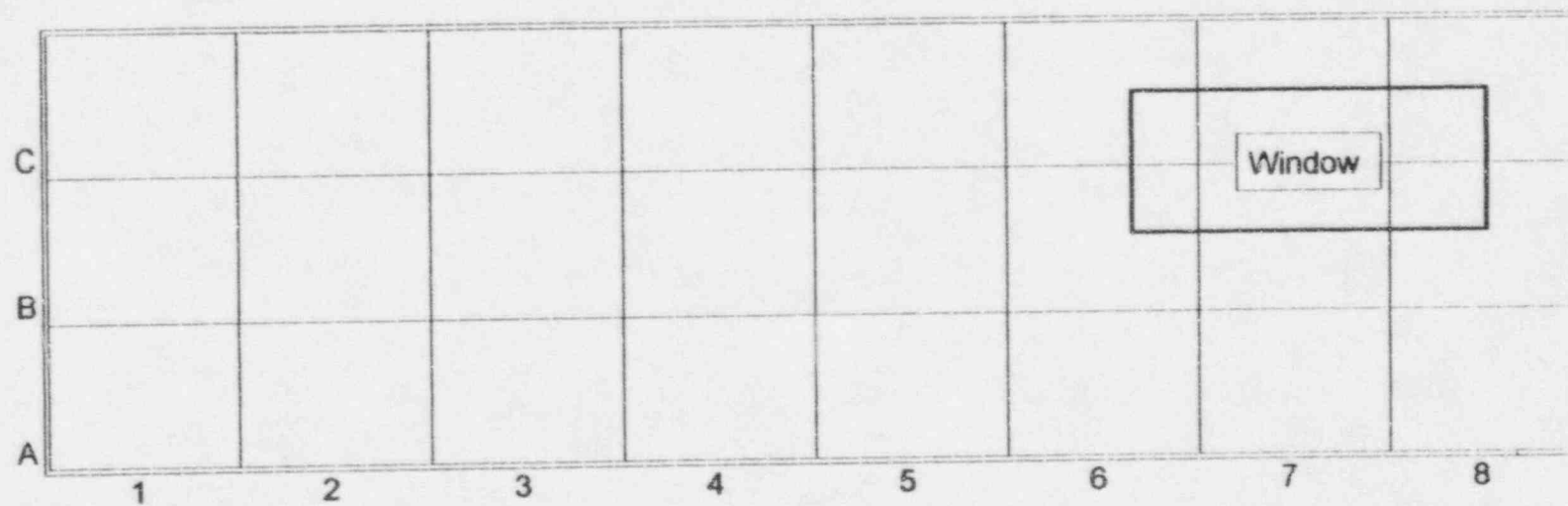
Table A-15a
 Building 4 Room 3
 East Wall - Affected Area
 Survey Numbers - 92596040308 & 92696040310 & 92696040311

Survey Point	Raw Counts Beta/Gamma cpm/100 cm ²	Raw Counts Alpha cpm/100 cm ²	Background Beta/Gamma cpm/100 cm ²	Background Alpha cpm/100 cm ²	Eff. Beta Gamma	Eff. Alpha	Net Activity Beta/Gamma dpm/100 cm ²	Net Activity Alpha dpm/100 cm ²	Instrument Used	Gamma Ekcd	Gamma Reading	Instrument Used
D7	285	5	288	8	30 %	17 %	-10.00	-17.65	Model 2224 SN 132142	10	10	Model 19 SN 91491
D8	304	9	288	8	30 %	17 %	53.33	5.88	Model 2224 SN 132142	10	10	Model 19 SN 91491
E1	307	1	288	8	30 %	17 %	63.33	-41.18	Model 2224 SN 132142	10	10	Model 19 SN 91491
E2	327	6	288	8	30 %	17 %	130.00	-11.76	Model 2224 SN 132142	10	10	Model 19 SN 91491
E3	312	8	288	8	30 %	17 %	80.00	0.00	Model 2224 SN 132142	10	10	Model 19 SN 91491
E4	255	7	288	8	30 %	17 %	-76.67	-5.88	Model 2224 SN 132142	10	10	Model 19 SN 91491
E5	288	5	288	8	30 %	17 %	0.00	-17.65	Model 2224 SN 132142	10	10	Model 19 SN 91491
E6	308	5	288	8	30 %	17 %	66.67	-17.65	Model 2224 SN 132142	10	10	Model 19 SN 91491
E7	314	6	288	8	30 %	17 %	86.67	-11.76	Model 2224 SN 132142	10	10	Model 19 SN 91491
E8	362	3	288	8	30 %	17 %	246.67	-29.41	Model 2224 SN 132142	10	10	Model 19 SN 91491
F1	326	4	288	8	30 %	17 %	126.67	-23.53	Model 2224 SN 132142	10	10	Model 19 SN 91491
F2	339	3	288	8	30 %	17 %	170.00	-29.41	Model 2224 SN 132142	10	10	Model 19 SN 91491
F3	337	2	288	8	30 %	17 %	163.33	-35.29	Model 2224 SN 132142	10	10	Model 19 SN 91491
F4	276	9	288	8	30 %	17 %	-40.00	5.88	Model 2224 SN 132142	10	10	Model 19 SN 91491
F5	293	7	288	8	30 %	17 %	16.67	-5.88	Model 2224 SN 132142	10	10	Model 19 SN 91491

Table A-15a
 Building 4 Room 3
 East Wall - Affected Area
 Survey Numbers - 92596040308 & 92696040310 & 92696040311

Survey Point	Raw Counts Beta/Gamma cpm/100 cm ²	Raw Counts Alpha cpm/100 cm ²	Background Beta/Gamma cpm/100 cm ²	Background Alpha cpm/100 cm ²	Eff. Beta Gamma	Eff. Alpha	Net Activity Beta/Gamma dpm/100 cm ²	Net Activity Alpha dpm/100 cm ²	Instrument Used	Gamma Bkgd	Gamma Reading	Instrument Used
F6	325	9	288	8	30 %	17 %	123.33	5.88	Model 2224 SN 132142	10	10	Model 19 SN 91491
F7	329	7	288	8	30 %	17 %	136.67	-5.88	Model 2224 SN 132142	10	10	Model 19 SN 91491
F8	330	7	288	8	30 %	17 %	140.00	-5.88	Model 2224 SN 132142	10	10	Model 19 SN 91491

Figure 18



Building 4 Room 3 - West Wall



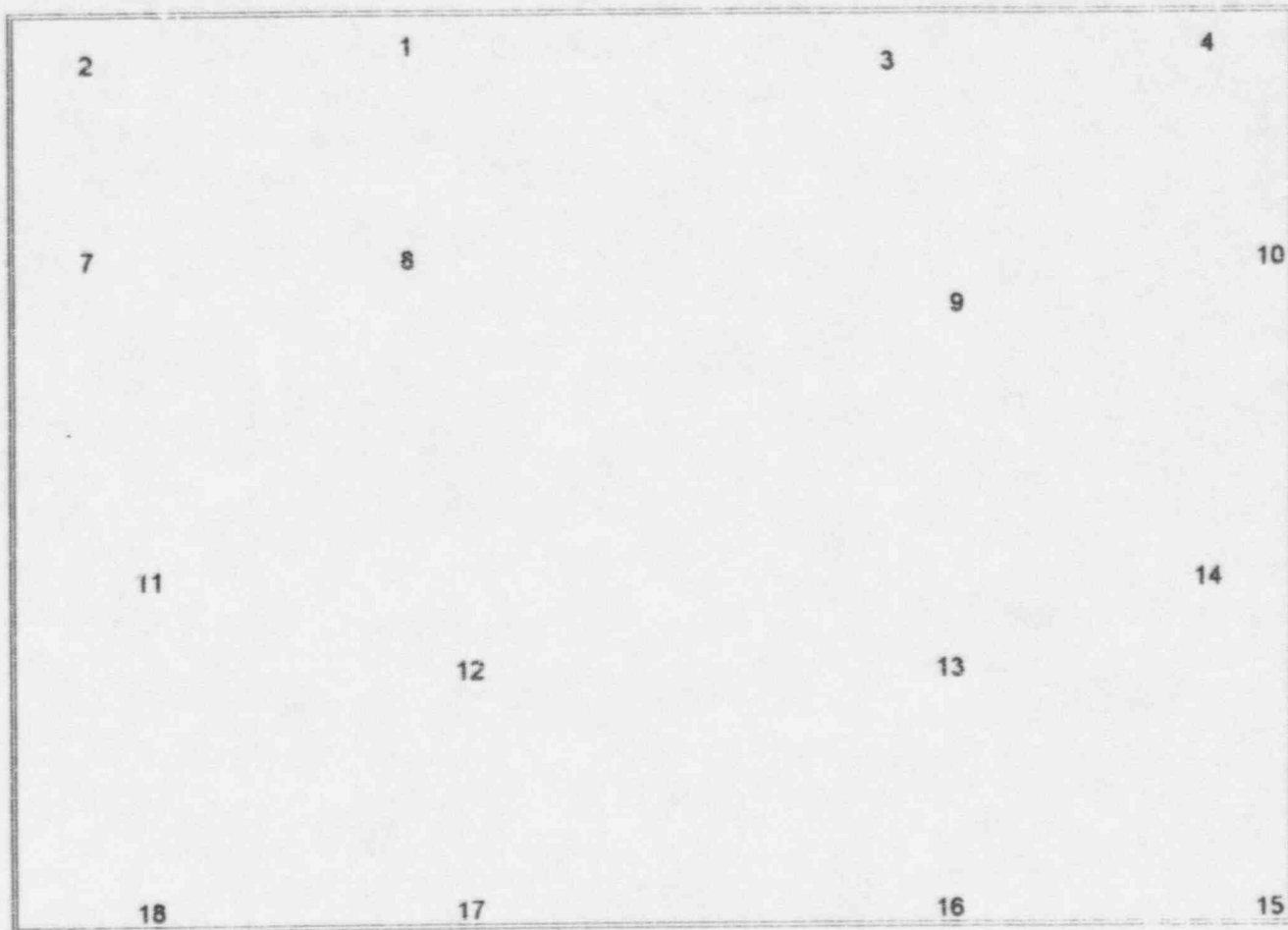
Table A-16a
 Building 4 Room 3
 West Wall - Affected Area
 Survey Numbers - 92596040308 & 92696040310

Survey Point	Raw Counts Beta/Gamma cpm/100 cm ²	Raw Counts Alpha cpm/100 cm ²	Background Beta/Gamma cpm/100 cm ²	Background Alpha cpm/100 cm ²	Eff. Beta Gammas	Eff. Alpha	Net Activity Beta/Gamma dpm/100 cm ²	Net Activity Alpha dpm/100 cm ²	Instrument Used	Gamma Bkgd	Gamma Reading	Instrument Used
A1	212	5	218	0	29 %	16 %	-20.69	31.25	Model 2224 SN 132151	15	15	Model 19 SN 76228
A2	222	7	218	0	29 %	16 %	13.79	43.75	Model 2224 SN 132151	15	15	Model 19 SN 76228
A3	275	2	218	0	29 %	16 %	196.55	12.50	Model 2224 SN 132151	15	15	Model 19 SN 76228
A4	260	12	218	0	29 %	16 %	144.83	75.00	Model 2224 SN 132151	15	15	Model 19 SN 76228
A5	220	1	218	0	29 %	16 %	6.90	6.25	Model 2224 SN 132151	15	15	Model 19 SN 76228
A6	222	1	218	0	29 %	16 %	13.79	6.25	Model 2224 SN 132151	15	15	Model 19 SN 76228
A7	271	3	218	0	29 %	16 %	182.76	18.75	Model 2224 SN 132151	15	15	Model 19 SN 76228
A8	212	2	218	0	29 %	16 %	-20.69	12.50	Model 2224 SN 132151	15	15	Model 19 SN 76228
B1	240	5	218	0	29 %	16 %	75.86	31.25	Model 2224 SN 132151	15	15	Model 19 SN 76228
B2	298	12	218	0	29 %	16 %	275.86	75.00	Model 2224 SN 132151	15	15	Model 19 SN 76228
B3	325	6	218	0	29 %	16 %	368.97	37.50	Model 2224 SN 132151	15	14	Model 19 SN 76228
B4	339	9	218	0	29 %	16 %	417.24	56.25	Model 2224 SN 132151	15	13	Model 19 SN 76228
B5	197	6	218	0	29 %	16 %	-72.41	37.50	Model 2224 SN 132151	15	15	Model 19 SN 76228
B6	230	4	218	0	29 %	16 %	41.38	25.00	Model 2224 SN 132151	15	15	Model 19 SN 76228
B7	240	4	218	0	29 %	16 %	75.86	25.00	Model 2224 SN 132151	15	15	Model 19 SN 76228

Table A-16a
 Building 4 Room 3
 West Wall - Affected Area
 Survey Numbers - 92596040308 & 92696040310

Survey Point	Raw Counts Beta/Gamma cpm/100 cm ²	Raw Counts Alpha cpm/100 cm ²	Background Beta/Gamma cpm/100 cm ²	Background Alpha cpm/100 cm ²	Eff. Beta Gamma	Eff. Alpha	Net Activity Beta/Gamma dpm/100 cm ²	Net Activity Alpha dpm/100 cm ²	Instrument Used	Gamma Bkgd	Gamma Reading	Instrument Used
B8	236	4	218	0	29 %	16 %	62.07	25.00	Model 2224 SN 132151	15	15	Model 19 SN 76228
C1	228	2	207	6	32 %	12 %	65.63	-33.33	Model 2224 SN 116257	10	11	Model 19 SN 91491
C2	224	6	207	6	32 %	12 %	53.13	0.00	Model 2224 SN 116257	10	11	Model 19 SN 91491
C3	237	5	207	6	32 %	12 %	93.75	-8.33	Model 2224 SN 116257	10	10	Model 19 SN 91491
C4	280	11	207	6	32 %	12 %	228.13	41.67	Model 2224 SN 116257	10	11	Model 19 SN 91491
C5	278	6	207	6	32 %	12 %	221.88	0.00	Model 2224 SN 116257	10	10	Model 19 SN 91491
C6	240	31	207	6	32 %	12 %	103.13	208.33	Model 2224 SN 116257	10	10	Model 19 SN 91491
C7	319	25	207	6	32 %	12 %	350.00	158.33	Model 2224 SN 116257	10	10	Model 19 SN 91491
C8	202	37	207	6	32 %	12 %	-15.63	258.33	Model 2224 SN 116257	10	10	Model 19 SN 91491

Figure 19



Building 4 Room 3 - Ceiling

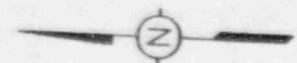


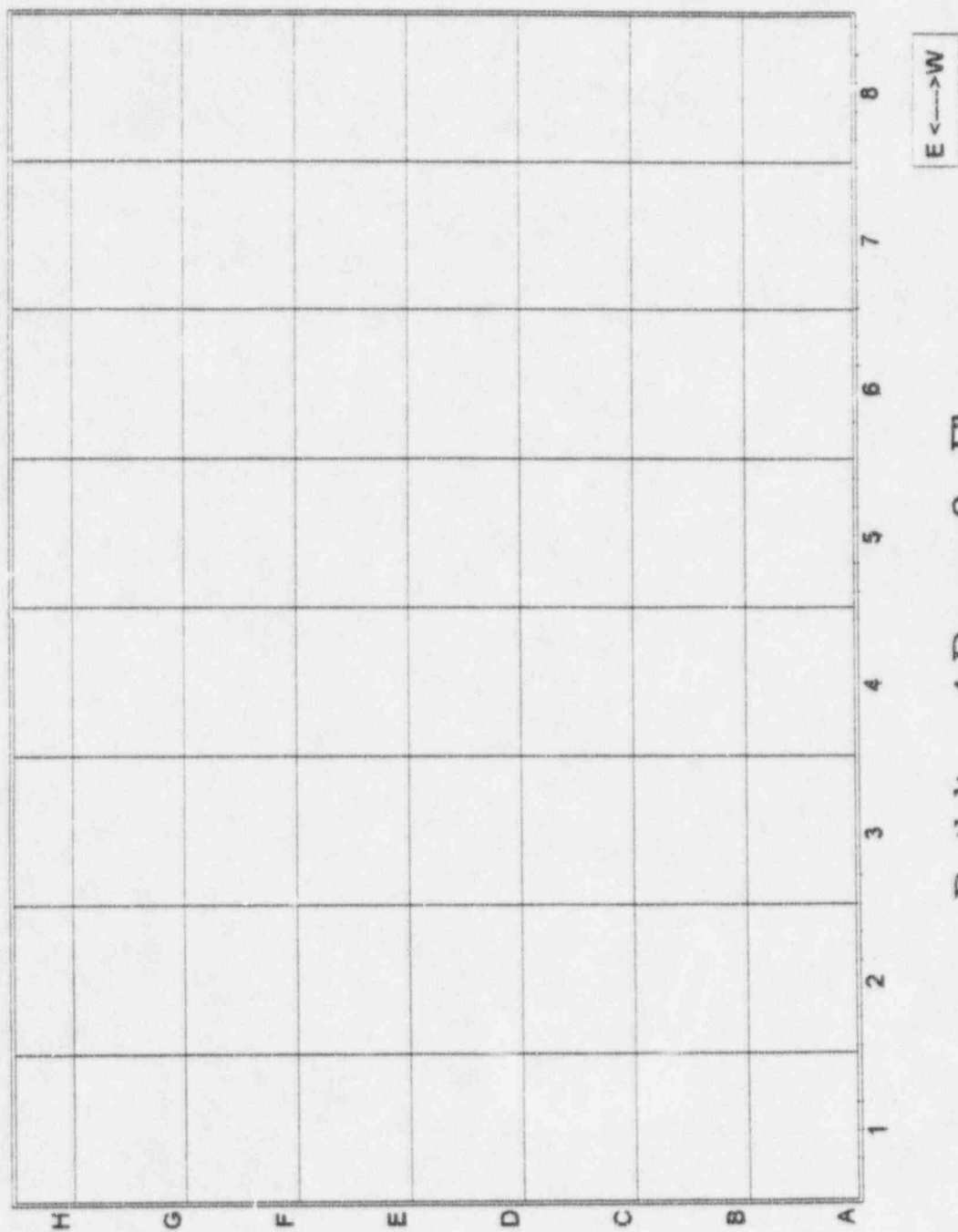
Table A-17u
Building 4 Room 3
Ceiling - Unaffected Area
Survey Number -92696040309

Survey Point	Raw Counts Beta/Gamma cpm/100 cm ²	Raw Counts Alpha cpm/100 cm ²	Background Beta/Gamma cpm/100 cm ²	Background Alpha cpm/100 cm ²	Eff. Beta Gamma	Eff. Alpha	Net Activity Beta/Gamma dpm/100 cm ²	Net Activity Alpha dpm/100 cm ²	Instrument Used	Gamma Bkgd	Gamma Reading	Instrument Used
1	226	7	204	2	30 %	17 %	73.33	29.41	Model 2224 SN 132142	10	10	Model 19 SN 91491
2	235	5	204	2	30 %	17 %	103.33	17.65	Model 2224 SN 132142	10	10	Model 19 SN 91491
3	243	9	204	2	30 %	17 %	130.00	41.18	Model 2224 SN 132142	10	10	Model 19 SN 91491
4	197	11	204	2	30 %	17 %	-23.33	52.94	Model 2224 SN 132142	10	10	Model 19 SN 91491
5	186	9	204	2	30 %	17 %	-60.00	41.18	Model 2224 SN 132142	10	10	Model 19 SN 91491
6	229	5	204	2	30 %	17 %	83.33	17.65	Model 2224 SN 132142	10	10	Model 19 SN 91491
7	201	4	204	2	30 %	17 %	-10.00	11.76	Model 2224 SN 132142	10	10	Model 19 SN 91491
8	172	11	204	2	30 %	17 %	-106.67	52.94	Model 2224 SN 132142	10	10	Model 19 SN 91491
9	213	4	204	2	30 %	17 %	30.00	11.76	Model 2224 SN 132142	10	10	Model 19 SN 91491
10	226	4	204	2	30 %	17 %	73.33	11.76	Model 2224 SN 132142	10	10	Model 19 SN 91491
11	180	7	204	2	30 %	17 %	-80.00	29.41	Model 2224 SN 132142	10	10	Model 19 SN 91491
12	194	8	204	2	30 %	17 %	-33.33	35.29	Model 2224 SN 132142	10	10	Model 19 SN 91491
13	214	4	204	2	30 %	17 %	33.33	11.76	Model 2224 SN 132142	10	10	Model 19 SN 91491
14	201	5	204	2	30 %	17 %	-10.00	17.65	Model 2224 SN 132142	10	10	Model 19 SN 91491

Table A-17u
 Building 4 Room 3
 Ceiling - Unaffected Area
 Survey Numbers -92696040309

Survey Point	Raw Counts Beta/Gamma cpm/100 cm ²	Raw Counts Alpha cpm/100 cm ²	Background Beta/Gamma cpm/100 cm ²	Background Alpha cpm/100 cm ²	Eff. Beta Gamma	Eff. Alpha	Net Activity Beta/Gamma dpm/100 cm ²	Net Activity Alpha dpm/100 cm ²	Instrument Used	Gamma Bkgd	Gamma Reading	Instrument Used
15	202	7	204	2	30 %	17 %	-6.67	29.41	Model 2224 SN 132142	10	10	Model 19 SN 91491
16	192	5	204	2	30 %	17 %	-40.00	17.65	Model 2224 SN 132142	10	10	Model 19 SN 91491

Figure 20



Building 4 Room 3 - Floor

Table A-18a
 Building 4 Room 3
 Floor - Affected Area
 Survey Numbers -92596040306 & 101096040004

Survey Point	Raw Counts Beta/Gamma cpm/100 cm ²	Raw Counts Alpha cpm/100 cm ²	Background Beta/Gamma cpm/100 cm ²	Background Alpha cpm/100 cm ²	Eff. Beta Gamma	Eff. Alpha	Net Activity Beta/Gamma dpm/100 cm ²	Net Activity Alpha dpm/100 cm ²	Instrument Used	Gamma Bkgd	Gamma Reading	Instrument Used
A1	330	20	248	4	30 %	17 %	273.33	94.12	Model 2224 SN 132142	10	15	Model 19 SN 76228
A2	436	31	248	4	30 %	17 %	626.67	158.82	Model 2224 SN 132142	10	15	Model 19 SN 76228
A3	529	28	248	4	30 %	17 %	936.67	141.18	Model 2224 SN 132142	10	15	Model 19 SN 76228
A4	483	33	248	4	30 %	17 %	783.33	170.59	Model 2224 SN 132142	10	15	Model 19 SN 76228
A5	305	29	248	4	30 %	17 %	190.00	147.06	Model 2224 SN 132142	10	15	Model 19 SN 76228
A6	270	24	248	4	30 %	17 %	73.33	117.65	Model 2224 SN 132142	10	15	Model 19 SN 76228
A7	302	14	248	4	30 %	17 %	180.00	58.82	Model 2224 SN 132142	10	15	Model 19 SN 76228
A8	349	23	248	4	30 %	17 %	336.67	111.76	Model 2224 SN 132142	10	15	Model 19 SN 76228
B1	313	22	248	4	30 %	17 %	216.67	105.88	Model 2224 SN 132142	10	15	Model 19 SN 76228
B2	304	16	248	4	30 %	17 %	186.67	70.59	Model 2224 SN 132142	10	15	Model 19 SN 76228
B3	305	16	248	4	30 %	17 %	190.00	70.59	Model 2224 SN 132142	10	15	Model 19 SN 76228
B4	271	11	248	4	30 %	17 %	76.67	41.18	Model 2224 SN 132142	10	15	Model 19 SN 76228
B5	269	17	248	4	30 %	17 %	70.00	76.47	Model 2224 SN 132142	10	15	Model 19 SN 76228
B6	256	11	248	4	30 %	17 %	26.67	41.18	Model 2224 SN 132142	10	15	Model 19 SN 76228
B7	236	7	248	4	30 %	17 %	-40.00	17.65	Model 2224 SN 132142	10	15	Model 19 SN 76228

Table A-18a
Building 4 Room 3
Floor - Affected Area
Survey Numbers -92596040306 & 101096040004

Survey Point	Raw Counts Beta/Gamma cpm/100 cm ²	Raw Counts Alpha cpm/100 cm ²	Background Beta/Gamma cpm/100 cm ²	Background Alpha cpm/100 cm ²	Eff. Beta Gamma	Eff. Alpha	Net Activity Beta/Gamma dpm/100 cm ²	Net Activity Alpha dpm/100 cm ²	Instrument Used	Gamma Bkgd	Gamma Res. Ling	Instrument Used
B8	288	30	248	4	30 %	17 %	133.33	152.94	Model 2224 SN 132142	10	15	Model 19 SN 76228
C1	309	13	248	4	30 %	17 %	203.33	52.94	Model 2224 SN 132142	10	15	Model 19 SN 76228
C2	269	12	248	4	30 %	17 %	70.00	47.06	Model 2224 SN 132142	10	15	Model 19 SN 76228
C3	218	14	248	4	30 %	17 %	-100.00	58.82	Model 2224 SN 132142	10	15	Model 19 SN 76228
C4	291	13	248	4	30 %	17 %	143.33	52.94	Model 2224 SN 132142	10	15	Model 19 SN 76228
C5	234	12	248	4	30 %	17 %	-46.67	47.06	Model 2224 SN 132142	10	15	Model 19 SN 76228
C6	234	7	248	4	30 %	17 %	-46.67	17.65	Model 2224 SN 132142	10	15	Model 19 SN 76228
C7	499	18	248	4	30 %	17 %	836.67	82.35	Model 2224 SN 132142	10	15	Model 19 SN 76228
C8	392	17	248	4	30 %	17 %	480.00	76.47	Model 2224 SN 132142	10	15	Model 19 SN 76228
D1	476	35	248	4	30 %	17 %	760.00	170.50	Model 2224 SN 132142	10	15	Model 19 SN 76228
D2	474	45	248	4	30 %	17 %	753.33	241.18	Model 2224 SN 132142	10	15	Model 19 SN 76228
D3	254	20	248	4	30 %	17 %	20.00	94.12	Model 2224 SN 132142	10	15	Model 19 SN 76228
D4	312	13	248	4	30 %	17 %	213.33	52.94	Model 2224 SN 132142	10	15	Model 19 SN 76228
D5	265	21	248	4	30 %	17 %	56.67	100.00	Model 2224 SN 132142	10	15	Model 19 SN 76228
D6	275	8	248	4	30 %	17 %	90.00	23.53	Model 2224 SN 132142	10	15	Model 19 SN 76228

Table A-18a
 Building 4 Room 3
 Floor - Affected Area
 Survey Numbers -92596040305 & 101096040004

Survey Point	Raw Counts Beta/Gamma cpm/100 cm ²	Raw Counts Alpha cpm/100 cm ²	Background Beta/Gamma cpm/100 cm ²	Background Alpha cpm/100 cm ²	Eff. Beta Gamma	Eff. Alpha	Net Activity Beta/Gamma dpm/100 cm ²	Net Activity Alpha dpm/100 cm ²	Instrument Used	Gamma Bkgd	Gamma Reading	Instrument Used
D7	239	8	248	4	30 %	17 %	-30.00	23.53	Model 2224 SN 132142	10	15	Model 19 SN 76228
D8	300	12	248	4	30 %	17 %	173.33	47.06	Model 2224 SN 132142	10	15	Model 19 SN 76228
E1	329	7	248	4	30 %	17 %	270.00	17.65	Model 2224 SN 132142	10	15	Model 19 SN 76228
E2	281	14.6	182	0	22 %	15 %	450.00	97.33	Model 2224 SN 125560	10	15	Model 19 SN 76228
E3	283	14	248	4	30 %	17 %	116.67	58.82	Model 2224 SN 132142	10	15	Model 19 SN 76228
E4	388	29	248	4	30 %	17 %	466.67	147.06	Model 2224 SN 132142	10	15	Model 19 SN 76228
E5	297	25	248	4	30 %	17 %	163.33	123.53	Model 2224 SN 132142	10	15	Model 19 SN 76228
E6	273	13	248	4	30 %	17 %	83.33	52.94	Model 2224 SN 132142	10	15	Model 19 SN 76228
E7	287	7	248	4	30 %	17 %	130.00	17.65	Model 2224 SN 132142	10	15	Model 19 SN 76228
E8	282	23	248	4	30 %	17 %	113.33	111.76	Model 2224 SN 132142	10	15	Model 19 SN 76228
F1	312	24	248	4	30 %	17 %	213.33	117.65	Model 2224 SN 132142	10	15	Model 19 SN 76228
F2	282	12	248	4	30 %	17 %	113.33	47.06	Model 2224 SN 132142	10	15	Model 19 SN 76228
F3	218	13	248	4	30 %	17 %	-100.00	52.94	Model 2224 SN 132142	10	15	Model 19 SN 76228
F4	263	8	248	4	30 %	17 %	50.00	23.53	Model 2224 SN 132142	10	15	Model 19 SN 76228
F5	235	9	248	4	30 %	17 %	-63.33	29.41	Model 2224 SN 132142	10	15	Model 19 SN 76228

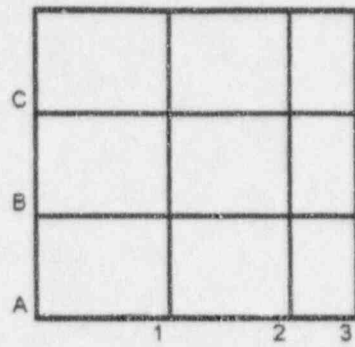
Table A-18a
 Building 4 Room 3
 Floor - Affected Area
 Survey Numbers -92596040306 & 101096040004

Survey Point	Raw Counts Beta/Gamma cpm/100 cm ²	Raw Counts Alpha cpm/100 cm ²	Background Beta/Gamma cpm/100 cm ²	Background Alpha cpm/100 cm ²	Eff. Beta Gamma	Eff. Alpha	Net Activity Beta/Gamma dpm/100 cm ²	Net Activity Alpha dpm/100 cm ²	Instrument Used	Gamma Bkgd	Gamma Reading	Instrument Used
F6	272	7	248	4	30 %	17 %	89.00	17.65	Model 2224 SN 132142	10	15	Model 19 SN 76228
F7	306	4	248	4	30 %	17 %	193.33	0.00	Model 2224 SN 132142	10	15	Model 19 SN 76228
F8	388	25	248	4	30 %	17 %	466.67	123.53	Model 2224 SN 132142	10	15	Model 19 SN 76228
G1	195	9	248	4	30 %	17 %	-176.67	29.41	Model 2224 SN 132142	10	15	Model 19 SN 76228
G2	259	11	248	4	30 %	17 %	36.67	41.18	Model 2224 SN 132142	10	15	Model 19 SN 76228
G3	468	26	248	4	30 %	17 %	733.33	129.41	Model 2224 SN 132142	10	15	Model 19 SN 76228
G4	342	22	248	4	30 %	17 %	313.33	105.88	Model 2224 SN 132142	10	15	Model 19 SN 76228
G5	310	23	248	4	30 %	17 %	206.67	111.76	Model 2224 SN 132142	10	15	Model 19 SN 76228
G6	331	11	248	4	30 %	17 %	276.67	41.18	Model 2224 SN 132142	10	15	Model 19 SN 76228
G7	351	8	248	4	30 %	17 %	343.33	23.53	Model 2224 SN 132142	10	15	Model 19 SN 76228
G8	293	13	248	4	30 %	17 %	150.00	52.94	Model 2224 SN 132142	10	15	Model 19 SN 76228
H1	204	13	248	4	30 %	17 %	-146.67	52.94	Model 2224 SN 132142	10	15	Model 19 SN 76228
H2	224	13	248	4	30 %	17 %	-80.00	52.94	Model 2224 SN 132142	10	15	Model 19 SN 76228
H3	428	20	248	4	30 %	17 %	600.00	94.12	Model 2224 SN 132142	10	15	Model 19 SN 76228
H4	327	12	248	4	30 %	17 %	263.33	47.06	Model 2224 SN 132142	10	15	Model 19 SN 76228

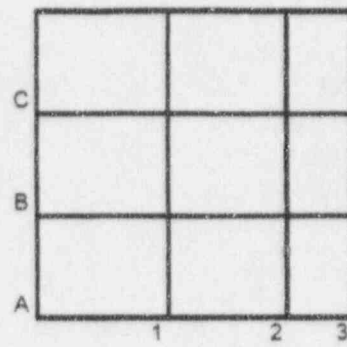
Table A-18a
 Building 4 Room 3
 Floor - Affected Area
 Survey Numbers -92596040306 & 101096040004

Survey Point	Raw Counts Beta/Gamma cpm/100 cm ²	Raw Counts Alpha cpm/100 cm ²	Background Beta/Gamma cpm/100 cm ²	Background Alpha cpm/100 cm ²	Eff. Beta Gamma	Eff. Alpha	Net Activity Beta/Gamma dpm/100 cm ²	Net Activity Alpha dpm/100 cm ²	Instrument Used	Gamma Bkgd	Gamma Reading	Instrument Used
H5	393	16	248	4	30 %	17 %	483.33	70.59	Model 2224 SN 132142	10	15	Model 19 SN 76228
H6	295	5	248	4	30 %	17 %	156.67	5.88	Model 2224 SN 132142	10	15	Model 19 SN 76228
H7	366	7	248	4	30 %	17 %	60.00	17.65	Model 2224 SN 132142	10	15	Model 19 SN 76228
H8	342	5	248	4	30 %	17 %	313.33	5.88	Model 2224 SN 132142	10	15	Model 19 SN 76228

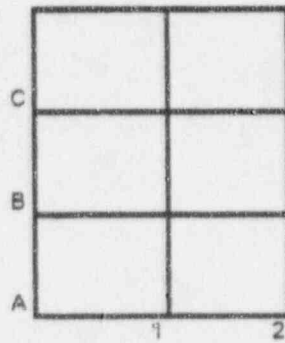
Figure 21



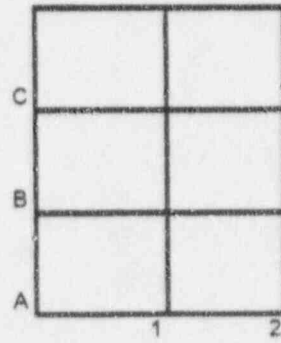
North Wall



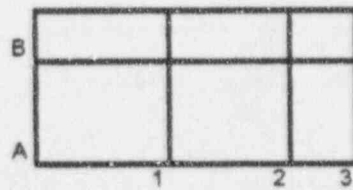
South Wall



East Wall



West Wall



Ceiling

Building 4 - Room 4

Table A-19a
 Building 4 Room 4
 North Wall - Affected Area
 Survey Numbers -0916040401

Survey Point	Raw Counts Beta/Gamma cpm/100 cm ²	Raw Counts Alpha cpm/100 cm ²	Background Beta/Gamma cpm/100 cm ²	Background Alpha cpm/100 cm ²	Eff. Beta Gamma	Eff. Alpha	Net Activity Beta/Gamma dpm/100 cm ²	Net Activity Alpha dpm/100 cm ²	Instrument Used	Gamma Bkgd	Gamma Reading	Instrument Used
A1	172	4	217	0	30 %	16 %	-150.00	25.00	Model 2224 SN 118241	10	10	Model 19 SN 91491
A2	225	1	217	0	30 %	16 %	26.67	6.25	Model 2224 SN 118241	10	10	Model 19 SN 91491
A3	223	1	217	0	30 %	16 %	20.00	6.25	Model 2224 SN 118241	10	10	Model 19 SN 91491
B1	210	1	217	0	30 %	16 %	-23.33	6.25	Model 2224 SN 118241	10	10	Model 19 SN 91491
B2	233	3	217	0	30 %	16 %	53.33	18.75	Model 2224 SN 118241	10	10	Model 19 SN 91491
B3	256	3	217	0	30 %	16 %	130.00	18.75	Model 2224 SN 118241	10	10	Model 19 SN 91491
C1	216	3	217	0	30 %	16 %	-3.33	18.75	Model 2224 SN 118241	10	10	Model 19 SN 91491
C2	243	1	217	0	30 %	16 %	93.33	6.25	Model 2224 SN 118241	10	10	Model 19 SN 91491
C3	219	1	217	0	30 %	16 %	6.67	6.25	Model 2224 SN 118241	10	10	Model 19 SN 91491

Table A-20a
 Building 4 Room 4
 South Wall - Affected Area
 Survey Numbers -0916040401

Survey Point	Raw Counts Beta/Gamma cpm/100 cm ²	Raw Counts Alpha cpm/100 cm ²	Background Beta/Gamma cpm/100 cm ²	Background Alpha cpm/100 cm ²	Eff. Beta Gamma	Eff. Alpha	Net Activity Beta/Gamma dpm/100 cm ²	Net Activity Alpha dpm/100 cm ²	Instrument Used	Gamma Bkgd	Gamma Reading	Instrument Used
A1	267	8	217	0	30 %	16 %	166.67	50.00	Model 2224 SN 118241	19	10	Model 19 SN 91491
A2	257	6	217	0	30 %	16 %	133.33	37.50	Model 2224 SN 118241	10	10	Model 19 SN 91491
A3	239	12	217	0	30 %	16 %	73.33	75.00	Model 2224 SN 118241	10	10	Model 19 SN 91491
B1	263	2	217	0	30 %	16 %	153.33	12.50	Model 2224 SN 118241	10	10	Model 19 SN 91491
B2	238	1	217	0	30 %	16 %	70.00	6.25	Model 2224 SN 118241	10	10	Model 19 SN 91491
B3	253	1	217	0	30 %	16 %	120.00	6.25	Model 2224 SN 118241	10	10	Model 19 SN 91491
C1	293	2	217	0	30 %	16 %	253.33	12.50	Model 2224 SN 118241	10	10	Model 19 SN 91491
C2	246	1	217	0	30 %	16 %	96.67	6.25	Model 2224 SN 118241	10	10	Model 19 SN 91491
C3	281	1	217	0	30 %	16 %	213.33	6.25	Model 2224 SN 118241	10	10	Model 19 SN 91491

Table A-21a
Building 4 Room 4
East Wall - Affected Area
Survey Numbers -0916040401

Survey Point	Raw Counts Beta/Gamma cpm/100 cm ²	Raw Counts Alpha cpm/100 cm ²	Background Beta/Gamma cpm/100 cm ²	Background Alpha cpm/100 cm ²	Eff. Beta Gamma	Eff. Alpha	Net Activity Beta/Gamma dpm/100 cm ²	Net Activity Alpha dpm/100 cm ²	Instrument Used	Gamma Flag	Gamma Reading	Instrument Used
A1	239	5	217	0	30 %	16 %	73.33	31.25	Model 2224 SN 118241	10	10	Model 19 SN 91491
A2	181	2	217	0	30 %	16 %	-120.00	12.50	Model 2224 SN 118241	10	10	Model 19 SN 91491
B1	215	2	217	0	30 %	16 %	-6.67	12.50	Model 2224 SN 118241	10	10	Model 19 SN 91491
B2	207	3	217	0	30 %	16 %	-33.33	18.75	Model 2224 SN 118241	10	10	Model 19 SN 91491
C1	231	2	217	0	30 %	16 %	46.67	12.50	Model 2224 SN 118241	10	10	Model 19 SN 91491
C2	226	1	217	0	30 %	16 %	30.00	6.25	Model 2224 SN 118241	10	10	Model 19 SN 91491

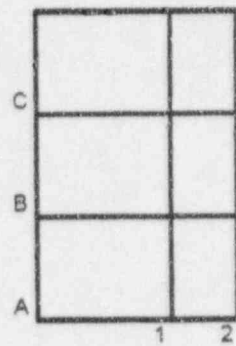
Table A-22a
 Building 4 Room 4
 West Wall - Affected Area
 Survey Numbers -0916040401

Survey Point	Raw Counts Beta/Gamma cpm/100 cm ²	Raw Counts Alpha cpm/100 cm ²	Background Beta/Gamma cpm/100 cm ²	Background Alpha cpm/100 cm ²	Eff. Beta Gamma	Eff. Alpha	Net Activity Beta/Gamma dpm/100 cm ²	Net Activity Alpha dpm/100 cm ²	Instrument Used	Gamma Bkgd	Gamma Reading	Instrument Used
A1	230	9	217	0	30 %	16 %	43.33	56.25	Model 2224 SN 118241	10	10	Model 19 SN 91491
A2	224	4	217	0	30 %	16 %	23.33	25.00	Model 2224 SN 118241	10	10	Model 19 SN 91491
B1	220	1	217	0	30 %	16 %	10.00	6.25	Model 2224 SN 118241	10	10	Model 19 SN 91491
B2	242	2	217	0	30 %	16 %	83.33	12.50	Model 2224 SN 118241	10	10	Model 19 SN 91491
C1	231	5	217	0	30 %	16 %	46.67	31.25	Model 2224 SN 118241	10	10	Model 19 SN 91491
C2	234	4	217	0	30 %	16 %	56.67	25.00	Model 2224 SN 118241	10	10	Model 19 SN 91491

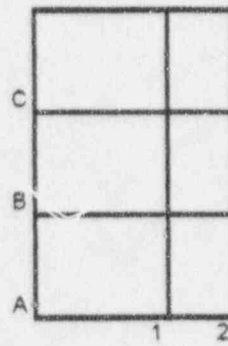
Table A-23a
 Building 4 Room 4
 Ceiling - Affected Area
 Survey Numbers -0916040401

Survey Point	Raw Counts Beta/Gamma cpm/100 cm ²	Raw Counts Alpha cpm/100 cm ²	Background Beta/Gamma cpm/100 cm ²	Background Alpha cpm/100 cm ²	Eff. Beta Gamma	Eff. Alpha	Net Activity Beta/Gamma dpm/100 cm ²	Net Activity Alpha dpm/100 cm ²	Instrument Used	Gamma Bkgd	Gamma Reading	Instrument Used
A1	176	1	217	0	30 %	16 %	-136.67	6.25	Model 2224 SN 118241	10	10	Model 19 SN 91491
A2	224	2	217	0	30 %	16 %	23.33	12.50	Model 2224 SN 118241	10	10	Model 19 SN 91491
A3	147	1	217	0	30 %	16 %	-233.33	6.25	Model 2224 SN 118241	10	10	Model 19 SN 91491
B1	177	1	217	0	30 %	16 %	-133.33	6.25	Model 2224 SN 118241	10	10	Model 19 SN 91491
B2	151	0	217	0	30 %	16 %	-220.00	0.00	Model 2224 SN 118241	10	10	Model 19 SN 91491
B3	175	1	217	0	30 %	16 %	-140.00	6.25	Model 2224 SN 118241	10	10	Model 19 SN 91491

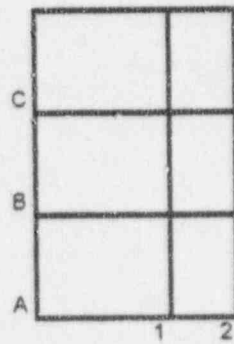
Figure 22



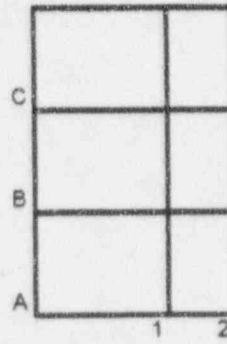
North Wall



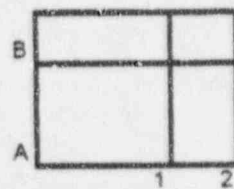
South Wall



East Wall



West Wall



Ceiling

Building 4 - Room 5

Table A-24a
 Building 4 Room 5
 North Wall - Affected Area
 Survey Number - 91696040501

Survey Point	Raw Counts Beta/Gamma cpm/100 cm ²	Raw Counts Alpha cpm/100 cm ²	Background Beta/Gamma cpm/100 cm ²	Background Alpha cpm/100 cm ²	Eff. Beta Gamma	Eff. Alpha	Net Activity Beta/Gamma dpm/100 cm ²	Net Activity Alpha dpm/100 cm ²	Instrument Used	Gamma Bkgd	Gamma Reading	Instrument Used
A1	237	1	165	1	33 %	14 %	218.18	0.00	Model 2224 SN 118241	10	10	Model 19 SN 91491
A2	205	6	165	1	33 %	14 %	121.21	35.71	Model 2224 SN 118241	10	10	Model 19 SN 91491
B1	272	0	165	1	33 %	14 %	324.24	-7.14	Model 2224 SN 118241	10	10	Model 19 SN 91491
B2	212	2	165	1	33 %	14 %	142.42	7.14	Model 2224 SN 118241	10	10	Model 19 SN 91491
C1	223	0	165	1	33 %	14 %	166.67	-7.14	Model 2224 SN 118241	10	10	Model 19 SN 91491
C2	202	2	165	1	33 %	14 %	112.12	7.14	Model 2224 SN 118241	10	10	Model 19 SN 91491

Table A-25a
 Building 4 Room 5
 South Wall - Affected Area
 Survey Number - 91696040501

Survey Point	Raw Counts Beta/Gamma cpm/100 cm ²	Raw Counts Alpha cpm/100 cm ²	Background Beta/Gamma cpm/100 cm ²	Background Alpha cpm/100 cm ²	Eff. Beta Gamma	Eff. Alpha	Net Activity Beta/Gamma dpm/100 cm ²	Net Activity Alpha dpm/100 cm ²	Instrument Used	Gamma Pkgel	Gamma Reading	Instrument Used
A1	250	3	165	1	33 %	14 %	257.88	14.29	Model 2224 SN 118241	10	10	Model 19 SN 91491
A2	280	7	165	1	33 %	14 %	348.48	42.86	Model 2224 SN 118241	10	10	Model 19 SN 91491
B1	281	0	165	1	33 %	14 %	351.52	-7.14	Model 2224 SN 118241	10	10	Model 19 SN 91491
B2	239	2	165	1	33 %	14 %	224.24	7.14	Model 2224 SN 118241	10	10	Model 19 SN 91491
C1	266	1	165	1	33 %	14 %	306.06	0.00	Model 2224 SN 118241	10	10	Model 19 SN 91491
C2	253	0	165	1	33 %	14 %	266.67	-7.14	Model 2224 SN 118241	10	10	Model 19 SN 91491

Table A-26a
 Building 4 Room 5
 East Wall - Affected Area
 Survey Number - 91696040501

Survey Point	Raw Counts Beta/Gamma cpm/100 cm ²	Raw Counts Alpha cpm/100 cm ²	Background Beta/Gamma cpm/100 cm ²	Background Alpha cpm/100 cm ²	Eff. Beta Gamma	Eff. Alpha	Net Activity Beta/Gamma dpm/100 cm ²	Net Activity Alpha dpm/100 cm ²	Instrument Used	Gamma Bkgt	Gamma Reading	Instrument Used
A2	233	8	165	1	33 %	14 %	206.06	50.00	Model 2224 SN 118241	10	10	Model 19 SN 91491
B2	247	2	165	1	33 %	14 %	248.48	7.14	Model 2224 SN 118241	10	10	Model 19 SN 91491
C1	231	1	165	1	33 %	14 %	200.00	0.00	Model 2224 SN 118241	10	10	Model 19 SN 91491
C2	225	0	165	1	33 %	14 %	181.82	-7.14	Model 2224 SN 118241	10	10	Model 19 SN 91491

Table A-27a
 Building 4 Room 5
 West Wall - Affected Area
 Survey Number - 91696040501

Survey Point	Raw Counts Beta/Gamma cpm/100 cm ²	Raw Counts Alpha cpm/100 cm ²	Background Beta/Gamma cpm/100 cm ²	Background Alpha cpm/100 cm ²	Eff. Beta Gamma	Eff. Alpha	Net Activity Beta/Gamma dpm/100 cm ²	Net Activity Alpha dpm/100 cm ²	Instrument Used	Gamma Bkgd	Gamma Reading	Instrument Used
A1	190	1	165	1	33 %	14 %	75.76	0.00	Model 2224 SN 118241	10	10	Model 19 SN 91491
A2	223	6	165	1	33 %	14 %	175.76	35.71	Model 2224 SN 118241	10	10	Model 19 SN 91491
B1	195	0	165	1	33 %	14 %	90.91	-7.14	Model 2224 SN 118241	10	10	Model 19 SN 91491
B2	197	4	165	1	33 %	14 %	96.97	21.43	Model 2224 SN 118241	10	10	Model 19 SN 91491
C1	186	1	165	1	33 %	14 %	63.64	0.00	Model 2224 SN 118241	10	10	Model 19 SN 91491
C2	222	0	165	1	33 %	14 %	172.73	-7.14	Model 2224 SN 118241	10	10	Model 19 SN 91491

Table A-28a
 Building 4 Room 5
 Ceiling - Affected Area
 Survey Number - 91696040501

Survey Point	Raw Counts Beta/Gamma cpm/100 cm ²	Raw Counts Alpha cpm/100 cm ²	Background Beta/Gamma cpm/100 cm ²	Background Alpha cpm/100 cm ²	Eff Beta Gamma	Eff Alpha	Net Activity Beta/Gamma dpm/100 cm ²	Net Activity Alpha dpm/100 cm ²	Instrument Used	Gamma Bkgd	Gamma Reading	Instrument Used
A1	160	0	165	1	33 %	14 %	-15.15	-7.14	Model 2224 SN 118241	10	10	Model 19 SN 91491
A2	155	0	165	1	33 %	14 %	-30.30	-7.14	Model 2224 SN 118241	10	10	Model 19 SN 91491
B1	145	0	165	1	33 %	14 %	-60.61	-7.14	Model 2224 SN 118241	10	10	Model 19 SN 91491
B2	176	1	165	1	33 %	14 %	33.33	0.00	Model 2224 SN 118241	10	10	Model 19 SN 91491

Table A-29

**Surface Activity Measurements
Building 4 Interiors**

Building/ Area and Surface	Measurement Location	Figure	Activity (dpm/100 cm ²)											
			Total						Removable					
			Alpha			Beta-Gamma			Alpha			Beta		
			Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA
Building 4 Affected Area North Wall Room 1	A1	3	6	5	65	300	42	250	0	0	15	-3	2	25
	A2	3	-6	4	65	183	41	250	7	3	15	9	4	25
	A3	3	6	5	65	317	43	250	0	0	15	3	3	25
	A4	3	6	5	65	187	41	250	7	3	15	0	3	25
	A5	3	13	6	65	113	40	250	0	0	15	9	4	25
	A6	3	-19	3	65	0	39	250	0	0	15	-3	2	25
	A7	3	-13	4	65	96	40	250	7	3	15	3	3	25
	B1	3	19	6	65	13	39	250	4	2	15	0	3	25
	B2	3	-13	4	65	-4	39	250	0	0	15	6	4	25
	B3	3	0	5	65	65	40	250	0	0	15	9	4	25
	B4	3	31	7	65	135	41	250	4	2	15	15	5	25
	B5	3	31	7	65	222	42	250	0	0	15	-3	2	25
	B6	3	-6	4	65	304	42	250	0	0	15	6	4	25
	B7	3	19	6	65	361	43	250	4	2	15	6	4	25
Building 4 Unaffected Area North Wall Room 1	1	3	-8	3	55	253	43	191	0	0	18	2	3	13
	2	3	-8	3	55	213	43	191	0	0	18	-2	2	13
	3	3	8	4	55	175	42	191	0	0	18	0	3	13
	4	3	-8	3	55	181	42	191	3	2	18	-2	2	13

Table A-2^S

**Surface Activity Measurements
Building 4 Interiors**

Building/ Area and Surface	Measurement Location	Figure	Activity (dpm/100 cm ²)											
			Total						Removable					
			Alpha			Beta-Gamma			Alpha			Beta		
			Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA
Building 4	A2	4	83	8	55	178	44	191	0	0	29	-2	3	18
Affected Area	A3	4	33	6	55	53	42	191	4	2	29	-2	3	18
South Wall	A4	4	17	6	55	72	43	191	0	0	29	-2	3	18
Room 1	A5	4	0	4	64	239	40	189	4	2	12	-2	2	4
	A6	4	-7	3	64	267	40	189	0	0	12	-2	2	4
	A7	4	7	4	64	424	43	189	0	0	12	0	3	4
	B2	4	-17	4	55	94	43	191	0	0	29	3	3	18
	B3	4	0	5	55	184	44	191	0	0	29	0	4	18
	B4	4	-17	4	55	50	42	191	4	2	29	-2	3	18
	B5	4	-7	3	64	203	39	189	4	2	12	2	3	4
	B6	4	-7	3	64	348	42	189	0	0	12	2	3	4
	B7	4	0	4	64	215	39	189	0	0	12	2	3	4
	C1	4	-8	4	55	56	42	191	0	0	29	-3	3	18
	C2	4	8	5	55	6	42	191	4	2	29	-3	3	18
	C3	4	17	6	55	-56	41	191	0	0	29	-3	3	18
	C4	4	-25	3	55	109	43	191	0	0	29	-2	3	18
Building 4	1	4	-17	3	55	-241	35	191	0	0	18	2	3	13
Unaffected Area	2	4	-17	3	55	31	40	191	0	0	18	7	5	13
South Wall	3	4	-17	3	55	50	40	191	7	3	18	4	4	13
Room 1	4	4	8	3	55	-59	38	191	0	0	18	2	3	13
	5	4	0	4	55	-119	37	191	7	3	18	-2	2	13

Table A-29

**Surface Activity Measurements
Building 4 Interiors**

Building/ Area and Surface	Measurement Location	Figure	Activity (dps/100 cm ²)											
			Total						Removable					
			Alpha			Beta-Gamma			Alpha			Beta		
			Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA
Building 4	A1	5	-25	3	55	-116	40	191	0	0	29	-3	3	18
Affected Area	A2	5	-17	4	55	-134	40	191	0	0	29	-3	3	18
East Wall	A3	5	-25	3	55	-66	41	191	0	0	29	5	5	18
Room 1	A4	5	-25	3	55	-100	40	191	0	0	29	-3	3	18
	A5	5	-17	4	55	-94	40	191	4	2	29	0	4	18
	A6	5	-25	3	55	-56	41	191	0	0	29	2	4	18
	A7	5	17	6	55	50	42	191	4	2	29	-3	3	18
	A8	5	42	7	55	-47	41	191	0	0	29	-2	3	18
	A9	5	42	7	55	256	45	191	0	0	29	2	4	18
	A10	5	0	5	65	43	40	250	0	0	15	0	3	25
	A11	5	9	5	65	48	40	250	0	0	15	3	3	25
	A12	5	7	6	77	-148	41	259	4	2	25	-2	2	14
	A13	5	14	6	77	57	44	259	4	2	25	-2	2	14
	A14	5	29	7	77	-130	42	259	4	2	25	5	4	14
	A16	5	7	4	64	348	42	189	4	2	12	-2	2	4
	A17	5	7	4	64	255	40	189	0	0	12	10	5	4
	B1	5	-8	4	55	-163	39	191	4	2	29	-2	3	18
	B2	5	-17	4	55	-156	39	191	0	0	29	2	4	18
	B3	5	-25	3	55	-47	41	191	0	0	29	0	4	18
	B4	5	-17	4	55	-181	39	191	0	0	29	2	4	18
	B5	5	-25	3	55	-103	40	191	0	0	29	2	4	18
	B6	5	-8	4	55	-100	40	191	0	0	29	0	4	18
	B7	5	-25	3	55	9	42	191	4	2	29	2	4	18
	B8	5	-17	4	55	-50	41	191	0	0	29	-2	3	18
	B9	5	-17	4	55	-28	41	191	4	2	29	-3	3	18
	B16	5	7	4	64	261	40	189	0	0	12	6	4	4
	B17	5	7	4	64	282	41	189	0	0	12	-2	2	4

Table A-29
Surface Activity Measurements
Building 4 Interiors

Building/ Area and Surface	Measurement Location	Figure	Activity (dpm/100 cm ²)											
			Total			Beta-Gamma			Removable			Beta		
			Alpha			Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA
			Act.	Uncert.	MDA									
Building 4	1	5	-8	3	55	238	43	191	0	0	18	2	3	13
Unaffected Area	2	5	0	4	55	84	41	191	0	0	18	9	5	13
East Wall	3	5	-8	3	55	197	42	191	3	2	18	-2	2	13
Room 1	4	5	-17	3	55	188	42	191	0	0	18	0	3	13

Table A-29
Surface Activity Measurements
Building 4 Interiors

Building/ Area and Surface	Measurement Location	Figure	Activity (dpm/100 cm ²)											
			Total						Removable					
			Alpha			Beta-Gamma			Alpha			Beta		
			Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA
Building 4	A1	5	0	5	55	125	43	191	0	0	29	5	5	18
Affected Area	A2	5	8	5	55	63	43	191	4	2	29	3	5	18
West Wall	A3	5	-25	3	55	-25	41	191	0	0	29	-3	3	18
Room 1	A4	5	8	5	55	172	44	191	8	3	29	-3	3	18
	A5	5	25	6	55	16	42	191	0	0	29	0	4	18
	A6	5	0	5	55	119	43	191	0	0	29	-2	3	18
	A7	5	-8	4	55	209	45	191	0	0	29	0	4	18
	A8	5	0	5	55	59	43	191	0	0	29	-3	3	18
	A9	5	0	5	55	147	44	191	0	0	29	-2	3	18
	A10	5	0	5	55	72	43	191	0	0	29	-3	3	18
	A11	5	-8	4	55	-172	39	191	0	3	29	-3	3	18
	A12	5	0	5	55	188	44	191	8	3	29	-2	3	18
	A13	5	-8	4	55	147	44	191	12	0	29	-2	3	18
	A14	5	0	5	55	63	43	191	0	3	29	0	4	18
	A15	5	-8	4	55	509	49	191	12	0	29	-3	3	18
	A16	5	-8	5	55	169	44	191	0	0	29	-2	3	18
	A17	5	-17	4	55	181	44	191	0	0	29	-2	3	18
	B1	5	0	5	55	88	43	191	0	0	29	-3	3	18
	B2	5	0	5	55	3	42	191	0	0	29	0	4	18
	B3	5	0	5	55	91	43	191	0	0	29	-3	3	18
	B4	5	-8	4	55	150	44	191	0	0	29	-3	3	18
	B5	5	17	6	55	203	45	191	0	0	29	-2	3	18
	B6	5	17	6	55	356	47	191	0	0	29	0	4	18
	B7	5	-17	4	55	134	44	191	4	2	29	2	4	18
	B8	5	-8	4	55	163	44	191	0	0	29	5	5	18
	B9	5	-25	3	55	34	42	191	4	2	29	0	4	18
	B10	5	17	6	55	16	42	191	8	3	29	0	4	18
	B11	5	-17	4	55	-238	38	191	0	0	29	-2	3	18

Table A-29

**Surface Activity Measurements
Building 4 Interiors**

Building/ Area and Surface	Measurement Location	Figure	Activity (dpm/100 cm ²)											
			Total						Removable					
			Alpha			Beta-Gamma			Alpha			Beta		
			Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA
Building 4	B12	5	0	5	55	106	43	191	0	0	29	-2	3	18
Affected Area	B13	5	-17	4	55	72	43	191	0	0	29	-3	3	18
West Wall	B14	5	-8	4	55	116	43	191	4	2	29	-2	3	18
Room 1	B15	5	-8	4	55	219	45	191	0	0	29	-2	3	18
	B16	5	-8	4	55	175	44	191	4	2	29	-3	3	18
	B17	5	8	5	55	178	44	191	4	2	29	-2	3	18
Building 4	1	5	17	5	55	88	41	191	13	4	18	5	4	13
Unaffected Area	2	5	-8	3	55	56	40	191	3	2	18	5	4	13
West Wall	3	5	17	5	55	138	41	191	0	0	18	0	3	13
Room 1	4	5	-17	3	55	66	40	191	0	0	18	0	3	13
	5	5	-8	3	55	159	42	191	0	0	18	0	3	13
	6	5	-8	3	55	47	40	191	0	0	18	4	4	13
	7	5	-8	3	55	-3	39	191	3	2	18	0	3	13
	8	5	-8	3	55	41	40	191	7	3	18	0	3	13
	9	5	17	5	55	-81	38	191	0	0	18	-2	2	13
	10	5	-8	3	55	-38	39	191	3	2	18	0	3	13
	11	5	-8	3	55	-97	38	191	0	0	18	0	3	13
	12	5	-17	3	55	-56	39	191	0	0	18	-2	2	13
	13	5	-8	3	55	-78	38	191	7	3	18	-2	2	13
	14	5	-17	3	55	-41	39	191	10	3	18	4	4	13
	15	5	-8	3	55	113	41	191	0	0	18	-2	2	13
	16	5	-17	3	55	9	40	191	0	0	18	4	4	13
	17	5	17	5	55	-25	39	191	0	0	18	4	4	13
	18	5	-8	3	55	13	40	191	3	2	18	0	3	13

Table A-29

**Surface Activity Measurements
Building 4 Interiors**

Building/ Area and Surface	Measurement Location	Figure	Activity (dpm/100 cm ²)											
			Total						Removable					
			Alpha			Beta-Gamma			Alpha			Beta		
			Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA
Building 4	1	6	8	4	55	-103	42	191	3	2	18	0	3	13
Unaffected Area	2	6	0	4	55	-188	38	191	0	0	18	0	3	13
Ceiling	3	6	-17	3	55	-178	36	191	0	0	18	-2	2	13
Room 1	4	6	-8	3	55	-131	37	191	3	2	18	0	3	13
	5	6	-17	3	55	-169	37	191	0	0	18	0	3	13
	6	6	0	4	55	-172	37	191	0	0	18	0	3	13
	7	6	-17	3	55	-100	37	191	3	2	18	5	4	13
	8	6	-17	3	55	-159	38	191	0	0	18	0	3	13
	9	6	-8	3	55	-188	37	191	0	0	18	0	3	13
	10	6	-17	3	55	-188	36	191	0	0	18	0	3	13
	11	6	-17	3	55	-225	36	191	3	2	18	5	4	13
	12	6	8	4	55	-184	36	191	0	0	18	2	3	13

Table A-29

**Surface Activity Measurements
Building 4 Interiors**

Building/ Area and Surface	Measurement Location	Figure	Activity (dpm/100 cm ²)											
			Total						Removable					
			Alpha			Beta-Gamma			Alpha			Beta		
			Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA
Building 4	A1	7	106	9	66	223	44	229	4	2	17	-2	3	16
Affected Area	A2	7	194	12	57	570	51	270	4	2	17	4	4	14
Floor	A3	7	53	7	57	130	47	270	8	3	17	4	4	14
Room 1	A4	7	35	6	57	133	47	270	0	6	17	4	4	14
	A5	7	29	5	57	-85	44	270	4	2	17	2	3	14
	A6	7	47	6	57	4	45	270	0	0	17	2	3	14
	A7	7	24	5	57	163	47	270	0	0	17	0	3	14
	B1	7	63	7	66	43	41	229	8	3	17	-2	3	16
	B2	7	118	9	57	237	48	270	4	2	17	6	4	14
	B3	7	12	4	57	67	46	270	0	0	17	2	3	14
	B4	7	47	6	57	-41	45	270	0	0	17	-2	2	14
	B5	7	129	10	57	330	49	270	6	0	17	-2	2	14
	B6	7	76	8	57	356	49	270	29	5	17	17	7	14
	B7	7	92	9	55	119	39	225	1	0	19	0	2	22
	C1	7	156	10	66	307	45	229	0	0	17	4	5	16
	C2	7	194	12	57	448	50	270	4	2	17	-2	2	14
	C3	7	24	5	57	130	47	270	0	0	17	6	4	14
	C4	7	24	5	57	96	46	270	0	0	17	4	4	14
	C5	7	94	8	57	44	46	270	0	0	17	2	3	14
	C6	7	59	7	57	130	47	270	0	0	17	2	3	14
	C7	7	71	8	55	364	42	225	1	4	19	0	3	22
	D1	7	63	7	66	-67	40	229	0	0	17	-4	2	16
	D2	7	224	16	57	356	49	270	4	2	17	8	5	14
	D3	7	88	8	57	178	47	270	0	0	17	2	3	14
	D4	7	35	6	57	-44	45	270	0	0	17	12	6	14
	D5	7	53	7	57	-19	45	270	0	0	17	2	3	14
	D6	7	59	7	57	148	47	270	0	0	17	0	3	14
	D7	7	94	8	57	167	47	270	4	2	17	-2	2	14

Table A-29

**Surface Activity Measurements
Building 4 Interiors**

Building/ Area and Surface	Measurement Location	Figure	Activity (dpm/100 cm ²)											
			Total						Removable					
			Alpha			Beta-Gamma			Alpha			Beta		
			Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA
Building 4	E1	7	63	7	66	-60	40	229	0	0	17	0	4	16
Affected Area	E2	7	159	11	57	211	47	270	0	0	17	-19	2	14
Floor	E3	7	35	6	57	96	46	270	0	0	17	2	3	14
Room 1	E4	7	53	7	57	115	46	270	0	0	17	-2	2	14
	E5	7	65	7	57	19	45	270	0	0	17	0	3	14
	E6	7	82	8	57	252	48	270	0	0	17	-2	2	14
	E7	7	182	11	57	289	48	270	0	0	17	0	3	14
	F1	7	31	5	66	-220	37	229	4	2	17	0	4	16
	F2	7	129	10	57	307	48	270	0	0	17	4	4	14
	F3	7	47	6	57	133	47	270	4	2	17	-2	2	14
	F4	7	76	8	57	137	47	270	4	2	17	0	3	14
	F5	7	106	9	57	-67	44	270	0	0	17	0	3	14
	F6	7	35	6	57	167	47	270	0	0	17	-2	2	14
	F7	7	71	7	57	181	47	270	0	0	17	-2	2	14
	G1	7	35	6	57	207	47	270	4	2	17	-2	2	14
	G2	7	88	8	57	-22	45	270	4	2	17	-2	2	14
	G3	7	18	4	57	-19	45	270	0	0	17	4	4	14
	G4	7	29	5	57	-70	44	270	4	2	17	10	5	14
	G5	7	18	4	57	-74	44	270	0	0	17	6	4	14
	G6	7	24	5	57	-37	45	270	0	0	17	2	3	14
	G7	7	71	7	57	-159	43	270	0	0	17	2	3	14
	H1	7	141	10	57	522	51	270	0	0	17	4	4	14
	H2	7	53	7	57	33	45	270	0	0	17	-2	2	14
	H3	7	24	5	57	-237	42	270	8	3	17	-2	2	14
	H4	7	18	4	57	-374	41	270	0	0	17	-2	2	14
	H5	7	47	6	57	241	48	270	0	0	17	2	3	14
	H6	7	47	6	57	-222	42	270	0	0	17	2	3	14
	H7	7	76	8	57	-74	44	270	0	0	17	2	3	14

Table A-29

**Surface Activity Measurements
Building 4 Interiors**

Building/ Area and Surface	Measurement Location	Figure	Activity (dpm/100 cm ²)											
			Total						Removable					
			Alpha			Beta-Gamma			Alpha			Beta		
			Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA
Building 4	I1	7	118	9	57	556	51	270	0	0	17	0	3	14
Affected Area	I2	7	218	12	57	578	51	270	0	0	17	4	4	14
Floor	I3	7	71	7	57	-148	43	270	0	0	17	2	3	14
Room 1	I4	7	47	6	57	-259	42	270	0	0	17	6	4	14
	I5	7	35	6	57	159	47	270	0	0	17	-2	2	14
	I6	7	29	5	57	-326	41	270	0	0	17	0	3	14
	I7	7	176	11	57	233	48	270	13	3	17	8	5	14
	J1	8	147	10	57	844	54	270	0	0	17	2	3	14
	J2	8	100	11	57	996	55	270	0	0	17	0	3	14
	J3	8	100	9	57	41	46	270	0	0	17	2	3	14
	J4	8	118	9	57	26	45	270	0	0	17	6	4	14
	J5	8	88	8	57	296	48	270	4	2	17	0	3	14
	J6	8	24	5	57	-207	43	270	4	2	17	6	4	14
	J7	8	112	9	57	67	46	270	0	0	17	0	3	14
	K1	8	-6	28	65	0	4	250	7	3	15	0	3	25
	K2	8	53	7	57	263	48	270	0	0	17	6	4	14
	K3	8	59	7	57	-363	41	270	0	0	17	0	3	14
	K4	8	135	10	57	163	47	270	0	0	17	-2	2	14
	K5	8	76	8	57	81	46	270	0	0	17	4	4	14
	K6	8	18	4	57	-326	41	270	4	2	17	6	4	14
	K7	8	94	8	57	126	46	270	0	0	17	4	4	14
	L1	8	0	5	65	-4	39	250	0	0	15	9	4	25
	L2	8	53	7	57	800	53	270	0	0	17	4	4	14
	L3	8	135	10	57	519	51	270	0	0	17	-2	2	14
	L4	8	182	11	57	622	52	270	0	0	17	-2	2	14
	L5	8	53	7	57	30	45	270	0	0	17	2	3	14
	L6	8	47	6	57	207	47	270	0	0	17	4	4	14
	L7	8	106	9	57	537	51	270	0	0	17	2	3	14

Table A-29
Surface Activity Measurements
Building 4 Interiors

Building/ Area and Surface	Measurement Location	Figure	Activity (dpm/100 cm ²)											
			Total						Removable					
			Alpha			Beta-Gamma			Alpha			Beta		
			Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA
Building 4	M1	8	29	7	77	-39	43	259	0	0	25	3	4	14
Affected Area	M2	8	50	7	66	-100	41	229	4	2	17	12	6	14
Floor	M3	8	150	10	66	250	46	229	0	0	17	-2	2	14
Room I	M4	8	38	6	66	-163	40	229	0	0	17	2	3	14
	M5	8	19	5	66	30	43	229	0	0	17	0	3	14
	M6	8	25	6	66	57	43	229	0	0	17	-2	2	14
	M7	8	63	7	66	60	43	229	4	2	17	2	3	14
	N1	8	86	9	77	-209	41	259	0	0	25	-2	2	14
	N2	8	63	7	66	-117	41	229	0	0	17	0	3	14
	N3	8	63	7	66	817	52	229	0	0	17	-2	2	14
	N4	8	88	8	66	393	47	229	4	2	17	4	4	14
	N5	8	94	9	66	197	45	229	0	0	17	4	4	14
	N6	8	56	7	66	-33	42	229	4	2	17	2	3	14
	N7	8	88	8	66	-83	41	229	0	0	17	2	3	14
	O1	8	44	7	66	23	43	229	0	0	17	0	3	14
	O2	8	69	8	66	-83	41	229	0	0	17	-2	2	14
	O3	8	94	9	66	533	49	229	0	0	17	0	3	14
	O4	8	169	11	66	563	49	229	13	3	17	8	5	14
	O5	8	50	7	66	383	47	229	0	0	17	0	3	14
	O6	8	75	8	66	60	43	229	0	0	17	2	3	14
	O7	8	156	11	66	53	43	229	4	2	17	4	4	14
	P1	8	44	7	66	90	44	229	0	0	17	8	5	14
	P2	8	19	5	66	303	46	229	0	0	17	2	3	14
	P3	8	81	8	66	347	47	229	0	0	17	-2	2	14
	P4	8	125	10	66	383	47	229	0	0	17	-2	2	14
	P5	8	144	10	66	217	45	229	0	0	17	2	3	14
	P6	8	100	9	66	-37	42	229	8	3	17	-2	2	14
	P7	8	163	11	66	80	43	229	0	0	17	8	5	14

Table A-29

**Surface Activity Measurements
Building 4 Interiors**

Building/ Area and Surface	Measurement Location	Figure	Activity (dpm/100 cm ²)											
			Total						Removable					
			Alpha			Beta-Gamma			Alpha			Beta		
			Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA
Building 4	Q1	8	50	7	66	193	45	229	0	0	17	0	3	14
Affected Area	Q2	8	38	6	66	217	45	229	0	0	17	0	3	14
Floor	Q3	8	38	6	66	340	47	229	8	3	17	0	3	14
Room 1	Q4	8	69	8	66	110	44	229	8	3	17	2	3	14
	Q5	8	75	8	66	77	41	229	0	0	17	6	4	14
	Q6	8	81	8	66	23	43	229	0	0	17	4	4	14
	Q7	8	119	9	66	17	43	229	0	0	17	10	5	14

Table A-29

**Surface Activity Measurements
Building 4 Interiors**

Building/ Area and Surface	Measurement Location	Figure	Activity (dpm/100 cm ²)											
			Total						Removable					
			Alpha			Beta-Gamma			Alpha			Beta		
			Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA
Building 4	A1	9	19	7	46	433	37	221	0	0	18	0	3	13
Affected Area	A2	9	13	6	46	347	36	221	0	0	18	0	3	13
North Wall	A3	9	31	7	46	220	34	221	0	0	18	2	3	13
Room 2	A4	9	25	7	46	177	33	221	0	0	18	2	3	13
	A5	9	31	7	46	70	31	221	0	0	18	0	3	13
	A6	9	19	7	46	487	38	221	3	2	18	0	3	13
	A7	9	56	8	46	310	36	221	0	0	18	-2	2	13
	A8	9	13	6	46	370	37	221	0	0	18	-2	2	13
	B1	9	56	8	46	207	34	221	0	0	18	-2	2	13
	B2	9	6	6	46	140	33	221	0	0	18	-2	2	13
	B3	9	38	7	46	83	32	221	0	0	18	0	3	13
	B4	9	44	8	46	-90	28	221	0	0	18	0	3	13
	B5	9	25	7	46	223	34	221	0	0	18	-2	2	13
	B6	9	31	7	46	253	35	221	0	0	18	0	3	13
	B7	9	25	7	46	267	35	221	7	3	18	-2	2	13
	B8	9	9	5	65	157	41	250	0	0	15	-3	2	25
Building 4	1	9	31	7	46	-93	35	221	0	0	18	4	4	13
Unaffected Area	2	9	25	7	46	-33	36	221	3	2	18	0	3	13
North Wall	3	9	13	6	46	-150	34	221	0	0	18	5	4	13
Room 2	4	9	13	6	46	-130	35	221	0	0	18	4	4	13

Table A-29

**Surface Activity Measurements
Building 4 Interiors**

Building/ Area and Surface	Measurement Location	Figure	Activity (dpm/100 cm ²)											
			Total						Removable					
			Alpha			Beta-Gamma			Alpha			Beta		
			Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA
Building 4	A1	10	15	5	43	171	37	207	0	0	18	0	3	13
Affected Area	A2	10	23	5	43	81	36	207	0	0	18	5	4	13
South Wall	A3	10	15	5	43	6	35	207	0	0	18	-2	2	13
Room 2	A4	10	15	5	43	110	36	207	0	0	18	0	3	13
	A5	10	0	4	43	148	37	207	0	0	18	-2	2	13
	A6	10	0	4	43	84	36	207	3	2	18	3	2	13
	A7	10	15	5	43	142	37	207	7	3	18	-2	2	13
	A8	10	31	6	43	77	36	207	0	0	18	2	3	13
	B1	10	0	4	43	26	35	207	3	2	18	-2	2	13
	B2	10	-15	3	43	65	36	207	0	0	18	-2	2	13
	B3	10	15	5	43	39	35	207	0	0	18	-2	2	13
	B4	10	8	4	43	26	35	207	0	0	18	2	3	13
	B5	10	0	4	43	116	36	207	0	0	18	2	3	13
	B6	10	-8	3	43	77	36	207	0	0	18	-2	2	13
	B7	10	0	4	43	19	35	207	7	3	18	-2	2	13
	B8	10	-8	3	43	71	36	207	0	0	18	4	4	13
Building 4	1	10	13	6	46	-10	37	221	0	0	18	0	3	13
Unaffected Area	2	10	0	6	46	-97	35	221	7	3	18	-2	2	13
South Wall	3	10	13	6	46	-3	37	221	0	0	18	-2	2	13
Room 2	4	10	0	6	46	-20	37	221	0	0	18	0	3	13

Table A-29

**Surface Activity Measurements
Building 4 Interiors**

Building/ Area and Surface	Measurement Location	Figure	Activity (dpm/100 cm ²)											
			Total						Removable					
			Alpha			Beta-Gamma			Alpha			Beta		
			Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA
Building 4	A1	11	50	10	46	223	44	221	3	2	18	2	3	13
Affected Area	A2	11	-19	8	46	37	41	221	3	2	18	-2	2	13
East Wall	A3	11	-19	8	46	280	44	221	0	0	18	-2	2	13
Room 2	A4	11	25	9	46	347	45	221	3	2	18	-2	2	13
	A5	11	-13	8	46	127	42	221	0	0	18	0	3	13
	A6	11	-38	7	46	77	42	221	0	0	18	0	3	13
	A7	11	-31	7	46	-90	39	221	0	0	18	-2	2	13
	A8	11	-19	8	46	237	44	221	0	0	18	0	3	13
	A9	11	-44	7	46	310	45	221	0	0	18	2	3	13
	B1	11	-31	7	46	27	41	221	3	2	18	2	3	13
	B2	11	-25	7	46	177	43	221	0	0	18	-2	2	13
	B3	11	-31	7	46	227	44	221	0	0	18	-2	2	13
	B4	11	-25	7	46	230	44	221	0	0	18	-2	2	13
	B5	11	-44	7	46	33	41	221	0	0	18	2	3	13
	B6	11	-44	7	46	280	44	221	7	3	18	0	3	13
	B7	11	-25	7	46	-90	39	221	0	0	18	2	3	13
	B8	11	-25	7	46	300	45	221	0	0	18	-2	2	13
	B9	11	-19	8	46	187	43	221	3	2	18	-2	2	13
Building 4	1	11	-13	5	46	-107	35	221	0	0	18	-2	0	13
Unaffected Area	2	11	0	6	46	-230	33	221	0	0	18	-2	0	13
East Wall	3	11	-25	4	46	-247	33	221	7	0	18	4	0	13
Room 2	4	11	-19	4	46	-180	34	221	0	0	18	0	0	13

Table A-29
Surface Activity Measurements
Building 4 Interiors

Building/ Area and Surface	Measurement Location	Figure	Activity (dpm/100 cm ²)											
			Total						Removable					
			Alpha			Beta-Gamma			Alpha			Beta		
			Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA
Building 4	A1	12	-25	7	46	120	42	221	0	0	18	-2	2	13
Affected Area	A2	12	0	8	46	140	42	221	0	0	18	5	4	13
West Wall	A3	12	-19	8	46	97	42	221	0	0	18	2	3	13
Room 2	A4	12	-31	7	46	93	43	221	0	0	18	0	3	13
	A5	12	-31	7	46	23	41	221	0	0	18	-2	2	13
	A6	12	25	7	46	0	30	221	0	0	18	2	3	13
	A7	12	75	9	46	-47	29	221	0	0	18	-2	2	13
	A8	12	106	10	46	-20	30	221	3	2	18	2	3	13
	A9	12	13	6	46	23	31	221	1	3	18	0	3	13
	B1	12	-31	7	46	-120	39	221	3	2	18	-2	2	13
	B2	12	-25	7	46	-37	40	221	0	0	18	7	5	13
	B3	12	13	9	46	-40	40	221	0	0	18	-2	2	13
	B4	12	-44	7	46	43	41	221	0	0	18	0	3	13
	B5	12	-25	7	46	-10	40	221	0	0	18	0	-	13
	B6	12	13	6	46	120	32	221	0	0	18	0	3	13
	B7	12	63	8	46	-53	29	221	0	0	18	-2	2	13
	B8	12	31	7	46	-83	28	221	0	0	18	-2	2	13
	B9	12	81	9	46	-73	29	221	3	2	18	-2	2	13
Building 4	1	12	25	7	46	-133	35	221	0	0	18	-2	2	13
Unaffected Area	2	12	38	7	46	20	37	221	0	0	18	0	3	13
West Wall	3	12	13	6	46	43	38	221	0	0	18	-2	2	13
Room 2	4	12	6	6	46	-210	33	221	0	0	18	-2	2	13

Table A-29

**Surface Activity Measurements
Building 4 Interiors**

Building/ Area and Surface	Measurement Location	Figure	Activity (dpm/100 cm ²)											
			Total						Removable					
			Alpha			Beta-Gamma			Alpha			Beta		
			Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA
Building 4	1	13	-8	3	43	-16	33	206	3	2	18	-2	2	13
Unaffected Area	2	13	8	4	43	-26	33	206	3	2	18	-2	2	13
Ceiling	3	13	15	5	43	29	34	206	0	0	18	0	3	13
Room 2	4	13	8	4	43	-10	33	206	0	0	18	2	3	13
	5	13	0	4	43	123	36	206	3	2	18	5	4	13
	6	13	0	4	43	81	35	206	0	0	18	0	3	13
	7	13	-8	3	43	100	35	206	0	0	18	0	3	13
	8	13	0	4	43	-19	33	206	3	2	18	0	3	13
	9	13	8	4	43	61	35	206	0	0	18	-2	2	13
	10	13	-8	3	43	152	36	206	0	0	18	5	4	13
	11	13	54	7	43	81	35	206	0	0	18	-2	2	13
	12	13	31	6	43	-10	33	206	0	0	18	0	3	13
	13	13	77	7	43	200	37	206	0	0	18	2	3	13
	14	13	-8	3	43	174	37	206	0	0	18	-2	2	13

Table A-29

**Surface Activity Measurements
Building 4 Interiors**

Building/ Area and Surface	Measurement Location	Figure	Activity (dpm/100 cm ²)											
			Total						Removable					
			Alpha			Beta-Gamma			Alpha			Beta		
			Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA
Building 4	A1	14	42	7	55	72	36	191	4	2	29	-3	3	18
Affected Area	A2	14	67	7	55	156	37	191	4	2	29	2	4	18
Floor	A3	14	83	8	55	63	36	191	0	0	29	-2	3	18
Room 2	A4	14	158	10	55	50	35	191	0	0	29	-3	3	18
	A5	14	83	8	55	247	39	191	0	0	29	2	4	18
	A6	14	92	8	55	-31	34	191	4	2	29	0	4	18
	A7	14	83	8	55	91	36	191	0	0	29	0	4	18
	A8	14	58	7	55	16	35	191	0	0	29	0	4	18
	B1	14	100	8	55	225	38	191	0	0	29	0	4	18
	B2	14	125	9	55	131	37	191	0	0	29	-3	3	18
	B3	14	92	8	55	91	36	191	0	0	29	-3	3	18
	B4	14	175	10	55	56	35	191	0	0	29	-2	3	18
	B5	14	92	8	55	69	36	191	0	0	29	2	4	18
	B6	14	8	5	55	-69	33	191	0	0	29	-3	3	18
	B7	14	17	6	55	25	35	191	0	0	29	2	4	18
	B8	14	58	7	55	-16	34	191	0	0	29	12	7	18
	C1	14	75	8	55	1126	36	191	0	0	29	2	4	18
	C2	14	125	9	55	56	35	191	0	0	29	-3	3	18
	C3	14	50	7	55	75	36	191	0	0	29	2	4	18
	C4	14	225	11	55	200	38	191	0	0	29	3	5	18
	C5	14	83	8	55	-34	34	191	0	0	29	-2	3	18
	C6	14	33	6	55	22	35	191	0	0	29	3	5	18
	C7	14	42	7	55	66	36	191	8	3	29	-3	3	18
	C8	14	75	8	55	-31	34	191	0	0	29	2	4	18
	D1	14	148	10	55	298	36	225	3	2	19	2	3	22
	D2	14	75	8	55	134	37	191	0	0	29	14	7	18
	D3	14	83	8	55	103	36	191	0	0	29	-2	3	18
	D4	14	342	13	55	203	38	191	0	0	29	-3	3	18

Table A-29

**Surface Activity Measurements
Building 4 Interiors**

Building/ Area and Surface	Measurement Location	Figure	Activity (dpm/100 cm ²)											
			Total						Removable					
			Alpha			Beta-Gamma			Alpha			Beta		
			Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA
Building 4	D5	14	50	7	55	131	37	191	8	3	29	-2	3	18
Affected Area	D6	14	17	6	55	147	37	191	4	2	29	2	4	18
Floor	D7	14	50	7	55	141	37	191	0	0	29	-3	3	18
Room 2	D8	14	175	10	55	116	37	191	4	2	29	2	4	18
	E1	14	294	16	46	317	45	221	3	2	18	7	5	13
	E2	14	63	10	46	103	42	221	7	3	18	5	4	13
	E3	14	25	9	46	110	42	221	3	2	18	4	4	13
	E4	14	81	11	46	57	41	221	17	4	18	7	5	13
	E5	14	75	11	46	70	42	221	10	3	18	5	4	13
	E6	14	106	12	46	40	41	221	10	3	18	2	3	13
	E7	14	13	9	46	60	41	221	0	0	18	2	3	13
	E8	14	6	9	46	-3	41	221	3	2	18	9	5	13
	F1	14	69	11	46	137	42	221	10	3	18	4	4	13
	F2	14	69	11	46	13	41	221	7	3	18	4	4	13
	F3	14	63	10	46	70	42	221	7	3	18	0	3	13
	F4	14	25	9	46	30	41	221	0	0	18	0	3	13
	F5	14	50	10	46	117	42	221	7	3	18	2	3	13
	F6	14	75	11	46	63	41	221	0	0	18	-2	2	13
	F7	14	44	10	46	13	41	221	7	3	18	4	4	13
	F8	14	156	13	46	163	43	221	3	2	18	7	5	13
	G1	14	56	10	46	93	42	221	0	0	18	4	4	13
	G2	14	75	11	46	23	41	221	0	0	18	2	3	13
	G3	14	94	11	46	20	41	221	0	0	18	4	4	13
	G4	14	88	11	46	77	42	221	3	2	18	2	3	13
	G5	14	94	11	46	113	42	221	0	0	18	4	4	13
	G6	14	13	9	46	47	41	221	0	0	18	-2	2	13
	G7	14	-6	8	46	60	41	221	0	0	18	0	3	13
	G8	14	124	9	55	522	38	225	2	2	19	-2	2	22

Table A-29

**Surface Activity Measurements
Building 4 Interiors**

Building/ Area and Surface	Measurement Location	Figure	Activity (dpm/100 cm ²)											
			Total						Removable					
			Alpha			Beta-Gamma			Alpha			Beta		
			Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA
Building 4	H1	14	69	11	46	127	42	221	3	2	18	2	3	13
Affected Area	H2	14	69	11	46	87	42	221	3	2	18	5	4	13
Floor	H3	14	75	11	46	10	41	221	0	0	18	-2	2	13
Room 2	H4	14	88	11	46	-23	40	221	0	0	18	2	3	13
	H5	14	19	9	46	13	41	221	3	2	18	2	3	13
	H6	14	150	13	46	130	42	221	0	0	18	-2	2	13
	H7	14	56	10	46	0	41	221	0	0	18	0	3	13
	H8	14	81	11	46	253	44	221	3	2	18	4	4	13
	H1	14	44	10	46	117	42	221	7	3	18	-2	2	13
	H2	14	63	10	46	27	41	221	17	4	18	7	5	13
	H3	14	50	10	46	117	42	221	7	3	18	5	4	13
	H4	14	69	11	46	290	44	221	10	3	18	0	3	13
	H5	14	13	9	46	163	43	221	3	2	18	4	4	13
	H6	14	-13	8	46	203	43	221	0	0	18	4	4	13
	H7	14	6	9	46	67	41	221	0	0	18	0	3	13
	H8	14	13	9	46	30	41	221	3	2	18	4	4	13

Table A-29

**Surface Activity Measurements
Building 4 Interiors**

Building/ Area and Surface	Measurement Location	Figure	Activity (dpm/100 cm ²)											
			Total						Removable					
			Alpha			Beta-Gamma			Alpha			Beta		
			Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA
Building 4	A1	15	31	4	55	10	41	233	0	0	18	7	5	13
Affected Area	A2	15	19	3	55	162	43	233	3	2	18	2	3	13
North Wall	A3	15	25	4	55	159	43	233	3	2	18	-2	2	13
Room 3	A4	15	25	4	55	17	41	233	7	3	18	0	3	13
	A5	15	25	4	55	-34	40	233	7	3	18	0	3	13
	A6	15	44	5	55	79	42	233	10	3	18	2	3	13
	A7	15	56	6	55	-93	40	233	3	2	18	2	3	13
	A8	15	31	4	55	62	42	233	3	2	18	7	5	13
	B1	15	19	3	55	-62	40	233	3	2	18	0	3	13
	B2	15	44	5	55	255	44	233	10	3	18	0	3	13
	B3	15	38	5	55	-55	40	233	3	2	18	0	3	13
	B4	15	75	7	55	28	41	233	0	0	18	5	4	13
	B5	15	44	5	55	0	41	233	0	0	18	0	3	13
	B6	15	94	8	55	272	44	233	3	2	18	-2	2	13
	B7	15	106	8	55	41	41	233	3	2	18	0	3	13
	B8	15	31	4	55	7	42	233	0	0	18	0	3	13
	C1	15	-8	7	84	131	42	185	13	3	25	5	4	14
	C2	15	0	7	84	72	41	185	0	0	25	7	5	14
	C3	15	-8	7	84	97	41	185	4	2	25	-2	2	14
	C4	15	0	7	84	122	42	185	4	2	25	2	3	14
	C5	15	-17	6	84	294	44	185	0	0	25	3	4	14
	C6	15	-33	6	84	309	44	185	4	2	25	2	3	14
	C7	15	0	7	84	275	44	185	4	2	25	0	3	14
	C8	15	-25	6	84	288	44	185	0	0	25	9	5	14
	D1	15	-6	8	72	57	48	223	7	3	18	4	4	13
	D2	15	-18	7	72	-43	47	223	0	0	18	-2	2	13
	D3	15	-6	8	72	-107	46	223	3	2	18	0	3	13
	D4	15	0	8	72	200	49	223	3	2	18	0	3	13

Table A-29

**Surface Activity Measurements
Building 4 Interiors**

Building/ Area and Surface	Measurement Location	Figure	Activity (dpm/100 cm ²)											
			Total						Removable					
			Alpha			Beta-Gamma			Alpha			Beta		
			Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA
Building 4	D5	15	-12	7	72	240	50	223	3	2	18	-2	2	13
Affected Area	D6	15	0	8	72	83	48	223	0	0	18	-2	2	13
North Wall	D7	15	-12	7	72	147	49	223	0	0	18	2	3	13
Room 3	D8	15	-29	7	72	367	51	223	0	0	18	0	3	13
	E4	15	-24	7	72	117	48	223	0	0	18	0	3	13
	E5	15	0	8	72	217	50	223	7	3	18	5	4	13
	E6	15	-12	7	72	137	49	223	0	0	18	4	4	13
	E7	15	-29	7	72	-37	47	223	7	3	18	-2	2	13
	E8	15	-12	7	72	70	48	223	0	0	18	0	3	13
	F7	15	-18	7	72	-23	47	223	3	2	18	0	3	13
	F8	15	-18	7	72	240	50	223	0	0	18	2	3	13

Table A-29

**Surface Activity Measurements
Building 4 Interiors**

Building/ Area and Surface	Measurement Location	Figure	Activity (dpm/100 cm ²)											
			Total						Removable					
			Alpha			Beta-Gamma			Alpha			Beta		
			Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA
Building 4	A1	16	38	8	55	224	44	233	3	2	18	5	4	13
Affected Area	A2	16	69	9	55	300	45	233	7	3	18	2	3	13
South Wall	A3	16	6	7	55	279	45	233	3	2	18	9	5	13
Room 3	A4	16	25	8	55	217	44	233	0	0	18	4	4	13
	A5	16	13	7	55	548	48	233	0	0	18	4	4	13
	A6	16	19	8	55	607	48	233	10	3	18	11	6	13
	A7	16	-6	7	55	114	42	233	3	2	18	-2	2	13
	A8	16	-6	7	55	93	42	233	0	0	18	5	4	13
	B1	16	25	8	55	228	44	233	0	0	18	2	3	13
	B2	16	13	7	55	162	43	233	7	3	18	0	3	13
	B3	16	6	7	55	234	44	233	10	3	18	5	4	13
	B4	16	13	7	55	0	41	233	3	2	18	9	5	13
	B5	16	-6	7	55	234	44	233	0	0	18	4	4	13
	B6	16	19	8	55	210	44	233	3	2	18	-2	2	13
	B7	16	6	7	55	34	41	233	7	3	18	4	4	13
	B8	16	0	7	55	221	44	233	13	4	18	9	5	13
	C1	16	-25	7	84	181	46	185	0	0	25	-2	2	14
	C2	16	-8	7	84	144	46	185	0	0	25	-2	2	14
	C3	16	-25	7	84	200	46	185	13	3	25	2	3	14
	C4	16	-17	7	84	138	46	185	0	0	25	0	3	14
	C5	16	-33	6	84	175	46	185	0	0	25	-2	3	14
	C6	16	-25	7	84	259	47	185	4	2	25	2	3	14
	C7	16	-33	6	84	97	45	185	0	0	25	2	3	14
	C8	16	-25	7	84	128	45	185	0	0	25	3	4	14
	D1	16	-12	7	72	67	48	223	3	2	18	2	3	13
	D2	16	-29	7	72	63	48	223	3	2	18	-2	2	13
	D3	16	-35	6	72	60	48	223	13	4	18	5	4	13
	D4	16	-6	8	72	200	49	223	3	2	18	2	3	13

Table A-29

**Surface Activity Measurements
Building 4 Interiors**

Building/ Area and Surface	Measurement Location	Figure	Activity (dpm/100 cm ²)											
			Total						Removable					
			Alpha			Beta-Gamma			Alpha			Beta		
			Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA
Building 4	D5	16	-6	8	72	97	43	223	3	2	18	0	3	13
Affected Area	D6	16	-18	7	72	193	49	223	3	2	18	0	3	13
South Wall	D7	16	-41	6	72	137	49	223	3	2	18	-2	2	13
Room 3	D8	16	-18	7	72	-23	47	223	0	0	18	-2	2	13
	E1	16	135	12	72	-160	45	223	0	0	18	7	5	13
	E2	16	-6	8	72	93	48	223	0	0	18	-2	2	13
	E3	16	6	8	72	133	49	223	0	0	18	0	3	13
	E4	16	0	8	72	70	48	223	0	0	18	0	3	13
	E5	16	-12	7	72	70	48	223	0	0	18	-2	2	13
	F1	16	171	13	72	-287	43	223	7	3	18	0	3	13
	F2	16	100	11	72	103	48	223	7	3	18	-2	2	13

Table A-29

**Surface Activity Measurements
Building 4 Interiors**

Building/ Area and Surface	Measurement Location	Figure	Activity (dpm/100 cm ²)											
			Total						Removable					
			Alpha			Beta-Gamma			Alpha			Beta		
			Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA
Building 4	A1	17	25	4	55	124	43	233	3	2	18	4	4	13
Affected Area	A2	17	13	3	55	162	43	233	3	2	18	5	4	13
East Wall	A3	17	25	4	55	48	42	233	17	4	18	0	3	13
Room 3	A4	17	25	4	55	24	41	233	3	2	18	0	3	13
	A5	17	44	5	55	66	42	233	3	2	18	2	3	13
	A6	17	19	3	55	256	44	233	3	2	18	2	3	13
	A7	17	25	4	55	-38	40	233	0	0	18	4	4	13
	A8	17	56	6	55	-79	40	233	0	0	18	2	3	13
	B1	17	50	6	55	83	42	233	3	2	18	7	5	13
	B2	17	44	5	55	-17	42	233	0	0	18	4	4	13
	B3	17	94	8	55	162	43	233	0	0	18	0	3	13
	B4	17	31	4	55	-45	40	233	0	0	18	2	3	13
	B5	17	50	6	55	3	41	233	0	0	18	2	3	13
	B6	17	13	3	55	-3	41	233	0	0	18	4	4	13
	B7	17	38	5	55	-66	40	233	0	0	18	0	3	13
	B8	17	63	6	55	17	41	233	3	2	18	2	3	13
	C1	17	-33	6	84	59	41	185	4	2	25	0	3	14
	C2	17	-33	6	84	63	41	185	4	2	25	3	4	14
	C3	17	-17	6	84	91	41	185	0	0	25	-2	2	14
	C4	17	-8	7	84	181	43	185	4	2	25	2	3	14
	C5	17	17	7	84	-72	39	185	9	3	25	2	3	14
	C6	17	-17	6	84	34	40	185	0	0	25	0	3	14
	C7	17	-33	6	84	75	41	185	4	2	25	0	3	14
	C8	17	-42	5	84	69	41	185	4	2	25	0	3	14
	D1	17	12	8	72	167	49	223	0	0	18	-2	2	13
	D2	17	-6	8	72	220	50	223	0	0	18	2	3	13
	D3	17	-6	8	72	240	50	223	7	3	18	2	3	13
	D4	17	-12	7	72	160	49	223	7	3	18	-2	2	13

Table A-29

**Surface Activity Measurements
Building 4 Interiors**

Building/ Area and Surface	Measurement Location	Figure	Activity (dpm/100 cm ²)											
			Total						Removable					
			Alpha			Beta-Gamma			Alpha			Beta		
			Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA
Building 4	D5	17	-12	7	72	-23	47	223	0	0	18	0	3	13
Affected Area	D6	17	-6	8	72	57	48	223	7	3	18	2	3	13
East Wall	D7	17	-18	7	72	-10	47	223	0	0	18	-2	2	13
Room 3	D8	17	6	8	72	53	48	223	3	2	18	-2	2	13
	E1	17	-41	6	72	63	48	223	0	0	18	-2	2	13
	E2	17	-12	7	72	130	49	223	7	3	18	2	3	13
	E3	17	0	8	72	80	48	223	3	2	18	0	3	13
	E4	17	-6	8	72	-77	46	223	0	0	18	2	3	13
	E5	17	-18	7	72	0	47	223	0	0	18	0	3	13
	E6	17	-18	7	72	67	48	223	0	0	18	2	3	13
	E7	17	-12	7	72	87	48	223	0	0	18	2	3	13
	E8	17	-29	7	72	247	50	223	7	3	18	4	4	13
	F1	17	-24	7	72	127	49	223	3	2	18	-2	2	13
	F2	17	-29	7	72	170	49	223	7	3	18	-2	2	13
	F3	17	-35	6	72	163	49	223	3	2	18	-2	2	13
	F4	17	6	8	72	-40	47	223	7	3	18	0	3	13
	F5	17	-6	8	72	17	47	223	3	2	18	-2	2	13
	F6	17	6	8	72	123	49	223	0	0	18	0	3	13
	F7	17	-6	8	72	137	49	223	0	0	18	-2	2	13
	F8	17	-	8	72	140	49	223	0	0	18	5	4	13

Table A-29

**Surface Activity Measurements
Building 4 Interiors**

Building/ Area and Surface	Measurement Location	Figure	Activity (dpm/100 cm ²)											
			Total						Removable					
			Alpha			Beta-Gamma			Alpha			Beta		
			Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA
Building 4	A1	18	31	4	55	-21	41	233	0	0	18	2	3	13
Affected Area	A2	18	44	5	55	14	41	233	3	2	18	-2	2	13
West Wall	A3	18	13	3	55	197	44	233	3	2	18	0	3	13
Room 3	A4	18	75	7	55	145	43	233	0	0	18	5	4	13
	A5	18	6	2	55	7	41	233	3	2	18	-2	2	13
	A6	18	6	2	55	14	41	233	3	2	18	0	3	13
	A7	18	19	3	55	183	43	233	0	0	18	4	4	13
	A8	18	13	3	55	-21	41	233	0	0	18	0	3	13
	B1	18	31	4	55	76	42	233	3	2	18	-2	2	13
	B2	18	75	7	55	276	45	233	0	0	18	-2	2	13
	B3	18	38	5	55	369	46	233	3	2	18	-2	2	13
	B4	18	56	6	55	417	46	233	7	3	18	-2	2	13
	B5	18	38	5	55	-72	40	233	0	0	18	0	3	13
	B6	18	25	4	55	41	41	233	0	0	18	-2	2	13
	B7	18	25	4	55	76	42	233	0	0	18	2	3	13
	B8	18	25	4	55	62	42	233	0	0	18	-2	2	13
	C1	18	-33	6	84	66	41	185	4	2	25	-2	2	14
	C2	18	0	7	84	53	41	185	4	2	25	10	6	14
	C3	18	-8	7	84	94	41	185	4	2	25	3	4	14
	C4	18	42	8	84	228	43	185	4	2	25	3	4	14
	C5	18	0	7	84	222	43	185	9	3	25	-2	2	14
	C6	18	208	12	84	103	41	185	0	0	25	3	4	14
	C7	18	158	11	84	350	45	185	4	2	25	2	3	14
	C8	18	258	13	84	-16	40	185	9	3	25	0	3	14

Table A-29

**Surface Activity Measurements
Building 4 Interiors**

Building/ Area and Surface	Measurement Location	Figure	Activity (dpm/100 cm ²)											
			Total						Removable					
			Alpha			Beta-Gamma			Alpha			Beta		
			Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA
Building 4	1	19	29	6	72	73	41	223	0	0	29	-3	3	18
Unaffected Area	2	19	18	5	72	103	41	223	0	0	29	-2	3	18
Ceiling	3	19	41	7	72	130	41	223	4	2	29	2	3	18
Room 3	4	19	53	7	72	-23	39	223	0	0	29	-2	3	18
	5	19	41	7	72	-60	39	223	0	0	29	-2	3	18
	6	19	18	5	72	83	41	223	0	0	29	-3	3	18
	7	19	12	5	72	-10	39	223	4	2	29	-2	3	18
	8	19	53	7	72	-107	38	223	0	0	29	-3	3	18
	9	19	12	5	72	30	40	223	0	0	29	-2	3	18
	10	19	12	5	72	73	41	223	0	0	29	-3	3	18
	11	19	29	6	72	-80	38	223	4	2	29	-2	3	18
	12	19	35	6	72	-33	39	223	0	0	29	0	4	18
	13	19	10	5	72	33	40	223	0	0	29	-3	3	18
	14	19	18	5	72	-10	39	223	0	0	29	-3	3	18
	15	19	29	6	72	-7	39	223	0	0	29	-3	3	18
	16	19	18	5	72	-40	39	223	0	0	29	-2	3	18

Table A-29

**Surface Activity Measurements
Building 4 Interiors**

Building/ Area and Surface	Measurement Location	Figure	Activity (dpm/100 cm ²)											
			Total						Removable					
			Alpha			Beta-Gamma			Alpha			Beta		
			Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA
Building 4	A1	20	94	10	72	273	47	223	10	3	18	4	4	13
Affected Area	A2	20	159	12	72	627	51	223	13	4	18	18	7	13
Floor	A3	20	141	11	72	937	55	223	3	2	18	11	6	13
Room 3	A4	20	171	12	72	783	53	223	3	2	18	-2	2	13
	A5	20	147	11	72	190	46	223	10	3	18	4	4	13
	A6	20	118	10	72	73	45	223	13	4	18	9	5	13
	A7	20	59	8	72	180	46	223	13	4	18	4	4	13
	A8	20	112	10	72	337	48	223	7	3	18	5	4	13
	B1	20	106	10	72	217	46	223	17	4	18	0	3	13
	B2	20	71	9	72	187	46	223	7	3	18	9	5	13
	B3	20	71	9	72	190	46	223	7	3	18	5	4	13
	B4	20	41	8	72	77	45	223	7	3	18	0	3	13
	B5	20	76	9	72	70	45	223	0	0	18	9	5	13
	B6	20	41	8	72	27	44	223	0	0	18	0	3	13
	B7	20	18	7	72	-40	43	223	10	3	18	5	4	13
	B8	20	153	11	72	133	45	223	3	2	18	4	4	13
	C1	20	53	8	72	203	46	223	0	0	18	4	4	13
	C2	20	47	8	72	70	45	223	3	2	18	9	5	13
	C3	20	59	8	72	-100	42	223	3	2	18	0	3	13
	C4	20	53	8	72	143	46	223	13	4	18	4	4	13
	C5	20	47	8	72	-47	43	223	0	0	18	-2	2	13
	C6	20	18	7	72	-47	43	223	0	0	18	0	3	13
	C7	20	82	9	72	837	54	223	-	0	18	5	4	13
	C8	20	76	9	72	480	50	223	20	5	18	7	5	13
	D1	20	171	12	72	760	53	223	13	4	18	5	4	13
	D2	20	241	14	72	753	53	223	3	2	18	7	5	13
	D3	20	94	10	72	20	44	223	0	0	18	0	3	13
	D4	20	53	8	72	213	46	223	3	2	18	2	3	13

Table A-29

**Surface Activity Measurements
Building 4 Interiors**

Building/ Area and Surface	Measurement Location	Figure	Activity (dpm/100 cm ²)											
			Total						Removable					
			Alpha			Beta-Gamma			Alpha			Beta		
			Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA
Building 4	D5	20	100	10	72	57	44	223	10	3	18	4	4	13
Affected Area	D6	20	24	7	72	90	45	223	10	3	18	5	4	13
Floor	D7	20	24	7	72	-30	43	223	3	2	18	2	3	13
Room 3	D8	20	47	8	72	173	46	223	0	0	18	9	5	13
	E1	20	18	7	72	270	47	223	7	3	18	11	6	13
	E2	20	97	7	72	450	42	223	5	2	19	2	3	22
	E3	20	59	8	72	117	45	223	23	5	18	26	8	13
	E4	20	147	11	72	467	49	223	7	3	18	-2	2	13
	E5	20	124	11	72	163	46	223	13	4	18	7	5	13
	E6	20	53	8	72	83	45	223	10	3	18	2	3	13
	E7	20	18	7	72	130	45	223	0	0	18	4	4	13
	E8	20	112	10	72	113	45	223	10	3	18	11	6	13
	F1	20	118	10	72	213	46	223	3	2	18	7	5	13
	F2	20	47	8	72	113	45	223	3	2	18	4	4	13
	F3	20	53	8	72	-100	42	223	0	0	18	7	5	13
	F4	20	24	7	72	50	44	223	10	3	18	12	6	13
	F5	20	29	7	72	-43	43	223	3	2	18	12	6	13
	F6	20	18	7	72	80	45	223	3	2	18	11	6	13
	F7	20	0	6	72	193	46	223	13	4	18	7	5	13
	F8	20	124	11	72	467	49	223	13	4	18	5	4	13
	G1	20	29	7	72	-177	41	223	0	0	18	4	4	13
	G2	20	41	8	72	37	44	223	7	3	18	0	3	13
	G3	20	129	11	72	733	52	223	17	4	18	14	6	13
	G4	20	106	10	72	313	48	223	0	0	18	11	6	13
	G5	20	112	10	72	207	46	223	0	0	18	5	4	13
	G6	20	41	8	72	277	47	223	7	3	18	0	3	13
	G7	20	24	7	72	343	48	223	13	4	18	18	7	13
	G8	20	53	8	72	150	46	223	7	3	18	12	6	13

Table A-29
Surface Activity Measurements
Building 4 Interiors

Building/ Area and Surface	Measurement Location	Figure	Activity (dpm/100 cm ²)											
			Total			Beta-Gamma			Removable			Beta		
			Alpha		MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA
			Act.	Uncert.										
Building 4 Affected Area Floor Room 3	H1	20	53	8	72	-147	42	223	3	2	18	2	3	13
	H2	20	53	8	72	-80	43	223	7	3	18	5	4	13
	H3	20	94	10	72	600	51	223	7	3	18	0	7	13
	H4	20	47	8	72	263	47	223	30	6	18	12	6	13
	H5	20	71	9	72	483	50	223	23	5	18	9	5	13
	H6	20	6	6	72	157	46	223	13	4	18	7	5	13
	H7	20	18	7	72	60	49	223	20	5	18	0	3	13
	H8	20	6	6	72	313	48	223	17	4	18	21	7	13

Table A-29
Surface Activity Measurements
Building 4 Interiors

Building/ Area and Surface	Measurement Location	Figure	Activity (dpm/100 cm ²)											
			Total			Beta-Gamma			Removable			Alpha		
			Alpha			Beta-Gamma			Removable			Alpha		
			Act	Uncert.	MDA	Act	Uncert.	MDA	Act	Uncert.	MDA	Act	Uncert.	MDA
Building 4 Affected Area North Wall Room 4	A1	21	25	4	64	-150	39	189	0	0	12	0	3	13
	A2	21	6	2	64	27	41	189	0	0	12	0	2	13
	A3	21	6	2	64	20	41	189	4	2	12	0	3	13
	B1	21	6	2	64	-23	41	189	17	4	12	13	6	13
	B2	21	19	3	64	53	42	189	0	0	12	2	3	13
	B3	21	19	3	64	130	43	189	4	2	12	2	3	13
	C1	21	19	3	64	-3	41	189	0	0	12	0	3	13
	C2	21	6	2	64	93	42	189	0	0	12	2	3	13
	C3	21	6	2	64	7	41	189	0	0	12	0	3	13

Table A-29

**Surface Activity Measurements
Building 4 Interiors**

Building/ Area and Surface	Measurement Location	Figure	Activity (dpm/100 cm ²)											
			Total						Removable					
			Alpha			Beta-Gamma			Alpha			Beta		
			Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA
Building 4	A1	21	50	6	64	167	43	189	0	0	12	0	3	13
Affected Area	A2	21	38	5	64	133	43	189	4	2	12	4	4	13
South Wall	A3	21	75	7	64	73	42	189	0	0	12	10	5	13
Room 4	B1	21	13	3	64	153	43	189	0	0	12	6	4	13
	B2	21	6	2	64	70	42	189	4	2	12	-2	2	13
	B3	21	6	2	64	120	42	189	4	2	12	0	3	13
	C1	21	13	3	64	253	44	189	4	2	12	-2	2	13
	C2	21	6	2	64	97	42	189	4	2	12	10	5	13
	C3	21	6	2	64	213	44	189	0	0	12	4	4	13

Table A-29
Surface Activity Measurements
Building 4 Interiors

Building/ Area and Surface	Measurement Location	Figure	Activity (dpm/10" cm ²)											
			Total			Beta-Gamma			Removable			Beta		
			Alpha			Beta-Gamma			Alpha			Beta		
			Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA
Building 4 Affected Area East Wall Room 4	A1	21	31	4	64	73	42	189	0	0	12	6	4	13
	A2	21	13	3	64	-120	39	189	4	2	12	4	4	13
	B1	21	13	3	64	-7	41	189	4	2	12	8	5	13
	B2	21	19	3	64	-33	40	189	4	2	12	17	7	13
	C1	21	13	3	64	47	41	189	0	0	12	-2	2	13
	C2	21	6	2	64	30	41	189	0	0	12	2	3	13

Table A-29
Surface Activity Measurements
Building 4 Interiors

Building/ Area and Surface	Measurement Location	Figure	Activity (dpm/100 cm ²)											
			Total			Betas-Gamma			Alpha			Removable		
			Alpha			Betas-Gamma			Alpha			Betas		
			Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA
Building 4 Affected Area West Wall Room 4	A1	21	56	6	64	43	41	189	0	0	12	4	4	13
	A2	21	25	4	64	23	41	189	4	2	12	0	3	13
	B1	21	6	2	64	10	41	189	0	0	12	-2	2	13
	B2	21	13	3	64	83	42	189	0	0	12	4	4	13
	C1	21	31	4	64	47	41	189	0	0	12	15	6	13
	C2	21	25	4	64	57	42	189	0	0	12	-2	2	13

Table A-29

Surface Activity Measurements
Building 4 Interiors

E. -ing/ Area and Surface	Measurement Location	Figure	Activity (dpm/100 cm ²)											
			Total			Beta-Gamma			Removable			Beta		
			Alpha			Uncert.			Alpha			Uncert.		
			Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA
Building 4 Ceiling Room 4	A1	21	6	2	64	-137	39	189	4	2	12	-2	2	13
	A2	21	13	3	64	23	41	189	0	0	12	0	3	13
	A3	21	6	2	64	-233	37	189	0	0	12	0	3	13
	B1	21	6	2	64	-133	39	189	9	3	12	4	4	13
	B2	21	0	0	64	-220	38	189	0	0	12	-2	2	13
	B3	21	6	2	64	-140	39	189	0	0	12	0	3	13

Table A-29
Surface Activity Measurements
Building 4 Interiors

Building/ Area and Surface	Measurement Location	Figure	Activity (dpm/100 cm ²)											
			Total			Beta-Gamma			Removable			Beta		
			Alpha			Alpha			Alpha			Alpha		
			Act	Uncert	MDA	Act	Uncert	MDA	Act	Uncert	MDA	Act	Uncert	MDA
Building 4 Affected Area North Wall Room 5	A1	22	0	3	64	218	39	189	0	0	12	-2	2	13
	A2	22	36	5	64	121	38	189	0	0	12	-2	2	13
	B1	22	-7	2	64	324	41	189	0	0	12	4	4	13
	B2	22	7	3	64	142	38	189	0	0	12	2	3	13
	C1	22	-7	2	64	167	39	189	4	2	12	2	3	13
	C2	22	7	3	64	112	38	189	0	0	12	0	3	13

Table A-29

**Surface Activity Measurements
Building 4 Interiors**

Building/ Area and Surface	Measurement Location	Figure	Activity (dpm/100 cm ²)											
			Total						Removable					
			Alpha			Beta-Gamma			Alpha			Beta		
			Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA
Building 4	A1	22	14	4	64	258	40	189	0	0	12	0	3	13
Affected Area	A2	22	43	6	64	348	41	189	9	3	12	0	3	13
South Wall	B1	22	-7	2	64	352	41	189	0	0	12	0	3	13
Room 5	B2	22	7	3	64	224	39	189	0	0	12	0	3	13
	C1	22	0	3	64	306	41	189	0	0	12	2	3	13
	C2	22	-7	2	64	267	40	189	4	2	12	4	4	13

Table A-29
Surface Activity Measurements
Building 4 Interiors

Building/ Area and Surface	Measurement Location	Figure	Activity (dpm/100 cm ²)											
			Total			Beta-Gamma			Alpha			Removable		
			Alpha			Beta-Gamma			Alpha			Alpha		
			Act	Uncert	MDA	Act	Uncert	MDA	Act	Uncert	MDA	Act	Uncert	MDA
Building 4 Affected Area East Wall Room 5	A2	22	50	6	64	206	39	189	0	0	12	-2	2	13
	B2	22	7	3	64	248	40	189	4	2	12	2	3	13
	C1	22	0	3	64	200	39	189	4	2	12	-2	2	13
	C2	22	-7	2	64	182	39	189	0	0	12	2	3	13

Table A-29
Surface Activity Measurements
Building 4 Interiors

Building/ Area and Surface	Measurement Location	Figure	Activity (dpm/100 cm ²)											
			Total			Betas-Gamma			Removable			Beta		
			Alpha			Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA
			Act.	Uncert.	MDA									
Building 4 Affected Area West Wall Room 5	A1	22	0	3	64	76	37	189	0	0	12	-2	2	13
	A2	22	36	5	64	176	39	189	9	3	12	2	3	13
	B1	22	-7	2	64	91	37	189	4	2	12	0	3	13
	B2	21	21	4	64	97	37	189	0	0	12	2	3	13
	C1	22	0	3	64	64	37	189	0	0	12	-2	2	13
	C2	22	-7	2	64	173	39	189	0	0	12	2	3	13

Table A-29
Surface Activity Measurements
Building 4 Interiors

Building/ Area and Surface	Measurement Location	Figure	Activity (dpm/100 cm ²)											
			Total			Beta-Gamma			Removable					
			Alpha			Beta-Gamma			Alpha			Beta		
			Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA	Act.	Uncert.	MDA
Building 4	A1	22	-7	2	64	-15	35	189	0	0	12	-2	2	13
Affected Area	B2	22	-7	2	64	-30	35	189	0	0	12	4	4	13
Ceiling	B1	22	-7	2	64	-61	35	189	4	2	12	0	3	13
Room 5	B2	22	0	3	64	33	36	189	0	0	12	2	3	13

Appendix B

Table B-1

Summary of Building Surface Activity Results

Building/Area and Surface	Surface Area (m ²)	Average Total Activity (dpm/100 cm ²)						μ_a^d	$n_1^{d,e}$		Guidelines/ Conditions Satisfied
		N ^a	\bar{x}^b	s ^c	n	\bar{x}	s _x	Beta only	β	γ	
Conversion Floor and lower walls		508	44	53	508	129	194	143	1.4	11	yes/yes
Ceiling		52	6	21	52	-35	112	-9	1.4	11	yes/yes
Upper walls		155	-3	39	155	-75	124	92	1.4	11	yes/yes

^a \bar{n} = Number of measurements.

^b \bar{x} = Average.

^c s = Standard deviation.

^d μ_a = Number of data points to demonstrate 95% confidence level.

^e n = Based on beta-gamma level.

Table B-2

Summary of Exposure Rate Measurements

Survey Unit	No. of Measurements (n)	Exposure Rate ($\mu\text{R/h}$)				Guidelines/ Conditions Satisfied
		\bar{x}^a	s^b	μ_a^c	n_1^d	
Building 4	715	11.3	8.3	11.8	4	yes/yes

^a \bar{x} = Average.

^c s = Standard deviation.

^c μ_a = Comparison value (hypothetical).

^d n_1 = Total number of samples for 95% confidence level (hypothetical).

Table B-3

Building Residual Activity

Mean Value for Beta Activity (dpm/100 cm ²)	Mean Value for Alpha Activity (dpm/100 cm ²)	Total Interior Area (m ²)	Total Beta Activity (μCi)	Total Alpha Activity (μCi)	Total Residual Activity (μCi)
105	32	684	3.2	0.98	4.2

Appendix C
Section C-1

RADIOLOGICAL SURVEY FORM

Survey Number

090596040103

Survey Description: <i>FIELD SURVEY</i>	<i>DATE</i>
<i>1000 Y. (CONCRETE)</i>	
<i>FIELD SURVEY</i>	
<i>N/A</i>	
Drawing Attached: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	

Instrument (1)
Instrument Model: PROTEAN
Instrument Ser. #: 621444
Calibration Due: N/A
Efficiency: A-0.25 B-0.53
MDA: A-1.12 CF: A-1.0 BKG: A-0.1
MDA: B-0.53 CF: B-1.0 BKG: B-0.5

Instrument (2)
Instrument Model: 2224
Instrument Ser. #: 132190
Calibration Due: 8-2-97
Efficiency: A-0.16 B-0.30
MDA: A-0.54 CF: A-0.17 BKG: A-1
MDA: B-0.17 CF: B-0.15 BKG: B-0.1

Survey Date: 09.05.96	Date
Survey by: <i>T. L. L. L.</i>	Date
Print Name: <i>K. L. L. L.</i>	Date
Review By: <i>John L. L. L.</i>	Date

Instrument (3)
Instrument Model: 19
Instrument Ser. #: 1491
Calibration Due: 12-2-96
Efficiency: N/A
MDA: N/A CF: N/A BKG: 1.0 102/102

Instrument (4)
Instrument Model: N/A
Instrument Ser. #: N/A
Calibration Due: N/A
Efficiency: N/A
MDA: N/A CF: N/A BKG: N/A

Survey Point	Smearable Contamination beta/gamma dpm/100cm ²	alpha dpm/100cm ²	Fixed Contamination beta/gamma cpm/100cm ²	alpha cpm/100cm ²	Radiation Level (uR/hr)	Instrument Used	Additional Comments
							(1) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(2) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(3) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(4) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(5) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(6) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(7) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(8) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(9) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(10) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(11) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(12) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(13) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(14) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(15) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(16) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(17) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(18) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(19) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(20) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(21) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(22) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(23) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(24) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(25) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(26) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(27) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(28) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(29) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(30) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(31) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(32) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(33) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(34) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(35) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(36) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(37) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(38) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(39) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(40) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(41) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(42) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(43) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(44) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(45) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(46) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(47) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(48) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(49) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(50) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(51) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(52) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(53) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(54) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(55) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(56) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(57) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(58) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(59) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(60) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(61) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(62) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(63) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(64) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(65) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(66) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(67) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(68) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(69) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(70) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(71) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(72) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(73) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(74) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(75) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(76) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(77) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(78) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(79) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(80) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(81) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(82) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(83) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(84) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(85) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(86) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(87) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(88) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(89) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(90) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(91) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(92) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(93) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(94) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(95) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(96) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(97) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(98) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(99) 2224 BKG. $\alpha = 1$ $\beta = 214$
							(100) 2224 BKG. $\alpha = 1$ $\beta = 214$

AS 10-1-96 ON PROTEAN DATA SHEET

RADIOLOGICAL SURVEY FORM CONTINUATION SHEET

Survey Number 070596040103

Survey Point	Smearable Contamination beas/gamma dpm/100cm ²	alpha dpm/100cm ²	Final Contamination beas/gamma cpm/100cm ²	alpha cpm/100cm ²	Radiation Level (uR/hr)	Instrument Used	Additional Comments
55 55			231	13	10	1,2,3	FLOOR
56 56	566		227	11	10		
57 57	NOTED		306	16	10		
58 58		DATA	194	11	10		
59 59		SHEET	196	11	10		
60 60			148	6	10		

RADIOLOGICAL SURVEY FORM

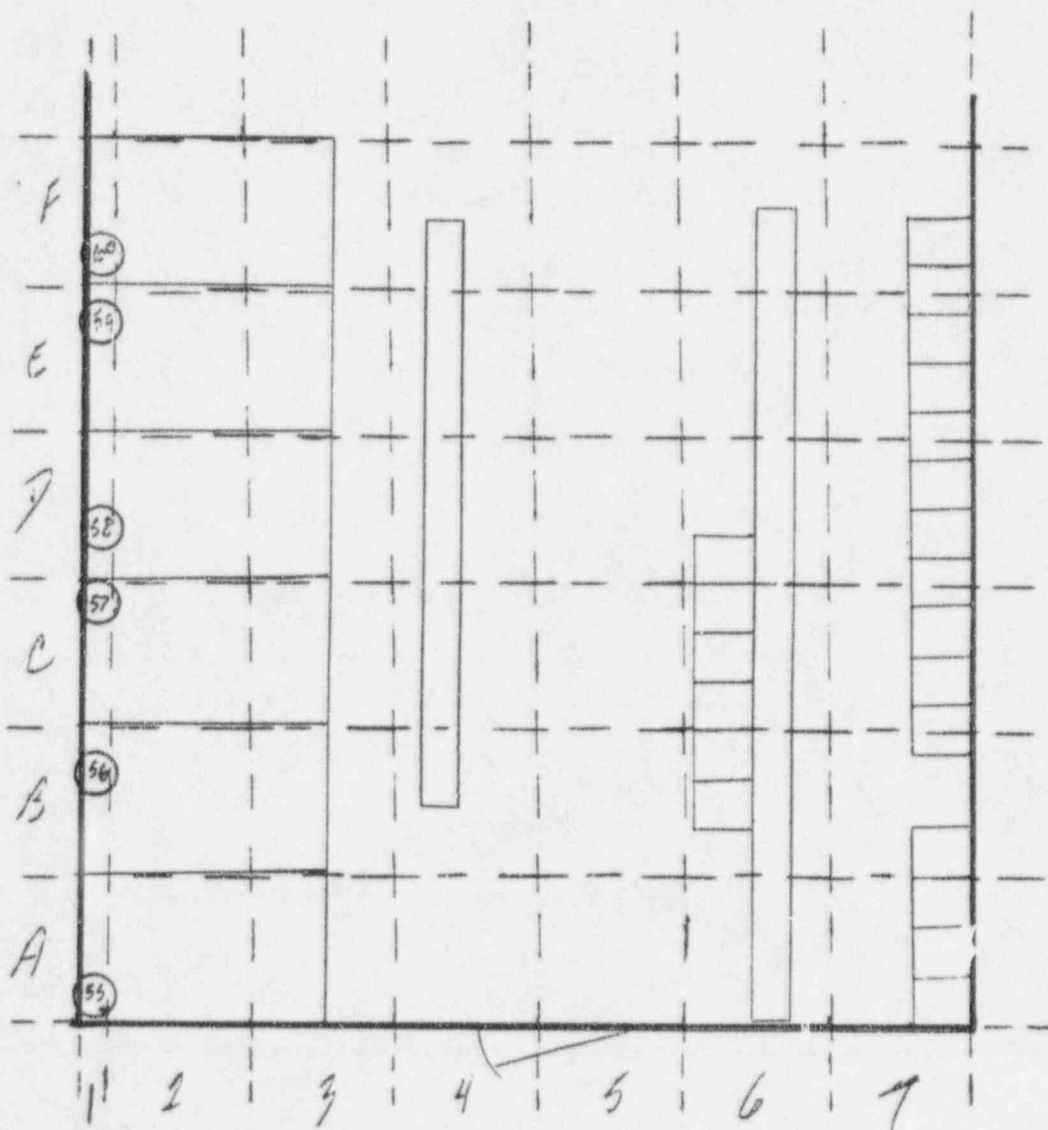
Survey Number 090596040103

BLDG 4 - ROOM 1

EACH FULL GRID = APPROX. 1 M²

BROKEN LINES DEFINE GRID

ALL SURVEYS ON FLOOR.



1/4 IN. = APPROX. 1 FT.

ALPHA					BETA						
Eff: 25.00% Bkg: 0.00 cpm MDA: 10.84 dpm					Eff: 53.00% Bkg: 2.00 cpm MDA: 17.52 dpm						
RPT	ID	COUNTS	NET CPM	DPM	LIMITS	COUNTS	NET CPM	DPM	LIMITS	DATE	TIME
00	040103	1	1.00	4.00		1	-1.00	-1.89		09-05-96	17:08:35
002	00	2	2.00	8.00		1	-1.00	-1.89		09-05-96	17:10:05
003	00	0	0.00	0.00		4	2.00	3.77		09-05-96	17:11:33
004	00	0	0.00	0.00		0	-2.00	-3.77		09-05-96	17:13:02
005	00	0	0.00	0.00		2	0.00	0.00		09-05-96	17:14:31
006	00	1	1.00	4.00		2	0.00	0.00		09-05-96	17:16:00

IT Corporation
Molycorp 768380

FIXED CONTAMINATION DATA SHEET

Survey Number

90596040103

Page 5 of 5

Survey Point	Fixed Contamination		Background		Efficiency		Activity		Instrument Used
	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta Gamma	Alpha	Beta/Gamma dpm/100 cm ²	Alpha dpm/100 cm ²	
55	281	18	214	1	0.3	0.16	223.33	106.25	Model 2224 132150
56	227	11	214	1	0.3	0.16	43.33	62.50	Model 2224 132150
57	306	26	214	1	0.3	0.16	306.67	156.25	Model 2224 132150
58	194	11	214	1	0.3	0.16	-66.67	62.50	Model 2224 132150
59	196	11	214	1	0.3	0.16	-60.00	62.50	Model 2224 132150
60	148	6	214	1	0.3	0.16	-220.00	31.25	Model 2224 132150

701100755050

Survey Description:	PERFECTED AREA		
	100% - 100%		
	PERFECTED AREA		
	100%		
Drawing Attached	Yes	X	No

Instrument Model:	PROTEAN	Instrument (1)
Instrument Ser. #:	621443	
Calibration Due:	N/A	
Efficiency:	A-C, 24 B-C, 5 Z	
MDA: A-13.42	CF: A-4.13	BKG A-C
MDA: B-13.6	CF: B-1.92	BKG B-C

Instrument (2)	Instrument Mode	MODEL 2224
Instrument Ser. #	1344	
Calibration Due:	8-2-97	
Efficiency:	A-0.17	B-0.27
	MDA-A-57.16	CF-A-6.06
	MDAB-46.93	CF-B-5.70
		BKG-A-1
		BKG-B-46.4

Survey Date: 08.09.96
Survey by: *[Signature]* Date: 12.8.96
Print Name: *K. S. [unclear]*
Review By: *[Signature]* Date: 19.7.96

Instrument Model:	19	Instrument (3)
Instrument Ser. #:	81491	
Calibration Due:	12-10-96	
Efficiency:	N/A	
QDA: N/A	QF: N/A	BKG: 10.1.163

Instrument Mode	Instrument (4)
Instrument Ser. #	14
Calibration Due	1/1
Efficiency	
QC	OK

Survey Point	Smearable Contamination		Fixed Contamination		Radiation Level (uR/Hr)	Instrument Used	Additional Comments
	beta/gamma dpm/100cm ²	alpha dpm/100cm ²	beta/gamma cpm/100cm ²	alpha cpm/100cm ²			
							(1) 2224 BACKGROUND X = 1 / 264
							(2) CORRECT NUMBERS ON MAP INDICATE SURVEY POINT LOCATIONS.
							(3) 100% FRISK FOR X & B-
							(4) 1 MINUTE STATIC COUNT FOR X & B-
							(5) X SURVEY TAKEN AT 1 METER FROM SURVEY POINT SURFACE

RADIOLOGICAL SURVEY FORM CONTINUATION SHEET

Survey Number 090796010104

Survey Point	Smearable Contamination bec/gamma dpm/100cm ²	alpha dpm/100cm ²	Fixed Contamination bec/gamma dpm/100cm ²	alpha cpm/100cm ²	Radiation Level (uR/hr)	Instrument Used	Additional Comments
1			418	34	10	1,2,3	FEOR
2			928	21	10		
3			325	34	10		
4			360	39	10		
5			321	28	10		
6			347	23	10		
7			300	7	10		
8			290	7	10		
9			312	16	10		
10			299	5	10		
11			282	3	10		
12			299	10	10		
13	SEE 1807000		300	7	10		
14			253	9	10		
15			290	5	10		
16		DATA SHEET	252	7	10		
17			295	10	18		
18			301	14	10		
19			246	19	10		
20			269	12	10		
21			257	10	10		
22			276	17	10		
23			253	23	10		
24			241	6	10		
25			265	9	10		
26			560	14	10		
27			299	11	10		
28			304	11	10		
29			332	13	10		
30			309	7	10		
31			313	13	10		

RADIOLOGICAL SURVEY FORM CONTINUATION SHEET

Survey Number 070996040104

Survey Number

Survey Point	Smearable Contamination be/gamma dpm/100cm ²	alpha dpm/100cm ²	Fixed Contamination be/gamma cpm/100cm ²	alpha cpm/100cm ²	Radiation Level (uR/hr)	Instrument Used	Additional Comments
32			342	32	10	1213	Floor
33			309	17	10		
34			854	22	10		
35			573	24	10		
36			308	5	10		
37			320	7	10		
38			405	22	10		
39			414	21	10		
40			420	38	10		
41			492	26	10		
42			533	30	10		
43			273	10	10		
44			270	16	10		
45			258	4	10		
46			245	6	10		
47			244	4	10		
48			254	5	10		
49			221	13	10		
50			244	14	10		
51			204	9	10		
52			176	6	10		
53			208	5	10		
54			176	4	10		
55			220	9	10		
56			229	9	10		
57			307	7	10		
58			344	10	10		
59			286	14	10		
60			272	10	10		
61			432	32	10		
62			303	24	10		

JE

PROTEIN

APR

SHEET

RADIOLOGICAL SURVEY FORM CONTINUATION SHEET

Survey Number 090996040104

Survey Point	Smearable Contamination dpm/100cm ²	alpha dpm/100cm ²	Fixed Contamination beta/gamma cpm/100cm ²	alpha cpm/100cm ²	Radon Level (uR/hr)	Instrument Used	Additional Comments
63			271	21	10	1233	FLOOR
64			194	9	10		
65			163	45	10		
66			200	13	10		
67			224	13	10		
68			275	11	10		
69			166	27	10		
70			404	10	10		
71			480	10	10		
72			335	19	10		
73			409	17	10		
74			298	20	10		
75			282	31	10		
76			327	N/A	N/A		
77			N/A	N/A	N/A		
78							
79							
80							
81							
82							
83							
84							
85							
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95							
96							
97							
98							
99							
100							

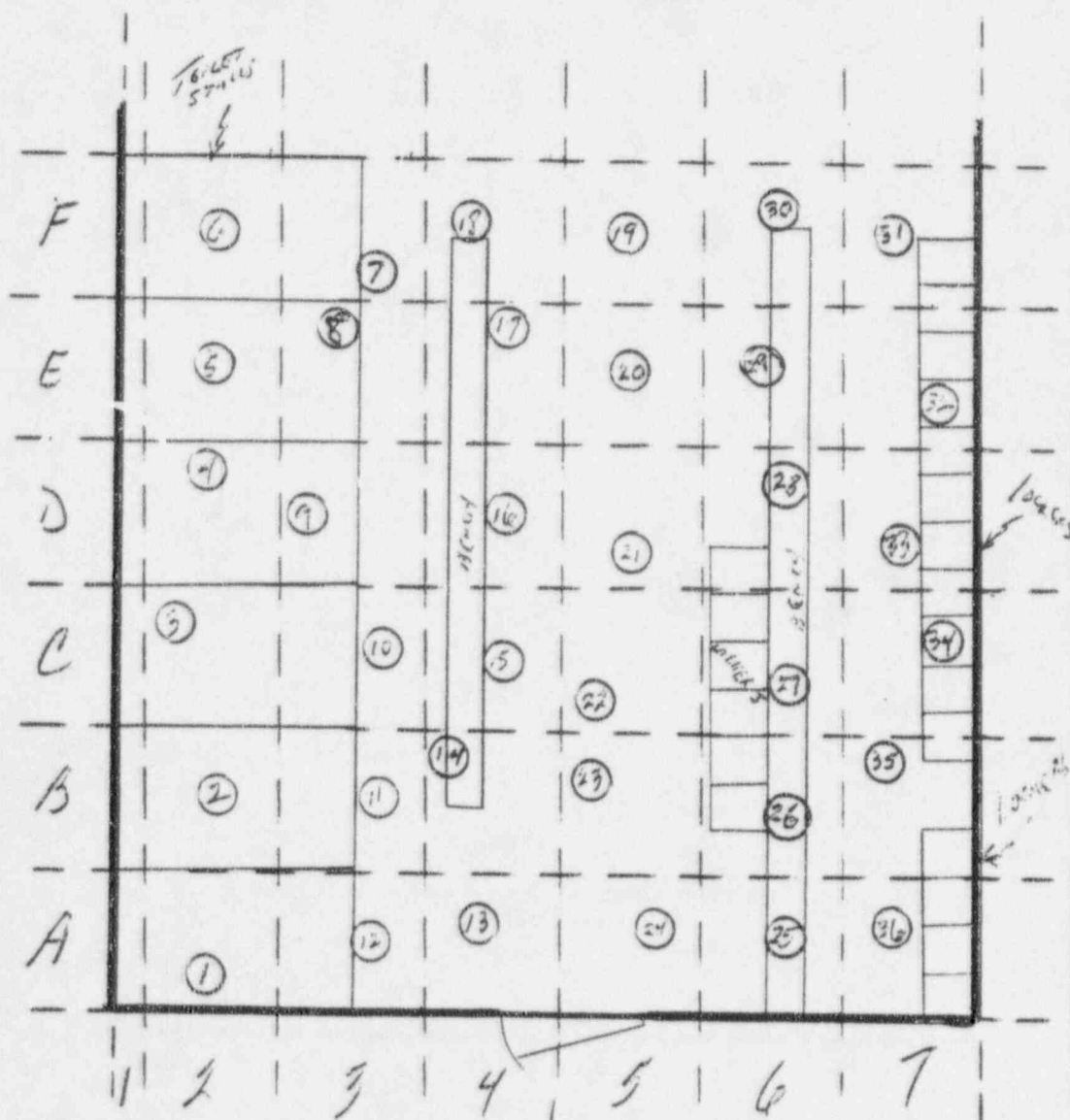
RADIOLOGICAL SURVEY FORM

Survey Number 290996040104

BLDG 4 - ROOM 1

EACH FULL GRID = APPROX 1M².ALL SURVEYS ON FLOOR

BROKEN LINES DEFINING GRID AREA.



1/4 IN. = APPROX. 1 FT.

RADIOLOGICAL SURVEY FORM

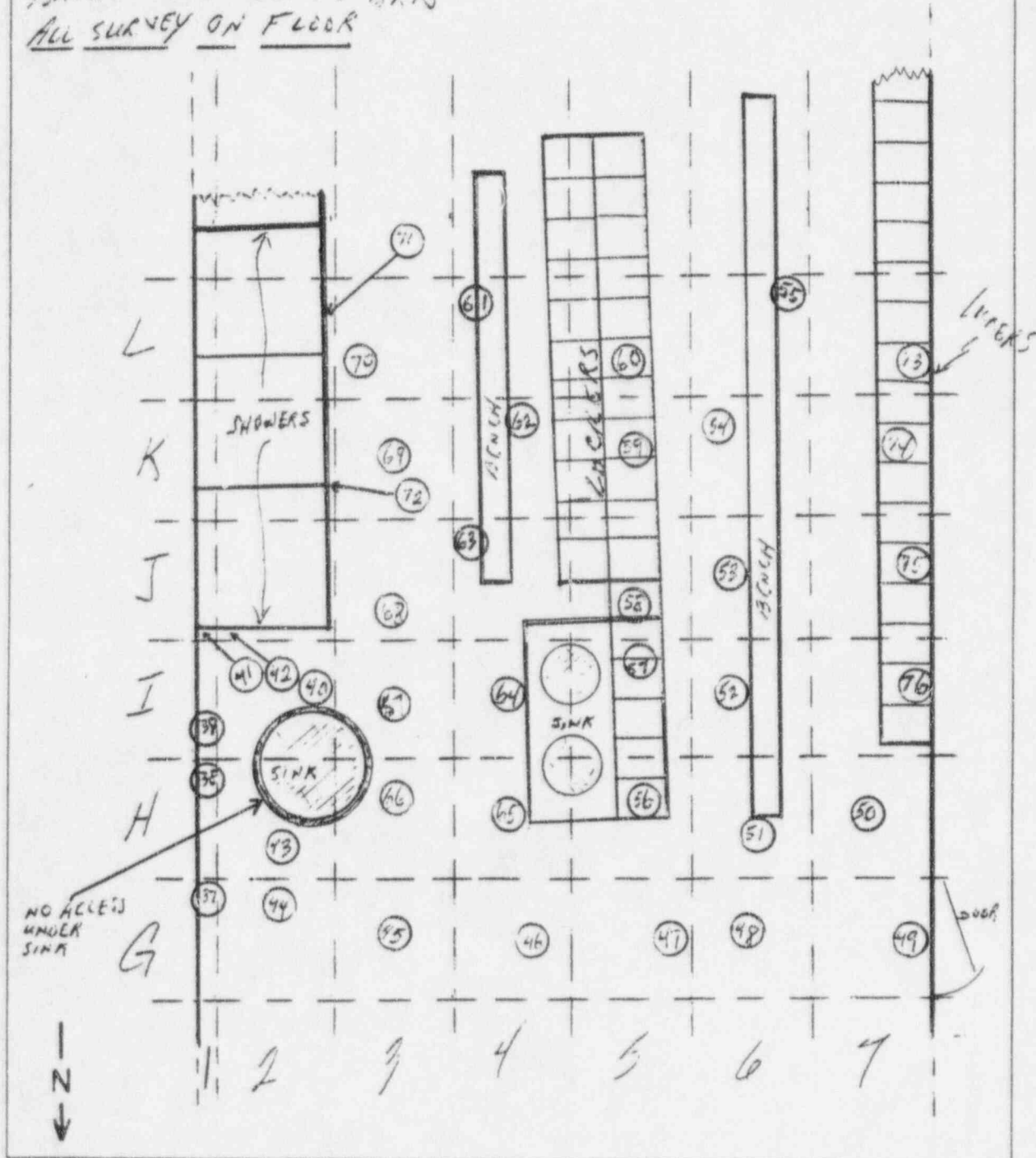
Survey Number 090996040104

BLDG 4 — ROOM 1

1/4 IN. = APPROX. 1 FT.

EACH FULL GRID = APPROX. 100'

BROKEN LINES DEFINE GRID

ALL SURVEY ON FLOORSHOWER STALLS WILL BE
SURVEYED LATER.

ALPHA				BETA								
Eff: 24.00% Bkg: 0.00 cpm MDA: 11.29 dpm				Eff: 52.00% Bkg: 1.00 cpm MDA: 14.15 dpm								
SN	RPT	ID	COUNTS	NET CPM	DPM	LIMITS	COUNTS	NET CPM	DPM	LIMITS	DATE	TIME
00			1	1.00	4.17		3	2.00	3.85		09-12-96	06:10:40
001	00		1	1.00	4.17		4	7.00	5.77		09-12-96	06:12:09
003	00		1	1.00	4.17		0	-1.00	-1.92		09-12-96	06:13:39
004	00		1	1.00	4.17		5	4.00	7.69		09-12-96	06:15:08
005	00		0	0.00	0.00		0	-1.00	-1.92		09-12-96	06:16:37
006	00		0	0.00	0.00		3	2.00	3.85		09-12-96	06:18:07
007	00		1	1.00	4.17		0	-1.00	-1.92		09-12-96	06:19:36
008	00		0	0.00	0.00		2	1.00	1.92		09-12-96	06:21:05
009	00		0	0.00	0.00		2	1.00	1.92		09-12-96	06:22:34
010	00		0	0.00	0.00		4	3.00	5.77		09-12-96	06:24:04
011	00		0	0.00	0.00		2	1.00	1.92		09-12-96	06:25:33
012	00		2	2.00	8.33		3	2.00	3.85		09-12-96	06:27:02
013	00		0	0.00	0.00		3	2.00	3.85		09-12-96	06:28:31
014	00		0	0.00	0.00		0	-1.00	-1.92		09-12-96	06:30:01
015	00		0	0.00	0.00		3	2.00	3.85		09-12-96	06:31:30
016	00		0	0.00	0.00		7	6.00	11.54		09-12-96	06:32:59
017	00		0	0.00	0.00		0	-1.00	-1.92		09-12-96	06:34:28
018	00		1	1.00	4.17		1	0.00	0.00		09-12-96	06:35:56
019	00		0	0.00	0.00		1	0.00	0.00		09-12-96	06:37:27
020	00		0	0.00	0.00		1	0.00	0.00		09-12-96	06:38:55
021	00		0	0.00	0.00		2	1.00	1.92		09-12-96	06:40:24
022	00		0	0.00	0.00		2	1.00	1.92		09-12-96	06:41:54
023	00		0	0.00	0.00		0	-1.00	-1.92		09-12-96	06:43:22
024	00		1	1.00	4.17		2	1.00	1.92		09-12-96	06:44:51
025	00		0	0.00	0.00		2	1.00	1.92		09-12-96	06:46:21
026	00		7	7.00	29.17		10	9.00	17.31		09-12-96	06:47:51
027	00		0	0.00	0.00		2	1.00	1.92		09-12-96	06:49:20
028	00		0	0.00	0.00		1	0.00	0.00		09-12-96	06:50:49
029	00		0	0.00	0.00		0	-1.00	-1.92		09-12-96	06:52:17
030	00		0	0.00	0.00		3	-1.00	-1.92		09-12-96	06:53:46
031	00		0	0.00	0.00		0	-1.00	-1.92		09-12-96	06:55:15
032	00		0	0.00	0.00		1	0.00	0.00		09-12-96	06:56:44
033	00		1	1.00	4.17		0	-1.00	-1.92		09-12-96	06:58:13
034	00		0	0.00	0.00		0	-1.00	-1.92		09-12-96	06:59:44
035	00		0	0.00	0.00		0	-1.00	-1.92		09-12-96	07:01:12
036	00		0	0.00	0.00		1	0.00	0.00		09-12-96	07:02:41
037	00		1	1.00	4.17		0	-1.00	-1.92		09-12-96	07:04:10
038	00		0	0.00	0.00		3	2.00	3.85		09-12-96	07:05:39
039	00		0	0.00	0.00		1	0.00	0.00		09-12-96	07:07:10
040	00		0	0.00	0.00		3	2.00	3.85		09-12-96	07:08:39
041	00		0	0.00	0.00		2	1.00	1.92		09-12-96	07:10:08
042	00		0	0.00	0.00		1	0.00	0.00		09-12-96	07:11:37
043	00		0	0.00	0.00		0	-1.00	-1.92		09-12-96	07:13:06
044	00		1	1.00	4.17		0	-1.00	-1.92		09-12-96	07:14:35
045	00		0	0.00	0.00		3	2.00	3.85		09-12-96	07:16:05
046	00		1	1.00	4.17		6	5.00	9.62		09-12-96	07:17:34
047	00		0	0.00	0.00		4	3.00	5.77		09-12-96	07:19:03
048	00		0	0.00	0.00		2	1.00	1.92		09-12-96	07:20:32
049	00		0	0.00	0.00		2	1.00	1.92		09-12-96	07:22:01
050	00		0	0.00	0.00		2	1.00	1.92		09-12-96	07:23:31
051	00		0	0.00	0.00		2	1.00	1.92		09-12-96	07:25:00

ALPHA				BETA			
Eff: 24.00% Bkg: 0.00 cps MDA: 11.29 dpm				Eff: 52.00% Bkg: 1.00 cps MDA: 14.15 dpm			
SN	RPT	ID	COUNTS	NET CPM	DPM	LIMITS	DATE
053	00		0	0.00	0.00		09-12-96 07:26:29
054	00		1	1.00	4.17		09-12-96 07:27:58
055	00		1	1.00	4.17		09-12-96 07:29:27
056	00		0	0.00	0.00		09-12-96 07:30:57
057	00		0	0.00	0.00		09-12-96 07:32:26
058	00		0	0.00	0.00		09-12-96 07:33:54
059	00		1	1.00	4.17		09-12-96 07:35:23
060	00		0	0.00	0.00		09-12-96 07:36:52
061	00		0	0.00	0.00		09-12-96 07:38:21
062	00		0	0.00	0.00		09-12-96 07:39:50
063	00		0	0.00	0.00		09-12-96 07:41:20
064	00		0	0.00	0.00		09-12-96 07:42:49
065	00		0	0.00	0.00		09-12-96 07:44:18
066	00		0	0.00	0.00		09-12-96 07:45:47
067	00		2	2.00	8.33		09-12-96 07:47:16
068	00		0	0.00	0.00		09-12-96 07:48:46
069	00		0	0.00	0.00		09-12-96 07:50:14
070	00		0	0.00	0.00		09-12-96 07:51:43
071	00		0	0.00	0.00		09-12-96 07:53:12
072	00		0	0.00	0.00		09-12-96 07:54:41
073	00		0	0.00	0.00		09-12-96 07:56:10
074	00		0	0.00	0.00		09-12-96 07:57:40
075	00		0	0.00	0.00		09-12-96 07:59:09
076	00		0	0.00	0.00		09-12-96 08:00:38
			3	3.00	12.50		09-12-96 08:02:07

Survey Point	Fixed Contamination		Background		Efficiency		Activity		Instrument Used
	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta Gamma	Alpha	Beta/Gamma dpm/100 cm ²	Alpha dpm/100 cm ²	
1	418	34	264	1	0.27	0.17	570.37	194.12	Model 2224 132142
2	328	21	264	1	0.27	0.17	237.04	117.65	Model 2224 132142
3	385	34	264	1	0.27	0.17	448.15	194.12	Model 2224 132142
4	360	39	264	1	0.27	0.17	355.56	223.53	Model 2224 132142
5	321	28	264	1	0.27	0.17	211.11	158.82	Model 2224 132142
6	347	23	264	1	0.27	0.17	307.41	129.41	Model 2224 132142
7	300	9	264	1	0.27	0.17	133.33	47.06	Model 2224 132142
8	290	7	264	1	0.27	0.17	96.30	35.29	Model 2224 132142
9	312	16	264	1	0.27	0.17	177.78	88.24	Model 2224 132142
10	299	5	264	1	0.27	0.17	129.63	23.53	Model 2224 132142
11	282	3	264	1	0.27	0.17	66.67	11.76	Model 2224 132142
12	299	10	264	1	0.27	0.17	129.63	52.94	Model 2224 132142
13	300	7	264	1	0.27	0.17	133.33	35.29	Model 2224 132142
14	253	9	264	1	0.27	0.17	-40.74	47.06	Model 2224 132142
15	290	5	264	1	0.27	0.17	96.30	23.53	Model 2224 132142
16	252	7	264	1	0.27	0.17	-44.44	35.29	Model 2224 132142
17	295	10	264	1	0.27	0.17	114.81	52.94	Model 2224 132142
18	301	14	264	1	0.27	0.17	137.04	76.47	Model 2224 132142
19	246	19	264	1	0.27	0.17	-66.67	105.88	Model 2224 132142
20	269	12	264	1	0.27	0.17	18.52	64.71	Model 2224 132142
21	259	10	264	1	0.27	0.17	-18.52	52.94	Model 2224 132142
22	276	17	264	1	0.27	0.17	44.44	94.12	Model 2224 132142
23	353	23	264	1	0.27	0.17	329.63	129.41	Model 2224 132142
24	241	6	264	1	0.27	0.17	-85.19	29.41	Model 2224 132142
25	265	9	264	1	0.27	0.17	3.70	47.06	Model 2224 132142
26	360	14	264	1	0.27	0.17	355.56	76.47	Model 2224 132142
27	299	11	264	1	0.27	0.17	129.63	58.82	Model 2224 132142
28	304	11	264	1	0.27	0.17	148.15	58.82	Model 2224 132142
29	332	15	264	1	0.27	0.17	251.85	82.35	Model 2224 132142
30	309	7	264	1	0.27	0.17	166.67	35.29	Model 2224 132142
31	313	13	264	1	0.27	0.17	181.48	70.59	Model 2224 132142

Survey Point	Fixed Contamination		Background		Efficiency		Activity		Instrument Used
	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta Gamma	Alpha	Beta/Gamma dpm/100 cm ²	Alpha dpm/100 cm ²	
32	342	32	264	1	0.27	0.17	288.89	182.35	Model 2224 132142
33	309	17	264	1	0.27	0.17	166.67	94.12	Model 2224 132142
34	854	22	264	1	0.27	0.17	2185.19	123.53	Model 2224 132142
35	573	24	264	1	0.27	0.17	1144.44	135.29	Model 2224 132142
36	308	5	264	1	0.27	0.17	162.96	23.53	Model 2224 132142
37	320	7	264	1	0.27	0.17	207.41	35.29	Model 2224 132142
38	405	25	264	1	0.27	0.17	522.22	141.18	Model 2224 132142
39	414	21	264	1	0.27	0.17	555.56	117.65	Model 2224 132142
40	420	38	264	1	0.27	0.17	577.78	217.65	Model 2224 132142
41	492	26	264	1	0.27	0.17	844.44	147.06	Model 2224 132142
42	533	30	264	1	0.27	0.17	996.30	170.59	Model 2224 132142
43	273	10	264	1	0.27	0.17	33.33	52.94	Model 2224 132142
44	270	16	264	1	0.27	0.17	22.22	88.24	Model 2224 132142
45	259	4	264	1	0.27	0.17	-18.52	17.65	Model 2224 132142
46	245	6	264	1	0.27	0.17	-70.37	29.41	Model 2224 132142
47	244	4	264	1	0.27	0.17	-74.07	17.65	Model 2224 132142
48	254	5	264	1	0.27	0.17	-37.04	23.53	Model 2224 132142
49	221	13	264	1	0.27	0.17	-159.26	70.59	Model 2224 132142
50	244	14	264	1	0.27	0.17	-74.07	76.47	Model 2224 132142
51	204	9	264	1	0.27	0.17	-222.22	47.06	Model 2224 132142
52	176	6	264	1	0.27	0.17	-325.93	29.41	Model 2224 132142
53	208	5	264	1	0.27	0.17	-207.41	23.53	Model 2224 132142
54	176	4	264	1	0.27	0.17	-325.93	17.65	Model 2224 132142
55	320	9	264	1	0.27	0.17	207.41	47.06	Model 2224 132142
56	329	9	264	1	0.27	0.17	240.74	47.06	Model 2224 132142
57	307	7	264	1	0.27	0.17	159.26	35.29	Model 2224 132142
58	344	16	264	1	0.27	0.17	296.30	88.24	Model 2224 132142
59	286	14	264	1	0.27	0.17	81.48	76.47	Model 2224 132142
60	272	10	264	1	0.27	0.17	29.63	52.94	Model 2224 132142
61	432	32	264	1	0.27	0.17	622.22	182.35	Model 2224 132142
62	308	24	264	1	0.27	0.17	162.96	135.29	Model 2224 132142

Survey Point	Fixed Contamination		Background		Efficiency		Activity		Instrument Used
	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta Gamma	Alpha	Beta/Gamma dpm/100 cm ²	Alpha dpm/100 cm ²	
63	271	21	264	1	0.27	0.17	25.93	117.65	Model 2224 132142
64	194	9	264	1	0.27	0.17	-259.26	47.06	Model 2224 132142
65	163	4	264	1	0.27	0.17	-374.07	17.65	Model 2224 132142
66	200	5	264	1	0.27	0.17	-237.04	23.53	Model 2224 132142
67	224	13	264	1	0.27	0.17	-148.15	70.59	Model 2224 132142
68	275	18	264	1	0.27	0.17	40.74	100.00	Model 2224 132142
69	166	11	264	1	0.27	0.17	-362.96	58.82	Model 2224 132142
70	404	24	264	1	0.27	0.17	518.52	135.29	Model 2224 132142
71	480	10	264	1	0.27	0.17	800.00	52.94	Model 2224 132142
72	335	10	264	1	0.27	0.17	262.96	52.94	Model 2224 132142
73	409	19	264	1	0.27	0.17	537.04	105.88	Model 2224 132142
74	298	17	264	1	0.27	0.17	125.93	94.12	Model 2224 132142
75	282	20	264	1	0.27	0.17	66.67	111.76	Model 2224 132142
76	327	31	264	1	0.27	0.17	233.33	176.47	Model 2224 132142

RADIOLOGICAL SURVEY FORM

Survey Number

091096040105

Survey Description:	AFFECTED AREA	
	Bldg 4 - ROOM 1	
	(LOCKER ROOM) FLOOR	
	AND SHOWER DRAIN	
	TRENCH: 1150c. TRENCH COVERS	
Drawing Attached:	Yes	No

Instrument (1)	
Instrument Model:	PROTEAN
Instrument Ser. #:	621444
Calibration Due:	N/A
Efficiency:	A-0.24 B-0.52
MDA: A-17.42	CF: A-4.17 BKG: A-0
MDA: B-13.69	CF: B-1.92 BKG: B-1

Instrument (2)	
Instrument Model:	MODEL 2224
Instrument Ser. #:	132150
Calibration Due:	8-2-97
Efficiency:	A-0.16 B-0.30
MDA: A-6564	CF: A-6.18 BKG: A-2
MDA: B-2273	CF: B-3.33 BKG: B-234

Survey Date:	09-10-96	
Survey by:	N/A 19-10-96	
Signature	Date	
Print Name:	K. R. R. R.	
Review By:	19-11-96	
Signature	Date	

Instrument (3)	
Instrument Model:	19
Instrument Ser. #:	91491
Calibration Due:	12-1-97
Efficiency:	N/A
MDA:	N/A
CF:	N/A
BKG:	10.000

Instrument (4)	
Instrument Model:	
Instrument Ser. #:	N/A
Calibration Due:	
Efficiency:	
MDA:	
CF:	
BKG:	

Survey Point	Smearable Contamination		Fixed Contamination		Radiation Level (uR/Hr)	Instrument Used	Additional Comments
	beta/gamma dpm/100cm ²	alpha dpm/100cm ²	beta/gamma cpm/100cm ²	alpha cpm/100cm ²			
							(1) 2224 BACKGROUND: α = 2 B = 234
							(2) 100% FRISK FOR α AND B-
							(3) ONE MINUTE STATIC COUNT FOR K & B-
							(4) 8 SURVEY @ ONE METER FROM SURVEY POINT LOCATION
							(5) CIRCLED NUMBERS ON MAP INDICATE SURVEY POINT LOCATIONS.

RADIOLOGICAL SURVEY FORM CONTINUATION SHEET

Survey Number 091096040105

Survey Point	Sizeable Contamination beta/gamma dpm/100cm ²	alpha dpm/100cm ²	Fixed Contamination beta/gamma cpm/100cm ²	alpha cpm/100cm ²	Radiation Level (uR/Hr)	Instrument Used	Additional Comments
1			307	26	10	1123	N13 FLOOR
2			478	14	10		N3
3			394	17	10		O3
4			209	13	10		O2
5			189	12	10		N2
6			207	10	10		M2
7			185	8	10		M4
8			243	5	10		M5
9			231	6	10		M6
10			252	12	10		M7
11			209	16	10		N7
12			250	27	10		G7
13			253	28	10		P7
14			239	21	10		Q7
15			241	15	10		Q10
16			223	18	10		P6
17			211	11	10		Q5
18			299	25	10		P5
19			349	10	10		O5
20			252	11	10		O6
21			221	11	10		N6
22			293	17	10		N5
23			352	16	10		N4
24			403	29	10		O4
25			349	22	10		P4
26			335	15	10		P3
27			336	8	10		Q3
28			267	13	10		Q4
29			325	5	10		P2
30			296	5	10		Q2
31			292	10	10		Q1

Survey Number 091096040105

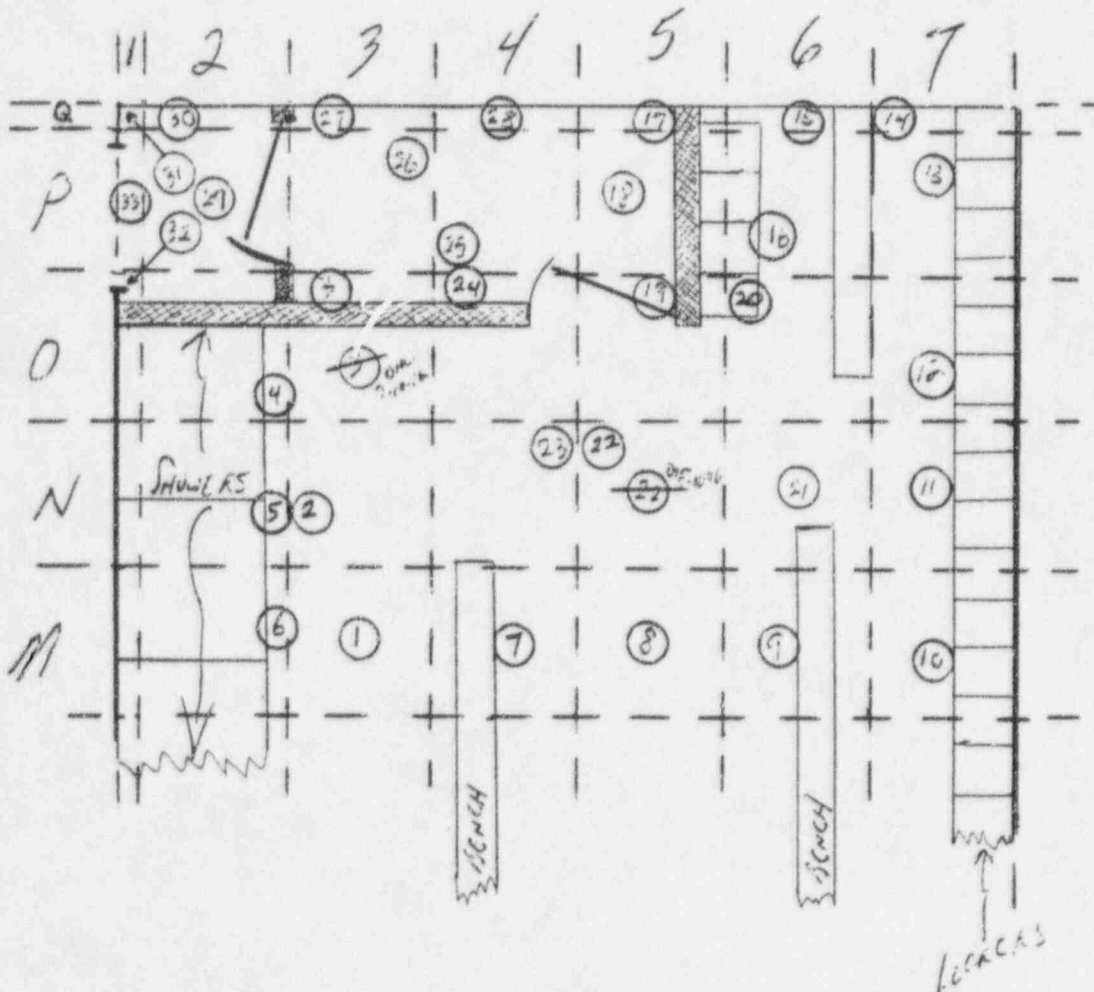
$1/4'' = \text{APPROX. } 1'$

EACH FULL GRID = APPROX. 1 M²

ALL SURVEY ON FLOOR

BACKEN LINE DEFINES GRASS.

SHOWERS TO BE SEARCHED SEPARATE FROM THEIR CREWS.



RADIOLOGICAL SURVEY FORM

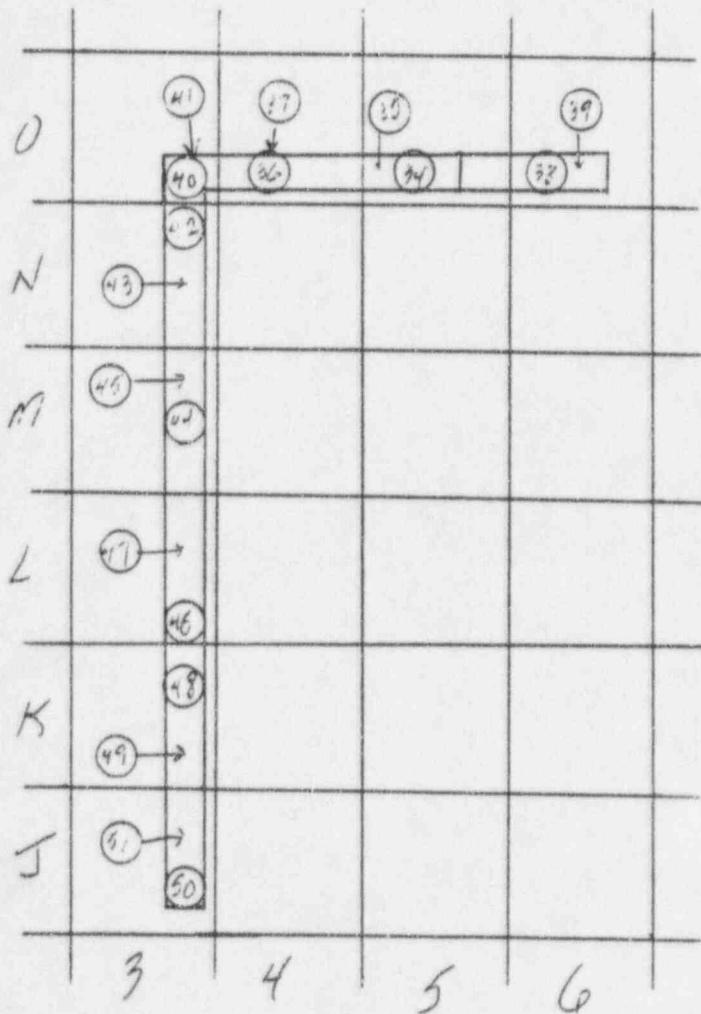
Survey Number 091096040105

BLDG 4 - "Room 1"

1/4" = APPROX 1'

EACH FULL GRID = APPROX 1 m²SURVEY OF SHOWER DRAIN TRENCH 1" - 5" IN FLOOR
SLAB + ASSOC. DIAMOND PLATE TRENCH COVER
(SURVEY OF TRENCH SIDE COVER...)

TRENCH SURVEY INCLUDES BOTTOM & SIDES OF TRENCH...

CIRCLES
NUMBERS
SHOWN
OUTSIDE
TRENCH
ARE
TRENCH
COVER
SURVEY
POSITIONS

ALPHA					BETA						
Eff: 24.00% Bkg: 0.00 cpm MDA: 11.29 dpm					Eff: 52.00% Bkg: 1.00 cpm MDA: 14.15 dpm						
RPT	ID	COUNTS	NET CPM	DPM	LIMITS	COUNTS	NET CPM	DPM	LIMITS	DATE	TIME
00	040105	0	0.00	0.00		0	-1.00	-1.92		09-12-96	11:09:58
001	00	0	0.00	0.00		0	-1.00	-1.92		09-12-96	11:11:26
003	00	0	0.00	0.00		1	0.00	0.00		09-12-96	11:12:55
004	00	0	0.00	0.00		0	-1.00	-1.92		09-12-96	11:14:24
005	00	0	0.00	0.00		1	0.00	0.00		09-12-96	11:15:53
006	00	1	1.00	4.17		7	6.00	11.54		09-12-96	11:17:22
007	00	0	0.00	0.00		2	1.00	1.92		09-12-96	11:18:51
008	00	0	0.00	0.00		1	0.00	0.00		09-12-96	11:20:20
009	00	0	0.00	0.00		0	-1.00	-1.92		09-12-96	11:21:49
010	00	1	1.00	4.17		2	1.00	1.92		09-12-96	11:23:18
011	00	0	0.00	0.00		2	1.00	1.92		09-12-96	11:24:46
012	00	1	1.00	4.17		3	2.00	3.85		09-12-96	11:26:15
013	00	0	0.00	0.00		5	4.00	7.69		09-12-96	11:27:44
014	00	0	0.00	0.00		6	5.00	9.62		09-12-96	11:29:14
015	00	0	0.00	0.00		3	2.00	3.85		09-12-96	11:30:43
016	00	2	2.00	8.33		0	-1.00	-1.92		09-12-96	11:32:12
017	00	0	0.00	0.00		4	3.00	5.77		09-12-96	11:33:41
018	00	0	0.00	0.00		2	1.00	1.92		09-12-96	11:35:10
019	00	0	0.00	0.00		1	0.00	0.00		09-12-96	11:36:39
020	00	0	0.00	0.00		2	1.00	1.92		09-12-96	11:38:08
021	00	1	1.00	4.17		2	1.00	1.92		09-12-96	11:39:37
022	00	0	0.00	0.00		3	2.00	3.85		09-12-96	11:41:06
023	00	1	1.00	4.17		3	2.00	3.85		09-12-96	11:42:35
024	00	3	3.00	12.50		5	4.00	7.69		09-12-96	11:44:04
025	00	0	0.00	0.00		0	-1.00	-1.92		09-12-96	11:45:33
026	00	0	0.00	0.00		0	-1.00	-1.92		09-12-96	11:47:02
027	00	2	2.00	8.33		1	0.00	0.00		09-12-96	11:48:31
028	00	2	2.00	8.33		2	1.00	1.92		09-12-96	11:49:59
029	00	0	0.00	0.00		2	1.00	1.92		09-12-96	11:51:28
030	00	0	0.00	0.00		1	0.00	0.00		09-12-96	11:52:57
031	00	0	0.00	0.00		1	0.00	0.00		09-12-96	11:54:26
032	00	0	0.00	0.00		1	0.00	0.00		09-12-96	11:55:55
033	00	0	0.00	0.00		5	4.00	7.69		09-12-96	11:57:24
034	00	1	1.00	4.17		2	1.00	1.92		09-12-96	11:58:53
035	00	2	2.00	8.33		2	1.00	1.92		09-12-96	12:00:22
036	00	1	1.00	4.17		3	2.00	3.85		09-12-96	12:01:51
037	00	0	0.00	0.00		3	2.00	3.85		09-12-96	12:03:20
038	00	1	1.00	4.17		4	3.00	5.77		09-12-96	12:04:48
039	00	0	0.00	0.00		2	1.00	1.92		09-12-96	12:06:17
040	00	0	0.00	0.00		0	-1.00	-1.92		09-12-96	12:07:46
041	00	0	0.00	0.00		4	3.00	5.77		09-12-96	12:09:15
042	00	0	0.00	0.00		0	-1.00	-1.92		09-12-96	12:10:44
043	00	2	2.00	8.33		6	5.00	9.62		09-12-96	12:12:13
044	00	0	0.00	0.00		4	3.00	5.77		09-12-96	12:13:42
045	00	0	0.00	0.00		3	2.00	3.85		09-12-96	12:15:11
046	00	0	0.00	0.00		1	0.00	0.00		09-12-96	12:16:40
047	00	1	1.00	4.17		0	-1.00	-1.92		09-12-96	12:18:09
048	00	1	1.00	4.17		3	2.00	3.85		09-12-96	12:19:38
049	00	1	1.00	4.17		1	0.00	0.00		09-12-96	12:21:07
050	00	2	2.00	8.33		8	7.00	13.46		09-12-96	12:22:36
051	00	5	5.00	20.83		13	12.00	23.08		09-12-96	12:24:04

Survey Point	Fixed Contamination		Background		Efficiency		Activity		Instrument Used
	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta Gamma	Alpha	Beta/Gamma dpm/100 cm ²	Alpha dpm/100 cm ²	
1	309	26	234	2	0.3	0.16	250.00	150.00	Model 2224 132150
2	479	12	234	2	0.3	0.16	816.67	62.50	Model 2224 132150
3	394	17	234	2	0.3	0.16	533.33	93.75	Model 2224 132150
4	209	13	234	2	0.3	0.16	-83.33	68.75	Model 2224 132150
5	199	12	234	2	0.3	0.16	-116.67	62.50	Model 2224 132150
6	204	10	234	2	0.3	0.16	-100.00	50.00	Model 2224 132150
7	185	8	234	2	0.3	0.16	-163.33	37.50	Model 2224 132150
8	243	5	234	2	0.3	0.16	30.00	18.75	Model 2224 132150
9	251	6	234	2	0.3	0.16	56.67	25.00	Model 2224 132150
10	252	12	234	2	0.3	0.16	60.00	62.50	Model 2224 132150
11	209	16	234	2	0.3	0.16	-83.33	87.50	Model 2224 132150
12	250	27	234	2	0.3	0.16	53.33	156.25	Model 2224 132150
13	258	28	234	2	0.3	0.16	80.00	162.50	Model 2224 132150
14	239	21	234	2	0.3	0.16	16.67	118.75	Model 2224 132150
15	241	15	234	2	0.3	0.16	23.33	81.25	Model 2224 132150
16	223	18	234	2	0.3	0.16	-36.67	100.00	Model 2224 132150
17	211	14	234	2	0.3	0.16	-76.67	75.00	Model 2224 132150
18	299	25	234	2	0.3	0.16	216.67	143.75	Model 2224 132150
19	349	10	234	2	0.3	0.16	383.33	50.00	Model 2224 132150
20	252	14	234	2	0.3	0.16	60.00	75.00	Model 2224 132150
21	224	11	234	2	0.3	0.16	-33.33	56.25	Model 2224 132150
22	293	17	234	2	0.3	0.16	196.67	93.75	Model 2224 132150
23	352	16	234	2	0.3	0.16	393.33	87.50	Model 2224 132150
24	403	29	234	2	0.3	0.16	563.33	168.75	Model 2224 132150
25	349	22	234	2	0.3	0.16	383.33	125.00	Model 2224 132150
26	338	15	234	2	0.3	0.16	346.67	81.25	Model 2224 132150
27	336	8	234	2	0.3	0.16	340.00	37.50	Model 2224 132150
28	267	13	234	2	0.3	0.16	110.00	68.75	Model 2224 132150
29	325	5	234	2	0.3	0.16	303.33	18.75	Model 2224 132150
30	299	8	234	2	0.3	0.16	216.67	37.50	Model 2224 132150
31	292	10	234	2	0.3	0.16	193.33	50.00	Model 2224 132150

Survey Point	Fixed Contamination		Background		Efficiency		Activity		Instrument Used
	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta Gamma	Alpha	Beta/Gamma dpm/100 cm ²	Alpha dpm/100 cm ²	
32	241	9	234	2	0.3	0.16	23.33	43.75	Model 2224 132150
33	261	9	234	2	0.3	0.16	90.00	43.75	Model 2224 132150
34	196	4	234	2	0.3	0.16	-126.67	12.50	Model 2224 132150
35	254	5	234	2	0.3	0.16	66.67	18.75	Model 2224 132150
36	389	13	234	2	0.3	0.16	516.67	68.75	Model 2224 132150
37	233	6	234	2	0.3	0.16	-3.33	25.00	Model 2224 132150
38	347	14	234	2	0.3	0.16	376.67	75.00	Model 2224 132150
39	143	6	234	2	0.3	0.16	-303.33	25.00	Model 2224 132150
40	215	6	234	2	0.3	0.16	-63.33	25.00	Model 2224 132150
41	154	5	234	2	0.3	0.16	-266.67	18.75	Model 2224 132150
42	396	28	234	2	0.3	0.16	540.00	162.50	Model 2224 132150
43	243	21	234	2	0.3	0.16	30.00	118.75	Model 2224 132150
44	327	13	234	2	0.3	0.16	310.00	68.75	Model 2224 132150
45	186	12	234	2	0.3	0.16	-160.00	62.50	Model 2224 132150
46	428	31	234	2	0.3	0.16	646.67	181.25	Model 2224 132150
47	238	19	234	2	0.3	0.16	13.33	106.25	Model 2224 132150
48	464	19	234	2	0.3	0.16	766.67	106.25	Model 2224 132150
49	244	13	234	2	0.3	0.16	33.33	68.75	Model 2224 132150
50	574	60	234	2	0.3	0.16	1133.33	362.50	Model 2224 132150
51	383	34	234	2	0.3	0.16	496.67	200.00	Model 2224 132150

RADIOLOGICAL SURVEY FORM

Survey Number 091396040112

Survey Description: Bldg 4 Survey
Showers stalls

Drawing Attached: Yes No

Instrument (1)
Instrument Model: PROTEAN
Instrument Ser #: 1021444
Calibration Due: N/A
Efficiency: A-0.23 B-0.58
MDA: A-24.08 BKG-A-0
MDA: B-13.70 CF-B-1.71 BKG-B-1

Instrument (2)
Instrument Model: 2224
Instrument Ser #: 116257
Calibration Due: B-2-97
Efficiency: A-0.14 B-0.23
MDA: A-77.26 CF-A-6.93 BKG-A-4
MDA: B-259.44 CF-B-4.34 BKG-B-240

Survey Date: Sept 13, 1996
Survey by: Michael A. Baird
Signature: Michael A. Baird Date: 9-13-96
Print Name: Michael A. Baird
Review By: Michael A. Baird Date: 10-24-96

Instrument (3)
Instrument Model: Model 119
Instrument Ser #: 91491
Calibration Due: 12-21-96
Efficiency: N/A
MDA: N/A CF: N/A BKG: 8.45/hr

Instrument (4)
Instrument Model: 2
Instrument Ser #: 2
Calibration Due: 2
Efficiency: 2
MDA: 2 CF: 2 BKG: 2

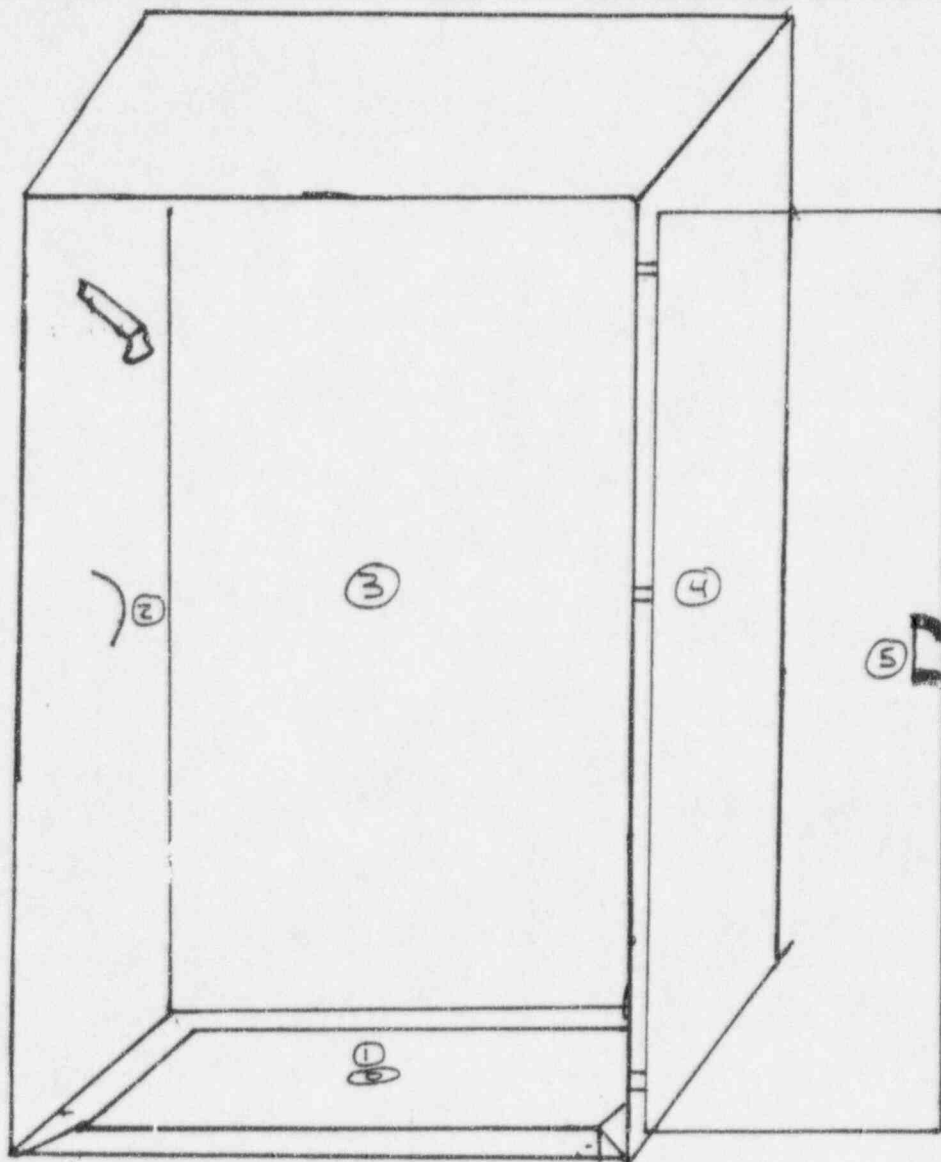
Survey Point	Seenable Contamination beta/gamma dpm/100cm ²	alpha dpm/100cm ²	Fixed Contamination beta/gamma cpm/100cm ²	alpha cpm/100cm ²	Radiation Level (uR/hr)	Instrument Used	Additional Comments
1			231	8	8	1, 2, 3	SHOWER DRAIN
2			227	7	10	↑	SHOWER WATER HANDLE
3			200	5	8		BACKWALL
4			189	11	9		SIDE WALL
5			182	6	9		DOOR
6	SEE PDS		192	14	10		SHOWER DRAIN
7			182	4	10		SHOWER WATER HANDLE
8			253	6	10		BACKWALL
9			162	9	10		SIDE WALL
10			201	4	8		DOOR
11			243	3	10		SHOWER DRAIN
12			282	9	10		SHOWER WATER HANDLE
13			210	8	8	1, 2, 3	BACKWALL

RADIOLOGICAL SURVEY FORM CONTINUATION SHEET

Survey Number 091396040112

Survey Point	Scatterable Contamination beta/gamma dpm/100cm ²		alpha dpm/100cm ²	Fixed Contamination beta/gamma cpm/100cm ²		alpha cpm/100cm ²	Radiation Level (uR/hr)	Instrument Used	Additional Comments
14	SEE	PDS	198	6	1,2,3	SIDE WALL			
15			206	8	1,2,3	DOOR			
* 100% FRISK OF AREA PERFORMED 1 MINUTE STATIC COUNT ON ALL SURVEY AREAS.									
SMEARS TAKEN PER 1M ² ON AREAS LISTED.									
ALL MICRO R READINGS AT 1METER FROM SURFACE.									
NOTE: ALL STATIC COUNTS TAKEN ON 10-24-96 WITH INSTRUMENT Z SN 116257									

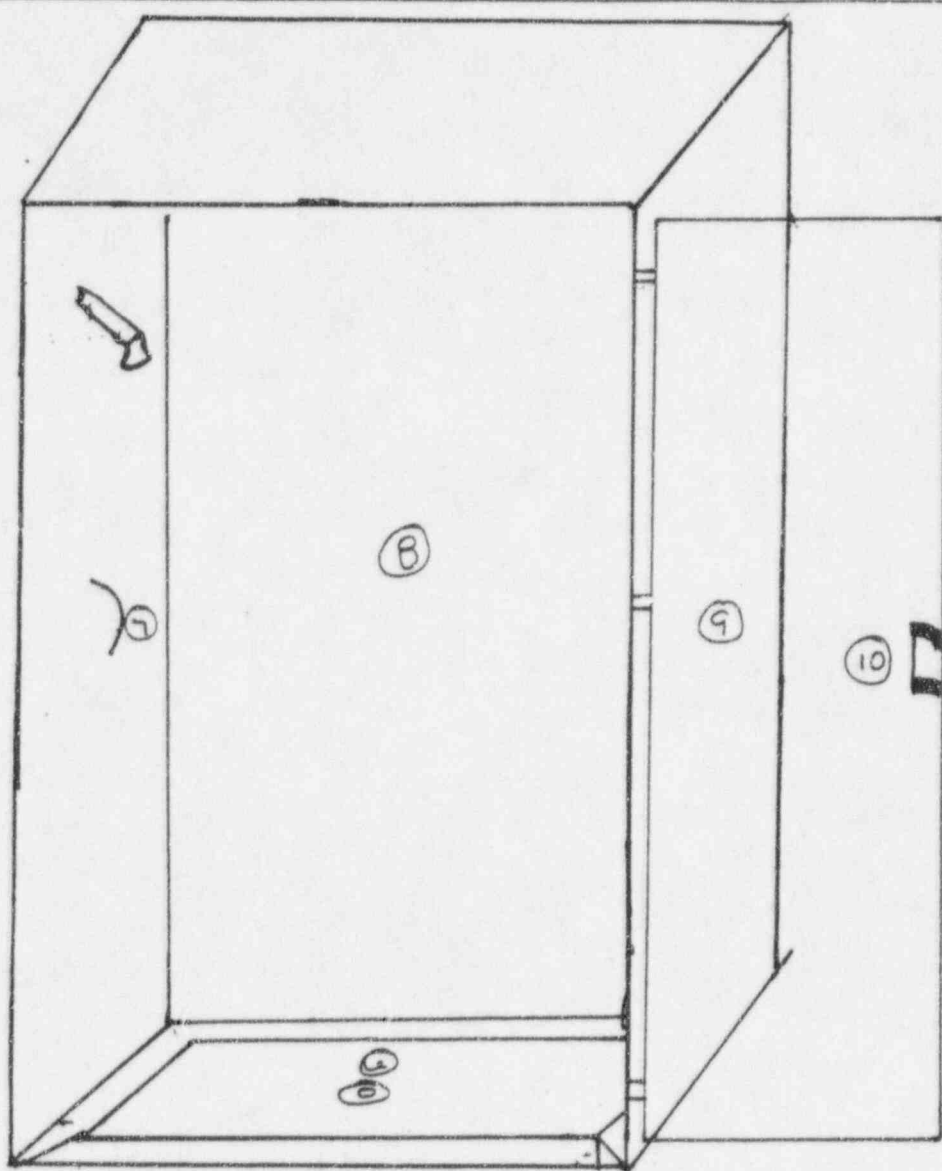
Survey Number 091396040112



SHOWER STALL

3

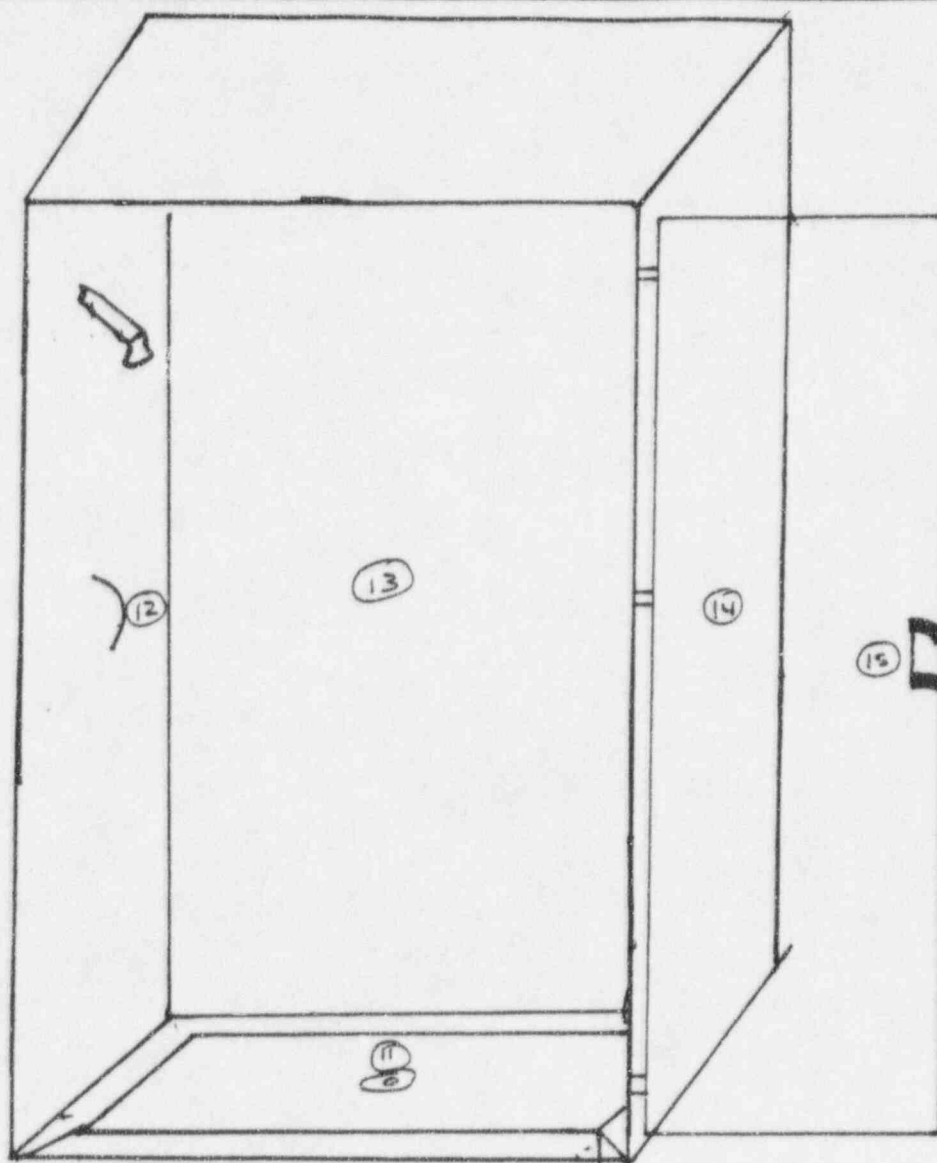
Survey Number 091396040112



SHOWER STALL

4

Survey Number 091396040112



SHOWER STALL

5

091396040112

ALPHA					BETA						
Eff: 23.00% Bkg: 0.00 cpm MDA: 11.78 dpm					Eff: 58.00% Bkg: 1.00 cpm MDA: 12.68 dpm						
RPT	ID	COUNTS	NET CPM	DPM	LIMITS	COUNTS	NET CPM	DPM	LIMITS	DATE	TIME
001	00	040112	0	0.00	0.00	3	2.00	3.45		10-03-98	09:31:52
002	00		0	0.00	0.00	4	3.00	5.17		10-03-98	09:33:20
003	00		1	1.00	4.35	0	-1.00	-1.72		10-03-98	09:34:49
004	00		2	2.00	8.70	4	3.00	5.17		10-03-98	09:36:18
005	00		0	0.00	0.00	0	-1.00	-1.72		10-03-98	09:37:47
006	00		0	0.00	0.00	0	-1.00	-1.72		10-03-98	09:39:15
007	00		1	1.00	4.35	1	0.00	0.00		10-03-98	09:40:44
008	00		1	1.00	4.35	0	-1.00	-1.72		10-03-98	09:42:13
009	00		1	1.00	4.35	5	5.00	8.62		10-03-98	09:43:41
010	00		1	1.00	4.35	0	-1.00	-1.72		10-03-98	09:45:10
011	00		0	0.00	0.00	1	0.00	0.00		10-03-98	09:46:38
012	00		1	1.00	4.35	0	-1.00	-1.72		10-03-98	09:48:07
013	00		1	1.00	4.35	4	3.00	5.17		10-03-98	09:49:35
014	00		0	0.00	0.00	0	-1.00	-1.72		10-03-98	09:51:04
015	00		1	1.00	4.35	5	4.00	6.90		10-03-98	09:52:33

Survey Point	Fixed Contamination		Background		Efficiency		Activity		Instrument Used
	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta Gamma	Alpha	Beta/Gamma dpm/100 cm ²	Alpha dpm/100 cm ²	
1	231	8	240	4	0.23	0.14	-39.13	28.57	Model 2224 116257
2	227	7	240	4	0.23	0.14	-56.52	21.43	Model 2224 116257
3	206	5	240	4	0.23	0.14	-147.83	7.14	Model 2224 116257
4	189	11	240	4	0.23	0.14	-221.74	50.00	Model 2224 116257
5	182	6	240	4	0.23	0.14	-252.17	14.29	Model 2224 116257
6	192	16	240	4	0.23	0.14	-208.70	85.71	Model 2224 116257
7	182	4	240	4	0.23	0.14	-252.17	0.00	Model 2224 116257
8	253	6	240	4	0.23	0.14	56.52	14.29	Model 2224 116257
9	162	9	240	4	0.23	0.14	-339.13	35.71	Model 2224 116257
10	201	4	240	4	0.23	0.14	-169.57	0.00	Model 2224 116257
11	243	3	240	4	0.23	0.14	13.04	-7.14	Model 2224 116257
12	282	9	240	4	0.23	0.14	182.61	35.71	Model 2224 116257
13	210	8	240	4	0.23	0.14	-130.43	28.57	Model 2224 116257
14	198	6	240	4	0.23	0.14	-182.61	14.29	Model 2224 116257
15	206	8	240	4	0.23	0.14	-147.83	28.57	Model 2224 116257

RADIOLOGICAL SURVEY FORM

Survey Number

091696040115

Survey Description: <u>AFFECTED AREA</u>	
<u>Room 4 - Room 1</u>	
<u>GPCCS</u>	
<u>1/1</u>	
Drawing Attached: Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

Instrument (1)	
Instrument Model: <u>PROTEAN</u>	
Instrument Ser. #: <u>67344</u>	
Calibration Due: <u>N/A</u>	
Efficiency: <u>A-0.27B-0.52</u>	
MDA: A-11.84 CF: A-4.37 BKG: A-0	
MDA: B-4.37 CF: B-1.92 BKG: B-1	

Instrument (2)	
Instrument Model: <u>MODEL 2724</u>	
Instrument Ser. #: <u>118241</u>	
Calibration Due: <u>8-2-97</u>	
Efficiency: <u>A-0.14 B-0.33</u>	
MDA: A-11.84 CF: A-4.37 BKG: A-1	
MDA: B-4.37 CF: B-1.92 BKG: B-1	

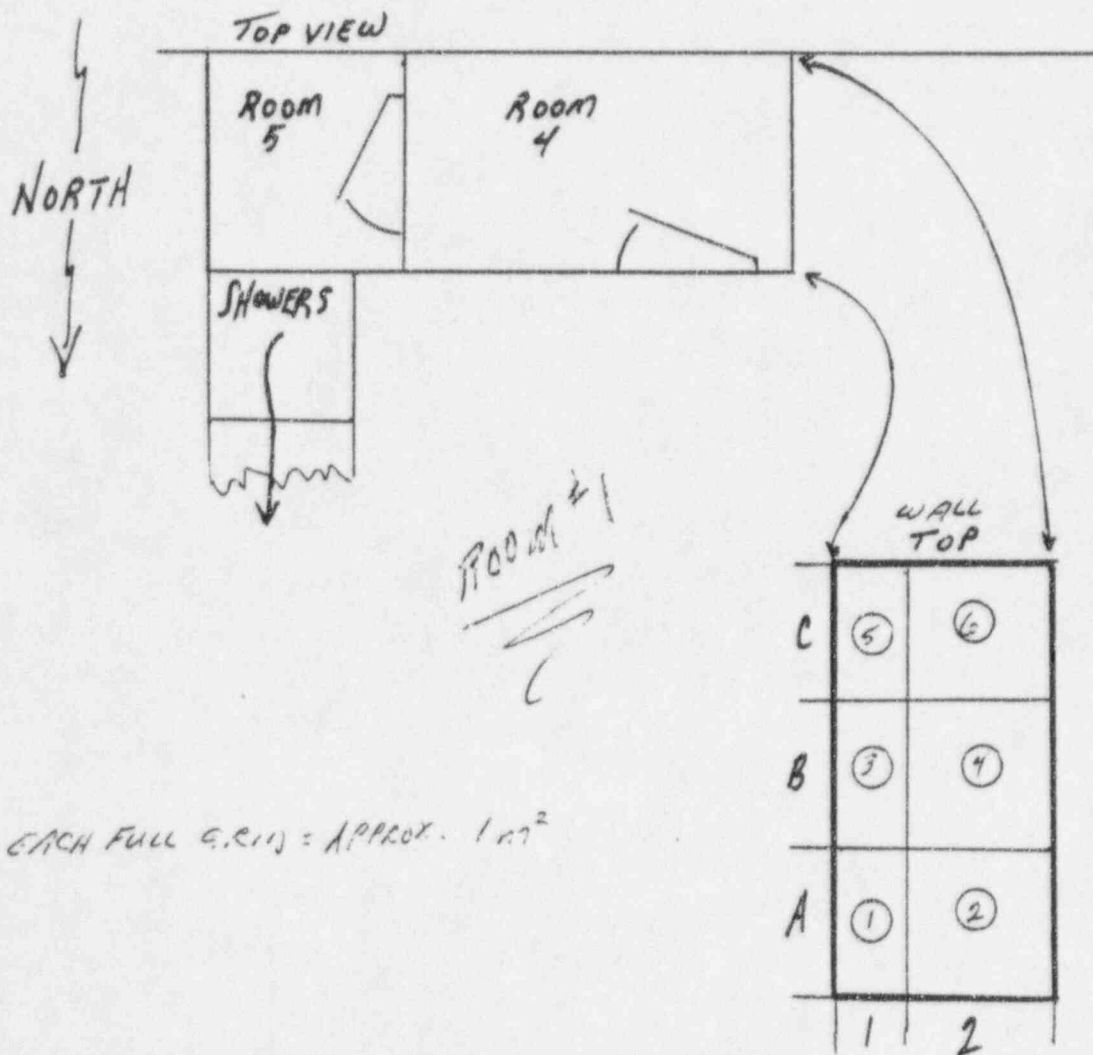
Survey Date: <u>09-16-96</u>	
Survey by: <u>[Signature]</u>	Date: <u>1/1/96</u>
Print Name: <u>P. Koron</u>	
Review By: <u>[Signature]</u>	Date: <u>1/1/96</u>

Instrument (3)	
Instrument Model: <u>19</u>	
Instrument Ser. #: <u>91491</u>	
Calibration Due: <u>12-21-96</u>	
Efficiency: <u>N/A</u>	
MDA: N/A CF: N/A BKG: N/A	

Instrument (4)	
Instrument Model: <u>N</u>	
Instrument Ser. #: <u>N</u>	
Calibration Due: <u>N</u>	
Efficiency: <u>N</u>	
MDA: N/A CF: N/A BKG: N/A	

Survey Point	Smearable Contamination beta/gamma dpm/100cm ²	alpha dpm/100cm ²	Fixed Contamination beta/gamma cpm/100cm ²	alpha cpm/100cm ²	Radiation Level (uR/Hr)	Instrument Used	Additional Comments
							(1) 2224 BACKGROUND: $\alpha = 2$ $\beta = 167$
							(2) 100% FRISK FOR α AND β
							(3) ONE MINUTE STATIC COUNT FOR α AND β
							(4) 8 SURVEY AT ONE METER FROM SURVEY POINT SURFACE
							(5) CIRCLED NUMBERS ON MAP INDICATE SURVEY POINT LOCATIONS

RADIOLOGICAL SURVEY FORM

Survey Number 091696040115BLOG. #4 - ROOM #1 $\frac{1}{4}$ " = APPROX. 1'

ROOM 4 WEST/"EXTERIOR" SIDE WALL.

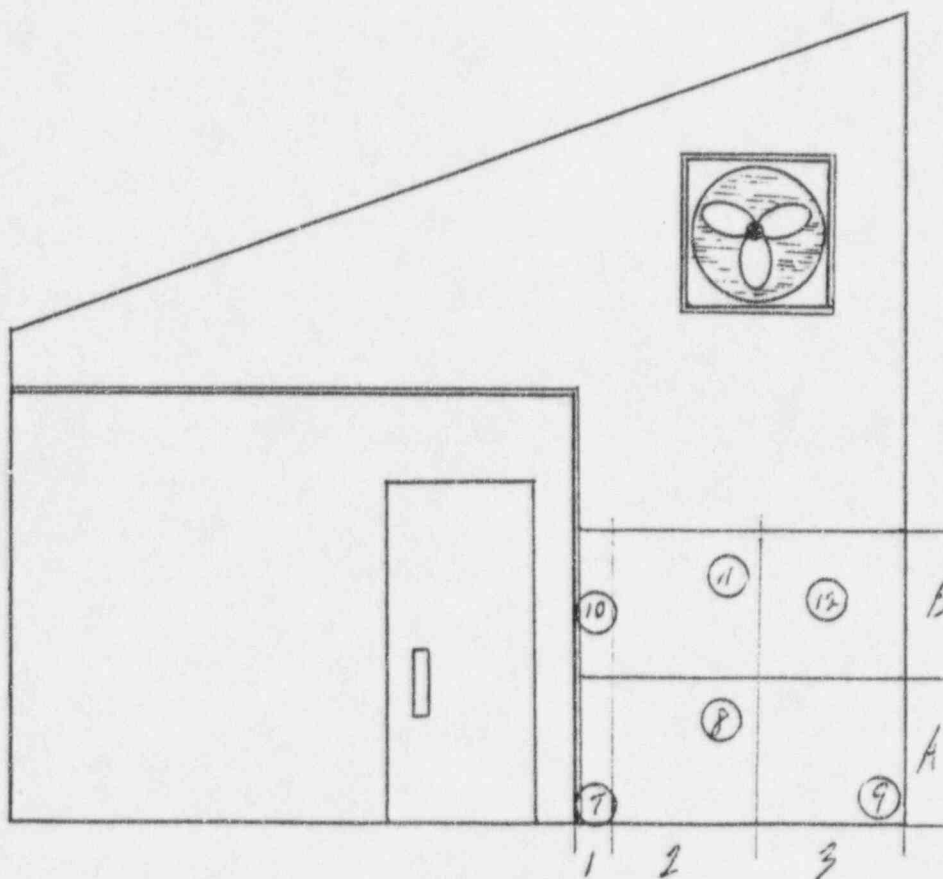
RADIOLOGICAL SURVEY FORM

Survey Number

09/696040115

BLDG #4 - Room 1 $\frac{1}{4}" = \text{APPROX. } 1'$

SOUTH WALL (INSIDE VIEW)

EACH FULL GRID = APPROX. 1 m^2 

091696040115

5 OF 6

ALPHA					BETA						
Eff: 23.00% Bkg: 0.00 cpm MDA: 11.78 dpm					Eff: 52.00% Bkg: 1.00 cpm MDA: 14.15 dpm						
RPT	ID	COUNTS	NET CPM	DPM	LIMITS	COUNTS	NET CPM	DPM	LIMITS	DATE	TIME
00	040115	1	1.00	4.35		0	-1.00	-1.92		09-20-96	13:39:24
002	00	0	0.00	0.00		6	5.00	9.62		09-20-96	13:40:51
003	00	0	0.00	0.00		4	3.00	5.77		09-20-96	13:42:20
004	00	0	0.00	0.00		0	-1.00	-1.92		09-20-96	13:43:48
005	00	0	0.00	0.00		0	-1.00	-1.92		09-20-96	13:45:17
006	00	2	2.00	8.70		0	-1.00	-1.92		09-20-96	13:46:46
007	00	1	1.00	4.35		0	-1.00	-1.92		09-20-96	13:48:14
008	00	0	0.00	0.00		0	-1.00	-1.92		09-20-96	13:49:43
009	00	0	0.00	0.00		1	0.00	0.00		09-20-96	13:51:12
010	00	1	1.00	4.35		2	1.00	1.92		09-20-96	13:52:40
011	00	0	0.00	0.00		2	1.00	1.92		09-20-96	13:54:09
012	00	0	0.00	0.00		2	1.00	1.92		09-20-96	13:55:38

Survey Point	Fixed Contamination		Background		Efficiency		Activity		Instrument Used
	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta Gamma	Alpha	Beta/Gamma dpm/100 cm ²	Alpha dpm/100 cm ²	
1	282	3	167	2	0.33	0.14	348.48	7.14	Model 2224 118241
2	251	3	167	2	0.33	0.14	254.55	7.14	Model 2224 118241
3	253	3	167	2	0.33	0.14	260.61	7.14	Model 2224 118241
4	260	3	167	2	0.33	0.14	281.82	7.14	Model 2224 118241
5	230	5	167	2	0.33	0.14	190.91	21.43	Model 2224 118241
6	257	3	167	2	0.33	0.14	272.73	7.14	Model 2224 118241
7	246	2	167	2	0.33	0.14	239.39	0.00	Model 2224 118241
8	255	1	167	2	0.33	0.14	266.67	-7.14	Model 2224 118241
9	307	3	167	2	0.33	0.14	424.24	7.14	Model 2224 118241
10	234	1	167	2	0.33	0.14	203.03	-7.14	Model 2224 118241
11	282	1	167	2	0.33	0.14	348.48	-7.14	Model 2224 118241
12	238	2	167	2	0.33	0.14	215.15	0.00	Model 2224 118241

RADIOLOGICAL SURVEY FORM

Survey Number 091796 040116

Survey Description:	<u>AFFECTED AREA</u>
<u>040116 - 000111</u>	
<u>040116 - 000111</u>	
Drawing Attached: Yes <u>2</u> No <u>0</u>	

Survey Date:	<u>07-17-96</u>
Survey by:	<u>Ed. Co.</u>
Print Name:	<u>Ed. Co.</u>
Review By:	<u>Ed. Co.</u>

Instrument (1)
Instrument Model: <u>PROTEAN</u>
Instrument Ser. #: <u>621444</u>
Calibration Due: <u>N/A</u>
Efficiency: <u>A-0.28-B-0.58</u>
MDA-A- <u>28.94</u> CF-A- <u>4.06</u> BKG-A- <u>0</u>
MDA-B- <u>17.72</u> CF-B- <u>1.74</u> BKG-B- <u>2</u>

Instrument (3)
Instrument Model: <u>19</u>
Instrument Ser. #: <u>91491</u>
Calibration Due: <u>12-21-96</u>
Efficiency: <u>N/A</u>
MDA-A- <u>28.94</u> CF-A- <u>4.06</u> BKG-A- <u>0</u>
MDA-B- <u>17.72</u> CF-B- <u>1.74</u> BKG-B- <u>2</u>

Instrument (2)
Instrument Model: <u>MODEL 2224</u>
Instrument Ser. #: <u>116240</u>
Calibration Due: <u>8-2-99</u> A- <u>0.12</u> B- <u>0.31</u>
Efficiency: <u>A-0.12 B-0.31</u>
MDA-A- <u>55.0</u> CF-A- <u>8.13</u> BKG-A- <u>3</u>
MDA-B- <u>51.3</u> CF-B- <u>8.13</u> BKG-B- <u>26</u>

Instrument (4)
Instrument Model: <u>N/A</u>
Instrument Ser. #: <u>N/A</u>
Calibration Due: <u>N/A</u>
Efficiency: <u>N/A</u>
MDA-A- <u>55.0</u> CF-A- <u>8.13</u> BKG-A- <u>3</u>
MDA-B- <u>51.3</u> CF-B- <u>8.13</u> BKG-B- <u>26</u>

Survey Point	Surface Contamination beta/gamma dpm/100cm ²	alpha dpm/100cm ²	Fixed Contamination beta/gamma cpm/100cm ²	alpha cpm/100cm ²	Radiation Level (uR/hr)	Instrument Used	Additional Comments
							(1) 2224 BACKGROUND: $\alpha = 3$ $\beta = 226$
							(2) CIRCLED NUMBERS ON MAP INDICATE SURVEY POINT LOCATION.
							(3) 100% EXIST FOR α & β
							(4) 1 MINUTE STATIC COUNT FOR α AND β
							(5) X SURVEY TAKEN AT ONE METER FROM SURVEY POINT LOCATION

RADIOLOGICAL SURVEY FORM CONTINUATION SHEET

091796040116

Survey Number

Survey Point	5m Sealed Contamination Bq/gamma dpm/100cm ²	alpha dpm/100cm ²	Fixed Contamination Bq/gamma dpm/100cm ²	alpha dpm/100cm ²	Radiation Level (uR/hr)	Instrument Used	Additional Comments
1			283	13	11	1,2,3	A2 Wipe See Note 5 For Details
2			243	1	11	1	A3
3			249	5	11		A4
4			256	1	11		B2
5			285	3	11		B3
6			242	1	11		B4
7			244	2	11		C1
8			228	4	11		C2
9			203	5	11		C3
10			201	0	11		C4
11			237	2	11		EXPERIMENTAL CONTAMINANT
12			237	2	11		EXPERIMENTAL CONTAMINANT
13			212	4	11		EXPERIMENTAL CONTAMINANT
14			266	3	11		A1 Wipe See Note
15			251	3	11		B1
16			246	1	11		A2
17			227	1	11		B2
18			218	0	11		A3
19			235	3	11		B3
20			281	4	11		B4
21			274	2	11		B4
22			231	0	11		A5
23			291	5	11		B5
24			264	3	11		A6
25			284	5	11		B6
26			283	2	11		A7
27			269	1	11		B7
28			245	3	11		A8
29			278	2	11		B8
30			273	3	11		A9
31			237	0	11		B9

RADIOLOGICAL SURVEY FORM CONTINUATION SHEET

Survey Number 091796040110

Survey Point	Searchable Contamination beta/gamma dpm/100cm ²	alpha dpm/100cm ²	Fixed Contamination beta/gamma cpm/100cm ²	alpha cpm/100cm ²	Radiation Level (uR/hr)	Instrument Used	Additional Comments
32			249	3	11	1333	A10 WEST WALL
33			231	5	11		A10 "
34			171	2	11		A11 WEST WALL DOOR
35			150	1	11		A11 WEST WALL DOOR
36			286	3	11		A12 WEST WALL
37			260	5	11		A12 "
38			273	2	11		A13 "
39			249	1	11		A13 "
40			240	3	11		A14 "
41			263	2	11		A14 "
42			389	2	11		A15 "
43			286	2	11		A15 "
44			280	4	11		A16 "
45			282	2	11		A16 "
46			284	1	11		A17 "
47			283	4	11		A17 "
48			200	1	11		A10 1/2" DIA. ON WALL (WEST WALL)
49			267	3	11		A12 ELECTRIC CONDUIT ON WALL (WEST WALL)
50			244	4	11		A12 ELECTRIC CONDUIT ON WEST WALL
51			274	1	11		A13 1/2" DIA. ON WEST WALL
52			187	0	11		A1 WEST WALL
53			174	2	11		A1 "
54			183	1	11		A1 "
55			176	1	11		A2 "
56			205	0	11		A3 "
57			211	0	11		A3 "
58			194	6	11		A4 "
59			168	1	11		A4 "
60			196	1	11		A5 "
61			193	0	11		A5 "
62			208	0	11		A6 "

SEE

PROTECT

SPART

SHEET

RADIOLOGICAL SURVEY FORM CONTINUATION SHEET

Page 4 of 15

Survey Number

091796040116

Survey Point	Surveyable Contamination beta/gamma dpm/100cm ²	alpha dpm/100cm ²	Fixed Contamination beta/gamma dpm/100cm ²	alpha dpm/100cm ²	Radiation Level (uR/hr)	Instrument Used	Additional Comments
63			194	6	11	12,3	B6 EST WARE
64			246	5	11		B1 "
65			228	0	11		B7 "
66			211	8	11		AR "
67			210	1	11		B8 "
68			308	5	11		A9 "
69			317	1	11		B7 "
70			214	2	11		B1 PIPE ASS. of EAST WARE
71			198	1	11		B2 "
72			201	2	11		B3 "
73			185	0	11		B4 "
74			181	1	11		B5 "
75			174	3	11		B6 "
76			212	1	11		B7 4134
77			162	2	11		B7 1763
78			227	0	11		B7 1763
79			243	2	11		AP 1763
80			211	1	11		B7 1763
81			176	2	11		SEE PAGE 10 (11,99)
82			158	3	11		" "
83			147	3	11		" "
84			140	3	11		" "

RADIOLOGICAL SURVEY FORM

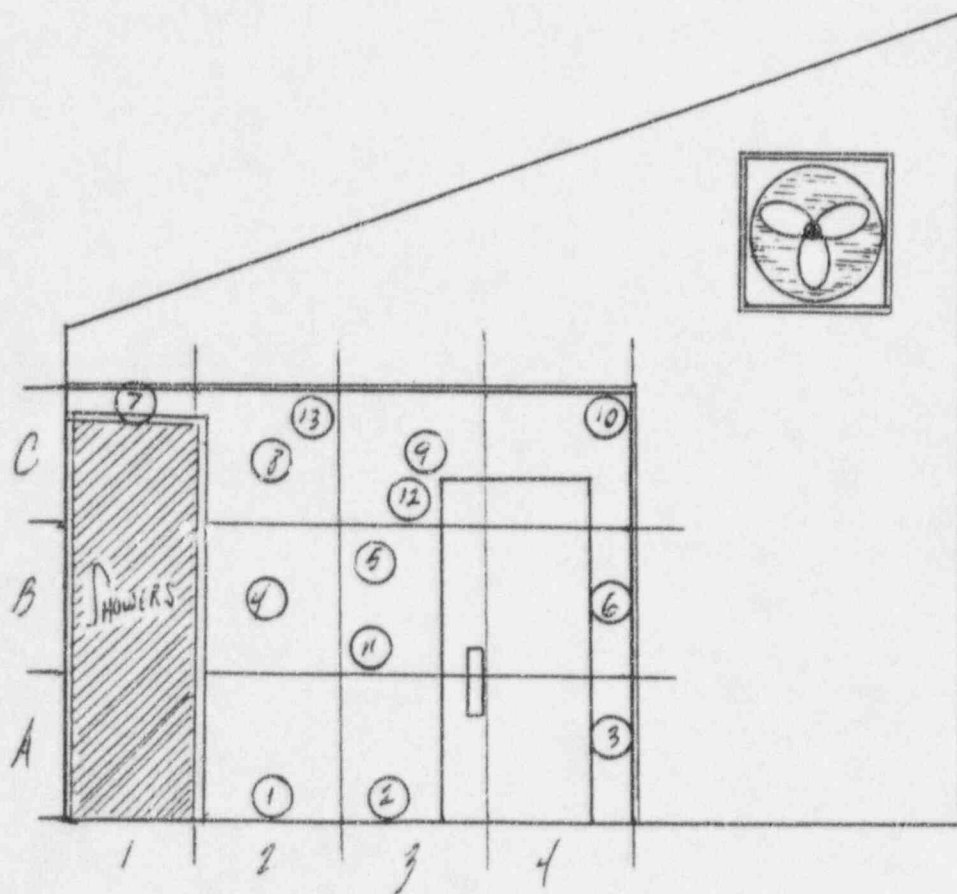
Survey Number 09,796040116

BLDG #4 - Room 1 $\frac{1}{4}" = \text{APPROX. } 1'$
 SOUTH WALL (INSIDE VIEW)

SURVEY OF ROOM 4/5 EXTERIOR/ROOM 1 SIDE WALL

ALL SURVEY OF WALL/DOOR EXCEPT:

- (11) - EYEWASH STATION (SPANS GRIDS A3 & B3)
- (12) - ELECTRIC CONDUIT (SPANS GRIDS B3 & C3)
- (13) - COPPER PIPE ASSOC. w/ NOTED EYEWASH STATION (SPANS GRIDS A3, B3, C3, C2, C1)



SHOWER PORTION WITHIN GRID PATTERN COMPLETED IN PREVIOUS SURVEY.

RADIOLOGICAL SURVEY FORM

Survey Number 091796046116

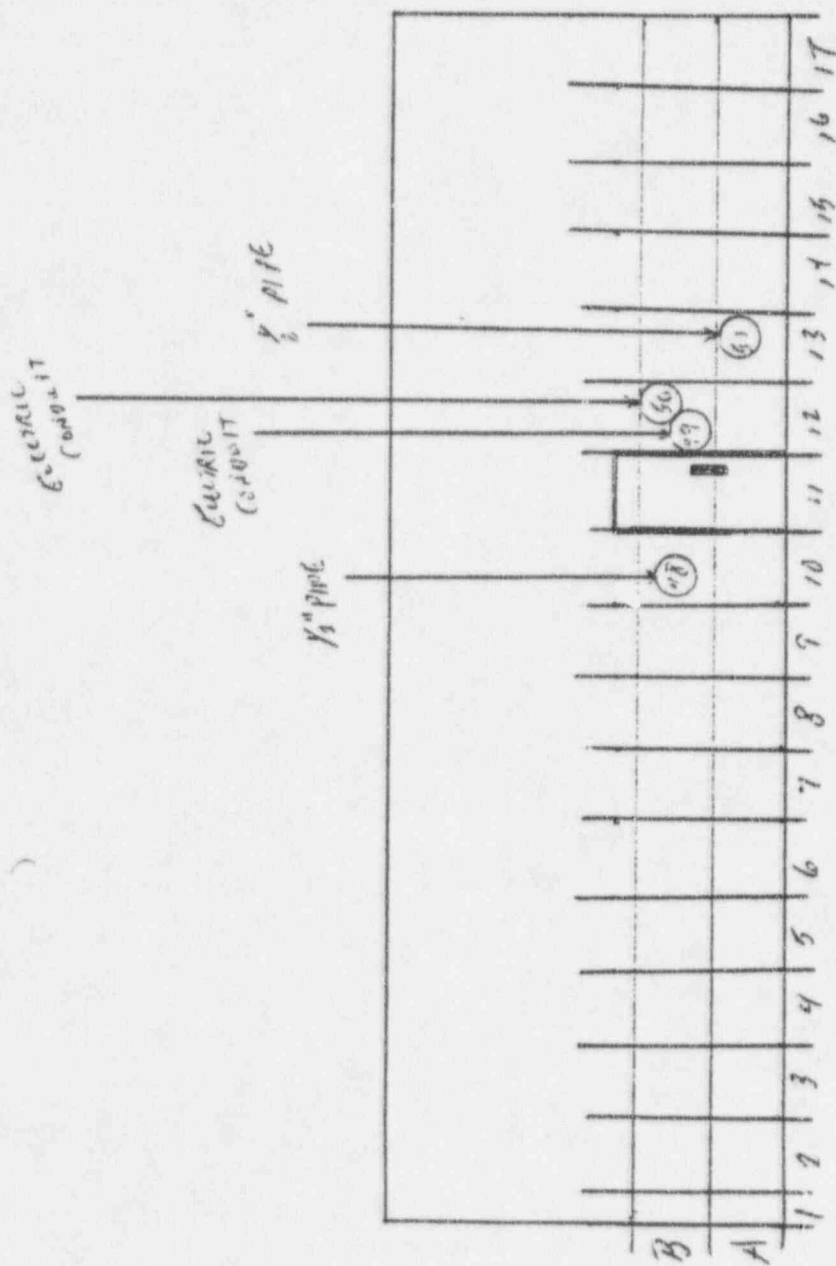
BLDG 4 - ROOM 1 WEST (INTERIOR) WALL
 1/8" = APPROX. 1' ... EACH FULL GRID = APPROX. 1 m²

B	16	17	19	21	23	25	27	29	31	33	35	37	39	41	43	45	47
A	14	15	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

RADIOLOGICAL SURVEY FORM

Survey Number 091796040116

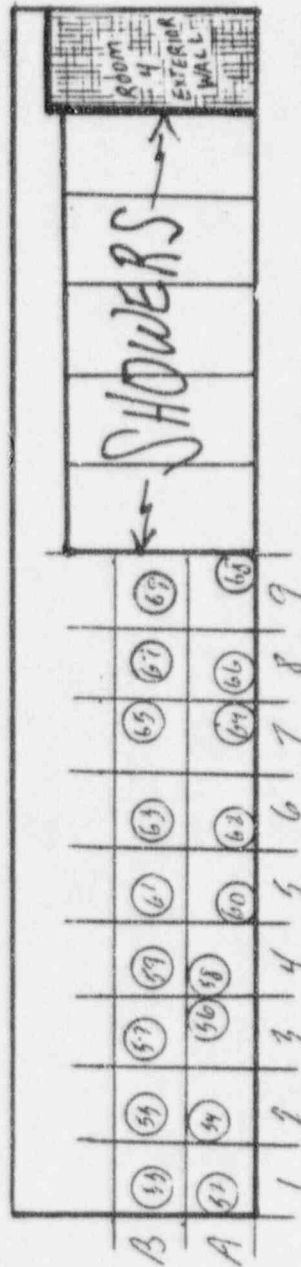
BLDG 4 - ROOM 1 WEST (INTERIOR) WALL
1/8" = APPROX. 1' ... EACH FULL GRID = APPROX. 1 M²



RADIOLOGICAL SURVEY FORM

Survey Number 09179604 0116

Bldg. 4 - Room 1 EAST WALL
 $\frac{1}{8}$ " = APPROX 1'
 1 FULL GRID = APPROX. 1 m²

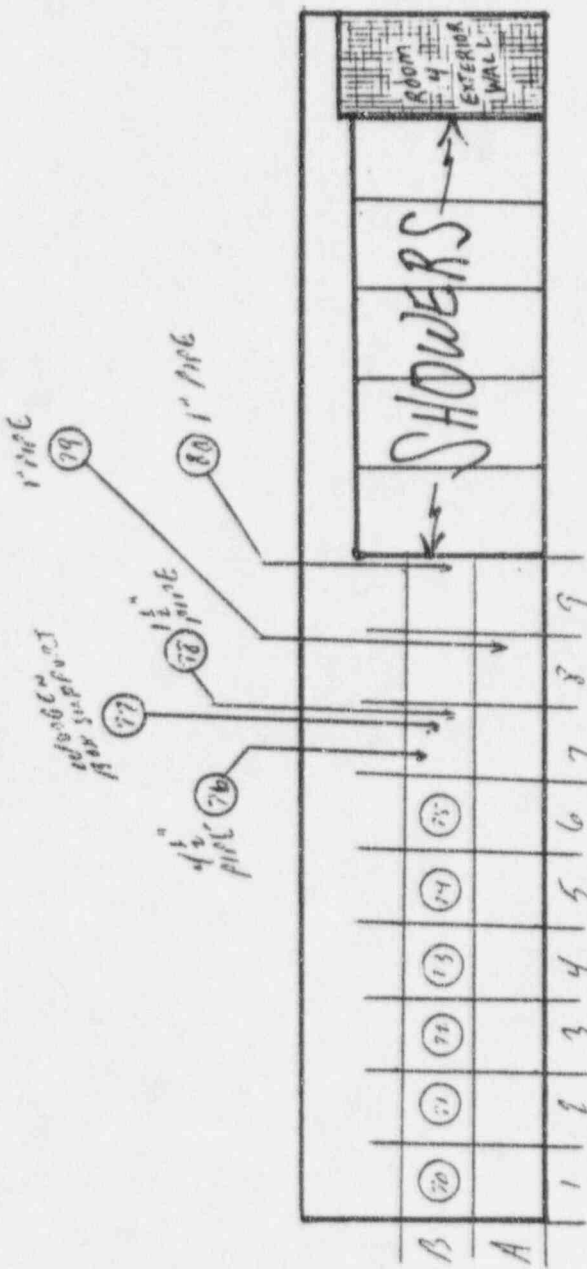


URINAL/TOILET STALLS & BULKY VESSEL NOT SHOWN

RADIOLOGICAL SURVEY FORM

Survey Number 091796040116

Bldg. 4 - Room 1 EAST WALL
 $\frac{1}{8}$ " = APPROX 1'
 1 FULL GRID = APPROX. 1 m²



MINERAL TONIC STAIN? BARGE VESSEL NOT SHOWN.

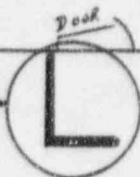
RADIOLOGICAL SURVEY FORM

Survey Number 09179604DI16

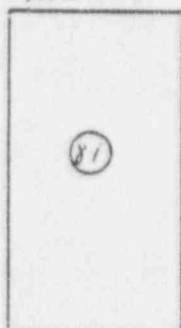
BUILDING #4 ROOM #1

TOP VIEW... - NORTH →
OF WEST WALL

SURVEY LOCKER ROOM
"FAIRWAY PARTITION"



SOUTH SIDE



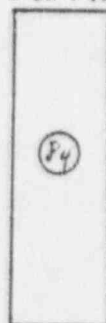
NORTH SIDE



EAST SIDE



WEST SIDE



$\frac{1}{4}'' = \text{APPROX. } 1'$

ALPHA				BETA			
Eff: 25.00% Bkg: 0.00 cps MDA: 10.84 dpm				Eff: 58.00% Bkg: 2.00 cps MDA: 16.01 dpm			
CH	RPT	ID	COUNTS	NET CPM	DPM	LIMITS	DATE
00	040116	0	0.00	0.00	1	-1.00	09-23-96 09:25:40
002	00	1	1.00	4.00	1	-1.00	09-23-96 09:27:09
003	00	0	0.00	0.00	1	-1.00	09-23-96 09:28:37
004	00	0	0.00	0.00	0	-2.00	09-23-96 09:30:06
005	00	0	0.00	0.00	2	0.00	09-23-96 09:31:34
006	00	1	1.00	4.00	1	-1.00	09-23-96 09:33:03
007	00	0	0.00	0.00	0	-2.00	09-23-96 09:34:31
008	00	1	1.00	4.00	0	-2.00	09-23-96 09:36:00
009	00	0	0.00	0.00	0	-2.00	09-23-96 09:37:28
010	00	0	0.00	0.00	1	-1.00	09-23-96 09:38:57
011	00	2	2.00	8.00	2	0.00	09-23-96 09:40:26
012	00	0	0.00	0.00	0	-2.00	09-23-96 09:41:54
013	00	1	1.00	4.00	1	-1.00	09-23-96 09:43:23
014	00	0	0.00	0.00	5	3.00	09-23-96 09:44:51
015	00	0	0.00	0.00	0	-2.00	09-23-96 09:46:20
016	00	1	1.00	4.00	4	2.00	09-23-96 09:47:49
017	00	0	0.00	0.00	2	0.00	09-23-96 09:49:17
018	00	0	0.00	0.00	0	-2.00	09-23-96 09:50:46
019	00	0	0.00	0.00	0	-2.00	09-23-96 09:52:14
020	00	2	2.00	8.00	0	-2.00	09-23-96 09:53:43
021	00	0	0.00	0.00	0	-2.00	09-23-96 09:55:11
022	00	0	0.00	0.00	2	0.00	09-23-96 09:56:40
023	00	0	0.00	0.00	1	-1.00	09-23-96 09:58:09
024	00	0	0.00	0.00	1	-1.00	09-23-96 09:59:37
025	00	0	0.00	0.00	2	0.00	09-23-96 10:01:06
026	00	0	0.00	0.00	2	0.00	09-23-96 10:02:34
027	00	1	1.00	4.00	3	1.00	09-23-96 10:04:03
028	00	0	0.00	0.00	0	-2.00	09-23-96 10:05:31
029	00	0	0.00	0.00	5	3.00	09-23-96 10:07:00
030	00	0	0.00	0.00	1	-1.00	09-23-96 10:08:28
031	00	1	1.00	4.00	2	0.00	09-23-96 10:09:57
032	00	0	0.00	0.00	0	-2.00	09-23-96 10:11:25
033	00	2	2.00	8.00	2	0.00	09-23-96 10:12:54
034	00	2	2.00	8.00	0	-2.00	09-23-96 10:14:22
035	00	0	0.00	0.00	1	-1.00	09-23-96 10:15:51
036	00	3	3.00	12.00	1	-1.00	09-23-96 10:17:20
037	00	0	0.00	0.00	1	-1.00	09-23-96 10:18:48
038	00	0	0.00	0.00	1	-1.00	09-23-96 10:20:17
039	00	0	0.00	0.00	0	-2.00	09-23-96 10:21:45
040	00	3	3.00	12.00	2	0.00	09-23-96 10:23:14
041	00	1	1.00	4.00	1	-1.00	09-23-96 10:24:42
042	00	0	0.00	0.00	0	-2.00	09-23-96 10:26:11
043	00	0	0.00	0.00	1	-1.00	09-23-96 10:27:39
044	00	0	0.00	0.00	1	-1.00	09-23-96 10:29:08
045	00	1	1.00	4.00	0	-2.00	09-23-96 10:30:36
046	00	0	0.00	0.00	1	-1.00	09-23-96 10:32:05
047	00	1	1.00	4.00	1	-1.00	09-23-96 10:33:33
048	00	2	2.00	8.00	1	-1.00	09-23-96 10:35:02
049	00	0	0.00	0.00	0	-2.00	09-23-96 10:36:30
050	00	1	1.00	4.00	6	4.00	09-23-96 10:37:59

----- ALPHA ----- BETA -----
| Eff: 25.00% Bkg: 0.00 cps MDA: 10.84 dpm | Eff: 58.00% Bkg: 2.00 cps MDA: 16.01 dpm |

--- RPT ---	ID ---	COUNTS ---	NET CPM ---	DPM ---	LIMITS ---	COUNTS ---	NET CPM ---	DPM ---	LIMITS ---	DATE ---	TIME ---
051	00	2	2.00	8.00		6	6.00	10.34		09-23-96	10:48:16
052	00	0	0.00	0.00		0	-2.00	-3.45		09-23-96	10:49:45
053	00	1	1.00	4.00		1	-1.00	-1.72		09-23-96	10:51:14
054	00	0	0.00	0.00		0	-2.00	-3.45		09-23-96	10:52:43
055	00	0	0.00	0.00		3	1.00	1.72		09-23-96	10:54:11
056	00	0	0.00	0.00		5	3.00	5.17		09-23-96	10:55:39
057	00	0	0.00	0.00		2	0.00	0.00		09-23-96	10:57:08
058	00	0	0.00	0.00		0	-2.00	-3.45		09-23-96	10:58:36
059	00	0	0.00	0.00		3	1.00	1.72		09-23-96	11:00:05
060	00	1	1.00	4.00		2	0.00	0.00		09-23-96	11:01:33
061	00	0	0.00	0.00		3	1.00	1.72		09-23-96	11:03:02
062	00	0	0.00	0.00		3	1.00	1.72		09-23-96	11:04:31
063	00	0	0.00	0.00		2	0.00	0.00		09-23-96	11:05:59
064	00	1	1.00	4.00		0	-2.00	-3.45		09-23-96	11:07:28
065	00	1	1.00	4.00		3	1.00	1.72		09-23-96	11:08:56
066	00	0	0.00	0.00		1	-1.00	-1.72		09-23-96	11:10:24
067	00	0	0.00	0.00		1	-1.00	-1.72		09-23-96	11:11:53
068	00	0	0.00	0.00		3	1.00	1.72		09-23-96	11:13:22
069	00	1	1.00	4.00		0	-2.00	-3.45		09-23-96	11:14:50
070	00	0	0.00	0.00		2	0.00	0.00		09-23-96	11:16:19
071	00	0	0.00	0.00		0	-2.00	-3.45		09-23-96	11:17:47
072	00	3	3.00	12.00		2	0.00	0.00		09-23-96	11:19:16
073	00	0	0.00	0.00		0	-2.00	-3.45		09-23-96	11:20:44
074	00	0	0.00	0.00		2	0.00	0.00		09-23-96	11:22:13
075	00	1	1.00	4.00		0	-2.00	-3.45		09-23-96	11:23:42
076	00	0	0.00	0.00		0	-2.00	-3.45		09-23-96	11:25:10
077	00	0	0.00	0.00		2	0.00	0.00		09-23-96	11:26:39
078	00	1	1.00	4.00		1	-1.00	-1.72		09-23-96	11:28:07
079	00	0	0.00	0.00		0	-2.00	-3.45		09-23-96	11:29:36
080	00	1	1.00	4.00		1	-1.00	-1.72		09-23-96	11:31:04
081	00	1	1.00	4.00		0	-2.00	-3.45		09-23-96	11:32:33
082	00	1	1.00	4.00		1	-1.00	-1.72		09-23-96	11:34:01
083	00	0	0.00	0.00		3	1.00	1.72		09-23-96	11:35:30
084	00	2	2.00	8.00		6	4.00	6.90		09-23-96	11:36:59

Fixed Contamination			Background	Efficiency			Activity		Instrument Used
Survey Point	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta Gamma	Alpha	Beta/Gamma dpm/100 cm ²	Alpha dpm/100 cm ²	
1	283	13	226	3	0.32	0.12	178.13	83.33	Model 2224 116240
2	243	7	226	3	0.32	0.12	53.13	33.33	Model 2224 116240
3	249	5	226	3	0.32	0.12	71.88	16.67	Model 2224 116240
4	256	1	226	3	0.32	0.12	93.75	-16.67	Model 2224 116240
5	285	3	226	3	0.32	0.12	184.38	0.00	Model 2224 116240
6	242	1	226	3	0.32	0.12	50.00	-16.67	Model 2224 116240
7	244	2	226	3	0.32	0.12	56.25	-8.33	Model 2224 116240
8	228	4	226	3	0.32	0.12	6.25	8.33	Model 2224 116240
9	208	5	226	3	0.32	0.12	-56.25	16.67	Model 2224 116240
10	261	0	226	3	0.32	0.12	109.38	-25.00	Model 2224 116240
11	237	8	226	3	0.32	0.12	34.38	41.67	Model 2224 116240
12	237	2	226	3	0.32	0.12	34.38	-8.33	Model 2224 116240
13	212	4	226	3	0.32	0.12	-43.75	8.33	Model 2224 116240
14	266	3	226	3	0.32	0.12	125.00	0.00	Model 2224 116240
15	254	3	226	3	0.32	0.12	87.50	0.00	Model 2224 116240
16	246	4	226	3	0.32	0.12	62.50	8.33	Model 2224 116240
17	227	3	226	3	0.32	0.12	3.13	0.00	Model 2224 116240
18	218	0	226	3	0.32	0.12	-25.00	-25.00	Model 2224 116240
19	255	3	226	3	0.32	0.12	90.63	0.00	Model 2224 116240
20	281	4	226	3	0.32	0.12	171.88	8.33	Model 2224 116240
21	274	2	226	3	0.32	0.12	150.00	-8.33	Model 2224 116240
22	231	6	226	3	0.32	0.12	15.63	25.00	Model 2224 116240
23	291	5	226	3	0.32	0.12	203.13	16.67	Model 2224 116240
24	264	3	226	3	0.32	0.12	118.75	0.00	Model 2224 116240
25	340	5	226	3	0.32	0.12	356.25	16.67	Model 2224 116240
26	293	2	226	3	0.32	0.12	209.38	-8.33	Model 2224 116240
27	269	1	226	3	0.32	0.12	134.38	-16.67	Model 2224 116240
28	245	3	226	3	0.32	0.12	59.38	0.00	Model 2224 116240
29	278	2	226	3	0.32	0.12	162.50	-8.33	Model 2224 116240
30	273	3	226	3	0.32	0.12	146.88	0.00	Model 2224 116240
31	237	0	226	3	0.32	0.12	34.38	-25.00	Model 2224 116240

Survey Point	Fixed Contamination		Background		Efficiency		Activity		Instrument Used
	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta Gamma	Alpha	Beta/Gamma dpm/100 cm ²	Alpha dpm/100 cm ²	
32	249	3	226	3	0.32	0.12	71.88	0.00	Model 2224 116240
33	231	5	226	3	0.32	0.12	15.63	16.67	Model 2224 116240
34	171	2	226	3	0.32	0.12	-171.88	-8.33	Model 2224 116240
35	150	1	226	3	0.32	0.12	-237.50	-16.67	Model 2224 116240
36	286	3	226	3	0.32	0.12	187.50	0.00	Model 2224 116240
37	260	3	226	3	0.32	0.12	106.25	0.00	Model 2224 116240
38	273	2	226	3	0.32	0.12	146.88	-8.33	Model 2224 116240
39	249	1	226	3	0.32	0.12	71.88	-16.67	Model 2224 116240
40	246	3	226	3	0.32	0.12	62.50	0.00	Model 2224 116240
41	263	2	226	3	0.32	0.12	115.63	-8.33	Model 2224 116240
42	389	2	226	3	0.32	0.12	509.38	-8.33	Model 2224 116240
43	296	2	226	3	0.32	0.12	218.75	-8.33	Model 2224 116240
44	280	4	226	3	0.32	0.12	168.75	8.33	Model 2224 116240
45	282	2	226	3	0.32	0.12	175.00	-8.33	Model 2224 116240
46	284	1	226	3	0.32	0.12	181.25	-16.67	Model 2224 116240
47	283	4	226	3	0.32	0.12	178.13	8.33	Model 2224 116240
48	200	1	226	3	0.32	0.12	-81.25	-16.67	Model 2224 116240
49	267	3	226	3	0.32	0.12	128.13	0.00	Model 2224 116240
50	244	4	226	3	0.32	0.12	56.25	8.33	Model 2224 116240
51	274	1	226	3	0.32	0.12	150.00	-16.67	Model 2224 116240
52	189	0	226	3	0.32	0.12	-115.63	-25.00	Model 2224 116240
53	174	2	226	3	0.32	0.12	-162.50	-8.33	Model 2224 116240
54	183	1	226	3	0.32	0.12	-134.38	-16.67	Model 2224 116240
55	176	1	226	3	0.32	0.12	-156.25	-16.67	Model 2224 116240
56	205	0	226	3	0.32	0.12	-65.63	-25.00	Model 2224 116240
57	211	0	226	3	0.32	0.12	-46.88	-25.00	Model 2224 116240
58	194	0	226	3	0.32	0.12	-100.00	-25.00	Model 2224 116240
59	168	1	226	3	0.32	0.12	-181.25	-16.67	Model 2224 116240
60	196	1	226	3	0.32	0.12	-93.75	-16.67	Model 2224 116240
61	193	0	226	3	0.32	0.12	-103.13	-25.00	Model 2224 116240
62	208	0	226	3	0.32	0.12	-56.25	-25.00	Model 2224 116240

Survey Point	Fixed Contamination		Background		Efficiency		Activity		Instrument Used
	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta Gamma	Alpha	Beta/Gamma dpm/100 cm ²	Alpha dpm/100 cm ²	
63	194	2	226	3	0.32	0.12	-100.00	-8.33	Model 2224 116240
64	242	5	226	3	0.32	0.12	50.00	16.67	Model 2224 116240
65	229	0	226	3	0.32	0.12	9.38	-25.00	Model 2224 116240
66	211	8	226	3	0.32	0.12	-46.88	41.67	Model 2224 116240
67	210	1	226	3	0.32	0.12	-50.00	-16.67	Model 2224 116240
68	308	8	226	3	0.32	0.12	256.25	41.67	Model 2224 116240
69	217	1	226	3	0.32	0.12	-28.13	-16.67	Model 2224 116240
70	214	2	226	3	0.32	0.12	-37.50	-8.33	Model 2224 116240
71	198	1	226	3	0.32	0.12	-87.50	-16.67	Model 2224 116240
72	201	2	226	3	0.32	0.12	-78.13	-8.33	Model 2224 116240
73	185	0	226	3	0.32	0.12	-128.13	-25.00	Model 2224 116240
74	181	1	226	3	0.32	0.12	-140.63	-16.67	Model 2224 116240
75	174	3	226	3	0.32	0.12	-162.50	0.00	Model 2224 116240
76	222	1	226	3	0.32	0.12	-12.50	-16.67	Model 2224 116240
77	162	2	226	3	0.32	0.12	-200.00	-8.33	Model 2224 116240
78	227	0	226	3	0.32	0.12	3.13	-25.00	Model 2224 116240
79	243	2	226	3	0.32	0.12	53.13	-8.33	Model 2224 116240
80	211	1	226	3	0.32	0.12	-46.88	-16.67	Model 2224 116240
81	176	2	226	3	0.32	0.12	-156.25	-8.33	Model 2224 116240
82	158	2	226	3	0.32	0.12	-212.50	-8.33	Model 2224 116240
83	147	3	226	3	0.32	0.12	-246.88	0.00	Model 2224 116240
84	140	3	226	3	0.32	0.12	-268.75	0.00	Model 2224 116240

RADIOLOGICAL SURVEY FORM

Survey Number

09189604017

Survey Description: <i>UNDERGROUND AREA</i>	
<i>RAVENS SURVEY AREA</i>	
<i>ANALYSIS OF SURVEY AREA</i>	
<i>7/1</i>	
Drawing Attached: Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

Survey Date: <i>9-18-96</i>	Date
Survey by: <i>[Signature]</i>	Date
Print Name: <i>[Signature]</i>	Date
Review By: <i>[Signature]</i>	Date

Instrument (1)	
Instrument Model: PROTEAN	
Instrument Ser. #: 621444	
Calibration Due: N/A	
Efficiency: A-0.30B-0.57	
MDA: A-17.81 CF: A-3.39 BKG: A-0.5	
MDA: B-12.50 CF: B-1.75 BKG: B-1	

Instrument (3)	
Instrument Model: <i>19</i>	
Instrument Ser. #: <i>2491</i>	
Calibration Due: <i>12-1-97</i>	
Efficiency: <i>N/A</i>	
MDA: <i>N/A</i>	
CF: <i>N/A</i>	
BKG: <i>11</i>	

Instrument (2)	
Instrument Model: MODEL 2224	
Instrument Ser. #: <i>116240</i>	
Calibration Due: <i>9-2-97</i>	
Efficiency: A-0.12 B-0.32	
MDA: A-24.0 CF: A-8.33 BKG: A-2	
MDA: B-19.13 CF: B-3.13 BKG: B-2.02	

Instrument (4)	
Instrument Model: <i>N/A</i>	
Instrument Ser. #: <i>N/A</i>	
Calibration Due: <i>N/A</i>	
Efficiency: <i>N/A</i>	
MDA: <i>N/A</i>	
CF: <i>N/A</i>	
BKG: <i>N/A</i>	

Survey Point	Securable Contamination beta/gamma dpm/100cm ²	alpha dpm/100cm ²	Fixed Contamination beta/gamma cpm/100cm ²	alpha cpm/100cm ²	Radiation Level (uR/Hr)	Instrument Used	Additional Comments
							(1) 2224 BKG: A-0.57
							(2) 1910001 (1) 1910001 (1) 1910001 (1) 1910001
							FOR R & P 15
							(3) 1910001 (1) 1910001 (1) 1910001 (1) 1910001
							SURVEY POINT LOCATION FIELD
							FOR R & P 15
							(4) SURVEY AT 1 METRIC FROM SURVEY
							POINT LOCATION SURFACE
							(5) 1910001 (1) 1910001 (1) 1910001 (1) 1910001
							POINT LOCATION
							N/A

RADIOLOGICAL SURVEY FORM CONTINUATION SHEET

Survey Number 09189604017

Survey Point	Screenable Contamination Bq/m ² / 100cm ²	alpha dpm/100cm ²	Fixed Contamination Bq/m ² / 100cm ²	alpha dpm/100cm ²	Radiation Level (uR/hr)	Instrument Used	Additional Comments
1			230	4	11	123	EAST WALL
2			220	1	11		
3			246	4	11		
4			223	0	11		
5			253	1	11		
6			217	1	11		
7			201	1	11		
8			215	1	11		
9			176	4	11		
10			190	1	11		
11			171	1	11		
12			184	0	11		
13			177	1	11		
14			187	0	11		
15			238	1	11		
16			205	0	11		
17			194	4	11		
18			200	1	11		
19			125	0	11		
20			212	0	11		
21			218	0	11		
22			183	1	11		
23			164	2	11		
24			218	1	11		
25			229	2	11		
26			205	1	11		
27			202	1	11		
28			283	1	11		
29			270	1	11		
30			258	3	11		
31			260	1	11		

Handwritten notes on the table:

- Large diagonal line across the table with "SAFE" written multiple times.
- Curved line across the top of the table.
- Arrows pointing to specific rows with labels: "SOUTH WALL FAN", "SOUTH WALL", "EAST WALL", "NORTH WALL".

091876040117

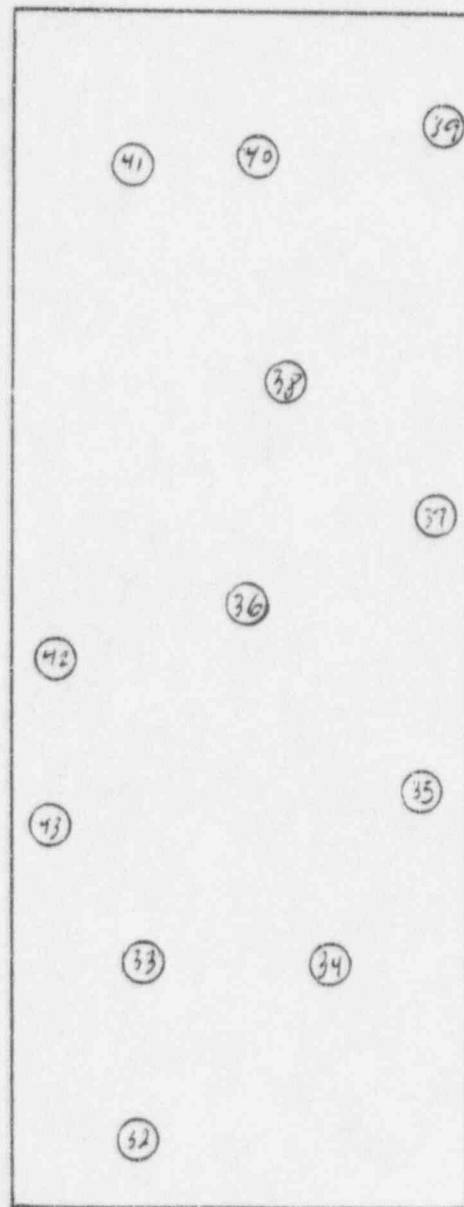
Survey Point	Scatterable Contamination dpm/100cm ²	alpha dpm/100cm ²	Fixed Contamination be/gm/cm ²	alpha cm ² /100cm ²	Radiation Level (μR/hr)	Instrument Used	Additional Comments
32			169	3	11	123	CEILING
33			142	2	11		
34			145	0	11		
35			160	1	11		
36			148	0	11		
37			147	2	11		
38			170	0	11		
39			151	0	11		
40			142	1	11		
41			142	0	11		
42			130	0	11		
43			143	3	11		
44			202	11	11		
45			201	15	11		
46			188	10	11		

RADIOLOGICAL SURVEY FORM

Survey Number 091896040117

BLDG 4 - ROOM 1 CEILING
8" = AREA 1'

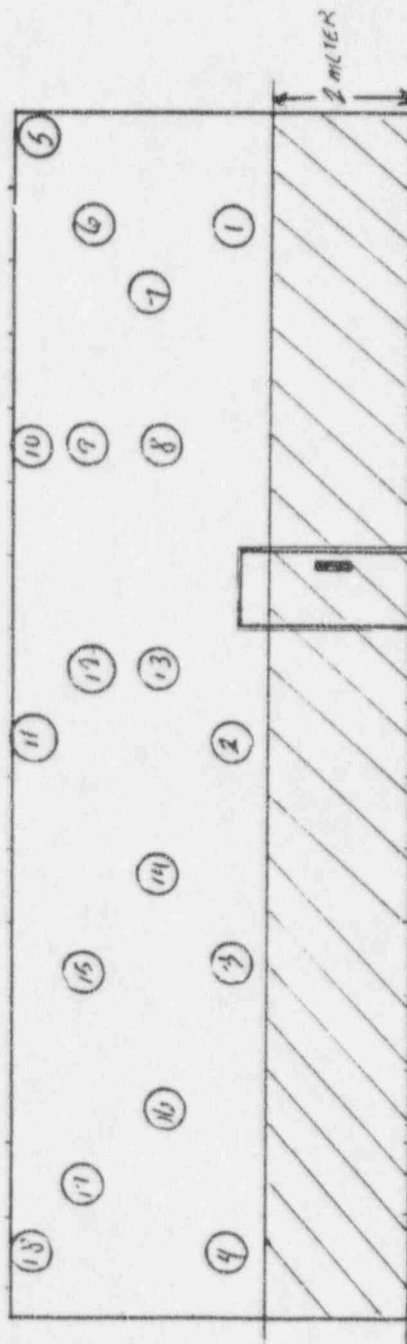
NORTH
↓



RADIOLOGICAL SURVEY FORM

Survey Number 091896040117

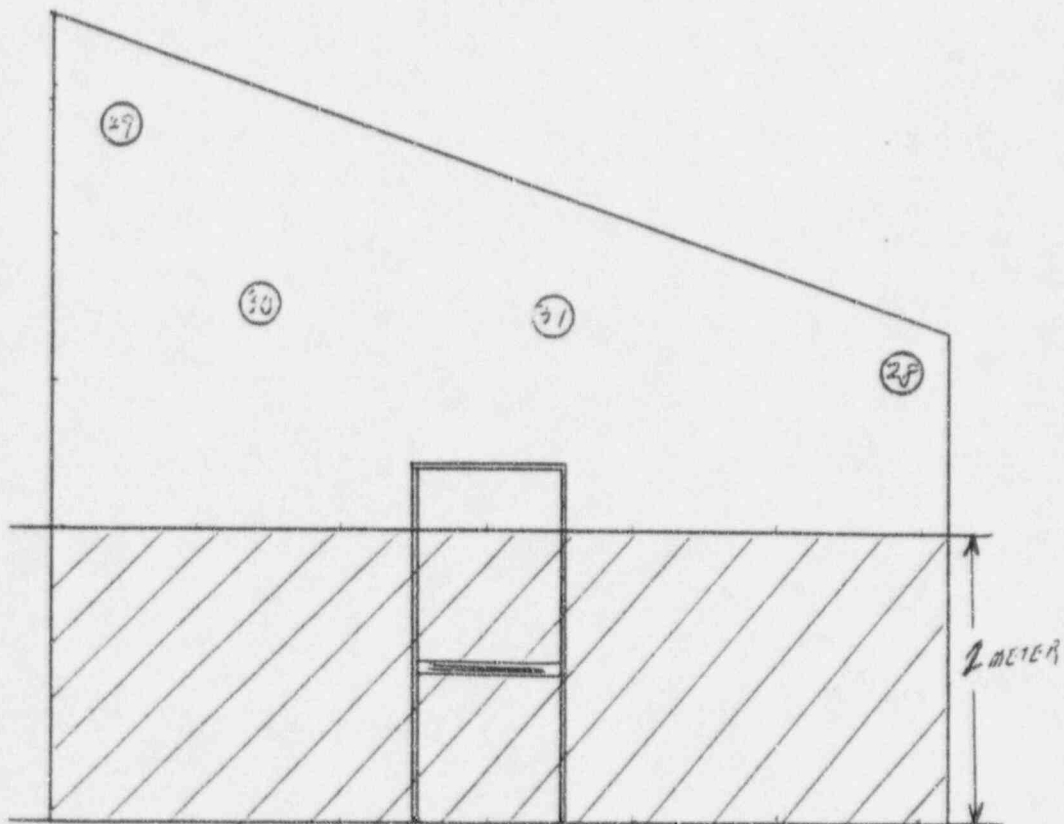
BLDG 4 - ROOM 1 WEST (INTERIOR) WALL
1/8" = APPROX. 1' ... EACH FULL GRID = APPROX. 1 M²



RADIOLOGICAL SURVEY FORM

Survey Number 091376 040117

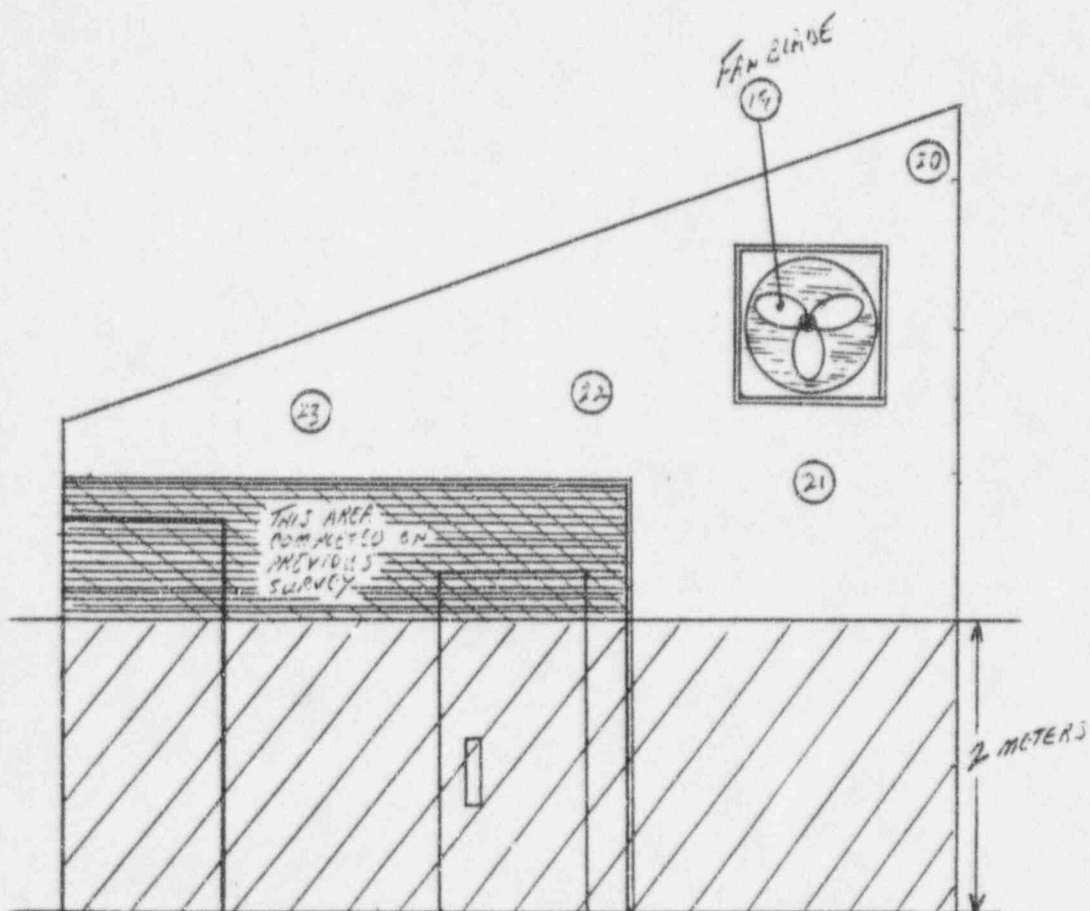
BLDG. 4 - ROOM 1
NORTH WALL
 $\frac{1}{4}" = \text{APPROX. } 1'$



RADIOLOGICAL SURVEY FORM

Survey Number 091896040117

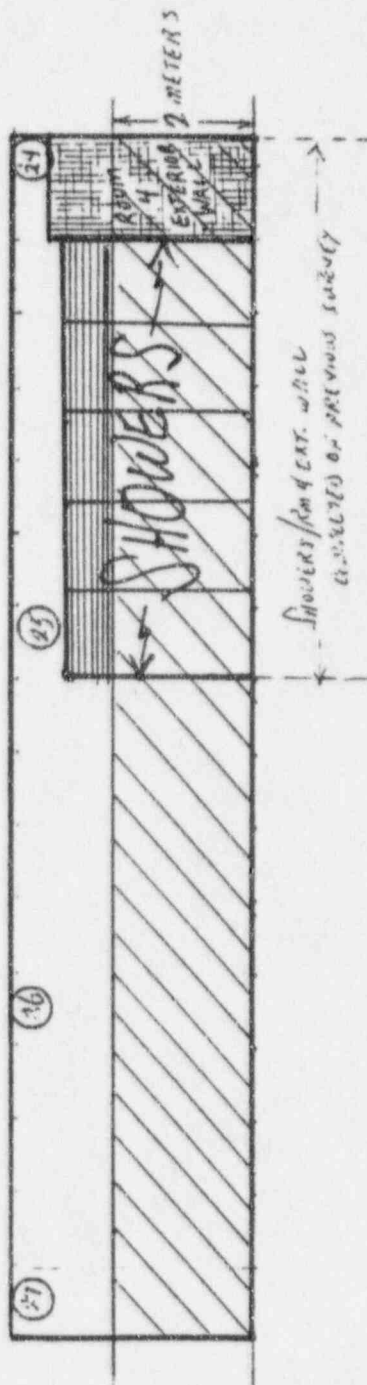
BLDG #4 - Room 1 $\frac{1}{4}" = \text{APPROX. } 1'$
SOUTH WALL (INSIDE VIEW)



RADIOLOGICAL SURVEY FORM

Survey Number 091896040117

Bldg. 4 - Room 1 EAST WALL
 $\frac{1}{8}'' = \text{APPROX } 1'$
 1 FULL GRID = APPROX. 1 m^2

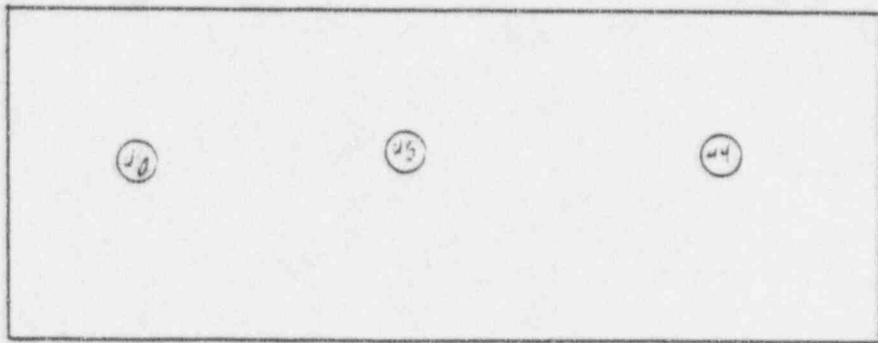
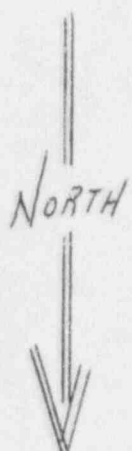


RADIOLOGICAL SURVEY FORM

Survey Number C91896040117

BLDG. 4 - ROOM 1

$\frac{3}{8}$ " = APPROX 1'



Room Room 4 + 5

91896040117

10 OF 12

ALPHA BETA
P10 WFO-RTSO

----- ALPHA ----- BETA -----
Eff: 50.00% Bkg: 0.00 cpm MDA: 9.03 dpm Eff: 57.00% Bkg: 1.00 cpm MDA: 12.91 dpm

CH	ART	IS	COUNTS	NET DPM	DPM	LIMITS	COUNTS	NET DPM	DPM	LIMITS	DATE	TIME
00	00	040117	4	4.00	13.37		4	3.00	5.26		09-23-96	21:18:57
00	00		1	1.00	5.33		4	3.00	5.26		09-23-96	21:20:23
00	00		0	0.00	0.00		1	0.00	0.00		09-23-96	21:21:59
00	00		0	0.00	0.00		1	0.00	0.00		09-23-96	21:23:25
00	00		0	0.00	0.00		1	0.00	0.00		09-23-96	21:24:51
00	00		0	0.00	0.00		0	0.00	0.00		09-23-96	21:26:17
00	00		1	1.00	5.33		1	0.00	0.00		09-23-96	21:27:43
00	00		2	2.00	6.67		1	0.00	0.00		09-23-96	21:29:10
00	00		0	0.00	0.00		0	-1.00	-1.75		09-23-96	21:30:36
00	00		1	1.00	5.33		1	0.00	0.00		09-23-96	21:32:02
00	00		0	0.00	0.00		1	0.00	0.00		09-23-96	21:33:28
00	00		0	0.00	0.00		0	-1.00	-1.75		09-23-96	21:34:54
00	00		1	1.00	6.67		0	-1.00	-1.75		09-23-96	21:36:20
00	00		2	2.00	10.00		0	2.00	3.51		09-23-96	21:37:46
00	00		0	0.00	0.00		0	-1.00	-1.75		09-23-96	21:39:12
00	00		0	0.00	0.00		0	2.00	3.51		09-23-96	21:40:38
00	00		0	0.00	0.00		0	2.00	3.51		09-23-96	21:42:04
00	00		0	0.00	0.00		1	0.00	0.00		09-23-96	21:43:30
00	00		1	1.00	5.33		1	0.00	0.00		09-23-96	21:44:56
00	00		0	0.00	0.00		1	1.00	1.75		09-23-96	21:46:22
00	00		0	0.00	0.00		0	4.00	7.02		09-23-96	21:47:48
00	00		0	0.00	0.00		0	2.00	3.51		09-23-96	21:49:14
00	00		0	0.00	0.00		1	1.00	1.75		09-23-96	21:50:40
00	00		0	0.00	0.00		1	1.00	1.75		09-23-96	21:52:06
00	00		0	0.00	0.00		0	-1.00	-1.75		09-23-96	21:53:32
00	00		2	2.00	3.51		2	1.00	1.75		09-23-96	21:54:58
00	00		0	0.00	0.00		0	5.00	8.77		09-23-96	21:56:24
00	00		1	1.00	5.33		0	-1.00	-1.75		09-23-96	21:57:50
00	00		0	0.00	0.00		1	0.00	0.00		09-23-96	21:59:16
00	00		0	0.00	0.00		2	1.00	1.75		09-23-96	22:00:42
00	00		0	0.00	0.00		0	-1.00	-1.75		09-23-96	22:02:08
00	00		0	0.00	0.00		1	0.00	0.00		09-23-96	22:03:34
00	00		0	0.00	0.00		0	-1.00	-1.75		09-23-96	22:05:00
00	00		0	0.00	0.00		1	0.00	0.00		09-23-96	22:06:26
00	00		0	0.00	0.00		0	-1.00	-1.75		09-23-96	22:07:52
00	00		1	1.00	5.33		1	0.00	0.00		09-23-96	22:09:18
00	00		0	0.00	0.00		1	0.00	0.00		09-23-96	22:10:44
00	00		0	0.00	0.00		1	0.00	0.00		09-23-96	22:12:10
00	00		1	1.00	5.33		4	3.00	5.26		09-23-96	22:13:36
00	00		0	0.00	0.00		1	0.00	0.00		09-23-96	22:15:02
00	00		0	0.00	0.00		1	0.00	0.00		09-23-96	22:16:28
00	00		1	1.00	5.33		1	0.00	0.00		09-23-96	22:17:54
00	00		0	0.00	0.00		4	3.00	5.26		09-23-96	22:19:20
00	00		0	0.00	0.00		2	1.00	1.75		09-23-96	22:20:46
00	00		0	0.00	0.00		4	3.00	5.26		09-23-96	22:22:12
00	00		0	0.00	0.00		0	2.00	3.51		09-23-96	22:23:38
00	00		2	2.00	6.67		1	3.00	5.26		09-23-96	22:25:04

Survey Point	Fixed Contamination		Background		Efficiency		Activity		Instrument Used
	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta Gamma	Alpha	Beta/Gamma dpm/100 cm ²	Alpha dpm/100 cm ²	
1	230	4	202	2	0.32	0.12	87.50	16.67	Model 2224 116240
2	220	1	202	2	0.32	0.12	56.25	-8.33	Model 2224 116240
3	246	4	202	2	0.32	0.12	137.50	16.67	Model 2224 116240
4	223	0	202	2	0.32	0.12	65.63	-16.67	Model 2224 116240
5	253	1	202	2	0.32	0.12	159.38	-8.33	Model 2224 116240
6	217	1	202	2	0.32	0.12	46.88	-8.33	Model 2224 116240
7	201	1	202	2	0.32	0.12	-3.13	-8.33	Model 2224 116240
8	215	1	202	2	0.32	0.12	40.63	-8.33	Model 2224 116240
9	176	4	202	2	0.32	0.12	-81.25	16.67	Model 2224 116240
10	190	1	202	2	0.32	0.12	-37.50	-8.33	Model 2224 116240
11	171	1	202	2	0.32	0.12	-96.88	-8.33	Model 2224 116240
12	184	0	202	2	0.32	0.12	-56.25	-16.67	Model 2224 116240
13	177	1	202	2	0.32	0.12	-78.13	-8.33	Model 2224 116240
14	189	0	202	2	0.32	0.12	-40.63	-16.67	Model 2224 116240
15	238	1	202	2	0.32	0.12	112.50	-8.33	Model 2224 116240
16	205	0	202	2	0.32	0.12	9.38	-16.67	Model 2224 116240
17	194	4	202	2	0.32	0.12	-25.00	16.67	Model 2224 116240
18	206	1	202	2	0.32	0.12	12.50	-8.33	Model 2224 116240
19	125	0	202	2	0.32	0.12	-240.63	-16.67	Model 2224 116240
20	212	0	202	2	0.32	0.12	31.25	-16.67	Model 2224 116240
21	218	0	202	2	0.32	0.12	50.00	-16.67	Model 2224 116240
22	183	1	202	2	0.32	0.12	-59.38	-8.33	Model 2224 116240
23	164	2	202	2	0.32	0.12	-118.75	0.00	Model 2224 116240
24	278	1	202	2	0.32	0.12	237.50	-8.33	Model 2224 116240
25	229	2	202	2	0.32	0.12	84.38	0.00	Model 2224 116240
26	265	1	202	2	0.32	0.12	196.88	-8.33	Model 2224 116240
27	262	0	202	2	0.32	0.12	187.50	-16.67	Model 2224 116240
28	283	1	202	2	0.32	0.12	253.13	-8.33	Model 2224 116240
29	270	1	202	2	0.32	0.12	212.50	-8.33	Model 2224 116240
30	258	3	202	2	0.32	0.12	175.00	8.33	Model 2224 116240

Fixed Contamination			Background		Efficiency		Activity		
Survey Point	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta Gamma	Alpha	Beta/Gamma dpm/100 cm ²	Alpha dpm/100 cm ²	Instrument Used
31	260	1	202	2	0.32	0.12	181.25	-8.33	Model 2224 116240
32	169	3	202	2	0.32	0.12	-103.13	8.33	Model 2224 116240
33	142	2	202	2	0.32	0.12	-187.50	0.00	Model 2224 116240
34	145	0	202	2	0.32	0.12	-178.13	-16.67	Model 2224 116240
35	160	1	202	2	0.32	0.12	-131.25	-8.33	Model 2224 116240
36	148	0	202	2	0.32	0.12	-168.75	-16.67	Model 2224 116240
37	147	2	202	2	0.32	0.12	-171.88	0.00	Model 2224 116240
38	170	0	202	2	0.32	0.12	-100.00	-16.67	Model 2224 116240
39	151	0	202	2	0.32	0.12	-159.38	-16.67	Model 2224 116240
40	142	1	202	2	0.32	0.12	-187.50	-8.33	Model 2224 116240
41	142	0	202	2	0.32	0.12	-187.50	-16.67	Model 2224 116240
42	130	0	202	2	0.32	0.12	-225.00	-16.67	Model 2224 116240
43	143	3	202	2	0.32	0.12	-184.38	8.33	Model 2224 116240
44	203	11	202	2	0.32	0.12	3.13	75.00	Model 2224 116240
45	201	15	202	2	0.32	0.12	-3.13	108.33	Model 2224 116240
46	188	10	202	2	0.32	0.12	-43.75	66.67	Model 2224 116240

RADIOLOGICAL SURVEY FORM

Survey Number

022097040101

Survey Description: <u>Bldg 4 Room 1</u>	
<u>NORTH WALL</u>	
Drawing Attached: <u>Yes</u>	No

Survey Date: <u>2-20-97</u>	Date
Survey by: <u>B. C. Anderson</u>	Signature
Print Name: <u>CHARSTEN</u>	Date
Review By: <u>John Wilson</u>	Signature
	Date

Instrument (1)	
Instrument Model: <u>PROTEAN</u>	
Instrument Ser. #: <u>621444</u>	
Calibration Due: <u>NA</u>	
Efficiency: <u>A: 0.28 B: 0.33</u>	
MADA: <u>A: 15.00</u>	
MIDA: <u>B: 24.55</u>	

Instrument (3)	
Instrument Model: <u>19</u>	
Instrument Ser. #: <u>76228</u>	
Calibration Due: <u>7-22-97</u>	
Efficiency: <u>NA</u>	
MADA: <u>As A</u>	
MIDA: <u>As A</u>	

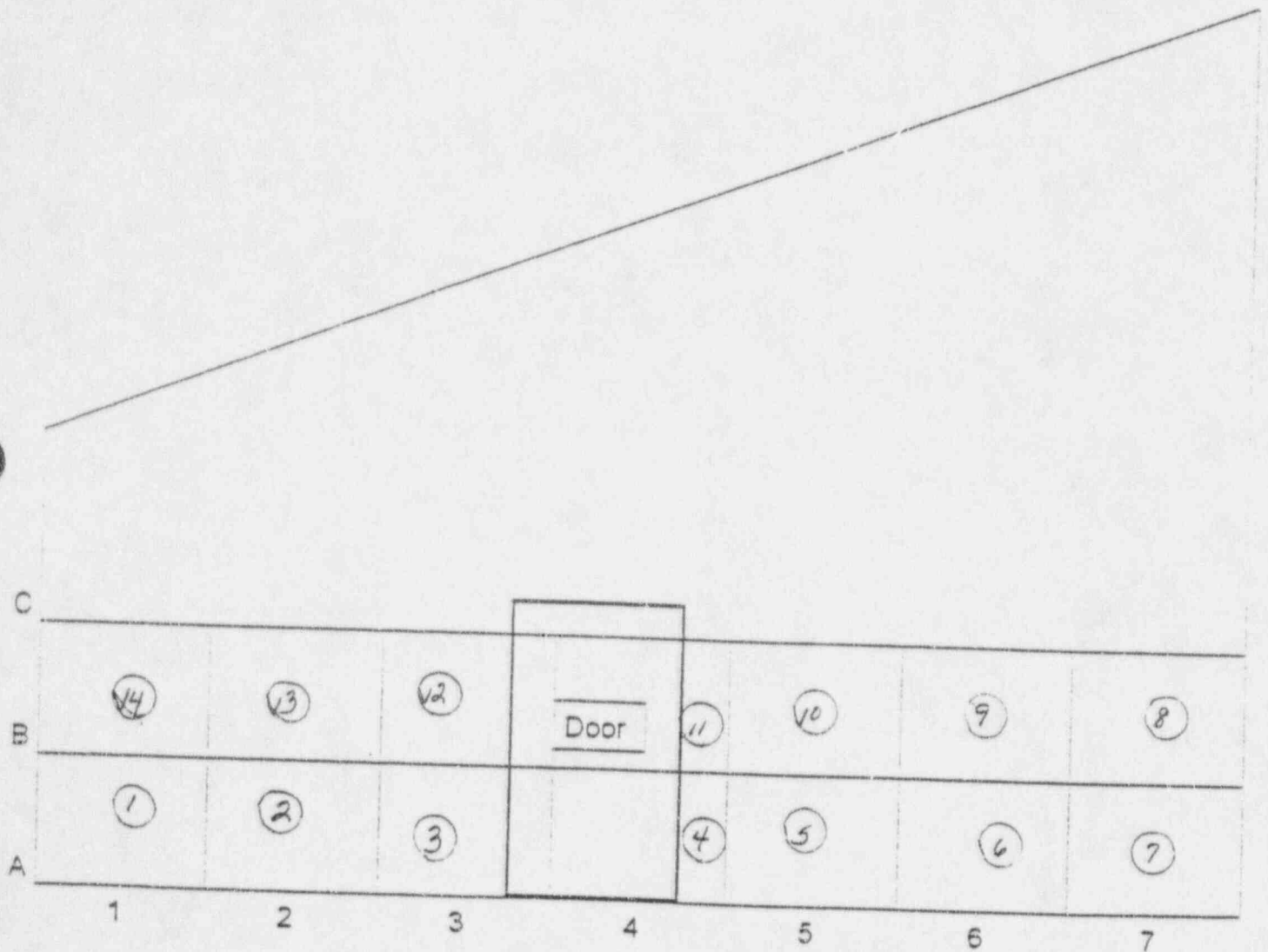
Instrument (2)	
Instrument Model: <u>062</u>	
Instrument Ser. #: <u>129450</u>	
Calibration Due: <u>12-5-97</u>	
Efficiency: <u>A: 0.16 B: 0.23</u>	
MADA: <u>A: 65.19</u>	
MIDA: <u>B: 49.67</u>	

Instrument (4)	
Instrument Model: <u>NA</u>	
Instrument Ser. #: <u>NA</u>	
Calibration Due: <u>NA</u>	
Efficiency: <u>NA</u>	
MADA: <u>NA</u>	
MIDA: <u>NA</u>	

Survey Point	Surveyable Contamination beta/gamma dpm/100cm ²	alpha dpm/100cm ²	Fixed Contamination beta/gamma cpm/100cm ²	alpha cpm/100cm ²	Radiation Level (mR/hr)	Instrument Used	Additional Comments
1	SEE	ADS	269	4	20	1-2-3	100 % FALSE ALARM, BETA
2			243	2	18		
3			273	4	18		PER READINGS TAKE IN FROM SURFACE
4			243	4	16		
5			226	5	16		
6			200	0	16		ONE MINUTE STATIC COUNT PER IN ²
7			222	1	16		
8			203	6	15		ONE SQUARE PER IN ²
9			199	1	15		
10			215	3	14		
11			231	8	16		
12			251	8	18		
13	SEE	ADS	270	2	15	1-2-3	

022097040101

Survey Point	Sourceless Contribution beta/gamma cpm/100cm ²	alpha dpm/100cm ²	Fixed Contribution beta/gamma cpm/100cm ²	alpha cpm/100cm ²	Radon Level (dpm/lb)	Institution Used	Additional Comments
14	SEE	205	283	6	15	1-2-3	SEE SHEET ONE



Building 4 Room 1 - North Wall

Survey# 022097040101

PAGE 4 OF 5

ALPHA						BETA						
Eff: 28.00% Bkg: 0.00 cpm MDA: 9.68 dpm						Eff: 33.00% Bkg: 1.00 cpm MDA: 22.30 dpm						
SN	RPT	ID	COUNTS	NET CPM	DPM	LIMITS	COUNTS	NET CPM	DPM	LIMITS	DATE	TIME
001	00	040101	0	0.00	0.00		0	-1.00	-3.03		02-20-97	14:19:29
002	00		2	2.00	7.14		4	3.00	9.09		02-20-97	14:20:57
003	00		0	0.00	0.00		2	1.00	3.03		02-20-97	14:22:26
004	00		2	2.00	7.14		1	0.00	0.00		02-20-97	14:23:55
005	00		0	0.00	0.00		4	3.00	9.09		02-20-97	14:25:23
006	00		0	0.00	0.00		0	-1.00	-3.03		02-20-97	14:26:52
007	00		2	2.00	7.14		2	1.00	3.03		02-20-97	14:28:20
008	00		1	1.00	3.57		1	0.00	0.00		02-20-97	14:29:49
009	00		0	0.00	0.00		3	2.00	6.06		02-20-97	14:31:17
010	00		0	0.00	0.00		4	3.00	9.09		02-20-97	14:32:46
011	00		1	1.00	3.57		6	5.00	15.15		02-20-97	14:34:15
012	00		0	0.00	0.00		0	-1.00	-3.03		02-20-97	14:35:43
013	00		0	0.00	0.00		3	2.00	6.06		02-20-97	14:37:12
014	00		1	1.00	3.57		3	2.00	6.06		02-20-97	14:38:40

Fixed Contamination			Background		Efficiency		Activity		Instrument Used
Survey Point	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta Gamma	Alpha	Beta/Gamma dpm/100 cm ²	Alpha dpm/100 cm ²	
1	269	4	200	3	0.23	0.16	300.00	6.25	Model 2224 129450
2	242	2	200	3	0.23	0.16	182.61	-6.25	Model 2224 129450
3	273	4	200	3	0.23	0.16	317.39	6.25	Model 2224 129450
4	243	4	200	3	0.23	0.16	186.96	6.25	Model 2224 129450
5	226	5	200	3	0.23	0.16	113.04	12.50	Model 2224 129450
6	200	0	200	3	0.23	0.16	0.00	-18.75	Model 2224 129450
7	222	1	200	3	0.23	0.16	95.65	-12.50	Model 2224 129450
8	203	6	200	3	0.23	0.16	13.04	18.75	Model 2224 129450
9	199	1	200	3	0.23	0.16	-4.35	-12.50	Model 2224 129450
10	215	3	200	3	0.23	0.16	65.22	0.00	Model 2224 129450
11	231	8	200	3	0.23	0.16	134.78	31.25	Model 2224 129450
12	251	8	200	3	0.23	0.16	221.74	31.25	Model 2224 129450
13	270	2	200	3	0.23	0.16	304.35	-6.25	Model 2224 129450
14	283	6	200	3	0.23	0.16	360.87	18.75	Model 2224 129450

RADIOLOGICAL SURVEY FORM

Survey Number 022097040102

Survey Description: BLOG 4 ROOM 1
SURVEY SHOWERS
#1 AND #2
SEE SURVEY #
091296040111
 Drawing Attached: Yes No

Survey Date: 2-20-97
 Survey by: S. Andersen Date: 2-20-97
 Print Name: GARSTENJEN
 Review by: Andersen Date: 2-21-97

Instrument (1)
 Instrument Model: PROJEAN
 Instrument Ser. #: 621444
 Calibration Due: N/A
 Efficiency: A: 0.28 B: 0.33
 MDA: A: 15.00 B: 0
 MDA: B: 24.55 B: 1

Instrument (2)
 Instrument Model: 19
 Instrument Ser. #: 76228
 Calibration Due: 7-22-97
 Efficiency: N/A
 MDA: N/A B: 15

Instrument (3)
 Instrument Model: 2224
 Instrument Ser. #: 129450
 Calibration Due: 12-5-97
 Efficiency: A: 0.14 B: 0.23
 MDA: A: 65.19 B: 6.30
 MDA: B: 249.67 B: 4.43

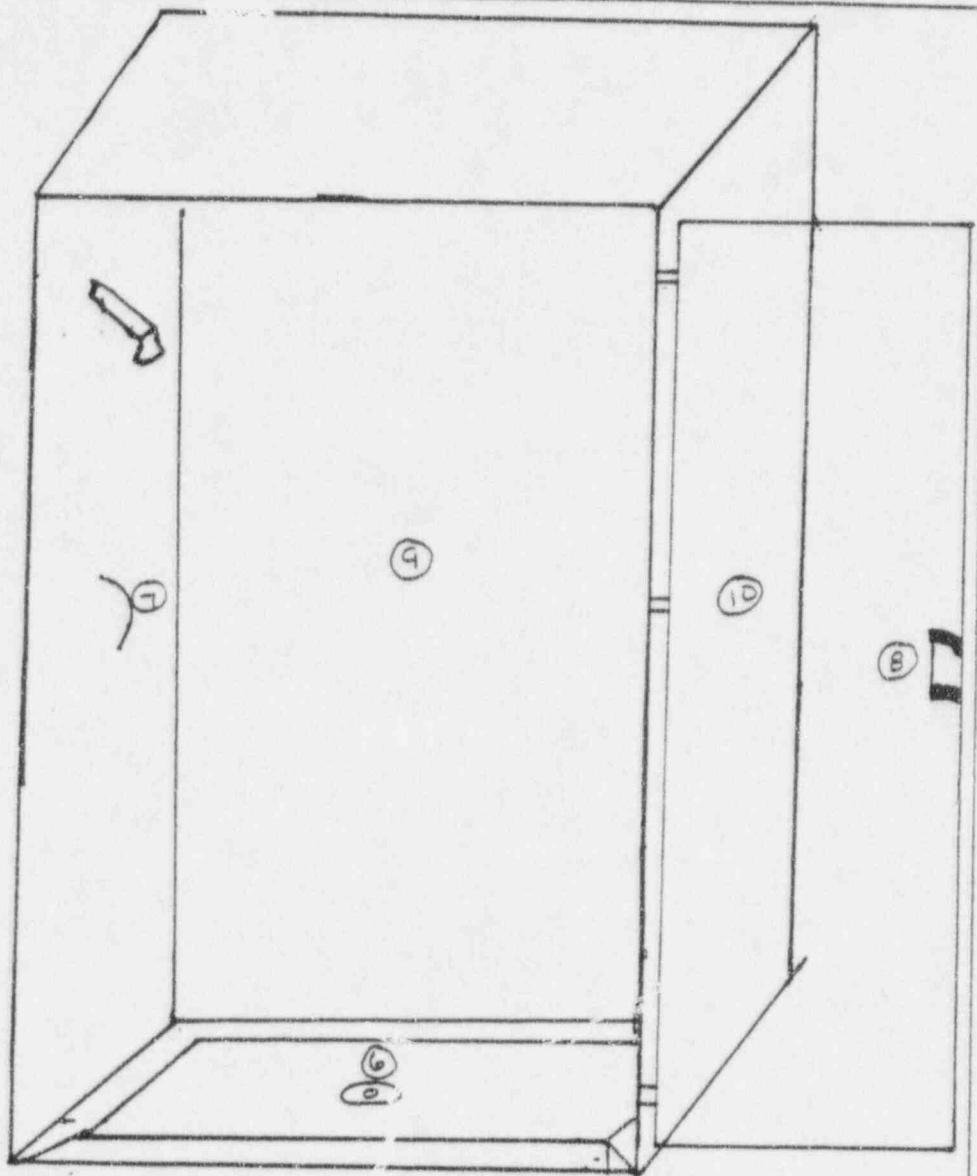
Instrument (4)
 Instrument Model: N/A
 Instrument Ser. #: N/A
 Calibration Due: N/A
 Efficiency: N/A
 MDA: N/A B: 200

Survey Point	Measurable Contamination beta gamma dpm/100cm ²	alpha dpm/100cm ²	Fitted Contamination beta gamma cpm/100cm ²	alpha cpm/100cm ²	Radiation Level (uR/hr)	Instrument Used	Additional Comments
1	SEE	NOS	200	2	15	1-2-3	1-5 SHOWER STALL #1
2	SEE	NOS	214	1	15	1-2-3	6-10 SHOWER STALL #2
3	SEE	NOS	206	1	15	1-2-3	4R READING 1A FROM SURFACE
4	SEE	NOS	210	3	15	1-2-3	100% FRISK ALPHA, BETA
5	SEE	NOS	211	3	15	1-2-3	ONE SWEAT VEST IN 2
6	SEE	NOS	199	3	15	1-2-3	ONE MINUTE STATIC COUNT
7	SEE	NOS	208	4	15	1-2-3	PER 1hr ²
8	SEE	NOS	210	4	15	1-2-3	
9	SEE	NOS	216	3	15	1-2-3	
10	SEE	NOS	202	4	15	1-2-3	

IT Corporation

RADIOLOGICAL SURVEY FORM

Survey Number 022097040102

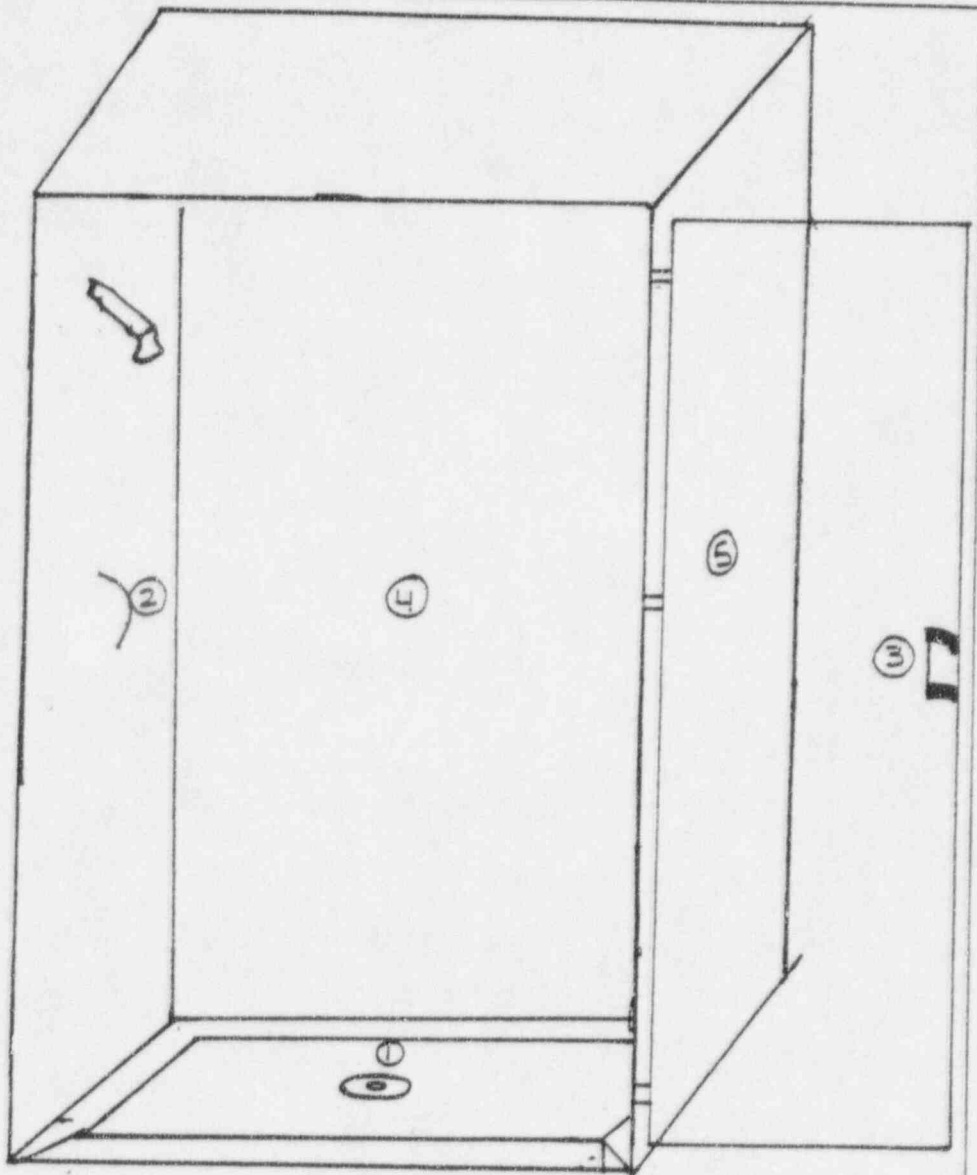


SHOWER STALL

2

IT Corporation

RADIOLOGICAL SURVEY FORM

Survey Number 022097040102

SHOWER STALL

1

Survey # 022097040102

PAGE 4 OF 5

ALPHA						BETA						
Ef: 28.00% Bkg: 0.00 cpm MDA: 9.68 dpm Eff: 33.00% Bkg: 1.00 cpm MDA: 22.30 dpm												
-SN-	-RPT-	-- ID --	- COUNTS -	- NET CPM -	--- DPM ---	- LIMITS -	- COUNTS -	- NET CPM -	--- DPM ---	- LIMITS -	- DATE -	- TIME -
00		040102	2	2.00	7.14		1	0.00	0.00		02-20-97	14:48:08
002	00		0	0.00	0.00		0	-1.00	-3.03		02-20-97	14:49:37
003	00		0	0.00	0.00		2	1.00	3.03		02-20-97	14:51:06
004	00		0	0.00	0.00		1	0.00	0.00		02-20-97	14:52:37
005	00		0	0.00	0.00		2	1.00	3.03		02-20-97	14:54:04
006	00		0	0.00	0.00		4	3.00	9.09		02-20-97	14:55:32
007	00		3	3.00	10.71		2	1.00	3.03		02-20-97	14:57:01
008	00		1	1.00	3.57		2	1.00	3.03		02-20-97	14:58:30
009	00		0	0.00	0.00		1	0.00	0.00		02-20-97	14:59:58
010	00		1	1.00	3.57		1	0.00	0.00		02-20-97	15:01:27

Survey Point	Fixed Contamination		Background		Efficiency		Activity		Instrument Used
	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta Gamma	Alpha	Beta/Gamma dpm/100 cm ²	Alpha dpm/100 cm ²	
1	200	2	200	3	0.23	0.16	0.00	-6.25	Model 2224 129450
2	216	1	200	3	0.23	0.16	69.57	-12.50	Model 2224 129450
3	206	1	200	3	0.23	0.16	26.09	-12.50	Model 2224 129450
4	210	3	200	3	0.23	0.16	43.48	0.00	Model 2224 129450
5	211	3	200	3	0.23	0.16	47.83	0.00	Model 2224 129450
6	199	3	200	3	0.23	0.16	-4.35	0.00	Model 2224 129450
7	208	4	200	3	0.23	0.16	34.78	6.25	Model 2224 129450
8	210	4	200	3	0.23	0.16	43.48	6.25	Model 2224 129450
9	216	3	200	3	0.23	0.16	69.57	0.00	Model 2224 129450
10	202	4	200	3	0.23	0.16	8.70	6.25	Model 2224 129450

Survey Number 10107X 040004

Instrument (1)	
Instrument Model: PROTEAN	
Instrument Ser. #: K26-150	
Calibration Due: N/A	
Efficiency: A-38 B-037	
MDA: A-18.52 CF: A-3.18 BKGA-3	
MDA: B-5.88 CF: B-0.52 BKGB-1	

Instrument (2):	2224
Instrument Model:	
Instrument Ser. #	125120
Calibration Due:	245-97
Efficiency:	A-0.5 B-1.2
MDA-A-37.4 CF-A-6.87	BKG-A-5.4
MDA-B-21.4 CF-B-4.48	BKG-B-4.24

Instrument Model:	Instrument: (3)
Instrument Ser. #:	
Calibration Due:	
Efficiency:	
CF:	BKG:

Instrument Mod. #	Instrument (4)
Instrument Ser. #	
Calibration Due:	
Efficiency:	
CF:	BKG:

[illegible]

101096040001

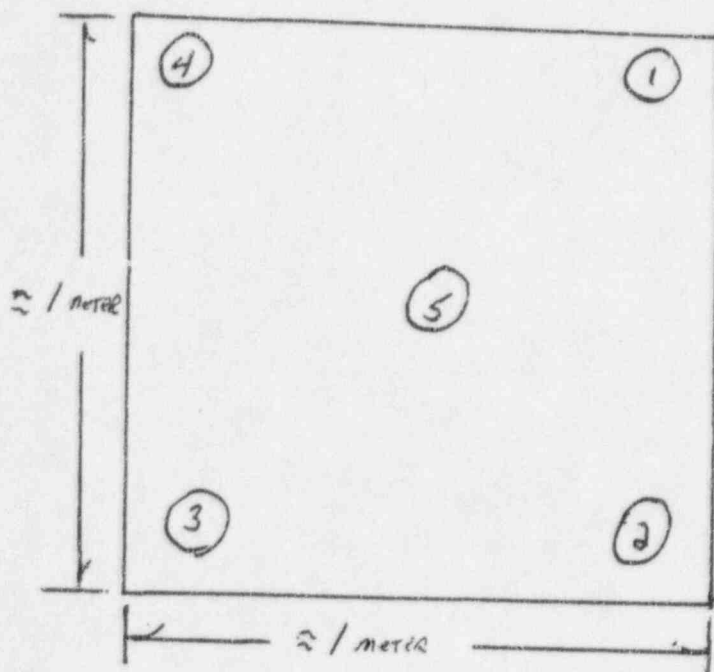
Survey Point	Measurable Contamination bets/gamma dpm/100cm ²	alpha dpm/100cm ²	Fixed Contamination bets/gamma cpm/100cm ²	alpha cpm/100cm ²	Radiation Level (uR/hr)	Instrument Used	Additional Comments
E-2	See PDS		351	32	NA	1,2	Grid E-2, Bldg 4, Room 3 on Floor
2			263	17			
3			218	11			
4			264	16			
5			309	7			
Average	for Grid E-2		281	14.6			Grid E-2 5 Point Sum Average
D-1	See PDS		194	36			Grid D-1, Bldg 4, Room 2 on Floor
7			214	30			
8			238	25			
9			198	19			
10			169	11			
Average	for Grid D-1		200.6	24.2			Grid D-1 5 Point Sum Average
G-8	See PDS		250	20			Grid G-8, Bldg 4, Room 2 on Floor
11			164	8			
12			277	12			
13			243	17			
14			315	41			
15			249.8	20.6			
Average	for Grid G-8		226	19			Grid G-8 5 Point Average
B-7	See PDS		223	17			Grid B-7, Bldg 4, Room 1 on Floor
16			200	17			
17			214	17			
18			202	14			
19			214.2	16.8			
20			146	10			
Average	for Grid B-7		317	27			Grid B-7 5 Point Average
C-7	See PDS		168	7			Grid C-7, Bldg 4 Room 1 on Floor
21			183	12			
22			224	12			
23			268	13.6			
24							
25							
Average	for Grid C-7						Grid C-7 5 Point Average

RADIOLOGICAL SURVEY FORM

Survey Number 101096040004Building 4, Room 3
FLOOR

From Survey # 092596040306

Grid # E-2



RADIOLOGICAL SURVEY FORM

Survey Number

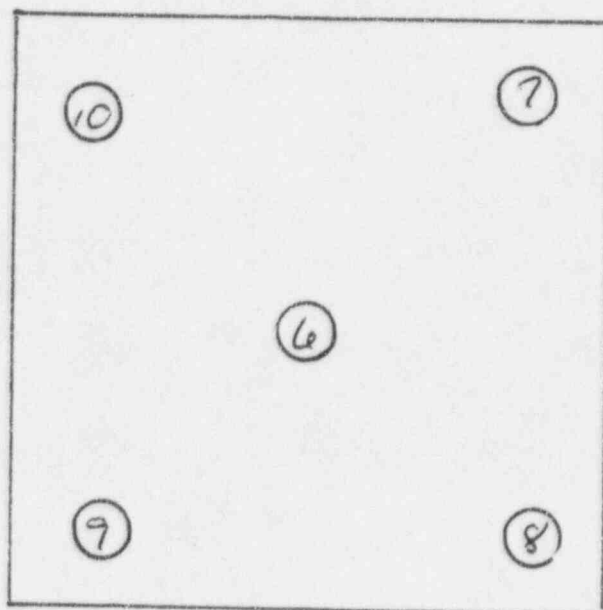
101096040004

Building # 4, Room # 2

FLOOR

From Survey # 092096040206

Grid # D-1



RADIOLOGICAL SURVEY FORM

Survey Number

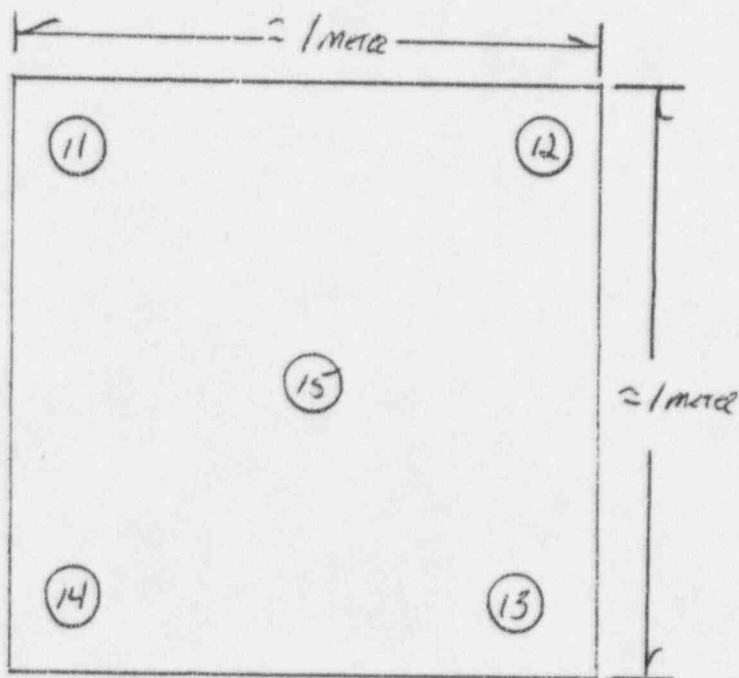
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Building #4, Room #2

FLOOR

From Survey # 092096040206

Grid # G-8

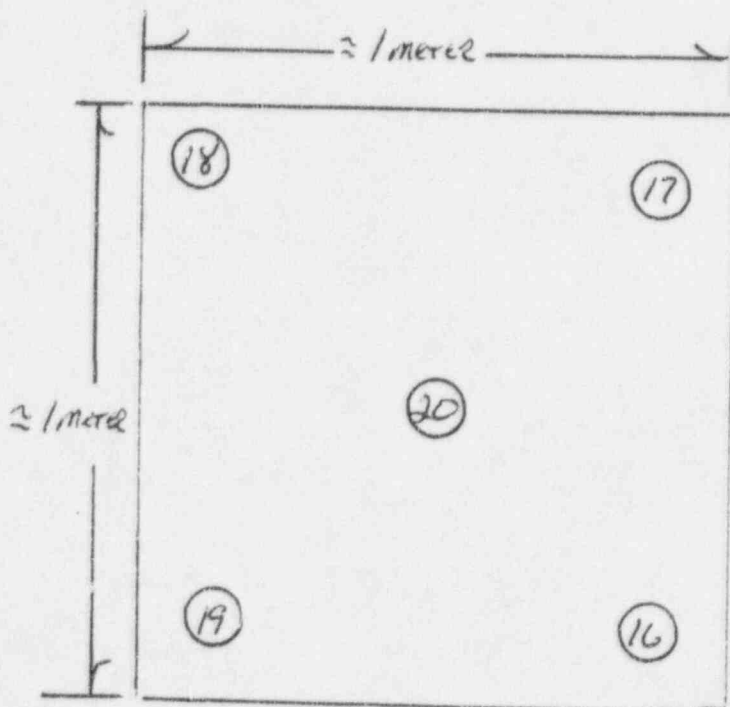


RADIOLOGICAL SURVEY FORM

Survey Number

101096040004

Building # 4, Room # 1
FLOOR
From Survey # 090996040104
Grid # B-7



RADIOLOGICAL SURVEY FORM

Survey Number

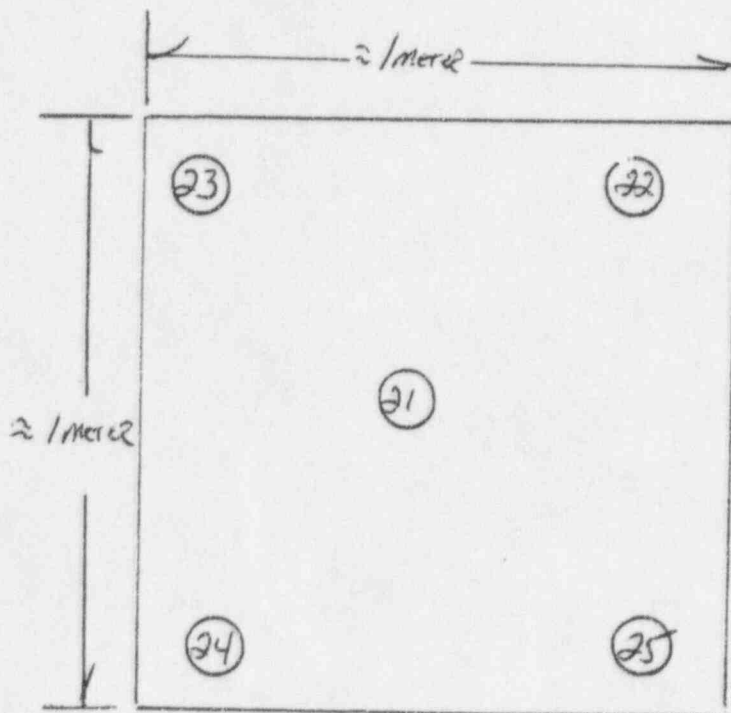
101096040004

Building # 4, Room # 1

FLOOR

From Survey # 050996040104

Grid # C-7



10109604 0004

8 OF 10

ALPHA BETA
1010-100

----- ALPHA ----- BETA -----
 Eff: 28.10% Bkg: 1.00 dpm YDA: 7.62 dpm Eff: 71.00% Bkg: 1.00 dpm YDA: 20.74 dpm

CH	SP	ID	COUNTS	NET CPM	CPM	LIMITS	COUNTS	NET CPM	CPM	LIMITS	DATE	TIME
001	00	040004	1	1.00	7.37		1	1.00	0.00		10-10-96	16:35:15
002	00		1	1.00	7.14		0	-1.00	-3.27		10-10-96	16:39:36
003	00		1	1.00	7.37		0	-1.00	-3.27		10-10-96	16:41:06
004	00		1	1.00	10.71		1	1.00	0.00		10-10-96	16:42:77
005	00		1	1.00	0.00		3	4.00	12.90		10-10-96	16:44:06
006	00		1	1.00	7.37		1	0.00	0.00		10-10-96	16:45:39
007	00		0	0.00	0.00		0	-1.00	-3.27		10-10-96	16:47:09
008	00		1	1.00	7.37		1	0.00	7.62		10-10-96	16:48:40
009	00		1	1.00	7.37		1	1.00	7.27		10-10-96	16:50:11
010	00		1	1.00	7.37		1	1.00	7.27		10-10-96	16:51:41
011	00		0	0.00	0.00		1	0.00	0.00		10-10-96	16:53:12
012	00		1	1.00	7.37		0	-1.00	-3.27		10-10-96	16:54:43
013	00		0	0.00	0.00		0	-1.00	-3.27		10-10-96	16:56:14
014	00		1	1.00	7.37		1	0.00	0.00		10-10-96	16:57:44
015	00		1	1.00	7.37		0	-1.00	-3.27		10-10-96	16:59:15
016	00		1	1.00	1.00		1	1.00	7.27		10-10-96	17:00:46
017	00		0	0.00	1.00		0	-1.00	-3.27		10-10-96	17:02:17
018	00		0	0.00	0.00		0	-1.00	-3.27		10-10-96	17:03:47
019	00		1	1.00	7.37		1	1.00	7.27		10-10-96	17:05:18
020	00		0	1.00	7.37		0	-1.00	-3.27		10-10-96	17:06:49
021	00		1	1.00	7.14		1	1.00	0.00		10-10-96	17:08:20
022	00		1	1.00	10.71		0	-1.00	-3.27		10-10-96	17:09:50
023	00		0	0.00	0.00		1	0.00	8.45		10-10-96	17:11:21
024	00		1	1.00	7.37		1	1.00	7.27		10-10-96	17:12:51
025	00		1	1.00	7.37		1	0.00	0.00		10-10-96	17:14:22

Survey Point	Fixed Contamination		Background		Efficiency		Activity		Instrument Used
	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta Gamma	Alpha	Beta/Gamma dpm/100 cm ²	Alpha dpm/100 cm ²	
1	351	22	182	0	0.22	0.15	768.18	146.67	Model 2224 125560
2	263	17	182	0	0.22	0.15	368.18	113.33	Model 2224 125560
3	218	11	182	0	0.22	0.15	163.64	73.33	Model 2224 125560
4	264	16	182	0	0.22	0.15	372.73	106.67	Model 2224 125560
5	309	7	182	0	0.22	0.15	577.27	46.67	Model 2224 125560
Avg	281	14.6	182	0	0.22	0.15	450.00	97.33	Model 2224 125560
6	194	36	135	2	0.22	0.15	268.18	226.67	Model 2224 125560
7	214	30	135	2	0.22	0.15	359.09	186.67	Model 2224 125560
8	228	25	135	2	0.22	0.15	422.73	153.33	Model 2224 125560
9	198	19	135	2	0.22	0.15	286.36	113.33	Model 2224 125560
10	169	11	135	2	0.22	0.15	154.55	60.00	Model 2224 125560
Avg	200.6	24.2	135	2	0.22	0.15	298.18	148.00	Model 2224 125560
11	250	20	135	2	0.22	0.15	522.73	120.00	Model 2224 125560
12	164	8	135	2	0.22	0.15	131.82	40.00	Model 2224 125560
13	277	17	135	2	0.22	0.15	645.45	100.00	Model 2224 125560
14	243	17	135	2	0.22	0.15	490.91	100.00	Model 2224 125560
15	315	41	135	2	0.22	0.15	818.18	260.00	Model 2224 125560
Avg	249.8	20.6	135	2	0.22	0.15	521.82	124.00	Model 2224 125560
16	226	19	188	3	0.22	0.15	172.73	106.67	Model 2224 125560
17	223	17	188	3	0.22	0.15	159.09	93.33	Model 2224 125560
18	206	17	188	3	0.22	0.15	81.82	93.33	Model 2224 125560
19	214	17	188	3	0.22	0.15	118.18	93.33	Model 2224 125560
20	202	14	188	3	0.22	0.15	63.64	73.33	Model 2224 125560
Avg	214.2	16.8	188	3	0.22	0.15	119.09	92.00	Model 2224 125560
21	446	10	188	3	0.22	0.15	1172.73	46.67	Model 2224 125560
22	317	27	188	3	0.22	0.15	586.36	160.00	Model 2224 125560

IT Corporation

Molycorp 768380

FIXED CONTAMINATION DATA SHEET

Survey Number

101095040004

Page 10 of 10

Survey Point	Fixed Contamination		Background		Efficiency		Activity		Instrument Used
	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta Gamma	Alpha	Beta/Gamma dpm/100 cm ²	Alpha dpm/100 cm ²	
23	168	7	188	3	0.22	0.15	-90.91	26.67	Model 2224 125560
24	183	12	188	3	0.22	0.15	-22.73	60.00	Model 2224 125560
25	226	12	188	3	0.22	0.15	172.73	60.00	Model 2224 125560
Avg	268	13.6	188	3	0.22	0.15	363.64	70.67	Model 2224 125560

RADIOLOGICAL SURVEY FORM

Survey Number: 022597040103

Survey Description: 0206 DM
Rooms 3, 2, 3, 4, 5
ADDITIONAL SURVEY DATA
RESULTS NEEDED
Drawing Attached: ☒ No

Instrument (1)
Instrument Model: PROTUM
Instrument Ser. #: 628134
Calibration Due: N/A
Efficiency: A-0.21 B-0.33
MIDA: A-43.00 BKG-A-0
MIDA: B-24.15 BKG-B-4

Instrument (2)
Instrument Model: 2224
Instrument Ser. #: 116240
Calibration Due: 5-6-97
Efficiency: A-0.25 B-0.21
MIDA: A-55.50 BKG-A-5
MIDA: B-24.52 BKG-B-59

Survey Data:
Survey by: J. G. Anderson
Signature: J. G. Anderson
Date: 12/2/97
Print Name: J. G. Anderson
Review By: J. G. Anderson
Signature: J. G. Anderson
Date: 12/2/97

Instrument (3)
Instrument Model: A
Instrument Ser. #: A
Calibration Due: A
Efficiency: A
BKG: A

Instrument (4)
Instrument Model: A
Instrument Ser. #: A
Calibration Due: A
Efficiency: A
BKG: A

Survey Point	Sanizable Contamination beta/gamma dpm/100cm ²	alpha dpm/100cm ²	Fixed Contamination beta/gamma cpm/100cm ²	alpha cpm/100cm ²	Ballast Level (uSv/h)	Instrument Used	Additional Comments
1	NA	NA	NA	NA	NA	1-2	ADDITIONAL DATA NEEDED
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13	NA	NA	NA	NA	NA	1-2	

RADIOLOGICAL SURVEY FORM CONTINUATION SHEET

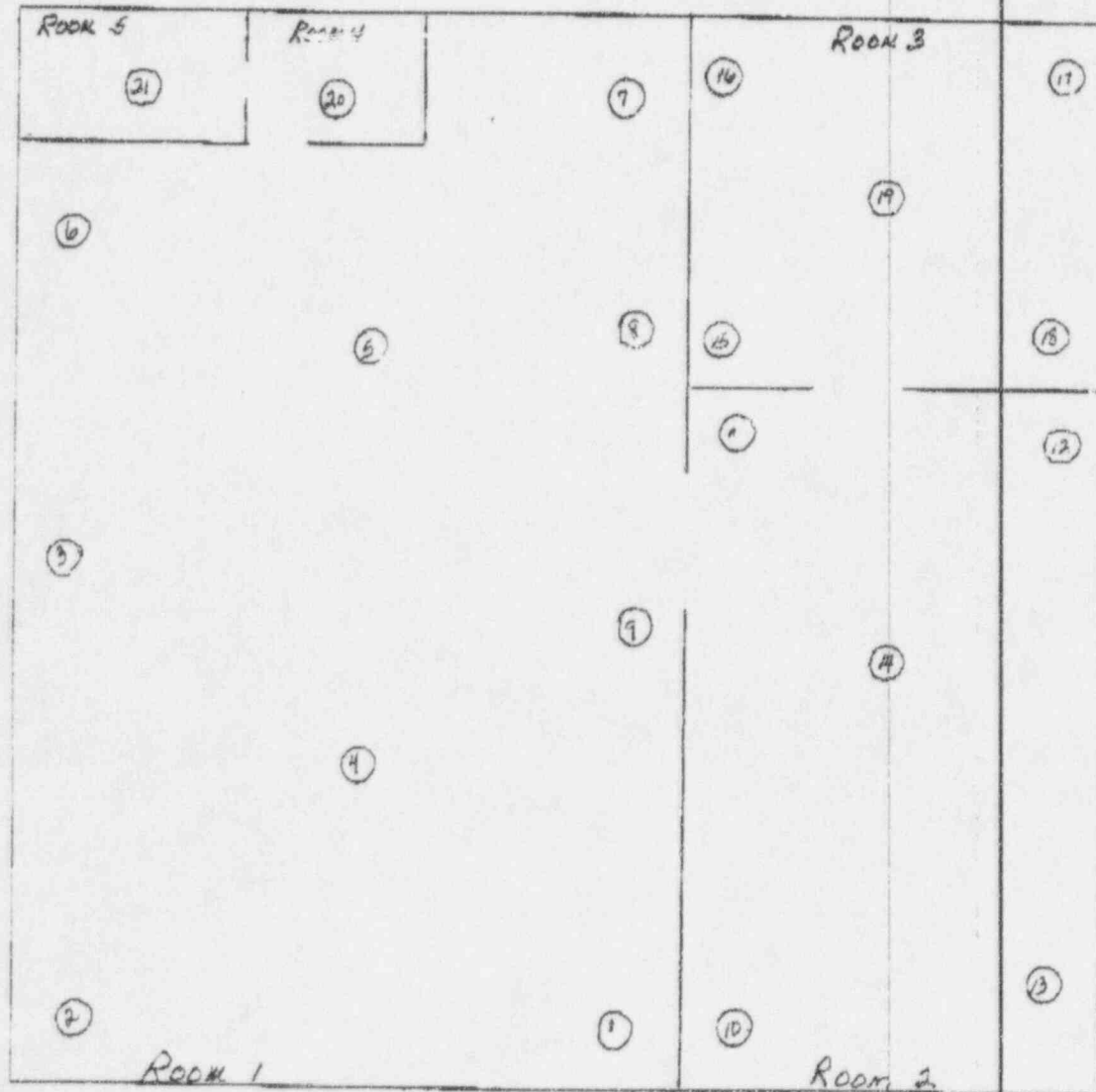
Survey Number 022597040103

Survey Point	Source Contamination Rad/SqM Sp/100cm ²	Area Contamination Rad/SqM Sp/100cm ²	Rad Level (dpm)	Rad Level (dpm)	Additional Comments
14	NA	NA	NA	NA	SEE SHEET ONE
15	NA	NA	NA	NA	
16	NA	NA	NA	NA	
17	NA	NA	NA	NA	
18	NA	NA	NA	NA	
19	NA	NA	NA	NA	
20	NA	NA	NA	NA	
21	NA	NA	NA	NA	

IT Corporation
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Page 3 of 3

RADIOLOGICAL SURVEY FORM

Survey Number 022597040103

Appendix C
Section C-2

RADIOLOGICAL SURVEY FORM

Survey Number

091996040205

Survey Description: DETECTED AREA
BLDG. 4 - NO. 2
FL 003 - CORRELATE METERS
N/A
 Drawing Attached: Yes ☒ No ☐

Instrument (1)
 Instrument Model: PROTEAN
 Instrument Ser. #: 621444
 Calibration Due: N/A
 Efficiency: A-0.35 B-0.58
 MDA: A-28.94 CF: A-4.06 BKG: A-0
 MDA: B-17.72 CF: B-1.74 BKG: B-2

Instrument (2)
 Instrument Model: MODEL 2224
 Instrument Ser. #: 116240
 Calibration Due: 8-2-97 8:30 02/23/97
 Efficiency: A-0.12 B-0.32
 MDA: A-35.0 CF: A-8.85 BKG: A-3
 MDA: B-19.13 CF: B-8.13 BKG: B-155

Survey Date: 08-18-96
 Survey by: W.H. 11-11-96
 Signature: [Signature] Date: 11-11-96
 Print Name: W. H. KUBANIT
 Review By: [Signature] Date: 9 12/1/96

Instrument (3)
 Instrument Model: 18
 Instrument Ser. #: 76228
 Calibration Due: 01-15-97
 Efficiency: N/A
 MDA: N/A CF: N/A BKG: 9 mR/hr

Instrument (4)
 Instrument Model: N/A
 Instrument Ser. #: N/A
 Calibration Due: N/A
 Efficiency: N/A
 MDA: N/A CF: N/A BKG: N/A

Survey Point	Source Contamination beta/gamma dpm/100cm ²	alpha dpm/100cm ²	Fixed Contamination beta/gamma cpm/100cm ²	alpha cpm/100cm ²	Radiation Level (uR/hr)	Instrument Used	Additional Comments
							(1) 2224 BACKGROUND: $\alpha = \beta =$
							(2) 100% FAIRSK EACH GRID FOR α & β
							(3) 1 MINUTE STATIC COUNT FOR α & β
							(4) X SURVEY AT 1 METER FROM SURVEY POINT LOCATION SURFACE
							(5) CIRCLED NUMBERS ON MAP INDICATE SURVEY POINT LOCATION.
							N/A
							N/A

RADIOLOGICAL SURVEY FORM CONTINUATION SHEET

Survey Number 081986040205

Survey Point	Smearable Contamination becs/gamma dpm/100cm ²	alpha dpm/100cm ²	Fixed Contamination becs/gamma dpm/100cm ²	alpha dpm/100cm ²	Radiation Level (uR/hr)	Instrument Used	Additional Comments
1			178	3	8.12	1213	A1 FLOOR
2			205	11	8.10		A2
3			175	13	8.10		A3
4			171	22	9		A4
5			234	13	9		A5
6			145	14	9		A6
7			184	13	9		A7
8			160	10	9		A8
9			150	10	9		A8
10			163	5	9		A7
11			133	4	9		A6
12			177	14	9		A5
13			173	21	10		A4
14			184	14	10		A3
15			197	18	10		A2
16			227	15	12		A1
17			191	12	12		C1
18			173	18	10		C2
19			179	9	10		C3
20			219	30	10		C4
21			144	13	9		C5
22			162	7	9		C6
23			176	8	9		C7
24			145	12	9		C8
25			194	24	9		D8
26			200	7	9		D7
27			202	2	9		P6
28			187	9	9		P5
29			220	14	10		P4
30			183	13	10		P3
31			198	12	12		P2

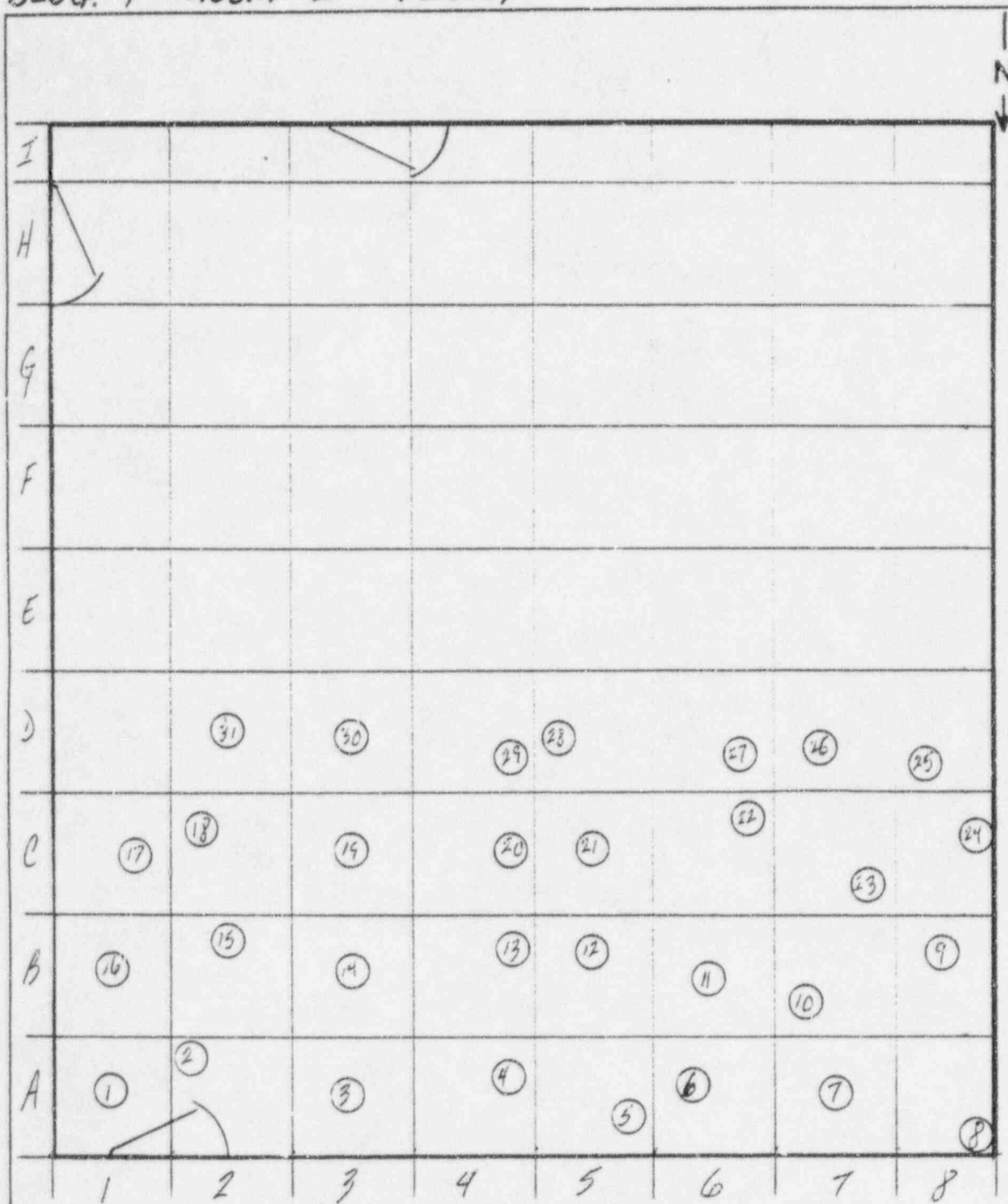
WATER

ALTA

RADIOLOGICAL SURVEY FORM

Survey Number 091996040205

BLDG. #4 - ROOM #2 - FLOOR

X₄ = APPROX. 1' EACH FULL GRID = APPROX. 1 M²

91996040205

4 OF 5

ALPHA/BETA
IPC9025 #621444

ALPHA

BETA

Eff: 25.00% Bkg: 0.00 cps MDA: 10.84 dpm Eff: 58.00% Bkg: 2.00 cps MDA: 16.01 dpm

REF	ID	COUNTS	NET CPM	DPM	LIMITS	COUNTS	NET CPM	DPM	LIMITS	DATE	TIME
001	00	040205	1	1.00	4.00	0	-2.00	-3.45		09-24-96	03:20:12
002	00		1	1.00	4.00	3	1.00	1.72		09-24-96	03:21:41
003	00		0	0.00	0.00	1	-1.00	-1.72		09-24-96	03:23:09
004	00		0	0.00	0.00	0	-2.00	-3.45		09-24-96	03:24:38
005	00		0	0.00	0.00	3	1.00	1.72		09-24-96	03:26:06
006	00		1	1.00	4.00	2	0.00	0.00		09-24-96	03:27:35
007	00		0	0.00	0.00	2	0.00	0.00		09-24-96	03:29:07
008	00		0	0.00	0.00	2	0.00	0.00		09-24-96	03:30:32
009	00		0	0.00	0.00	9	7.00	12.07		09-24-96	03:32:00
010	00		0	0.00	0.00	3	1.00	1.72		09-24-96	03:33:29
011	00		0	0.00	0.00	0	-2.00	-3.45		09-24-96	03:34:57
012	00		0	0.00	0.00	3	1.00	1.72		09-24-96	03:36:26
013	00		0	0.00	0.00	1	-1.00	-1.72		09-24-96	03:37:55
014	00		0	0.00	0.00	0	-2.00	-3.45		09-24-96	03:39:27
015	00		0	0.00	0.00	0	-2.00	-3.45		09-24-96	03:40:52
016	00		0	0.00	0.00	2	0.00	0.00		09-24-96	03:42:20
017	00		0	0.00	0.00	3	1.00	1.72		09-24-96	03:43:49
018	00		0	0.00	0.00	0	-2.00	-3.45		09-24-96	03:45:17
019	00		0	0.00	0.00	3	1.00	1.72		09-24-96	03:46:46
020	00		0	0.00	0.00	4	2.00	3.45		09-24-96	03:48:14
021	00		0	0.00	0.00	1	-1.00	-1.72		09-24-96	03:49:43
022	00		0	0.00	0.00	4	2.00	3.45		09-24-96	03:51:11
023	00		2	2.00	8.00	0	-2.00	-3.45		09-24-96	03:52:40
024	00		0	0.00	0.00	3	1.00	1.72		09-24-96	03:54:08
025	00		1	1.00	4.00	3	1.00	1.72		09-24-96	03:55:37
026	00		0	0.00	0.00	0	-2.00	-3.45		09-24-96	03:57:06
027	00		1	1.00	4.00	3	1.00	1.72		09-24-96	03:58:34
028	00		2	2.00	8.00	1	-1.00	-1.72		09-24-96	04:00:03
029	00		0	0.00	0.00	0	-2.00	-3.45		09-24-96	04:01:31
030	00		0	0.00	0.00	1	-1.00	-1.72		09-24-96	04:03:00
031	00		0	0.00	0.00	10	8.00	13.79		09-24-96	04:04:28

IT Corporation

MolyCorp 768380

FIXED CONTAMINATION DATA SHEET

Survey Number

91996040205

Page 5 of 5

Survey Point	Fixed Contamination		Background		Efficiency		Activity		Instrument Used
	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta Gamma	Alpha	Beta/Gamma dpm/100 cm ²	Alpha dpm/100 cm ²	
1	178	8	155	3	0.32	0.12	71.88	41.67	Model 2224 116240
2	205	11	155	3	0.32	0.12	156.25	66.67	Model 2224 116240
3	175	13	155	3	0.32	0.12	62.50	83.33	Model 2224 116240
4	171	22	155	3	0.32	0.12	50.00	158.33	Model 2224 116240
5	234	13	155	3	0.32	0.12	246.88	83.33	Model 2224 116240
6	145	14	155	3	0.32	0.12	-31.25	91.67	Model 2224 116240
7	184	13	155	3	0.32	0.12	90.63	83.33	Model 2224 116240
8	160	10	155	3	0.32	0.12	15.63	58.33	Model 2224 116240
9	150	10	155	3	0.32	0.12	-15.63	58.33	Model 2224 116240
10	163	5	155	3	0.32	0.12	25.00	16.67	Model 2224 116240
11	133	4	155	3	0.32	0.12	-68.75	8.33	Model 2224 116240
12	177	14	155	3	0.32	0.12	68.75	91.67	Model 2224 116240
13	173	24	155	3	0.32	0.12	56.25	175.00	Model 2224 116240
14	184	14	155	3	0.32	0.12	90.63	91.67	Model 2224 116240
15	197	18	155	3	0.32	0.12	131.25	125.00	Model 2224 116240
16	227	15	155	3	0.32	0.12	225.00	100.00	Model 2224 116240
17	191	12	155	3	0.32	0.12	112.50	75.00	Model 2224 116240
18	173	18	155	3	0.32	0.12	56.25	125.00	Model 2224 116240
19	179	9	155	3	0.32	0.12	75.00	50.00	Model 2224 116240
20	219	30	155	3	0.32	0.12	200.00	225.00	Model 2224 116240
21	144	13	155	3	0.32	0.12	-34.38	83.33	Model 2224 116240
22	162	7	155	3	0.32	0.12	21.88	33.33	Model 2224 116240
23	176	8	155	3	0.32	0.12	65.63	41.67	Model 2224 116240
24	145	12	155	3	0.32	0.12	-31.25	75.00	Model 2224 116240
25	192	24	155	3	0.32	0.12	115.63	175.00	Model 2224 116240
26	200	9	155	3	0.32	0.12	140.63	50.00	Model 2224 116240
27	202	5	155	3	0.32	0.12	146.88	16.67	Model 2224 116240
28	197	9	155	3	0.32	0.12	131.25	50.00	Model 2224 116240
29	220	44	155	3	0.32	0.12	203.13	341.67	Model 2224 116240
30	188	13	155	3	0.32	0.12	103.13	83.33	Model 2224 116240
31	198	12	155	3	0.32	0.12	134.38	75.00	Model 2224 116240

RADIOLOGICAL SURVEY FORM

Survey Number 092096040206

Survey Description: AFFECTED AREA
Bldg 4 - 2nd Floor Survey
Wall Survey

Drawing Attached (Yes) No

Instrument (1)
 Instrument Model: PROTEAN
 Instrument Ser. #: 1026-150
 Calibration Due: N/A
 Efficiency: A-0.3 B-0.57
 MDA: A-17.81 CF: A-3.39 BKG: A-0.5
 MDA: B-12.5 CF: B-1.75 BKG: B-1

Instrument (2)
 Instrument Model: MODEL 2224
 Instrument Ser. #: 132150
 Calibration Due: 8-2-97
 Efficiency: A-0.16 B-0.30
 MDA: A-46 CF: A-6.25 BKG: A-9
 MDA: B-220.5 CF: B-3.33 BKG: B-214

Survey Date: 9-20-96
 Survey by: [Signature] Date: 10-20-96
 Print Name: [Signature]
 Review By: [Signature] Date: 10-3-96

Instrument (3)
 Instrument Model: 19
 Instrument Ser. #: 91491
 Calibration Due: 12-21-96
 Efficiency: N/A
 MDA: N/A CF: N/A BKG: 8 uR/hr

Instrument (4)
 Instrument Model: N/A
 Instrument Ser. #: N/A
 Calibration Due: N/A
 Efficiency: N/A
 CF: N/A BKG: N/A

Survey Point	Seamless Contamination beta/gamma dpm/100cm ²	alpha dpm/100cm ²	Fixed Contamination beta/gamma cpm/100cm ²	alpha cpm/100cm ²	Radiation Level (uR/Hr)	Instrument Used	Additional Comments
							(1) 2224 Background: α = 9 β = 214
							(2) 100% Frisk GR1A For α & β -
							(3) 1 minute static count for α & β -
							(4) Reading taken at 1 meter from survey point location
							(5) Circled numbers on map indicate survey point location

RADIOLOGICAL SURVEY FORM CONTINUATION SHEET

Survey Number 092096040206

Survey Point	Smearable Contamination beta/gamma dpm/100cm ²	alpha dpm/100cm ²	Fixed Contamination beta/gamma cpm/100cm ²	alpha cpm/100cm ²	Radiation Level (uR/hr)	Instrument Used	Additional Comments
1			684	48	10	12,3	D1 DIRT ON FLOOR
2			291	17	10		D1 FLOOR (POST-DECON VIA VACUUM)
3			198	17	10		
4			221	13	10		
5			236	51	10		
6			236	11	10		
7			199	11	10		
8			222	32	10		
9			202	14	10		
10			213	10	10		
11			232	11	10		
12			226	26	10		
13			235	21	10		
14			231	22	10		
15			247	13	10		
16			245	19	10		
17			309	56	10		
18			255	20	10		
19			218	20	10		
20			235	19	10		
21			223	13	10		
22			249	17	10		
23			233	21	10		
24			218	16	10		
25			263	34	10		
26			242	18	10		
27			221	21	10		
28			220	24	10		
29			237	23	10		
30			243	24	10		
31			228	11	10		

SEGS PATERN
DIRT
SLICKY

RADIOLOGICAL SURVEY FORM CONTINUATION SHEET

Survey Number 092080401012

Survey Point	5secarable Contamination bpm/100cm ²	alpha dpm/100cm ²	Fixed Contamination bpm/100cm ²	alpha cpm/100cm ²	Radiation Level (uR/hr)	Instrument Used	Additional Comments
32			232	32	10	1223	G7 Floor
33			529	75	10		G8 Floor
34			443	80	10		G8 Floor (post-wash via vacuum)
35			290	22	10		H8 Floor
36			214	18	10		"
37			253	33	10		"
38			218	12	10		"
39			207	23	10		"
40			217	21	10		"
41			240	20	10		"
42			252	20	10		"
43			249	18	10		"
44			222	19	10		"
45			264	17	10		"
46			301	20	10		"
47			263	11	10		"
48			275	7	10		"
49			234	10	10		"
50			223	11	10		"
51			281	17	10		A1 Wall (East)
52			222	4	10		B1 Wall
53			225	6	10		A2 " "
54			267	5	10		B2 " "
55			298	6	10		A3 " "
56			282	4	10		B3 " "
57			313	13	10		A4 " "
58			283	5	10		B4 " "
59			252	7	10		A5 " "
60			224	3	10		B5 " "
61			237	3	10		A6 " "
62			298	2	10		B6 " "

RADIOLOGICAL SURVEY FORM CONTINUATION SHEET

Survey Number 092096040206

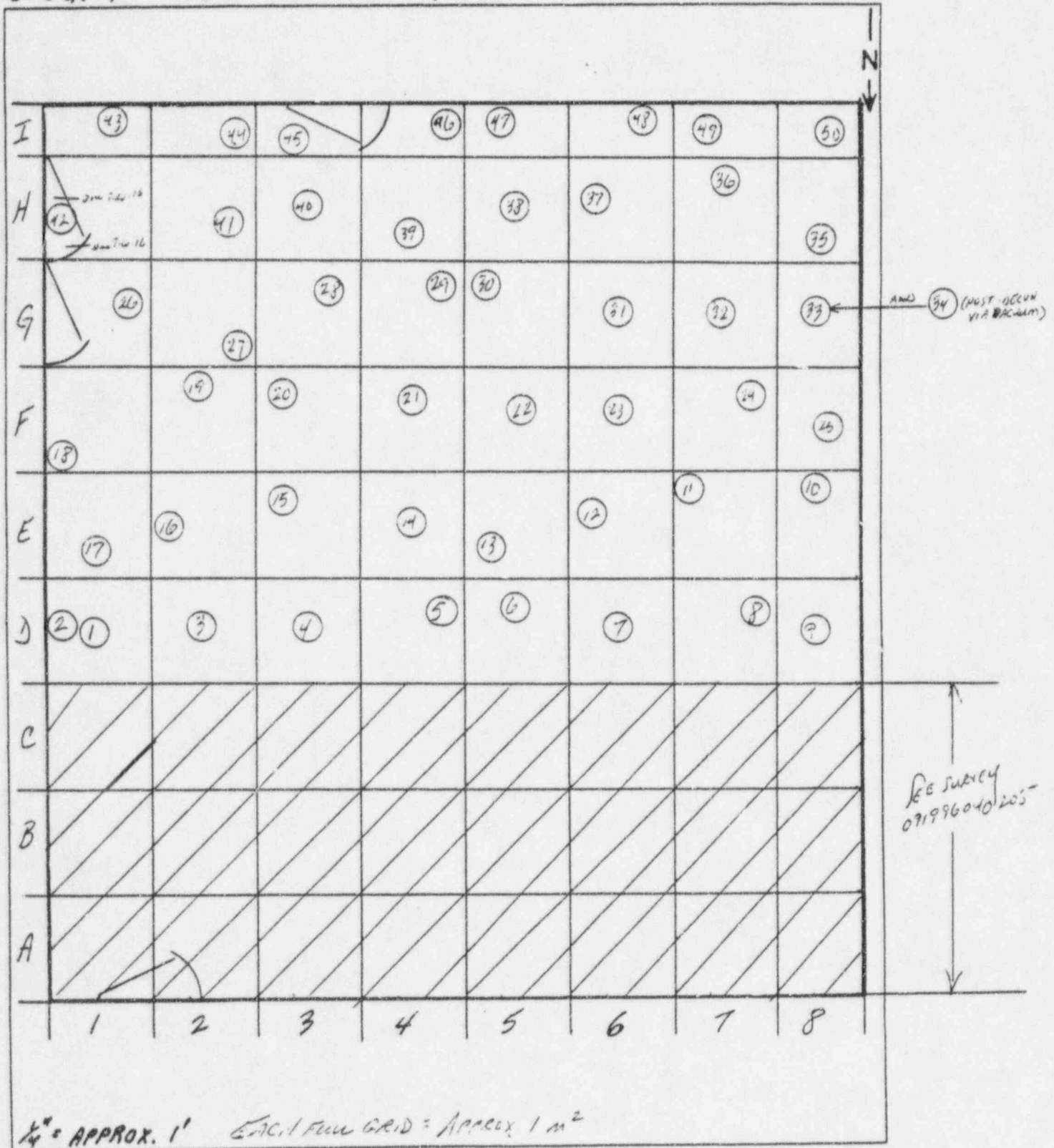
Survey Point	Measurable Contamination beta/gamma dpm/100cm ²	alpha dpm/100cm ²	Fixed Contamination beta/gamma cpm/100cm ²	alpha cpm/100cm ²	Radiation Level (uR/hr)	Instrument Used	Additional Comments
63			187	4	10	1,2,3	A7 Post (EAST)
64			187	5	10		B7 Post "
65			285	3	10		A8 Wall "
66			304	5	10		B3 Wall "
67			307	2	10		A9 " "
68			270	6	10		B9 " "
69			250	5	10		A1 Wall (WEST)
70			178	4	10		B1 " "
71			256	9	10		A2 " "
72			203	5	10		B2 " "
73			243	6	10		A3 " "
74			202	11	10		B3 " "
75			272	4	10		A4 " "
76			227	2	10		B4 " "
77			221	4	10		A5 " "
78			211	5	10		B5 " "

IT Corporation

RADIOLOGICAL SURVEY FORM

Survey Number 092096040206

BLDG. #4 - ROOM #2 - FLOOR

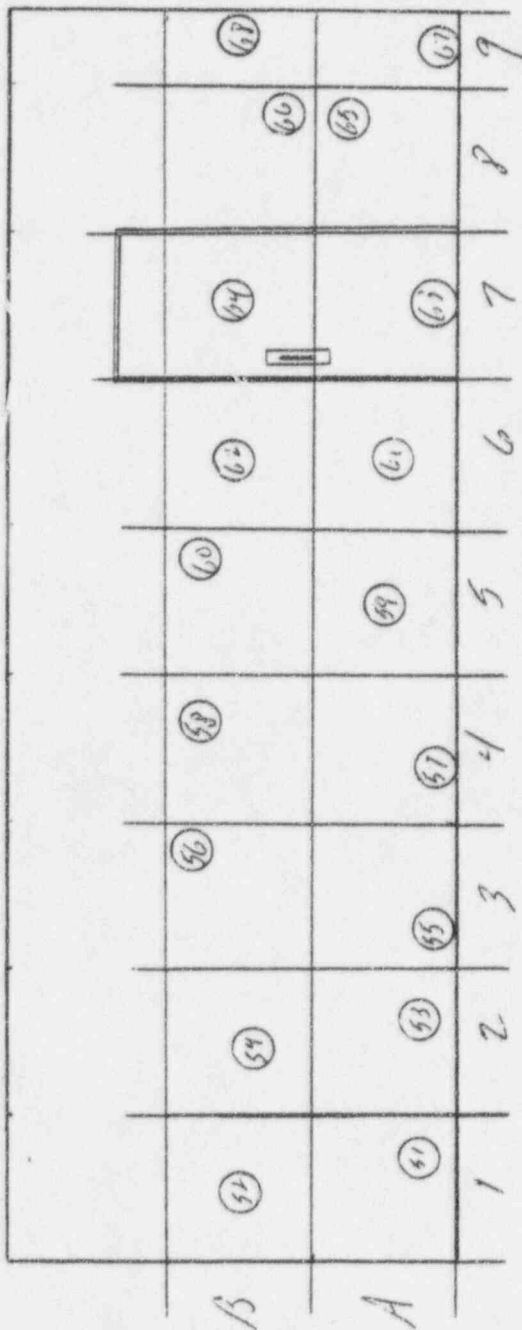


RADIOLOGICAL SURVEY FORM

Survey Number

092096040206

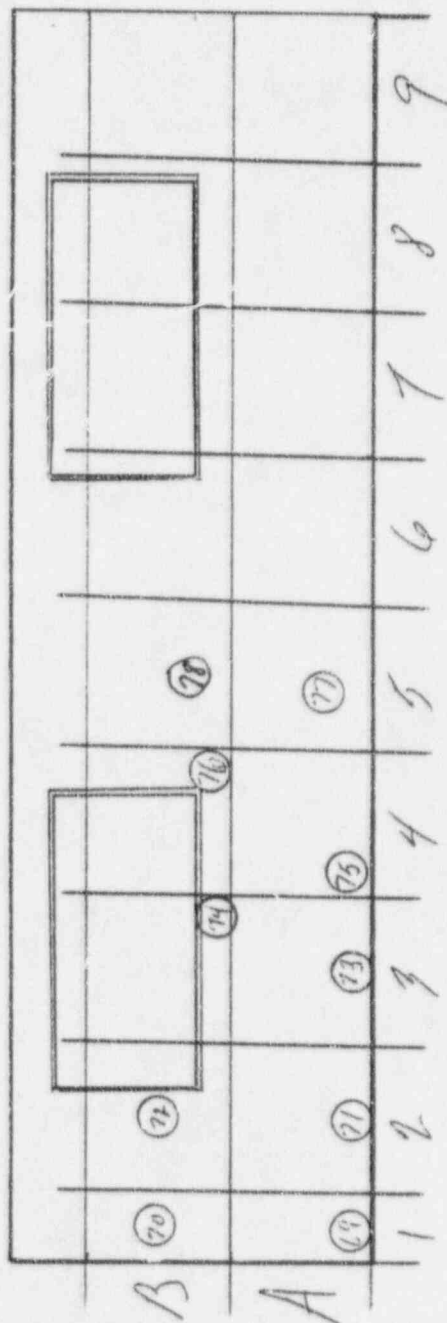
Bldg. #4 - Room #2 - EAST WALL (INTERIOR)

 $\frac{1}{4}'' = \text{APPROX. } 1' \quad \text{EACH FULL GRID} = \text{APPROX } 1 \text{ m}^2$

RADIOLOGICAL SURVEY FORM

Survey Number 092096040206

BLOG. #4 - ROOM #2 - WEST WALL (INTERIOR)

 $\frac{1}{4}" = \text{APPROX. } 1'$ EACH FACE OF BOX = APPROX. 1 m²

ALPHA

BETA

Eff: 50.00% Bkg: 0.00 cpm MDA: 9.03 dpm Eff: 57.00% Bkg: 1.70 cpm MDA: 12.91 dpm

SN	RPT	ID	COUNTS	NET CPM	CPM	LIMITS	COUNTS	NET CPM	CPM	LIMITS	DATE	TIME
001	00	040206	12	12.00	40.00		58	57.00	100.00		09-27-96	08:40:21
002	00		6	6.00	20.00		4	7.00	5.26		09-27-96	08:41:32
003	00		0	0.00	0.00		2	1.00	1.75		09-27-96	08:42:22
004	00		2	2.00	6.67		3	4.00	7.02		09-27-96	08:44:33
005	00		0	0.00	0.00		5	4.00	7.02		09-27-96	08:46:23
006	00		2	2.00	6.67		3	2.00	3.51		09-27-96	08:47:54
007	00		2	2.00	6.67		3	2.00	3.51		09-27-96	08:49:24
008	00		0	0.00	0.00		4	3.00	5.26		09-27-96	08:50:55
009	00		1	1.00	3.33		4	3.00	5.26		09-27-96	08:52:25
010	00		1	1.00	3.33		6	5.00	9.77		09-27-96	08:53:56
011	00		0	0.00	0.00		2	1.00	1.75		09-27-96	08:55:26
012	00		3	3.00	10.00		2	1.00	1.75		09-27-96	08:56:56
013	00		3	3.00	10.00		4	3.00	5.26		09-27-96	08:58:27
014	00		5	5.00	16.67		5	4.00	7.02		09-27-96	08:59:57
015	00		1	1.00	3.33		3	2.00	3.51		09-27-96	09:01:28
016	00		2	2.00	6.67		4	3.00	5.26		09-27-96	09:02:58
017	00		1	1.00	3.33		5	4.00	7.02		09-27-96	09:04:29
018	00		3	3.00	10.00		3	2.00	3.51		09-27-96	09:05:59
019	00		2	2.00	6.67		3	2.00	3.51		09-27-96	09:07:30
020	00		2	2.00	6.67		3	0.00	0.00		09-27-96	09:09:00
021	00		0	0.00	0.00		2	0.00	0.00		09-27-96	09:10:31
022	00		2	2.00	6.67		3	1.00	1.75		09-27-96	09:12:01
023	00		0	0.00	0.00		0	-1.00	-1.75		09-27-96	09:13:32
024	00		2	2.00	6.67		1	2.00	3.51		09-27-96	09:15:02
025	00		1	1.00	3.33		4	4.00	7.02		09-27-96	09:16:33
026	00		0	0.00	0.00		3	2.00	3.51		09-27-96	09:18:03
027	00		0	0.00	0.00		3	1.00	1.75		09-27-96	09:19:34
028	00		0	0.00	0.00		4	2.00	3.51		09-27-96	09:21:04
029	00		1	1.00	3.33		3	1.00	1.75		09-27-96	09:22:35
030	00		1	0.00	0.00		3	2.00	3.51		09-27-96	09:24:05
031	00		0	0.00	0.00		0	-1.00	-1.75		09-27-96	09:25:36
032	00		0	0.00	0.00		1	0.00	0.00		09-27-96	09:27:06
033	00		5	5.00	16.67		2	19.00	33.33		09-27-96	09:28:36
034	00		4	4.00	13.33		3	4.00	7.02		09-27-96	09:30:07
035	00		1	1.00	3.33		3	2.00	3.51		09-27-96	09:31:37
036	00		0	0.00	0.00		1	0.00	0.00		09-27-96	09:33:08
037	00		0	0.00	0.00		0	-1.00	-1.75		09-27-96	09:34:38
038	00		1	1.00	3.33		2	1.00	1.75		09-27-96	09:36:08
039	00		0	0.00	0.00		2	1.00	1.75		09-27-96	09:37:39
040	00		0	0.00	0.00		0	-1.00	-1.75		09-27-96	09:39:09
041	00		1	1.00	3.33		4	3.00	5.26		09-27-96	09:40:39
042	00		1	1.00	3.33		2	1.00	1.75		09-27-96	09:42:10
043	00		2	2.00	6.67		0	-1.00	-1.75		09-27-96	09:43:40
044	00		5	5.00	16.67		5	4.00	7.02		09-27-96	09:45:10
045	00		2	2.00	6.67		4	3.00	5.26		09-27-96	09:46:41
046	00		3	3.00	10.00		1	0.00	0.00		09-27-96	09:48:11
047	00		1	1.00	3.33		3	2.00	3.51		09-27-96	09:49:41
048	00		0	0.00	0.00		3	2.00	3.51		09-27-96	09:51:12
049	00		0	0.00	0.00		1	0.00	0.00		09-27-96	09:52:42
050	00		1	1.00	3.33		3	2.00	3.51		09-27-96	09:54:13
051	00		1	1.00	3.33		2	1.00	1.75		09-27-96	09:55:43

1026-150

ALPHA

BETA

Eff: 30.00% Bkg: 0.00 cpm MDA: 9.03 cpm Eff: 37.00% Bkg: 1.00 cpm MDA: 12.91 cpm

-BX-	-RPT-	ID	-COUNTS-	-NET CPM-	-DPM	-LIMITS-	-COUNTS-	-NET CPM-	-DPM	-LIMITS-	-DATE-	-TIME-
052	00	040206	1	1.00	3.33		1	1.00	1.75		09-23-96	15:00:18
053	00		1	1.00	3.33		0	-1.00	-1.75		09-23-96	15:01:48
054	00		0	0.00	0.00		0	-1.00	-1.75		09-23-96	15:03:18
055	00		0	0.00	0.00		0	-1.00	-1.75		09-23-96	15:04:49
056	00		0	0.00	0.00		0	-1.00	-1.75		09-23-96	15:06:19
057	00		1	1.00	3.33		0	-1.00	-1.75		09-23-96	15:07:49
058	00		0	0.00	0.00		0	-1.00	-1.75		09-23-96	15:09:19
059	00		0	0.00	0.00		1	0.00	0.00		09-23-96	15:10:50
060	00		0	0.00	0.00		1	1.00	1.75		09-23-96	15:12:20
061	00		0	0.00	0.00		1	0.00	0.00		09-23-96	15:13:50
062	00		2	2.00	6.67		1	0.00	0.00		09-23-96	15:15:20
063	00		0	0.00	0.00		0	-1.00	-1.75		09-23-96	15:16:51
064	00		0	0.00	0.00		2	1.00	1.75		09-23-96	15:18:21
065	00		0	0.00	0.00		1	0.00	0.00		09-23-96	15:19:51
066	00		0	0.00	0.00		0	-1.00	-1.75		09-23-96	15:21:21
067	00		0	0.00	0.00		2	1.00	1.75		09-23-96	15:22:52
068	00		1	1.00	3.33		0	-1.00	-1.75		09-23-96	15:24:22
069	00		0	0.00	0.00		0	-1.00	-1.75		09-23-96	15:25:52
070	00		1	1.00	3.33		0	-1.00	-1.75		09-23-96	15:27:23
071	00		0	0.00	0.00		4	3.00	5.26		09-23-96	15:28:53
072	00		0	0.00	0.00		3	4.00	7.00		09-23-96	15:30:23
073	00		0	0.00	0.00		2	1.00	1.75		09-23-96	15:31:53
074	00		0	0.00	0.00		0	-1.00	-1.75		09-23-96	15:33:24
075	00		0	0.00	0.00		1	0.00	0.00		09-23-96	15:34:54
076	00		0	0.00	0.00		1	0.00	0.00		09-23-96	15:36:24
077	00		0	0.00	0.00		0	-1.00	-1.75		09-23-96	15:37:54
078	00		0	0.00	0.00		1	0.00	0.00		09-23-96	15:39:24

Survey Point	Fixed Contamination		Background		Efficiency		Activity		Instrument Used
	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta Gamma	Alpha	Beta/Gamma dpm/100 cm ²	Alpha dpm/100 cm ²	
1	684	48	214	9	0.3	0.16	1566.67	243.75	Model 2224 132150
2	291	17	214	9	0.3	0.16	256.67	50.00	Model 2224 132150
3	198	17	214	9	0.3	0.16	-53.33	50.00	Model 2224 132150
4	221	13	214	9	0.3	0.16	23.33	25.00	Model 2224 132150
5	236	51	214	9	0.3	0.16	73.33	262.50	Model 2224 132150
6	236	11	214	9	0.3	0.16	73.33	12.50	Model 2224 132150
7	199	11	214	9	0.3	0.16	-50.00	12.50	Model 2224 132150
8	222	32	214	9	0.3	0.16	26.67	143.75	Model 2224 132150
9	202	14	214	9	0.3	0.16	-40.00	31.25	Model 2224 132150
10	213	10	214	9	0.3	0.16	-3.33	6.25	Model 2224 132150
11	232	11	214	9	0.3	0.16	60.00	12.50	Model 2224 132150
12	226	26	214	9	0.3	0.16	40.00	106.25	Model 2224 132150
13	235	21	214	9	0.3	0.16	70.00	75.00	Model 2224 132150
14	231	22	214	9	0.3	0.16	56.67	81.25	Model 2224 132150
15	247	13	214	9	0.3	0.16	110.00	25.00	Model 2224 132150
16	245	19	214	9	0.3	0.16	103.33	62.50	Model 2224 132150
17	309	56	214	9	0.3	0.16	316.67	293.75	Model 2224 132150
18	255	20	214	9	0.3	0.16	136.67	68.75	Model 2224 132150
19	218	20	214	9	0.3	0.16	13.33	68.75	Model 2224 132150
20	235	19	214	9	0.3	0.16	70.00	62.50	Model 2224 132150
21	223	13	214	9	0.3	0.16	30.00	25.00	Model 2224 132150
22	249	17	214	9	0.3	0.16	116.67	50.00	Model 2224 132150
23	233	21	214	9	0.3	0.16	63.33	75.00	Model 2224 132150
24	218	16	214	9	0.3	0.16	13.33	43.75	Model 2224 132150
25	263	34	214	9	0.3	0.16	163.33	156.25	Model 2224 132150
26	242	18	214	9	0.3	0.16	93.33	56.25	Model 2224 132150
27	221	21	214	9	0.3	0.16	23.33	75.00	Model 2224 132150
28	220	24	214	9	0.3	0.16	20.00	93.75	Model 2224 132150
29	237	23	214	9	0.3	0.16	76.67	87.50	Model 2224 132150
30	248	24	214	9	0.3	0.16	113.33	93.75	Model 2224 132150

Fixed Contamination			Background		Efficiency		Activity		Instrument Used
Survey Point	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta Gamma	Alpha	Beta/Gamma dpm/100 cm ²	Alpha dpm/100 cm ²	
31	228	11	214	9	0.3	0.16	46.67	12.50	Model 2224 132150
32	232	8	214	9	0.3	0.16	60.00	-6.25	Model 2224 132150
33	529	75	214	9	0.3	0.16	1050.00	412.50	Model 2224 132150
34	443	80	214	9	0.3	0.16	763.33	443.75	Model 2224 132150
35	290	22	214	9	0.3	0.16	253.33	81.25	Model 2224 132150
36	214	18	214	9	0.3	0.16	0.00	56.25	Model 2224 132150
37	253	33	214	9	0.3	0.16	130.00	150.00	Model 2224 132150
38	218	12	214	9	0.3	0.16	13.33	18.75	Model 2224 132150
39	207	23	214	9	0.3	0.16	-23.33	87.50	Model 2224 132150
40	217	21	214	9	0.3	0.16	10.00	75.00	Model 2224 132150
41	240	20	214	9	0.3	0.16	86.67	68.75	Model 2224 132150
42	252	20	214	9	0.3	0.16	126.67	68.75	Model 2224 132150
43	249	16	214	9	0.3	0.16	116.67	43.75	Model 2224 132150
44	222	19	214	9	0.3	0.16	26.67	62.50	Model 2224 132150
45	264	17	214	9	0.3	0.16	166.67	50.00	Model 2224 132150
46	301	20	214	9	0.3	0.16	290.00	68.75	Model 2224 132150
47	263	11	214	9	0.3	0.16	163.33	12.50	Model 2224 132150
48	275	7	214	9	0.3	0.16	203.33	-12.50	Model 2224 132150
49	234	10	214	9	0.3	0.16	66.67	6.25	Model 2224 132150
50	223	11	214	9	0.3	0.16	30.00	12.50	Model 2224 132150
51	281	17	214	9	0.3	0.16	223.33	50.00	Model 2224 132150
52	222	4	214	9	0.3	0.16	26.67	-31.25	Model 2224 132150
53	225	6	214	9	0.3	0.16	36.67	-18.75	Model 2224 132150
54	267	5	214	9	0.3	0.16	176.67	-25.00	Model 2224 132150
55	298	6	214	9	0.3	0.16	280.00	-18.75	Model 2224 132150
56	282	4	214	9	0.3	0.16	226.67	-31.25	Model 2224 132150
57	318	13	214	9	0.3	0.16	346.67	25.00	Model 2224 132150
58	283	5	214	9	0.3	0.16	230.00	-25.00	Model 2224 132150
59	252	7	214	9	0.3	0.16	126.67	-12.50	Model 2224 132150
60	224	2	214	9	0.3	0.16	33.33	-43.75	Model 2224 132150

Survey Point	Fixed Contamination		Background		Efficiency		Activity		Instrument Used
	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta Gamma	Alpha	Beta/Gamma dpm/100 cm ²	Alpha dpm/100 cm ²	
61	237	3	214	9	0.3	0.16	76.67	-37.50	Model 2224 132150
62	298	2	214	9	0.3	0.16	280.00	-43.75	Model 2224 132150
63	187	4	214	9	0.3	0.16	-90.00	-31.25	Model 2224 132150
64	187	5	214	9	0.3	0.16	-90.00	-25.00	Model 2224 132150
65	285	6	214	9	0.3	0.16	236.67	-18.75	Model 2224 132150
66	304	5	214	9	0.3	0.16	300.00	-25.00	Model 2224 132150
67	307	2	214	9	0.3	0.16	310.00	-43.75	Model 2224 132150
68	270	6	214	9	0.3	0.16	186.67	-18.75	Model 2224 132150
69	250	5	214	9	0.3	0.16	120.00	-25.00	Model 2224 132150
70	178	4	214	9	0.3	0.16	-120.00	-31.25	Model 2224 132150
71	256	9	214	9	0.3	0.16	140.00	0.00	Model 2224 132150
72	203	5	214	9	0.3	0.16	-36.67	-25.00	Model 2224 132150
73	243	6	214	9	0.3	0.16	96.67	-18.75	Model 2224 132150
74	202	11	214	9	0.3	0.16	-40.00	12.50	Model 2224 132150
75	272	4	214	9	0.3	0.16	193.33	-31.25	Model 2224 132150
76	227	2	214	9	0.3	0.16	43.33	-43.75	Model 2224 132150
77	221	4	214	9	0.3	0.16	23.33	-31.25	Model 2224 132150
78	211	5	214	9	0.3	0.16	-10.00	-25.00	Model 2224 132150

RADIOLOGICAL SURVEY FORM

Survey Number

291696040207

Survey Description: <u>AFFECTED AREA</u>	
<u>BOG 4 - ROOM 2</u>	
<u>WALL SURVEY</u>	
<u>NA</u>	
Drawing Attached: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	

Instrument (1)	
Instrument Model: <u>PROTEAN 1016</u>	
Instrument Ser. #: <u>62445</u>	<u>1016 150</u>
Calibration Due: <u>N/A</u>	
Efficiency: <u>10.30 0.57</u>	
MDA: A-1781 CF: A-4.06 BKG: A-0	
MDA: B-12.50 CF: B-1.74 BKG: B-2	

Instrument (2)	
Instrument Model: <u>MODEL 2224</u>	
Instrument Ser. #: <u>173130</u>	
Calibration Due: <u>8-2-97</u>	
Efficiency: <u>A-0.16 B-0.30</u>	
MDA: A-48.0 CF: A-6.25 BKG: A-4	
MDA: B-20.23 CF: B-3.33 BKG: B-118	

Survey Date: <u>08-23-96</u>	
Survey by: <u>[Signature]</u>	Date: <u>11/1/96</u>
Print Name: <u>P. BROWN</u>	
Review By: <u>[Signature]</u>	Date: <u>9/12/96</u>

Instrument (3)	
Instrument Model: <u>19</u>	
Instrument Ser. #: <u>21981</u>	
Calibration Due: <u>12-11-96</u>	
Efficiency: <u>N/A</u>	
MDA: <u>N/A</u>	CF: <u>N/A</u> BKG: <u>N/A</u>

Instrument (4)	
Instrument Model: <u>[Signature]</u>	
Instrument Ser. #: <u>[Signature]</u>	
Calibration Due: <u>[Signature]</u>	
Efficiency: <u>[Signature]</u>	
MDA: <u>[Signature]</u>	CF: <u>[Signature]</u> BKG: <u>[Signature]</u>

Survey Point	Source Contamination beta/gamma dpm/100cm ²	alpha dpm/100cm ²	Fixed Contamination beta/gamma cpm/100cm ²	alpha cpm/100cm ²	Radiation Level (uR/Hr)	Instrument Used	Additional Comments
							(1) 2224 BACKGROUND:
							$\alpha = 14$ $\beta = 118$
							(2) 100% FRISK EACH
							GRAB FOR X & B-
							(3) 1 MINUTE STATIC COUNT
							FOR X & B-
							(4) X SURVEY TAKEN
							AT 1 METERS FROM
							SURVEY POINT
							LOCATION SURFACE
							(5) CORRELATIONS ON WALL
							WALL SURVEY
							POINT LOCATIONS
							(6) SURVEY POINT MOVING IN...
							POSSIBLE INVERSION IN PLACE

RADIOLOGICAL SURVEY FORM CONTINUATION SHEET

Survey Number 099396040207

Survey Point	Smearable Contamination beta/gamma dpm/100cm ²	alpha dpm/100cm ²	Fixed Contamination beta/gamma cpm/100cm ²	alpha cpm/100cm ²	Radiation Level (uR/hr)	Instrument Used	Additional Comments
1			118	8	10	111, 3	86 WEST WALK / HEATER HOUSING
2			154	6	10		86 WEST WALK / WINDOW
3			104	16	10		87 WEST WALK / HEATER HOUSING
4			102	14	10		87 WEST WALK / WINDOW
5			112	21	10		88 WEST WALK / HEATER HOUSING
6			93	9	10		88 WEST WALK / WINDOW
7			125	6	10		89 WEST WALK
8			86	17	10		91 NORTH WALK / HEATER HOUSING
9			248	7	10		91 NORTH WALK / WINDOW
10			180	13	10		92 NORTH WALK / HEATER HOUSING
11			222	6	10		92 NORTH WALK / WINDOW
12			160	5	10		93 NORTH WALK / HEATER HOUSING
13			184	9	10		93 NORTH WALK / WINDOW
14			143	10	10		94 NORTH WALK / HEATER HOUSING
15			171	8	10		94 NORTH WALK / WINDOW
16			91	11	10		95 NORTH WALK / HEATER HOUSING
17			139	35.5	10		95 NORTH WALK / WINDOW / CO. 2000
18			183	8	10		95 NORTH WALK / HEATER HOUSING / CO. 2000
19			264	7	10		96 NORTH WALK / CO. 2000 / HEATER HOUSING
20			194	7	10		96 NORTH WALK / CO. 2000 / WINDOW
21			211	13	10		97 NORTH WALK / DOOR / CO. 2000
22			198	8	10		97 NORTH WALK / DOOR
23			229	6	11		98 NORTH WALK / DOOR
24					11		98 NORTH WALK / DOOR

DATE 10/15/07 BY 1045

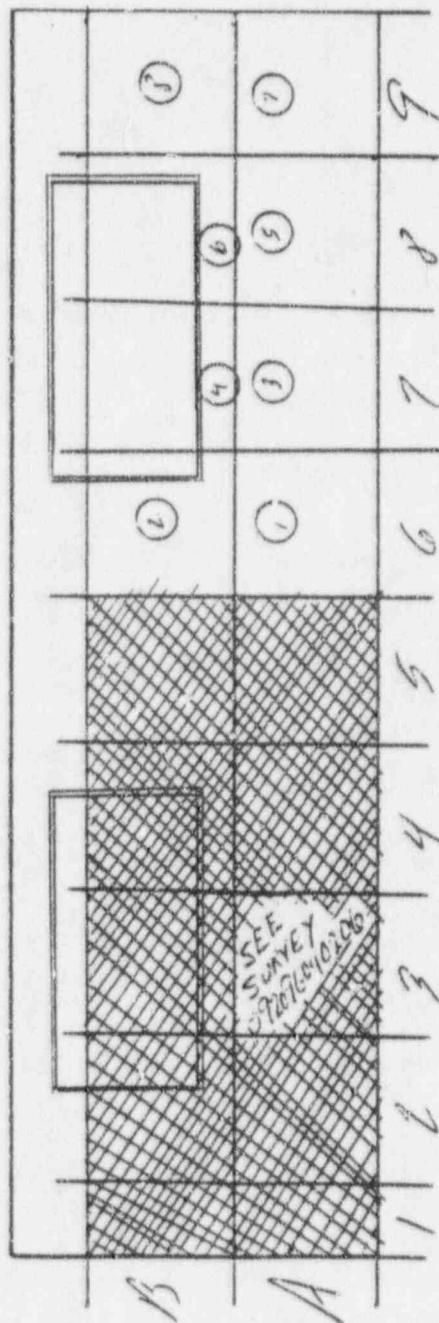
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RADIOLOGICAL SURVEY FORM

Survey Number 091396040207

BLDG. #4 - ROOM #2 - WEST WALL (INTERIOR)

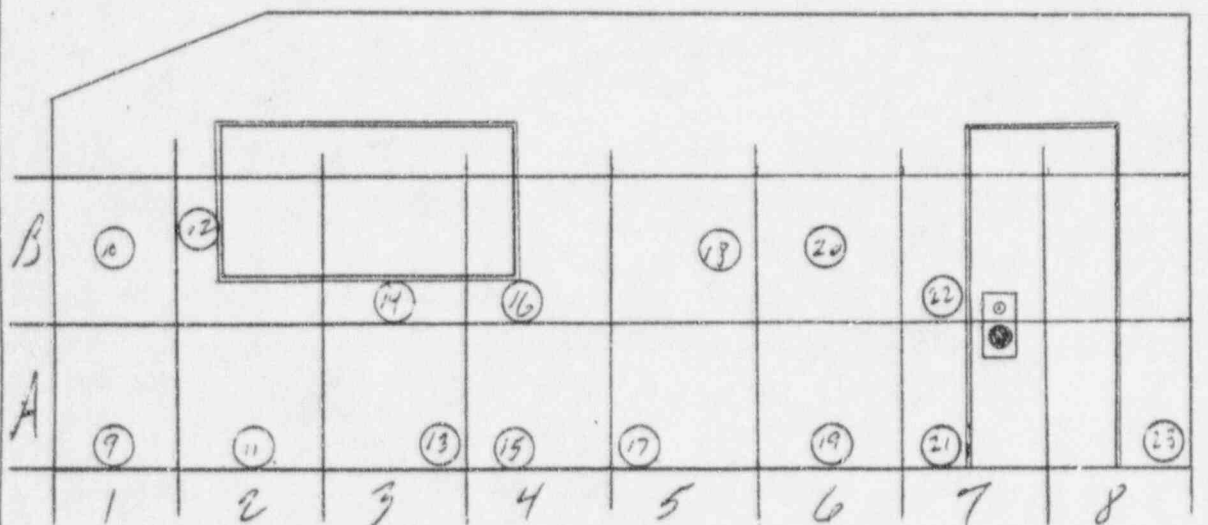


$\frac{1}{4}" = \text{APPROX. } 1'$

RADIOLOGICAL SURVEY FORM

Survey Number 092396040207

BLOG. #4 - ROOM #2 - NORTH WALL (INTERIOR)

 $\frac{1}{4}'' = \text{APPROX. } 1'$ EACH FULL GRID = APPROX. 1 m^2

----- ALPHA -----										----- BETA -----									
Eff: 30.00% Bkg: 0.00 cpm MDA: 9.03 dpm										Eff: 57.00% Bkg: 1.00 cpm MDA: 12.91 dpm									
-SN-	-RPT-	ID	COUNTS	NET CPM	DPM	LIMITS	COUNTS	NET CPM	DPM	LIMITS	DATE	TIME							
001	00	040207	0	0.00	0.00		2	1.00	1.75		09-23-96	12:32:25							
002	00		0	0.00	0.00		1	0.00	0.00		09-23-96	12:33:56							
003	00		0	0.00	0.00		0	-1.00	-1.75		09-23-96	12:35:26							
004	00		0	0.00	0.00		0	-1.00	-1.75		09-23-96	12:36:56							
005	00		1	1.00	3.33		2	1.00	1.75		09-23-96	12:38:27							
006	00		0	0.00	0.00		0	-1.00	-1.75		09-23-96	12:39:57							
007	00		2	2.00	6.67		1	0.00	0.00		09-23-96	12:41:27							
008	00		1	1.00	3.33		0	-1.00	-1.75		09-23-96	12:42:58							
009	00		0	0.00	0.00		1	0.00	0.00		09-23-96	12:44:28							
010	00		0	0.00	0.00		0	-1.00	-1.75		09-23-96	12:45:58							
011	00		0	0.00	0.00		1	0.00	0.00		09-23-96	12:47:29							
012	00		0	0.00	0.00		0	-1.00	-1.75		09-23-96	12:48:59							
013	00		0	0.00	0.00		2	1.00	1.75		09-23-96	12:50:29							
014	00		0	0.00	0.00		1	0.00	0.00		09-23-96	12:51:59							
015	00		0	0.00	0.00		2	1.00	1.75		09-23-96	12:53:30							
016	00		0	0.00	0.00		1	0.00	0.00		09-23-96	12:55:00							
017	00		0	0.00	0.00		1	0.00	0.00		09-23-96	12:56:30							
018	00		0	0.00	0.00		0	-1.00	-1.75		09-23-96	12:58:01							
019	00		1	1.00	3.33		1	0.00	0.00		09-23-96	12:59:31							
020	00		0	0.00	0.00		1	0.00	0.00		09-23-96	13:01:01							
021	00		0	0.00	0.00		0	-1.00	-1.75		09-23-96	13:02:32							
022	00		2	2.00	6.67		0	-1.00	-1.75		09-23-96	13:04:02							
023	00		0	0.00	0.00		0	-1.00	-1.75		09-23-96	13:05:32							
024	00		4	4.00	13.33		6	5.00	8.77		09-23-96	13:07:03							

Survey Point	Fixed Contamination		Background		Efficiency		Activity		Instrument Used
	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta Gamma	Alpha	Beta/Gamma dpm/100 cm ²	Alpha dpm/100 cm ²	
1	118	8	118	4	0.3	0.16	0.00	25.00	Model 2224 132150
2	154	6	118	4	0.3	0.16	120.00	12.50	Model 2224 132150
3	104	16	118	4	0.3	0.16	-46.67	75.00	Model 2224 132150
4	102	14	118	4	0.3	0.16	-53.33	62.50	Model 2224 132150
5	112	21	118	4	0.3	0.16	-20.00	106.25	Model 2224 132150
6	93	9	118	4	0.3	0.16	-83.33	31.25	Model 2224 132150
7	125	6	118	4	0.3	0.16	23.33	12.50	Model 2224 132150
8	96	17	118	4	0.3	0.16	-73.33	81.25	Model 2224 132150
9	248	7	118	4	0.3	0.16	433.33	18.75	Model 2224 132150
10	180	13	118	4	0.3	0.16	206.67	56.25	Model 2224 132150
11	222	6	118	4	0.3	0.16	346.67	12.50	Model 2224 132150
12	160	5	118	4	0.3	0.16	140.00	6.25	Model 2224 132150
13	184	9	118	4	0.3	0.16	220.00	31.25	Model 2224 132150
14	143	10	118	4	0.3	0.16	83.33	37.50	Model 2224 132150
15	171	8	118	4	0.3	0.16	176.67	25.00	Model 2224 132150
16	91	11	118	4	0.3	0.16	-90.00	43.75	Model 2224 132150
17	139	9	118	4	0.3	0.16	70.00	31.25	Model 2224 132150
18	185	8	118	4	0.3	0.16	223.33	25.00	Model 2224 132150
19	264	7	118	4	0.3	0.16	486.67	18.75	Model 2224 132150
20	194	9	118	4	0.3	0.16	253.33	31.25	Model 2224 132150
21	211	13	118	4	0.3	0.16	310.00	56.25	Model 2224 132150
22	198	8	118	4	0.3	0.16	266.67	25.00	Model 2224 132150
23	229	6	118	4	0.3	0.16	370.00	12.50	Model 2224 132150

Survey Number 092396040208

Instrument (1)	
Instrument Model: Protean IPC 9025	
Instrument Ser. #: 1022-156	
Calibration Due: N/A	
Efficiency:	0.30 0.57
MDA: 17.81	CF: 3.39 BKG: 0.5
MDA: 12.50	CF: 1.75 BKG: 1

Instrument Model:	L A-19	Instrument (3)
Instrument Ser. #:	51951	
Calibration Due:	12-21-96	
Efficiency:	N/A	
MDA:	N/A	CF: N/A BKG: 1

Instrument Model:	
Instrument Ser. #:	N
Calibration Due:	A
Efficiency:	
SEA:	
CF:	
BKG:	
Instrument (4)	

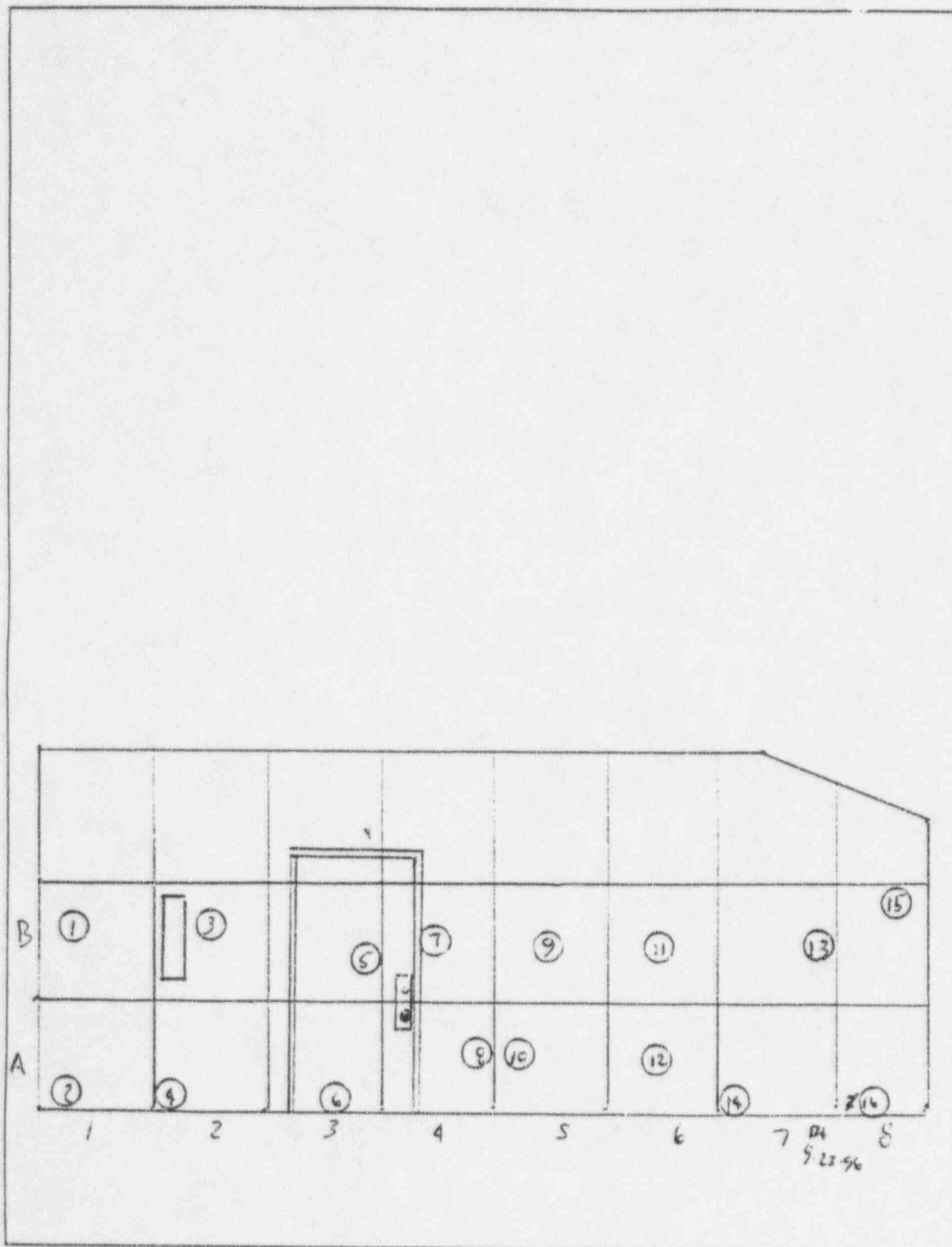
Survey Point	Smear/Rte Contamination		Fixed Contamination		Radiation Level (uR/hr)	Instrument Used	Additional Comments
	beta/gamma dpm/100cm ²	alpha dpm/100cm ²	beta/gamma cpm/100cm ²	alpha cpm/100cm ²			
							* 100% Fresh, Earth Good $\alpha + \beta$ -
							* 1 mark status (lost $\alpha + \beta$ -
							* 2-Survey taken 1 meter from Survey Point Location Survey
							* CIRCLED Numbers on map INDICATE SURVEY POINT LOCATIONS

802060353260

Survey Point	Smearable Contamination		alpha dpm/100cm ²	Fixed Contamination		alpha cpm/100cm ²	Radiation Level (uR/hr)	Instrument Used	Additional Comments
	beta/gamma dpm/100cm ²	beta/gamma cpm/100cm ²		alpha cpm/100cm ²	alpha cpm/100cm ²				
1				163	2	12	1,2,3	B1	SOUTH WALL
2				208	4	12	1,2,3	A1	SOUTH WALL
3				175	0	10	1,2,3	B2	SOUTH WALL
4				180	5	12	1,2,3	A2	SOUTH WALL
5				167	4	10	1,2,3	B3	SOUTH WALL
6				157	4	10	1,2,3	A3	SOUTH WALL
7				165	3	10	1,2,3	B4	SOUTH WALL
8				123	4	12	1,2,3	A4	SOUTH WALL
9	SEE		PDS	191	2	10	1,2,3	B5	SOUTH WALL
10				201	2	10	1,2,3	A5	SOUTH WALL
11				179	1	12	1,2,3	B6	SOUTH WALL
12				181	2	10	1,2,3	A6	SOUTH WALL
13				161	2	12	1,2,3	B7	SOUTH WALL
14				199	4	12	1,2,3	A7	SOUTH WALL
15				177	1	10	1,2,3	B8	SOUTH WALL
16				179	0	10	1,2,3	A8	SOUTH WALL

RADIOLOGICAL SURVEY FORM

Survey Number 0923966402408
 09.23.96



Survey #092396040208

PM 9.23.96
Page #
Page 4 of 5

ALPHA					BETA				
Eff: 36.00% Bkg: 0.00 cpm MDA: 9.03 cpm					Eff: 37.00% Bkg: 1.00 cpm MDA: 12.91 cpm				
REF	ID	COUNTS	NET DPM	DPM	LIMITS	COUNTS	NET DPM	DPM	LIMITS
00	040208	1	1.00	3.33		0	-1.00	-1.75	09-23-96 1a:11:46
002	00	0	0.00	0.00		1	0.00	0.00	09-23-96 1a:12:17
003	00	0	0.00	0.00		0	-1.00	-1.75	09-23-96 1a:13:47
004	00	0	0.00	0.00		4	3.00	5.26	09-23-96 1a:12:17
005	00	0	0.00	0.00		0	-1.00	-1.75	09-23-96 1a:17:46
006	00	0	0.00	0.00		0	-1.00	-1.75	09-23-96 1a:18:18
007	00	0	0.00	0.00		1	0.00	0.00	09-23-96 1a:19:46
008	00	0	0.00	0.00		1	0.00	0.00	09-23-96 1a:19:18
009	00	0	0.00	0.00		2	1.00	1.75	09-23-96 1a:19:47
010	00	0	0.00	0.00		0	-1.00	-1.75	09-23-96 1a:19:19
011	00	0	0.00	0.00		0	-1.00	-1.75	09-23-96 1a:19:49
012	00	1	1.00	3.33		0	-1.00	-1.75	09-23-96 1a:19:01
013	00	1	1.00	3.33		0	-1.00	-1.75	09-23-96 1a:19:50
014	00	1	1.00	3.33		0	-1.00	-1.75	09-23-96 1a:41:20
015	00	0	0.00	0.00		3	2.00	3.51	09-23-96 1a:42:50
016	00	0	0.00	0.00		2	1.00	1.75	09-23-96 1a:44:11

Survey Point	Fixed Contamination		Background		Efficiency		Activity		Instrument Used
	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta Gamma	Alpha	Beta/Gamma dpm/100 cm ²	Alpha dpm/100 cm ²	
1	163	2	155	2	0.31	0.13	25.81	0.00	Model 2224 116257
2	208	4	155	2	0.31	0.13	170.97	15.38	Model 2224 116257
3	175	0	155	2	0.31	0.13	64.52	-15.38	Model 2224 116257
4	180	5	155	2	0.31	0.13	80.65	23.08	Model 2224 116257
5	167	4	155	2	0.31	0.13	38.71	15.38	Model 2224 116257
6	157	4	155	2	0.31	0.13	6.45	15.38	Model 2224 116257
7	163	3	155	2	0.31	0.13	25.81	7.69	Model 2224 116257
8	189	4	155	2	0.31	0.13	109.68	15.38	Model 2224 116257
9	191	2	155	2	0.31	0.13	116.13	0.00	Model 2224 116257
10	201	2	155	2	0.31	0.13	148.39	0.00	Model 2224 116257
11	179	1	155	2	0.31	0.13	77.42	-7.69	Model 2224 116257
12	181	2	155	2	0.31	0.13	83.87	0.00	Model 2224 116257
13	161	2	155	2	0.31	0.13	19.35	0.00	Model 2224 116257
14	199	4	155	2	0.31	0.13	141.94	15.38	Model 2224 116257
15	177	1	155	2	0.31	0.13	70.97	-7.69	Model 2224 116257
16	179	6	155	2	0.31	0.13	77.42	30.77	Model 2224 116257

RADIOLOGICAL SURVEY FORM

Survey Number 09239604020810
B2 9-23-96

Survey Description: BLDG 4, Room 2
UN AFFECTED AREA, CEILING
Drawing Attached: ☒ Yes ☐ No

Instrument (1)
Instrument Model: Protean IPC 9025
Instrument Ser. #: 1020-150
Calibration Due: N/A
Efficiency: 0.30 0.57
MDA: 17.81 CF: 3.39 BKG: 0.5
MDA: 12.50 CF: 1.75 BKG: 1

Instrument (2)
Instrument Model: CM 2224
Instrument Ser. #: 116257
Calibration Due: 2-23-97
Efficiency: 0.013 0.31
MDA: 43.46 CF: 7.65 BKG: 0.472 2nd 7/24/96
MDA: 5-206.55 CF: 3.23 BKG: 0.2147

Survey Date: 9-23-96
Survey by: B. Rogers 19-23-96
Signature: B. Rogers Date: 19-23-96
Print Name: B. Rogers
Review By: B. Rogers 10-1-96
Signature: B. Rogers Date: 10-1-96

Instrument (3)
Instrument Model: CM 19
Instrument Ser. #: 71491
Calibration Due: 12-21-96
Efficiency: N/A
MDA: N/A CF: N/A BKG: 10

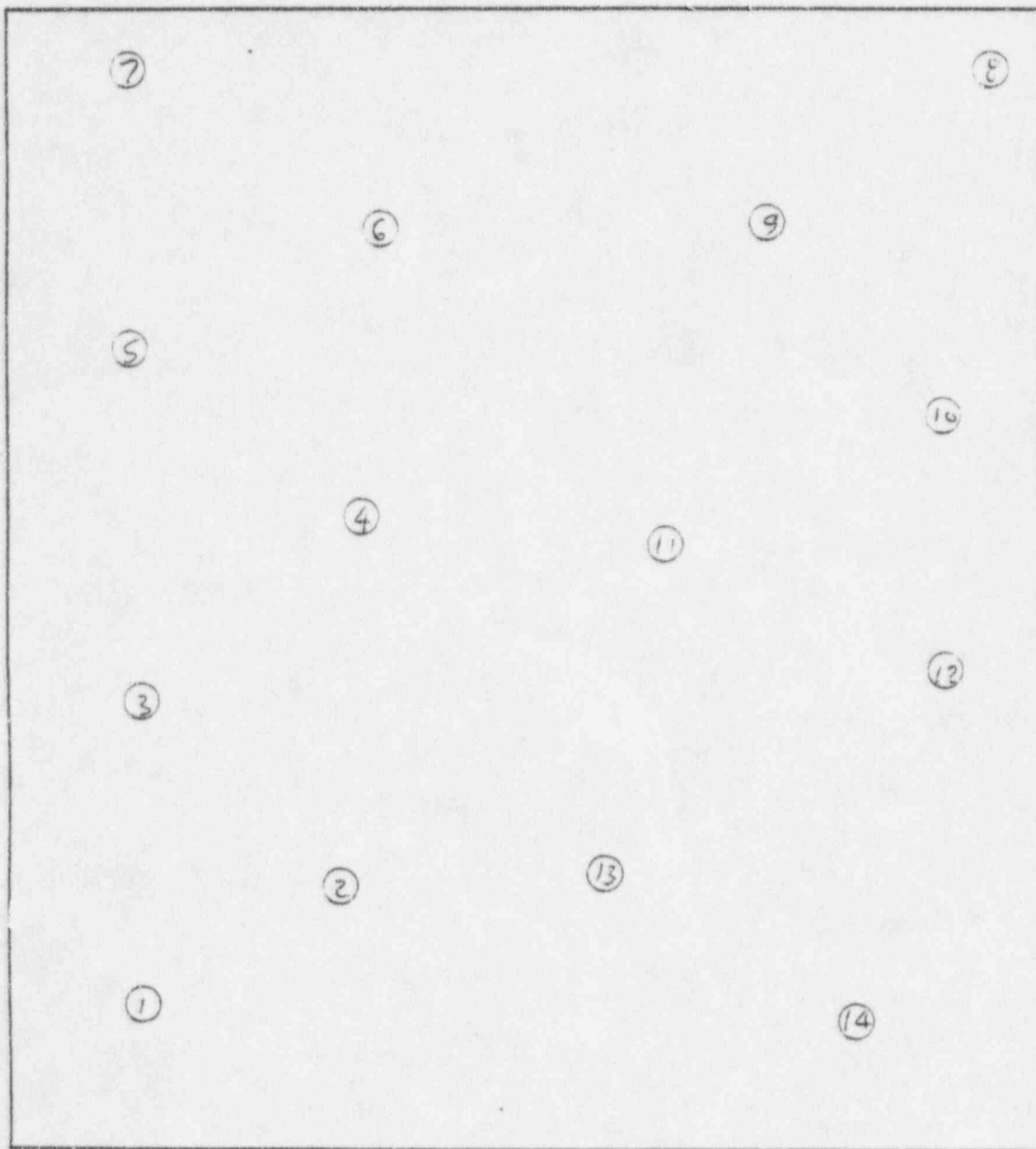
Instrument (4)
Instrument Model: N/A
Instrument Ser. #: N/A
Calibration Due: N/A
Efficiency: N/A
MDA: N/A CF: N/A BKG: N/A

Survey Point	Smearable Contamination		Fixed Contamination		Radiation Level (uR/Hr)	Instrument Used	Additional Comments
	beta/gamma dpm/100cm ²	alpha dpm/100cm ²	beta/gamma cpm/100cm ²	alpha cpm/100cm ²			
							• RANDOM 1 minute static counts alpha + beta
							• Immediate area surrounding static count frisked alpha + beta
							• gamma survey taken 1 meter from survey point location
							• Circled numbers on map indicate survey point locations
							• SEE survey 92396040211 for other portion of unaffected area survey

RADIOLOGICAL SURVEY FORM

Survey Number 0923 560402010

BLDG. #4 - ROOM #2 - CEILING

↓
N
↓

ALPHA						BETA						
Eff: 20.00% Bkg: 0.00 cpm MDA: 9.07 dpm						Eff: 57.00% Bkg: 1.00 cpm MDA: 12.71 dpm						
BN	RPT	ID	COUNTS	NET DPM	DPM	LIMITS	COUNTS	NET DPM	DPM	LIMITS	DATE	TIME
000	00	040210	1	1.00	3.33		0	-1.00	-1.75		09-23-96	15:41:09
001	00		1	1.00	3.33		0	-1.00	-1.75		09-23-96	15:42:00
002	00		0	0.00	0.00		1	0.00	0.00		09-23-96	15:44:09
004	00		0	0.00	0.00		2	1.00	1.75		09-23-96	15:46:00
005	00		1	1.00	3.33		4	1.00	5.26		09-23-96	15:47:01
006	00		0	0.00	0.00		1	0.00	0.00		09-23-96	15:49:01
007	00		0	0.00	0.00		1	0.00	0.00		09-23-96	15:50:01
008	00		1	1.00	3.33		1	0.00	0.00		09-23-96	15:51:01
009	00		0	0.00	0.00		0	-1.00	-1.75		09-23-96	15:53:01
010	00		0	0.00	0.00		4	1.00	5.26		09-23-96	15:55:02
011	00		0	0.00	0.00		0	-1.00	-1.75		09-23-96	15:56:02
012	00		0	0.00	0.00		1	0.00	0.00		09-23-96	15:58:02
013	00		0	0.00	0.00		2	1.00	1.75		09-23-96	15:59:03
014	00		0	0.00	0.00		0	-1.00	-1.75		09-23-96	16:01:03

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FIXED CONTAMINATION DATA SHEET

Survey Number

092396040210

Page 5 of 5

Survey Point	Fixed Contamination		Background		Efficiency		Activity		Instrument Used
	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta Gamma	Alpha	Beta/Gamma dpm/100 cm ²	Alpha dpm/100 cm ²	
1	142	1	147	2	0.31	0.13	-16.13	-7.69	Model 2224 116257
2	139	3	147	2	0.31	0.13	-25.81	7.69	Model 2224 116257
3	156	4	147	2	0.31	0.13	29.03	15.38	Model 2224 116257
4	144	3	147	2	0.31	0.13	-9.68	7.69	Model 2224 116257
5	185	2	147	2	0.31	0.13	122.58	0.00	Model 2224 116257
6	172	2	147	2	0.31	0.13	80.65	0.00	Model 2224 116257
7	178	1	147	2	0.31	0.13	100.00	-7.69	Model 2224 116257
8	141	2	147	2	0.31	0.13	-19.35	0.00	Model 2224 116257
9	166	3	147	2	0.31	0.13	61.29	7.69	Model 2224 116257
10	194	1	147	2	0.31	0.13	151.61	-7.69	Model 2224 116257
11	172	9	147	2	0.31	0.13	80.65	53.85	Model 2224 116257
12	144	6	147	2	0.31	0.13	-9.68	30.77	Model 2224 116257
13	209	12	147	2	0.31	0.13	200.00	76.92	Model 2224 116257
14	201	1	147	2	0.31	0.13	174.19	-7.69	Model 2224 116257

RADIOLOGICAL SURVEY FORM

Survey Number 092396040211

Survey Description: <u>UNAFFECTED AREA</u> <u>WALL ABOVE 2 METERS</u> <u>BKG 4 - ROOM 2</u>
<u>1.9</u>
Drawing Attached: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

Instrument (1)
Instrument Model: <u>PROTEAN 10156</u>
Instrument Ser. #: <u>62144-01 1026 157</u>
Calibration Due: <u>N/A</u>
Efficiency: <u>A-0.47</u>
MDA: A-17.51 CF: A-3.31 BKG: A-0.5
MDA: B-12.50 CF: B-6.75 BKG: B-1

Instrument (2)
Instrument Model: <u>MODEL 2224</u>
Instrument Ser. #: <u>132150</u>
Calibration Due: <u>8-2-97</u>
Efficiency: <u>A-0.16 B-0.30</u>
MDA: A-76.8 CF: A-6.75 BKG: A-4
MDA: B-220.39 CF: B-3.93 BKG: B-177

Survey Date: <u>09-27-96</u>
Survey by: <u>PHILSON</u> <u>12-23-96</u>
Signature: <u>[Signature]</u> Date: <u>12-23-96</u>
Print Name: <u>P. KORONA</u>
Review By: <u>[Signature]</u> <u>9/24/96</u>
Signature: <u>[Signature]</u> Date: <u>9/24/96</u>

Instrument (3)
Instrument Model: <u>19</u>
Instrument Ser. #: <u>91491</u>
Calibration Due: <u>12-21-96</u>
Efficiency: <u>N/A</u>
MDA: <u>N/A</u> CF: <u>N/A</u> BKG: <u>1016.41</u>

Instrument (4)
Instrument Model: <u>N/A</u>
Instrument Ser. #: <u>N/A</u>
Calibration Due: <u>N/A</u>
Efficiency: <u>N/A</u>
MDA: <u>N/A</u> CF: <u>N/A</u> BKG: <u>N/A</u>

Survey Point	Smearable Contamination		Fixed Contamination		Radiation Level (uR/Hr)	Instrument Used	Additional Comments
	beta/gamma dpm/100cm ²	alpha dpm/100cm ²	beta/gamma cpm/100cm ²	alpha cpm/100cm ²			
							(1) 2224 BACKGROUND: α = 4 β = 177
							(2) RANDOM ONE MINUTE STATIC COUNT FOR α & β -
							(3) IMMEDIATE AREA OF STATIC COUNT FRISKED FOR α & β -
							(4) 8 SURVEY TAKEN AT 1 METER FROM SURVEY POINT LOCATION SURFACE
							(5) CIRCLED NUMBERS ON MAP INDICATE SURVEY POINT LOCATION.

(6) STORM FRONT MOVING IN.
POSSIBLE INVERSION IN PLACE.
(7) SEE 0923960402 FOR CONTINUED DATA.

RADIOLOGICAL SURVEY FORM CONTINUATION SHEET

092396040211

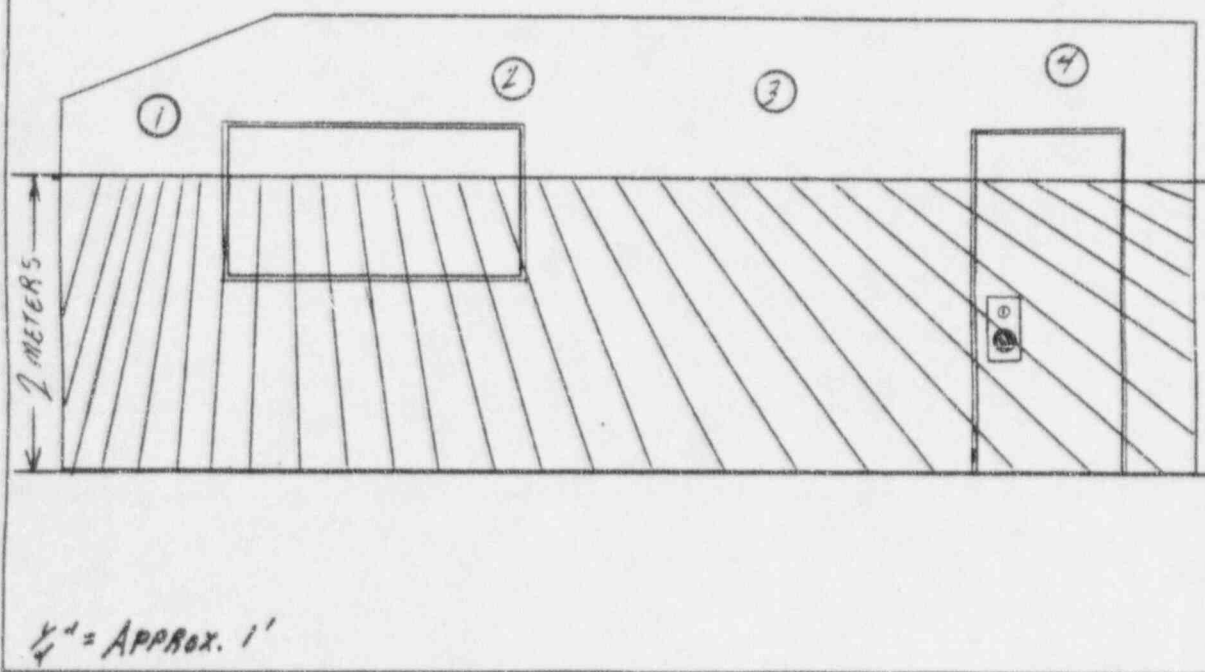
Survey Number

Survey Point	Measurable Contamination beta/gmms dpm/100cm ²	alpha dpm/100cm ²	Fixed Contamination beta/gmms cpm/100cm ²	alpha cpm/100cm ²	Radiation Level (uR/hr)	Instrument Used	Additional Comments
1			149	9	10	1,2,3	NORTH WALL
2			167	8	10		"
3			132	6	10		"
4			138	6	10		"
5			145	2	10		"
6			108	4	10		EAST WALL
7			103	0	10		"
8			123	1	10		"
9	SEE PROTEAN	DATA SHEET	174	6	10		SOUTH WALL
10			148	4	10		"
11			176	6	10		"
12			121	4	10		"
13			137	8	10		"
14			183	10	10		WEST WALL
15			190	6	10		"
16			114	5	10		"

RADIOLOGICAL SURVEY FORM

Survey Number 092196040211

BLDG. #4 - ROOM #2 - NORTH WALL (INTERIOR)



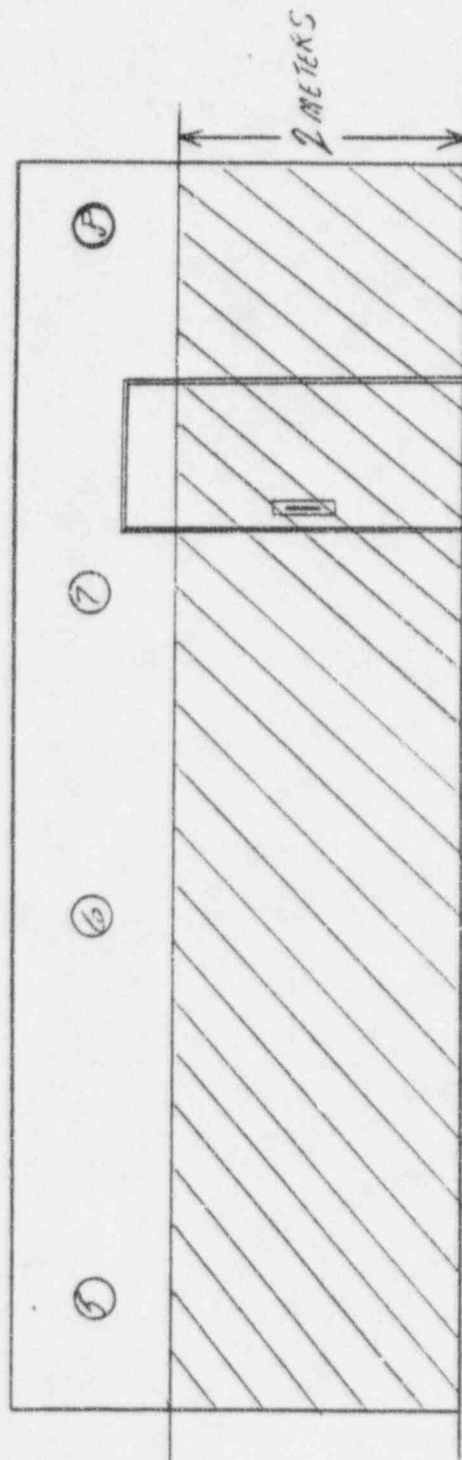
$\frac{1}{4}'' = \text{APPROX. } 1'$

RADIOLOGICAL SURVEY FORM

Survey Number

092396040211

BLDG. #4 - ROOM #2 - EAST WALL (INTERIOR)



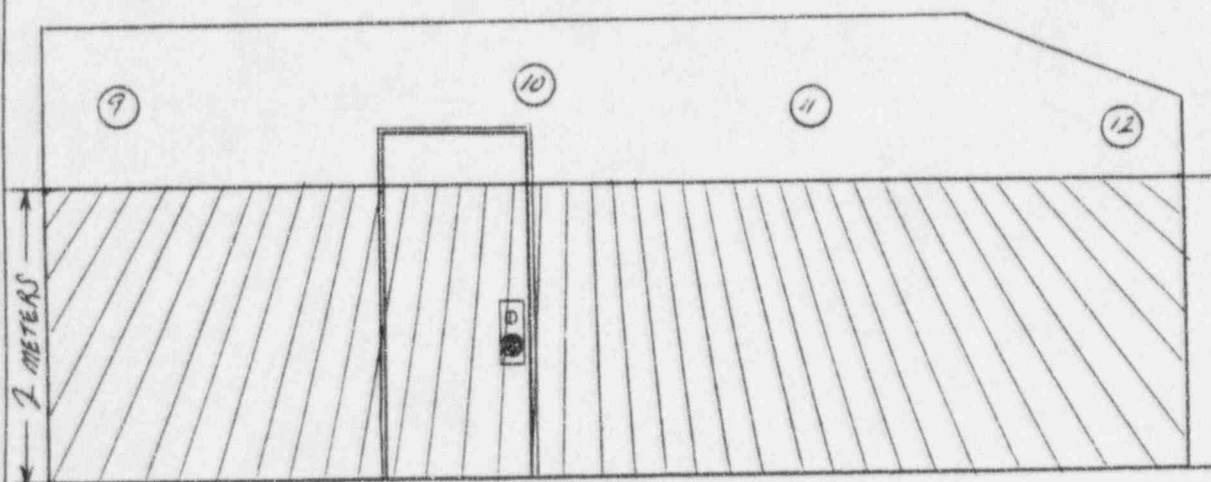
1/4" = APPROX. 1'

IT Corporation

RADIOLOGICAL SURVEY FORM

Survey Number 092396040211

BLOG. #4 - ROOM #2 - SOUTH WALL (INTERIOR)

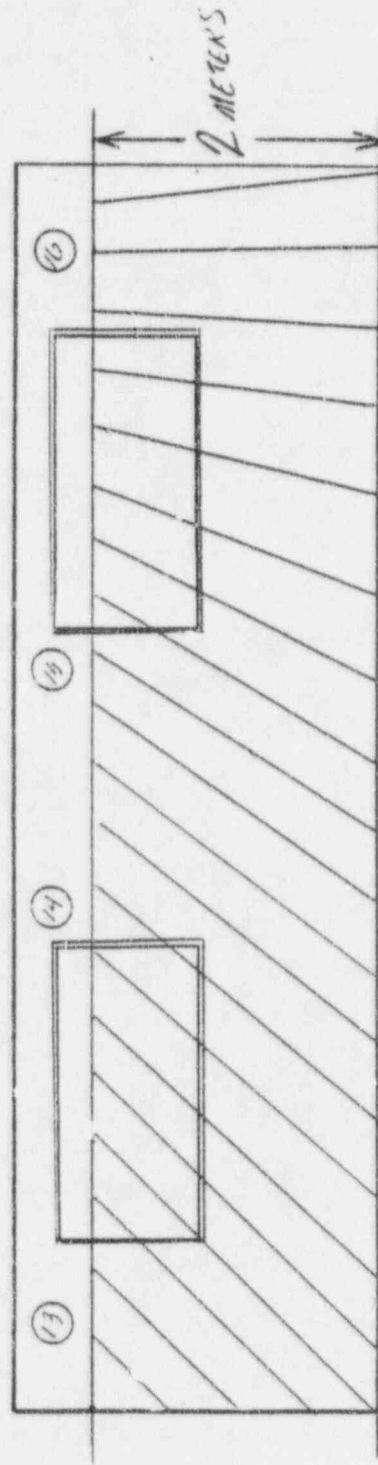


$\frac{1}{4}'' = \text{APPROX. } 1'$

RADIOLOGICAL SURVEY FORM

Survey Number 090396040211

BLOK. #4 - ROOM #2 - WEST WALL (INTERIOR)



$\frac{1}{4}'' = \text{APPROX. } 1'$

Survey 09239604027

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ALPHA										BETA									
Eff: 30.00% Wkg: 0.00 cpm MDA: 9.03 cpm										Eff: 27.00% Wkg: 1.00 cpm MDA: 12.91 dpm									
SN	PT	IS	COUNTS	NET CPM	DFM	LIMITS	COUNTS	NET CPM	DFM	LIMITS	DATE	TIME							
001	00	040211	0	0.00	0.00		3	2.00	3.51		09-23-96	16:47:19							
002	00		1	1.00	3.33		1	0.00	0.00		09-23-96	16:48:50							
003	00		0	0.00	0.00		4	3.00	5.26		09-23-96	16:50:21							
004	00		0	0.00	0.00		3	2.00	3.51		09-23-96	16:51:51							
005	00		0	0.00	0.00		0	-1.00	-1.75		09-23-96	16:53:21							
006	00		0	0.00	0.00		0	-1.00	-1.75		09-23-96	16:54:51							
007	00		2	2.00	6.67		3	2.00	3.51		09-23-96	16:56:22							
008	00		0	0.00	0.00		1	0.00	0.00		09-23-96	16:57:52							
009	00		0	0.00	0.00		1	0.00	0.00		09-23-96	16:59:22							
010	00		2	2.00	6.67		0	-1.00	-1.75		09-23-96	17:00:53							
011	00		0	0.00	0.00		0	-1.00	-1.75		09-23-96	17:02:23							
012	00		0	0.00	0.00		1	0.00	0.00		09-23-96	17:03:53							
013	00		0	0.00	0.00		0	-1.00	-1.75		09-23-96	17:05:23							
014	00		0	0.00	0.00		1	0.00	0.00		09-23-96	17:06:54							
015	00		0	0.00	0.00		0	-1.00	-1.75		09-23-96	17:08:24							
016	00		0	0.00	0.00		0	-1.00	-1.75		09-23-96	17:09:54							

Survey Point	Fixed Contamination		Background		Efficiency		Activity		Instrument Used
	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta Gamma	Alpha	Beta/Gamma dpm/100 cm ²	Alpha dpm/100 cm ²	
1	149	9	177	4	0.3	0.16	-93.33	31.25	Model 2224 132150
2	167	8	177	4	0.3	0.16	-33.33	25.00	Model 2224 132150
3	132	6	177	4	0.3	0.16	-150.00	12.50	Model 2224 132150
4	138	6	177	4	0.3	0.16	-130.00	12.50	Model 2224 132150
5	145	2	177	4	0.3	0.16	-106.67	-12.50	Model 2224 132150
6	108	4	177	4	0.3	0.16	-230.00	0.00	Model 2224 132150
7	103	0	177	4	0.3	0.16	-246.67	-25.00	Model 2224 132150
8	123	1	177	4	0.3	0.16	-180.00	-18.75	Model 2224 132150
9	174	6	177	4	0.3	0.16	-10.00	12.50	Model 2224 132150
10	148	4	177	4	0.3	0.16	-96.67	0.00	Model 2224 132150
11	176	6	177	4	0.3	0.16	-3.33	12.50	Model 2224 132150
12	171	4	177	4	0.3	0.16	-20.00	0.00	Model 2224 132150
13	137	8	177	4	0.3	0.16	-133.33	25.00	Model 2224 132150
14	183	10	177	4	0.3	0.16	20.00	37.50	Model 2224 132150
15	190	6	177	4	0.3	0.16	43.33	12.50	Model 2224 132150
16	114	5	177	4	0.3	0.16	-210.00	6.25	Model 2224 132150

Survey Number 022097040201

Instrument Model:	Instrument (1)
Instrument Ser. #:	PROTEAM
Calibration Due:	602444
Efficiency:	10A
NDA: A500	A 0.28
NDA: B2455	CF A 3.59
	CF B 2.99
	D 0.33
	HCSA 0
	HCB 1

Instrument Model:	Instrument (1)
Instrument Ser. #:	19
Calibration Due:	76228
Efficiency:	7-22-97
ANPA	NA
CT	NA
HR	12

Instrument Model:	Instrument (2)
Instrument Ser. #:	2224
Installation Due:	129450
Efficiency:	125-97
ANALYST:	A. O. 16
ANALYST:	B. O. 23
ANALYST:	CEA. 6.30
ANALYST:	HECA. 3
ANALYST:	CEB. 443
ANALYST:	HECH. 008

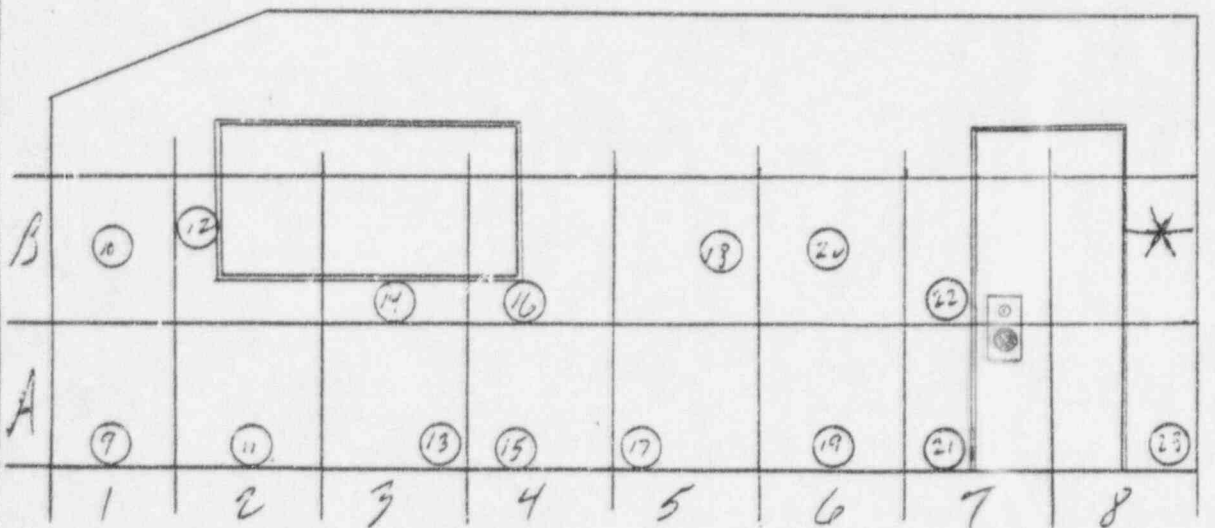
Instrument Model:	Instrument #:	Instrument (4)
Calibration Due:	Efficiency:	
CF:	CF:	CF:
CF:	CF:	CF:

Survey Point	Measurable Contamination		Fixed Contamination		Radialion Level (uR/hr)	Instrument Used	Additional Comments
	beta/gamma dpm/100cm ²	alpha dpm/100cm ²	beta/gamma cpm/100cm ²	alpha cpm/100cm ²			
1	SEE	405	236	3	12	1-2-3	FRISK, SMEAR, STATIC COUNT, AND GR READINGS ON SINGLE GRIN. SEE SURVEY #092396040207

RADIOLOGICAL SURVEY FORM

Survey Number ~~022097040201~~ ⁰²⁻²⁰⁹⁷
022097040201

BLDG. #4 - ROOM #2 - NORTH WALL (INTERIOR)

* SMEAR AND READINGS
ON THIS GRID ONLY (BB)

1" = APPROX. 1'

EACH FULL GRID = APPROX. 1 m²

Survey #022097040201

PAGE 3 of

----- ALPHA ----- BETA -----
Eff: 28.00% Bkg: 0.00 cpm MDA: 9.68 dpm Eff: 33.00% Bkg: 1.00 cpm MDA: 22.30 dpm

SN	RPT	ID	COUNTS	NET CPM	DPM	LIMITS	COUNTS	NET CPM	DPM	LIMITS	DATE	TIME
1	00	040201	0	0.00	0.00		0	-1.00	-3.03		02-20-97	14:45:49

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FIXED CONTAMINATION DATA SHEET

Survey Number

022097040201

Page 4 of 4

Survey Point	Fixed Contamination		Background		Efficiency		Activity		Instrument Used
	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta Gamma	Alpha	Beta/Gamma dpm/100 cm ²	Alpha dpm/100 cm ²	
1	236	3	200	3	0.23	0.16	156.52	0.00	Model 2224 129450

Appendix C
Section C-3

RADIOLOGICAL SURVEY FORM

Survey Number 092596040306

Survey Description: AFFECTED AREA
Bldg 4 - Room 3
FLOOR
N/A
Drawing Attached: Yes ☒ No

Instrument (1)
Instrument Model: Protean IPC 9025
Instrument Ser. #:
Calibration Due: N/A
Efficiency: 0.30 0.57
MDA: 17.91 CF: 3.39 BKG: 0.5
MDA: 12.50 CF: 1.75 BKG: 1

Instrument (2)
Instrument Model: 2224
Instrument Ser. #: 132142
Calibration Due: 08-02-97
Efficiency: 0.17 0.30
MDA: 71.61 CF: 6.02 BKG: 4
MDA: 21.11 CF: 3.35 BKG: 2.98

Survey Date: 09-25-96
Survey by: [Signature] 192596
Signature Date
Print Name: J. KURCZ
Review By: [Signature] 110376
Signature Date

Instrument (3)
Instrument Model: 19
Instrument Ser. #: 70228
Calibration Due: 0-12-97
Efficiency: N/A
MDA: N/A CF: N/A BKG: 10 SURF

Instrument (4)
Instrument Model:
Instrument Ser. #: N
Calibration Due: 4
Efficiency:
MDA: CF: BKG:

Survey Point	Smearable Contamination		Fixed Contamination		Radiation Level (uR/Hr)	Instrument Used	Additional Comments
	beta/gamma dpm/100cm ²	alpha dpm/100cm ²	beta/gamma cpm/100cm ²	alpha cpm/100cm ²			
							(1) 2224 BACKGROUND: X = 1 B = 278
							(2) 100% FRISK EACH GRID FOR X AND B-
							(3) 1 MINUTE STATIC COUNT FOR X AND B-
							(4) 8 SURVEY TAKEN AT 1 METER FROM SURVEY POINT LOCATION SURFACE
							(5) CIRCLED NUMBERS ON MAP INDICATE SURVEY POINT LOCATIONS

RADIOLOGICAL SURVEY FORM CONTINUATION SHEET

Survey Number 0925-96040306

Survey Point	Smearable Contamination beta/gamma dpm/100cm ²	alpha dpm/100cm ²	Fixed Contamination beta/gamma cpm/100cm ²	alpha cpm/100cm ²	Radiation Level (uR/hr)	Instrument Used	Additional Comments
1			530	20	15	12,3	A1 Floor
2			436	31	15		A2
3			529	28	15		A3
4			483	33	15		A4
5			305	29	15		A5
6			270	24	15		A6
7			302	19	15		A7
8			319	23	15		A7
9			313	22	15		B1
10			304	16	15		B2
11			305	16	15		B3
12			271	11	15		B4
13			269	17	15		B5
14			256	11	15		B6
15			236	7	15		B7
16			288	30	15		B8
17			309	13	15		C1
18			269	12	15		C2
19			218	14	15		C3
20			291	13	15		C4
21			234	12	15		C5
22			234	7	15		C6
23			499	18	15		C7
24			392	17	15		C8
25			476	33	15		D1
26			474	45	15		D2
27			254	20	15		D3
28			312	13	15		D4
29			265	21	15		D5
30			275	8	15		D6
31			239	8	15		D7

RADIOLOGICAL SURVEY FORM CONTINUATION SHEET

Survey Number

092596040300

Survey Point	Smearable Contamination beta/gamma dpm/100cm ²	alpha dpm/100cm ²	Fixed Contamination beta/gamma cpm/100cm ²	alpha cpm/100cm ²	Radiation Level (uR/hr)	Instrument Used	Additional Comments
32			300 329 ¹²	12	15	1, 2, 3	08 Floor
33			329	7	15		E1
34			576	40	15		E2
35			283	14	15		E3
36			388	29	15		E4
37			297	15	15		E5 ^{thin} E5
38			273	13	15		E6
39			287	7	15		E7
40			282	23	15		E8
41			312	24	15		F1
42			282	12	15		F2
43			218	13	15		F3
44	SEE		263	8	15		F4
45	PROTEAN		235	9	15		F5
46		DATA	272	7	15		F6
47		FILET	306	4	15		F7
48			385	15	15		F8
49			19535 ¹⁰⁰	9 ²⁵⁴⁶	15		G1
50			259	11	15		G2
51			468	26	15		G3
52			342	22	15		G4
53			310	13	15		G5
54			331	11	15		G6
55			351	8	15		G7
56			293	13	15		G8
57			204	13	15		H1
58			224	13	15		H2
59			428	20	15		H3
60			327	12	15		H4
61			393	16	15		H5
62			295	5	15		H6

0725-96040306

Survey Number

Survey Point	Smearable Contamination		Fixed Contamination		alpha cpm/100cm ²	Radiation Level (uR/hr)	Instrument Used	Additional Comments
	beta/gamma dpm/100cm ²	alpha dpm/100cm ²	beta/gamma cpm/100cm ²	alpha cpm/100cm ²				
63	SEE FIELD		266	7	15	123	HP	FLOOR
64	DATA SHEET		342	5	15	123	HP	FLOOR

IT Corporation

RADIOLOGICAL SURVEY FORM

Survey Number 092596040306

BLDG 4 - ROOM 3 - FLOOR

↑
N
↓

H	57	58	59	60	61	62	63	64
G	49	50	51	52	53	54	55	56
F	41	42	43	44	45	46	47	48
E	33	34	35	36	37	38	39	40
D	25	26	27	28	29	30	31	32
C	17	18	19	20	21	22	23	24
B	9	10	11	12	13	14	15	16
A	1	2	3	4	5	6	7	8
	1	2	3	4	5	6	7	8

$\frac{1}{4}" = \text{APPROX. } 1'$

EACH FULL GRID = APPROX 1 m²

ALPHA

BETA

Eff: 30.00% Bgr: 1.00 cpm MDA: 9.07 dpm Eff: 87.00% Bgr: 1.00 cpm MDA: 12.91 dpm

RPT	ID	COUNTS	NET CPM	CPM	LIMITS	COUNTS	NET CPM	CPM	LIMITS	DATE	TIME
001	00	040506	3	3.00	10.00	3	2.00	3.51		09-26-93	04:08:01
002	00		4	4.00	17.00	11	10.00	17.84		09-26-93	04:10:00
003	00		1	1.00	3.00	7	6.00	10.80		09-26-93	04:11:00
004	00		1	1.00	3.00	0	-1.00	-1.75		09-26-93	04:11:01
005	00		3	3.00	10.00	3	2.00	3.51		09-26-93	04:11:02
006	00		4	4.00	17.00	6	5.00	8.77		09-26-93	04:11:07
007	00		4	4.00	17.00	7	6.00	10.80		09-26-93	04:11:04
008	00		1	1.00	3.00	4	3.00	5.26		09-26-93	04:11:04
009	00		3	3.00	10.00	1	0.00	0.00		09-26-93	04:12:00
010	00		1	1.00	3.00	6	5.00	8.77		09-26-93	04:12:06
011	00		1	1.00	3.00	4	3.00	5.26		09-26-93	04:12:07
012	00		2	2.00	6.00	1	0.00	0.00		09-26-93	04:12:08
013	00		0	0.00	0.00	6	5.00	8.77		09-26-93	04:12:08
014	00		0	0.00	0.00	0	0.00	0.00		09-26-93	04:12:09
015	00		3	3.00	10.00	4	3.00	5.26		09-26-93	04:12:09
016	00		1	1.00	3.00	3	2.00	3.51		09-26-93	04:13:10
017	00		0	0.00	0.00	1	0.00	0.00		09-26-93	04:13:11
018	00		1	1.00	3.00	6	5.00	8.77		09-26-93	04:13:11
019	00		1	1.00	3.00	1	0.00	0.00		09-26-93	04:13:12
020	00		4	4.00	17.00	1	0.00	0.00		09-26-93	04:13:12
021	00		0	0.00	0.00	0	-1.00	-1.75		09-26-93	04:13:12
022	00		0	0.00	0.00	1	0.00	0.00		09-26-93	04:13:13
023	00		0	0.00	0.00	4	3.00	5.26		09-26-93	04:13:13
024	00		4	4.00	17.00	3	2.00	3.51		09-26-93	04:13:14
025	00		4	4.00	17.00	4	3.00	5.26		09-26-93	04:14:14
026	00		1	1.00	3.00	3	2.00	3.51		09-26-93	04:14:17
027	00		0	0.00	0.00	1	0.00	0.00		09-26-93	04:14:17
028	00		1	1.00	3.00	13	12.00	21.73		09-26-93	04:15:18
029	00		1	1.00	3.00	1	0.00	0.00		09-26-93	04:15:18
030	00		3	3.00	10.00	1	0.00	0.00		09-26-93	04:15:19
031	00		0	0.00	0.00	4	3.00	5.26		09-26-93	04:15:20
032	00		1	1.00	3.00	3	2.00	3.51		09-26-93	04:15:21
033	00		0	0.00	0.00	6	5.00	8.77		09-26-93	04:15:21
034	00		1	1.00	3.00	3	2.00	3.51		09-26-93	04:15:22
035	00		1	1.00	3.00	10	9.00	16.73		09-26-93	04:15:27

ALPHA					BETA						
Eff: 30.00% Brq: 0.00 dpm MDA: 9.00 dpm					Eff: 37.00% Brq: 1.00 dpm MDA: 11.91 dpm						
SPR	ID	COUNTS	NET DPM	DPM	LIMITS	COUNTS	NET DPM	DPM	LIMITS	DATE	TIME
001	00	040305	2	2.00	2.57	0	-1.01	-1.75		09-25-98	03:29:24
002	00		4	4.00	17.77	2	4.00	7.02		09-25-98	03:31:00
003	00		7	7.00	10.00	3	1.00	1.75		09-25-98	03:32:11
004	00		0	0.00	0.00	1	2.00	3.51		09-25-98	03:34:02
005	00		7	7.00	10.00	7	6.00	10.53		09-25-98	03:35:02
006	00		1	1.00	5.77	3	4.00	7.02		09-25-98	03:37:02
007	00		2	1.00	5.77	2	2.00	3.51		09-25-98	03:38:34
008	00		0	0.00	0.00	3	4.00	7.02		09-25-98	03:41:04
009	00		3	3.00	10.00	1	7.00	12.23		09-25-98	03:43:05
010	00		1	1.00	5.77	1	7.00	12.23		09-25-98	03:43:05
011	00		1	1.00	5.77	3	6.00	10.53		09-25-98	03:44:05
012	00		4	4.00	17.77	3	4.00	7.02		09-25-98	03:46:07
013	00		0	0.00	0.00	1	3.00	5.25		09-25-98	03:47:05
014	00		0	0.00	0.00	1	2.00	3.51		09-25-98	03:48:05
015	00		2	2.00	5.77	1	0.00	0.00		09-25-98	03:50:07
016	00		3	3.00	10.00	3	5.00	14.04		09-25-98	03:52:10
017	00		1	0.00	0.00	1	6.00	10.53		09-25-98	03:53:41
018	00		1	0.00	0.00	1	7.00	8.24		09-25-98	03:55:11
019	00		2	2.00	5.77	1	0.00	0.00		09-25-98	03:56:42
020	00		4	4.00	17.77	11	14.00	17.54		09-25-98	03:58:12
021	00		2	2.00	5.77	3	7.00	12.23		09-25-98	03:59:43
022	00		1	1.00	5.77	2	1.00	1.75		09-25-98	04:01:14
023	00		2	2.00	5.77	4	3.00	5.25		09-25-98	04:02:45
024	00		2	2.00	5.77	1	0.00	0.00		09-25-98	04:04:15
025	00		3	3.00	10.00	3	7.00	12.23		09-25-98	04:05:47
026	00		7	7.00	17.77	6	5.00	8.77		09-25-98	04:07:18
027	00		4	4.00	17.77	3	4.00	7.02		09-25-98	04:08:49
028	00		0	0.00	0.00	1	0.00	0.00		09-25-98	04:10:20
029	00		5	5.00	16.67	13	12.00	21.25		09-25-98	04:11:50

Fixed Contamination			Background	Efficiency			Activity		
Survey Point	Beta/Gamma cpm/100 cm^2	Alpha cpm/100 cm^2	Beta/Gamma cpm/100 cm^2	Alpha cpm/100 cm^2	Beta Gamma	Alpha	Beta/Gamma dpm/100 cm^2	Alpha dpm/100 cm^2	Instrument Used
1	330	20	248	4	0.3	0.17	273.33	94.12	Model 2224 132142
2	436	31	248	4	0.3	0.17	626.67	158.82	Model 2224 132142
3	529	28	248	4	0.3	0.17	936.67	141.18	Model 2224 132142
4	483	33	248	4	0.3	0.17	783.33	170.59	Model 2224 132142
5	305	29	248	4	0.3	0.17	190.00	147.06	Model 2224 132142
6	270	24	248	4	0.3	0.17	73.33	117.65	Model 2224 132142
7	302	14	248	4	0.3	0.17	180.00	58.82	Model 2224 132142
8	349	23	248	4	0.3	0.17	336.67	111.76	Model 2224 132142
9	313	22	248	4	0.3	0.17	216.67	105.88	Model 2224 132142
10	304	16	248	4	0.3	0.17	186.67	70.59	Model 2224 132142
11	305	16	248	4	0.3	0.17	190.00	70.59	Model 2224 132142
12	271	11	248	4	0.3	0.17	76.67	41.18	Model 2224 132142
13	269	17	248	4	0.3	0.17	70.00	76.47	Model 2224 132142
14	256	11	248	4	0.3	0.17	26.67	41.18	Model 2224 132142
15	236	7	248	4	0.3	0.17	-40.00	17.65	Model 2224 132142
16	288	30	248	4	0.3	0.17	133.33	152.94	Model 2224 132142
17	309	13	248	4	0.3	0.17	203.33	52.94	Model 2224 132142
18	269	12	248	4	0.3	0.17	70.00	47.06	Model 2224 132142
19	218	14	248	4	0.3	0.17	-100.00	58.82	Model 2224 132142
20	291	13	248	4	0.3	0.17	143.33	52.94	Model 2224 132142
21	234	12	248	4	0.3	0.17	-46.67	47.06	Model 2224 132142
22	234	7	248	4	0.3	0.17	-46.67	17.65	Model 2224 132142
23	499	18	248	4	0.3	0.17	836.67	82.35	Model 2224 132142
24	392	17	248	4	0.3	0.17	480.00	76.47	Model 2224 132142
25	476	33	248	4	0.3	0.17	760.00	170.59	Model 2224 132142
26	474	45	248	4	0.3	0.17	753.33	241.18	Model 2224 132142
27	254	20	248	4	0.3	0.17	20.00	94.12	Model 2224 132142
28	312	13	248	4	0.3	0.17	213.33	52.94	Model 2224 132142
29	265	21	248	4	0.3	0.17	56.67	100.00	Model 2224 132142
30	275	8	248	4	0.3	0.17	90.00	23.53	Model 2224 132142

Fixed Contamination			Background		Efficiency		Activity		Instrument Used
Survey Point	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta Gamma	Alpha	Beta/Gamma dpm/100 cm ²	Alpha dpm/100 cm ²	
31	239	8	248	4	0.3	0.17	-30.00	23.53	Model 2224 132142
32	300	12	248	4	0.3	0.17	173.33	47.06	Model 2224 132142
33	329	7	248	4	0.3	0.17	270.00	17.65	Model 2224 132142
34	576	40	248	4	0.3	0.17	1093.33	211.76	Model 2224 132142
35	283	14	248	4	0.3	0.17	116.67	58.82	Model 2224 132142
36	388	29	248	4	0.3	0.17	466.67	147.06	Model 2224 132142
37	297	25	248	4	0.3	0.17	163.33	123.53	Model 2224 132142
38	273	13	248	4	0.3	0.17	83.33	52.94	Model 2224 132142
39	287	7	248	4	0.3	0.17	130.00	17.65	Model 2224 132142
40	282	23	248	4	0.3	0.17	113.33	111.76	Model 2224 132142
41	312	24	248	4	0.3	0.17	213.33	117.65	Model 2224 132142
42	282	12	248	4	0.3	0.17	113.33	47.06	Model 2224 132142
43	218	13	248	4	0.3	0.17	-100.00	52.94	Model 2224 132142
44	263	8	248	4	0.3	0.17	50.00	23.53	Model 2224 132142
45	235	9	248	4	0.3	0.17	-43.33	29.41	Model 2224 132142
46	272	7	248	4	0.3	0.17	80.00	17.65	Model 2224 132142
47	306	4	248	4	0.3	0.17	193.33	0.00	Model 2224 132142
48	388	25	248	4	0.3	0.17	466.67	123.53	Model 2224 132142
49	195	9	248	4	0.3	0.17	-176.67	29.41	Model 2224 132142
50	259	11	248	4	0.3	0.17	36.67	41.18	Model 2224 132142
51	468	26	248	4	0.3	0.17	733.33	129.41	Model 2224 132142
52	342	22	248	4	0.3	0.17	313.33	105.88	Model 2224 132142
53	310	23	248	4	0.3	0.17	206.67	111.76	Model 2224 132142
54	331	11	248	4	0.3	0.17	276.67	41.18	Model 2224 132142
55	351	8	248	4	0.3	0.17	343.33	23.53	Model 2224 132142
56	293	13	248	4	0.3	0.17	150.00	52.94	Model 2224 132142
57	204	13	248	4	0.3	0.17	-146.67	52.94	Model 2224 132142
58	224	13	248	4	0.3	0.17	-80.00	52.94	Model 2224 132142
59	428	20	248	4	0.3	0.17	600.00	94.12	Model 2224 132142
60	327	12	248	4	0.3	0.17	263.33	47.06	Model 2224 132142

IT Corporation

Molycorp 768380

FIXED CONTAMINATION DATA SHEET

Survey Number

92596040306

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Survey Point	Fixed Contamination		Background		Efficiency			Activity		Instrument Used
	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta Gamma	Alpha	Beta/Gamma dpm/100 cm ²	Alpha dpm/100 cm ²		
61	393	16	248	4	0.3	0.17	483.33	70.59	Model 2224 132142	
62	295	5	248	4	0.3	0.17	156.67	5.88	Model 2224 132142	
63	266	7	248	4	0.3	0.17	60.00	17.65	Model 2224 132142	
64	342	5	248	4	0.3	0.17	313.33	5.88	Model 2224 132142	

RADIOLOGICAL SURVEY FORM

Survey Number 92596040507

Survey Description: Alfa, beta, gamma, alpha
614755 beta, gamma, alpha - 30, 16, 6, 11

Drawing Attached Yes No

Instrument (1)
Instrument Model: Proton IPC 9025
Instrument Ser. #: JL 46 150
Calibration Due: N/A
Efficiency: 0.30 0.57
MDA: 17.81 CF: 3.39 BKG: 0.3
MDA: 12.50 CF: 1.75 BKG: 1

Instrument (2)
Instrument Model: Lot 2224
Instrument Ser. #: 132151
Calibration Due: 8.2.27
Efficiency: 0.16 0.15
MDA: 55.48 CF: 6.32 BKG: 6
MDA: 33.15 CF: 3.46 BKG: 0.8

Survey Date: 9.25.96
Survey by: David Rogers
Print Name: David Rogers
Review By: David Rogers
Date: 10.5.96

Instrument (3)
Instrument Model: Lot 19
Instrument Ser. #: 76228
Calibration Due: 1-11-97
Efficiency: N/A
MDA: N/A CF: N/A BKG: 10

Instrument (4)
Instrument Model: N/A
Instrument Ser. #: A
Calibration Due: N/A
Efficiency: N/A
MDA: N/A CF: N/A BKG: N/A

Survey Point	Smearable Contamination beta/gamma dpm/100cm ²	alpha dpm/100cm ²	Fixed Contamination beta/gamma cpm/100cm ²	alpha cpm/100cm ²	Radiation Level (uR/hr)	Instrument Used	Additional Comments
							• 100% Tisk; at 1
							• 1 minute static counts per m ² ; at 1
							• 1 smear per m ²
							• 4HR READINGS taken at 1m from surface

RADIOLOGICAL SURVEY FORM CONTINUATION SHEET

Survey Number

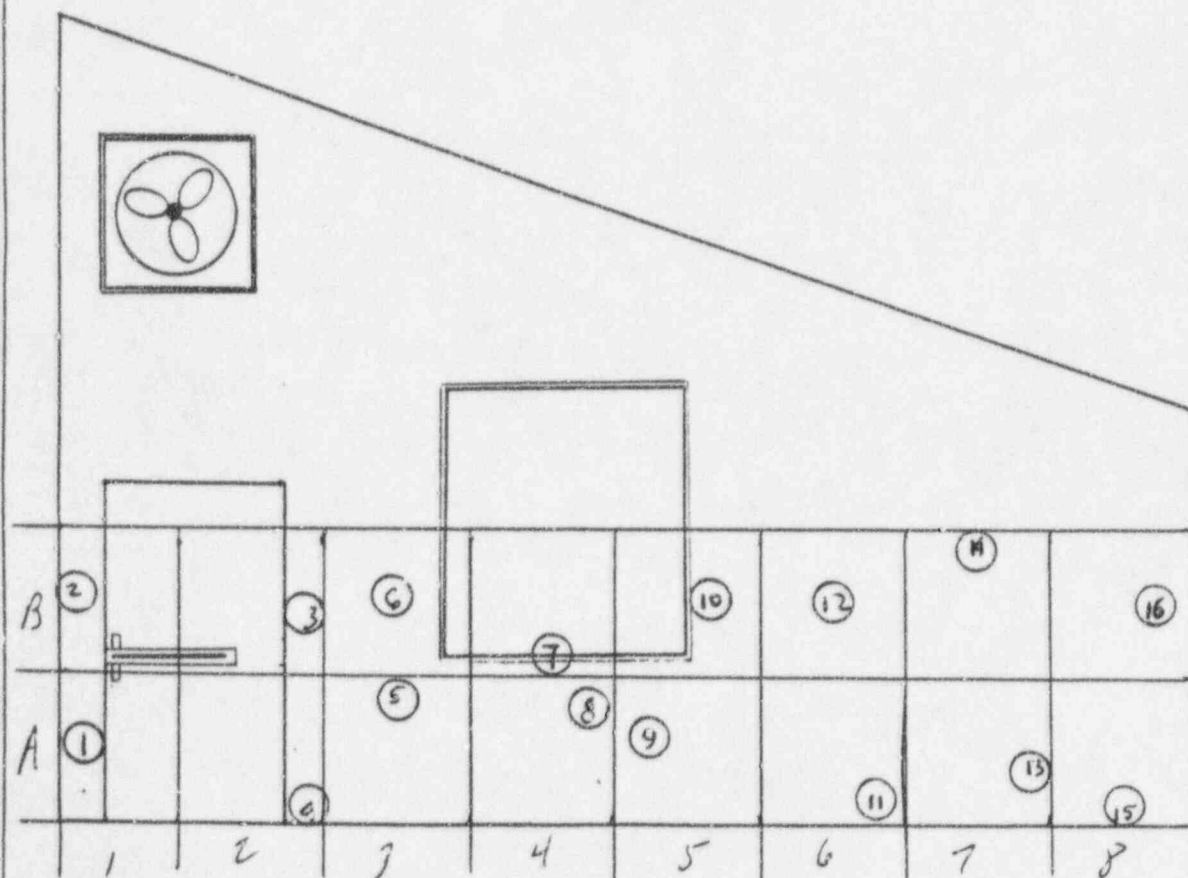
92596040301

Survey Point	Smearable Contamination beta/gamma dpm/100cm ²	alpha dpm/100cm ²	Fixed Contamination beta/gamma cpm/100cm ²	alpha cpm/100cm ²	Radiation Level (uR/hr)	Instrument Used	Additional Comments
1	SEE PDS	PDS	283	12	15	1, 2, 3	A1
2			284	10	15		B1
3			305	17	15		A2
4			265	8	14		B2
5			299	7	15		A3
6			286	7	15		B3
7			281	10	15		A4
8			318	8	13		B4
9			377	5	16		A5
10			286	5	15		B5
11			554	9	15		A6
12			279	9	15		B6
13			251	5	15		A7
14			225	7	15		B7
15			245	5	15		A8
16			281	6	15		B8

RADIOLOGICAL SURVEY FORM

Survey Number 92596040307

BLDG. 4 - ROOM 3 - SOUTH WALL (INTERIOR)

 $\frac{1}{4}'' = \text{APPROX. } 1'$

92596040307

4 OF 5

ALPHA BETA
P.D. 472-7331

ALPHA					BETA				
Eff: 20.00% Bkg: 0.00 cpm MDA: 9.07 cpm					Eff: 27.00% Bkg: 1.00 cpm MDA: 12.91 cpm				
ID	COUNTS	NET DPM	DPM	LIMITS	ID	COUNTS	NET DPM	DPM	LIMITS
001 00	040307	1	1.00	3.33	4	0.00	0.00	3.26	09-28-96 02:35:38
002 00		0	0.00	0.00	5	1.00	1.00	3.75	09-28-96 02:36:08
003 00		1	1.00	3.33	6	0.00	0.00	3.26	09-28-96 02:36:38
004 00		1	1.00	3.33	7	0.00	0.00	3.26	09-28-96 02:37:07
005 00		1	1.00	3.33	8	0.00	0.00	3.26	09-28-96 02:37:38
006 00		0	0.00	0.00	9	0.00	0.00	3.26	09-28-96 02:38:08
007 00		0	0.00	0.00	10	0.00	0.00	3.26	09-28-96 02:38:38
008 00		1	1.00	3.33	11	0.00	0.00	3.26	09-28-96 02:39:08
009 00		0	0.00	0.00	12	0.00	0.00	3.26	09-28-96 02:39:38
010 00		0	0.00	0.00	13	0.00	0.00	3.26	09-28-96 02:40:08
011 00		0	0.00	0.00	14	0.00	0.00	3.26	09-28-96 02:40:38
012 00		0	0.00	0.00	15	0.00	0.00	3.26	09-28-96 02:41:08
013 00		1	1.00	3.33	16	0.00	0.00	3.26	09-28-96 02:41:38
014 00		1	1.00	3.33	17	0.00	0.00	3.26	09-28-96 02:42:08
015 00		0	0.00	0.00	18	0.00	0.00	3.26	09-28-96 02:42:38
016 00		4	4.00	10.73	19	0.00	0.00	3.26	09-28-96 02:43:08

Fixed Contamination			Background		Efficiency		Activity		Instrument Used
Survey Point	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta Gamma	Alpha	Beta/Gamma dpm/100 cm ²	Alpha dpm/100 cm ²	
1	283	12	218	6	0.29	0.16	224.14	37.50	Model 2224 132151
2	284	10	218	6	0.29	0.16	227.59	25.00	Model 2224 132151
3	305	17	218	6	0.29	0.16	300.06	68.75	Model 2224 132151
4	265	8	218	6	0.29	0.16	162.07	12.50	Model 2224 132151
5	299	7	218	6	0.29	0.16	279.31	6.25	Model 2224 132151
6	286	7	218	6	0.29	0.16	234.48	6.25	Model 2224 132151
7	281	10	218	6	0.29	0.16	217.24	25.00	Model 2224 132151
8	218	8	218	6	0.29	0.16	0.00	12.50	Model 2224 132151
9	377	8	218	6	0.29	0.16	548.28	12.50	Model 2224 132151
10	286	5	218	6	0.29	0.16	234.48	-6.25	Model 2224 132151
11	394	9	218	6	0.29	0.16	606.90	18.75	Model 2224 132151
12	279	9	218	6	0.29	0.16	210.34	18.75	Model 2224 132151
13	251	5	218	6	0.29	0.16	113.79	-6.25	Model 2224 132151
14	228	7	218	6	0.29	0.16	34.48	6.25	Model 2224 132151
15	245	5	218	6	0.29	0.16	93.10	-6.25	Model 2224 132151
16	282	6	218	6	0.29	0.16	220.69	0.00	Model 2224 132151

RADIOLOGICAL SURVEY FORM

Survey Number

925960403 c8

Survey Description: AFFECTED AREA CHARACTERIZATION: EAST WEST AND NORTH WALL	Drawing Attached: (Yes) No
--	----------------------------

Survey Date: 9-25-16
Survey by: [Signature] Date: 1-27-2018
Print Name: [Signature]
Review By: [Signature] Date: 10-5-2018

Instrument (1)	
Instrument Model:	Proteom IPC 9025
Instrument Ser. #:	1U26-156
Calibration Due:	N/A
Efficiency:	0.30 0.057
MDA:	17.81 CF: 3.39 BKG: 0.5
MDA:	12.50 CF: 1.75 BKG:

Instrument Model:	Instrument (3)
Instrument Ser. #:	211-19
Callibration Due:	76228
Efficiency:	115-97
MDA:	211A
CF:	211A BKG-

Instrument Model:	LM-2424	Instrument (2)
Instrument Set. #:	132151	
Calibration Due:	5-2-97	
Efficiency:	X-0.16 - B.C. 25	
MDA: w-5.54%	CF: 6.32	BKG: 6
MDA: A-7.71%	CF: 8.46	BKG: 6

Instrument Model:		Instrument (4)
Instrument Ser. #:	24	
Calibration Due:		
Efficiency:		
CE:		BKG.

Survey Point	Smearable Contamination		Fixed Contamination		Radiation Level (uR/Hr)	Instrument Used	Additional Comments
	beta/gamma dpm/100cm ²	alpha dpm/100cm ²	beta/gamma cpm/100cm ²	alpha cpm/100cm ²			
							• 100% Fe ₂ O ₃ x + β
							• 1 minute static count per m ² at β ⁻
							• 1 smear per m ²
							• AIR readings taken at 1m from surface.

RADIOLOGICAL SURVEY FORM CONTINUATION SHEET

Survey Number 92536040308

Survey Point	Smearable Contamination beta/gamma dpm/100cm ²	alpha dpm/100cm ²	Fixed Contamination beta/gamma cpm/100cm ²	alpha cpm/100cm ²	Radiation Level (uR/hr)	Instrument Used	Additional Comments
1			254	4	15	123	A1 EAST WALL
2			242	5	15		B1
3			265	2	14		A2
4			213	7	15		B2
5			232	4	13		A3
6			265	15	16		B3
7			225	4	15		A4
8			205	5	15		B4
9			237	7	15		A5
10			219	8	15		B5
11			295	3	15		A6
12			217	2	15		B6
13			207	4	15		A7
14			199	6	15		B7
15			195	9	12		A8
16	SEE	PDS	223	10	15		B8
17			212	5	15		A1 WEST WALL
18			240	5	15		B2 B1 229 2336
19			222	7	15		A2
20			248	12	15		B2
21			275	2	15		A3
22			325	6	14		B3
23			260	12	15		A4
24			339 439 458 9	9	13		B4
25			220	1	15		A5
26			197	6	15		B5
27			222	1	15		A6
28			230	4	15		B6
29			211	3	15		A7
30			240	4	15		B7
31			212	2	15		A8

RADIOLOGICAL SURVEY FORM CONTINUATION SHEET

Survey Number

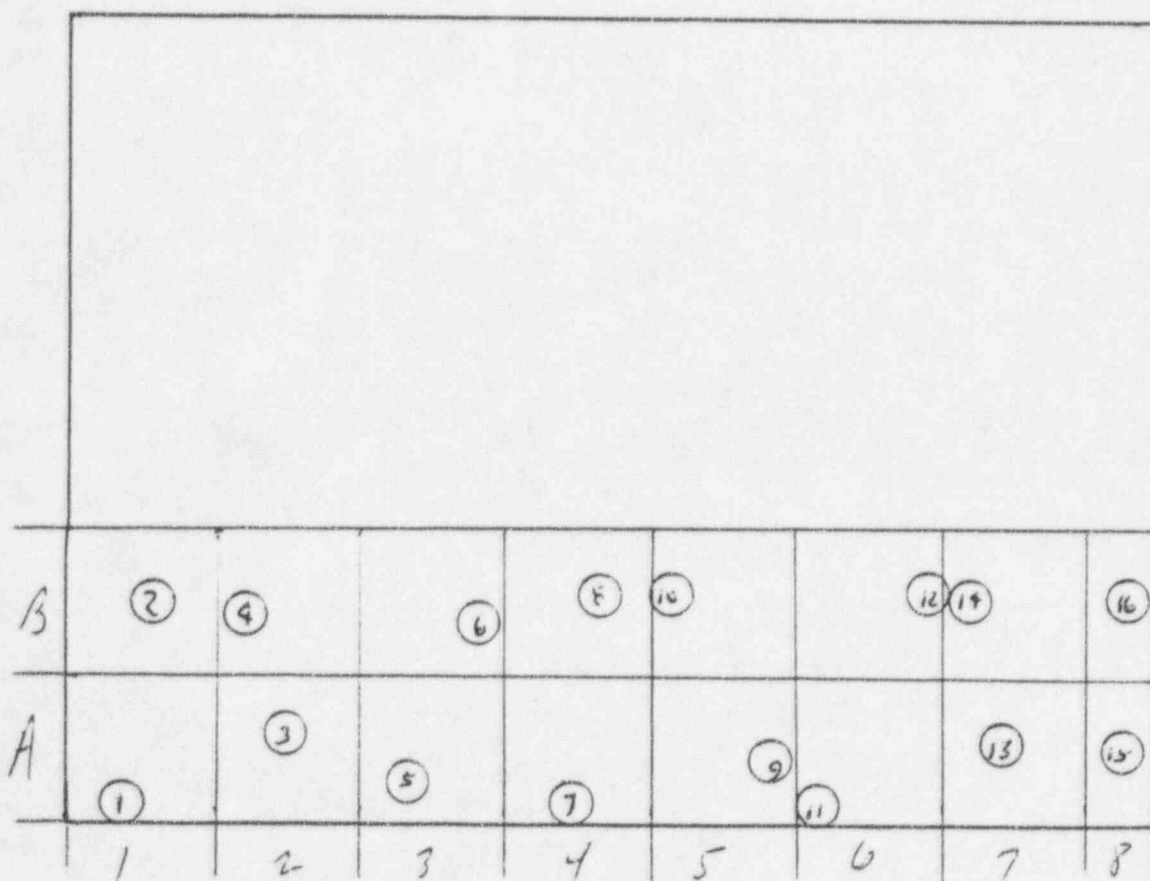
92596 040308

Survey Point	Smearable Contamination bpm/gamma dpm/100cm ²	alpha dpm/100cm ²	Fixed Contamination bpm/gamma cpm/100cm ²	alpha cpm/100cm ²	Radiation Level (uR/hr)	Instrument Used	Additional Comments
32			236	4	15	1, 2, 3	BE
33			221	5	15		A1
34			200	3	15		B1
35			265	3	14		A2
36			292	7	15		B2
37			264	4	15		A3
38			202	6	15		B3
39			223	4	16		A4
40			226	12	13		B4
41			208	4	10		A5
42			210	7	15		B5
43			241	7	14		A6
44			291	15	15		B6
45			191	9	15		A7
46			230	17	15		B7
47			236	5	14		A8
48			220	5	15		B8

RADIOLOGICAL SURVEY FORM

Survey Number 92596040308

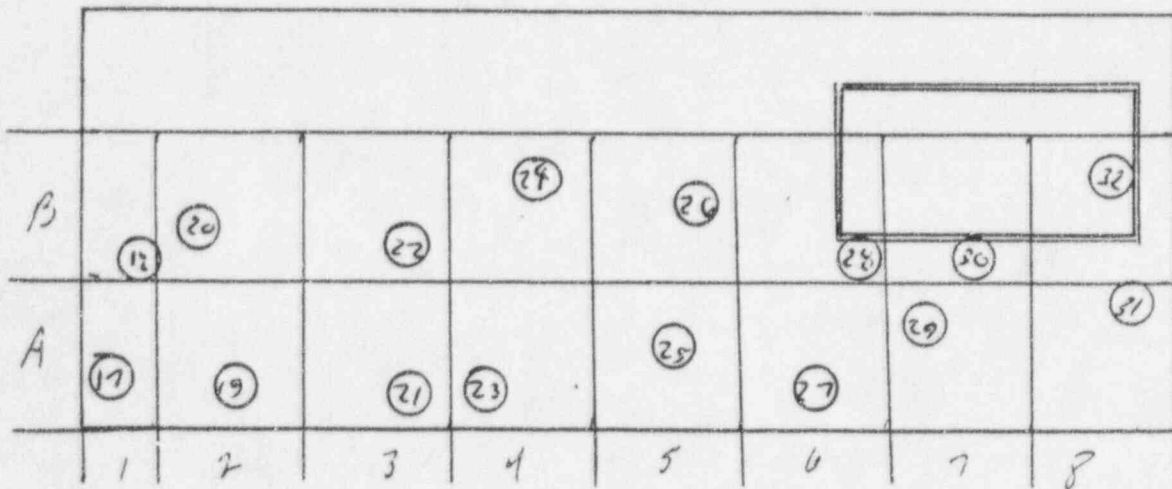
BLDG 4 - ROOM 3 - EAST WALL (INTERIOR)

 $\frac{1}{4}'' = \text{APPROX. } 1'$

RADIOLOGICAL SURVEY FORM

Survey Number 92586090308

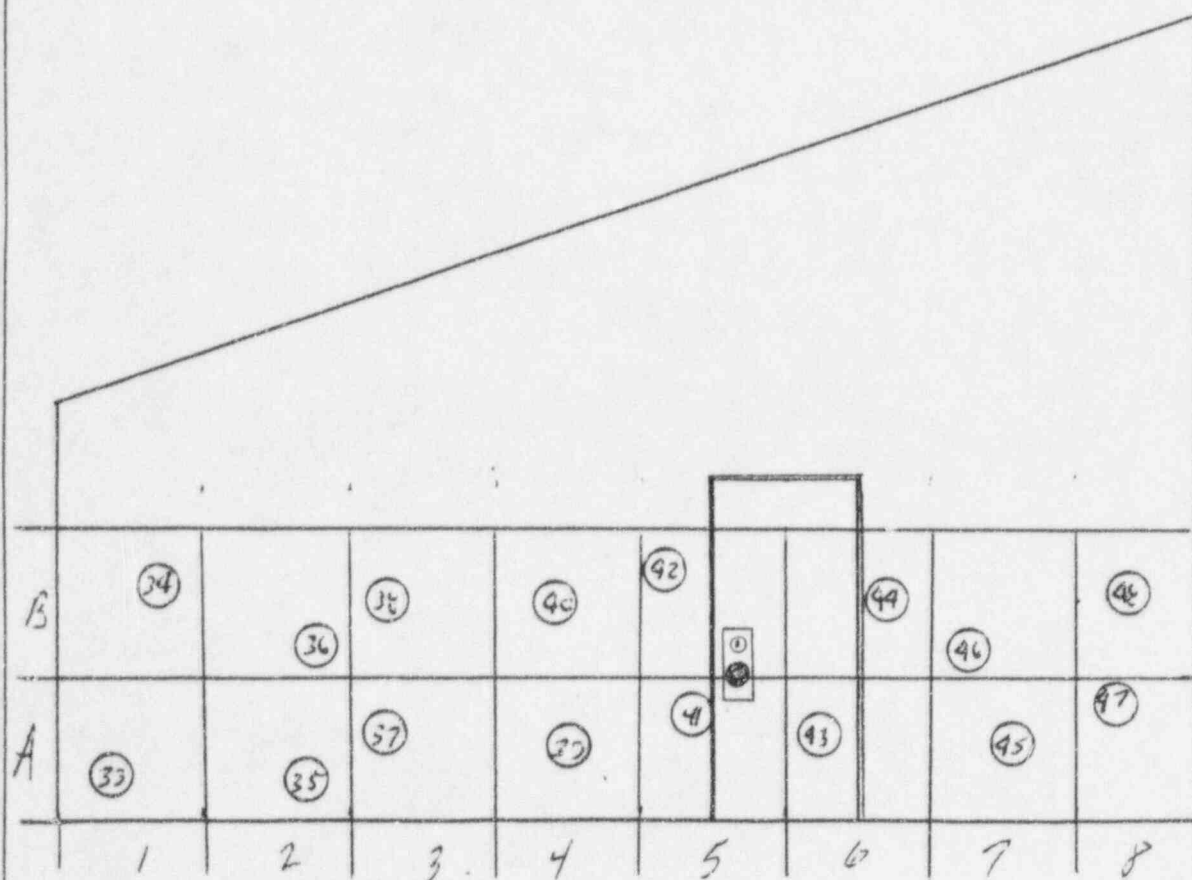
BLOG. 4 - ROOM 3 - WEST WALL (INTERIOR)

 $\frac{1}{4}'' = \text{APPROX. } 1'$

RADIOLOGICAL SURVEY FORM

Survey Number 92596 040308

BLDG. 4 - ROOM 3 - NORTH WALL (INTERIOR)

 $\frac{1}{4}'' = \text{APPROX. } 1'$

Eff: 30.00% Bq: 0.00 cpm MDA: 9.07 cpm / Eff: 57.00% Bq: 1.00 cpm MDA: 12.91 cpm

SETH

1 OF 10

SN	RPT	ID	COUNTS	NET CPM	CPM	LIMITS	COUNTS	NET CPM	CPM	LIMITS	DATE	TIME
001	00	040303	1	1.00	3.33		3	2.00	3.31		09-25-96	19:32:20
002	00		1	1.00	3.33		5	4.00	7.32		09-25-96	19:33:53
003	00		1	1.00	3.33		4	3.00	5.26		09-25-96	19:33:24
004	00		0	0.00	0.00		3	1.00	1.31		09-25-96	19:36:54
005	00		5	5.00	16.67		1	0.00	0.00		09-25-96	19:38:25
006	00		0	0.00	0.00		1	0.00	0.00		09-25-96	19:39:55
007	00		1	1.00	3.33		1	0.00	0.00		09-25-96	19:41:26
008	00		0	0.00	0.00		1	1.00	1.75		09-25-96	19:42:56
009	00		1	1.00	3.33		1	1.00	1.75		09-25-96	19:44:27
010	00		0	0.00	0.00		1	1.00	1.75		09-25-96	19:45:57
011	00		1	1.00	3.33		1	1.00	1.75		09-25-96	19:47:28
012	00		0	0.00	0.00		1	2.00	3.31		09-25-96	19:48:58
013	00		0	0.00	0.00		3	2.00	3.31		09-25-96	19:50:29
014	00		0	0.00	0.00		0	0.00	0.00		09-25-96	19:51:59
015	00		0	0.00	0.00		1	1.00	1.75		09-25-96	19:53:30
016	00		1	1.00	3.33		1	1.00	1.75		09-25-96	19:55:00
017	00		0	0.00	0.00		1	1.00	1.75		09-25-96	19:56:31
018	00		1	1.00	3.33		0	-1.00	-1.75		09-25-96	19:58:01
019	00		1	1.00	3.33		0	-1.00	-1.75		09-25-96	19:59:32
020	00		0	0.00	0.00		0	-1.00	-1.75		09-25-96	20:01:02
021	00		1	1.00	3.33		1	0.00	0.00		09-25-96	20:02:33
022	00		1	1.00	3.33		0	-1.00	-1.75		09-25-96	20:04:03
023	00		0	0.00	0.00		4	3.00	5.26		09-25-96	20:05:34
024	00		2	2.00	6.67		0	-1.00	-1.75		09-25-96	20:07:04
025	00		1	1.00	3.33		0	-1.00	-1.75		09-25-96	20:08:35
026	00		0	0.00	0.00		1	0.00	0.00		09-25-96	20:10:06
027	00		1	1.00	3.33		1	0.00	0.00		09-25-96	20:11:36
028	00		0	0.00	0.00		0	-1.00	-1.75		09-25-96	20:13:07
029	00		0	0.00	0.00		3	2.00	3.31		09-25-96	20:14:37
030	00		0	0.00	0.00		2	1.00	1.75		09-25-96	20:16:08
031	00		0	0.00	0.00		1	0.00	0.00		09-25-96	20:17:38
032	00		0	0.00	0.00		0	-1.00	-1.75		09-25-96	20:19:09
033	00		0	0.00	0.00		8	4.00	7.01		09-25-96	20:20:39
034	00		1	1.00	3.33		1	0.00	0.00		09-25-96	20:22:10
035	00		1	1.00	3.33		1	1.00	1.75		09-25-96	20:23:41
036	00		3	3.00	10.00		1	0.00	0.00		09-25-96	20:25:11
037	00		1	1.00	3.33		0	-1.00	-1.75		09-25-96	20:26:42
038	00		1	1.00	3.33		1	0.00	0.00		09-25-96	20:28:12
039	00		2	2.00	6.67		1	0.00	0.00		09-25-96	20:29:43
040	00		0	0.00	0.00		4	2.00	3.26		09-25-96	20:31:14

120100-0000

BETA 8 OF 10

Eff: 35.00% Bkg: 0.00 cpm MDA: 9.03 dpm Eff: 57.00% Bkg: 1.00 cpm MDA: 12.91 dpm

CH	RPT	ID	COUNTS	NET DPM	DPM	LIMITS	COUNTS	NET DPM	DPM	LIMITS	DATE	TIME
41	00	040308	2	2.00	6.67		1	0.00	0.00		09-25-96	20:44:35
002	00		0	0.00	0.00		1	0.00	0.00		09-25-96	20:46:05
003	00		3	3.00	10.00		1	1.00	1.75		09-25-96	20:47:06
004	00		1	1.00	3.33		0	-1.00	-1.75		09-25-96	20:49:06
005	00		1	1.00	3.33		1	1.00	1.75		09-25-96	20:50:37
006	00		1	1.00	3.33		1	0.00	0.00		09-25-96	20:52:07
007	00		1	1.00	3.33		3	4.00	7.00		09-25-96	20:53:38
42	00		0	0.00	0.00		1	0.00	0.00		09-25-96	20:55:08

IT Corporation

Molycorp 768380

FIXED CONTAMINATION DATA SHEET

Survey Number

92596040308

Page 9 of 10

Survey Point	Fixed Contamination		Background		Efficiency		Activity		Instrument Used
	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta Gamma	Alpha	Beta/Gamma dpm/100 cm ²	Alpha dpm/100 cm ²	
1	254	4	218	0	0.29	0.16	124.14	25.00	Model 2224 132151
2	242	8	218	0	0.29	0.16	82.76	50.00	Model 2224 132151
3	265	2	218	0	0.29	0.16	162.07	12.50	Model 2224 132151
4	213	7	218	0	0.29	0.16	-17.24	43.75	Model 2224 132151
5	232	4	218	0	0.29	0.16	48.28	25.00	Model 2224 132151
6	265	15	218	0	0.29	0.16	162.07	93.75	Model 2224 132151
7	225	4	218	0	0.29	0.16	24.14	25.00	Model 2224 132151
8	205	5	218	0	0.29	0.16	-44.83	31.25	Model 2224 132151
9	237	7	218	0	0.29	0.16	65.52	43.75	Model 2224 132151
10	219	8	218	0	0.29	0.16	3.45	50.00	Model 2224 132151
11	295	3	218	0	0.29	0.16	265.52	18.75	Model 2224 132151
12	217	2	218	0	0.29	0.16	-3.45	12.50	Model 2224 132151
13	207	4	218	0	0.29	0.16	-37.93	25.00	Model 2224 132151
14	199	6	218	0	0.29	0.16	-65.52	37.50	Model 2224 132151
15	195	9	218	0	0.29	0.16	-79.31	56.25	Model 2224 132151
16	223	10	218	0	0.29	0.16	17.24	62.50	Model 2224 132151
17	212	5	218	0	0.29	0.16	-20.69	31.25	Model 2224 132151
18	240	5	218	0	0.29	0.16	75.86	31.25	Model 2224 132151
19	222	7	218	0	0.29	0.16	13.79	43.75	Model 2224 132151
20	298	12	218	0	0.29	0.16	275.86	75.00	Model 2224 132151
21	275	2	218	0	0.29	0.16	196.55	12.50	Model 2224 132151
22	325	6	218	0	0.29	0.16	368.97	37.50	Model 2224 132151
23	260	12	218	0	0.29	0.16	144.83	75.00	Model 2224 132151
24	339	9	218	0	0.29	0.16	417.24	56.25	Model 2224 132151
25	220	1	218	0	0.29	0.16	6.90	6.25	Model 2224 132151
26	197	6	218	0	0.29	0.16	-72.41	37.50	Model 2224 132151
27	222	1	218	0	0.29	0.16	13.79	6.25	Model 2224 132151
28	230	4	218	0	0.29	0.16	41.38	25.00	Model 2224 132151
29	271	3	218	0	0.29	0.16	182.76	18.75	Model 2224 132151
30	240	4	218	0	0.29	0.16	75.86	25.00	Model 2224 132151

IT Corporation

Mclycorp 768380

FIXED CONTAMINATION DATA SHEET

Survey Number

92596040308

Page 10 of 10

Survey Point	Fixed Contamination		Background		Efficiency		Activity		Instrument Used
	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta Gamma	Alpha	Beta/Gamma dpm/100 cm ²	Alpha dpm/100 cm ²	
31	212	2	218	0	0.29	0.16	-20.69	12.50	Model 2224 132151
32	236	4	218	0	0.29	0.16	62.07	25.00	Model 2224 132151
33	221	5	218	0	0.29	0.16	10.34	31.25	Model 2224 132151
34	200	3	218	0	0.29	0.16	-62.07	18.75	Model 2224 132151
35	265	3	218	0	0.29	0.16	162.07	18.75	Model 2224 132151
36	292	7	218	0	0.29	0.16	255.17	43.75	Model 2224 132151
37	264	4	218	0	0.29	0.16	158.62	25.00	Model 2224 132151
38	202	6	218	0	0.29	0.16	-55.17	37.50	Model 2224 132151
39	223	4	218	0	0.29	0.16	17.24	25.00	Model 2224 132151
40	226	12	218	0	0.29	0.16	27.59	75.00	Model 2224 132151
41	208	4	218	0	0.29	0.16	-34.48	25.00	Model 2224 132151
42	218	7	218	0	0.29	0.16	0.00	43.75	Model 2224 132151
43	241	7	218	0	0.29	0.16	79.31	43.75	Model 2224 132151
44	297	15	218	0	0.29	0.16	272.41	93.75	Model 2224 132151
45	191	9	218	0	0.29	0.16	-93.10	56.25	Model 2224 132151
46	230	17	218	0	0.29	0.16	41.38	106.25	Model 2224 132151
47	236	5	218	0	0.29	0.16	62.07	31.25	Model 2224 132151
48	220	5	218	0	0.29	0.16	6.90	31.25	Model 2224 132151

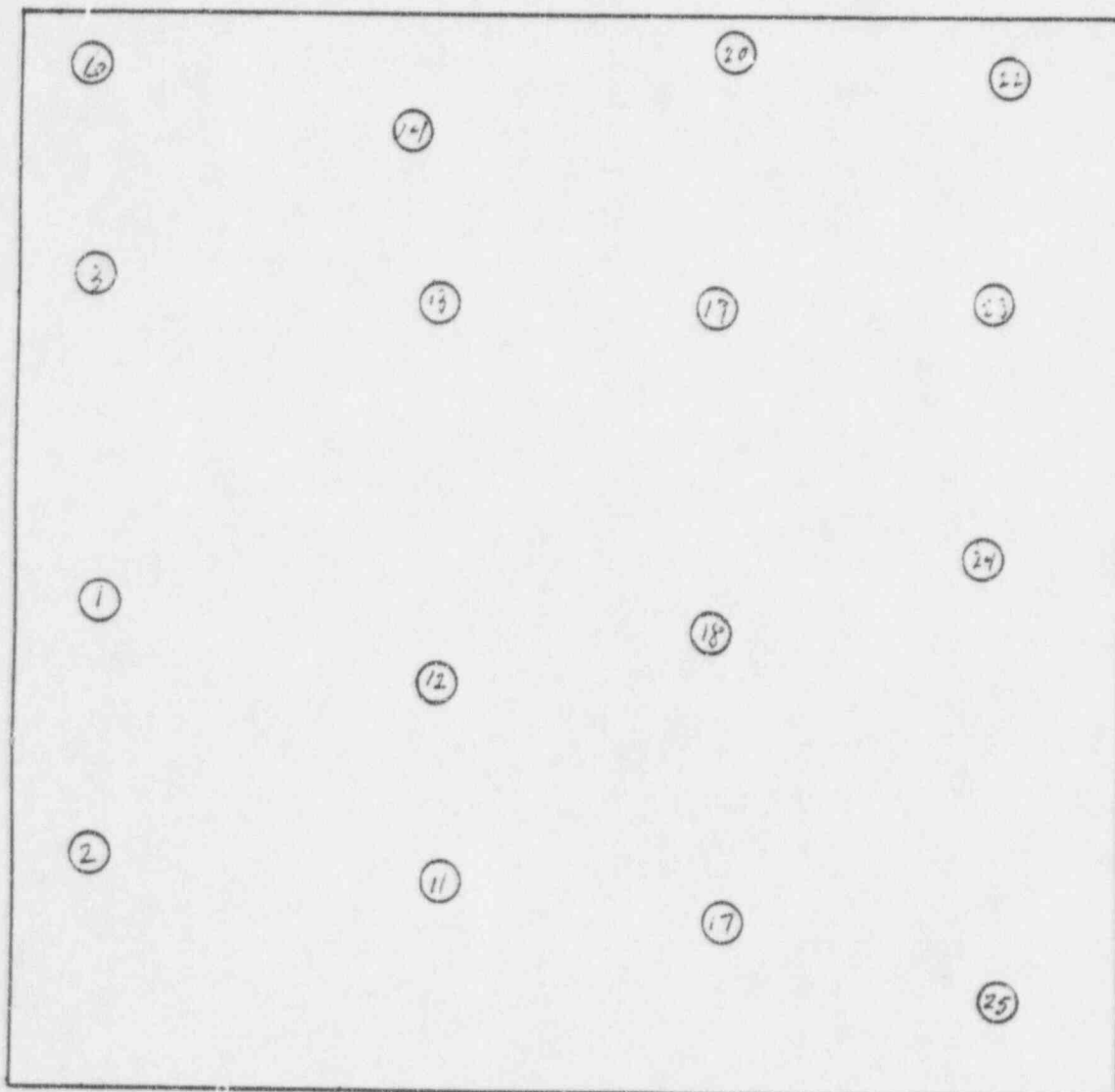
092696040309

Survey Point	Smearable Contamination		alpha		Fixed Contamination beta/gamma cpm/100cm ²	alpha cpm/100cm ²	Radiation Level (uR/hr)	Instrument Used	Additional Comments
	beta/gamma dpm/100cm ²	dpm/100cm ²	dpm/100cm ²	dpm/100cm ²					
1					226	7	10	1,2,3	CEILING
2					235	5	10		CEILING
3					243	9	10		CEILING
4					310	7	10		EAST WALL
5					314	11	10		EAST WALL
6					197	11	10		CEILING
7					334	5	10		EAST WALL
8					334	11	10		SETH WALL
9					382	6	10		NORTH WALL
10					333	7	10		NORTH WALL
11	SEE PROICAN				186	9	10		CEILING
12					229	5	10		CEILING
13				DATA SHEET	201	4	10		CEILING
14					172	11	10		CEILING
15					318	7	10		SETH WALL
16					331	9	10		NORTH WALL
17					213	4	10		CEILING
18					226	4	10		CEILING
19					180	7	10		CEILING
20					194	8	10		CEILING
21					302	5	10		SETH WALL
22					214	4	10		CEILING
23					201	5	10		CEILING
24					202	7	10		CEILING
25					192	5	10		CEILING
					N A				

RADIOLOGICAL SURVEY FORM

Survey Number 092696040309

BLDG 4 - ROOM 3 - CEILING

N
↓

ALL DIRECT FRISK RESULTS: < 250 d.p.m. ^{0.04 uCi} (15")
CEILING REMAINS ~~"UNAFFECTED"~~ IN 9/11/01 "UNAFFECTED"
PENNING SMOKE RESULTS -

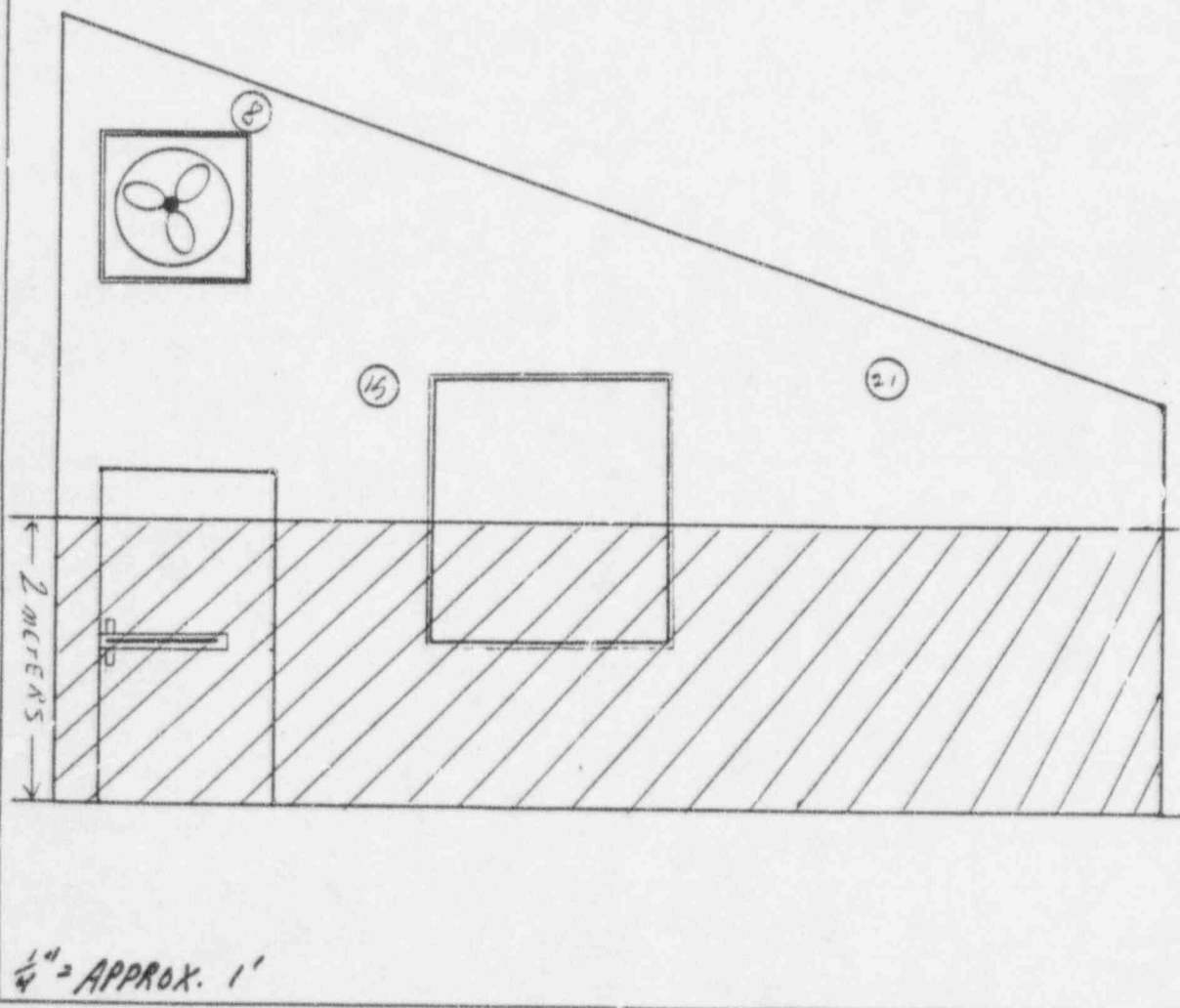
1/4" = APPROX. 1'

RADIOLOGICAL SURVEY FORM

Survey Number 092696040309

BLDG. 4 - ROOM 3 - SOUTH WALL (INTERIOR)

ALL DIRECT RISK SHOWN $> 250 \text{ dpm}$ ^{per shell} (B-)
AREA NOW CLASSIFIED "AFFECTED" AREA

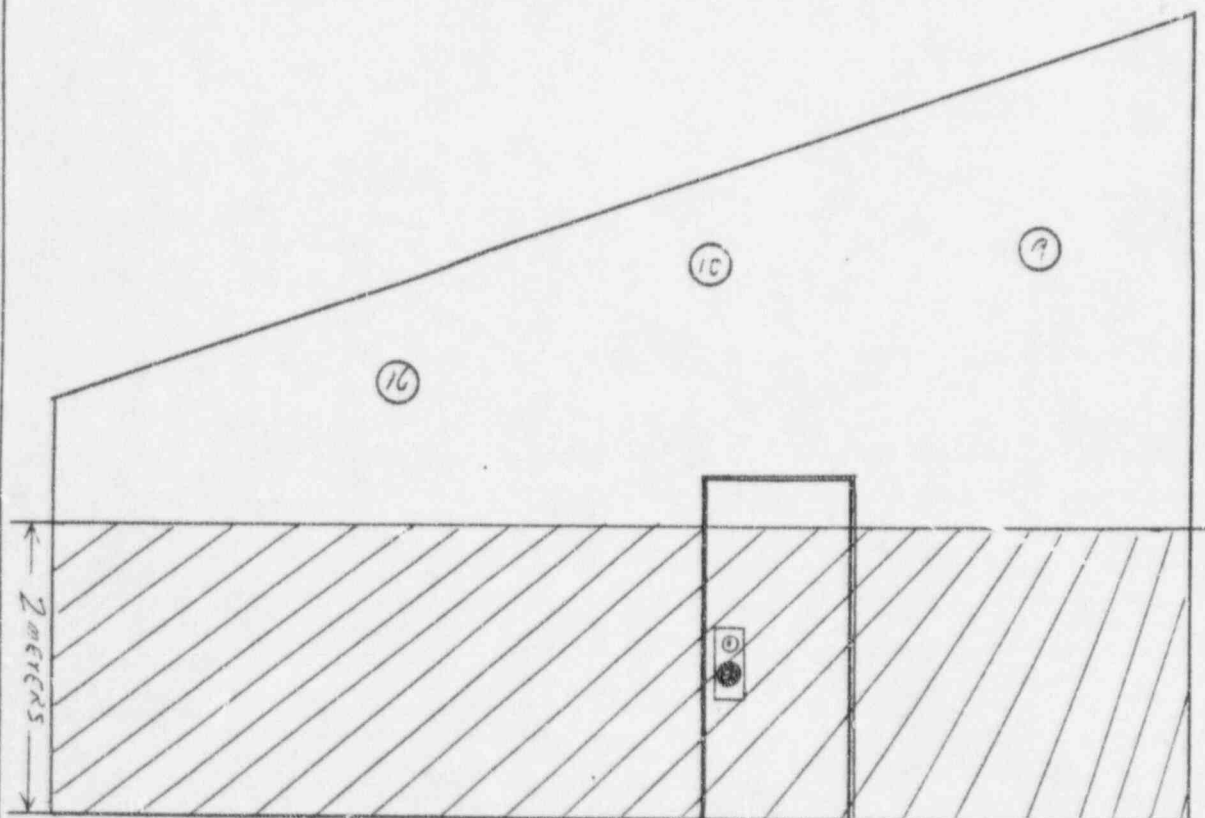


RADIOLOGICAL SURVEY FORM

Survey Number 092686040309

BLDG. 4 - ROOM 3 - NORTH WALL (INTERIOR)

AW DIRECT FRISK SHOW 7250 $\mu\text{Ci}/\text{m}^2$ (B-)
AREA NOW CLASSIFIED AS "AFFECTED" AREA -

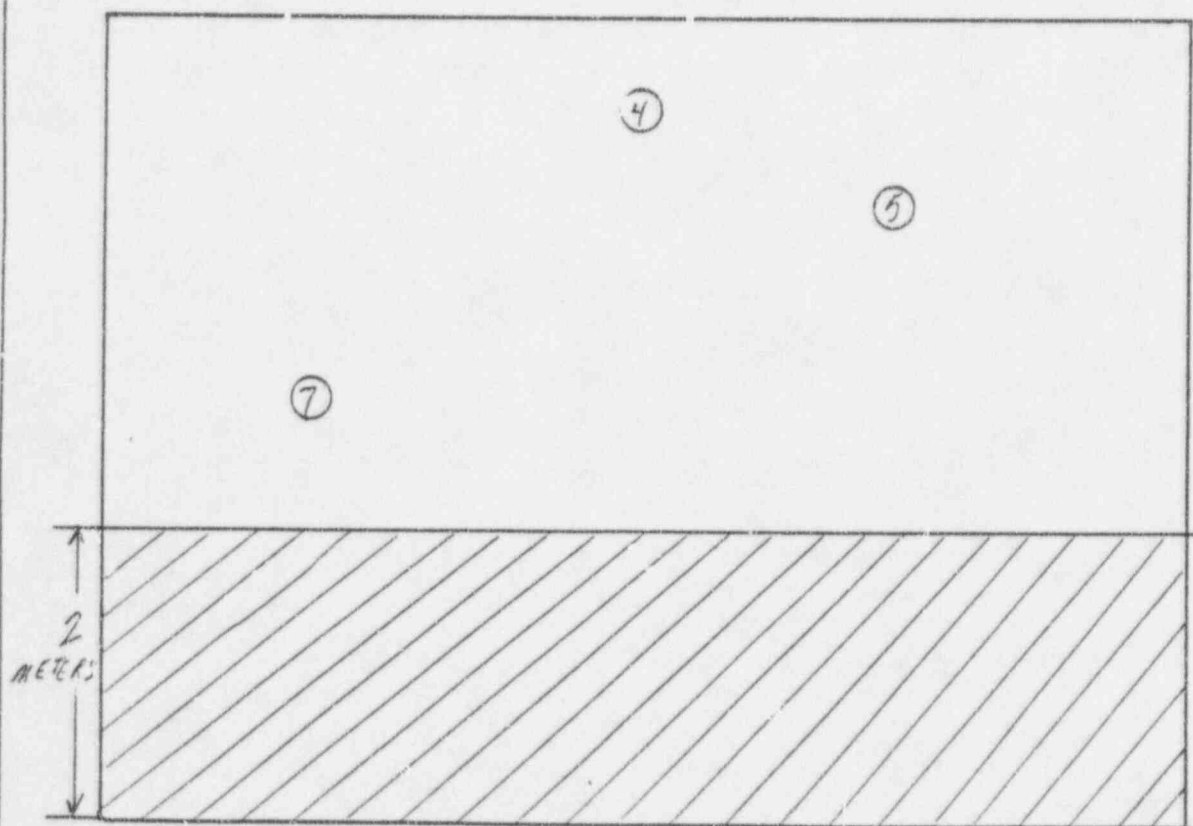
 $\frac{1}{4}'' = \text{APPROX. } 1'$

RADIOLOGICAL SURVEY FORM

Survey Number 092696040309

BLDG 4 - ROOM 3 - EAST WALL (INTERIOR)

Air direct risk shown 7250 dpm (B-)
Area now classified as "AFFECTED" AREA -

 $\frac{1}{4}'' = \text{APPROX. } 1'$

0926 96040309

7 of 9

ALPHA/BETA
IPC9025 #021444

ALPHA						BETA						
Eff: 25.00% Bkg: 0.00 cpm MDA: 10.84 dpm						Eff: 58.00% Bkg: 2.00 cpm MDA: 10.01 dpm						
SN	RPT	ID	COUNTS	NET CPM	DPM	LIMITS	COUNTS	NET CPM	DPM	LIMITS	DATE	TIME
001	00	040309	0	0.00	0.00		0	-2.00	-3.45		09-27-96	13:30:38
002	00		0	0.00	0.00		1	-1.00	-1.72		09-27-96	13:32:07
003	00		1	1.00	4.00		1	-1.00	-1.72		09-27-96	13:33:36
004	00		1	1.00	4.00		1	-1.00	-1.72		09-27-96	13:35:04
005	00		0	0.00	0.00		4	2.00	3.45		09-27-96	13:36:33
006	00		0	0.00	0.00		1	-1.00	-1.72		09-27-96	13:38:01
007	00		0	0.00	0.00		2	0.00	0.00		09-27-96	13:39:30
008	00		0	0.00	0.00		1	-1.00	-1.72		09-27-96	13:40:58
009	00		2	2.00	8.00		2	0.00	0.00		09-27-96	13:42:27
010	00		0	0.00	0.00		0	-2.00	-3.45		09-27-96	13:43:55
011	00		0	0.00	0.00		1	-1.00	-1.72		09-27-96	13:45:24
012	00		0	0.00	0.00		0	-2.00	-3.45		09-27-96	13:46:52
013	00		1	1.00	4.00		1	-1.00	-1.72		09-27-96	13:48:21
014	00		0	0.00	0.00		0	-2.00	-3.45		09-27-96	13:49:49
015	00		0	0.00	0.00		2	0.00	0.00		09-27-96	13:51:18
016	00		0	0.00	0.00		0	-2.00	-3.45		09-27-96	13:52:46
017	00		0	0.00	0.00		1	-1.00	-1.72		09-27-96	13:54:15
018	00		0	0.00	0.00		0	-2.00	-3.45		09-27-96	13:55:43
019	00		1	1.00	4.00		1	-1.00	-1.72		09-27-96	13:57:12
020	00		0	0.00	0.00		2	0.00	0.00		09-27-96	13:58:40
021	00		0	0.00	0.00		1	-1.00	-1.72		09-27-96	14:00:09
022	00		0	0.00	0.00		0	-2.00	-3.45		09-27-96	14:01:38
023	00		0	0.00	0.00		0	-2.00	-3.45		09-27-96	14:03:06
024	00		0	0.00	0.00		0	-2.00	-3.45		09-27-96	14:04:35

092696040309

8 OF 9

ALPHA/BETA
IPC9025 #621444

----- ALPHA -----				----- BETA -----									
Eff: 25.00% Bkg: 0.00 cpm MDA: 10.84 dpm				Eff: 58.00% Bkg: 2.00 cpm MDA: 16.01 dpm									
SN	RPT	ID	---	COUNTS	NET CPM	DPM	LIMITS	COUNTS	NET CPM	DPM	LIMITS	DATE	TIME
001	00	040309		0	0.00	0.00		1	-1.00	-1.72		09-27-96	14:25:45

Survey Point	Fixed Contamination		Background		Efficiency		Activity		Instrument Used
	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta Gamma	Alpha	Beta/Gamma dpm/100 cm ²	Alpha dpm/100 cm ²	
1	226	7	204	2	0.3	0.17	73.33	29.41	Model 2224 132142
2	235	5	204	2	0.3	0.17	103.33	17.65	Model 2224 132142
3	243	9	204	2	0.3	0.17	130.00	41.18	Model 2224 132142
4	310	7	204	2	0.3	0.17	353.33	29.41	Model 2224 132142
5	314	11	204	2	0.3	0.17	366.67	52.94	Model 2224 132142
6	197	11	204	2	0.3	0.17	-23.33	52.94	Model 2224 132142
7	334	5	204	2	0.3	0.17	433.33	17.65	Model 2224 132142
8	334	11	204	2	0.3	0.17	433.33	52.94	Model 2224 132142
9	388	6	204	2	0.3	0.17	613.33	23.53	Model 2224 132142
10	333	7	204	2	0.3	0.17	430.00	29.41	Model 2224 132142
11	186	9	204	2	0.3	0.17	-60.00	41.18	Model 2224 132142
12	229	5	204	2	0.3	0.17	83.33	17.65	Model 2224 132142
13	201	4	204	2	0.3	0.17	-10.00	11.76	Model 2224 132142
14	172	11	204	2	0.3	0.17	-106.67	52.94	Model 2224 132142
15	318	7	204	2	0.3	0.17	380.00	29.41	Model 2224 132142
16	331	9	204	2	0.3	0.17	423.33	41.18	Model 2224 132142
17	213	4	204	2	0.3	0.17	30.00	11.76	Model 2224 132142
18	226	4	204	2	0.3	0.17	73.33	11.76	Model 2224 132142
19	180	7	204	2	0.3	0.17	-80.00	29.41	Model 2224 132142
20	194	8	204	2	0.3	0.17	-33.33	35.29	Model 2224 132142
21	302	5	204	2	0.3	0.17	326.67	17.65	Model 2224 132142
22	214	4	204	2	0.3	0.17	33.33	11.76	Model 2224 132142
23	201	5	204	2	0.3	0.17	-10.00	17.65	Model 2224 132142
24	202	7	204	2	0.3	0.17	-6.67	29.41	Model 2224 132142
25	192	5	204	2	0.3	0.17	-40.00	17.65	Model 2224 132142

RADIOLOGICAL SURVEY FORM CONTINUATION SHEET

Survey Number 92596,040310

Survey Point	Surveyable Contamination beta/gamma dpm/100cm ²	alpha dpm/100cm ²	Fixed Contamination beta/gamma cpm/100cm ²	alpha cpm/100cm ²	Radiation Level (uR/hr)	Instrument Used	Additional Comments
1			313	0	10	1,2,3	WEST WALL
2			329	7	10		C7
3			311	7	10		C6
4			278	6	10		C5
5	SEE		282	11	11		C4
6		PDS	251	5	10		C3
7			224	6	11		C2
8			228	2	11		C1
9			226	2	11		C1
10			227	2	11		C2
11			238	4	10		C3
12			265	5	10		C4
13			189	3	11		C5
14			210	4	10		C6
15			231	2	10		C7
16			229	1	10		C8
17			265	3	11		C1
18			253	5	10		C2
19			271	3	10		C3
20			251	4	10		C4
21	SEE	PDS	263	2	11		C5
22			290	3	10		C6
23			238	2	11		C7
24			248	3	11		C8
25			249	5	10		C1
26			230	6	10		C2
27			238	5	10		C3
28			246	6	11		C4
29			301	4	11		C5
30			306	2	10		C6
31			295	6	10		C7

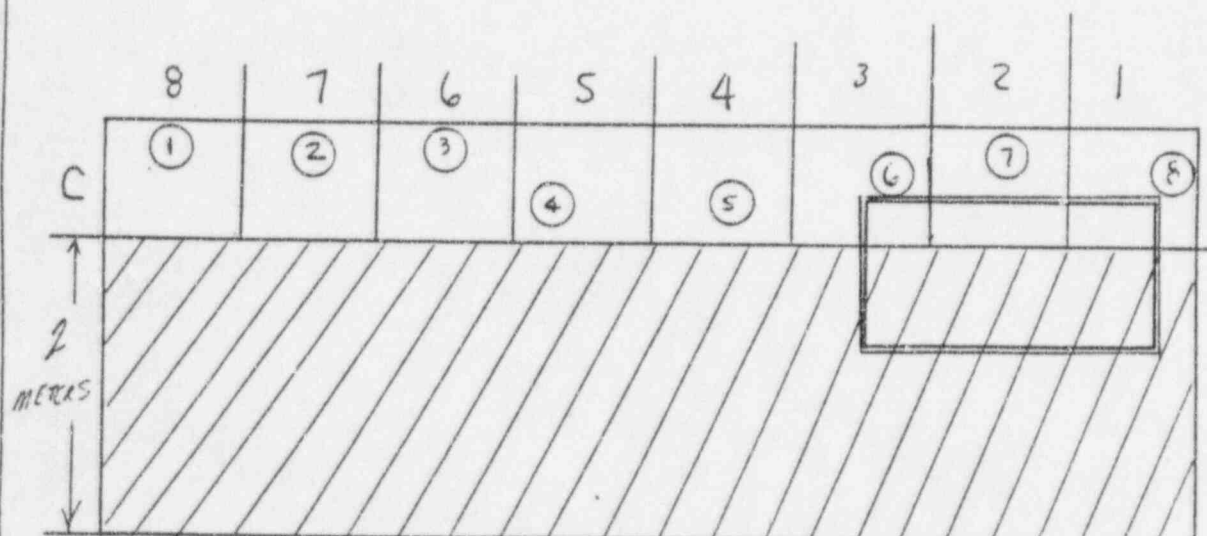
RADIOLOGICAL SURVEY FORM CONTINUATION SHEET

Survey Number 928960403.10

Survey Point	Smearable Contamination		Fixed Contamination		alpha	Radiation Level	Instrument Used	Additional Comments
	beta/gamma dpm/100cm ²	alpha dpm/100cm ²	beta/gamma cpm/100cm ²	alpha cpm/100cm ²		(uR/hr)		
52	SEE	PDS	299	3	11	12.3	C8	NORTH WALL N A

Survey Number 92696040310

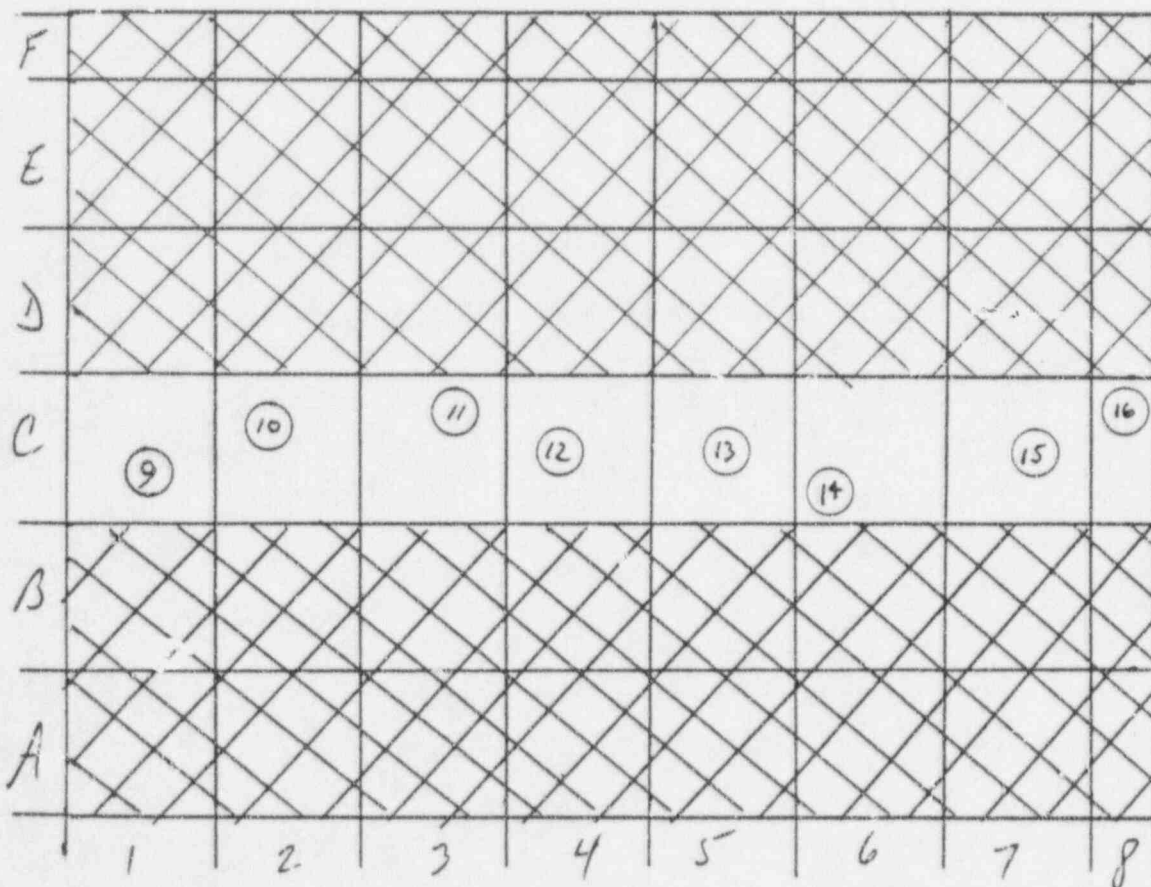
BLOG. 4 - ROOM 3 - WEST WALL (INTERIOR)

 $\frac{1}{4}'' = \text{APPROX. } 1'$

RADIOLOGICAL SURVEY FORM

Survey Number 92²⁶960403/0
12 9-26-96

BLDG 4 - ROOM 3 - EAST WALL (INTERIOR)

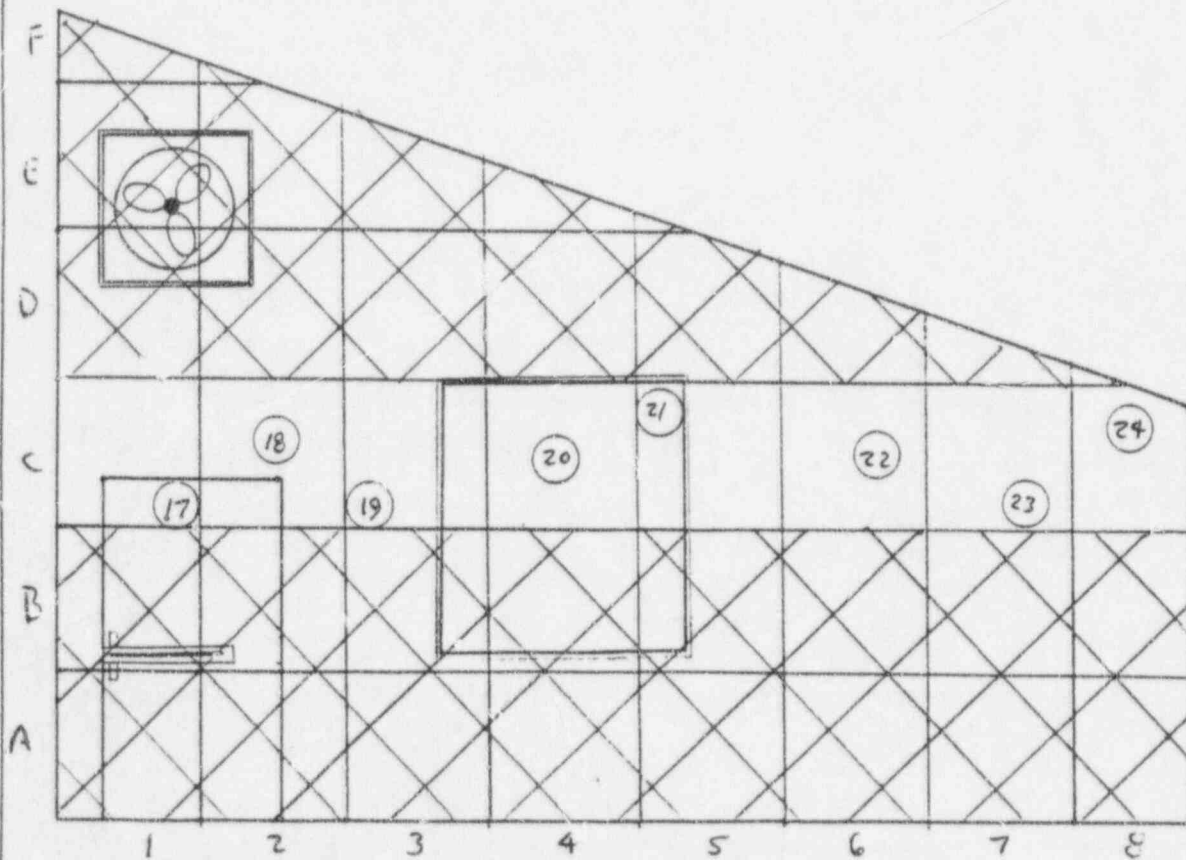


$\frac{1}{4}" = \text{APPROX. } 1'$

RADIOLOGICAL SURVEY FORM

Survey Number 926 96 04 0310

BLDG. 4 - ROOM 3 - SOUTH WALL (INTERIOR)

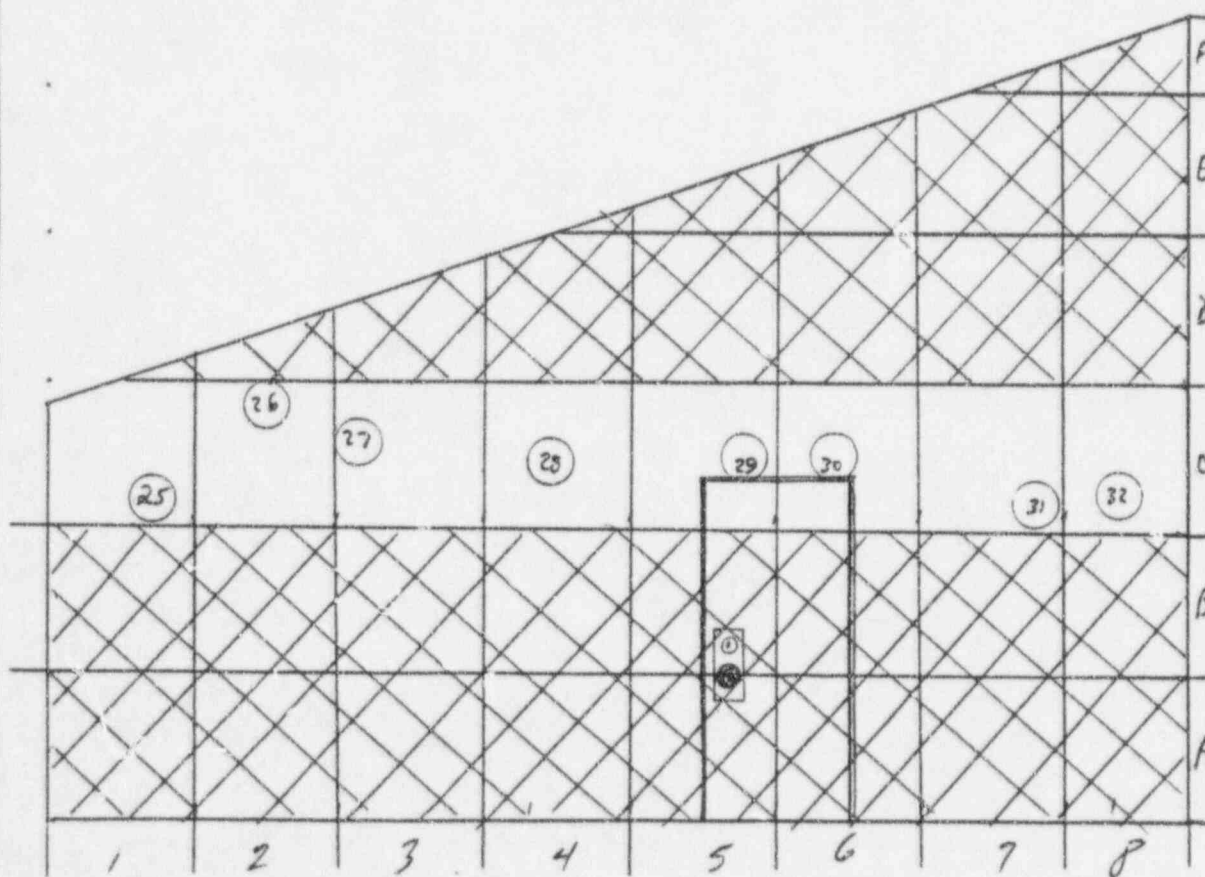


1" = APPROX. 1'

RADIOLOGICAL SURVEY FORM

Survey Number 92696040310

BLDG. 4 - ROOM 3 - NORTH WALL (INTERIOR)

 $\frac{1}{4}'' = \text{APPROX. } 1'$

ALPHA					BETA							
Eff: 23.00% Bkg: 0.00 cps MDA: 11.78 dpm					Eff: 55.00% Bkg: 1.00 cps MDA: 12.69 dpm							
SN	RPT	ID	COUNTS	NET CPM	DPM	LIMITS	COUNTS	NET CPM	DPM	LIMITS	DATE	TIME
001	00	040310	1	1.00	4.35		0	-1.00	-1.72		10-01-96	10:26:09
002	00		1	1.00	4.35		7	6.00	10.34		10-01-96	10:27:37
003	00		1	1.00	4.35		3	2.00	3.45		10-01-96	10:29:06
004	00		1	1.00	4.35		3	2.00	3.45		10-01-96	10:30:34
005	00		2	2.00	8.70		0	-1.00	-1.72		10-01-96	10:32:03
006	00		0	0.00	0.00		3	2.00	3.45		10-01-96	10:33:31
007	00		1	1.00	4.35		2	1.00	1.72		10-01-96	10:35:00
008	00		2	2.00	8.70		1	0.00	0.00		10-01-96	10:36:29
009	00		1	1.00	4.35		1	0.00	0.00		10-01-96	10:37:57
010	00		1	1.00	4.35		3	2.00	3.45		10-01-96	10:39:26
011	00		0	0.00	0.00		0	-1.00	-1.72		10-01-96	10:40:54
012	00		1	1.00	4.35		2	1.00	1.72		10-01-96	10:42:23
013	00		2	2.00	8.70		2	1.00	1.72		10-01-96	10:43:51
014	00		0	0.00	0.00		1	0.00	0.00		10-01-96	10:45:20
015	00		1	1.00	4.35		1	0.00	0.00		10-01-96	10:46:48
016	00		1	1.00	4.35		1	0.00	0.00		10-01-96	10:48:17
017	00		0	0.00	0.00		0	-1.00	-1.72		10-01-96	10:49:45
018	00		0	0.00	0.00		0	-1.00	-1.72		10-01-96	10:51:13
019	00		3	3.00	13.04		2	1.00	1.72		10-01-96	10:52:42
020	00		0	0.00	0.00		1	0.00	0.00		10-01-96	10:54:10
021	00		0	0.00	0.00		2	1.00	1.72		10-01-96	10:55:39
022	00		1	1.00	4.35		2	1.00	1.72		10-01-96	10:57:07
023	00		0	0.00	0.00		2	1.00	1.72		10-01-96	10:58:36
024	00		0	0.00	0.00		3	2.00	3.45		10-01-96	11:00:04
025	00		3	3.00	13.04		4	3.00	5.17		10-01-96	11:01:33
026	00		0	0.00	0.00		5	4.00	6.90		10-01-96	11:03:01
027	00		1	1.00	4.35		0	-1.00	-1.72		10-01-96	11:04:30
028	00		1	1.00	4.35		2	1.00	1.72		10-01-96	11:05:59
029	00		0	0.00	0.00		3	2.00	3.45		10-01-96	11:07:27
030	00		1	1.00	4.35		2	1.00	1.72		10-01-96	11:08:56
031	00		1	1.00	4.35		1	0.00	0.00		10-01-96	11:10:24
032	00		0	0.00	0.00		6	5.00	8.62		10-01-96	11:11:53

Fixed Contamination			Background		Efficiency			Activity		Instrument Used
Survey Point	Beta/Gamma cpm/100 cm^2	Alpha cpm/100 cm^2	Beta/Gamma cpm/100 cm^2	Alpha cpm/100 cm^2	Beta Gamma	Alpha	Beta/Gamma dpm/100 cm^2	Alpha dpm/100 cm^2		
1	202	37	207	6	0.32	0.12	-15.63	258.33	Model 2224 094819	
2	319	25	207	6	0.32	0.12	350.00	158.33	Model 2224 094819	
3	240	31	207	6	0.32	0.12	103.13	208.33	Model 2224 094819	
4	278	6	207	6	0.32	0.12	221.88	0.00	Model 2224 094819	
5	280	11	207	6	0.32	0.12	228.13	41.67	Model 2224 094819	
6	237	5	207	6	0.32	0.12	93.75	-8.33	Model 2224 094819	
7	224	6	207	6	0.32	0.12	53.13	0.00	Model 2224 094819	
8	228	2	207	6	0.32	0.12	65.63	-33.33	Model 2224 094819	
9	226	2	207	6	0.32	0.12	59.38	-33.33	Model 2224 094819	
10	227	2	207	6	0.32	0.12	62.50	-33.33	Model 2224 094819	
11	236	4	207	6	0.32	0.12	90.63	-16.67	Model 2224 094819	
12	265	5	207	6	0.32	0.12	181.25	-8.33	Model 2224 094819	
13	184	8	207	6	0.32	0.12	-71.88	16.67	Model 2224 094819	
14	218	4	207	6	0.32	0.12	34.38	-16.67	Model 2224 094819	
15	231	2	207	6	0.32	0.12	75.00	-33.33	Model 2224 094819	
16	229	1	207	6	0.32	0.12	68.75	-41.67	Model 2224 094819	
17	265	3	207	6	0.32	0.12	181.25	-25.00	Model 2224 094819	
18	253	5	207	6	0.32	0.12	143.75	-8.33	Model 2224 094819	
19	271	3	207	6	0.32	0.12	200.00	-25.00	Model 2224 094819	
20	251	4	207	6	0.32	0.12	137.50	-16.67	Model 2224 094819	
21	263	2	207	6	0.32	0.12	175.00	-33.33	Model 2224 094819	
22	290	3	207	6	0.32	0.12	259.38	-25.00	Model 2224 094819	
23	238	2	207	6	0.32	0.12	96.88	-33.33	Model 2224 094819	
24	248	3	207	6	0.32	0.12	128.13	-25.00	Model 2224 094819	
25	249	5	207	6	0.32	0.12	131.25	-8.33	Model 2224 094819	
26	230	6	207	6	0.32	0.12	71.88	0.00	Model 2224 094819	
27	238	5	207	6	0.32	0.12	96.88	-8.33	Model 2224 094819	
28	246	6	207	6	0.32	0.12	121.88	0.00	Model 2224 094819	
29	301	4	207	6	0.32	0.12	293.75	-16.67	Model 2224 094819	
30	306	2	207	6	0.32	0.12	309.38	-33.33	Model 2224 094819	

IT Corporation

Molycorp 768380

FIXED CONTAMINATION DATA SHEET

Survey Number

92696040310

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Fixed Contamination			Background		Efficiency		Activity		Instrument Used
Survey Point	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta Gamma	Alpha	Beta/Gamma dpm/100 cm ²	Alpha dpm/100 cm ²	
31	295	6	207	6	0.32	0.12	275.00	0.00	Model 2224 094819
32	299	3	207	6	0.32	0.12	287.50	-25.00	Model 2224 094819

Survey Number 072676040311

Instrument (4)

Instrument Model: _____

Instrument Ser. #: NA

Calibration Due: _____

Efficiency: _____

CE: _____ BKG: _____

Survey Point	Smearable Contamination		Fixed Contamination		Radiation Level (uR/hr)	Instrument Used	Additional Comments
	beta/gamma dpm/100cm ²	alpha dpm/100cm ²	beta/gamma cpm/100cm ²	alpha cpm/100cm ²			
							<p>(1) 2224 BACKGROUNDS: $\alpha = 0$ $\beta = 280$</p> <p>(2) 100% FASK FOR α's β's - EACH GRID</p> <p>(3) 1 MINUTE STATIC COUNT FOR α's β's</p> <p>(4) γ SURVEY C 1 METER FROM SURVEY POINT LOCATION SURFACE</p> <p>(5) CIRCLED NUMBERS ON MAP INDICATE SURVEY POINT LOCATIONS.</p>

RADIOLOGICAL SURVEY FORM CONTINUATION SHEET

Survey Number

07269604311

Survey Point	Smearable Contamination beta/gamma dpm/100cm ²	alpha dpm/100cm ²	Fixed Contamination beta/gamma cpm/100cm ²	alpha cpm/100cm ²	Radiation Level (uR/hr)	Instrument Used	Additional Comments
1			336	7	10	1,2,3	F1 SOUTH WALL
2			340	7	10		F2 SOUTH WALL
3			337	5	10		E1 SOUTH WALL
4			310	7	10		E2 SOUTH WALL
5			330	7	10		F8 EAST WALL
6			329	7	10		F7 EAST WALL
7			315	9	10		F6 EAST WALL
8			308	5	10		E6 EAST WALL
9	SEE		314	6	10		E7 EAST WALL
10	PROTECTOR		302	3	10		E8 EAST WALL
11		DATA SHEET	305	7	10		D6 EAST WALL
12			285	5	10	1,2,3	E10 EAST WALL
13			304	9	10		D8 EAST WALL
14			308	6	10		D1 SOUTH WALL
15			307	3	10		D2 SOUTH WALL
16			228	7	10		FAN (room wall)
17			293	7	10		F5 EAST WALL
18			276	9	10		E4 EAST WALL
19			288	5	10		E5 EAST WALL
20			265	7	10		E4 EAST WALL
21			337	2	10		F3 EAST WALL
22			339	3	10		F2 EAST WALL
23			327	6	10		E2 EAST WALL
24			312	8	10		E3 EAST WALL
25			360	7	10		D3 EAST WALL
26			354	7	10		D2 EAST WALL
27			336	6	10		D4 EAST WALL
28			281	6	10		D5 EAST WALL
29			326	4	10		F1 EAST WALL
30			307	1	10		E1 EAST WALL
31			338	10	10		D1 EAST WALL

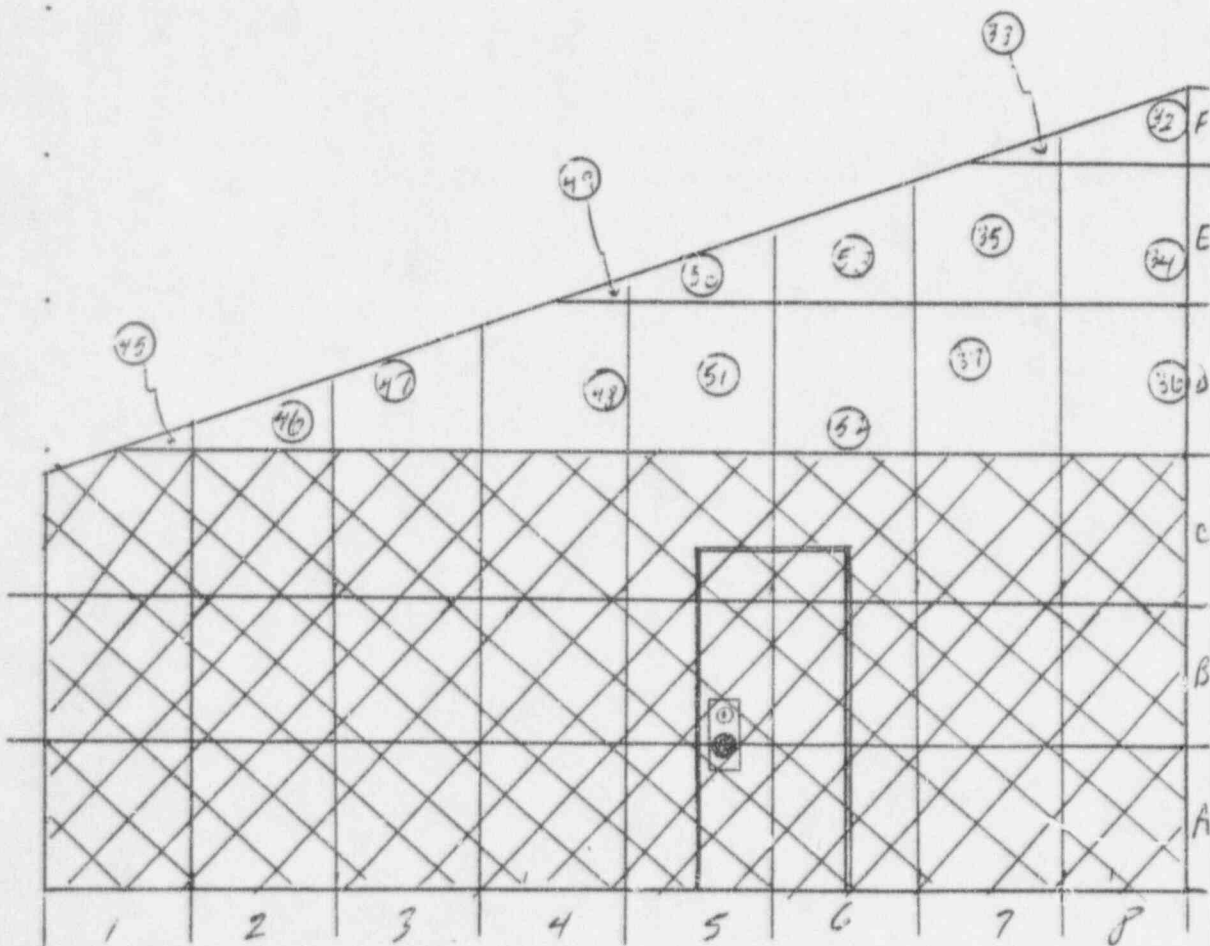
1504006780

[illegible]

RADIOLOGICAL SURVEY FORM

Survey Number 092696040311

BLDG. 4 - ROOM 3 - NORTH WALL (INTERIOR)

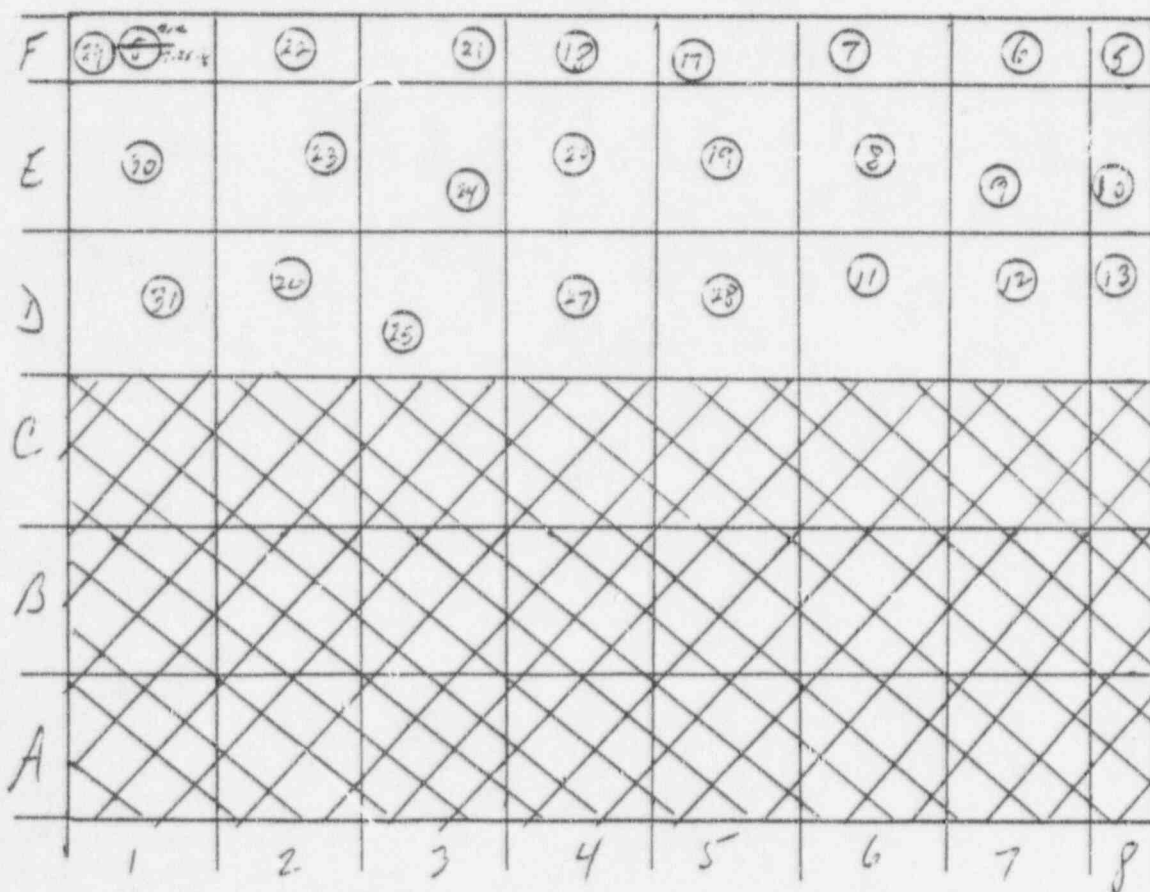
 $\frac{1}{4}'' = \text{APPROX. } 1'$ EACH FULL GRID = APPROX. 1 m^2

IT Corporation

RADIOLOGICAL SURVEY FORM

Survey Number 092696040311

BLDG 4 - ROOM 3 - EAST WALL (INTERIOR)

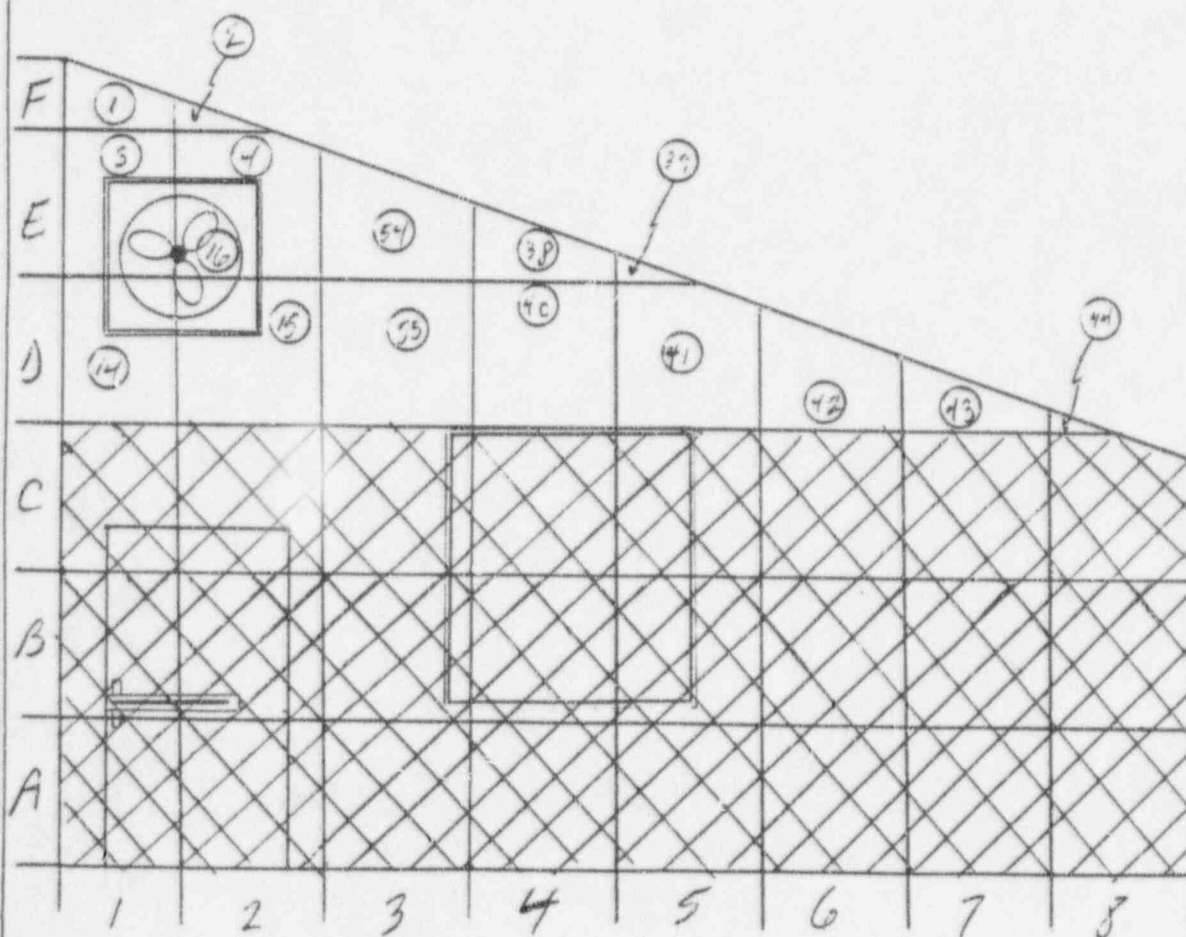


$\frac{1}{4}'' = \text{APPROX. } 1' \text{ FULL GRID} = \text{APPROX. } 1 \text{ m}^2$

RADIOLOGICAL SURVEY FORM

Survey Number 292626040311

BLOK. 4 - ROOM 3 - SOUTH WALL (INTERIOR)

 $\frac{1}{4}'' = \text{APPROX. } 1'$

72696040311

Page 7 of 10

RPT#00000000

SU#1026150

ALPHA

BETA

Eff: 30.00% Bq: 0.00 dpm MDA: 5.00 dpm Eff: 57.00% Bq: 1.00 dpm MDA: 12.91 dpm

SN	EFF	ID	COUNTS	NET DPM	DPH	LIMITS	COUNTS	NET DPM	DPH	LIMITS	DATE	TIME
001	00	041011	1	2.00	6.67		1	0.00	0.00		08-30-98	08:10:11
002	00		1	2.00	6.67		0	-1.00	-1.75		08-30-98	08:10:12
003	00		0	0.00	0.00		3	4.00	7.02		08-30-98	08:10:13
004	00		0	0.00	0.00		0	-1.00	-1.75		08-30-98	08:10:14
005	00		0	0.00	0.00		4	3.00	5.26		08-30-98	08:10:15
006	00		0	0.00	0.00		0	-1.00	-1.75		08-30-98	08:10:16
007	00		0	0.00	0.00		1	0.00	0.00		08-30-98	08:10:17
008	00		0	0.00	0.00		2	1.00	1.75		08-30-98	08:10:18
009	00		0	0.00	0.00		2	1.00	1.75		08-30-98	08:10:19
010	00		2	2.00	6.67		3	2.00	3.51		08-30-98	08:10:20
011	00		2	2.00	6.67		2	1.00	1.75		08-30-98	08:10:21
012	00		0	0.00	0.00		0	-1.00	-1.75		08-30-	08:20:44
013	00		1	1.00	3.33		0	-1.00	-1.75		08-30-98	08:20:45
014	00		1	1.00	3.33		2	1.00	1.75		08-30-98	08:20:46
015	00		1	1.00	3.33		0	-1.00	-1.75		08-30-98	08:20:47
016	00		1	3.00	10.00		1	0.00	0.00		08-30-98	08:20:48
017	00		1	1.00	3.33		0	-1.00	-1.75		08-30-98	08:20:49
018	00		2	2.00	6.67		1	0.00	0.00		08-30-98	08:20:50
019	00		0	0.00	0.00		1	0.00	0.00		08-30-98	08:20:51
020	00		0	0.00	0.00		2	1.00	1.75		08-30-98	08:20:52
021	00		1	1.00	3.33		0	-1.00	-1.75		08-30-98	08:20:53
022	00		1	1.00	6.67		0	-1.00	-1.75		08-30-98	08:20:54
023	00		1	2.00	6.67		0	-1.00	-1.75		08-30-98	08:20:55
024	00		1	1.00	3.33		1	0.00	0.00		08-30-98	08:20:56
025	00		1	1.00	6.67		1	0.00	0.00		08-30-98	08:20:57
026	00		0	0.00	0.00		1	1.00	1.75		08-30-98	08:20:58
027	00		2	2.00	6.67		0	-1.00	-1.75		08-30-98	08:20:59
028	00		0	0.00	0.00		1	0.00	0.00		08-30-98	08:21:00
029	00		1	1.00	3.33		0	-1.00	-1.75		08-30-98	08:21:01
030	00		0	0.00	0.00		0	-1.00	-1.75		08-30-98	08:21:02
031	00		0	0.00	0.00		0	-1.00	-1.75		08-30-98	08:21:03
032	00		0	0.00	0.00		2	1.00	1.75		08-30-98	08:21:04
033	00		1	1.00	3.33		1	0.00	0.00		08-30-98	08:21:05
034	00		0	0.00	0.00		1	0.00	0.00		08-30-98	08:21:06
035	00		2	2.00	6.67		0	-1.00	-1.75		08-30-98	08:21:07
036	00		0	0.00	0.00		1	0.00	0.00		08-30-98	08:21:08
037	00		0	0.00	0.00		2	1.00	1.75		08-30-98	08:21:09
038	00		0	0.00	0.00		1	0.00	0.00		08-30-98	08:21:10
039	00		0	0.00	0.00		0	-1.00	-1.75		08-30-98	08:21:11
040	00		1	1.00	3.33		2	1.00	1.75		08-30-98	08:21:12
041	00		1	1.00	3.33		1	0.00	0.00		08-30-98	08:21:13
042	00		1	1.00	3.33		1	0.00	0.00		08-30-98	08:21:14
043	00		1	1.00	3.33		0	-1.00	-1.75		08-30-98	08:21:15
044	00		0	0.00	0.00		0	-1.00	-1.75		08-30-98	08:21:16
045	00		2	2.00	6.67		3	2.00	3.51		08-30-98	08:21:17
046	00		0	0.00	0.00		0	-1.00	-1.75		08-30-98	08:21:18
047	00		1	1.00	3.33		1	0.00	0.00		08-30-98	08:21:19
048	00		1	1.00	3.33		1	0.00	0.00		08-30-98	08:21:20
049	00		0	0.00	0.00		1	0.00	0.00		08-30-98	08:21:21
050	00		2	2.00	6.67		4	3.00	5.26		08-30-98	08:21:22
051	00		1	1.00	3.33		0	-1.00	-1.75		08-30-98	08:21:23

ALPHA/BETA
PIC WPC-9350

92696040311

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SN# 1026-150

ALPHA

BETA

Eff: 30.00% Bkg: 0.00 cpm MDA: 5.07 cpm Eff: 37.00% Bkg: 1.00 cpm MDA: 12.91 cpm

PK-RPT-ID	COUNTS	NET CPM	CPM	LIMITS	COUNTS	NET CPM	CPM	LIMITS	DATE	TIME
02 00	0	0.00	0.00		0	-1.00	-1.75		09-30-96	09:21:06
03 00	0	0.00	0.00		3	2.00	3.81		09-30-96	09:22:36
054 00	0	0.00	0.00		1	0.00	0.00		09-30-96	09:24:07
055 00	4	4.30	10.33		4	3.00	5.26		09-30-96	09:25:38

Survey Point	Fixed Contamination		Background		Efficiency		Activity		Instrument Used
	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta Gamma	Alpha	Beta/Gamma dpm/100 cm ²	Alpha dpm/100 cm ²	
1	202	37	288	8	0.3	0.17	-286.67	170.59	Model 2224 132142
2	319	25	288	8	0.3	0.17	103.33	100.00	Model 2224 132142
3	240	31	288	8	0.3	0.17	-160.00	135.29	Model 2224 132142
4	316	7	288	8	0.3	0.17	93.33	-5.88	Model 2224 132142
5	330	7	288	8	0.3	0.17	140.00	-5.88	Model 2224 132142
6	329	7	288	8	0.3	0.17	136.67	-5.88	Model 2224 132142
7	325	9	288	8	0.3	0.17	123.33	5.88	Model 2224 132142
8	308	5	288	8	0.3	0.17	66.67	-17.65	Model 2224 132142
9	314	6	288	8	0.3	0.17	86.67	-11.76	Model 2224 132142
10	362	3	288	8	0.3	0.17	246.67	-29.41	Model 2224 132142
11	305	7	288	8	0.3	0.17	56.67	-5.88	Model 2224 132142
12	285	5	288	8	0.3	0.17	-10.00	-17.65	Model 2224 132142
13	304	9	288	8	0.3	0.17	53.33	5.88	Model 2224 132142
14	308	6	288	8	0.3	0.17	66.67	-11.76	Model 2224 132142
15	307	3	288	8	0.3	0.17	63.33	-29.41	Model 2224 132142
16	228	7	288	8	0.3	0.17	-200.00	-5.88	Model 2224 132142
17	293	7	288	8	0.3	0.17	16.67	-5.88	Model 2224 132142
18	276	9	288	8	0.3	0.17	-40.00	5.88	Model 2224 132142
19	288	5	288	8	0.3	0.17	0.00	-17.65	Model 2224 132142
20	265	7	288	8	0.3	0.17	-76.67	-5.88	Model 2224 132142
21	337	2	288	8	0.3	0.17	163.33	-35.29	Model 2224 132142
22	339	3	288	8	0.3	0.17	170.00	-29.41	Model 2224 132142
23	327	6	288	8	0.3	0.17	130.00	-11.76	Model 2224 132142
24	312	8	288	8	0.3	0.17	80.00	0.00	Model 2224 132142
25	360	7	288	8	0.3	0.17	240.00	-5.88	Model 2224 132142
26	354	7	288	8	0.3	0.17	220.00	-5.88	Model 2224 132142
27	336	6	288	8	0.3	0.17	160.00	-11.76	Model 2224 132142
28	281	6	288	8	0.3	0.17	-23.33	-11.76	Model 2224 132142
29	326	4	288	8	0.3	0.17	126.67	-23.53	Model 2224 132142
30	307	1	288	8	0.3	0.17	63.33	-41.18	Model 2224 132142

Fixed Contamination			Background		Efficiency			Activity		
Survey Point	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta Gamma	Alpha	Beta/Gamma dpm/100 cm ²	Alpha dpm/100 cm ²	Instrument Used	
31	338	10	288	8	0.3	0.17	166.67	11.76	Model 2224 132142	
32	360	5	288	8	0.3	0.17	240.00	-17.65	Model 2224 132142	
33	281	5	288	8	0.3	0.17	-23.33	-17.65	Model 2224 132142	
34	309	6	288	8	0.3	0.17	70.00	-11.76	Model 2224 132142	
35	277	3	288	8	0.3	0.17	-36.67	-29.41	Model 2224 132142	
36	398	3	288	8	0.3	0.17	366.67	-29.41	Model 2224 132142	
37	332	6	288	8	0.3	0.17	146.67	-11.76	Model 2224 132142	
38	309	8	288	8	0.3	0.17	70.00	0.00	Model 2224 132142	
39	309	6	288	8	0.3	0.17	70.00	-11.76	Model 2224 132142	
40	348	7	288	8	0.3	0.17	200.00	-5.88	Model 2224 132142	
41	317	7	288	8	0.3	0.17	96.67	-5.88	Model 2224 132142	
42	346	5	288	8	0.3	0.17	193.33	-17.65	Model 2224 132142	
43	329	1	288	8	0.3	0.17	136.67	-41.18	Model 2224 132142	
44	281	5	288	8	0.3	0.17	-23.33	-17.65	Model 2224 132142	
45	305	7	288	8	0.3	0.17	56.67	-5.88	Model 2224 132142	
46	275	5	288	8	0.3	0.17	-43.33	-17.65	Model 2224 132142	
47	256	7	288	8	0.3	0.17	-106.67	-5.88	Model 2224 132142	
48	348	8	288	8	0.3	0.17	200.00	0.00	Model 2224 132142	
49	323	4	288	8	0.3	0.17	116.67	-23.53	Model 2224 132142	
50	353	8	288	8	0.3	0.17	216.67	0.00	Model 2224 132142	
51	360	6	288	8	0.3	0.17	240.00	-11.76	Model 2224 132142	
52	313	8	288	8	0.3	0.17	83.33	0.00	Model 2224 132142	
53	329	6	288	8	0.3	0.17	136.67	-11.76	Model 2224 132142	
54	328	9	288	8	0.3	0.17	133.33	5.88	Model 2224 132142	
55	306	2	288	8	0.3	0.17	60.00	-35.29	Model 2224 132142	

Appendix C
Section C-4

RADIOLOGICAL SURVEY FORM

Survey Number 091696040201-091696040401

Survey Description: OFFICE-60 AREA
1301G 4 - ROOM 4
WALL & CEILING
7/19
 Drawing Attached: Yes ☒ No ☐

Instrument (1)
 Instrument Model: PROTEAN
 Instrument Ser. #: 621444
 Calibration Due: N/A
 Efficiency: A-0.21 B-0.52
 MDA: A-11.84 CF: A-4.37 BKG-A-0
 MDA: B-12.69 CF: B-1.92 BKG-B-1

Instrument (2)
 Instrument Model: MODEL 2224
 Instrument Ser. #: 118241
 Calibration Due: 8-2-97 10/10 12/13/97
 Efficiency: A-0.16 B-0.20
 MDA: A-69.93 CF: A-7.14 BKG-A-0
 MDA: B-180.0 CF: B-3.03 BKG-B-1.17

Survey Date: 9-16-96
 Survey by: EMC/...
 Signature: [Signature] Date: 9/16/96
 Print Name: [Name]
 Review By: [Signature] Date: 9/16/96

Instrument (3)
 Instrument Model: 19
 Instrument Ser. #: 91791
 Calibration Due: 12-21-96
 Efficiency: N/A
 MDA: N/A CF: N/A BKG: N/A

Instrument (4)
 Instrument Model: N/A
 Instrument Ser. #: N/A
 Calibration Due: N/A
 Efficiency: N/A
 CF: N/A BKG: N/A

Survey Point	Smearable Contamination beta/gamma dpm/100cm ²	alpha dpm/100cm ²	Fixed Contamination beta/gamma cpm/100cm ²	alpha cpm/100cm ²	Radiation Level (uR/Hr)	Instrument Used	Additional Comments
							(1) 2224 BACKGROUND: X=0 B=217
							(2) 100% FRISK FOR X & B-
							(3) 1 MINUTE STATIC COUNT FOR X & B-
							(4) X SURVEY AT 1 METER FROM SURVEY POINT LOCATION.
							(5) CIRCLED NUMBERS ON MAP INDICATE SURVEY POINT LOCATIONS.

RADIOLOGICAL SURVEY FORM CONTINUATION SHEET

Survey Number 8111 091696040401

Survey Point	Smearable Contamination beta/gamma dpm/100cm ²	alpha dpm/100cm ²	Fixed Contamination beta/gamma cpm/100cm ²	alpha cpm/100cm ²	Radiation Level (uR/hr)	Instrument Used	Additional Comments
1			230	9	10	1113	WEST WALL 131
2			224	4	10		" " 132
3			220	1	10		" " 131
4			242	2	10		" " 132
5			231	5	10		" " C1
6			234	4	10		" " C2
7			172	4	10		NORTH WALL 131
8			225	1	10		" " 132
9			223	1	10		" " 131
10			210	1	10		" " 131
11			233	3	10		" " 132
12			256	3	10		" " 133
13			216	3	10		" " C1
14			245	1	10		" " C2
15			219	1	10		" " C3
16			267	8	10		SOUTH WALL 131
17			257	6	10		" " 132
18			239	12	10		" " 133
19			263	2	10		" " 131
20			232	1	10		" " 132
21			253	1	10		" " 133
22			293	2	10		" " C1
23			246	1	10		" " C2
24			281	1	10		" " C3
25			259	5	10		EAST WALL 131
26			181	2	10		" " 132
27			215	2	10		" " 131
28			207	3	10		" " 132
29			271	2	10		" " C1
30			226	1	10		" " C2
31			236	0	10		" " C3

FILE CONTINUED SPREADING 131, 132, 133, C1, C2, C3 (NORTH WALL)

RADIOLOGICAL SURVEY FORM CONTINUATION SHEET

Survey Number 091696040401

Survey Point	Scatterable Contamination Bq/m ² (100cm ²)	Fixed Contamination Bq/m ² (100cm ²)	sp/bs cpm/100cm ²	sp/bs cpm/100cm ²	Radiation Level (uR/hr)	Instrument Used	Additional Comments
32		206	4	10	10	1, 2, 3	COA: After Shutdown CRI 1, 2, 3 (Same as Dec)
33	SEE	176	1	10	10		CEILING A1
34	NO DETECTION	224	2	10	10		" A2
35		147	1	10	10		" B3
36		177	1	10	10		" B3
37		151	0	10	10		" B2
38		175	1	10	10		" B3
39		180	1	10	10		COA: After Shutdown CRI 1, 2, 3 (Same as Dec)

091696040401

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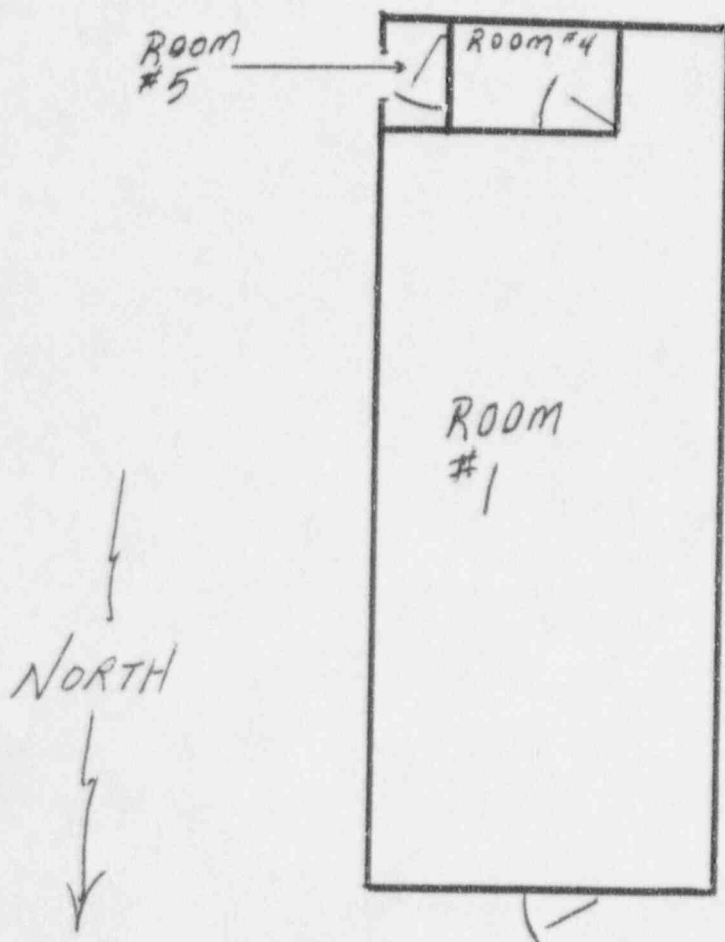
ALPHA						BETA						
Eff: 23.00% Bkg: 0.00 cpm MDA: 11.78 dpm						Eff: 52.00% Bkg: 1.00 cpm MDA: 14.15 dpm						
-SN-	-RPT-	ID	COUNTS	NET CPM	DPM	LIMITS	COUNTS	NET CPM	DPM	LIMITS	DATE	TIME
001	00	040401	0	0.00	0.00		3	2.00	3.85		09-21-96	13:42:51
002	00		1	1.00	4.35		1	0.00	0.00		09-21-96	13:44:20
003	00		0	0.00	0.00		0	-1.00	-1.92		09-21-96	13:45:49
004	00		0	0.00	0.00		3	2.00	3.85		09-21-96	13:47:18
005	00		0	0.00	0.00		9	5.00	15.38		09-21-96	13:48:46
006	00		0	0.00	0.00		0	-1.00	-1.92		09-21-96	13:50:15
007	00		0	0.00	0.00		1	0.00	0.00		09-21-96	13:51:44
008	00		0	0.00	0.00		0	-1.00	-1.92		09-21-96	13:53:13
009	00		1	1.00	4.35		1	0.00	0.00		09-21-96	13:54:41
010	00		4	4.00	17.39		8	7.00	13.46		09-21-96	13:56:10
011	00		0	0.00	0.00		2	1.00	1.92		09-21-96	13:57:38
012	00		1	1.00	4.35		2	1.00	1.92		09-21-96	13:59:07
013	00		0	0.00	0.00		1	0.00	0.00		09-21-96	14:00:36
014	00		0	0.00	0.00		2	1.00	1.92		09-21-96	14:02:04
015	00		0	0.00	0.00		1	0.00	0.00		09-21-96	14:03:33
016	00		0	0.00	0.00		1	0.00	0.00		09-21-96	14:05:02
017	00		1	1.00	4.35		3	2.00	3.85		09-21-96	14:06:30
018	00		0	0.00	0.00		6	5.00	9.62		09-21-96	14:07:59
019	00		0	0.00	0.00		4	3.00	5.77		09-21-96	14:09:27
020	00		1	1.00	4.35		0	-1.00	-1.92		09-21-96	14:10:56
021	00		1	1.00	4.35		1	0.00	0.00		09-21-96	14:12:25
022	00		1	1.00	4.35		0	-1.00	-1.92		09-21-96	14:13:53
023	00		1	1.00	4.35		6	5.00	9.62		09-21-96	14:15:22
024	00		0	0.00	0.00		3	2.00	3.85		09-21-96	14:16:51
025	00		0	0.00	0.00		4	3.00	5.77		09-21-96	14:18:19
026	00		1	1.00	4.35		3	2.00	3.85		09-21-96	14:19:48
027	00		1	1.00	4.35		5	4.00	7.69		09-21-96	14:21:17
028	00		1	1.00	4.35		10	9.00	17.31		09-21-96	14:22:45
029	00		0	0.00	0.00		0	-1.00	-1.92		09-21-96	14:24:14
030	00		0	0.00	0.00		2	1.00	1.92		09-21-96	14:25:43
031	00		1	1.00	4.35		2	1.00	1.92		09-21-96	14:27:12
032	00		1	1.00	4.35		3	2.00	3.85		09-21-96	14:28:40
033	00		1	1.00	4.35		0	-1.00	-1.92		09-21-96	14:30:09
034	00		0	0.00	0.00		1	0.00	0.00		09-21-96	14:31:38
035	00		0	0.00	0.00		1	0.00	0.00		09-21-96	14:33:06
036	00		2	2.00	8.70		3	2.00	3.85		09-21-96	14:34:35
037	00		0	0.00	0.00		0	-1.00	-1.92		09-21-96	14:36:04
038	00		0	0.00	0.00		1	0.00	0.00		09-21-96	14:37:32
039	00		1	1.00	4.35		4	3.00	5.77		09-21-96	14:39:01

RADIOLOGICAL SURVEY FORM

Survey Number 091696040401

BUILDING 4 (LOCKER ROOM)

ROOM DEFINITIONS:

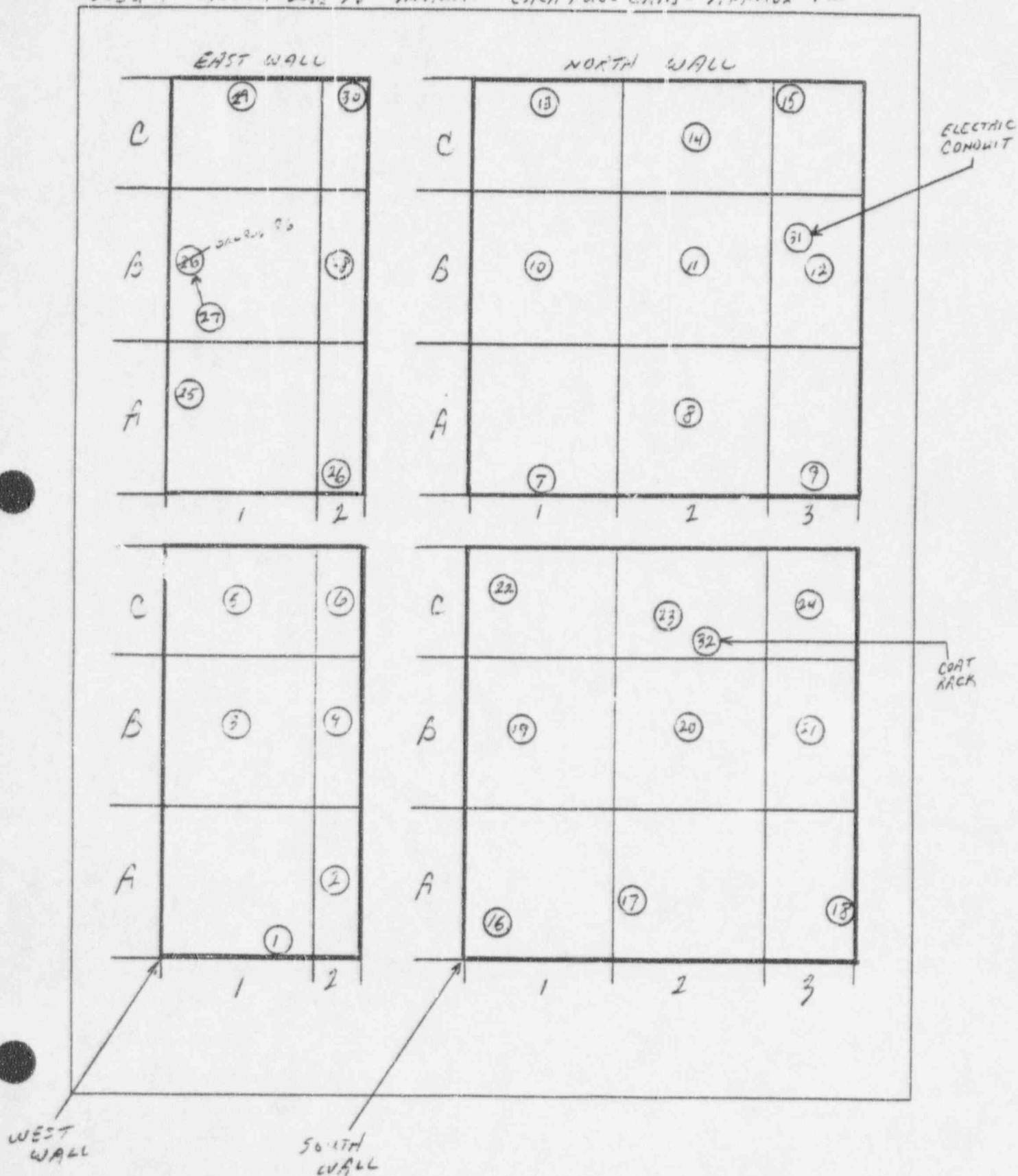


NOTE:
FLOOR SURVEY
FOR ROOMS
#1 #4 #5
COMPLETED
UNDER
SURVEY
#091096040105

RADIOLOGICAL SURVEY FORM

Survey Number ~~091696040201~~ 091676040401

BLOCK 4 - ROOM 4 $\frac{1}{8}" = \text{APPROX. } 1'$ EACH FULL GRID = APPROX 1 m²



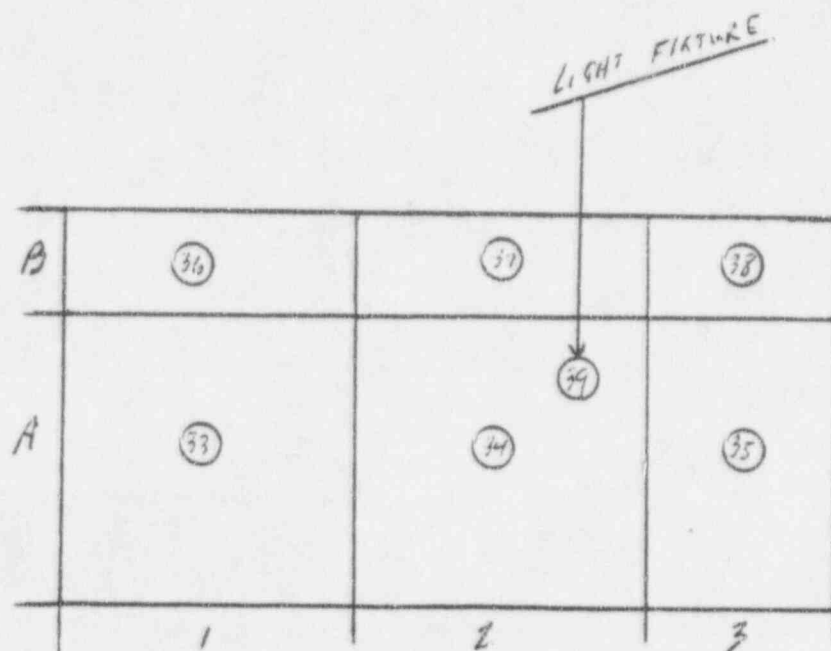
RADIOLOGICAL SURVEY FORM

Survey Number 091696040401

BUILDING #4

Room #4

CEILING

 $\frac{1}{2}" = \text{APPROX. } 1'$ EACH FULL GRID = APPROX 1 m^2 NORTH
↓

Survey Point	Fixed Contamination		Background		Efficiency		Activity		Instrument Used
	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta Gamma	Alpha	Beta/Gamma dpm/100 cm ²	Alpha dpm/100 cm ²	
1	230	9	217	0	0.3	0.16	43.33	56.25	Model 2224 118241
2	224	4	217	0	0.3	0.16	23.33	25.00	Model 2224 118241
3	220	1	217	0	0.3	0.16	10.00	6.25	Model 2224 118241
4	242	2	217	0	0.3	0.16	83.33	12.50	Model 2224 118241
5	231	5	217	0	0.3	0.16	46.67	31.25	Model 2224 118241
6	234	4	217	0	0.3	0.16	56.67	25.00	Model 2224 118241
7	172	4	217	0	0.3	0.16	-150.00	25.00	Model 2224 118241
8	225	1	217	0	0.3	0.16	26.67	6.25	Model 2224 118241
9	223	1	217	0	0.3	0.16	20.00	6.25	Model 2224 118241
10	210	1	217	0	0.3	0.16	-23.33	6.25	Model 2224 118241
11	233	3	217	0	0.3	0.16	53.33	18.75	Model 2224 118241
12	256	3	217	0	0.3	0.16	130.00	18.75	Model 2224 118241
13	216	3	217	0	0.3	0.16	-3.33	18.75	Model 2224 118241
14	245	1	217	0	0.3	0.16	93.33	6.25	Model 2224 118241
15	219	1	217	0	0.3	0.16	6.67	6.25	Model 2224 118241
16	267	8	217	0	0.3	0.16	166.67	50.00	Model 2224 118241
17	257	6	217	0	0.3	0.16	133.33	37.50	Model 2224 118241
18	239	12	217	0	0.3	0.16	73.33	75.00	Model 2224 118241
19	263	2	217	0	0.3	0.16	153.33	12.50	Model 2224 118241
20	238	1	217	0	0.3	0.16	70.00	6.25	Model 2224 118241
21	253	1	217	0	0.3	0.16	120.00	6.25	Model 2224 118241
22	293	2	217	0	0.3	0.16	253.33	12.50	Model 2224 118241
23	246	1	217	0	0.3	0.16	96.67	6.25	Model 2224 118241
24	281	1	217	0	0.3	0.16	213.33	6.25	Model 2224 118241
25	239	5	217	0	0.3	0.16	73.33	31.25	Model 2224 118241
26	181	2	217	0	0.3	0.16	-120.00	12.50	Model 2224 118241
27	215	2	217	0	0.3	0.16	-6.67	12.50	Model 2224 118241
28	207	3	217	0	0.3	0.16	-33.33	18.75	Model 2224 118241
29	231	2	217	0	0.3	0.16	46.67	12.50	Model 2224 118241
30	226	1	217	0	0.3	0.16	30.00	6.25	Model 2224 118241
31	236	0	217	0	0.3	0.16	63.33	0.00	Model 2224 118241

IT Corporation
Molycorp 768380

FIXED CONTAMINATION DATA SHEET

Survey Number

91696040401

Page 9 of 9

Survey Point	Fixed Contamination		Background		Efficiency		Activity		Instrument Used
	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta Gamma	Alpha	Beta/Gamma dpm/100 cm ²	Alpha dpm/100 cm ²	
32	206	4	217	0	0.3	0.16	-36.67	25.00	Model 2224 118241
33	176	1	217	0	0.3	0.16	-136.67	6.25	Model 2224 118241
34	224	2	217	0	0.3	0.16	23.33	12.50	Model 2224 118241
35	147	1	217	0	0.3	0.16	-233.33	6.25	Model 2224 118241
36	177	1	217	0	0.3	0.16	-133.33	6.25	Model 2224 118241
37	151	0	217	0	0.3	0.16	-220.00	0.00	Model 2224 118241
38	175	1	217	0	0.3	0.16	-140.00	6.25	Model 2224 118241
39	180	1	217	0	0.3	0.16	-123.33	6.25	Model 2224 118241

Appendix C
Section C-5

RADIOLOGICAL SURVEY FORM

Survey Number

091696040501

Survey Description:	<u>DIFFERENTIAL AREA</u>
<u>344C HY RGN #5</u>	
<u>6016651 CEMENT</u>	
<u>7/1</u>	
Drawing Attached: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	

Instrument (1)	
Instrument Model:	<u>PROTEAN</u>
Instrument Ser. #:	<u>621444</u>
Calibration Due:	<u>N/A</u>
Efficiency:	<u>A-0.83 B-0.52</u>
MDA: A- <u>11.84</u> CF: A- <u>4.37</u> BKG: A- <u>0</u>	
MDA: B- <u>12.69</u> CF: B- <u>1.92</u> BKG: B- <u>1</u>	

Instrument (2)	
Instrument Model:	<u>MODEL 2224</u>
Instrument Ser. #:	<u>118241</u>
Calibration Due:	<u>8-8-97-11/16 3/23/97</u>
Efficiency:	<u>A-0.14 B-0.33</u>
MDA: A- <u>6.33</u> CF: A- <u>7.14</u> BKG: A- <u>1</u>	
MDA: B- <u>17.07</u> CF: B- <u>3.03</u> BKG: B- <u>10.5</u>	

Survey Date:	<u>08-16-96</u>
Survey by:	<u>Ellen A. ...</u>
Signature	<u>[Signature]</u>
Date	<u>11/16</u>
Print Name:	<u>K. K. ...</u>
Review By:	<u>[Signature]</u>
Date	<u>11-21-96</u>

Instrument (3)	
Instrument Model:	<u>19</u>
Instrument Ser. #:	<u>81491</u>
Calibration Due:	<u>12-21-96</u>
Efficiency:	<u>~10%</u>
MDA: <u>21.13</u> CF: <u>10.7</u> BKG: <u>10.00</u>	

Instrument (4)	
Instrument Model:	<u>N/A</u>
Instrument Ser. #:	<u>N/A</u>
Calibration Due:	<u>N/A</u>
Efficiency:	<u>N/A</u>
MDA: <u>N/A</u> CF: <u>N/A</u> BKG: <u>N/A</u>	

Survey Point	Measurable Contamination beta/gamma dpm/100cm ²	alpha dpm/100cm ²	Fixed Contamination beta/gamma cpm/100cm ²	alpha cpm/100cm ²	Radiation Level (uR/hr)	Instrument Used	Additional Comments
							(1) 2224 BACKGROUND: X = 1 B = 10.5
							(2) 100% FRISK FOR X BNS B-
							(3) ONE MINUTE STATIC COUNT FOR X & B-
							(4) X SURVEY TAKEN AT ONE METER FROM SURVEY POINT LOCATION.
							(5) GRID NUMBERS ON MAP INDICATE SURVEY POINT LOCATION.

RADIOLOGICAL SURVEY FORM CONTINUATION SHEET

Survey Number C91696040501

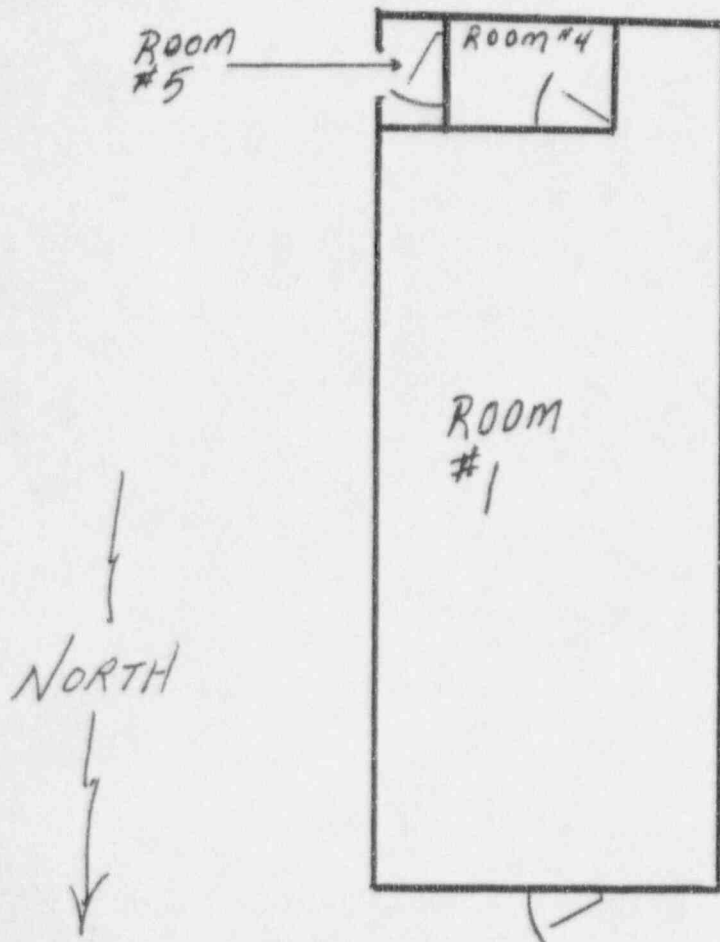
Survey Point	Measurable Contamination becquerels dpm/100cm ²	alpha dpm/100cm ²	Fixed Contamination becquerels dpm/100cm ²	alpha dpm/100cm ²	alpha cpm/100cm ²	Radiation Level (uR/hr)	Instrument Used	Additional Comments
1			237		1	10	1133	NORTH WALL A1
2			205		6	10		" " A2
3			272		0	10		" " B1
4			212		2	10		" " B2
5			220		0	10		" " C1
6			207		2	10		" " C2
7			250		3	10		SOUTH WALL A1
8			280		7	10		" " A2
9			281		0	10		" " B1
10			239		2	10		" " B2
11			266		1	10		" " C1
12			253		0	10		" " C2
13			190		1	10		WEST WALL A1
14			223		6	10		" " A2
15			195		0	10		" " B1
16			197		4	10		" " B2
17			186		1	10		" " C1
18			222		0	10		" " C2
19			233		8	10		EAST WALL A2
20			247		2	10		" " B2
21			271		1	10		" " C1
22			225		0	10		" " C2
23			160		0	10		CEILING A1
24			155		0	10		" " A2
25			145		0	10		" " B1
26			176		1	10		" " B2
								WALL 1011
								N A
								A

RADIOLOGICAL SURVEY FORM

Survey Number 091696040501

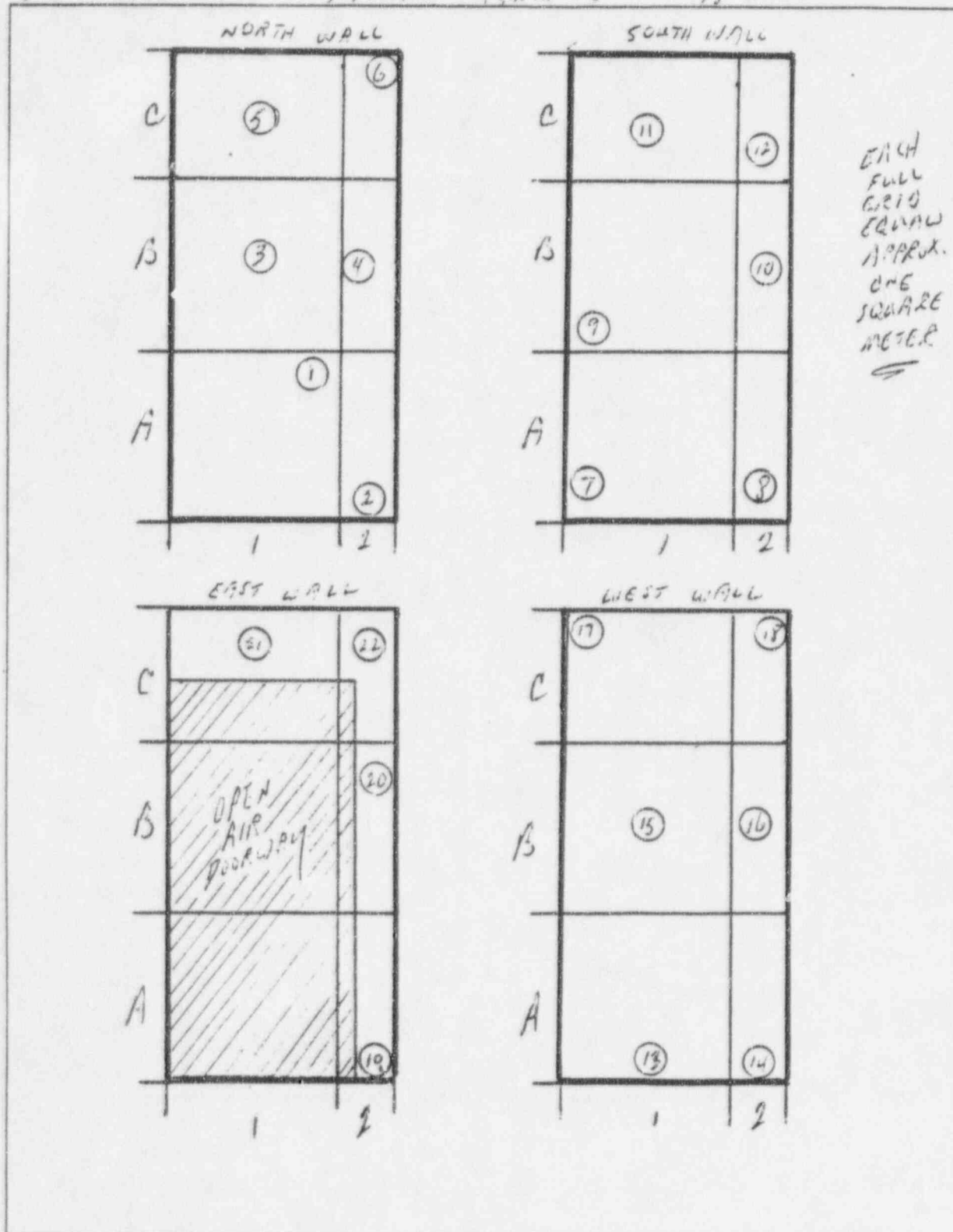
BUILDING 4 (LOCKER ROOM)

ROOM DEFINITIONS:



NOTE
FLOOR SURVEY
FOR ROOM
#1 #4 #5
COMPLETED UNDER
SURVEY
#091096040105

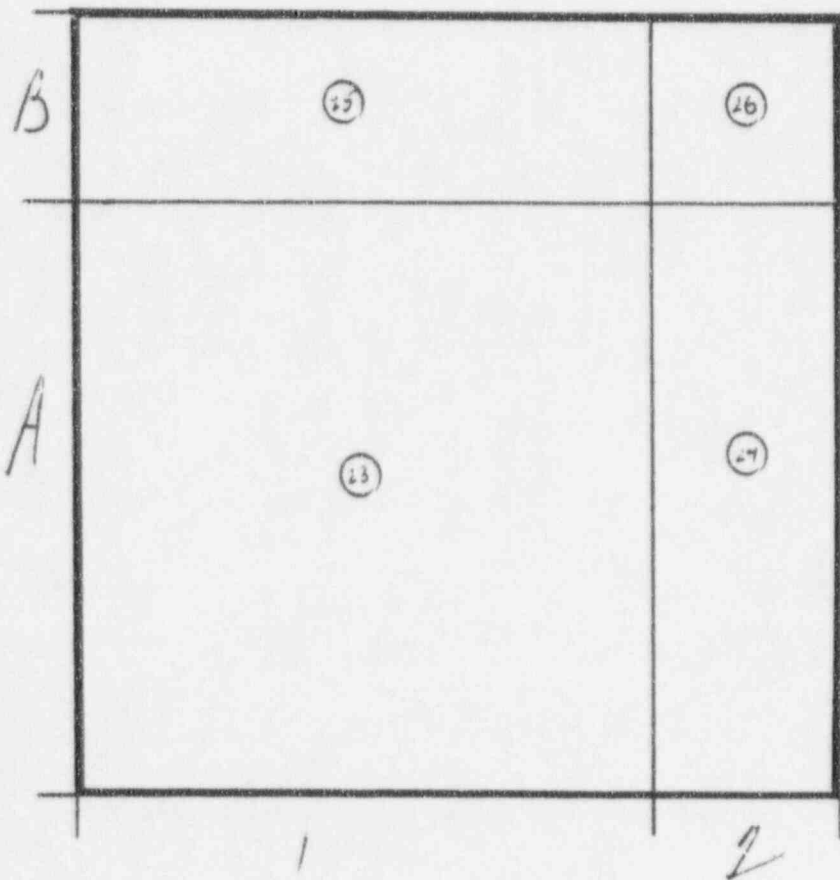
RADIOLOGICAL SURVEY FORM

Survey Number 091696-0105-01BLOG #4 (LOCKER ROOM) Room ~~2~~^{7A} ~~1~~^{2.16th} #5- $\frac{1}{8}$ " APPROX 1'

RADIOLOGICAL SURVEY FORM

Survey Number 091696040501BLDG #4 ROOM #5
CEILING.~~1/2" = APPROX 1'~~ 9/16/861 FULL SQUARE GRID =
APPROX. 1 m²

1" = APPROX. 1'

NORTH
↓

ALPHA						BETA						
Eff: 23.00% Bkg: 0.00 cpm MDA: 11.78 dpm						Eff: 52.00% Bkg: 1.00 cpm MDA: 14.15 dpm						
SN	RPT	ID	COUNTS	NET CPM	DPM	LIMITS	COUNTS	NET CPM	DPM	LIMITS	DATE	TIME
00		040501	0	0.00	0.00		0	-1.00	-1.92		09-20-96	15:53:07
00			0	0.00	0.00		0	-1.00	-1.92		09-20-96	15:54:36
003	00		0	0.00	0.00		3	2.00	3.85		09-20-96	15:56:05
004	00		0	0.00	0.00		2	1.00	1.92		09-20-96	15:57:34
005	00		1	1.00	4.35		2	1.00	1.92		09-20-96	15:59:03
006	00		0	0.00	0.00		1	0.00	0.00		09-20-96	16:00:31
007	00		0	0.00	0.00		1	0.00	0.00		09-20-96	16:02:00
008	00		2	2.00	8.70		1	0.00	0.00		09-20-96	16:03:29
009	00		0	0.00	0.00		1	0.00	0.00		09-20-96	16:04:57
010	00		0	0.00	0.00		1	0.00	0.00		09-20-96	16:06:26
011	00		0	0.00	0.00		2	1.00	1.92		09-20-96	16:07:55
012	00		1	1.00	4.35		3	2.00	3.85		09-20-96	16:09:23
013	00		0	0.00	0.00		0	-1.00	-1.92		09-20-96	16:10:52
014	00		2	2.00	8.70		2	1.00	1.92		09-20-96	16:12:21
015	00		1	1.00	4.35		1	0.00	0.00		09-20-96	16:13:50
016	00		0	0.00	0.00		2	1.00	1.92		09-20-96	16:15:19
017	00		0	0.00	0.00		0	-1.00	-1.92		09-20-96	16:16:47
018	00		0	0.00	0.00		2	1.00	1.92		09-20-96	16:18:16
019	00		0	0.00	0.00		0	-1.00	-1.92		09-20-96	16:19:45
020	00		1	1.00	4.35		2	1.00	1.92		09-20-96	16:21:14
021	00		1	1.00	4.35		0	-1.00	-1.92		09-20-96	16:22:42
022	00		0	0.00	0.00		2	1.00	1.92		09-20-96	16:24:11
023	00		0	0.00	0.00		0	-1.00	-1.92		09-20-96	16:25:40
024	00		0	0.00	0.00		3	2.00	3.85		09-20-96	16:27:09
025	00		1	1.00	4.35		1	0.00	0.00		09-20-96	16:28:37
026	00		0	0.00	0.00		2	1.00	1.92		09-20-96	16:30:06

Survey Point	Fixed Contamination		Background		Efficiency		Activity		Instrument Used
	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta/Gamma cpm/100 cm ²	Alpha cpm/100 cm ²	Beta Gamma	Alpha	Beta/Gamma dpm/100 cm ²	Alpha dpm/100 cm ²	
1	237	1	165	1	0.33	0.14	218.18	0.00	Model 2224 118241
2	205	6	165	1	0.33	0.14	121.21	35.71	Model 2224 118241
3	272	0	165	1	0.33	0.14	324.24	-7.14	Model 2224 118241
4	212	2	165	1	0.33	0.14	142.42	7.14	Model 2224 118241
5	220	0	165	1	0.33	0.14	166.67	-7.14	Model 2224 118241
6	202	2	165	1	0.33	0.14	112.12	7.14	Model 2224 118241
7	250	3	165	1	0.33	0.14	257.58	14.29	Model 2224 118241
8	280	7	165	1	0.33	0.14	348.48	42.86	Model 2224 118241
9	281	0	165	1	0.33	0.14	351.52	-7.14	Model 2224 118241
10	239	2	165	1	0.33	0.14	224.24	7.14	Model 2224 118241
11	266	1	165	1	0.33	0.14	306.06	0.00	Model 2224 118241
12	253	0	165	1	0.33	0.14	266.67	-7.14	Model 2224 118241
13	190	1	165	1	0.33	0.14	75.76	0.00	Model 2224 118241
14	223	6	165	1	0.33	0.14	175.76	35.71	Model 2224 118241
15	195	0	165	1	0.33	0.14	90.91	-7.14	Model 2224 118241
16	197	4	165	1	0.33	0.14	96.97	21.43	Model 2224 118241
17	186	1	165	1	0.33	0.14	63.64	0.00	Model 2224 118241
18	222	0	165	1	0.33	0.14	172.73	-7.14	Model 2224 118241
19	233	8	165	1	0.33	0.14	206.06	50.00	Model 2224 118241
20	247	2	165	1	0.33	0.14	248.48	7.14	Model 2224 118241
21	231	1	165	1	0.33	0.14	200.00	0.00	Model 2224 118241
22	225	0	165	1	0.33	0.14	181.82	-7.14	Model 2224 118241
23	160	0	165	1	0.33	0.14	-15.15	-7.14	Model 2224 118241
24	155	0	165	1	0.33	0.14	-30.30	-7.14	Model 2224 118241
25	145	0	165	1	0.33	0.14	-60.61	-7.14	Model 2224 118241
26	176	1	165	1	0.33	0.14	33.33	0.00	Model 2224 118241